

Fiebig, Markus¹; Moernaut, Jasper²; Neuhuber, Stephanie¹; Ortler, Marcel²; Schmalfluss, Clemens¹; Heine, Erwin¹

End moraine system of Lake Altaussee

¹BOKU University, Österreich;

²Universität Innsbruck, Österreich;

markus.fiebig@boku.ac.at

Lake Altaussee (Salzkammergut, Austria) is considered to be dammed by a so called Gschnitz endmoraine system (Mandl et al. 2012: 46). The terminal position of this endmoraine was determined on the base of former outcrops along the Altaussee Traun close to the west end of the village Altaussee (Van Husen, oral communication). The surface shape of the landscape above the former outcrop points to a streamlined ground moraine landscape from peak glaciation during MIS 2. A prominent lateral moraine was found on the southern lake side close to the Strandcafe. Dating with cosmogenic isotopes of carbonate blocks on top of the Strandcafe moraine was not successful yet. Interestingly, seismic investigations of the lake subsurface found evidence for a wall moraine structure in the western part of the lake and which is buried under a sequence of glacio-lacustrine sediments. This structure could fit together with the southern Strandcafe moraine into one moraine loop. The configuration of meltwater flow from such a low-lying endmoraine system is unclear. Finally, a lateral moraine wall was mapped on the northern lake side at the northeastern end of the village Altaussee. Different (higher) lake levels have been proposed by industry drilling, peat coring, geo-electric profiling and geomorphological mapping, but without age determination. The age of wall moraine systems around and below Lake Altaussee is still under investigation and should shed more light on the genesis of the lake.

References

Gerhard W. Mandl, Dirk van Husen & Harald Lobitzer 2012. *Geologische Karte der Republik Österreich 1 : 50 000 Erläuterungen zu Blatt 96 BAD ISCHL. Geologische Bundesanstalt Wien. Österreich.*

Session: *Pangeo workshop: Glacial erosion and deposition*

Keywords: *End moraine system, Lake Altaussee, mapping, seismic investigations*