

Wastl, M., Stötter, J. and Venzke, J.-F. (2003): Neue Beiträge zur spätglazialen und holozänen Gletschergeschichte in Nordisland. *Norden*, 15, 137-150.

Abstract

Based on calculations of equilibrium line altitude depressions relative to the maximum glacier extent during the Little Ice Age, present evidence allows the identification of four stages of local glacier extents in Northern Iceland between ca. 10300 BP and 9200 BP (uncalibrated radiocarbon years). These stages are geomorphologically and stratigraphically compared with corresponding extents of the Eyjafjörður outlet glacier. A basic age model for these findings is provided by tephrochronology.

Since ca. 9200 BP, the local glaciers in Northern Iceland have never been much larger than they were during their Little Ice Age maximum extent. For the period since the end of the Preboreal, eleven glacier advances pre-dating the Little Ice Age have been found. These have been dated to between ca. 5600 BP and ca. 5200 BP (Vatnsdalur I), before ca. 5200 BP (Lambárdalur I and II), before ca. 4700 BP (Þverárdalur), after ca. 4300 BP (Bægisárdalur I), after ca. 3600 BP (Kónsstaðadalur), between ca. 3500 BP and ca. 2850 BP (Vatnsdalur II), between ca. 2250 BP and ca. 1550 BP (Barkárdalur I and II) and before ca. 1000 BP (Bægisárdalur II). For the Little Ice Age, five lichenometrically dated advance periods of the glaciers in Northern Iceland can be distinguished between around 1810 AD and the 1920s, further glacier advances followed in the 1940s and 1970/1980s.