

Stage 1: 22 Ka: Last glacial cycle, the glacier advances, and the valley bottom is eroded down to the bedrock (Elverhøi et al., 1995). The FSI is probably located at the meeting point of the sea and land.



Stage 2: 10-10.5 Ka: Maximal sea ingression (Lønne & Nemec, 2004) and deltaic sediment deposition (Gilbert et al., 2018). The FSI migrates eastward to the new location where sea and land meet.



Stage 3: 9.5 Ka: The FSI migrates westward and freezes when temperatures drop sharply. Freezing front (from top down) exceeds freshwater lateral flow. Epigenetic permafrost aggrades.



Stage 4: ADE site at present. Fluvial and aeolian deposition freeze syngenetically (Gilbert et al., 2018).