

PALEOHYDROGRAPHY OF THE BALTIC SINCE THE LAST DEGLACIATION: THE DARSS SILL GATEWAY

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Results from joint Danish and German investigations indicate that the formation of the ice marginal line "G" (Velgaster Staffel) between Falster, Denmark and Fischland, Germany caused the damming of a pre-existing (sub)glacial meltwater discharge system. As the Baltic Ice Lake began to form (around 12,500 yrs. BP), a (glacio) fluvial drainage pattern developed, with a deep and presently buried channel cutting line "G" south of Kadet Channel. Discharge was toward northeast. During the Baltic Ice Lake transgression, an infill by sandy sediments of this channel resulted in the virtual closure of the Darss Sill gateway. Main erosion and deepening of the Kadet Channel began during the Ancylus Lake highstand maximum (around 9,000 yrs. BP) and continued during the following Littorina period.

Present current-induced bedforms, among other 5 m-high sand waves, point to maximum bottom-flow speed on the order of 70-100 cm/s for both in- and outflow.