

QUATERNARY GEOLOGY OF NORDRE STRØMFJORD  
AND ITS ENVIRONS

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In the 1968 summer field season a reconnaissance investigation was made of the Quaternary geology of the region of Nordre Strømfjord ( $67^{\circ} 30' - 68^{\circ} 00' N$ ) and Nordre Isortoq (north side) ( $67^{\circ} 12' N$ ). From the field observations and supplementary air photo interpretation a preliminary map at 1 : 50 000 is being made of the area, which totals  $8000 \text{ km}^2$ . This was a one-season project to provide data for a regional map of the Quaternary of West Greenland.

Net sea level displacement at the outer coast has been  $150 \pm 5 \text{ m}$ , whilst at the fjord head the younger displacement is  $55 \text{ m}$ . Evidence of shorelines in the fjords is scant and determination of differential uplift and of the relationship of isochronous sea levels to moraine stages will depend on the  $C^{14}$  dating programme being undertaken. In the outer coastal regions there are extensive outcrops of marine sediments. Their stratigraphy is complex due to facies variation and recycling during sea level recession.

Nunatak moraines of a major ice sheet are very well developed in the coastal mountains of Nordre Isortoq, and are presumably of late Wisconsin/Wurm age. Summit autochthonous boulder fields are not considered to be significantly older than this. In the fjords several younger moraine stages, only locally well developed, predate the early postglacial (Boreal) moraines of Weidick (1968) which lie at the fjord head, 10 - 15 km from the present ice sheet margin. In this interval there is a complex of recessional moraines.

Reference

Weidick, A. (1968) Observations on some Holocene glacier fluctuations in West Greenland. Bull. Grønlands geol. Unders., No. 73 (also Meddr Grønland, Bd. 165, Nr. 6).