



Organic substances in bottom sediments from the shelf-coastal area, the Laptev Sea

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For several years, drilling was performed on the shore and from the ice in the shelf-coastal area of the Buor-Khaya Gulf in the Laptev Sea. Short and long (20, 30 and 50 m) boreholes were drilled. Detailed analyses of the soil composition were carried out. New data were obtained on the state of underwater permafrost, its evolution, stratification of deposits, and specific characteristics of distribution and composition of organic carbon and nitrogen in bottom sediments during transfer of alluvia from the coastal area towards the Arctic shelf. The balance of the sedimentary material in this area is composed of two major sources: suspended particles of the river flow and products from thermal-abrasive destruction of the coastal glacial complex. The origin of organic substance in bottom sediments in this area is determined by high rates of thermal-abrasion destruction of the coast and high content of organic material in the rocks of the Pleistocene glacial complex widely spread on the east-Siberian coast of the Arctic. The coastal deposits contain clayish soil with organics and peat layers. The content of Corg in the coastal complex varied from 0.8 to 5.8