

## **SPATIAL-TEMPORAL DYNAMICS OF MORPHOMETRIC PARAMETERS OF LAKES ON THE YAMAL PENINSULA AND THE LENA RIVER DELTA AREA**

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Last years between scientists become popular a theory about rising of surface temperature in permafrost regions. The possibility of temperature rising has a big influence on thermokarst degradation. The thawing of permafrost that can generate dramatic changes in ecosystems and in infrastructure performance.

Since the beginning of the 21st century, scientists have carried out numerous studies of the dynamics of thermokarst lakes, based on the analysis of different time periods images. Some of them point to a direct relationship between changes in lake area and climate warming, others do not.

Researching on thermokarst degradation helping scientist to make a prediction about possible subsequent thawing of permafrost in world and particular in Siberia region. In future it can make changes in ecosystems. In work exactly thermokarst lakes and dynamic of its degradation is an object of research.

Revealing changes in the area of lakes is the main stage in researching of thermokarst lakes dynamic. It includes: processing of the results of thermokarst lakes remote sensing (vectorization, remote sensing; combination of lakes consisting of several vector objects). For researching was chose two study areas in Northern Eurasia region: Lena Delta area from East Siberia and Yamal peninsula from West Siberia.