Institute of Monitoring of Climatic and Ecological Systems SB RAS

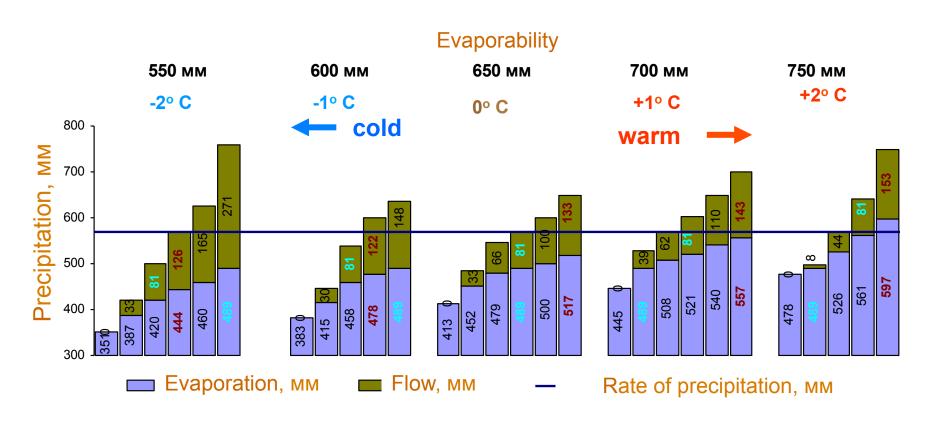
Kopysov Sergey G.

wosypok@mail.ru

Пределы влияния климатических изменений на заболачивание в бассейне р. Бакчар

Limits of Climatic Changes Influence on Swamping in Basin of River Bakchar

Limits of Climatic Changes Influence on water balance in Basin of River Bakchar



The analysis of possible climatic changes has allowed to draw following conclusions:

- 1) Warming to 2 °C at an insignificant increase in precipitation will lead to growth of evaporation and flow reduction, but growth of swamps will not stop because the hydrographic network dumping marsh waters will be even faster covered by peat that will lead to growth of the area of swamps due to the adjoining grounds. It will be accompanied by fire risk growth, up to full burning out of separate peatbogs in dry years. At the further warming the dry of peatbogs and their burning out will receive a mass character that will lead to destruction of the tracts of up-river swamps.
- 2) The fall of temperature to 2 °C will lead to flow increase in 1,5 times that will originally promote increase in the area of swamps as the existing hydrographic network full of peat and cannot dump additional waters from suburbs of swamp in view of slow increase of the flow that will not allow to restore the hydrographic network. However, if artificially to clear away this network or the flow growth appears intensive enough for natural restoration of the hydrographic network will begin the dry of swamps due to development of upper courses of the hydrographic network.

Thus, at change of environmental conditions in the considered limits (±2°C) there will be no termination of growth of swamps, speed of swamping and its reason will vary only.