Spatio-temporal variation of methane emission from reservoirs with the different water residence time

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Increase in concentration in the atmosphere of greenhouse gases (GHG) is considered as one of the possible reasons of climatic changes. Recently all their possible anthropogenic sources including artificial reservoirs are considered. The actual task is the inventory of GHG emissions various sources for possible reduction and parameterization of emission from the underlying surface to define the conditions of interaction with the atmosphere in climate models. The work concerned questions of time-spatial changes of contents and emission of methane from a surface of polytypic reservoirs. On the basis of comparison of the field observations on the Mozhaisk and Gorky reservoirs the distinctions of contents and specific fluxes of methane for reservoirs with various water residence time and hydrological regime are shown. Comparison with literary data has shown that emission rate from reservoirs of a boreal zone with slow water exchange can be underestimated.