



Net ecosystem exchange in a sedge-sphagnum fen at the South of West Siberia, Russia

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The model of net ecosystem exchange was used to study the influence of different environmental factors and to calculate daily and growing season carbon budget for minerotrophic fen at South of West Siberia, Russia. Minerotrophic sedge-sphagnum fen occupies the central part of the Bakcharskoe bog. The model uses air and soil temperature, incoming photosynthetically active radiation, and leaf area index as the explanatory factors for gross primary production, heterotrophic and autotrophic respiration. The model coefficients were calibrated using data collected by automated soil CO₂ flux system with clear long-term chamber. The studied ecosystem is a sink of carbon according to modelling and observation results.

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