

Seasonal variability of vertical fluxes of greenhouse gases in Western Siberia

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Results of monitoring of the vertical carbon dioxide flow in the atmospheric surface layer of a background region of Western Siberia



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Introduction

The carbon dioxide dynamics is now studied actively in different regions of Russia. Carbon dioxide is one of the main greenhouse gases, the increase of whose concentration is associated with climate change. From this point of view, it is important to know which regions are sources of carbon dioxide and in which regions its sink is observed. Western Siberia is a region of prevalent carbon dioxide sink from the atmosphere. Therefore, it is important to have estimates of the vertical carbon dioxide flow, which can be used in global and mesoscale climatic models for theoretical investigations. The goal of this study is to obtain the annual distribution of the vertical carbon dioxide flow for the background region

Vertical fluxes of water vapor, carbon dioxide and methane

