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**Title:** *STOCKS OF CARBON AND NITROGEN IN POLAR SOILS: IN CASE OF STUDY OF ISLANDS AND SHORES OF RUSSIAN SECTOR OF ARCTIC*

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Permafrost affected soils are responsible for essential carbon stock and regulates carbon dioxide and methane fluxes on the contact of biosphere and lithosphere. The role of polar soils in global balance of carbon is underestimated, that is why the aim of this study is to assess the particular characteristics of soils of Russian north as accumulators of organic carbon and storage of humus as well as to understand changeable characteristics of humus in scenarios of short-time climatic changes. This study is based on field-sampled material in the “High-latitude Arctic expedition” and expedition “Yamal – Arctic 2012”. Soils and grounds from natural and anthropogenically affected landscapes were analyzed. Geography of samples is presented by 18 sites located on island and coastal zones of Russian sector of Arctic (from Kolguev Island to Wrangell Island). The most important indexes of soil carbon state assessed: carbon and nitrogen percentages and total stock, C/N ration, respiration activity, metabolic status of soils micro flora. All of these give important information about organization and functioning of soil organic profile in gradient of soil geography and anthropic impact. It can help to assess the role of Arctic soil in the global emission of greenhouse gases.