Mire Aeration & Particles Experiment : Dataset from the study: Particles and aeration at mire-stream interfaces cause selective removal and modification of dissolved organic matter. Article accepted by AGU-JGR-Biogeosciences

SND-ID: 2024-305. **Version**: 1. **DOI**: https://doi.org/10.57804/a7a6-6867

Ladda ner data

DATASET01.xlsx *(2.49 MB)*

Citering

Einarsdóttir, K., Kothawala, D., Tranvik, L., Hawkes, J. A., & Attermeyer, K. (2020) Mire Aeration & Particles Experiment : Dataset from the study: Particles and aeration at mire-stream interfaces cause selective removal and modification of dissolved organic matter. Article accepted by AGU-JGR-Biogeosciences (Version 1) [Dataset]. Uppsala universitet. Tillgänglig via: https://doi.org/10.57804/a7a6-6867

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Beskrivning

The dataset contains physio-chemical data from an experiment that aimed to answer how aeration of anoxic mire water, and suspended particles, may impacts dissolved organic matter in both quality and quantity. The experimental data gives idea how physio-chemical parameters may change upon aeration, e.g., at soil-water interfaces or when anoxic mire water merges into a stream and the water is mixed with the atmosphere. In addition, the importance of suspended particles that are found in the mire water was also examined.

The dataset comprises measured concentrations of dissolved organic carbon (DOC), inorganic carbon (IC), particulate organic carbon (POC) and particulate nitrogen (PN), dissolved iron (DFe, divided in ferrous (Fe (II)) and ferric (Fe(III)) forms), dissolved oxygen, temperature, chemical composition of DOM (intensity of formulas CHO) divided in three fractions depending on hydrophobicity, and intensity of absorbance of 254nm.

The study was conducted in September 2017 and the samples come from a sloping mire that drains into small headwater-stream and is located in a boreal forest of Mid-Sweden. The samples were anoxic and sampled for all parameters in a nitrogen aired glovebox prior the experiment start, half of

the samples were aerated, and half of the aerated and half of the anoxic samples contained particles from the mire while the other half was filtered through GF/F filter. After aeration, samples for DFe species and IC were taken from aerated samples. Oxygen was monitored the whole time. The experiment went on for five days and then all parameters were measured again.

Datasetet har ursprungligen publicerats i DiVA och flyttades över till SND 2024.

Data innefattar personuppgifter

Nej

Språk

Engelska

Identifierare

URN: urn:nbn:se:uu:diva-423189

Forskningsområde

Miljövetenskap (Standard för svensk indelning av forskningsämnen 2011)

Oceanografi, hydrologi och vattenresurser (Standard för svensk indelning av forskningsämnen 2011)

Nyckelord

Carbon, Iron, Particles, Headwaters, Mire, Redox, Particle adsorption, Coprecipitation, Biodegradation, Organic matter, Biology with specialization in limnology

Tillgänglighetsnivå

Åtkomst till data via SND
Data är fritt tillgängliga

Användning av data

Att tänka på vid användning av data som delas via SND

Versioner

Version 1. 2020-10-20

Ladda ner metadata

DataCite

DDI 2.5

DDI 3.3

DCAT-AP-SE 2.0

JSON-LD

PDF

Citation (CSL)

Filöversikt (CSV)

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