



5th International Workshop on C/H₂O/Energy balance and climate over boreal and arctic regions with special emphasis on eastern Eurasia

11-13 November 2010, Wageningen, the Netherlands

Program

Thursday 11 November

Location: Wageningen University, Gaia building (building no. 101), Room Gaia 1, Droevendaalsesteeg 3

9:30 Coffee + registration

10:00 Welcome by Frank Berendse

Carbon and water/energy budgets chaired by Ko van Huissteden

10:10 Trofim Maximov Carbon budgets in forest and tundra permafrost ecosystems of Far East Russia
(keynote speaker) *Maximov TC, Dolman AJ, van Huissteden J, Ohta T, Sugimoto A, Kononov AV, Maximov AP, Karsanaev SV*

10:40 Ryuhei Yoshida Effect of land cover change on regional water/energy field in Eastern Siberia
Yoshida R, Sawada M, Yamazaki T

11:00 Almut Arneth BVOC fluxes in the East Siberian larch biome
Arneth A, Holst T, Kaijros M, Olin S, Miller P, Hakola H, Rinne J, Maximov TC

11:20 Break

Permafrost degradation chaired by Gabriela Schaepman-Strub

11:50 Ko van Huissteden Modeling thaw lake expansion
Van Huissteden J, Berrittella C

12:10 Matthias Forkel A global view on fire-influenced permafrost degradation: an analysis based on earth observation products and model simulations
Forkel M

12:30 Stanislav Ksenofontov Climate change awareness of rural population in the permafrost region
Ksenofontov SM, Yamashita T

12:50 Lunch + posters Poster titles, see below

Methane dynamics chaired by Monique Heijmans

14:20 Katey Walter Anthony Positive and negative feedbacks to climate change associated with methane emissions and carbon dynamics in the thermokarst-lake cycle
(keynote speaker) *Walter-Anthony KM*

14:50 Frans-Jan Parmentier Modeling of tundra methane emissions as measured by the eddy covariance technique
Parmentier FJW, van Huissteden J, van der Molen MK, Karsanaev SV, Maximov TC, Dolman AJ

15:10 Gabriela Schaepman-Strub Upscaling methane emissions to regional scale using remotely sensed proxies - spectral and spatial identification of arctic tundra vegetation types
Schaepman-Strub G, Popova M, Bartholomeus H

15:30 Break

16:00 Maarten van Hardenbroek Stable carbon isotopes of invertebrate remains: do they reveal past methane fluxes from lakes?
van Hardenbroek M, Heiri O, Parmentier FJW, Lotter AF

- 16:20 Wladimir Bleuten New data of methane emission from West Siberian mire landscapes
Glagolev M, Kleptsova I, Filippov I, Bleuten W, Peregon A, Maksutov S
- 16:40 Alexey Desyatkin Methane emission from thermokarst depression in Central Yakutia
Desyatkin AR
- 17:00 Closing of session
- 19:00 Dinner at bar-restaurant H41, Heerenstraat 41, 6701 DH Wageningen

Friday 12 November

Location: Wageningen University, Atlas building (building no. 104), Room Atlas 1, Droevendaalsesteeg 4

Vegetation response to climatic changes chaired by Trofim Maximov and Pavel Remigaylo

- 9:15 Atsuko Sugimoto Response of vegetation to soil moisture in Eastern Siberia and related change in material cycling
(keynote speaker) *Sugimoto A, Iwahana G, Tei S, Shingubara R, Liang M, Takano S, Petrov R, Maximov TC*
- 9:45 Frida Keuper Plant available nitrogen in near-surface permafrost: potential release and vegetation responses
Keuper F, van Bodegom P, Dorrepaal E, Aerts R
- 10:05 Pavel Remigaylo Phytoplankton dynamic of the Lena river under climate change
Remigaylo PA
- 10:25 Marcel Urban Pan-arctic land cover mapping and fire assessment for the ESA Data User Element Permafrost
Urban M, Pöcking S, Hese S, Herold M, Schmullius C
- 10:45 Break
- 11:10 Nadia Soudzilovskaia Does *Sphagnum* drive a fen-bog succession?
Soudzilovskaia N, Cornelissen H
- 11:30 Annett Bartsch Improved monitoring of land surface hydrology in northern Eurasia - contributions of the
European Space Agency projects DUE Permafrost and STSE ALANIS-Methane
Bartsch A
- 11:50 Shunsuke Tei Reconstruction of the past soil moisture based on delta-¹³C of larch tree rings for analysis of
water and carbon cycle in Eastern Siberia
Tei S, Sugimoto A, Yonenobu H, Maximov TC
- 12:10 Daan Blok Shrub growth response to climate change and feedbacks of vegetation change to permafrost
thaw in the Siberian Arctic tundra
Blok D, Schaepman-Strub G, Sass-Klaassen U, Heijmans MMPD, Bartholomeus H, Berendse F
- 12:30 Lunch at Forum building

Soil carbon and permafrost-vegetation interactions chaired by Atsuko Sugimoto and Han Dolman

- 14:00 Han Dolman The greenhouse gas balance of Siberian arctic tundra
(keynote speaker) *Dolman AJ, van Huissteden J*
- 14:30 Harm Bartholomeus Spectral estimation of soil properties in the organic layer of tundra soils
Bartholomeus H, Schaepman-Strub G, Blok D, Udaltsov S, Sofronov R
- 14:50 Alexander Kononov Comparison of diurnal and annual soil CO₂-efflux in larch forests of Central and South-Eastern
Yakutia
Kononov AV, Maximov AP, Maximov TC, Karsanaev SV
- 15:10 Break
- 15:40 Tetsuzo Yasunari Dynamics of taiga-permafrost coupling in East Siberia revealed from a new dynamic
soil-vegetation model
Yasunari T, Zhang N, Ohta T
- 16:00 Monique Heijmans Vegetation-soil-permafrost interactions in Siberian tundra: on-going field experiments
Heijmans MMPD, Nauta AL, Blok D
- 16:20 General discussion
- 17:00 Closing of session

Saturday 13 November: Excursion

- 9:00 Departure at hotel Hof van Wageningen
10:30 Coffee + explanation + visit domestic use methane sources at typical Dutch farm
12:30 Lunch
14:00 Visit historic town of Zaandam, Czar Peter house, eating pancakes
18:00 Back to Wageningen

Upon request, transportation to Schiphol airport or Amsterdam is possible during or after excursion

Posters

More posters are welcome

Seasonal changes of dehydrin-like proteins of *Betula platyphylla* in cryolithic zone
Bubyakina, V.V., Tatarinova, T.D., Perk, A.A., Ponomarev, A.G., Maximov, T.C.

Ecosystem scale exchange of BVOC over a Siberian larch forest
Holst, T.

Interannual variation of carbon dioxide flux in an eastern Siberian larch forest
Ito, S., Ohta, T., Kotani, A., Maximov, T.C., Kononov, A.V.

The number of microorganisms in frozen soils of Elgeei forest scientific station of Yakutia.
Ivanova, T.I., Kuz'mina, N.P., Kononov, A.V., Maximov, T.C.

Comparison of C/H₂O/energy fluxes over boreal forest - introduction of new measurement site at southern part of Lena basin
Kotani, A., Ohta, T., Kononov, A.V., Maximov, T.C.

Peatlands and forests as alternative ecosystem states: can drought events and facilitative interactions initiate ecosystem change?
Limpens, J.

The effect of permafrost thawing on soil and vegetation in the Siberian tundra
Nauta, A.L.

The influence of climate change on conifer tree rings growth in Yakutia
Petrov RE, Nikolayev AN

High resolution vegetation and water body mapping in Arctic permafrost regions
Pöcking, S., Hese, S., Urban, M., Herold, M., Schmullius, C.

Inter-annual variation of photosynthesis of larch forest subcanopy vegetation in Central Yakutia
Prokopievna, T.M.

The spatio-temporal variation of flood disasters at Lena river using satellite time-series data
Sakai, T., Hatta, S., Okumura, M., Takeuchi, W., Hiyama, T., Inoue, G.

Quenching of excess light energy in Scots pine growing in Near-Baikal region during autumnal lowering of air temperature
Sofronova, S., Saito, H., Maximov, T., Suvorova G.

Variation of the content of heat-shock proteins in the needles of *Pinus sylvestris* L. under autumn lowering of the temperature in the Baikal area takes place on the earlier stage of photoinhibition of PSII
Sofronova, S., Saito, H., Maximov, T., Suvorova G. Korotaeva, N., Borovsky, G., Suvorova, G., Oskorbina, M.

Registration

At the registration desk you will be asked to pay for:

Workshop: 60 Euro (includes 2 lunches, 1 diner)

Excursion: 40 Euro (includes transportation, fee, lunch, simple diner)

Hotel: 88.65 Euro per night (or half of it if you share a room) if you booked using our block reservation at hotel Hof van Wageningen, Lawickse Allee 9, 6701 AN Wageningen.

Please note that the hotel is Hof van Wageningen, located in the city centre, and not Brink Residence (of same owner) as indicated in earlier circulars.

Fees are to be paid cash at the registration desk during workshop

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