



9:00 – 9:30 Introduction and overview of PCN activities

Leads: Ted Schuur, Christina Schädel

9:30 – 10:30 Synthesis updates (5 min. presentations)

10:15 – 10:35 Coffee break

10:35 – 12.00 Synthesis updates (5 min. presentations)

Date: Sunday, December 10, 2017

Time: 9:00 am – 5:00 pm

Location: New Orleans Marriott, 555 Canal St

Room: Galerie 1 & 2, 2nd Floor

SYNTHESIS UPDATES

Carbon Pools and Decomposability:

- **Gustaf Hugelius:** Mapping Northern peatland extent, carbon and nitrogen stocks
- **Guido Grosse:** Yedom database
- **Guido Grosse:** ESA permafrost project
- **Yuanhe Yang:** Spatial and vertical heterogeneity of permafrost soil organic carbon stocks.
- **Jessica Ernakovich:** Thaw-induced changes to the permafrost microbiome

Coffee Break

Carbon Fluxes:

- **Eugenie Euskirchen:** Bottom-up CO₂ flux synthesis
- **Sue Natali:** Non-growing season flux synthesis
- **Ben Abbott/Jennifer Frederick:** Expert assessment for subsea permafrost and related emissions
- **Claire Treat:** Non-growing season methane fluxes from high-latitude ecosystems
- **McKenzie Kuhn:** Development of a land cover model for scaling methane emissions

Vegetation:

- **Heather Kropp/Mike Loranty:** Air-soil temperature decoupling across vegetation types

Modeling/Benchmarking:

- **Dave Lawrence/Charlie Koven:** Updates on modeling activities
- **Christina Schädel:** Site specific data-model comparison
- **Kevin Schaefer:** The International Land Model Benchmarking project
- **Irina Overeem:** Permafrost modeling toolbox

Hydrology/Lateral transport:

- **Jon O'Donnell:** Dissolved organic matter composition of waters draining permafrost landscapes
- **Christian Andresen:** Permafrost-hydrology MIP
- **Erin Trochim:** Surface water analysis for pan-Arctic permafrost

Soil data hackathon: Jen Harden



- 12:00 – 1:00** **Lunch at the Marriott**
Provided by PCN/SEARCH and ISCN for registered participants
- 1:00 – 1:30** **Introduction of new research opportunities, ideas, projects, networks of interest to the PCN**
- 1:30 – 2:45** **1st Breakout**
- 2:45 – 3:00** **Coffee break**
- 3:00 – 4:15** **2nd Breakout**
- 4:15 – 5:00** **Wrap-Up and Outlook**

BREAKOUT TOPICS

1st Breakout

A. Data hacking: Recovering the long tail of soils data

All afternoon, organized by Jennifer Harden and Kathe Todd-Brown, details can be found here:
<http://iscn.fluxdata.org/event/hackathon2017/>

B. Expert assessment for subsea permafrost and related emissions (Ben Abbott/Jennifer Frederick)

C. Thermokarst: what have we done, what do we know, where are we going (Merritt Turetsky, Guido Grosse)

D. Bottom-up estimations of methane emissions (Claire Treat, McKenzie Kuhn)

E. Model benchmarking, model-data comparison, modeling toolbox (Kevin Schaefer, Irina Overeem, Charlie Koven, Christina Schädel)

Coffee Break

2nd Breakout

A. Continuing: data hacking: Recovering the long tail of soils data

F. Thaw-induced changes to the permafrost microbiome and the functional implications (Jessica Ernakovich)

G. Bottom-up CO₂ flux synthesis (Ted Schuur, Eugenie Euskirchen, Marguerite Mauritz)

H. Organizing validation data for remote sensing products (Kevin Schaefer)

I. Surface water analysis for pan-Arctic permafrost (Erin Trochim, Christian Andresen)