

# Research Station IPGG “Samoylov Island” - 5 years of Russian-German Cooperation

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# Scientific research station IPGG “Samoylov Island”

Web-site: [samoylov-island.ru](http://samoylov-island.ru)



The station supports multidisciplinary arctic research:

- permafrost studies (geological, geomorphological, soil studies, geophysics);
- greenhouse gas emission;
- climate change;
- tundra biodiversity;
- Lena delta hydrology

...

Russian-German expedition “Lena Delta” - main user of the station.

Station is included into INTERACT as joint IPGG-AWI unit.

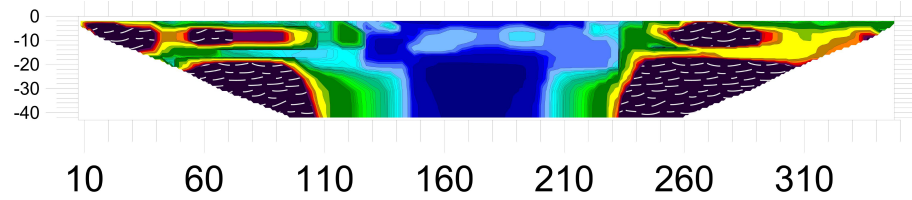
Other data networks: GTN-P, FLuxNet...





# 2014

## First steps: joint studies and life activities



# 2016

## Sharing experience

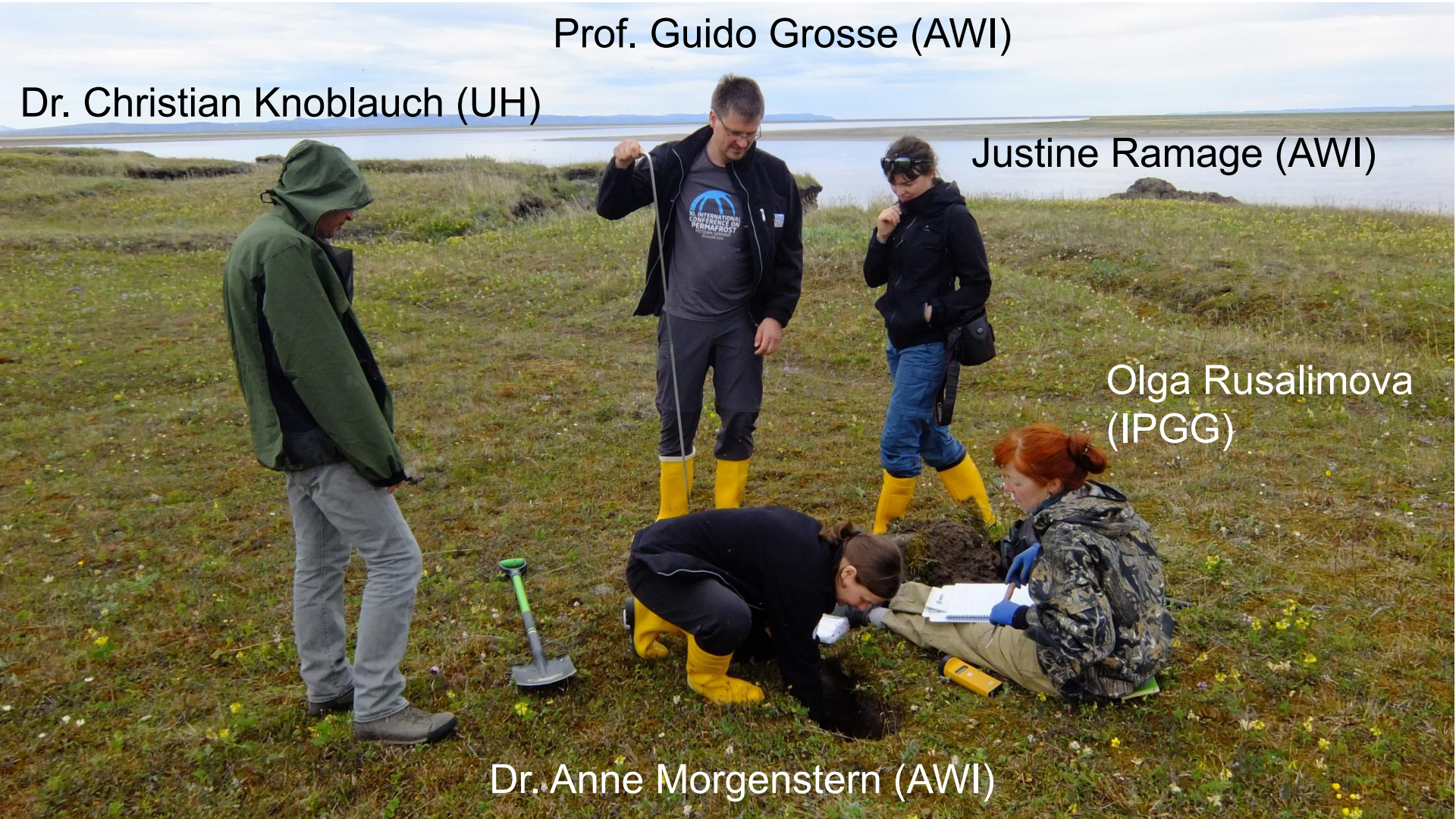
Prof. Guido Grosse (AWI)

Dr. Christian Knoblauch (UH)

Justine Ramage (AWI)

Olga Rusalimova  
(IPGG)

Dr. Anne Morgenstern (AWI)



# 2018 Collaboration in progress

Dr. Nikolay Mikhaltsov (IPGG)

Dr. Mattias Fuchs (AWI)



2019

## Russian-German Expedition “Lena-2019”

AWI, IPGG, AARI, MPI, ...



## Methane emission from ponds

Dr. Lars Kurzbach (Uni Hamburg)

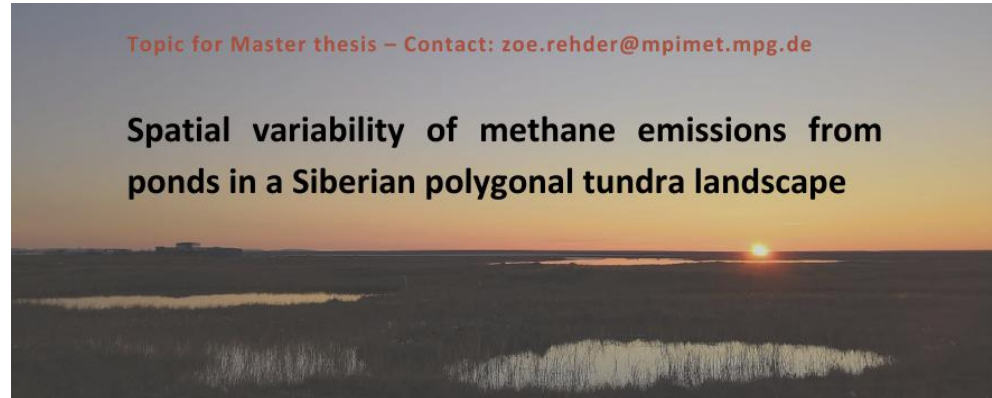
PhD cand. Zoe Rehder (Max-Planck  
Institute for Meteorologie)

Dr. Natalia Yurkevich (IPGG)

Anna Zaplavnova (IPGG)

Topic for Master thesis – Contact: [zoe.rehder@mpimet.mpg.de](mailto:zoe.rehder@mpimet.mpg.de)

Spatial variability of methane emissions from  
ponds in a Siberian polygonal tundra landscape

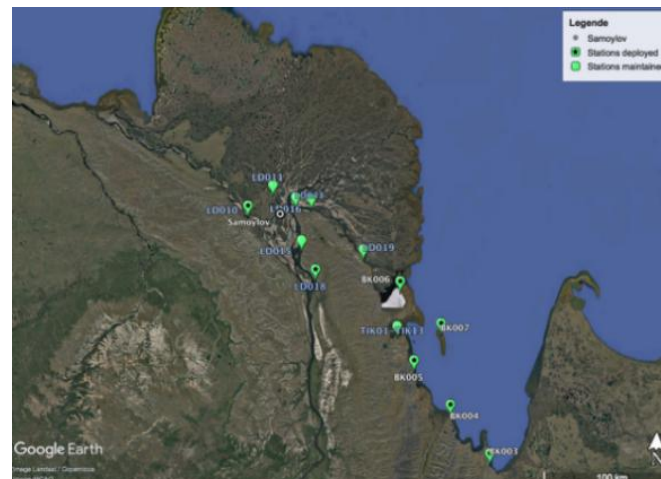


## Selsmicity and neOtectonics of the LAptev sea region (SIOLA)

AWI/IORAS/GSYB/GFZ/UPotsdam

Prof. Wolfram Geissler (AWI)

Dr. Anton Duchkov (IPGG)



## Goals:

- elaboration and realization of interdisciplinary studies program;
- support of international research teams;
- monitoring organization and maintaining;
- collaboration with scientific and educational organizations in the field of joint projects, student practices, etc.







## Challenges:

- equipment depreciation;
- underuse of the station and its equipment in winter period;
- limited transport facilities;
- need for formality clarification.

# Nearest plans:

- enlarge and make actual the scientific equipment

- develop full-year monitoring systems

- gather all-purpose data

- enhance a transport accessibility with

- support educational activities

-

**Water purification system**



## DNA Sequencer



## MTU



# Nearest plans:

- enlarge and make actual the scientific equipment
- **develop full-year monitoring systems**

- gather all-purpose data

- enhance a transpo

- support educationa

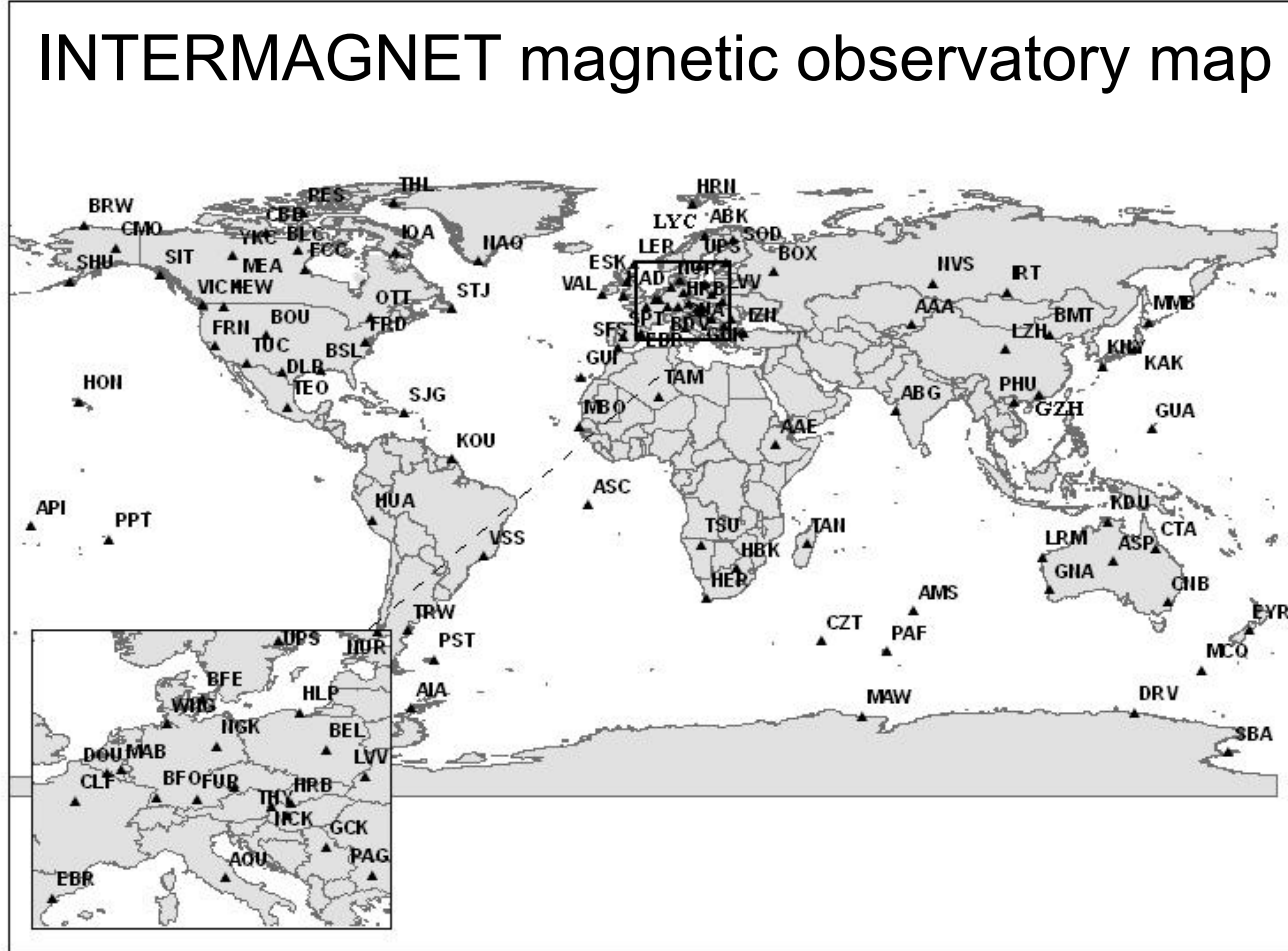
- arrange formalities

- magnetic observatory

- temperature profiler

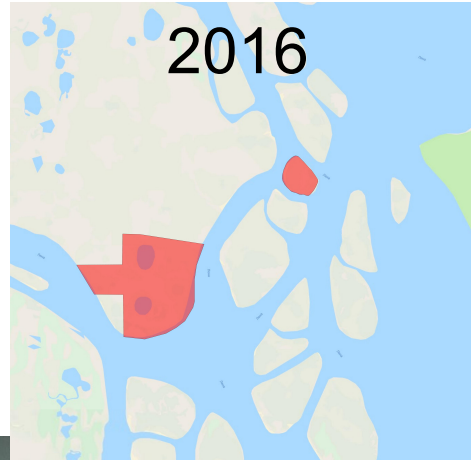
- cloud radar

- new temprature boreholes

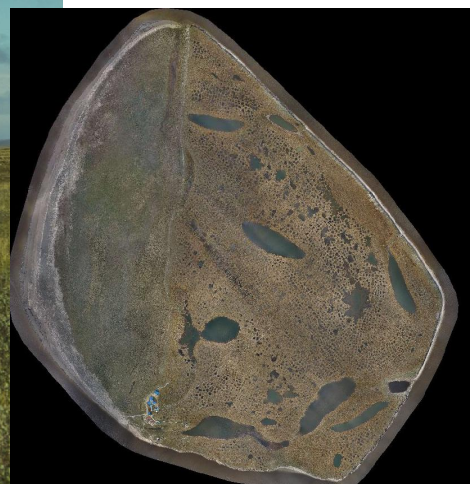


# Nearest plans:

- enlarge and make actual the scientific equipment
- develop full-year monitoring systems
- gather all-purpose data

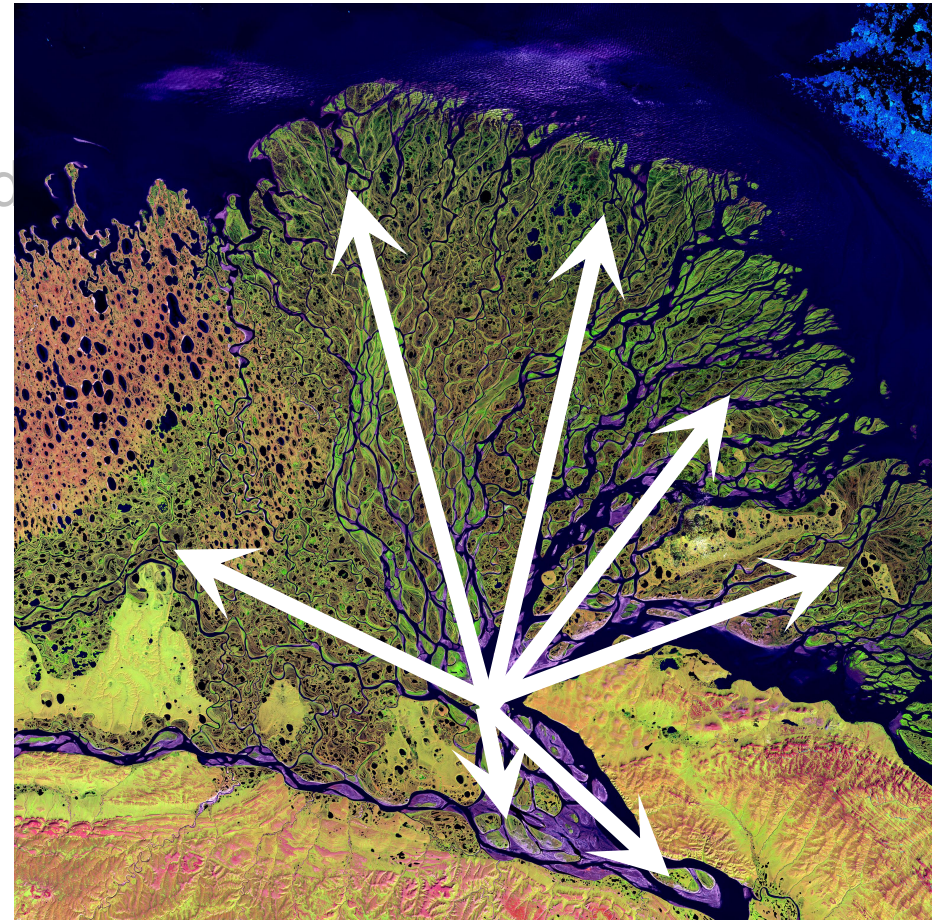


- aerial imagery
- DEM
- vegetation map
- monitoring data



## Nearest plans:

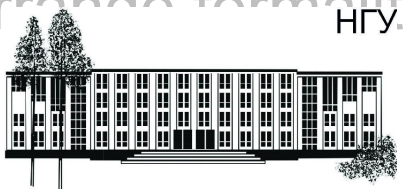
- enlarge and make actual the scientific equipment
- develop full-year monitoring systems
- gather all-purpose data
- enhance a transport accessibility within the delta



# Nearest plans:

- enlarge and make actual the scientific equipment
- develop full-year monitoring systems
- gather all-purpose data
- enhance a transport accessibility within the delta
- **support educational activities**

- arrange formalities (permission, data transfer, etc)



Since 2016 -  
“School of polar  
geologists”

NSU



Since 2017 -  
Permafrost geology  
practice

EPFL



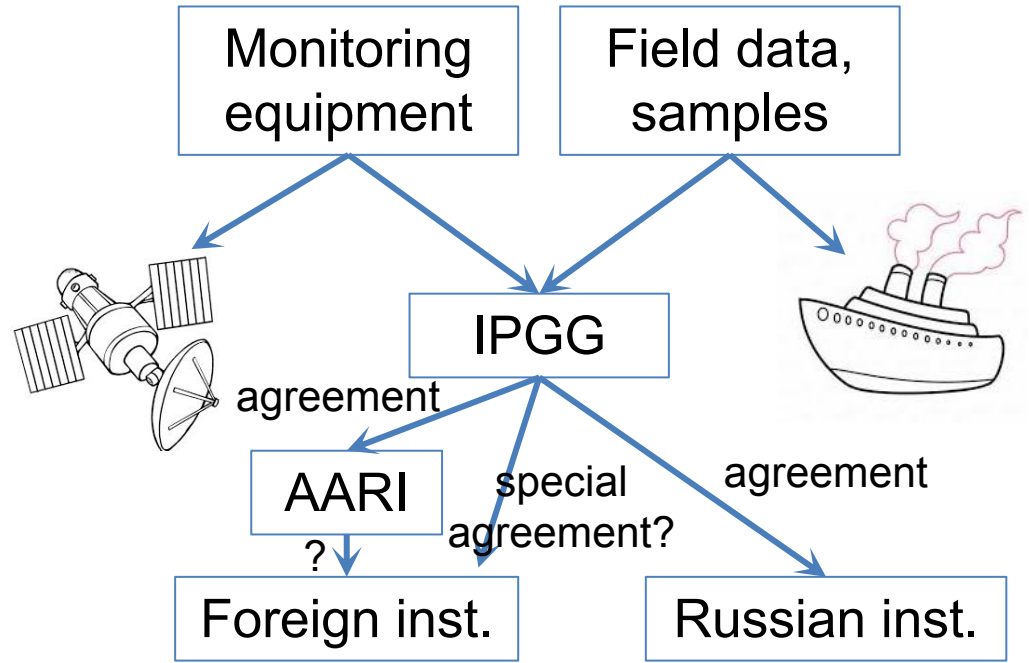
Since 2020 ? -  
Permafrost soil  
practice


UH

+ 2020 ? - educational birdwatching  
(ornithological) field trip in Lena delta

# Nearest plans:

- enlarge and make actual the scientific equipment
- develop full-year monitoring systems
- gather all-purpose data
- enhance a transport accessibility within the delta
- support educational activities
- **arrange formalities (permission, data transfer, etc)**



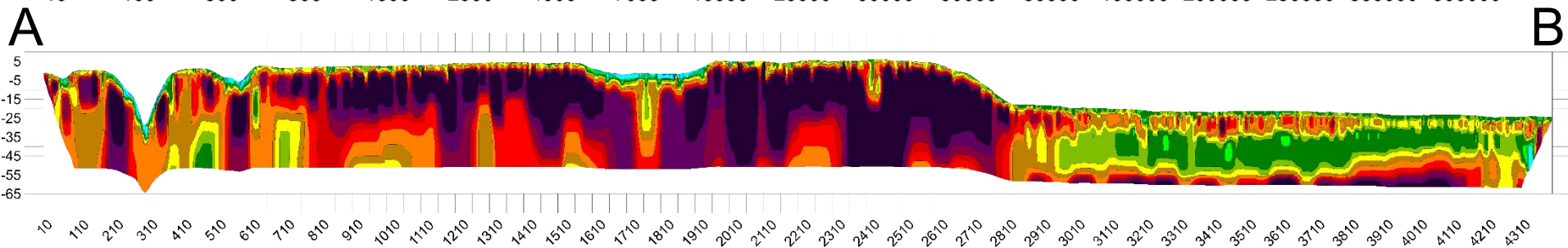
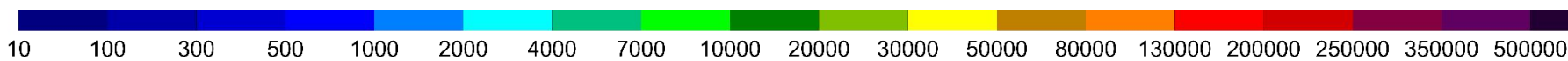
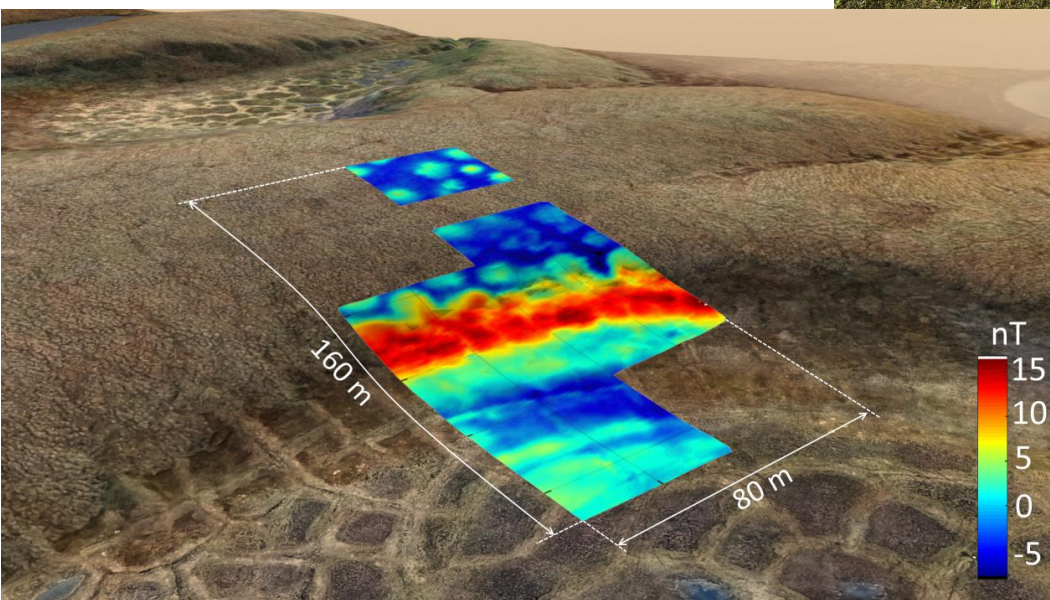
An aerial photograph of a vast, flat, brownish landscape, likely a tundra or a similar natural environment. The terrain is covered in low-lying vegetation, and numerous small, irregularly shaped ponds are scattered across the surface. The ponds vary in size and shape, some being elongated and others more circular. The overall color palette is dominated by earthy browns and greys, with the blue of the water providing a stark contrast. The text "Thank you for your attention" is centered in the middle of the image in a white, sans-serif font.

Thank you for your attention



# Multidisciplinary studies:

- geophysics
- soil science
- geobotany
- geology



2014  
First visit of  
IPGG research team  
to Samoylov Island



Surprise meeting

Leonid Tsibizov (IPGG) and Sonya Antonova (AWI) - old friends who have not seen each other since 2007