

Earth Cryosphere Institute SB RAS

YAMAL PENINSULA

*Climate, zonation, physiography,
geology, permafrost*

Pavel Orekhov

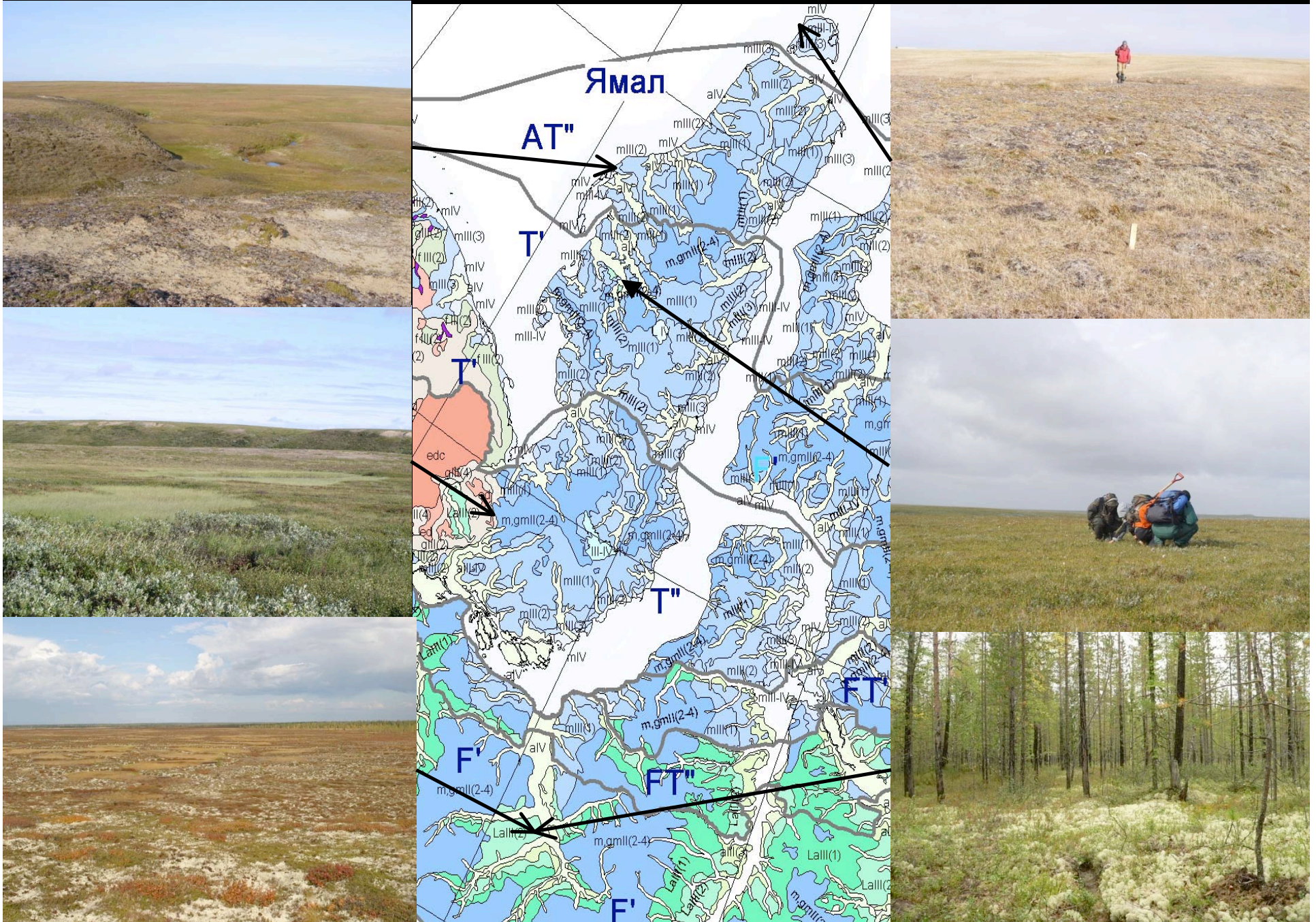
Marina Leybman

Ivan Gameev

Location of Yamal Transect



Bioclimatic zones and subzones in the north of West Siberia



Belyy

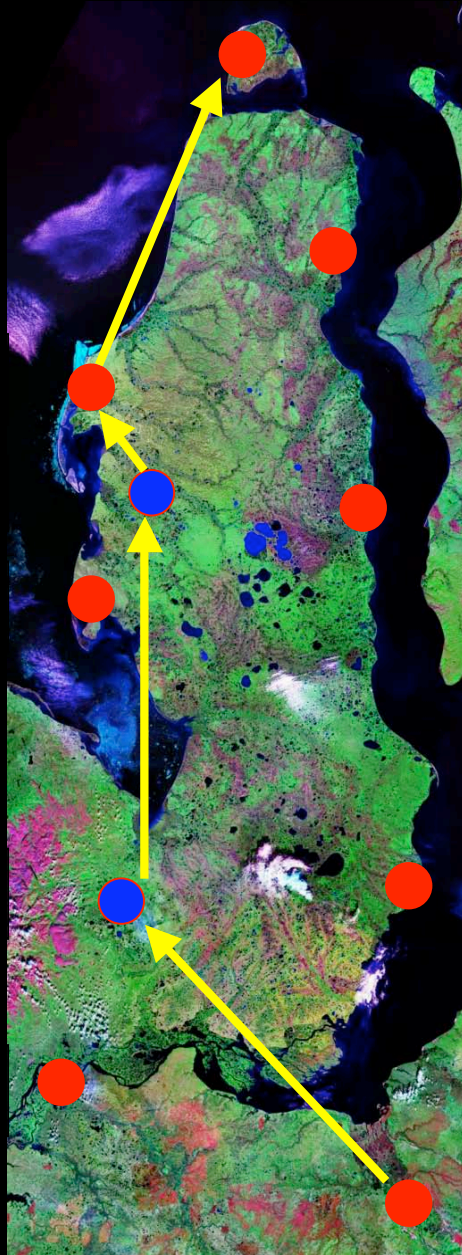
Kharasawey

Vaskiny Dachi

Marra-Sale

Laborovaya

Salekhard



Tambey

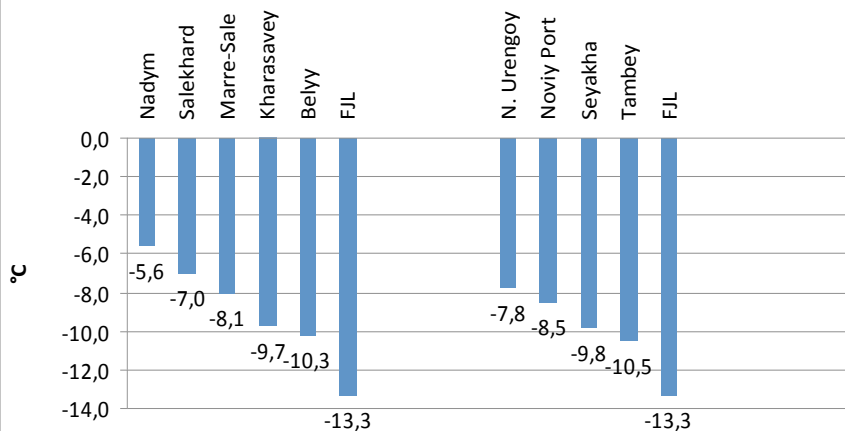
Seyakha

Novyj Port

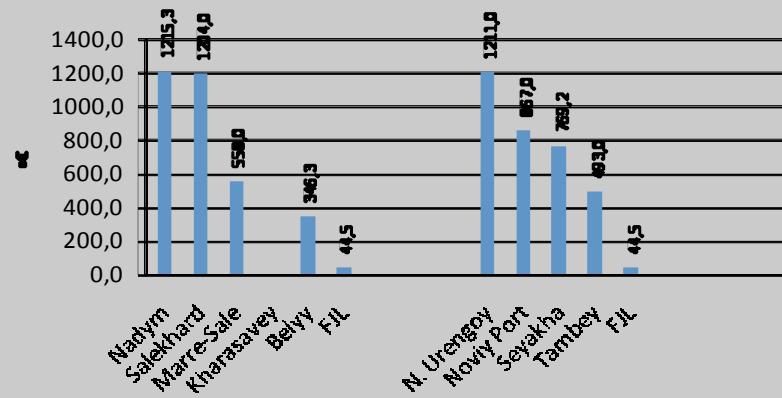
Nadym

Climate

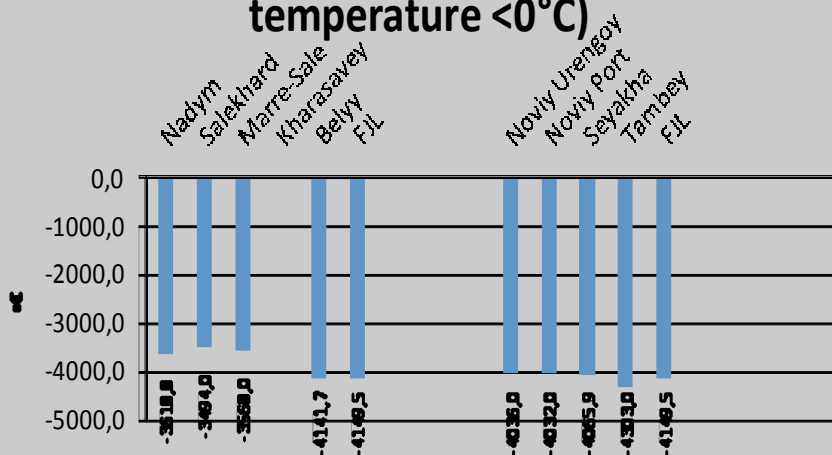
average annual air temperature, °C



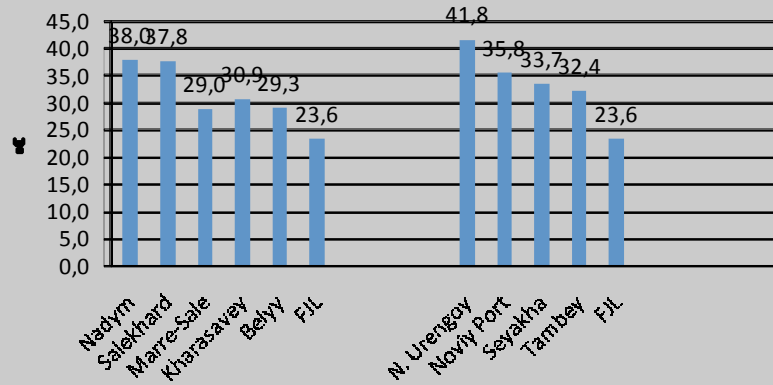
Thaw index (Sum of diurnal air temperatures >0°C)



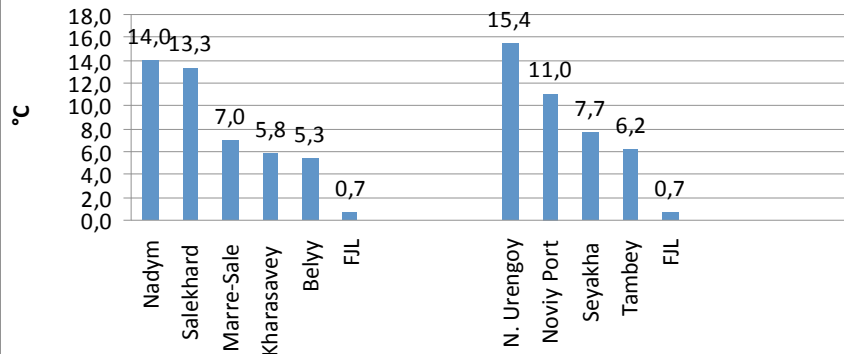
Freeze index (Sum of diurnal air temperature <0°C)



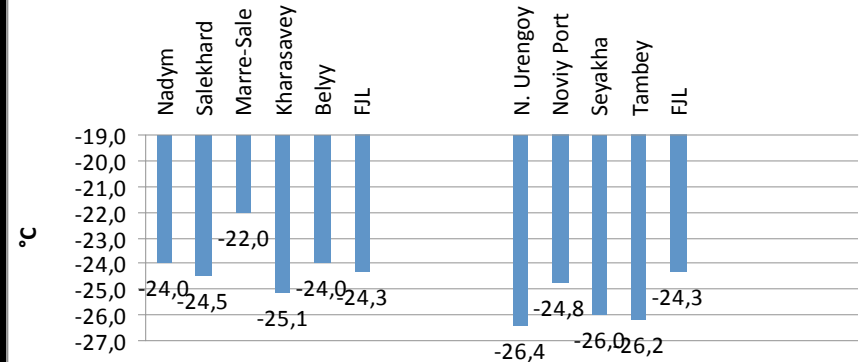
Average amplitude of mean monthly air temperature, °C



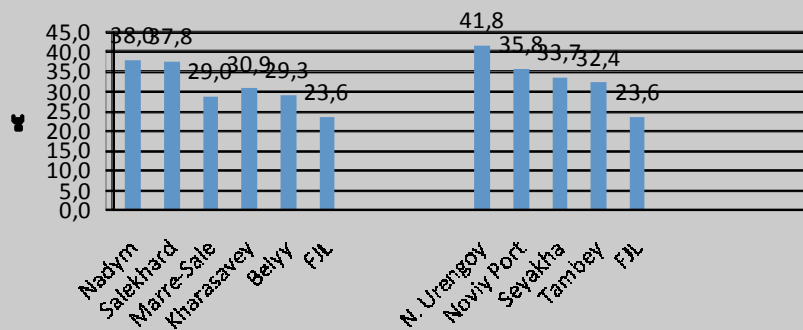
temperature of the warmest month, °C



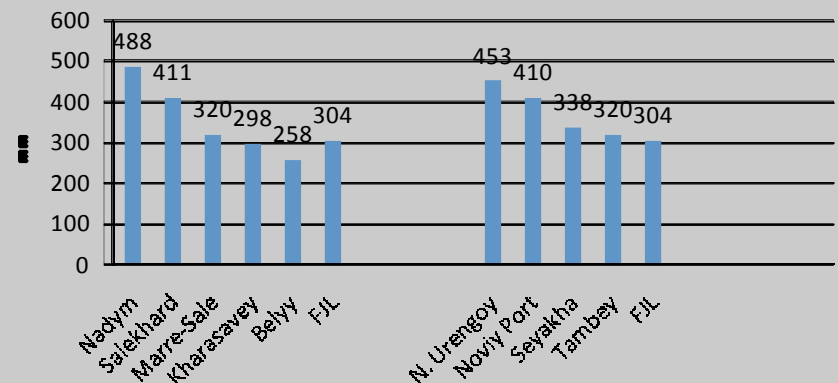
temperature of the coldest month, °C



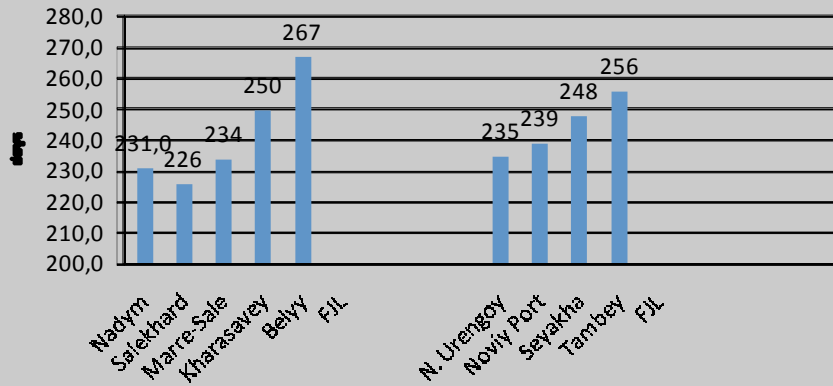
Average amplitude of mean monthly air temperature, °C



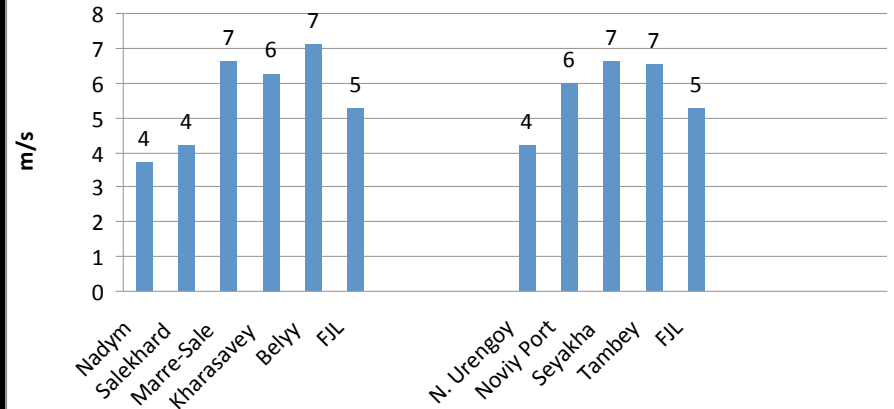
Annual precipitation, mm



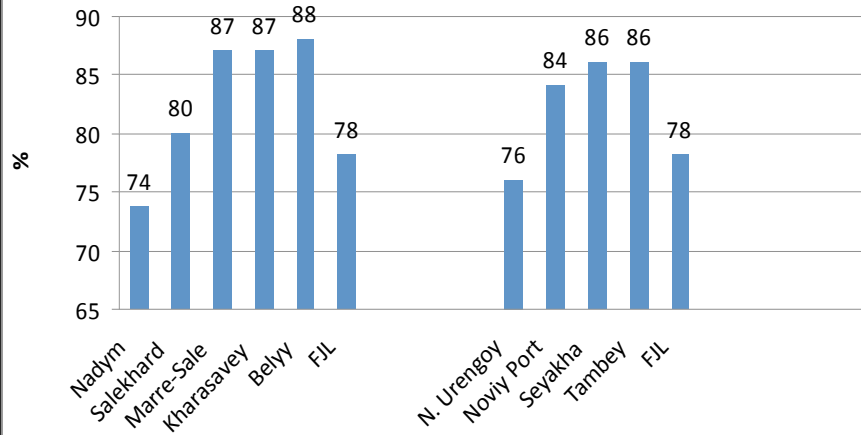
duration of snow cover



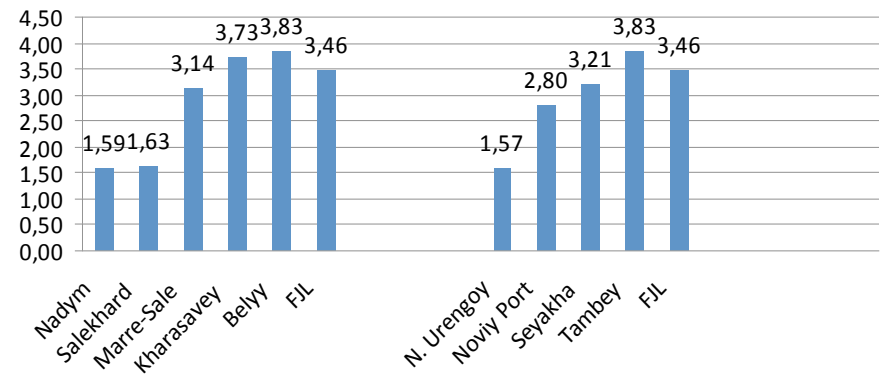
average annual wind speed



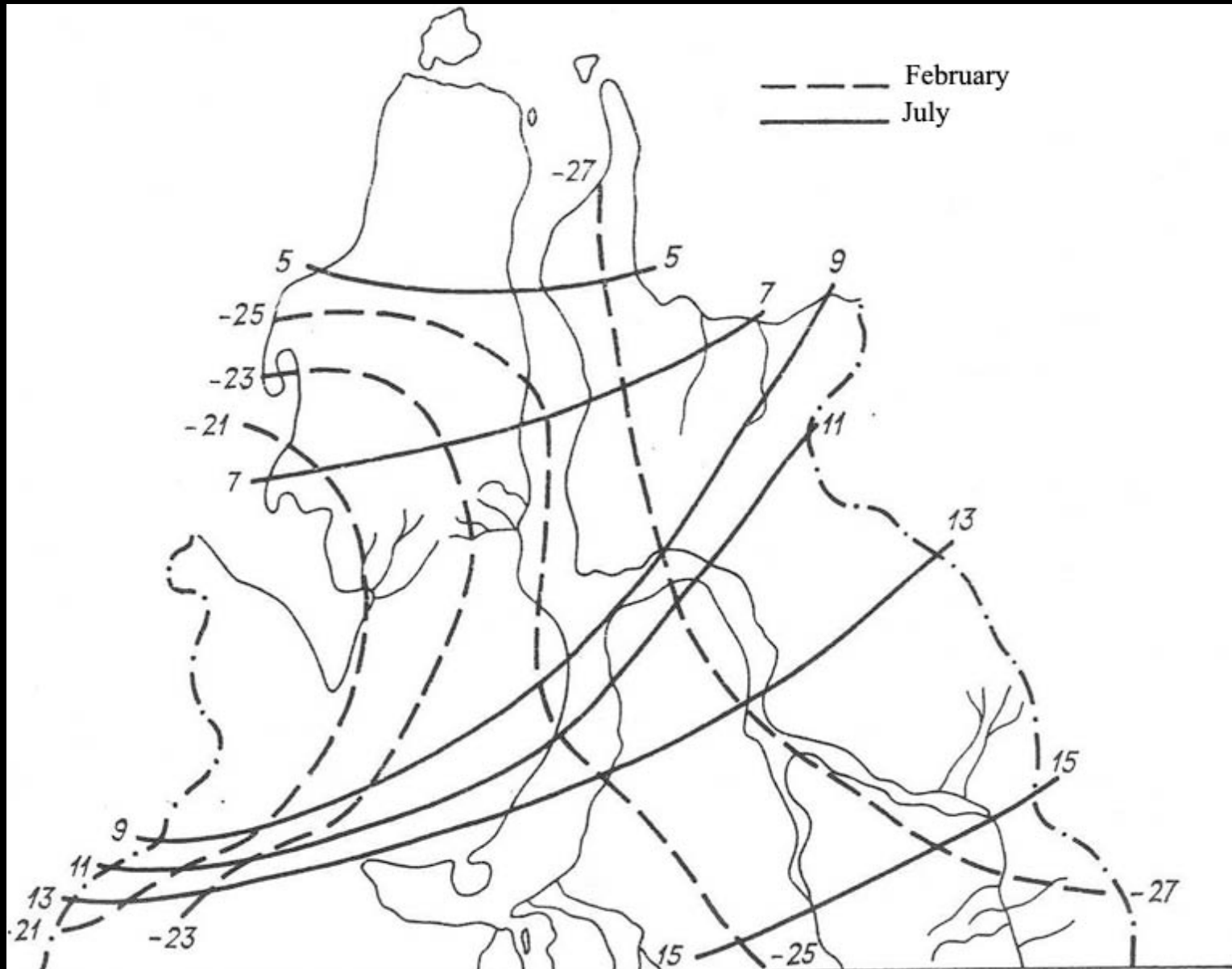
relative humidity



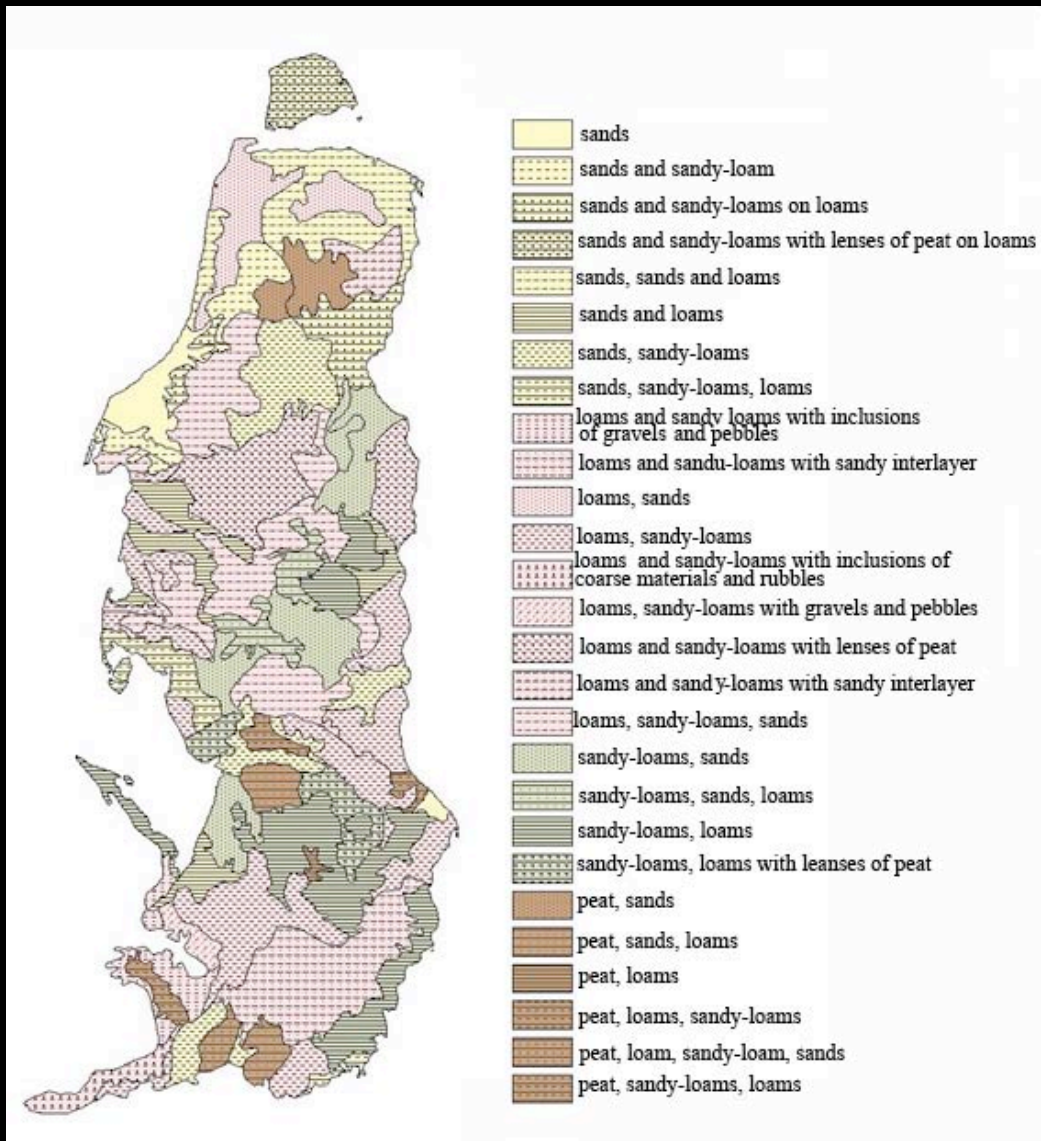
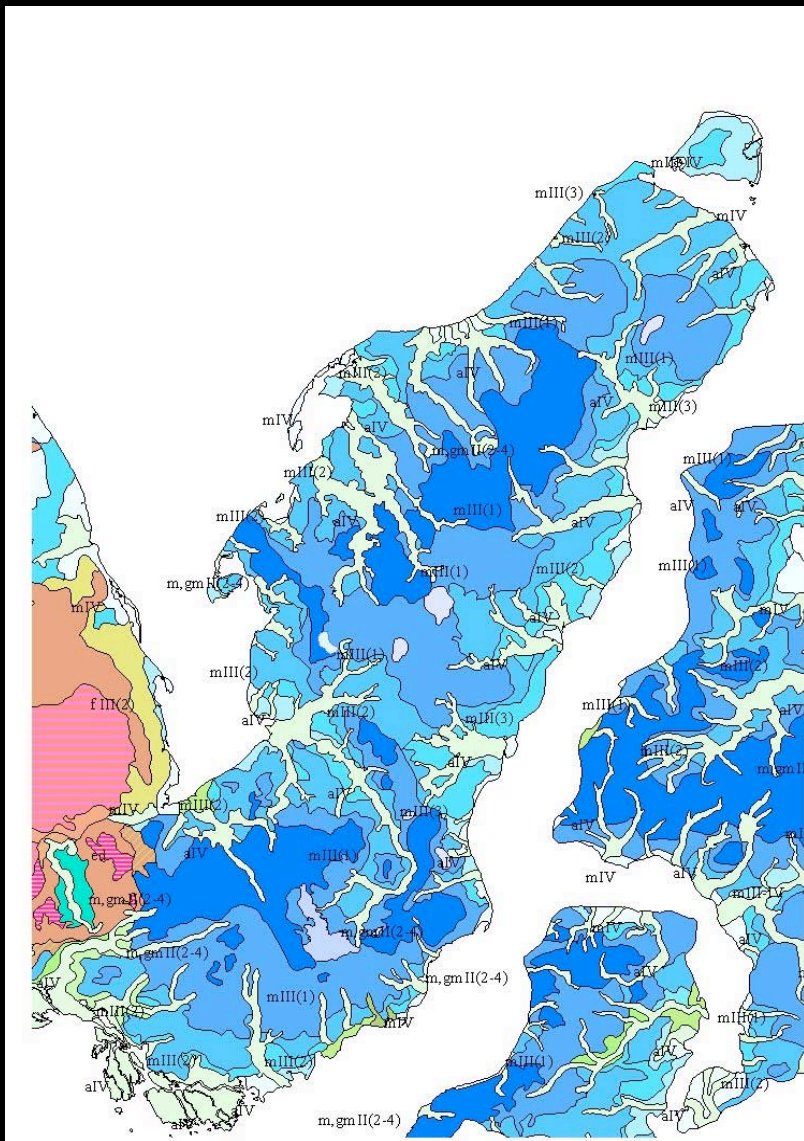
Visotsky-Ivanov humidification coefficient



pattern of air temperatures of the warmest and coldest months



Geology



- sands
- sands and sandy-loam
- sands and sandy-loams on loams
- sands and sandy-loams with lenses of peat on loams
- sands, sands and loams
- sands and loams
- sands, sandy-loams
- sands, sandy-loams, loams
- loams and sandy loams with inclusions of gravels and pebbles
- loams and sandy-loams with sandy interlayer
- loams, sands
- loams, sandy-loams
- loams and sandy-loams with inclusions of coarse materials and rubbles
- loams, sandy-loams with gravels and pebbles
- loams and sandy-loams with lenses of peat
- loams and sandy-loams with sandy interlayer
- loams, sandy-loams, sands
- sandy-loams, sands
- sandy-loams, sands, loams
- sandy-loams, loams
- sandy-loams, loams with lenses of peat
- peat, sands
- peat, sands, loams
- peat, loams
- peat, loams, sandy-loams
- peat, loam, sandy-loam, sands
- peat, sandy-loams, loams

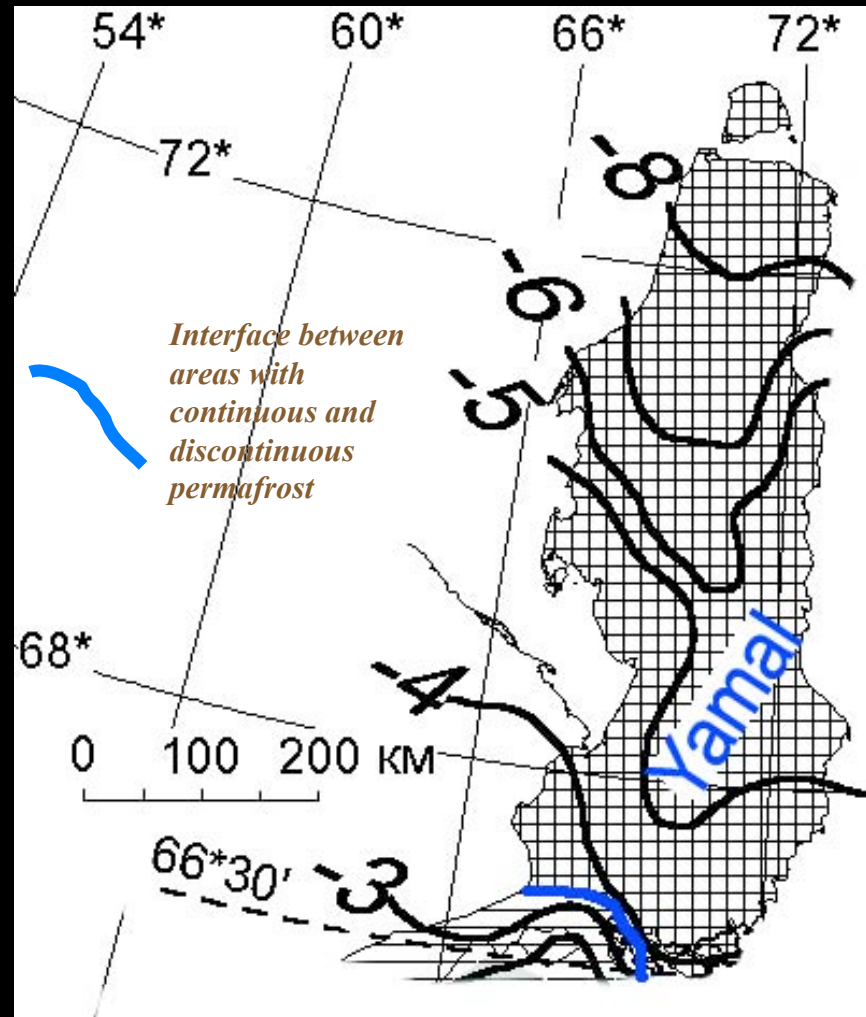
permafrost condition

THICKNESS AND DISTRIBUTION OF PERMAFROST

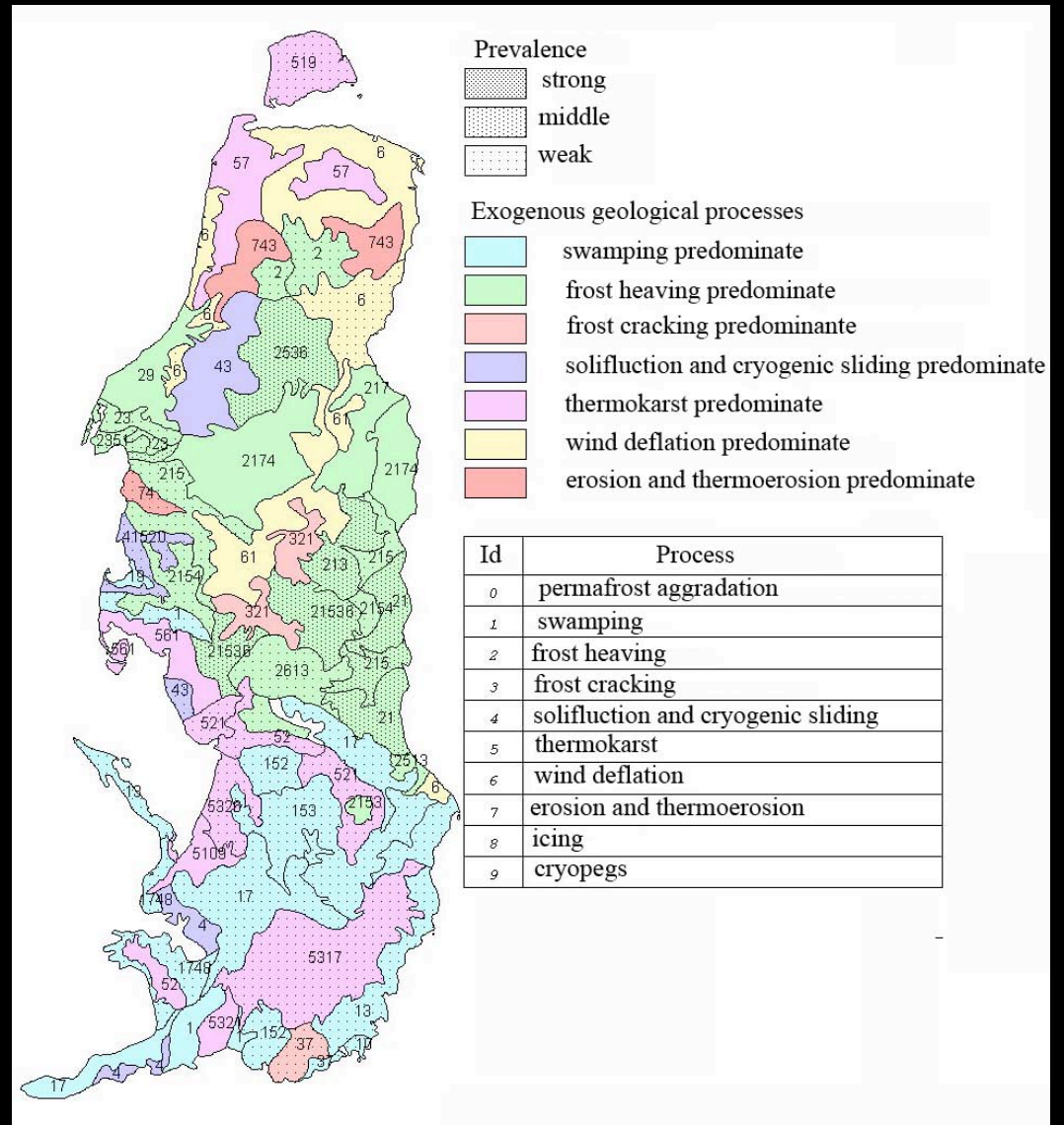
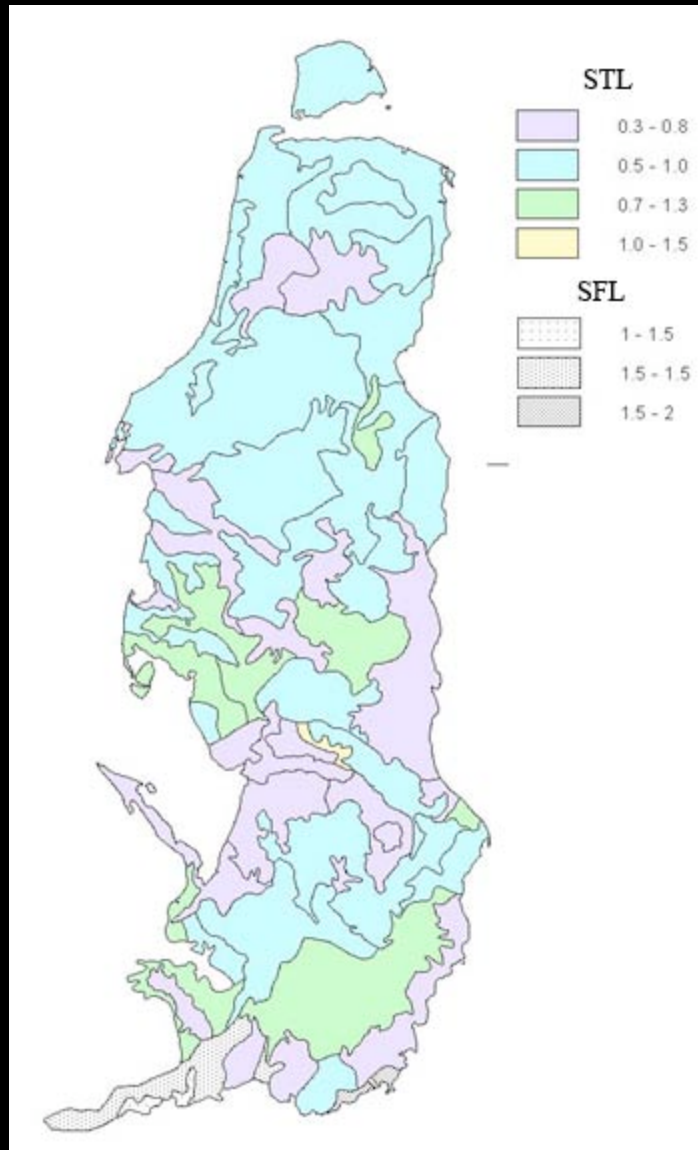


- 1 >100 m;
- 2 >300 m;
- 3 >400 m;
- 4 >500 m.

Ground temperature



Active layer and cryogenic and other surface processes



**Thank you for
your attention!**