

Arctic Polar Regional Climate Centre Network

Eurasian node

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Implementation of ArcRCC-N Eurasian node

Implementation of the **ArcRCC-N Eurasian node services** is conducted by a consortium of 4 Roshydromet institutions, i.e. similar to existing NEARCC:

- ❑ Arctic and Antarctic Research Institute (AARI), St.Petersburg, coordinator
- ❑ Main Geophysical observatory (MGO), St.Petersburg
- ❑ Russian Institute for Hydrometeorological information – World Data Center (RIHMI-WDC), Obninsk
- ❑ Hydrometcenter of Russia (RHMC)



Planned content for pan-Arctic bulletin (by the end of demo-phase)



1 Meteorological conditions in the Northern Polar Region

1.1 Large-scale atmospheric processes

1.2 Meteorological parameters

2. Ice conditions and processes in the Arctic Ocean

2.1 Ice extent, concentration, SoD

2.2 Coastal fast ice

2.3 Ice drift

2.4 Fram Strait discharge

3 Oceanography

3.1 Temperature /salinity

3.2 Sea level

3.3 Wind waves

4. Land processes based on CryoNet

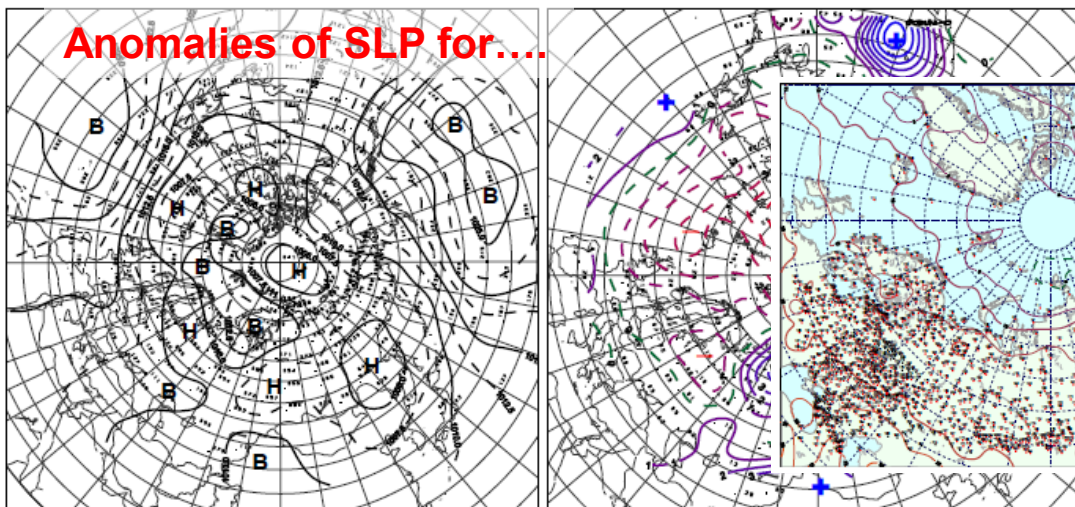
4.1 Glaciers

4.2 Permafrost

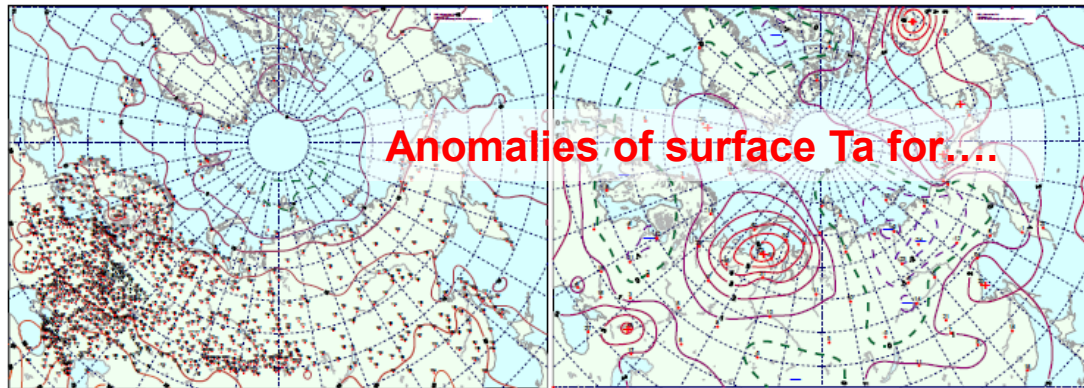
4.3 Rivers

1 Meteorological conditions in the Northern Polar Region

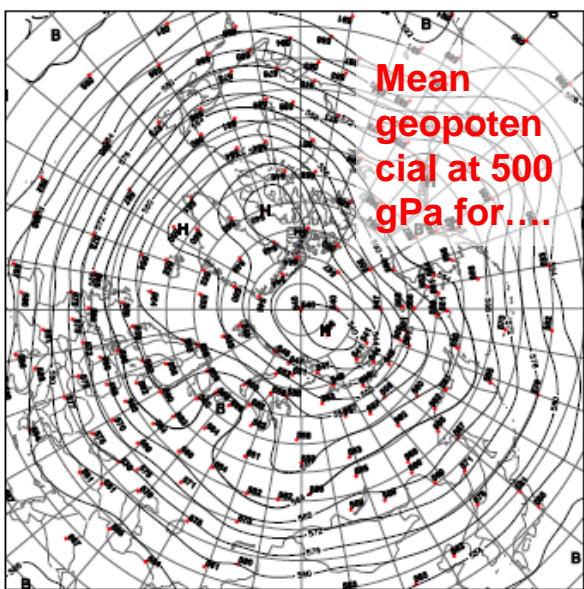
Anomalies of SLP for....



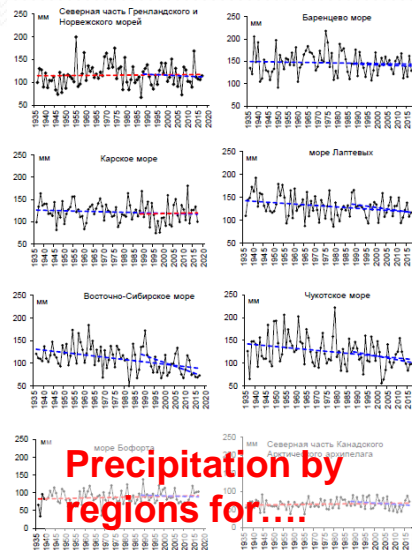
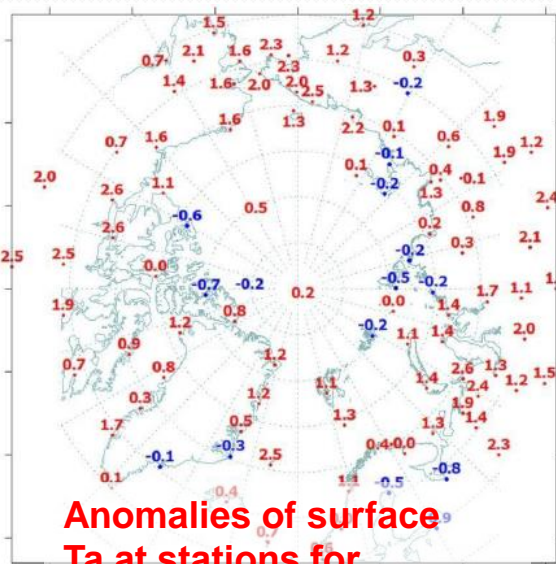
Anomalies of surface Ta for....



Mean geopotential at 500 gPa for....



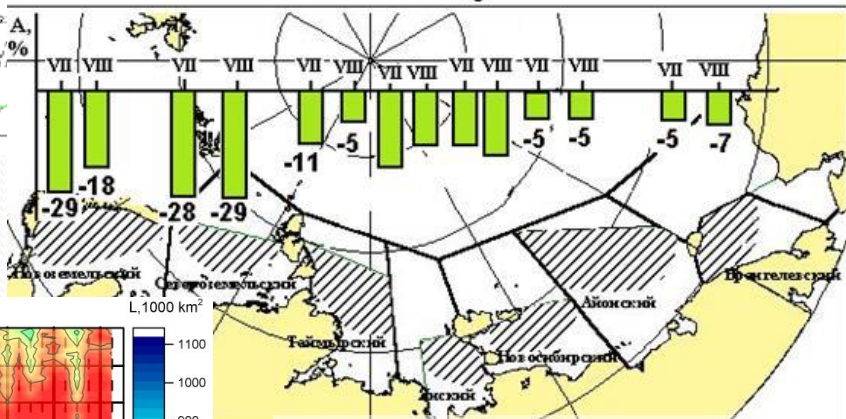
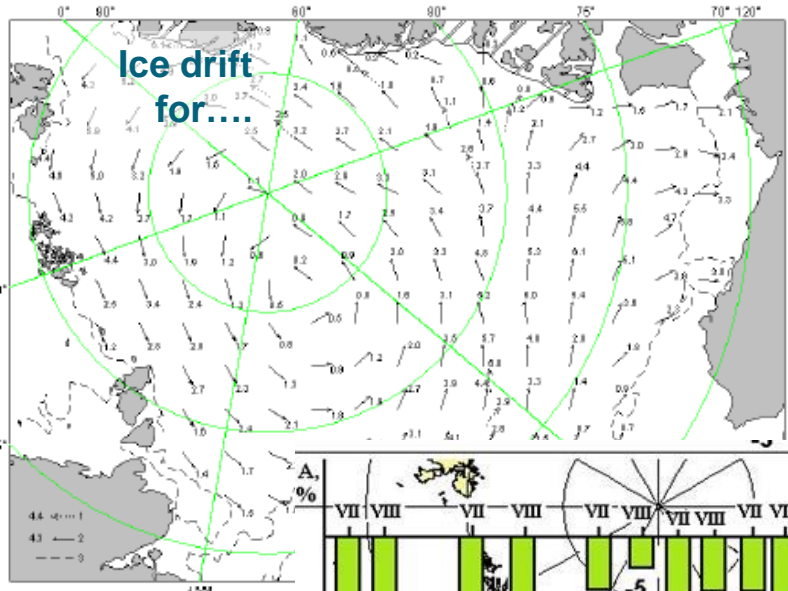
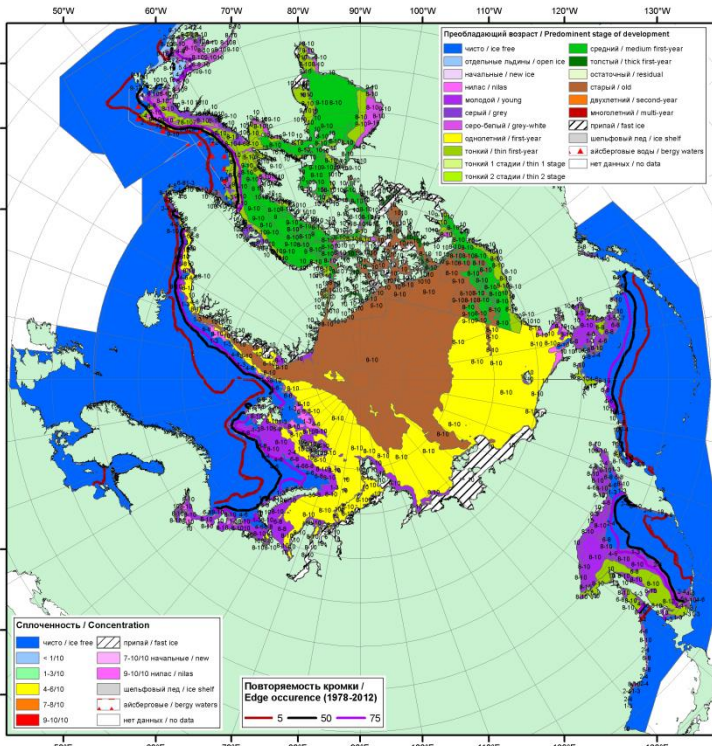
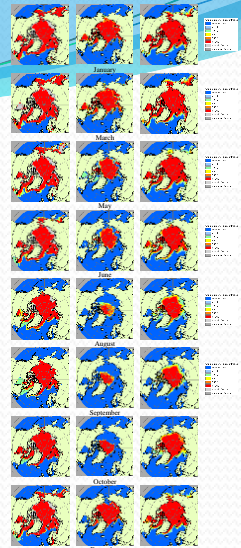
Anomalies of surface Ta at stations for....



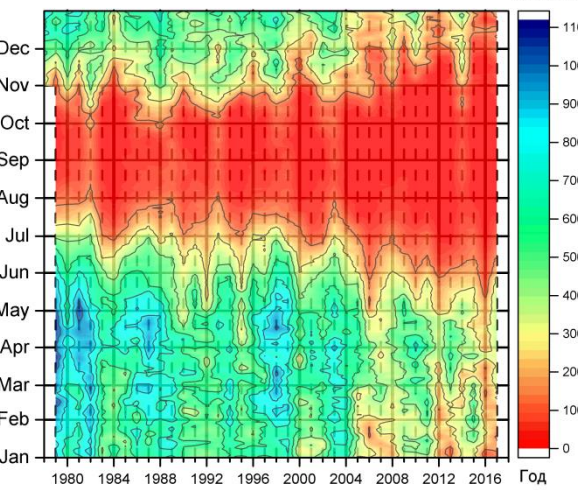
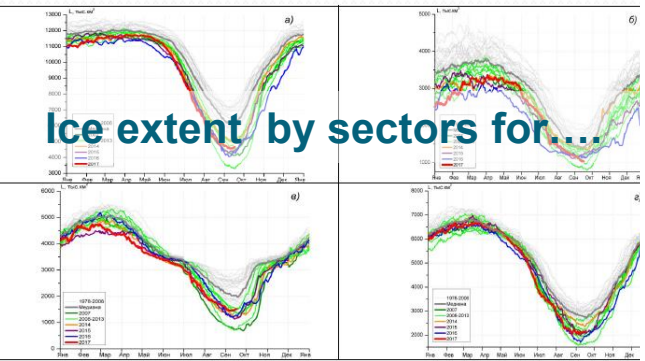
Precipitation by regions for....

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2 Ice conditions and processes in the Arctic Ocean

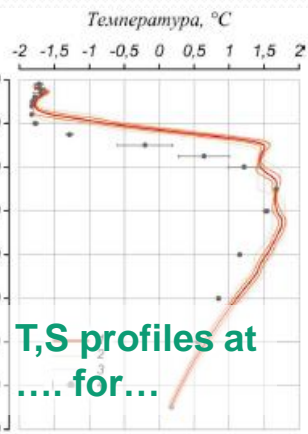
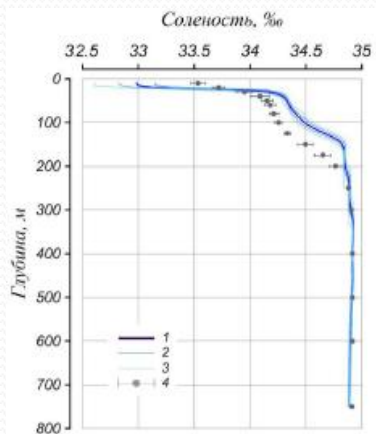
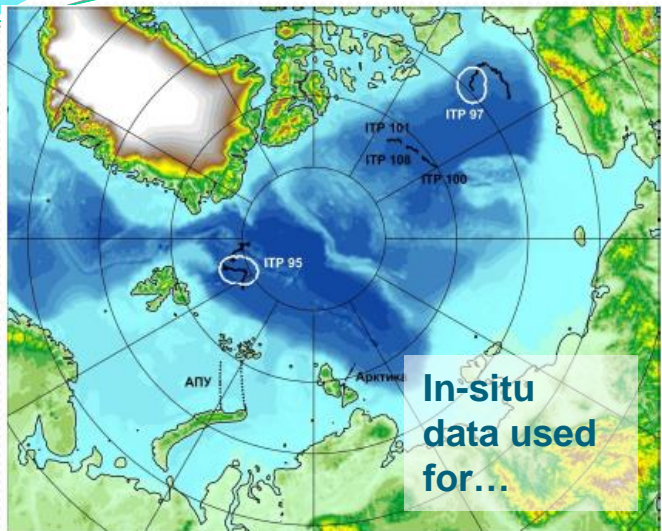


Ice conditions for....

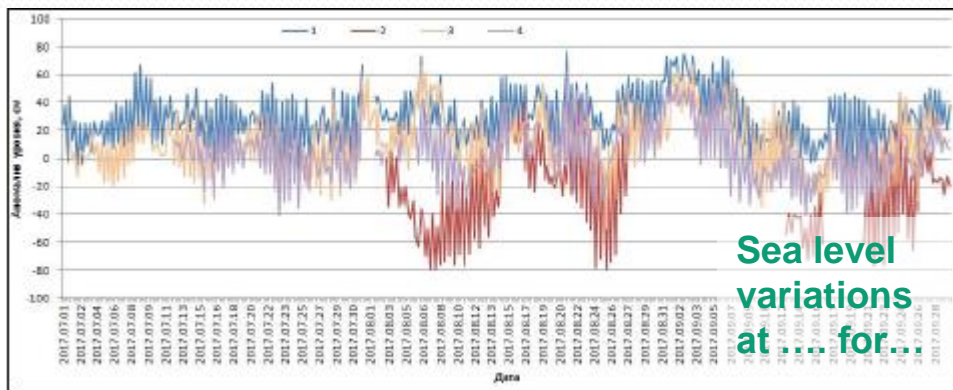


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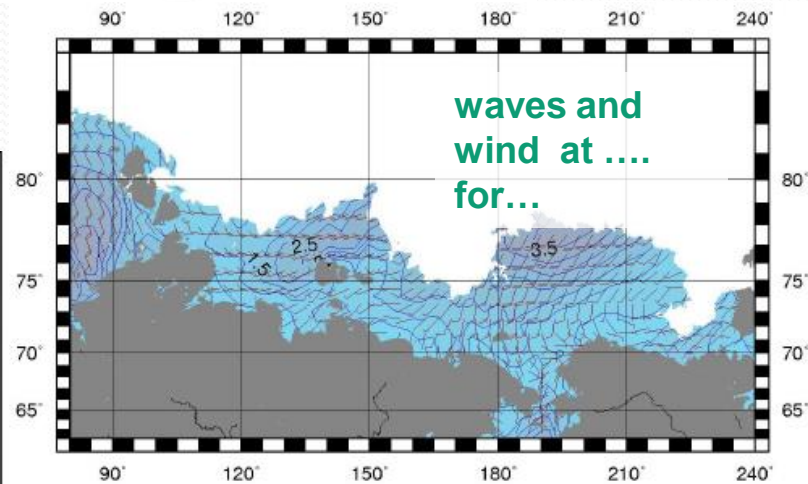
3 Oceanographic conditions in the Arctic Ocean



T,S profiles at ... for...



Sea level variations at ... for...



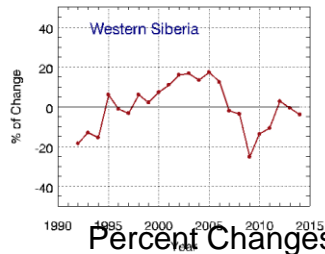
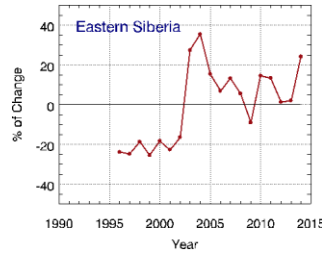
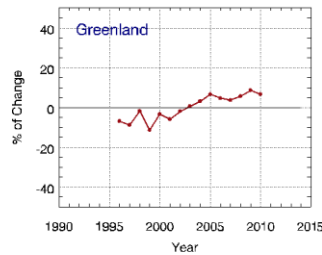
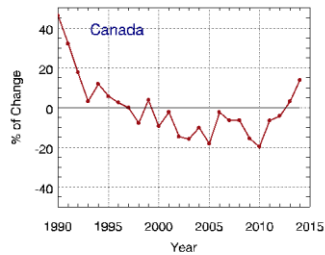
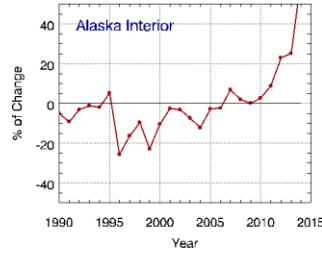
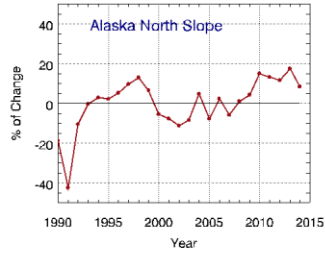
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4 Permafrost

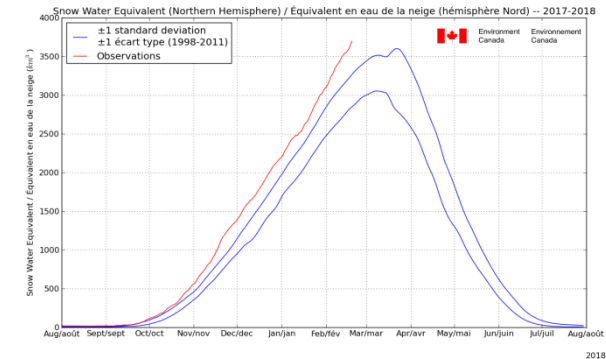
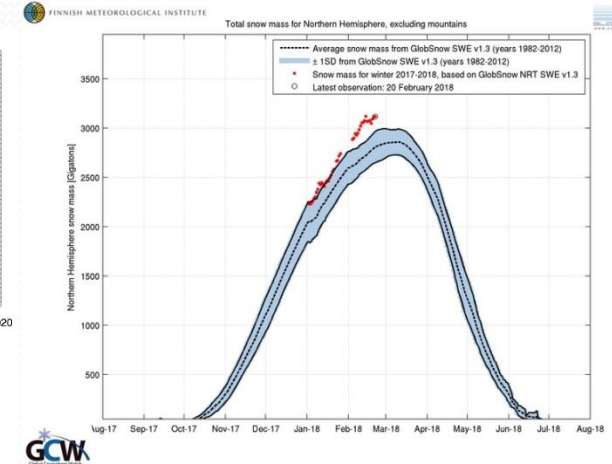
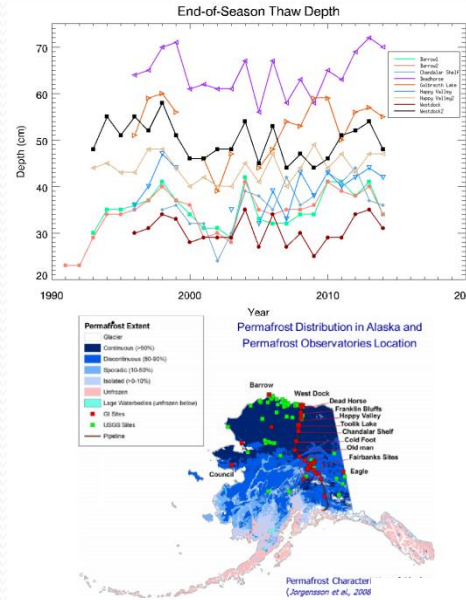


Global Cryosphere Watch

http://globalcryospherewatch.org/state_of_cryo/permafrost/



Region	Measurement Sites
Alaska North Slope	41
Alaska Interior	24
Canada	30
Greenland	3
Russia European North	5
Western Siberia	13
Eastern Siberia	25



Percent Changes in active layer thickness (ALT) relative to the 1991-2014 average for 7 different Arctic regions. The lower right table documents the populations of measurement sites used to create corresponding time series.

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Content by spheres /parameters

Sphere	Parameter	Periodicity	Presentation	Year
Meteorology	SLP	M, 3M, Y	chart, index	2018
	AT500	M, 3M, Y	chart, index	2019
	Tair	M, 3M, Y	chart, index	2018
	Precipitation	M, 3M, Y	chart	2018
	Freeze degrees Day Sum	M, 3M, Y	table	2020
	Snow extent	M, 3M, Y	chart	2020
	Dangerous phenomena (wind?)	M, 3M, Y	table	?
Sea Ice	Concentration/extent/edge	M, 3M, Y	chart, index	2018
	Old ice / Stages of development	M, 3M, Y	chart	2018
	Drift	M, 3M, Y	Chart	2019
	Fram Strait discharge	M, 3M, Y	Index	2020
	Fast ice thickness/width	M, 3M, Y	table	2020 ?
Ocean	T/S profiles	M, 3M, Y	graph	2020 ?
	Waves	M, 3M, Y	chart	2020 ?
	Level	M, 3M, Y	table	2020 ?
Land	Permafrost	3M, Y	Table	2020 ?
	Fresh-water ice	M, 3M, Y	Table	2020 ?
M – monthly, 3M – 3-monthly, Y – yearly				