

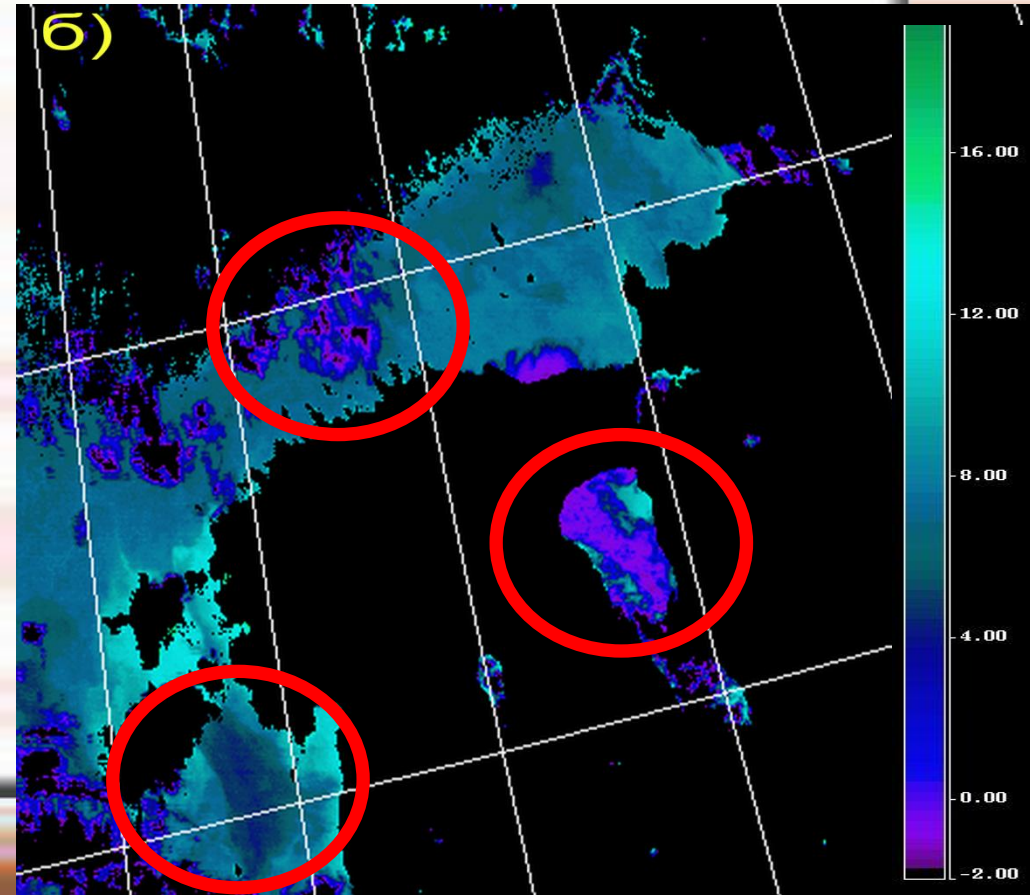
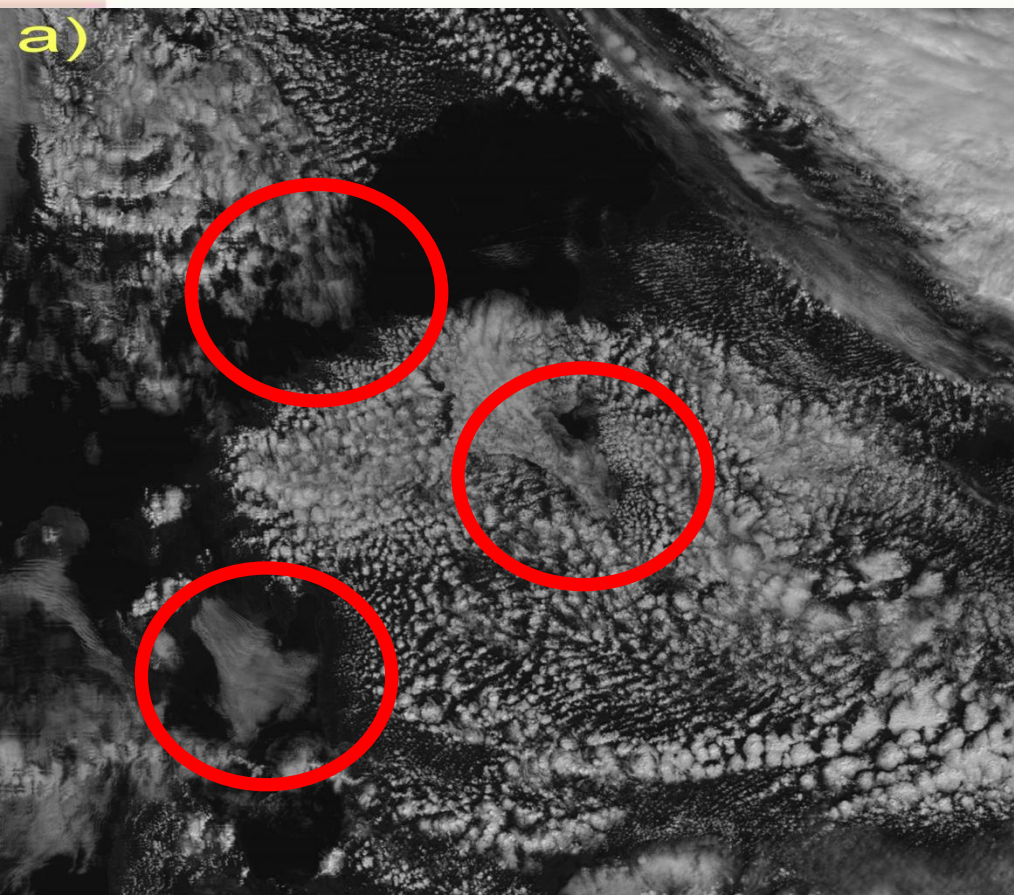
Satellite measurements of water surface temperature

Ekaterina Shcherbak, RSHU

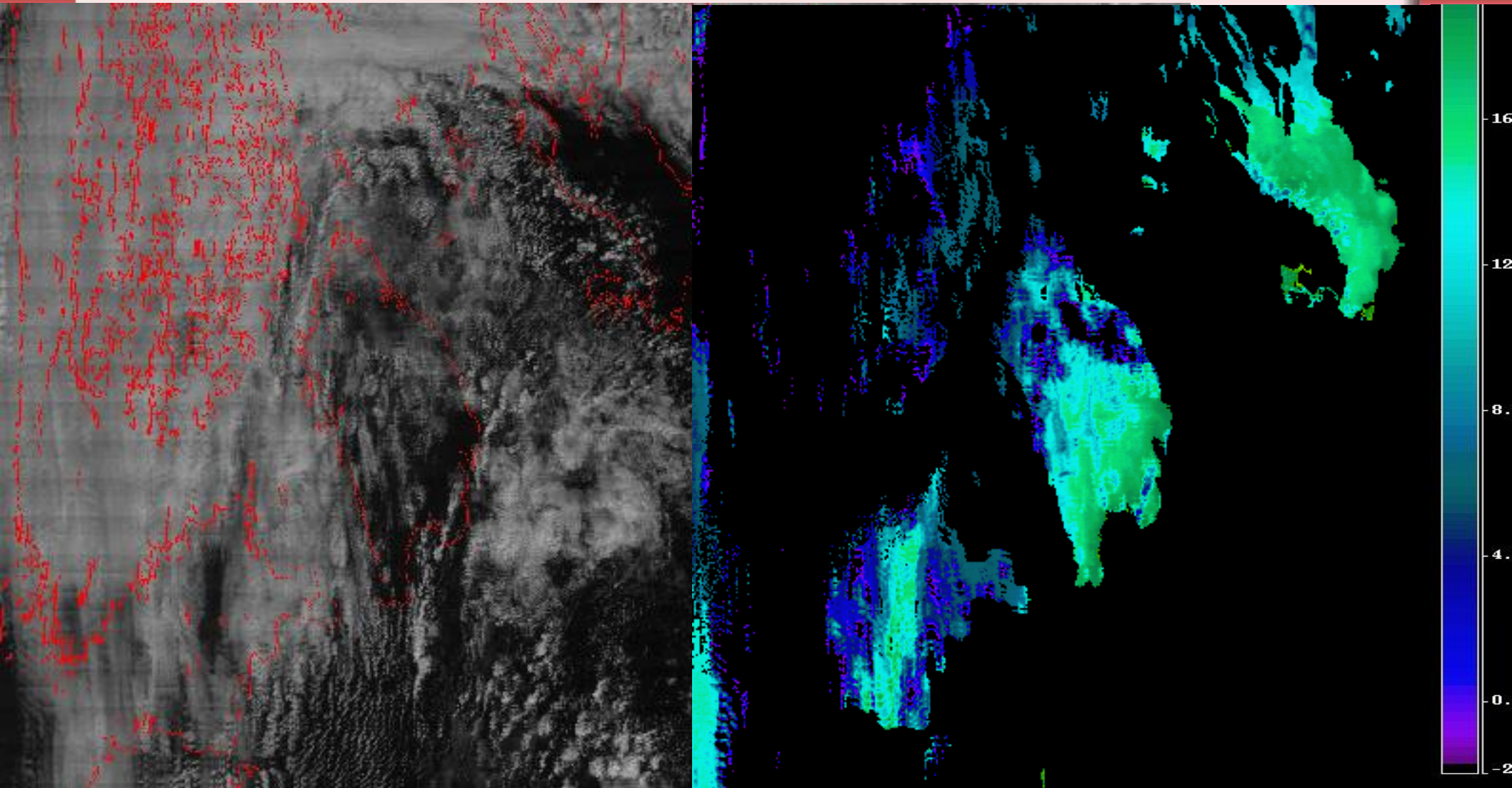
Possible errors in satellite measurements of water temperature:

- Inaccuracies in land-sea(water) mask
- Inaccuracies in cloud mask (due to high cloudiness)
- Possible dependency of brightness temperature on water transparency (especially in the case of intensive eutrophication)
- Possible dependency of brightness temperature on the low temperature inversion
- Wrong identifying of ice cover

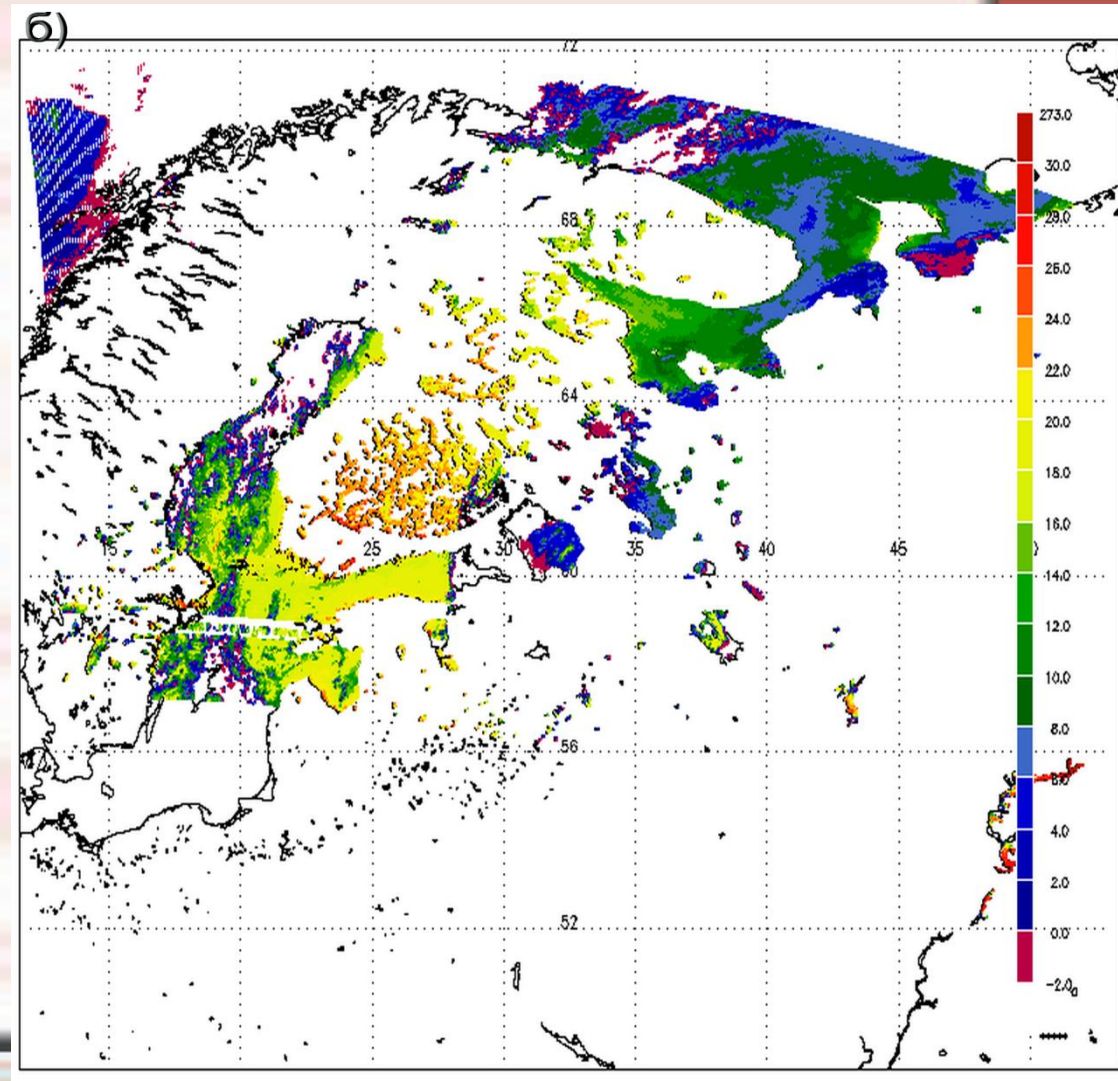
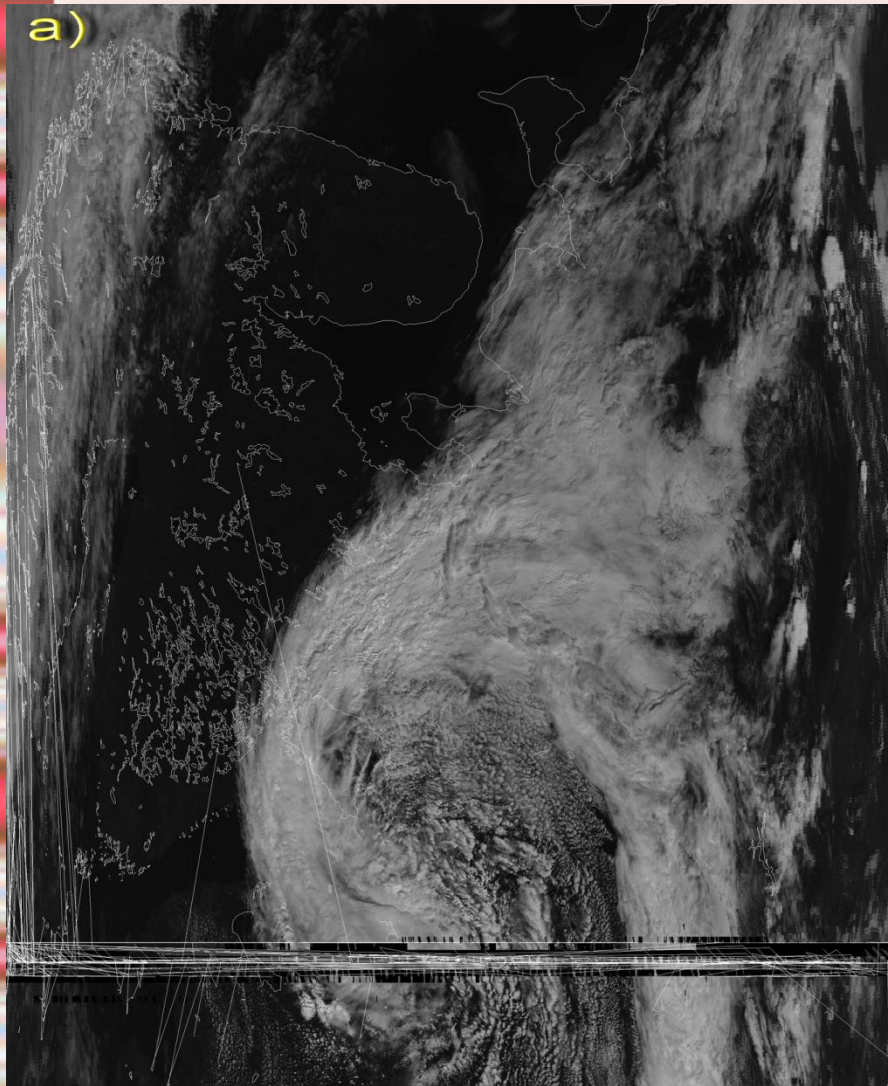
Problem due to high cloudiness



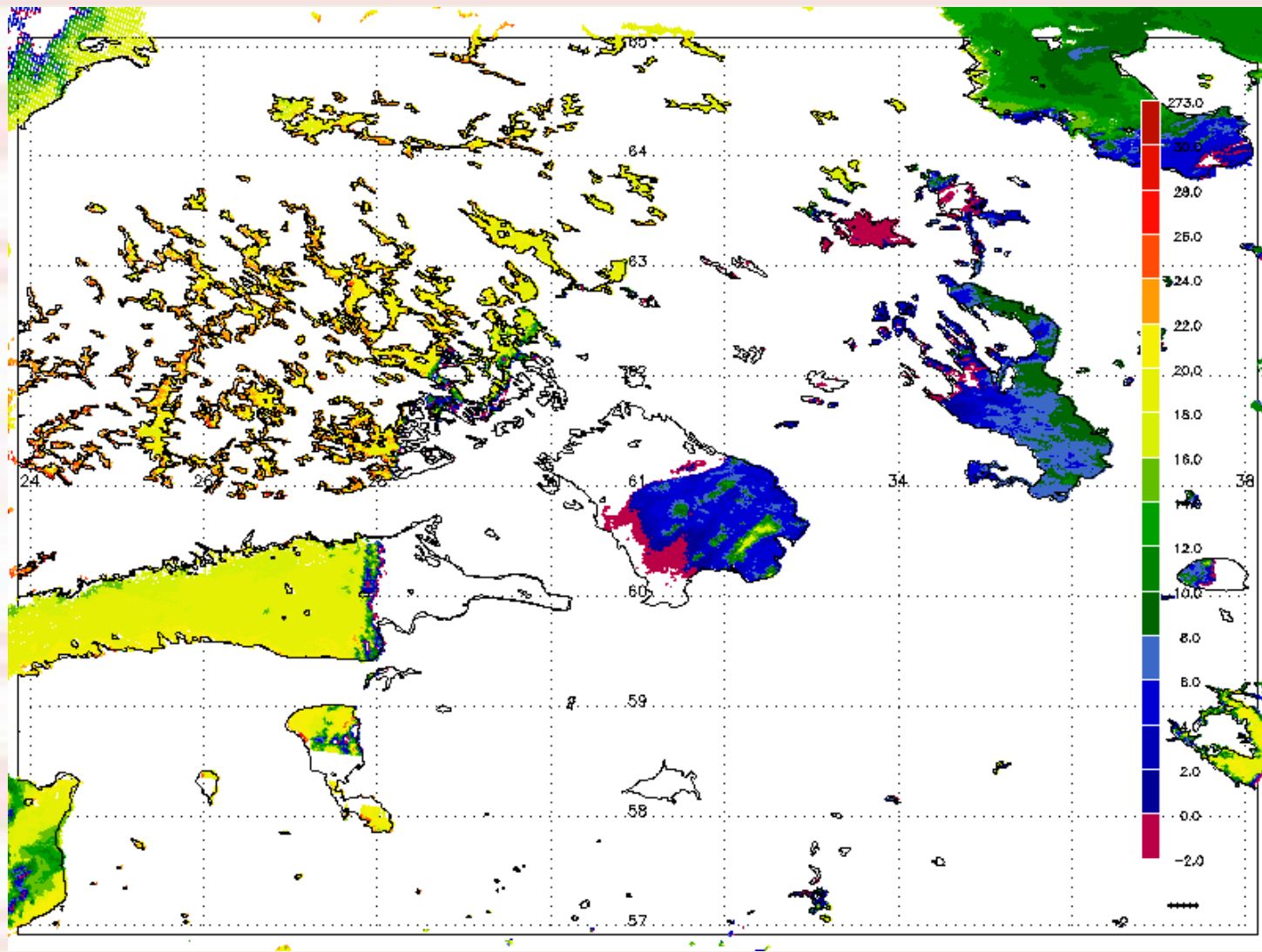
28.06.2006



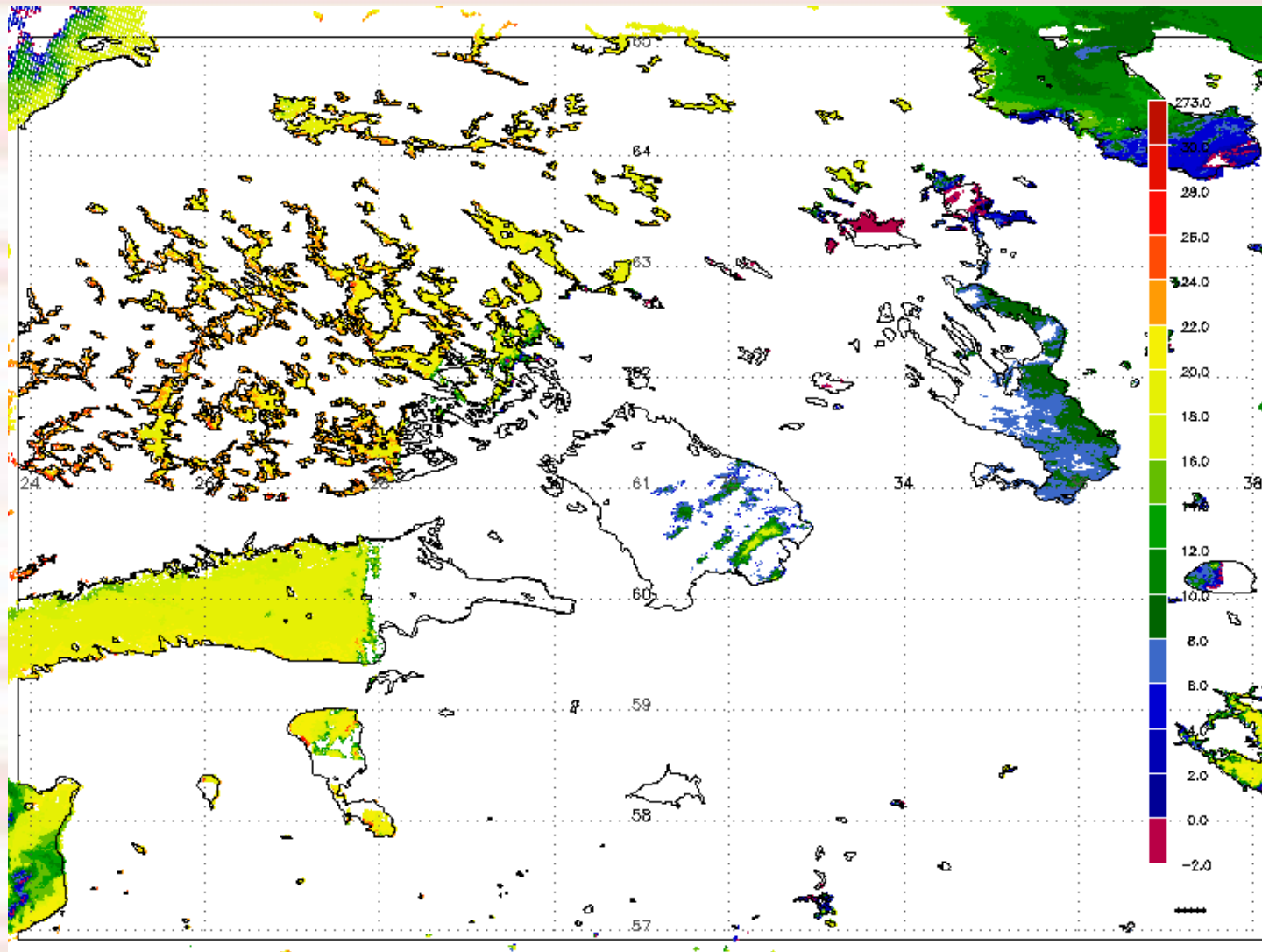
summer 17.07.2006



summer 17.07.2006



summer 17.07.2006



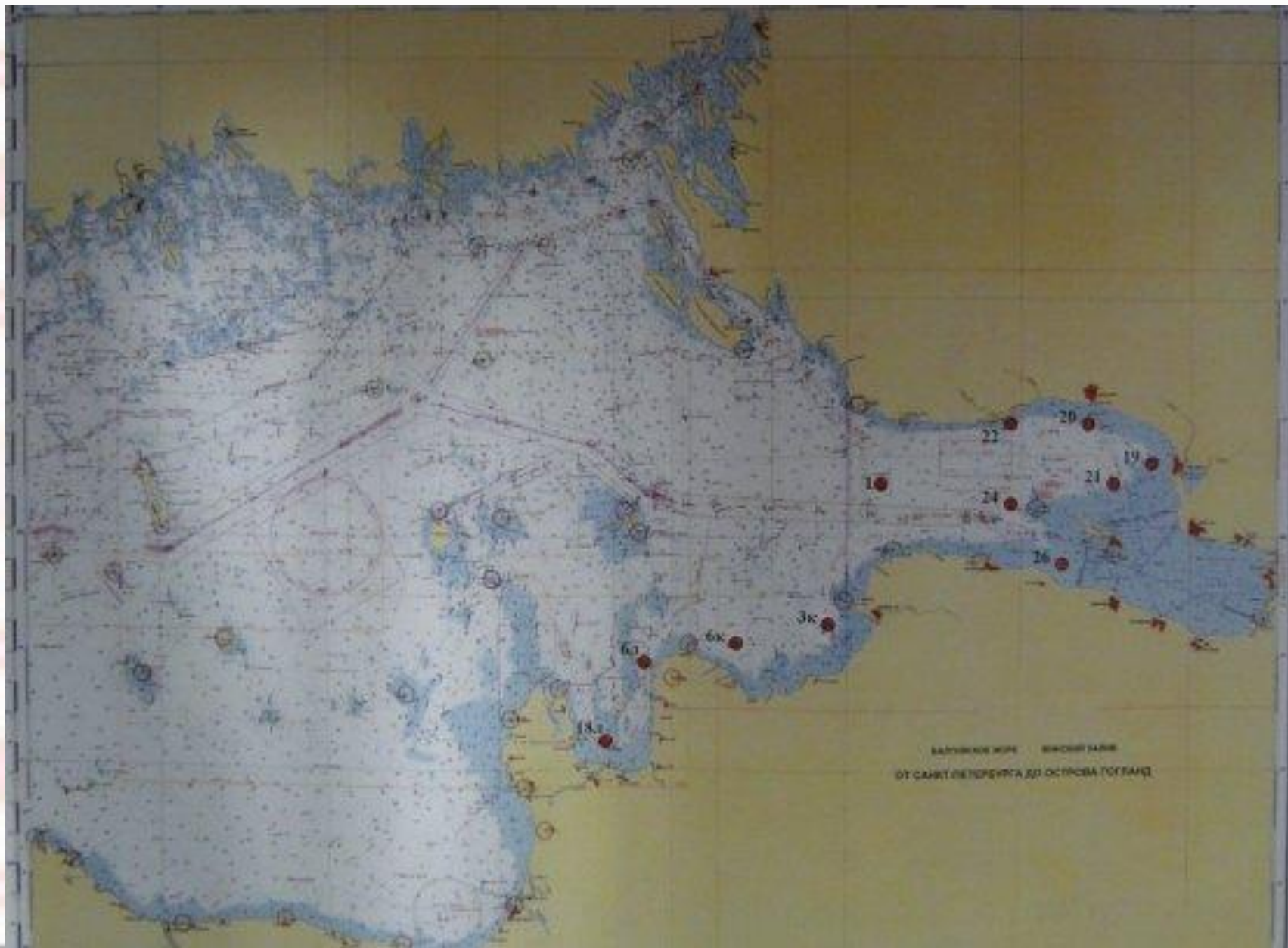
Our aim:

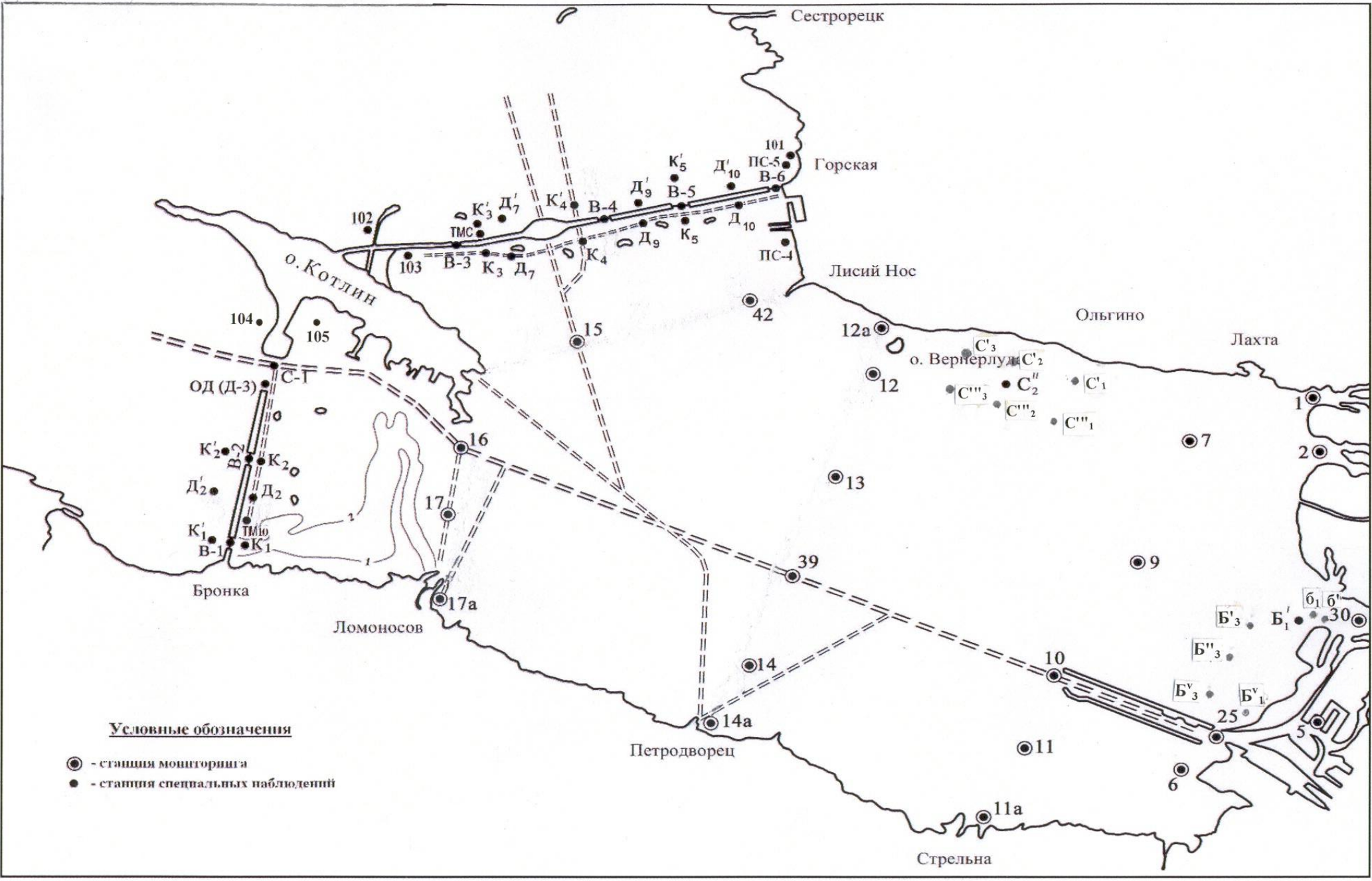
- To validate MODIS products against in-situ measurements

Our data:

- MODIS:
 - 1 km. resolution
 - 4 km. resolution (not SeaDas)
- in-situ:
 - expeditional data
 - station data (?)

Gulf of Finland







Lake Ladoga