



Joint management of Latvian – Lithuanian
transboundary river and lake water bodies
(TRANSWAT)

Lake bathymetry as a tool for sampling plan design

Jānis Dumpis/ *Project expert (Bathymetry)*

Projekta seminārs, 29.08.2022.

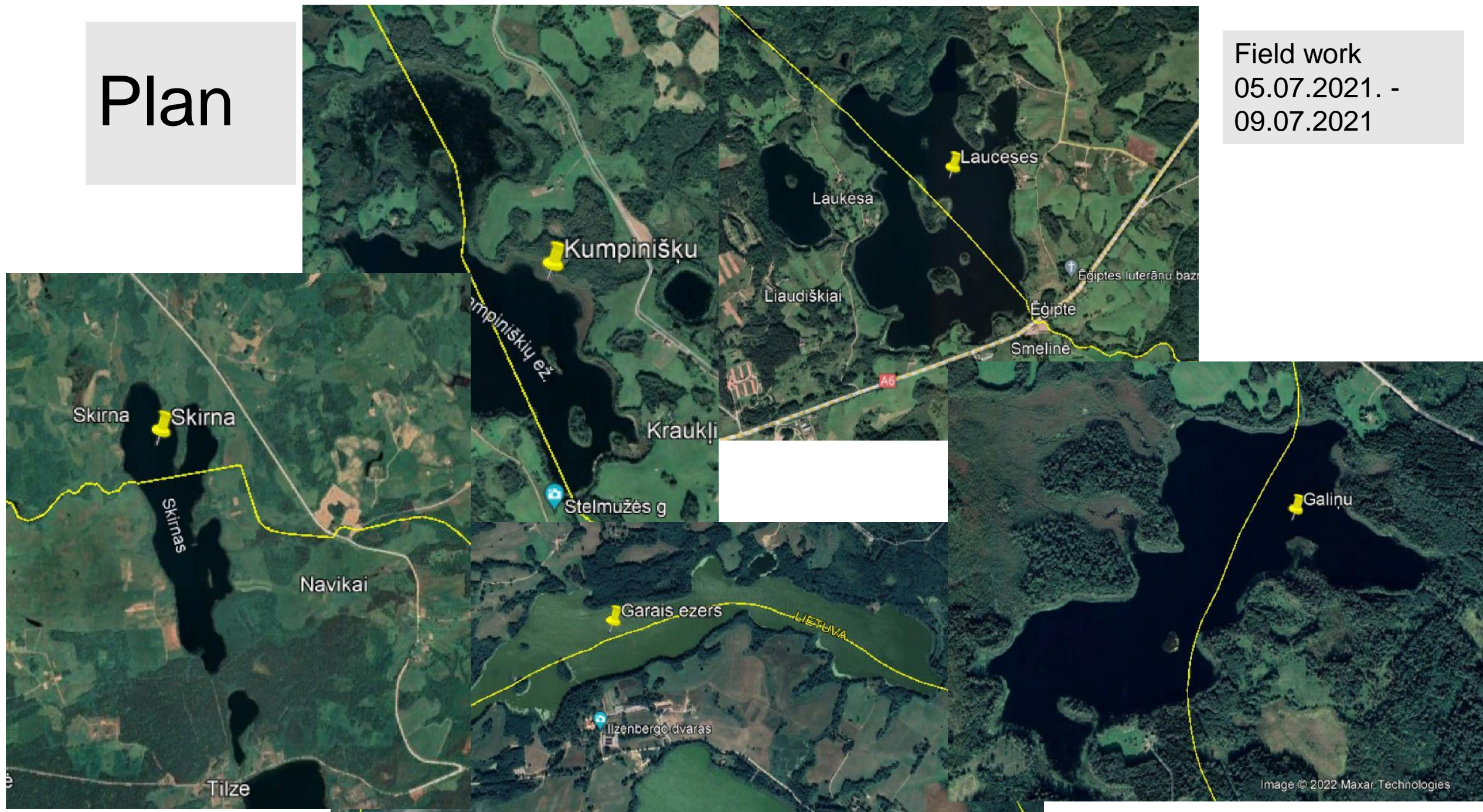
Introduction

- Work plan;
- Solutions;
- Field work;
- Data processing;
- Data editing;
- Construction of maps;
- Publication of maps.



Plan

Field work
05.07.2021. -
09.07.2021

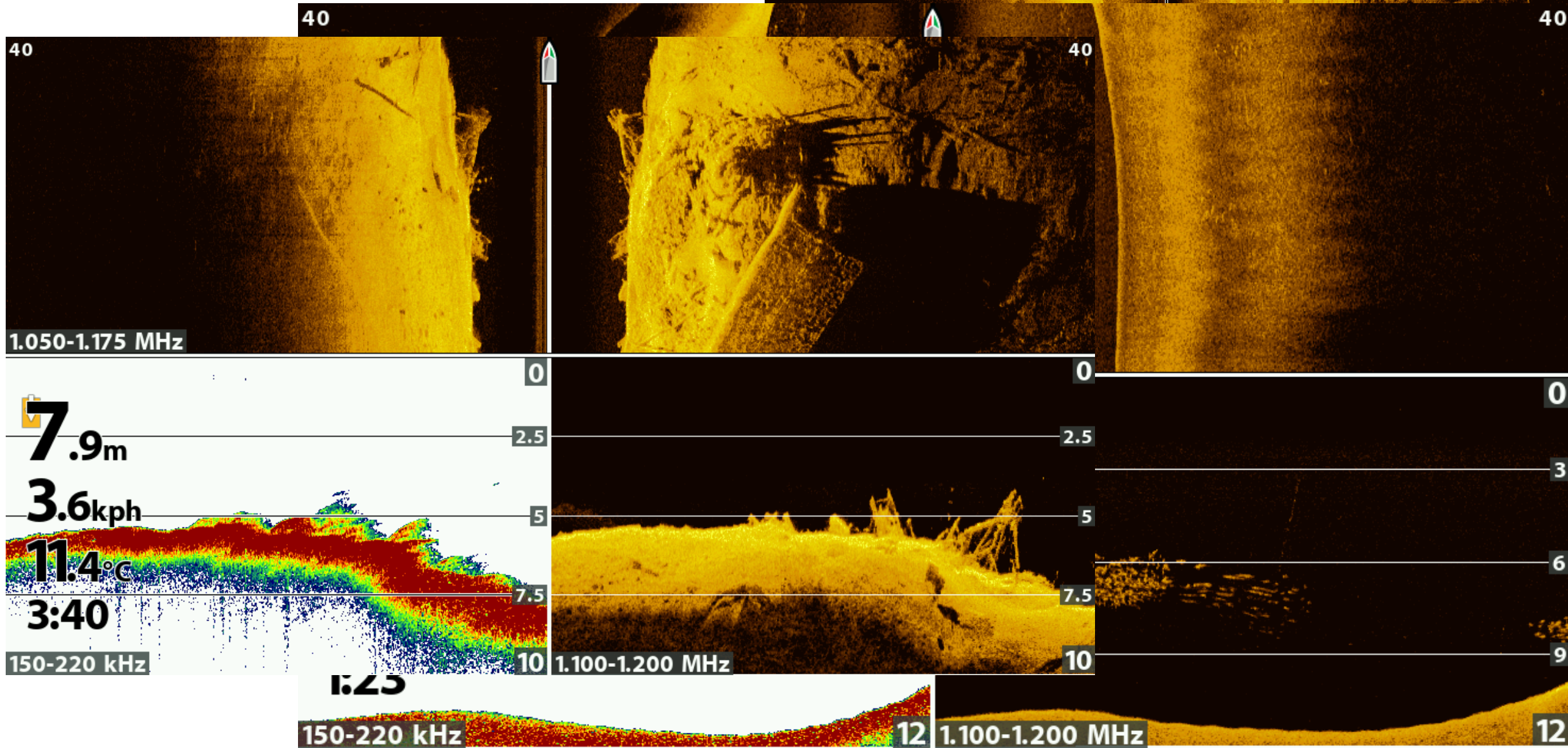


Solutions and problems

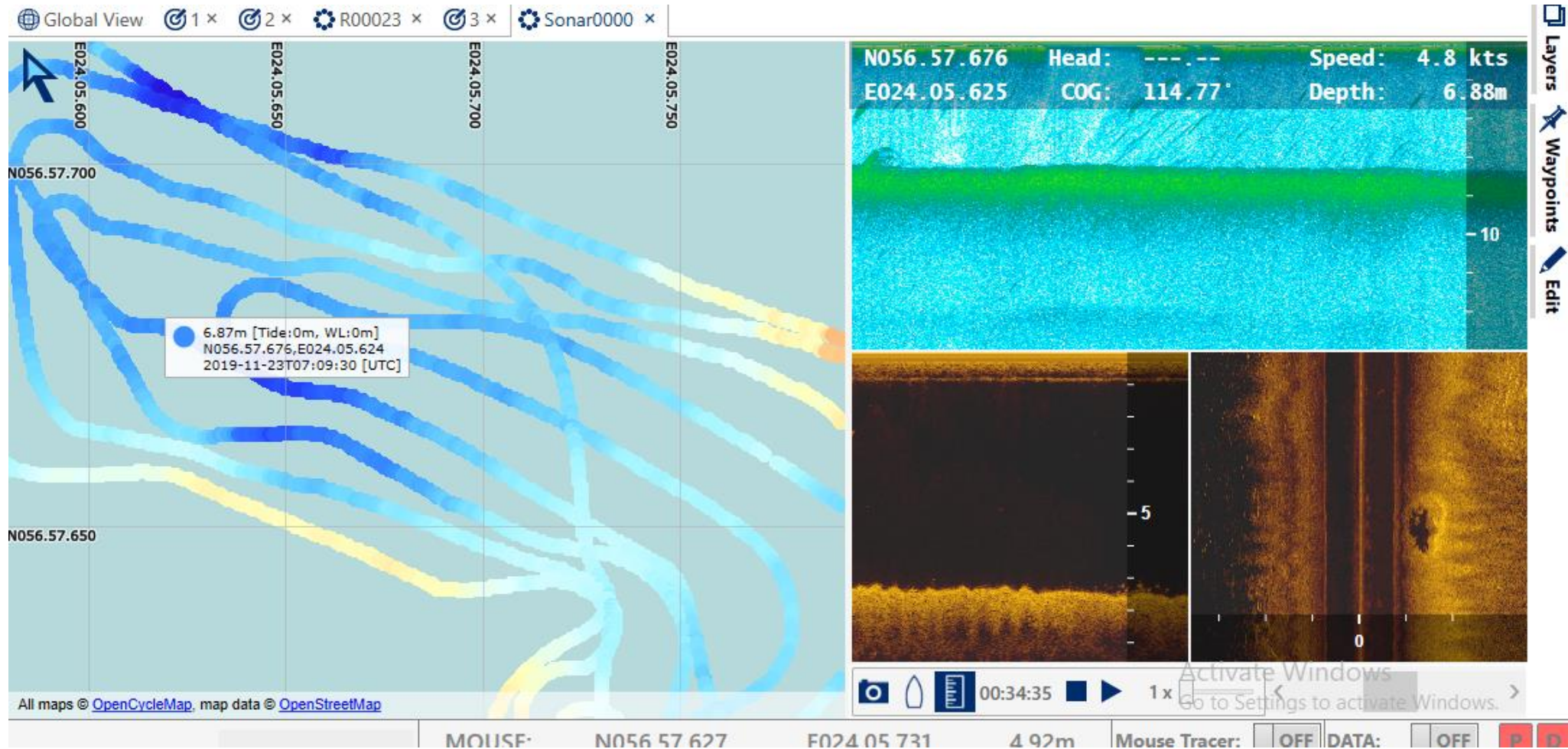
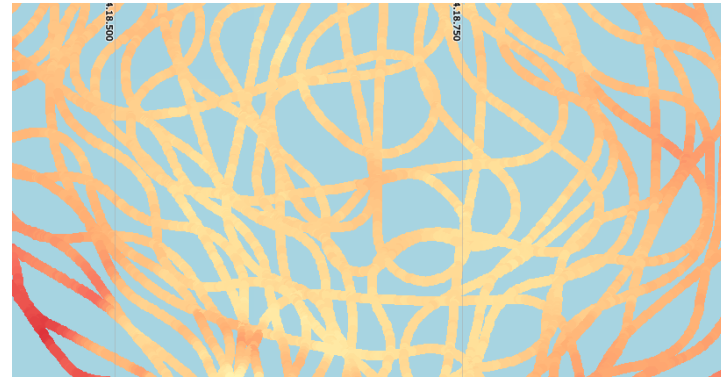
- Overnight stay;
- Boat launch;
- Electricity for sounder;
- Bathymetric survey;
- How to withstand the heat;
- Private properties;
- Safety on the water;
- Covid 19.



What do I see?

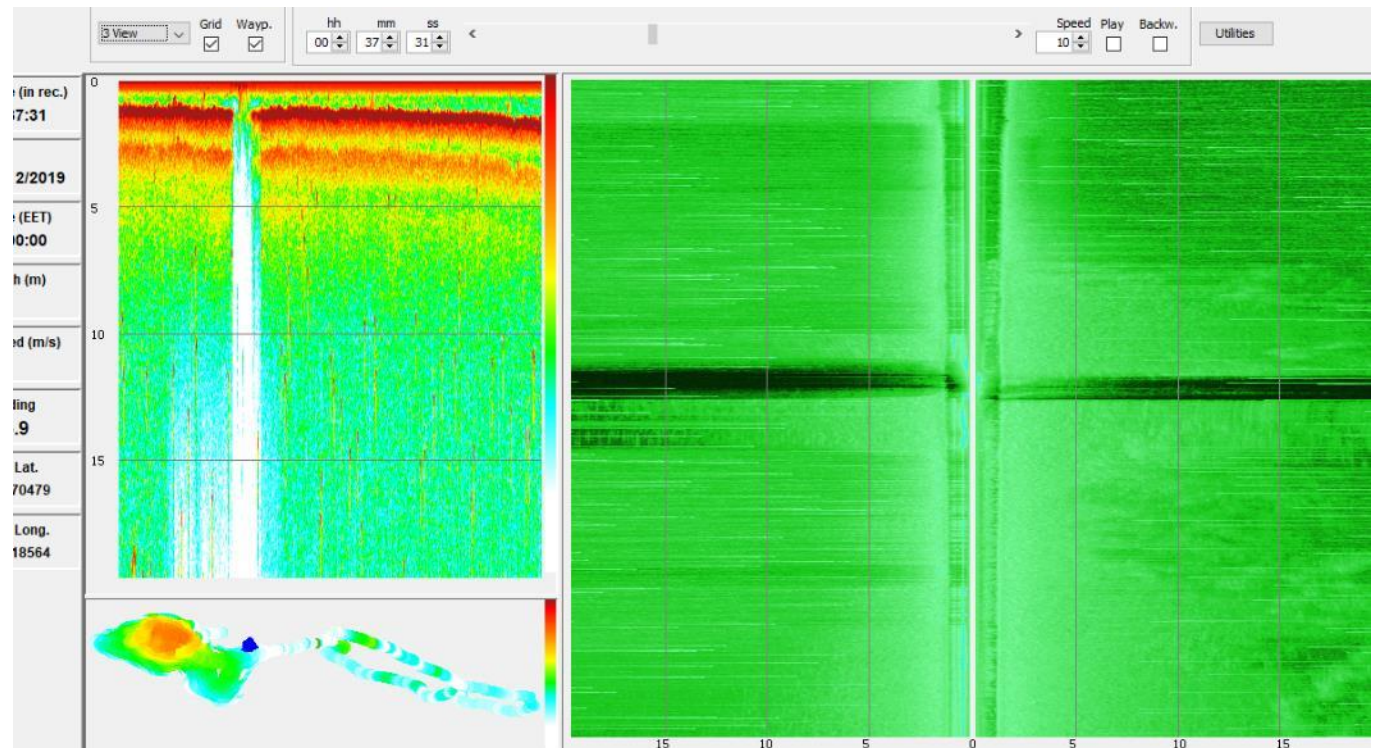
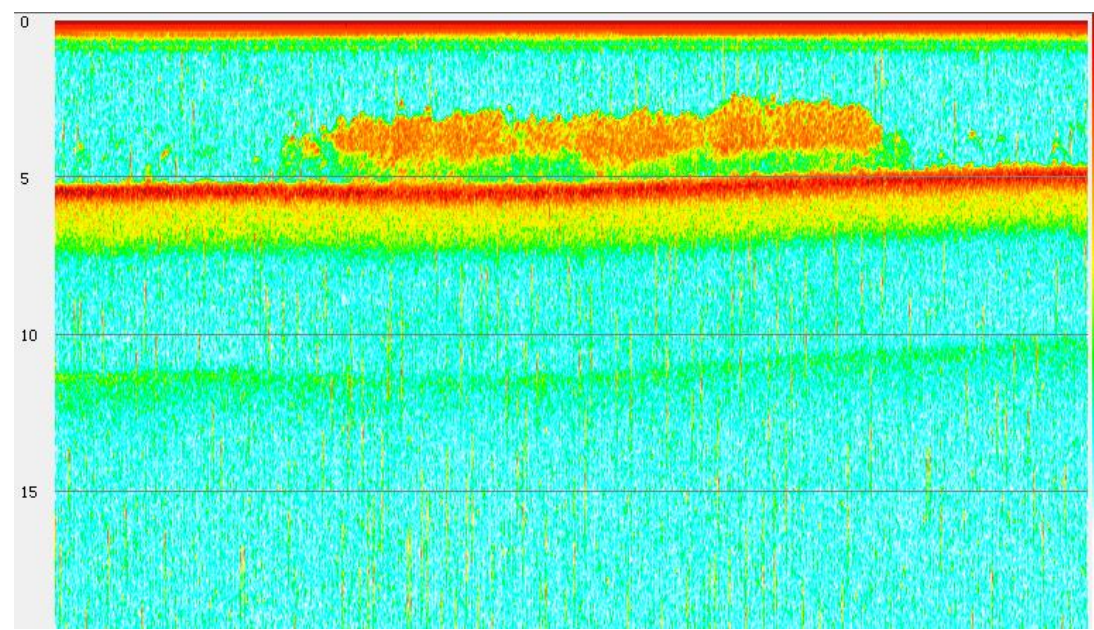
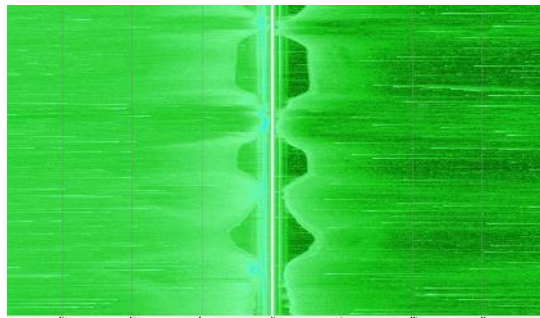


What does the echosounder see?



Disturbances

- Water temperature;
- Movement speed;
- Sonar transducer placed in wrong position;
- Water clarity;
- Depth;
- Magnetism, magnetic field.



Depth map recipe

- Field work;
- Data conversion;
- Data editing;
- Data processing;
- Bathymetric map construction;
- Morphometric calculations, catchment construction;
- Bathymetric map conversion.

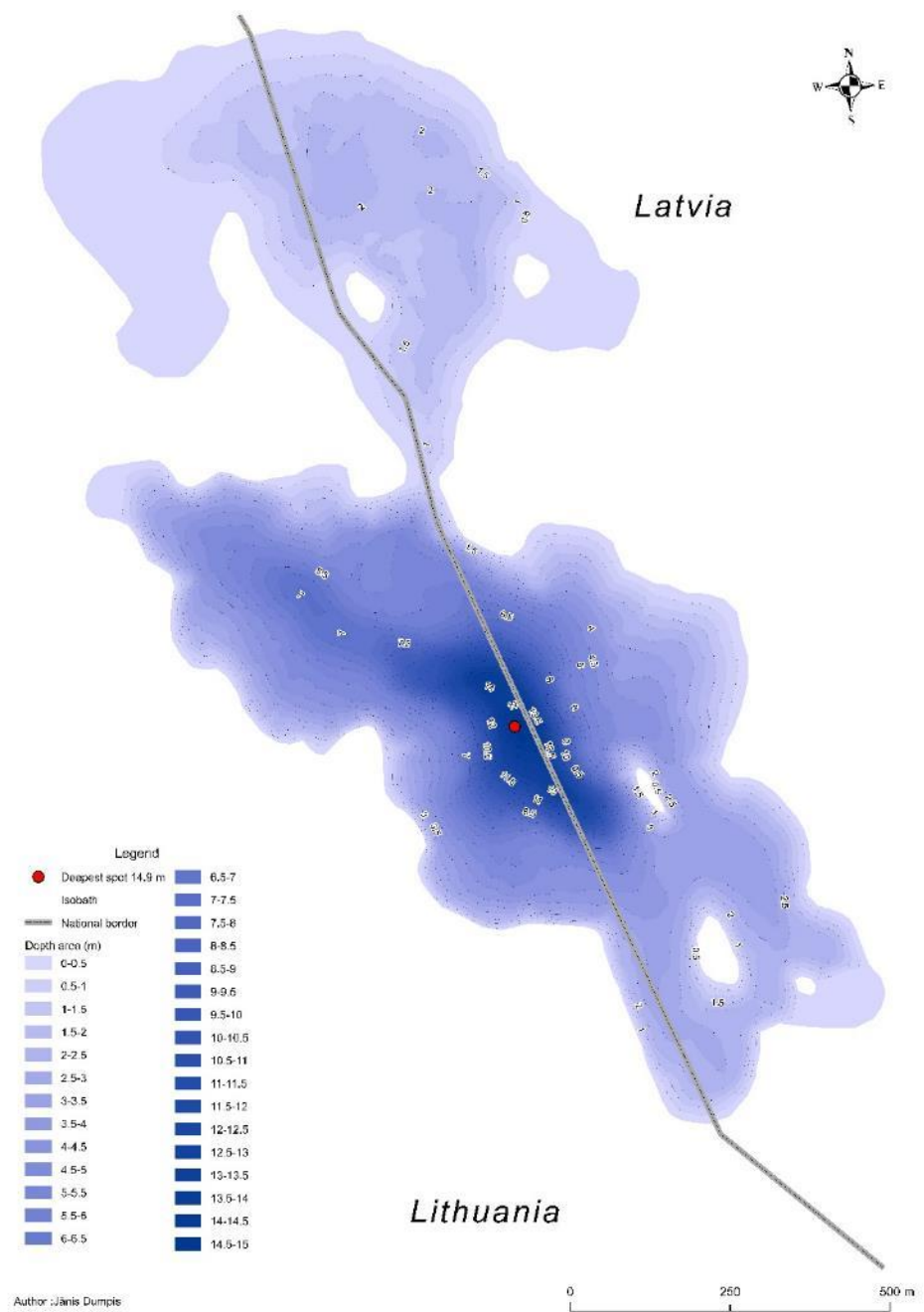
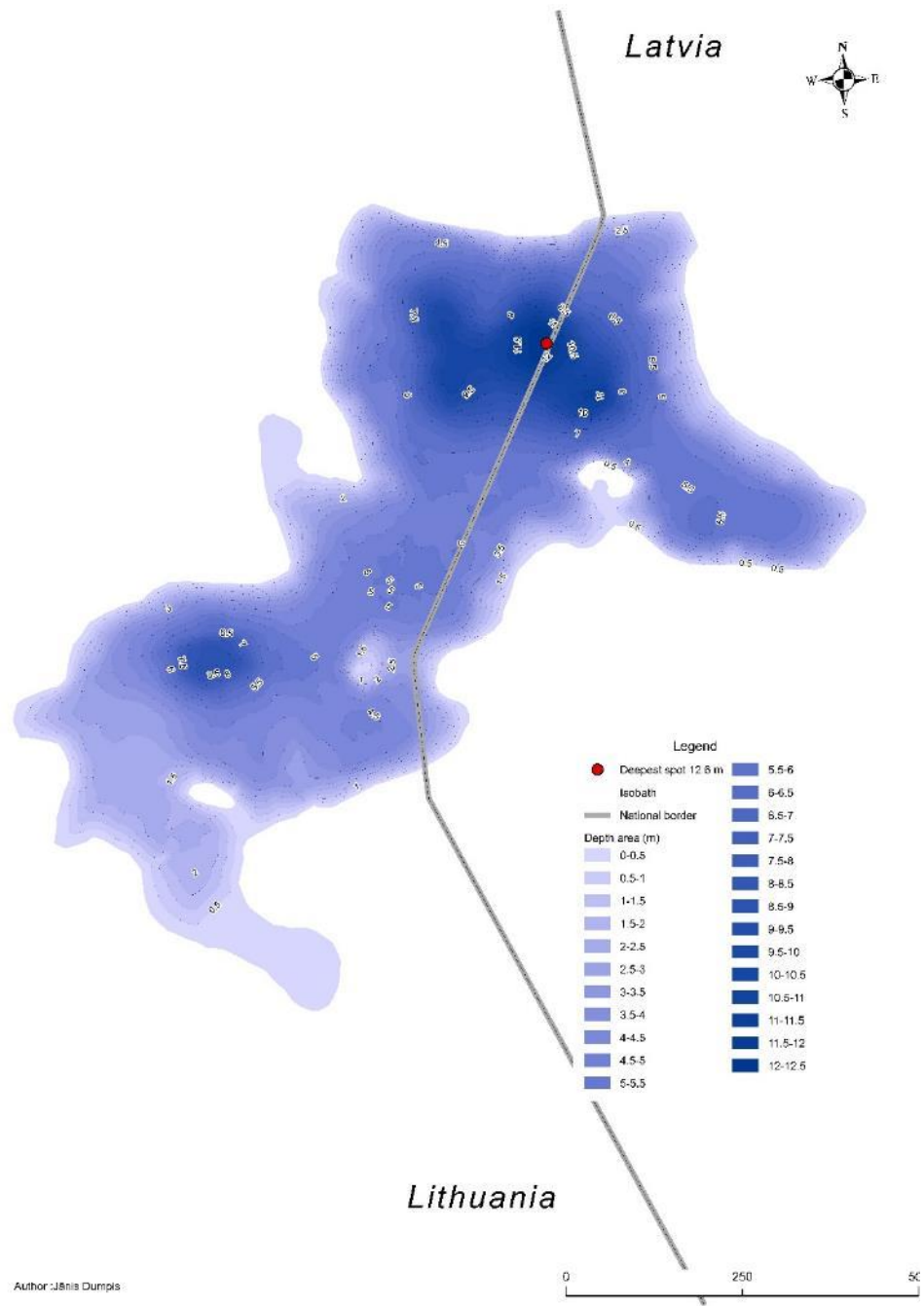


Work plan
Correct data entry
Thoughtful activities on the water

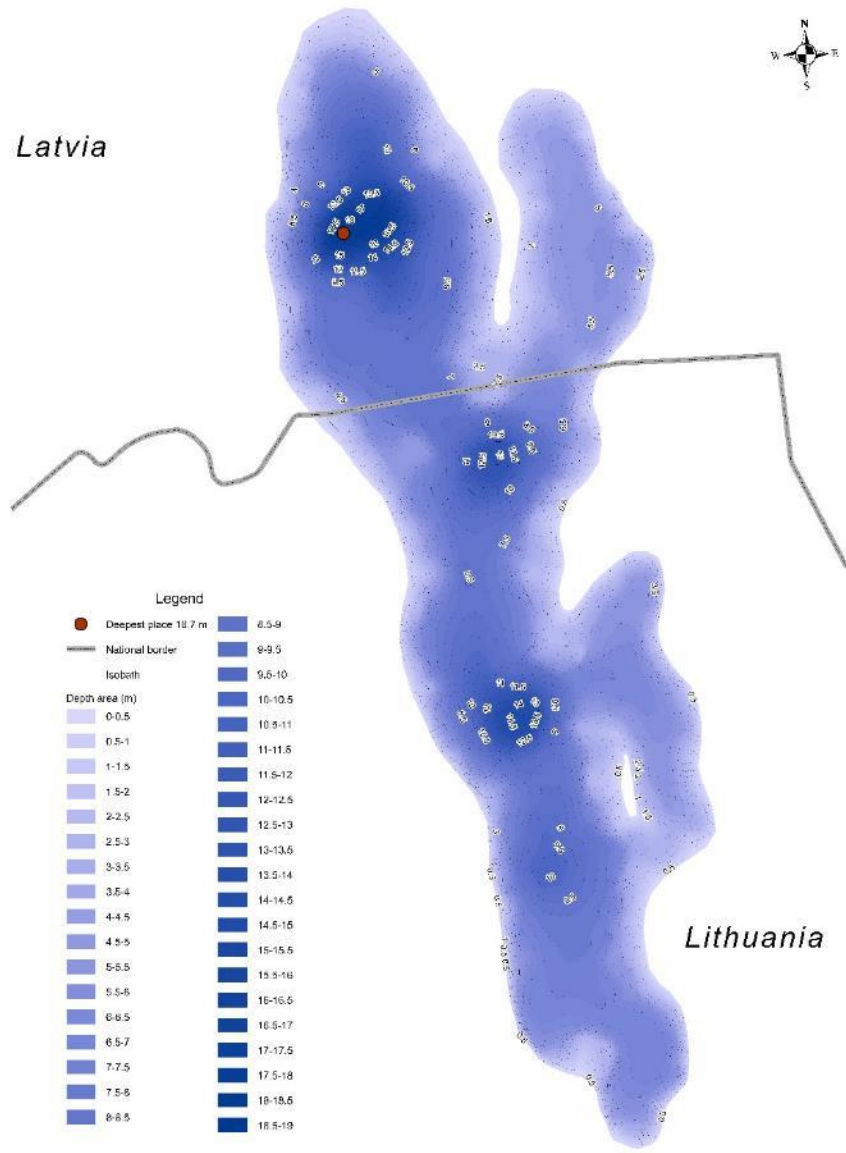


The result

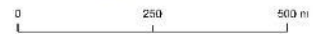




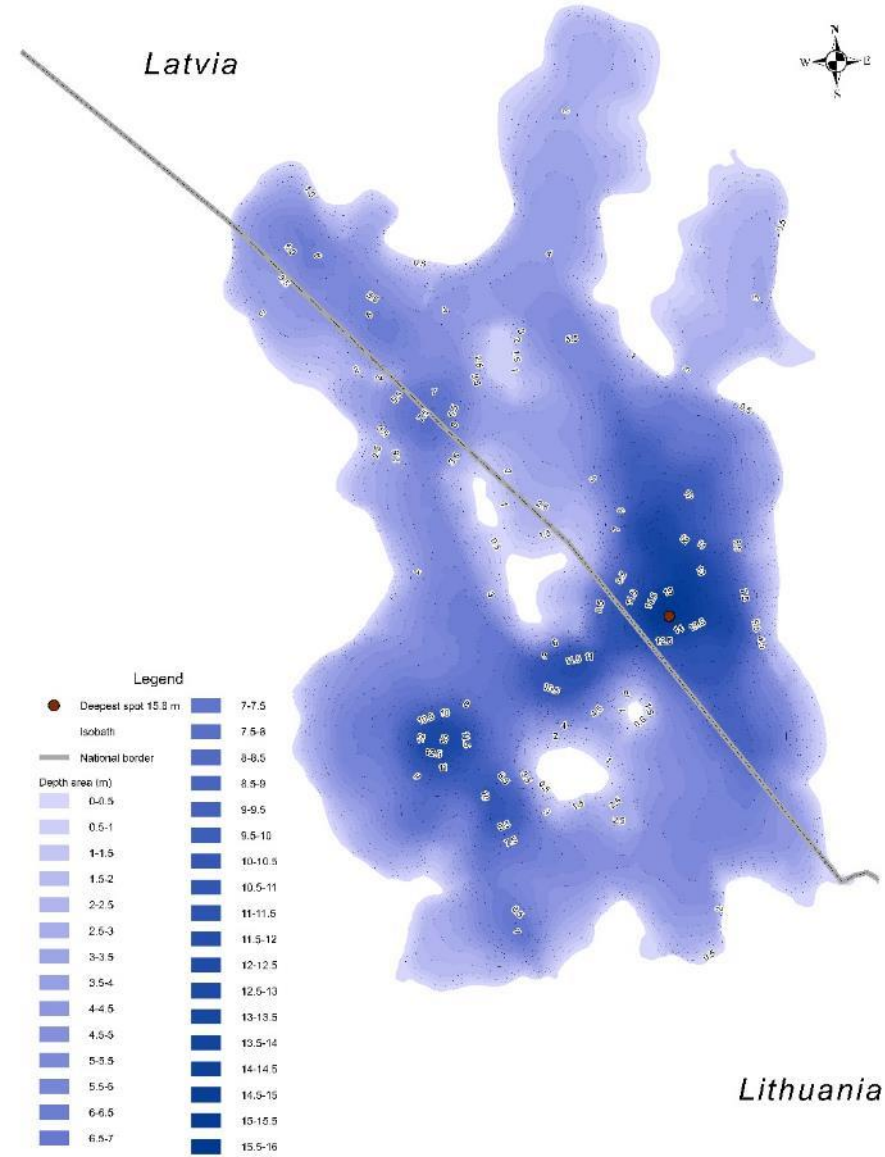
Latvia



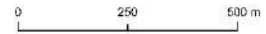
Author: Jānis Dumpis



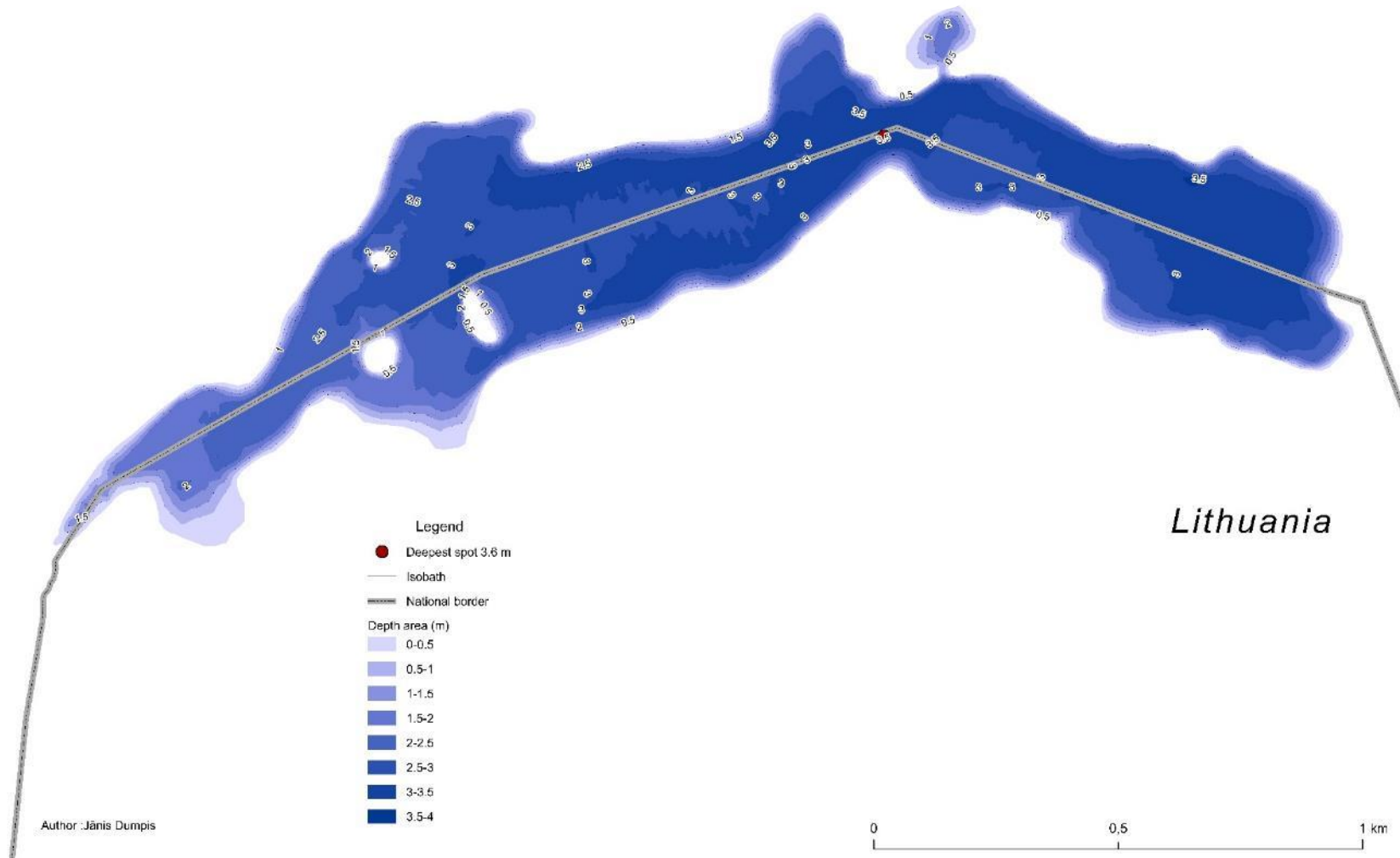
Latvia



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Latvia



Lithuania



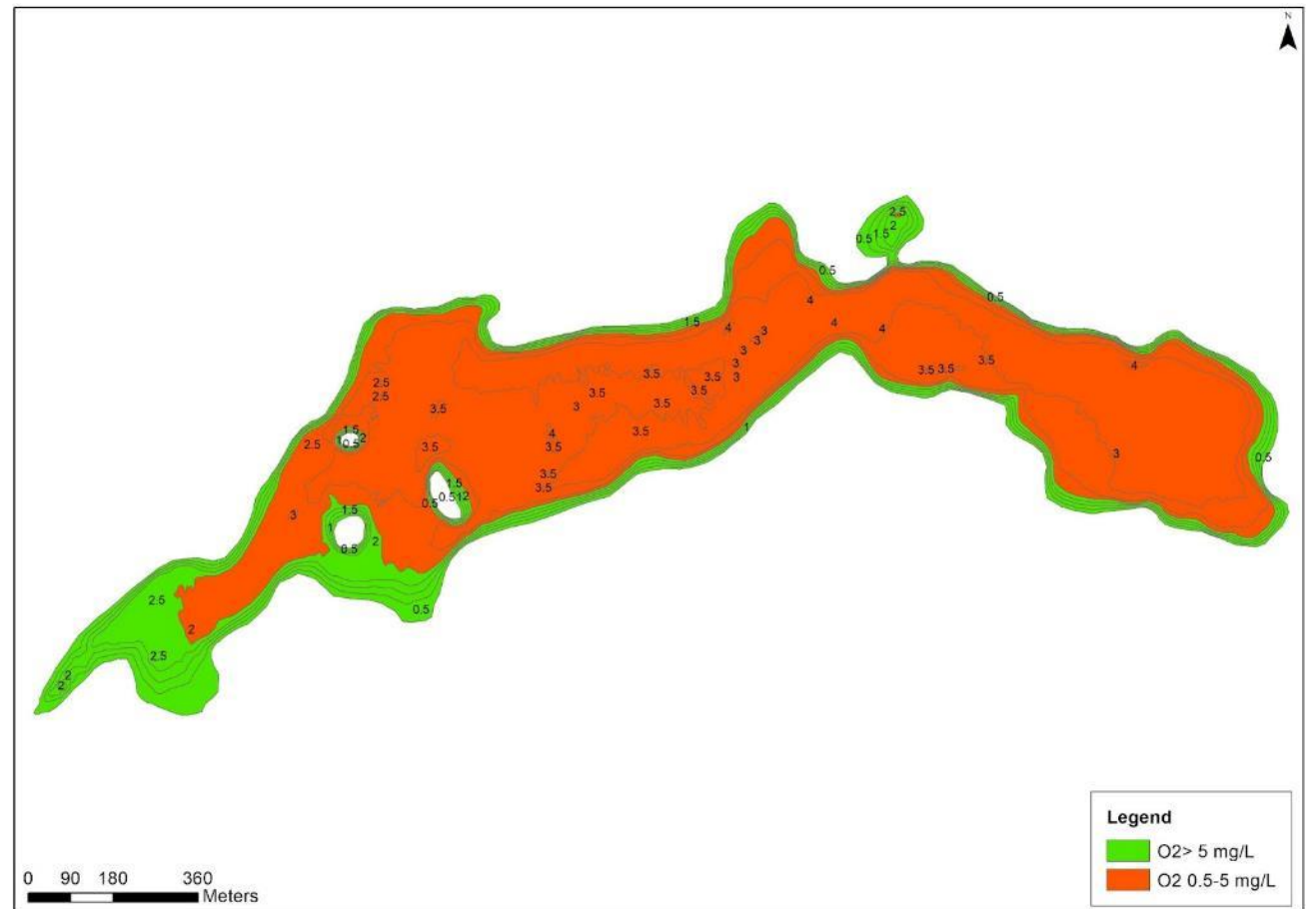
2021. gada vasarā projekta Nr. LLI -533 “Latvijas-Lietuvas pārrobežu upju un ezeru ūdens baseinu vienota pārvaldība” TRANSWAT ietvaros ir izstrādātas batimetriskās kartes Ilzu (Garajā)/Ilgē, Galiņu/Salna, Kumpinišķu/Kampiniskiai un Lauceses/Laukesas un Skirnas ezeros. Kartes pieejamas lejuplādei jpg, kmz, at5 un shp formātos.

- Ilzu ezers
- Galiņu ezers
- Kumpinišķu ezers
- Lauceses ezers
- Skirnas ezers

<https://bior.lv/lv/latvijas-lietuv-parrobezu-ezeru-kartografija>

What do we get from all this?

- Potential plan for field work;
- Materials for modeling, cartographical base;
- Hydromorphological assessment of lakes;
- Ability to correctly classify and study water bodies;
- Evaluation of the functionality of the water body.



Thank for your attention!

CONTACTS:

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