









"Homogenized marine gravity maps of southern and eastern Baltic Sea for modern 3D applications in marine geodesy, geology and navigation (BalMarGrav)"

Small project of the Interreg Baltic Sea Region Programme Programme priority: 2. Water-smart society / Programme objective: 2.2 Blue economy

Period of realization: 2022-2024 **Project value:** 500 K€

Project challenges:

Improve the problem of insufficient and outdated mapping of the marine gravity field in the southeastern Baltic Sea region;

Project objectives:

- Increase the potential of national sectoral agencies and the Baltic Sea Hydrographic Commission (BSHC) to realize their tasks:
- Building trust that could lead to further cooperation initiatives;
- Initiating and keeping networks that are important for the BSR.

Project Partners:













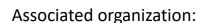




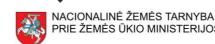




























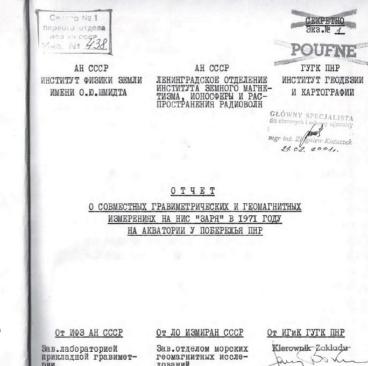




WP.1: Homogenization of the marine gravity maps of the southern and eastern Baltic Sea

A.1.1: Revitalization and QC of the historical marine gravity data sources

- Project Partners have searched their and/or state archives to find documentation and gravity data measured during the historical survey campaigns conducted in their countries' territorial waters;
- available documentation and data have been identified;
- now work is underway on the legal side of the use of this data in the project, not all data is the property of the Project Partners - the signing of the relevant licenses is necessary;
- next data will be collected and reprocessed to the current gravimetric and geodetic systems of the Project Partners;
- report on the availability and re-processing procedure of the historical marine gravity data will be prepared in September 2



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A.1.2: Modern shipborne gravity surveys

Planned surveys:

in June 2023 - gravity marine measurements in the territorial waters of Poland, Denmark and Lithuania conducted by the Maritime University of Szczecin (Poland, PP, the owner of NAWIGATOR XXI research-training vessel) and Gdańsk University of Technology (Poland, PP, the owner of MGS-6 gravimeter) with the support of the DTU Space (Denmark, PP) and VGTU (Lithuania, PP) colleagues;



- in April-July 2023 gravity marine measurements in the territorial waters of Latvia conducted by Lantmäteriet (Sweden, PP, the owner of ZLS-D13 gravimeter) and Latvian Geospatial information agency (Latvia, AO);
- additional reference absolute gravity measurement conducted by the Institute
 of Geodesy and Cartography (Poland, PP, the owner of A10 gravimeter) in
 Szczecin, Klaipėda, Liepāja and Rīga ports as well as in additional points along the
 Polish coast.



