

The ValidITy project –Transferring knowledge about bathymetric feature detection into a polished software project - Demo

Thursday 4 April 2024 17:05 (1 minute)

We will showcase a live demo version of the software developed in the ValidITy project (Validation of Intelligent Terrain Feature Recognition Methods for Hydrographic Data <https://validity-project.eu/>). This software aims to integrate all necessary steps of an object and terrain annotation and classification workflow on bathymetric data into one user-friendly product.

In the current version the software features a responsive map view that can compute common geomorphometric derivatives immediately due to efficient use of OpenGL compute shaders. Users can then annotate sections of their data with point-, box- or polygon shapes and train machine learning models on them. The trained model will be used to extend the annotations to the full set of data.

Further workflow components such as implementing additional machine learning approaches, annotation quality control, terrain classification and the development of classification dictionaries are planned for the future.

We hope to use this demo not only to introduce the software to an interested scientific audience, but also to gather further suggestions: which further features would be useful for the analysis of bathymetric data and which application problems exist in the workflow with other software packages that might be simplified by the Validity software.

Primary authors: HENNKE, Anne; STÄBLER, Flemming (GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel); GREINERT, Jens (Geomar Helmholtz Centre for Ocean Research); BRAUER, Josephine (GEOMAR - Helmholtz-Zentrum für Ozeanforschung Kiel); MEYER, Stephan (GEOMAR Helmholtz Centre for Ocean Research); FREY, Torsten (Geomar Helmholtz Centre for Ocean Research); BUCK, Valentin (GEOMAR Helmholtz Centre for Ocean Research)

Presenters: HENNKE, Anne; STÄBLER, Flemming (GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel); GREINERT, Jens (Geomar Helmholtz Centre for Ocean Research); BRAUER, Josephine (GEOMAR - Helmholtz-Zentrum für Ozeanforschung Kiel); MEYER, Stephan (GEOMAR Helmholtz Centre for Ocean Research); FREY, Torsten (Geomar Helmholtz Centre for Ocean Research); BUCK, Valentin (GEOMAR Helmholtz Centre for Ocean Research)

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