

“BaltRap”: The Baltic Sea and its southern Lowlands: proxy – environment interactions in times of Rapid change

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Akronim: BaltRap

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Instytucja zamawiająca: WGL - Leibniz-Gemeinschaft

[Oficjalna strona projektu](#)

The coupled marine-terrestrial system of the Baltic Sea and its southern lowlands is highly sensitive to both natural climate forcing and human impact. To comprehensively understand the impact of rapid climate change in the southern Baltic Sea region (SBSR) and to distinguish between natural and human forcing, our BaltRap network aims, for the first time, at integrating high-resolution marine (sediments) and terrestrial (lake sediments and tree rings) proxy archives. Considering the wide range of temporal and spatial scales involved in shaping system dynamics, we expect significant differences in the response time and magnitude of the considered environments. Beyond instrumental observations only a rigorous proxy development, testing, and application tailored to the different bio- and geo-archives based on precise and accurate chronologies will enable us to address the following main goals: 1. Comprehensive understanding of the environmental responses and response times of marine and terrestrial/limnic systems to gradual changes, major climatic transitions, and short-term climate oscillations during the Holocene 2. Integration and precise synchronization of the various proxy records from brackish/marine and terrestrial/limnic systems in the SBSR to grasp the entire range of interactions between the Baltic Sea and its adjacent terrestrial systems 3. Distinction of natural variability from the increasing influence of human societies in the later Holocene (particularly in the last century) to better project 21st century dynamics.

Publikacje

Abstrakty, recenzje, notatki

- Lindemann Christin, Ott Florian, Słowiński Michał, Tjallingi Rik, Plessen Birgit, Noryśkiewicz Agnieszka M., Schwab Markus J., Obremska Milena, Wulf Sabine, Błaszczewicz Mirosław, Brauer Achim: [Sedimentation responses to Younger Dryas climate change in a three lake cascade in northern Poland.](#) [w]: 20th Congress of the International Union for Quaternary Research (INQUA). Dublin: INQUA, 2019 - 1 s.