

3rd Baltic Earth Conference

Jastarnia, Hel Peninsula, Poland

1 - 5 June 2020



Earth system changes and Baltic Sea coasts



Second Announcement and Call for Papers

Scope

Baltic Earth strives to achieve an improved Earth System understanding of the Baltic Sea region as the basis for science-based management in the face of climatic, environmental and human impact in the region. Baltic Earth brings together a broad international research community around core scientific issues. Baltic Earth targets the atmosphere, land and marine environments of the Baltic Sea, its drainage basin and nearby areas with relevance for the Baltic Sea region.

The conference covers the topics of Baltic Earth, and in particular highlights the Baltic Earth Grand Challenges, as defined by the Baltic Earth Science Plan, and the topics treated by the BEAR (Baltic Earth Assessment Reports). The grand topic of the conference „Earth system changes and Baltic Sea coasts“ refers to the manifold aspects of the changing Earth system of the Baltic Sea region, in the atmosphere, on land and in the sea. Climate change and the associated sea level rise, but also other human activities puts a particular pressure on the coasts of the southern Baltic Sea, of which the Hel peninsula and the Polish coasts in general are exemplary. Land-sea interactions and human uses shape and modify the coasts all over the Baltic Sea.

Topics

The sessions reflect the Baltic Earth Grand Challenges and BEAR topics:

Salinity dynamics - Observation and modelling of saltwater inflows and other processes like advection, diffusion and dilution of saltwater, relating to the salinity conditions in the Baltic Sea.

Land-Sea-Atmosphere biogeochemical feedbacks - Investigations on the marine and terrestrial carbon, nitrogen and phosphorus cycles and pathways towards an understanding of primary production mechanisms and organic matter transformations in the Baltic Sea; biogeochemical causes and effects of eutrophication and oxygen limitations, trace gas dynamics.

Natural hazards and high impact events - Observations, analysis and modelling of high impact events in the Baltic Sea region; frequency and strength of storm surges and waves, flooding due to extreme precipitation events or droughts; prediction systems, probabilistic estimates and attribution analyses.

Sea level dynamics, coastal morphology and erosion - Variability and change of sea level, waves, currents, seiches, variations in wind and sea level pressure, river runoff, effects of sea ice, inflows, thermosteric effects, land uplift/subsidence and sediment accumulation/coastal changes. Projections of future sea level rise, observed and projected long-term trends and multi-decadal variations.

Regional variability of water and energy exchanges - Observation, analysis and modelling of the regional water cycle; precipitation, evaporation, river runoff; hydrological and atmospheric exchange processes; analysis of the natural variability of energy and water components; cloud-aerosol-feedback mechanisms, cloud and atmospheric boundary layer processes; hind- and forecast short- and long-term water and energy exchanges of the past and future.

Multiple drivers of regional Earth system changes - Interactions between anthropogenic forcings like eutrophication, pollution, fisheries, hydrographic engineering, agricultural and forestry practices and land cover change with natural forcings; analysis and application of coupled Earth system models capturing interactions between atmospheric, marine and land compartments/processes, as well as responses to anthropogenic forcings; regional detection and attribution efforts.

Regional climate system modelling - Recent progress in the understanding of regional climate variability with special focus on coupled effects between sea, atmosphere, land and anthroposphere.

Climate change and its impacts in the Baltic Sea region - Recent and projected changes in regional climate variables like temperature, precipitation, etc., as well as impacts on the atmosphere, hydrosphere, oceanography, and biosphere of the Baltic Sea region.

New climate observation systems - New oceanographic, land-based and atmospheric observation systems including remote sensing.

Results from any of these research fields and related to the overall theme of the conference are welcome, as well as contributions from related programmes. Invited and contributed papers will be presented in plenary along with parallel poster sessions.

The conference is also intended as discussion forum for scientists, managers and other stakeholders. Conference language is English.



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Call for Papers

Contributions in accordance with the preliminary conference topics as outlined above, both oral or as poster, are welcome. Extended abstracts in English, maximum of two pages, including figures, tables or diagrams, are invited to be submitted by e-mail to the International Baltic Earth Secretariat.

Abstracts must be submitted by e-mail to balticearth@hzg.de by 16 February 2020. Please indicate to which topic you would like to have your presentation allocated. An electronic abstract template is available for download at <https://baltic.earth/hel2020>. Please use this template, other formats will not be accepted.

Abstract Deadline: 16 February 2020

The Scientific Conference Committee will review the submitted papers, decide on allocation to topic, oral or poster presentation and establish the conference programme. Authors will be notified by beginning of March 2020, and the programme is expected to be online by middle of March 2020. An abstract volume will be distributed at the conference.

Authors will be invited to submit a full paper based on their presentation for a special conference issue in an international scientific journal to be published after the conference.

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International Baltic Earth Secretariat

For an updated list of sponsors, see the conference website

Time Table

Abstract deadline..... 16 February 2020
Notification to authors..... 2 March 2020
Programme available..... 16 March 2020
Registration and booking deadline..... 29 March 2020
Conference..... 1- 5 June 2020

Social programme
Ice Breaker..... 1 June 2020
Excursion..... 2 June 2020
Conference Dinner..... 4 June 2020

3rd Baltic Earth Conference

Venue and Accommodation

Hotel Dom Zdrojowy Jastarnia
Kościuszki 2A
PL 84-140 Jastarnia
Poland
<https://zdrojowy.com.pl/en/>



The conference takes place in the Hotel Dom Zdrojowy, in Jastarnia in Puck County, Pomeranian Voivodship, Poland, located on the Hel Peninsula. The peninsula is a narrow sandy spit, separating the Bay of Puck, the western part of Gdansk Bay, from the Baltic Sea. Hel Peninsula with its two main towns Jastarnia and Hel is a holiday resort for the greater Gdynia-Sopot-Gdansk (Tri-City) metropolitan region.

We recommend to book accommodation in the Hotel Dom Zdrojowy, where the conference will take place. **Single, double rooms as well as apartments are reserved for conference participants at special rates until 29 March.** Please book your room with the Hotel before this date. See the conference website for further infos on accommodation.

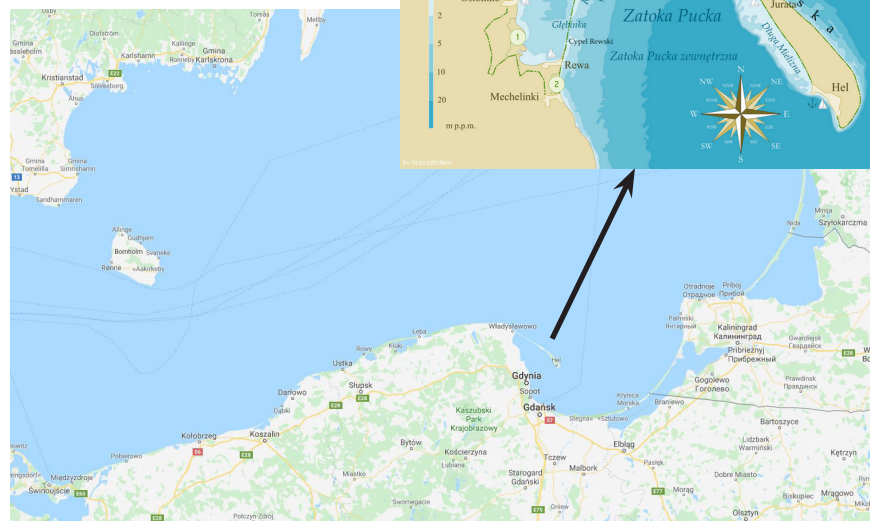
Travel Information

By air: Gdansk Lech Walesa Airport is an international hub which is served by all major airports in the Baltic Sea region and beyond. It is possible to get to Gdansk or Gdynia train station and downtown by train or bus.

By train: From Gdansk Central Train Station (Gdansk Główny) you can take the train to Jastarnia (about 2h ride, change train in Gdynia Główna).

By ferry: From Sweden, there are regular ferries: from Nynashamn (close to Stockholm) to Gdansk and from Karlskrona to Gdynia.

By car: Go to Puck and Władysławowo, then on Highway 216 to Jastarnia on the Hel spit.



Registration and Fees

Conference participants must register online via the conference website: baltic.earth/hel2020

Registration Deadline: 29 March 2020

The conference fee is 350€ (400€ after 29 March) for full delegates. Students (proof needed) pay 150 € (200 € after 29 March). The conference fee covers the conference venue, the abstract volume, the Ice Breaker, morning and afternoon coffee and refreshments, daily lunches and the conference dinner. Accompanying persons will be charged for participation at the conference dinner.

Partial support for students and young scientists may be available, depending on additional funding.

Details on support and conference fee payment are available at the conference website.

**Fee payment is due at time of registration, latest on 29 March.
For payment details see the conference website**

baltic.earth/hel2020