

Tracing the late Holocene storminess at the Polish Baltic Sea coast - regional survey and local in depth research - Mechelinki

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Aim:

- to establish the first tentative chronology of the storminess pattern throughout the late-Holocene in the southern Baltic sea basin;
- to test the usefulness of the sedimentary archive for the reconstruction of storm intensity.

Methods:

- 15 cores, including 2 vibro-cores, have been recovered within 4 geological transects within the site;
- the origin of the siliclastic layers have been established using combined evidence from loss-on-ignition, grain-size, micromorphological, geochemical and micropalaeontological analysed.

Conclusion:

- the sedimentary archive at Mechelinki consists of organic deposits punctuated by 24 siliclastic layers associated with storm events;
- at least 4 periods of enhanced coastal flooding associated with storminess is established: 3.5-3.05 ka, sometime after 3.05 ka BP, just before 2.25 ka BP and after 0.26 ka BP

