

## Weekly Report 1: North Sea Plastics I

### Through the canal and into the North Sea

The sampling plan for cruise AL586 includes a transect of stations along the north Europe coast from the Elbe River (DE) to the Thames River (UK), and primarily supports field sampling within the EU Horizon 2020 project LABPLAS (Land-Based Solutions of Plastics in the Sea; Grant agreement No. 101003954) and the Helmholtz Innovation Pool project P-LEACH (Plastic-LEACHate impact on ecosystem function and human health). North Sea Plastics I (and a second cruise planned for Summer 2023, North Sea Plastics II) focuses on the southern North Sea as the ultimate sink for river-borne plastic pollution from the Elbe and Thames River catchments, which will be studied simultaneously as part of the LABPLAS project.

We left port early with 11 scientific participants in the morning on Saturday, 04 February, with calm winds and glassy seas. We transited through the Kiel Canal until the evening, and arrived to a nice sunset over the Elbe estuary. Despite the weather yesterday, a storm front is moving over the North Sea today and preventing sampling, so we are taking advantage of the time to make progress toward our farthest stations near England.

The labs and sampling gear are all set up, and we're looking forward to our first station off the coast of the Netherlands tomorrow morning.



*(Left) Passing through the Kiel Canal. (Right) Setting sun on arrival in the Elbe estuary.*

With greetings on behalf of the cruise participants,

*Aaron Beck, GEOMAR Helmholtz Centre for Ocean Research Kiel*

North Sea, Sunday, 05 February 2023