



Mapping benthic habitats in the Sylt-Rømø Bight

Lasse Sander, Svenja Papenmeier, Rune Michaelis, Finn Mielck, and H. Christian Hass

Wadden Sea Research Station, Alfred-Wegener-Institut, Helmholtz Center for Polar and Marine Research, List/Sylt, Germany

Maps are a valuable source of information for the public, institutions and scientists alike. However, obtaining base data for tidal landscapes is by many regards a challenging task due to the transitional, dynamic and diverse character of the environment. Sensors are working at their limits and surveys have in the past been restricted to either the supra- and intertidal areas, or the deeper channels.

We here present preliminary results from an interdisciplinary approach combining classic terrestrial and marine sensors to obtain spatially discrete and continuous data for the 450 km² large Sylt-Rømø Bight. The area is located on the eastern seaboard of the North Sea and characterized by a narrow tidal inlet, a branching channel network and vast areas of sandy tidal flats. Data from a small research vessel (MBES, SSS, RoxAnn, Biosonics, grab samples) are combined with information from remote and proximal sensing platforms (Landsat, high resolution aerial images) to obtain a seamless dataset.

The aim of the project is to gather information on the spatial patterns of landforms, bedforms, sediment properties and the structure of habitats, in order to increase our knowledge on the dynamics of life and landscapes in a large tidal basin of the Wadden Sea.