

Supplementary material for Space-time analyses of
sediment composition reveals synchronized
dynamics at all intertidal flats in the Dutch Wadden
Sea

5th April 2022

A Timing of sampling

Sediment composition of intertidal flats changes throughout the season and mud contents are generally lower in winter than in summer. Sampling of sediment took place in the months June until October. The maps in figure S1 show when and where sampling took place.

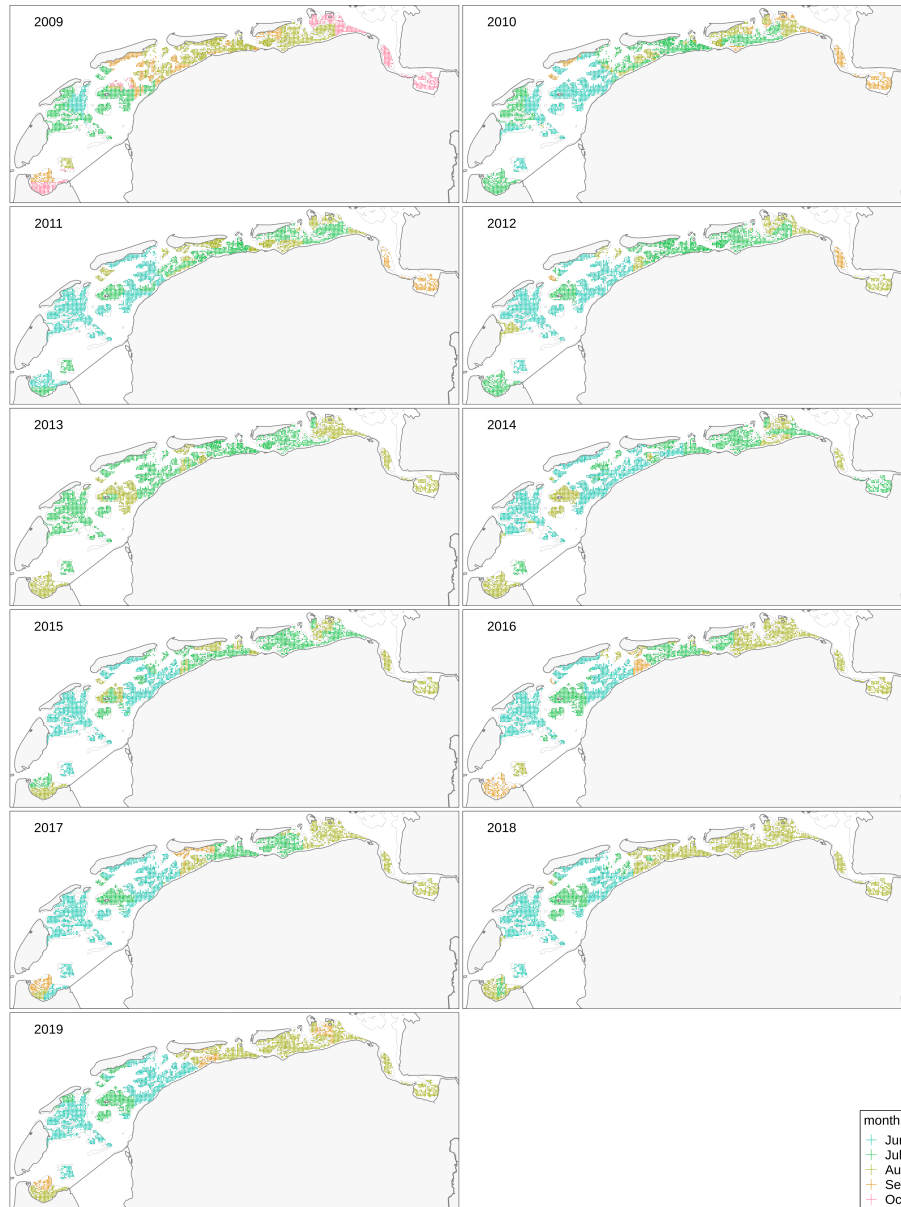


Figure S1: Yearly maps with the sampled stations. The colours represent the months in which the stations were sampled. The maps were made using R 4.1.3 (<https://cran.r-project.org/>).

B Yearly sediment composition

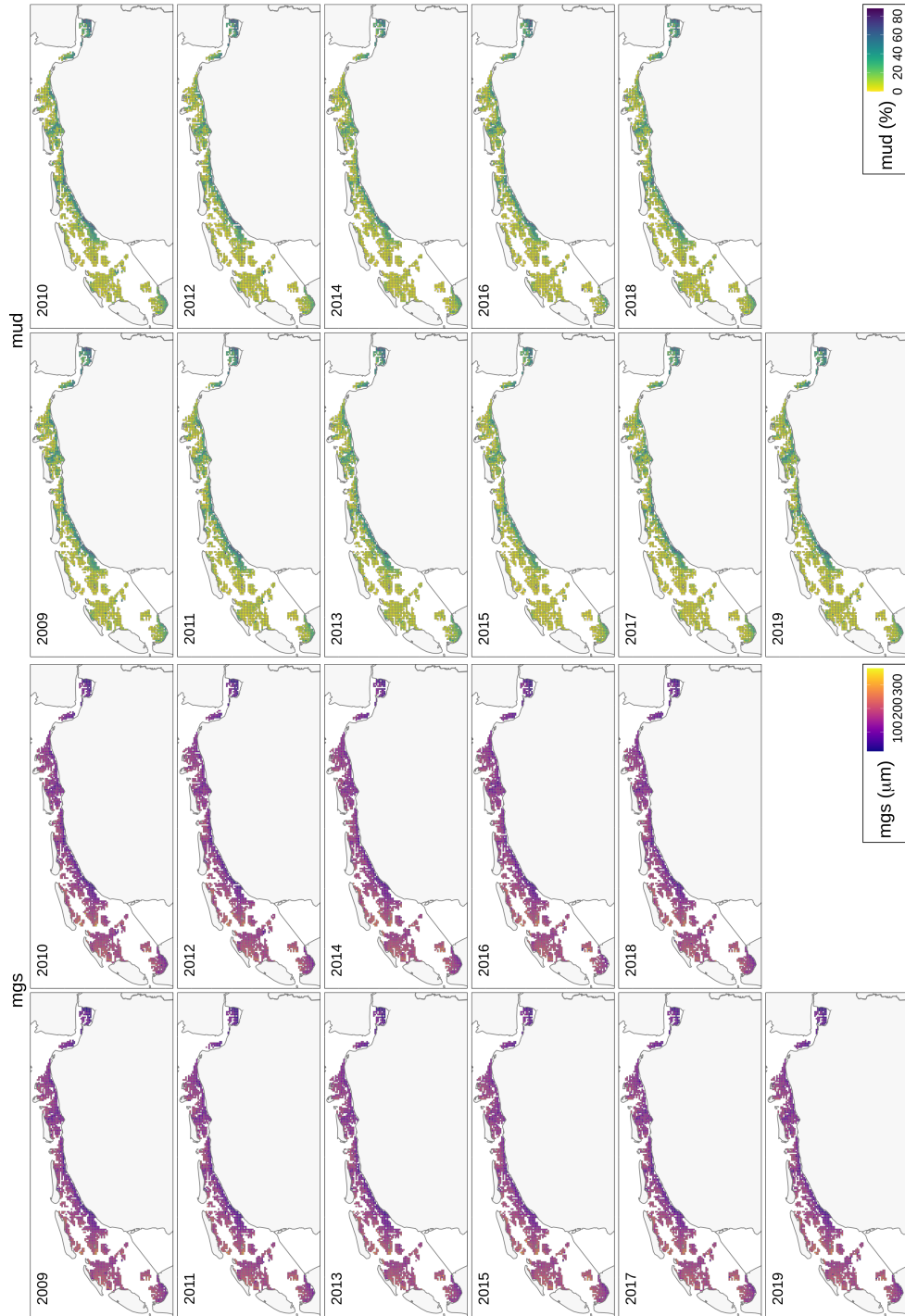


Figure S2: Yearly maps of the median grain size (*mgs* μm) and mud content (*mud* %) of the intertidal flats in the Wadden Sea for the period 2009-2019. The maps were made using R 4.1.3 (<https://cran.r-project.org/>).

B YEARLY SEDIMENT COMPOSITION

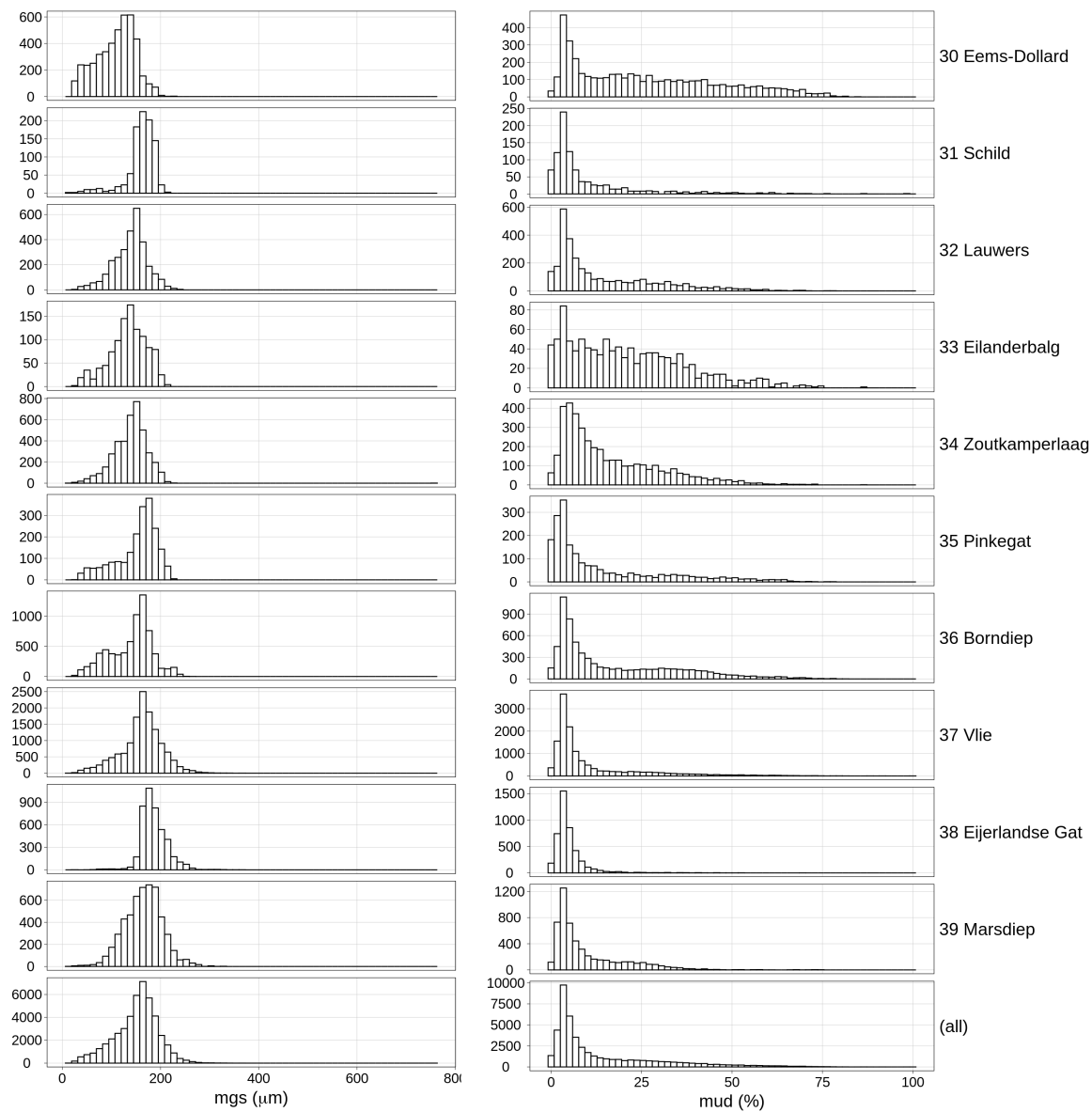


Figure S3: Distributions of the yearly median grain size (mgs μm) and mud content (%) per tidal basin for the period 2009-2019.

B YEARLY SEDIMENT COMPOSITION

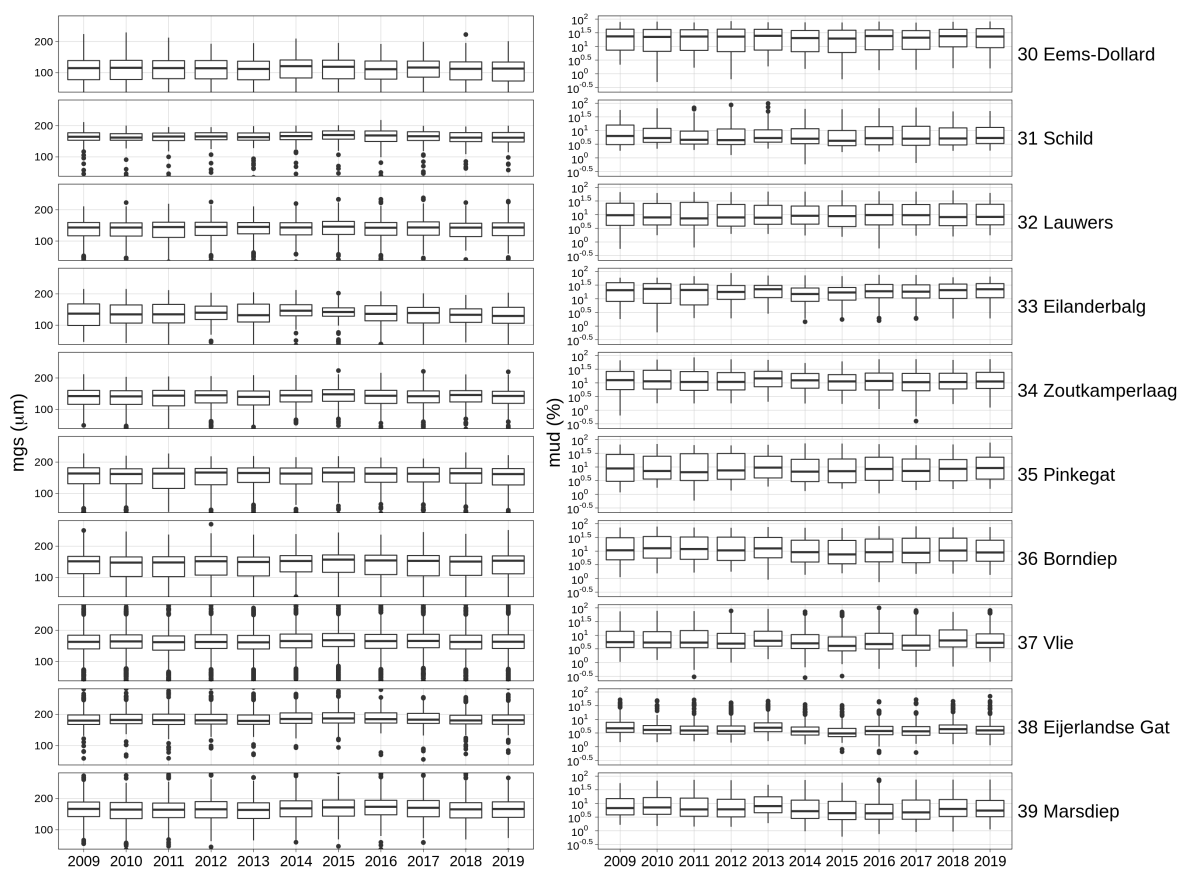


Figure S4: Boxplots of the yearly median grain size (*mgs* μm) and mud content (*mud* %) per tidal basin for the period 2009-2019.

C Wind data

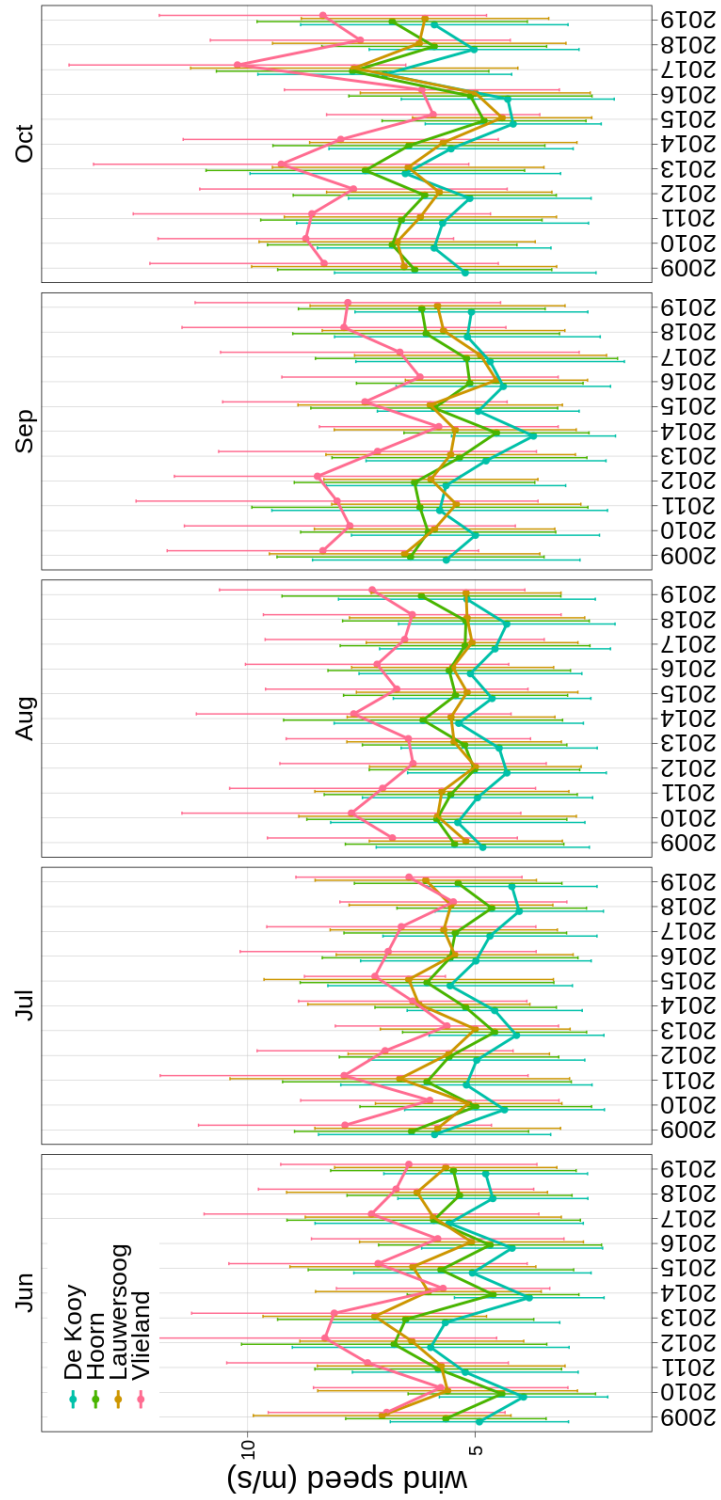


Figure S5: Average wind speed and standard deviation in the months June - October between 2009 and 2019 at the four weather stations along the Dutch Wadden Sea.