Supplements

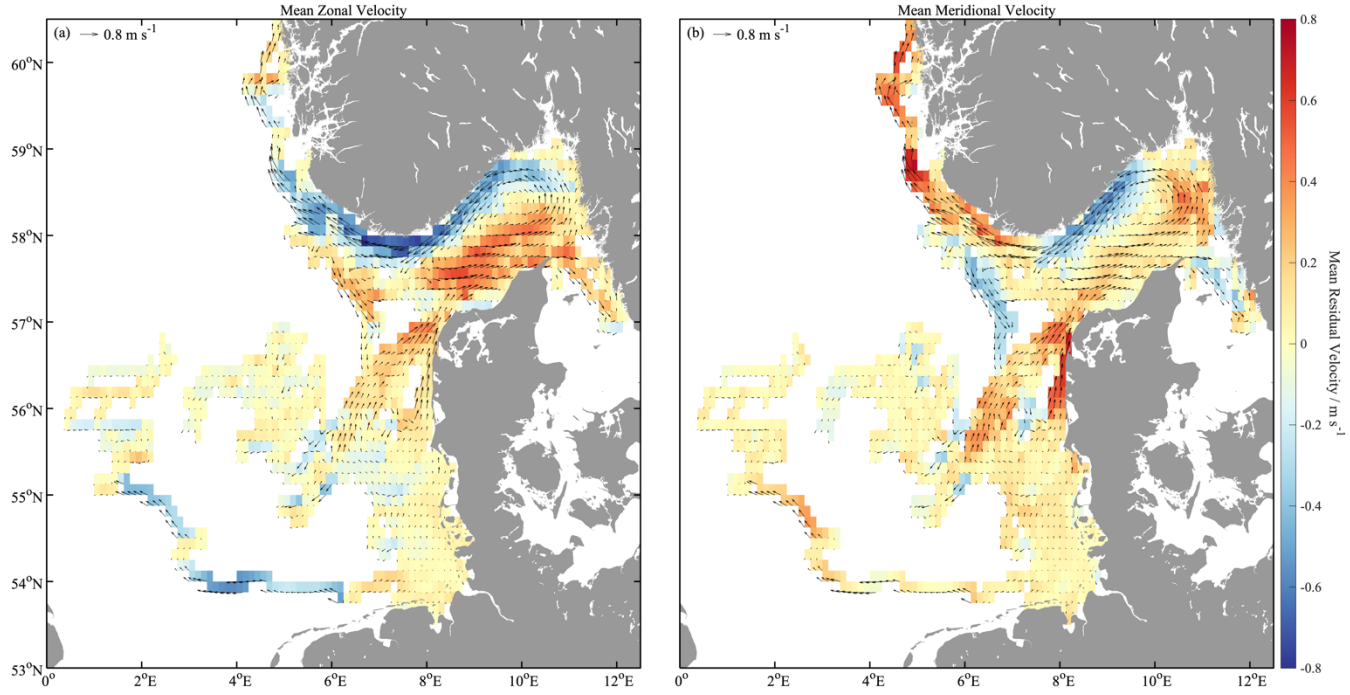

Figure S1: Mean velocities of the residual circulations for (a) the zonal component *u* and (b) the meridional component *v*. The arrows indicate the direction of the mean velocities, the magnitude describes the strength of the velocity. The spring 2018 dataset is included and shows unusual westward circulation due to a strong easterly wind period.

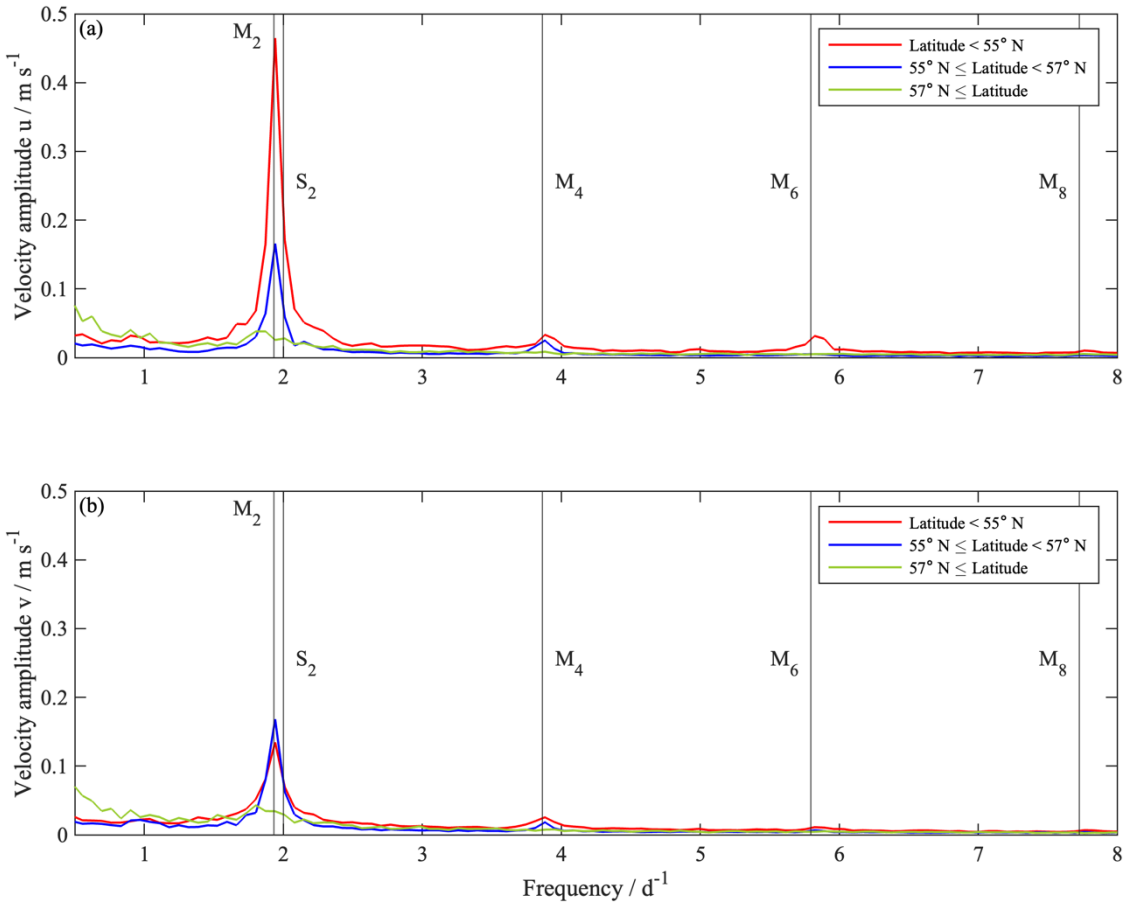

Figure S2: Spectral analysis using a Fourier transform of (a) zonal *u* and (b) meridional *v* drifter velocities averaged over trajectories. The periods of the semidiurnal and shallow water tidal components are indicated by the vertical lines.