Effects of macroalgal accumulations on the variability in zoobenthos of high-energy macrotidal sandy beaches

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Supplement. Additional information regarding MEMs, variation partitioning, variation of univariate variables and organic matter content at each site per beach.
Fig. S1. All dbMEMs (upper panel) and decomposed dbMEMs (individual curves below) eigenfunctions generated based on the number of sampling occasions and the number of days between sampling occasions (Time).
Fig S2. Venn diagram illustrating the result of variation partitioning of the biomass time series at SBA with respect to environmental ([E]), spatial ([S]) and MEM ([T]) explanatory variables. The fractions of variation displayed in the diagram are computed from adjusted $r^2$. Circles are not drawn to scale.
Fig S3. Mean (+ sd) abundance, biomass, species richness, numbers equivalent Shannon’s entropy and Simpson’s index (after Jost 2006) in the period April 2012 to February 2013 at each site for the three beaches (SBA, SBB, SBC). GT = Green tides, Gdt = Gradient, Abu = Abundance.
Fig S4. Principal component analysis (PCA) plots (scaling 1) of sites 1 (circles), 2 (triangles), and 3 (squares), based on Hellinger transformed abundance of benthic community sampled at SBₐ, SBₜ and SBₙ from April 2012 to February 2013 (excluding December 2012 for balanced design) with superimposed indicative clusters for spatial (continuous [sites 1], loose-dotted line [sites 2] or stippled-line [sites 3] polygons) and/or temporal structuring (grey boxes for autumn/winter dots, highlighting the difference to spring/summer dots).
Fig S5. Boxplots of organic matter content time series at each SBs, WS = winter storm, GT = presence of stranded *Ulva* onshore. A clear seasonal variation with increasing of organic matter content until winter storms was observed at SB_A while highly variable organic matter contents in time were measured at SBB and SBC, both harbouring green tides.