



Figure S1. Frequency distribution of log-transformed values of biotic and abiotic variables. (a) – optimal assimilation number (P^b_{opt}); (b) – surface chlorophyll *a* concentration (Chl_0); (c) – subsurface photosynthetically available radiation (PAR) (E_0); (d) – sea surface temperature (T_0); (e) – sea surface salinity (S_0); (f) – concentration of dissolved inorganic nitrogen (DIN); (g) – concentration of phosphates (PO_4); (h) – concentration of dissolved silicon ($Si(OH)_4$); (i) – the ratio of chlorophyll *a* concentration of small ($< 3 \mu m$) to total surface phytoplankton (Chl_s/Chl_0); K_α – value of Kolmogorov-Smirnov test; p value – statistical reliability; N – number of data. Solid line is the curve of expected normal distribution.