

*The following supplement accompanies the article*

**Empirical modelling of seston quality based on environmental factors in a mussel culture area (NW Iberian upwelling system)**

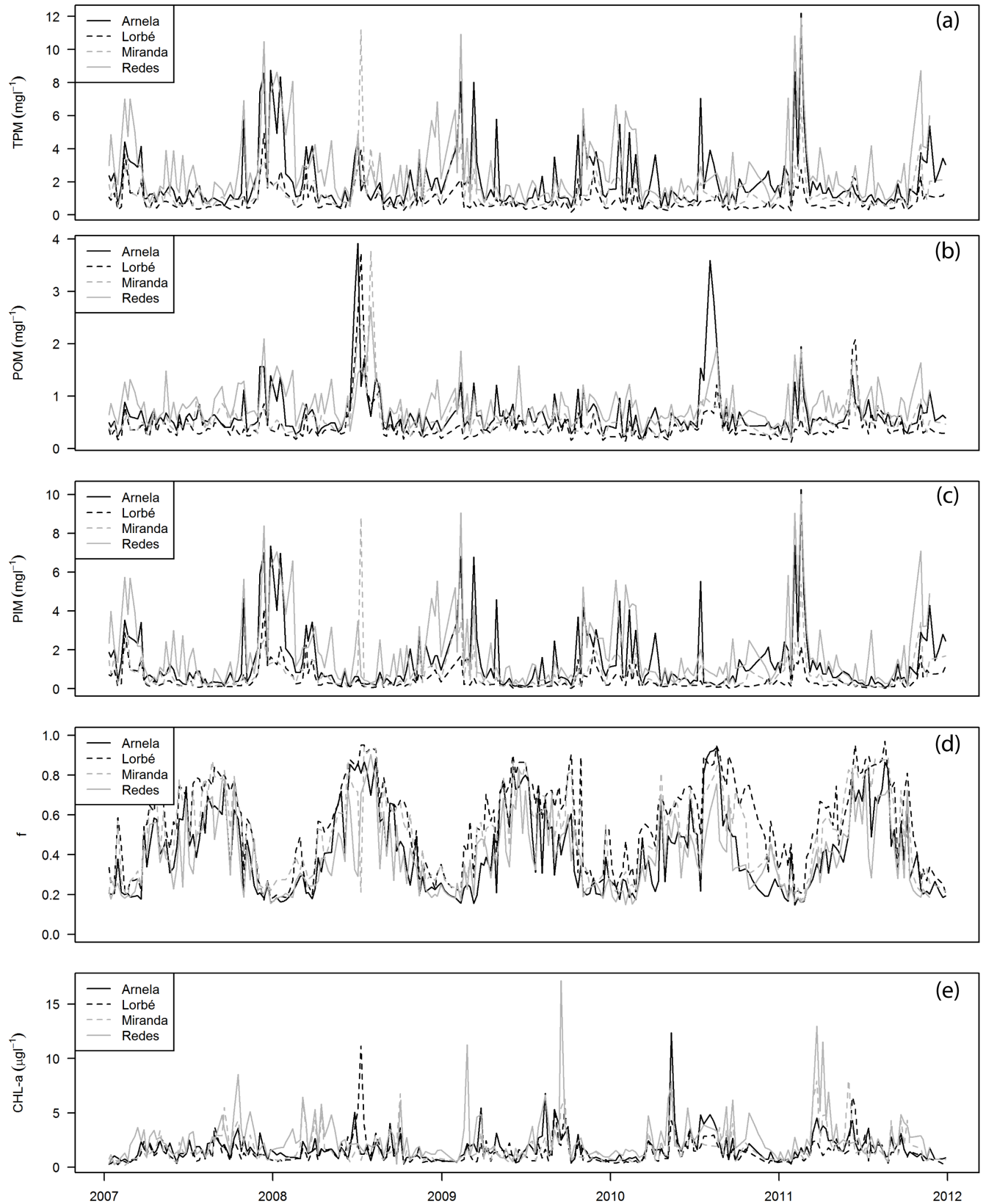
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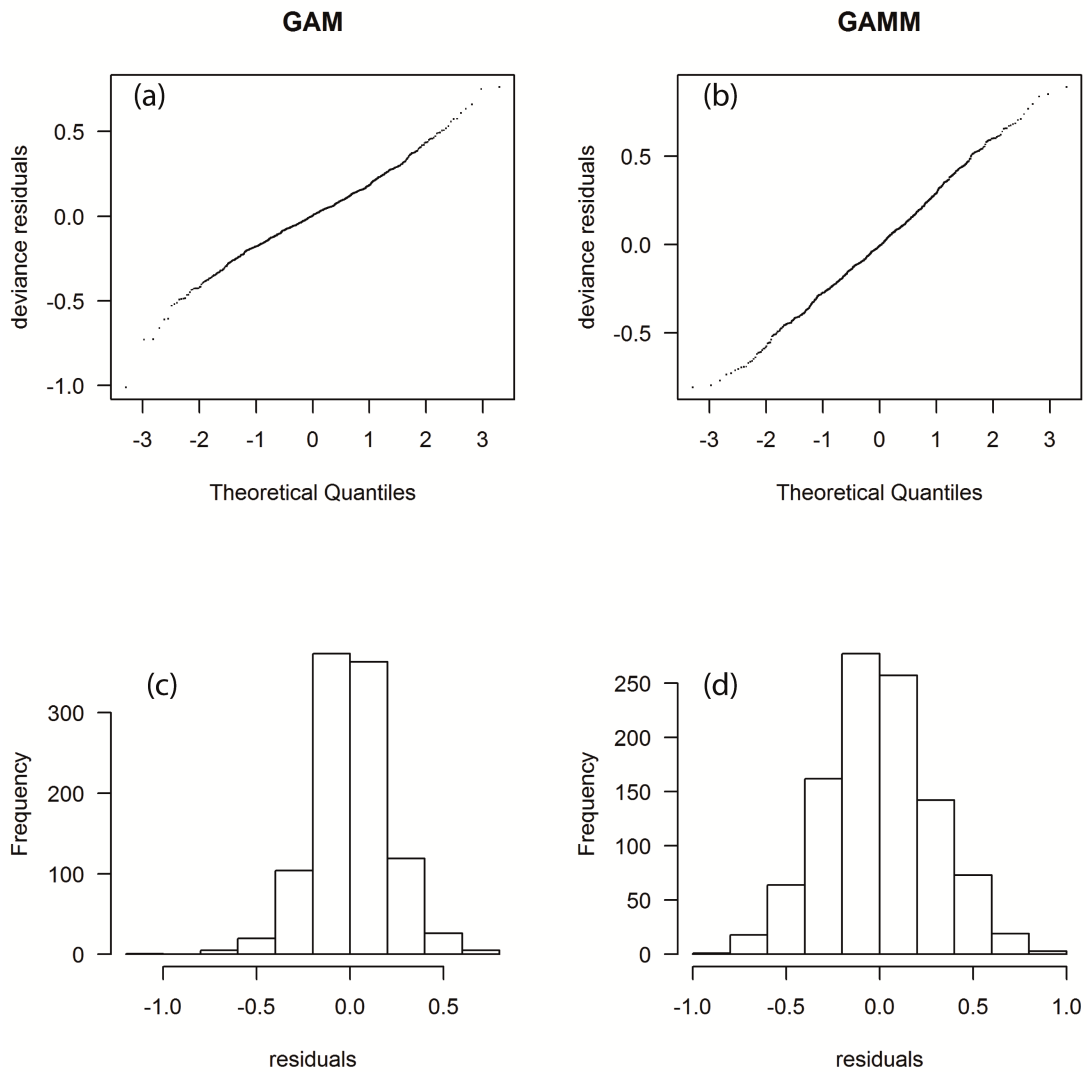
*Marine Ecology Progress Series 536: 89–105 (2015)*

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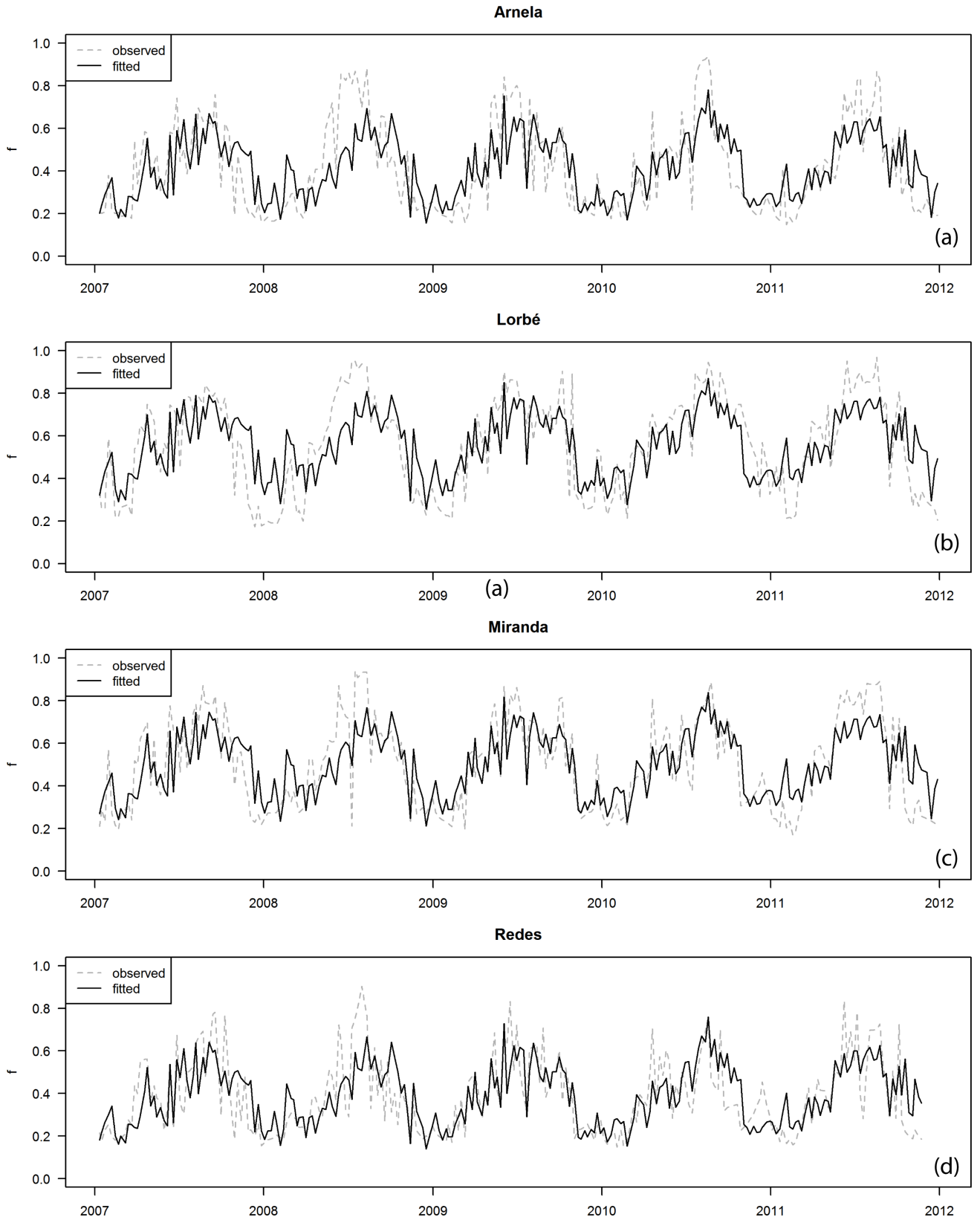
**Supplement.**



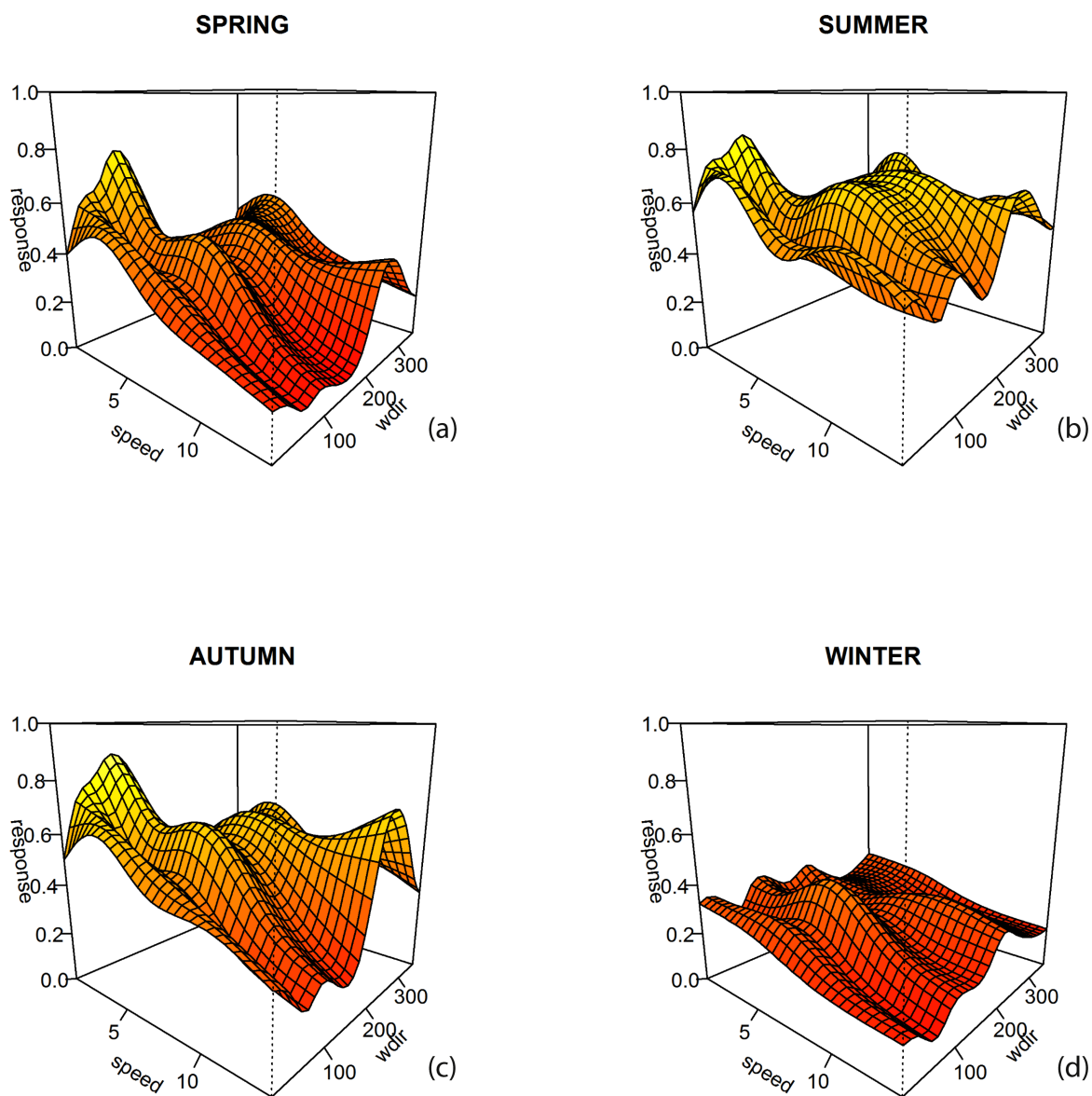
**Fig. S1.** Seston time series: total particulate matter, TPM (a); total organic matter, POM (b); total inorganic matter, PIM (c); seston quality;  $f$  (d) and chlorophyll content, Chl $a$  (e) from 2007 to 2011 at each location. Outer/inner locations are denoted by broken/continuous lines and northern/southern by grey/black lines.



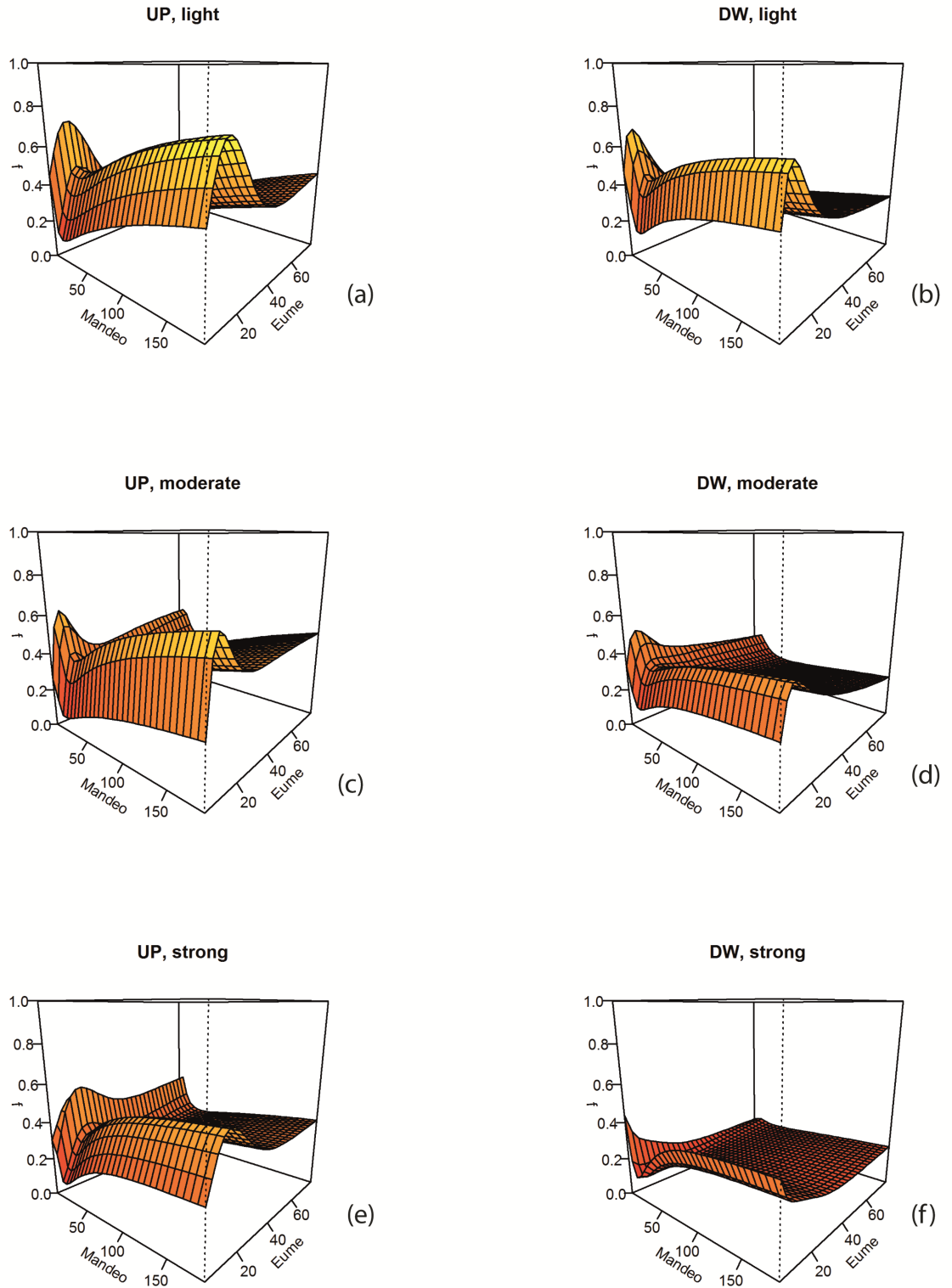
**Fig. S2.** Q-Q plots (a, b) that compare the probability distribution of the deviance residuals of the model and the theoretical values (by plotting their quantiles against each other). Histograms of deviance residuals (c, d) obtained for GAM model (c) and for GAMM model (d) fits of seston quality. Note that the residuals of the GAM (c) are not normal and this assumption is fulfilled in the GAMM model (d).



**Fig. S3.** Observed and model-fitted temporal series of seston quality at Arnela (a), Lorbé (b), Miranda (c) and Redes (d).



**Fig. S4.** Joint effect of wind speed and direction on seston quality (f) under spring (a), summer (b), autumn (c) and winter (d) conditions.



**Fig. S5.** Joint effect of river discharge on seston quality (f) under light (a, b) moderate (c, d) and strong (e, f) upwelling (UP) and downwelling (DW) conditions.