

Ocean Dynamics

Changes in phytoplankton production and upwelling intensity off A Coruña (NW Spain) for the last 28 yr

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Spearman correlations (lower semimatrix) and significance (upper semimatrix) of selected variables measured at station E2CO. SST and SSS: sea surface temperature and salinity, NO₃, PO₄ and SiO₄: photic-zone integrated total nitrate, phosphate, and silicate, O₂: mean oxygen concentration in the photic zone, NO_{3_b}, PO_{4_b} and SiO_{4_b}: total nitrate (nitrate+nitrite), phosphate and silicate in bottom water (70 m), Chl, PP, POC and PON: photic-zone integrated chlorophyll, primary production and particulate carbon and nitrogen, UI: upwelling index averaged for 15 d prior to sampling. Significant values ($p<0.05$) appear in bold.

	SST	SSS	NO ₃	PO ₄	SiO ₄	NO _{3_b}	PO _{4_b}	SiO _{4_b}	O ₂	Chl	PP	POC	NOP	UI
SST	1.000	0.287	0.000	0.000	0.001	0.000	0.102	0.000	0.000	0.023	0.000	0.000	0.000	0.386
SSS	0.062	1.000	0.248	0.384	0.000	0.152	0.305	0.611	0.588	0.211	0.687	0.803	0.205	0.000
NO ₃	-0.415	-0.068	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.088	0.068	0.000	0.000	0.954
PO ₄	-0.269	-0.052	0.614	1.000	0.000	0.000	0.000	0.000	0.001	0.741	0.893	0.003	0.001	0.030
SiO ₄	-0.197	-0.247	0.558	0.546	1.000	0.236	0.000	0.000	0.000	0.052	0.148	0.000	0.000	0.000
NO _{3_b}	0.272	0.085	0.354	0.385	0.070	1.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000
PO _{4_b}	0.096	0.061	0.272	0.735	0.210	0.725	1.000	0.000	0.083	0.001	0.000	0.089	0.095	0.000
SiO _{4_b}	0.270	-0.030	0.217	0.404	0.526	0.600	0.572	1.000	0.000	0.000	0.000	0.033	0.008	0.000
O ₂	-0.369	-0.033	-0.296	-0.199	-0.378	-0.169	-0.107	-0.272	1.000	0.006	0.041	0.000	0.000	0.017
Chl	0.131	0.073	-0.096	-0.019	-0.114	0.339	0.182	0.264	0.167	1.000	0.000	0.000	0.000	0.000
PP	0.239	0.024	-0.106	0.008	-0.086	0.420	0.265	0.351	0.125	0.701	1.000	0.000	0.000	0.000
POC	0.354	0.016	-0.259	-0.182	-0.316	0.300	0.106	0.133	0.259	0.574	0.563	1.000	0.000	0.000
PON	0.398	0.079	-0.323	-0.214	-0.337	0.306	0.105	0.165	0.242	0.664	0.610	0.932	1.000	0.000
UI	0.050	0.277	0.003	0.122	-0.231	0.489	0.393	0.233	0.146	0.442	0.465	0.361	0.418	1.000