

## Response of copepod communities to ocean warming in three time-series across the North Atlantic and Mediterranean Sea

Ernesto Villarino\*, Xabier Irigoien, Fernando Villate, Arantza Iriarte, Ibon Uriarte, Soultana Zervoudaki, Jacob Carstensen, Todd D. O'Brien, Guillem Chust

\*Corresponding author: evillarino@azti.es

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### SUPPLEMENT

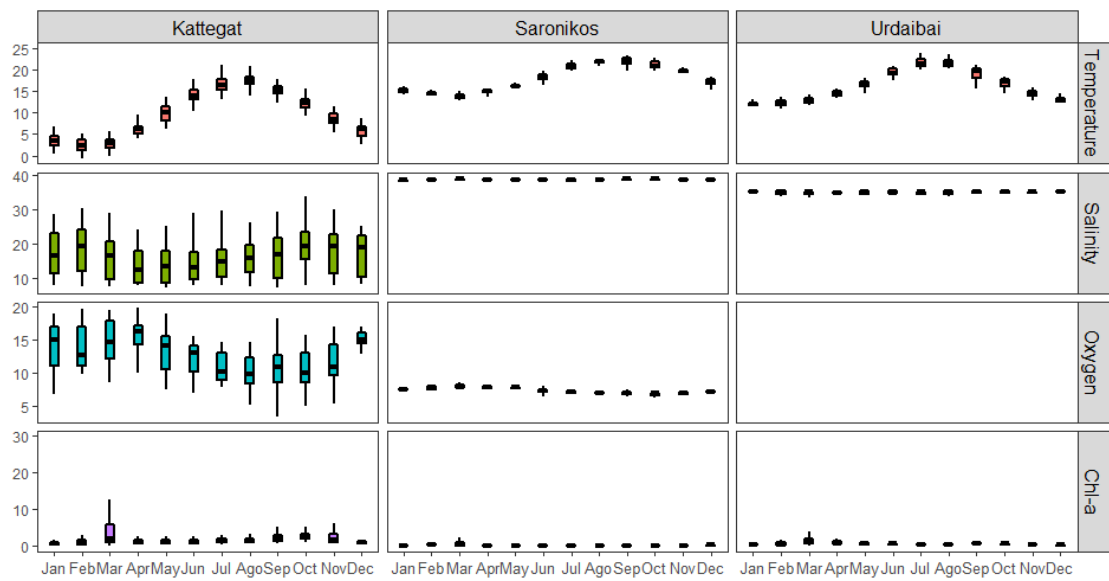
**Supplementary Table S1.** Species thermal optimum and midpoint calculated as the 5<sup>th</sup> and 95<sup>th</sup> percentile of the temperature distribution occupied by each species. The species present at each station are also shown.

Species	SST <sub>Optimum Mean</sub>	Midpoint	N obs.	Kattegat	Urdaibai	Saronikos
<i>Acartia bifilosa</i>	8.57	8.81	12019	X	X	
<i>Acartia clausi</i>	14.75	18.80	37590	X	X	X
<i>Acartia discaudata</i>	15.82	18.91	124	X	X	
<i>Acartia longiremis</i>	5.52	6.46	31296	X		
<i>Acartia negligens</i>	22.81	22.29	4879			X
<i>Acartia tonsa</i>	15.53	15.66	3257	X	X	
<i>Aetideus armatus</i>	14.10	16.24	4350			X
<i>Aetideus giesbrechti</i>	22.47	21.79	809			X
<i>Calanus finmarchicus</i>	7.91	7.31	229026	X		
<i>Calanus helgolandicus</i>	12.37	13.06	72007	X	X	X
<i>Calocalanus pavo</i>	25.33	23.25	10876		X	X
<i>Calocalanus plumulosus</i>	26.22	23.66	6228			X
<i>Calocalanus styliremis</i>	24.93	22.01	3705		X	X
<i>Calocalanus tenuis</i>	18.66	18.01	468		X	X
<i>Candacia armata</i>	12.41	13.44	10958	X	X	X
<i>Candacia bispinosa</i>	22.68	22.55	882			X
<i>Candacia simplex</i>	21.53	21.90	962			X
<i>Candacia varicans</i>	22.53	21.24	107			X
<i>Centropages hamatus</i>	8.84	7.60	39548	X		
<i>Centropages kroyeri</i>	17.62	17.67	226			X
<i>Centropages ponticus</i>	14.82	16.64	2197			X
<i>Centropages typicus</i>	11.68	12.05	59957	X	X	X
<i>Centropages violaceus</i>	22.26	22.17	1175			X
<i>Clausocalanus arcuicornis</i>	23.83	20.08	22373			X
<i>Clausocalanus furcatus</i>	22.69	18.91	8331			X
<i>Clausocalanus jobei</i>	19.26	20.51	496			X
<i>Clausocalanus lividus</i>	19.20	18.35	557			X
<i>Clausocalanus mastigophorus</i>	22.02	23.24	739			X
<i>Clausocalanus parapergens</i>	18.15	19.16	343			X
<i>Clytemnestra scutellata</i>	16.20	17.93	587		X	
<i>Ctenocalanus vanus</i>	7.69	11.16	21804		X	X
<i>Diaixis hibernica</i>	15.57	14.40	93	X		

<i>Diaixis pymaea</i>	17.03	18.66	243			X
<i>Ditrichocorycaeus anglicus</i>	12.61	12.88	2687	X	X	
<i>Euchaeta acuta</i>	15.95	16.89	3254			X
<i>Euchaeta marina</i>	24.41	22.22	8848			X
<i>Eurytemora affinis</i>	8.88	9.00	6823	X		
<i>Euterpina acutifrons</i>	21.30	20.02	9202		X	X
<i>Farranula rostrata</i>	19.69	21.61	1293			X
<i>Goniopsyllus rostratus</i>	18.46	19.14	695			X
<i>Haloptilus longicornis</i>	23.32	23.11	2471			X
<i>Heterorhabdus papilliger</i>	20.17	20.39	3130			X
<i>Isias clavipes</i>	12.57	14.53	1736			X
<i>Lubbockia squillimana</i>	21.72	20.94	515			X
<i>Lucicutia flavicornis</i>	24.65	22.16	11027			X
<i>Lucicutia gemina</i>	19.85	21.01	543			X
<i>Macrosetella gracilis</i>	26.55	23.52	6677			X
<i>Mecynocera clausi</i>	20.31	19.28	11326			X
<i>Mesocalanus tenuicornis</i>	18.47	18.76	6209			X
<i>Metridia longa</i>	2.53	3.65	45300	X		
<i>Metridia lucens</i>	20.31	19.28	11326	X		X
<i>Microcalanus pygmaeus</i>	0.25	3.30	10694	X		X
<i>Microsetella norvegica</i>	5.65	9.43	10670		X	
<i>Microsetella rosea</i>	24.82	21.65	17096		X	
<i>Monothula oncaea subtilis</i>	19.43	20.99	630		X	
<i>Nannocalanus minor</i>	20.00	20.91	688		X	X
<i>Oithona atlantica</i>	7.41	10.46	9291	X		
<i>Oithona nana</i>	15.41	18.50	11599	X	X	X
<i>Oithona plumifera</i>	18.61	28.06	5498		X	
<i>Oithona similis</i>	5.34	6.58	94999	X	X	X
<i>Oncaea media</i>	21.10	21.30	2682		X	
<i>Paracalanus denudatus</i>	25.95	23.02	2295			X
<i>Paracalanus nanus</i>	21.06	22.53	1293		X	X
<i>Paracalanus parvus</i>	18.46	18.95	42615	X	X	X
<i>Paracalanus pygmaeus</i>	18.18	18.94	3013		X	
<i>Paracartia grani</i>	19.05	19.05	3		X	X
<i>Paracartia latisetosa</i>	20.59	20.29	59			X
<i>Paraeucalanus sewelli</i>	15.73	18.69	161			X
<i>Paraeuchaeta hebes</i>	13.74	13.46	5504		X	
<i>Pleuromamma gracilis</i>	17.91	19.58	13003			X
<i>Pontellina plumata</i>	26.00	24.15	1274			X
<i>Pseudocalanus elongatus</i>	10.38	9.47	75659	X	X	
<i>Pseudocalanus minutus</i>	3.56	3.80	41376	X		
<i>Scolecithricella dentata</i>	19.60	20.52	713			X
<i>Scolecithrix bradyi</i>	23.14	22.42	1245			X
<i>Subeucalanus crassus</i>	21.14	19.19	3252			X
<i>Subeucalanus monachus</i>	23.88	22.20	1038			X
<i>Temora longicornis</i>	9.17	7.67	90719	X	X	
<i>Temora stylifera</i>	21.25	20.92	6148		X	X

## SUPPLEMENTARY FIG. S1

(a)



(b)

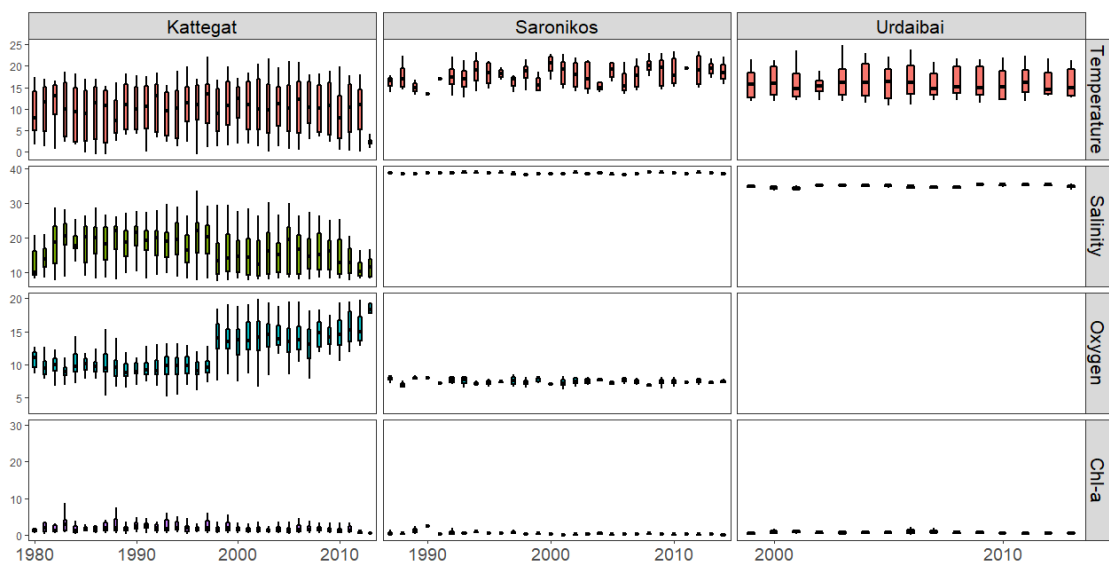


Fig. S1. Time-series of the environmental variables measured at each sampling site at seasonal (a) and interannual (b) scales. The boxplot shows variability of the values for each month or year. The bottom and top of the box are the lower (Q1) and upper (Q3) quartiles and the band inside the box is the median. The whiskers extend up to 1.5 times the interquartile range (Q3-Q1) from the box. The points outside the whiskers are not drawn.