

Table S-E01 Correlations of dominant Cladoceran and Copepod species with SST

	Alboran Sea						Transition				Balearic Sea		
Species	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape		Palos Cape	Ibiza Channel	Baleares		Tarragona	Barcelona	Menorca
<i>Penilia avirostris</i>	ns	ns	ns	ns	NEG marg-signif $R_s(10) = -0.5879$, $p < 0.10$		NEG * $R_s(9) = -0.8542$, $p < 0.05$ *	ns	ns		ns	ns	ns
<i>Evadne spinifera</i>	ns	ns	ns	ns	ns		NEG * $R_s(10) = -0.6727$, $p < 0.05$ *	ns	ns		ns	ns	ns
<i>Clausocalanus arcuicornis</i>	ns	ns	ns	ns	ns		ns	ns	ns		ns	NEG marg-signif $R_s(9) = -0.6167$, $p < 0.10$	ns
<i>Clausocalanus lividus</i>	ns	ns	ns	ns	ns		ns	ns	NEG marg-signif $R_s(8) = -0.7381$, $p < 0.10$		ns	ns	ns
<i>Clausocalanus furcatus</i>	ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Paracalanus parvus</i>	ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Centropages typicus</i>	ns	ns	ns	ns	ns		ns	NEG marg-signif $R_s(9) = -0.6333$, $p < 0.10$	NEG * $R_s(9) = -0.8500$, $p < 0.05$ *		ns	NEG * $R_s(9) = -0.7667$, $p < 0.05$ *	ns
<i>Temora stylifera</i>	ns	ns	POS marg-signif $R_s(8) = 0.8095$, $p < 0.10$	ns	ns		ns	ns	ns		ns	ns	ns
<i>Calanus helgolandicus</i>	ns	ns	ns	ns	ns		ns	NEG marg-signif $R_s(9) = -0.6000$, $p < 0.10$	ns		ns	ns	ns
<i>Subeucalanus monachus</i>	ns	ns	ns	ns	ns								.
<i>Acartia clausi</i>	ns	ns	ns	NEG marg-signif $R_s(8) = -0.7857$, $p < 0.10$	ns		ns	ns	ns		ns	ns	ns
Species	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape		Palos Cape	Ibiza Channel	Baleares		Tarragona	Barcelona	Menorca
	Alboran Sea						Transition				Balearic Sea		

Table S-E02 Correlations of dominant Cladoceran and Copepod species with PSAL

	Alboran Sea						Transition				Balearic Sea		
Species	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape		Palos Cape	Ibiza Channel	Baleares		Tarragona	Barcelona	Menorca
<i>Penilia avirostris</i>	ns	ns	ns	ns	ns		ns	NEG * $R_s(9) = -0.7167$, $p < 0.05$ *	NEG marg-signif $R_s(8) = -0.6905$, $p < 0.10$		ns	ns	ns
<i>Evadne spinifera</i>	POS * $R_s(9) = 0.7833$, $p < 0.05$ *	ns	POS marg-signif $R_s(10) = 0.5515$, $p < 0.10$	ns	ns		ns	ns	ns		ns	ns	POS marg-signif $R_s(7) = 0.8571$, $p < 0.10$
<i>Clausocalanus arcuicornis</i>	ns	ns	ns	ns	ns		ns	ns	ns		ns	POS marg-signif $R_s(9) = 0.7000$, $p < 0.10$	POS marg-signif $R_s(9) = 0.6000$, $p < 0.10$
<i>Clausocalanus lividus</i>	ns	ns	ns	ns	ns		ns	ns	POS marg-signif $R_s(8) = 0.7619$, $p < 0.10$		ns	ns	POS * $R_s(8) = 0.8810$, $p < 0.05$ *
<i>Clausocalanus furcatus</i>	ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	POS * $R_s(8) = 0.8571$, $p < 0.05$ *
<i>Paracalanus parvus</i>	ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Centropages typicus</i>	ns	ns	ns	ns	ns		ns	ns	POS * $R_s(9) = 0.8667$, $p < 0.05$ *		ns	POS * $R_s(9) = 0.8500$, $p < 0.05$ *	POS marg-signif $R_s(9) = 0.6167$, $p < 0.10$
<i>Temora stylifera</i>	ns	ns	ns	POS * $R_s(8) = 0.9048$, $p < 0.05$ *	ns		ns	ns	ns		ns	ns	ns
<i>Calanus helgolandicus</i>	ns	ns	ns	ns	ns		ns	ns	ns		ns	POS marg-signif $R_s(8) = 0.8095$, $p < 0.10$	POS marg-signif $R_s(9) = 0.6792$, $p < 0.10$
<i>Subeucalanus monachus</i>	ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	.
<i>Acartia clausi</i>	NEG marg-signif $R_s(8) = -0.7381$, $p < 0.10$	ns	ns	ns	ns		ns	ns	ns		ns	POS marg-signif $R_s(8) = 0.7381$, $p < 0.10$	ns
Species	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape		Palos Cape	Ibiza Channel	Baleares		Tarragona	Barcelona	Menorca
	Alboran Sea						Transition				Balearic Sea		

Table S-E03 Correlations of dominant Cladoceran and Copepod species with **CHL**

		Alboran Sea						Transition				Balearic Sea		
Species		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape		Palos Cape	Ibiza Channel	Baleares		Tarragona	Barcelona	Menorca
<i>Penilia avirostris</i>		ns	POS marg-signif $R_s(10) = 0.5515$, $p < 0.10$	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Evadne spinifera</i>		ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Clausocalanus arcuicornis</i>		ns	ns	ns	POS marg-signif $R_s(8) = 0.7381$, $p < 0.10$	ns		ns	ns	ns		ns	ns	ns
<i>Clausocalanus lividus</i>		ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Clausocalanus furcatus</i>		ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Paracalanus parvus</i>		ns	ns	ns	ns			ns	ns	ns		ns	ns	ns
<i>Centropages typicus</i>		ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Temora stylifera</i>		ns	ns	ns	ns	ns		ns	ns	ns		ns	ns	ns
<i>Calanus helgolandicus</i>		ns	ns	ns	ns			ns	ns	ns		ns	ns	ns
<i>Subeucalanus monachus</i>		POS marg-signif $R_s(8) = 0.7381$, $p < 0.10$	ns	ns	ns	ns								.
<i>Acartia clausi</i>		ns	ns	POS marg-signif $R_s(8) = 0.7381$, $p < 0.10$	ns	ns		ns	ns	ns		ns	ns	ns
Species		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape		Palos Cape	Ibiza Channel	Baleares		Tarragona	Barcelona	Menorca
		Alboran Sea						Transition				Balearic Sea		