

Table S-A01 Sea Surface Temperature ($^{\circ}\text{C}$) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A01.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		18.5 (+/- 0.3)	18.5 (+/- 0.3)	18.5 (+/- 0.3)	18.8 (+/- 0.3)	19.2 (+/- 0.3)	19.6 (+/- 0.4)	19.4 (+/- 0.4)	19.7 (+/- 0.4)	19.1 (+/- 0.4)	18.5 (+/- 0.4)	19.2 (+/- 0.4)	18.8 (+/- 0.3)	19.5 (+/- 0.4)	18.9 (+/- 0.4)
Winter Mean $m02 + m03$		15.4 (+/- 0.5)	15.1 (+/- 0.5)	15.1 (+/- 0.5)	15.1 (+/- 0.4)	15.0 (+/- 0.4)	14.6 (+/- 0.5)	14.0 (+/- 0.6)	14.3 (+/- 0.5)	13.6 (+/- 0.4)	13.3 (+/- 0.3)	13.9 (+/- 0.4)	15.1 (+/- 0.4)	14.2 (+/- 0.5)	13.6 (+/- 0.4)
Spring Mean $m04 + m05$		17.0 (+/- 0.4)	17.0 (+/- 0.6)	17.0 (+/- 0.6)	17.0 (+/- 0.5)	17.1 (+/- 0.4)	17.4 (+/- 0.4)	17.0 (+/- 0.6)	17.3 (+/- 0.6)	16.6 (+/- 0.7)	16.1 (+/- 0.6)	16.7 (+/- 0.6)	17.1 (+/- 0.5)	17.2 (+/- 0.5)	16.4 (+/- 0.7)
Summer Mean $m06 + m07$		20.8 (+/- 0.7)	21.2 (+/- 0.8)	21.2 (+/- 0.8)	21.6 (+/- 0.7)	22.2 (+/- 0.8)	23.2 (+/- 0.8)	23.3 (+/- 0.7)	23.6 (+/- 0.7)	23.2 (+/- 0.8)	22.6 (+/- 0.8)	23.0 (+/- 0.7)	21.6 (+/- 0.7)	23.4 (+/- 0.7)	23.0 (+/- 0.8)
Autumn Mean $m10 + m11$		19.1 (+/- 0.5)	18.9 (+/- 0.7)	18.9 (+/- 0.7)	19.4 (+/- 0.9)	20.2 (+/- 0.7)	20.9 (+/- 0.9)	21.0 (+/- 0.7)	21.3 (+/- 0.7)	20.5 (+/- 0.6)	19.9 (+/- 0.7)	20.9 (+/- 0.7)	19.6 (+/- 0.7)	21.1 (+/- 0.7)	20.4 (+/- 0.6)
S-A01.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca			
Annual Trend		(+)	(+)	(+)	(+)	marg-signif POS ($t=0.0532, p<0.10$)	POS * ($t=0.0822, p<0.05$)	POS ** ($t=0.0821, p<0.01$)	POS ** ($t=0.0984, p<0.01$)	POS ** ($t=0.0904, p<0.01$)	POS ** ($t=0.0751, p<0.01$)	POS ** ($t=0.0879, p<0.01$)			
Winter Trend $m02 + m03$		(-)	(-)	(-)	(-)	(+)	(+)	(+)	(+)	(+)	marg-signif POS ($t=0.0565, p<0.10$)	(+)			
Spring Trend $m04 + m05$		POS * ($t=0.0766, p<0.05$)	marg-signif POS ($t=0.1221, p<0.10$)	marg-signif POS ($t=0.1221, p<0.10$)	marg-signif POS ($t=0.0993, p<0.10$)	marg-signif POS ($t=0.0706, p<0.10$)	marg-signif POS ($t=0.0751, p<0.10$)	(+)	(+)	(+)	(+)	(+)			
Summer Trend $m06 + m07$		marg-signif POS ($t=0.0902, p<0.10$)	marg-signif POS ($t=0.1157, p<0.10$)	marg-signif POS ($t=0.1157, p<0.10$)	(+)	(+)	(+)	(+)	(+)	POS * ($t=0.0904, p<0.05$)	POS * ($t=0.1415, p<0.05$)	marg-signif POS ($t=0.1233, p<0.10$)			
Autumn Trend $m10 + m11$		(+)	(+)	(+)	(+)	(+)	POS * ($t=0.1257, p<0.05$)	marg-signif POS ($t=0.1332, p<0.10$)	POS ** ($t=0.1715, p<0.01$)	marg-signif POS ($t=0.0909, p<0.10$)	(+)	POS * ($t=0.1551, p<0.05$)			

S-A01.d Regional Averages plot

Table S-A02 Surface Salinity trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A02.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		36.84 (+/- 0.16)	36.96 (+/- 0.16)	36.96 (+/- 0.16)	36.99 (+/- 0.15)	37.00 (+/- 0.15)	37.21 (+/- 0.16)	37.51 (+/- 0.20)	37.49 (+/- 0.15)	37.82 (+/- 0.17)	37.97 (+/- 0.11)	37.65 (+/- 0.09)	36.95 (+/- 0.15)	37.44 (+/- 0.17)	37.86 (+/- 0.11)
Winter Mean $m02 + m03$		36.93 (+/- 0.20)	37.08 (+/- 0.20)	37.08 (+/- 0.20)	37.12 (+/- 0.21)	37.12 (+/- 0.21)	37.31 (+/- 0.22)	37.65 (+/- 0.25)	37.58 (+/- 0.19)	38.00 (+/- 0.21)	38.14 (+/- 0.15)	37.69 (+/- 0.12)	37.07 (+/- 0.20)	37.56 (+/- 0.22)	37.99 (+/- 0.14)
Spring Mean $m04 + m05$		36.85 (+/- 0.15)	36.99 (+/- 0.15)	36.99 (+/- 0.15)	37.02 (+/- 0.15)	37.02 (+/- 0.15)	37.20 (+/- 0.18)	37.48 (+/- 0.20)	37.44 (+/- 0.17)	37.79 (+/- 0.17)	37.94 (+/- 0.17)	37.60 (+/- 0.12)	36.97 (+/- 0.14)	37.41 (+/- 0.18)	37.82 (+/- 0.13)
Summer Mean $m06 + m07$		36.81 (+/- 0.20)	36.92 (+/- 0.19)	36.92 (+/- 0.19)	36.96 (+/- 0.17)	36.98 (+/- 0.16)	37.20 (+/- 0.18)	37.49 (+/- 0.25)	37.48 (+/- 0.20)	37.77 (+/- 0.22)	37.90 (+/- 0.15)	37.61 (+/- 0.11)	36.92 (+/- 0.17)	37.43 (+/- 0.22)	37.80 (+/- 0.15)
Autumn Mean $m10 + m11$		36.76 (+/- 0.20)	36.85 (+/- 0.21)	36.85 (+/- 0.21)	36.87 (+/- 0.21)	36.89 (+/- 0.21)	37.09 (+/- 0.20)	37.39 (+/- 0.21)	37.46 (+/- 0.14)	37.73 (+/- 0.19)	37.90 (+/- 0.13)	37.68 (+/- 0.09)	36.84 (+/- 0.21)	37.36 (+/- 0.17)	37.81 (+/- 0.13)
S-A02.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Trend		NEG ** ($t=-0.0436, p=0.01$)	NEG ** ($t=-0.0361, p=0.01$)	NEG ** ($t=-0.0361, p=0.01$)	NEG ** ($t=-0.0256, p=0.01$)	marg-signif NEG ($t=-0.0215, p=0.10$)	marg-signif NEG ($t=-0.0146, p=0.10$)	(-)	(-)	(+)	(+)	(+)			
Winter Trend $m02 + m03$		marg-signif NEG ($t=-0.0324, p=0.10$)	(-)	(-)	(-)	(-)	(-)	(-)	(+)	(+)	(+)				
Spring Trend $m04 + m05$		NEG ** ($t=-0.0347, p=0.01$)	NEG * ($t=-0.0308, p=0.05$)	NEG * ($t=-0.0308, p=0.05$)	(-)	(-)	(-)	(-)	(+)	(+)	(+)				
Summer Trend $m06 + m07$		NEG ** ($t=-0.0577, p=0.01$)	NEG ** ($t=-0.0495, p=0.01$)	NEG ** ($t=-0.0495, p=0.01$)	NEG ** ($t=-0.0437, p=0.01$)	NEG ** ($t=-0.0346, p=0.01$)	NEG * ($t=-0.0269, p=0.05$)	(-)	(-)	(+)	(+)	(+)			
Autumn Trend $m10 + m11$		NEG ** ($t=-0.0483, p=0.01$)	NEG ** ($t=-0.0464, p=0.01$)	NEG ** ($t=-0.0464, p=0.01$)	NEG * ($t=-0.0415, p=0.05$)	marg-signif NEG ($t=-0.0391, p=0.10$)	NEG ** ($t=-0.0371, p=0.01$)	NEG * ($t=-0.0358, p=0.05$)	marg-signif NEG ($t=-0.0217, p=0.10$)	(-)	(-)	(+)			
S-A02.d Regional Averages plot															
S-A02.c Averages-n-Trends plots															
<img alt="A series of 4 horizontally stacked box plots showing seasonal averages for the Alboran Sea, Transition, and Balearic Sea regions. Each plot includes a red horizontal line for the average and															

Table S-A03 Scalar Surface Wind (m s^{-1}) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A03.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		7.3 (+/- 0.4)	7.3 (+/- 0.3)	7.3 (+/- 0.3)	7.6 (+/- 0.4)	7.5 (+/- 0.3)	6.8 (+/- 0.2)	6.4 (+/- 0.3)	6.5 (+/- 0.5)	6.7 (+/- 0.5)	6.0 (+/- 0.3)	7.5 (+/- 0.5)	7.4 (+/- 0.4)	6.5 (+/- 0.3)	6.7 (+/- 0.3)
Winter Mean $m02 + m03$		8.6 (+/- 0.7)	8.8 (+/- 0.7)	8.8 (+/- 0.7)	9.5 (+/- 0.9)	8.7 (+/- 0.8)	7.6 (+/- 0.8)	7.3 (+/- 0.9)	7.7 (+/- 1.1)	7.7 (+/- 1.0)	6.5 (+/- 0.5)	9.4 (+/- 1.5)	9.0 (+/- 0.7)	7.5 (+/- 0.7)	7.8 (+/- 0.7)
Spring Mean $m04 + m05$		7.4 (+/- 1.0)	7.5 (+/- 1.0)	7.5 (+/- 1.0)	8.1 (+/- 0.8)	8.0 (+/- 0.4)	6.8 (+/- 0.5)	6.1 (+/- 0.8)	6.0 (+/- 0.9)	6.4 (+/- 1.1)	5.7 (+/- 0.8)	7.2 (+/- 0.8)	7.8 (+/- 0.7)	6.2 (+/- 0.7)	6.3 (+/- 0.6)
Summer Mean $m06 + m07$		7.0 (+/- 1.0)	6.5 (+/- 0.9)	6.5 (+/- 0.9)	6.2 (+/- 0.4)	6.7 (+/- 0.3)	6.0 (+/- 0.6)	5.6 (+/- 0.7)	5.4 (+/- 0.6)	5.3 (+/- 0.7)	5.2 (+/- 0.7)	5.8 (+/- 0.6)	6.5 (+/- 0.6)	5.6 (+/- 0.5)	5.5 (+/- 0.6)
Autumn Mean $m10 + m11$		6.9 (+/- 0.9)	7.0 (+/- 1.0)	7.0 (+/- 1.0)	7.2 (+/- 1.0)	7.1 (+/- 1.0)	6.8 (+/- 0.8)	6.7 (+/- 0.8)	6.6 (+/- 0.7)	7.5 (+/- 1.1)	6.4 (+/- 0.5)	8.1 (+/- 1.1)	7.0 (+/- 0.9)	6.7 (+/- 0.7)	7.3 (+/- 0.6)
S-A03.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca			
Annual Trend		NEG * ($r=-0.0084, p=0.05$)	NEG * ($r=-0.0091, p=0.05$)	NEG * ($r=-0.0091, p=0.05$)	NEG * ($r=-0.0092, p=0.05$)	(-)		marg-signif NEG ($r=-0.0079, p=0.10$)	NEG ** ($r=-0.0081, p=0.01$)	marg-signif NEG ($r=-0.0032, p=0.10$)	NEG ** ($r=-0.0081, p=0.01$)	NEG ** ($r=-0.0183, p=0.01$)	(-)		
Winter Trend $m02 + m03$		(+)	(+)	(+)	marg-signif POS ($r=0.0079, p=0.10$)	(+)		(+)	(+)	(+)	(+)	(+)	(-)	(-)	
Spring Trend $m04 + m05$		NEG ** ($r=-0.0271, p=0.01$)	NEG * ($r=-0.0249, p=0.05$)	NEG * ($r=-0.0249, p=0.05$)	marg-signif NEG ($r=-0.0183, p=0.10$)	marg-signif NEG ($r=-0.0084, p=0.10$)	(-)	(-)	(-)	NEG * ($r=-0.0342, p=0.05$)	marg-signif NEG ($r=-0.0198, p=0.10$)	NEG * ($r=-0.0277, p=0.05$)			
Summer Trend $m06 + m07$		marg-signif NEG ($r=0.0274, p=0.10$)	NEG * ($r=-0.0203, p=0.05$)	NEG * ($r=-0.0203, p=0.05$)	(-)	(-)	(-)	(-)	marg-signif NEG ($r=0.0140, p=0.10$)	NEG ** ($r=-0.0281, p=0.01$)	(-)	(-)			
Autumn Trend $m10 + m11$		(-)	(-)	(-)	marg-signif NEG ($r=-0.0287, p=0.10$)	(-)	marg-signif NEG ($r=-0.0156, p=0.10$)	NEG * ($r=-0.0179, p=0.05$)	(-)	NEG * ($r=-0.0149, p=0.05$)	NEG * ($r=-0.0298, p=0.05$)	marg-signif NEG ($r=-0.0205, p=0.10$)			
S-A03.d Regional Averages plot															
S-A03.c Averages-n-Trends plots															
<img alt="Four panels showing averages-n-trends for Winter, Spring, Summer, and Autumn. Each panel contains four box plots for the Alboran Sea, Transition, and Balear															

Table S-A04 Satellite Chlorophyll (mg m^{-3}) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A04.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		0.65 (+/- 0.06)	0.82 (+/- 0.13)	0.82 (+/- 0.13)	0.53 (+/- 0.06)	0.41 (+/- 0.06)	0.54 (+/- 0.07)	0.37 (+/- 0.05)	0.21 (+/- 0.03)	0.31 (+/- 0.04)	0.37 (+/- 0.04)	0.23 (+/- 0.03)	0.59 (+/- 0.07)	0.30 (+/- 0.03)	0.31 (+/- 0.03)
Winter Mean <i>m02 + m03</i>		0.76 (+/- 0.10)	1.10 (+/- 0.24)	1.10 (+/- 0.24)	0.76 (+/- 0.14)	0.64 (+/- 0.14)	0.69 (+/- 0.15)	0.56 (+/- 0.10)	0.38 (+/- 0.10)	0.54 (+/- 0.12)	0.60 (+/- 0.11)	0.46 (+/- 0.09)	0.84 (+/- 0.14)	0.48 (+/- 0.09)	0.56 (+/- 0.08)
Spring Mean <i>m04 + m05</i>		0.69 (+/- 0.19)	1.00 (+/- 0.47)	1.00 (+/- 0.47)	0.55 (+/- 0.23)	0.40 (+/- 0.18)	0.50 (+/- 0.11)	0.38 (+/- 0.13)	0.17 (+/- 0.04)	0.31 (+/- 0.09)	0.43 (+/- 0.13)	0.22 (+/- 0.07)	0.63 (+/- 0.25)	0.26 (+/- 0.05)	0.32 (+/- 0.09)
Summer Mean <i>m06 + m07</i>		0.59 (+/- 0.09)	0.57 (+/- 0.22)	0.57 (+/- 0.22)	0.29 (+/- 0.04)	0.19 (+/- 0.02)	0.38 (+/- 0.09)	0.22 (+/- 0.04)	0.11 (+/- 0.02)	0.19 (+/- 0.08)	0.21 (+/- 0.04)	0.11 (+/- 0.02)	0.38 (+/- 0.08)	0.17 (+/- 0.03)	0.16 (+/- 0.03)
Autumn Mean <i>m10 + m11</i>		0.64 (+/- 0.11)	0.76 (+/- 0.19)	0.76 (+/- 0.19)	0.55 (+/- 0.20)	0.37 (+/- 0.09)	0.52 (+/- 0.08)	0.35 (+/- 0.08)	0.18 (+/- 0.01)	0.25 (+/- 0.02)	0.34 (+/- 0.06)	0.18 (+/- 0.02)	0.57 (+/- 0.14)	0.27 (+/- 0.02)	0.25 (+/- 0.02)
S-A04.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Trend		<i>marg-signif NEG</i> ($t=-0.0099, p=0.10$)	NEG ** ($t=-0.0409, p=0.01$)	NEG ** ($t=-0.0409, p=0.01$)	(-)	(-)	NEG ** ($t=-0.0307, p=0.01$)	NEG ** ($t=-0.0358, p=0.01$)	NEG * ($t=-0.0207, p=0.05$)	(+)	(-)	<i>marg-signif NEG</i> ($t=-0.0077, p=0.10$)			
Winter Trend <i>m02 + m03</i>		(-)	(-)	(-)	(+)	(-)	(-)	NEG * ($t=-0.0223, p=0.05$)	(-)	(+)	(+)	<i>marg-signif NEG</i> ($t=-0.0246, p=0.10$)			
Spring Trend <i>m04 + m05</i>		NEG * ($t=-0.0486, p=0.05$)	NEG * ($t=-0.0846, p=0.05$)	NEG * ($t=-0.0846, p=0.05$)	(-)	(-)	<i>marg-signif NEG</i> ($t=-0.0446, p=0.10$)	NEG * ($t=-0.0311, p=0.05$)	(-)	(+)	(-)	(-)			
Summer Trend <i>m06 + m07</i>		NEG * ($t=-0.0274, p=0.05$)	NEG * ($t=-0.0421, p=0.05$)	NEG * ($t=-0.0421, p=0.05$)	(-)	<i>marg-signif NEG</i> ($t=-0.0127, p=0.10$)	NEG ** ($t=-0.0445, p=0.01$)	NEG ** ($t=-0.0397, p=0.01$)	NEG ** ($t=-0.0355, p=0.01$)	(-)	NEG * ($t=-0.0167, p=0.05$)	(-)	NEG * ($t=-0.0167, p=0.05$)		
Autumn Trend <i>m10 + m11</i>		(+)	(-)	(-)	(-)	(-)	(-)	NEG ** ($t=-0.0620, p=0.01$)	(-)	(+)	(-)	(+)			

S-A04.c Averages-n-Trends plots

S-A04.d Regional Averages plot

Table S-A05 Ashfree Dry Mass (mg m^{-3}) trends in the western Mediterranean Sea (2007-2017)

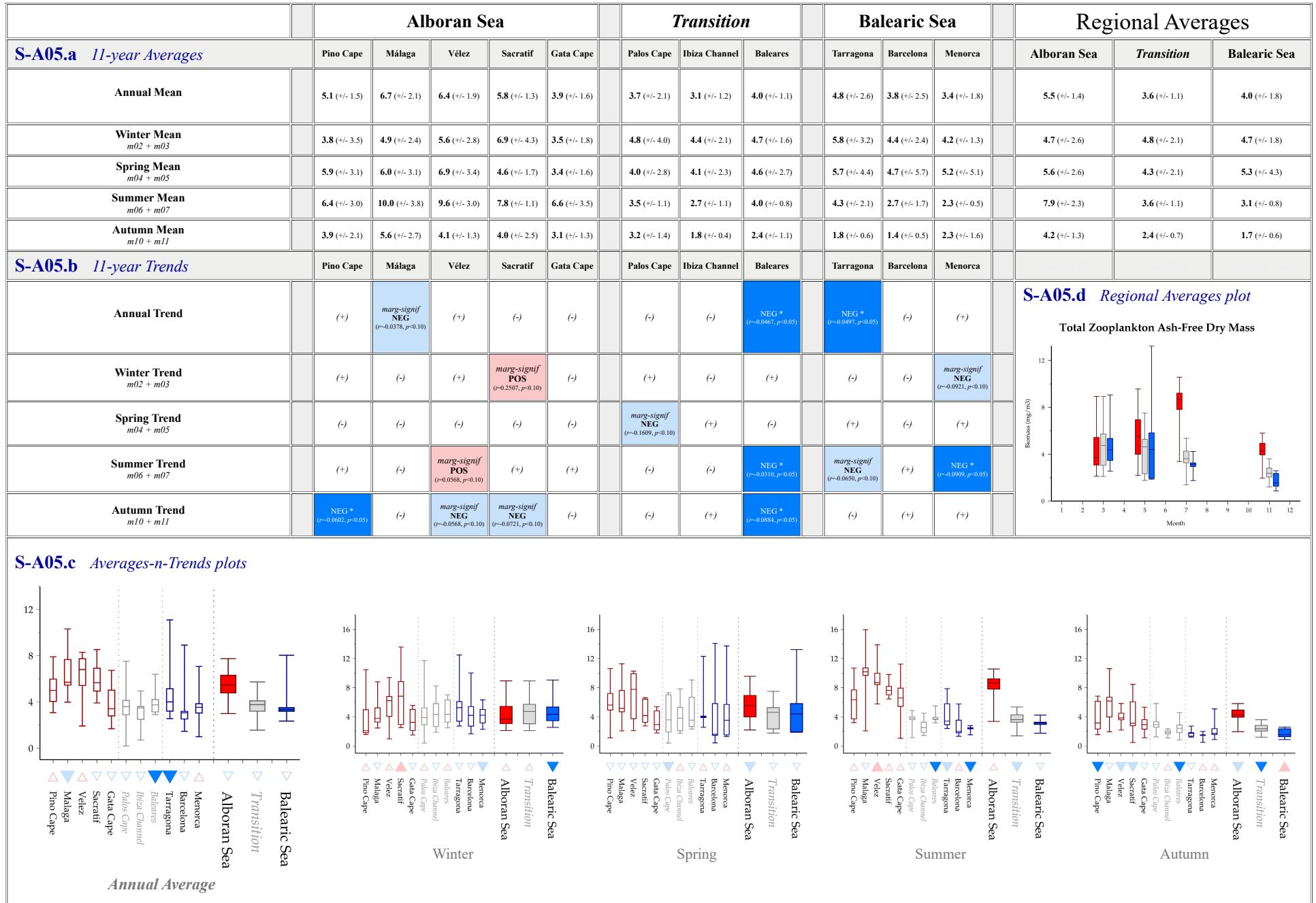


Table S-A06 Dry Mass (mg m^{-3}) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A06.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		8.0 (+/- 3.0)	10.4 (+/- 3.0)	10.0 (+/- 3.2)	9.3 (+/- 1.9)	6.3 (+/- 2.7)	5.8 (+/- 3.6)	4.7 (+/- 1.8)	5.7 (+/- 1.5)	7.1 (+/- 3.0)	5.4 (+/- 3.7)	4.6 (+/- 2.0)	8.6 (+/- 2.1)	5.3 (+/- 1.6)	5.6 (+/- 2.4)
Winter Mean $m02 + m03$		5.6 (+/- 4.7)	7.8 (+/- 4.1)	9.0 (+/- 4.5)	10.7 (+/- 6.7)	5.0 (+/- 2.5)	6.5 (+/- 5.2)	6.7 (+/- 3.4)	6.8 (+/- 2.7)	7.8 (+/- 3.3)	6.2 (+/- 4.0)	5.3 (+/- 1.5)	7.4 (+/- 4.2)	6.8 (+/- 2.9)	6.3 (+/- 2.5)
Spring Mean $m04 + m05$		9.0 (+/- 4.3)	8.9 (+/- 3.9)	10.5 (+/- 4.8)	6.7 (+/- 2.3)	5.3 (+/- 2.5)	6.3 (+/- 4.2)	6.0 (+/- 3.2)	6.4 (+/- 3.2)	8.9 (+/- 5.9)	6.0 (+/- 6.5)	6.4 (+/- 5.5)	8.4 (+/- 3.3)	6.3 (+/- 2.9)	7.2 (+/- 5.0)
Summer Mean $m06 + m07$		9.7 (+/- 4.7)	14.9 (+/- 5.6)	15.1 (+/- 5.4)	12.3 (+/- 2.2)	11.2 (+/- 6.3)	5.4 (+/- 1.8)	3.9 (+/- 1.1)	5.4 (+/- 1.3)	7.1 (+/- 4.3)	4.0 (+/- 2.6)	3.1 (+/- 0.7)	12.3 (+/- 3.8)	5.1 (+/- 1.3)	4.7 (+/- 1.6)
Autumn Mean $m10 + m11$		6.5 (+/- 3.6)	9.1 (+/- 4.3)	6.7 (+/- 2.2)	6.7 (+/- 4.6)	5.1 (+/- 2.0)	5.5 (+/- 3.5)	2.9 (+/- 0.9)	3.9 (+/- 1.7)	3.0 (+/- 1.3)	2.3 (+/- 0.7)	3.7 (+/- 2.1)	7.0 (+/- 2.1)	4.0 (+/- 1.5)	2.8 (+/- 0.9)
S-A06.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca			
Annual Trend		(+)	(-)	(+)	(+)	(-)	(-)	(-)	(-)	marg-signif NEG ($t=0.0249, p=0.10$)	NEG *	marg-signif NEG ($t=-0.344, p=0.05$)	marg-signif NEG ($t=-0.0303, p=0.10$)	(+)	
Winter Trend $m02 + m03$		(+)	(+)	(+)	marg-signif POS ($t=0.2376, p=0.10$)	(-)	(+)	(-)	(+)	marg-signif NEG ($t=-0.0557, p=0.10$)	(-)	marg-signif NEG ($t=-0.0585, p=0.10$)	(-)		
Spring Trend $m04 + m05$		(-)	(-)	(-)	(-)	(-)	marg-signif NEG ($t=-0.1400, p=0.10$)	(+)	(-)	(+)	(-)	(+)	(-)		
Summer Trend $m06 + m07$		(+)	(-)	(+)	(+)	(+)	(+)	(+)	(-)	(-)	(+)	(-)	(+)		
Autumn Trend $m10 + m11$		marg-signif NEG ($t=-0.0797, p=0.10$)	(+)	(-)	(-)	(-)	(+)	(+)	(+)	marg-signif NEG ($t=-0.0633, p=0.10$)	(-)	(-)	(+)		
S-A06.d Regional Averages plot															
S-A06.c Averages-n-Trends plots															
<img alt="Averages-n-Trends plots for the Alboran Sea, Transition, and Balearic Sea. Each plot shows dry mass trends for different months (January, February, March, April, May, June) across various locations (Pino Cape, Málaga, Vélez, Sacratif															

Table S-A07 Ratio of Ashfree Dry Mass to Dry Mass trends in the western Mediterranean Sea (2007-2017)

S-A07.a 11-year Averages

	Alboran Sea					Transition			Balearic Sea			Regional Averages		
	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean	0.6 (+/- 0.1)	0.6 (+/- 0.1)	0.6 (+/- 0.1)	0.6 (+/- 0.1)	0.6 (+/- 0)	0.7 (+/- 0.1)	0.7 (+/- 0)	0.7 (+/- 0.1)	0.7 (+/- 0.1)	0.7 (+/- 0.1)	0.7 (+/- 0.1)	0.6 (+/- 0)	0.7 (+/- 0)	0.7 (+/- 0.1)
Winter Mean $m02 + m03$	0.7 (+/- 0.1)	0.6 (+/- 0.1)	0.6 (+/- 0.1)	0.7 (+/- 0.1)	0.7 (+/- 0)	0.7 (+/- 0.1)	0.8 (+/- 0.1)	0.6 (+/- 0.1)	0.7 (+/- 0)	0.7 (+/- 0.1)				
Spring Mean $m04 + m05$	0.6 (+/- 0.1)	0.7 (+/- 0.1)	0.7 (+/- 0.1)	0.7 (+/- 0.1)	0.6 (+/- 0.1)	0.6 (+/- 0.1)	0.7 (+/- 0.1)	0.7 (+/- 0.1)	0.6 (+/- 0.1)	0.7 (+/- 0.1)				
Summer Mean $m06 + m07$	0.7 (+/- 0.1)	0.7 (+/- 0.1)	0.6 (+/- 0)	0.6 (+/- 0.1)	0.6 (+/- 0.1)	0.6 (+/- 0.1)	0.7 (+/- 0.2)	0.7 (+/- 0.1)	0.6 (+/- 0.1)	0.7 (+/- 0.2)	0.7 (+/- 0.2)	0.6 (+/- 0)	0.7 (+/- 0.1)	0.7 (+/- 0.2)
Autumn Mean $m10 + m11$	0.6 (+/- 0.1)													

S-A07.b 11-year Trends

	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca			
Annual Trend	NEG * ($t=0.0120, p=0.05$)	NEG * ($t=0.0154, p=0.05$)	(-)	(-)	(-)	NEG ** ($t=-0.0240, p=0.01$)	NEG * ($t=0.0145, p=0.05$)	NEG * ($t=0.0171, p=0.05$)	(-)	(-)	(-)			
Winter Trend $m02 + m03$	(+)	NEG * ($t=-0.0260, p=0.05$)	(+)	(-)	(+)	marg-signif NEG ($t=-0.0232, p=0.10$)	(-)	(-)	(+)	(-)	(-)			
Spring Trend $m04 + m05$	NEG * ($t=-0.0359, p=0.05$)	NEG * ($t=-0.0313, p=0.05$)	NEG * ($t=-0.0235, p=0.05$)	NEG * ($t=-0.0290, p=0.05$)	NEG * ($t=-0.0188, p=0.05$)	NEG * ($t=-0.0273, p=0.05$)	(+)	marg-signif NEG ($t=-0.0127, p=0.10$)	(-)	(-)	(-)			
Summer Trend $m06 + m07$	marg-signif NEG ($t=-0.0146, p=0.10$)	(-)	NEG * ($t=-0.0061, p=0.05$)	NEG * ($t=-0.0140, p=0.05$)	(-)	NEG ** ($t=-0.0239, p=0.01$)	(-)	(-)	marg-signif NEG ($t=-0.0341, p=0.10$)	NEG * ($t=-0.0283, p=0.05$)	(-)			
Autumn Trend $m10 + m11$	marg-signif NEG ($t=-0.0209, p=0.10$)	NEG * ($t=-0.0202, p=0.05$)	(-)	(+)	(+)	marg-signif NEG ($t=-0.0365, p=0.10$)	marg-signif NEG ($t=-0.0191, p=0.10$)	NEG * ($t=-0.0146, p=0.05$)	(+)	(+)	(+)			

S-A07.d Regional Averages plot

Ratio of AFDW to DryMass

Month

S-A07.c Averages-n-Trends plots

Annual Average

Table S-A08 Total Zooplankton (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A08.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		936.7 (+/- 364.7)	1420.1 (+/- 804.2)	1504.0 (+/- 601.6)	1181.5 (+/- 401.5)	843.4 (+/- 253.0)	645.8 (+/- 349.5)	599.9 (+/- 198.0)	785.0 (+/- 286.9)	881.7 (+/- 313.0)	783.9 (+/- 469.1)	747.0 (+/- 729.5)	1175.3 (+/- 377.2)	704.0 (+/- 212.5)	806.5 (+/- 350.2)
Winter Mean $m02 + m03$		769.3 (+/- 592.5)	777.9 (+/- 436.3)	977.0 (+/- 804.4)	957.9 (+/- 653.4)	719.3 (+/- 185.0)	828.1 (+/- 545.7)	753.2 (+/- 232.8)	1008.1 (+/- 456.0)	1155.6 (+/- 483.9)	1050.7 (+/- 606.7)	1109.0 (+/- 841.1)	788.4 (+/- 372.0)	919.7 (+/- 307.9)	1101.9 (+/- 448.8)
Spring Mean $m04 + m05$		840.6 (+/- 327.0)	1071.2 (+/- 517.5)	1122.3 (+/- 813.4)	967.3 (+/- 431.8)	665.6 (+/- 254.2)	683.4 (+/- 532.3)	584.4 (+/- 370.5)	901.9 (+/- 408.9)	627.8 (+/- 344.0)	685.1 (+/- 784.4)	741.5 (+/- 657.4)	990.1 (+/- 434.3)	765.5 (+/- 336.4)	731.6 (+/- 527.9)
Summer Mean $m06 + m07$		1577.5 (+/- 920.6)	2412.6 (+/- 1882.5)	2964.2 (+/- 1420.0)	2101.4 (+/- 613.0)	1351.5 (+/- 727.6)	654.1 (+/- 454.7)	583.7 (+/- 277.3)	563.4 (+/- 214.0)	1524.7 (+/- 959.0)	913.0 (+/- 698.2)	274.9 (+/- 135.6)	2085.4 (+/- 904.0)	591.6 (+/- 265.6)	896.7 (+/- 344.5)
Autumn Mean $m10 + m11$		809.4 (+/- 674.9)	1465.9 (+/- 1161.6)	915.4 (+/- 611.8)	682.8 (+/- 504.8)	574.2 (+/- 180.6)	545.4 (+/- 421.7)	471.6 (+/- 252.4)	442.2 (+/- 371.6)	382.5 (+/- 146.3)	254.0 (+/- 110.0)	283.7 (+/- 139.5)	886.8 (+/- 533.1)	467.6 (+/- 245.8)	287.4 (+/- 76.0)
S-A08.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca			
Annual Trend		(-)	NEG * ($t=-0.0565, p=0.05$)	(-)	NEG ** ($t=-0.0813, p=0.01$)	(-)	(-)	NEG * ($t=-0.0537, p=0.05$)	NEG ** ($t=-0.0552, p=0.05$)	(+)	(-)	(-)			
Winter Trend $m02 + m03$		(+)	(-)	(-)	(-)	(+)	(+)	(-)	(+)	(+)	(-)	(+)			
Spring Trend $m04 + m05$		(+)	margin-signif NEG ($t=-0.1038, p=0.10$)	(-)	NEG * ($t=-0.0863, p=0.05$)	(-)	(-)	NEG * ($t=-0.1215, p=0.05$)	(-)	(-)	(-)	(-)			
Summer Trend $m06 + m07$		(+)	(-)	(-)	NEG * ($t=-0.0361, p=0.05$)	(-)	NEG * ($t=-0.0931, p=0.05$)	margin-signif NEG ($t=-0.0772, p=0.10$)	(-)	(+)	(+)	(-)			
Autumn Trend $m10 + m11$		NEG ** ($t=-0.1101, p=0.01$)	(-)	NEG * ($t=-0.1346, p=0.05$)	(-)	(-)	(-)	NEG * ($t=-0.0593, p=0.05$)	NEG ** ($t=-0.1054, p=0.01$)	(-)	(+)	(+)			

S-A08.c Averages-n-Trends plots

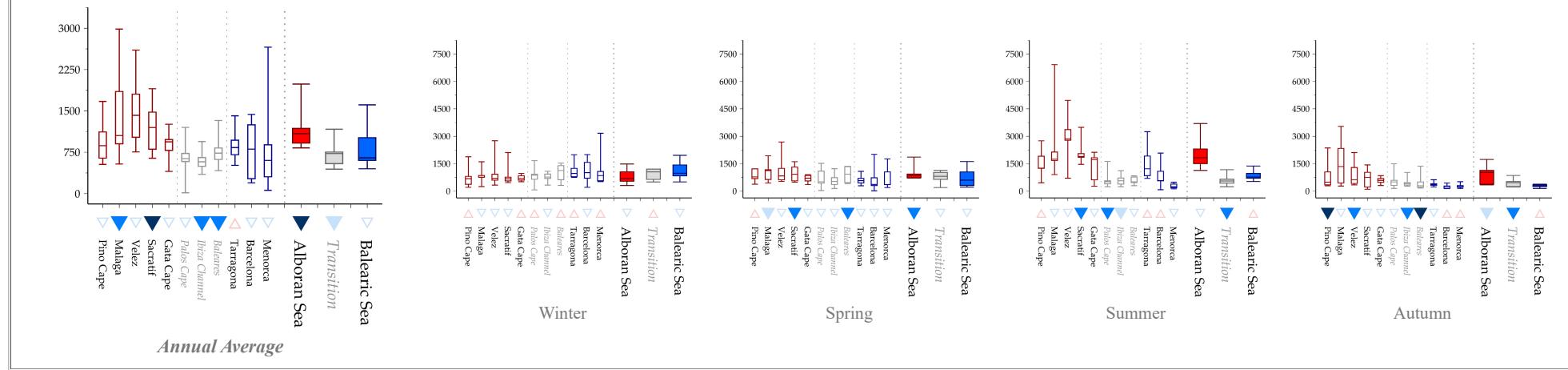


Table S-A09 Ashfree Dry Mass per Individual (ug ind^{-1}) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A09.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		6.6 (+/- 4.8)	7.2 (+/- 5.9)	5.7 (+/- 2.8)	6.0 (+/- 3.5)	4.5 (+/- 2.2)	6.9 (+/- 2.3)	5.9 (+/- 2.1)	6.0 (+/- 1.7)	6.1 (+/- 2.5)	6.0 (+/- 2.5)	7.5 (+/- 1.9)	5.8 (+/- 2.3)	6.2 (+/- 1.6)	6.2 (+/- 1.1)
Winter Mean $m02 + m03$		5.5 (+/- 2.6)	6.2 (+/- 3.0)	5.6 (+/- 3.3)	6.7 (+/- 4.4)	5.1 (+/- 3.4)	4.8 (+/- 2.0)	5.1 (+/- 2.3)	4.6 (+/- 1.5)	5.4 (+/- 3.2)	4.7 (+/- 1.9)	4.0 (+/- 1.9)	5.8 (+/- 3.1)	4.9 (+/- 1.7)	4.6 (+/- 1.4)
Spring Mean $m04 + m05$		7.5 (+/- 4.2)	6.2 (+/- 2.9)	7.3 (+/- 4.4)	5.1 (+/- 1.4)	4.4 (+/- 0.9)	8.2 (+/- 4.5)	8.2 (+/- 3.8)	5.4 (+/- 2.0)	8.7 (+/- 2.2)	9.9 (+/- 8.7)	6.9 (+/- 2.5)	6.4 (+/- 2.8)	7.3 (+/- 3.0)	8.1 (+/- 3.1)
Summer Mean $m06 + m07$		4.8 (+/- 2.5)	4.7 (+/- 2.1)	4.3 (+/- 3.2)	3.5 (+/- 0.7)	5.0 (+/- 1.9)	6.2 (+/- 2.5)	5.3 (+/- 1.5)	7.9 (+/- 3.0)	3.9 (+/- 2.6)	3.2 (+/- 0.6)	(+/-)	4.4 (+/- 1.5)	6.7 (+/- 1.9)	5.4 (+/- 1.9)
Autumn Mean $m10 + m11$		6.6 (+/- 5.3)	7.3 (+/- 7.1)	5.8 (+/- 3.2)	9.1 (+/- 10.2)	6.0 (+/- 3.0)	7.6 (+/- 3.5)	4.5 (+/- 1.9)	6.7 (+/- 3.0)	4.9 (+/- 1.8)	6.2 (+/- 3.5)	7.7 (+/- 1.5)	7.1 (+/- 3.7)	6.5 (+/- 2.4)	6.3 (+/- 2.1)
S-A09.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca			
Annual Trend		(+)	(+)	(+)	(+)	(-)	(+)	marg-signif POS ($t=0.0506, p=0.10$)	(+)	marg-signif NEG ($t=-0.0587, p=0.10$)	(+)	(+)	(+)		
Winter Trend $m02 + m03$		(+)	(+)	(+)	(+)	(+)	marg-signif NEG ($t=-0.0357, p=0.10$)	(+)	(-)	marg-signif NEG ($t=-0.0835, p=0.10$)	(+)	(-)			
Spring Trend $m04 + m05$		(-)	(+)	(+)	POS * ($t=0.0669, p=0.05$)	(-)	(-)	(+)	(+)	(-)	(+)	(+)			
Summer Trend $m06 + m07$		(-)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	NEG * ($t=-0.1902, p=0.05$)	NEG * ($t=-0.0299, p=0.05$)	(+)	(+)		
Autumn Trend $m10 + m11$		(+)	(+)	marg-signif POS ($t=0.0763, p=0.10$)	(+)	(-)	(-)	(+)	(+)	(-)	(+)	(+)			
S-A09.d Regional Averages plot															
AFDW-per-Individual															
S-A09.c Averages-n-Trends plots															

Table S-A10 Dry Mass per Individual ($\mu\text{g ind}^{-1}$) trends in the western Mediterranean Sea (2007-2017)

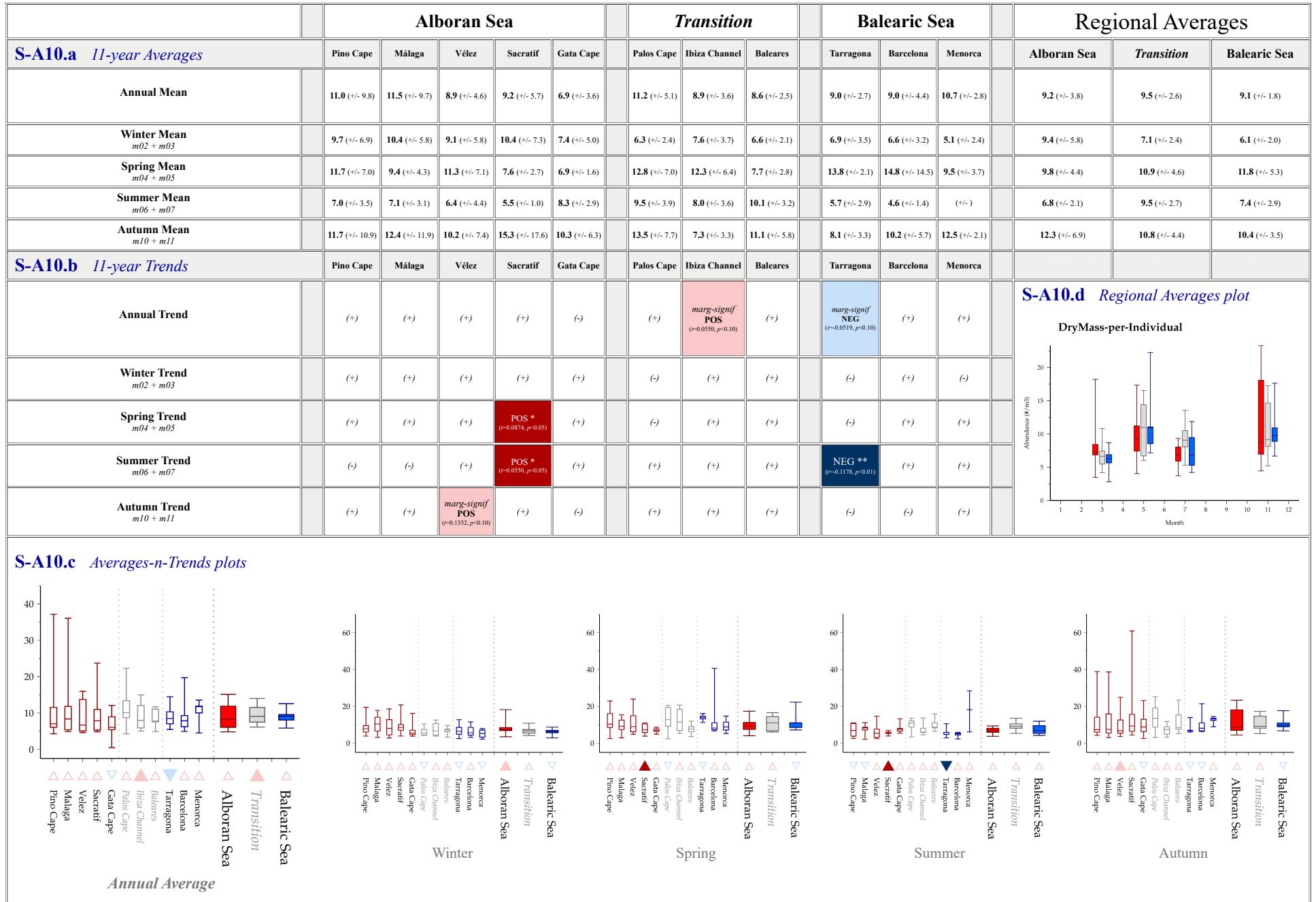


Table S-A11 Total Copepods (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Baleeric Sea			Regional Averages		
S-A11.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Baleeric Sea
Annual Mean		460.8 (+/- 151.9)	522.4 (+/- 189.7)	553.9 (+/- 196.7)	413.4 (+/- 139.9)	395.6 (+/- 96.9)	371.1 (+/- 198.5)	347.5 (+/- 112.5)	498.4 (+/- 244.5)	370.2 (+/- 172.7)	552.4 (+/- 344.7)	619.0 (+/- 679.0)	473.7 (+/- 112.5)	428.6 (+/- 131.7)	540.6 (+/- 313.6)
Winter Mean <i>m02 + m03</i>		569.3 (+/- 471.3)	473.1 (+/- 256.9)	581.6 (+/- 591.1)	489.6 (+/- 320.0)	493.9 (+/- 160.2)	665.6 (+/- 442.9)	547.9 (+/- 199.7)	759.7 (+/- 372.5)	909.0 (+/- 436.2)	891.5 (+/- 550.5)	1005.2 (+/- 789.5)	506.4 (+/- 231.2)	695.4 (+/- 246.7)	937.4 (+/- 402.2)
Spring Mean <i>m04 + m05</i>		494.8 (+/- 290.7)	574.3 (+/- 270.1)	616.7 (+/- 408.5)	439.6 (+/- 151.6)	457.1 (+/- 126.8)	436.9 (+/- 452.6)	337.3 (+/- 333.0)	554.2 (+/- 318.3)	370.1 (+/- 270.1)	545.3 (+/- 689.8)	605.6 (+/- 670.0)	533.0 (+/- 208.4)	476.3 (+/- 261.8)	568.1 (+/- 493.9)
Summer Mean <i>m06 + m07</i>		514.0 (+/- 373.9)	537.1 (+/- 240.9)	628.5 (+/- 267.4)	447.4 (+/- 111.2)	310.2 (+/- 130.9)	195.2 (+/- 124.2)	223.7 (+/- 132.2)	261.3 (+/- 63.6)	127.0 (+/- 68.4)	394.7 (+/- 448.1)	150.5 (+/- 76.2)	484.4 (+/- 138.0)	227.6 (+/- 102.9)	264.7 (+/- 245.0)
Autumn Mean <i>m10 + m11</i>		352.9 (+/- 211.6)	523.3 (+/- 360.7)	429.1 (+/- 278.9)	256.5 (+/- 153.0)	244.1 (+/- 109.5)	258.3 (+/- 148.4)	273.2 (+/- 130.5)	230.4 (+/- 110.1)	206.3 (+/- 61.8)	166.5 (+/- 65.6)	179.5 (+/- 71.1)	360.2 (+/- 174.3)	249.7 (+/- 92.7)	178.5 (+/- 37.1)
S-A11.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	S-A11.d Regional Averages plot		
Annual Trend		(-)	(-)	<i>marg-signif NEG</i> ($t=-0.0298, p=0.10$)	<i>marg-signif NEG</i> ($t=-0.0453, p=0.10$)	(-)	(+)	(-)	(-)	(-)	(-)	(-)			
Winter Trend <i>m02 + m03</i>		(+)	(-)	(-)	(+)	(+)	(+)	(-)	(+)	(+)	(-)	(+)			
Spring Trend <i>m04 + m05</i>		(+)	<i>NEG *</i> ($t=-0.1257, p=0.05$)	(-)	<i>marg-signif NEG</i> ($t=-0.0612, p=0.10$)	(-)	(-)	(-)	(+)	(+)	(-)	(+)			
Summer Trend <i>m06 + m07</i>		(-)	(+)	(+)	<i>marg-signif NEG</i> ($t=-0.0405, p=0.10$)	(-)	(-)	<i>marg-signif NEG</i> ($t=-0.0875, p=0.10$)	<i>marg-signif NEG</i> ($t=-0.0219, p=0.10$)	(-)	(-)	(-)			
Autumn Trend <i>m10 + m11</i>		<i>NEG *</i> ($t=-0.0829, p=0.05$)	<i>marg-signif NEG</i> ($t=-0.0610, p=0.10$)	<i>NEG **</i> ($t=-0.1196, p=0.01$)	<i>NEG *</i> ($t=-0.1349, p=0.05$)	(-)	(+)	<i>NEG *</i> ($t=-0.0691, p=0.10$)	<i>NEG *</i> ($t=-0.0693, p=0.05$)	(+)	(+)	(+)			

S-A11.c Averages-n-Trends plots

Table S-A12 Total Cladocera (ind. m^{-3}) trends in the western Mediterranean Sea (2007-2017)

S-A12.a 11-year Averages

	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca		Alboran Sea	Transition	Balearic Sea
Annual Mean	206.7 (+/- 145.8)	413.3 (+/- 340.0)	465.2 (+/- 316.7)	342.6 (+/- 226.0)	168.3 (+/- 127.4)	130.7 (+/- 147.6)	81.0 (+/- 52.3)	58.7 (+/- 110.3)	253.8 (+/- 180.2)	64.2 (+/- 106.4)	15.1 (+/- 12.9)		319.8 (+/- 194.0)	83.4 (+/- 86.8)	96.7 (+/- 66.2)
Winter Mean $m02 + m03$	25.9 (+/- 44.6)	50.2 (+/- 56.7)	86.4 (+/- 127.6)	111.7 (+/- 196.5)	47.1 (+/- 48.2)	13.1 (+/- 15.7)	8.2 (+/- 14.2)	7.2 (+/- 10.9)	14.1 (+/- 28.3)	3.1 (+/- 5.7)	2.4 (+/- 5.7)		52.8 (+/- 78.0)	8.7 (+/- 6.9)	5.4 (+/- 11.1)
Spring Mean $m04 + m05$	41.8 (+/- 37.0)	33.6 (+/- 17.3)	57.8 (+/- 73.8)	99.9 (+/- 114.3)	9.3 (+/- 7.4)	50.1 (+/- 74.6)	35.8 (+/- 37.8)	57.9 (+/- 49.7)	23.7 (+/- 29.4)	6.3 (+/- 9.2)	22.5 (+/- 36.5)		57.1 (+/- 47.5)	45.3 (+/- 33.2)	13.5 (+/- 15.7)
Summer Mean $m06 + m07$	534.2 (+/- 505.5)	946.1 (+/- 825.5)	1409.6 (+/- 942.3)	885.7 (+/- 404.4)	454.4 (+/- 316.6)	280.5 (+/- 309.4)	202.1 (+/- 117.3)	45.5 (+/- 39.3)	897.0 (+/- 748.7)	226.9 (+/- 399.1)	27.5 (+/- 28.5)		846.8 (+/- 454.8)	167.8 (+/- 122.5)	359.2 (+/- 287.7)
Autumn Mean $m10 + m11$	288.7 (+/- 342.9)	659.8 (+/- 667.6)	283.1 (+/- 260.5)	260.5 (+/- 249.8)	141.3 (+/- 100.3)	136.0 (+/- 243.5)	62.9 (+/- 79.9)	79.7 (+/- 224.1)	52.0 (+/- 83.6)	6.5 (+/- 6.5)	6.7 (+/- 7.3)		325.1 (+/- 273.5)	77.8 (+/- 107.6)	15.4 (+/- 23.8)

S-A12.b 11-year Trends

	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca		Alboran Sea	Transition	Balearic Sea
Annual Trend	(-)	NEG * ($t=-0.1088, p=0.05$)	NEG * ($t=-0.0570, p=0.05$)	NEG * ($t=-0.1433, p=0.05$)	(+)	NEG ** ($t=-0.1645, p=0.01$)	(-)	NEG * ($t=-0.0606, p=0.05$)	marg-signif POS ($t=-0.1203, p=0.10$)	(-)	(+)				
Winter Trend $m02 + m03$	(-)	NEG * ($t=-0.0910, p=0.05$)	NEG ** ($t=-0.1198, p=0.01$)	(-)	(-)	(-)	(-)	(+)	(-)	(-)	(+)				
Spring Trend $m04 + m05$		marg-signif NEG ($t=-0.1633, p=0.10$)	NEG * ($t=-0.1545, p=0.05$)	NEG * ($t=-0.0750, p=0.05$)	NEG * ($t=-0.1243, p=0.05$)	NEG * ($t=-0.1869, p=0.05$)	(-)	NEG * ($t=-0.2110, p=0.05$)	(-)	(-)	(-)				
Summer Trend $m06 + m07$	(+)		(-)	(-)	marg-signif NEG ($t=-0.0566, p=0.10$)	(+)	NEG ** ($t=-0.2205, p=0.01$)	(-)	marg-signif NEG ($t=-0.1006, p=0.10$)	marg-signif POS ($t=-0.1429, p=0.10$)	(-)	(-)			
Autumn Trend $m10 + m11$		NEG * ($t=-0.1596, p=0.05$)	marg-signif NEG ($t=-0.1367, p=0.10$)	NEG * ($t=-0.2036, p=0.05$)	(-)	(+)	(-)	marg-signif NEG ($t=-0.0447, p=0.10$)	marg-signif NEG ($t=-0.0114, p=0.10$)	(+)	(+)	(+)			

S-A12.d Regional Averages plot

S-A12.c Averages-n-Trends plots

Table S-A13 Total Ostracods (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

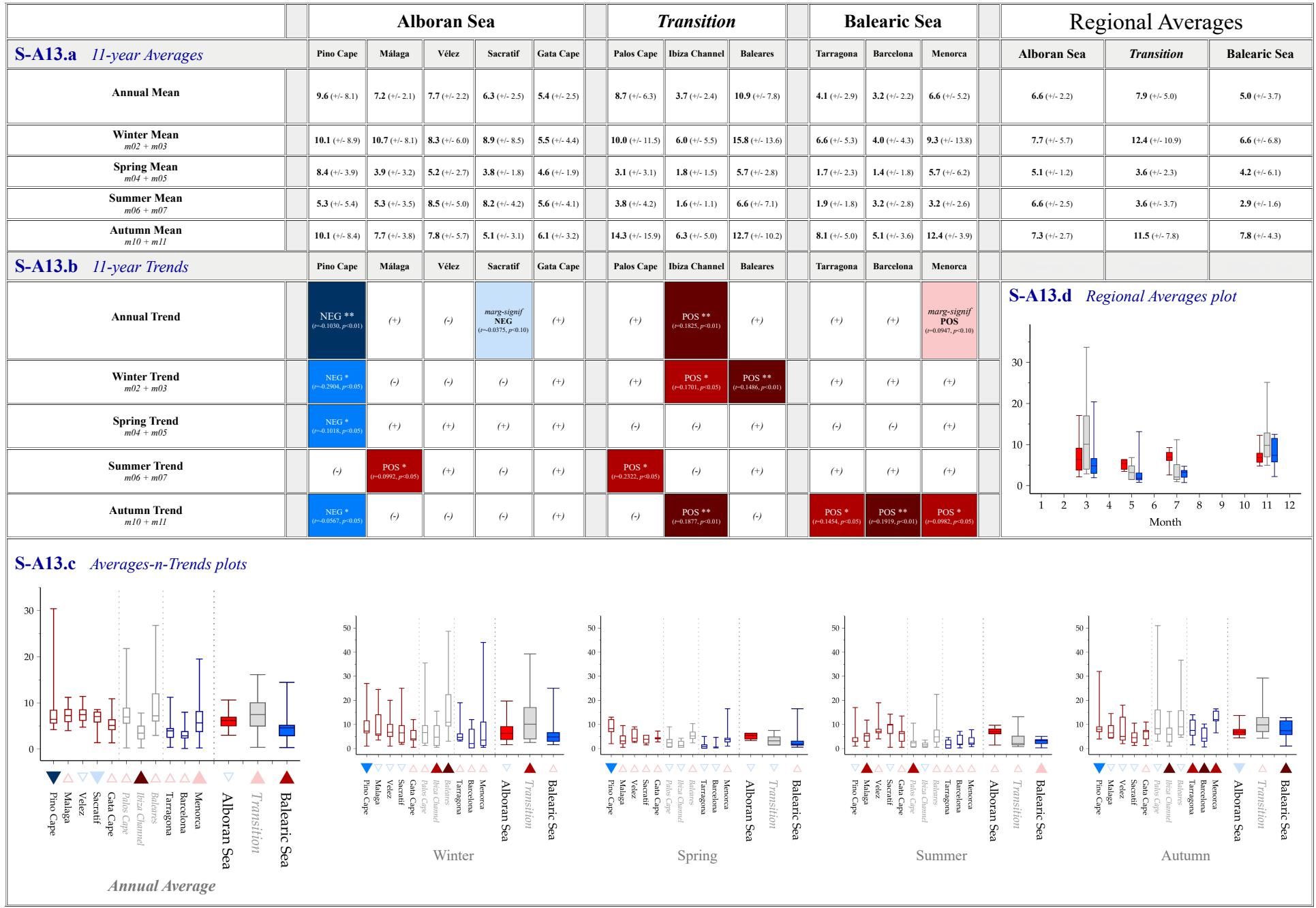


Table S-A14 Total Euphausiids (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

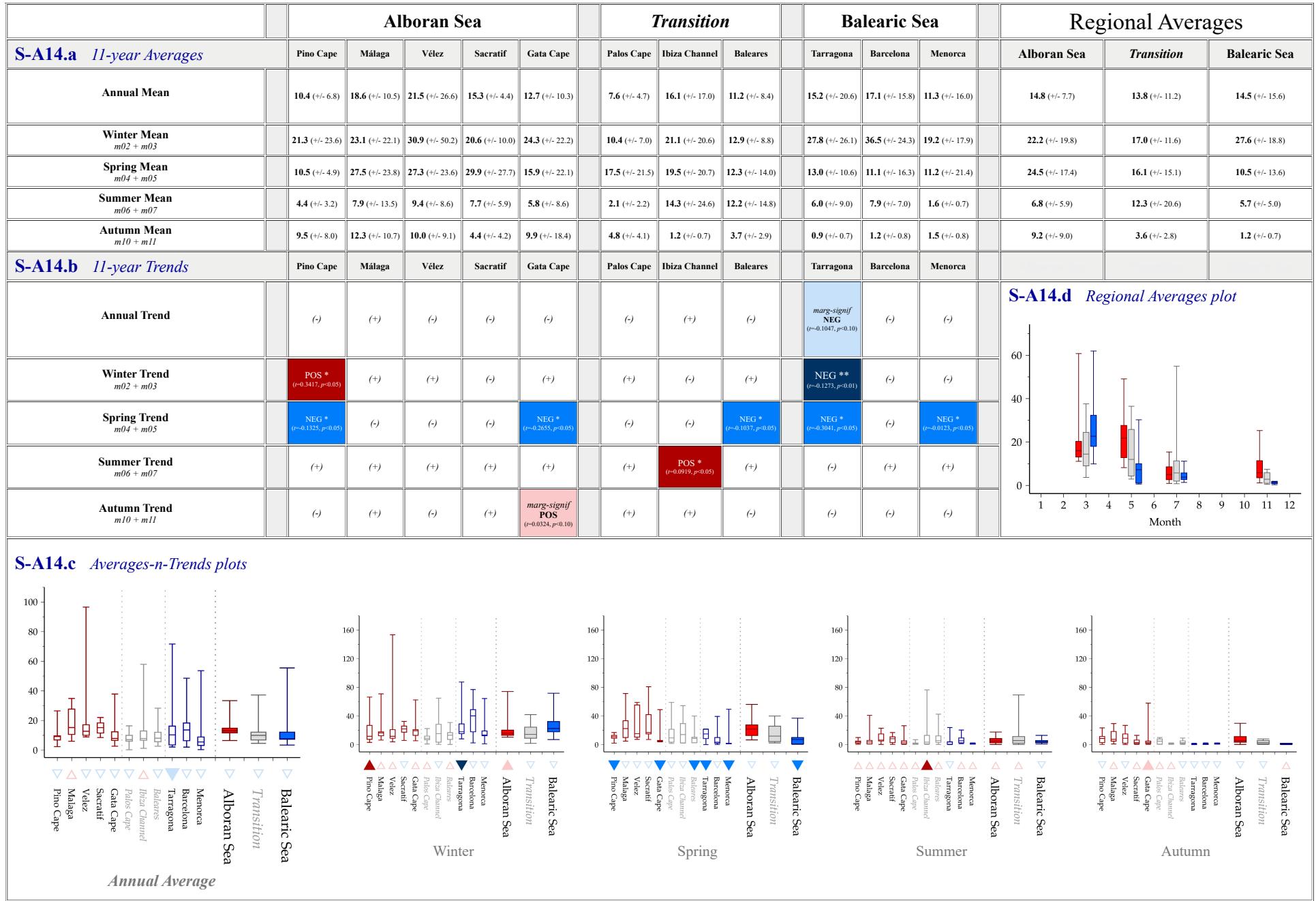


Table S-A15 Total Amphipods (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

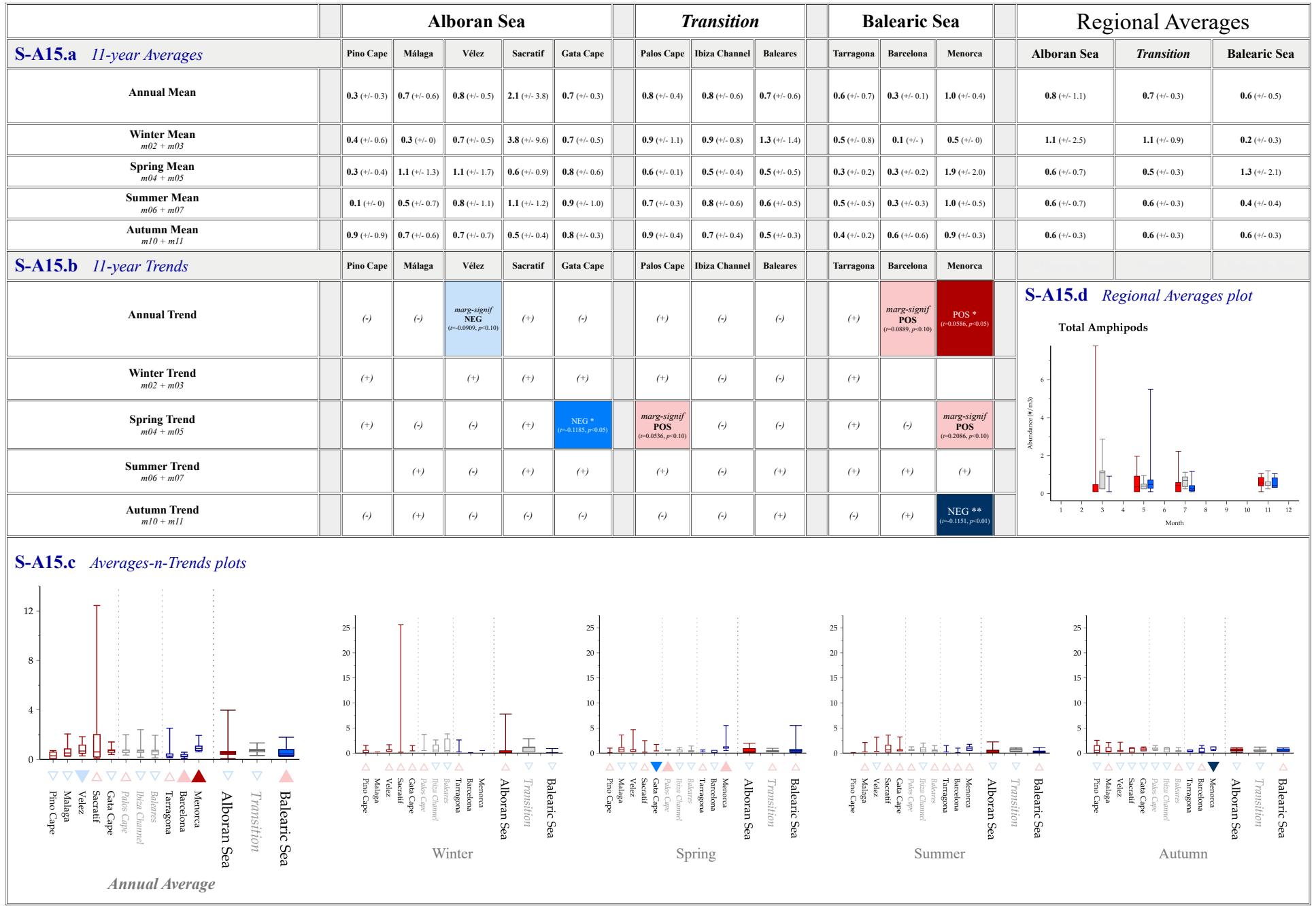


Table S-A16 Total Isopods (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

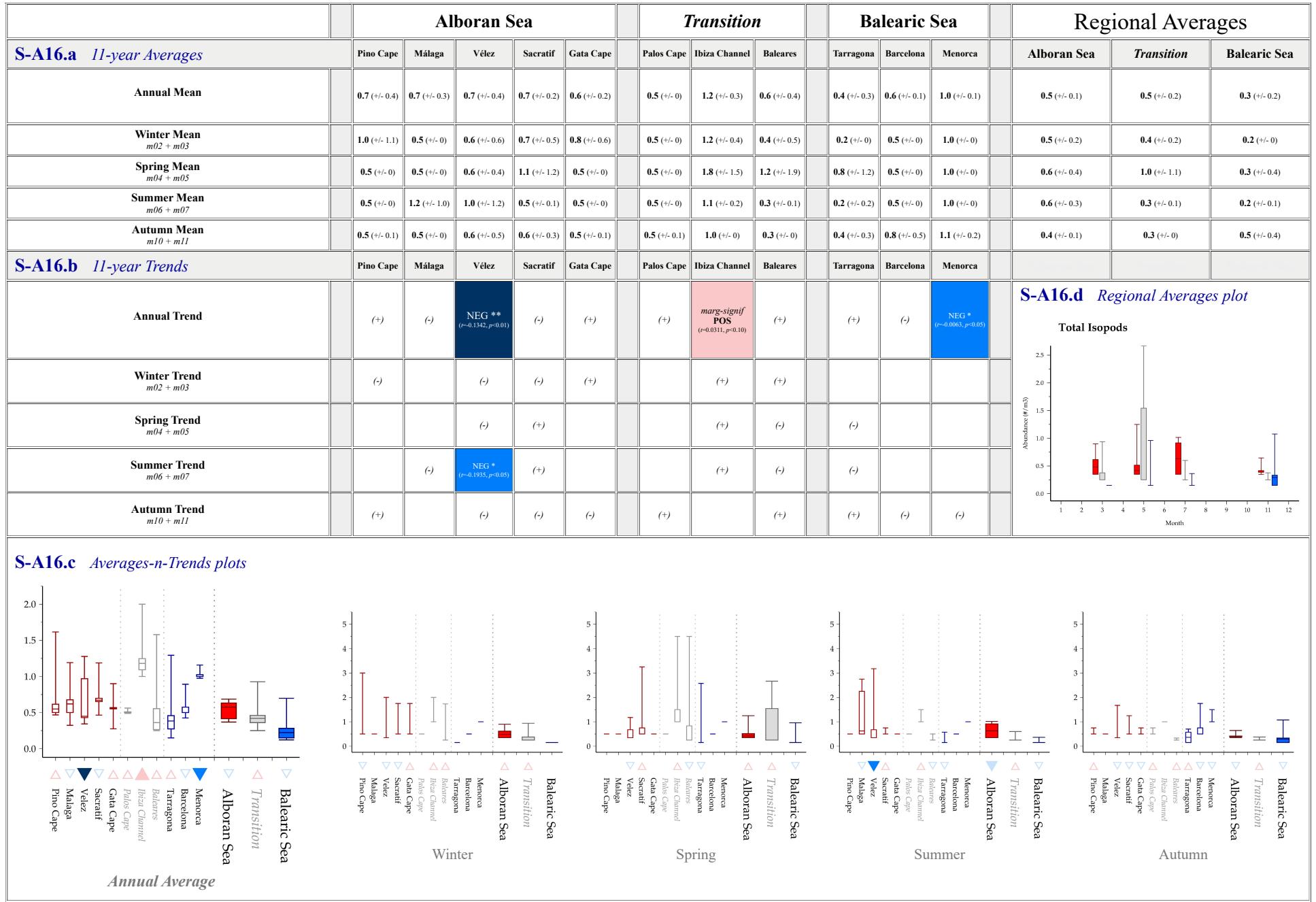


Table S-A17 Total Decapod Larvae (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

Table S-A18 Total Chaetognaths (ind. m^{-3}) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages			
S-A18.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea	
Annual Mean		21.8 (+/- 35.5)	29.6 (+/- 28.9)	32.3 (+/- 21.2)	32.0 (+/- 19.4)	37.4 (+/- 30.7)	22.3 (+/- 9.6)	12.3 (+/- 5.5)	19.1 (+/- 15.6)	13.0 (+/- 6.6)	8.0 (+/- 2.9)	8.5 (+/- 7.3)	30.8 (+/- 24.0)	17.4 (+/- 8.8)	9.4 (+/- 3.9)	
Winter Mean $m02 + m03$		15.3 (+/- 16.6)	15.6 (+/- 13.7)	23.6 (+/- 18.6)	24.3 (+/- 20.1)	16.0 (+/- 23.8)	12.2 (+/- 18.9)	7.4 (+/- 7.7)	11.6 (+/- 15.5)	6.8 (+/- 9.7)	1.8 (+/- 2.5)	5.8 (+/- 8.9)	16.7 (+/- 15.6)	10.3 (+/- 11.9)	4.0 (+/- 5.7)	
Spring Mean $m04 + m05$		14.4 (+/- 9.7)	18.2 (+/- 12.6)	15.7 (+/- 11.8)	16.3 (+/- 11.0)	16.9 (+/- 12.5)	9.7 (+/- 11.8)	3.7 (+/- 4.9)	10.8 (+/- 10.4)	5.1 (+/- 6.3)	1.0 (+/- 1.0)	4.8 (+/- 5.8)	16.4 (+/- 9.3)	7.7 (+/- 4.9)	4.5 (+/- 5.3)	
Summer Mean $m06 + m07$		40.0 (+/- 58.9)	42.1 (+/- 28.3)	55.4 (+/- 35.4)	54.6 (+/- 16.8)	79.4 (+/- 19.9)	38.7 (+/- 9.1)	12.9 (+/- 8.5)	34.7 (+/- 29.8)	25.4 (+/- 21.7)	14.1 (+/- 12.4)	7.6 (+/- 8.9)	54.7 (+/- 25.1)	27.8 (+/- 15.8)	15.7 (+/- 11.4)	
Autumn Mean $m10 + m11$		42.2 (+/- 78.7)	54.4 (+/- 79.8)	42.5 (+/- 52.7)	40.0 (+/- 51.1)	57.2 (+/- 71.8)	32.8 (+/- 37.4)	26.2 (+/- 20.6)	15.5 (+/- 14.4)	19.9 (+/- 11.4)	14.9 (+/- 8.4)	13.0 (+/- 7.8)	47.2 (+/- 66.2)	24.3 (+/- 15.3)	14.6 (+/- 6.8)	
S-A18.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	S-A18.d Regional Averages plot			
Annual Trend		(-)	(-)	(-)	NEG * ($t=-0.0675, p=0.05$)	(-)	(-)	(+)	(-)	(+)	(+)					
Winter Trend $m02 + m03$		(-)	(-)	NEG * ($t=-0.1713, p=0.05$)	(-)	(-)	(+)	POS * ($t=0.1828, p=0.05$)	POS * ($t=0.1481, p=0.05$)	marg-signif POS ($t=0.0864, p=0.10$)	(+)	(+)				
Spring Trend $m04 + m05$		(-)	(-)	(+)	(-)	(-)	(-)	(-)	(+)	(+)	(-)	marg-signif POS ($t=0.3460, p=0.10$)				
Summer Trend $m06 + m07$		(-)	(-)	(+)	(-)	(+)	(-)	(-)	(+)	(+)	(+)					
Autumn Trend $m10 + m11$		NEG * ($t=-0.0313, p=0.05$)	(-)	(-)	NEG * ($t=-0.0978, p=0.05$)	marg-signif NEG ($t=-0.0713, p=0.10$)	NEG ** ($t=-0.1320, p=0.01$)	(-)	(+)	NEG * ($t=-0.0976, p=0.05$)	(-)	POS * ($t=0.1972, p=0.05$)				
S-A18.c Averages-n-Trends plots																

Table S-A19 Total Pteropods (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

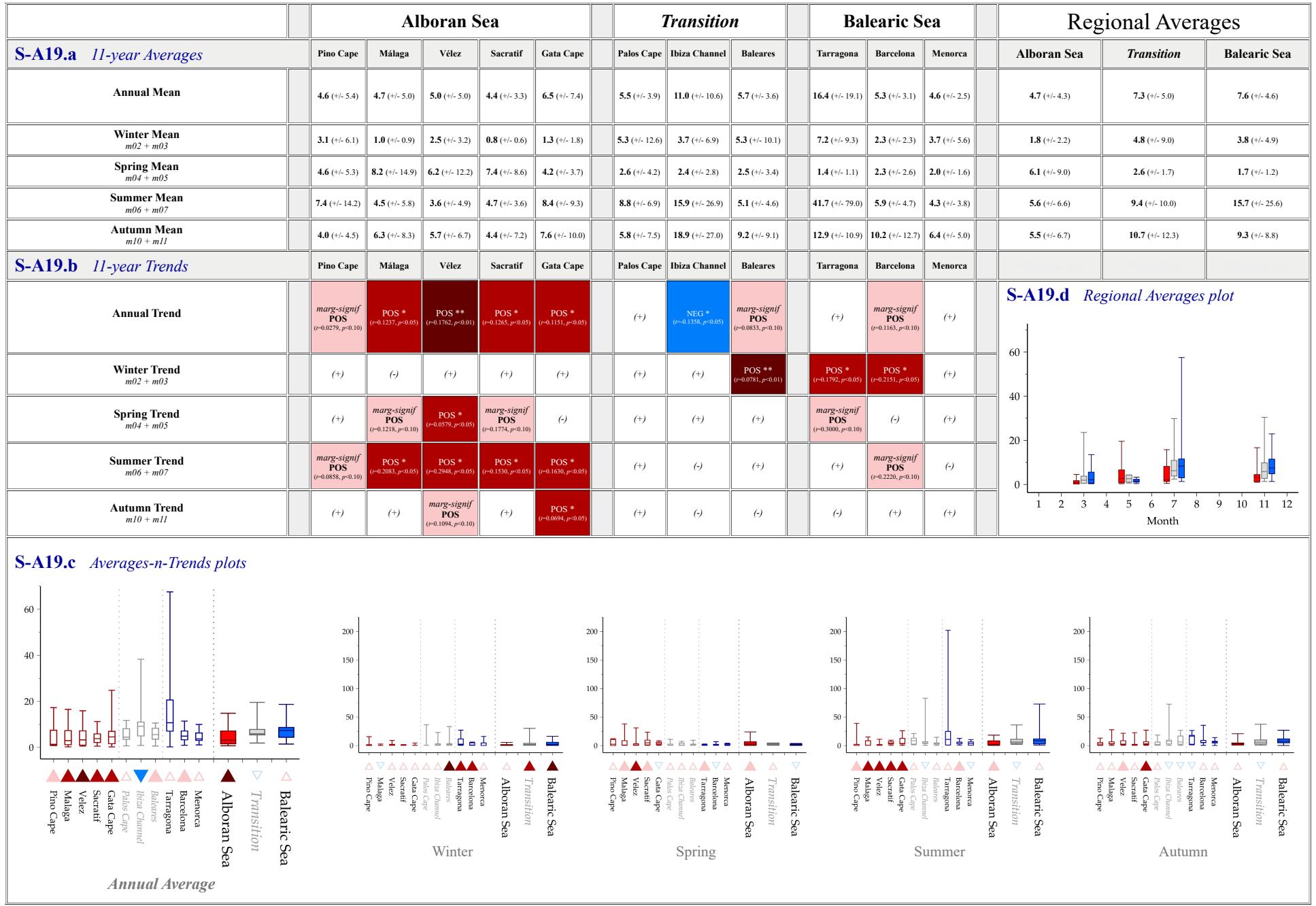


Table S-A20 Total Polychaetes (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

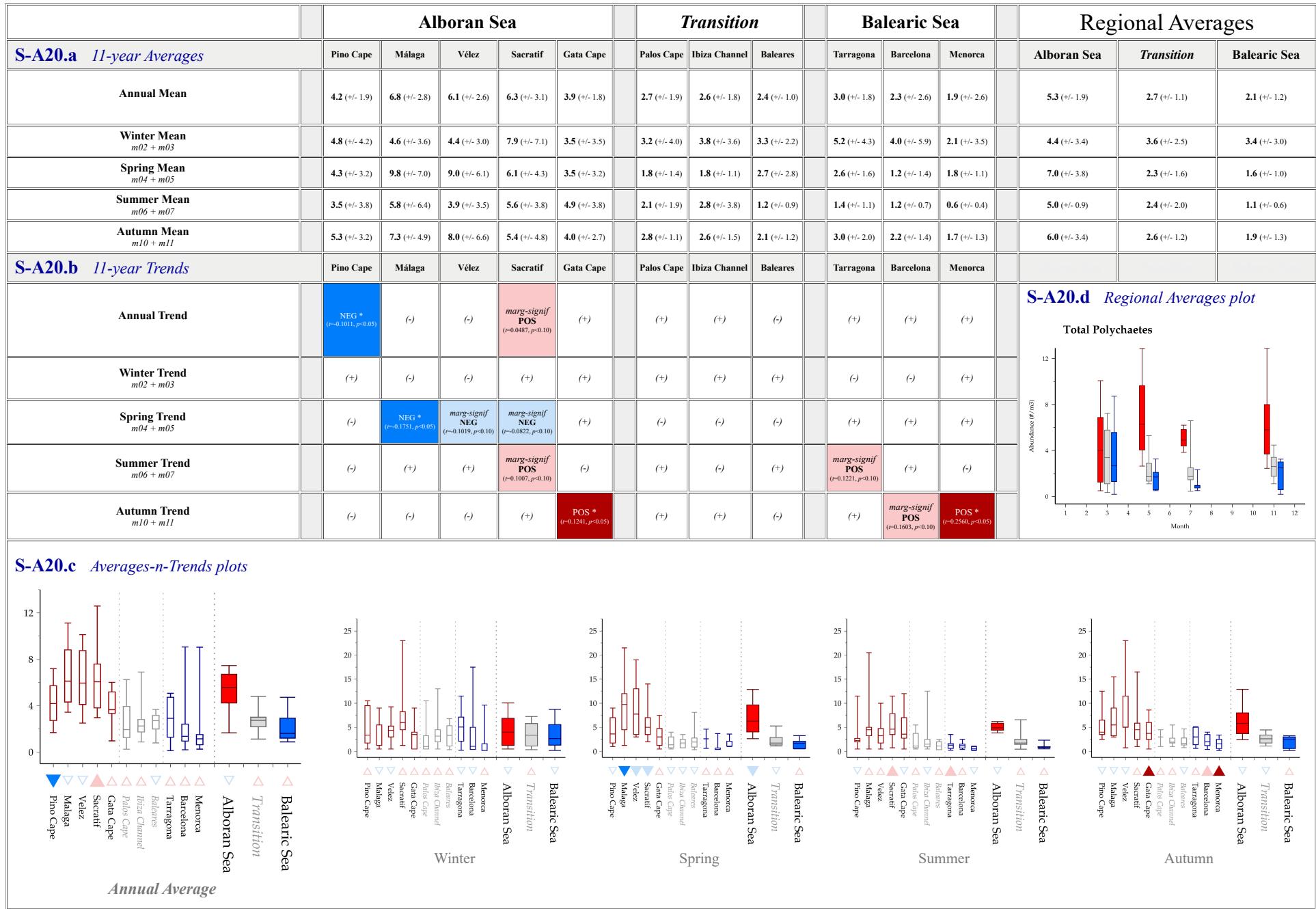


Table S-A21 Total Other Meroplankton Larvae (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A21.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		10.6 (+/- 8.5)	19.6 (+/- 32.2)	12.4 (+/- 9.4)	11.7 (+/- 9.8)	10.4 (+/- 14.6)	9.4 (+/- 9.4)	9.0 (+/- 8.1)	12.2 (+/- 9.3)	9.8 (+/- 7.2)	6.3 (+/- 5.7)	5.2 (+/- 10.0)	13.3 (+/- 14.0)	10.9 (+/- 7.7)	6.1 (+/- 4.7)
Winter Mean <i>m02 + m03</i>		8.0 (+/- 6.5)	7.1 (+/- 6.4)	18.6 (+/- 19.7)	5.1 (+/- 3.3)	7.5 (+/- 5.3)	4.4 (+/- 5.8)	5.1 (+/- 6.5)	7.9 (+/- 15.4)	9.7 (+/- 13.7)	3.4 (+/- 3.8)	1.4 (+/- 2.2)	8.7 (+/- 7.6)	6.4 (+/- 8.5)	4.0 (+/- 5.7)
Spring Mean <i>m04 + m05</i>		9.1 (+/- 5.2)	16.4 (+/- 10.8)	15.3 (+/- 15.1)	19.9 (+/- 13.9)	5.5 (+/- 6.0)	15.6 (+/- 22.6)	7.9 (+/- 8.3)	24.7 (+/- 35.4)	12.3 (+/- 21.8)	4.0 (+/- 5.3)	1.8 (+/- 2.1)	14.8 (+/- 9.4)	18.0 (+/- 18.2)	5.3 (+/- 9.4)
Summer Mean <i>m06 + m07</i>		17.0 (+/- 24.9)	54.0 (+/- 130.1)	9.4 (+/- 10.7)	19.3 (+/- 28.8)	16.3 (+/- 20.7)	13.1 (+/- 20.5)	5.6 (+/- 3.7)	9.8 (+/- 15.6)	13.0 (+/- 6.9)	16.6 (+/- 25.8)	7.7 (+/- 15.0)	23.9 (+/- 45.3)	9.0 (+/- 11.9)	12.8 (+/- 16.6)
Autumn Mean <i>m10 + m11</i>		13.3 (+/- 10.3)	12.1 (+/- 9.4)	11.6 (+/- 11.6)	9.0 (+/- 8.2)	20.0 (+/- 30.2)	13.1 (+/- 19.5)	20.2 (+/- 29.0)	6.3 (+/- 13.0)	8.9 (+/- 6.8)	4.6 (+/- 2.8)	1.3 (+/- 1.2)	13.1 (+/- 12.6)	12.8 (+/- 15.3)	4.6 (+/- 3.2)
S-A21.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Trend		NEG * ($r=-0.0903, p<0.05$)	(-)	(-)	NEG ** ($r=-0.1542, p<0.01$)	NEG * ($r=-0.1562, p<0.05$)	NEG ** ($r=-0.2315, p<0.01$)	NEG * ($r=-0.1413, p<0.05$)	marg-signif NEG ($r=-0.0794, p=0.10$)	(+)	marg-signif NEG ($r=-0.1120, p=0.10$)	marg-signif NEG ($r=-0.0719, p=0.10$)			
Winter Trend <i>m02 + m03</i>		POS * ($r=0.1554, p<0.05$)	(+)	(-)	(+)	(+)	(+)	(-)	(+)	(+)	marg-signif POS ($r=0.1327, p=0.10$)	(+)			
Spring Trend <i>m04 + m05</i>		marg-signif NEG ($r=-0.1610, p<0.10$)	marg-signif NEG ($r=-0.2030, p<0.10$)	marg-signif NEG ($r=-0.1712, p<0.10$)	NEG * ($r=-0.1997, p<0.05$)	NEG * ($r=-0.3015, p<0.05$)	marg-signif NEG ($r=-0.0856, p<0.10$)	marg-signif NEG ($r=-0.1461, p<0.10$)	NEG * ($r=-0.1338, p<0.05$)	NEG ** ($r=-0.3438, p<0.01$)	marg-signif NEG ($r=-0.2095, p<0.10$)	NEG * ($r=-0.3179, p<0.05$)			
Summer Trend <i>m06 + m07</i>		NEG * ($r=-0.1874, p<0.05$)	marg-signif NEG ($r=-0.0231, p<0.10$)	(-)	marg-signif NEG ($r=-0.1750, p<0.10$)	(-)	(-)	(-)	(-)	(-)	NEG * ($r=-0.1053, p<0.05$)	(-)			
Autumn Trend <i>m10 + m11</i>		NEG * ($r=-0.1066, p<0.05$)	NEG ** ($r=-0.1648, p<0.01$)	marg-signif NEG ($r=-0.1730, p<0.10$)	NEG * ($r=-0.1669, p<0.05$)	NEG * ($r=-0.0686, p<0.05$)	NEG * ($r=-0.1241, p<0.05$)	NEG * ($r=-0.0729, p<0.05$)	NEG ** ($r=-0.0927, p<0.01$)	(-)	(-)	(+)			

S-A21.c Averages-n-Trends plots

S-A21.d Regional Averages plot

Table S-A22 Total Appendicularia (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)



Table S-A23 Total Doliolids (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

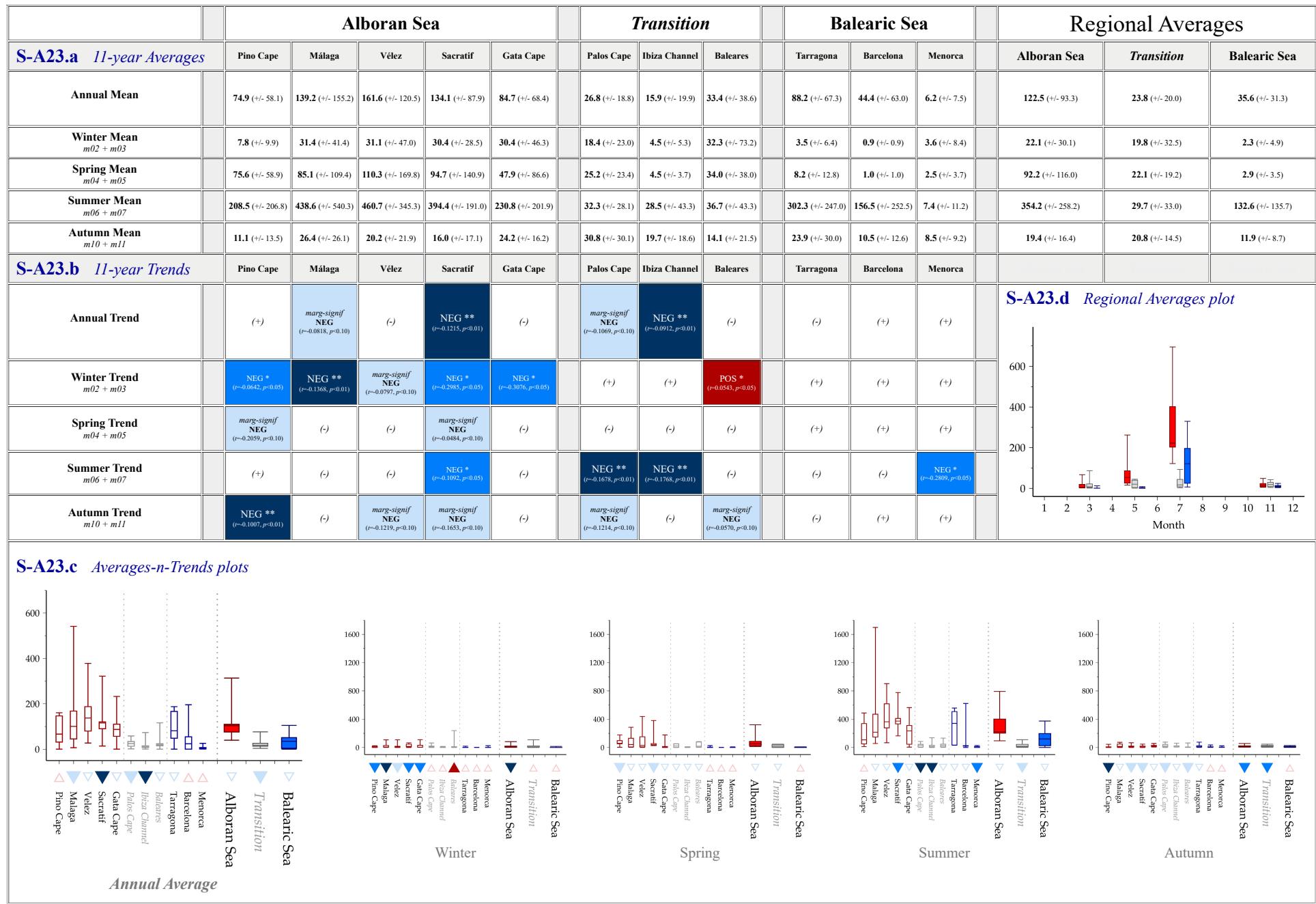


Table S-A24 Total Salps (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

Table S-A25 Total Siphonophores (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

S-A25.a 11-year Averages

	Alboran Sea					Transition			Balearic Sea			Regional Averages		
	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean	27.6 (+/- 8.6)	37.8 (+/- 20.0)	44.0 (+/- 35.5)	39.2 (+/- 20.2)	20.6 (+/- 15.0)	13.5 (+/- 6.3)	30.9 (+/- 20.8)	25.6 (+/- 17.6)	23.2 (+/- 12.7)	11.0 (+/- 6.1)	11.1 (+/- 7.7)	32.9 (+/- 13.0)	23.3 (+/- 11.7)	13.7 (+/- 4.1)
Winter Mean $m02 + m03$	30.7 (+/- 47.4)	32.4 (+/- 40.5)	40.9 (+/- 43.3)	27.6 (+/- 19.6)	9.3 (+/- 4.3)	10.4 (+/- 9.0)	41.2 (+/- 36.2)	16.8 (+/- 14.4)	28.2 (+/- 20.2)	9.2 (+/- 11.7)	9.1 (+/- 12.2)	26.0 (+/- 27.3)	22.8 (+/- 13.4)	13.8 (+/- 10.8)
Spring Mean $m04 + m05$	57.3 (+/- 29.0)	52.5 (+/- 53.6)	48.8 (+/- 58.9)	72.3 (+/- 47.8)	31.8 (+/- 37.6)	26.6 (+/- 22.5)	63.2 (+/- 48.6)	43.6 (+/- 44.3)	37.1 (+/- 23.3)	9.4 (+/- 10.3)	13.6 (+/- 8.4)	55.0 (+/- 35.8)	46.1 (+/- 27.6)	17.7 (+/- 9.4)
Summer Mean $m06 + m07$	21.4 (+/- 11.4)	44.8 (+/- 26.6)	52.6 (+/- 35.5)	47.9 (+/- 38.0)	35.4 (+/- 45.3)	10.4 (+/- 5.3)	17.1 (+/- 12.0)	36.5 (+/- 33.0)	21.3 (+/- 11.0)	19.3 (+/- 15.2)	12.2 (+/- 8.7)	42.2 (+/- 17.4)	21.2 (+/- 14.8)	17.9 (+/- 10.7)
Autumn Mean $m10 + m11$	9.4 (+/- 9.1)	22.6 (+/- 19.9)	20.5 (+/- 14.4)	14.9 (+/- 11.2)	15.1 (+/- 7.4)	9.3 (+/- 6.4)	8.9 (+/- 4.6)	9.0 (+/- 7.3)	7.7 (+/- 5.6)	5.9 (+/- 8.1)	6.4 (+/- 3.5)	16.5 (+/- 9.9)	9.2 (+/- 4.9)	6.4 (+/- 5.2)

S-A25.b 11-year Trends

	Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca			
Annual Trend	(-)	(-)	(-)	(-)	(-)	(-)	NEG * ($r=-0.1172, p=0.05$)	NEG * ($r=-0.1039, p=0.05$)	(+)	marg-signif NEG ($r=-0.0945, p=0.10$)	NEG * ($r=-0.1250, p=0.05$)			
Winter Trend $m02 + m03$	(+)	(-)	(+)	(-)	NEG * ($r=-0.1622, p=0.05$)	marg-signif POS ($r=0.1261, p=0.10$)	NEG ** ($r=-0.2133, p=0.01$)	(-)	(-)	(-)	(-)			
Spring Trend $m04 + m05$	(-)	(-)	(+)	(-)	NEG * ($r=-0.1684, p=0.05$)	(-)	(-)	NEG ** ($r=-0.2872, p=0.01$)	(-)	NEG * ($r=-0.2652, p=0.05$)	NEG * ($r=-0.1833, p=0.05$)			
Summer Trend $m06 + m07$	NEG * ($r=-0.1112, p=0.05$)	(-)	(-)	(-)	(+)	(-)	(-)	marg-signif NEG ($r=-0.0885, p=0.10$)	(-)	(-)	NEG * ($r=-0.1840, p=0.05$)			
Autumn Trend $m10 + m11$	marg-signif NEG ($r=-0.1059, p=0.10$)	(-)	(-)	(-)	(+)	(-)	marg-signif NEG ($r=-0.0716, p=0.10$)	(-)	(+)	(+)	(+)			

S-A25.d Regional Averages plot

S-A25.c Averages-n-Trends plots

Table S-A26 Total Jellyfish small (ind. m⁻³) trends in the western Mediterranean Sea (2007-2017)

		Alboran Sea					Transition			Balearic Sea			Regional Averages		
S-A26.a 11-year Averages		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca	Alboran Sea	Transition	Balearic Sea
Annual Mean		5.7 (+/- 6.9)	8.9 (+/- 6.7)	6.2 (+/- 3.0)	8.5 (+/- 4.1)	12.8 (+/- 22.9)	7.8 (+/- 5.8)	4.7 (+/- 3.4)	9.1 (+/- 3.6)	8.4 (+/- 6.3)	8.2 (+/- 8.3)	7.2 (+/- 7.4)	8.1 (+/- 4.1)	8.0 (+/- 4.0)	7.4 (+/- 4.3)
Winter Mean $m02 + m03$		2.4 (+/- 1.7)	1.8 (+/- 1.2)	2.2 (+/- 1.7)	5.0 (+/- 8.0)	2.7 (+/- 1.3)	5.4 (+/- 7.2)	5.4 (+/- 4.9)	3.6 (+/- 4.1)	7.4 (+/- 14.7)	2.1 (+/- 3.0)	1.4 (+/- 1.6)	2.8 (+/- 2.0)	4.7 (+/- 3.8)	3.2 (+/- 5.5)
Spring Mean $m04 + m05$		9.9 (+/- 14.9)	15.1 (+/- 16.7)	10.1 (+/- 5.1)	16.9 (+/- 12.1)	2.3 (+/- 2.9)	18.5 (+/- 25.7)	9.2 (+/- 8.7)	21.9 (+/- 17.1)	11.9 (+/- 7.8)	23.7 (+/- 49.4)	17.7 (+/- 28.9)	11.9 (+/- 9.0)	18.5 (+/- 13.7)	15.6 (+/- 23.0)
Summer Mean $m06 + m07$		8.0 (+/- 11.7)	13.5 (+/- 14.8)	10.0 (+/- 15.2)	7.9 (+/- 7.1)	20.9 (+/- 49.9)	5.3 (+/- 8.1)	5.0 (+/- 4.4)	8.7 (+/- 6.9)	15.3 (+/- 11.7)	6.1 (+/- 6.7)	9.5 (+/- 6.5)	11.4 (+/- 9.8)	6.6 (+/- 5.4)	9.9 (+/- 5.3)
Autumn Mean $m10 + m11$		2.9 (+/- 2.9)	4.2 (+/- 5.1)	3.4 (+/- 5.0)	3.4 (+/- 5.4)	7.6 (+/- 15.6)	3.2 (+/- 2.5)	2.0 (+/- 1.2)	3.5 (+/- 2.5)	3.2 (+/- 2.0)	2.2 (+/- 1.6)	1.7 (+/- 1.2)	4.2 (+/- 4.1)	2.9 (+/- 1.3)	2.3 (+/- 0.6)
S-A26.b 11-year Trends		Pino Cape	Málaga	Vélez	Sacratif	Gata Cape	Palos Cape	Ibiza Channel	Baleares	Tarragona	Barcelona	Menorca			
Annual Trend		(+)	(+)	margin-signif POS ($t=0.0507, p=0.10$)	(+)	margin-signif NEG ($t=-0.0164, p=0.10$)	(-)	(-)	(-)	(+)	(+)	(+)			
Winter Trend $m02 + m03$		(+)	(-)	(-)	(+)	(+)	(+)	(-)	POS * ($t=0.1627, p=0.05$)	(+)	(+)	(+)			
Spring Trend $m04 + m05$		(+)	(+)	(+)	(+)	(-)	(+)	(+)	margin-signif NEG ($t=-0.1563, p=0.10$)	(+)	margin-signif NEG ($t=-0.0409, p=0.10$)	(-)			
Summer Trend $m06 + m07$		(+)	(+)	(+)	(+)	(-)	(-)	(+)	(+)	(+)	POS * ($t=0.1956, p=0.05$)	(+)			
Autumn Trend $m10 + m11$		(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)			
S-A26.d Regional Averages plot															
S-A26.c Averages-n-Trends plots															