

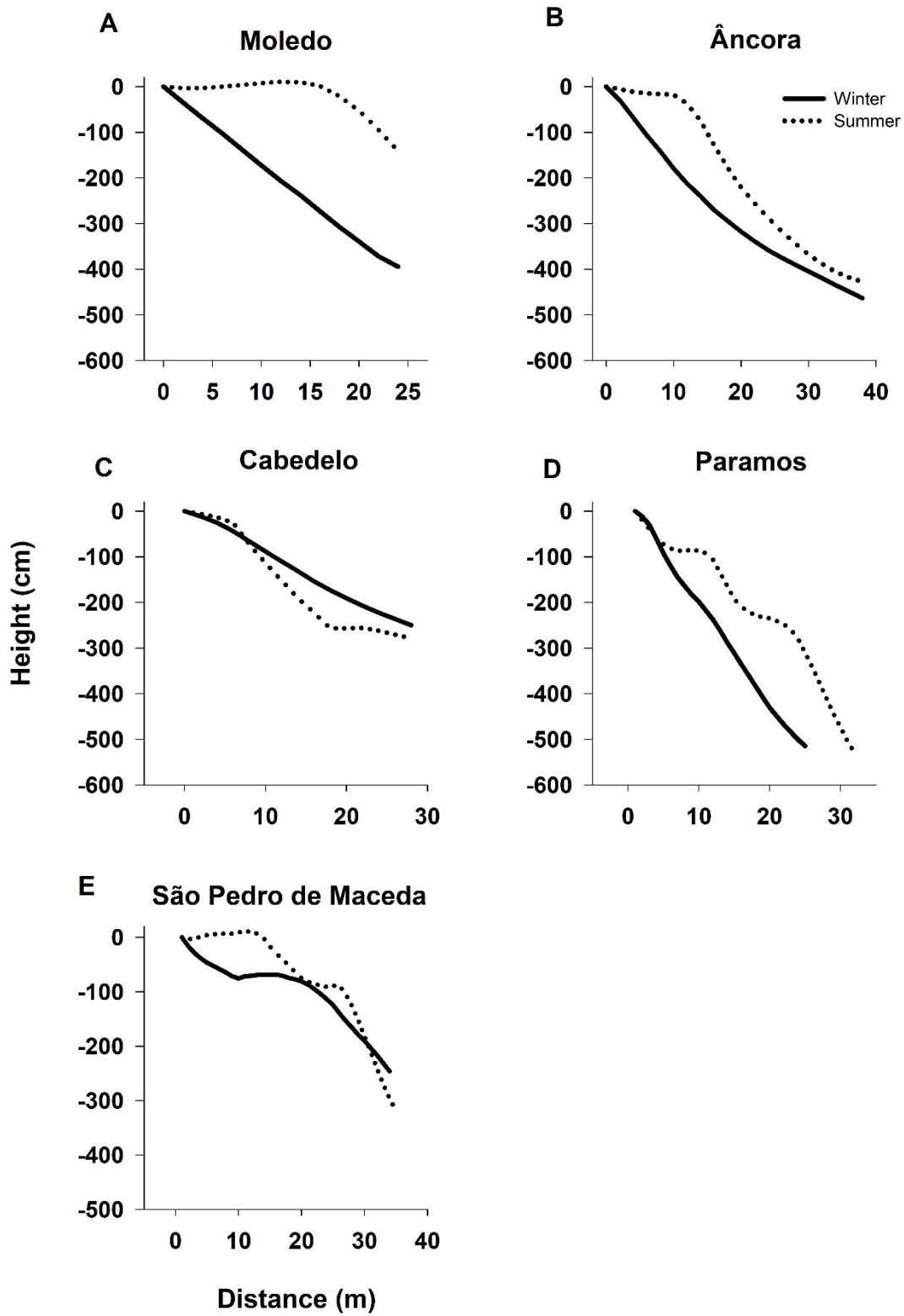


Figure S1. Beaches profiles.

Table S1. Sediment kind and sorting kind of the five sandy beaches studied during both dates (summer and winter) of natural wrack and marine litter surveys. Sediment kind was determined by calculating the median particle size (Md) following the method described by Bale and Kenny, 2005. Sorting kind was assessed by calculating the sorting coefficient of the sediment (QDΦ) using the method described by Yamanaka et al 2012. Numbers 1 and 2 indicate different replicates at different tide levels.

Beach	Period	Tide level	Md (mm)	Sediment kind	QDΦ	Sorting kind
Moledo	Summer	Low level 1	0.510	Coarse sand	0.520	Moderately well sorted
		Low level 2	0.490	Medium sand	0.520	Moderately well sorted
		High level 1	0.430	Medium sand	0.460	Well sorted
		High level 2	0.500	Medium sand	0.510	Moderately well sorted
	Winter	Low level 1	0.540	Coarse sand	0.510	Moderately well sorted
		Low level 2	0.590	Coarse sand	0.490	Well sorted
		High level 1	0.620	Coarse sand	0.430	Well sorted
		High level 2	0.600	Coarse sand	0.460	Well sorted
Âncora	Summer	Low level 1	0.420	Medium sand	0.450	Well sorted
		Low level 2	0.420	Medium sand	0.460	Well sorted
		High level 1	0.420	Medium sand	0.440	Well sorted
		High level 2	0.400	Medium sand	0.380	Well sorted
	Winter	Low level 1	0.420	Medium sand	0.450	Well sorted
		Low level 2	0.420	Medium sand	0.460	Well sorted
		High level 1	0.380	Medium sand	0.310	Very well sorted
		High level 2	0.380	Medium sand	0.310	Very well sorted
Cabedelo	Summer	Low level 1	0.280	Medium sand	0.540	Moderately well sorted
		Low level 2	0.270	Medium sand	0.550	Moderately well sorted
		High level 1	0.350	Medium sand	0.320	Very well sorted
		High level 2	0.350	Medium sand	0.340	Very well sorted
	Winter	Low level 1	0.320	Medium sand	0.340	Very well sorted
		Low level 2	0.320	Medium sand	0.340	Very well sorted
		High level 1	0.330	Medium sand	0.370	Well sorted
		High level 2	0.340	Medium sand	0.350	Well sorted
Paramos	Summer	Low level 1	0.620	Coarse sand	0.470	Well sorted
		Low level 2	0.590	Coarse sand	0.490	Well sorted
		High level 1	0.470	Medium sand	0.500	Moderately well sorted
		High level 2	0.480	Medium sand	0.510	Moderately well sorted
	Winter	Low level 1	0.440	Medium sand	0.490	Well sorted
		Low level 2	0.570	Coarse sand	0.610	Moderately well sorted

São Pedro de Maceda	Summer	High level 1	0.510	Coarse sand	0.520	Moderately well sorted
		High level 2	0.400	Medium sand	0.370	Well sorted
		Low level 1	0.510	Coarse sand	0.510	Moderately well sorted
		Low level 2	0.500	Medium sand	0.500	Moderately well sorted
	Winter	High level 1	0.410	Medium sand	0.390	Well sorted
		High level 2	0.390	Medium sand	0.320	Very well sorted
		Low level 1	0.420	Medium sand	0.450	Well sorted
		Low level 2	0.410	Medium sand	0.420	Well sorted
		High level 1	0.350	Coarse sand	0.280	Very well sorted
		High level 2	0.340	Medium sand	0.290	Very well sorted

Table 2. Summary of the two-way ANOVA results of the effects of the beach (Moledo, Âncora, Cabedelo, Paramos and São Pedro de Maceda) and date of collection (summer and winter) for percentages of abundance of the major taxa of natural wrack and marine litter material. No differences were found in the analyses ($p>0.01$). Asterisks indicate that the variables did not meet homogeneity of variances and /or normality.

Variable	Source of Variation	DF	MS	F	<i>p</i> -value
Wrack higher taxa					
Chlorophyta	Beach (B)	4	0.009	0.610	0.676
	Date (D)	1	0.004	0.610	0.444
	B x D	4	0.015	2.660	0.063
	Residual	20	0.006		
Heterokontophyta	Beach (B)	4	0.225	2.090	0.246
	Date (D)	1	0.102	1.750	0.200
	B x D	4	0.107	1.850	0.159
	Residual	20	0.058		
Rhodophyta	Beach (B)	4	0.004	0.460	0.763
	Date (D)	1	0.016	2.130	0.160
	B x D	4	0.008	1.110	0.380
	Residual	20	0.007		
Seagrass	Beach (B)	4	0.009	0.610	0.676
	Date (D)	1	0.004	0.610	0.444
	B x D	4	0.015	2.660	0.063
	Residual	20	0.006		
Marine litter material					
Plastic	Beach (B)	4	207.1	5.230	0.069
	Date (D)	1	719.2	14.890	0.001
	B x D	4	39.63	0.820	0.527
	Residual	20	48.30		
Rubber	Beach (B)	4	3.477	2.350	0.214

Cloth	Date (D)	1	4.087	1.330	0.263
	B x D	4	1.481	0.480	0.749
	Residual	20	3.077		
	Beach (B)	4	4.623	3.480	0.127
Paper/Cardboard	Date (D)	1	3.253	2.040	0.169
	B x D	4	1.327	0.830	0.521
	Residual	20	1.596		
	Beach (B)	4	108.4	8.610	0.030
Wood	Date (D)	1	290.6	12.800	0.002
	B x D	4	12.59	0.550	0.698
	Residual	20	22.70		
	Beach (B)	4	0.123	0.730	0.618
<i>Ln (x+1)transformed</i>	Date (D)	1	0.014	0.090	0.768
	B x D	4	0.170	1.060	0.403
	Residual	20	0.161		
	Beach (B)	4	0.226	4.480	0.088
Metal	Date (D)	1	0.499	1.580	0.223
	B x D	4	0.051	0.160	0.956
	Residual	20	0.315		
	Beach (B)	4	9.043	0.890	0.544
Glass	Date (D)	1	16.54	1.440	0.244
	B x D	4	10.18	0.890	0.489
	Residual	20	11.45		
	Beach (B)	4	21.99	0.450	0.773
Sanitary waste	Date (D)	1	3.299	0.110	0.747
	B x D	4	49.16	1.590	0.215
	Residual	20	30.82		
	Beach (B)	4	0.487	2.560	0.192
Medical waste	Date (D)	1	0.213	0.470	0.500
	B x D	4	0.190	0.420	0.791
	Residual	20	0.451		
	Beach (B)	4	12.41	0.710	0.626
Other pollutants*	Date (D)	1	10.72	2.490	0.130
	B x D	4	17.49	4.060	0.014
	Residual	20	4.302		

Table 3. Percentage of contribution ($\delta i\%$) and cumulate percentage (Cum %) of the assemblages of natural wrack (taxa) and marine litter based on weight and on items of OSPAR categories to the average Bray-Curtis dissimilarity between dates (summer and winter).

Variable	Date	Groups (Beaches)	Species/ Material	Average (g DW/items)	Average δi	$\delta i/S$	$\delta i\%$	Cum %
				Beach 1	Beach 2			
Natural wrack assemblage	Summer	Âncora & Moledo Average dissimilarity = 86.26	<i>Saccorhiza polyschides</i>	12.56	158.56	57.68	5.55	66.87
			<i>Ulva sp.</i>	0.81	35.80	13.73	8.38	15.92
			<i>Ceramium sp.</i>	0.01	6.13	3.12	1.32	3.62
			<i>Sargassum muticum</i>	3.15	2.21	1.44	1.15	1.67
			<i>Fucus sp.</i>	5.27	2.50	1.39	5.10	2.78
			<i>Codium sp.</i>	0.00	3.89	1.39	2.14	1.63
		Cabedelo & Moledo Average dissimilarity = 94.88	<i>Saccorhiza polyschides</i>	0.38	158.56	46.85	4.23	49.38
			<i>Fucus sp.</i>	83.07	2.50	23.71	2.02	24.99
			<i>Ulva sp.</i>	4.26	35.80	9.31	2.70	9.81
			<i>Ascophyllum nodosum</i>	8.79	0.00	2.44	0.88	2.57
			<i>Ceramium sp.</i>	0.00	6.13	2.21	1.33	2.33
			<i>Pelvetia canaliculata</i>	7.10	0.00	1.98	1.26	2.09
		Moledo & Paramos Average dissimilarity = 95.37	<i>Saccorhiza polyschides</i>	158.56	0.00	58.59	9.10	61.43
			<i>Ulva sp.</i>	35.80	0.11	13.05	8.13	13.68
			<i>Fucus sp.</i>	2.50	14.81	5.07	1.76	5.32
				0.00				

			2.2	14.3		0.9	5.1	85.
		<i>Sargassum muticum</i>	1	9	4.94	1	8	61
			6.1			1.3	3.0	88.
		<i>Ceramium sp.</i>	3	0.00	2.86	5	0	61
			1.4			1.2	2.7	91.
		<i>Himanthalia elongata</i>	7	7.13	2.60	2	3	34
	Moledo & Sao							
	Pedro de		158		60.8	15.	65.	65.
	Maceda	<i>Saccorhiza polyschides</i>	.56	0.00	8	61	18	18
	Average							
	dissimilarity =		35.		13.3	9.8	14.	79.
	93.41	<i>Ulva sp.</i>	80	0.63	5	8	29	47
			2.2	11.6		1.6	4.3	83.
		<i>Sargassum muticum</i>	1	3	4.03	3	1	78
			6.1			1.2	2.8	86.
		<i>Ceramium sp.</i>	3	0.71	2.69	5	8	66
			2.5			1.3	2.5	89.
		<i>Fucus sp.</i>	0	7.13	2.40	6	7	23
			1.4			1.1	1.8	91.
		<i>Himanthalia elongata</i>	7	4.65	1.70	7	2	05
	Cabedelo &							
	Sao Pedro de		83.		50.3	3.4	60.	60.
	Maceda	<i>Fucus sp.</i>	07	7.13	7	2	88	88
	Average							
	dissimilarity =	<i>Sargassum muticum</i>	2.9	11.6	8.68	1.1	10.	71.
	82.73		8	3		9	49	37
		<i>Ascophyllum nodosum</i>	8.7	0.00	4.90	0.9	5.9	77.
			9			3	2	29
		<i>Himanthalia elongata</i>	0.0	4.65	4.38	1.0	5.3	82.
			0			4	0	59
		<i>Pelvetia canaliculata</i>	7.1	0.02	4.01	1.3	4.8	87.
			0			4	5	44
		<i>Brown inderterminated</i>	2.5	0.00	2.50	1.3	3.0	90.
			7			7	2	46
Wint	Cabedelo &							
er	Sao Pedro de		135		73.3	12.	73.	73.
	Maceda	<i>Fucus sp.</i>	.03	0.03	0	25	33	33
	Average							
	dissimilarity =		27.		14.7	2.3	14.	88.
	99.96	<i>Ascophyllum nodosum</i>	22	0.00	5	1	76	09
			16.			12.	9.5	97.
		<i>Cystoseira sp.</i>	78	0.00	9.51	38	1	60

Cabedelo & Paramos Average dissimilarity = 96.60	<i>Fucus sp.</i>	135		71.5	11.	74.	74.
		.03	0.67	4	76	06	06
	<i>Ascophyllum nodosum</i>	27.		13.2	2.0	13.	87.
		22	1.99	5	0	72	78
	<i>Cystoseira sp.</i>	16.			13.	9.6	97.
		78	0.05	9.29	71	2	40
Cabedelo & Moledo Average dissimilarity = 99.90	<i>Fucus sp.</i>	135		71.8	11.	71.	71.
		.03	0.00	9	19	96	96
	<i>Ascophyllum nodosum</i>	27.		14.4	2.3	14.	86.
		22	0.00	8	0	49	45
	<i>Cystoseira sp.</i>	16.			12.	9.2	95.
		78	0.06	9.28	15	9	74
Âncora & Cabedelo Average dissimilarity = 93.81	<i>Fucus sp.</i>	6.0	135.	64.5	6.2	74.	74.
		8	03	7	1	98	98
	<i>Ascophyllum nodosum</i>		27.2	10.1	1.5	11.	86.
		6	2	8	3	82	8
	<i>Cystoseira sp.</i>	0.0	16.7		13.	10.	96.
		6	8	8.75	18	16	96
Âncora & Moledo Average dissimilarity = 98.32	<i>Ascophyllum nodosum</i>			52.4	1.7	53.	53.
		6	0	7	1	36	36
	<i>Fucus sp.</i>	6.0		27.6	1.1	28.	81.
		8	0	6	1	13	49
	<i>Saccorhiza polyschides</i>	0.7		15.4	0.7	15.	97.
		6	2.87	6	4	73	22
Âncora & Sao Pedro de Maceda Average dissimilarity = 98.79	<i>Ascophyllum nodosum</i>			59.6	2.0	60.	60.
		6	0.00	3	2	37	37
	<i>Fucus sp.</i>	6.0		27.4	1.5	27.	88.
		8	0.03	9	5	83	20
	<i>Saccorhiza polyschides</i>	0.7			0.7	9.8	98.
		6	0.00	9.69	2	0	00

		Paramos & Sao Pedro de Maceda	<i>Ascophyllum nodosum</i>	6	0	63.8 9	2.1 2	64. 34	64. 34
		Average dissimilarity = 99.31	<i>Fucus sp.</i>	6.0 8	0.03	31.2	1.2	31. 41	95. 75
Assembla ge of marine litter based on weight	Sum mer	Cabedelo & Paramos Average dissimilarity = 76.21	Rope (diameter more than 1 cm)	0.0 0	54.5 0	14.0 1	1.2 9	18. 38	18. 38
			Plastic/polystyrene pieces 2.5-50 cm	12. 50	49.8 8	13.9 0	2.0 9	18. 24	36. 62
			Tangled net/cord/rope and string	0.0 1	30.3 7	9.10	1.3 3	11. 94	48. 55
			Oyster nets or mussel bags including plastic stoppers	0.0 0	8.71	3.86	0.6 6	5.0 7	53. 62
			Paraffin or wax pieces size range 1 - 10 cm	0.0 0	15.9 0	3.34	0.6 6	4.3 9	58. 01
			Small plastic bags	0.0 0	13.0 0	3.15	0.9 9	4.1 3	62. 15
			String and cord (diameter less than 1 cm)	13. 18	7.14	3.12	1.3 3	4.1 0	66. 24
			Caps/lids	5.3 3	8.83	2.18	1.5 3	2.8 6	69. 10
			Food containers incl. fast food containers	0.4 8	4.42	2.07	0.7 2	2.7 1	71. 81
			Industrial packaging. plastic sheeting	0.0 0	5.52	1.96	1.9 6	2.5 8	74. 39
			Foam sponge	0.5 9	4.44	1.87	1.3 3	2.4 6	76. 85
			Plastic/Polystyrene pieces 0-2.5 cm	8.7 6	12.0 7	1.84	0.9 8	2.4 2	79. 27
			Other sanitary items	5.0 3	1.62	1.73	1.1 0	2.2 6	81. 53
			Strapping bands	0.5 4	4.16	1.63	1.2 9	2.1 4	83. 68
			Sanitary towels/panty liners/baking strips	2.7 2	5.85	1.34	1.3 5	1.7 6	85. 44
			Other textiles	0.5 4	2.39	1.14	0.7 7	1.4 9	86. 93
			Cups	0.0 0	2.00	0.92	0.6 6	1.2 1	88. 14
			Crisp/sweet packets and lolly sticks	0.0 0	3.10	0.86	1.4 0	1.1 3	89. 27

		Other pollutants	1.9 6	0.00	0.84	0.6 6	1.1 1	90. 38
Paramos & Sao Pedro de Maceda		Plastic/polystyrene pieces 2.5-50 cm	49. 88	1.55	20.9 3	2.7 3	22. 33	22. 33
Average dissimilarity = 93.70		Rope (diameter more than 1 cm)	54. 55	0	15.8 4	1.3 8	16. 9	39. 23
		Tangled net/cord/rope and string	30. 37	0	10.5 1	1.3 1	11. 22	50. 46
		Plastic/Polystyrene pieces 0-2.5 cm	12. 07	0.27	4.99	2.9 9	5.3 3	55. 79
		Oyster nets or mussel bags including plastic stoppers	8.7 1	0	4.66	0.6 6	4.9 7	60. 76
		Paraffin or wax pieces size range 1 - 10 cm	15. 9	0	3.64	0.6 6	3.8 9	64. 64
		Small plastic bags	13	1.41	3.42	1.0 3	3.6 5	68. 3
		Other pollutants	8.8 0	9.17	3.34	1.5 3	2.7 7	74. 86
		Caps/lids	3	0.78	2.56	2	4	6
		Food containers incl. fast food containers	4.4 2	0	2.47	0.6 6	2.6 4	77. 24
		Foam sponge	4.4 4	0	2.43	2.5 1.3	79. 9	83
		String and cord (diameter less than 1 cm)	7.1 4 4.1	3.31	2.41	1.4 9 1.3	2.5 8 2.2	82. 4 84.
		Strapping bands	6	0.15	2.11	1	6	66
		Industrial packaging. plastic sheeting	5.5 2	0.88	2	1.4 1	2.1 4	86. 8
		Sanitary towels/panty liners/baking strips	5.8 5	0	1.67	1.2 5	1.7 9	88. 58
		Other textiles	2.3 9	0	1.34	0.6 6	1.4 3	90. 01
Wint er	Cabedelo & Moledo	Plastic/polystyrene pieces 2.5-50 cm	290 .68	0.00	27.3 6	7.9 7	27. 75	27. 75
	Average dissimilarity = 98.59	String and cord (diameter less than 1 cm)	153 .10	0.00	18.5 1	2.3 3	18. 78	46. 53
		Plastic/Polystyrene	94.	0.23	9.95	4.0	10.	56.

	pieces 0-2.5 cm	04			6	09	63
	Oyster nets or mussel bags including plastic stoppers	67.			3.1	7.0	63.
		38	0.00	6.98	5	8	71
		83.			0.6	6.0	69.
	Shoes	37	0.00	6.01	8	9	80
	Rope (diameter more than 1 cm)	57.			0.7	4.3	74.
		17	0.00	4.28	1	4	14
		48.			0.7	3.6	77.
	Fishing weights	53	0.00	3.64	0	9	83
		22.			2.0	2.9	80.
	Cotton bud sticks	93	0.08	2.87	0	1	73
		30.			1.7	2.3	83.
	Foam sponge	40	1.82	2.35	9	9	12
		19.			1.8	2.3	85.
	Caps/lids	46	0.00	2.30	3	3	45
	Industrial packaging.	28.			1.1	2.1	87.
	plastic sheeting	99	0.04	2.15	6	8	63
	Nets and pieces of net < 50 cm	8.0			0.6	1.5	89.
		0	9.00	1.49	0	1	14
		15.			1.0	1.3	90.
	Cigarette butts	68	0.00	1.30	6	1	46
Cabedelo & Sao Pedro de Maceda Average dissimilarity = 92.43	Plastic/polystyrene pieces 2.5-50 cm	290	16.5	23.9	3.5	25.	25.
		.68	6	0	6	85	85
	String and cord (diameter less than 1 cm)	153		17.2	2.3	18.	44.
		.10	0.00	3	0	64	50
	Plastic/Polystyrene pieces 0-2.5 cm	94.			3.6	9.9	54.
		04	1.27	9.20	6	6	45
	Rope (diameter more than 1 cm)	57.	56.6		0.7	8.2	62.
		17	7	7.62	1	4	70
	Oyster nets or mussel bags including plastic stoppers	67.			2.9	7.0	69.
		38	0.00	6.56	1	9	79
		83.			0.6	6.2	76.
	Shoes	37	0.00	5.79	7	7	06
		48.			0.7	3.7	79.
	Fishing weights	53	0.00	3.50	0	9	85
		22.			1.9	2.8	82.
	Cotton bud sticks	93	0.26	2.65	5	6	71
		30.			2.1	2.6	85.
	Foam sponge	40	0.34	2.44	4	3	34
		19.			1.8	2.2	87.
	Caps/lids	46	0.41	2.08	0	5	60

			Industrial packaging. plastic sheeting	28. 99 15.	0.00	2.07	1.1 5 1.0	2.2 4 1.3	89. 83 91.
			Cigarette butts	68	0.00	1.24	4	4	17
		Âncora & Sao Pedro de Maceda	Rope (diameter more than 1 cm)	268 .33	56.6 7	22.7 8	1.1 2	25. 66	54. 65
		Average dissimilarity = 88.77	Plastic/Polystyrene pieces 0-2.5 cm	41. 84 44.	1.27	5.26	1.9 5 0.6	5.9 3 5.7	60. 58 66.
			Fish boxes	33 54.	0	5.12	6 1.3	7	34 71.
			Clothing String and cord (diameter less than 1 cm)	67 42. 22	0	4.88 3.91	1 1.6 1	5.5 76. 4.4	84 76. 24
			Oyster nets or mussel bags including plastic stoppers	37. 63 20.	0	3.16	1.2 5 2.8	3.5 6 2.9	79. 81 82.
			Caps/lids Other plastic/polystyrene items	25 17. 08	0.41 2.06	2.66 2.54	7 1.1 9	9 2.8 6	8 85. 66
			Nets and pieces of net < 50 cm	20. 02 10.	0	2.31	0.6 6 0.9	88. 2.6 90.	26 26 90.
			Cotton bud sticks	47	0.26	2.13	1	2.4	66
Assembla ge of marine litter based on items	Sum mer	Âncora & Cabedelo Average dissimilarity = 74.97	Plastic/Polystyrene pieces 0-2.5 cm	2.3 3	32.3 3	21.6 4	1.9 3	28. 86	28. 86
			String and cord (diameter less than 1 cm)	5.3 3 0.0	16.0 0	7.81	1.5 0 1.8	10. 41 9.8	39. 27 49.
			Fishing line (angling)	0	8.33	7.42	3	9	17
			Plastic/polystyrene pieces 2.5-50 cm	2.0 0 2.3	11.3 3	6.94	3.7 2 2.0	9.2 6 8.2	58. 43 66.
			Cigarette butts	3 0.3	9.33	6.18	4 2.7	4 5.8	67 72.
			Caps/lids	3 0.6	6.00	4.37	2 1.7	3 5.5	50 78.
			Cotton bud sticks	7	6.33	4.13	0	1	02

		0.0			3.1	2.6	80.
	Other sanitary items	0	2.67	1.96	5	2	63
		0.0			3.4	2.2	82.
	Cutlery/trays/straws	0	2.00	1.68	2	5	88
	Food containers incl.	0.3			1.3	1.4	84.
	fast food containers	3	1.33	1.11	2	9	37
		1.3			0.6	1.4	85.
	Other glass items	3	0.00	1.11	3	8	85
	Rope (diameter more	1.3			0.9	1.4	87.
	than 1 cm)	3	0.00	1.11	6	8	33
	Sanitary towels/panty	0.0			3.0	1.4	88.
	liners/baking strips	0	1.33	1.08	2	5	78
	Other						
	plastic/polystyrene	1.0			3.4	1.1	89.
	items	0	0.67	0.84	2	2	90
		0.3			1.5	1.0	90.
	Other textiles	3	1.33	0.78	3	4	94
Âncora & Paramos Average dissimilarity = 81.49	Plastic/Polystyrene	2.3	32.0	20.1	4.5	24.	24.
	pieces 0-2.5 cm	3	0	2	3	70	70
		0.0	21.3	14.1	2.2	17.	42.
	Fishing line (angling)	0	3	0	0	31	01
	Industrial packaging.	0.0	10.0		2.6	8.2	50.
	plastic sheeting	0	0	6.72	6	5	25
	Plastic/polystyrene	2.0			1.6	5.4	55.
	pieces 2.5-50 cm	0	8.67	4.47	0	9	74
		0.6			1.4	5.0	60.
	Cotton bud sticks	7	6.33	4.11	2	4	78
	String and cord						
	(diameter less than 1	5.3	10.3		1.3	4.6	65.
	cm)	3	3	3.80	5	7	45
	Tangled net/cord/rope	0.6			1.9	4.2	69.
	and string	7	6.00	3.45	2	4	69
		0.3			2.8	4.0	73.
	Caps/lids	3	5.33	3.32	0	8	77
	Sanitary towels/panty	0.0			1.9	2.4	76.
	liners/baking strips	0	3.00	2.03	6	9	26
		1.0			1.3	2.4	78.
	Strapping bands	0	4.00	2.00	3	5	71
	Toys and party	0.0			2.5	1.8	80.
	poppers	0	2.33	1.54	3	8	59
		0.0			0.8	1.8	82.
	Foam sponge	0	2.33	1.47	7	0	39
	Cigarette butts	2.3	0.33	1.37	2.5	1.6	84.

		3			5	8	08
	Crisp/sweet packets and lolly sticks	0.0			2.3	1.6	85.
		0	2.00	1.33	3	4	71
	Rope (diameter more than 1 cm)	1.3			1.5	1.5	87.
		3	3.00	1.27	2	6	27
		0.0			0.9	1.4	88.
	Small plastic bags	0	1.67	1.15	4	1	69
		1.3			0.6	1.1	89.
	Other glass items	3	0.00	0.89	6	0	79
	Other plastic/polystyrene items	1.0			11.	0.8	90.
		0	0.00	0.68	96	3	62
Âncora & Sao Pedro de Maceda Average dissimilarity = 69.48		0.0	15.6	25.4	2.3	36.	36.
	Fishing line (angling)	0	7	2	2	58	58
		2.3			3.3	7.4	44.
	Cigarette butts	3	4.00	5.17	6	4	02
	Industrial packaging. plastic sheeting	0.0			0.6	6.1	50.
		0	3.67	4.27	7	4	16
	String and cord (diameter less than 1 cm)	5.3			0.9	5.1	55.
		3	4.00	3.57	0	4	30
	Other plastic/polystyrene items	1.0			1.4	4.1	59.
		0	2.00	2.88	0	4	44
	Plastic/polystyrene pieces 2.5-50 cm	2.0			3.0	3.8	63.
		0	1.67	2.66	1	2	26
	Plastic/Polystyrene pieces 0-2.5 cm	2.3			1.1	3.6	66.
		3	3.00	2.53	4	4	90
		0.6			1.0	3.4	70.
	Cotton bud sticks	7	1.67	2.39	5	4	34
		1.3			0.6	3.0	73.
	Other glass items	3	0.00	2.14	5	8	42
	Rope (diameter more than 1 cm)	1.3			1.0	3.0	76.
		3	0.00	2.14	1	8	50
		1.0			4.4	2.3	78.
	Strapping bands	0	0.67	1.64	5	6	86
	Newspapers and Magazines	0.6			0.6	1.6	80.
		7	0.00	1.17	4	8	54
	Tangled net/cord/rope and string	0.6			1.2	1.5	82.
		7	0.00	1.10	5	9	13
		0.3			0.9	1.5	83.
	Caps/lids	3	0.67	1.04	9	0	63

		0.0			1.2	1.4	85.
	Other sanitary items	0	0.67	1.01	3	5	08
		0.6			1.0	1.4	86.
	Other pollutants	7	0.33	0.98	1	1	49
		0.0			0.6	1.1	87.
	Light sticks	0	0.67	0.78	7	2	61
		0.3			0.8	1.0	88.
	Other textiles	3	0.33	0.75	1	8	69
		0.0			0.6	0.9	89.
	Cardboard	0	0.33	0.63	7	1	60
		0.0			0.6	0.9	90.
	Other woods < 50 cm	0	0.33	0.63	7	1	51
Cabedelo & Sao Pedro de Maceda	Plastic/Polystyrene pieces 0-2.5 cm	32. 33		18.5 4	1.7 8	28. 92	28. 92
	String and cord (diameter less than 1 cm)	16. 00	4.00	7.81	1.8 5	12. 19	41. 11
Average dissimilarity = 64.09	Plastic/polystyrene pieces 2.5-50 cm	11. 33	1.67	6.42	2.5 6	10. 02	51. 13
	Fishing line (angling)	8.3 3	15.6 7	5.40	1.5 1	8.4 2	59. 55
		9.3			1.2	6.5	66.
	Cigarette butts	3	4.00	4.17	4	1	06
		6.0			2.0	5.6	71.
	Caps/lids	0	0.67	3.61	7	4	69
		6.3			1.5	4.9	76.
	Cotton bud sticks	3	1.67	3.14	0	0	59
	Industrial packaging. plastic sheeting	0.0 0			0.6	3.5	80. 10
	Other plastic/polystyrene items	0.6 7	2.00	1.39	0.9 9	2.1 7	82. 27
		2.6			1.5	1.9	84.
	Other sanitary items	7	0.67	1.25	1	5	23
		2.0			2.1	1.9	86.
	Cutlery/trays/straws	0	0.33	1.24	3	3	16
	Food containers incl. fast food containers	1.3 3			1.2 3	1.6 6	87. 82
	Sanitary towels/panty liners/baking strips	1.3 3			2.8 7	1.4 6	89. 28
		1.3	0.00	0.93	1.5	1.0	90.
	Other textiles	3	0.33	0.65	3	2	29

Paramos & Sao Pedro de Maceda	Plastic/Polystyrene pieces 0-2.5 cm	32. 00	3.00	17.4 4	4.0 2	26. 37	26. 37
	Average dissimilarity = 66.16	21. 33	15.6 7	5.84	1.2 5	8.8 2	35. 19
	Fishing line (angling)	10. 00	3.67	4.73	1.5 1	7.1 5	42. 34
	Industrial packaging. plastic sheeting	8.6 7	1.67	4.25	1.4 9	6.4 2	48. 76
	Plastic/polystyrene pieces 2.5-50 cm	10. 33	4.00	3.66	1.3 2	5.5 4	54. 30
	String and cord (diameter less than 1 cm)	6.0 0	0.00	3.47	2.1 7	5.2 4	59. 54
	Tangled net/cord/rope and string	6.3 3	1.67	3.28	1.4 3	4.9 5	64. 50
	Cotton bud sticks	5.3 3	0.67	2.79	2.1 6	4.2 2	68. 72
	Caps/lids	0.3 3	4.00	2.26	1.3 8	3.4 2	72. 14
	Cigarette butts	4.0 0	0.67	2.14	1.6 0	3.2 3	75. 37
	Strapping bands	3.0 0	0.00	1.80	1.9 3	2.7 2	78. 08
	Sanitary towels/panty liners/baking strips	3.0 0	0.00	1.78	3.4 0	2.6 9	80. 77
	Rope (diameter more than 1 cm)	2.3 3	0.00	1.36	2.4 4	2.0 6	82. 83
	Toys and party poppers	2.3 3	0.00	1.31	0.8 6	1.9 8	84. 81
	Foam sponge	0.0 0	2.00	1.27	1.1 5	1.9 2	86. 72
	Other plastic/polystyrene items	2.0 0	0.33	1.01	1.5 9	1.5 2	88. 25
	Crisp/sweet packets and lolly sticks	1.6 7	0.33	0.95	0.9 2	1.4 4	89. 68
	Small plastic bags	1.0 0	0.00	0.63	1.1 2	0.9 5	90. 00
	Nets and pieces of net < 50 cm						

Wint er	Ancora & Moledo	Plastic/Polystyrene pieces 0-2.5 cm	118 .67	1.00	40.0 9	22. 63	43. 24	43. 24
	Average dissimilarity =	Plastic/polystyrene pieces 2.5-50 cm	32. 67	0.00	11.6 3	4.9 5	12. 54	55. 78

	Cotton bud sticks	30. 00	0.33	10.5 1	6.8 1	11. 34	67. 12
	Other plastic/polystyrene items	23. 33	5.00	5.96	3.7 2	6.4 3	73. 54
	Foam sponge	14. 33	1.33	3.95	3.1 7	4.2 6	77. 80
	String and cord (diameter less than 1 cm)	13. 00	0.00	3.62	1.4 7	3.9 1	81. 71
	Caps/lids	11. 33	0.00	3.62	4.5 5	3.9 0	85. 61
	Crisp/sweet packets and lolly sticks	6.0 0	0.33	1.97	2.8 5	2.1 3	87. 74
	Nets and pieces of net < 50 cm	4.6 7	0.33	1.47	0.7 4	1.5 9	89. 33
	Cutlery/trays/straws	4.3 3	0.00	1.11	1.0 4	1.2 0	90. 53
Cabedelo & Moledo Average dissimilarity = 98.26	Plastic/Polystyrene pieces 0-2.5 cm	288 .00	1.00	30.7 3	18. 80	31. 28	31. 28
	Plastic/polystyrene pieces 2.5-50 cm	184 .67	0.00	18.8 9	4.7 7	19. 23	50. 51
	Cotton bud sticks	104 .67	0.33	12.2 1	3.6 6	12. 43	62. 93
	String and cord (diameter less than 1 cm)	100 .00	0.00	10.7 1	8.1 3	10. 90	73. 83
	Industrial packaging. plastic sheeting	68. 00	0.67	5.59	1.3 3	5.6 9	79. 52
	Foam sponge	46. 33	1.33	5.39	3.0 3	5.4 8	85. 00
	Cigarette butts	44. 00	0.00	4.23	3.1 9	4.3 0	89. 30
	Other plastic/polystyrene items	22. 33	5.00	1.95	1.3 5	1.9 9	91. 29
Moledo & Paramos Average dissimilarity =	Plastic/Polystyrene pieces 0-2.5 cm	1.0 0	16.3 3	18.7 7	2.2 3	21. 00	21. 00
	Plastic/polystyrene pieces 2.5-50 cm	0.0 0	10.3 3	13.5 8	1.7 7	15. 19	36. 19

	String and cord (diameter less than 1 cm)	0.0 0	7.67	9.67	3.0 2	10. 81	47. 00
	Industrial packaging. plastic sheeting	0.6 7	6.33	7.43	3.7 9	8.3 2	55. 32
	Other plastic/polystyrene items	5.0 0	0.33	6.59	1.4 0	7.3 7	62. 68
	Cotton bud sticks	0.3 3	5.33	6.18	1.3 1	6.9 1	69. 60
	Rope (diameter more than 1 cm)	0.0 0	2.33	3.69	1.1 0	4.1 3	73. 73
	Fishing line (angling)	0.0 0	1.67	2.94	0.8 2	3.2 9	77. 02
	Caps/lids	0.0 0	1.67	2.48	1.3 3	2.7 7	79. 79
	Foam sponge	1.3 3	3.00	2.25	1.3 2	2.5 1	82. 30
	Crisp/sweet packets and lolly sticks	0.3 3	2.00	2.12	1.8 9	2.3 7	84. 67
	Other medical items	0.0 0	1.33	2.08	1.2 3	2.3 3	87. 00
	Cardboard	0.0 0	1.00	1.93	0.6 7	2.1 5	89. 15
	Cigarette butts	0.0 0	1.00	1.66	0.9 7	1.8 6	91. 01
Moledo & Sao Pedro de Maceda Average dissimilarity = 73.08	Plastic/Polystyrene pieces 0-2.5 cm	1.0 0	7.00	19.4 9	4.8 7	26. 68	26. 68
	Plastic/polystyrene pieces 2.5-50 cm	0.0 0	5.33	17.3 6	6.6 5	23. 75	50. 43
	Other plastic/polystyrene items	5.0 0	3.67	11.3 7	0.9 7	15. 56	65. 99
	Cotton bud sticks	0.3 3	1.33	3.87	0.9 8	5.3 0	71. 29
	Rope (diameter more than 1 cm)	0.0 0	1.67	3.80	0.6 7	5.2 0	76. 48
	Foam sponge	1.3 3	0.33	3.66	1.2 0	5.0 0	81. 49
	Industrial packaging. plastic sheeting	0.6 7	0.00	2.54	1.1 2	3.4 7	84. 96

Âncora & Paramos Average dissimilarity = 69.63	Bags	0.0 0	0.67	2.23	0.6 6	3.0 6	88. 02	
	Balloons. including plastic valves. ribbons. strings etc	0.3 3	0.00	1.16	0.6 2	1.5 9	89. 61	
	Crisp/sweet packets and lolly sticks	0.3 3	0.00	1.16	0.6 2	1.5 9	91. 20	
	Plastic/Polystyrene pieces 0-2.5 cm	118 .67	16.3 3	28.2 3	4.8 7	40. 55	40. 55	
	Cotton bud sticks	30	5.33	7.05	3.6 1	10. 12	50. 67	
	Other plastic/polystyrene items	23. 33	0.33	6.45	8.2 3	9.2 7	59. 94	
	Plastic/polystyrene pieces 2.5-50 cm	32. 67	10.3 3	6.24	8.9 2	68. 6	9	
	Foam sponge	14. 33	3	2.83	1.7 7	4.0 6	72. 96	
	String and cord (diameter less than 1 cm)	13 11.	7.67	2.59	1.3 1	3.7 2	76. 68	
	Caps/lids	33	1.67	2.48	2.2 1	3.5 6	80. 25	
	Industrial packaging. plastic sheeting	2	6.33	1.46	1.3 5	82. 2.1	34	
	Nets and pieces of net < 50 cm	4.6 7	0	1.21	0.6 7	1.7 4	84. 08	
	Crisp/sweet packets and lolly sticks	6 4.3	2	1.09	1.7 1	1.5 6	85. 64	
	Cutlery/trays/straws	3 3.6	1	0.98	1.2 4	87. 1.4	87.	
	Cigarette butts	7	1	0.87	2.1 3	1.2 5	88. 3	
	Rope (diameter more than 1 cm)	1.6 7	2.33	0.64	0.8 8	0.9 2	89. 21	
	Oyster nets or mussel bags including plastic stoppers	2.6 7	0	0.62	1.2 8	0.8 9	90. 1	
	Âncora & Sao Pedro de Maceda	Plastic/Polystyrene pieces 0-2.5 cm	118 .67	7	36.1 6	13. 74	42. 09	42. 09

Average dissimilarity = 85.90					5.7	11.	53.
	Cotton bud sticks	30	1.33	9.7	7	3	39
	Plastic/polystyrene	32.			4.3	10.	63.
	pieces 2.5-50 cm	67	5.33	9.11	6	6	99
	Other						
	plastic/polystyrene	23.			4.0		71.
	items	33	3.67	6.27	6	7.3	29
		14.			3.8	4.8	76.
	Foam sponge	33	0.33	4.19	3	8	17
	String and cord						
	(diameter less than 1				1.4	4.0	80.
	cm)	13	0	3.51	5	8	26
		11.			3.7		84.
	Caps/lids	33	0.33	3.35	4	3.9	16
	Crisp/sweet packets				3.1	2.3	86.
	and lolly sticks	6	0	2.02	1	5	51
	Nets and pieces of net	4.6			0.6	1.5	88.
	< 50 cm	7	0	1.36	7	9	09
		4.3			1.0	1.2	89.
	Cutlery/trays/straws	3	0	1.08	4	6	35
		3.6			1.3	1.1	90.
	Cigarette butts	7	0	0.96	3	2	47
Cabedelo & Paramos Average dissimilarity = 87.21	Plastic/Polystyrene	288	16.3	26.8	12.	30.	30.
	pieces 0-2.5 cm	.00	3	7	10	81	81
	Plastic/polystyrene	184	10.3	16.4	3.7	18.	49.
	pieces 2.5-50 cm	.67	3	5	7	86	67
	Cotton bud sticks	104	5.33	10.7	4.1	12.	61.
		.67		3	2	30	97
	String and cord	100	7.67	9.07	7.0	10.	72.
	(diameter less than 1	.00			6	40	37
	Industrial packaging.	68.	6.33	5.41	1.6	6.2	78.
	plastic sheeting	00			3	0	58
	Foam sponge	46.	3.00	4.79	3.3	5.4	84.
		33			3	9	07
	Cigarette butts	44.	1.00	3.85	2.7	4.4	88.
		00			6	2	49
	Other	22.	0.33	1.88	1.1	2.1	90.
	plastic/polystyrene	33			0	5	64
	items						

Cabedelo & Sao Pedro de Maceda	Plastic/Polystyrene pieces 0-2.5 cm	288 .00	7.00	29.5 3	20. 06	30. 87	30. 87
Average dissimilarity = 95.67	Plastic/polystyrene pieces 2.5-50 cm	184 .67	5.33	17.9 6	4.4 0	18. 77	49. 63
	Cotton bud sticks	104 .67	1.33	11.8 9	3.7 4	12. 43	62. 07
	String and cord (diameter less than 1 cm)	100 .00	0.00	10.5 5	8.2 9	11. 03	73. 10
	Industrial packaging. plastic sheeting	68. 00	0.00	5.53	1.2 9	5.7 8	78. 87
	Foam sponge	46. 33	0.33	5.43	3.0 6	5.6 8	84. 55
	Cigarette butts	44. 00	0.00	4.17	3.1 3	4.3 6	88. 91
	Other plastic/polystyrene items	22. 33	3.67	1.91	1.2 3	1.9 9	90. 90
