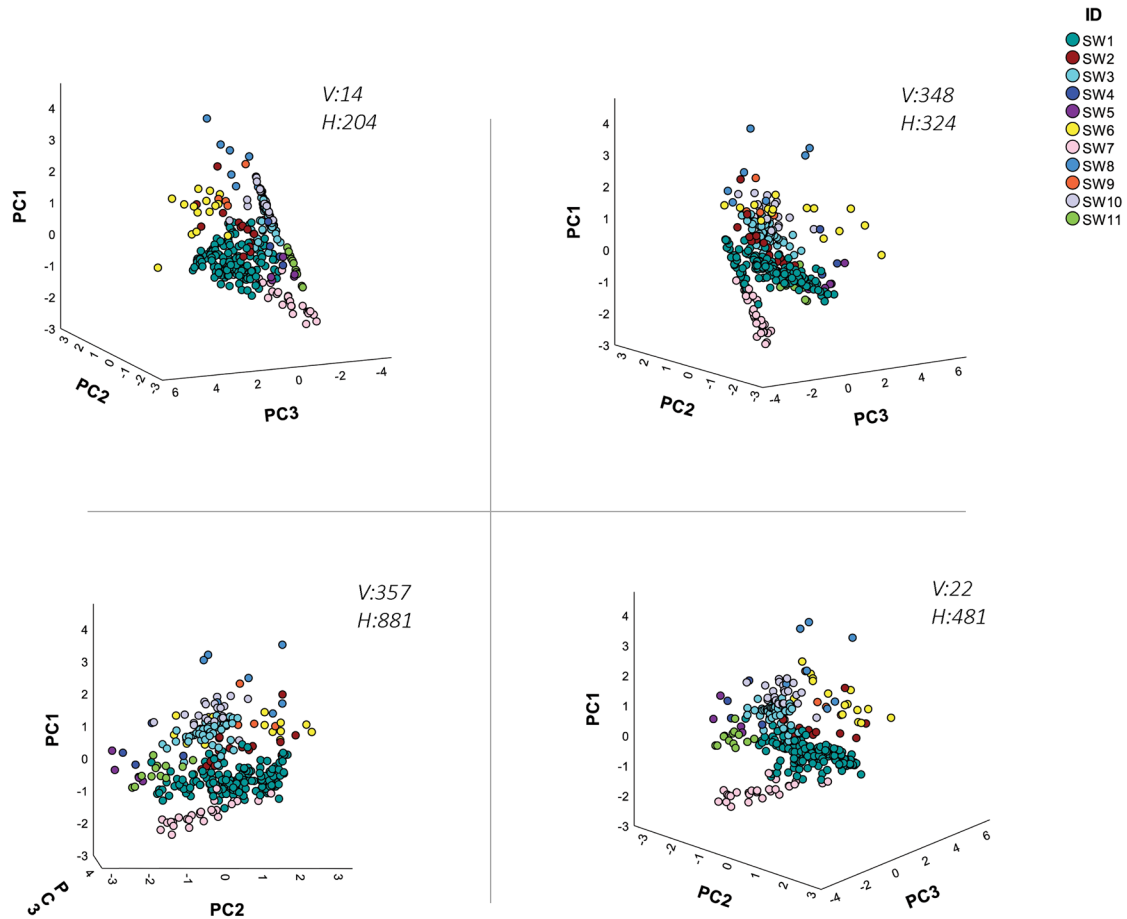# Vocal behaviour of a bottlenose dolphin pod during a deadly bycatch event in the Gulf of Catania, Ionian Sea

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Supplementary material

Figure S1. The 11 signature whistle types are plotted in the space defined by the first three Principal Components. Four different rotation angles are shown.

Table S1. Mean ± standard deviation (SD) of acoustic parameters of the 11 signature whistle types.

SW ID	Frequency (kHz)						Inflections (n)	Duration (s)
	Start	End	Maximum	Minimum	Mean	Range		
SW1	9.88	7.3	12.2	4.74	8.79	7.46	2.3	1
±SD	2.1	1.61	1.03	1.1	0.53	1.8	1.86	0.46
SW2	9.52	8.09	13.48	7.22	10.64	6.26	0.8	0.96
±SD	2.22	2.31	1.03	0.88	0.87	1.23	1.47	0.32
SW3	7.92	11.74	12.56	7.77	10.62	4.79	0	0.51
±SD	0.85	1.73	0.43	0.85	0.42	0.95	0	0.12
SW4	5.35	13.79	14.08	4.91	9.04	9.18	0.25	0.74
±SD	1.34	1.87	1.97	1.11	0.98	2.61	0.5	0.14
SW5	4.12	11.73	13.65	4.04	7.38	9.61	0.8	0.66
±SD	0.37	3.36	1.59	0.36	0.95	1.88	1.3	0.26
SW6	10.56	10.27	17.72	6.73	12.02	10.99	6.47	1.3
±SD	2.96	2.8	2.18	0.43	0.43	2.43	6.31	0.54
SW7	7.42	5.37	7.51	4.93	5.24	2.84	0.15	0.25
±SD	1.98	0.69	1.96	1.14	1.15	1.9	0.36	0.14
SW8	11.1	16.59	17.85	9.24	12.92	8.61	0.57	0.41
±SD	1.85	2.6	3.72	1.13	1.58	3.65	1.13	0.23
SW9	10.41	10.8	15.15	8.98	12.71	6.17	2.5	0.83
±SD	0.88	3.21	0.44	0.79	0.65	0.63	2.08	0.19
SW10	8.54	13.68	14.65	8.41	11.16	6.25	0	0.4
±SD	0.95	2.15	0.98	0.96	0.43	1.52	0	0.18
SW11	5.23	10.37	10.41	5.19	8.08	5.22	0	0.18
±SD	0.92	0.78	0.78	0.94	0.48	1.23	0	0.04

Table S2. Variance explained by the Principal Components showing eigenvalues > 1.

Principal Component	Eigenvalue	% variance	% cumulative variance
1	3.16	39.52	39.52
2	2.72	34.10	73.62
3	0.98	12.27	85.89

Table S3. Factor loadings for the eight acoustic parameters on the Principal Components showing eigenvalue >1.

Acoustic parameters	Principal Component		
	1	2	3
Maximum frequency	**0.88**	0.40	-0.05
Mean frequency	**0.86**	-0.27	-0.14
End frequency	**0.72**	**-0.54**	-0.03
Duration	**0.69**	**-0.50**	-0.14
Range frequency	-0.02	**0.90**	0.13
Minimum frequency	0.24	**0.82**	-0.28
Inflection	**0.66**	**0.68**	0.05
Start frequency	0.35	-0.03	**0.92**

Bold text indicates the factor loadings with r > 0.5.