Table 1. Range use (50%/25% UD core areas and sighting coverage) and residency pattern of 105 individuals with 15+ sightings from the PRE humpback dolphin photo-ID catalogue during 1995-2012.

(abbreviations: SR=Seasonal Resident; YR=Year-round Resident; SV=Seasonal Visitor; YV=Year-round Visitor; UD= Utilization Distribution; MP= Sha Chau & Lung Kwu Chau Marine Park; CLK= northeast corner of airport; BR= Brothers Islands; WL= West Lantau; DB= Deep Bay; EL= East Lantau; NEL= Notheast Lantau; NWL= Northwest Lantau; SWL= Southwest Lantau; SEL= Southeast Lantau; CH=Chinese waters)

(* denotes individuals that have their gender determined by biopsy sampling)

	Last				Occurrence in Survey Areas								50% UD Core Area				25% UD Core Area			
ID#	Sighted	# STG	Gender	Residency	DB	EL	NEL	NWL	WL	SWL	SEL	CH	MP	CLK	BR	WL	MP	CLK	BR	WL
CH12	07/08/12	25	?	SR					√	√		√				√				√
CH25	06/05/11	16	F	SR				√	√			√				√				√
CH34	17/12/12	64	F	YR	√		√	√				√	√		√				√	
CH37	21/11/11	16	?	SR					√	√		√				√				√
CH38	12/12/12	36	?	SR					√	√		√				√				√
CH98	09/11/12	50	?	YR	√			√	√				√				√			
CH108	12/09/12	31	F	YR					√	√		√				√				√
CH113	18/05/12	19	F	SR				√	√			√				√				√
EL01	06/12/12	81	M*	YR		√	√	√	√				√		√				√	
NL06	03/08/12	21	?	YR			√	√					√		√		√			
NL11	09/11/12	84	F	YR	√			√				√	√				√			
NL12	02/11/11	22	F	SR			√	√		√		√	√				√			
NL18	09/12/12	100	F	YR			√	√	√			√	√		√				√	
NL24	02/11/12	172	F	YR			√	√	√			√	√		√		√			
NL33	20/12/12	75	F*	YR			√	√	√				√		√		√		√	
NL37	31/05/12	53	?	SR		√	√	√	√				√	√	√		√	√	√	
NL46	13/12/12	51	F*	YR				√	√			√	√				√			
NL48	13/12/12	58	?	SR			√	√	√				√				√			
NL49	13/12/12	27	F*	SR			√	√	√				√				√			
NL75	29/08/12	28	F	SR			√	√					√	√	√				√	
NL93	17/12/12	41	F	SR			√	√	√				√		√		√			
NL98	12/11/12	101	F*	YR			√	√	√			√	√	√	√		√		√	
NL103	06/12/12	39	?	SR				√	√				√				√			
NL104	17/12/12	68	F	YR			√	√	√			√	√	√	√		√			
NL105	11/07/12	20	?	SR				√	√			√	√			√	√			
NL112	28/12/12	21	M*	SR	√		√	√	√				√				√			
NL120	20/12/12	73	F*	YR			√	√	√						√				√	
NL123	20/12/12	102	F	YR			√	√	√			√	√	√	√			√	√	
NL128	07/06/12	39	M*	YR			√	√	√	√	√	√				√				√
NL136	06/12/12	46	F*	SR			√	√	√				√				√			
NL139	09/12/12	88	F	YR			√	√	√			√			√				√	
NL145	07/03/12	25	F	SR			√	√	√				√				√			
NL150	13/12/12	21	?	SR			√	√	√				√				√			
NL153	20/06/12	17	F	SR				√				√	√				√			
NL156	01/11/12	21	?	SR				√	√				√			√	√			
NL165	11/12/12	43	?	YR			√	√	√				√		√		√		√	
NL179	20/12/12	49	?	YR			√	√						√	√				√	
NL182	13/12/12	34	?	SV			√	√					√		√		√		√	
NL188	13/12/12	38	?	SR			√	√	√				√				√			
NL191	17/12/12	46	?	YR			√	√	√			√	√		√		√		√	
NL202	12/11/12	52	F	YR			√	√	√				√				√			
NL206	04/07/12	28	F*	SR				√	√	√						√				√
NL210	04/07/12	28	?	SR			√	√	√				√				√			
NL212	10/07/12	19	F	SR				√	√			√				√				√
NL215	19/02/12	18	F	SR			√	√	√					√	√			√		
NL219	26/02/12	17	?	SR				√					√				√			
NL220	06/12/12	34	?	SR			√	√	√				√				√			
NL224	24/08/12	31	?	YV	√		√	√	√			√	√				√			
NL226	20/12/12	26	?	SV	√		√	√	√						√				√	

Table 1. (cont'd)

ID#	Last Sighted	# STG	Gender	Residency	Occurrence in Survey Areas								50% UD Core Area				25% UD Core Area			
					DB	EL	NEL	NWL	WL	SWL	SEL	CH	MP	CLK	BR	WL	MP	CLK	BR	WL
NL233	14/06/12	32	F	SR			√	√	√				√				√			
NL236	11/07/12	18	?	YV				√	√				√				√			
NL241	13/09/12	21	?	SR				√					√				√			
NL242	17/12/12	37	F*	YR			√	√	√				√		√		√			
NL244	09/12/12	44	F	YR			√	√	√				√				√			
NL246	20/12/12	35	?	SR			√	√					√	√	√		√		√	
NL258	04/07/12	18	?	SR				√	√	√			√			√	√			√
NL259	17/12/12	33	?	YR			√	√	√				√			√	√			
NL260	13/12/12	37	?	SR			√	√	√				√		√				√	
NL261	17/12/12	32	?	YR	√		√	√	√						√				√	
NL262	13/12/12	21	?	SR				√	√				√				√			
NL264	11/12/12	33	F	YR			√	√	√				√		√		√		√	
SL05	26/10/12	35	F	SR					√	√						√				√
SL27	12/12/12	26	M	SR				√	√	√						√				√
SL35	21/12/12	66	?	YR				√	√	√	√	√				√				√
SL40	16/08/12	31	F	YR					√	√		√				√				√
WL04	01/11/12	32	?	SR	√			√	√				√				√			
WL05	18/11/12	42	?	YR			√	√	√			√	√				√			
WL09	26/11/10	20	?	SR				√	√	√		√				√				√
WL11	02/11/12	53	F*	YR			√	√	√			√	√				√			
WL15	21/12/12	52	M*	YR			√	√	√	√						√				√
WL17	20/05/12	20	?	SR					√	√	√					√				√
WL21	10/07/12	35	F	SR				√	√	√		√				√				√
WL25	12/12/12	103	F	YR				√	√	√		√				√				√
WL29	10/07/12	22	F	SR					√			√				√				√
WL37	15/08/12	20	?	SR					√	√		√				√				√
WL40	14/05/11	18	F*	SV				√	√			√	√				√			
WL42	07/08/12	51	?	YR				√	√	√		√				√				√
WL44	30/01/12	22	?	SR			√	√	√	√		√	√			√				√
WL46	05/07/12	23	?	SR			√	√	√							√				√
WL47	25/10/12	19	?	SV	√			√	√	√	√	√	√			√	√			√
WL48	11/02/12	15	F	SR				√	√			√				√				√
WL50	26/10/12	42	F*	YR				√	√	√		√				√				√
WL55	04/07/12	28	?	SR				√	√	√						√				√
WL61	13/12/12	33	?	SR					√							√				√
WL62	29/11/11	34	F	SR				√	√	√	√	√				√				√
WL69	12/12/12	37	?	YR					√	√		√				√				√
WL72	12/12/12	43	F	YR				√	√	√						√				√
WL73	21/08/12	23	?	SR					√	√						√				√
WL84	06/06/12	18	F	SR					√	√						√				√
WL86	12/12/12	32	F	YR					√	√						√				√
WL87	25/10/12	32	?	SR					√	√	√	√				√				√
WL88	29/11/11	31	F	YR				√	√	√	√					√				√
WL93	10/11/12	20	?	SR				√	√	√						√				√
WL94	07/08/12	17	?	SR					√			√				√				√
WL98	24/05/12	17	F	SR				√	√			√				√				√
WL109	10/07/12	36	?	SR				√	√	√		√				√				√
WL111	13/11/12	18	F*	SR			√	√	√				√				√			
WL114	21/11/12	21	?	SR				√	√	√		√				√				√
WL116	03/10/12	27	?	SR				√	√	√		√	√				√			
WL118	12/12/12	21	F	SR					√	√						√				√
WL120	10/07/12	16	?	SR				√	√							√				√
WL123	26/10/12	32	F	YR				√	√	√		√				√				√
WL130	07/08/12	21	?	SR				√	√	√						√				√
WL131	12/12/12	34	?	YR					√							√				√
WL138	20/02/12	21	?	SR				√	√							√				√

Table 2. Descriptive statistics, showing mean ± s.d., and range of acoustic parameters of 27 whistles type of Chinese White Dolphins in Hong Kong

Whistle Type		Duration (s)	Start (Hz)	End (Hz)	Min. (Hz)	Max. (Hz)	Range (Hz)	# Harm.
#1 (n=13)	mean ± s.d.	0.24 ± 0.15	8390 ± 2714	8916 ± 2475	6036 ± 2706	9088 ± 2479	3052 ± 1135	1.5 ±1.8
	range	0.06-0.51	3557-13848	4830-13358	2214-11101	4830-13848	1140-4802	0-6
#2 (n=170)	mean ± s.d.	0.21 ± 0.18	5957 ± 2757	5852 ± 2721	5494 ± 2738	6205 ± 2755	711 ± 200	1.1 ±3.6
	range	0.03-1.01	1318-17743	2087-16755	1318-16755	2087-17743	0-993	0-31
#3 (n=33)	mean ± s.d.	0.31 ± 0.18	7003 ± 2668	6452 ± 2584	4712 ± 2036	7483 ± 2736	2771 ± 1794	1.2 ±1.8
	range	0.09-0.83	3874-13733	3582-13489	2806-11371	3874-13733	1017-8020	0-9
#4 (n=46)	mean ± s.d.	0.15 ± 0.15	9389 ± 3631	7299 ± 3119	6329 ± 3172	9430 ± 3598	3101 ± 1844	1.8 ±3.2
	range	0.03-0.89	4785-17721	3629-14927	1307-14048	4785-17721	823-9297	0-20
#5 (n=86)	mean ± s.d.	0.31 ± 0.29	8642 ± 4430	6369 ± 3330	6280 ± 3332	8804 ± 4394	2524 ± 1876	1.0 ±2.2
	range	0.04-1.19	3341-21534	3035-17743	3035-17743	4317-21534	1011-11151	0-15
#6 (n=7)	mean ± s.d.	0.52 ± 0.18	5600 ± 1273	4506 ± 1477	4001 ± 1202	6046 ± 1198	2045 ± 596	1.0 ±1.2
	range	0.29-0.75	4250-7691	3461-7636	3248-6702	4776-8405	1528-2966	0-3
#7 (n=6)	mean ± s.d.	0.76 ± 0.19	9057 ± 1771	6442 ± 2134	5034 ± 1220	10089 ± 2467	5055 ± 1387	0.8 ±1.2
	range	0.43-0.99	7569-11558	3992-8938	3984-6924	8221-14429	3651-7505	0-3
#8 (n=59)	mean ± s.d.	0.29 ± 0.26	6789 ± 2589	4941 ± 2271	4807 ± 2284	6847 ± 2566	2040 ± 1234	0.8 ±1.1
	range	0.04-1.28	3842-14719	3002-12525	3002-12525	4275-14719	896-8167	0-4
#9 (n=32)	mean ± s.d.	0.5 ± 0.36	8458 ± 3609	5769 ± 3216	5463 ± 3294	8759 ± 3736	3295 ± 1540	1.5 ±1.5
	range	0.09-1.46	3955-16425	2582-14447	2582-14447	3955-16425	1017-7838	0-4
#10 (n=333)	mean ± s.d.	0.09 ± 0.08	8881 ± 3402	8921 ± 3461	7225 ± 3226	9155 ± 3464	1930 ± 936	1.7 ±2.4
	range	0.02-1.02	2182-21692	2419-21692	1402-19610	2419-21692	195-6731	0-20
#11 (n=9)	mean ± s.d.	0.28 ± 0.12	7374 ± 2851	8504 ± 3184	5402 ± 2211	8974 ± 3473	3572 ± 1895	1.8 ±2.3
	range	0.13-0.50	4316-13986	4032-14328	3225-9151	4316-15639	806-6488	0-6
#12 (n=20)	mean ± s.d.	0.2 ± 0.16	10183 ±	8570 ± 2796	7985 ± 2756	11894 ± 3109	3909 ± 1869	0.7 ±1.0
	range	0.06-0.64	3681-17492	4120-14128	3681-13466	5274-18025	1593-8844	0-4
#13 (n=90)	mean ± s.d.	0.1 ± 0.11	8147 ± 2962	10149 ±	7295 ± 2949	10159 ± 3393	2864 ± 1237	2.0 ±2.7
	range	0.04-1.05	2416-15766	3241-18001	1758-14997	3241-18001	775-5878	0-20
#14 (n=75)	mean ± s.d.	0.12 ± 0.13	6162 ± 3357	8828 ± 3609	6145 ± 3405	8881 ± 3624	2736 ± 1765	2.0 ±3.8
	range	0.03-0.84	561-15931	2130-16974	561-15931	2130-16974	853-8405	0-23
#15 (n=28)	mean ± s.d.	0.47 ± 0.25	5883 ± 4771	7161 ± 4789	5375	9141	3766	1.9 ±1.7
	range	0.06-1.20	1699-19610	3535-20578	1699-19610	5036-21837	1598-6866	0-6
#16 (n=16)	mean ± s.d.	0.69 ± 0.37	6274 ± 2762	7403 ± 3895	5550 ± 2608	9624 ± 3673	4074 ± 2339	2.6 ±1.9
	range	0.11-1.48	2711-11325	2428-14557	2428-10524	4680-15100	1114-9064	0-6
#17 (n=14)	mean ± s.d.	0.34 ± 0.25	11038 ±	9077 ± 5378	7752 ± 5589	11349 ± 5319	3596 ± 2120	1.0 ±1.0
	range	0.09-0.96	5878-24224	4164-22529	3244-21803	5933-24224	1310-10108	0-3
#18 (n=14)	mean ± s.d.	0.36 ± 0.19	5260 ± 2813	6976 ± 2335	4565 ± 2533	7915 ± 2323	3350 ± 1674	2.5 ±2.8
	range	0.08-0.69	2130-12498	3186-11507	2130-11507	5132-13489	1703-6642	0-10
#19 (n=22)	mean ± s.d.	0.44 ±0.30	4494 ± 2545	6012 ± 3105	4345 ± 2467	6396 ± 2998	2050 ± 1146	0.9 ±1.1
	range	0.06-1.23	2123-12362	2627-16928	2123-12362	3821-17364	498-5001	0-4
#20 (n=41)	mean ± s.d.	0.1 ± 0.05	8478 ± 3229	8513 ± 3160	8252 ± 3159	10193 ± 3598	1940 ± 1661	0.9 ±2.4
	range	0.03-0.23	2635-16717	2635-15922	2635-15922	3700-17660	566-7746	0-15
#21 (n=39)	mean ± s.d.	0.21 ± 0.12	6332 ± 2077	6260 ± 2084	4718 ± 2142	6557 ± 2083	1839 ± 831	2.5 ±2.9
	range	0.07-0.49	3124-11717	3958-11877	2747-10667	4065-11877	879-4450	0-9
#22 (n=14)	mean ± s.d.	0.12 ± 0.06	7525 ± 2451	10077 ±	7419 ± 2329	10925 ± 2733	3506 ± 1626	1.1 ±1.1
	range	0.05-0.25	4194-11481	6892-14754	4194-11481	7615-15985	1321-6922	0-3
#23 (n=11)	mean ± s.d.	0.2 ± 0.10	10260 ±	8508 ± 3926	8341 ± 3905	10408 ± 3345	2067 ± 912	0.7 ±1.0
	range	0.08-0.35	5568-15766	2966-14337	2966-14337	5568-15766	1065-3689	0-3
#24 (n=19)	mean ± s.d.	0.15 ± 0.11	5374 ± 2970	7048 ± 3041	5287 ± 2889	7048 ± 3041	1761 ± 549	1.7 ±1.9
	range	0.06-0.45	1124-11151	2697-13843	1124-11151	2697-13843	1099-2971	0-5
#25 (n=8)	mean ± s.d.	0.57 ± 0.29	3854 ± 288	3528 ± 241	3246 ± 319	6909 ± 729	3663 ± 586	1.8 ±0.9
	range	0.41-1.29	3196-4146	3196-3877	2747-3756	5606-7457	2411-4261	1-3
#26 (n=12)	mean ± s.d.	0.11 ± 0.07	9973 ± 1912	8209 ± 2349	8209 ± 2349	10813 ± 1627	2604 ± 1218	0.2 ±0.6
	range	0.05-0.30	5900-12140	3642-10852	3642-10852	6622-12553	1206-5383	0-2
#27 (n=17)	mean ± s.d.	1.1 ± 0.19	4818 ± 996	3761 ± 1458	3327 ± 701	7607 ± 502	4208 ± 655	1.3 ±0.8
	range	0.74-1.38	3446-7157	2355-7157	2355-4373	6237-8185	2971-5507	0-2

Table 3. The percentage and total number (n) of whistle types recorded in three sampling areas West Lantau (WL), Southwest Lantau (SWL), and Northwest Lantau (NWL).

Whistle Type	WL (%)	SWL(%)	NWL (%)	n
1	45	55	0	11
2	47	45	8	152
3	58	21	21	33
4	43	54	2	46
5	40	45	14	84
6	71	0	29	7
7	33	0	67	6
8	49	31	20	59
9	53	31	16	32
10	38	59	4	327
11	67	17	17	6
12	65	20	15	20
13	22	66	11	89
14	30	49	21	71
15	56	15	30	27
16	50	31	19	16
17	71	7	21	14
18	57	43	0	14
19	31	63	6	16
20	58	30	13	40
21	43	49	8	37
22	21	64	14	14
23	36	64	0	11
24	21	68	11	19
25	0	100	0	8
26	42	50	8	12
27	0	100	0	17

Table 4. The means of all response variables including swimming speed, reorientation rate, and linearity in the presence and absence of vessels by time of day, and maximum number of vessels present.

	Swimming Speed (km/hr)	Reorientation rate (degrees/surfacing)	Linearity
Vessels absent	3.43	58.45	0.414
Morning (n=5)	3.05	61.65	0.298
Afternoon (n=4)	3.89	54.46	0.559
Vessels present	2.69	68.30	0.434
Morning (n=9)	2.61	70.48	0.395
Afternoon (n=13)	2.74	66.80	0.461
1 vessel (n=5)	2.75	72.47	0.508
2 vessels (n=9)	2.98	60.71	0.495
3 vessels (n=4)	2.59	65.61	0.421
4 vessels (n=3)	1.65	86.34	0.165
6 vessels (n=1)	3.34	72.57	0.367

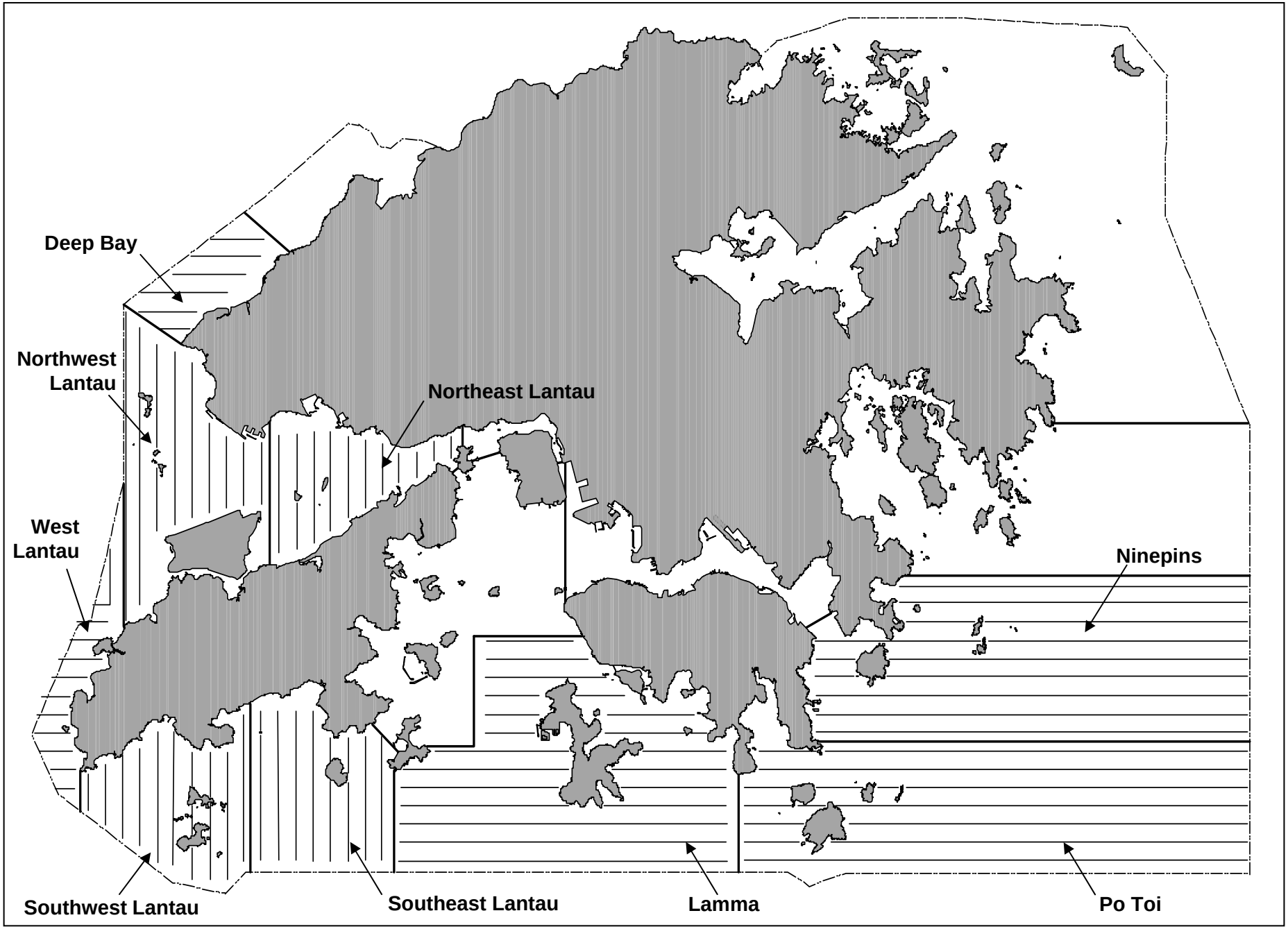


Figure 1. Nine Line-Transect Survey Areas within the Study Area

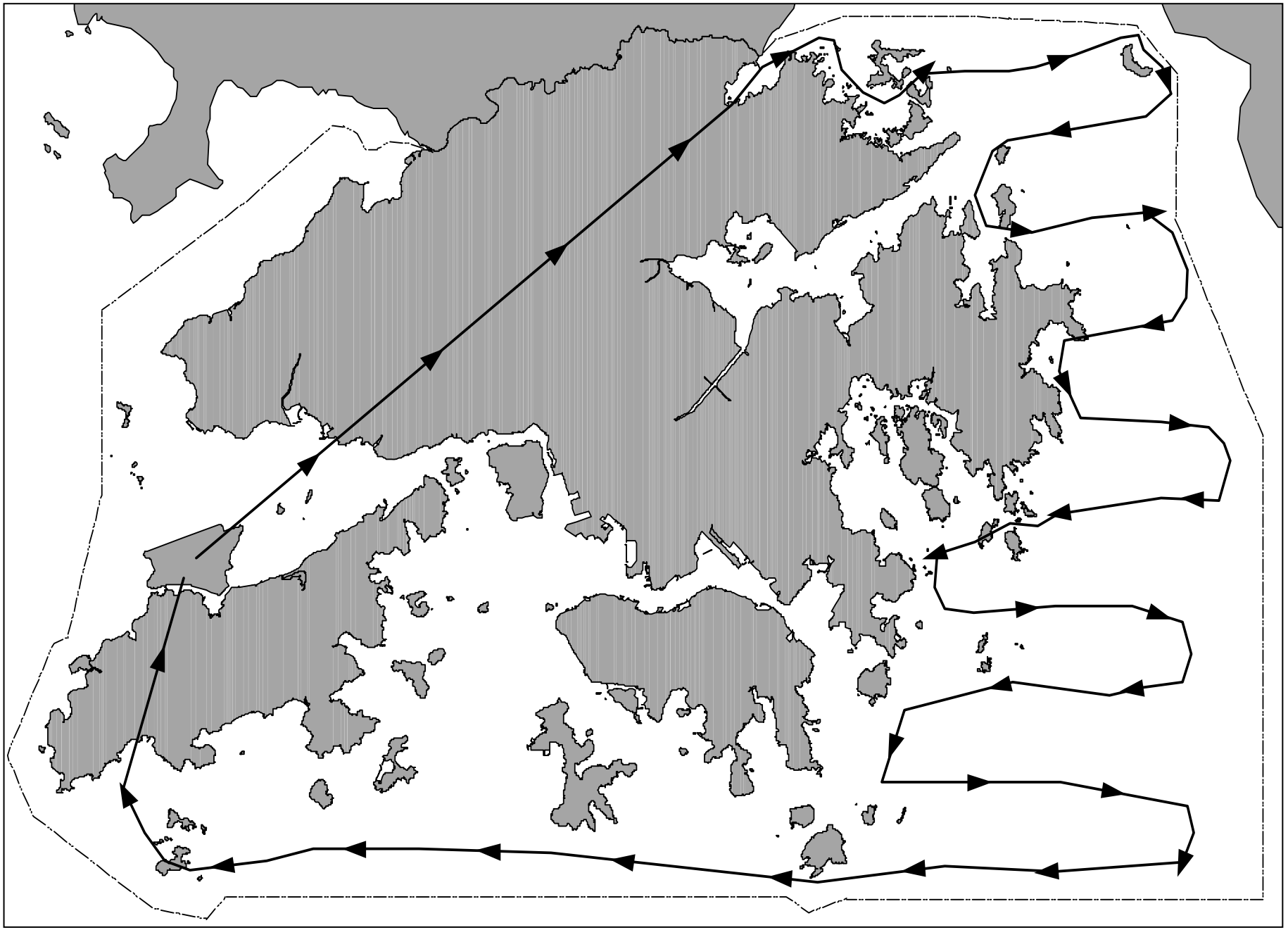


Figure 2. Survey Route for Helicopter Surveys in Eastern and Southern Waters of Hong Kong

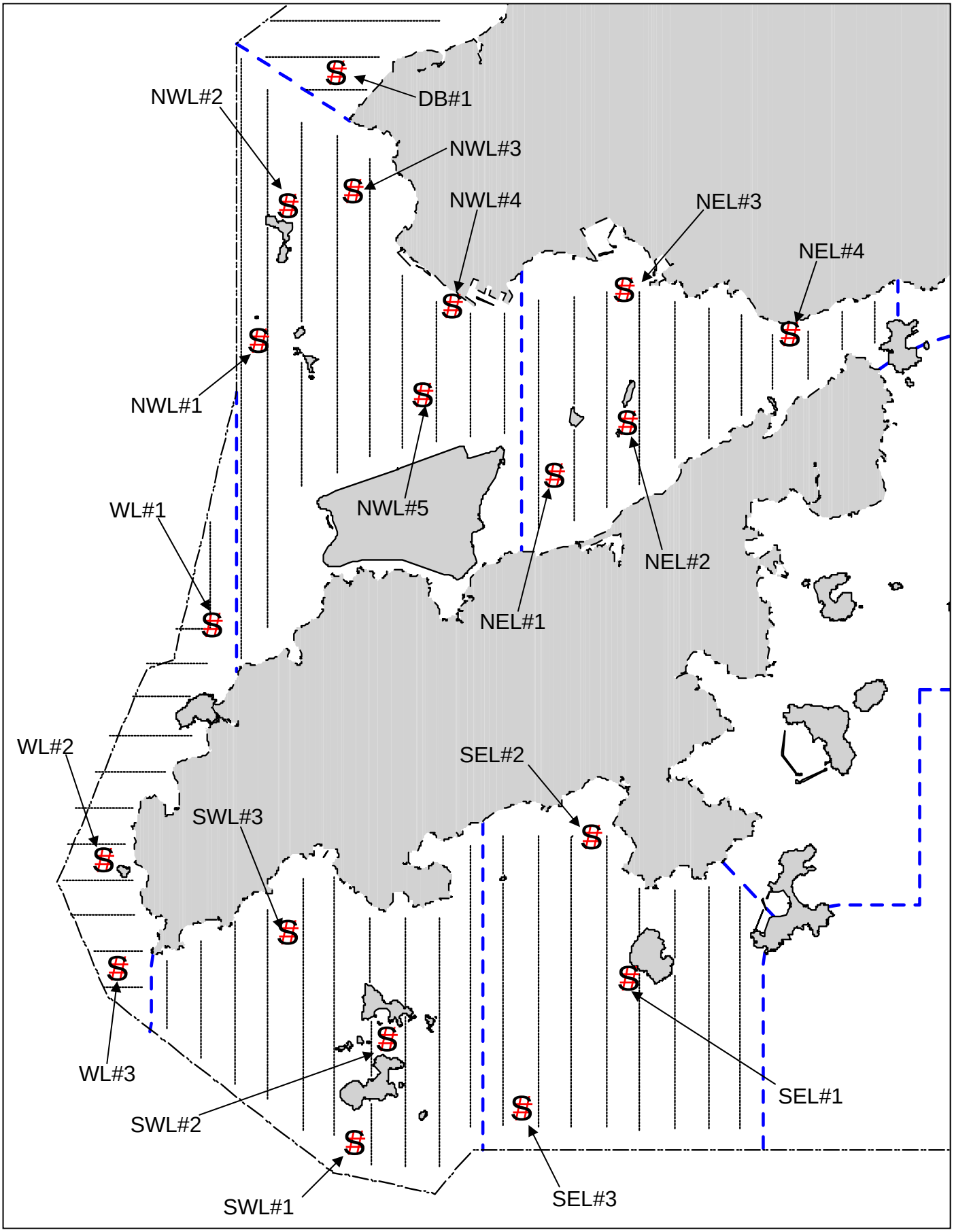


Figure 3. Locations of various acoustic monitoring stations around Lantau waters

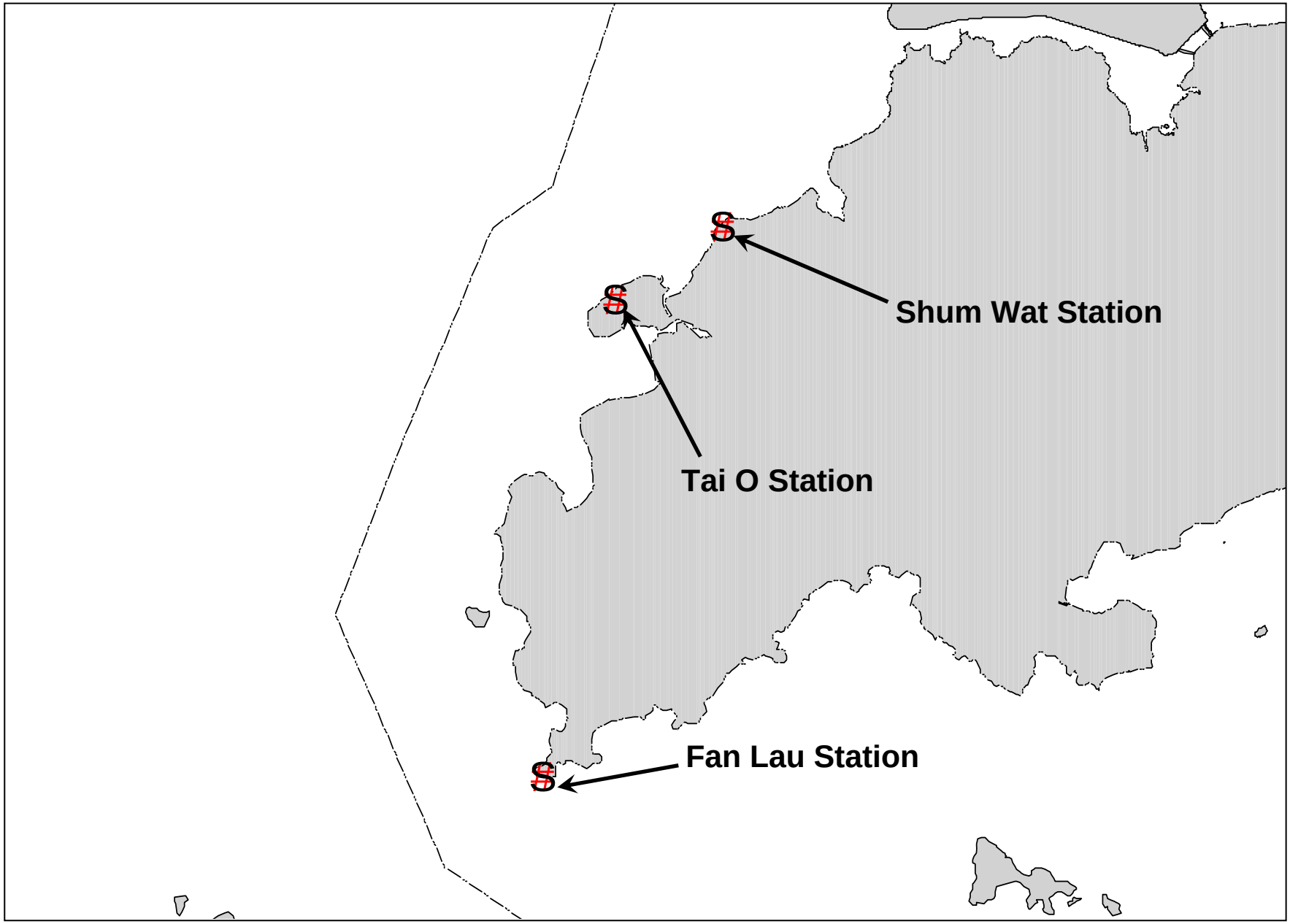


Figure 4. Three theodolite-tracking stations set up along the western coastline of Lantau Island

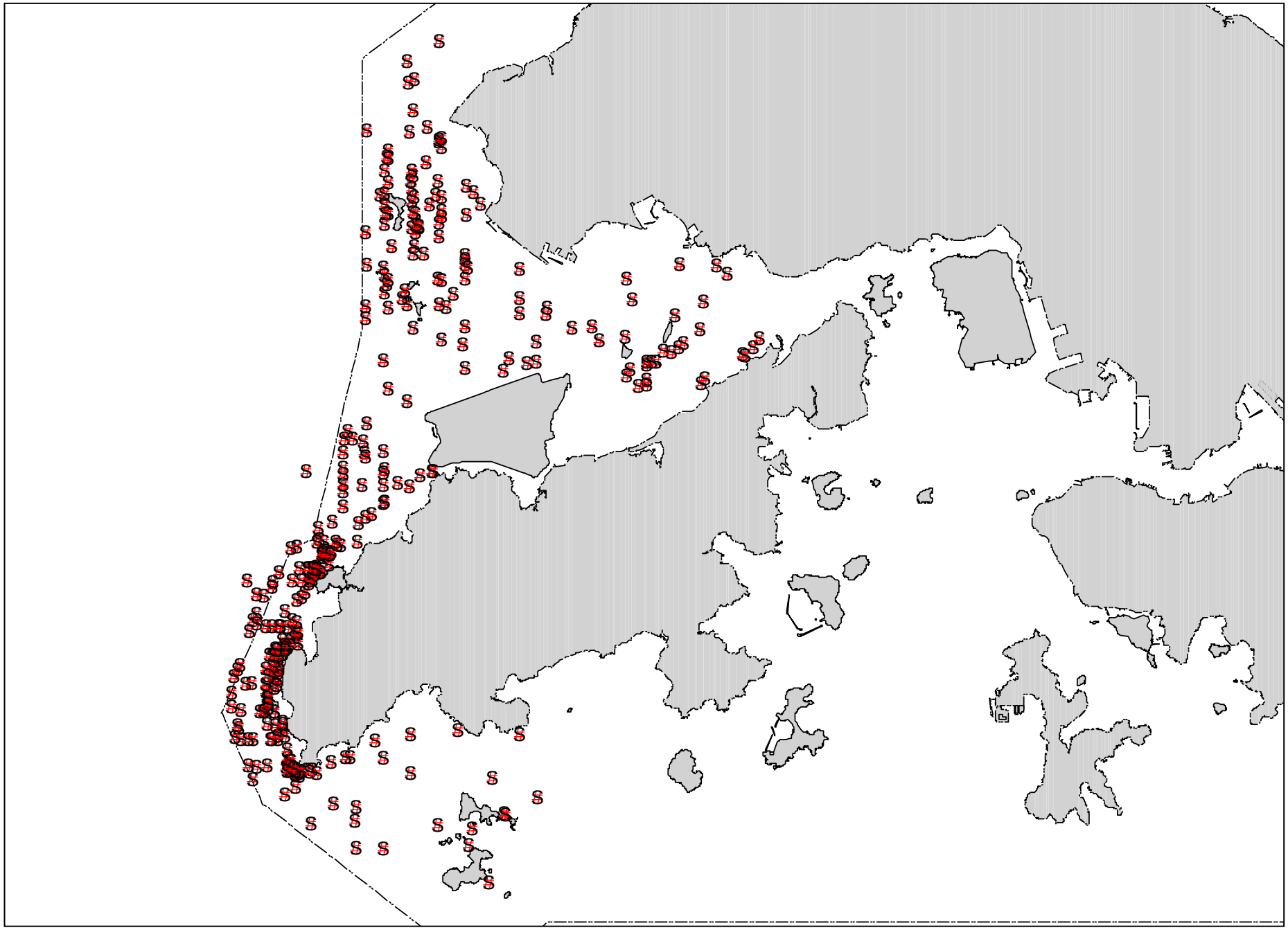


Figure 5. Distribution of Chinese white dolphin sightings in Hong Kong waters (April 2012 – March 2013)

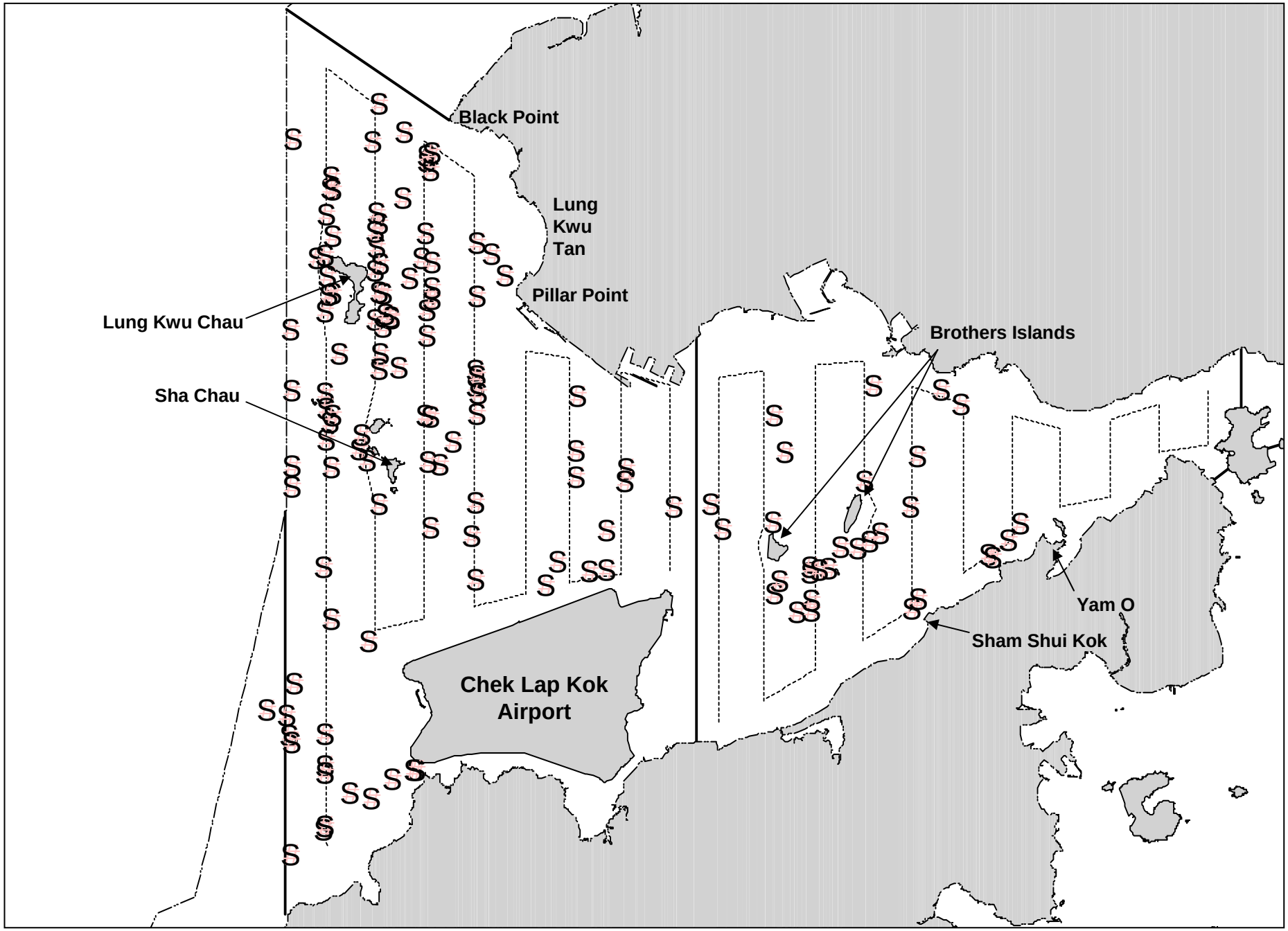


Figure 6. Distribution of Chinese white dolphin sightings in North Lantau waters (April 2012 – March 2013)

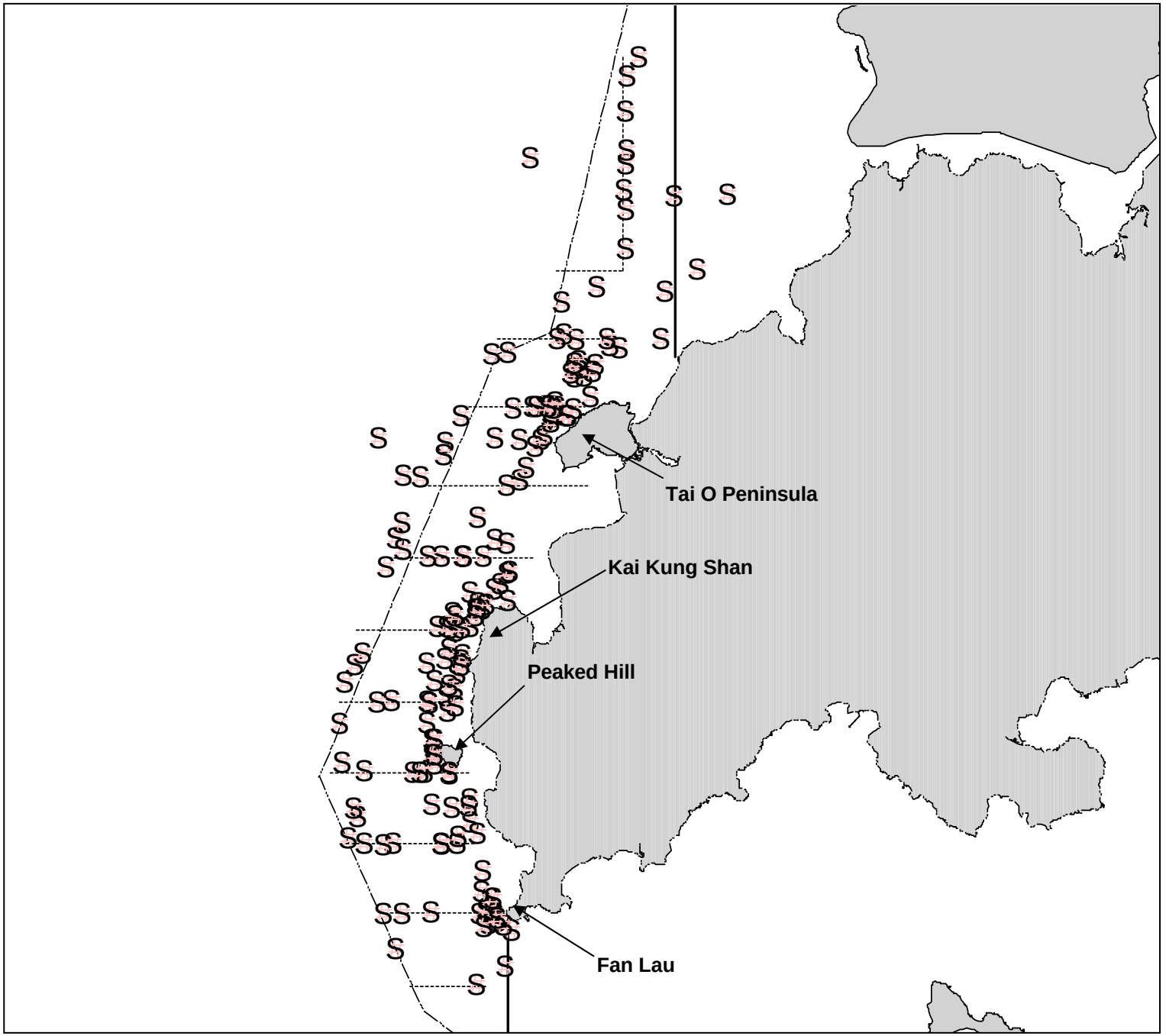


Figure 7. Distribution of Chinese white dolphin sightings in West Lantau waters (April 2012 – March 2013)

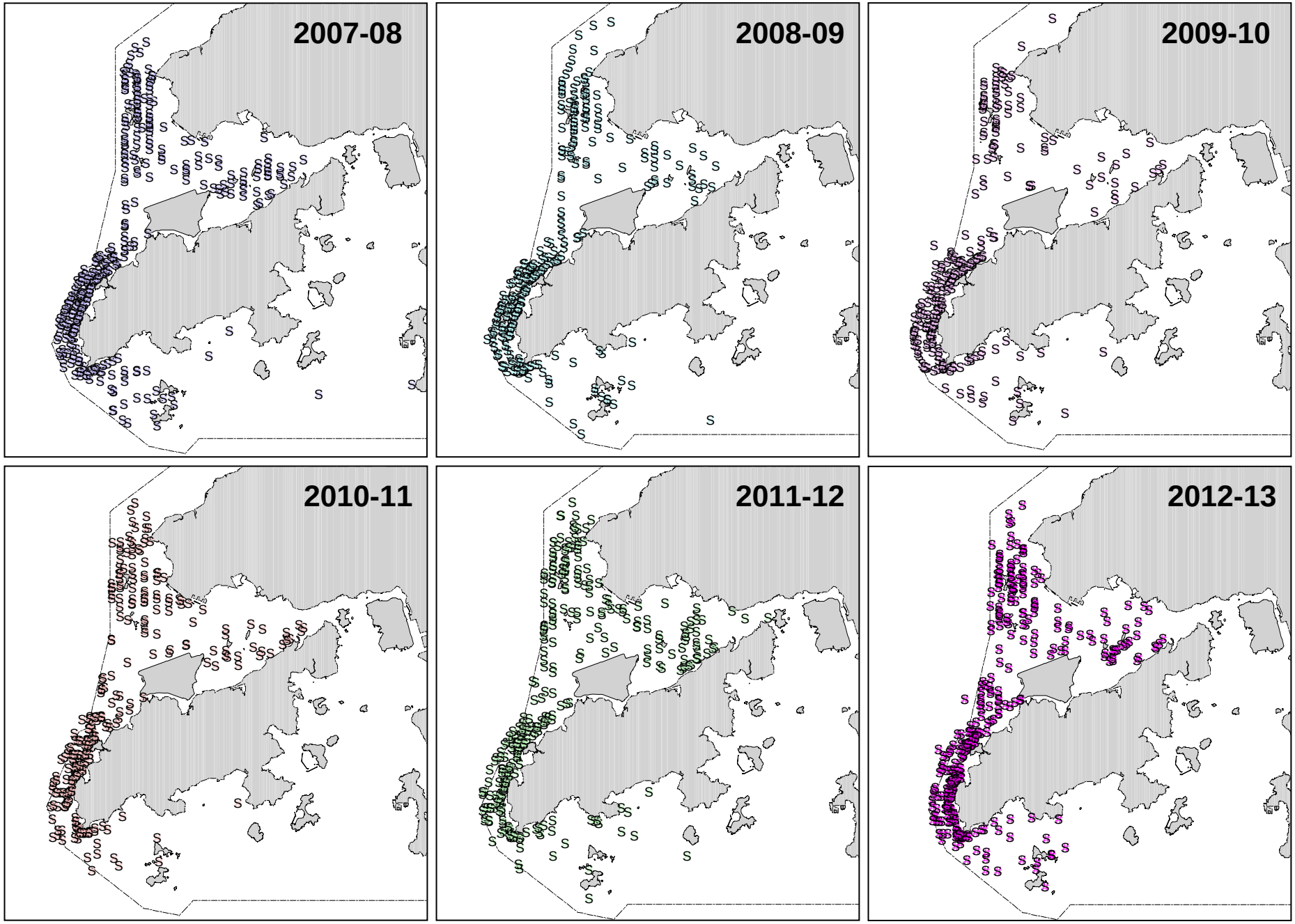


Figure 8. Comparison of dolphin distribution patterns from the past six monitoring periods (2007-13)

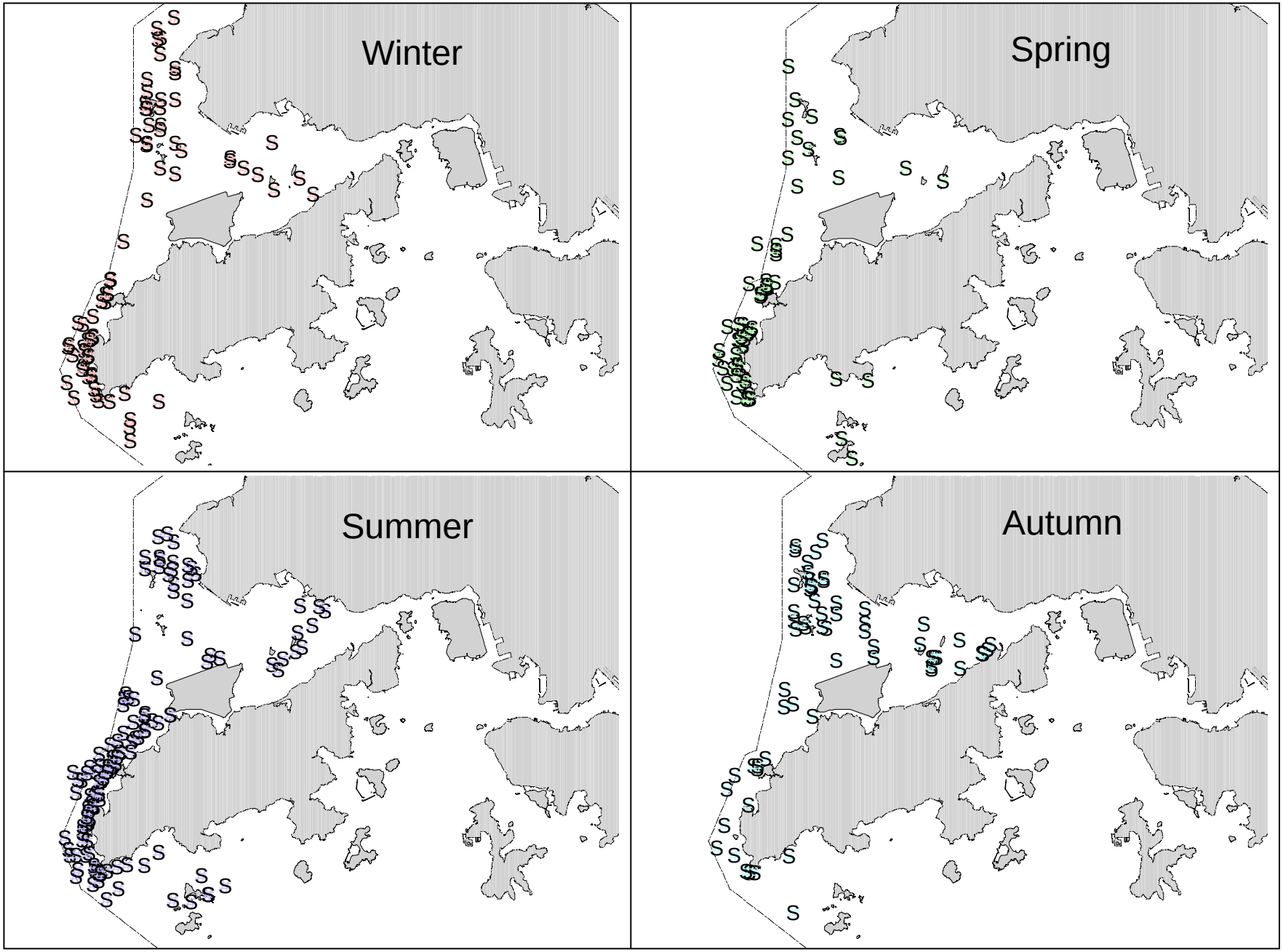


Figure 9. Seasonal distribution of Chinese white dolphins in Hong Kong waters (April 2012 – March 2013)

Figure 10. Distribution of finless porpoise sightings (April 2012 – March 2013)

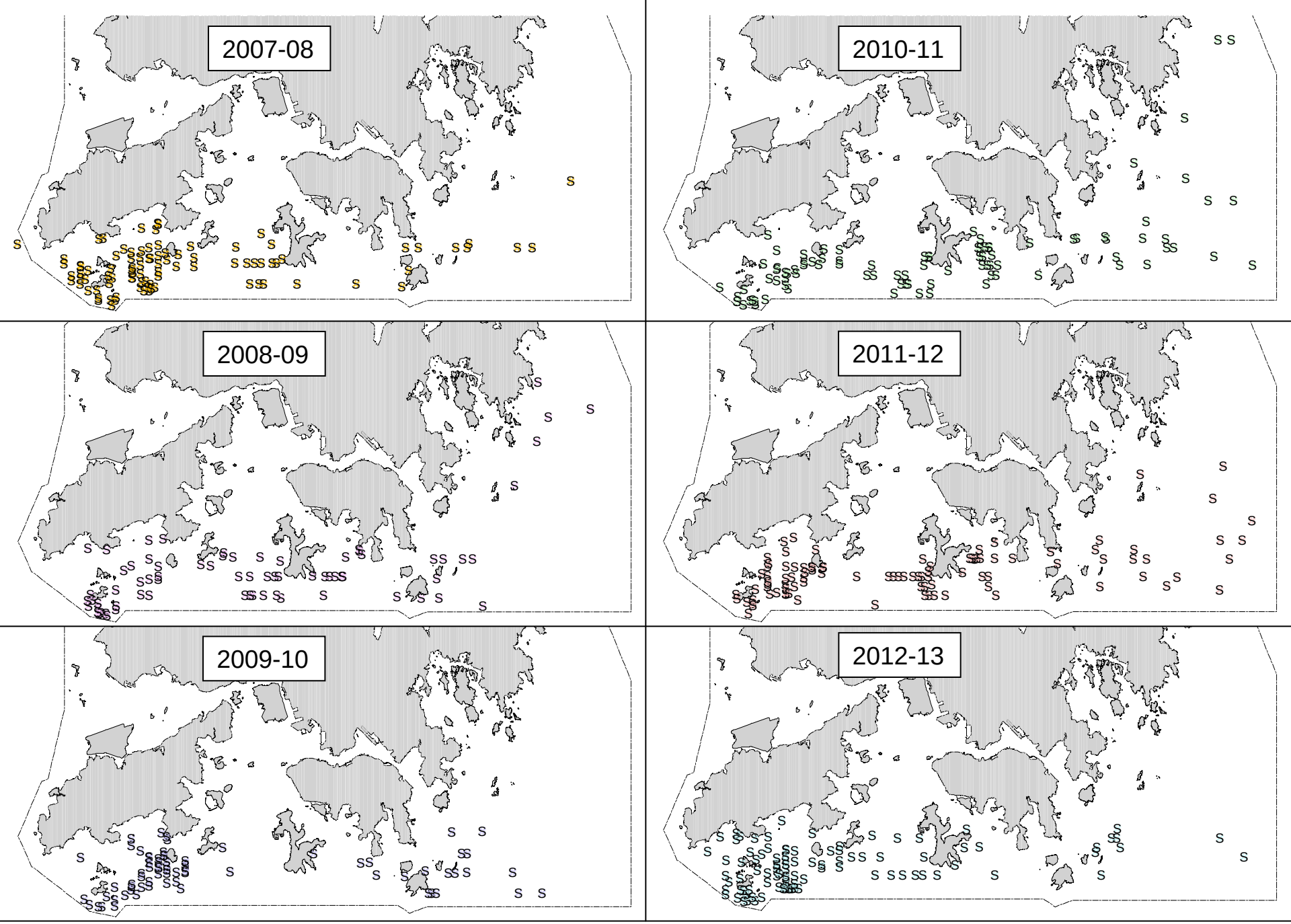


Figure 11. Comparison of porpoise distribution patterns from the past six monitoring periods (2007-13)

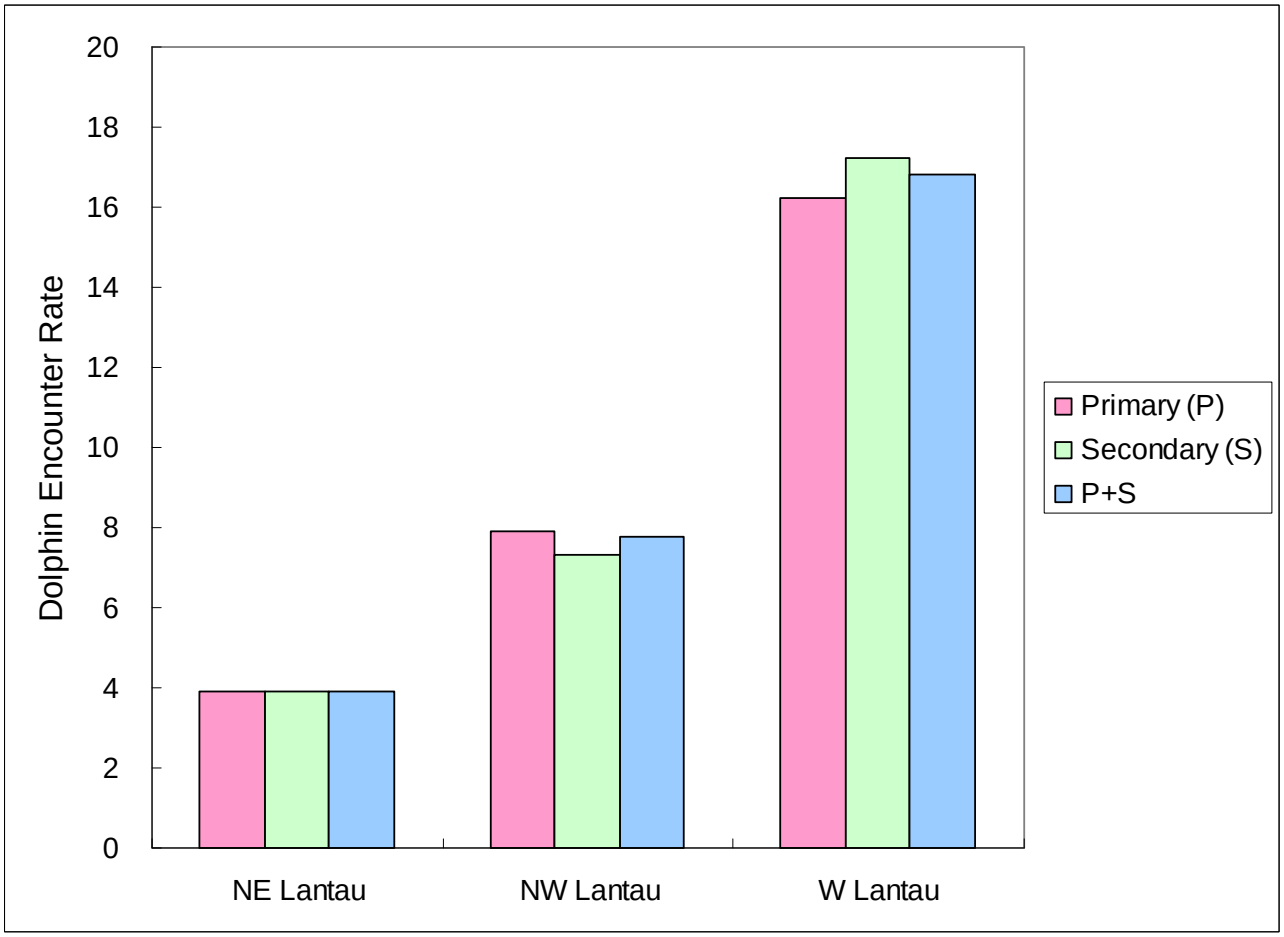


Figure 12. Comparison of dolphin encounter rates (number of on-effort sightings of Chinese White Dolphins per 100 km of survey effort) deduced from data collected along primary lines alone, along secondary lines alones, and along both primary and secondary lines combined in Northeast, Northwest and West Lantau during 2010-12

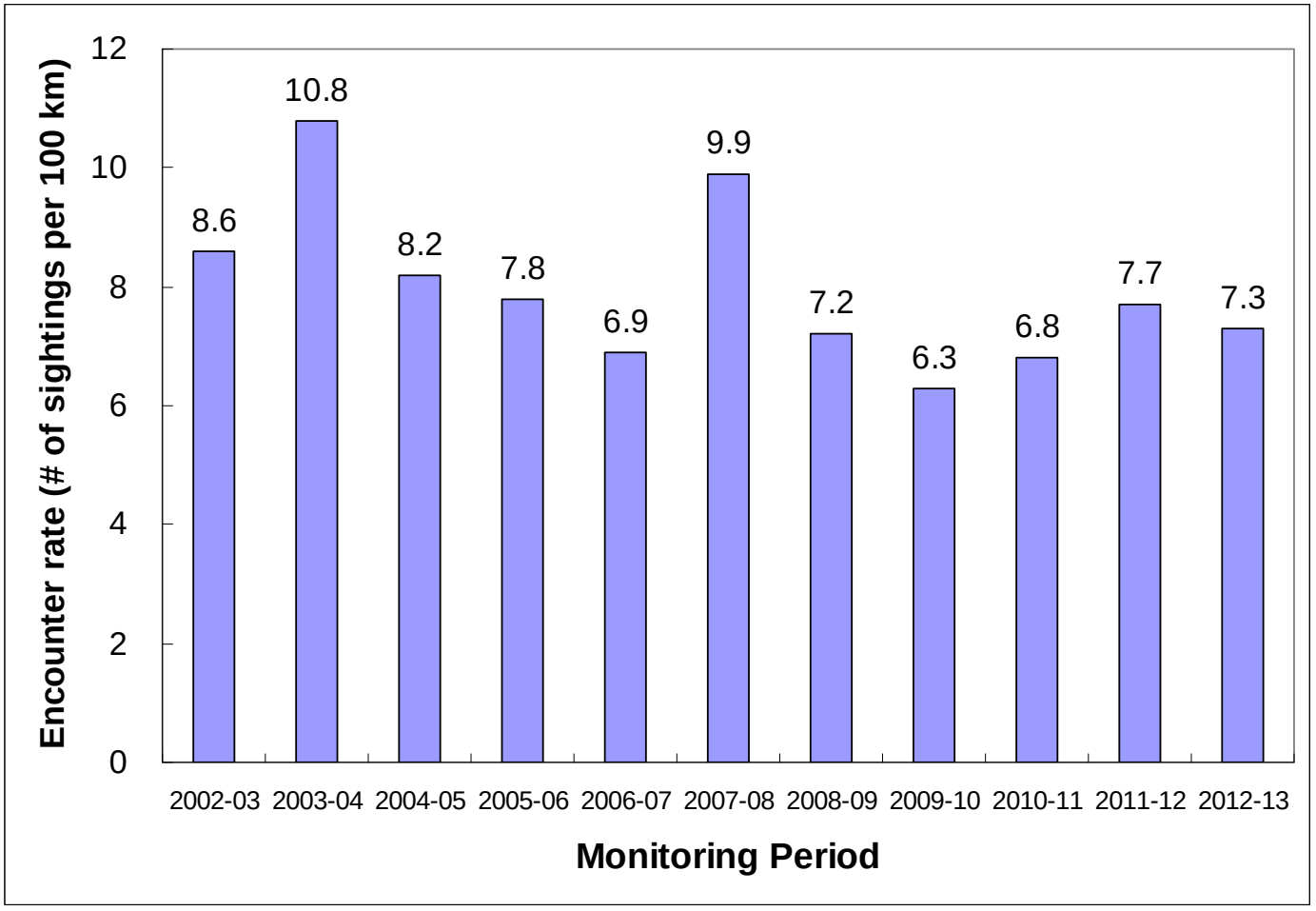


Figure 13. Temporal trend in encounter rates of Chinese white dolphins (combined from WL, NWL, NEL and SWL survey areas) in the past eleven monitoring periods from 2002-13

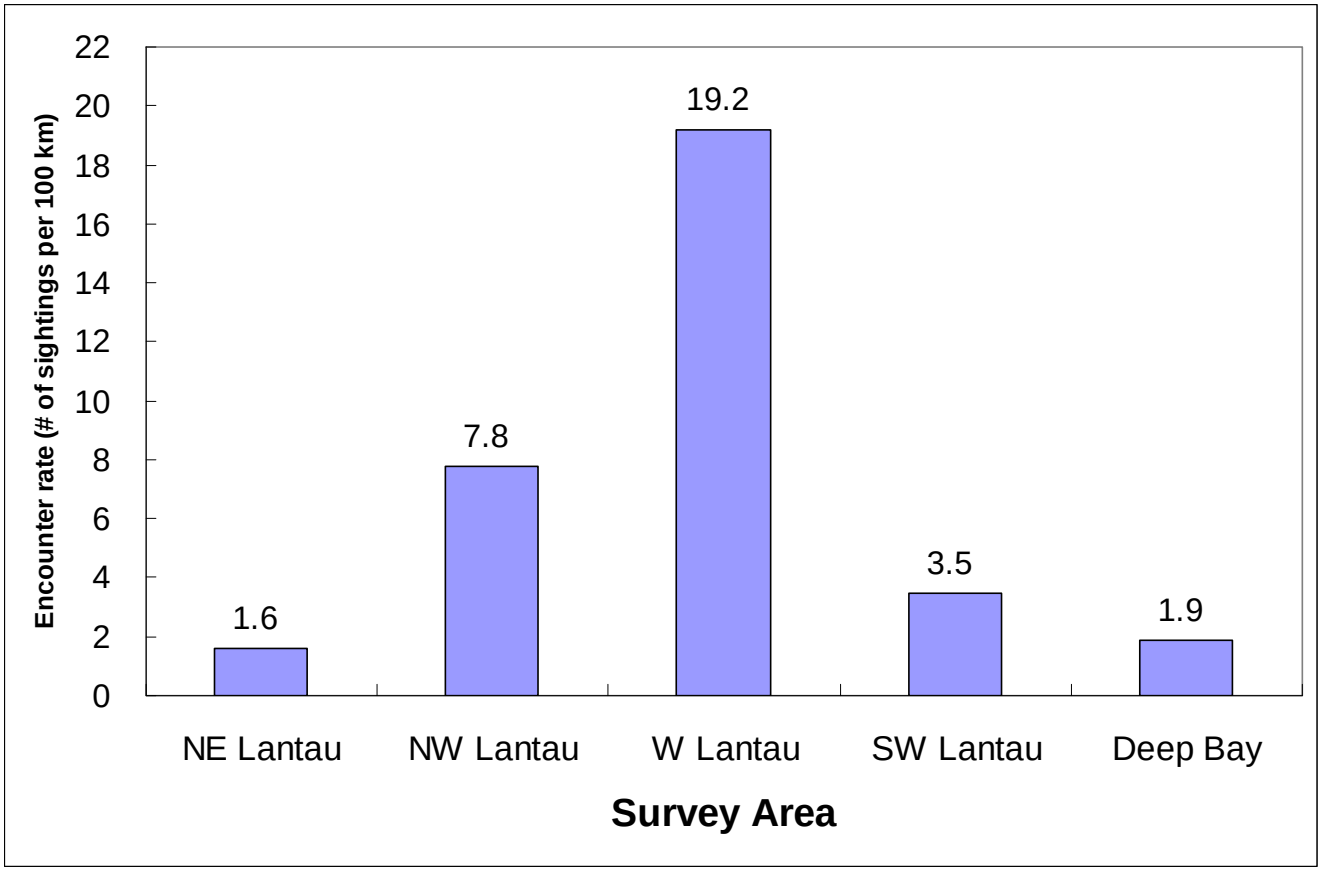


Figure 14. Encounter rates of Chinese white dolphins among different survey areas (April 2012 – March 2013)

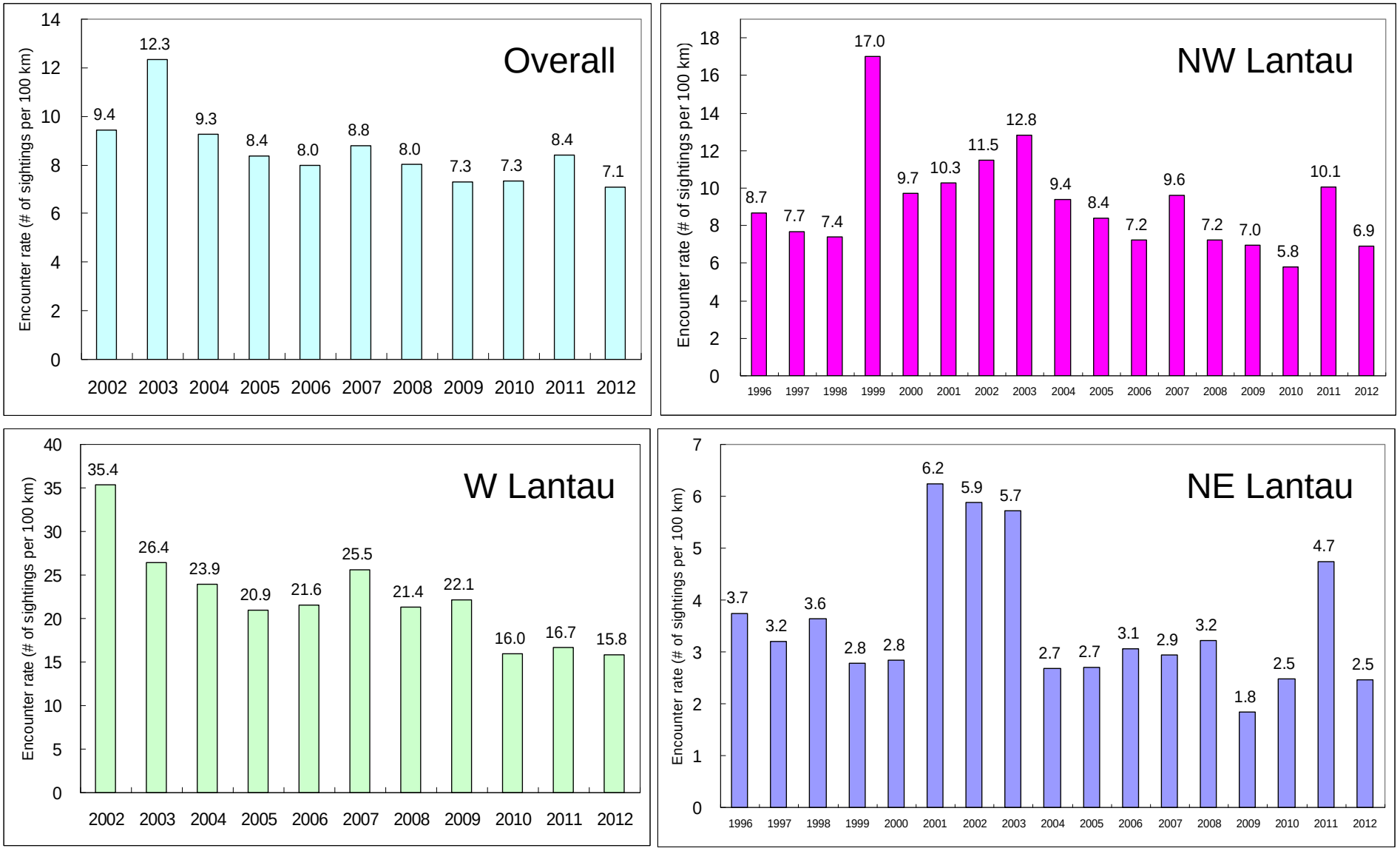


Figure 15. Long-term trends in annual encounter rates of Chinese white dolphins in different survey areas

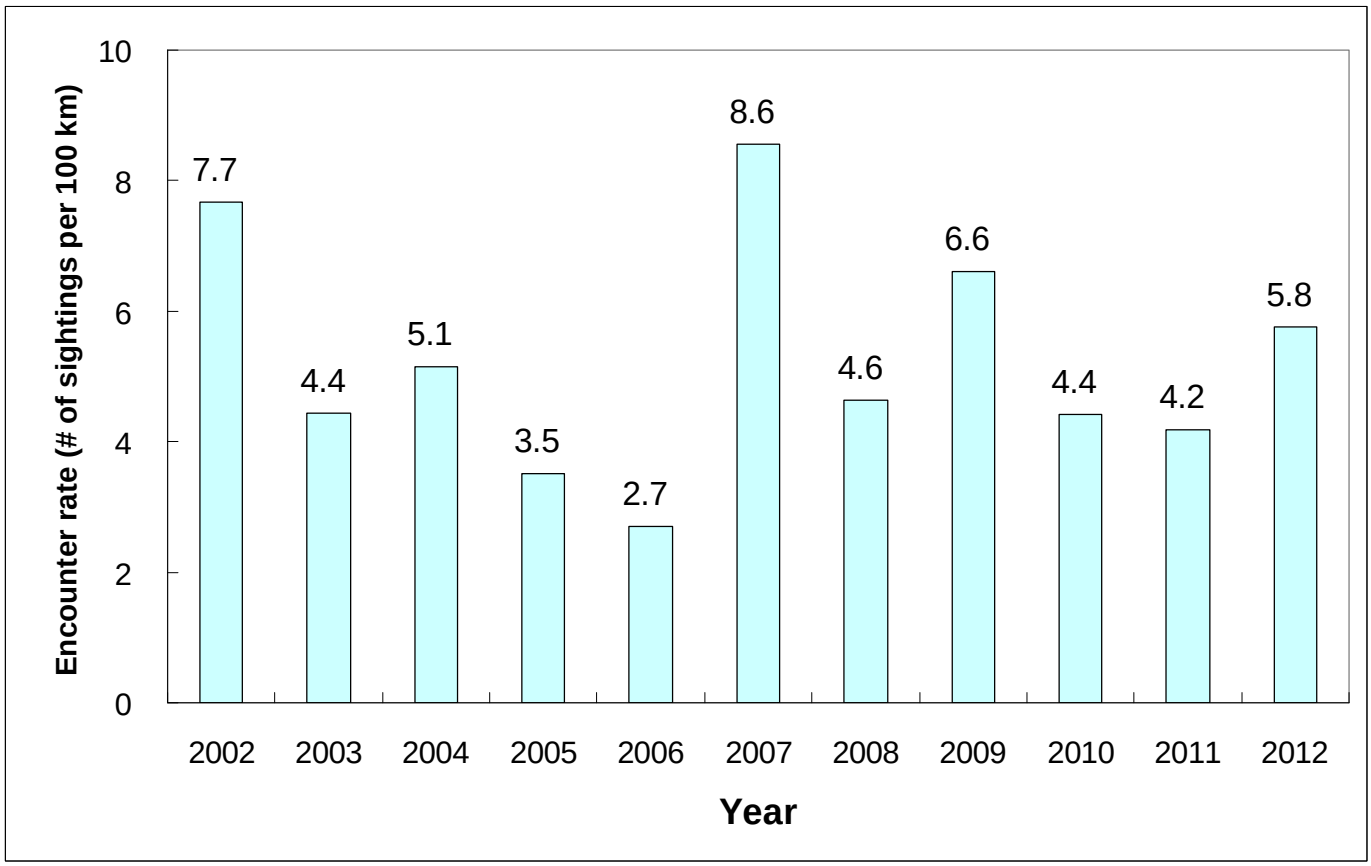
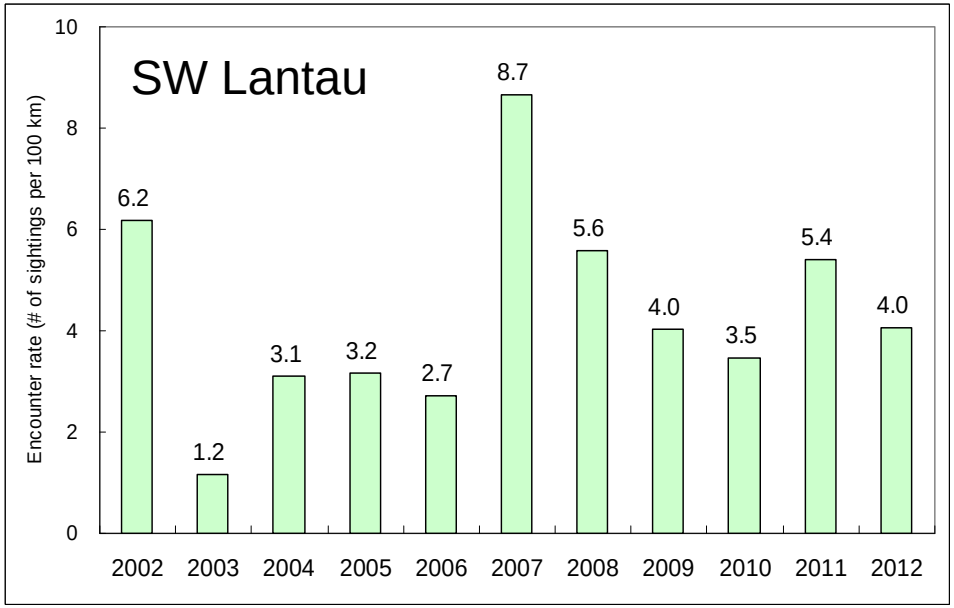
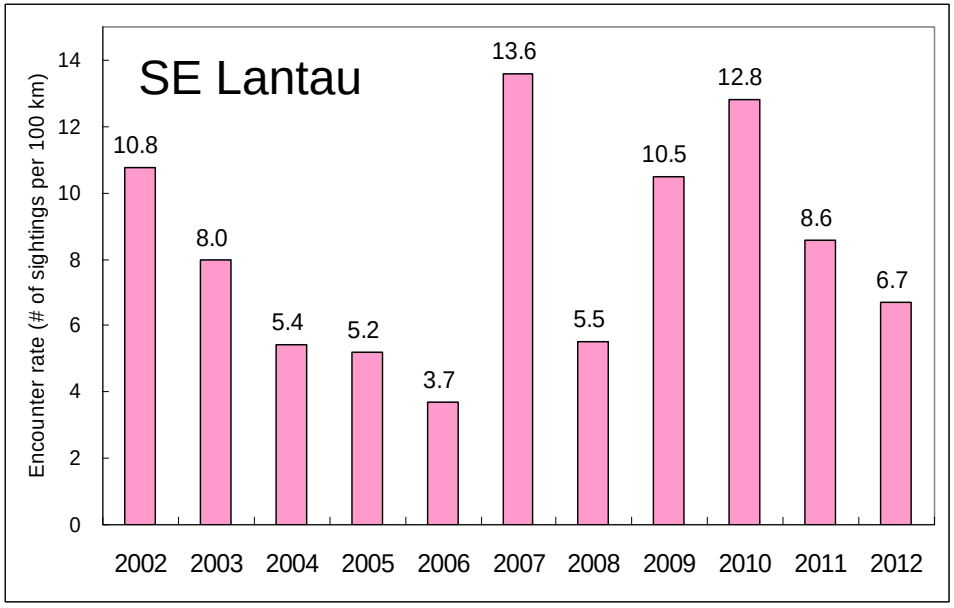
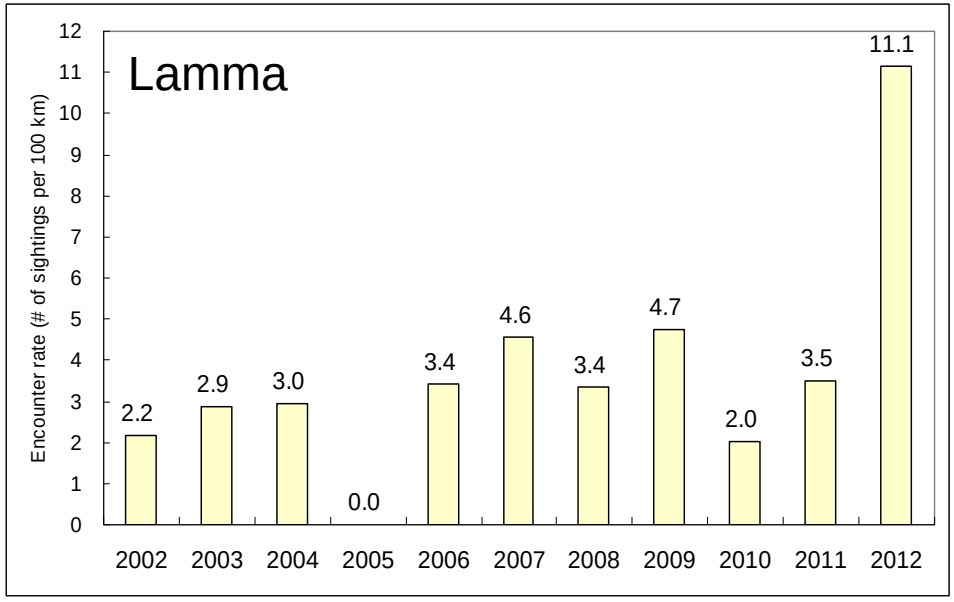


Figure 16. Temporal trend of annual encounter rates of finless porpoises (combined from SWL, SEL, LM and PT survey areas) from 2002-12







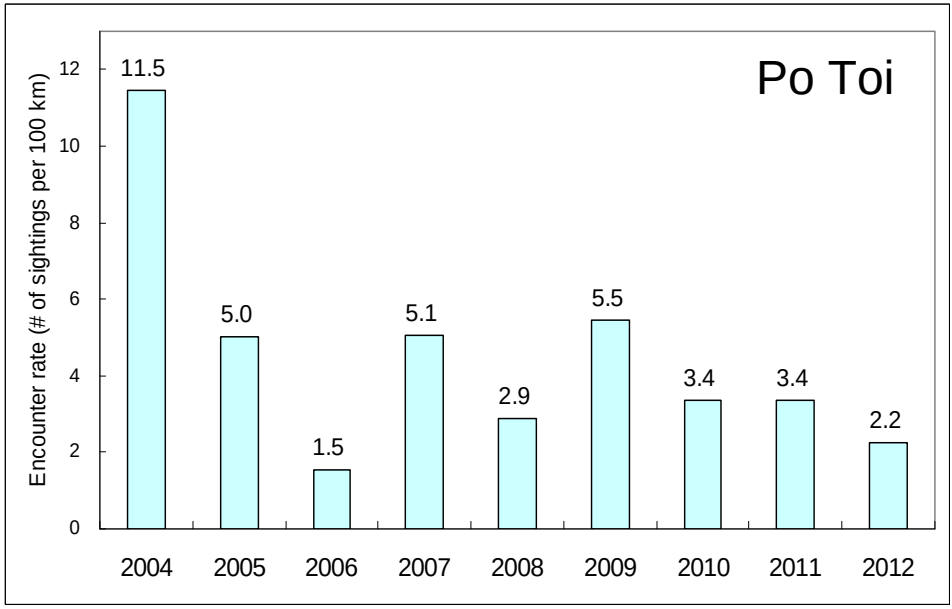


Figure 17. Temporal trends in annual encounter rates of finless porpoises among different survey areas

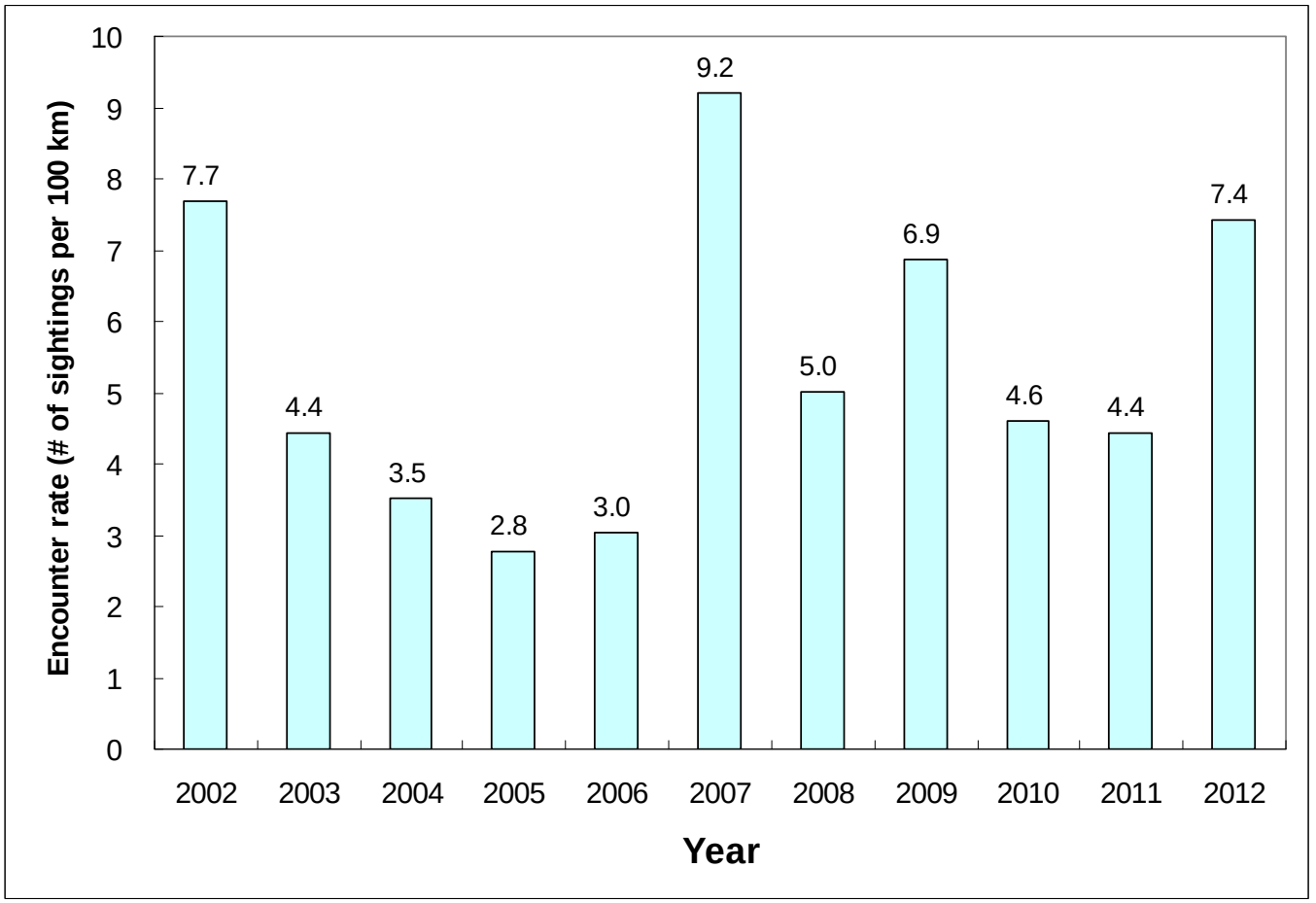


Figure 18. Temporal trend of porpoise encounter rates in South Lantau and Lamma waters combined from winter/spring months of 2002-12

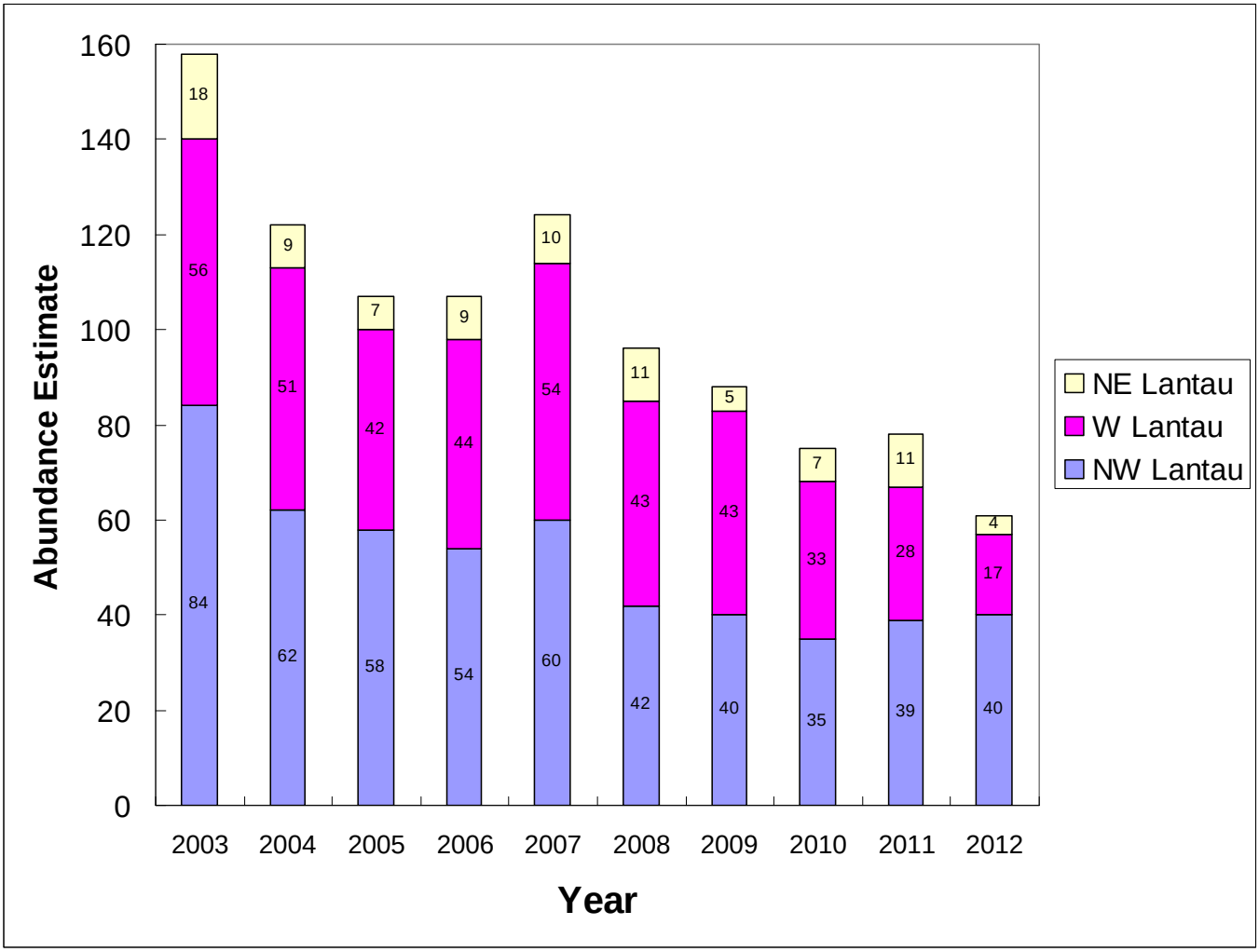
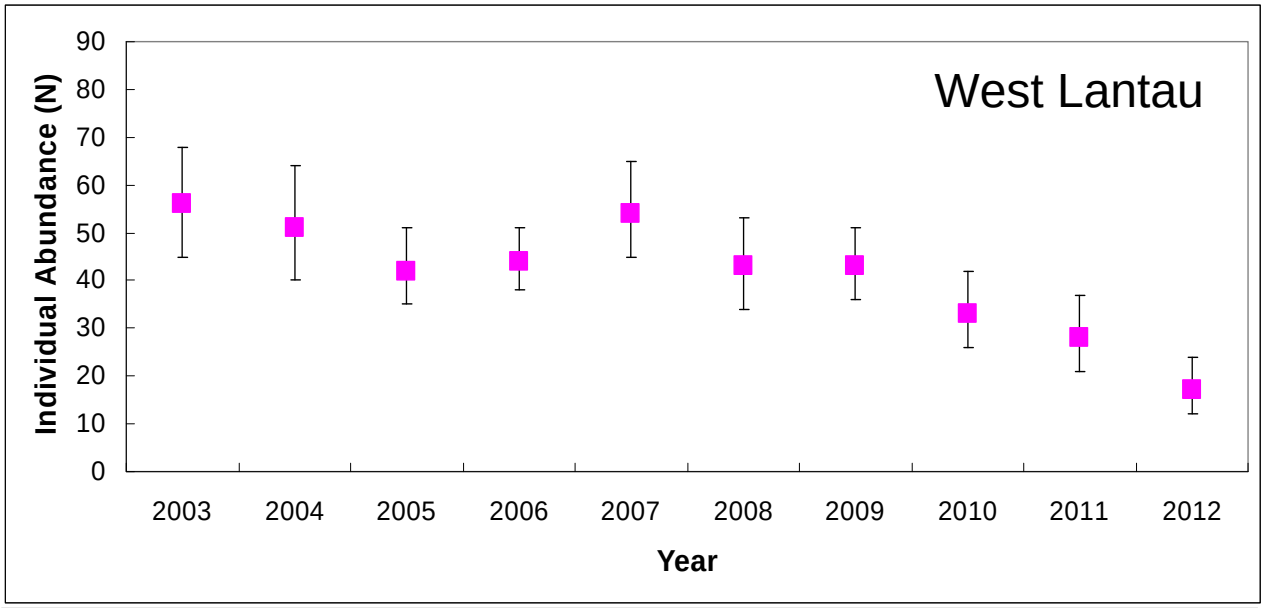
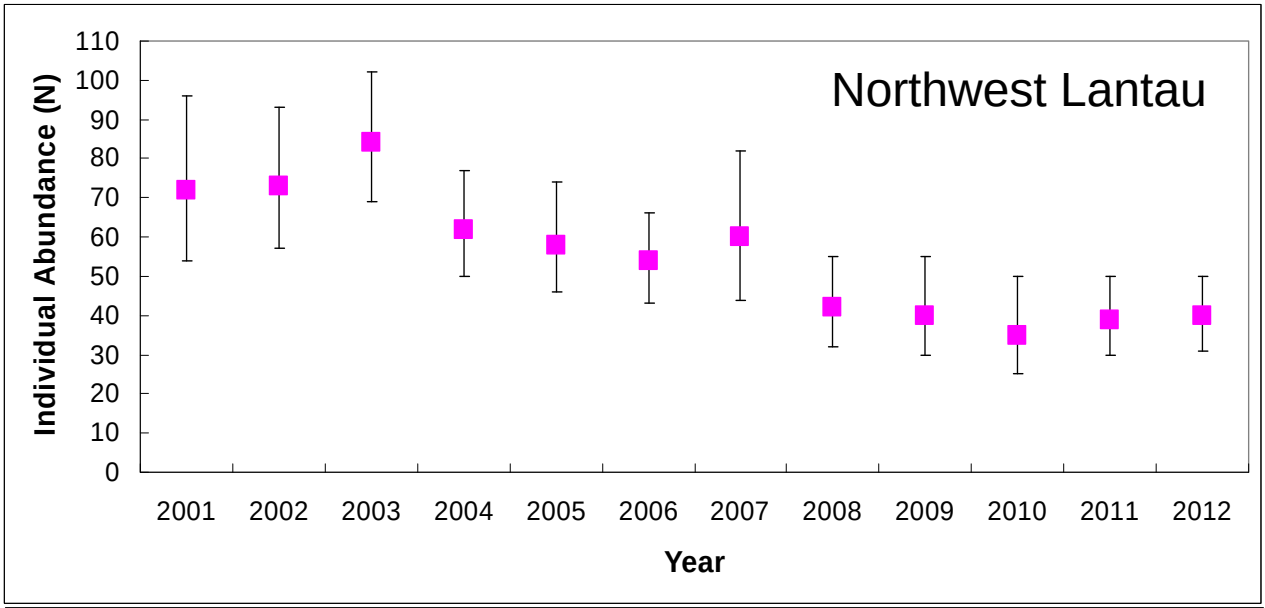


Figure 19. Temporal trends in combined abundance estimates of Chinese white dolphins in West, Northwest & Northeast Lantau from 2003-12





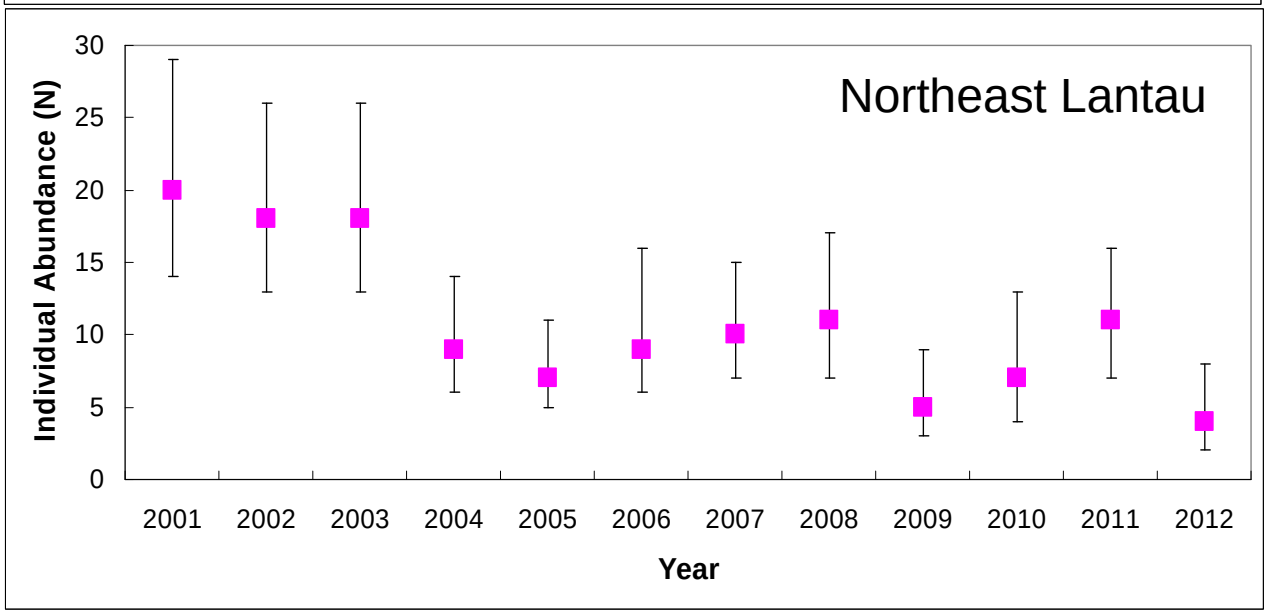


Figure 20. Temporal trends in abundance estimates of Chinese white dolphins in West, Northwest & Northeast Lantau from 2001-12 (error bars: 95% confidence interval of abundance estimates)

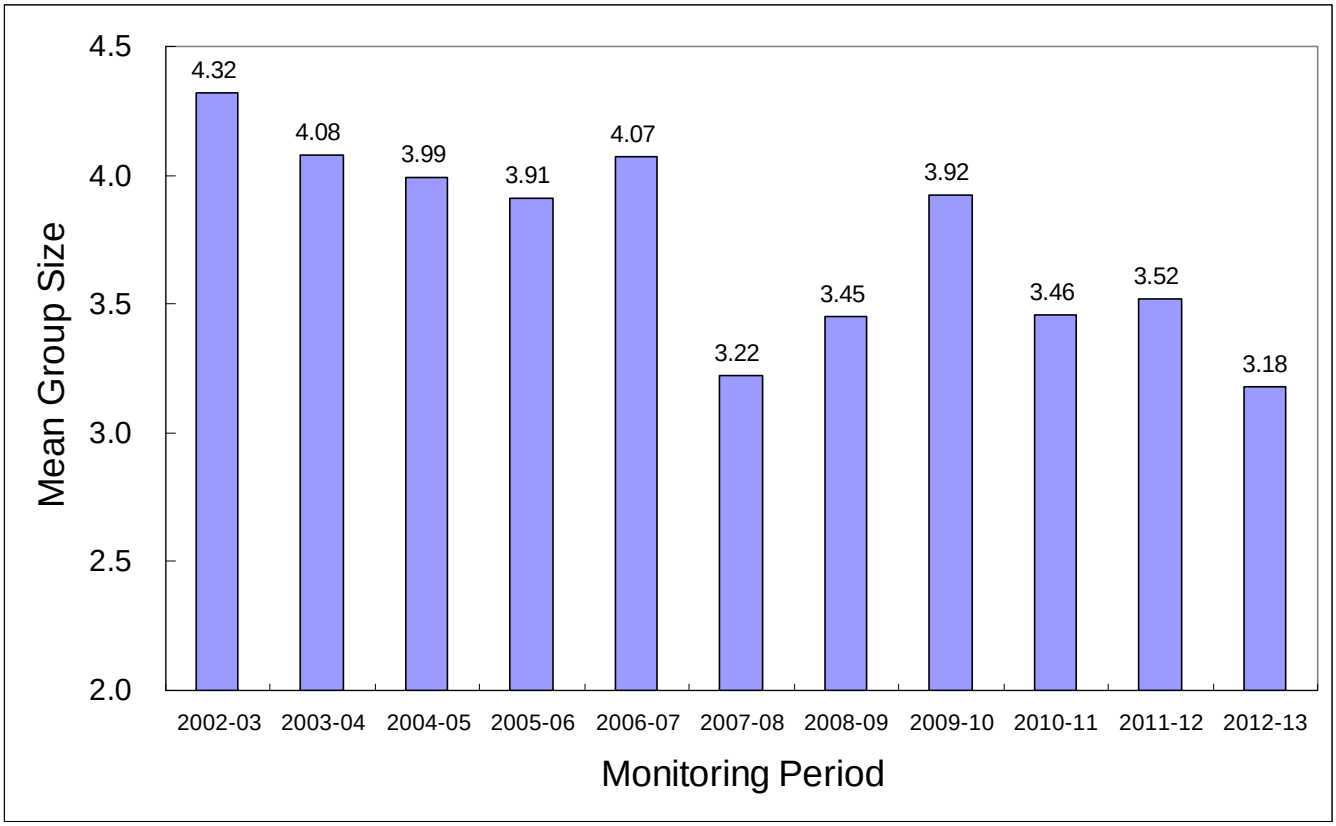


Figure 21. Temporal trend of mean dolphin group size in 2002-13

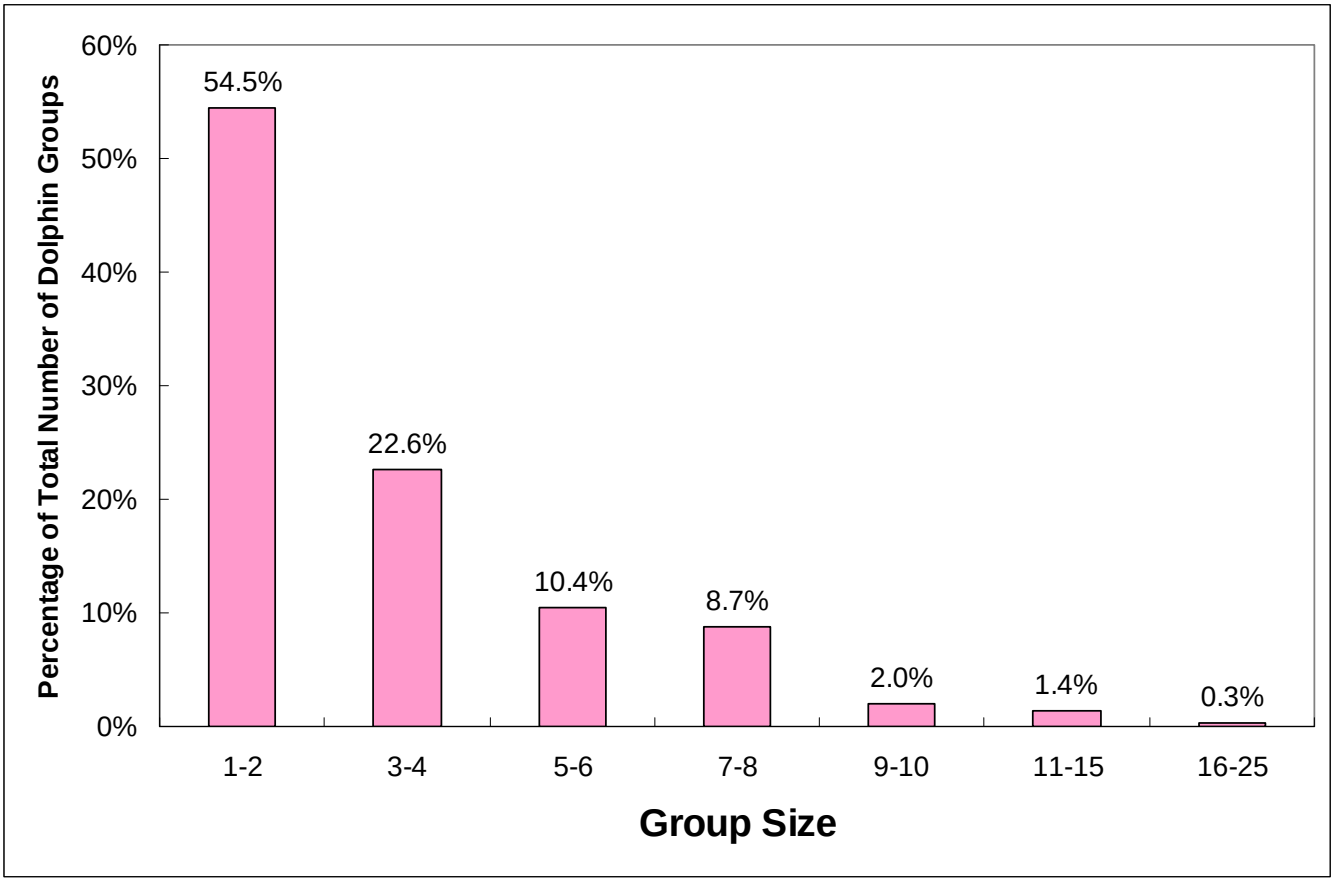


Figure 22. Percentages of different group sizes of Chinese white dolphins in Hong Kong during April 2012 to March 2013

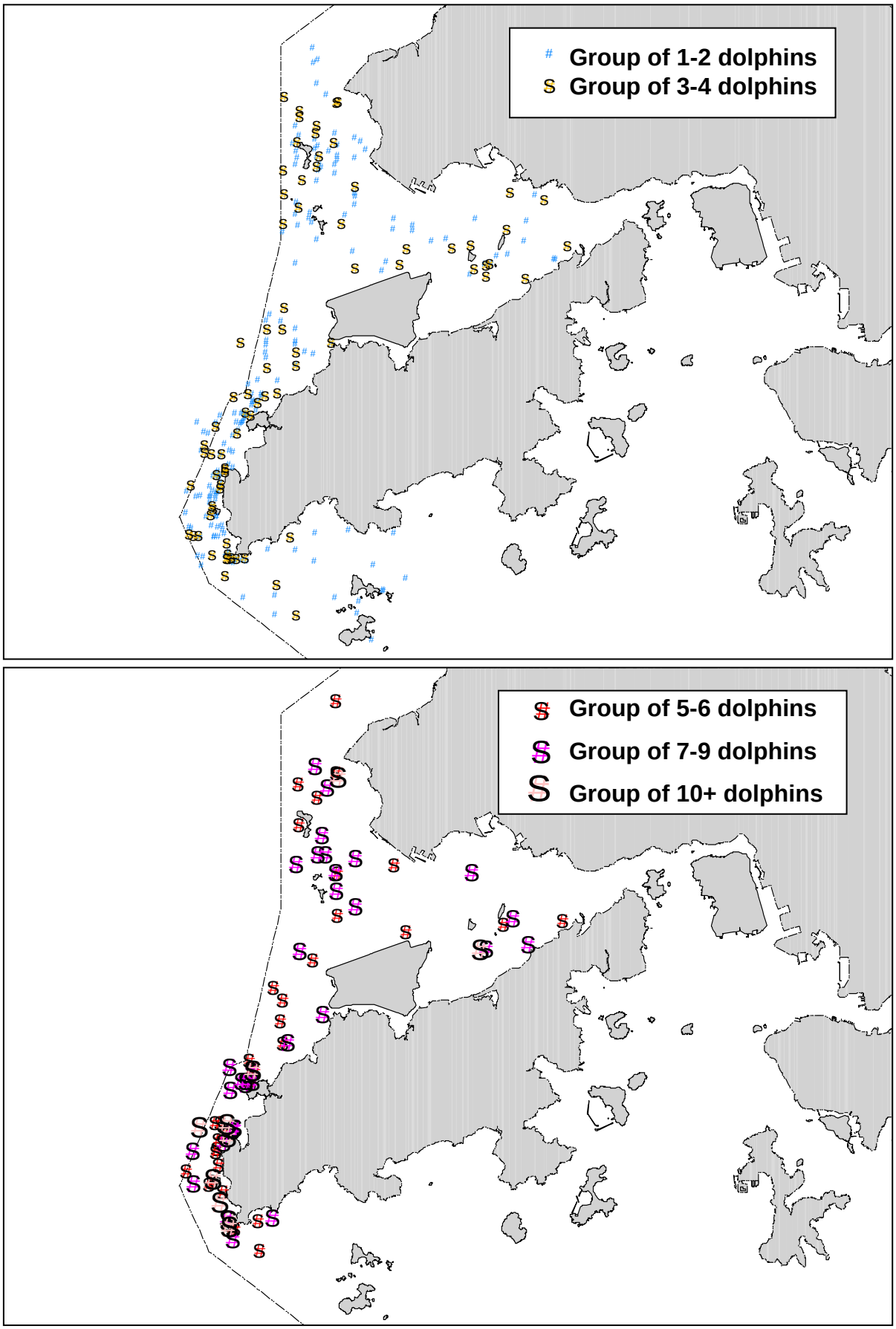


Figure 23. Distribution of Chinese white dolphins with different group sizes (April 2012 – March 2013)

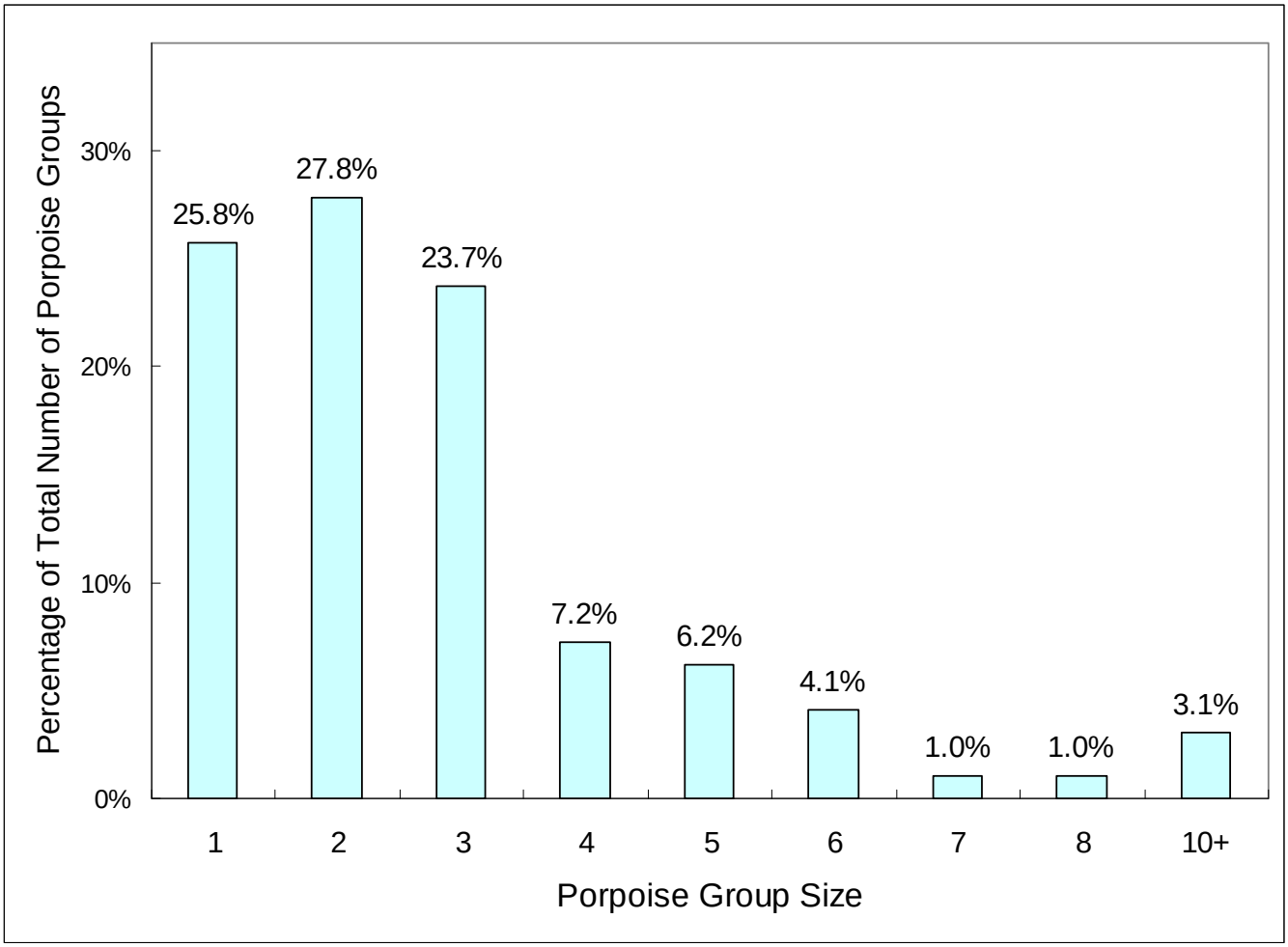


Figure 24. Percentages of different group sizes of finless porpoises in Hong Kong during April 2012 to March 2013

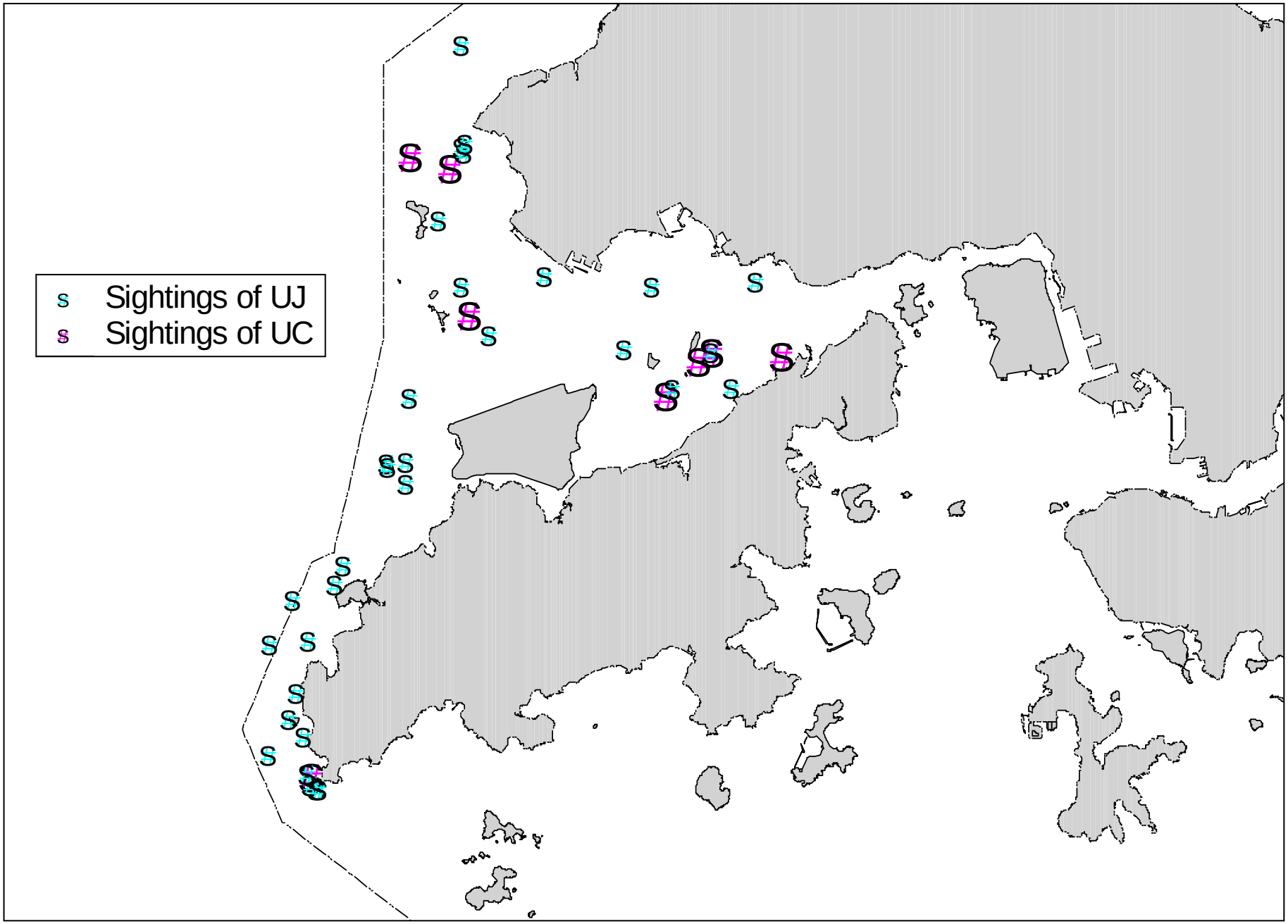


Figure 25. Distribution of Unspotted Calves (UC) & Unspotted Juveniles (UJ) (April 2012 – March 2013)

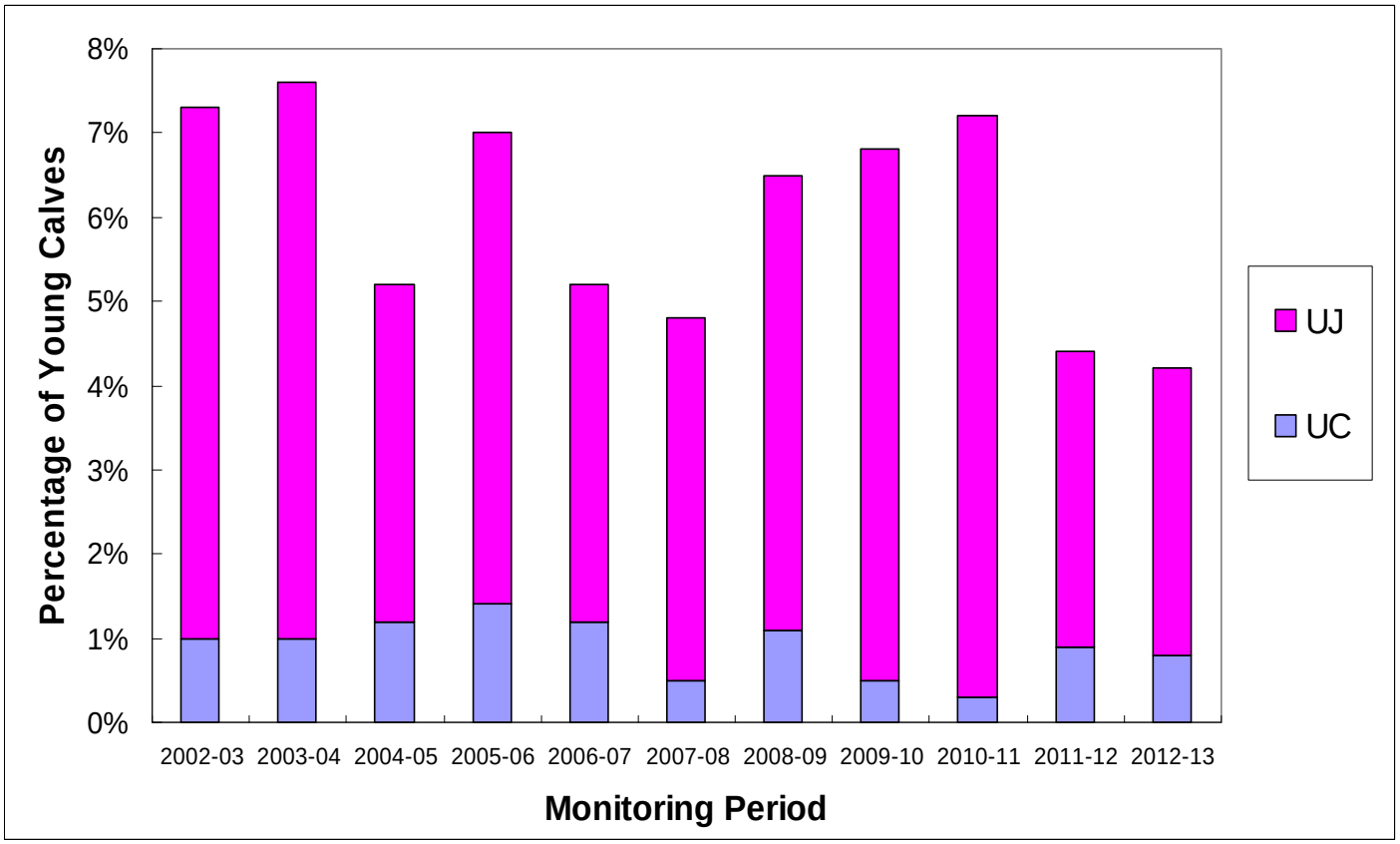


Figure 26a. Percentages of young calves (i.e. unspotted calves (UC) and unspotted juveniles (UJ)) among dolphin groups during 2002-13

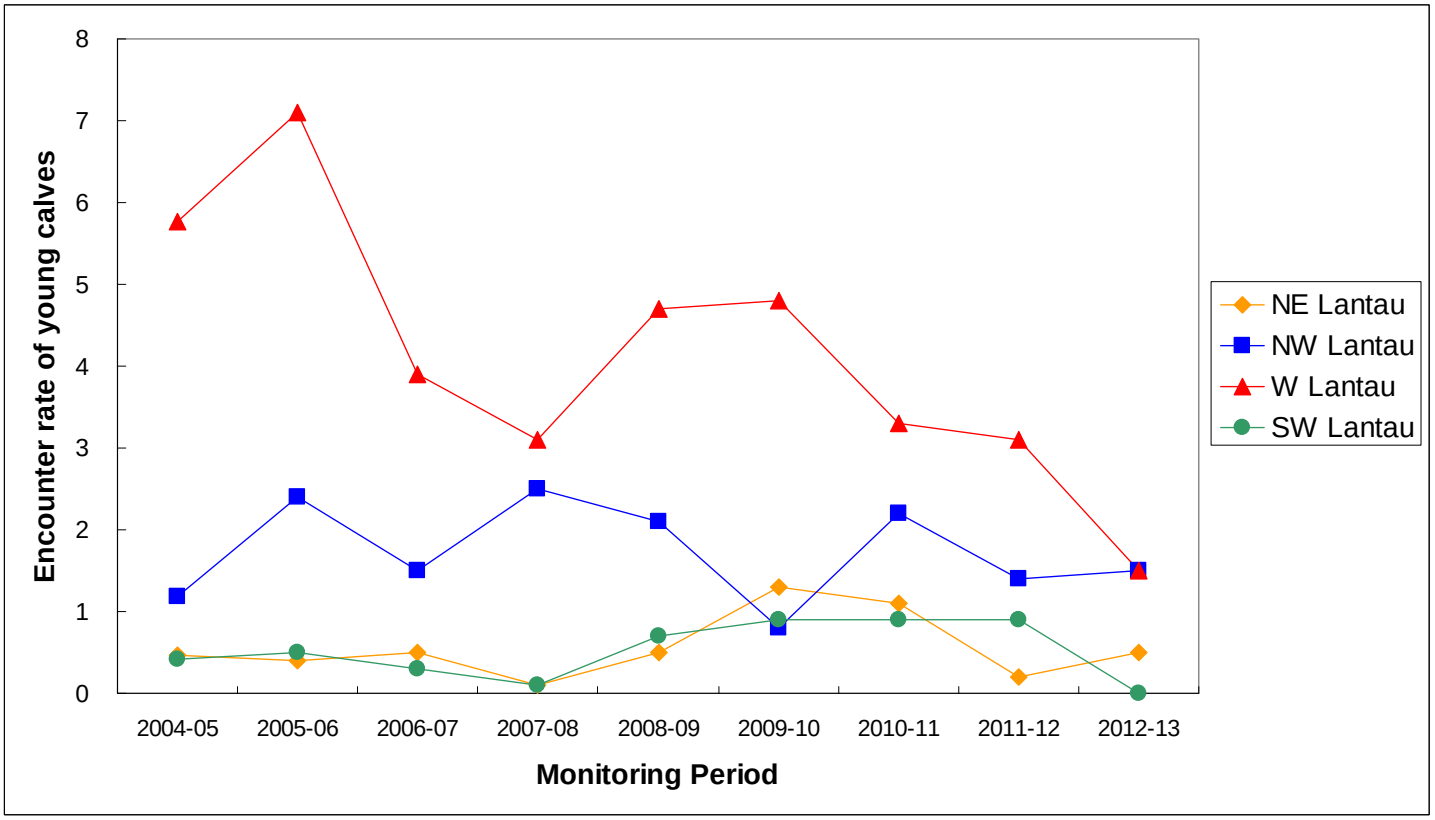


Figure 26b. Temporal trends of encounter rates of young calves (including unspotted calves and unspotted juveniles) in 2004-13

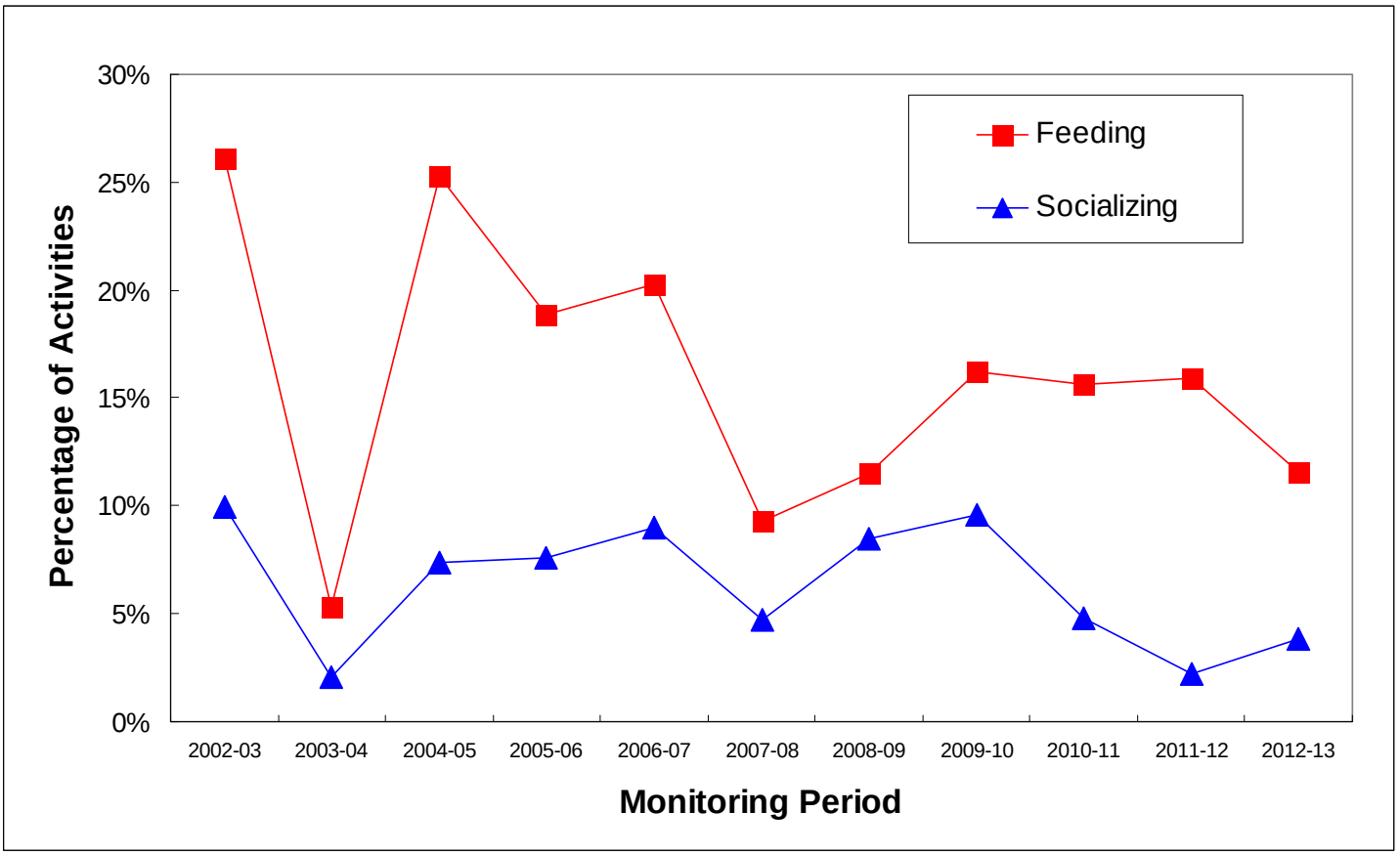


Figure 27. Percentages of feeding and socializing activities among all dolphin groups sighted in Hong Kong during 2002-13

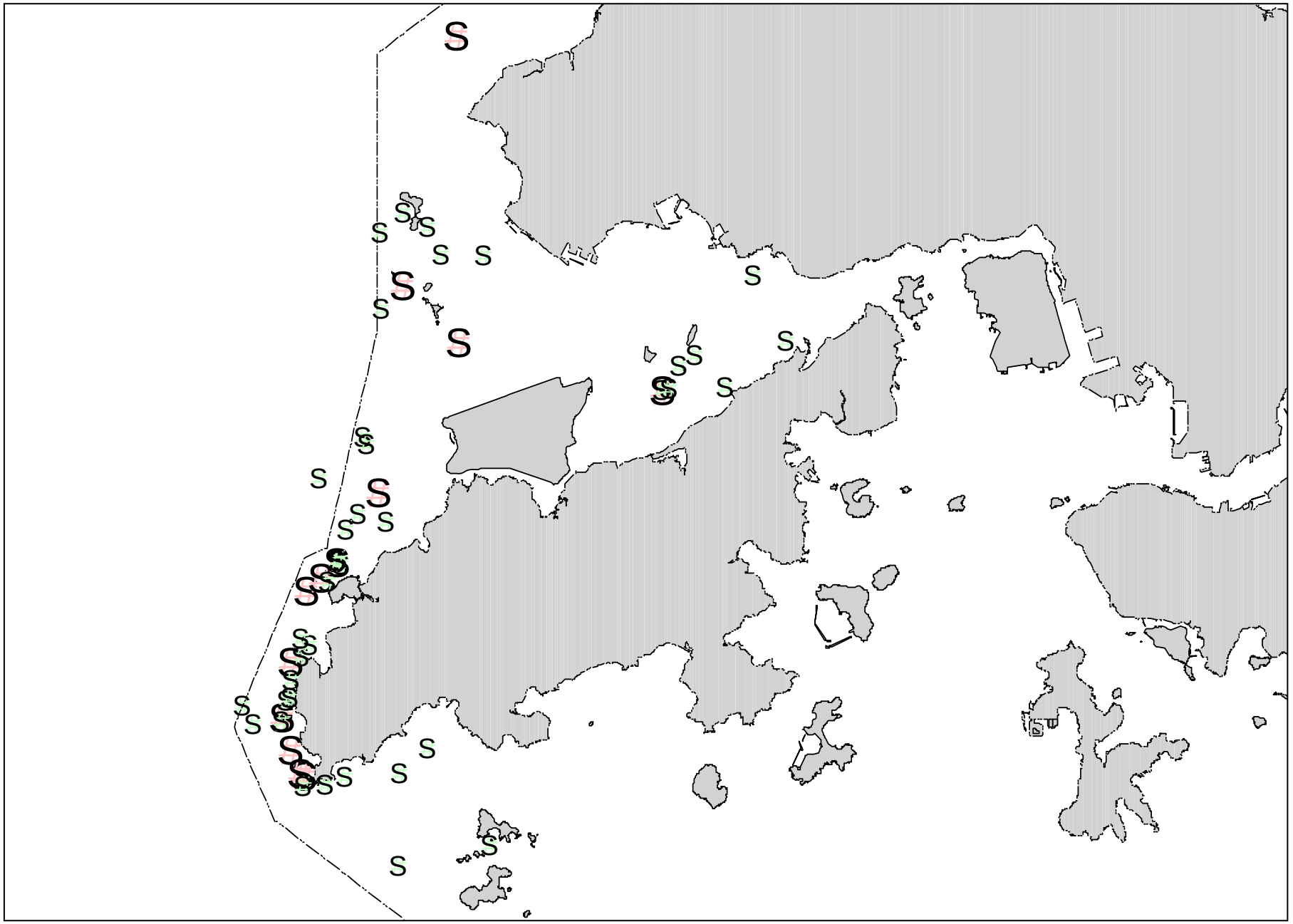


Figure 28. Distribution of Chinese white dolphins engaged in feeding (green dots) and socializing (pink dots) activities (April 2012 – March 2013)

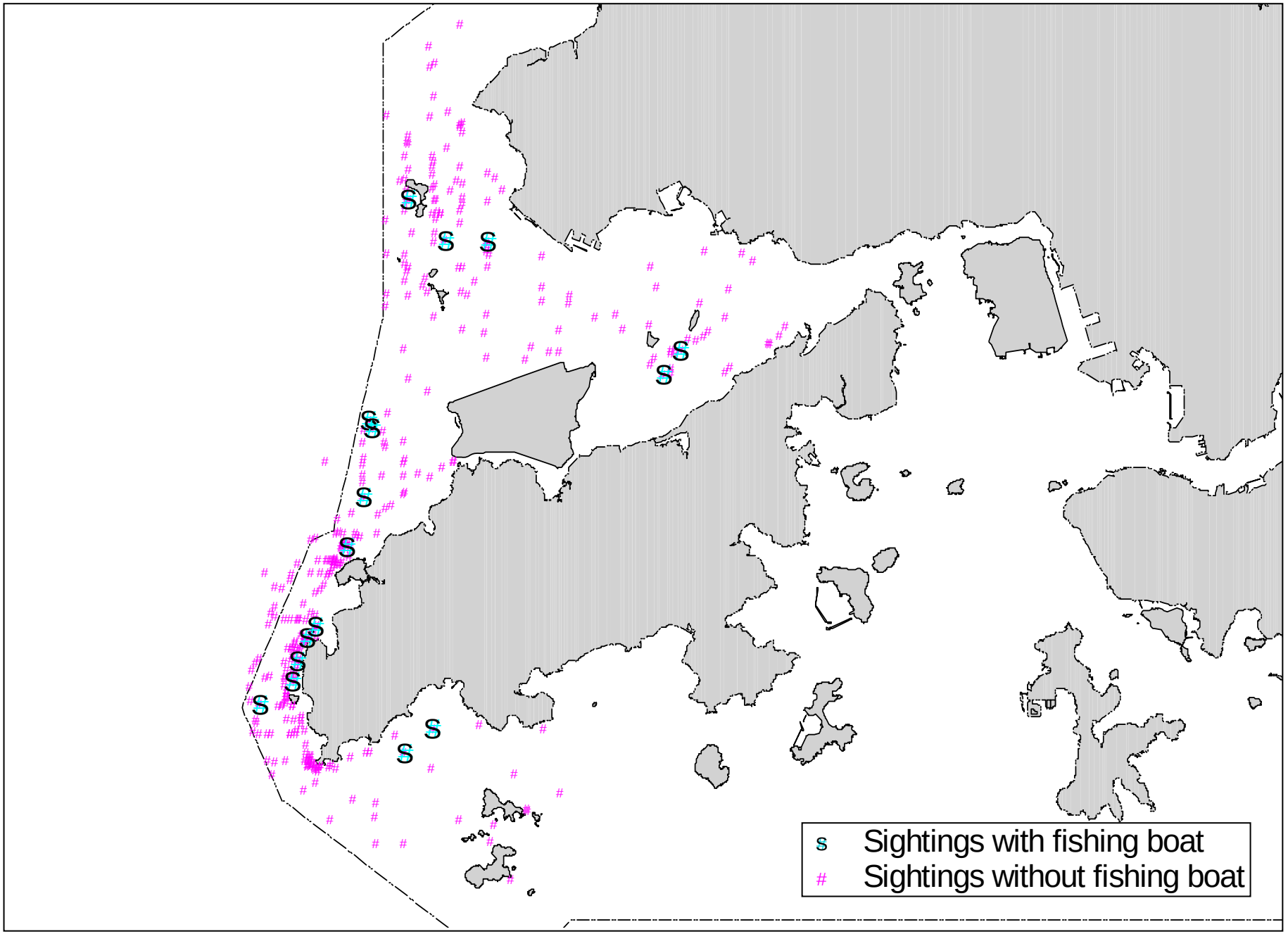
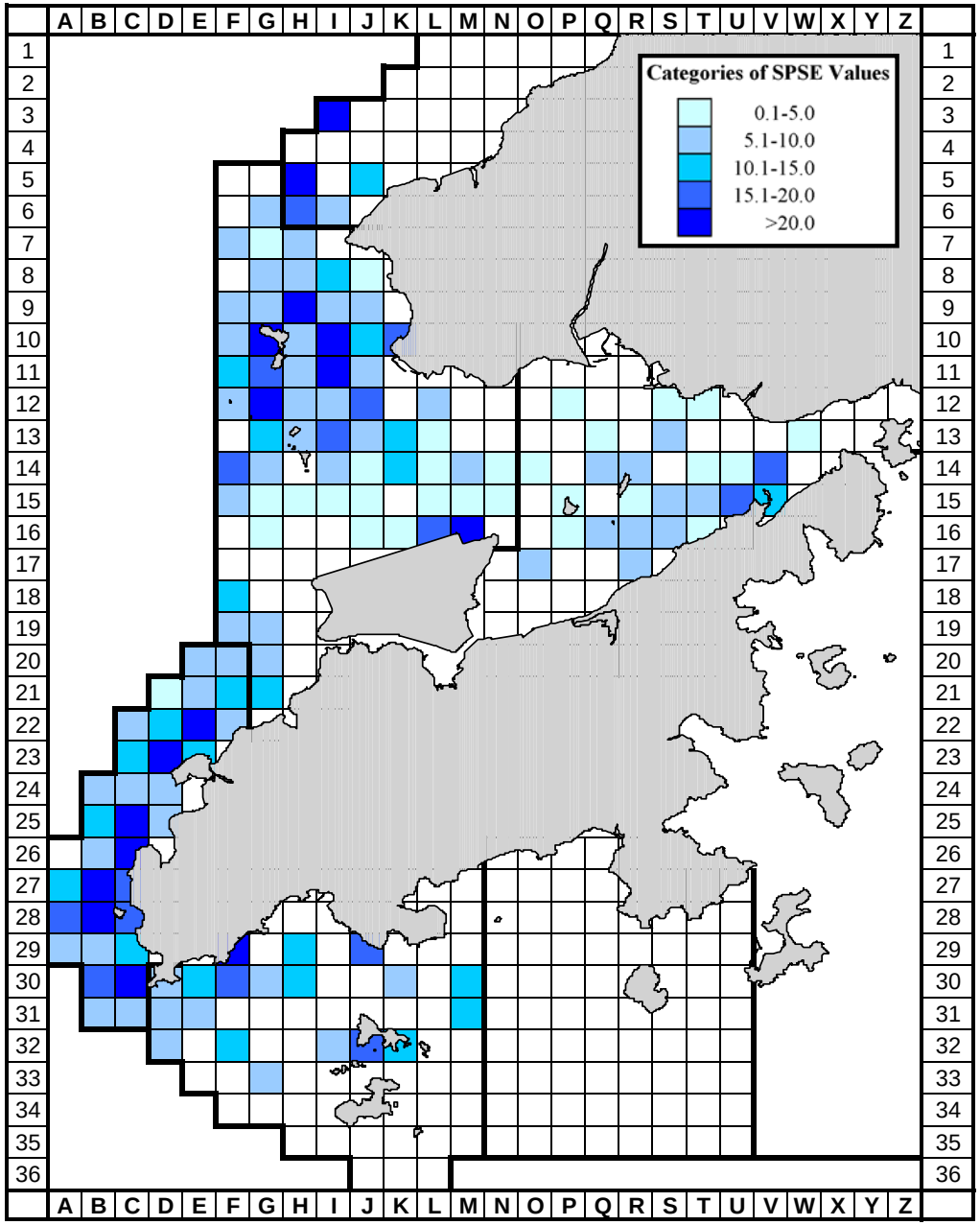


Figure 29. Distribution of dolphin sightings associated with and without fishing boats (April 2012 – March 2013)



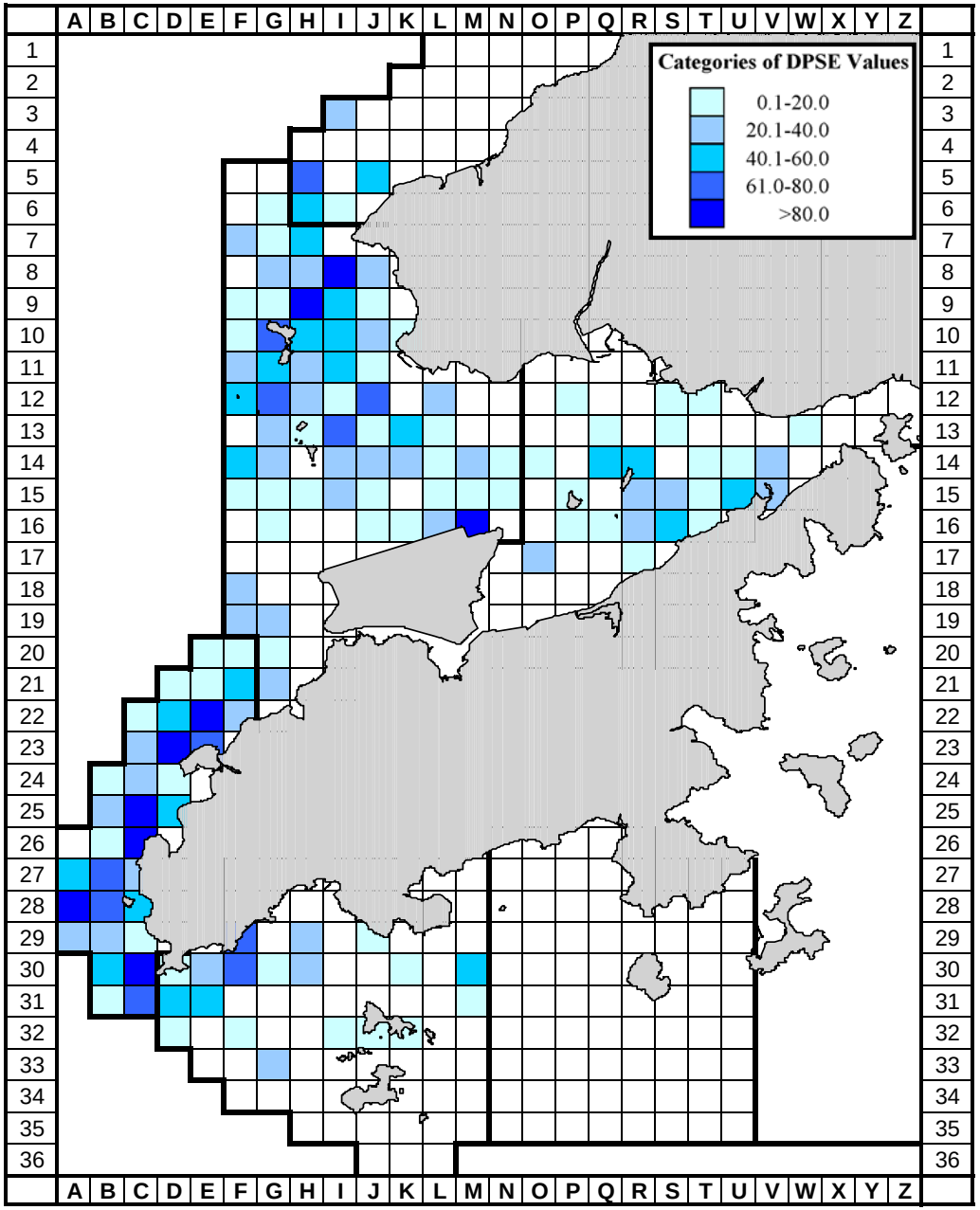
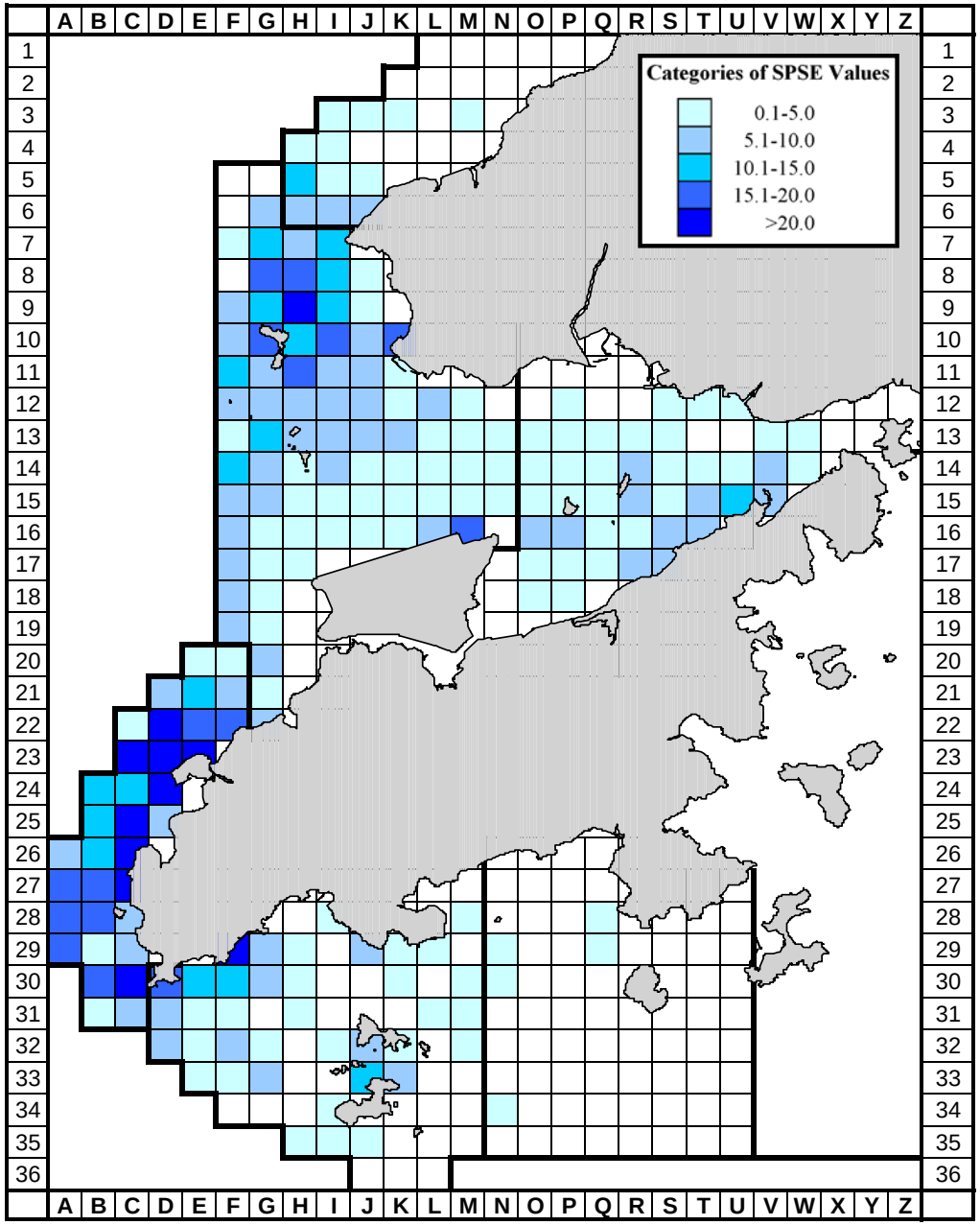


Figure 30. (left) Sighting density of Chinese white dolphins with corrected survey effort per km^2 in waters around Lantau Island (number within grids represent "SPSE" = no. of on-effort dolphin sightings per 100 units of survey effort) (using data from January - December 2012)

(right) Density of Chinese white dolphins with corrected survey effort per km^2 in waters around Lantau Island (number within grids represent "DPSE" = no. of dolphins per 100 units of survey effort) (using data from January - December 2012)



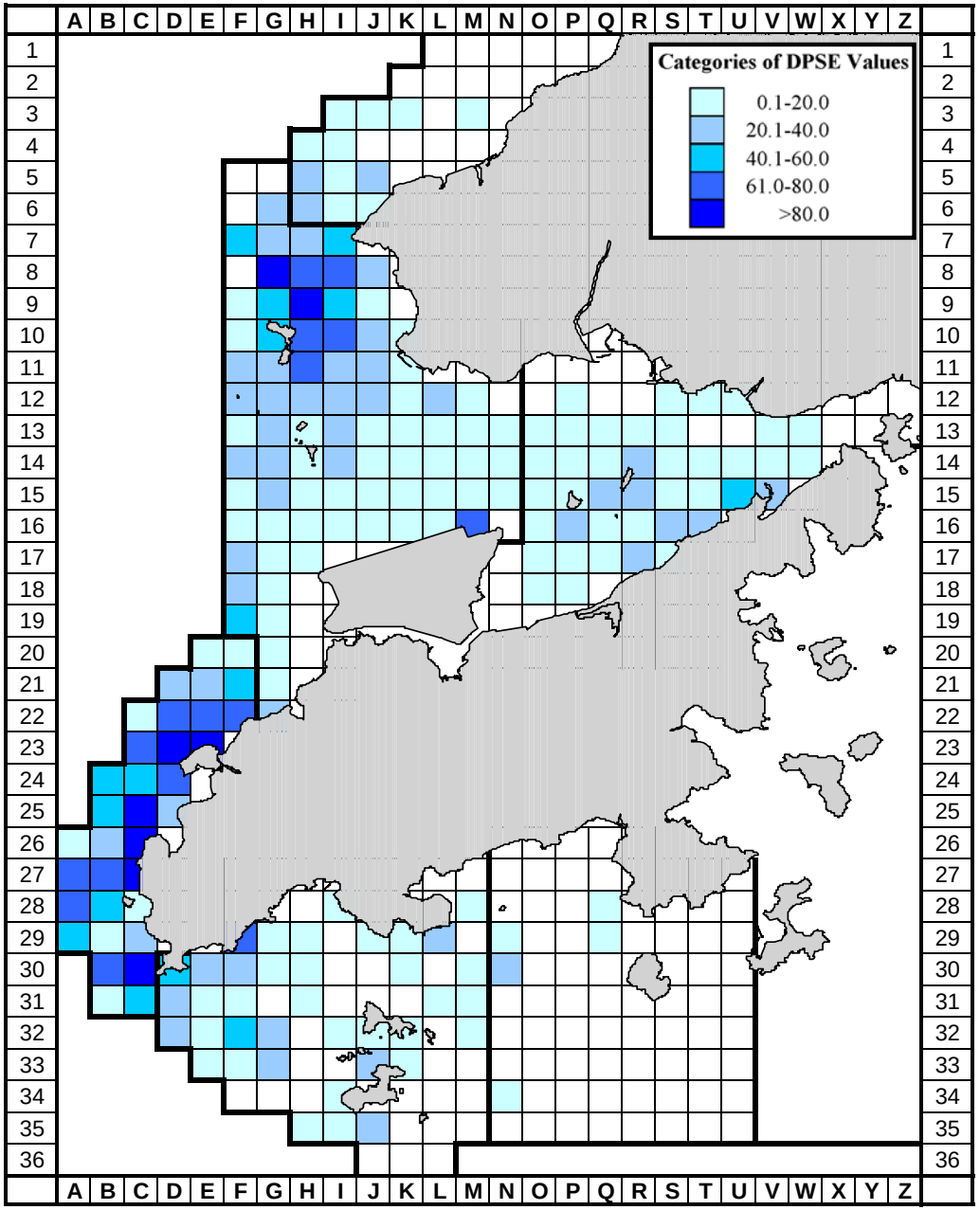


Figure 31. (left) Sighting density of Chinese white dolphins with corrected survey effort per km^2 in waters around Lantau Island during 2008-12 (number within grids represent "SPSE" = no. of on-effort sightings per 100 units of survey effort)

(right) Density of Chinese white dolphins with corrected survey effort per km^2 in waters around Lantau Island during 2008-12 (number within grids represent "DPSE" = no. of dolphins per 100 units of survey effort)

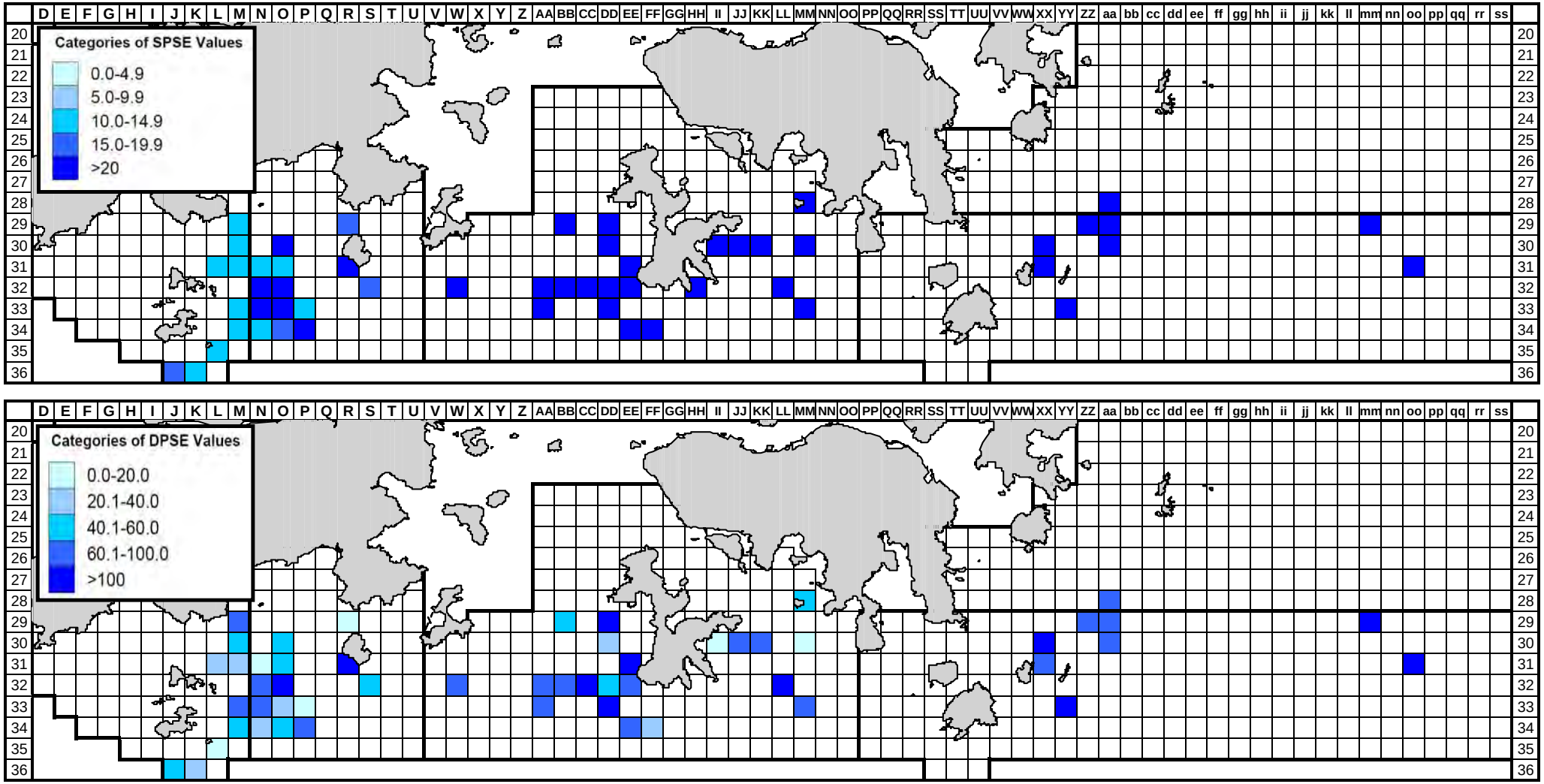


Figure 32. (top) Sighting density of finless porpoises with corrected survey effort per km^2 in southern waters of Hong Kong (number within grids represent "SPSE" = no. of on-effort porpoise sightings per 100 units of survey effort) (using data from January - December 2012)

(bottom) Density of finless porpoises with corrected survey effort per km^2 in southern waters of Hong Kong (number within grids represents "DPSE" = no. of porpoises per 100 units of survey effort) (using data from January - December 2012)

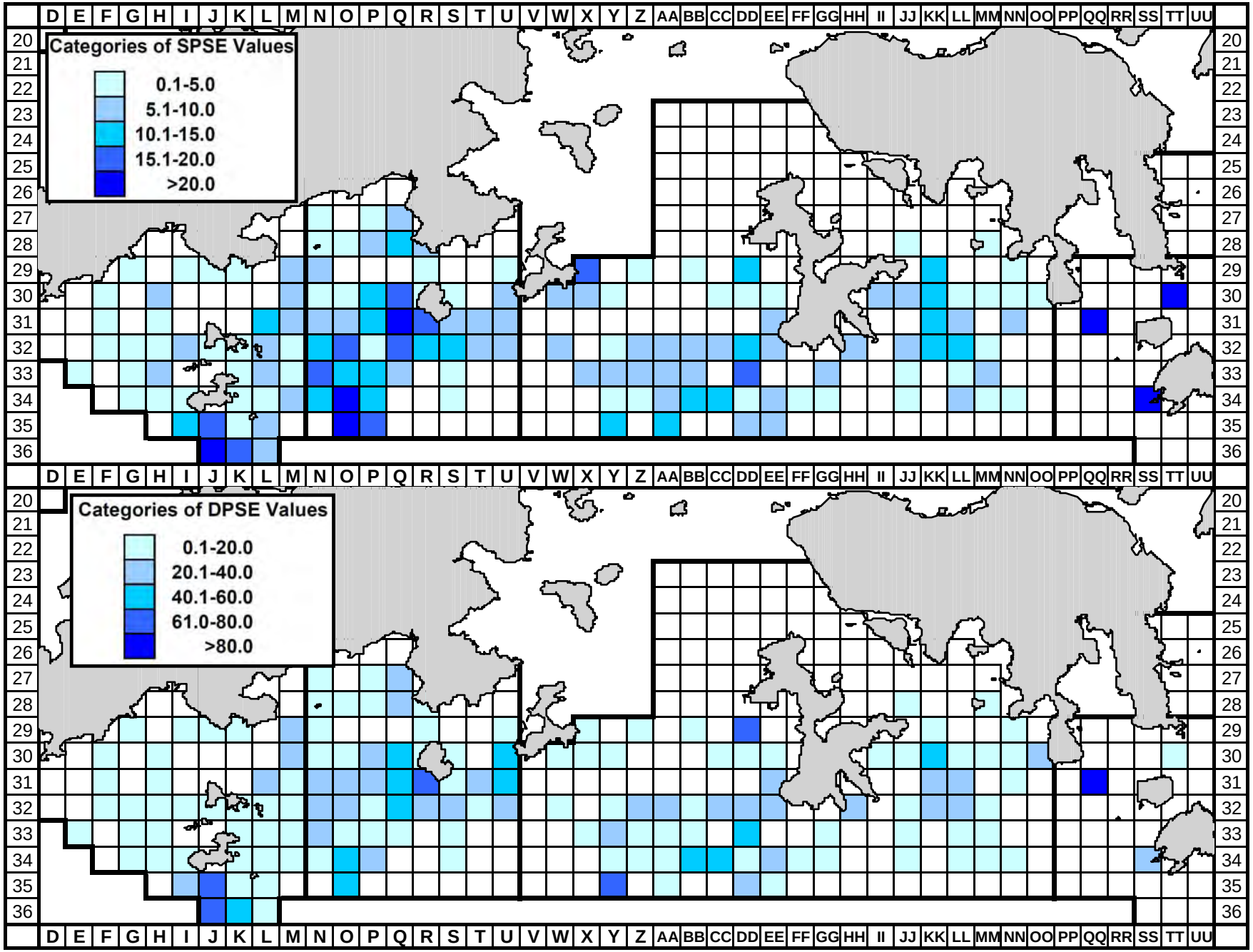


Figure 33. Density of finless porpoises with corrected survey effort per km^2 in southern waters of Hong Kong during dry season (December to May), using data collected during 2004-12 (SPSE = no. of on-effort porpoise sightings per 100 units of survey effort; DPSE = no. of porpoises per 100 units of survey effort)

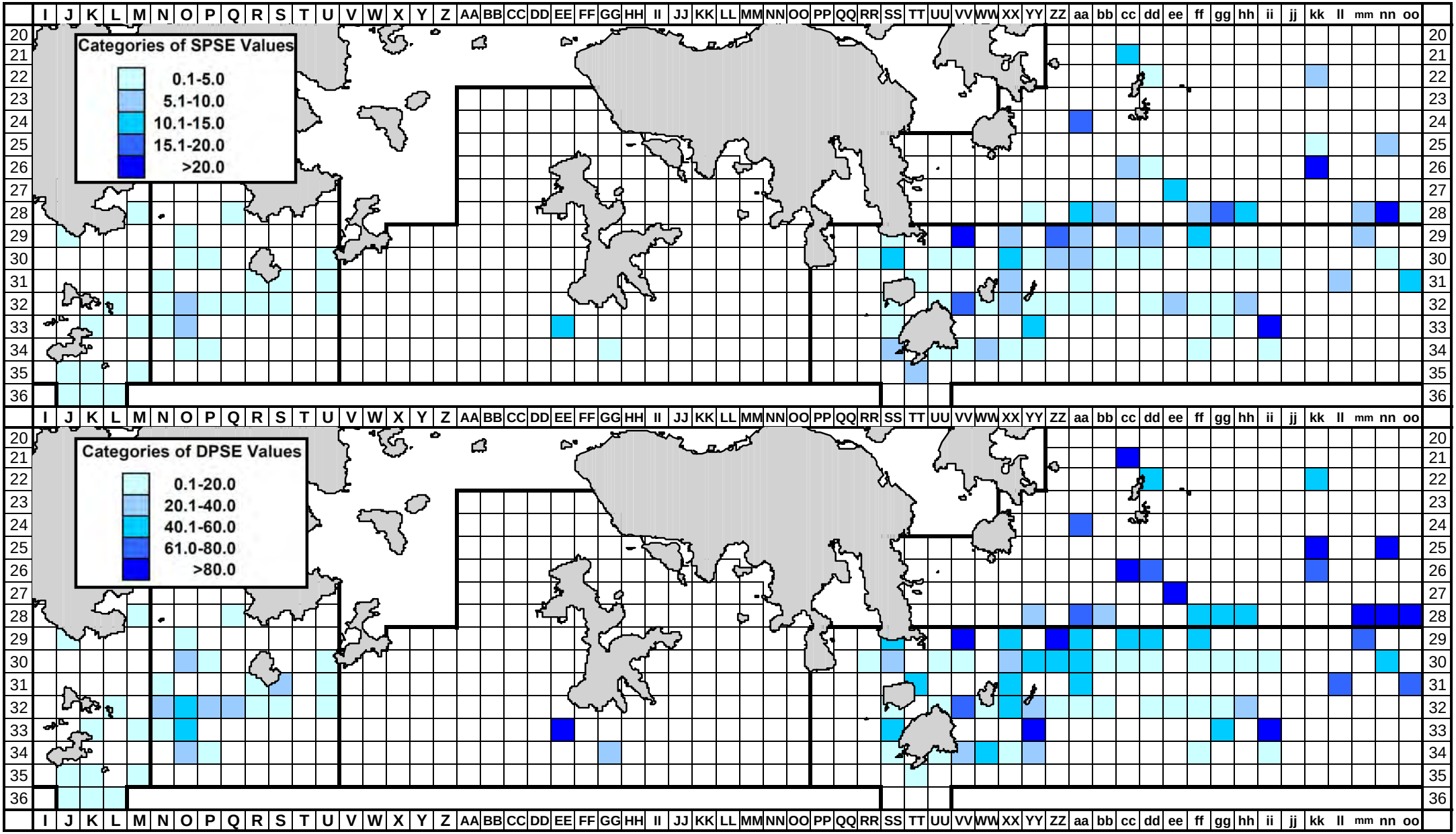


Figure 34. Density of finless porpoises with corrected survey effort per km^2 in southern waters of Hong Kong during wet season (June to November), using data collected during 2004-12 (SPSE = no. of on-effort porpoise sightings per 100 units of survey effort; DPSE = no. of porpoises per 100 units of survey effort

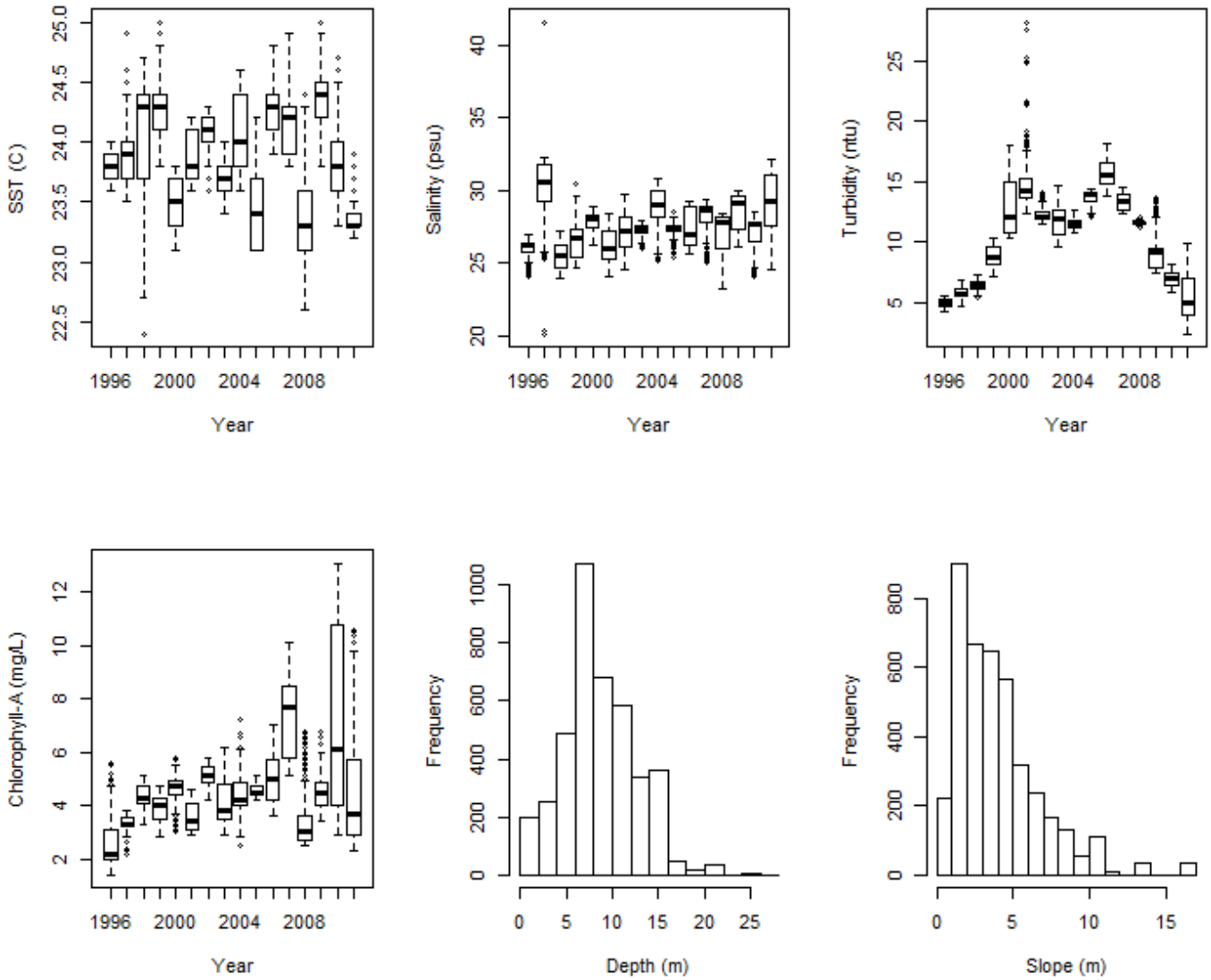


Figure 35. Variation in environmental variables by year for the duration of the study period (1996-2011) (Boxplots show median, upper and lower quartiles and interquartile ranges variation from year to year for (a) sea surface temperature, (b) salinity, (c) turbidity, and (d) chlorophyll-A. Histograms show frequency of (d) depth and (e) slope values, which were assumed to be consistent across the entire study period)

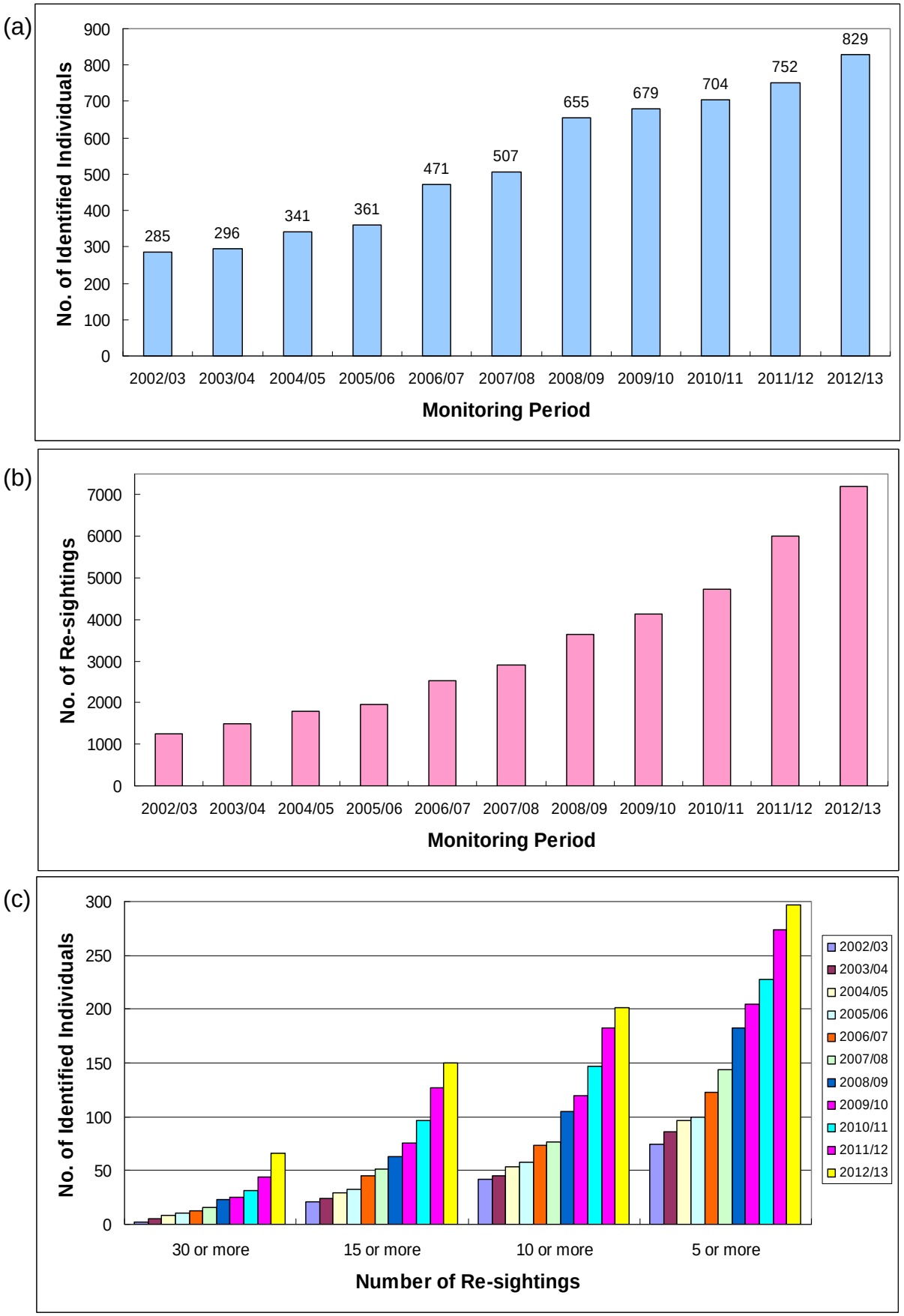


Figure 36. Temporal trends of (a) total number of identified individuals; (b) total number of re-sightings made; and (c) number of identified individuals within several categories of number of re-sightings in the past 11 monitoring periods since 2002

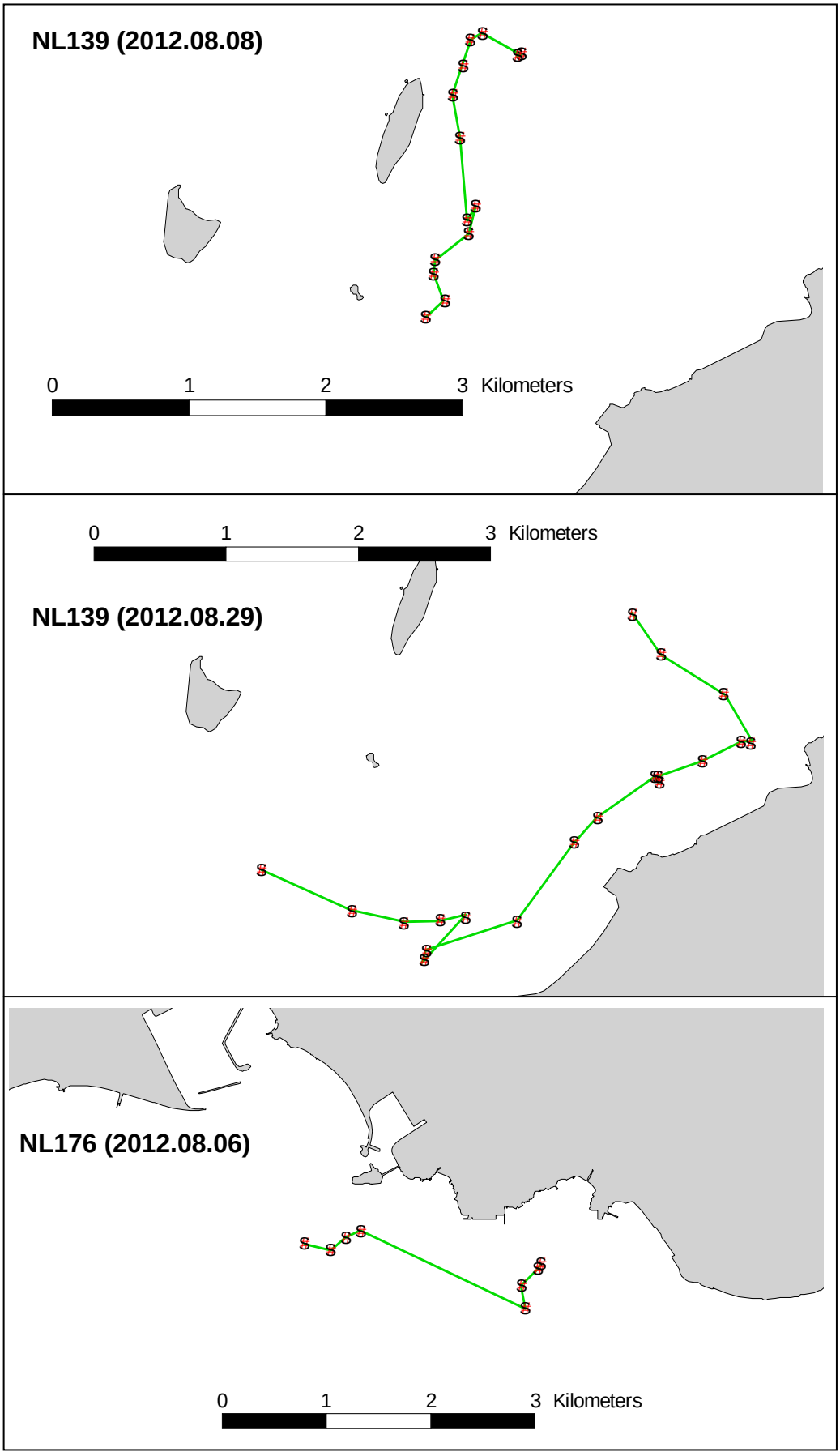


Figure 37. Tracks of six individuals under pilot study of focal follow observations in 2012-13 monitoring period

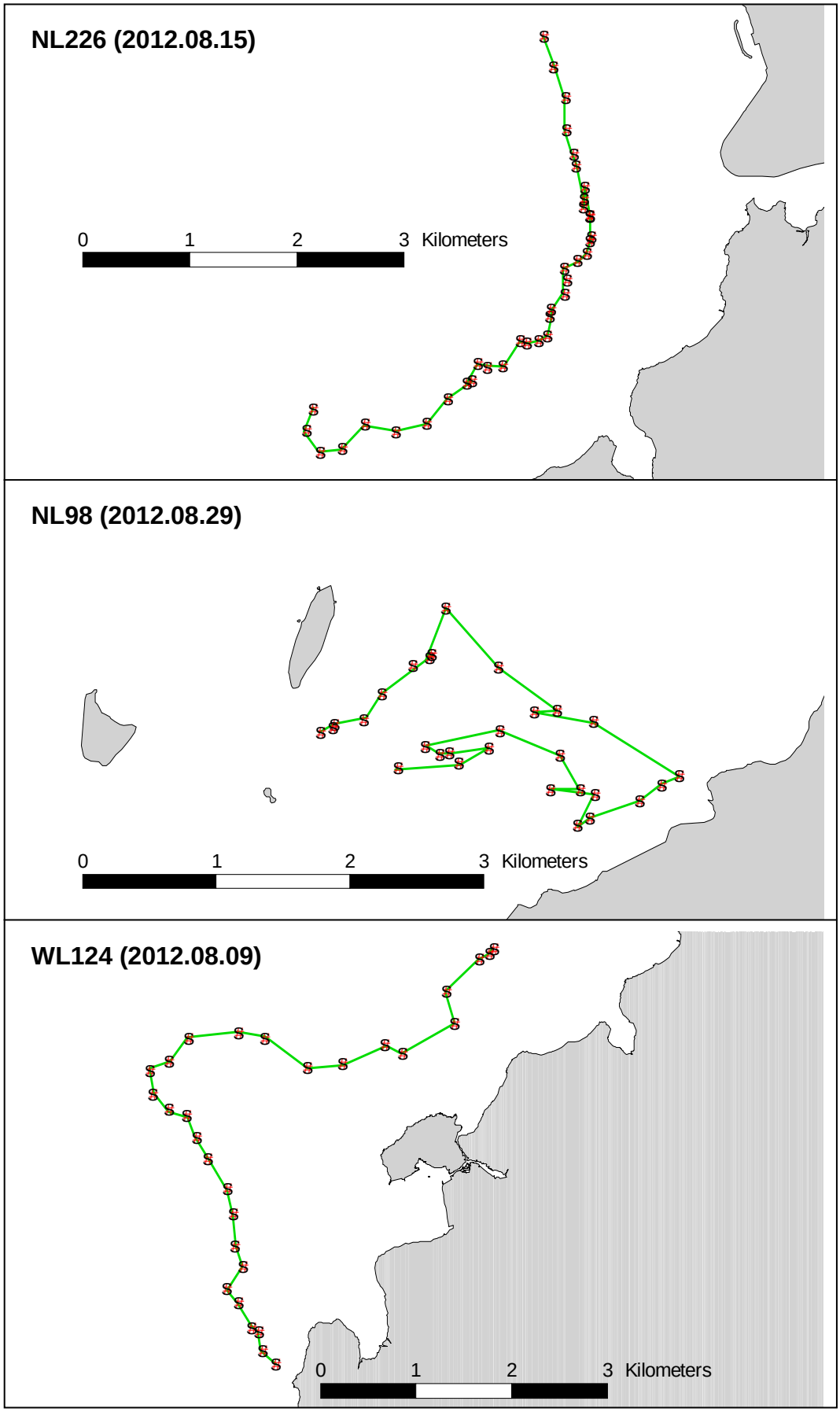


Figure 37. (cont'd)

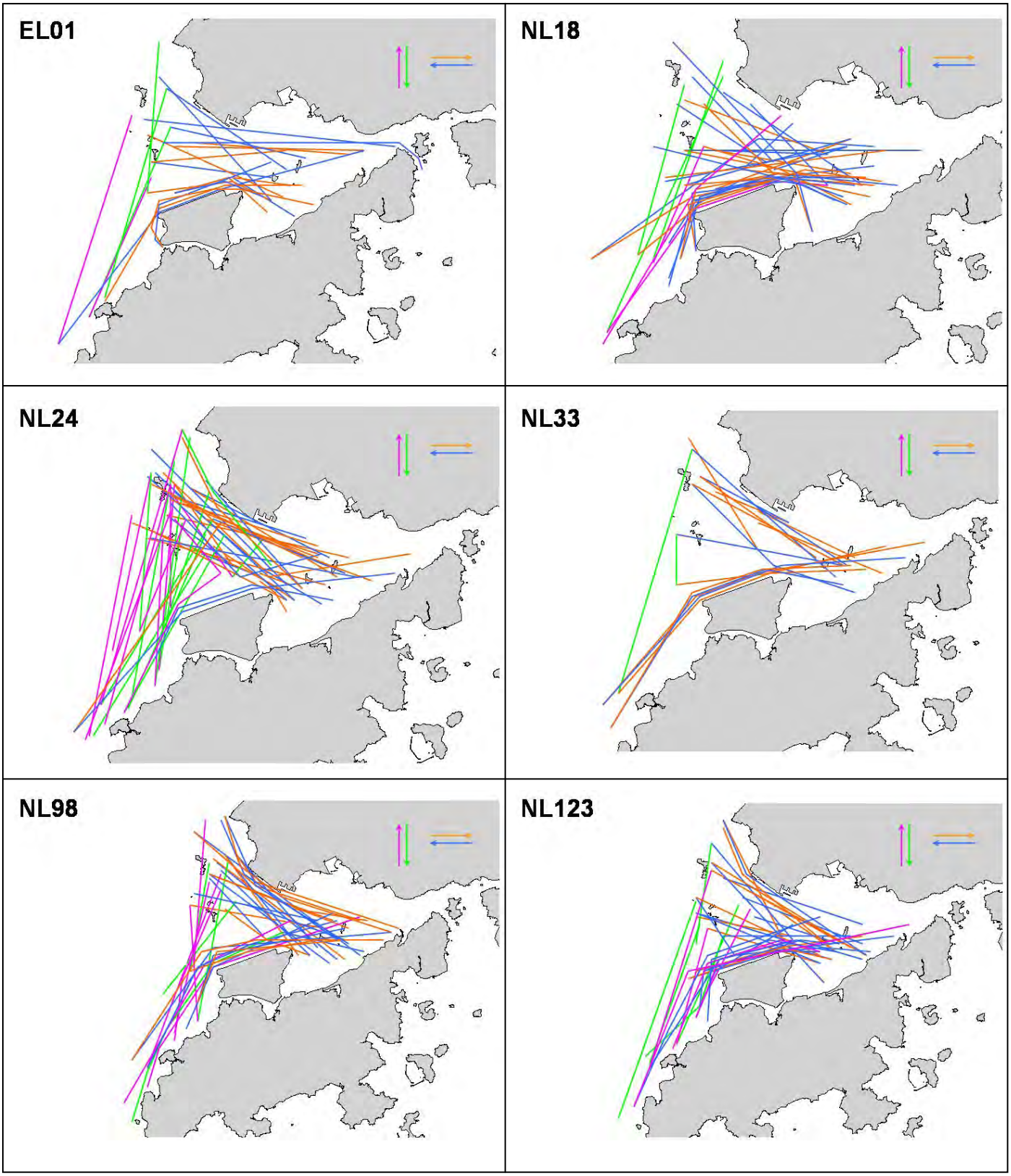


Figure 38. Segments drawn between locations of consecutive sightings that were made during the same day or in consecutive days among 12 different individual, assuming that dolphins move linearly from one sighting location to the next

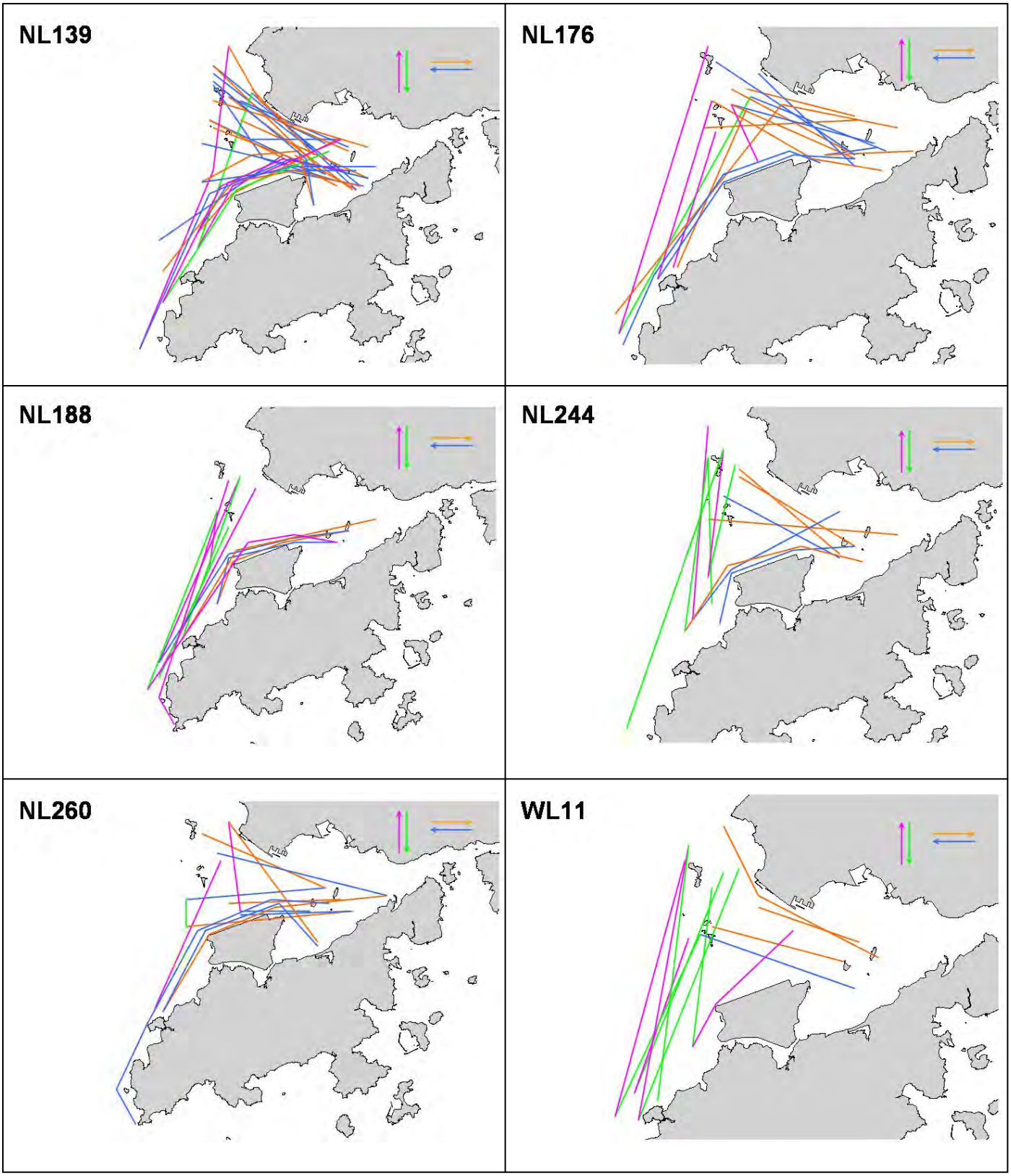


Figure 38. (cont'd)

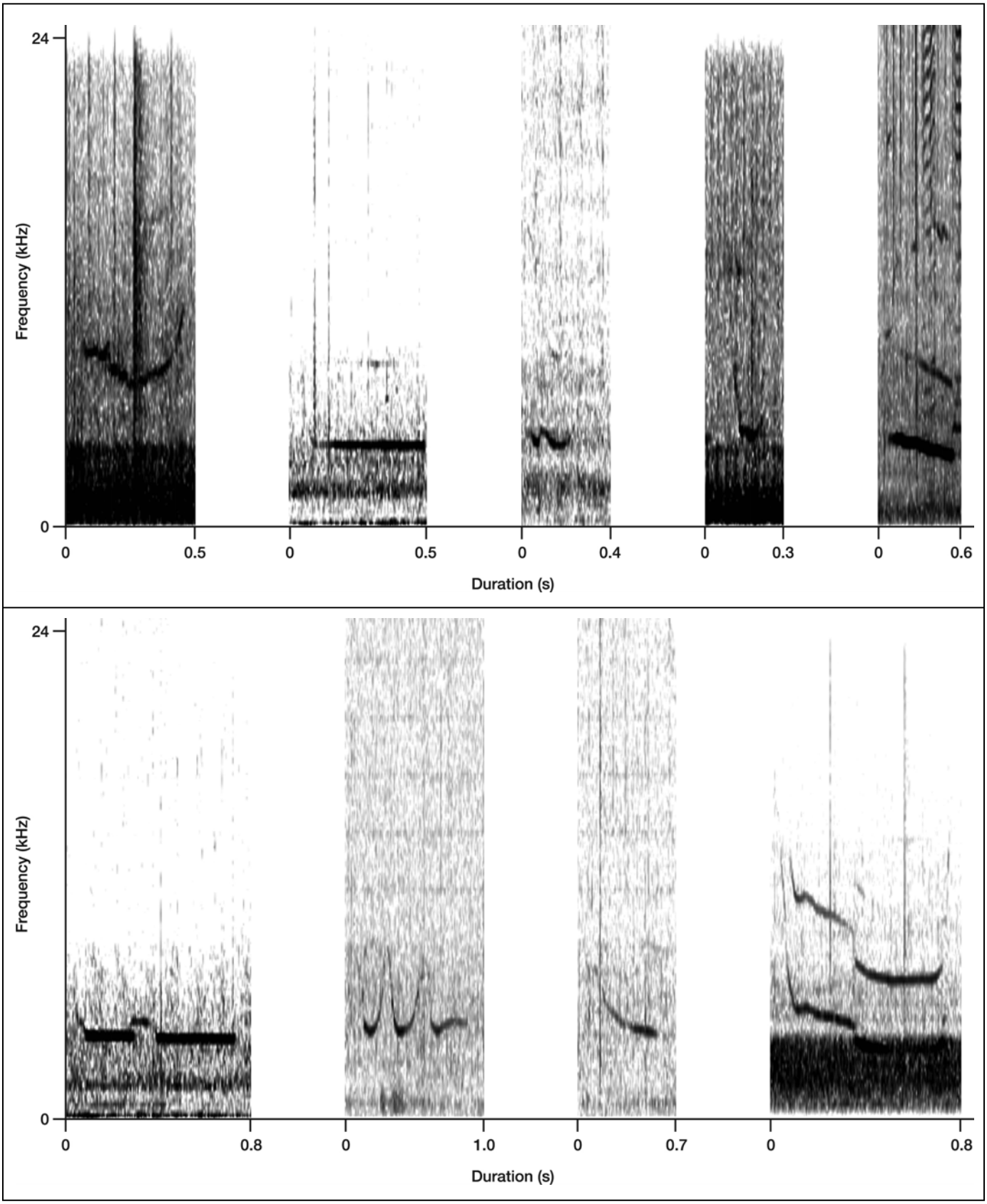


Figure 39. Spectrogram figures of whistle types 1-9 (from left to right) recorded from Chinese White Dolphins (smoothing window: Hanning; Fast Fourier Transform (FFT): 1024; hop size: 10-11 ms; FFT window overlap: 50%).

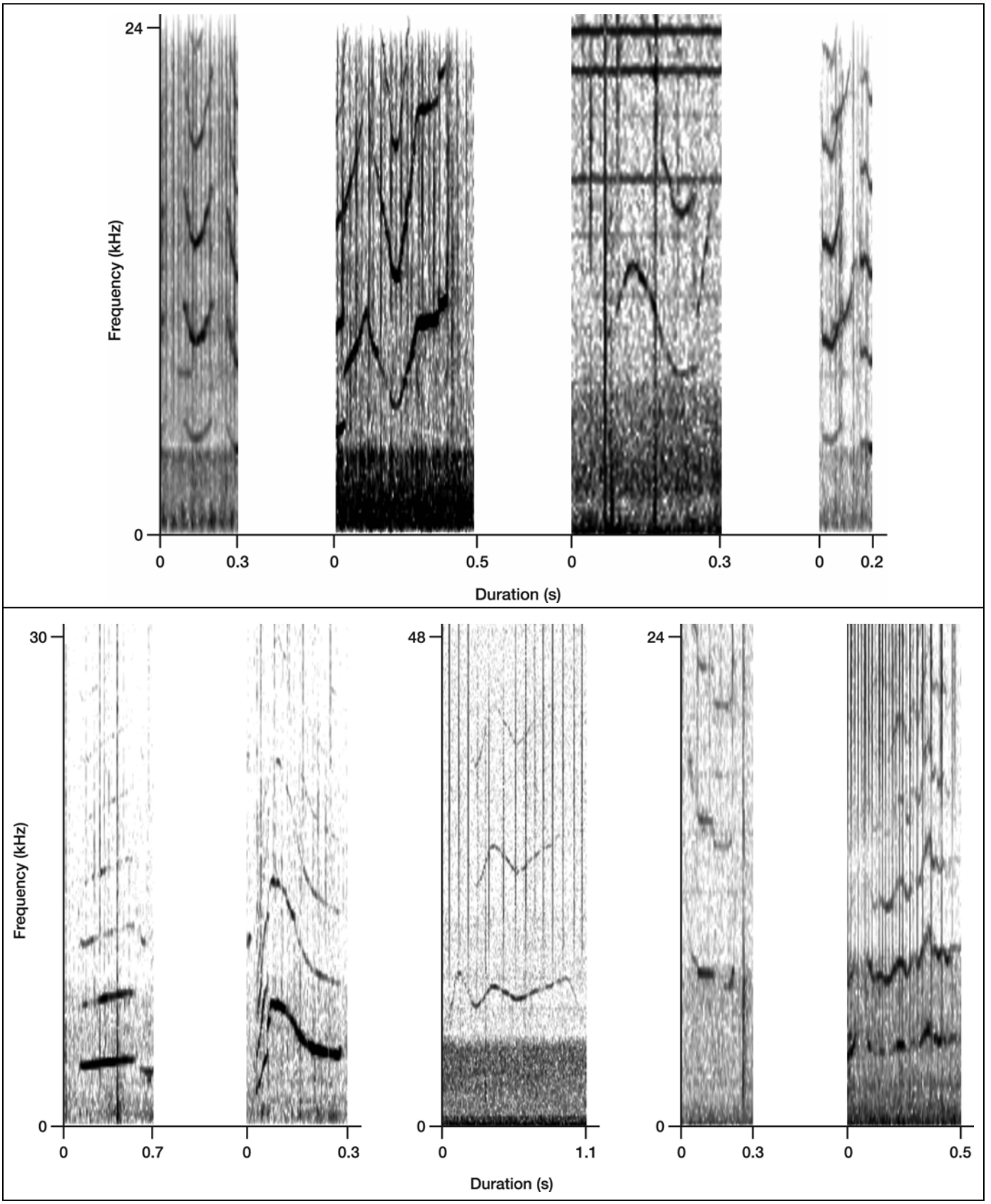


Figure 40. Spectrogram figures of whistle types 10-18 (from left to right) recorded from Chinese White Dolphins (smoothing window: Hanning; Fast Fourier Transform (FFT): 1024; hop size: 10-11 ms; FFT window overlap: 50%).

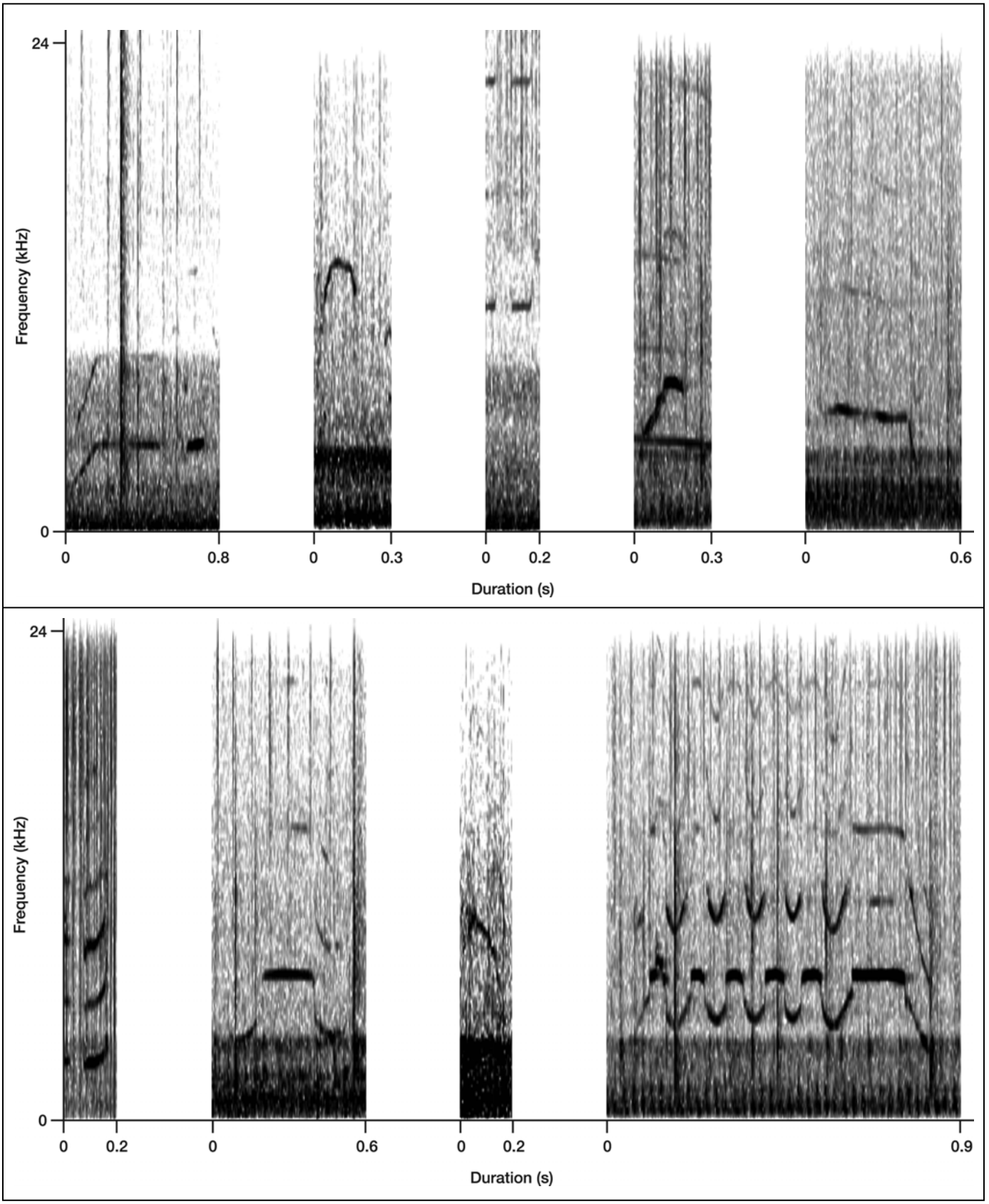


Figure 41. Spectrogram figures of whistle types 19-27 (from left to right) recorded from Chinese White Dolphins (smoothing window: Hanning; Fast Fourier Transform (FFT): 1024; hop size: 10-11 ms; FFT window overlap: 50%).

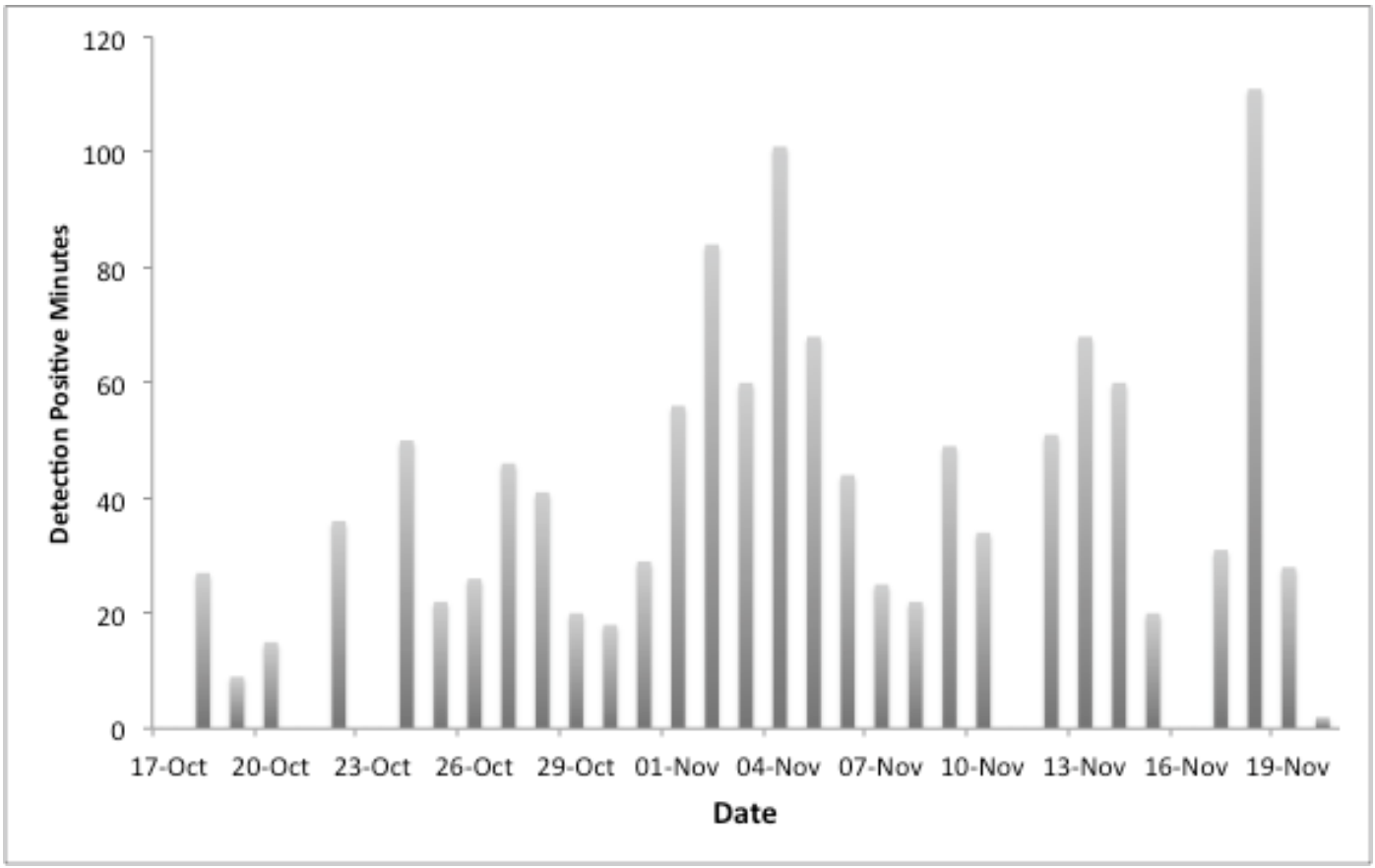


Figure 42. Daily detection positive minutes (DPM) of Chinese White Dolphin click trains through October 17, 2012 to November 20, 2012 at the Lung Kwu Chau east buoy

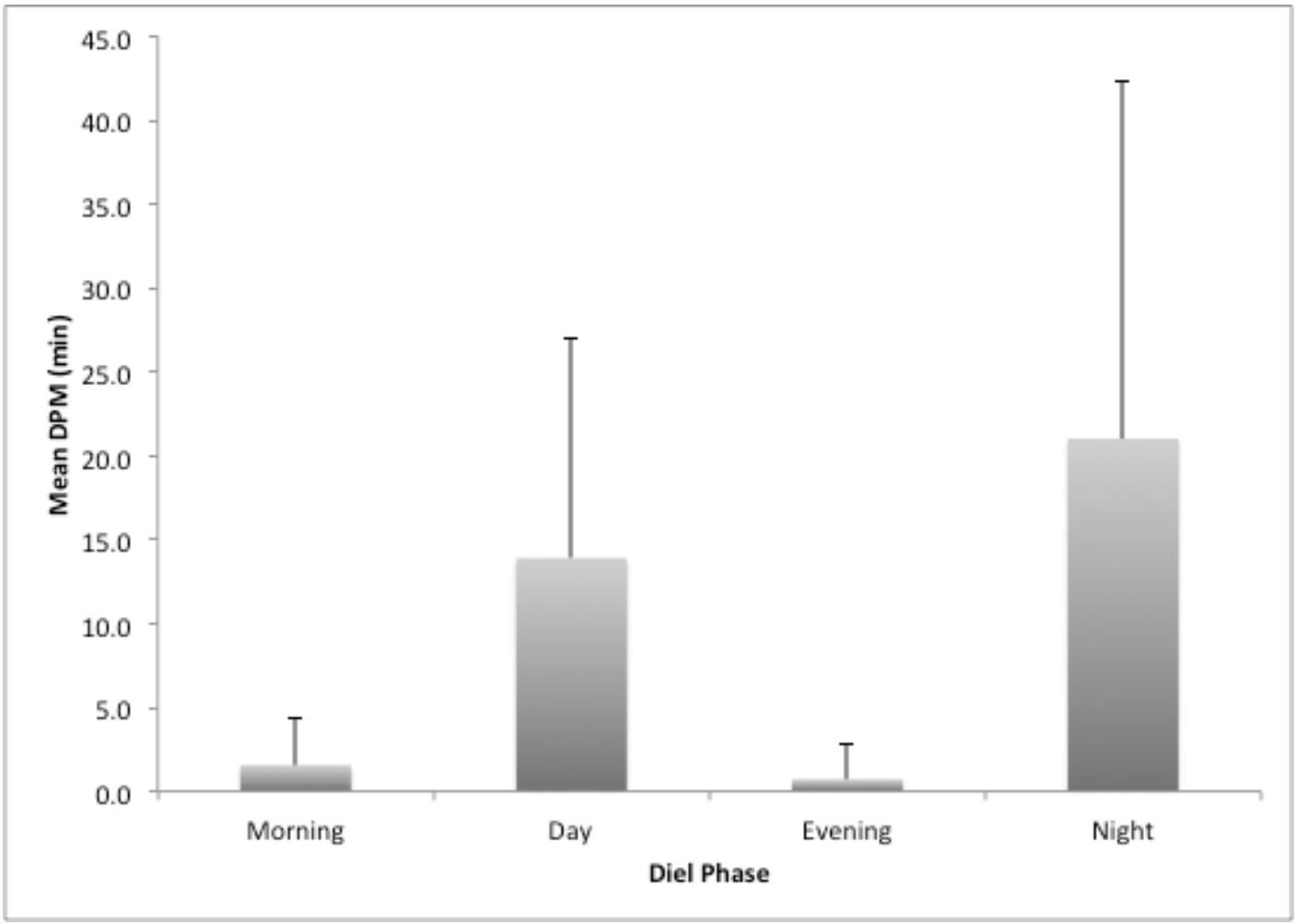


Figure 43. Mean detection positive minutes (DPM) and standard deviation for each diel phase of Chinese White Dolphin click trains through October 17, 2012 to November 20, 2012 at the Lung Kwu Chau east buoy (note: morning and evening phases are shorter in duration and thus have a lower mean DPM)