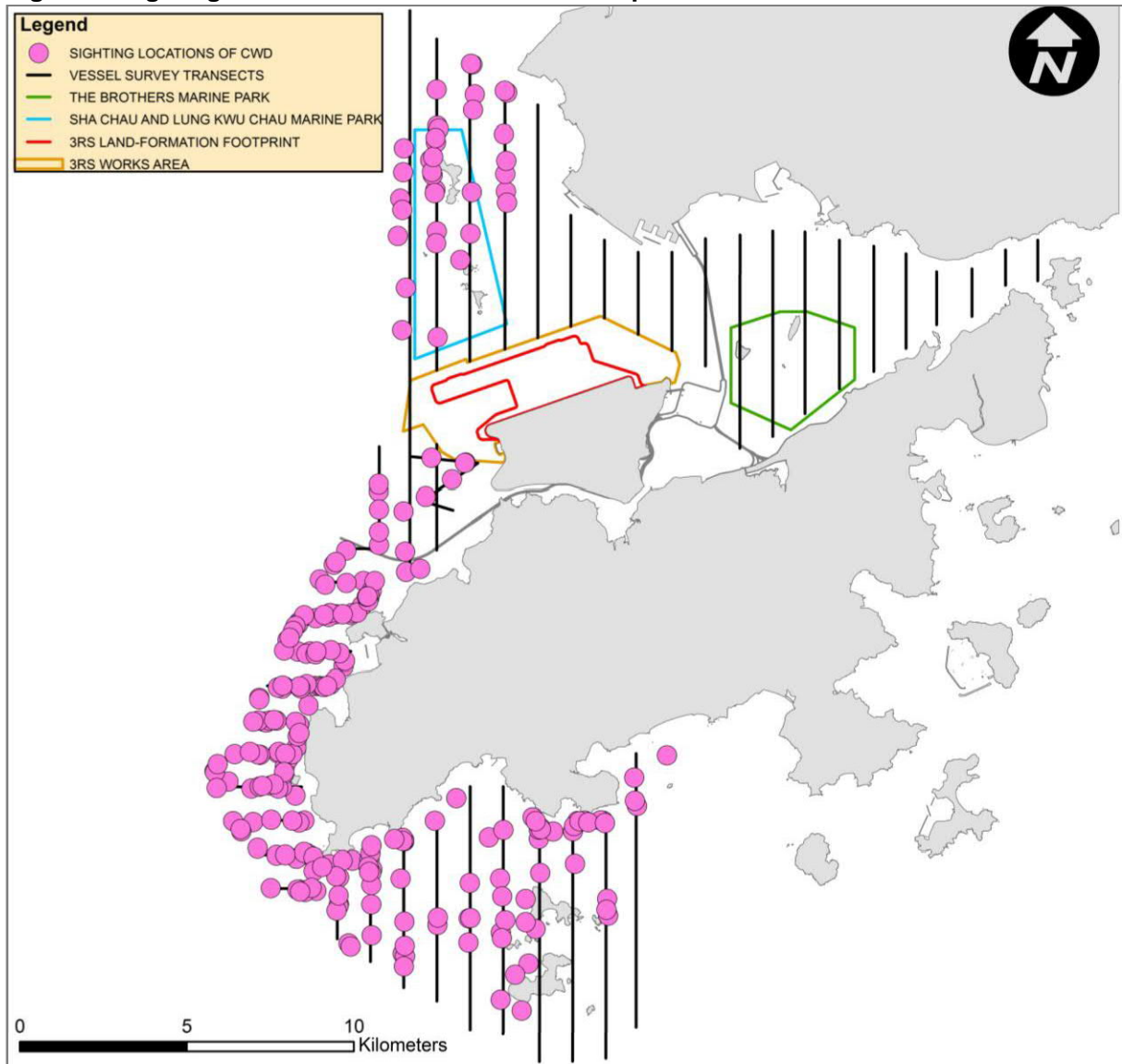
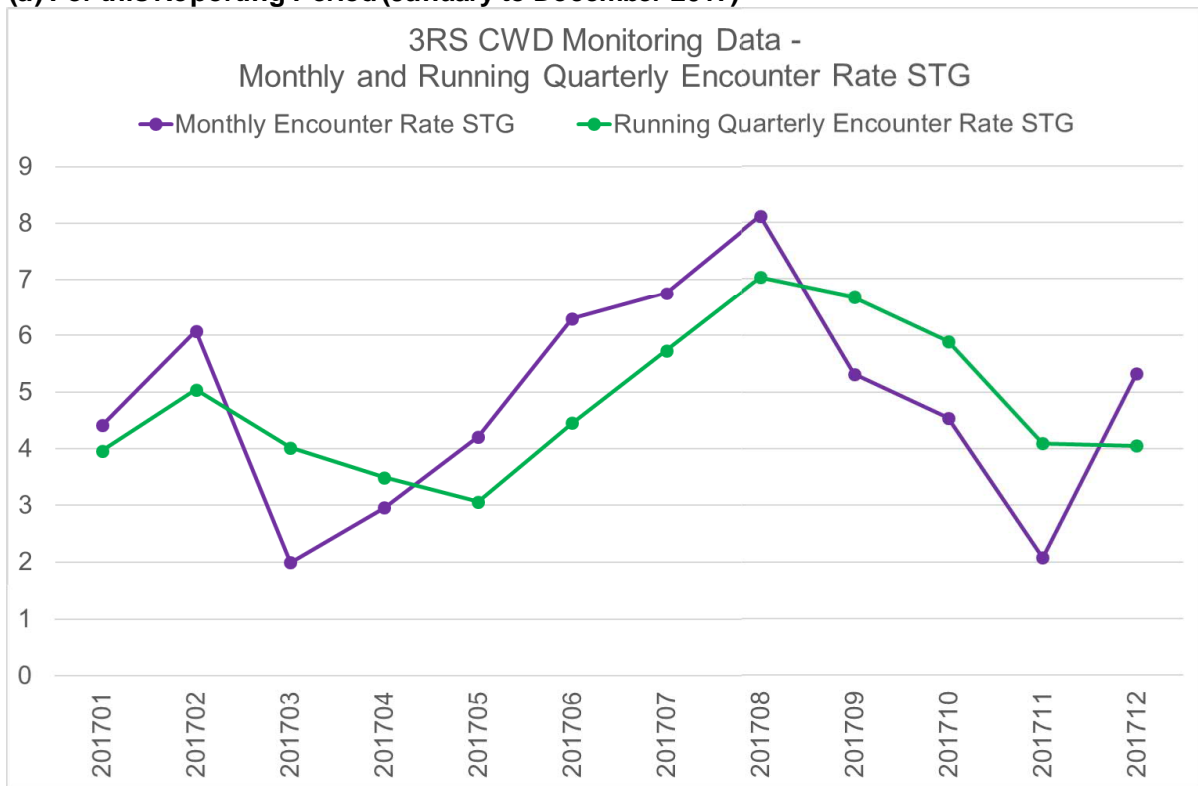


Appendix E. Chinese White Dolphin Monitoring Results

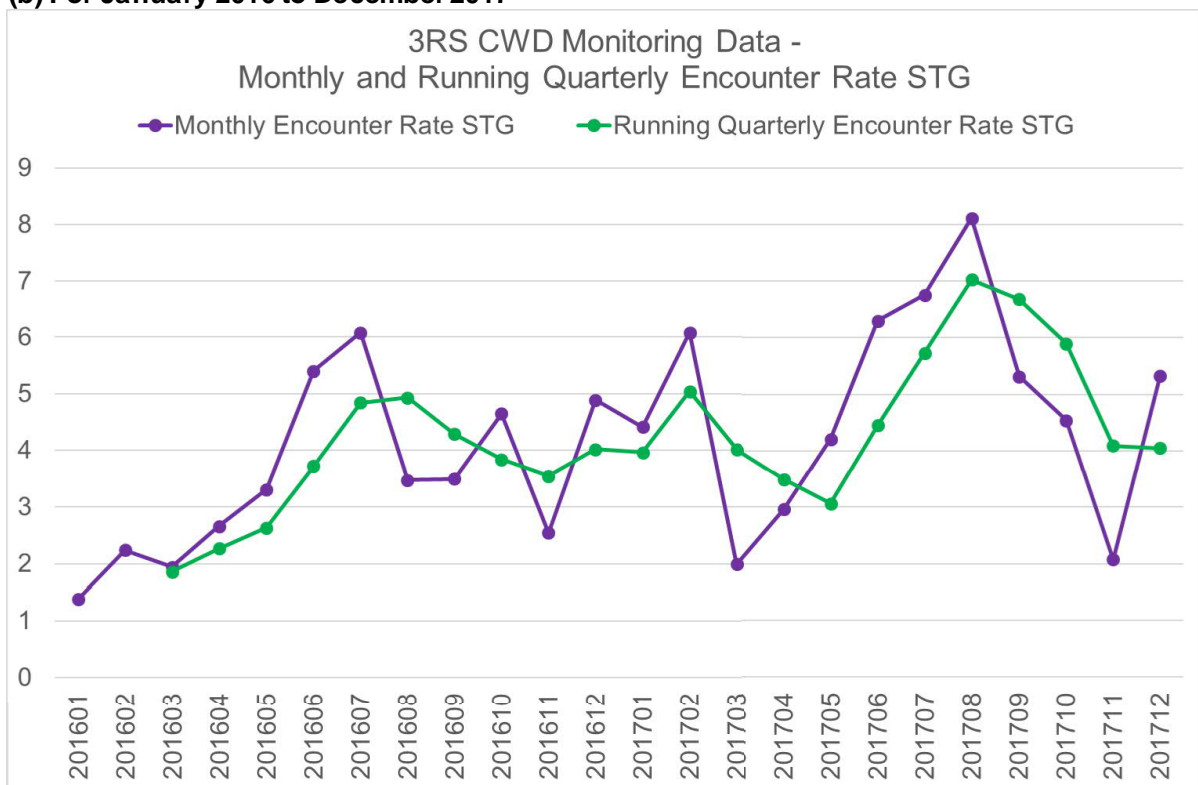
Figure 1: Sightings Distribution of Chinese White Dolphins



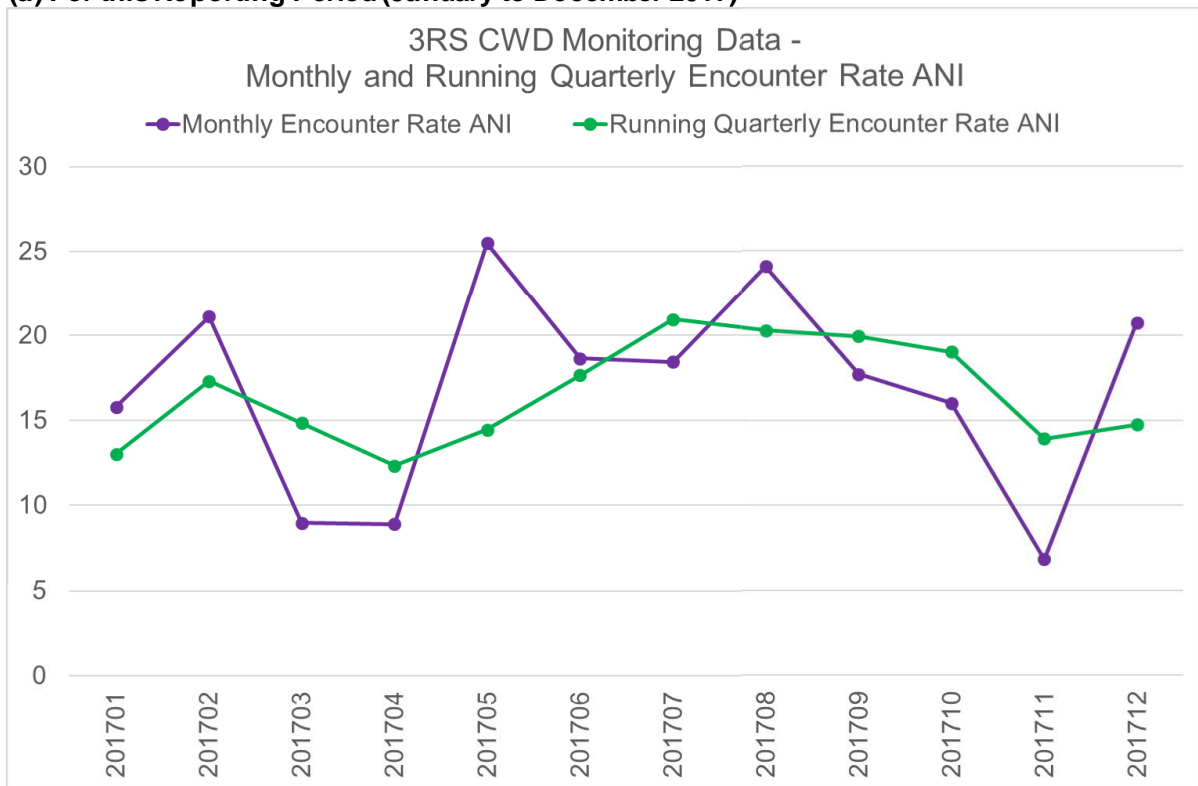
**Figure 2: Graphical Presentation of Monthly and Running Quarterly STG
(a) For this Reporting Period (January to December 2017)**



(b) For January 2016 to December 2017



**Figure 3: Graphical Presentation of Monthly and Running Quarterly ANI
(a) For this Reporting Period (January to December 2017)**



(b) For January 2016 to December 2017

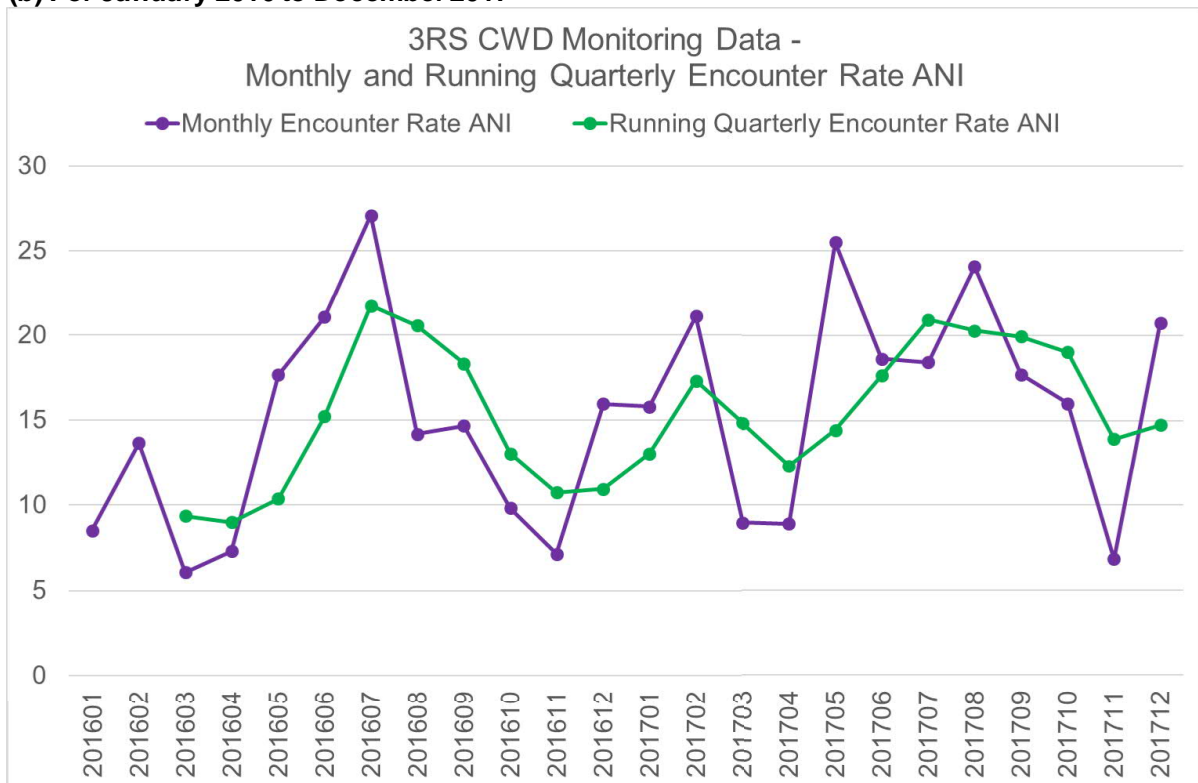
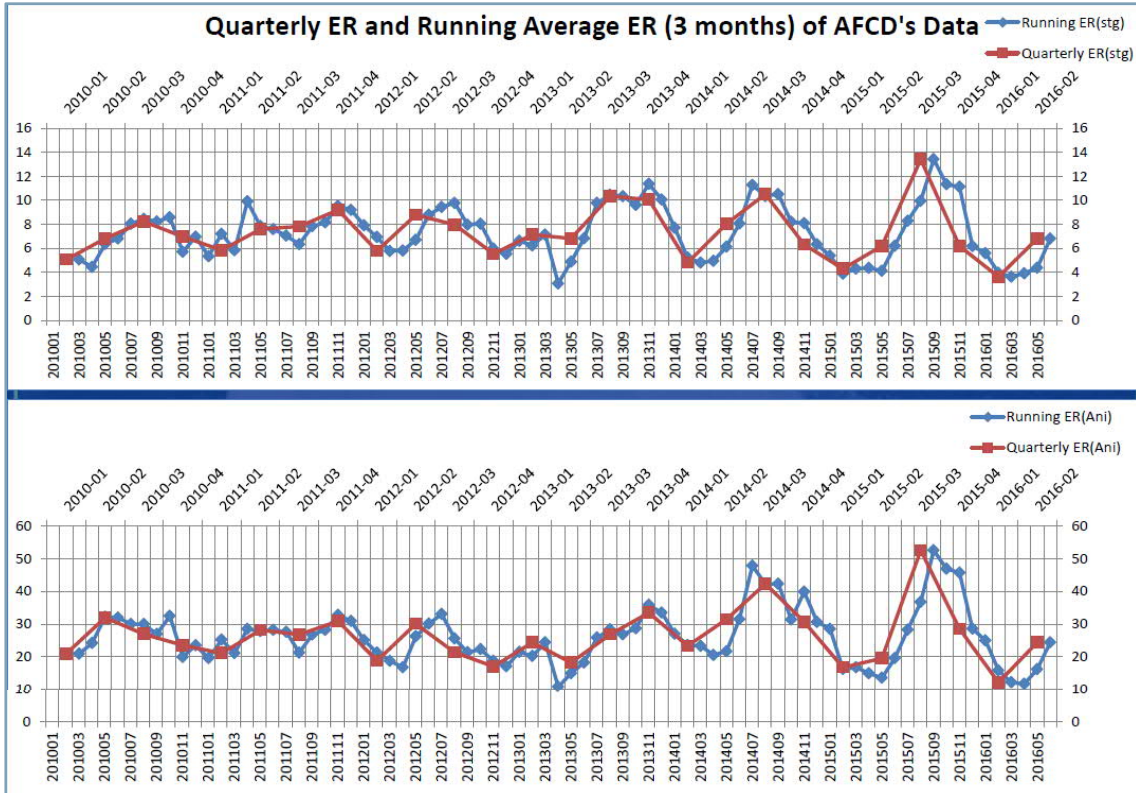
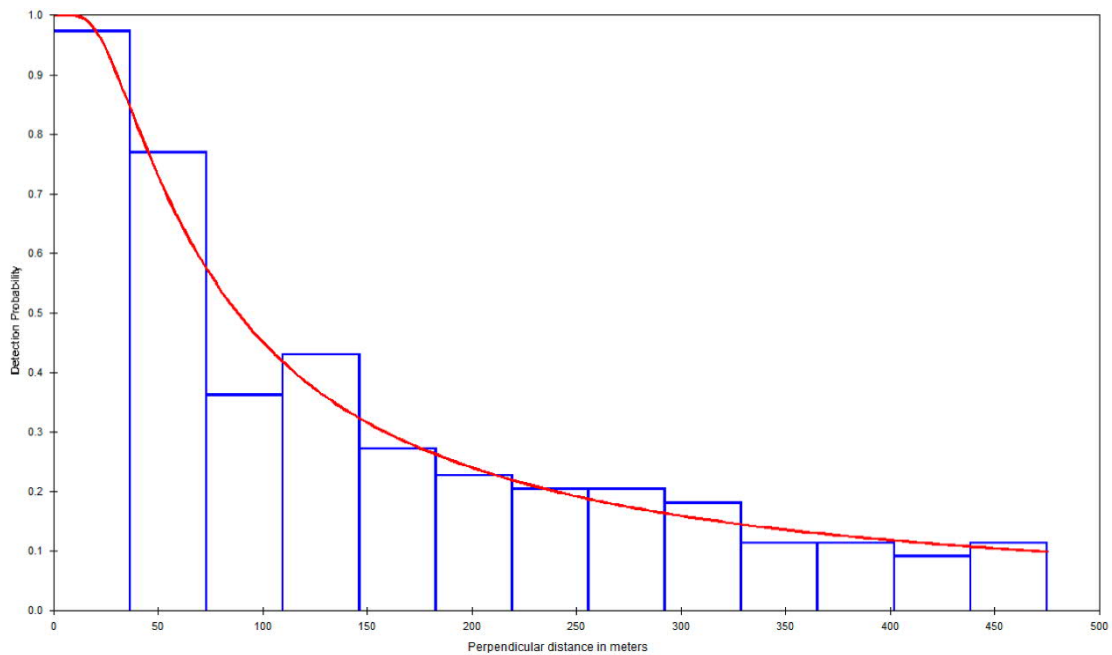


Figure 4: Quarterly Encounter Rates and Running Average Encounter Rates from AFCD's Monitoring Data



Source: from AFCD in mid-2016

Figure 5: Fitted Detection Function of the 2017 CWD Sightings, Pooled from All Western Hong Kong Survey Areas



Note: Detection function used a Hazard Rate model with a polynomial adjustment.

Figure 6: Quantitative Grid Analysis – SPSE and DPSE of CWDs with Corrected Survey Effort per km² from Dec 2015 to Dec 2016 and Year 2017

[SPSE = no. of on-effort dolphin sightings per 100 units of survey effort, DPSE = no. of dolphins per 100 units of survey effort]

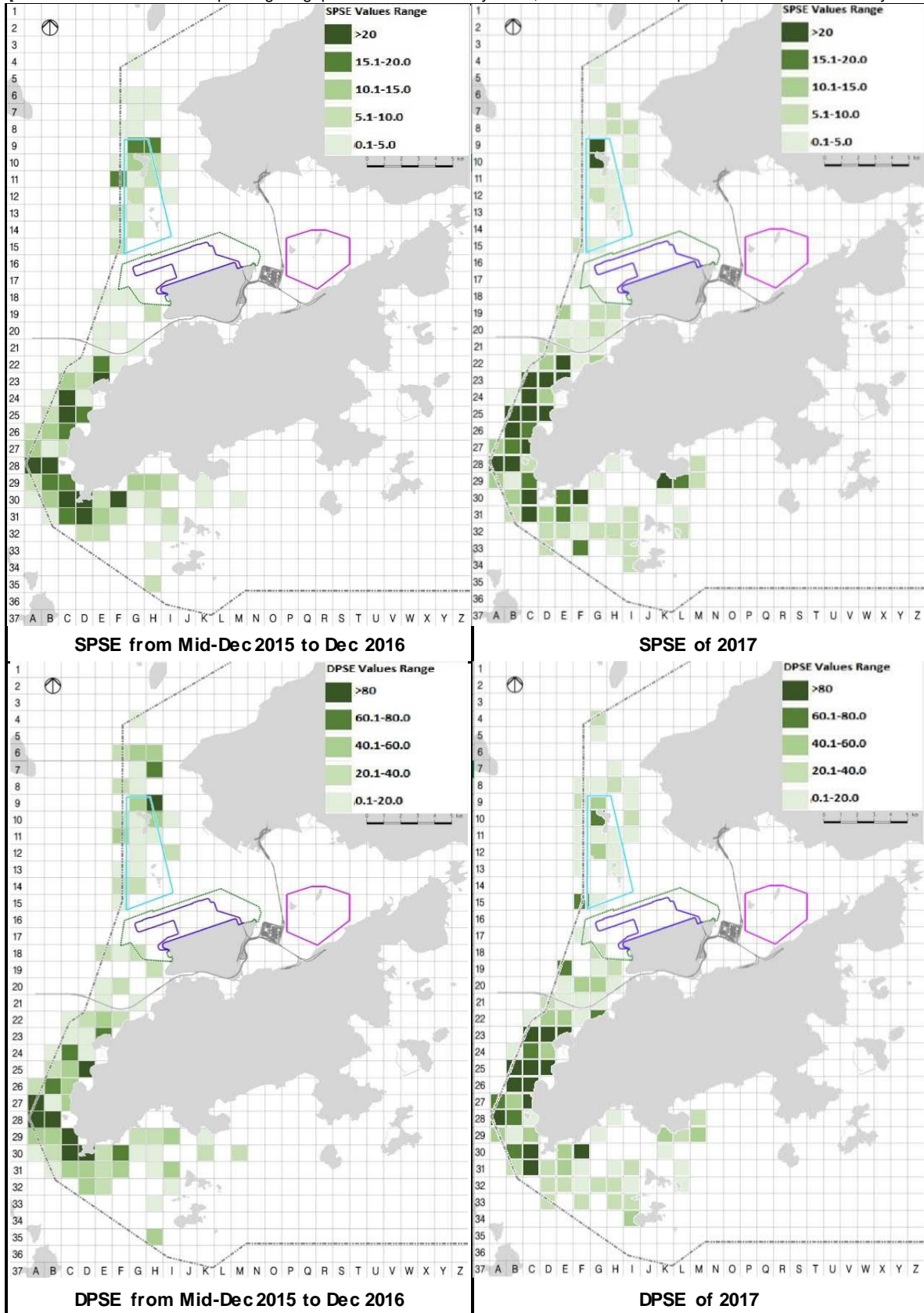


Figure 7: Cumulative SPSE and DPSE of CWDs with Corrected Survey Effort per km² from Dec 2015 to Dec 2017

[SPSE = no. of on-effort dolphin sightings per 100 units of survey effort, DPSE = no. of dolphins per 100 units of survey effort]

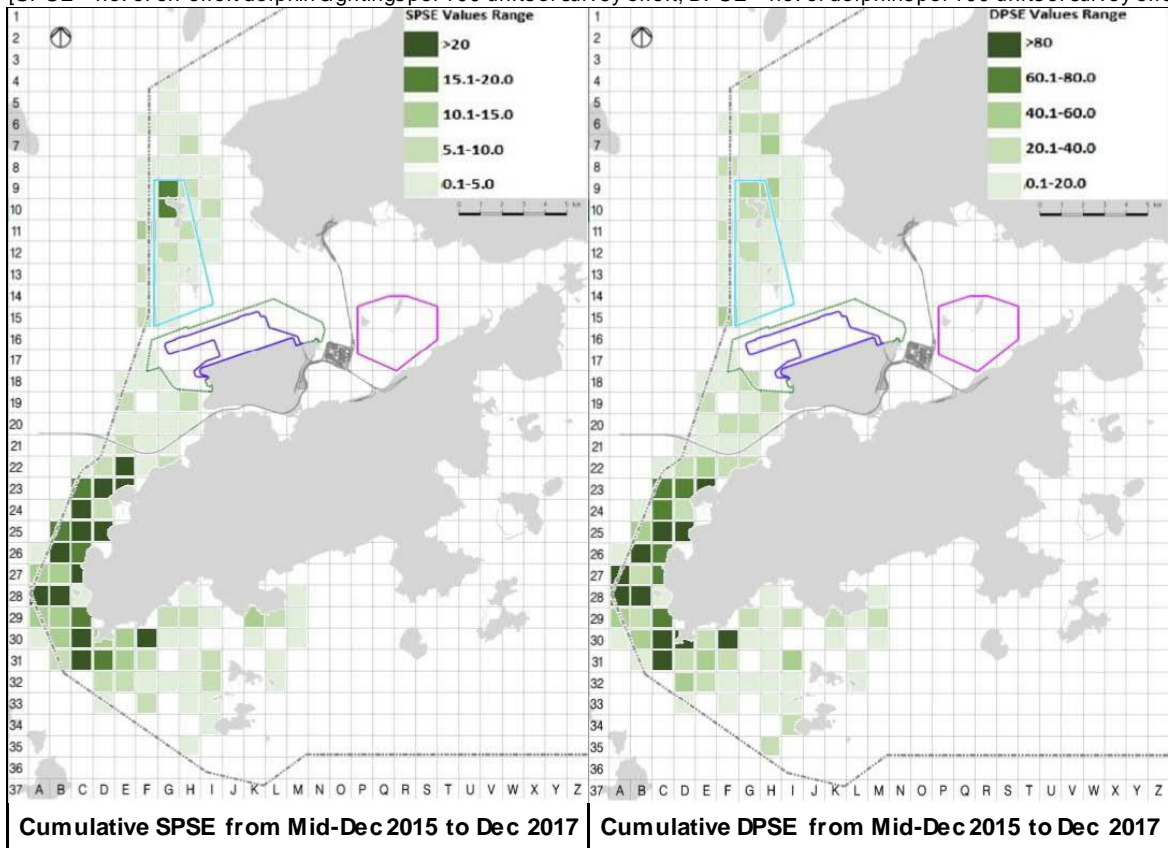
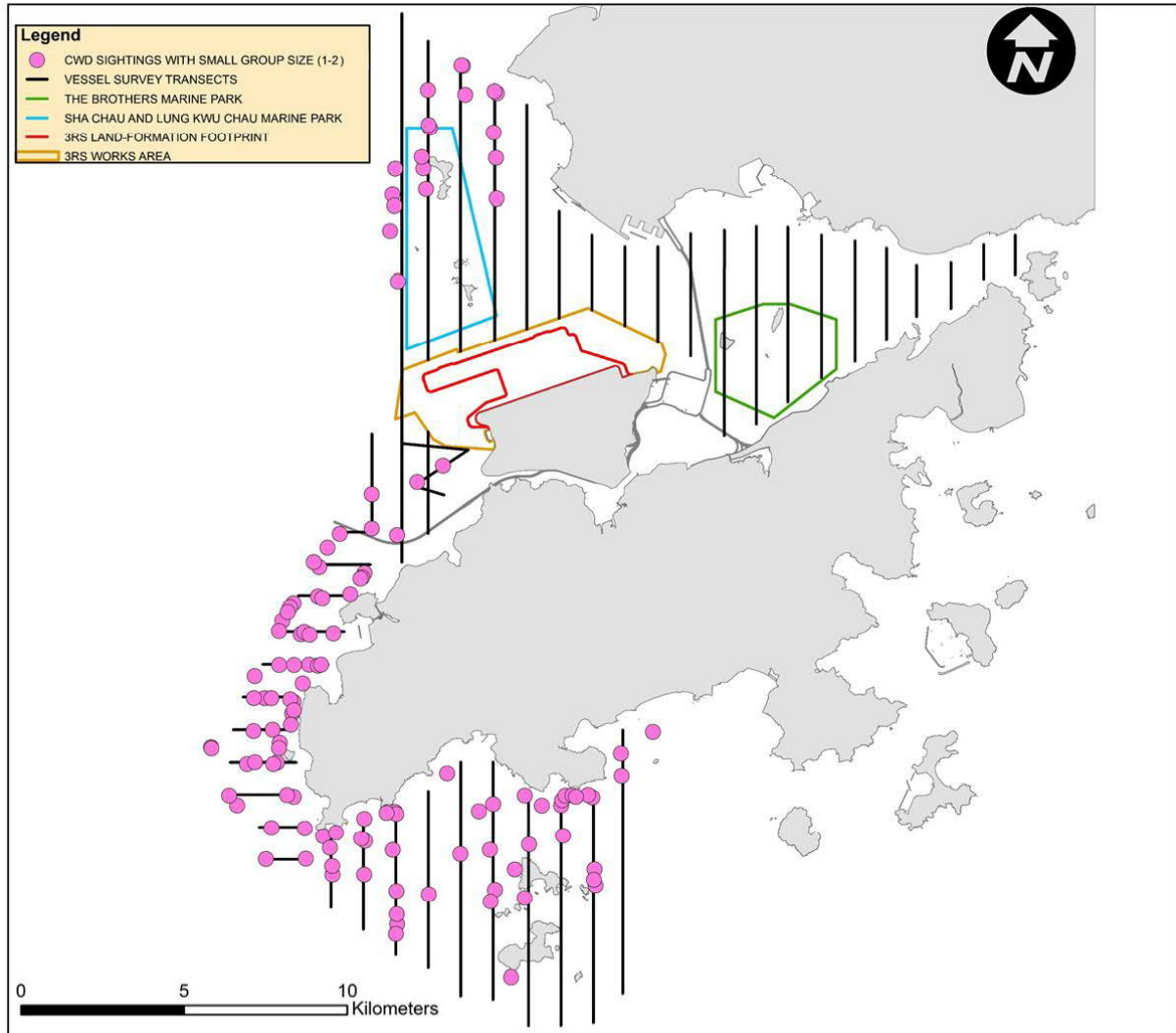


Figure 8: Sightings Distribution of Chinese White Dolphins with Different Group Sizes
(a) Small Group Size (1 to 2 dolphins)



(b) Medium Group Size (3 to 9 dolphins) and Large Group Size (10 or more dolphins)

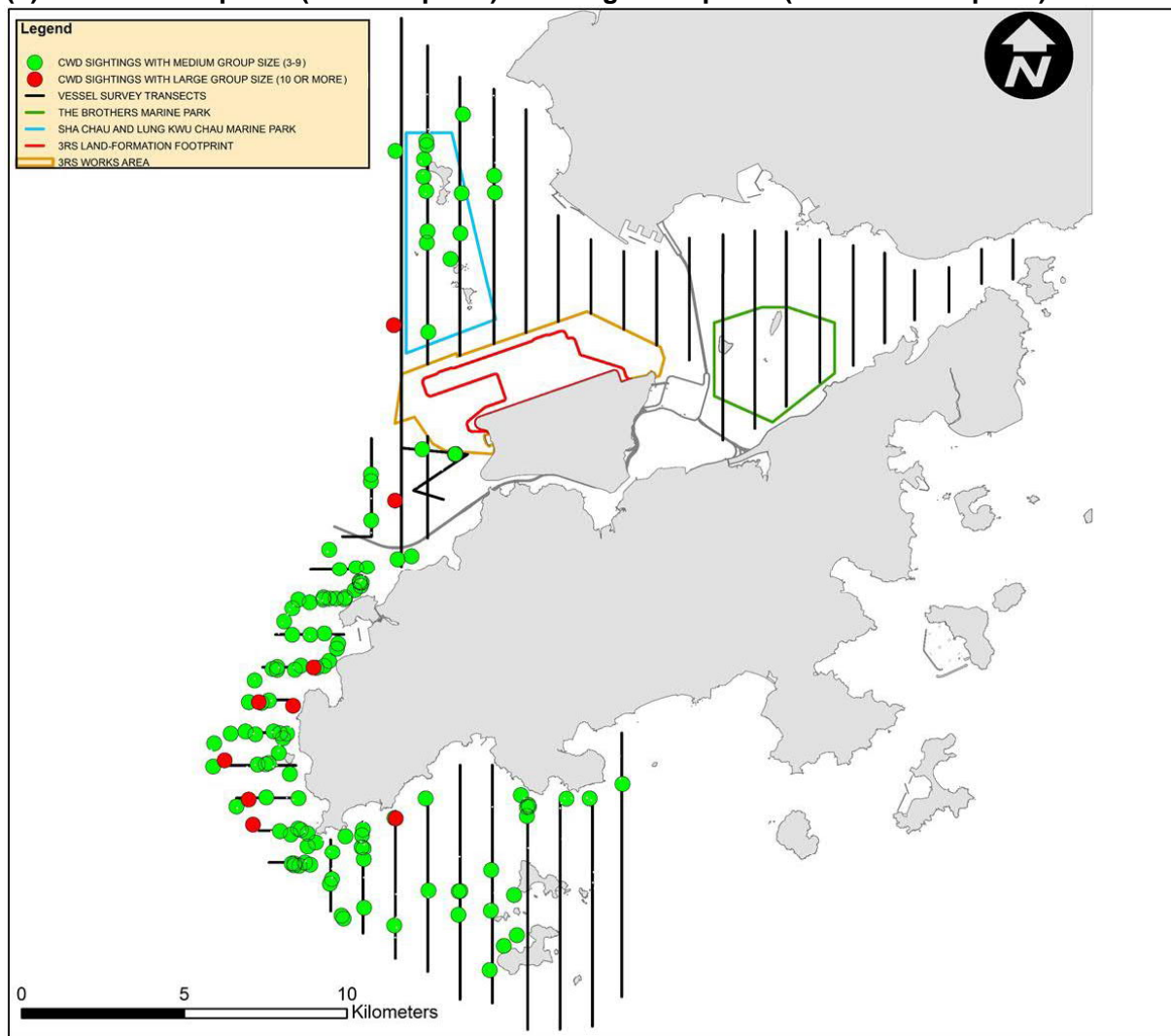


Figure 9: Sighting Locations of CWD Groups Engaged in Different Activities

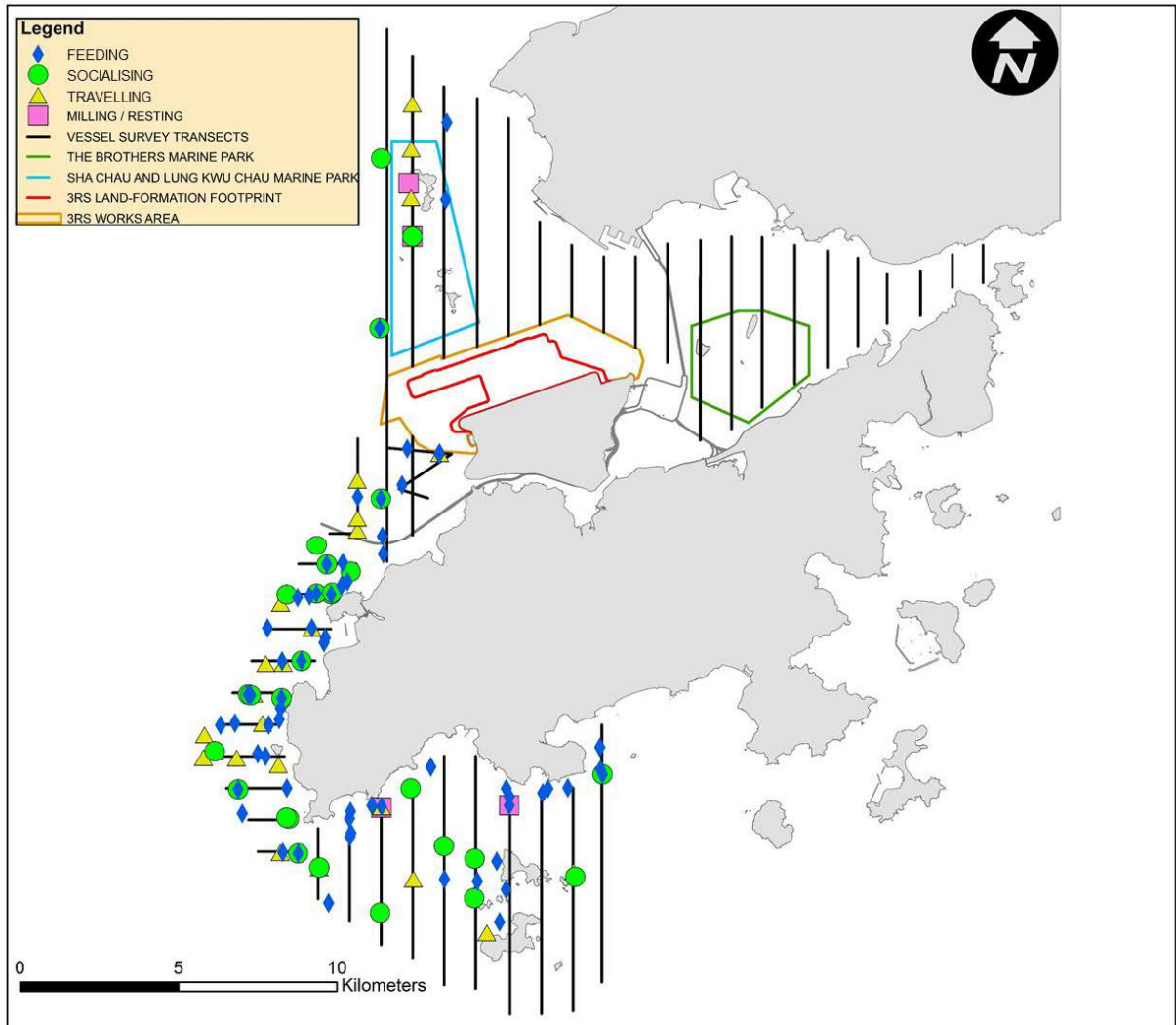


Figure 10: Sighting Locations of CWD Groups in Association with Fishing Boat

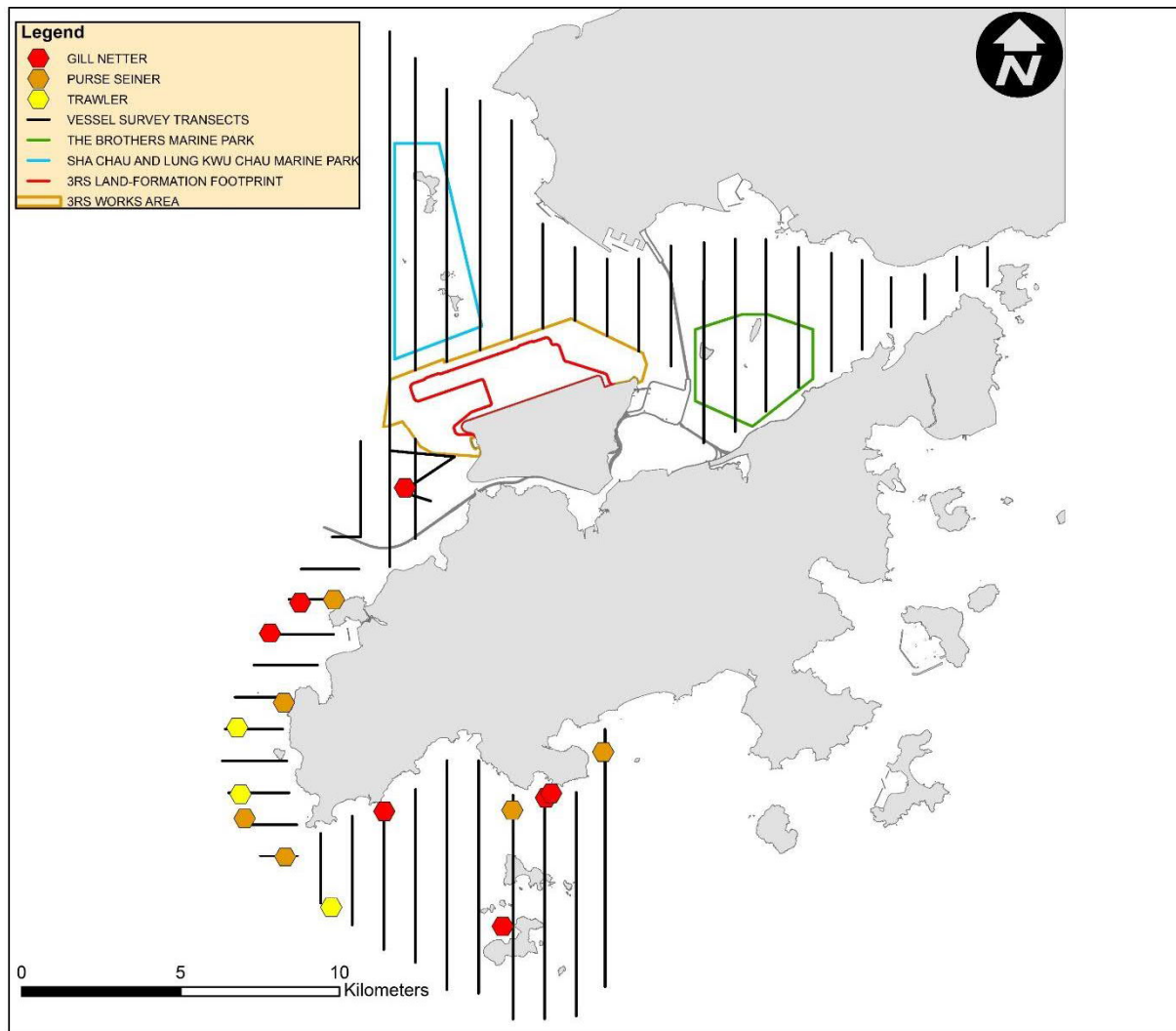


Figure 11: Sighting Locations of Mother-Calf Pairs

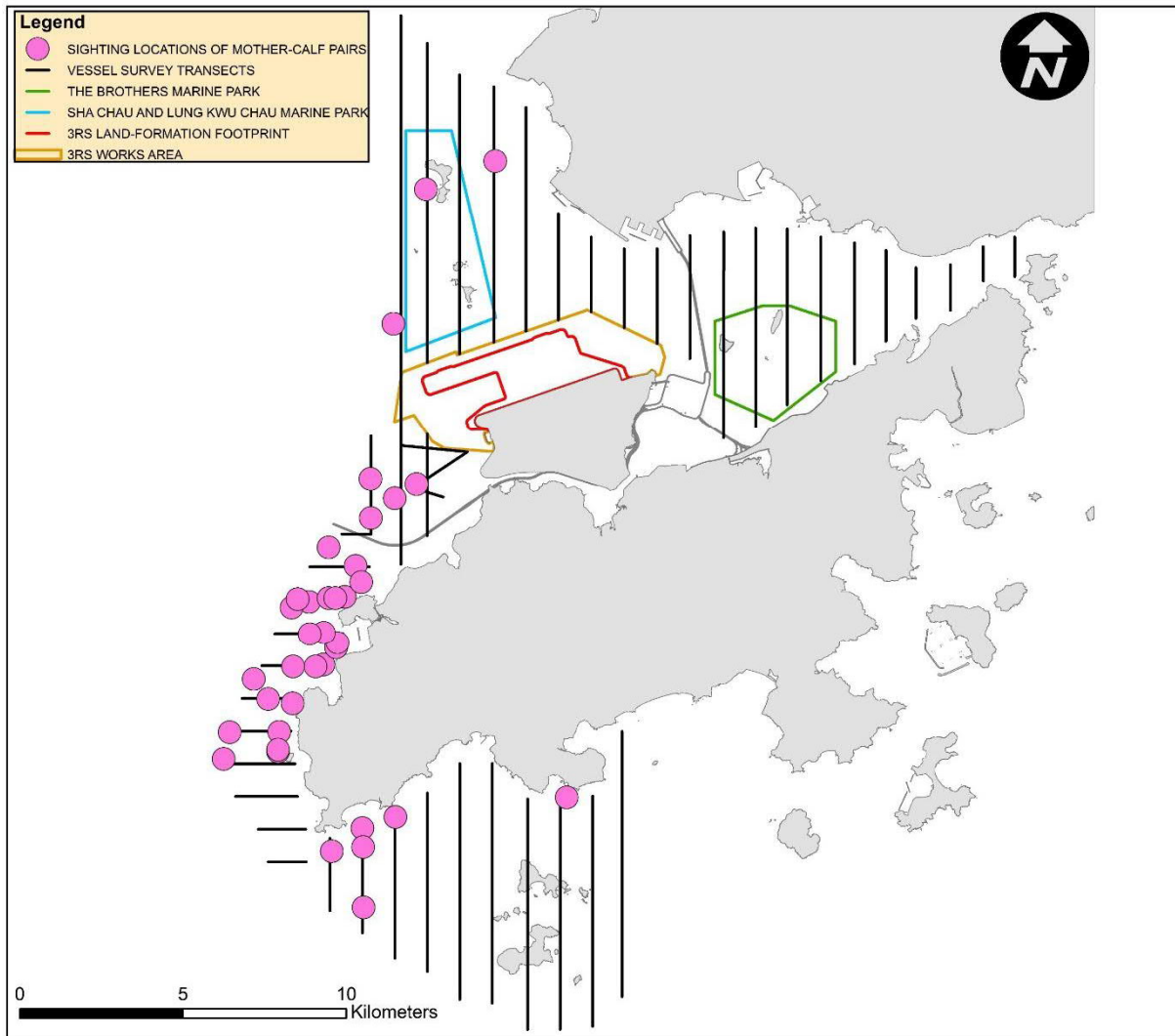
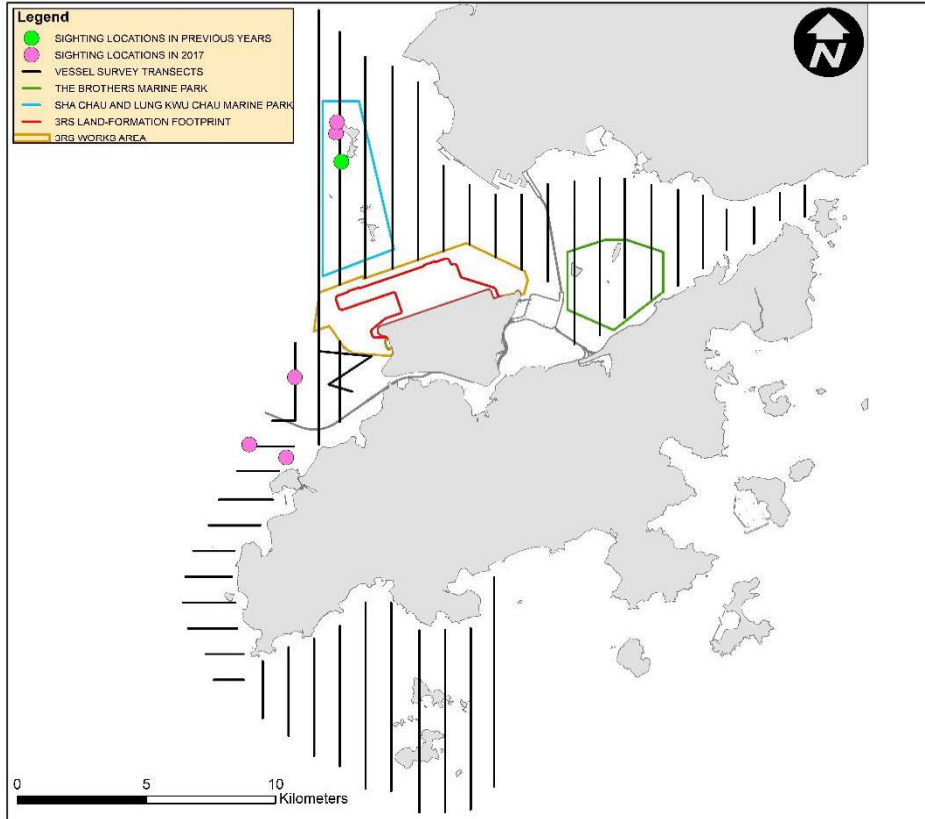
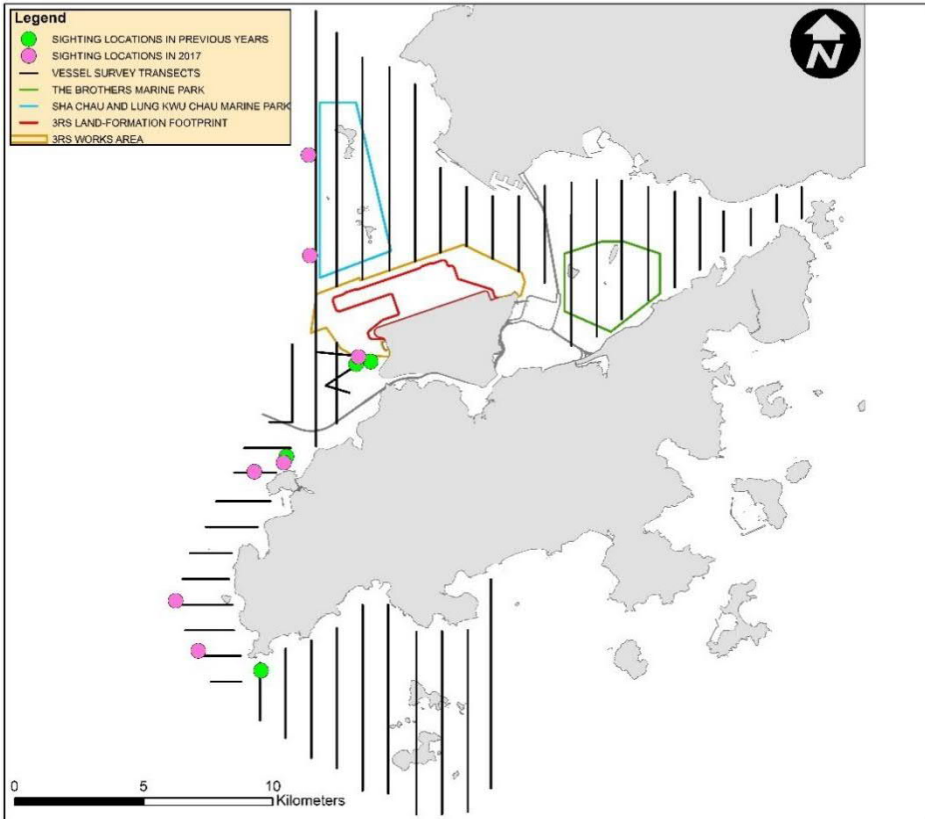


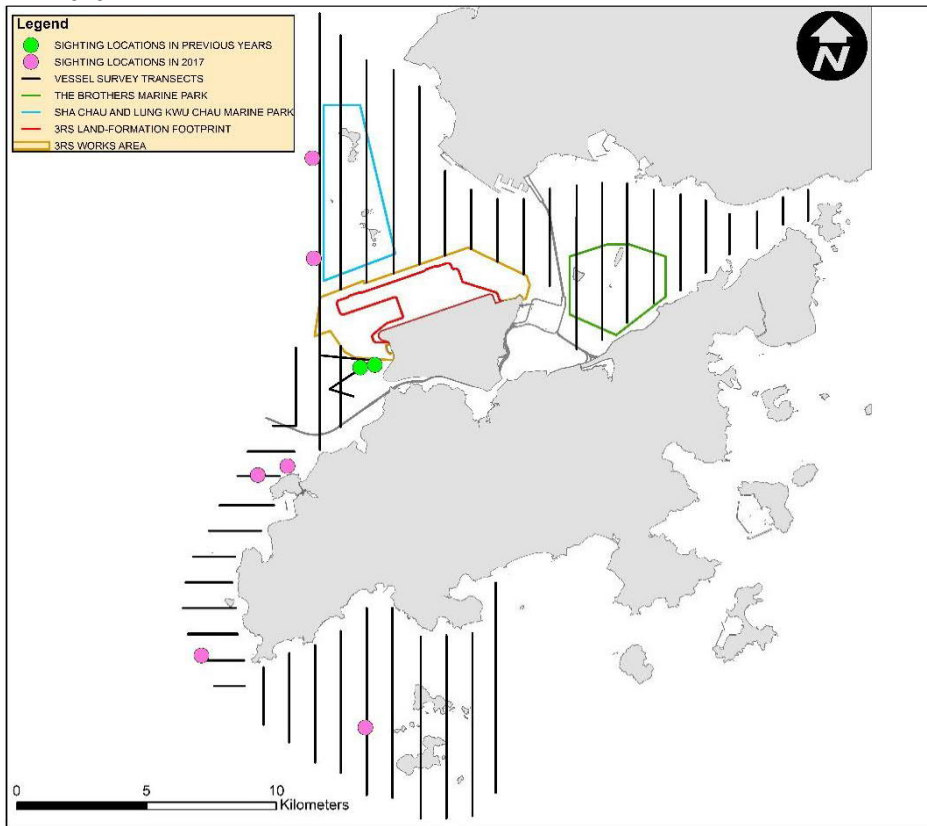
Figure 12 (batch): Photo Identification – Re-sighting Locations
NLMM016



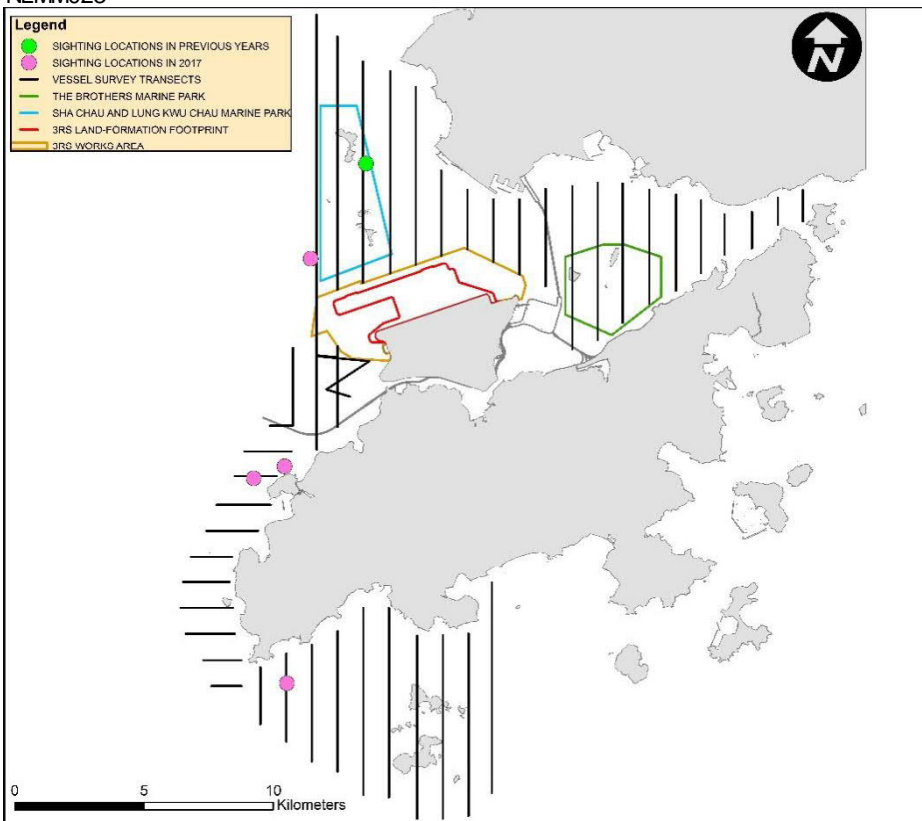
NLMM019



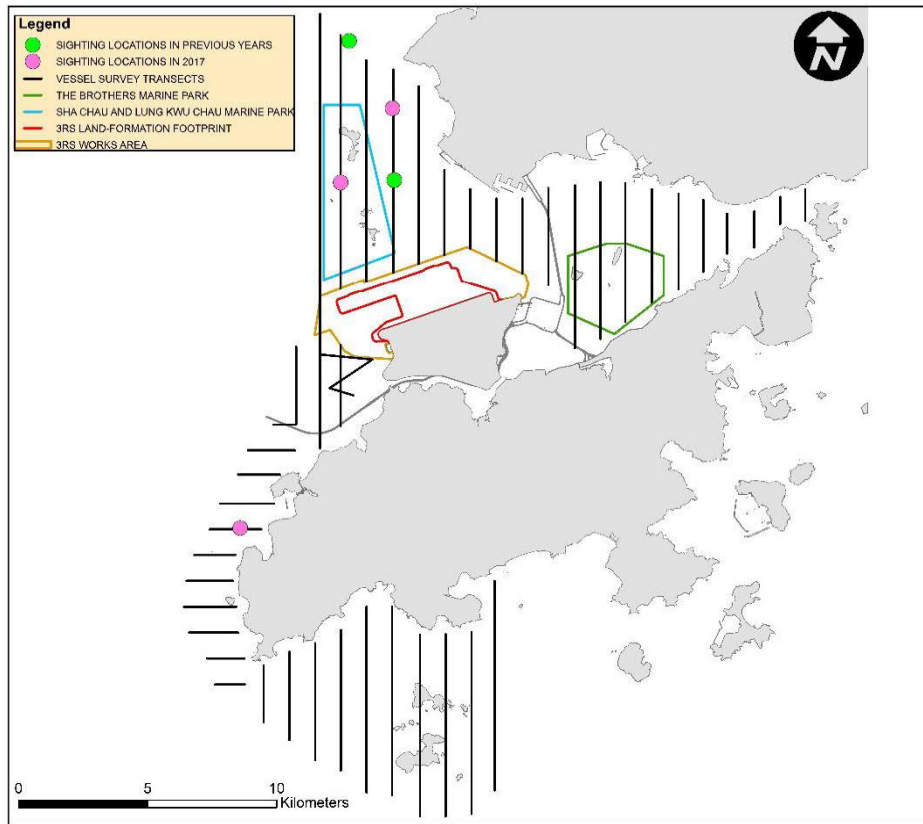
NLMM020



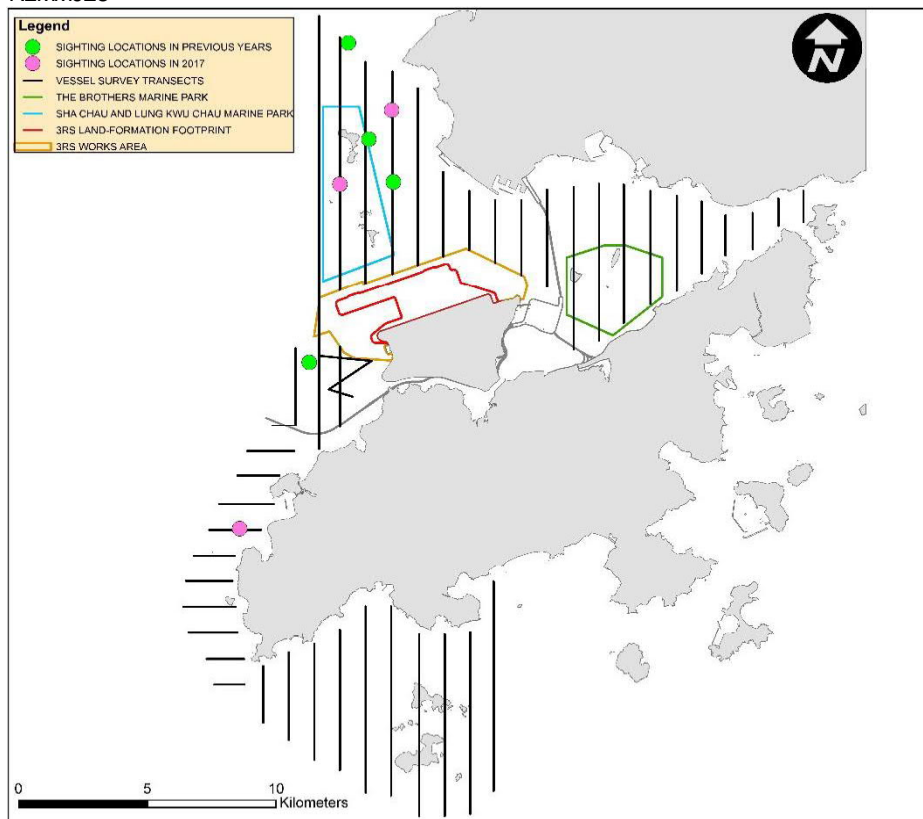
NLMM023



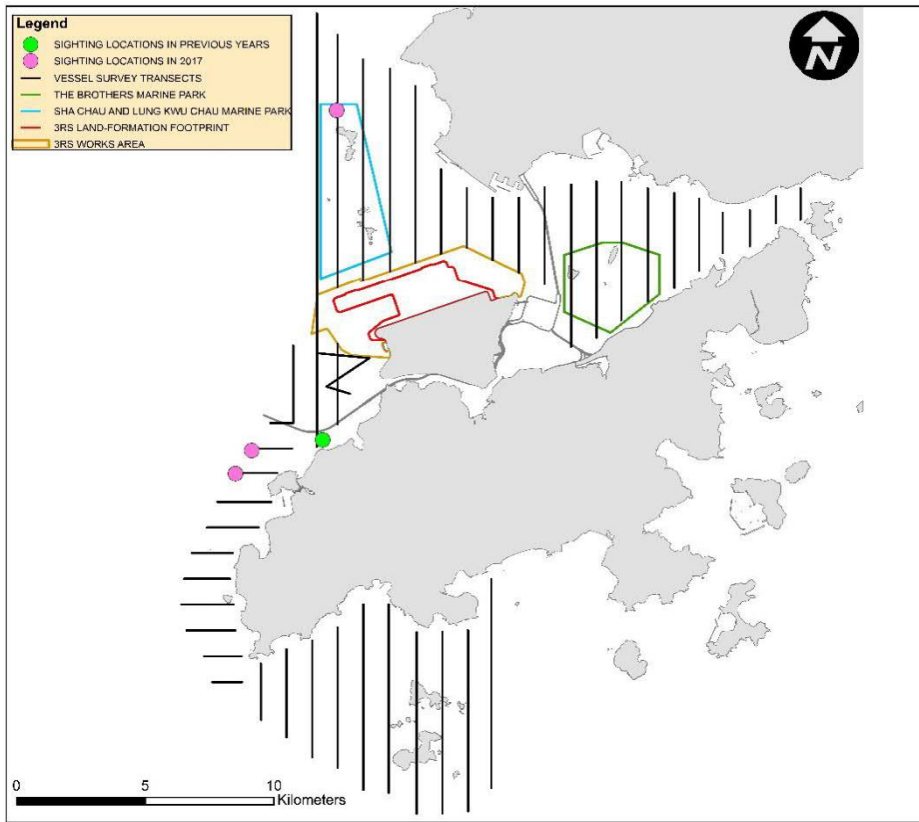
NLMM027



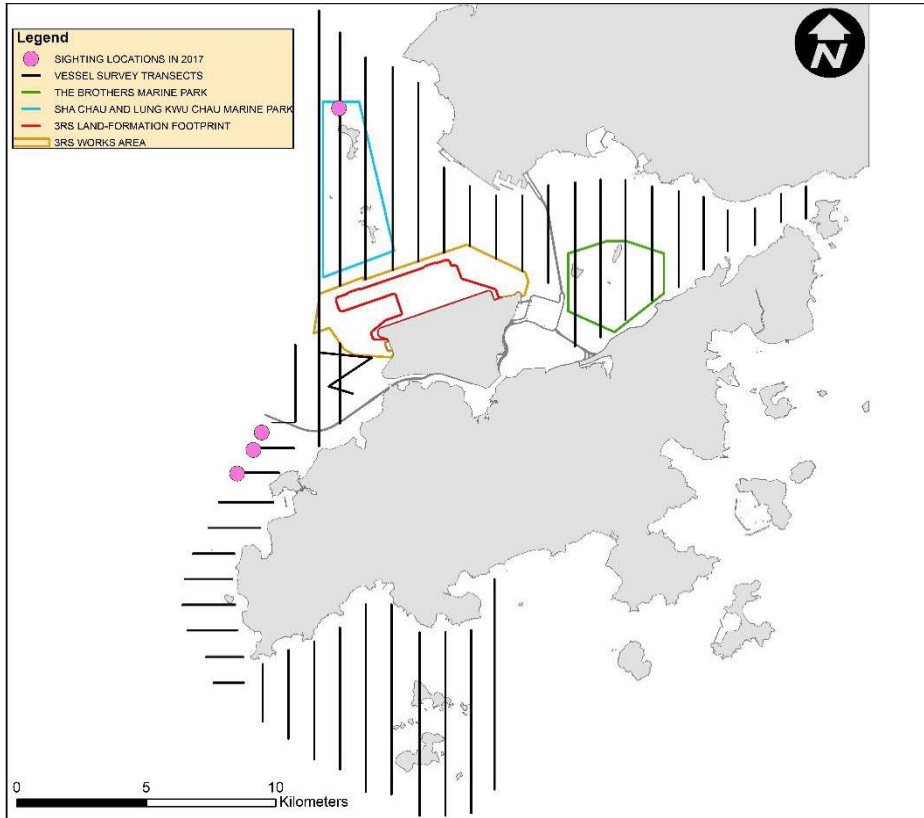
NLMM028



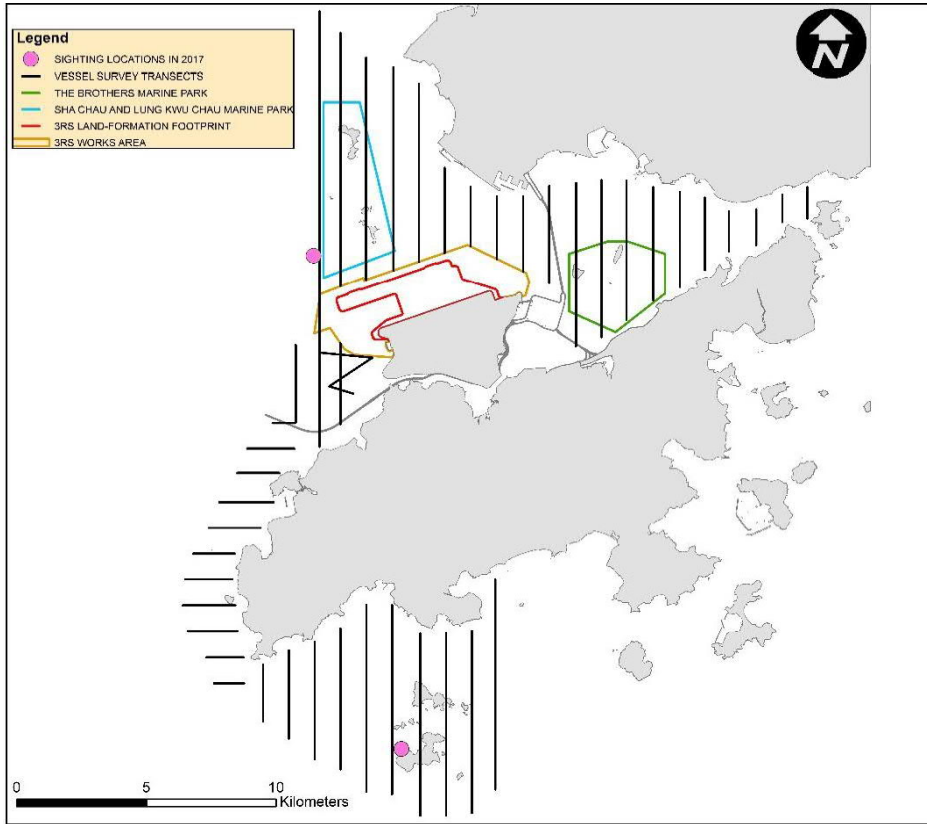
NLMM033



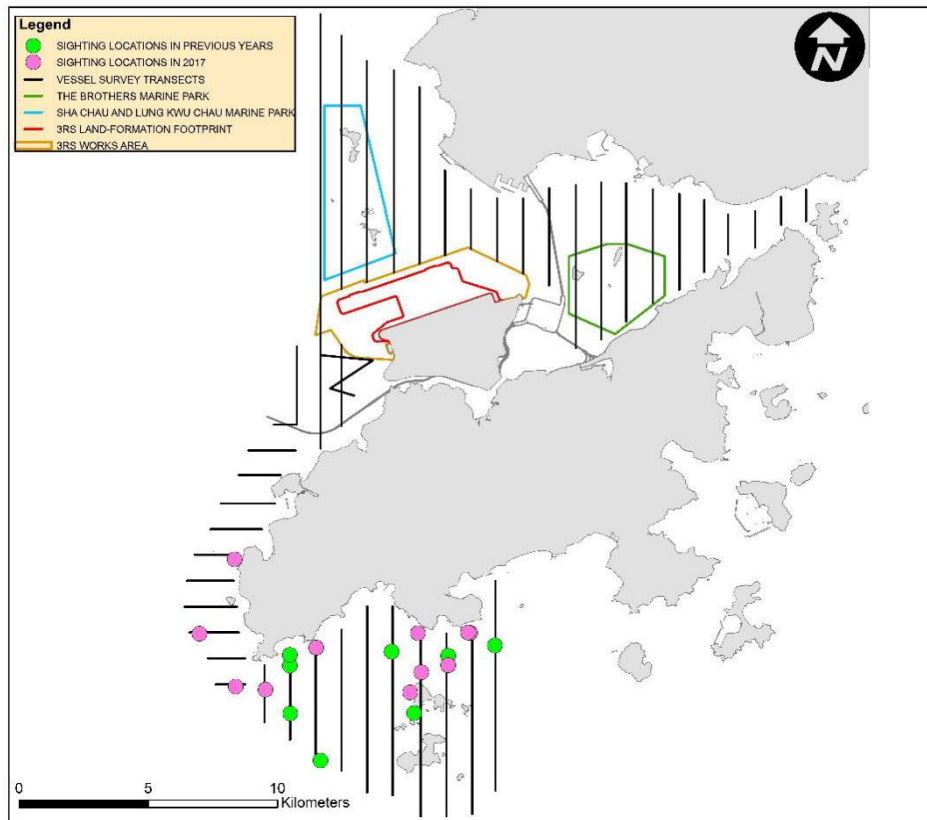
NLMM051



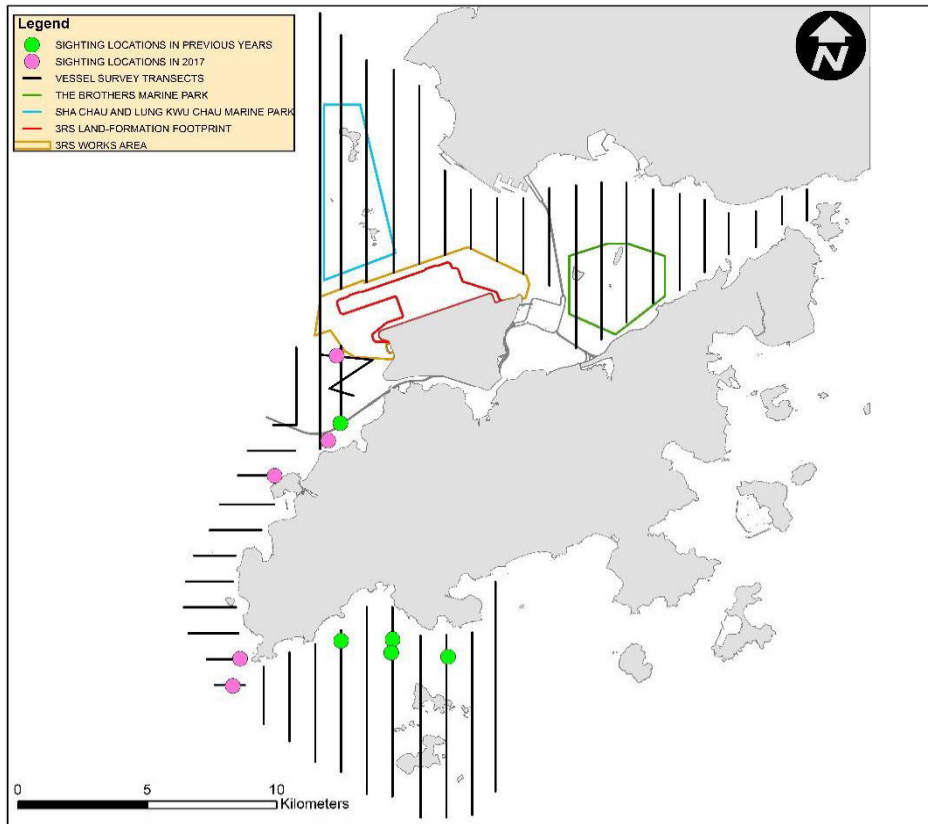
NLMM052



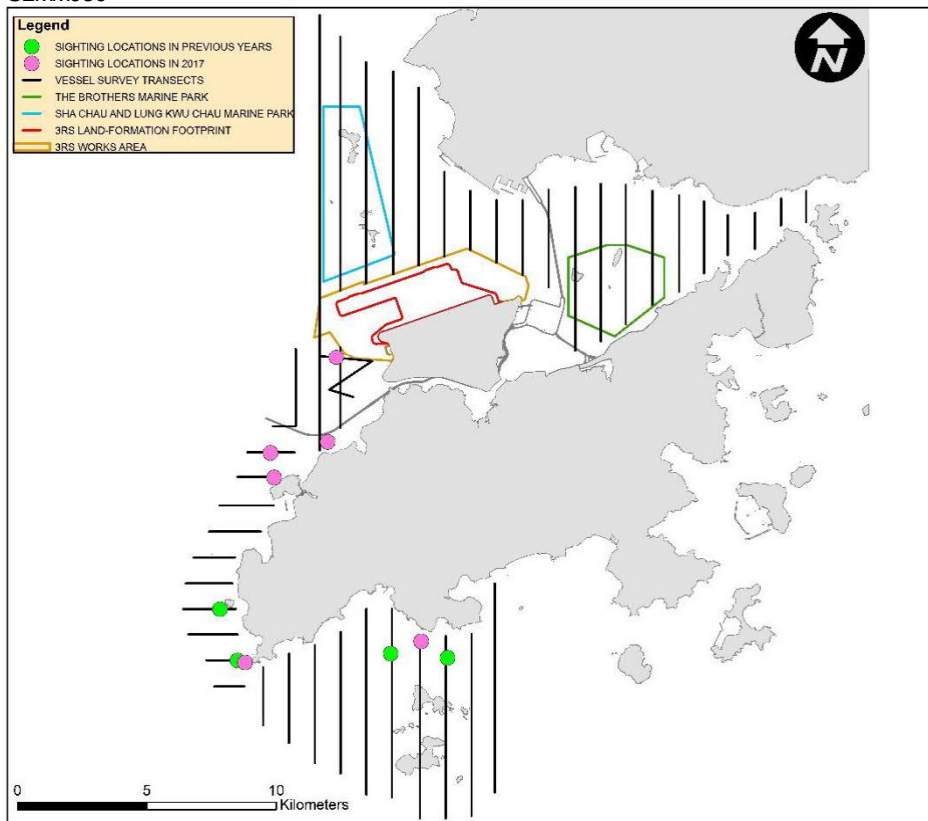
SLMM014



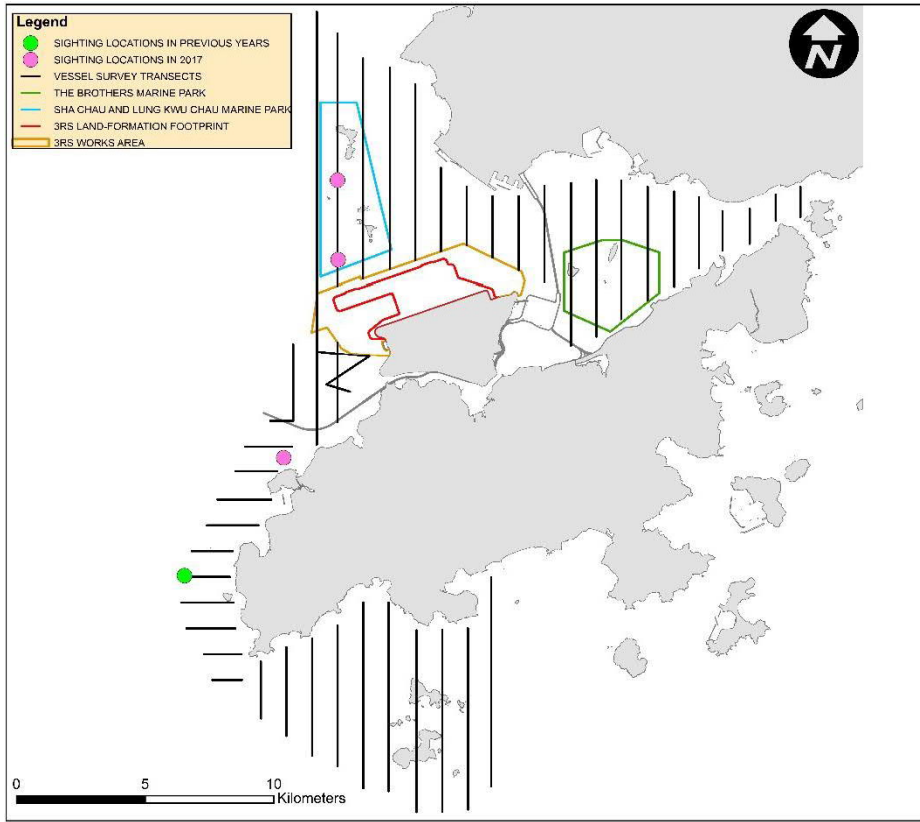
SLMM028



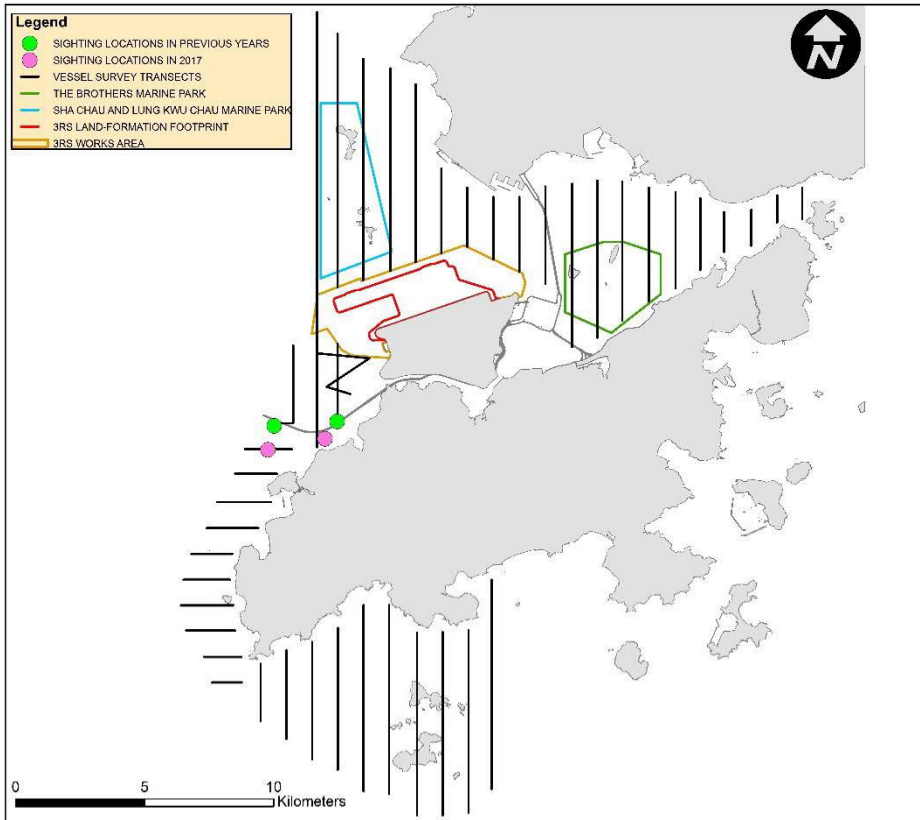
SLMM030



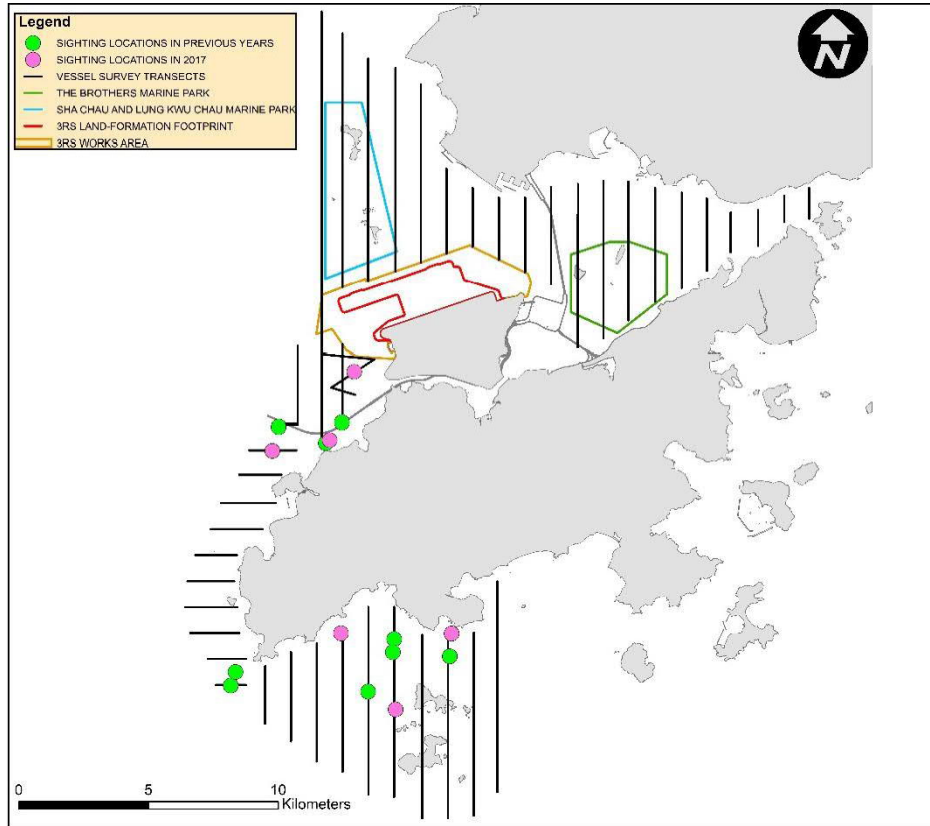
WLM019



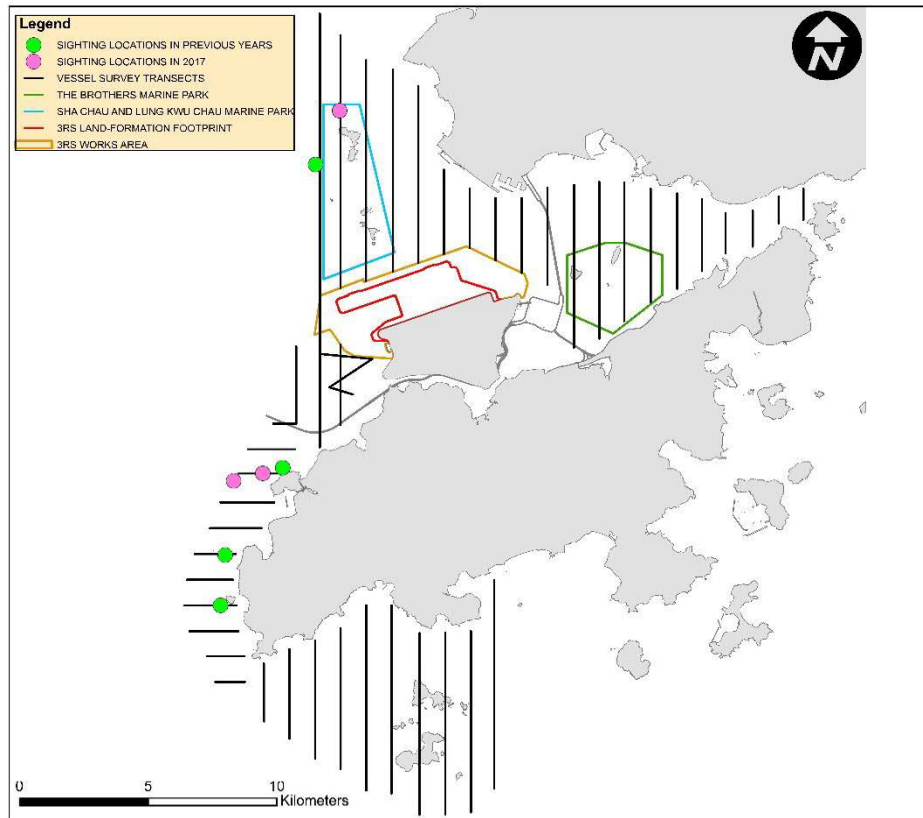
WLM026



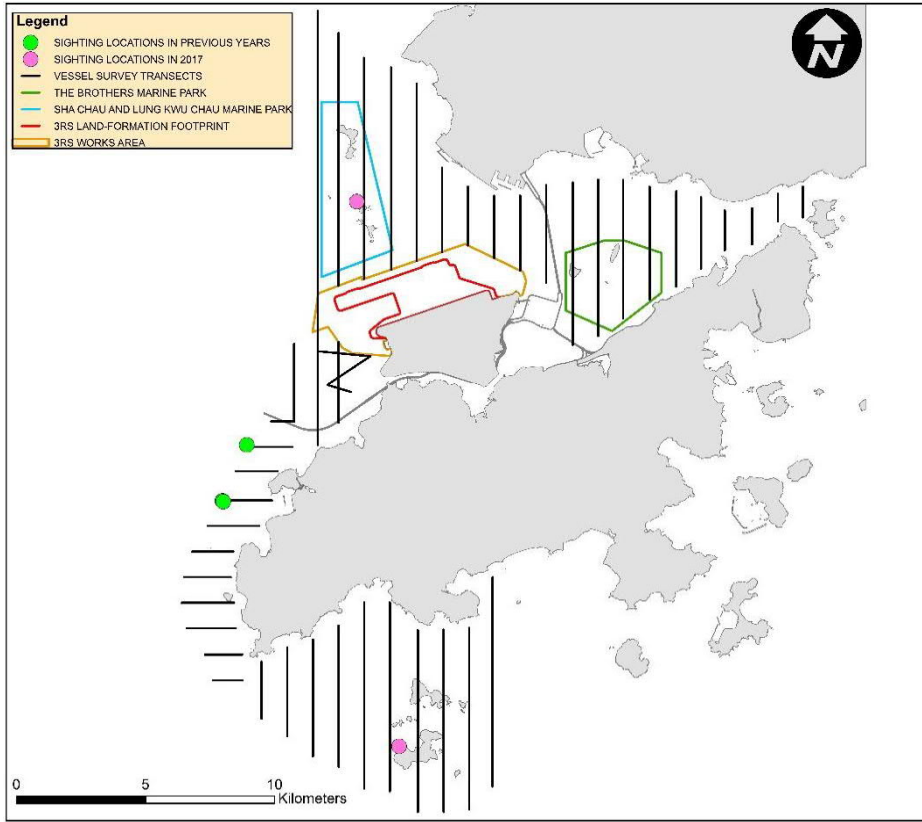
WLM027



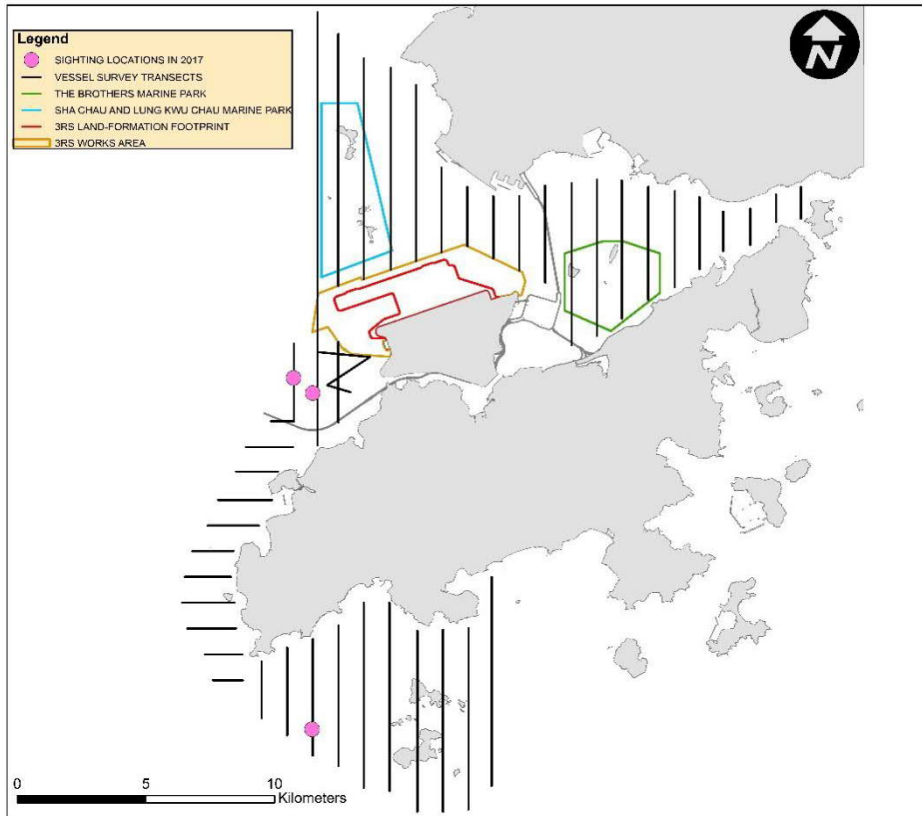
WLM030



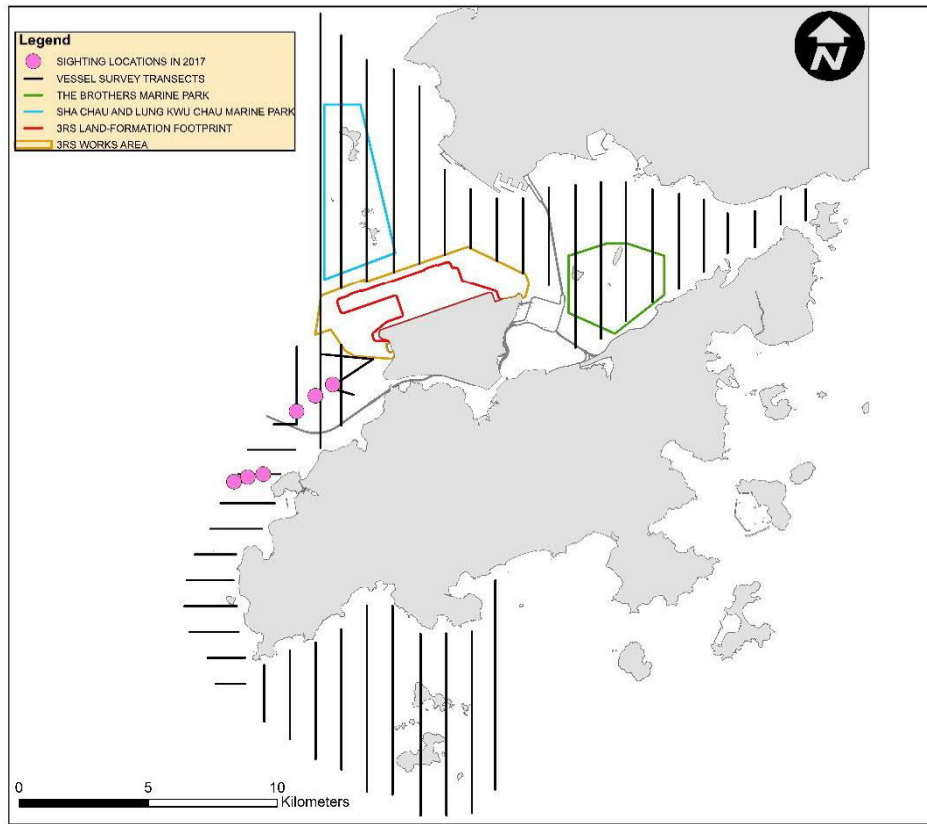
WLMM049



WLMM064



WLM071



WLM0100

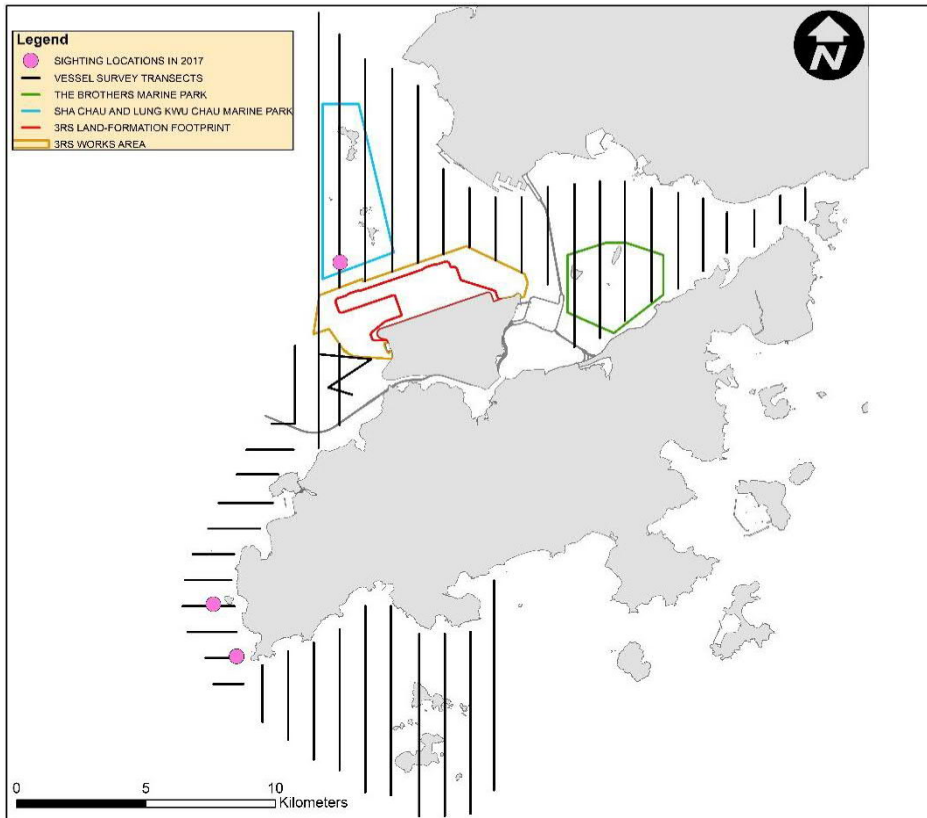


Figure 13: Plots of First Sightings of All CWD Groups (prior to filtering out short-track data) Obtained from Land-based Station at Lung Kwu Chau

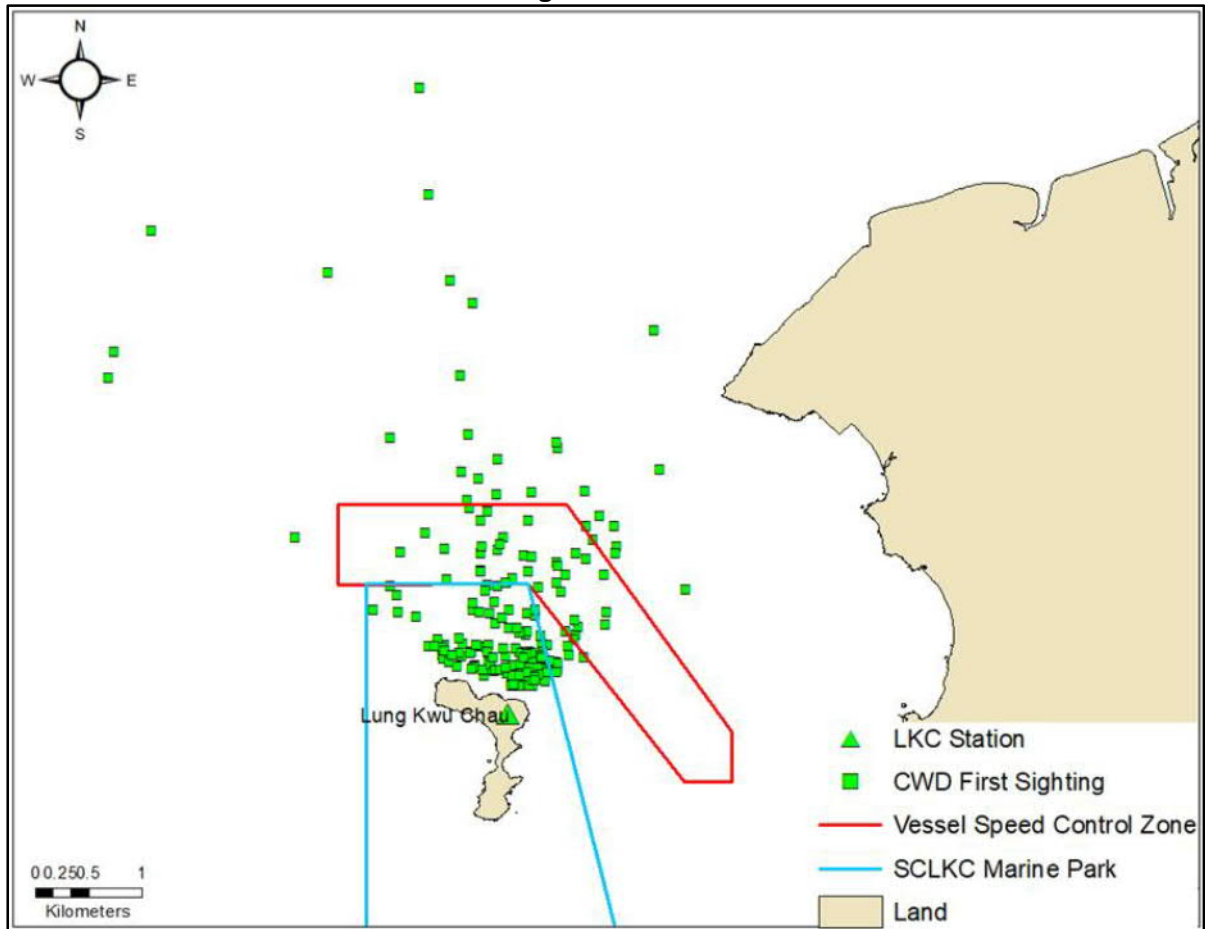


Figure 14: Plots of First Sightings of All CWD Groups (prior to filtering out short-track data) Obtained from Land-based Station at Sha Chau

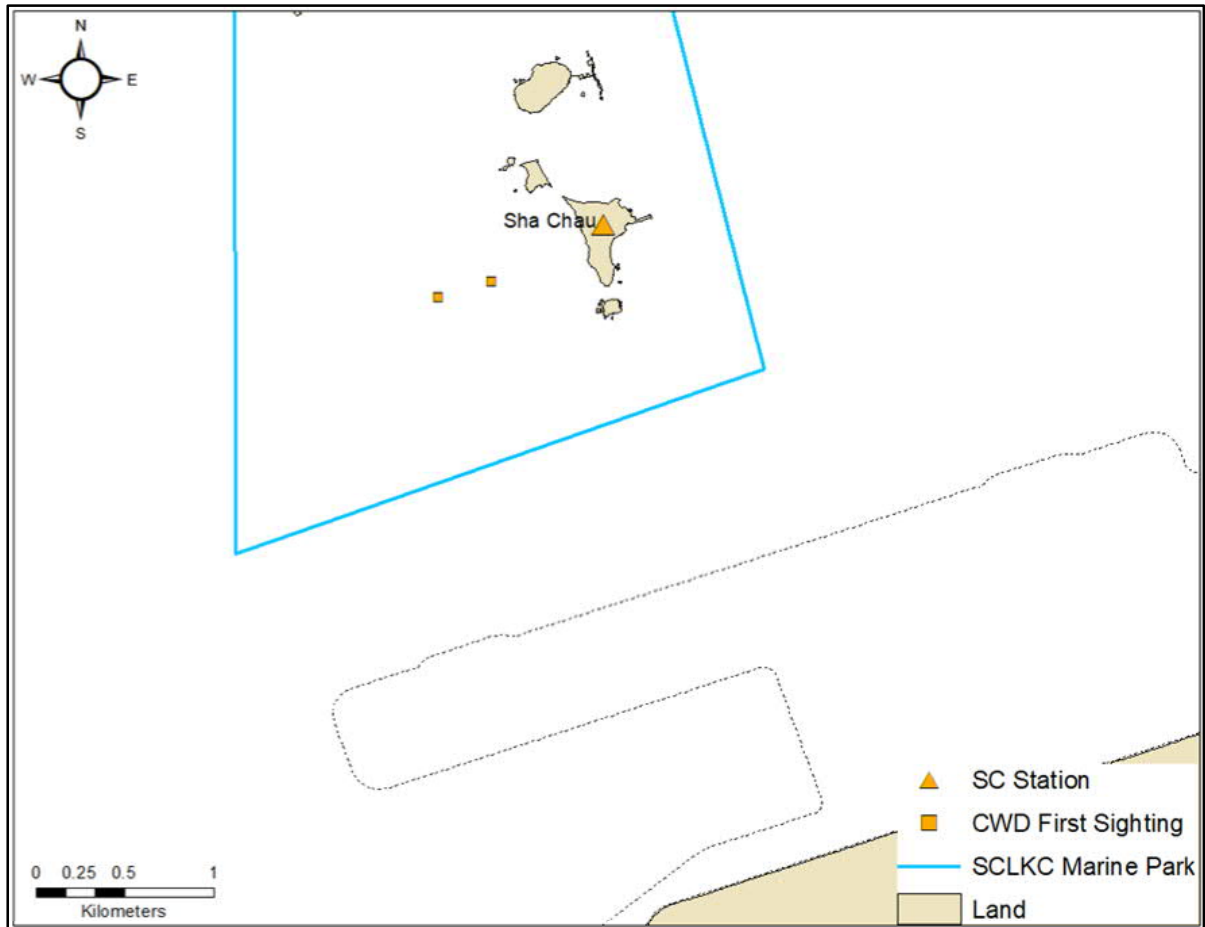


Figure 15: Total Duration of CWD Groups Tracked (per total effort time) from Lung Kwu Chau (prior to filtering short-track data) Based on Time of Day

[Time indicates the hour block during which CWD groups were tracked. The "n" in parentheses represents the number of days that survey effort was carried out during the associated hour block.]

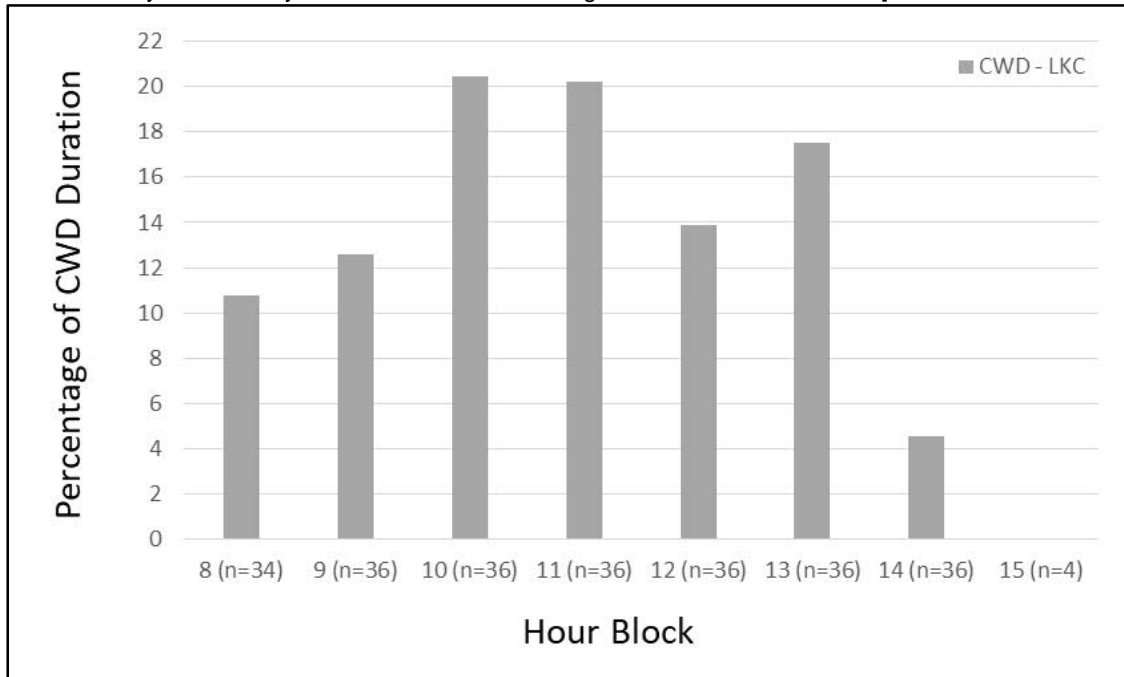


Figure 16: CWD Groups Sighted and Tracked from Lung Kwu Chau and Sha Chau Based on Month of the Year

[The numbers above the bars indicate the total number of CWD groups tracked per study period (prior to filtering data)]

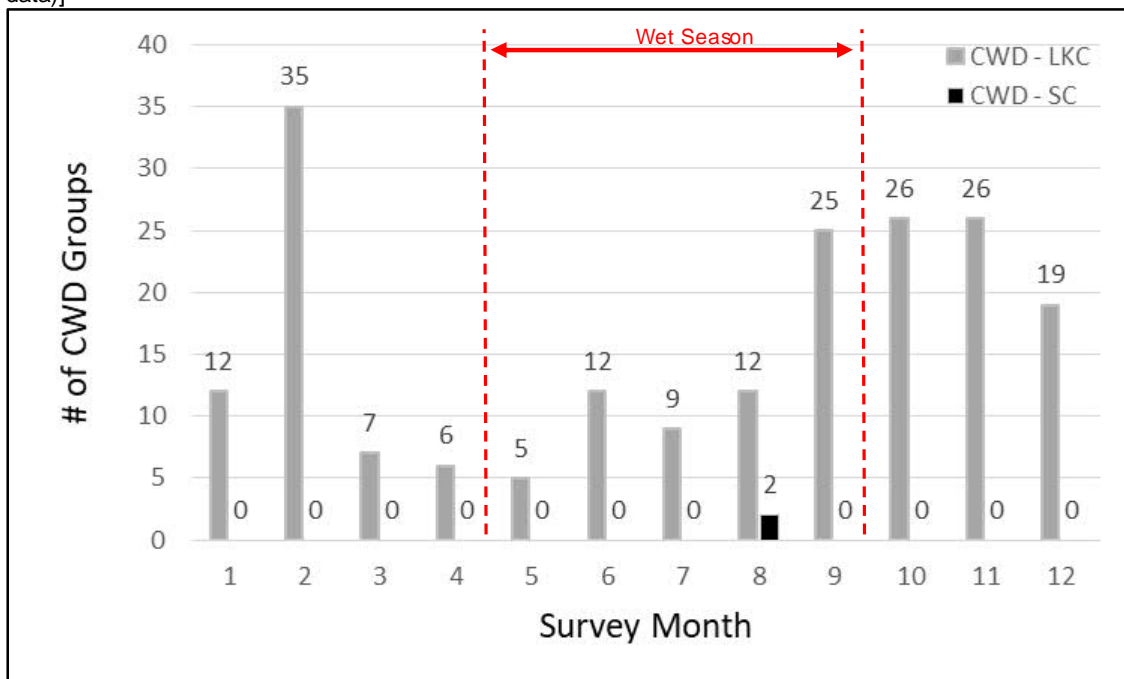


Figure 17: Plots of CWD Short-track Positions (Standardized Segments) relative to Group Size tracked within Sha Chau and Lung Kwu Chau Marine Park

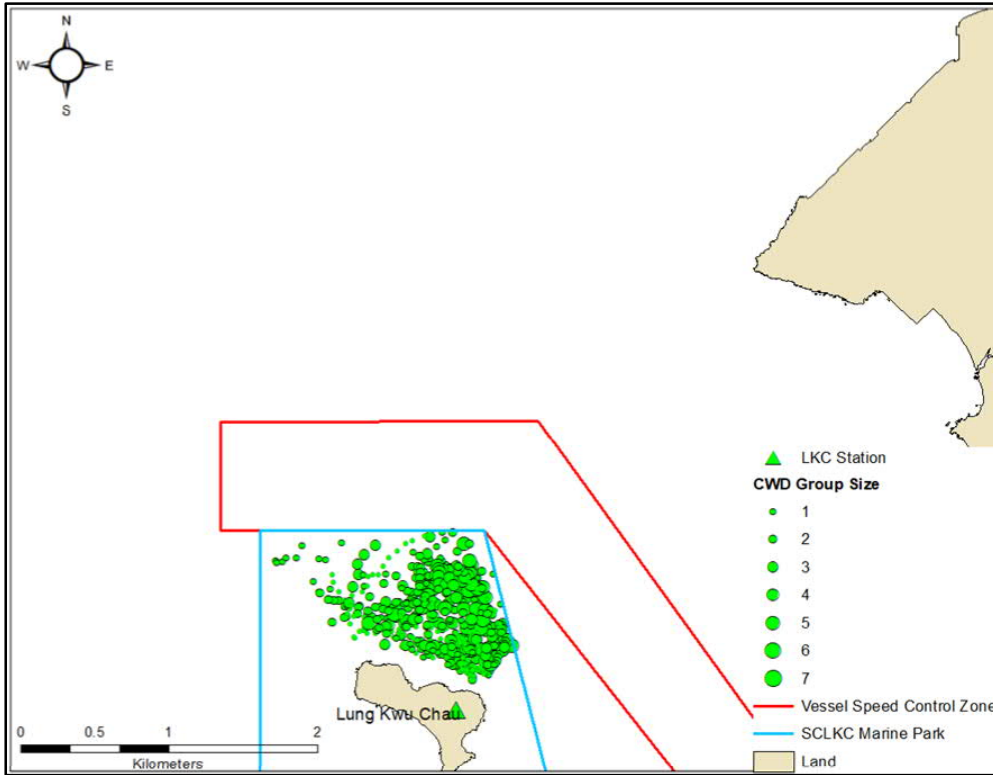


Figure 18: Plots of CWD Short-track Positions (Standardized Segments) relative to Group Size crossing the boundary of Sha Chau and Lung Kwu Chau Marine Park

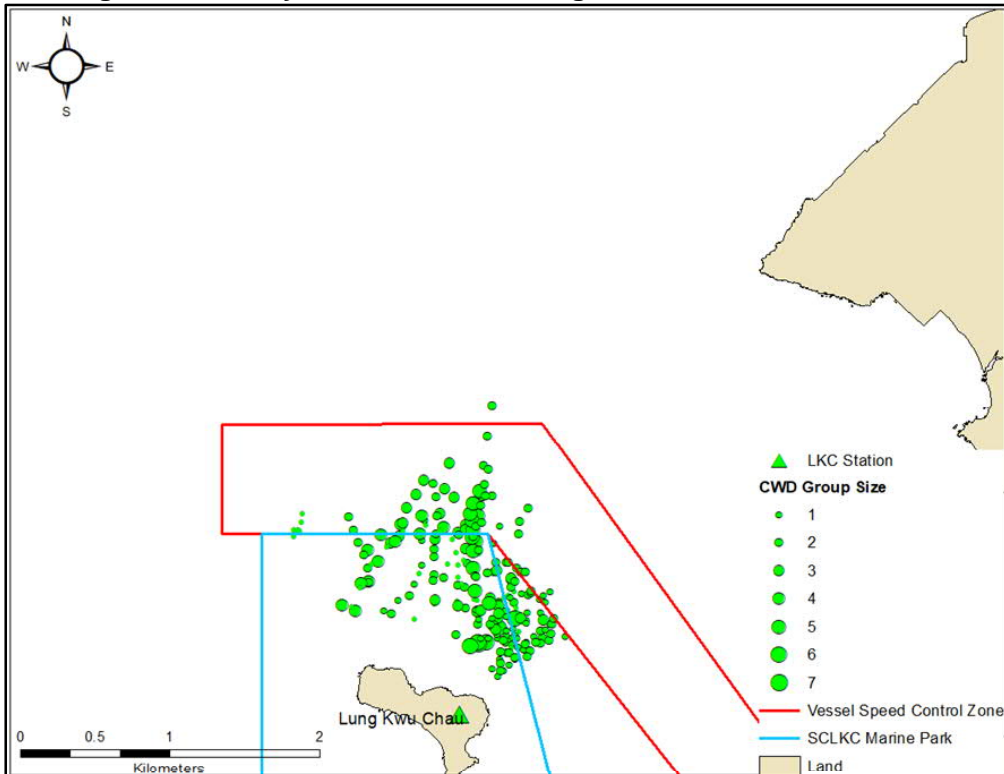


Figure 19: Plots of CWD Short-track Positions (Standardized Segments) relative to Group Size tracked outside Sha Chau and Lung Kwu Chau Marine Park

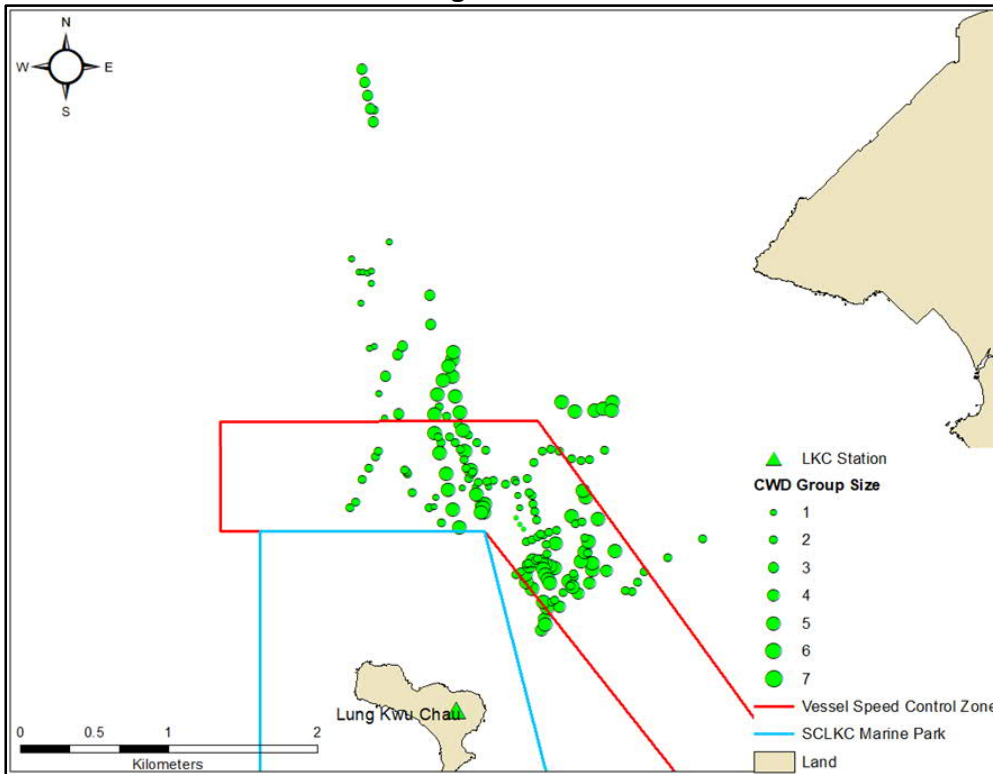


Figure 20: Percentages of CWD Behavioural States, excluding Unknown Category, recorded from Lung Kwu Chau

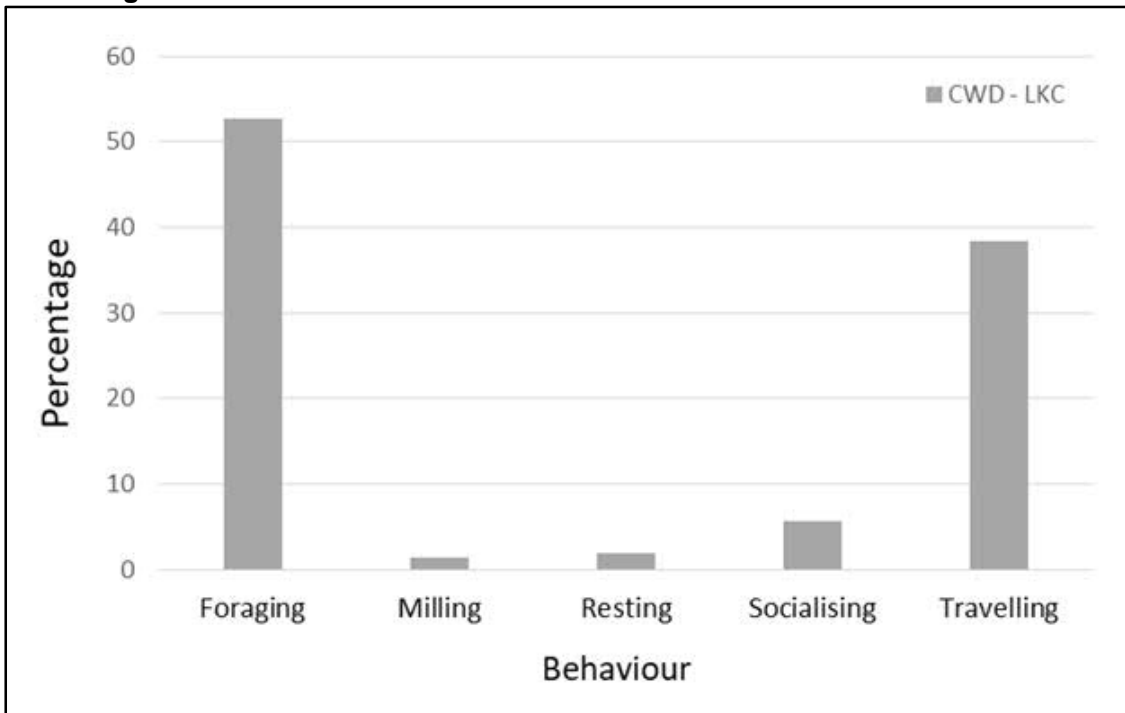


Figure 21: Plots of All Vessel Positions and All CWD Positions (prior to filtering out short-track data) obtained from Lung Kwu Chau in 2017

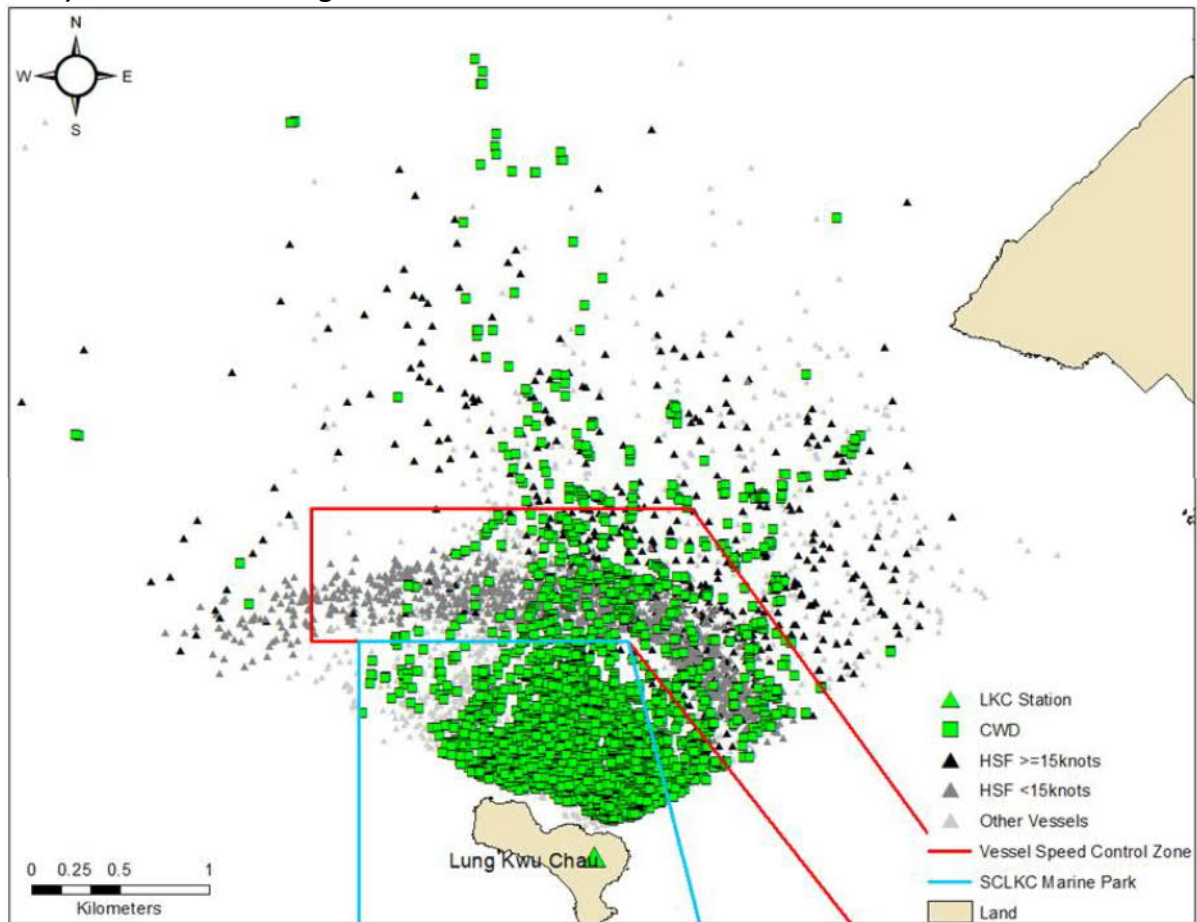


Figure 22: Plots of All Vessel Positions and All CWD Positions (prior to filtering out short-track data) obtained from Sha Chau in 2017

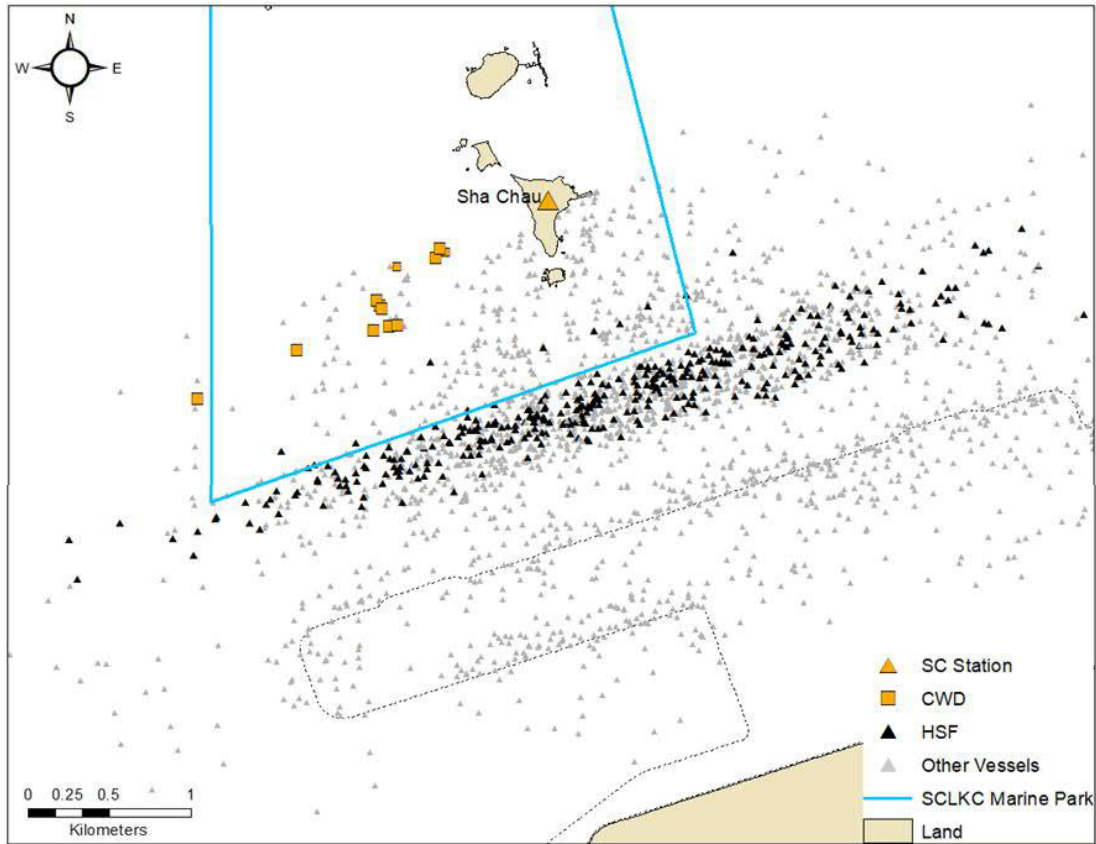
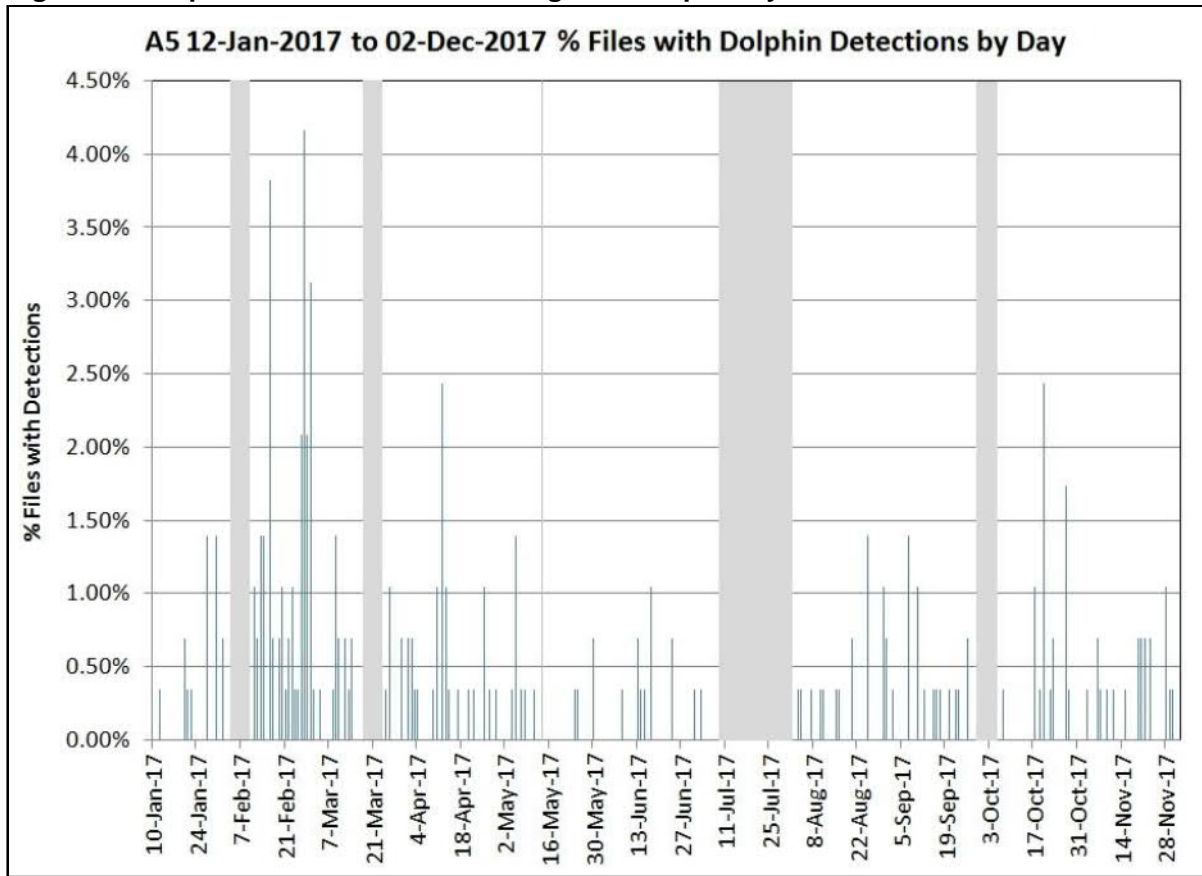


Figure 23: Dolphin Detections as Percentage of Files per day in 2017



[Grey shading indicates no recording]

Figure 24: Dolphin Detections by Hour of Day in 2017

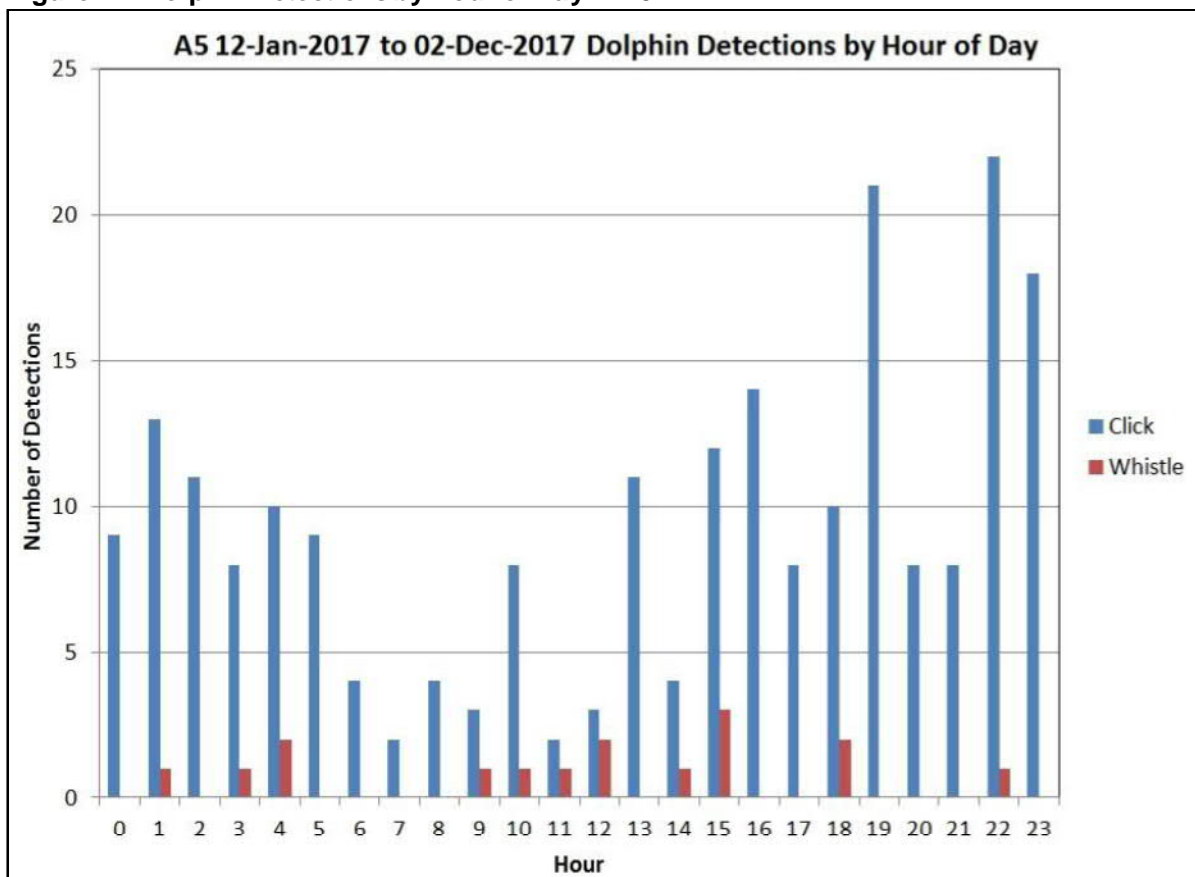


Figure 25: Dolphin Detections by Hour of Day in 2016 to 2017

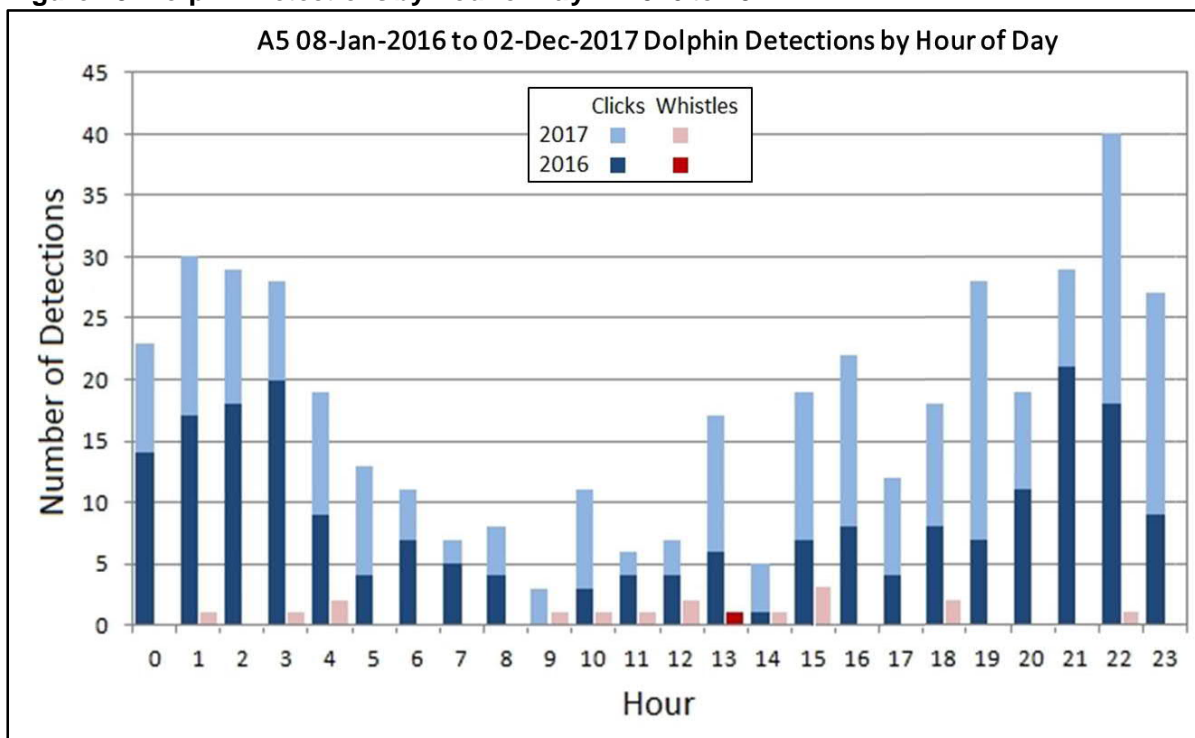


Figure 26: Dolphin Detections by Hour of Day and Solar Season in 2017

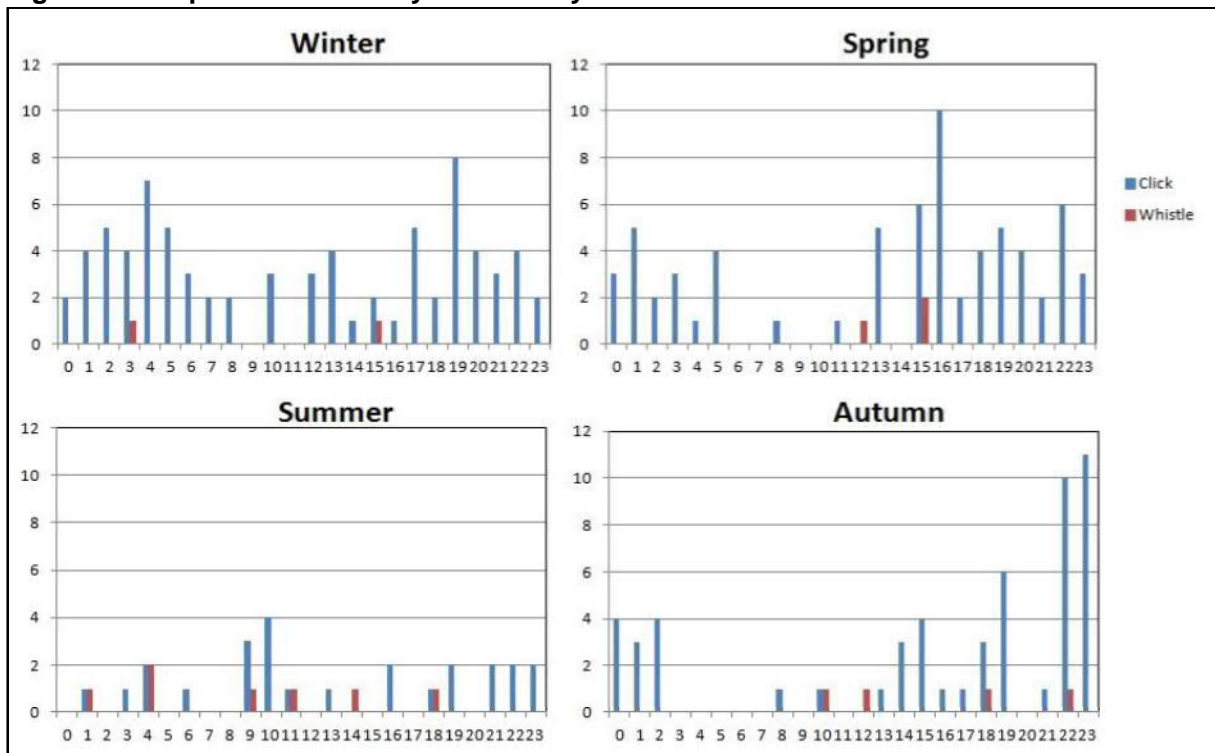
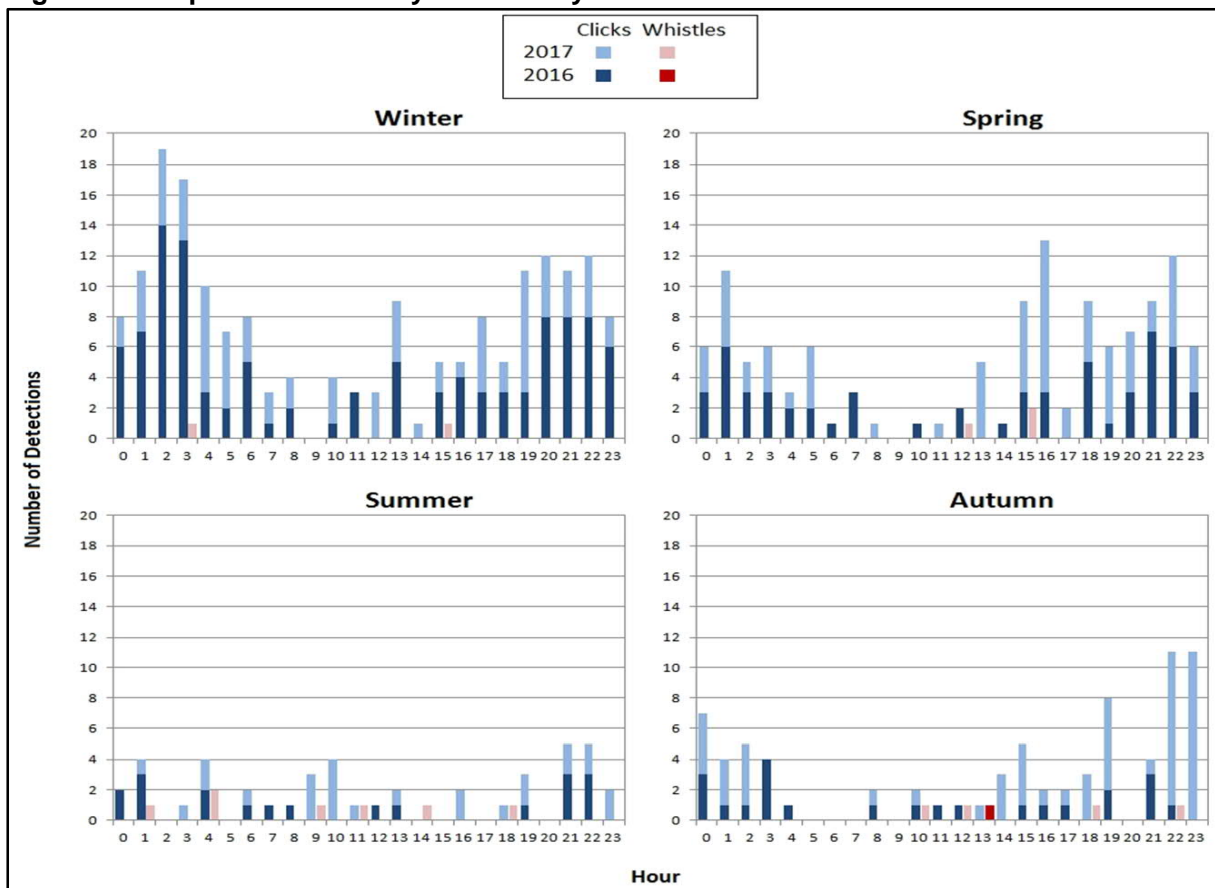
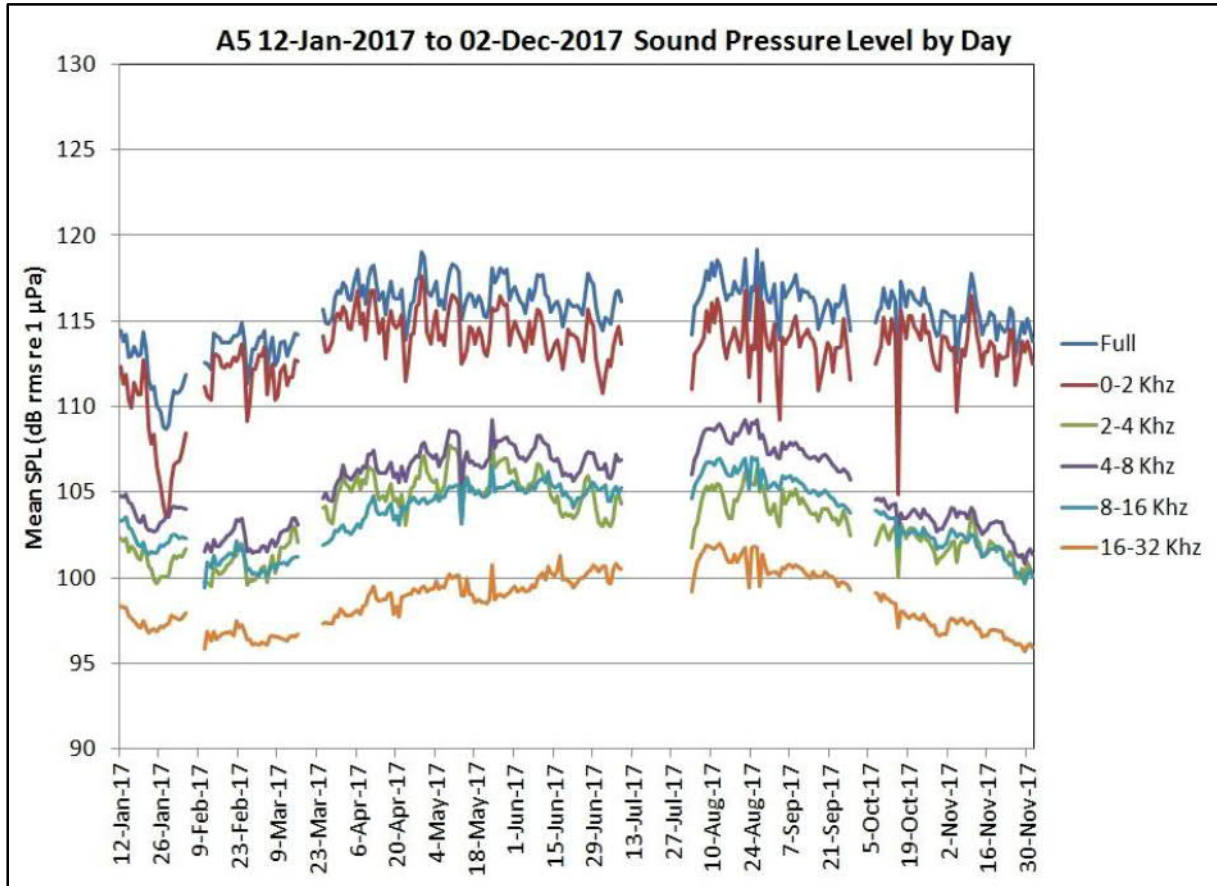


Figure 27: Dolphin Detections by Hour of Day and Solar Season in 2016 to 2017



[Figure 26 & Figure 27: Winter = Dec-Jan-Feb, Spring = Mar-Apr-May, Summer = Jun-Jul-Aug, Autumn = Sep-Oct-Nov]

Figure 28: Daily Mean Sound Pressure Level (dB rms re 1 µPa) recorded in 2017



[Blank area represents no recording]

Figure 29: Sound Pressure Level (SPL) by Hour of Day recorded in 2017

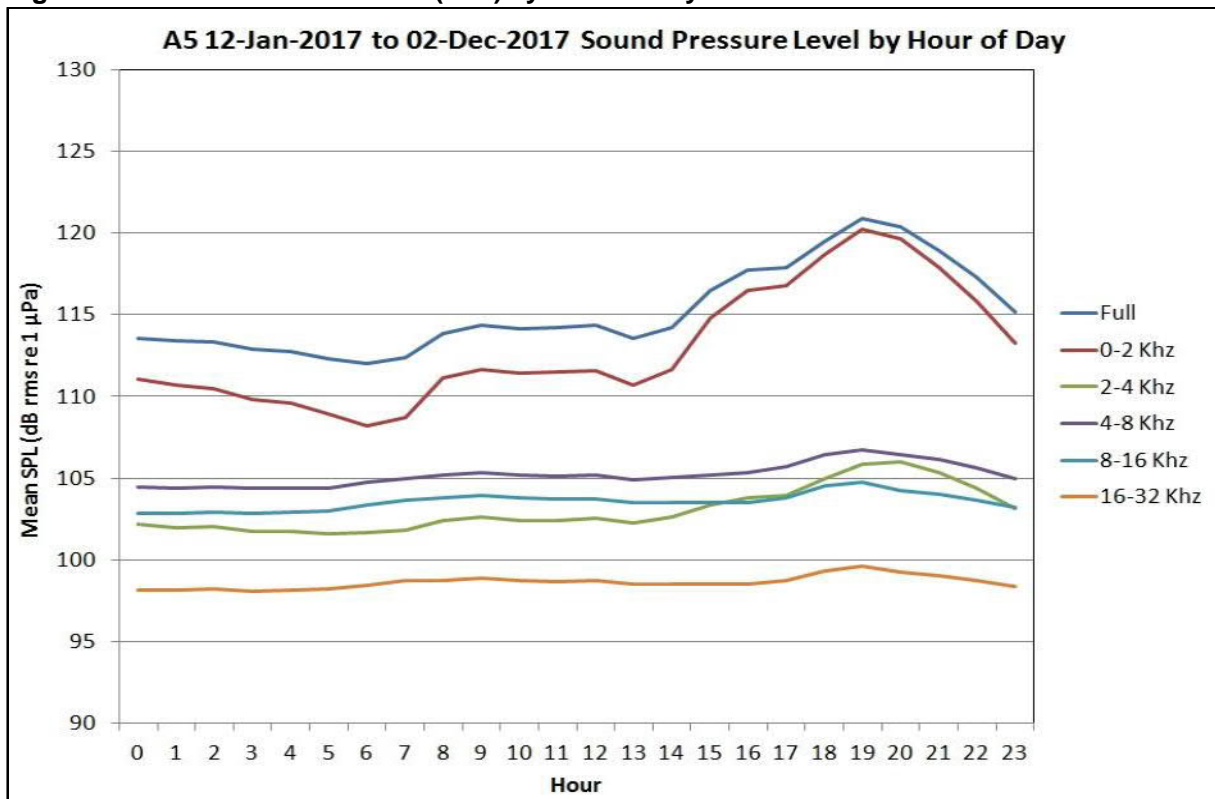


Figure 30: Sound Pressure Level (SPL) by Hour of Day and Solar Season recorded in 2017
 [Spring = Mar-Apr-May, Summer = Jun-Jul-Aug, Autumn = Sep-Oct-Nov, Winter = Dec-Jan-Feb]

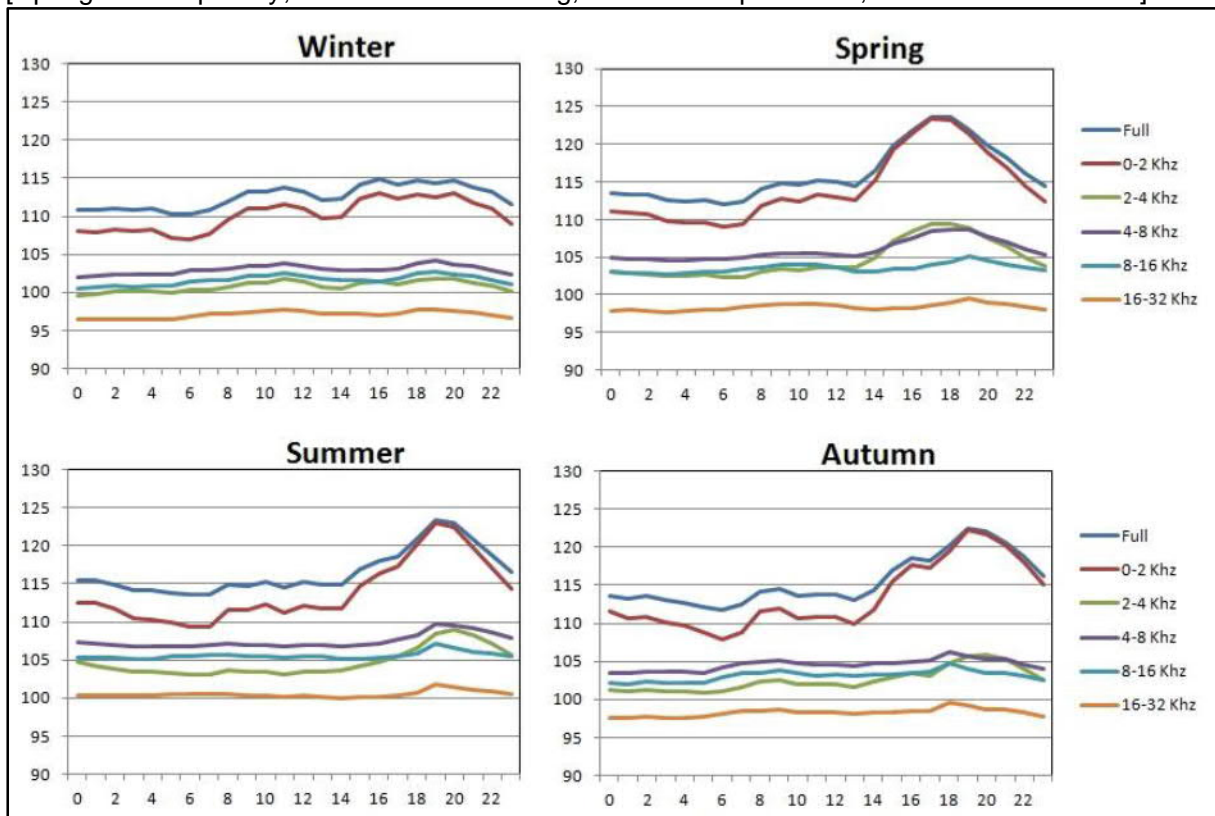


Table 1: CWD Encounter Rates by Survey Areas

Survey Area	Encounter Rate (STG)		Encounter Rate (ANI)	
	2016	2017	2016	2017
NEL	0	0	0	0
NWL	2.32	2.41	9.51	8.14
AW	2.81	4.55	11.23	14.57
WL	11.85	17.85	44.27	67.94
SWL	3.46	5.00	13.99	15.39
Combined	3.44	4.80	13.44	16.8

Table 2: Summary of Monthly and Running Quarterly Encounter Rates STG and ANI

Encounter Rate	Winter		Spring			Summer			Autumn			Winter
	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17	Oct 17	Nov 17	Dec 17
Monthly STG	4.41	6.08	1.99	2.96	4.21	6.30	6.76	8.11	5.32	4.54	2.07	5.33
Monthly ANI	15.78	21.12	8.97	8.89	25.49	18.64	18.45	24.06	17.73	16.02	6.82	20.77
Running Quarterly STG	3.96	5.04	4.02	3.49	3.06	4.45	5.73	7.03	6.68	5.90	4.09	4.05
Running Quarterly ANI	13.02	17.31	14.85	12.33	14.46	17.65	20.95	20.30	19.97	19.05	13.91	14.75

Table 3: CWD Line Transects Parameters and Estimates of Density and Abundance for Western Hong Kong based on 3RS Project Data (January 2017 – December 2017)

Time Period	Stratum	No. Stgs.	Average Group Size*	Trackline Detection Prob. - g(0) [#]	Individual Density (no./100km ²)	Abundance	95% CI (Abund.)	%CV
Jan-Dec 2017	AW	5	2.6	1.0	40.55	2	1-4	43.9
Jan-Dec 2017	DB	1	2.6	1.0	2.31	1	0-4	97.5
Jan-Dec 2017	NEL	0	n/a	1.0	0.00	0	n/a	n/a
Jan-Dec 2017	NWL	37	2.6	1.0	16.59	14	9-23	23.6
Jan-Dec 2017	SWL	65	2.6	1.0	33.57	22	14-35	23.0
Jan-Dec 2017	WL	113	2.6	1.0	132.22	36	23-58	23.8
Jan-Dec 2017	Pooled[^]	221	2.6	1.0	27.33	71	48-102	19.9
Jan-Dec 2017	Winter [^]	55	2.6	1.0	43.57	79	44-139	29.3
Jan-Dec 2017	Spring [^]	37	2.6	1.0	22.00	40	24-66	26.4
Jan-Dec 2017	Summer [^]	78	2.6	1.0	61.85	112	74-169	21.3
Jan-Dec 2017	Autumn [^]	46	2.6	1.0	34.47	62	38-100	24.7

From Jefferson (2000)

* The Distance software gives the option for the user to either pool or stratify group size among different strata. (Thomaset al., 2010). In this case, small sample sizes for some strata (<10) could lead to very inaccurate abundance/density estimates, and thus the approach of pooling is considered more robust for this line transect analysis.

[^] Pooled abundance not including Airport West (AW). Note that the pooled estimates do not necessarily add up to the sum of the individual stratum estimates, as these are computed separately.

Table 4: Average Group Sizes of CWDs by Survey Areas

Survey Area	Average Group Size of CWDs
NEL	0
NWL	3.28
AW	3.20
WL	3.67
SWL	2.89
Overall	3.35 ± 2.59

Table 5: Average Group Sizes of CWDs by Seasons

Solar Season	Average Group Size of CWDs
Spring	4.69
Summer	2.83
Autumn	3.25
Winter	3.39

Table 6: Percentage of CWD Groups recorded as Exhibiting Various Behaviours/Activities, and recorded as having Association with Fishing Boat

Survey Area	Year	Activity				Fishing Boat Association
		Feeding	Travelling	Socialising	Resting/Milling	
AW	2016	75%	-	-	-	-
	2017	80%	20%			20%
NEL	2016	-	-	-	-	-
	2017	-	-	-	-	-
NWL	2016	41%	15%	9%	9%	7%
	2017	15%	8%	10%	3%	-
WL	2016	33%	31%	5%	8%	4%
	2017	23%	12%	12%	-	8%
SWL	2016	48%	13%	11%	8%	13%
	2017	28%	6%	10%	1%	9%

Table 7: Summary of Photo Identification

Individual ID	Date of sighting (dd/mm/yyyy)	Sighting No.	Area
NLMM001	11/05/2017	3	WL
NLMM002	25/10/2017	1	NWL
	14/12/2017	1	NWL
NLMM004	12/01/2017	1	NWL
	23/03/2017	1	NWL
		2	NWL
	05/04/2017	1	NWL
		2	NWL
	06/12/2017	5	NWL
14/12/2017	1	NWL	
NLMM005	18/09/2017	2	NWL
	14/12/2017	1	NWL
NLMM006	08/06/2017	1	NWL
NLMM010	25/10/2017	1	NWL
NLMM011	15/11/2017	1	NWL
NLMM012	15/11/2017	1	NWL
NLMM013	08/06/2017	1	NWL
	14/07/2017	1	NWL
NLMM015	05/01/2017	1	WL
	21/03/2017	2	WL
	27/10/2017	3	WL
NLMM016	05/01/2017	1	WL
	05/04/2017	1	NWL
		2	NWL
	18/04/2017	1	WL
07/12/2017	3	WL	
NLMM017	12/01/2017	1	NWL
	23/03/2017	1	NWL
		2	NWL
NLMM019	21/03/2017	2	WL
	11/05/2017	8	WL
	12/07/2017	1	NWL
	12/09/2017	4	WL
		5	WL
	18/09/2017	1	NWL
21/11/2017	1	AW	
NLMM020	21/03/2017	2	WL
	12/07/2017	1	NWL
	21/08/2017	4	SWL
	12/09/2017	4	WL
		5	WL
18/09/2017	1	NWL	
NLMM022	18/09/2017	1	NWL
NLMM023	11/05/2017	1	WL
	11/07/2017	13	SWL
	12/09/2017	5	WL
	18/09/2017	1	NWL
NLMM027	22/08/2017	7	WL
	25/10/2017	1	NWL
	14/12/2017	2	NWL
NLMM028	22/08/2017	7	WL
	25/10/2017	1	NWL
	14/12/2017	2	NWL
NLMM033	22/08/2017	3	WL
		6	WL
	25/10/2017	2	NWL
NLMM034	11/07/2017	2	WL
		5	WL

Individual ID	Date of sighting (dd/mm/yyyy)	Sighting No.	Area
NLMM037	12/01/2017	1	NWL
	23/03/2017	1	NWL
		2	NWL
	18/09/2017	3	NWL
	15/11/2017	1	NWL
14/12/2017	1	NWL	
NLMM039	15/11/2017	1	NWL
NLMM040	22/08/2017	6	WL
NLMM041	22/08/2017	6	WL
NLMM042	18/09/2017	1	NWL
NLMM049	07/11/2017	1	NWL
NLMM050	14/07/2017	2	NWL
NLMM051	22/08/2017	3	WL
		6	WL
	19/09/2017	1	WL
	25/10/2017	2	NWL
NLMM052	18/09/2017	1	NWL
	20/09/2017	1	SWL
NLMM053	18/09/2017	1	NWL
NLMM054	07/11/2017	1	NWL
NLMM055	06/12/2017	1	NWL
NLMM056	06/12/2017	4	NWL
NLMM057	06/12/2017	4	NWL
NLMM058	06/12/2017	4	NWL
NLMM059	06/12/2017	4	NWL
SLMM002	05/01/2017	7	WL
SLMM003	26/07/2017	4	SWL
SLMM007	05/01/2017	7	WL
	06/02/2017	3	WL
	11/05/2017	9	WL
SLMM010	05/01/2017	5	WL
	19/01/2017	6	SWL
	16/02/2017	10	WL
	11/05/2017	10	SWL
	20/07/2017	1	SWL
SLMM011	17/02/2017	2	SWL
	21/03/2017	2	WL
		3	WL
	11/05/2017	11	SWL
	28/06/2017	5	WL
	20/07/2017	1	SWL
SLMM012	20/09/2017	1	SWL
		2	SWL
SLMM014	05/01/2017	7	WL
	16/02/2017	10	WL
	20/03/2017	1	SWL
		3	SWL
		22/06/2017	2
		3	SWL
		6	SWL
		7	SWL
	22/08/2017	9	WL
	07/12/2017	5	WL
08/12/2017	2	SWL	
SLMM015	21/03/2017	2	WL
		3	WL
	04/05/2017	1	SWL
	21/08/2017	1	SWL
	11/09/2017	2	SWL
19/10/2017	2	SWL	

Individual ID	Date of sighting (dd/mm/yyyy)	Sighting No.	Area
SLMM017	11/09/2017	2	SWL
	20/09/2017	1	SWL
SLMM018	17/02/2017	2	SWL
		3	SWL
	23/10/2017	2	SWL
	07/12/2017	5	WL
SLMM021	19/01/2017	6	SWL
	21/03/2017	2	WL
		3	WL
	26/04/2017	1	SWL
	19/10/2017	2	SWL
SLMM022	16/02/2017	10	WL
	05/05/2017	4	WL
		5	WL
SLMM023	05/05/2017	4	WL
		5	WL
	11/05/2017	3	WL
		8	WL
	21/08/2017	1	SWL
	22/08/2017	9	WL
	26/10/2017	8	WL
SLMM025	16/02/2017	11	WL
SLMM027	11/05/2017	3	WL
		8	WL
SLMM028	07/06/2017	2	SWL
	21/03/2017	1	WL
	18/04/2017	5	WL
	05/05/2017	5	WL
	06/12/2017	3	NWL
SLMM030	07/12/2017	1	AW
	21/03/2017	1	WL
	21/07/2017	7	WL
	19/10/2017	1	SWL
	26/10/2017	1	WL
	06/12/2017	3	NWL
	07/12/2017	1	AW
SLMM031	17/02/2017	2	SWL
		3	SWL
	21/03/2017	2	WL
	07/06/2017	1	SWL
	26/10/2017	10	SWL
SLMM034	15/08/2017	3	SWL
	21/08/2017	1	SWL
SLMM036	05/01/2017	1	WL
	16/02/2017	10	WL
	21/03/2017	2	WL
	07/06/2017	3	SWL
	20/09/2017	3	SWL
SLMM037	19/01/2017	6	SWL
	21/03/2017	2	WL
	20/09/2017	1	SWL
	26/10/2017	2	WL
SLMM040	22/06/2017	1	SWL
	11/07/2017	7	WL
	21/07/2017	5	WL
SLMM045	21/07/2017	7	WL
	22/08/2017	2	WL
SLMM047	16/02/2017	10	WL
	11/05/2017	8	WL
SLMM048	28/12/2017	3	WL

Individual ID	Date of sighting (dd/mm/yyyy)	Sighting No.	Area
SLMM049	16/02/2017	3	WL
		10	WL
	07/12/2017	4	WL
SLMM050	20/09/2017	1	SWL
		2	SWL
SLMM052	05/01/2017	7	WL
	16/02/2017	10	WL
	05/05/2017	4	WL
		5	WL
	11/05/2017	10	SWL
	07/06/2017	2	SWL
	28/12/2017	8	SWL
SLMM053	06/12/2017	2	NWL
SLMM055	26/04/2017	4	SWL
SLMM056	11/05/2017	11	SWL
SLMM057	22/06/2017	1	SWL
	15/08/2017	5	SWL
SLMM058	22/06/2017	5	SWL
SLMM059	26/07/2017	5	SWL
SLMM060	15/08/2017	2	SWL
SLMM061	15/08/2017	3	SWL
SLMM062	15/08/2017	5	SWL
SLMM063	15/08/2017	7	SWL
SLMM064	21/08/2017	5	SWL
WLMM001	05/01/2017	6	WL
	19/01/2017	8	WL
	11/05/2017	3	WL
		7	WL
	11/07/2017	10	WL
		13	SWL
	21/11/2017	2	SWL
07/12/2017	2	WL	
WLMM003	16/02/2017	10	WL
	11/07/2017	13	SWL
	22/08/2017	7	WL
WLMM004	05/05/2017	4	WL
		5	WL
	07/06/2017	2	SWL
WLMM006	11/07/2017	12	SWL
	20/07/2017	3	WL
WLMM007	13/01/2017	1	SWL
		2	SWL
	16/02/2017	10	WL
	05/05/2017	1	WL
	11/05/2017	6	WL
	07/12/2017	4	WL
WLMM008	21/03/2017	2	WL
		3	WL
	11/05/2017	7	WL
	22/06/2017	1	SWL
	26/07/2017	3	SWL
	22/08/2017	11	SWL
WLMM009	09/06/2017	4	SWL
	28/06/2017	8	WL
	11/07/2017	12	SWL
	20/07/2017	3	WL
WLMM011	21/03/2017	1	WL
	22/08/2017	8	WL
		10	SWL
	20/09/2017	3	SWL
WLMM013	21/07/2017	2	WL

Individual ID	Date of sighting (dd/mm/yyyy)	Sighting No.	Area
WLMM015	11/07/2017	9	WL
	21/07/2017	2	WL
WLMM017	16/02/2017	10	WL
WLMM018	11/05/2017	8	WL
WLMM019	19/09/2017	2	WL
	24/10/2017	1	NWL
	25/10/2017	1	NWL
WLMM020	15/08/2017	5	SWL
		7	SWL
WLMM021	06/01/2017	1	SWL
	27/10/2017	1	WL
WLMM024	21/11/2017	1	AW
WLMM025	16/02/2017	10	WL
WLMM026	26/10/2017	1	WL
	06/12/2017	3	NWL
	WLMM027	22/06/2017	4
21/08/2017		2	SWL
22/08/2017		1	AW
20/09/2017		3	SWL
26/10/2017		1	WL
06/12/2017		3	NWL
WLMM028	11/07/2017	10	WL
	19/09/2017	6	WL
WLMM029	19/09/2017	6	WL
WLMM030	18/04/2017	2	WL
		3	WL
	25/10/2017	2	NWL
WLMM032	19/09/2017	6	WL
WLMM038	11/07/2017	5	WL
WLMM040	09/06/2017	1	WL
WLMM042	11/05/2017	3	WL
WLMM043	16/02/2017	4	WL
	21/03/2017	1	WL
	05/05/2017	1	WL
	09/06/2017	1	WL
	21/07/2017	5	WL
7		WL	
WLMM046	21/08/2017	3	SWL
	19/09/2017	1	WL
WLMM047	21/07/2017	7	WL
WLMM049	20/09/2017	1	SWL
	06/12/2017	5	NWL
WLMM051	14/08/2017	3	WL
WLMM052	28/06/2017	2	WL
WLMM053	18/09/2017	1	NWL
WLMM054	18/04/2017	7	SWL
	15/08/2017	1	SWL
	19/09/2017	8	SWL
	26/10/2017	1	WL
WLMM056	16/02/2017	10	WL
	20/09/2017	1	SWL
	27/10/2017	1	WL
WLMM060	19/01/2017	3	WL
	16/02/2017	1	AW
	18/04/2017	2	WL
3		WL	
WLMM062	26/10/2017	5	WL
WLMM063	19/01/2017	3	WL
	07/06/2017	2	SWL
	28/12/2017	3	WL

Individual ID	Date of sighting (dd/mm/yyyy)	Sighting No.	Area
WLMM064	05/01/2017	1	WL
	26/04/2017	3	SWL
	06/12/2017	1	NWL
WLMM065	05/01/2017	1	WL
	26/10/2017	4	WL
		6	WL
		27/10/2017	2
	17/11/2017	1	WL
WLMM066	05/01/2017	1	WL
	26/10/2017	4	WL
		6	WL
	27/10/2017	2	WL
	17/11/2017	1	WL
WLMM067	05/01/2017	2	WL
	11/07/2017	12	SWL
WLMM068	05/01/2017	2	WL
	19/01/2017	3	WL
	18/04/2017	2	WL
		3	WL
WLMM069	13/01/2017	2	SWL
WLMM070	13/01/2017	2	SWL
	11/05/2017	11	SWL
WLMM071	19/01/2017	3	WL
	06/02/2017	1	WL
	16/02/2017	1	AW
	18/04/2017	2	WL
		3	WL
06/12/2017	1	NWL	
WLMM072	19/01/2017	3	WL
	18/04/2017	2	WL
WLMM073	16/02/2017	10	WL
	11/05/2017	8	WL
WLMM074	21/03/2017	3	WL
WLMM075	18/04/2017	2	WL
	27/10/2017	2	WL
WLMM076	05/05/2017	1	WL
	22/06/2017	1	SWL
	26/07/2017	5	SWL
WLMM077	05/05/2017	1	WL
WLMM078	05/05/2017	1	WL
	22/06/2017	1	SWL
	26/07/2017	5	SWL
WLMM079	05/05/2017	4	WL
		5	WL
	11/07/2017	7	WL
	26/07/2017	4	SWL
	12/09/2017	3	WL
WLMM080	11/05/2017	2	WL
WLMM081	11/05/2017	2	WL
WLMM082	11/05/2017	2	WL
		4	WL
WLMM083	11/05/2017	2	WL
WLMM085	11/05/2017	4	WL
WLMM086	11/05/2017	5	WL
	09/06/2017	1	WL
		3	WL
WLMM087	11/05/2017	5	WL
WLMM089	11/05/2017	8	WL
	22/08/2017	7	WL
WLMM090	09/06/2017	1	WL
WLMM091	28/06/2017	3	WL
	26/10/2017	7	WL

Individual ID	Date of sighting (dd/mm/yyyy)	Sighting No.	Area
WLMM092	28/06/2017	3	WL
WLMM093	28/06/2017	6	WL
	26/10/2017	7	WL
WLMM094	28/06/2017	6	WL
	26/10/2017	7	WL
WLMM095	28/06/2017	6	WL
WLMM096	28/06/2017	8	WL
	19/09/2017	1	WL
WLMM097	11/07/2017	1	WL
WLMM098	11/07/2017	1	WL
WLMM099	11/07/2017	3	WL
WLMM100	11/07/2017	10	WL
	12/09/2017	3	WL
	24/10/2017	1	NWL
WLMM101	22/08/2017	4	WL
	19/09/2017	1	WL
WLMM102	19/09/2017	1	WL
WLMM103	19/09/2017	2	WL
WLMM104	26/10/2017	2	WL
WLMM105	26/10/2017	8	WL
WLMM106	26/10/2017	8	WL
WLMM107	26/10/2017	8	WL
	28/12/2017	2	WL
	28/12/2017	3	WL

Table 8: Land-based Survey, Theodolite Effort and CWD Group Summary

Land-based Station	# of Survey Sessions	Survey Effort (hh:mm)	# CWD Groups Sighted	CWD Group Sighting per Survey Hr	# Groups After Filtering	# of 10-minutes segments
Sha Chau	24	144:00	2	0.014	1	1
Lung Kwu Chau	36	216:25	194	0.896	90	156
TOTAL	60	360:25	196	0.544	91	157

Table 9: CWD Groups Sighted and Tracked from Land-based Stations by Survey Month

Month	No. of Survey Days	# of CWD Groups per Sha Chau Station	# of CWD Groups per Lung Kwu Chau Station	TOTAL
January 2017	Sha Chau: 2 Lung Kwu Chau: 3	12 (6%)	0	12
February 2017	Sha Chau: 2 Lung Kwu Chau: 3	35 (18%)	0	35
March 2017	Sha Chau: 2 Lung Kwu Chau: 3	7 (4%)	0	7
April 2017	Sha Chau: 2 Lung Kwu Chau: 3	6 (3%)	0	6
May 2017	Sha Chau: 2 Lung Kwu Chau: 3	5 (3%)	0	5
June 2017	Sha Chau: 2 Lung Kwu Chau: 3	12 (6%)	0	12
July 2017	Sha Chau: 2 Lung Kwu Chau: 3	9 (5%)	0	9
August 2017	Sha Chau: 2 Lung Kwu Chau: 3	12 (6%)	2 (100%)	14
September 2017	Sha Chau: 2 Lung Kwu Chau: 3	25 (13%)	0	25
October 2017	Sha Chau: 2 Lung Kwu Chau: 3	26 (13%)	0	26
November 2017	Sha Chau: 2 Lung Kwu Chau: 3	26 (13%)	0	26
December 2017	Sha Chau: 2 Lung Kwu Chau: 3	19 (10%)	0	19
TOTAL	Sha Chau: 24 Lung Kwu Chau: 36	194	2	196

Table 10: Land-based CWD Focal Group Size Summary

Station	n (sample size)	Minimum # Individuals	Maximum # Individuals	Mean Grp Size	Standard Deviation
Sha Chau	1	2	2	2	0
Lung Kwu Chau	156	1	7	3.03	1.58
Inside SCLKCMP boundary	88	1	7	2.73	1.51
Crossing SCLKCMP boundary	39	1	7	2.93	1.45
Outside SCLKCMP boundary	29	1	6	4.05	1.54

Table 11: CWD Mean Swimming Speed, Reorientation Rate, and Linearity based on Vessel Presence record from Lung Kwu Chau in 2017

Vessel Type	Sample Size	Mean Speed (Std. dev.)	Mean Reorientation Rate (Std. dev.)	Mean Linearity (Std. dev.)
No Vessel	129	2.83 (1.26)	25.35 (19.60)	0.83 (0.20)
High Speed Ferry	3	2.47 (1.24)	12.57 (5.65)	0.96 (0.03)
High Speed Ferry Under Speed Restriction	8	2.44 (0.95)	32.66 (19.11)	0.76 (0.24)
Other	16	2.35 (1.70)	46.11 (22.21)	0.56 (0.30)

Table 12: Summary of PAM Deployments and Dolphin Detections in 2017

Site	Dep #	Data start (dd/mm/yyyy)	Data end (dd/mm/yyyy)	# recording days	# files	Days with dolphins (%)	Files with dolphins (%)
A5	1	12/01/2017	04/02/2017	24	6769	7 (29%)	15 (0.2%)
A5	2	11/02/2017	17/03/2017	35	9792	25 (71%)	86 (0.9%)
A5	3	25/03/2017	13/05/2017	50	14260	23 (46%)	43 (0.3%)
A5	4	14/05/2017	09/07/2017	57	16370	11 (19%)	16 (0.10%)
A5	5	03/08/2017	28/09/2017	57	16370	22 (39%)	35 (0.21%)
A5	6	07/10/2017	02/12/2017	57	16370	21 (37%)	41 (0.25%)

Table 13: Summary of Dolphin Sightings within the DEZ in 2017

Date	Works Area* and Type of Works Suspended	Location of the DEZ Monitoring Station	Time of Initial Sighting of Dolphin Group	Time of Last Sighting of Dolphin Group
17/02/2017	DCM works at Area A3	22°19.489N, 113°53.746E	08:51	08:53
15/07/2017	DCM works at Area D6	22°18.838N, 113°53.754E	09:11	10:00
15/07/2017	DCM works at Area A8	22°19.110N, 113°52.884E	09:12	09:25
28/08//2017	DCM works at Area D6	22°18.837N, 113°53.770E	14:12	14:17
20/09/2017	DCM works at Area F1	22°19.498N, 113°56.135E	15:04	15:04
19/12/2017	DCM works at Area F1	22°19.349N, 113°56.224E	09:02	09:25

*Note: Please refer to **Figure 1.2** for the location of works area.

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
05-Jan-17	AW	2	4.860	WINTER	32166	3RS ET
05-Jan-17	WL	1	12.529	WINTER	32166	3RS ET
05-Jan-17	WL	2	14.382	WINTER	32166	3RS ET
05-Jan-17	SWL	2	6.010	WINTER	32166	3RS ET
06-Jan-17	SWL	1	1.300	WINTER	32166	3RS ET
06-Jan-17	SWL	2	61.200	WINTER	32166	3RS ET
06-Jan-17	SWL	3	1.800	WINTER	32166	3RS ET
09-Jan-17	NWL	1	6.900	WINTER	32166	3RS ET
09-Jan-17	NWL	2	60.460	WINTER	32166	3RS ET
09-Jan-17	NWL	3	15.640	WINTER	32166	3RS ET
10-Jan-17	DB	2	8.740	WINTER	32166	3RS ET
10-Jan-17	DB	3	5.630	WINTER	32166	3RS ET
10-Jan-17	DB	4	4.630	WINTER	32166	3RS ET
10-Jan-17	NEL	2	2.100	WINTER	32166	3RS ET
10-Jan-17	NEL	3	29.220	WINTER	32166	3RS ET
10-Jan-17	NEL	4	16.680	WINTER	32166	3RS ET
12-Jan-17	NWL	2	20.090	WINTER	32166	3RS ET
12-Jan-17	NWL	3	61.010	WINTER	32166	3RS ET
12-Jan-17	NWL	4	0.700	WINTER	32166	3RS ET
13-Jan-17	SWL	2	27.517	WINTER	32166	3RS ET
13-Jan-17	SWL	3	28.899	WINTER	32166	3RS ET
13-Jan-17	SWL	4	5.330	WINTER	32166	3RS ET
19-Jan-17	AW	1	4.590	WINTER	32166	3RS ET
19-Jan-17	WL	2	7.198	WINTER	32166	3RS ET
19-Jan-17	WL	3	14.132	WINTER	32166	3RS ET
19-Jan-17	WL	4	11.030	WINTER	32166	3RS ET
19-Jan-17	SWL	3	5.883	WINTER	32166	3RS ET
19-Jan-17	SWL	4	1.000	WINTER	32166	3RS ET
20-Jan-17	DB	3	19.100	WINTER	32166	3RS ET
20-Jan-17	NEL	2	23.300	WINTER	32166	3RS ET
20-Jan-17	NEL	3	22.000	WINTER	32166	3RS ET
20-Jan-17	NEL	4	1.600	WINTER	32166	3RS ET
06-Feb-17	AW	2	2.940	WINTER	32166	3RS ET
06-Feb-17	AW	3	1.930	WINTER	32166	3RS ET
06-Feb-17	WL	2	17.000	WINTER	32166	3RS ET
06-Feb-17	WL	3	9.790	WINTER	32166	3RS ET
06-Feb-17	WL	4	3.530	WINTER	32166	3RS ET
06-Feb-17	SWL	4	2.540	WINTER	32166	3RS ET
06-Feb-17	SWL	5	4.350	WINTER	32166	3RS ET
07-Feb-17	DB	2	4.830	WINTER	32166	3RS ET
07-Feb-17	DB	3	6.020	WINTER	32166	3RS ET
07-Feb-17	DB	4	8.150	WINTER	32166	3RS ET
07-Feb-17	NEL	2	5.800	WINTER	32166	3RS ET
07-Feb-17	NEL	3	25.760	WINTER	32166	3RS ET
07-Feb-17	NEL	4	11.470	WINTER	32166	3RS ET
07-Feb-17	NEL	5	4.270	WINTER	32166	3RS ET
09-Feb-17	SWL	2	0.900	WINTER	32166	3RS ET
09-Feb-17	SWL	3	14.170	WINTER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
09-Feb-17	SWL	4	15.230	WINTER	32166	3RS ET
09-Feb-17	SWL	5	32.400	WINTER	32166	3RS ET
10-Feb-17	NEL	1	3.300	WINTER	32166	3RS ET
10-Feb-17	NEL	2	8.030	WINTER	32166	3RS ET
10-Feb-17	NEL	3	34.170	WINTER	32166	3RS ET
10-Feb-17	NEL	4	2.000	WINTER	32166	3RS ET
10-Feb-17	DB	2	8.790	WINTER	32166	3RS ET
10-Feb-17	DB	3	8.940	WINTER	32166	3RS ET
10-Feb-17	DB	4	0.970	WINTER	32166	3RS ET
16-Feb-17	AW	1	4.727	WINTER	32166	3RS ET
16-Feb-17	WL	1	18.363	WINTER	32166	3RS ET
16-Feb-17	WL	2	3.100	WINTER	32166	3RS ET
16-Feb-17	WL	3	6.070	WINTER	32166	3RS ET
17-Feb-17	SWL	1	37.700	WINTER	32166	3RS ET
17-Feb-17	SWL	2	29.260	WINTER	32166	3RS ET
20-Feb-17	NWL	1	27.200	WINTER	32166	3RS ET
20-Feb-17	NWL	2	48.100	WINTER	32166	3RS ET
21-Feb-17	NWL	3	14.170	WINTER	32166	3RS ET
21-Feb-17	NWL	4	38.720	WINTER	32166	3RS ET
21-Feb-17	NWL	5	21.810	WINTER	32166	3RS ET
06-Mar-17	NWL	1	5.000	SPRING	32166	3RS ET
06-Mar-17	NWL	2	17.100	SPRING	32166	3RS ET
06-Mar-17	NWL	3	50.100	SPRING	32166	3RS ET
06-Mar-17	NWL	4	3.700	SPRING	32166	3RS ET
10-Mar-17	DB	2	15.180	SPRING	32166	3RS ET
10-Mar-17	DB	3	3.920	SPRING	32166	3RS ET
10-Mar-17	NEL	1	1.000	SPRING	32166	3RS ET
10-Mar-17	NEL	2	11.750	SPRING	32166	3RS ET
10-Mar-17	NEL	3	34.250	SPRING	32166	3RS ET
13-Mar-17	AW	2	4.720	SPRING	32166	3RS ET
13-Mar-17	WL	2	12.180	SPRING	32166	3RS ET
13-Mar-17	WL	3	20.820	SPRING	32166	3RS ET
13-Mar-17	SWL	2	12.500	SPRING	32166	3RS ET
14-Mar-17	SWL	3	22.600	SPRING	32166	3RS ET
14-Mar-17	SWL	4	18.780	SPRING	32166	3RS ET
14-Mar-17	SWL	5	16.020	SPRING	32166	3RS ET
20-Mar-17	SWL	2	36.220	SPRING	32166	3RS ET
20-Mar-17	SWL	3	26.040	SPRING	32166	3RS ET
21-Mar-17	AW	1	4.850	SPRING	32166	3RS ET
21-Mar-17	WL	1	9.950	SPRING	32166	3RS ET
21-Mar-17	WL	2	19.076	SPRING	32166	3RS ET
21-Mar-17	WL	3	2.334	SPRING	32166	3RS ET
21-Mar-17	SWL	2	0.380	SPRING	32166	3RS ET
21-Mar-17	SWL	3	6.430	SPRING	32166	3RS ET
23-Mar-17	NWL	1	32.614	SPRING	32166	3RS ET
23-Mar-17	NWL	2	43.766	SPRING	32166	3RS ET
24-Mar-17	DB	2	8.740	SPRING	32166	3RS ET
24-Mar-17	DB	3	10.460	SPRING	32166	3RS ET
24-Mar-17	NEL	3	27.720	SPRING	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
24-Mar-17	NEL	4	18.880	SPRING	32166	3RS ET
05-Apr-17	NWL	1	3.000	SPRING	32166	3RS ET
05-Apr-17	NWL	2	38.728	SPRING	32166	3RS ET
05-Apr-17	NWL	3	32.700	SPRING	32166	3RS ET
10-Apr-17	AW	2	1.920	SPRING	32166	3RS ET
10-Apr-17	AW	3	1.090	SPRING	32166	3RS ET
10-Apr-17	AW	4	1.810	SPRING	32166	3RS ET
10-Apr-17	WL	3	24.720	SPRING	32166	3RS ET
10-Apr-17	WL	4	8.880	SPRING	32166	3RS ET
10-Apr-17	SWL	2	8.940	SPRING	32166	3RS ET
10-Apr-17	SWL	3	3.360	SPRING	32166	3RS ET
11-Apr-17	SWL	1	20.090	SPRING	32166	3RS ET
11-Apr-17	SWL	2	32.090	SPRING	32166	3RS ET
11-Apr-17	SWL	3	4.900	SPRING	32166	3RS ET
12-Apr-17	NEL	1	13.483	SPRING	32166	3RS ET
12-Apr-17	NEL	2	26.217	SPRING	32166	3RS ET
12-Apr-17	NEL	3	7.300	SPRING	32166	3RS ET
12-Apr-17	DB	2	7.700	SPRING	32166	3RS ET
12-Apr-17	DB	3	11.100	SPRING	32166	3RS ET
18-Apr-17	AW	3	4.870	SPRING	32166	3RS ET
18-Apr-17	WL	2	25.679	SPRING	32166	3RS ET
18-Apr-17	WL	3	4.960	SPRING	32166	3RS ET
18-Apr-17	SWL	1	0.821	SPRING	32166	3RS ET
18-Apr-17	SWL	2	5.049	SPRING	32166	3RS ET
24-Apr-17	NEL	2	26.150	SPRING	32166	3RS ET
24-Apr-17	NEL	3	20.650	SPRING	32166	3RS ET
24-Apr-17	DB	2	16.790	SPRING	32166	3RS ET
24-Apr-17	DB	3	1.710	SPRING	32166	3RS ET
25-Apr-17	NWL	2	1.100	SPRING	32166	3RS ET
25-Apr-17	NWL	3	35.320	SPRING	32166	3RS ET
25-Apr-17	NWL	4	38.880	SPRING	32166	3RS ET
26-Apr-17	SWL	1	1.400	SPRING	32166	3RS ET
26-Apr-17	SWL	2	40.231	SPRING	32166	3RS ET
26-Apr-17	SWL	3	20.409	SPRING	32166	3RS ET
04-May-17	SWL	1	1.190	SPRING	32166	3RS ET
04-May-17	SWL	2	43.260	SPRING	32166	3RS ET
04-May-17	SWL	3	17.450	SPRING	32166	3RS ET
05-May-17	AW	1	5.010	SPRING	32166	3RS ET
05-May-17	WL	2	24.605	SPRING	32166	3RS ET
05-May-17	WL	3	7.320	SPRING	32166	3RS ET
05-May-17	SWL	1	2.630	SPRING	32166	3RS ET
05-May-17	SWL	2	4.260	SPRING	32166	3RS ET
08-May-17	NWL	3	51.352	SPRING	32166	3RS ET
08-May-17	NWL	4	24.048	SPRING	32166	3RS ET
09-May-17	NEL	2	40.300	SPRING	32166	3RS ET
09-May-17	NEL	3	7.100	SPRING	32166	3RS ET
09-May-17	DB	2	20.900	SPRING	32166	3RS ET
11-May-17	AW	1	4.590	SPRING	32166	3RS ET
11-May-17	WL	1	13.043	SPRING	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
11-May-17	WL	2	2.621	SPRING	32166	3RS ET
11-May-17	WL	3	7.059	SPRING	32166	3RS ET
11-May-17	WL	4	5.220	SPRING	32166	3RS ET
11-May-17	SWL	2	0.520	SPRING	32166	3RS ET
11-May-17	SWL	3	2.050	SPRING	32166	3RS ET
11-May-17	SWL	4	2.970	SPRING	32166	3RS ET
17-May-17	NWL	1	8.700	SPRING	32166	3RS ET
17-May-17	NWL	2	60.600	SPRING	32166	3RS ET
17-May-17	NWL	3	6.300	SPRING	32166	3RS ET
22-May-17	NEL	2	6.960	SPRING	32166	3RS ET
22-May-17	NEL	3	27.140	SPRING	32166	3RS ET
22-May-17	NEL	4	12.700	SPRING	32166	3RS ET
22-May-17	DB	2	6.860	SPRING	32166	3RS ET
22-May-17	DB	3	11.640	SPRING	32166	3RS ET
23-May-17	SWL	2	26.840	SPRING	32166	3RS ET
23-May-17	SWL	3	33.160	SPRING	32166	3RS ET
07-Jun-17	SWL	2	33.230	SUMMER	32166	3RS ET
07-Jun-17	SWL	3	27.200	SUMMER	32166	3RS ET
07-Jun-17	SWL	4	1.900	SUMMER	32166	3RS ET
08-Jun-17	NWL	2	29.074	SUMMER	32166	3RS ET
08-Jun-17	NWL	3	26.566	SUMMER	32166	3RS ET
08-Jun-17	NWL	4	18.660	SUMMER	32166	3RS ET
08-Jun-17	NWL	5	1.100	SUMMER	32166	3RS ET
09-Jun-17	AW	1	1.040	SUMMER	32166	3RS ET
09-Jun-17	AW	2	3.900	SUMMER	32166	3RS ET
09-Jun-17	WL	1	2.850	SUMMER	32166	3RS ET
09-Jun-17	WL	2	5.782	SUMMER	32166	3RS ET
09-Jun-17	WL	3	13.859	SUMMER	32166	3RS ET
09-Jun-17	WL	4	8.589	SUMMER	32166	3RS ET
09-Jun-17	WL	5	0.920	SUMMER	32166	3RS ET
09-Jun-17	SWL	2	0.521	SUMMER	32166	3RS ET
09-Jun-17	SWL	3	1.399	SUMMER	32166	3RS ET
09-Jun-17	SWL	4	4.060	SUMMER	32166	3RS ET
12-Jun-17	DB	2	1.520	SUMMER	32166	3RS ET
12-Jun-17	DB	3	6.350	SUMMER	32166	3RS ET
12-Jun-17	DB	4	10.730	SUMMER	32166	3RS ET
12-Jun-17	NEL	2	1.100	SUMMER	32166	3RS ET
12-Jun-17	NEL	3	28.890	SUMMER	32166	3RS ET
12-Jun-17	NEL	4	7.910	SUMMER	32166	3RS ET
15-Jun-17	DB	2	1.530	SUMMER	32166	3RS ET
15-Jun-17	DB	3	17.070	SUMMER	32166	3RS ET
15-Jun-17	NEL	1	4.600	SUMMER	32166	3RS ET
15-Jun-17	NEL	2	37.200	SUMMER	32166	3RS ET
22-Jun-17	SWL	2	25.837	SUMMER	32166	3RS ET
22-Jun-17	SWL	3	29.935	SUMMER	32166	3RS ET
22-Jun-17	SWL	4	2.840	SUMMER	32166	3RS ET
23-Jun-17	NWL	2	37.550	SUMMER	32166	3RS ET
23-Jun-17	NWL	3	31.360	SUMMER	32166	3RS ET
23-Jun-17	NWL	4	4.790	SUMMER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
23-Jun-17	NEL	2	4.930	SUMMER	32166	3RS ET
23-Jun-17	NEL	3	2.930	SUMMER	32166	3RS ET
28-Jun-17	AW	2	4.750	SUMMER	32166	3RS ET
28-Jun-17	WL	2	4.697	SUMMER	32166	3RS ET
28-Jun-17	WL	3	16.707	SUMMER	32166	3RS ET
28-Jun-17	WL	4	8.280	SUMMER	32166	3RS ET
28-Jun-17	SWL	3	4.960	SUMMER	32166	3RS ET
11-Jul-17	AW	2	4.860	SUMMER	32166	3RS ET
11-Jul-17	WL	2	12.725	SUMMER	32166	3RS ET
11-Jul-17	WL	3	13.429	SUMMER	32166	3RS ET
11-Jul-17	WL	4	2.400	SUMMER	32166	3RS ET
11-Jul-17	SWL	2	1.616	SUMMER	32166	3RS ET
11-Jul-17	SWL	3	3.150	SUMMER	32166	3RS ET
12-Jul-17	NWL	1	16.730	SUMMER	32166	3RS ET
12-Jul-17	NWL	2	27.170	SUMMER	32166	3RS ET
12-Jul-17	NWL	3	30.520	SUMMER	32166	3RS ET
12-Jul-17	NWL	4	0.700	SUMMER	32166	3RS ET
13-Jul-17	DB	2	10.290	SUMMER	32166	3RS ET
13-Jul-17	DB	3	8.410	SUMMER	32166	3RS ET
13-Jul-17	NEL	2	4.253	SUMMER	32166	3RS ET
13-Jul-17	NEL	3	27.477	SUMMER	32166	3RS ET
13-Jul-17	NEL	4	14.770	SUMMER	32166	3RS ET
14-Jul-17	NWL	2	29.960	SUMMER	32166	3RS ET
14-Jul-17	NWL	3	33.840	SUMMER	32166	3RS ET
14-Jul-17	NWL	4	9.330	SUMMER	32166	3RS ET
20-Jul-17	SWL	2	9.500	SUMMER	32166	3RS ET
20-Jul-17	SWL	3	39.350	SUMMER	32166	3RS ET
20-Jul-17	SWL	4	12.780	SUMMER	32166	3RS ET
20-Jul-17	SWL	5	1.030	SUMMER	32166	3RS ET
21-Jul-17	AW	2	3.510	SUMMER	32166	3RS ET
21-Jul-17	AW	3	1.320	SUMMER	32166	3RS ET
21-Jul-17	WL	2	13.854	SUMMER	32166	3RS ET
21-Jul-17	WL	3	10.040	SUMMER	32166	3RS ET
21-Jul-17	WL	4	7.050	SUMMER	32166	3RS ET
21-Jul-17	SWL	3	1.970	SUMMER	32166	3RS ET
21-Jul-17	SWL	4	4.660	SUMMER	32166	3RS ET
25-Jul-17	NEL	2	31.060	SUMMER	32166	3RS ET
25-Jul-17	NEL	3	15.740	SUMMER	32166	3RS ET
25-Jul-17	DB	2	6.400	SUMMER	32166	3RS ET
25-Jul-17	DB	3	6.457	SUMMER	32166	3RS ET
25-Jul-17	DB	4	5.843	SUMMER	32166	3RS ET
26-Jul-17	SWL	2	41.124	SUMMER	32166	3RS ET
26-Jul-17	SWL	3	11.530	SUMMER	32166	3RS ET
26-Jul-17	SWL	4	9.430	SUMMER	32166	3RS ET
04-Aug-17	NWL	1	11.000	SUMMER	32166	3RS ET
04-Aug-17	NWL	2	20.300	SUMMER	32166	3RS ET
04-Aug-17	NWL	3	42.293	SUMMER	32166	3RS ET
04-Aug-17	NWL	4	0.300	SUMMER	32166	3RS ET
08-Aug-17	NWL	3	16.760	SUMMER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
08-Aug-17	NWL	4	57.140	SUMMER	32166	3RS ET
08-Aug-17	NWL	5	0.800	SUMMER	32166	3RS ET
09-Aug-17	DB	2	1.100	SUMMER	32166	3RS ET
09-Aug-17	DB	3	9.130	SUMMER	32166	3RS ET
09-Aug-17	DB	4	8.570	SUMMER	32166	3RS ET
09-Aug-17	NEL	2	29.120	SUMMER	32166	3RS ET
09-Aug-17	NEL	3	11.010	SUMMER	32166	3RS ET
09-Aug-17	NEL	4	4.470	SUMMER	32166	3RS ET
09-Aug-17	NEL	5	2.600	SUMMER	32166	3RS ET
14-Aug-17	AW	3	1.820	SUMMER	32166	3RS ET
14-Aug-17	AW	4	2.840	SUMMER	32166	3RS ET
14-Aug-17	WL	3	12.390	SUMMER	32166	3RS ET
14-Aug-17	WL	4	20.110	SUMMER	32166	3RS ET
14-Aug-17	SWL	3	12.400	SUMMER	32166	3RS ET
15-Aug-17	SWL	2	24.510	SUMMER	32166	3RS ET
15-Aug-17	SWL	3	29.836	SUMMER	32166	3RS ET
15-Aug-17	SWL	4	0.740	SUMMER	32166	3RS ET
21-Aug-17	SWL	1	2.600	SUMMER	32166	3RS ET
21-Aug-17	SWL	2	48.228	SUMMER	32166	3RS ET
21-Aug-17	SWL	3	7.160	SUMMER	32166	3RS ET
21-Aug-17	SWL	4	1.530	SUMMER	32166	3RS ET
22-Aug-17	AW	0	1.880	SUMMER	32166	3RS ET
22-Aug-17	AW	1	2.410	SUMMER	32166	3RS ET
22-Aug-17	WL	1	9.997	SUMMER	32166	3RS ET
22-Aug-17	WL	2	9.174	SUMMER	32166	3RS ET
22-Aug-17	WL	3	12.400	SUMMER	32166	3RS ET
22-Aug-17	WL	4	0.900	SUMMER	32166	3RS ET
22-Aug-17	SWL	1	1.940	SUMMER	32166	3RS ET
22-Aug-17	SWL	2	0.252	SUMMER	32166	3RS ET
22-Aug-17	SWL	3	3.154	SUMMER	32166	3RS ET
25-Aug-17	DB	2	14.360	SUMMER	32166	3RS ET
25-Aug-17	DB	3	3.840	SUMMER	32166	3RS ET
25-Aug-17	NEL	1	1.900	SUMMER	32166	3RS ET
25-Aug-17	NEL	2	34.960	SUMMER	32166	3RS ET
25-Aug-17	NEL	3	9.940	SUMMER	32166	3RS ET
11-Sep-17	SWL	1	9.330	AUTUMN	32166	3RS ET
11-Sep-17	SWL	2	51.970	AUTUMN	32166	3RS ET
12-Sep-17	SWL	3	5.564	AUTUMN	32166	3RS ET
12-Sep-17	SWL	4	1.334	AUTUMN	32166	3RS ET
12-Sep-17	WL	2	23.366	AUTUMN	32166	3RS ET
12-Sep-17	WL	3	8.530	AUTUMN	32166	3RS ET
12-Sep-17	WL	4	0.590	AUTUMN	32166	3RS ET
12-Sep-17	AW	2	4.850	AUTUMN	32166	3RS ET
13-Sep-17	NEL	1	5.293	AUTUMN	32166	3RS ET
13-Sep-17	NEL	2	41.007	AUTUMN	32166	3RS ET
13-Sep-17	NEL	3	1.200	AUTUMN	32166	3RS ET
13-Sep-17	DB	2	11.610	AUTUMN	32166	3RS ET
13-Sep-17	DB	3	7.190	AUTUMN	32166	3RS ET
14-Sep-17	DB	2	0.960	AUTUMN	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
14-Sep-17	DB	3	9.150	AUTUMN	32166	3RS ET
14-Sep-17	DB	4	5.740	AUTUMN	32166	3RS ET
14-Sep-17	DB	5	2.150	AUTUMN	32166	3RS ET
14-Sep-17	NEL	2	21.130	AUTUMN	32166	3RS ET
14-Sep-17	NEL	3	24.570	AUTUMN	32166	3RS ET
14-Sep-17	NEL	4	1.500	AUTUMN	32166	3RS ET
18-Sep-17	NWL	1	1.020	AUTUMN	32166	3RS ET
18-Sep-17	NWL	2	26.330	AUTUMN	32166	3RS ET
18-Sep-17	NWL	3	19.210	AUTUMN	32166	3RS ET
18-Sep-17	NWL	4	22.550	AUTUMN	32166	3RS ET
19-Sep-17	AW	2	2.890	AUTUMN	32166	3RS ET
19-Sep-17	AW	3	1.840	AUTUMN	32166	3RS ET
19-Sep-17	WL	1	3.460	AUTUMN	32166	3RS ET
19-Sep-17	WL	2	4.998	AUTUMN	32166	3RS ET
19-Sep-17	WL	3	7.760	AUTUMN	32166	3RS ET
19-Sep-17	WL	4	13.081	AUTUMN	32166	3RS ET
19-Sep-17	SWL	2	3.010	AUTUMN	32166	3RS ET
19-Sep-17	SWL	3	3.250	AUTUMN	32166	3RS ET
19-Sep-17	SWL	4	5.750	AUTUMN	32166	3RS ET
20-Sep-17	SWL	2	13.420	AUTUMN	32166	3RS ET
20-Sep-17	SWL	3	38.810	AUTUMN	32166	3RS ET
20-Sep-17	SWL	4	4.360	AUTUMN	32166	3RS ET
21-Sep-17	NWL	1	4.500	AUTUMN	32166	3RS ET
21-Sep-17	NWL	2	67.480	AUTUMN	32166	3RS ET
09-Oct-17	NEL	2	12.420	AUTUMN	32166	3RS ET
09-Oct-17	NEL	3	30.880	AUTUMN	32166	3RS ET
09-Oct-17	NEL	4	3.500	AUTUMN	32166	3RS ET
09-Oct-17	DB	2	0.900	AUTUMN	32166	3RS ET
09-Oct-17	DB	3	11.560	AUTUMN	32166	3RS ET
09-Oct-17	DB	4	5.640	AUTUMN	32166	3RS ET
18-Oct-17	NEL	2	43.800	AUTUMN	32166	3RS ET
18-Oct-17	NEL	3	3.000	AUTUMN	32166	3RS ET
18-Oct-17	DB	1	0.300	AUTUMN	32166	3RS ET
18-Oct-17	DB	2	15.030	AUTUMN	32166	3RS ET
18-Oct-17	DB	3	2.470	AUTUMN	32166	3RS ET
19-Oct-17	SWL	2	3.260	AUTUMN	32166	3RS ET
19-Oct-17	SWL	3	32.800	AUTUMN	32166	3RS ET
19-Oct-17	SWL	4	26.700	AUTUMN	32166	3RS ET
23-Oct-17	SWL	2	19.370	AUTUMN	32166	3RS ET
23-Oct-17	SWL	3	41.060	AUTUMN	32166	3RS ET
23-Oct-17	SWL	4	2.300	AUTUMN	32166	3RS ET
24-Oct-17	NWL	2	35.250	AUTUMN	32166	3RS ET
24-Oct-17	NWL	3	39.850	AUTUMN	32166	3RS ET
25-Oct-17	NWL	1	2.320	AUTUMN	32166	3RS ET
25-Oct-17	NWL	2	48.270	AUTUMN	32166	3RS ET
25-Oct-17	NWL	3	23.420	AUTUMN	32166	3RS ET
26-Oct-17	AW	2	4.880	AUTUMN	32166	3RS ET
26-Oct-17	WL	2	25.367	AUTUMN	32166	3RS ET
26-Oct-17	WL	3	7.387	AUTUMN	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
26-Oct-17	SWL	2	6.890	AUTUMN	32166	3RS ET
27-Oct-17	SWL	2	3.450	AUTUMN	32166	3RS ET
27-Oct-17	SWL	3	3.360	AUTUMN	32166	3RS ET
27-Oct-17	WL	2	5.730	AUTUMN	32166	3RS ET
27-Oct-17	WL	3	20.457	AUTUMN	32166	3RS ET
27-Oct-17	WL	4	7.333	AUTUMN	32166	3RS ET
27-Oct-17	AW	2	4.890	AUTUMN	32166	3RS ET
06-Nov-17	NEL	2	37.700	AUTUMN	32166	3RS ET
06-Nov-17	NEL	3	9.600	AUTUMN	32166	3RS ET
06-Nov-17	DB	1	1.800	AUTUMN	32166	3RS ET
06-Nov-17	DB	2	12.443	AUTUMN	32166	3RS ET
06-Nov-17	DB	3	4.157	AUTUMN	32166	3RS ET
07-Nov-17	NWL	2	5.860	AUTUMN	32166	3RS ET
07-Nov-17	NWL	3	53.860	AUTUMN	32166	3RS ET
07-Nov-17	NWL	4	14.980	AUTUMN	32166	3RS ET
15-Nov-17	NWL	2	13.220	AUTUMN	32166	3RS ET
15-Nov-17	NWL	3	55.550	AUTUMN	32166	3RS ET
15-Nov-17	NWL	4	5.100	AUTUMN	32166	3RS ET
16-Nov-17	DB	2	6.730	AUTUMN	32166	3RS ET
16-Nov-17	DB	3	9.810	AUTUMN	32166	3RS ET
16-Nov-17	DB	4	2.260	AUTUMN	32166	3RS ET
16-Nov-17	NEL	2	12.810	AUTUMN	32166	3RS ET
16-Nov-17	NEL	3	31.090	AUTUMN	32166	3RS ET
16-Nov-17	NEL	4	2.100	AUTUMN	32166	3RS ET
17-Nov-17	AW	2	2.920	AUTUMN	32166	3RS ET
17-Nov-17	AW	3	1.800	AUTUMN	32166	3RS ET
17-Nov-17	WL	1	1.082	AUTUMN	32166	3RS ET
17-Nov-17	WL	2	18.218	AUTUMN	32166	3RS ET
17-Nov-17	WL	3	1.660	AUTUMN	32166	3RS ET
17-Nov-17	WL	4	12.240	AUTUMN	32166	3RS ET
17-Nov-17	SWL	3	16.340	AUTUMN	32166	3RS ET
17-Nov-17	SWL	4	2.360	AUTUMN	32166	3RS ET
20-Nov-17	SWL	2	3.100	AUTUMN	32166	3RS ET
20-Nov-17	SWL	3	24.410	AUTUMN	32166	3RS ET
20-Nov-17	SWL	4	22.590	AUTUMN	32166	3RS ET
21-Nov-17	AW	3	4.660	AUTUMN	32166	3RS ET
21-Nov-17	WL	2	1.000	AUTUMN	32166	3RS ET
21-Nov-17	WL	3	22.000	AUTUMN	32166	3RS ET
21-Nov-17	WL	4	10.500	AUTUMN	32166	3RS ET
21-Nov-17	SWL	2	3.860	AUTUMN	32166	3RS ET
21-Nov-17	SWL	3	12.600	AUTUMN	32166	3RS ET
21-Nov-17	SWL	4	2.190	AUTUMN	32166	3RS ET
22-Nov-17	SWL	3	4.100	AUTUMN	32166	3RS ET
22-Nov-17	SWL	4	18.741	AUTUMN	32166	3RS ET
22-Nov-17	SWL	5	27.459	AUTUMN	32166	3RS ET
06-Dec-17	NWL	2	38.557	WINTER	32166	3RS ET
06-Dec-17	NWL	3	33.211	WINTER	32166	3RS ET
07-Dec-17	AW	2	4.662	WINTER	32166	3RS ET
07-Dec-17	WL	2	8.193	WINTER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
07-Dec-17	WL	3	25.630	WINTER	32166	3RS ET
07-Dec-17	SWL	2	1.930	WINTER	32166	3RS ET
07-Dec-17	SWL	3	4.795	WINTER	32166	3RS ET
08-Dec-17	SWL	3	27.200	WINTER	32166	3RS ET
08-Dec-17	SWL	4	23.990	WINTER	32166	3RS ET
08-Dec-17	SWL	5	11.760	WINTER	32166	3RS ET
13-Dec-17	NEL	2	46.600	WINTER	32166	3RS ET
13-Dec-17	DB	2	11.530	WINTER	32166	3RS ET
13-Dec-17	DB	3	7.160	WINTER	32166	3RS ET
14-Dec-17	NWL	2	63.690	WINTER	32166	3RS ET
14-Dec-17	NWL	3	11.210	WINTER	32166	3RS ET
18-Dec-17	SWL	3	10.240	WINTER	32166	3RS ET
18-Dec-17	SWL	4	35.830	WINTER	32166	3RS ET
18-Dec-17	SWL	5	17.000	WINTER	32166	3RS ET
21-Dec-17	DB	3	9.500	WINTER	32166	3RS ET
21-Dec-17	DB	4	9.050	WINTER	32166	3RS ET
21-Dec-17	NEL	2	10.490	WINTER	32166	3RS ET
21-Dec-17	NEL	3	25.110	WINTER	32166	3RS ET
21-Dec-17	NEL	4	10.900	WINTER	32166	3RS ET
28-Dec-17	AW	2	4.810	WINTER	32166	3RS ET
28-Dec-17	WL	2	32.373	WINTER	32166	3RS ET
28-Dec-17	WL	3	0.910	WINTER	32166	3RS ET
28-Dec-17	SWL	2	5.346	WINTER	32166	3RS ET
28-Dec-17	SWL	3	1.280	WINTER	32166	3RS ET

CWD Small Vessel Line-transect Survey Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
05-Jan-17	1	1010	CWD	9	WL	2	822	ON	3RS ET	22.2934	113.8612	WINTER	NONE
05-Jan-17	2	1051	CWD	2	WL	2	1361	ON	3RS ET	22.2738	113.8482	WINTER	NONE
05-Jan-17	3	1118	CWD	2	WL	2	118	ON	3RS ET	22.2584	113.8381	WINTER	NONE
05-Jan-17	4	1150	CWD	1	WL	2	65	ON	3RS ET	22.2413	113.8339	WINTER	NONE
05-Jan-17	5	1208	CWD	1	WL	2	86	ON	3RS ET	22.2321	113.8316	WINTER	NONE
05-Jan-17	6	1223	CWD	1	WL	1	115	ON	3RS ET	22.2248	113.8374	WINTER	NONE
05-Jan-17	7	1315	CWD	11	WL	1	84	ON	3RS ET	22.2049	113.8249	WINTER	PAIR TRAWLER
05-Jan-17	8	1347	CWD	1	WL	1	49	ON	3RS ET	22.1961	113.8317	WINTER	NONE
05-Jan-17	9	1356	CWD	1	WL	1	59	ON	3RS ET	22.1960	113.8416	WINTER	NONE
05-Jan-17	10	1436	CWD	5	SWL	2	190	ON	3RS ET	22.1726	113.8527	WINTER	PAIR TRAWLER
06-Jan-17	1	1006	CWD	2	SWL	2	N/A	OFF	3RS ET	22.1938	113.8471	WINTER	NONE
06-Jan-17	2	1453	CWD	1	SWL	1	N/A	OFF	3RS ET	22.2230	113.9451	WINTER	NONE
12-Jan-17	1	1121	CWD	5	NWL	2	260	ON	3RS ET	22.3739	113.8775	WINTER	NONE
13-Jan-17	1	1016	CWD	3	SWL	3	N/A	OFF	3RS ET	22.1948	113.8538	WINTER	NONE
13-Jan-17	2	1036	CWD	11	SWL	3	435	ON	3RS ET	22.1998	113.8688	WINTER	NONE
13-Jan-17	3	1334	CWD	2	SWL	2	41	ON	3RS ET	22.1547	113.9030	WINTER	NONE
13-Jan-17	4	1434	CWD	1	SWL	3	44	ON	3RS ET	22.1847	113.9278	WINTER	NONE
19-Jan-17	1	0926	CWD	3	AW	1	23	ON	3RS ET	22.3010	113.8864	WINTER	NONE
19-Jan-17	2	1022	CWD	1	WL	3	383	ON	3RS ET	22.2791	113.8613	WINTER	NONE
19-Jan-17	3	1107	CWD	6	WL	2	690	ON	3RS ET	22.2594	113.8430	WINTER	GILLNETTER
19-Jan-17	4	1131	CWD	1	WL	3	950	ON	3RS ET	22.2504	113.8413	WINTER	NONE
19-Jan-17	5	1217	CWD	2	WL	3	N/A	OFF	3RS ET	22.2234	113.8320	WINTER	NONE
19-Jan-17	6	1403	CWD	4	SWL	3	69	ON	3RS ET	22.1951	113.8587	WINTER	NONE
19-Jan-17	7	1436	CWD	2	WL	3	N/A	OFF	3RS ET	22.2198	113.8341	WINTER	NONE
19-Jan-17	8	1439	CWD	3	WL	3	N/A	OFF	3RS ET	22.2218	113.8351	WINTER	NONE
06-Feb-17	1	1013	CWD	3	WL	3	854	ON	3RS ET	22.2826	113.8613	WINTER	NONE
06-Feb-17	2	1140	CWD	3	WL	2	243	ON	3RS ET	22.2237	113.8323	WINTER	NONE
06-Feb-17	3	1218	CWD	3	WL	3	23	ON	3RS ET	22.2147	113.8300	WINTER	NONE
16-Feb-17	1	0957	CWD	2	AW	1	16	ON	3RS ET	22.2920	113.8749	WINTER	GILLNETTER
16-Feb-17	2	1037	CWD	5	WL	1	220	ON	3RS ET	22.2953	113.8612	WINTER	NONE
16-Feb-17	3	1121	CWD	4	WL	1	58	ON	3RS ET	22.2628	113.8564	WINTER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
16-Feb-17	4	1147	CWD	3	WL	1	244	ON	3RS ET	22.2602	113.8470	WINTER	NONE
16-Feb-17	5	1206	CWD	2	WL	1	53	ON	3RS ET	22.2535	113.8348	WINTER	NONE
16-Feb-17	6	1215	CWD	3	WL	1	20	ON	3RS ET	22.2504	113.8378	WINTER	NONE
16-Feb-17	7	1231	CWD	7	WL	1	173	ON	3RS ET	22.2418	113.8473	WINTER	NONE
16-Feb-17	8	1304	CWD	2	WL	1	19	ON	3RS ET	22.2414	113.8428	WINTER	NONE
16-Feb-17	9	1315	CWD	2	WL	1	31	ON	3RS ET	22.2382	113.8266	WINTER	NONE
16-Feb-17	10	1333	CWD	14	WL	1	226	ON	3RS ET	22.2308	113.8381	WINTER	PURSE SEINER
16-Feb-17	11	1420	CWD	2	WL	2	452	ON	3RS ET	22.2139	113.8244	WINTER	NONE
16-Feb-17	12	1449	CWD	1	WL	2	29	ON	3RS ET	22.2051	113.8191	WINTER	NONE
17-Feb-17	1	1048	FP	2	SWL	2	174	ON	3RS ET	22.1586	113.9356	WINTER	NONE
17-Feb-17	2	1238	CWD	3	SWL	1	1380	ON	3RS ET	22.2005	113.9079	WINTER	PURSE SEINER
17-Feb-17	3	1349	CWD	2	SWL	1	50	ON	3RS ET	22.1889	113.8879	WINTER	NONE
17-Feb-17	4	1551	CWD	1	SWL	1	N/A	OFF	3RS ET	22.2009	113.8934	WINTER	NONE
17-Feb-17	5	1559	CWD	1	SWL	1	N/A	OFF	3RS ET	22.2025	113.9121	WINTER	NONE
20-Feb-17	1	1137	CWD	1	NWL	2	259	ON	3RS ET	22.3819	113.8760	WINTER	NONE
21-Feb-17	1	1137	CWD	4	NWL	3	64	ON	3RS ET	22.3866	113.8776	WINTER	NONE
13-Mar-17	1	1130	CWD	4	WL	2	374	ON	3RS ET	22.2229	113.8269	SPRING	NONE
14-Mar-17	1	1045	FP	1	SWL	4	N/A	OFF	3RS ET	22.1827	113.9356	SPRING	NONE
14-Mar-17	2	1214	FP	1	SWL	5	N/A	ON	3RS ET	22.1461	113.9081	SPRING	NONE
20-Mar-17	1	1025	CWD	1	SWL	2	209	ON	3RS ET	22.2001	113.8688	SPRING	GILLNETTER
20-Mar-17	2	1211	FP	1	SWL	2	100	ON	3RS ET	22.1622	113.8978	SPRING	NONE
20-Mar-17	3	1257	CWD	1	SWL	2	36	ON	3RS ET	22.1846	113.9041	SPRING	NONE
20-Mar-17	4	1432	FP	3	SWL	3	108	ON	3RS ET	22.1470	113.9278	SPRING	NONE
20-Mar-17	5	1439	FP	2	SWL	3	63	ON	3RS ET	22.1472	113.9326	SPRING	NONE
20-Mar-17	6	1457	FP	2	SWL	3	24	ON	3RS ET	22.1816	113.9359	SPRING	NONE
21-Mar-17	1	1025	CWD	4	WL	1	202	ON	3RS ET	22.2603	113.8533	SPRING	PURSE SEINER
21-Mar-17	2	1214	CWD	13	WL	3	397	ON	3RS ET	22.1980	113.8262	SPRING	PURSE SEINER
21-Mar-17	3	1242	CWD	7	WL	2	1163	ON	3RS ET	22.1870	113.8386	SPRING	PURSE SEINER
23-Mar-17	1	1128	CWD	3	NWL	1	123	ON	3RS ET	22.3779	113.8767	SPRING	NONE
23-Mar-17	2	1222	CWD	3	NWL	1	19	ON	3RS ET	22.3733	113.8881	SPRING	NONE
05-Apr-17	1	1132	CWD	2	NWL	2	128	ON	3RS ET	22.3787	113.8765	SPRING	NONE
05-Apr-17	2	1147	CWD	3	NWL	2	16	ON	3RS ET	22.3827	113.8768	SPRING	NONE
11-Apr-17	1	1042	FP	1	SWL	1	336	ON	3RS ET	22.1801	113.9363	SPRING	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
11-Apr-17	2	1051	FP	6	SWL	1	3	ON	3RS ET	22.1699	113.9359	SPRING	NONE
11-Apr-17	3	1103	FP	5	SWL	1	43	ON	3RS ET	22.1561	113.9358	SPRING	NONE
11-Apr-17	4	1212	FP	5	SWL	2	363	ON	3RS ET	22.1480	113.9180	SPRING	NONE
18-Apr-17	1	1023	CWD	1	WL	3	17	ON	3RS ET	22.2698	113.8441	SPRING	NONE
18-Apr-17	2	1047	CWD	7	WL	2	580	ON	3RS ET	22.2605	113.8488	SPRING	NONE
18-Apr-17	3	1113	CWD	5	WL	2	277	ON	3RS ET	22.2578	113.8378	SPRING	NONE
18-Apr-17	4	1246	CWD	3	WL	2	278	ON	3RS ET	22.1873	113.8417	SPRING	NONE
18-Apr-17	5	1302	CWD	5	WL	2	450	ON	3RS ET	22.1870	113.8378	SPRING	NONE
18-Apr-17	6	1330	CWD	2	SWL	2	40	ON	3RS ET	22.1831	113.8499	SPRING	NONE
18-Apr-17	7	1406	CWD	2	SWL	2	512	ON	3RS ET	22.1925	113.8595	SPRING	NONE
26-Apr-17	1	1022	CWD	1	SWL	2	48	ON	3RS ET	22.2170	113.9356	SPRING	PURSE SEINER
26-Apr-17	2	1224	FP	2	SWL	2	89	ON	3RS ET	22.1526	113.9068	SPRING	NONE
26-Apr-17	3	1441	CWD	3	SWL	3	55	ON	3RS ET	22.1699	113.8684	SPRING	NONE
26-Apr-17	4	1456	CWD	2	SWL	3	755	ON	3RS ET	22.1692	113.8691	SPRING	NONE
04-May-17	1	1423	CWD	2	SWL	1	318	ON	3RS ET	22.2114	113.8839	SPRING	NONE
05-May-17	1	1032	CWD	11	WL	3	143	ON	3RS ET	22.2318	113.8279	SPRING	NONE
05-May-17	2	1121	CWD	3	WL	2	263	ON	3RS ET	22.2231	113.8363	SPRING	NONE
05-May-17	3	1135	CWD	1	WL	2	271	ON	3RS ET	22.2230	113.8263	SPRING	NONE
05-May-17	4	1211	CWD	5	WL	2	343	ON	3RS ET	22.2053	113.8398	SPRING	NONE
05-May-17	5	1305	CWD	7	WL	2	650	ON	3RS ET	22.1966	113.8405	SPRING	NONE
11-May-17	1	1041	CWD	1	WL	1	171	ON	3RS ET	22.2598	113.8467	SPRING	NONE
11-May-17	2	1118	CWD	9	WL	1	800	ON	3RS ET	22.2466	113.8511	SPRING	NONE
11-May-17	3	1148	CWD	13	WL	2	442	ON	3RS ET	22.2414	113.8442	SPRING	NONE
11-May-17	4	1217	CWD	6	WL	2	118	ON	3RS ET	22.2407	113.8333	SPRING	NONE
11-May-17	5	1228	CWD	6	WL	1	79	ON	3RS ET	22.2378	113.8266	SPRING	NONE
11-May-17	6	1236	CWD	7	WL	2	760	ON	3RS ET	22.2316	113.8287	SPRING	NONE
11-May-17	7	1315	CWD	9	WL	3	306	ON	3RS ET	22.2231	113.8195	SPRING	NONE
11-May-17	8	1335	CWD	11	WL	3	26	ON	3RS ET	22.2157	113.8177	SPRING	NONE
11-May-17	9	1432	CWD	6	WL	3	1021	ON	3RS ET	22.1867	113.8433	SPRING	NONE
11-May-17	10	1513	CWD	6	SWL	4	409	ON	3RS ET	22.1827	113.8498	SPRING	NONE
11-May-17	11	1543	CWD	4	SWL	3	354	ON	3RS ET	22.1967	113.8590	SPRING	NONE
23-May-17	1	1115	CWD	2	SWL	3	1472	ON	3RS ET	22.1802	113.9281	SPRING	NONE
23-May-17	2	1459	CWD	2	SWL	2	N/A	OFF	3RS ET	22.2029	113.8976	SPRING	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
07-Jun-17	1	1224	CWD	1	SWL	2	N/A	OFF	3RS ET	22.1766	113.9070	SUMMER	NONE
07-Jun-17	2	1249	CWD	6	SWL	2	125	ON	3RS ET	22.2030	113.9079	SUMMER	NONE
07-Jun-17	3	1507	CWD	2	SWL	2	116	ON	3RS ET	22.2007	113.8684	SUMMER	NONE
08-Jun-17	1	1202	CWD	2	NWL	3	362	ON	3RS ET	22.3993	113.8889	SUMMER	NONE
09-Jun-17	1	1106	CWD	5	WL	2	846	ON	3RS ET	22.2413	113.8450	SUMMER	NONE
09-Jun-17	2	1207	CWD	2	WL	4	138	ON	3RS ET	22.2311	113.8382	SUMMER	NONE
09-Jun-17	3	1240	CWD	3	WL	3	44	ON	3RS ET	22.2120	113.8372	SUMMER	NONE
09-Jun-17	4	1358	CWD	5	SWL	3	6	ON	3RS ET	22.1915	113.8592	SUMMER	NONE
22-Jun-17	1	1026	CWD	9	SWL	2	620	ON	3RS ET	22.2094	113.9364	SUMMER	NONE
22-Jun-17	2	1200	CWD	3	SWL	3	11	ON	3RS ET	22.2054	113.9266	SUMMER	NONE
22-Jun-17	3	1212	CWD	1	SWL	3	67	ON	3RS ET	22.2055	113.9258	SUMMER	NONE
22-Jun-17	4	1222	CWD	1	SWL	3	25	ON	3RS ET	22.2053	113.9191	SUMMER	NONE
22-Jun-17	5	1230	CWD	2	SWL	2	64	ON	3RS ET	22.2026	113.9178	SUMMER	NONE
22-Jun-17	6	1248	CWD	1	SWL	2	720	ON	3RS ET	22.1941	113.9184	SUMMER	NONE
22-Jun-17	7	1354	CWD	2	SWL	2	28	ON	3RS ET	22.1916	113.9083	SUMMER	NONE
22-Jun-17	8	1406	CWD	3	SWL	2	5	ON	3RS ET	22.2063	113.9061	SUMMER	NONE
23-Jun-17	1	1001	CWD	1	NWL	2	72	ON	3RS ET	22.3476	113.8690	SUMMER	NONE
23-Jun-17	2	1212	CWD	2	NWL	3	17	ON	3RS ET	22.4073	113.8882	SUMMER	NONE
28-Jun-17	1	1028	CWD	3	WL	3	869	ON	3RS ET	22.2694	113.8568	SUMMER	NONE
28-Jun-17	2	1047	CWD	3	WL	2	65	ON	3RS ET	22.2649	113.8580	SUMMER	NONE
28-Jun-17	3	1119	CWD	5	WL	3	49	ON	3RS ET	22.2480	113.8515	SUMMER	NONE
28-Jun-17	4	1141	CWD	2	WL	3	250	ON	3RS ET	22.2411	113.8454	SUMMER	NONE
28-Jun-17	5	1201	CWD	2	WL	3	4	ON	3RS ET	22.2321	113.8296	SUMMER	NONE
28-Jun-17	6	1214	CWD	5	WL	4	482	ON	3RS ET	22.2232	113.8342	SUMMER	NONE
28-Jun-17	7	1250	CWD	2	WL	3	441	ON	3RS ET	22.2144	113.8268	SUMMER	NONE
28-Jun-17	8	1330	CWD	5	WL	3	224	ON	3RS ET	22.1953	113.8375	SUMMER	NONE
28-Jun-17	9	1428	CWD	1	SWL	3	1164	ON	3RS ET	22.1831	113.8593	SUMMER	NONE
11-Jul-17	1	1038	CWD	2	WL	2	82	ON	3RS ET	22.2668	113.8592	SUMMER	NONE
11-Jul-17	2	1055	CWD	8	WL	2	19	ON	3RS ET	22.2608	113.8536	SUMMER	NONE
11-Jul-17	3	1133	CWD	2	WL	3	351	ON	3RS ET	22.2498	113.8403	SUMMER	NONE
11-Jul-17	4	1144	CWD	1	WL	2	8	ON	3RS ET	22.2500	113.8500	SUMMER	NONE
11-Jul-17	5	1159	CWD	4	WL	2	726	ON	3RS ET	22.2432	113.8488	SUMMER	NONE
11-Jul-17	6	1216	CWD	1	WL	2	17	ON	3RS ET	22.2414	113.8463	SUMMER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
11-Jul-17	7	1242	CWD	2	WL	3	11	ON	3RS ET	22.2279	113.8378	SUMMER	NONE
11-Jul-17	8	1259	CWD	2	WL	3	196	ON	3RS ET	22.2185	113.8137	SUMMER	NONE
11-Jul-17	9	1318	CWD	2	WL	3	16	ON	3RS ET	22.2143	113.8333	SUMMER	NONE
11-Jul-17	10	1350	CWD	7	WL	4	324	ON	3RS ET	22.1969	113.8397	SUMMER	NONE
11-Jul-17	11	1414	CWD	3	WL	4	157	ON	3RS ET	22.1864	113.8401	SUMMER	NONE
11-Jul-17	12	1435	CWD	4	SWL	2	118	ON	3RS ET	22.1903	113.8499	SUMMER	NONE
11-Jul-17	13	1506	CWD	4	SWL	2	299	ON	3RS ET	22.1883	113.8593	SUMMER	NONE
12-Jul-17	1	0950	CWD	2	NWL	1	70	ON	3RS ET	22.3715	113.8673	SUMMER	NONE
12-Jul-17	2	1316	CWD	1	NWL	3	102	ON	3RS ET	22.3998	113.8983	SUMMER	NONE
14-Jul-17	1	0953	CWD	1	NWL	3	351	ON	3RS ET	22.3615	113.8666	SUMMER	NONE
14-Jul-17	2	1048	CWD	2	NWL	2	890	ON	3RS ET	22.2773	113.8689	SUMMER	NONE
14-Jul-17	3	1210	CWD	1	NWL	2	169	ON	3RS ET	22.3909	113.8780	SUMMER	NONE
20-Jul-17	1	1412	CWD	2	SWL	3	319	ON	3RS ET	22.1776	113.8785	SUMMER	NONE
20-Jul-17	2	1457	CWD	1	SWL	3	2226	ON	3RS ET	22.1900	113.8678	SUMMER	NONE
20-Jul-17	3	1524	CWD	3	WL	2	N/A	OFF	3RS ET	22.2178	113.8339	SUMMER	NONE
21-Jul-17	1	1032	CWD	5	WL	2	20	ON	3RS ET	22.2649	113.8585	SUMMER	NONE
21-Jul-17	2	1131	CWD	2	WL	3	65	ON	3RS ET	22.2318	113.8372	SUMMER	NONE
21-Jul-17	3	1151	CWD	2	WL	2	17	ON	3RS ET	22.2288	113.8383	SUMMER	NONE
21-Jul-17	4	1208	CWD	2	WL	3	190	ON	3RS ET	22.2182	113.8138	SUMMER	NONE
21-Jul-17	5	1223	CWD	2	WL	4	27	ON	3RS ET	22.2139	113.8322	SUMMER	NONE
21-Jul-17	6	1243	CWD	1	WL	4	62	ON	3RS ET	22.2048	113.8383	SUMMER	NONE
21-Jul-17	7	1310	CWD	6	WL	3	27	ON	3RS ET	22.1956	113.8425	SUMMER	NONE
25-Jul-17	1	1301	CWD	4	DB	4	N/A	OFF	3RS ET	22.4062	113.8941	SUMMER	NONE
26-Jul-17	1	1026	CWD	1	WL	2	N/A	OFF	3RS ET	22.2362	113.8409	SUMMER	NONE
26-Jul-17	2	1033	CWD	2	WL	2	N/A	OFF	3RS ET	22.2183	113.8339	SUMMER	NONE
26-Jul-17	3	1045	CWD	2	SWL	2	N/A	OFF	3RS ET	22.1948	113.8509	SUMMER	NONE
26-Jul-17	4	1056	CWD	3	SWL	2	252	ON	3RS ET	22.1999	113.8684	SUMMER	NONE
26-Jul-17	5	1301	CWD	7	SWL	2	234	ON	3RS ET	22.2036	113.9083	SUMMER	NONE
26-Jul-17	6	1411	FP	2	SWL	3	87	ON	3RS ET	22.1534	113.9183	SUMMER	NONE
26-Jul-17	7	1437	CWD	2	SWL	3	711	ON	3RS ET	22.2040	113.9181	SUMMER	GILNETTER
04-Aug-17	1	1202	CWD	2	NWL	3	41	ON	3RS ET	22.4075	113.8878	SUMMER	NONE
04-Aug-17	2	1322	CWD	3	NWL	3	42	ON	3RS ET	22.3735	113.8980	SUMMER	NONE
04-Aug-17	3	1339	CWD	3	NWL	1	3	ON	3RS ET	22.3782	113.8978	SUMMER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
08-Aug-17	1	1305	CWD	2	NWL	4	N/A	OFF	3RS ET	22.3817	113.8981	SUMMER	NONE
14-Aug-17	1	1121	CWD	1	WL	3	98	ON	3RS ET	22.2321	113.8264	SUMMER	NONE
14-Aug-17	2	1242	CWD	2	WL	4	149	ON	3RS ET	22.1874	113.8301	SUMMER	NONE
14-Aug-17	3	1252	CWD	4	WL	4	N/A	OFF	3RS ET	22.1920	113.8425	SUMMER	NONE
14-Aug-17	4	1316	CWD	1	SWL	3	N/A	OFF	3RS ET	22.1906	113.8491	SUMMER	NONE
15-Aug-17	1	1029	CWD	1	SWL	2	303	ON	3RS ET	22.2108	113.9358	SUMMER	NONE
15-Aug-17	2	1131	CWD	1	SWL	3	182	ON	3RS ET	22.1818	113.9276	SUMMER	NONE
15-Aug-17	3	1255	CWD	5	SWL	2	146	ON	3RS ET	22.1784	113.9041	SUMMER	NONE
15-Aug-17	4	1338	CWD	1	SWL	3	1090	ON	3RS ET	22.1901	113.8967	SUMMER	NONE
15-Aug-17	5	1343	CWD	8	SWL	3	477	ON	3RS ET	22.1853	113.8973	SUMMER	NONE
15-Aug-17	6	1407	CWD	1	SWL	2	783	ON	3RS ET	22.1756	113.8969	SUMMER	NONE
15-Aug-17	7	1455	CWD	3	SWL	2	11	ON	3RS ET	22.1794	113.8876	SUMMER	NONE
21-Aug-17	1	1232	CWD	3	SWL	3	156	ON	3RS ET	22.1673	113.9050	SUMMER	GILNETTER
21-Aug-17	2	1333	CWD	2	SWL	2	29	ON	3RS ET	22.1789	113.8982	SUMMER	NONE
21-Aug-17	3	1344	CWD	8	SWL	2	713	ON	3RS ET	22.1741	113.8972	SUMMER	NONE
21-Aug-17	4	1431	CWD	8	SWL	2	174	ON	3RS ET	22.1729	113.8875	SUMMER	NONE
21-Aug-17	5	1516	CWD	3	SWL	2	15	ON	3RS ET	22.1796	113.8786	SUMMER	NONE
21-Aug-17	6	1539	CWD	2	SWL	2	126	ON	3RS ET	22.1665	113.8688	SUMMER	NONE
21-Aug-17	7	1549	CWD	2	SWL	2	28	ON	3RS ET	22.1720	113.8690	SUMMER	NONE
22-Aug-17	1	0943	CWD	1	AW	1	87	ON	3RS ET	22.2965	113.8825	SUMMER	NONE
22-Aug-17	2	1031	CWD	1	WL	1	37	ON	3RS ET	22.2776	113.8518	SUMMER	NONE
22-Aug-17	3	1043	CWD	2	WL	1	6	ON	3RS ET	22.2684	113.8457	SUMMER	NONE
22-Aug-17	4	1059	CWD	2	WL	1	140	ON	3RS ET	22.2656	113.8585	SUMMER	NONE
22-Aug-17	5	1112	CWD	1	WL	1	189	ON	3RS ET	22.2609	113.8550	SUMMER	NONE
22-Aug-17	6	1127	CWD	6	WL	1	84	ON	3RS ET	22.2602	113.8396	SUMMER	NONE
22-Aug-17	7	1202	CWD	4	WL	2	149	ON	3RS ET	22.2419	113.8404	SUMMER	NONE
22-Aug-17	8	1326	CWD	1	WL	3	31	ON	3RS ET	22.1875	113.8419	SUMMER	NONE
22-Aug-17	9	1335	CWD	4	WL	2	376	ON	3RS ET	22.1865	113.8386	SUMMER	NONE
22-Aug-17	10	1408	CWD	3	SWL	3	182	ON	3RS ET	22.1718	113.8533	SUMMER	NONE
22-Aug-17	11	1432	CWD	4	SWL	2	210	ON	3RS ET	22.1748	113.8594	SUMMER	NONE
11-Sep-17	1	1131	CWD	1	SWL	2	83	ON	3RS ET	22.2054	113.9212	AUTUMN	NONE
11-Sep-17	2	1344	CWD	4	SWL	1	780	ON	3RS ET	22.1795	113.8881	AUTUMN	NONE
12-Sep-17	1	1045	CWD	1	SWL	4	93	ON	3RS ET	22.1932	113.8584	AUTUMN	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
12-Sep-17	2	1110	CWD	3	SWL	3	N/A	OFF	3RS ET	22.1814	113.8492	AUTUMN	NONE
12-Sep-17	3	1211	CWD	4	WL	2	53	ON	3RS ET	22.2150	113.8309	AUTUMN	NONE
12-Sep-17	4	1347	CWD	3	WL	2	60	ON	3RS ET	22.2608	113.8471	AUTUMN	NONE
12-Sep-17	5	1358	CWD	3	WL	2	107	ON	3RS ET	22.2640	113.8582	AUTUMN	NONE
18-Sep-17	1	1009	CWD	15	NWL	2	248	ON	3RS ET	22.3365	113.8679	AUTUMN	NONE
18-Sep-17	2	1211	CWD	2	NWL	2	151	ON	3RS ET	22.4006	113.8778	AUTUMN	NONE
18-Sep-17	3	1345	CWD	1	NWL	3	65	ON	3RS ET	22.4003	113.8976	AUTUMN	NONE
19-Sep-17	1	1020	CWD	6	WL	1	860	ON	3RS ET	22.2745	113.8488	AUTUMN	NONE
19-Sep-17	2	1106	CWD	4	WL	2	57	ON	3RS ET	22.2652	113.8578	AUTUMN	NONE
19-Sep-17	3	1126	CWD	2	WL	2	428	ON	3RS ET	22.2603	113.8454	AUTUMN	NONE
19-Sep-17	4	1134	CWD	1	WL	3	30	ON	3RS ET	22.2573	113.8371	AUTUMN	NONE
19-Sep-17	5	1145	CWD	1	WL	3	18	ON	3RS ET	22.2497	113.8429	AUTUMN	NONE
19-Sep-17	6	1202	CWD	3	WL	3	73	ON	3RS ET	22.2408	113.8386	AUTUMN	NONE
19-Sep-17	7	1258	CWD	1	WL	4	113	ON	3RS ET	22.2053	113.8363	AUTUMN	NONE
19-Sep-17	8	1420	CWD	1	SWL	2	261	ON	3RS ET	22.2004	113.8659	AUTUMN	NONE
20-Sep-17	1	1215	CWD	7	SWL	2	305	ON	3RS ET	22.1643	113.9011	AUTUMN	NONE
20-Sep-17	2	1332	CWD	5	SWL	3	90	ON	3RS ET	22.1576	113.8969	AUTUMN	NONE
20-Sep-17	3	1434	CWD	3	SWL	2	496	ON	3RS ET	22.2053	113.8777	AUTUMN	NONE
20-Sep-17	4	1534	CWD	3	SWL	3	N/A	OFF	3RS ET	22.1931	113.8450	AUTUMN	NONE
21-Sep-17	1	0952	CWD	1	NWL	2	1308	ON	3RS ET	22.3786	113.8681	AUTUMN	NONE
21-Sep-17	2	1005	CWD	1	NWL	2	N/A	OFF	3RS ET	22.3685	113.8679	AUTUMN	NONE
21-Sep-17	3	1148	CWD	1	NWL	2	284	ON	3RS ET	22.3730	113.8773	AUTUMN	NONE
21-Sep-17	4	1204	CWD	2	NWL	2	124	ON	3RS ET	22.3901	113.8784	AUTUMN	NONE
19-Oct-17	1	1228	CWD	3	SWL	3	420	ON	3RS ET	22.2031	113.9085	AUTUMN	NONE
19-Oct-17	2	1351	CWD	4	SWL	3	176	ON	3RS ET	22.2053	113.9197	AUTUMN	GILLNETTER
19-Oct-17	3	1436	FP	1	SWL	3	11	ON	3RS ET	22.1671	113.9271	AUTUMN	NONE
23-Oct-17	1	1110	FP	2	SWL	3	105	ON	3RS ET	22.1654	113.9271	AUTUMN	NONE
23-Oct-17	2	1133	CWD	1	SWL	2	18	ON	3RS ET	22.2050	113.9222	AUTUMN	NONE
24-Oct-17	1	1114	CWD	3	NWL	2	1096	ON	3RS ET	22.3346	113.8782	AUTUMN	NONE
25-Oct-17	1	1126	CWD	5	NWL	2	178	ON	3RS ET	22.3628	113.8779	AUTUMN	NONE
25-Oct-17	2	1158	CWD	4	NWL	2	459	ON	3RS ET	22.3878	113.8775	AUTUMN	NONE
26-Oct-17	1	1024	CWD	6	WL	2	174	ON	3RS ET	22.2689	113.8519	AUTUMN	NONE
26-Oct-17	2	1052	CWD	5	WL	3	84	ON	3RS ET	22.2605	113.8508	AUTUMN	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
26-Oct-17	3	1116	CWD	2	WL	2	814	ON	3RS ET	22.2507	113.8338	AUTUMN	GILLNETTER
26-Oct-17	4	1142	CWD	2	WL	3	396	ON	3RS ET	22.2413	113.8383	AUTUMN	NONE
26-Oct-17	5	1206	CWD	3	WL	3	427	ON	3RS ET	22.2410	113.8320	AUTUMN	NONE
26-Oct-17	6	1233	CWD	3	WL	3	199	ON	3RS ET	22.2323	113.8309	AUTUMN	NONE
26-Oct-17	7	1301	CWD	6	WL	2	916	ON	3RS ET	22.2237	113.8239	AUTUMN	SHRIMP TRAWLER
26-Oct-17	8	1326	CWD	4	WL	2	67	ON	3RS ET	22.2140	113.8143	AUTUMN	NONE
26-Oct-17	9	1410	CWD	4	WL	2	57	ON	3RS ET	22.1962	113.8343	AUTUMN	NONE
26-Oct-17	10	1511	CWD	2	SWL	2	143	ON	3RS ET	22.1987	113.8593	AUTUMN	NONE
27-Oct-17	1	1236	CWD	5	WL	3	35	ON	3RS ET	22.2415	113.8334	AUTUMN	NONE
27-Oct-17	2	1304	CWD	4	WL	3	257	ON	3RS ET	22.2508	113.8474	AUTUMN	NONE
27-Oct-17	3	1402	CWD	1	WL	2	320	ON	3RS ET	22.2886	113.8613	AUTUMN	NONE
07-Nov-17	1	1211	CWD	3	NWL	3	5	ON	3RS ET	22.3622	113.8877	AUTUMN	NONE
15-Nov-17	1	0946	CWD	6	NWL	2	594	ON	3RS ET	22.3850	113.8683	AUTUMN	NONE
15-Nov-17	2	1314	CWD	1	NWL	3	4	ON	3RS ET	22.3705	113.8983	AUTUMN	NONE
17-Nov-17	1	1053	CWD	4	WL	2	668	ON	3RS ET	22.2504	113.8432	AUTUMN	NONE
20-Nov-17	1	1154	FP	2	SWL	3	122	ON	3RS ET	22.1564	113.9180	AUTUMN	NONE
21-Nov-17	1	0936	CWD	5	AW	3	46	ON	3RS ET	22.3009	113.8862	AUTUMN	NONE
21-Nov-17	2	1324	CWD	2	SWL	3	142	ON	3RS ET	22.1785	113.8689	AUTUMN	NONE
22-Nov-17	1	1121	CWD	2	SWL	3	21	ON	3RS ET	22.2048	113.9271	AUTUMN	NONE
06-Dec-17	1	1031	CWD	12	NWL	3	630	ON	3RS ET	22.2881	113.8684	WINTER	NONE
06-Dec-17	2	1113	CWD	4	NWL	3	100	ON	3RS ET	22.2719	113.8692	WINTER	NONE
06-Dec-17	3	1132	CWD	7	NWL	2	137	ON	3RS ET	22.2727	113.8733	WINTER	NONE
06-Dec-17	4	1236	CWD	5	NWL	3	494	ON	3RS ET	22.3596	113.8777	WINTER	NONE
06-Dec-17	5	1350	CWD	3	NWL	2	13	ON	3RS ET	22.3551	113.8848	WINTER	NONE
07-Dec-17	1	0929	CWD	5	AW	2	145	ON	3RS ET	22.3023	113.8765	WINTER	NONE
07-Dec-17	2	1058	CWD	3	WL	2	146	ON	3RS ET	22.2694	113.8601	WINTER	NONE
07-Dec-17	3	1126	CWD	1	WL	2	46	ON	3RS ET	22.2653	113.8580	WINTER	NONE
07-Dec-17	4	1238	CWD	3	WL	3	194	ON	3RS ET	22.2204	113.8146	WINTER	NONE
07-Dec-17	5	1407	CWD	2	WL	3	530	ON	3RS ET	22.1855	113.8498	WINTER	NONE
08-Dec-17	1	1213	FP	1	SWL	3	61	ON	3RS ET	22.1481	113.9173	WINTER	NONE
08-Dec-17	2	1258	CWD	1	SWL	5	343	ON	3RS ET	22.2053	113.9070	WINTER	NONE
14-Dec-17	1	1204	CWD	7	NWL	2	765	ON	3RS ET	22.3952	113.8884	WINTER	NONE
14-Dec-17	2	1327	CWD	2	NWL	3	127	ON	3RS ET	22.3888	113.8974	WINTER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
18-Dec-17	1	1056	FP	2	SWL	4	135	ON	3RS ET	22.1511	113.9358	WINTER	NONE
21-Dec-17	1	0921	CWD	7	DB	4	N/A	OFF	3RS ET	22.4141	113.8911	WINTER	NONE
21-Dec-17	2	1014	CWD	1	DB	3	65	ON	3RS ET	22.4221	113.8818	WINTER	NONE
28-Dec-17	1	1044	CWD	1	WL	3	216	ON	3RS ET	22.2559	113.8364	WINTER	NONE
28-Dec-17	2	1102	CWD	3	WL	2	34	ON	3RS ET	22.2541	113.8354	WINTER	NONE
28-Dec-17	3	1146	CWD	4	WL	2	82	ON	3RS ET	22.2318	113.8249	WINTER	NONE
28-Dec-17	4	1244	CWD	4	WL	2	106	ON	3RS ET	22.2146	113.8276	WINTER	NONE
28-Dec-17	5	1303	CWD	3	WL	2	100	ON	3RS ET	22.2055	113.8302	WINTER	NONE
28-Dec-17	6	1322	CWD	2	WL	2	306	ON	3RS ET	22.2024	113.8215	WINTER	NONE
28-Dec-17	7	1332	CWD	3	WL	2	N/A	OFF	3RS ET	22.2030	113.8213	WINTER	NONE
28-Dec-17	8	1428	CWD	3	SWL	2	1182	ON	3RS ET	22.1918	113.8586	WINTER	NONE

Abbreviations: STG# = Sighting Number; GP SZ = Dolphin Group Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance (in metres); N/A = Not Applicable;
DEC LAT = Latitude (WGS84 in Decimal), DEC LON = Longitude (WGS84 in Decimal); BOAT ASSOC. = Fishing Boat Association

CWD Land-based Theodolite Tracking

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
9/Jan/17	Sha Chau	8:40	14:40	6:00	2	3	0	N/A
18/Jan/17	Lung Kw u Chau	8:40	14:40	6:00	2-3	3-4	3	1-5
20/Jan/17	Sha Chau	8:45	14:45	6:00	3	2	0	N/A
24/Jan/17	Lung Kw u Chau	8:33	14:33	6:00	2-3	3	1	4
25/Jan/17	Lung Kw u Chau	8:36	14:36	6:00	2-3	3	6	1-3
14/Feb/17	Sha Chau	8:34	14:34	6:00	2-3	1	0	N/A
15/Feb/17	Lung Kw u Chau	8:38	14:38	6:00	2-3	2	12	1-4
20/Feb/17	Lung Kw u Chau	8:45	14:45	6:00	1	3-4	0	N/A
27/Feb/17	Sha Chau	8:45	14:45	6:00	2-4	2	0	N/A
28/Feb/17	Lung Kw u Chau	8:47	15:02	6:15	1-2	2	12	1-7
20/Mar/17	Lung Kw u Chau	8:50	14:50	6:00	2	3	1	2
21/Mar/17	Lung Kw u Chau	8:47	14:47	6:00	2	3	0	N/A
24/Mar/17	Sha Chau	8:48	14:48	6:00	4	2	0	N/A
28/Mar/17	Lung Kw u Chau	8:41	14:41	6:00	2-3	2	5	1-4
29/Mar/17	Sha Chau	8:38	14:38	6:00	2-4	3	0	N/A
6/Apr/17	Sha Chau	8:35	14:35	6:00	2	3	0	N/A
7/Apr/17	Lung Kw u Chau	8:44	14:44	6:00	2	2-3	2	2
20/Apr/17	Lung Kw u Chau	8:50	14:50	6:00	1-2	2-4	4	2-3
25/Apr/17	Lung Kw u Chau	8:49	14:49	6:00	3-4	3-4	0	N/A
27/Apr/17	Sha Chau	8:50	14:50	6:00	2-4	1-4	0	N/A
17/May/17	Sha Chau	8:37	14:37	6:00	2	2	0	N/A
19/May/17	Lung Kw u Chau	8:39	14:39	6:00	1-3	2	0	N/A
22/May/17	Sha Chau	8:35	14:35	6:00	4	2-3	0	N/A
25/May/17	Lung Kw u Chau	8:40	14:40	6:00	3	2-3	1	5
29/May/17	Lung Kw u Chau	8:41	14:41	6:00	2-3	2	1	2
22/Jun/17	Lung Kw u Chau	8:44	14:44	6:00	2-3	2	0	N/A
23/Jun/17	Sha Chau	8:44	14:44	6:00	2-3	1-2	0	N/A
26/Jun/17	Lung Kw u Chau	8:37	14:37	6:00	1-3	2	5	3-5
27/Jun/17	Sha Chau	8:39	14:39	6:00	2-3	1-2	0	N/A
29/Jun/17	Lung Kw u Chau	8:46	14:46	6:00	2-3	1	4	2-5
5/Jul/17	Lung Kw u Chau	8:39	14:39	6:00	2-4	1	0	N/A

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
10/Jul/17	Lung Kw u Chau	8:44	14:44	6:00	2	2	5	1-6
14/Jul/17	Lung Kw u Chau	8:46	14:56	6:10	2-3	1	4	1-4
21/Jul/17	Sha Chau	8:46	14:46	6:00	2-3	2	0	N/A
24/Jul/17	Sha Chau	8:39	14:39	6:00	2	2	0	N/A
17/Aug/17	Lung Kw u Chau	8:39	14:39	6:00	2	2	2	1-4
18/Aug/17	Sha Chau	8:49	14:49	6:00	1-2	2	0	N/A
21/Aug/17	Lung Kw u Chau	9:10	15:10	6:00	2	2-3	6	1-6
22/Aug/17	Lung Kw u Chau	8:43	14:43	6:00	2-4	4	3	1-5
25/Aug/17	Sha Chau	8:46	14:46	6:00	2	2	2	1-2
6/Sep/17	Lung Kw u Chau	8:46	14:26	5:40	2	2-3	13	1-5
18/Sep/17	Lung Kw u Chau	8:42	15:02	6:20	2-3	3	4	1-3
22/Sep/17	Sha Chau	9:11	15:11	6:00	2-3	2	0	N/A
27/Sep/17	Lung Kw u Chau	8:51	14:51	6:00	2-3	3	6	1-4
28/Sep/17	Sha Chau	8:40	14:40	6:00	2	2	0	N/A
20/Oct/17	Lung Kw u Chau	8:52	14:52	6:00	2-3	2	4	1-4
23/Oct/17	Lung Kw u Chau	8:42	14:42	6:00	3-4	3	6	2-4
25/Oct/17	Sha Chau	8:46	14:46	6:00	2	3	0	N/A
26/Oct/17	Sha Chau	9:01	15:01	6:00	2	3	0	N/A
27/Oct/17	Lung Kw u Chau	8:48	14:48	6:00	2-3	2	6	1-6
2/Nov/17	Lung Kw u Chau	8:52	14:52	6:00	3	3	7	2-6
9/Nov/17	Sha Chau	8:40	14:40	6:00	2	2-3	0	N/A
16/Nov/17	Sha Chau	8:36	14:36	6:00	2-3	1-2	0	N/A
22/Nov/17	Lung Kw u Chau	8:48	14:48	6:00	4	2	4	3-11
23/Nov/17	Lung Kw u Chau	8:37	14:37	6:00	3-4	3	7	1-6
5/Dec/17	Sha Chau	8:38	14:38	6:00	2-3	3	0	N/A
11/Dec/17	Lung Kw u Chau	8:41	14:41	6:00	2-4	3	6	1-5
15/Dec/17	Lung Kw u Chau	8:40	14:40	6:00	2-3	2-3	6	2-4
28/Dec/17	Sha Chau	9:01	15:01	6:00	2	2-3	0	N/A
29/Dec/17	Lung Kw u Chau	9:09	15:09	6:00	2-3	3	4	1-3

Annex 1 List of References for CWD Monitoring

- Buckland, S.T., Anderson, D.R., Burnham, K.P., Laake, J.L., Borchers, D.L. & Thomas, L. (2001) Introduction to Distance Sampling: Estimating Abundance of Biological Populations. Oxford University Press.
- Chen, T., Hung, S.K., Qiu, Y., Jia, X. & Jefferson, T.A. (2010) Distribution, abundance, and individual movements of Indo-Pacific humpback dolphins (*Sousa chinensis*) in the Pearl River Estuary, China. *Mammalia*, 74, 117-125.
- Gailey, G. & Ortega-Ortiz, J.G. (2002) A note on a computer-based system for theodolite tracking of cetaceans. *Journal of Cetacean Research and Management*, 4, 213-218.
- Gailey, G., Würsig, B. & McDonald, T.L. (2007) Abundance, behavior, and movement patterns of western gray whales in relation to a 3-D seismic survey, Northeast Sakhalin Island, Russia. *Environmental Monitoring and Assessment*, 134, 75-91.
- Hastie T., Tibshirani R. (1986) Generalized additive models. *Statistical science*:297-310.
- Hoyt, E. 2011. Marine Protected Areas for Whales, Dolphins, and Porpoises, Second Edition. Earthscan Press, London, UK. 464 pp.
- Hung, S. K. 2008. Habitat use of Indo-Pacific humpback dolphins (*Sousa chinensis*) in Hong Kong. Ph.D. dissertation. University of Hong Kong, Hong Kong, 266 p.
- Hung, S. K. 2016. Monitoring of Marine Mammals in Hong Kong Waters (2015 – 2016) Final Report (1 April 2015 to 31 March 2016). Agriculture, Fisheries and Conservation Department of the Hong Kong SAR Government.
- Jefferson, T.A. (2000) Population biology of the Indo-Pacific hump-backed dolphin in Hong Kong waters. *Wildlife Monographs*, 144, 65 pp.
- Lammers, M.O., Brainard, R.E., Au, W.W.L., Mooney, T.A. & Wong, K.B. (2008) An ecological acoustic recorder (EAR) for long-term monitoring of biological and anthropogenic sounds on coral reefs and other marine habitats. *Journal of the Acoustical Society of America*, 123, 1720-1728.
- Lundquist, D., Gemmell, N.J. & Würsig, B. (2012) Behavioural responses of dusky dolphin groups (*Lagenorhynchus obscurus*) to tour vessels off Kaikoura, New Zealand. *PLoS ONE*, 7, 9pp.
- Lusseau, D. (2006). The short-term behavioral reactions of bottlenose dolphins to interactions with boats in Doubtful Sound, New Zealand. *Marine Mammal Science*, 22(4), 802-818.
- Mott MacDonald (2014). Expansion of Hong Kong International Airport into a Three-Runway System Environmental Impact Assessment Report. The Airport Authority Hong Kong, Hong Kong.
- Munger, L., Lammers, M.O., Cifuentes, M., Würsig, B., Jefferson, T.A. & Hung, S.K. (2016) Indo-Pacific humpback dolphin occurrence north of Lantau Island, Hong Kong, based on year-round passive acoustic monitoring. *Journal of the Acoustical Society of America*, 140, 2754–2765
- Piwetz, S., Hung, S., Wang, J., Lundquist, D. & Würsig, B. (2012) Influence of vessel traffic on movements of Indo-Pacific Humpback dolphins (*Sousa chinensis*) off Lantau Island, Hong Kong. *Aquatic Mammals*, 38, 325-331.
- Quinn, G. P., & Keough, M. J. (2002). Experimental design and data analysis for biologists. Cambridge University Press.

Sims, P.Q., Vaughn, R., Hung, S.K. & Würsig, B. (2011) Sounds of Indo-Pacific humpback dolphins (*Sousa chinensis*) in West Hong Kong: A preliminary description. *JASA Express Letters*, 131, E48-E53.

Sims, P.Q., Hung, S.K. & Würsig, B. (2012) High-speed vessel noises in West Hong Kong waters and their contributions relative to Indo-Pacific humpback dolphins (*Sousa chinensis*). *Journal of Marine Biology*, 2012, 11 pp.

Thomas, L., S. T. Buckland, E. A. Rexstad, J. L. Laake, S. Strindberg, S. L. Hedley, J. R. B. Bishop, T. A. Marques and K. P. Burnham. 2010. Distance software: design and analysis of distance sampling surveys for estimating population size. *Journal of Applied Ecology* 47:5-14.

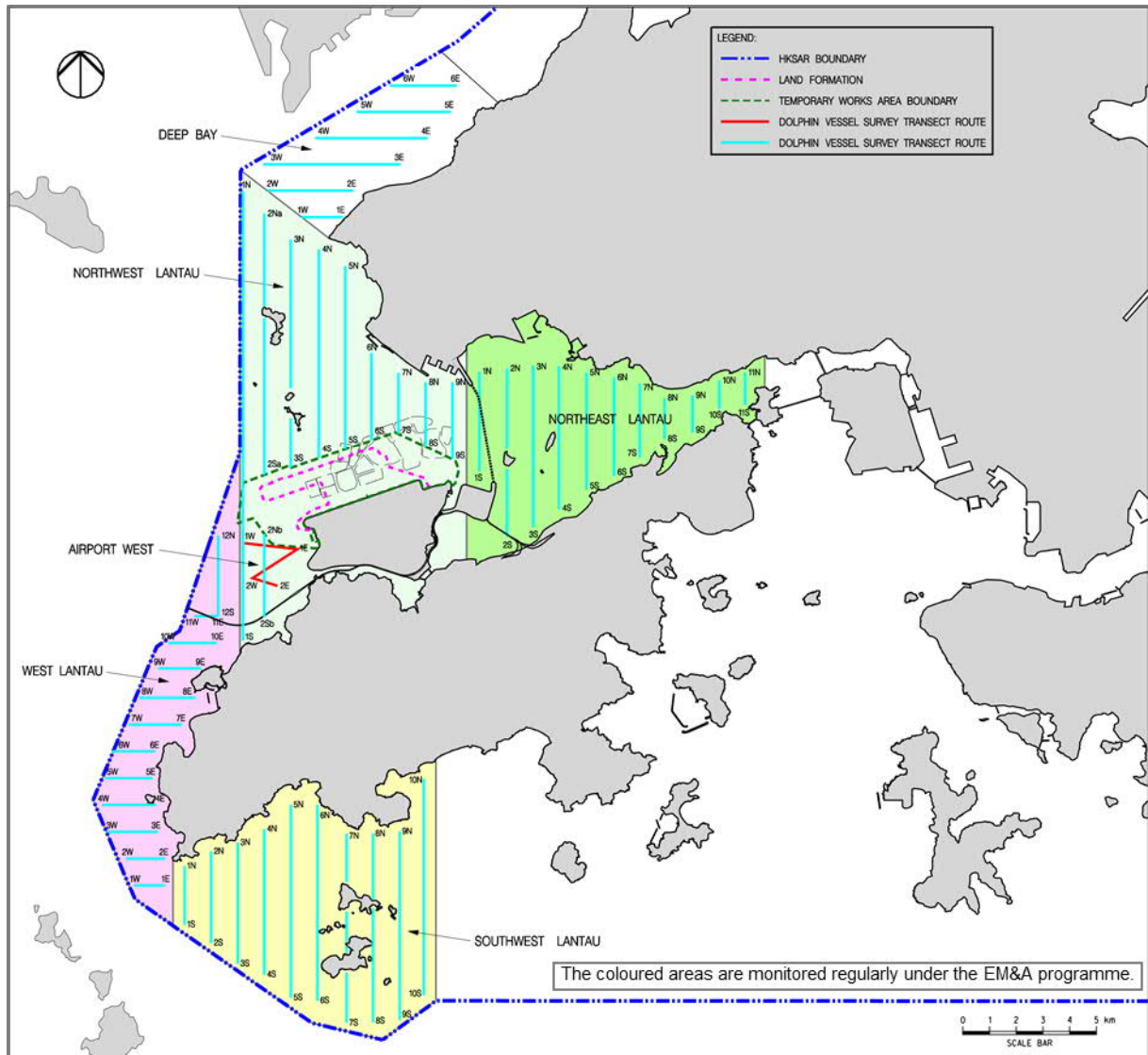
Turchin, P. (1998) *Quantitative Analysis of Movement: Measuring and modelling population redistribution in animals and plants*. Sinauer Associates, Inc., U.S.A.

Wiggins, S.M. & Hildebrand, J. (2007) High-frequency Acoustic Recording Package (HARP) for broadband, long-term marine mammal monitoring. In: *Symposium on Underwater Technology and Workshop on Scientific Use of Submarine Cables and Related Technologies* (ed. by Anonymous), pp. 551-557.

Wood S. (2006) *Generalized additive models: an introduction with R* CRC press.

Würsig, B., Cipriano, F. & Würsig, M. (1991) Dolphin movement patterns: information from radio and theodolite tracking studies. In: *Dolphin societies: Discoveries and puzzles* (ed. by K. Pryor & K.S. Norris), pp. 79-111. University of California Press.

Reference: Additional Vessel Survey for CWD Monitoring in Deep Bay Area



The additional survey in Deep Bay (DB) was conducted on a voluntary basis at the same frequency of two surveys per month.

All DB data were for reference and used only for density and abundance estimation.

(Note: The transect route in the DB survey area could not be fully travelled due to obstruction by the existing oyster culture rafts.)