

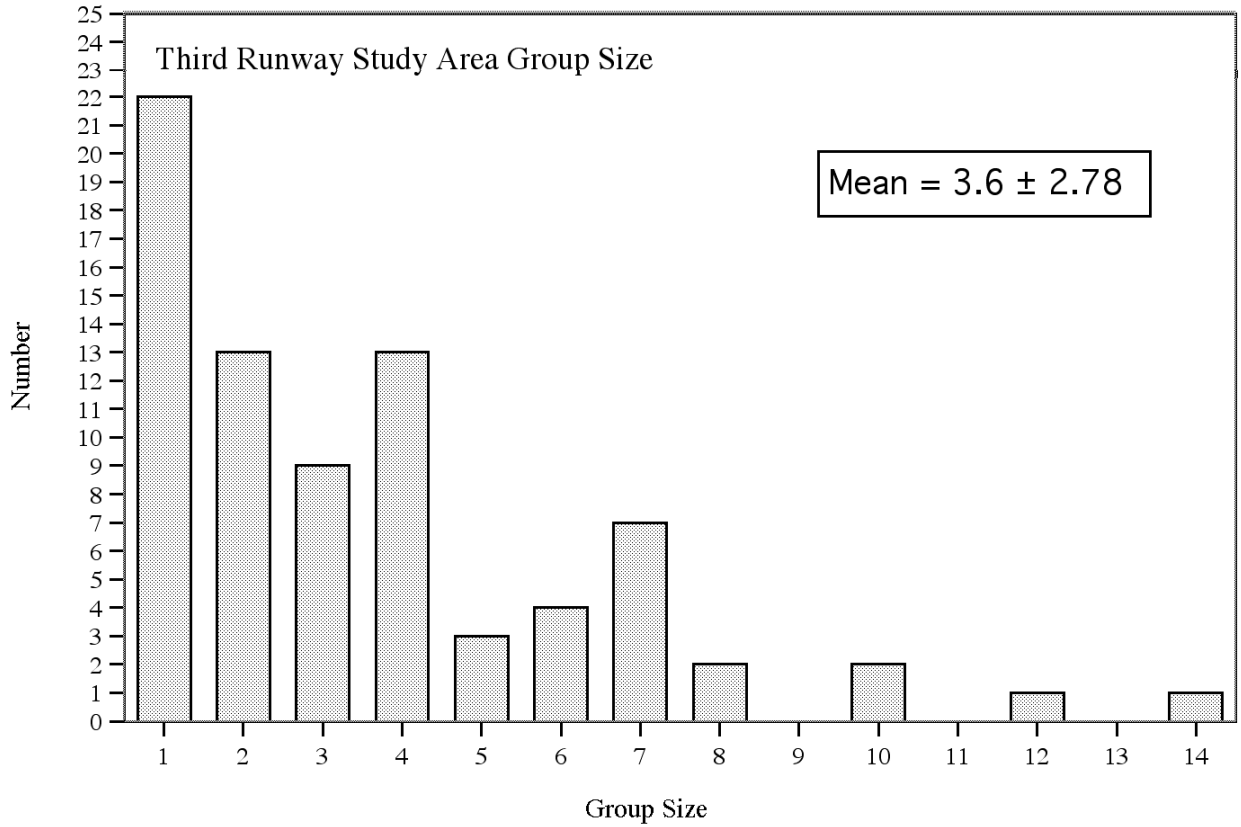
## Appendix 13.7 Dolphin Vessel Survey Result

Table 1: CWD Sightings Obtained between October 2012 and November 2013

Date	Sightings Record Number	Time of Sighting	Group Size	Location of Sighting	Beaufort Sea State	Perpendicular Sighting Distance
11-Oct-12	1	1353	4	AIRPORT NORTH	2	42
11-Oct-12	1	1025	4	AIRPORT WEST	2	440
11-Oct-12	2	1143	3	AIRPORT NORTH	2	ND
30-Oct-12	1	1337	4	AIRPORT NORTH	2	186
1-Nov-12	1	0851	7	AIRPORT WEST	2	106
1-Nov-12	2	1000	1	AIRPORT WEST	3	64
1-Nov-12	3	1103	3	AIRPORT NORTH	4	136
1-Nov-12	4	1200	14	AIRPORT NORTH	2	65
1-Nov-12	5	1327	7	AIRPORT NORTH	2	101
1-Nov-12	6	1403	1	AIRPORT NORTH	2	797
7-Nov-12	1	1123	5	AIRPORT NORTH	4	167
7-Nov-12	2	1247	1	AIRPORT NORTH	3	133
14-Nov-12	1	1014	1	AIRPORT NORTH	3	86
14-Nov-12	2	1256	7	AIRPORT NORTH	3	64
22-Nov-12	1	1501	2	AIRPORT NORTH	2	ND
4-Dec-12	1	1437	2	AIRPORT WEST	3	ND
15-Dec-12	1	1148	1	AIRPORT WEST	2	199
22-Dec-12	1	1116	1	AIRPORT NORTH	4	41
7-Jan-13	1	1029	4	AIRPORT WEST	3	347
17-Jan-13	1	1015	8	AIRPORT NORTH	1	86
17-Jan-13	2	1038	3	AIRPORT NORTH	2	ND
17-Jan-13	3	1226	3	AIRPORT NORTH	2	214
17-Jan-13	4	1428	5	AIRPORT NORTH	2	242
21-Jan-13	1	1152	3	AIRPORT NORTH	1	146
21-Jan-13	2	1251	1	AIRPORT NORTH	1	387
5-Mar-13	1	1025	3	AIRPORT NORTH	1	814
12-Apr-13	1	1207	8	AIRPORT NORTH	3	53
16-Apr-13	1	1404	2	AIRPORT NORTH	2	238
18-Apr-13	1	1316	6	AIRPORT WEST	2	408
13-May-13	1	1401	4	AIRPORT NORTH	1	88
20-May-13	1	1129	4	AIRPORT NORTH	3	48
24-May-13	1	1022	2	AIRPORT NORTH	1	259
24-May-13	2	1153	2	AIRPORT NORTH	1	ND
21-Jun-13	1	0941	4	AIRPORT NORTH	1	115
21-Jun-13	2	1223	1	AIRPORT NORTH	2	151
21-Jun-13	3	1247	3	AIRPORT NORTH	2	22
21-Jun-13	4	1442	4	AIRPORT WEST	1	339
08-Jul-13	1	0946	4	AIRPORT NORTH	2	217

Date	Sightings Record Number	Time of Sighting	Group Size	Location of Sighting	Beaufort Sea State	Perpendicular Sighting Distance
08-Jul-13	2	1009	6	AIRPORT NORTH	1	ND
08-Jul-13	3	1150	1	AIRPORT NORTH	1	566
12-Jul-13	1	0923	12	AIRPORT WEST	2	385
12-Jul-13	2	1114	1	AIRPORT WEST	2	242
12-Jul-13	3	1206	1	AIRPORT NORTH	2	150
12-Jul-13	4	1240	3	AIRPORT NORTH	2	201
05-Aug-13	1	1035	2	AIRPORT WEST	1	860
05-Aug-13	2	1101	1	AIRPORT NORTH	2	ND
05-Aug-13	3	1108	1	AIRPORT NORTH	2	ND
05-Aug-13	4	1116	4	AIRPORT NORTH	2	236
05-Aug-13	5	1230	1	AIRPORT WEST	2	ND
05-Aug-13	6	1243	2	AIRPORT NORTH	2	88
05-Aug-13	7	1300	1	AIRPORT NORTH	2	477
05-Aug-13	8	1555	2	AIRPORT NORTH	3	ND
09-Aug-13	1	1156	6	AIRPORT NORTH	2	283
20-Aug-13	1	0947	7	AIRPORT NORTH	2	498
22-Aug-13	1	1032	2	AIRPORT NORTH	2	111
22-Aug-13	2	1135	3	AIRPORT NORTH	3	107
03-Sep-13	1	1228	7	AIRPORT NORTH	2	537
09-Sep-13	1	1333	1	AIRPORT WEST	2	132
09-Sep-13	2	1453	4	AIRPORT NORTH	2	ND
13-Sep-13	1	1200	2	AIRPORT NORTH	2	95
25-Sep-13	1	1021	2	AIRPORT NORTH	3	5
25-Sep-13	2	1246	1	AIRPORT NORTH	4	108
18-Oct-13	1	1327	5	AIRPORT NORTH	3	150
18-Oct-13	2	1627	1	AIRPORT WEST	2	ND
23-Oct-13	1	1015	7	AIRPORT NORTH	2	165
23-Oct-13	2	1318	1	AIRPORT NORTH	3	248
23-Oct-13	3	1554	2	AIRPORT WEST	3	ND
29-Oct-13	1	1156	1	AIRPORT NORTH	2	ND
29-Oct-13	2	1240	1	AIRPORT WEST	2	ND
29-Oct-13	3	1259	10	AIRPORT WEST	2	ND
6-Nov-13	1	1044	10	AIRPORT NORTH	3	81
6-Nov-13	2	1426	2	AIRPORT WEST	2	67
20-Nov-13	1	1212	6	AIRPORT NORTH	3	25
20-Nov-13	2	1314	1	AIRPORT NORTH	2	78
20-Nov-13	3	1519	4	AIRPORT NORTH	2	155
22-Nov-13	1	1115	7	AIRPORT WEST	2	480
22-Nov-13	1	1128	4	AIRPORT NORTH	2	280

Chart 1 Group Size Distribution of CWD Groups during the Vessel Surveys



## Appendix 13.8 Focal Follow Work

Examples of focal follows from the Airport West and North areas:

Figure 1a: dolphin's movements in a meandering course

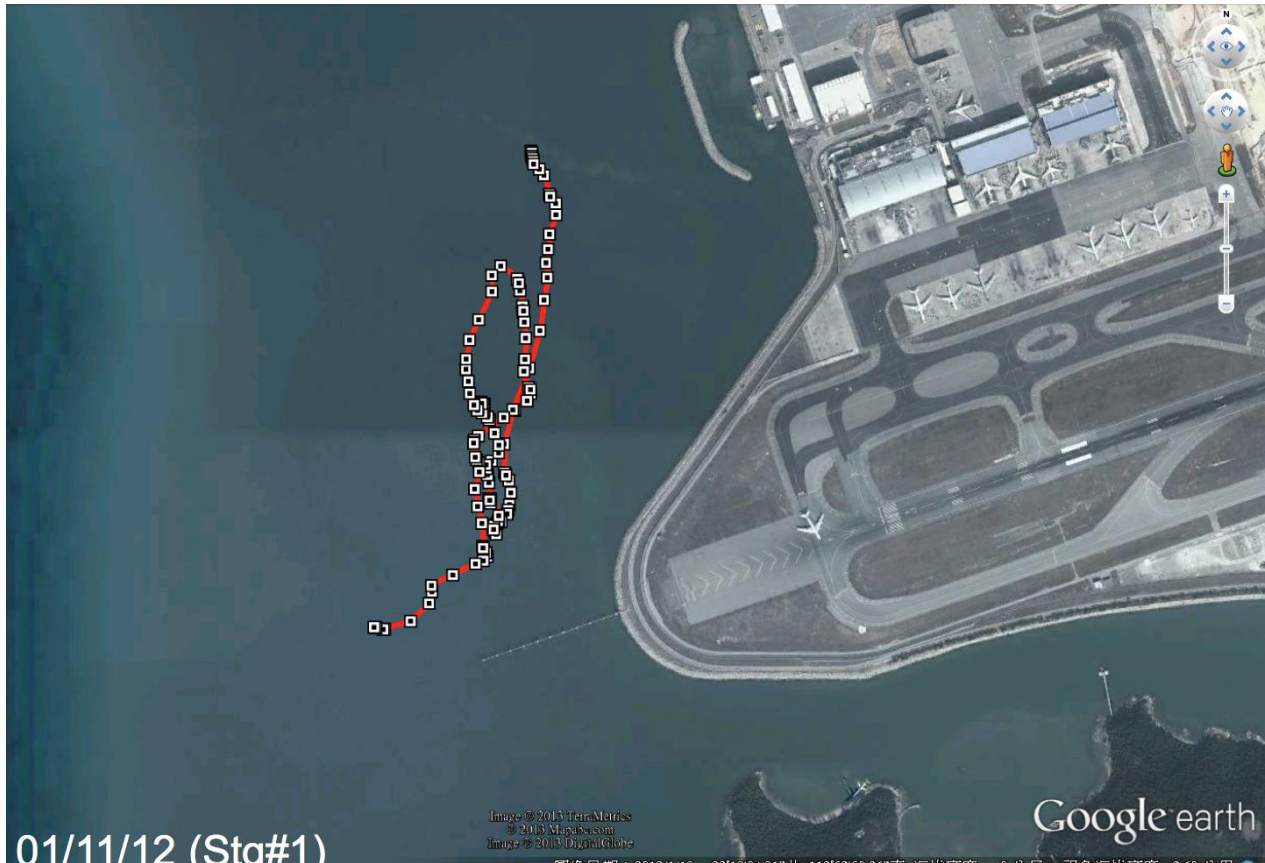


Figure 1b: dolphin's movements in a relatively straight-line course



Table 1: : Mean CWD Swimming Speed (km/hr) Reorientation Rate and Linearity obtained during Vessel-based Focal Follows

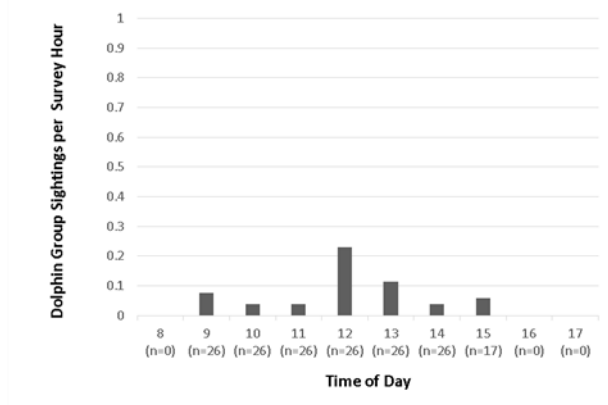
Speed	n#	Mean Swimming Speed, km/hr (Std Dev)	Mean Reorientation Rate, deg/min (Std Dev)	Mean Linearity (Std Dev)
<b>Location</b>				
North of Airport	265	2.83 (1.15)	8.37 (4.96)	0.72 (0.24)
West of Airport	66	3.22 (1.07)	8.28 (3.62)	0.68 (0.23)
<b>Solar Season</b>				
Autumn	61	2.45 (0.98)	7.29 (3.64)	0.75 (0.18)
Winter	37	3.64 (1.06)	6.73 (3.07)	0.85 (0.08)
Spring	97	2.95 (0.82)	9.55 (5.08)	0.75 (0.24)
Summer	136	2.95 (1.36)	9.04 (5.42)	0.59 (0.29)
<b>Oceanographic Season</b>				
Dry Season	85	3.28 (1.05)	6.63 (2.75)	0.78 (0.16)
Wet Season	246	2.77 (1.14)	9.24 (5.05)	0.67 (0.26)
<b>Time of Day</b>				
Morning	71	2.32 (0.96)	11.27 (4.88)	0.62 (0.17)
Midday	206	3.15 (1.19)	7.54 (4.82)	0.73 (0.25)
Afternoon	54	2.89 (0.94)	8.29 (2.34)	0.71 (0.27)
<b>Behaviour</b>				
Foraging	7	1.73 (1.32)	NA	NA
Milling	185	2.33 (1.56)	NA	NA
Socialising	14	2.04 (1.44)	NA	NA
Travelling	44	4.52 (2.27)	NA	NA

#The term "n" is the sample size, i.e. number of 5-minute sampling intervals extracted from overall CWD focal follows

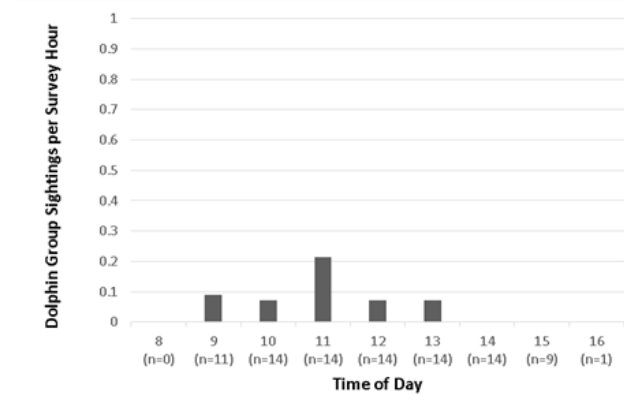
# Appendix 13.9 Land-based Surveys and Theodolite Tracking

Chart 1: CWD Groups Sighted (per survey hour) and Tracked from Land-based Stations (prior to filtering data) Based on Time of Day

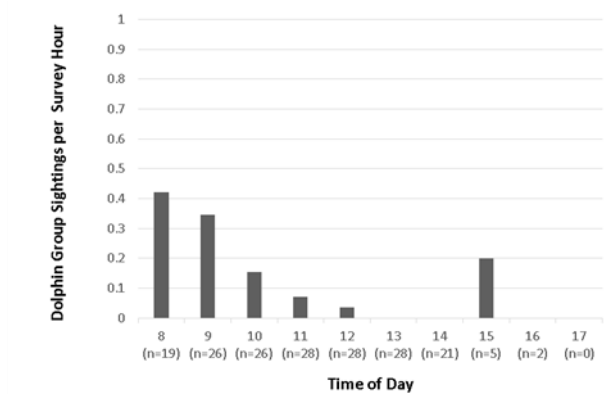
Station A – Airport Northeast



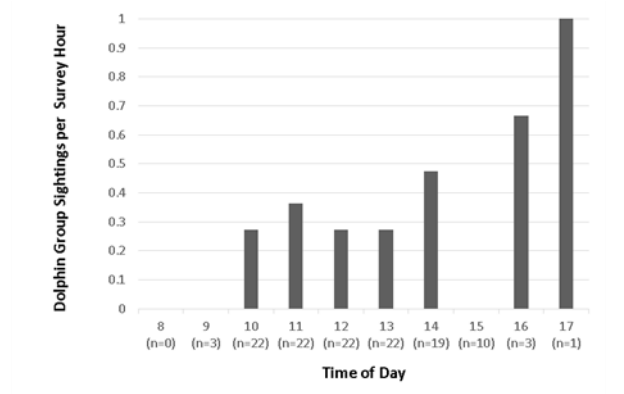
Station B – Airport North



Station C – Airport West



Station D - Sha Chau



Notes: Time of Day indicates the hour block when the CWD Group was first sighted. The "n" in brackets represents the number of days that survey effort was carried out during the associated hour block.

Table 1: Dolphin sightings obtained from land-based tracking.

<b>STATION A</b>	<b>DATE</b>	<b># DOLPHIN GROUPS</b>
	6-Dec-12	4
	7-Dec-12	1
	11-Dec-12	1
	24-Dec-12	1
	2-Jan-13	1
	8-Jan-13	1
	21-Feb-13	1
	7-Mar-13	1
	12-Mar-13	1
	5-Jul-13	1
	30-Jul-13	3
	5-Aug-13	2
	2-Sep-13	1
	11-Sep-13	1
	26-Nov-13	2
<b>STATION B</b>	<b>DATE</b>	<b># DOLPHIN GROUPS</b>
	24-Dec-12	1
	29-Jan-13	1
	4-Feb-13	1
	4-Mar-13	3
	8-Mar-13	1
	6-Aug-13	1
	20-Aug-13	1
	6-Sep-13	2
<b>STATION C</b>	<b>DATE</b>	<b># DOLPHIN GROUPS</b>
	5-Nov-12	2
	29-Nov-12	3
	12-Dec-12	1
	14-Dec-12	1
	27-Dec-12	2
	3-Jan-13	2
	7-Jan-13	1
	16-Jan-13	1
	5-Feb-13	1
	13-Mar-13	2
	21-Mar-13	2
	28-Mar-13	2
	3-Jun-13	1
	5-Jul-13	2



10-Jul-13	5
29-Jul-13	2
6-Aug-13	1
4-Oct-13	1
21-Nov-13	2

STATION D	DATE	# DOLPHIN GROUPS
	12-Oct-12	3
	7-Nov-12	1
	14-Nov-12	3
	22-Nov-12	4
	22-Dec-12	1
	17-Jan-13	3
	21-Jan-13	1
	1-Feb-13	6
	16-Apr-13	2
	24-Apr-13	1
	13-May-13	2
	6-Jun-13	1
	18-Jun-13	1
	5-Aug-13	2
	9-Aug-13	5
	9-Sep-13	3
	18-Oct-13	2
	23-Oct-13	1
	6-Nov-13	1
	20-Nov-13	2

Table 2: Dolphin land-based survey results. Number of CWD groups after filtering.

	Dolphin ID	Theo Stn	Date	Time at First Fix	Time at Last Fix	Duration (hh:mm:ss)	# Fixes
1	D41194Dolphin1	D	12-Oct-12	10:35:10 AM	10:48:27 AM	0:13:17	26
2	C41218Dolphin1	C	5-Nov-12	9:29:45 AM	9:40:44 AM	0:10:59	36
3	C41218Dolphin1s1	C	5-Nov-12	9:46:04 AM	10:04:46 AM	0:18:42	30
4	C41218Dolphin1s2	C	5-Nov-12	10:09:54 AM	10:51:31 AM	0:41:37	39
5	C41218Dolphin1s4	C	5-Nov-12	11:07:55 AM	11:26:07 AM	0:18:12	20
6	D41235Dolphin1	D	22-Nov-12	10:27:57 AM	10:46:15 AM	0:18:18	25
7	A41249Dolphin2	A	6-Dec-12	10:35:35 AM	10:47:29 AM	0:11:54	10
8	A41249Dolphin2s1	A	6-Dec-12	10:53:24 AM	11:07:15 AM	0:13:51	10
9	A41249Dolphin2s2	A	6-Dec-12	11:14:22 AM	11:29:17 AM	0:14:55	11
10	A41249Dolphin4	A	6-Dec-12	3:29:27 PM	3:41:35 PM	0:12:08	38
11	A41250Dolphin1s1	A	7-Dec-12	1:07:34 PM	1:20:03 PM	0:12:29	15
12	A41254Dolphin1	A	11-Dec-12	1:03:45 PM	1:13:58 PM	0:10:13	5
13	C41255Dolphin1s1	C	12-Dec-12	8:59:57 AM	9:43:56 AM	0:43:59	42

14	C41255Dolphin1s2	C	12-Dec-12	9:49:37 AM	10:10:35 AM	0:20:58	15
15	C41255Dolphin1s6	C	12-Dec-12	11:32:39 AM	11:43:17 AM	0:10:38	7
16	C41255Dolphin1s12	C	12-Dec-12	12:52:29 PM	1:05:41 PM	0:13:12	20
17	C41257Dolphin1	C	14-Dec-12	10:30:48 AM	10:43:01 AM	0:12:13	38
18	A41267Dolphin1	A	24-Dec-12	9:32:55 AM	10:22:29 AM	0:49:34	62
19	C41270Dolphin1	C	27-Dec-12	8:57:13 AM	9:19:21 AM	0:22:08	41
20	A41276Dolphin1	A	2-Jan-13	2:23:41 PM	2:35:50 PM	0:12:09	39
21	C41277Dolphin1	C	3-Jan-13	8:30:12 AM	8:40:14 AM	0:10:02	25
22	C41277Dolphin2s1	C	3-Jan-13	9:05:01 AM	10:18:24 AM	1:13:23	230
23	C41281Dolphin1	C	7-Jan-13	8:48:34 AM	9:00:17 AM	0:11:43	11
24	A41282Dolphin1	A	8-Jan-13	12:25:07 PM	12:48:58 PM	0:23:51	46
25	C41290Dolphin1	C	16-Jan-13	9:15:57 AM	9:36:36 AM	0:20:39	43
26	B41303Dolphin1s1	B	29-Jan-13	10:52:11 AM	11:08:29 AM	0:16:18	21
27	D41306Dolphin2	D	1-Feb-13	12:39:53 PM	12:58:29 PM	0:18:36	31
28	D41306Dolphin2s1	D	1-Feb-13	1:30:39 PM	1:41:15 PM	0:10:36	11
29	D41306Dolphin2s2	D	1-Feb-13	1:52:55 PM	2:08:22 PM	0:15:27	55
30	D41306Dolphin4	D	1-Feb-13	2:15:07 PM	2:29:14 PM	0:14:07	8
31	D41306Dolphin6	D	1-Feb-13	2:46:06 PM	3:18:39 PM	0:32:33	76
32	A41326Dolphin1	A	21-Feb-13	12:06:04 PM	12:22:28 PM	0:16:24	14
33	A41326Dolphin1s3	A	21-Feb-13	1:01:07 PM	1:14:18 PM	0:13:11	17
34	A41326Dolphin1s5	A	21-Feb-13	1:48:18 PM	2:07:22 PM	0:19:04	17
35	B41337Dolphin1s1	B	4-Mar-13	11:22:16 AM	11:36:09 AM	0:13:53	18
36	B41337Dolphin3	B	4-Mar-13	12:28:24 PM	12:55:13 PM	0:26:49	31
37	B41341Dolphin1	B	8-Mar-13	11:53:43 AM	12:05:24 PM	0:11:41	13
38	C41346Dolphin1	C	13-Mar-13	9:45:57 AM	10:20:37 AM	0:34:40	88
39	C41346Dolphin2s2	C	13-Mar-13	10:43:52 AM	11:20:55 AM	0:37:03	88
40	C41354Dolphin2s1	C	21-Mar-13	9:44:13 AM	9:56:22 AM	0:12:09	10
41	C41361Dolphin2	C	28-Mar-13	3:33:36 PM	3:48:49 PM	0:15:13	35
42	D41388Dolphin1	D	24-Apr-13	12:59:55 PM	1:50:16 PM	0:50:21	52
43	D41407Dolphin2	D	13-May-13	1:29:38 PM	1:41:00 PM	0:11:22	14
44	C41428Dolphin1	C	3-Jun-13	8:45:31 AM	9:07:43 AM	0:22:12	44
45	C41428Dolphin1s3	C	3-Jun-13	9:41:20 AM	9:52:59 AM	0:11:39	25
46	D41443Dolphin1	D	18-Jun-13	12:33:18 PM	1:03:32 PM	0:30:14	66
47	D41443Dolphin1a	D	18-Jun-13	1:27:29 PM	1:42:18 PM	0:14:49	28
48	C41460Dolphin1	C	5-Jul-13	9:20:20 AM	9:38:24 AM	0:18:04	21
49	A41460Dolphin1	A	5-Jul-13	9:39:14 AM	9:55:40 AM	0:16:26	20
50	C41460Dolphin2s1	C	5-Jul-13	9:42:50 AM	10:10:20 AM	0:27:30	51
51	C41460Dolphin2s2	C	5-Jul-13	10:17:13 AM	10:46:50 AM	0:29:37	20
52	C41460Dolphin2s6	C	5-Jul-13	11:48:04 AM	11:59:07 AM	0:11:03	24
53	C41465Dolphin1s1	C	10-Jul-13	9:35:44 AM	9:47:02 AM	0:11:18	19
54	C41465Dolphin2	C	10-Jul-13	9:42:03 AM	10:08:46 AM	0:26:43	24

55	C41484Dolphin1as1	C	29-Jul-13	9:33:45 AM	9:47:20 AM	0:13:35	21
56	C41484Dolphin2s2	C	29-Jul-13	11:13:14 AM	11:26:53 AM	0:13:39	12
57	A41485Dolphin1	A	30-Jul-13	12:30:46 PM	12:46:01 PM	0:15:15	17
58	D41491Dolphin2A	D	5-Aug-13	11:47:08 AM	12:08:27 PM	0:21:19	40
59	C41492Dolphin1s1	C	6-Aug-13	9:25:15 AM	9:41:46 AM	0:16:31	13
60	B41492Dolphin1	B	6-Aug-13	10:16:07 AM	10:26:30 AM	0:10:23	18
61	D41495Dolphin5	D	9-Aug-13	3:44:53 PM	3:57:04 PM	0:12:11	21
62	B41506Dolphin1	B	20-Aug-13	9:47:38 AM	10:05:14 AM	0:17:36	14
63	B41523Dolphin2	B	6-Sep-13	1:32:36 PM	2:13:28 PM	0:40:52	54
64	D41526Dolphin3	D	9-Sep-13	3:10:46 PM	3:29:44 PM	0:18:58	27
65	D41526Dolphin3a	D	9-Sep-13	3:35:34 PM	3:48:16 PM	0:12:42	19
66	C41551Dolphin1	C	4-Oct-13	8:56:51 AM	9:07:41 AM	0:10:50	12
67	D41565Dolphin2s2	D	18-Oct-13	12:54:30 PM	1:14:44 PM	0:20:14	27
68	C41599Dolphin1s1	C	21-Nov-13	9:51:58 AM	10:12:02 AM	0:20:04	21
69	A41604Dolphin1	A	26-Nov-13	1:03:18 PM	2:14:08 PM	1:10:50	143

Table 3: Number of CWD 10-minute segments after auto-correlation.

	<b>Dolphin ID</b>	<b>Theo Stn</b>	<b>Date</b>	<b>Time at First Fix</b>	<b>Time at Last Fix</b>
1	D411941_	D	12-Oct-12	10:35:10 AM	10:45:10 AM
2	C412181_	C	5-Nov-12	9:29:45 AM	9:39:45 AM
3	C412181_s1	C	5-Nov-12	9:46:04 AM	9:56:04 AM
4	C412181_s2	C	5-Nov-12	10:09:54 AM	10:19:54 AM
5	C412181_s4	C	5-Nov-12	11:07:55 AM	11:17:55 AM
6	D412351_	D	22-Nov-12	10:27:57 AM	10:37:57 AM
7	A412492_	A	6-Dec-12	10:35:35 AM	10:45:35 AM
8	A412492_s1	A	6-Dec-12	10:53:24 AM	11:03:24 AM
9	A412492_s2	A	6-Dec-12	11:14:22 AM	11:24:22 AM
10	A412494_	A	6-Dec-12	3:29:27 PM	3:39:27 PM
11	A412501_s1	A	7-Dec-12	1:07:34 PM	1:17:34 PM
12	A412541_	A	11-Dec-12	1:03:45 PM	1:13:45 PM
13	C412551_s1	C	12-Dec-12	8:59:57 AM	9:09:57 AM
14	C412551_s2	C	12-Dec-12	9:49:37 AM	9:59:37 AM
15	C412551_s6	C	12-Dec-12	11:32:39 AM	11:42:39 AM
16	C412551_s12	C	12-Dec-12	12:52:29 PM	1:02:29 PM
17	C412571_	C	14-Dec-12	10:30:48 AM	10:40:48 AM
18	A412671_	A	24-Dec-12	9:32:55 AM	9:42:55 AM
19	A412671_b3	A	24-Dec-12	10:08:55 AM	10:18:55 AM
20	C412701_	C	27-Dec-12	8:57:13 AM	9:07:13 AM
21	A412761_	A	2-Jan-13	2:23:41 PM	2:33:41 PM
22	C412771_	C	3-Jan-13	8:30:12 AM	8:40:12 AM
23	C412772_s1	C	3-Jan-13	9:05:01 AM	9:15:01 AM

24	C412772_s1b3	C	3-Jan-13	9:41:01 AM	9:51:01 AM
25	C412811_	C	7-Jan-13	8:48:34 AM	8:58:34 AM
26	A412821_	A	8-Jan-13	12:25:07 PM	12:35:07 PM
27	C412901_	C	16-Jan-13	9:15:57 AM	9:25:57 AM
28	B413031_s1	B	29-Jan-13	10:52:11 AM	11:02:11 AM
29	D413062_	D	1-Feb-13	12:39:53 PM	12:49:53 PM
30	D413062_s1	D	1-Feb-13	1:30:39 PM	1:40:39 PM
31	D413062_s2	D	1-Feb-13	1:52:55 PM	2:02:55 PM
32	D413064_	D	1-Feb-13	2:15:07 PM	2:25:07 PM
33	D413066_	D	1-Feb-13	2:46:06 PM	2:56:06 PM
34	A413261_	A	21-Feb-13	12:06:04 PM	12:16:04 PM
35	A413261_s3	A	21-Feb-13	1:01:07 PM	1:11:07 PM
36	A413261_s5	A	21-Feb-13	1:48:18 PM	1:58:18 PM
37	B413371_s1	B	4-Mar-13	11:22:16 AM	11:32:16 AM
38	B413373_	B	4-Mar-13	12:28:24 PM	12:38:24 PM
39	B413411_	B	8-Mar-13	11:53:43 AM	12:03:43 PM
40	C413461_	C	13-Mar-13	9:45:57 AM	9:55:57 AM
41	C413462_s2	C	13-Mar-13	10:43:52 AM	10:53:52 AM
42	C413542_s1	C	21-Mar-13	9:44:13 AM	9:54:13 AM
43	C413612_	C	28-Mar-13	3:33:36 PM	3:43:36 PM
44	D413881_	D	24-Apr-13	12:59:55 PM	1:09:55 PM
45	D413881_b3	D	24-Apr-13	1:35:55 PM	1:45:55 PM
46	D414072_	D	13-May-13	1:29:38 PM	1:39:38 PM
47	C414281_	C	3-Jun-13	8:45:31 AM	8:55:31 AM
48	C414281_b1	C	3-Jun-13	8:57:31 AM	9:07:31 AM
49	C414281_s3	C	3-Jun-13	9:41:20 AM	9:51:20 AM
50	C414281_s3b3	C	3-Jun-13	10:17:20 AM	10:27:20 AM
51	D414431_	D	18-Jun-13	12:33:18 PM	12:43:18 PM
52	D414431a_	D	18-Jun-13	1:27:29 PM	1:37:29 PM
53	C414601_	C	5-Jul-13	9:20:20 AM	9:30:20 AM
54	A414601_	A	5-Jul-13	9:39:14 AM	9:49:14 AM
55	C414602_s1	C	5-Jul-13	9:42:50 AM	9:52:50 AM
56	C414602_s2	C	5-Jul-13	10:17:13 AM	10:27:13 AM
57	C414602_s6	C	5-Jul-13	11:48:04 AM	11:58:04 AM
58	C414651_s1	C	10-Jul-13	9:35:44 AM	9:45:44 AM
59	C414652_	C	10-Jul-13	9:42:03 AM	9:52:03 AM
60	C414841a_s1	C	29-Jul-13	9:33:45 AM	9:43:45 AM
61	C414842_s2	C	29-Jul-13	11:13:14 AM	11:23:14 AM
62	A414851_	A	30-Jul-13	12:30:46 PM	12:40:46 PM
63	D414912A_	D	5-Aug-13	11:47:08 AM	11:57:08 AM
64	C414921_s1	C	6-Aug-13	9:25:15 AM	9:35:15 AM

65	B414921_	B	6-Aug-13	10:16:07 AM	10:26:07 AM
66	D414955_	D	9-Aug-13	3:44:53 PM	3:54:53 PM
67	B415061_	B	20-Aug-13	9:47:38 AM	9:57:38 AM
68	B415232_	B	6-Sep-13	1:32:36 PM	1:42:36 PM
69	D415263_	D	9-Sep-13	3:10:46 PM	3:20:46 PM
70	D415263a_	D	9-Sep-13	3:35:34 PM	3:45:34 PM
71	C415511_	C	4-Oct-13	9:06:51 AM	9:16:51 AM
72	D415652_s2	D	18-Oct-13	1:04:30 PM	1:14:30 PM
73	C415991_s1	C	21-Nov-13	10:01:58 AM	10:11:58 AM
74	A416041_b5	A	26-Nov-13	2:13:18 PM	2:23:18 PM
75	A416041_b1	A	26-Nov-13	1:25:18 PM	1:35:18 PM
76	A416041_b2	A	26-Nov-13	1:37:18 PM	1:47:18 PM
77	A416041_	A	26-Nov-13	1:13:18 PM	1:23:18 PM
78	A416041_b3	A	26-Nov-13	1:49:18 PM	1:59:18 PM
79	A416041_b4	A	26-Nov-13	2:01:18 PM	2:11:18 PM

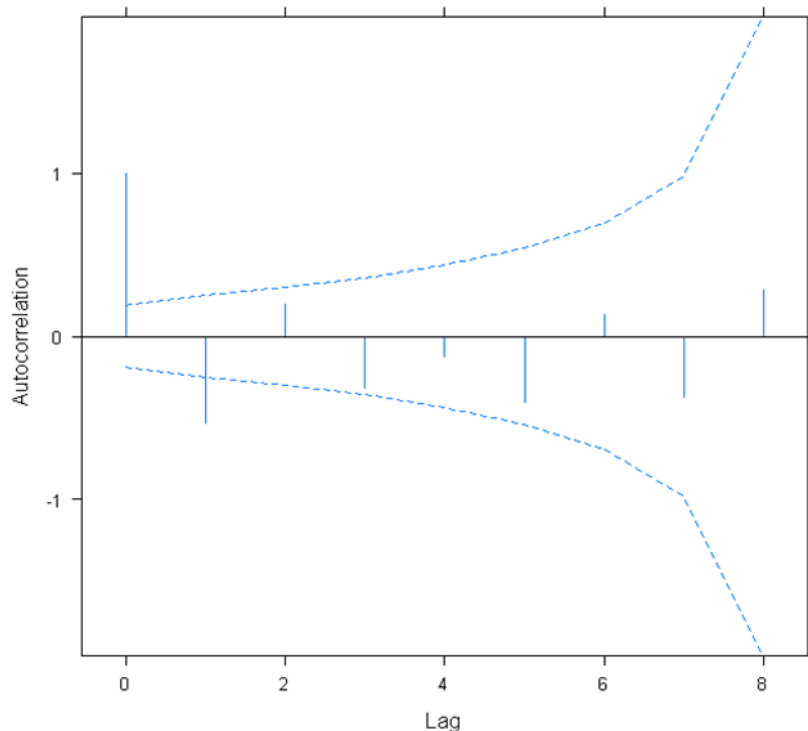


Chart 2. Autocorrelation of movement data: prior to filtering (top) and after filtering (bottom). The autocorrelation coefficient is measured at different lags, with lag 1 equating to the correlation between two successive segments within the same group (e.g. lag 1 = 10 minutes after first observation, lag 2 = 20 minutes, etc.).

## Statistical Analyses

Sample sizes were unequal and the response variables violated assumptions of linear modelling including normally distributed residuals (**Table 4**). To correct for non-normal distributions, data were transformed. Square root transformations were applied to the speed and reorientation variables and because linearity contains values between 0 and 1, an empirical logit transformation was applied (**Table 4**). Overall, unequal sample sizes over seasons do not invalidate statistical analyses of movement types, as long as enough data are present for valid comparisons per spatial and temporal scales.

Table 4 Shapiro-Wilk Test for Normality

Response Variable	n	SHAPIRO-WILK	P-Value	Transformed P-Value
Swimming Speed	79	0.9124	4.716e-05	0.3448
Reorientation Rate	79	0.8896	5.13e-06	0.0905
Linearity	79	0.8718	1.07e-06	0.2262

## Swimming Speed

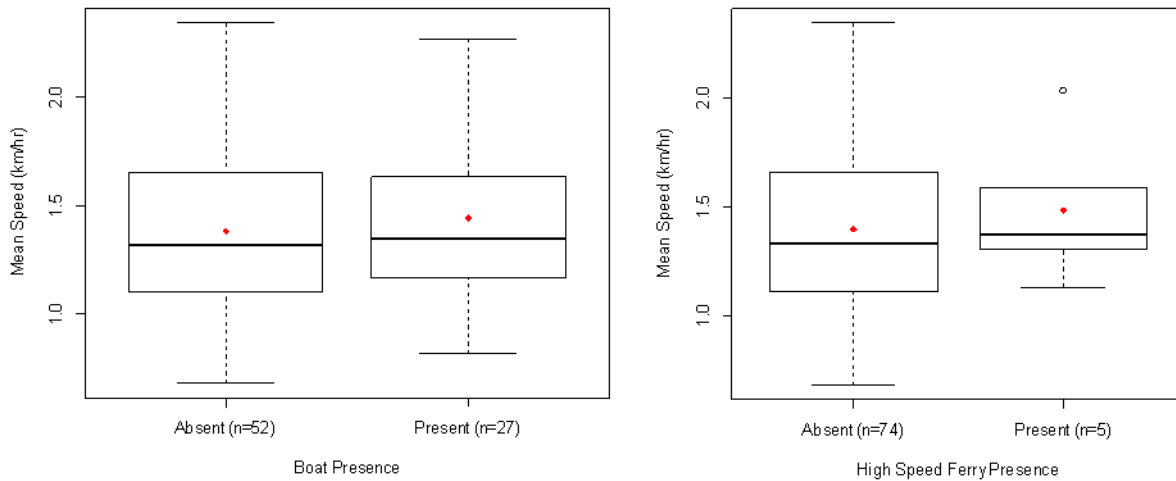
Table 5: Mean CWD Swimming Speed (km/hr), based on Natural Factors and Vessel Presence

Season and Vessel Presence	n	Mean	Standard Deviation	Minimum	Maximum
<b>Solar Season</b>					
Autumn	26	2.131	1.340	0.464	5.143
Winter	24	1.968	0.947	0.500	3.718
Spring	11	1.906	1.539	0.614	4.902
Summer	18	2.514	1.299	0.671	5.492
<b>Vessels Present</b>					
Morning	5	2.485	1.203	1.052	3.921
Midday	19	2.222	1.331	0.671	5.143
Afternoon	3	1.867	0.569	1.489	2.521
<b>High Speed Ferry Presence</b>					
	<b>5</b>	<b>2.300</b>	<b>1.121</b>	<b>1.268</b>	<b>4.137</b>
<b>No Vessels</b>					
Morning	21	1.772	1.076	0.614	4.902
Midday	25	2.431	1.374	0.464	5.492
Afternoon	6	1.768	1.276	0.540	3.377
Station A	12	2.315	1.467	0.500	4.761
Station B	4	3.595	1.708	1.442	5.49
Station C	25	1.709	1.024	0.464	4.902
Station D	11	2.156	1.063	0.798	4.161

The term "n" is the sample size, i.e. number of 10 min. sections extracted from overall CWD movement data that met the appropriate criteria.

Chart 3: Variation in Mean CWD Swimming Speed (transformed) Based on Vessel Presence

Swimming speed based on general vessel presence (left, one-way ANOVA p-value = 0.5418) and on high speed ferry presence (right, one-way ANOVA p-value = 0.6523).



Boxes represent 25th and 75th percentiles, horizontal lines in boxes represent 50th percentile; whiskers represent 10th and 90th percentiles; closed diamonds represent means.

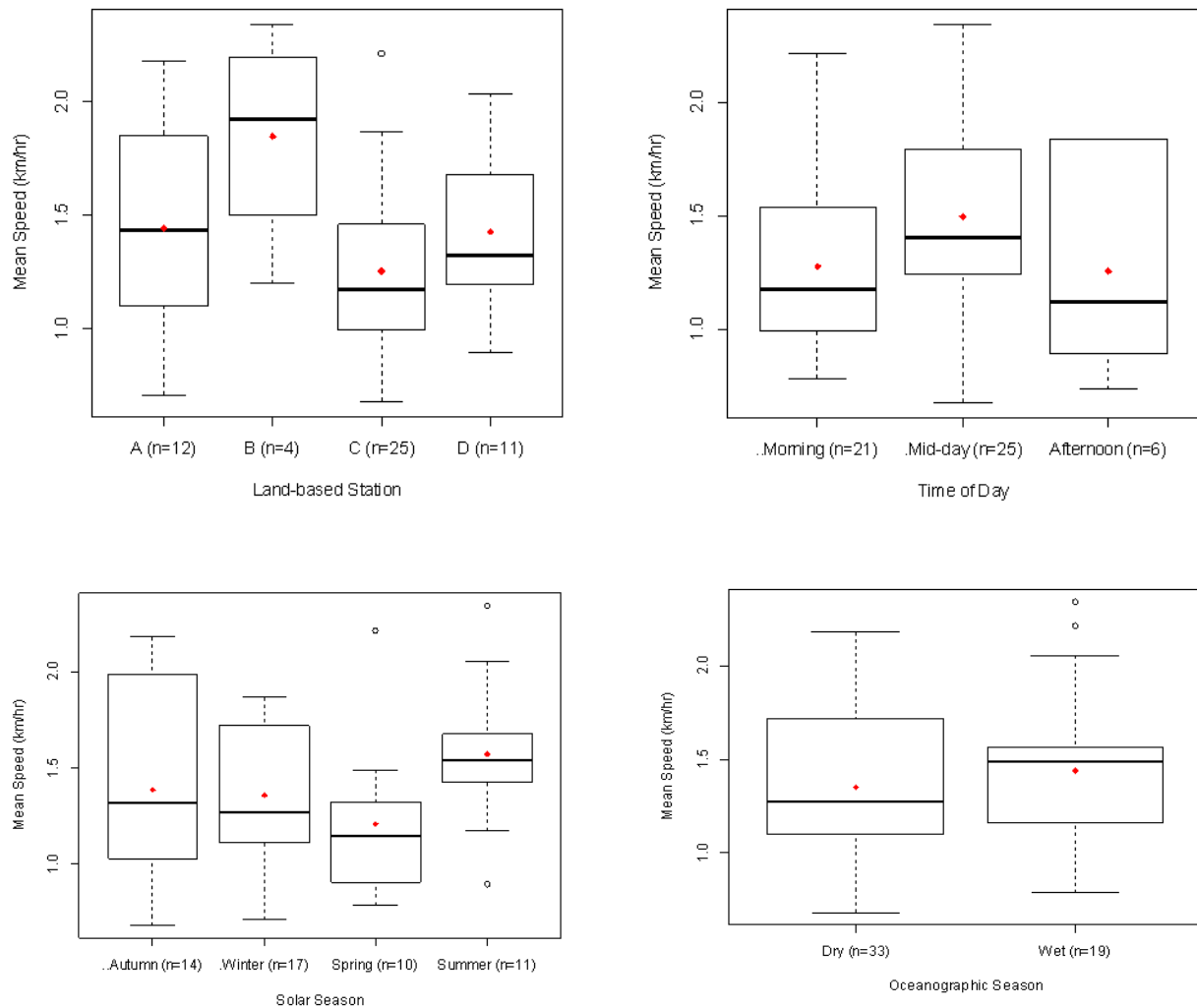
Chart 4: Natural Variation in Mean CWD Swimming Speed (transformed) with No Vessels Present

Top Left: Area of Observation (one-way ANOVA p-value = 0.0572)

Top Right: Time of Day (one-way ANOVA p-value = 0.1705)

Bottom Left: Solar Season (one-way ANOVA p-value = 0.2732)

Bottom Right: Oceanographic Season (one-way ANOVA p-value = 0.4780)



Boxes represent 25th and 75th percentiles, horizontal lines in boxes represent 50th percentile; whiskers represent 10th and 90th percentiles; open circles represent outliers; closed diamonds represent means.

### Reorientation Rate

Table 6: Mean Dolphin Reorientation Rate based on Natural Factors and Vessel Presence.

Season and Vessel Presence	n	Mean	Standard Deviation	Minimum	Maximum
<b>Solar Season</b>					
Autumn	26	35.969	26.268	1.145	105.986
Winter	24	20.931	13.863	3.162	53.040
Spring	11	25.034	13.468	4.235	41.002
Summer	18	23.594	14.897	3.054	57.155

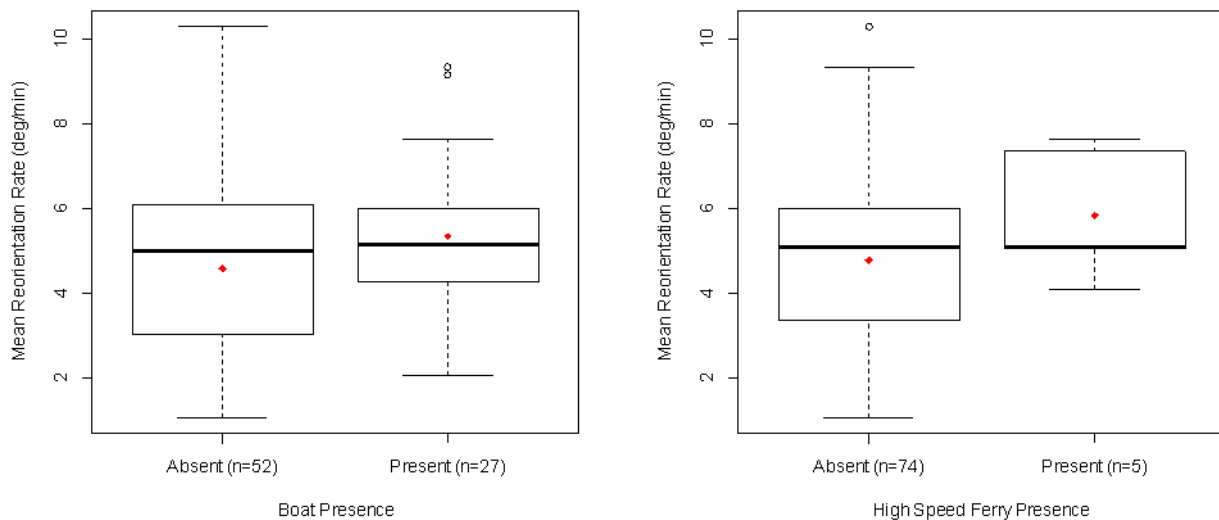


Season and Vessel Presence	n	Mean	Standard Deviation	Minimum	Maximum
<b>Vessels Present</b>	<b>27</b>	<b>31.743</b>	<b>21.153</b>	<b>4.285</b>	<b>87.333</b>
Morning	5	17.370	7.365	7.742	26.667
Midday	19	37.039	22.959	4.285	87.333
Afternoon	3	22.159	6.627	14.508	26.045
<b>High Speed Ferry Presence</b>	<b>5</b>	<b>36.150</b>	<b>18.749</b>	<b>16.863</b>	<b>58.378</b>
<b>No Vessels</b>	<b>52</b>	<b>24.626</b>	<b>18.760</b>	<b>1.145</b>	<b>105.986</b>
Morning	21	26.638	15.792	3.544	60.355
Midday	25	23.978	22.147	1.145	105.986
Afternoon	6	20.283	14.007	3.162	37.789
Station A	12	28.890	29.620	1.145	105.986
Station B	4	26.110	19.467	3.054	44.501
Station C	25	25.884	13.195	5.273	60.355
Station D	11	16.576	14.155	3.162	38.167

The term "n" is the sample size, i.e. number of 10 min. sections extracted from overall CWD movement data that met the appropriate

Chart 5: Variation in dolphin reorientation rate based on vessel presence.

Reorientation rate (transformed) based on general vessel presence (left, one-way ANOVA p-value = 0.0957) and on high speed ferry presence (right, one-way ANOVA p-value = 0.2252).



Boxes represent 25th and 75th percentiles, horizontal lines in boxes represent 50th percentile; whiskers represent 10th and 90th percentiles; open circles represent outliers; closed diamonds represent means. The term "n" is the sample size, i.e. number of 10 min. sections extracted from overall CWD movement data that met the appropriate criteria.

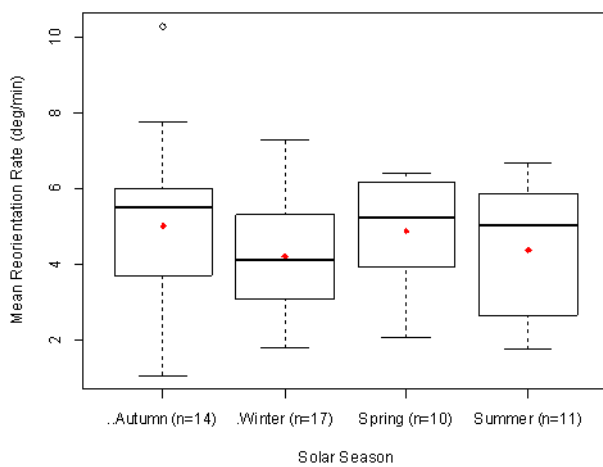
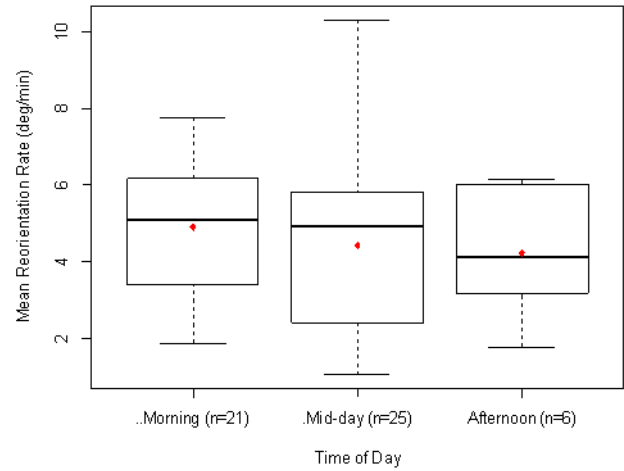
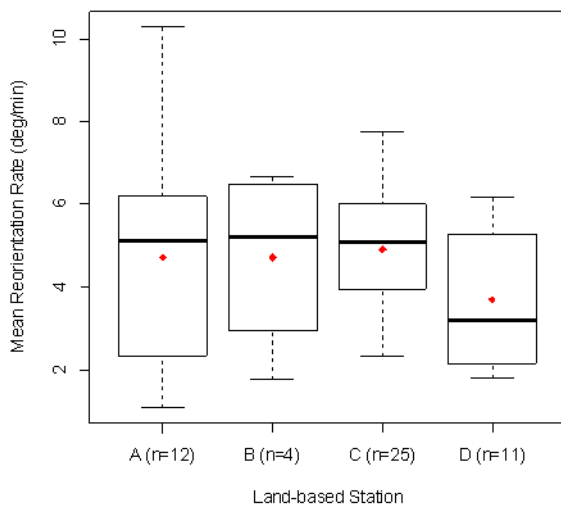
Chart 6: Natural Variation in CWD Reorientation Rate (transformed) with No Vessels Present

Top Left: Area of Observation (one-way ANOVA p-value = 0.3703)

Top Right: Time of Day (one-way ANOVA p-value = 0.6262)

Bottom Left: Solar Season (one-way ANOVA p-value = 0.6459)

Bottom Right: Oceanographic Season (one-way ANOVA p-value = 0.9254)



Boxes represent 25th and 75th percentiles, horizontal lines in boxes represent 50th percentile; whiskers represent 10th and 90th percentiles; open circles represent outliers; closed diamonds represent means. The term "n" is the sample size, i.e. number of 10 min. sections extracted from overall CWD movement data that met the appropriate criteria.

## Linear Movement

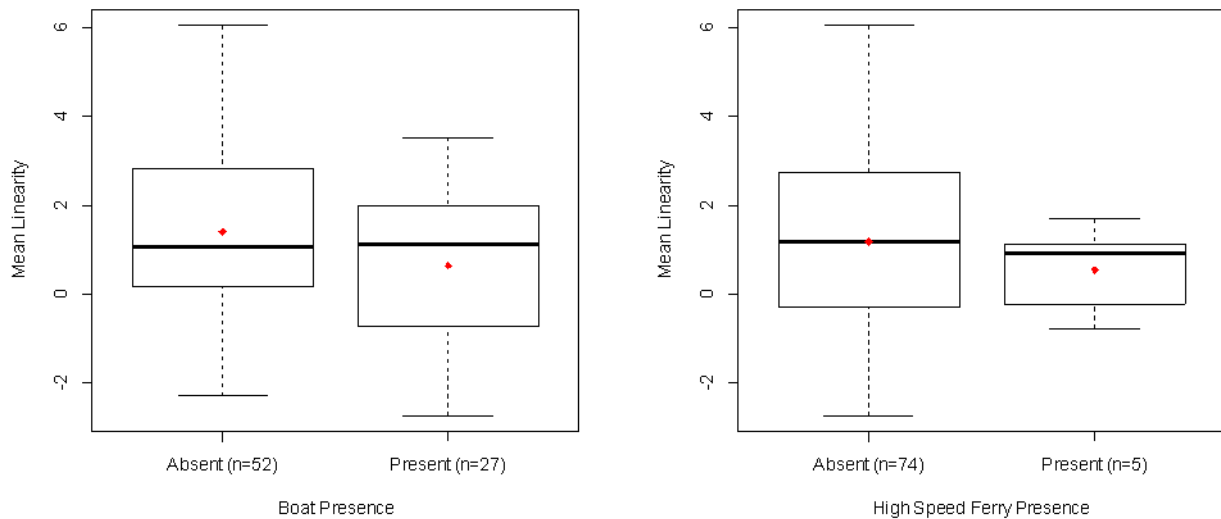
Table 7: Mean CWD Linearity Based on Natural Factors and Vessel Presence.

Season and Vessel Presence	n	Mean	Standard Deviation	Minimum	Maximum
<b>Solar Season</b>					
Autumn	26	0.571	0.304	0.060	0.999
Winter	24	0.722	0.316	0.102	0.991
Spring	11	0.560	0.387	0.108	0.975
Summer	18	0.752	0.222	0.090	0.994
<b>Vessels Present</b>	<b>27</b>	<b>0.603</b>	<b>0.320</b>	<b>0.060</b>	<b>0.973</b>
Morning	5	0.749	0.328	0.176	0.972
Midday	19	0.537	0.330	0.060	0.973
Afternoon	3	0.772	0.012	0.755	0.787
<b>High Speed Ferry Presence</b>	<b>5</b>	<b>0.616</b>	<b>0.226</b>	<b>0.313</b>	<b>0.846</b>
<b>No Vessels</b>	<b>52</b>	<b>0.685</b>	<b>0.304</b>	<b>0.091</b>	<b>0.999</b>
Morning	21	0.655	0.334	0.091	0.981
Midday	25	0.675	0.301	0.117	0.998
Afternoon	6	0.831	0.172	0.543	0.991
Station A	12	0.671	0.318	0.113	0.999
Station B	4	0.574	0.361	0.117	0.994
Station C	25	0.653	0.310	0.091	0.981
Station D	11	0.812	0.254	0.173	0.993

The term "n" is the sample size, i.e. number of 10 min. sections extracted from overall CWD movement data that met the appropriate criteria.

Chart 7: Variation in CWD Linear Movement (empirical logit transformed) Based on Vessel Presence

Linearity based on general vessel presence (left, one-way ANOVA p-value = 0.1215) and on high speed ferry presence (right, one-way ANOVA p-value = 0.5125).



Boxes represent 25th and 75th percentiles, horizontal lines in boxes represent 50th percentile; whiskers represent 10th and 90th percentiles; open circles represent outliers; closed diamonds represent means. The term "n" is the sample size, i.e. number of 10 min. sections extracted from overall CWD movement data that met the appropriate criteria.

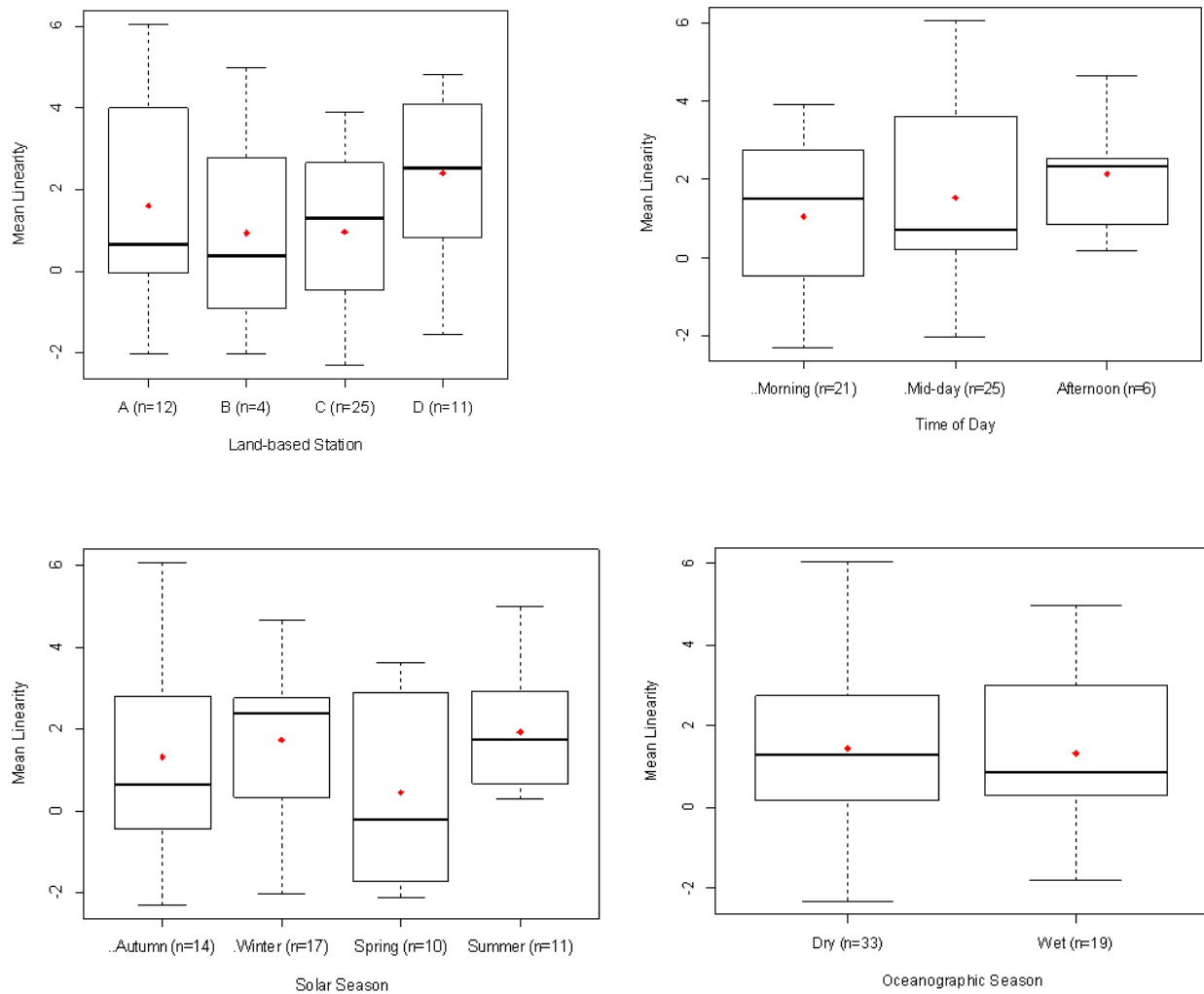
Chart 8: Natural variation in CWD Linear Movement (empirical logit transformed) with No Vessels Present

Top Left: Area of Observation (one-way ANOVA p-value = 0.3027)

Top Right: Time of Day (one-way ANOVA p-value = 0.5131)

Bottom Left: Solar Season (one-way ANOVA p-value = 0.3953)

Bottom Right: Oceanographic Season (one-way ANOVA p-value = 0.8444)



Boxes represent 25th and 75th percentiles, horizontal lines in boxes represent 50th percentile; whiskers represent 10th and 90th percentiles; open circles represent outliers; closed diamonds represent means. The term "n" is the sample size, i.e. number of 10 min. sections extracted from overall CWD movement data that met the appropriate criteria

## Appendix 13.10 Ecological Acoustic Recorder (EAR) Ambient Noise Data

Table 1: Deployment Details of EARs Units

Site	Dep #	Latitude	Longitude	Data Start	Data End	Number of Files
A1	1	22 18.082N	113 52.834E	06/12/2012	30/01/2013	16856
A2 <sup>(1)</sup>	1	22 19.228N	113 54.391E	18/01/2013	30/01/2013	16413
A3 <sup>(2)</sup>	1					
A4 <sup>(2)</sup>	1					
A5	1	22 20.295N	113 53.918E	06/12/2012	30/01/2013	16865
A6	1	22 19.228N	113 54.391E	06/12/2012	See Note <sup>(3)</sup>	See Note <sup>(3)</sup>
A1	2	22 18.082N	113 52.834E	04/02/2013	01/03/2013	8382
A2	2	22 19.228N	113 54.391E	04/02/2013	04/02/2013	63 <sup>(4)</sup>
A3	2	22 19.527N	113 55.349E	19/01/2013	01/03/2013	12952
A4	2	22 19.632N	113 56.339E	31/01/2013	01/03/2013	8552
A5	2	22 20.295N	113 53.918E	04/02/2013	01/03/2013	8367
A1	3	22 18.082N	113 52.834E	06/03/2013	08/05/2013	18039
A2	3	22 19.228N	113 54.391E	06/03/2013	08/05/2013	17915
A3	3	22 19.527N	113 55.349E	06/03/2013	08/05/2013	18034
A4	3	22 19.632N	113 56.339E	06/03/2013	08/05/2013	18039
A5	3	22 20.295N	113 53.918E	06/03/2013	08/05/2013	18037
A1	4	22 18.082N	113 52.834E	15/05/2013	01/06/2013	5037
A2	4	22 19.228N	113 54.391E	15/05/2013	08/06/2013	6999
A3	4	22 19.527N	113 55.349E	15/05/2013	10/06/2013	7505
A4	4	22 19.632N	113 56.339E	15/05/2013	11/06/2013	7974
A5	4	22 20.295N	113 53.918E	22/05/2013	05/06/2013	4142
A1	5	22 18.082N	113 52.834E	15/06/2013	15/08/2013	17766
A2	5	22 19.228N	113 54.391E	15/06/2013	15/08/2013	17766
A3	5	22 19.527N	113 55.349E	15/06/2013	15/08/2013	17766
A4	5	22 19.632N	113 56.339E	15/06/2013	15/08/2013	17766
A5	5	22 20.295N	113 53.918E	15/06/2013	15/08/2013	17766
A1	6	22 18.082N	113 52.834E	25/08/2013	19/09/2013	7407
A2	6	22 19.228N	113 54.391E	25/08/2013	19/09/2013	6722
A3	6	22 19.527N	113 55.349E	25/08/2013	19/09/2013	7936
A4	6	22 19.632N	113 56.339E	25/08/2013	19/09/2013	6646
A5	6	22 20.295N	113 53.918E	30/08/2013	19/09/2013	6487
A1	7	22 18.082N	113 52.834E	27/09/2013	05/11/2013	11520
A2	7	22 19.228N	113 54.391E	27/09/2013	05/11/2013	11520

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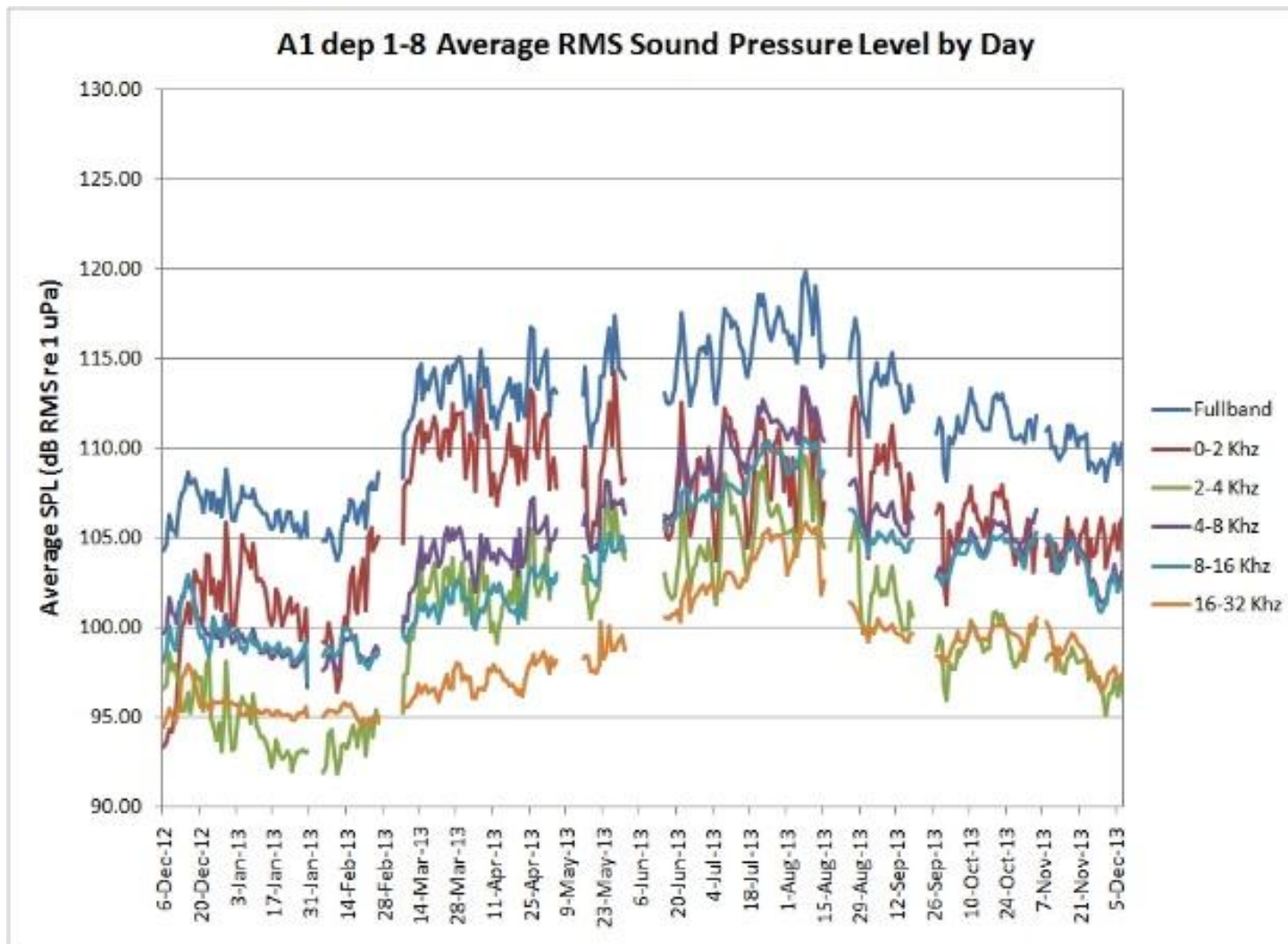
Site	Dep #	Latitude	Longitude	Data Start	Data End	Number of Files
A3	7	22 19.527N	113 55.349E	27/09/2013	05/11/2013	11520
A4	7	22 19.632N	113 56.339E	27/09/2013	05/11/2013	11520
A5	7	22 20.295N	113 53.918E	27/09/2013	05/11/2013	11520
A1	8	22 18.082N	113 52.834E	08/11/2013	07/12/2013	8640
A2	8	22 19.228N	113 54.391E	08/11/2013	07/12/2013	8640
A3	8	22 19.527N	113 55.349E	08/11/2013	07/12/2013	8640
A4	8	22 19.632N	113 56.339E	08/11/2013	07/12/2013	8640
A5	8	22 20.295N	113 53.918E	08/11/2013	06/12/2013	8341

- Notes:
- (1) The unit at site A2 was originally at A6 and was moved on 18/01/13.
  - (2) Not deployed, location issue.
  - (3) A6 was moved to A2 on 18/01/13.
  - (4) Unit malfunction, no recording past file 63.

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Figure 1: Average RMS Sound Pressure Level for EAR A1.





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Figure 2: Average RMS Sound Pressure Level in Winter for EAR A1

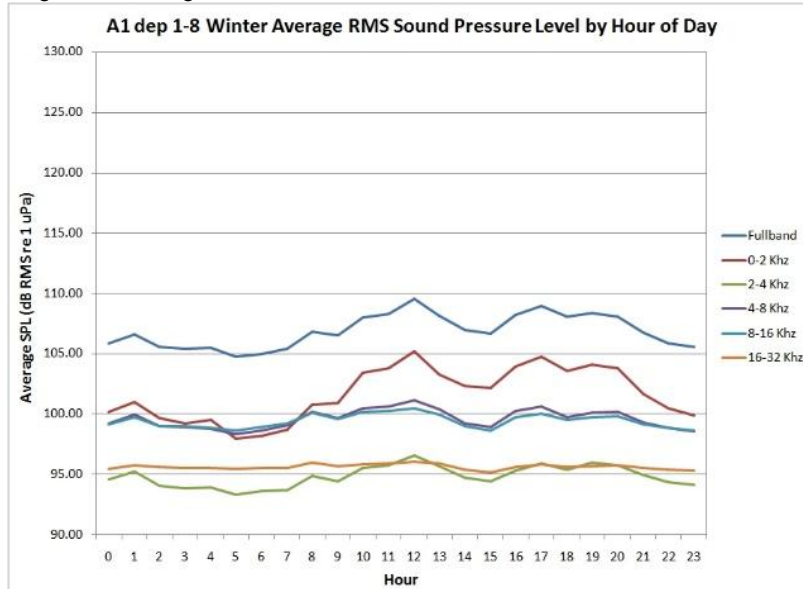


Figure 3: Average RMS Sound Pressure Level in Spring for EAR A1

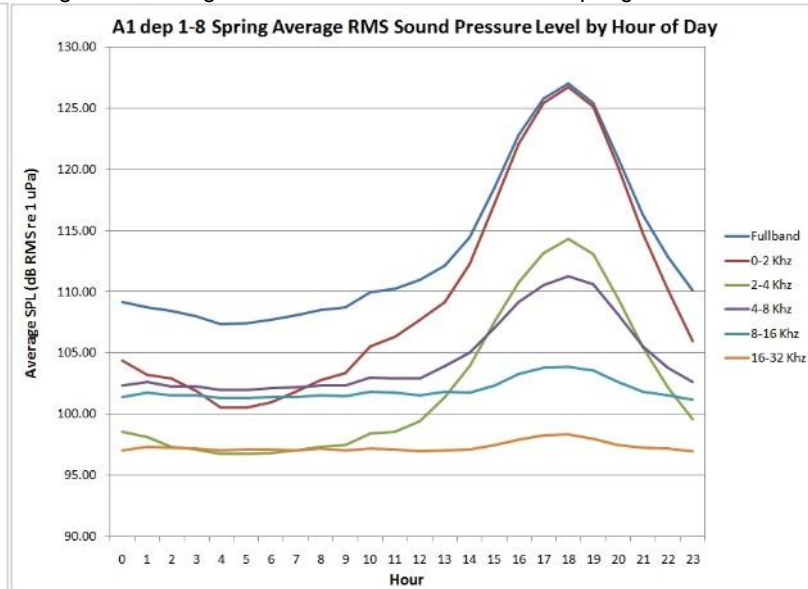


Figure 4: Average RMS Sound Pressure Level in Summer for EAR A1

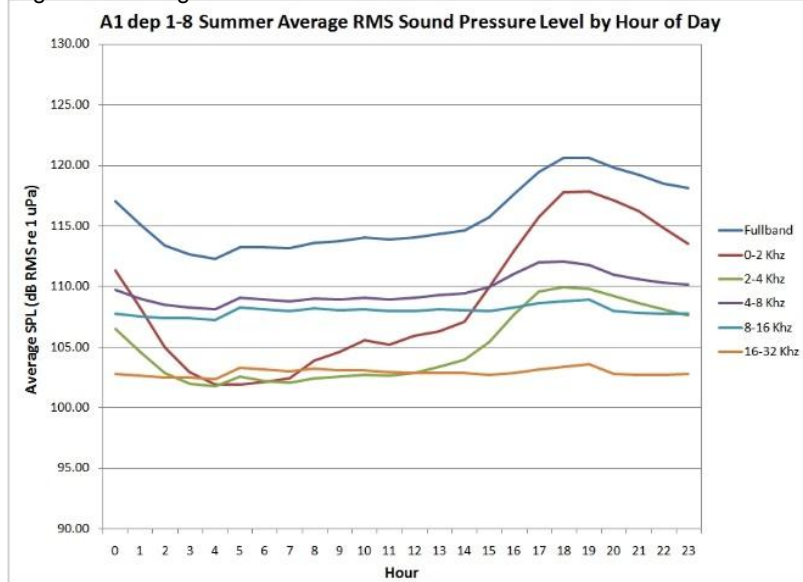
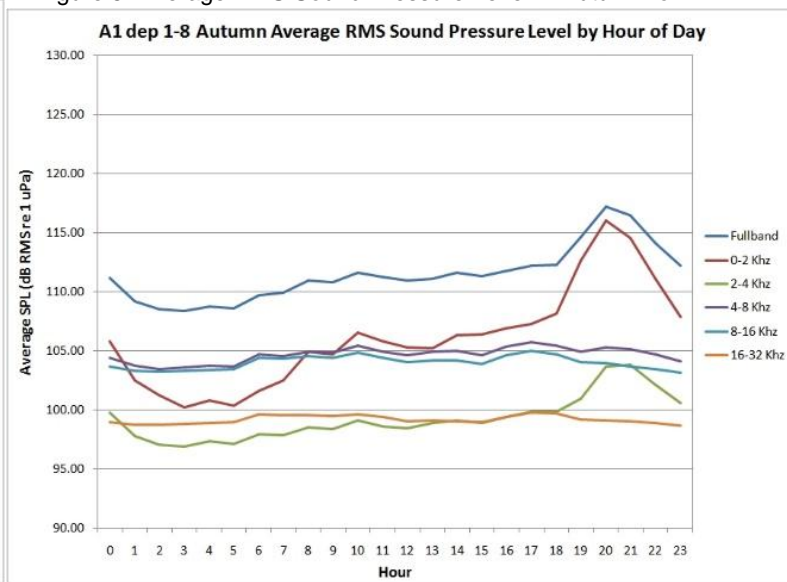


Figure 5: Average RMS Sound Pressure Level in Autumn for EAR A1



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Figure 6: Average RMS Sound Pressure Level in Dry Season for EAR A1

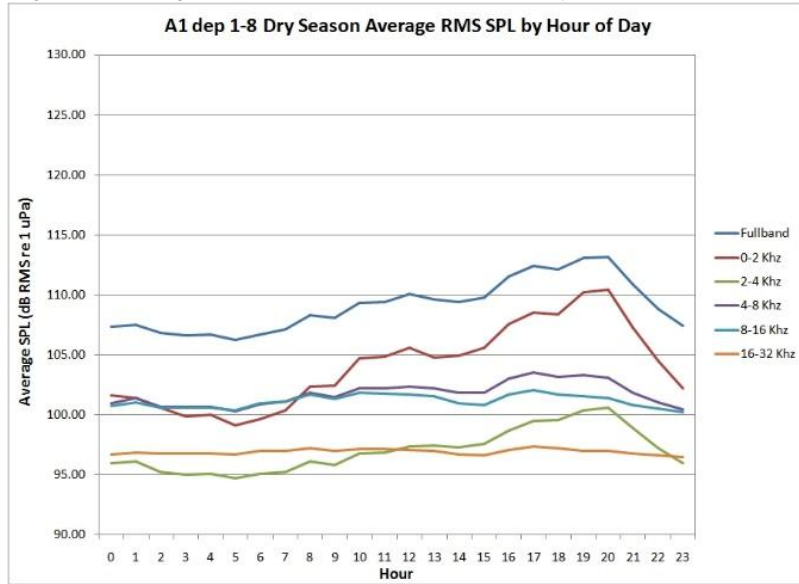
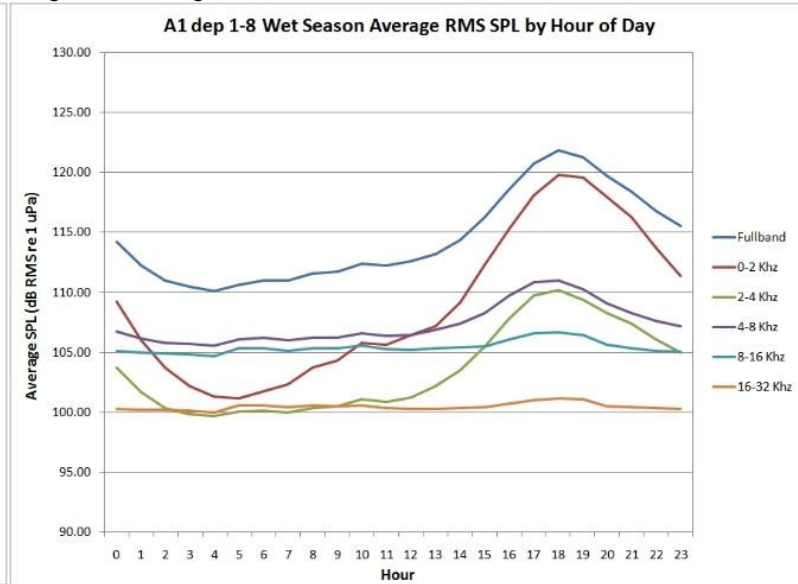
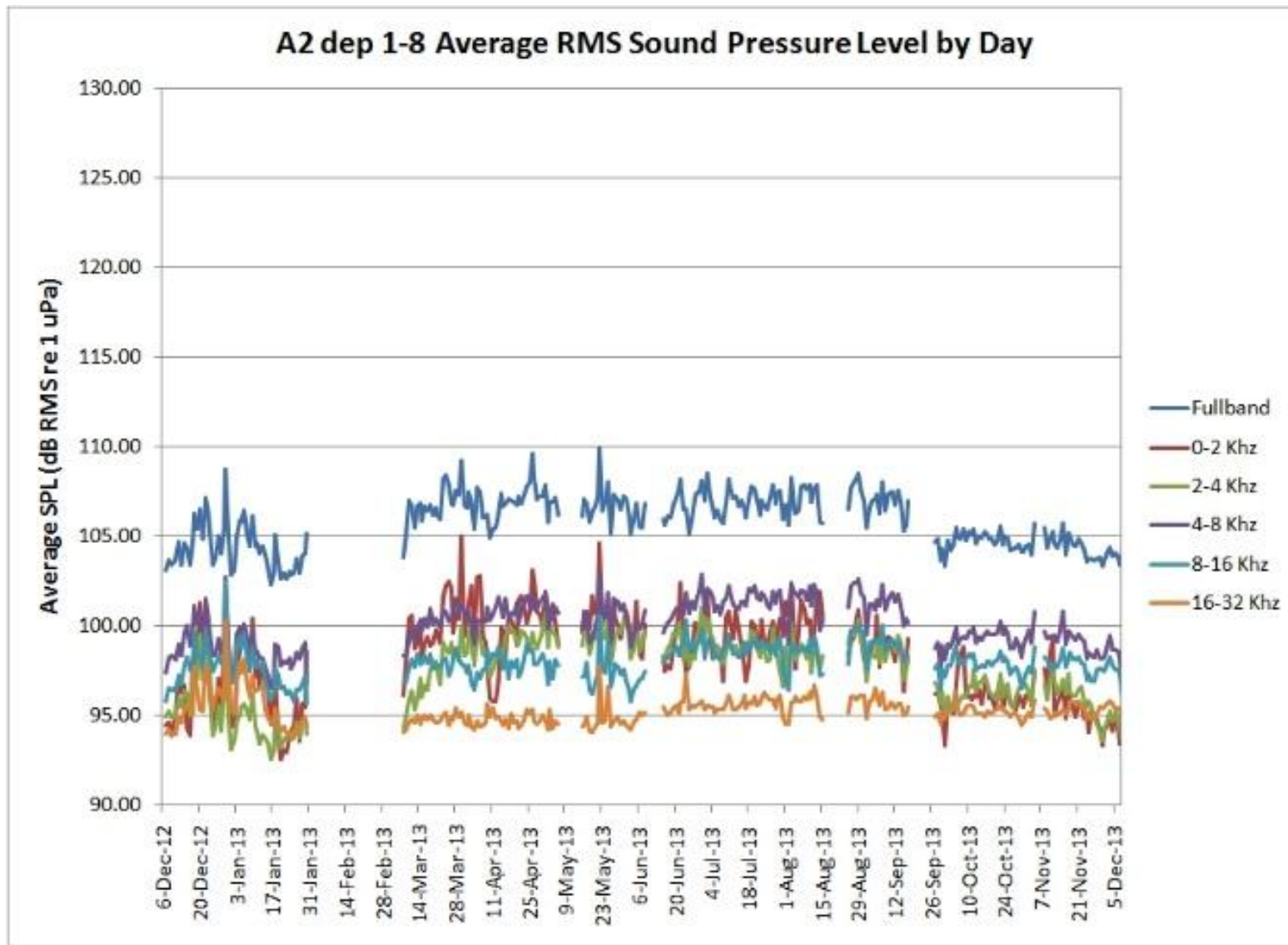


Figure 7: Average RMS Sound Pressure Level in Wet Season for EAR A1



Figures 8: Average RMS Sound Pressure Level for EAR A2.



# Expansion of Hong Kong International Airport into a Three-Runway System Environmental Impact Assessment Report



Figure 9: Average RMS Sound Pressure Level in Winter for EAR A2

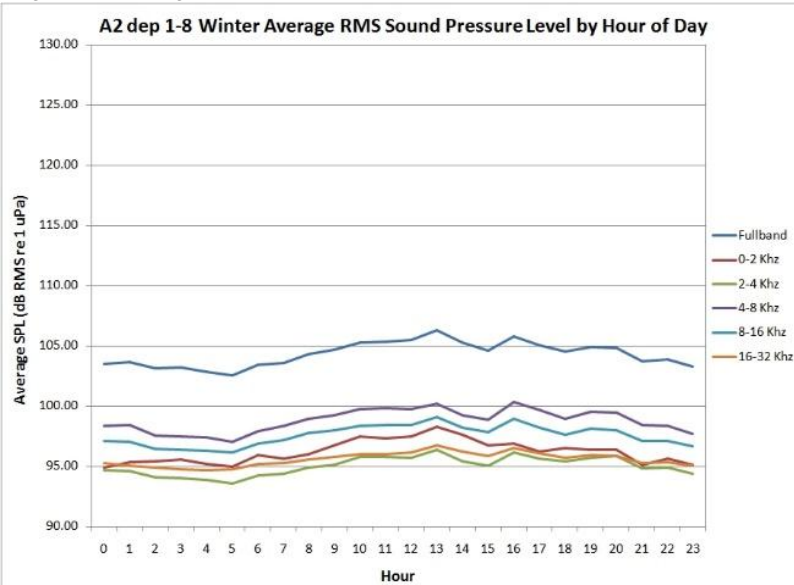


Figure 10: Average RMS Sound Pressure Level in Spring for EAR A2

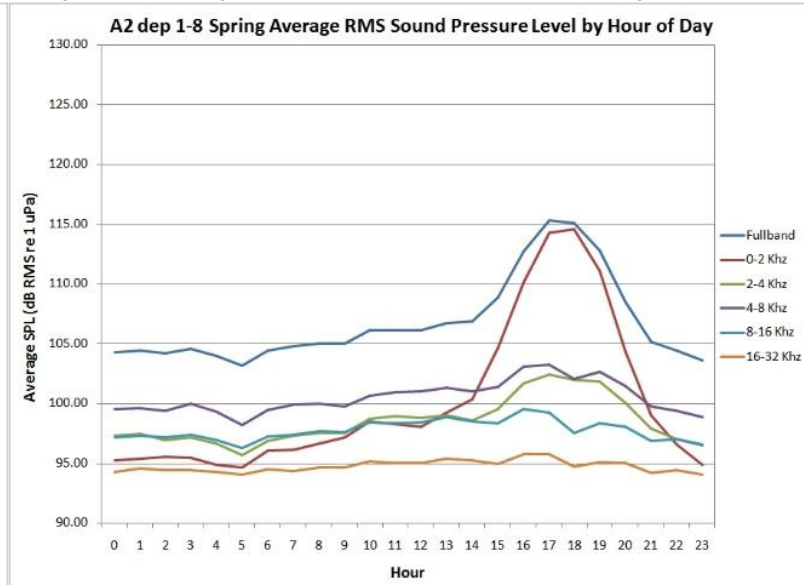


Figure 11: Average RMS Sound Pressure Level in Summer for EAR A2

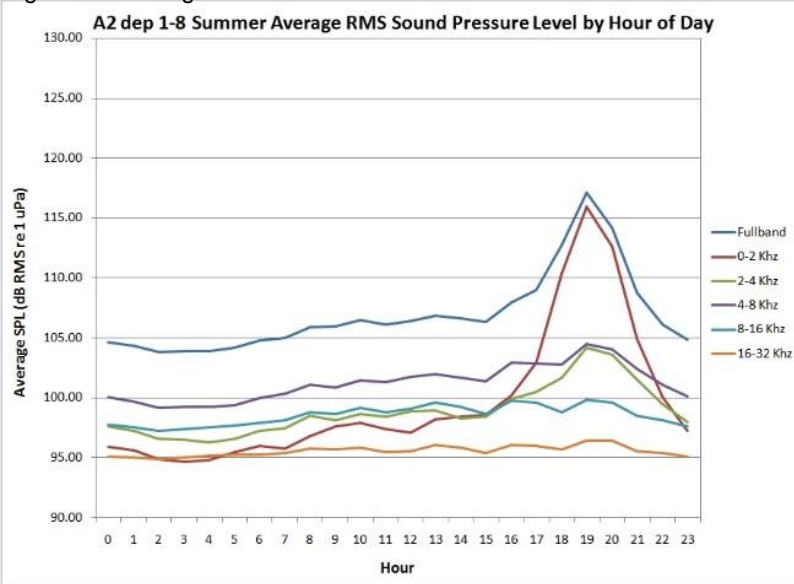
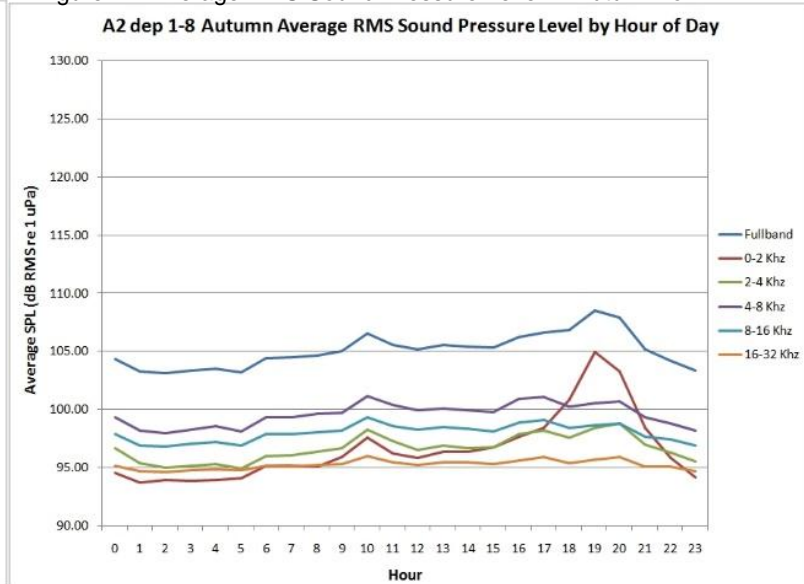


Figure 12: Average RMS Sound Pressure Level in Autumn for EAR A2



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Figure 13: Average RMS Sound Pressure Level in Dry Season for EAR A2

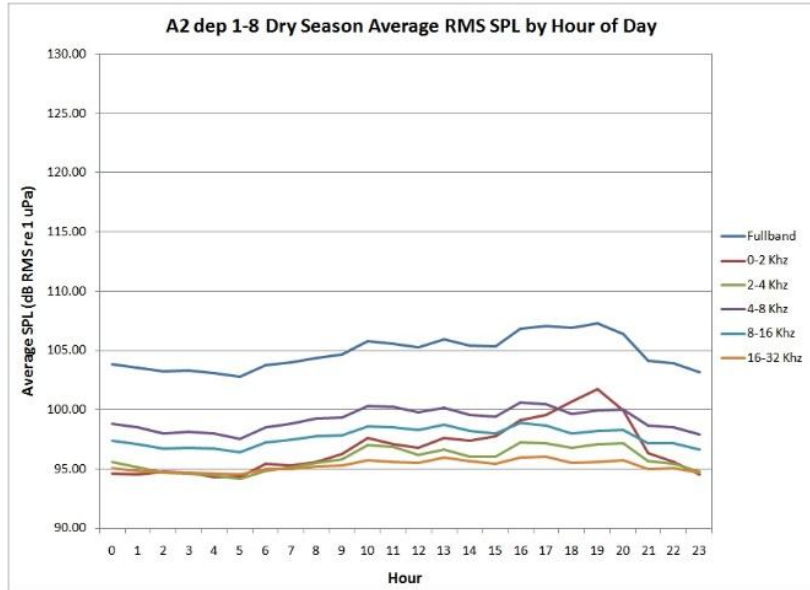
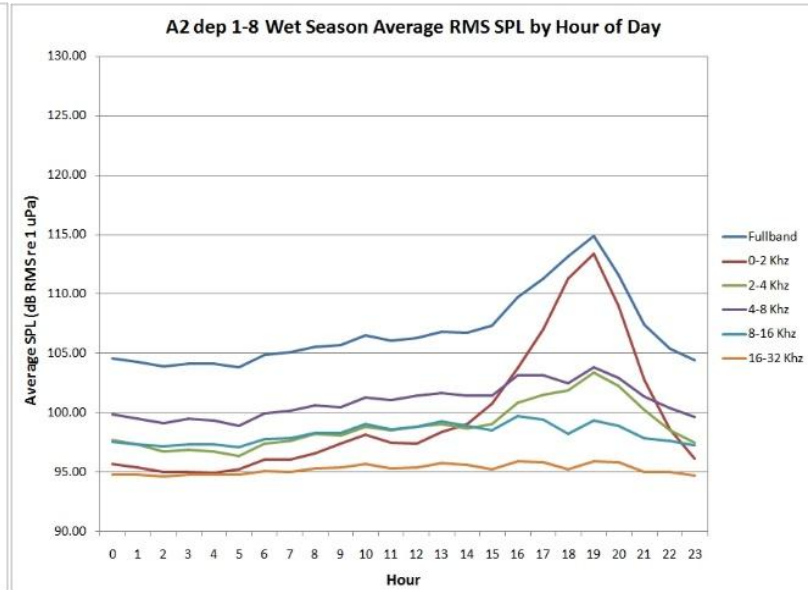
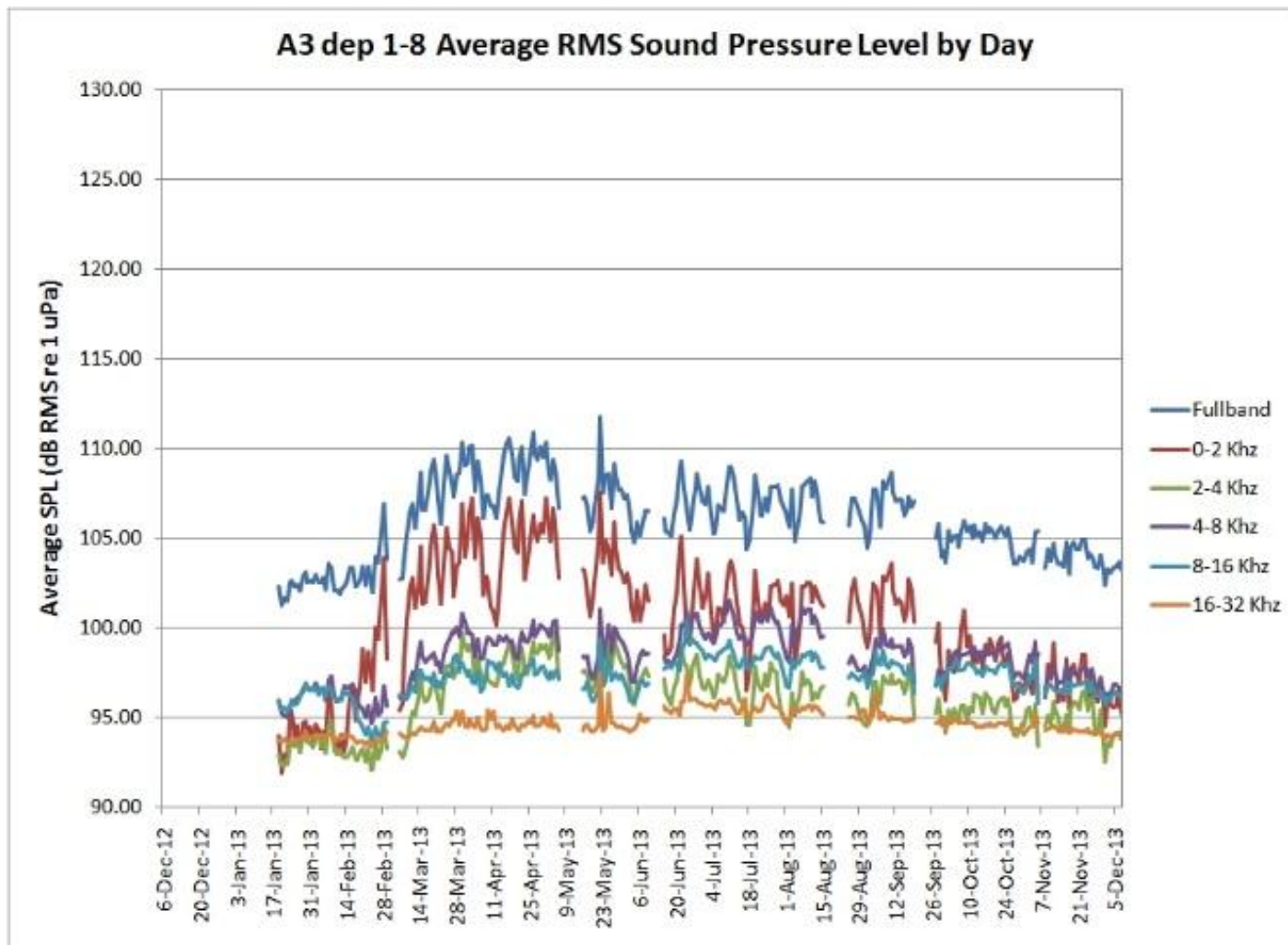


Figure 14: Average RMS Sound Pressure Level in Wet Season for EAR A2



Figures 15: Average RMS Sound Pressure Level for EAR A3.



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Figure 16: Average RMS Sound Pressure Level in Winter for EAR A3

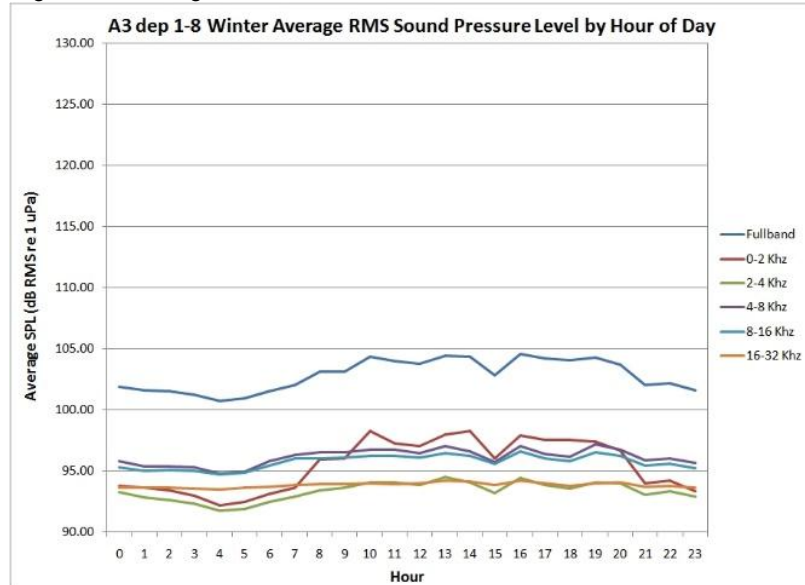


Figure 17: Average RMS Sound Pressure Level in Spring for EAR A3

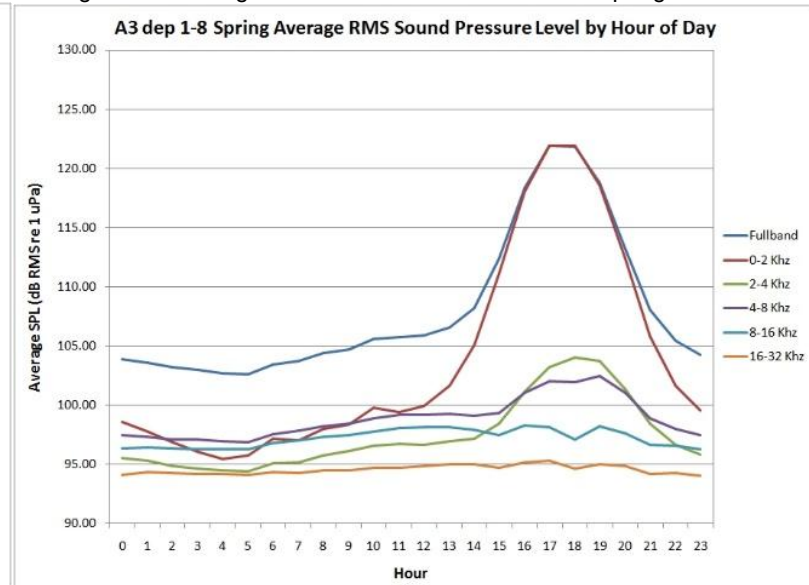


Figure 18: Average RMS Sound Pressure Level in Summer for EAR A3

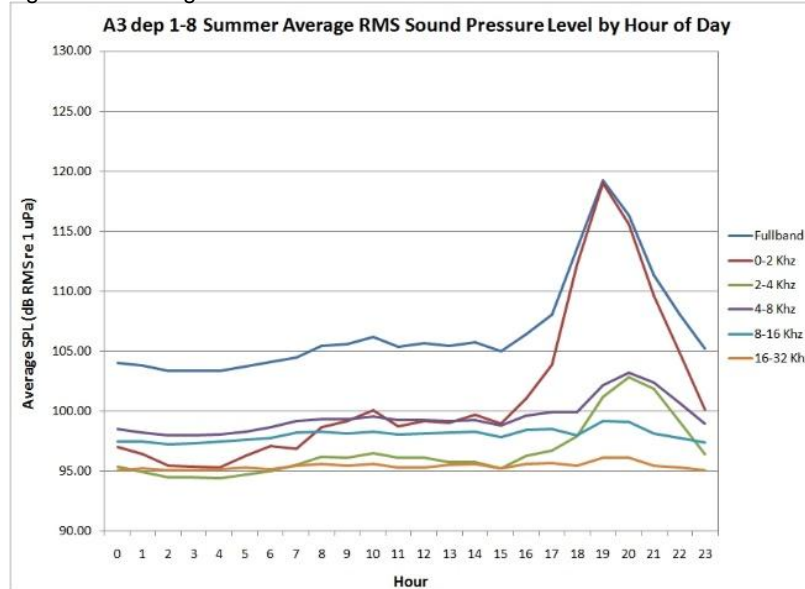
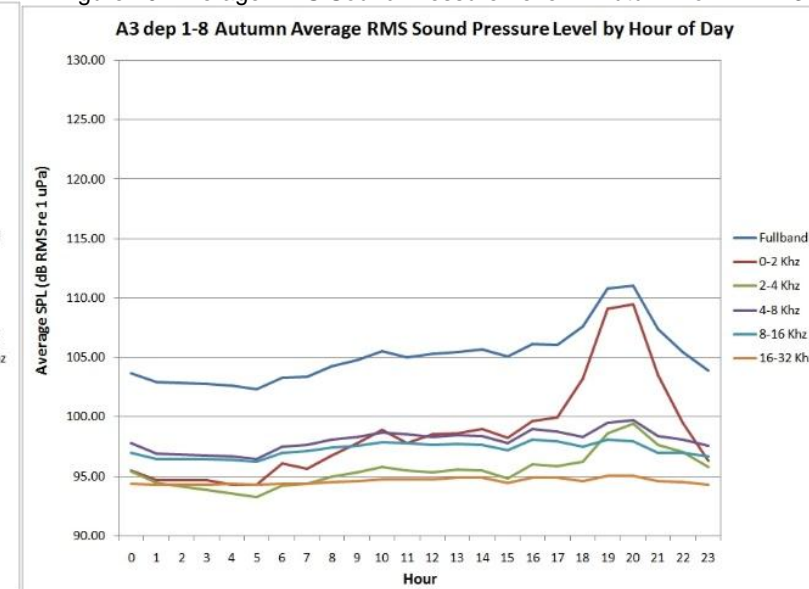


Figure 19: Average RMS Sound Pressure Level in Autumn for EAR A3



# Expansion of Hong Kong International Airport into a Three-Runway System Environmental Impact Assessment Report



Figure 20: Average RMS Sound Pressure Level in Dry Season for EAR A3

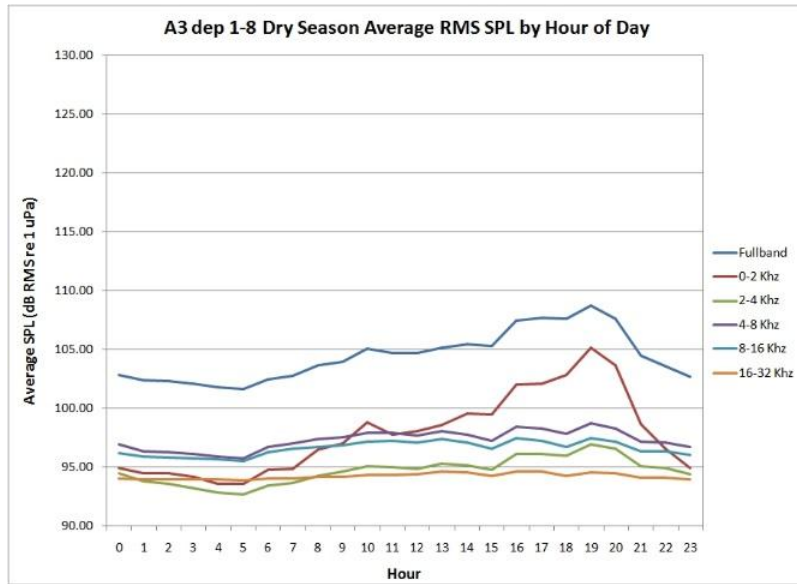
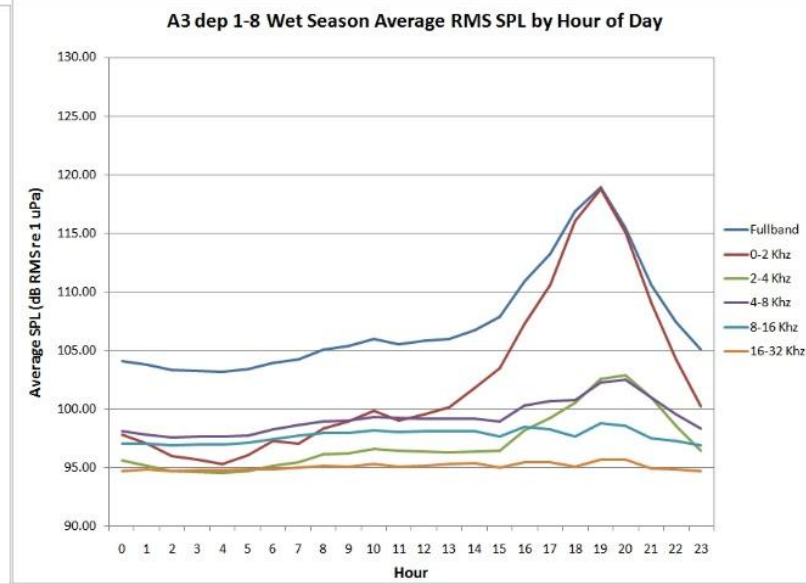


Figure 21: Average RMS Sound Pressure Level in Wet Season for EAR A3





Figures 22: Average RMS Sound Pressure Level for EAR A4.

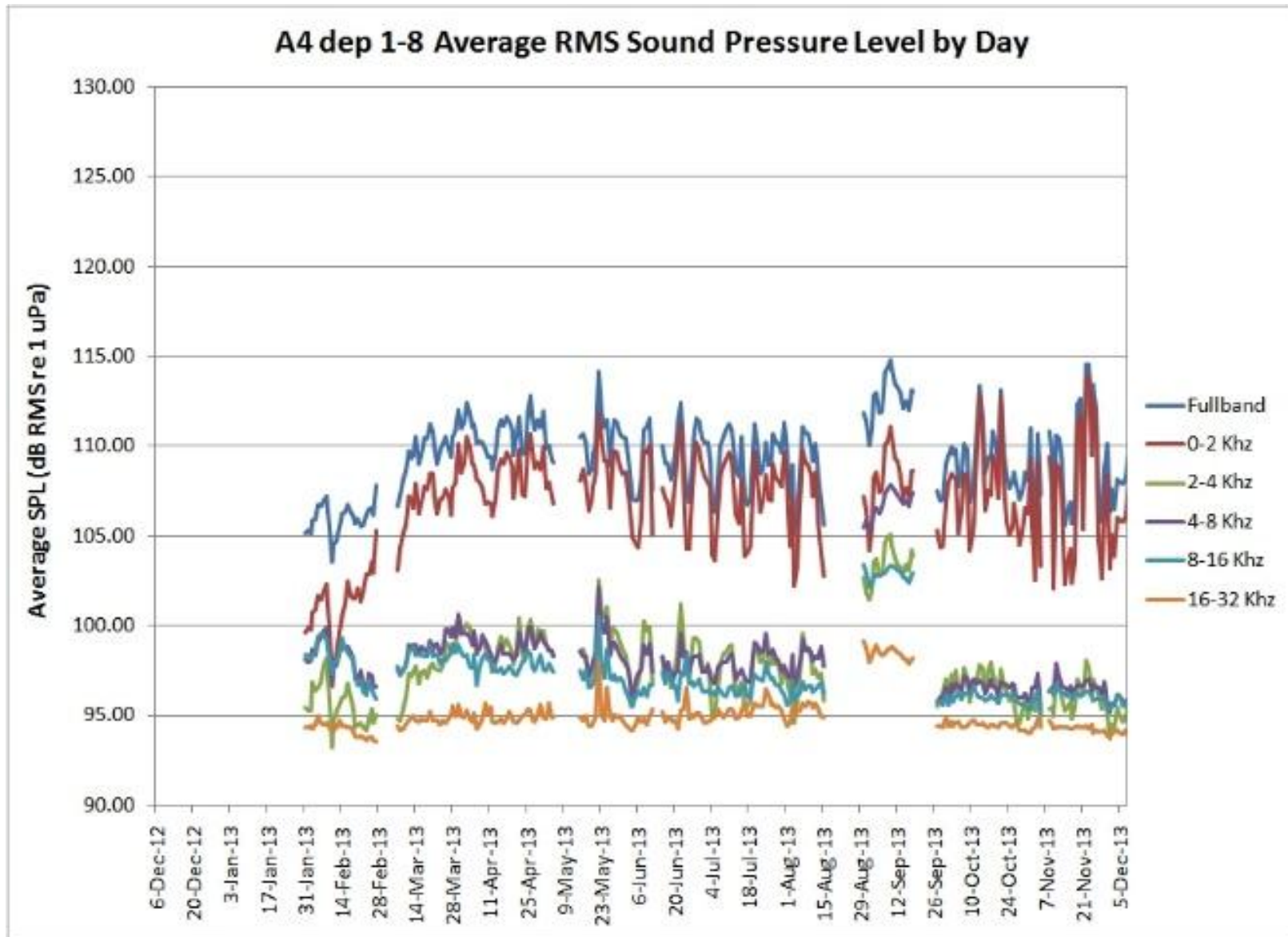


Figure 23: Average RMS Sound Pressure Level in Winter for EAR A4

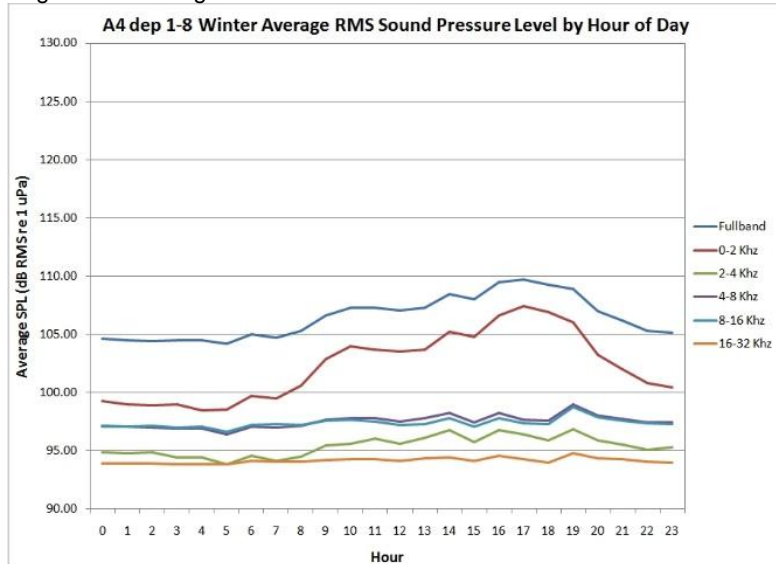


Figure 24: Average RMS Sound Pressure Level in Spring for EAR A4

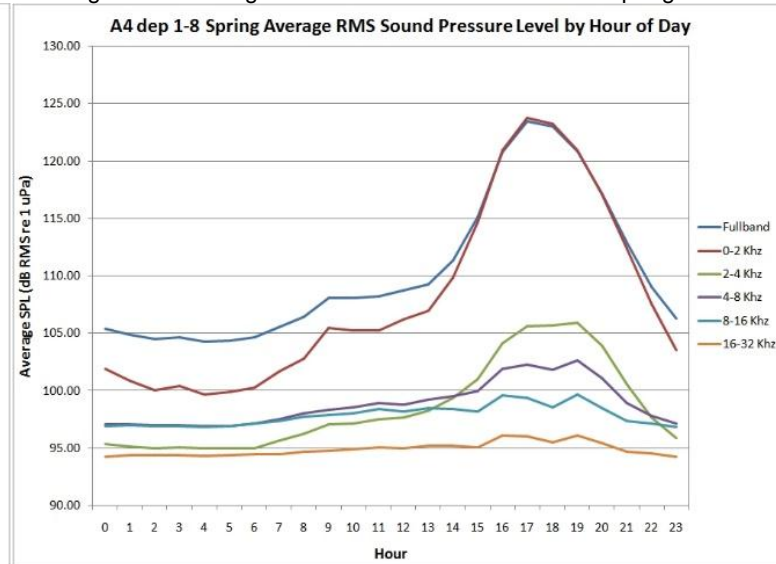


Figure 25: Average RMS Sound Pressure Level in Summer for EAR A4

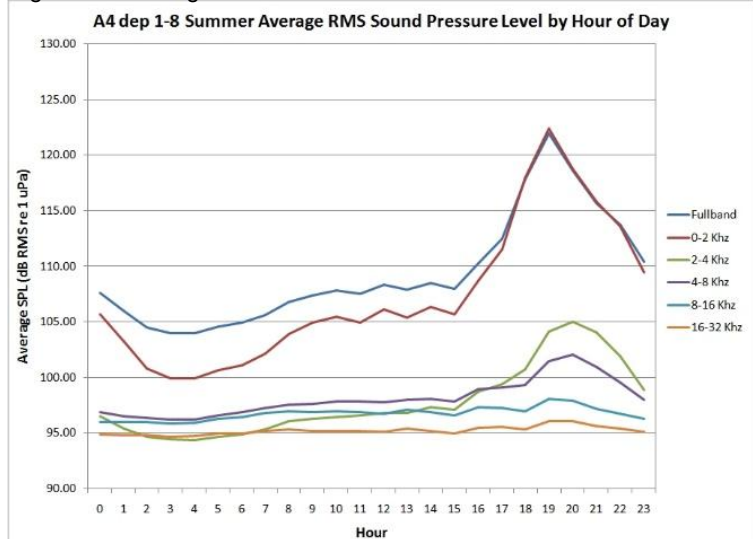


Figure 26: Average RMS Sound Pressure Level in Autumn for EAR A4

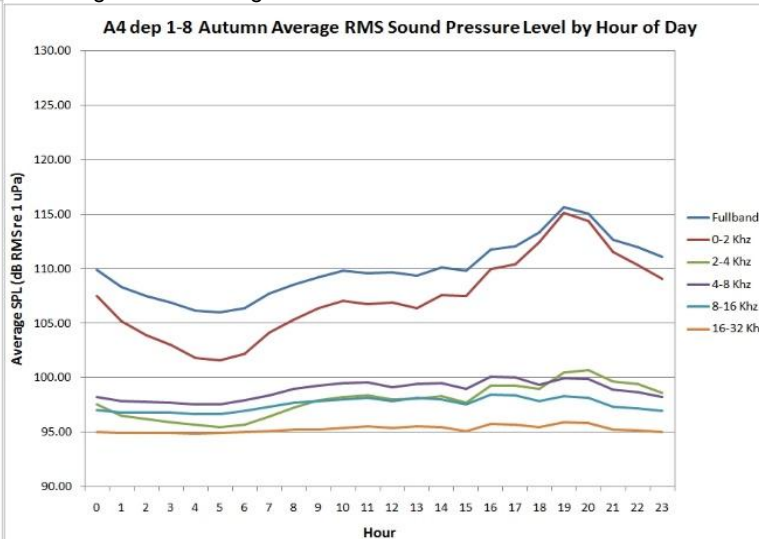


Figure 27: Average RMS Sound Pressure Level in Dry Season for EAR A4

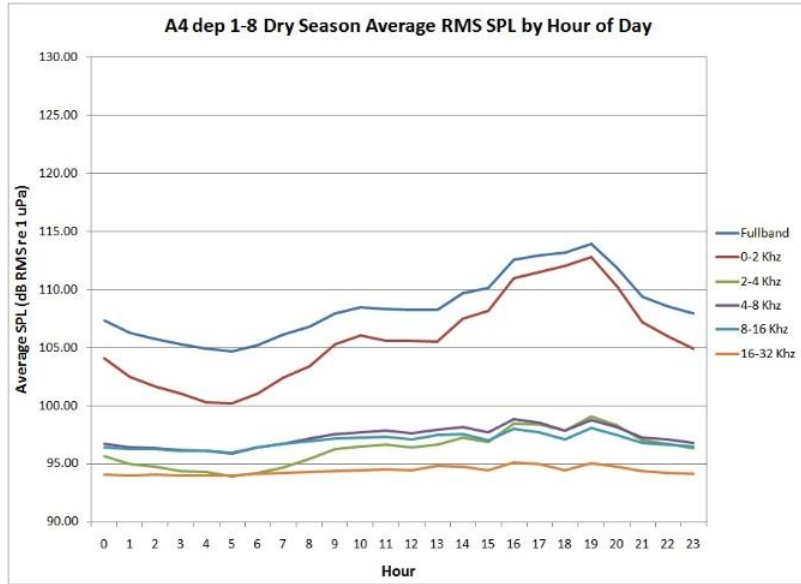
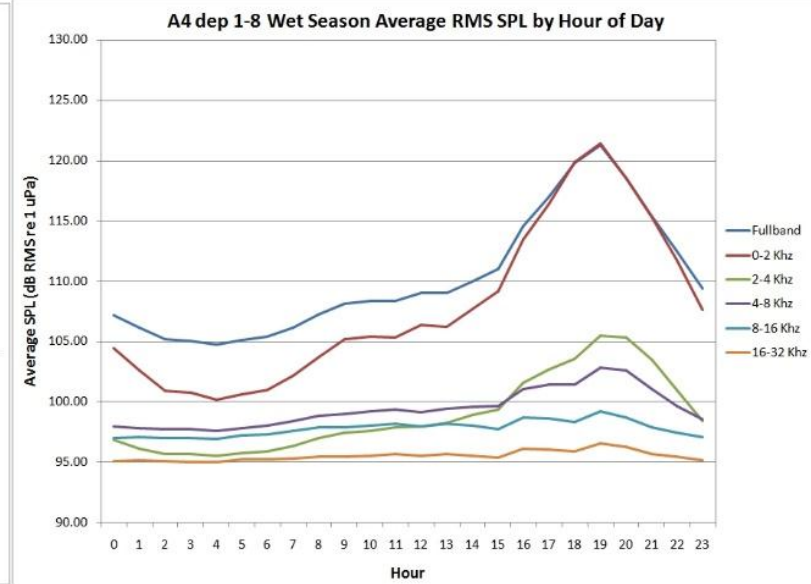
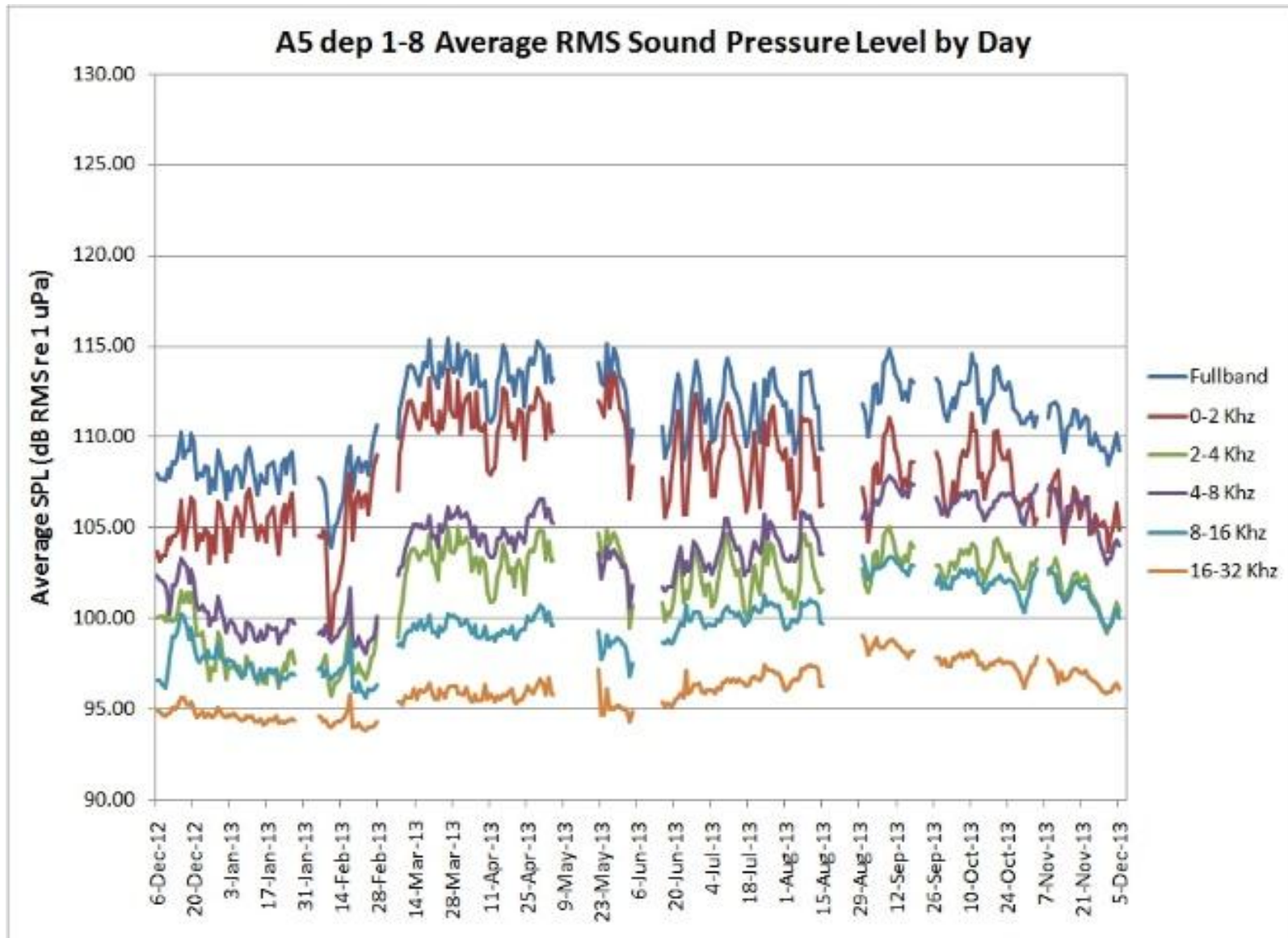


Figure 28: Average RMS Sound Pressure Level in Wet Season for EAR A4



Figures 29: Average RMS Sound Pressure Level in Dry and Wet Seasons for EAR A5.



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Figure 30: Average RMS Sound Pressure Level in Winter for EAR A5

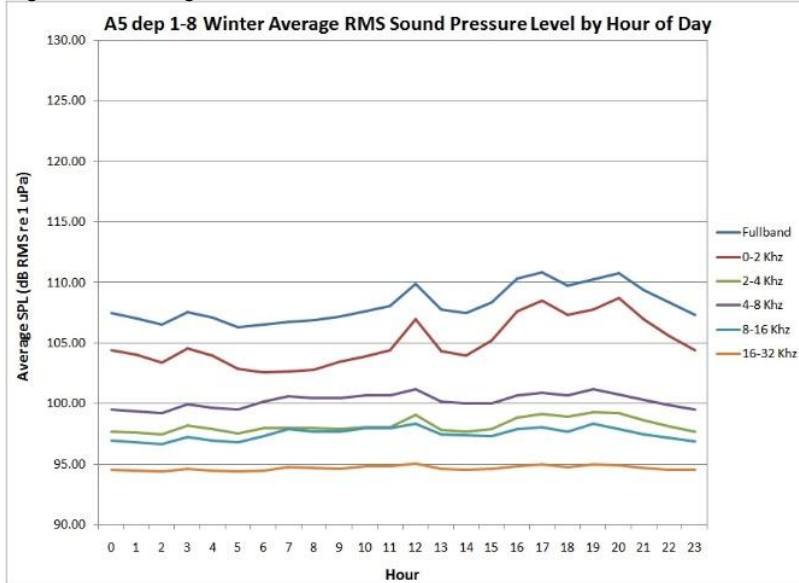


Figure 31: Average RMS Sound Pressure Level in Spring for EAR A5

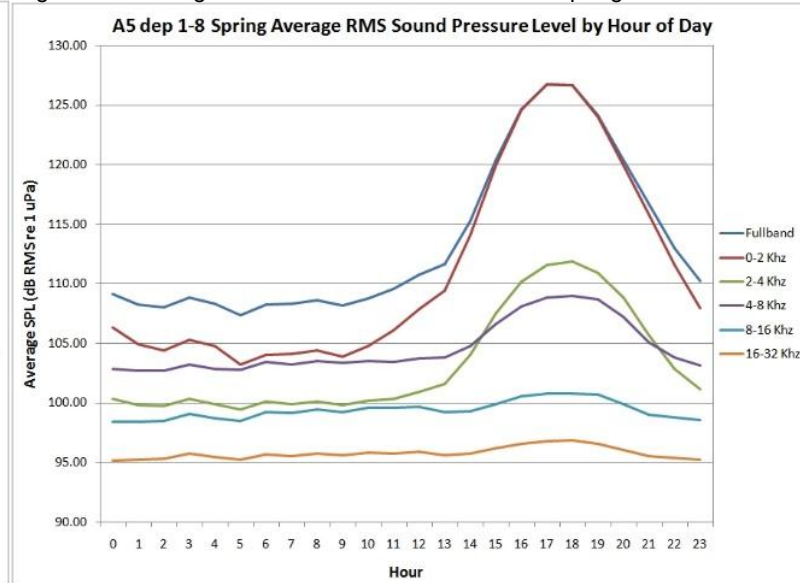


Figure 32: Average RMS Sound Pressure Level in Summer for EAR A5

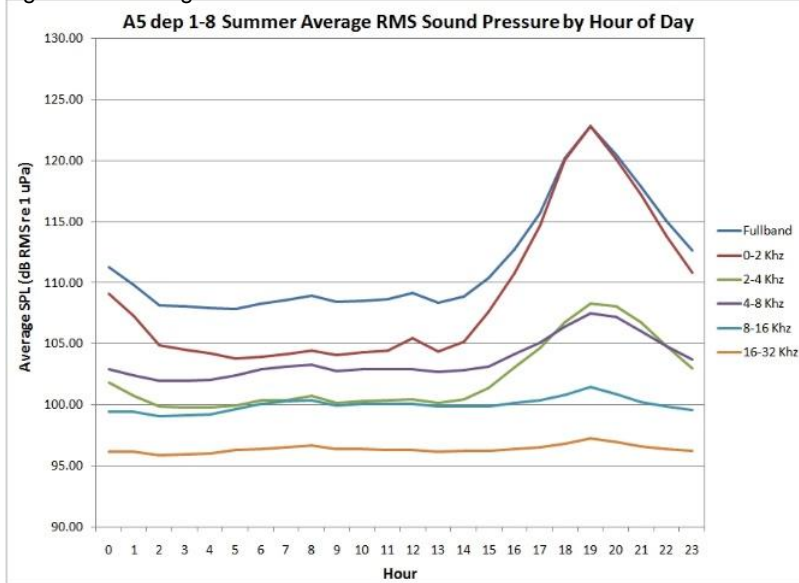
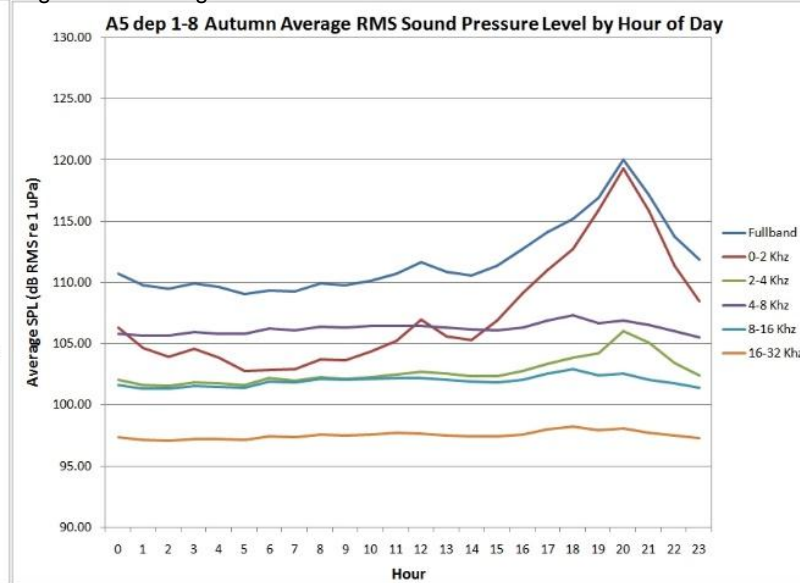


Figure 33: Average RMS Sound Pressure Level in Autumn for EAR A5



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Figure 34: Average RMS Sound Pressure Level in Dry Season for EAR A5

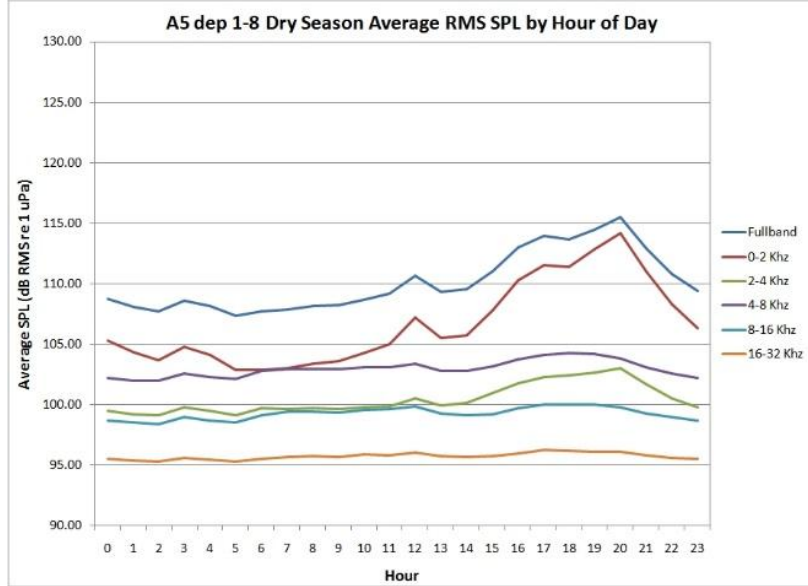
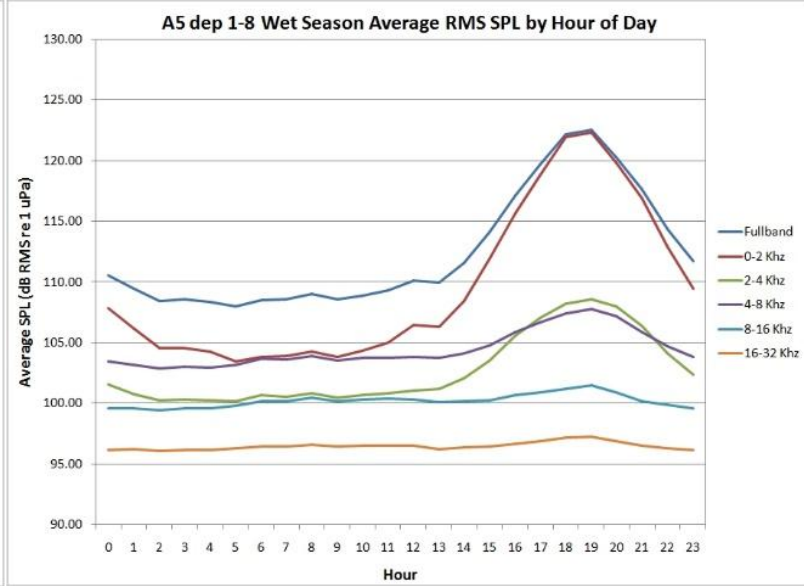


Figure 35: Average RMS Sound Pressure Level in Wet Season for EAR A5



## Appendix 13.11 Dolphin Detections at the 5 EARs

Figure 1: Dolphin detections for EAR A1.

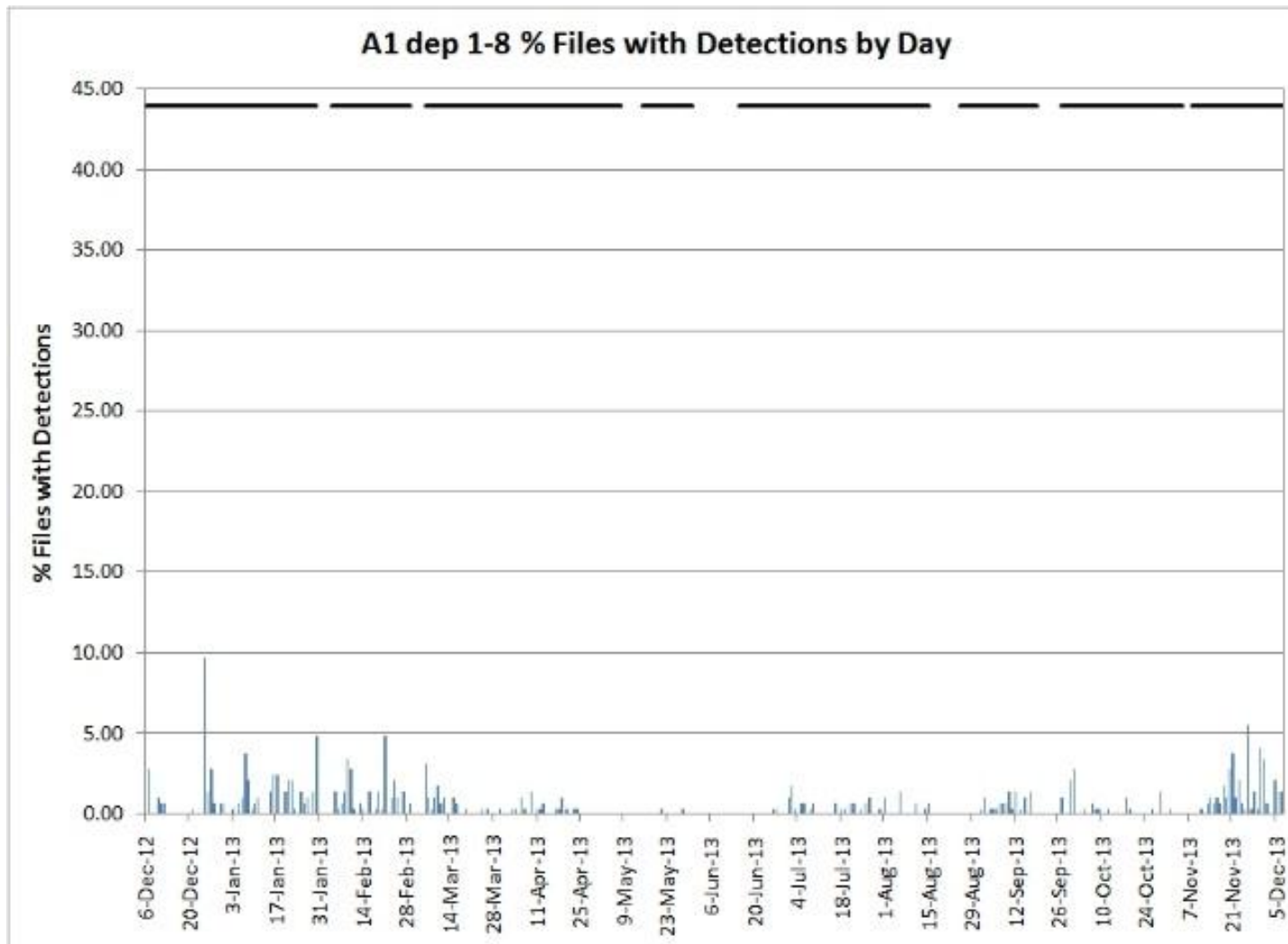


Figure 2: Dolphin detections in Winter for EAR A1

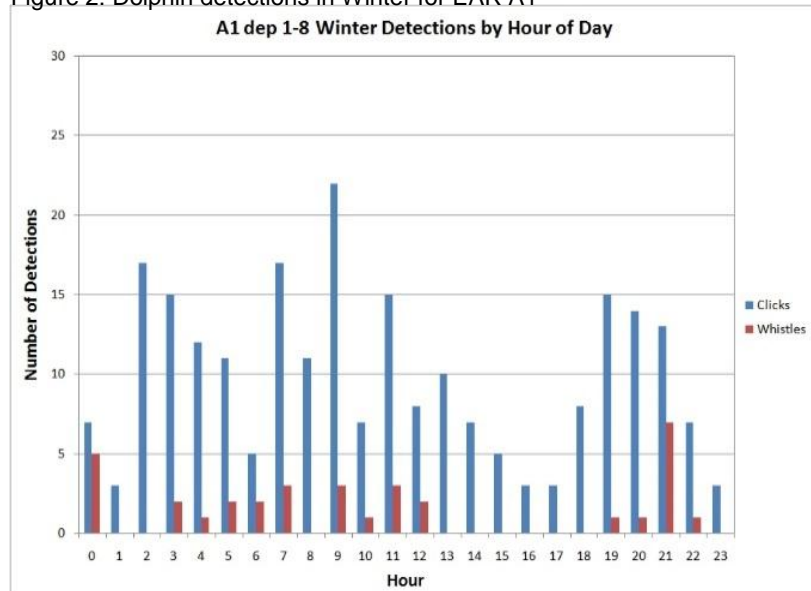


Figure 3: Dolphin detections in Spring for EAR A1

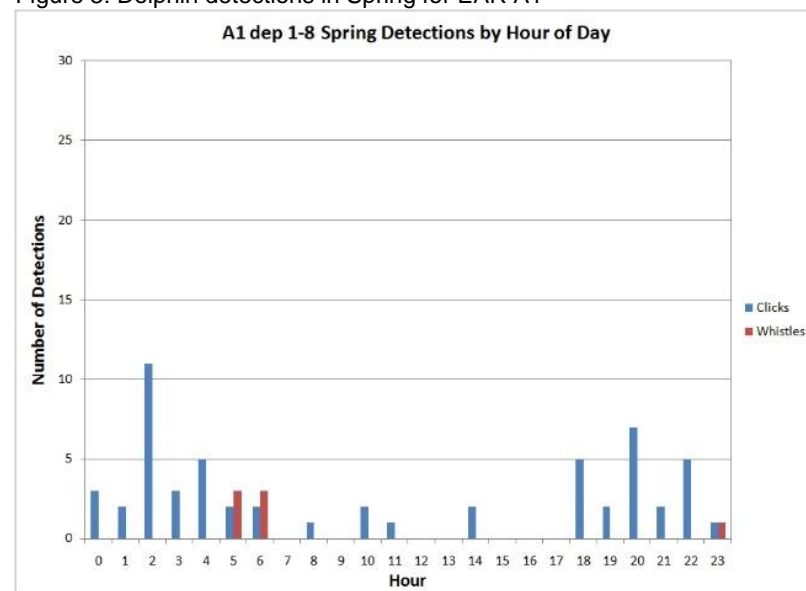


Figure 4: Dolphin detections in Summer for EAR A1

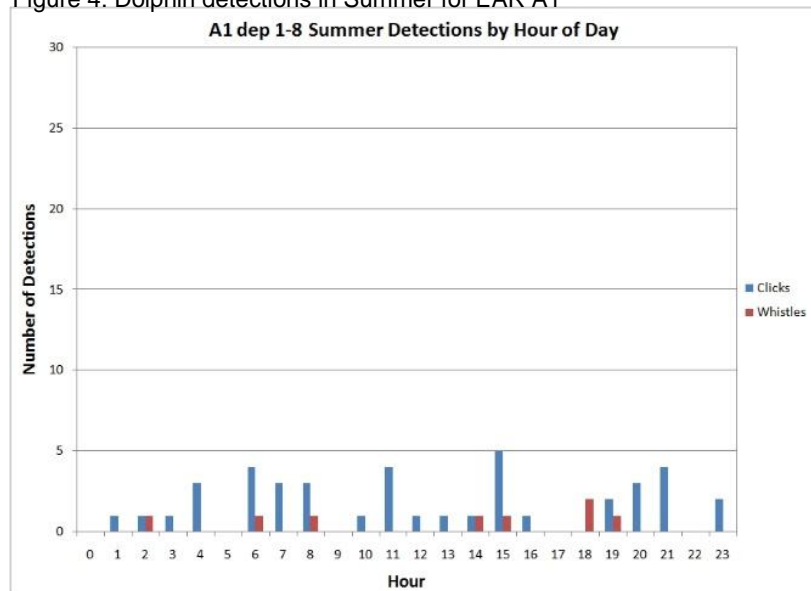


Figure 5: Dolphin detections in Autumn for EAR A1

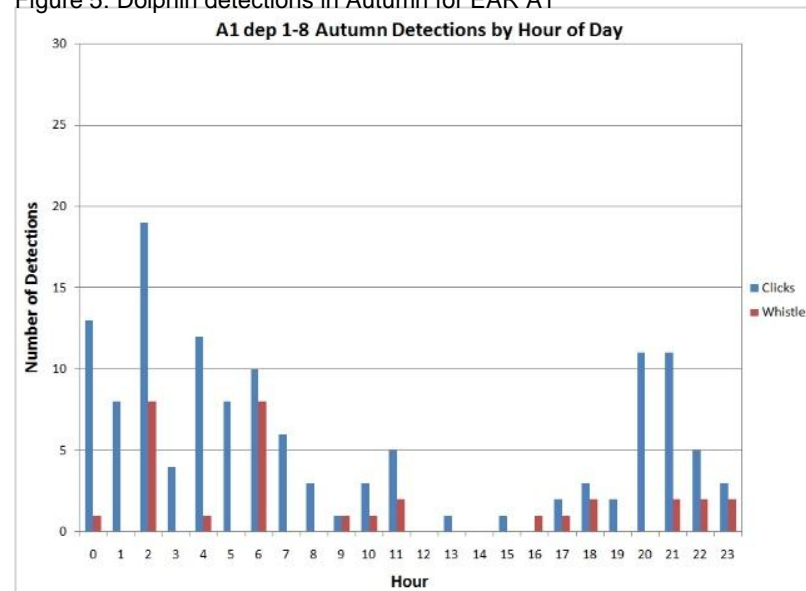




Figure 6: Dolphin detections in Dry Season for EAR A1

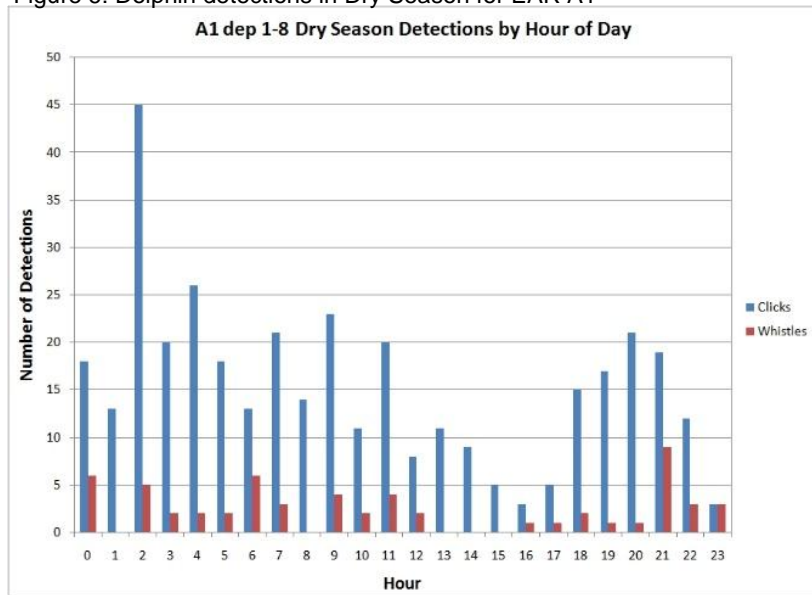


Figure 7: Dolphin detections in Wet Season for EAR A1

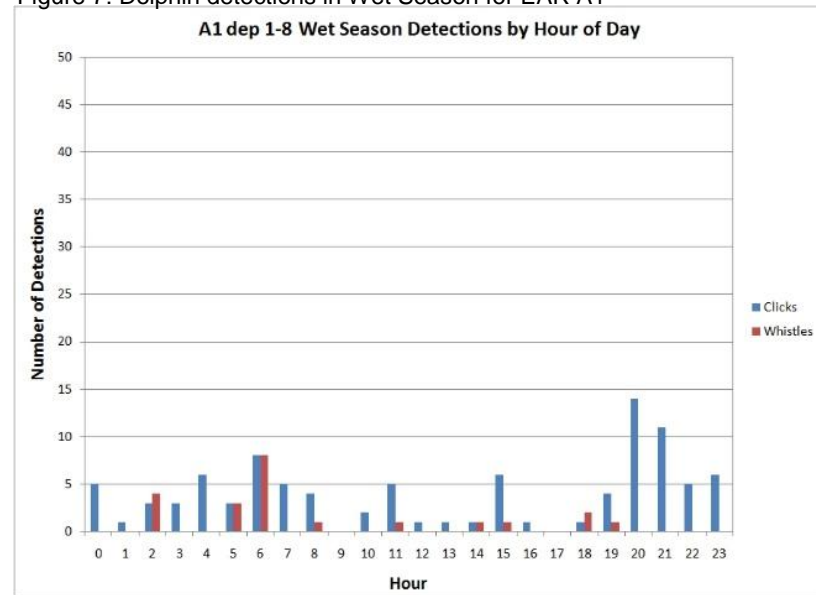


Figure 8: Dolphin detections for EAR A2.

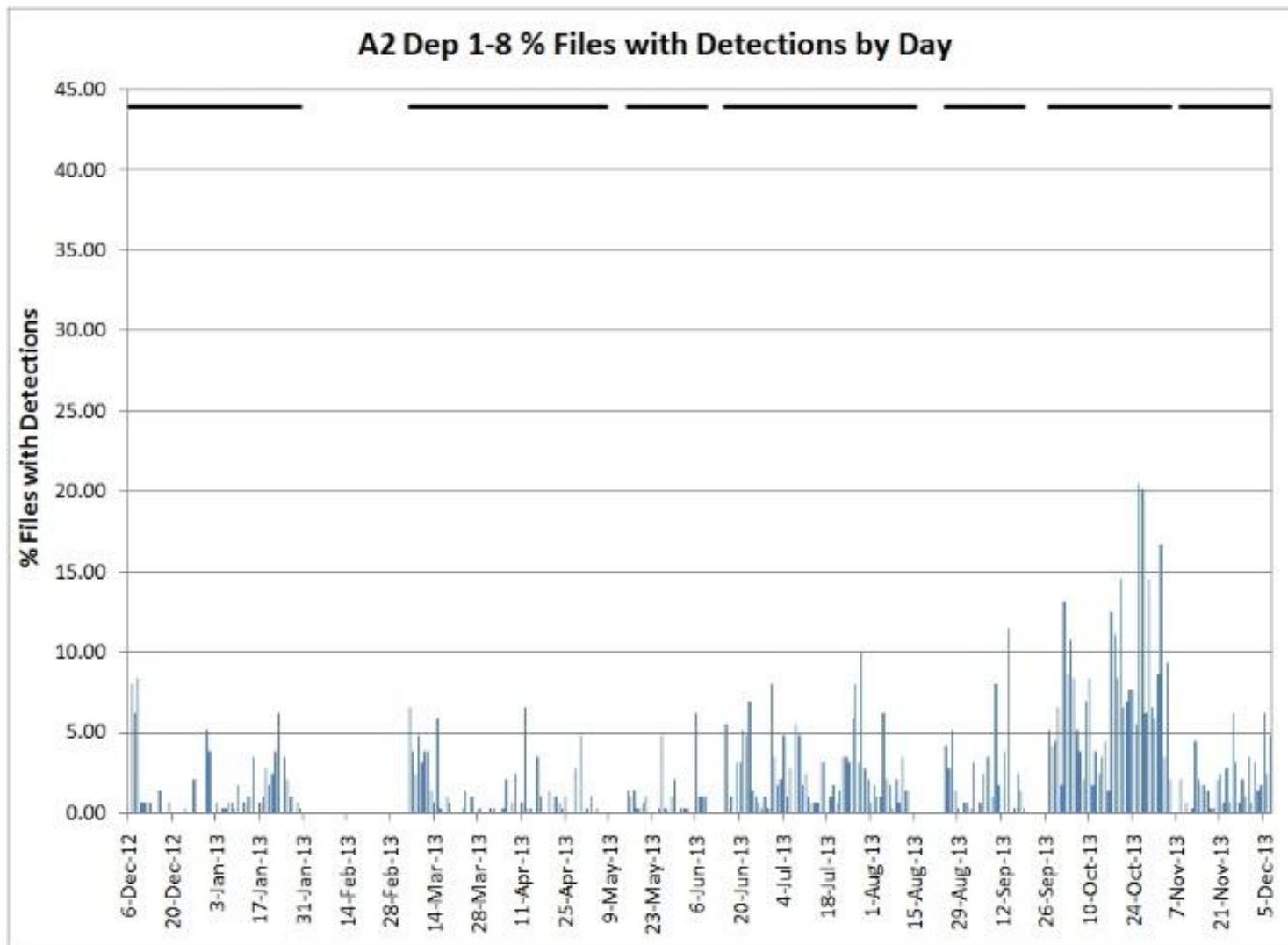


Figure 9: Dolphin detections in Winter for EAR A2

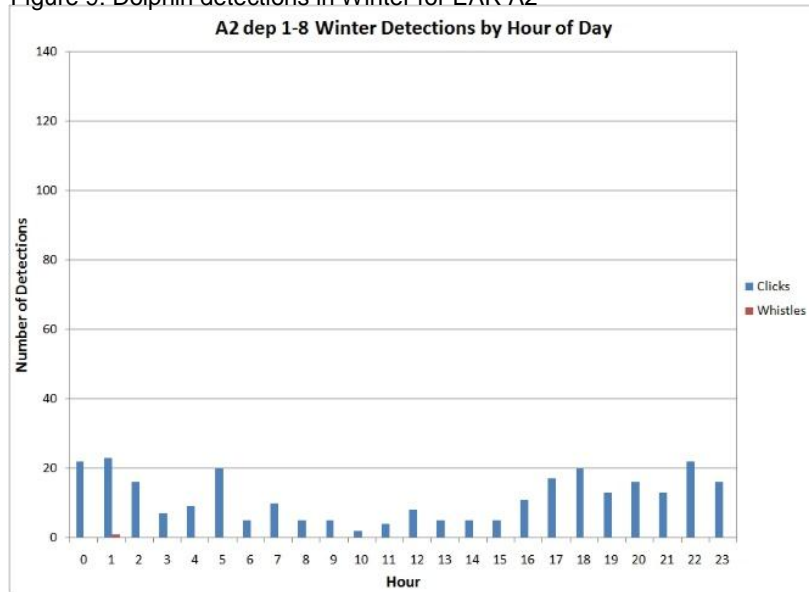


Figure 10: Dolphin detections in Spring for EAR A2

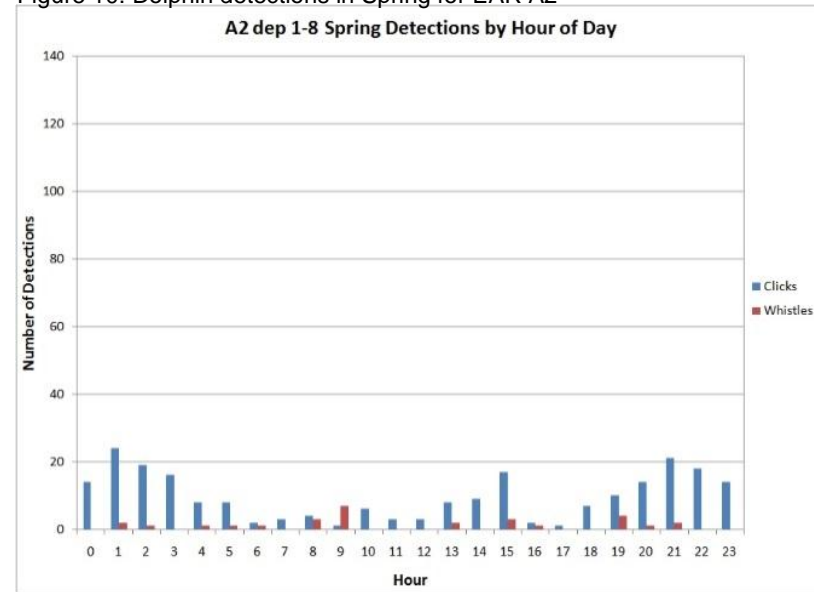


Figure 11: Dolphin detections in Summer for EAR A2

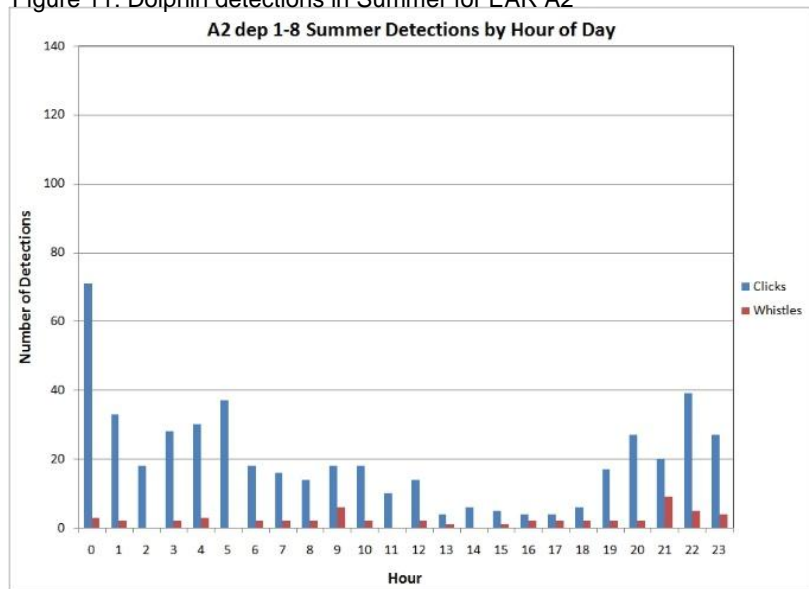


Figure 12: Dolphin detections in Autumn for EAR A2

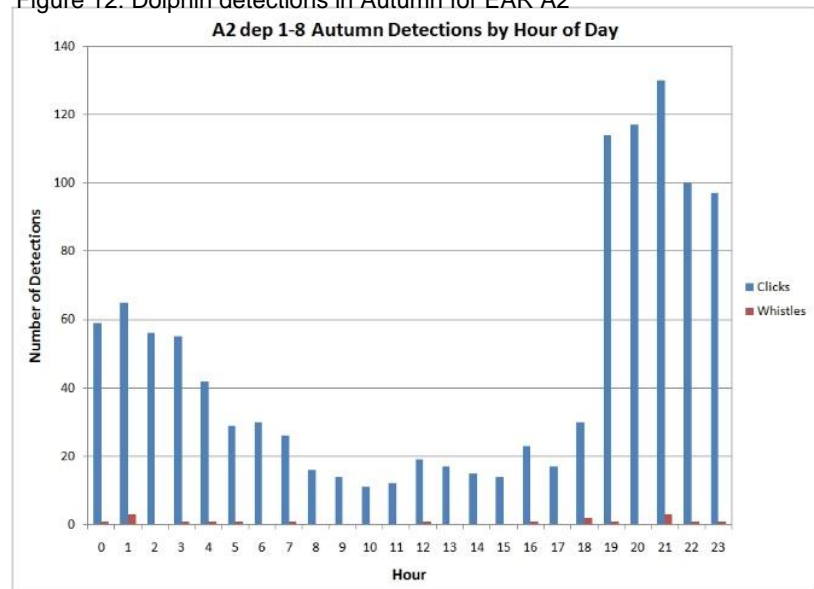


Figure 13: Dolphin detections in Dry Season for EAR A2

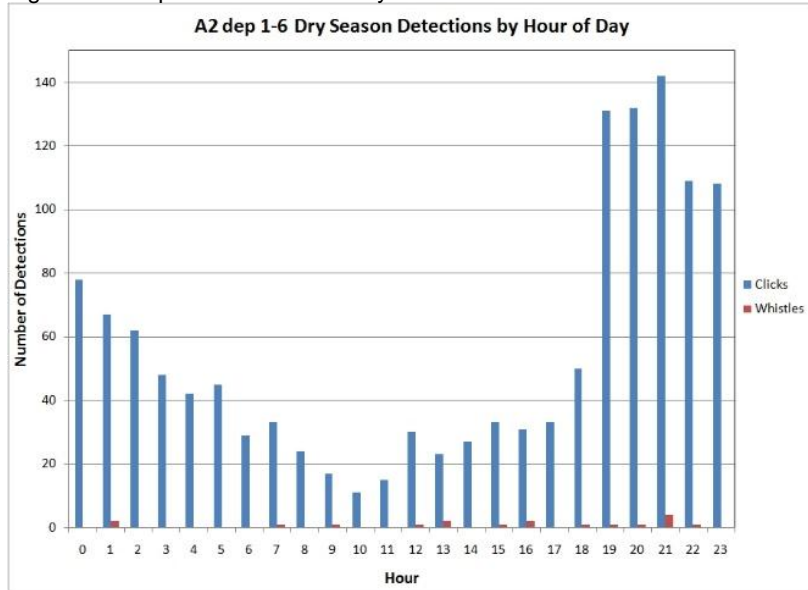


Figure 14: Dolphin detections in Wet Season for EAR A2

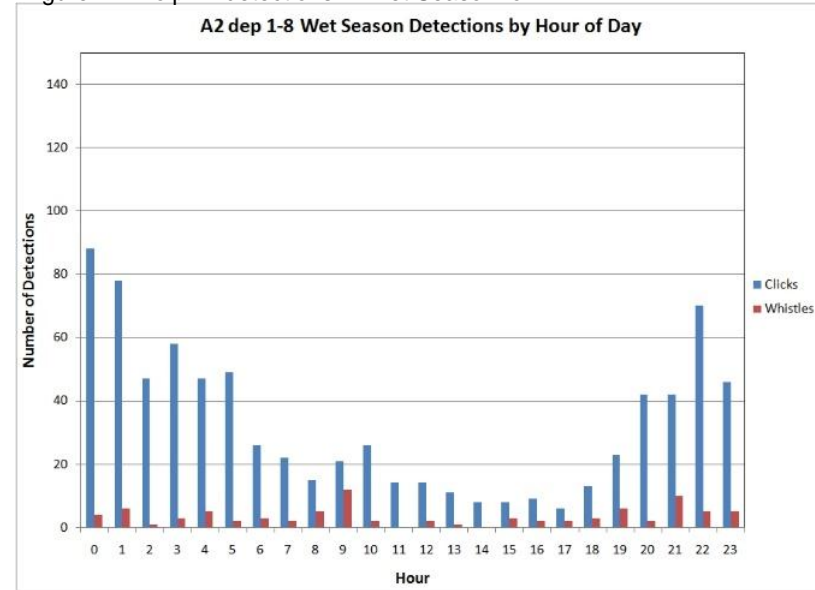


Figure 15: Dolphin detections for EAR A3.

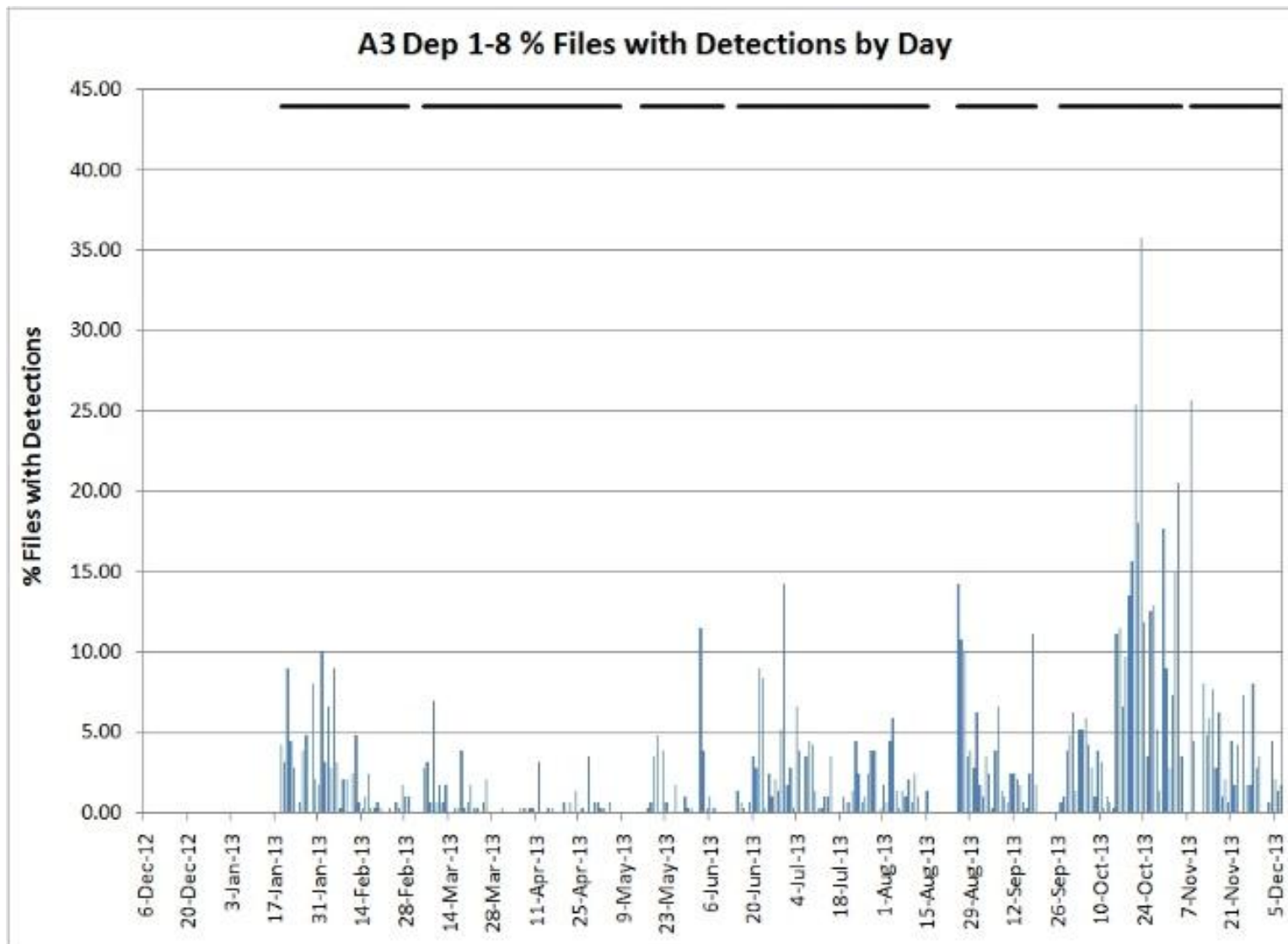


Figure 16: Dolphin detections in Winter for EAR A3

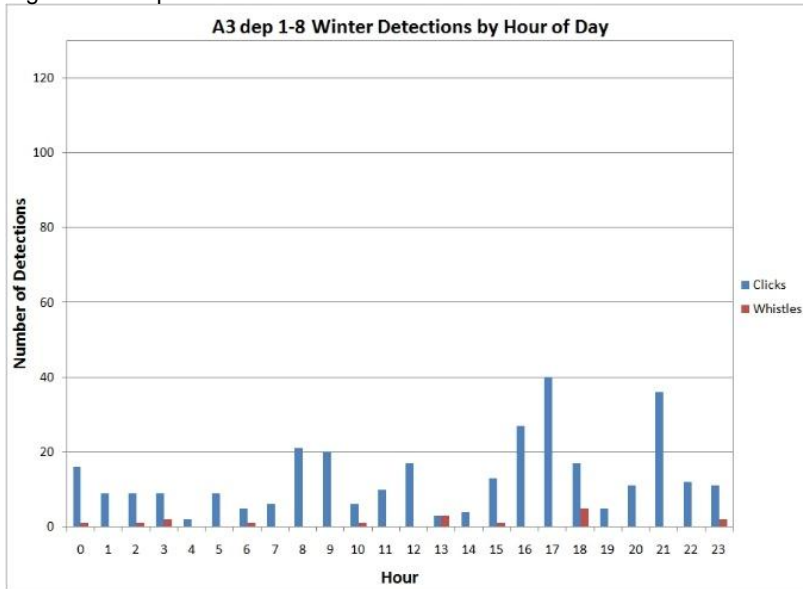


Figure 17: Dolphin detections in Spring for EAR A3

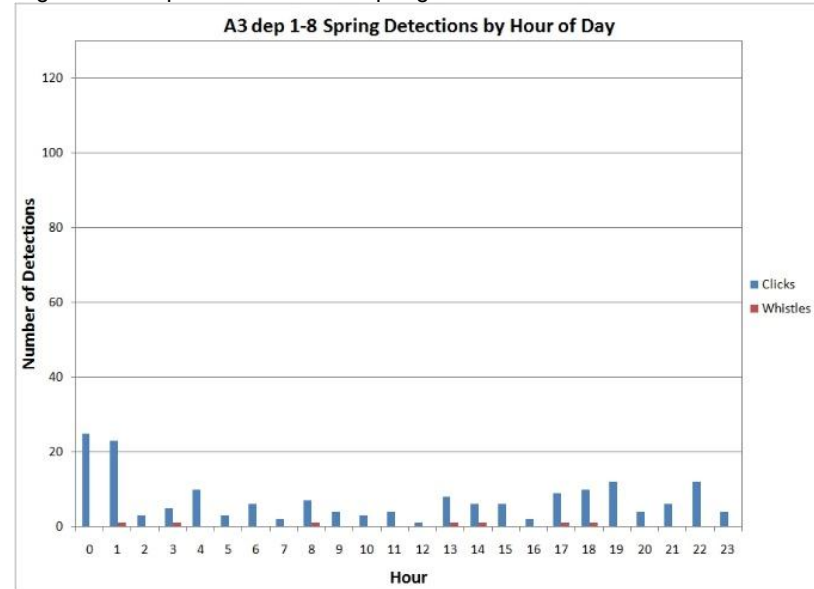


Figure 18: Dolphin detections in Summer for EAR A3

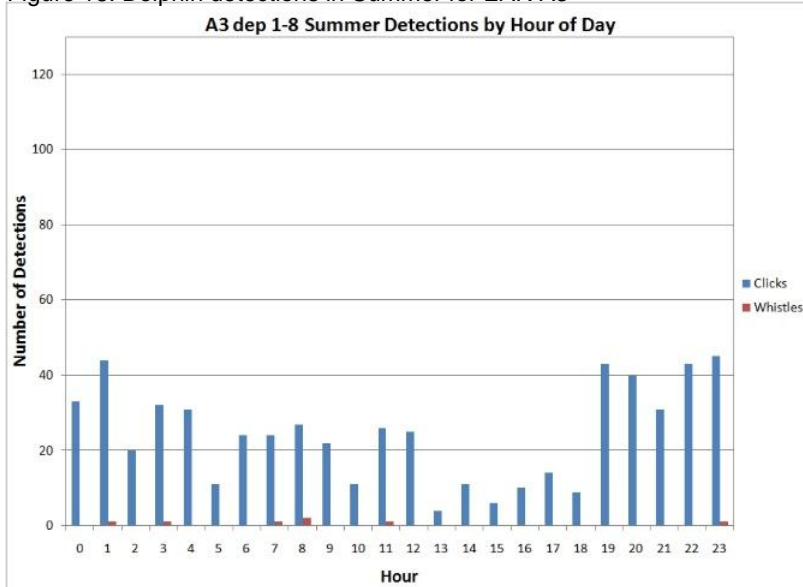


Figure 19: Dolphin detections in Autumn for EAR A3

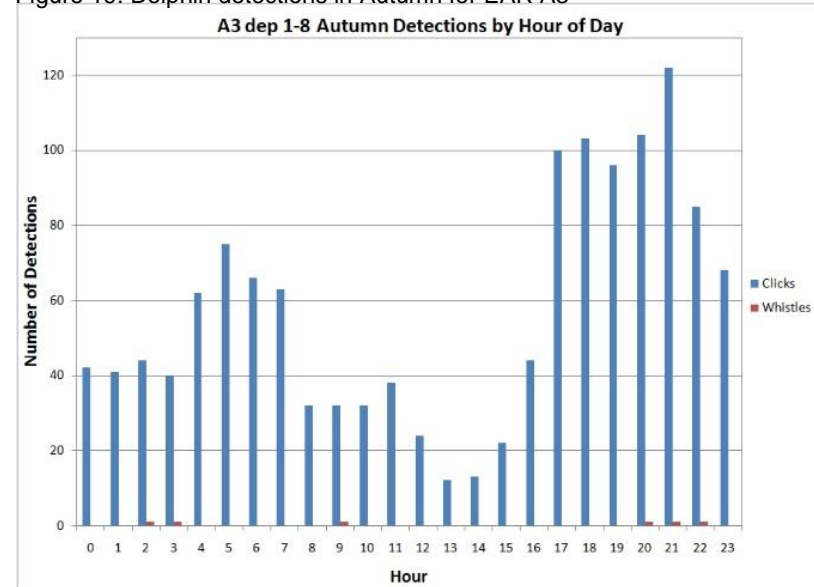


Figure 20: Dolphin detections in Dry Season for EAR A3

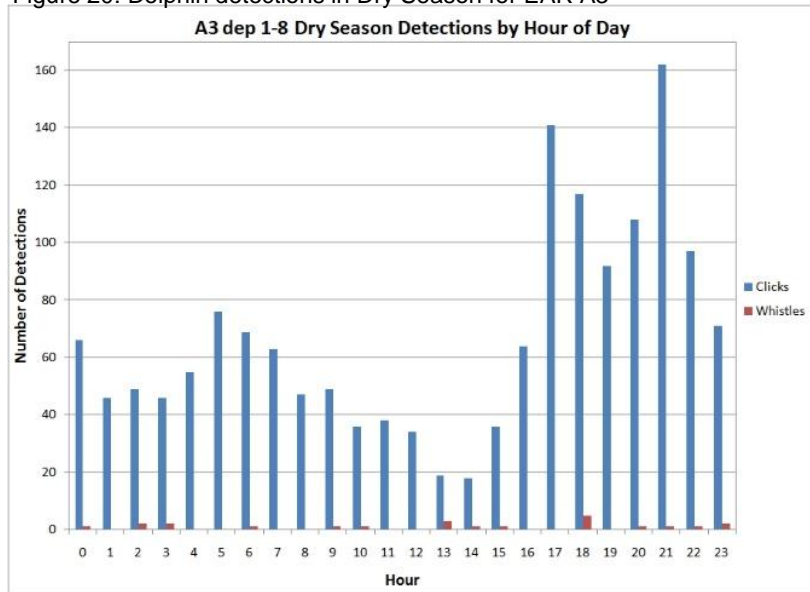
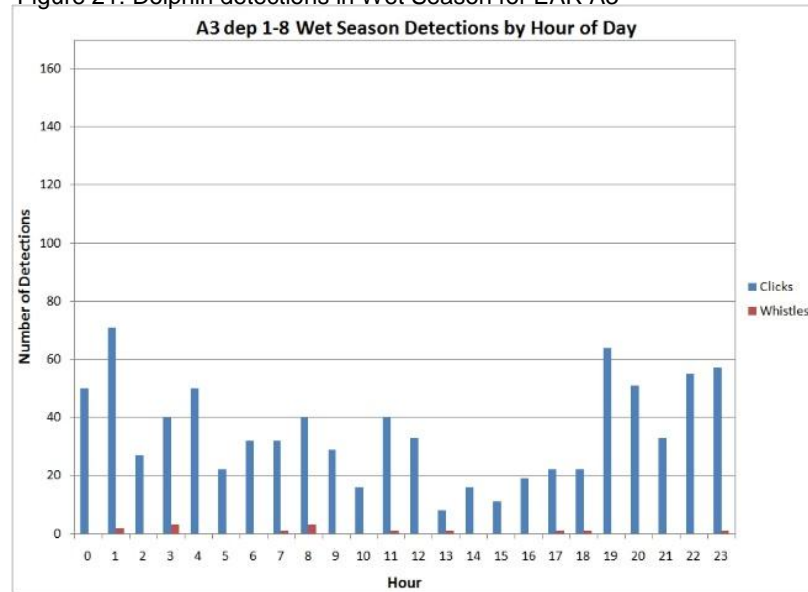


Figure 21: Dolphin detections in Wet Season for EAR A3



Figures 22: Dolphin detections for EAR A4

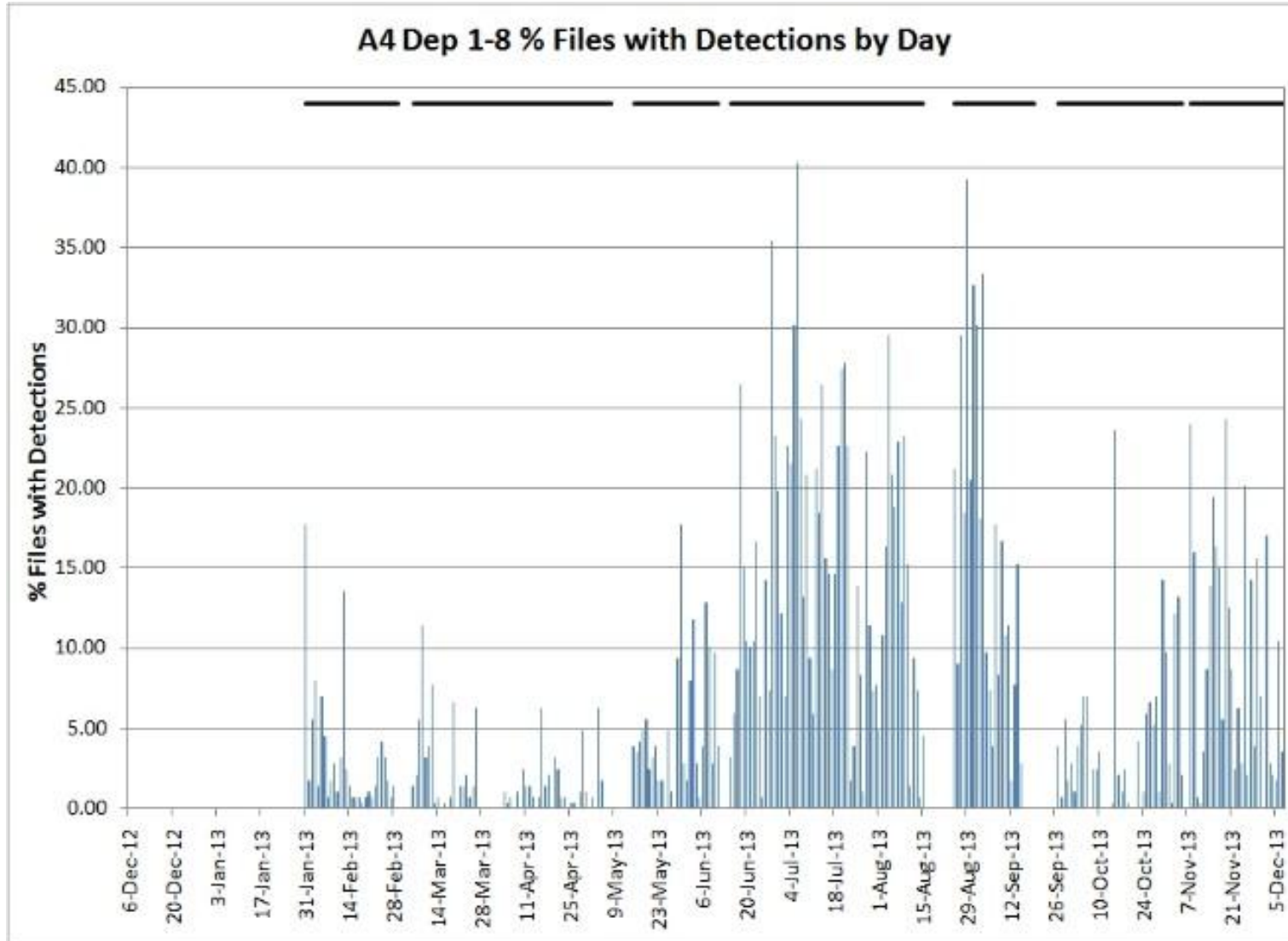




Figure 23: Dolphin detections in Winter for EAR A4

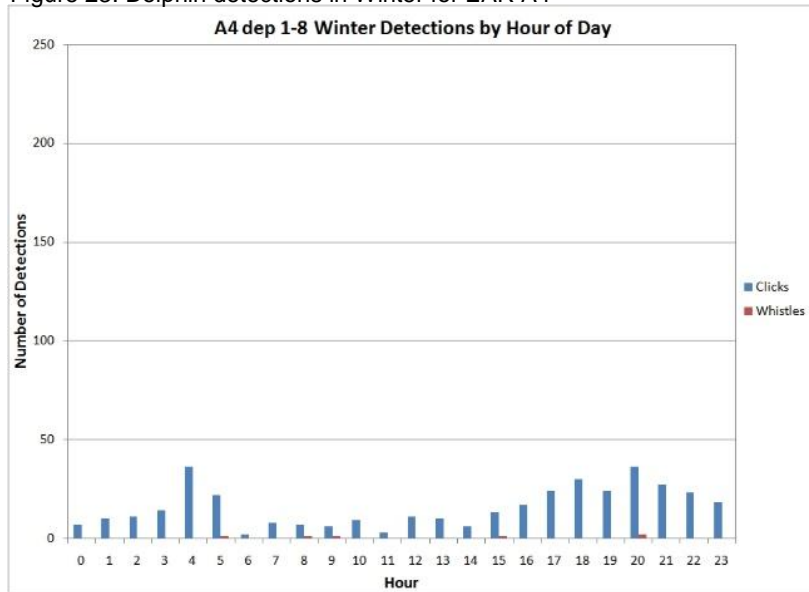


Figure 24: Dolphin detections in Spring for EAR A4

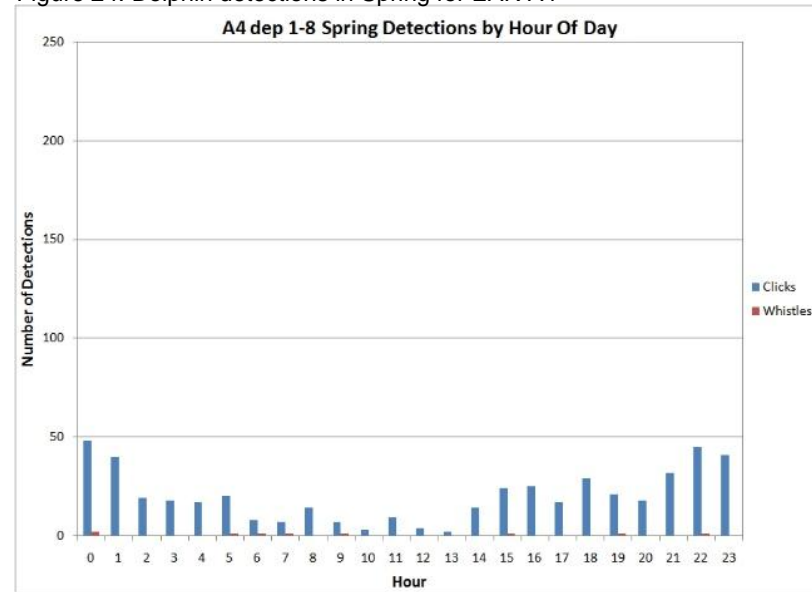


Figure 25: Dolphin detections in Summer for EAR A4

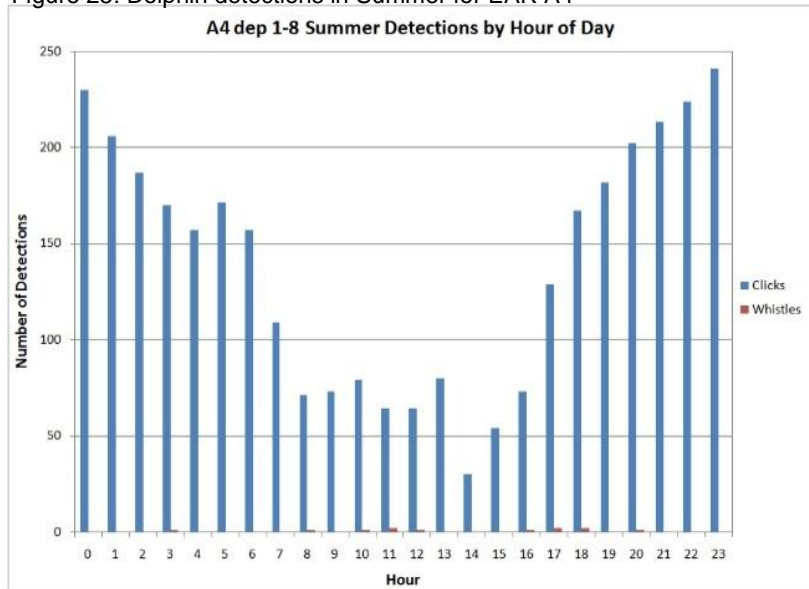


Figure 26: Dolphin detections in Autumn for EAR A4

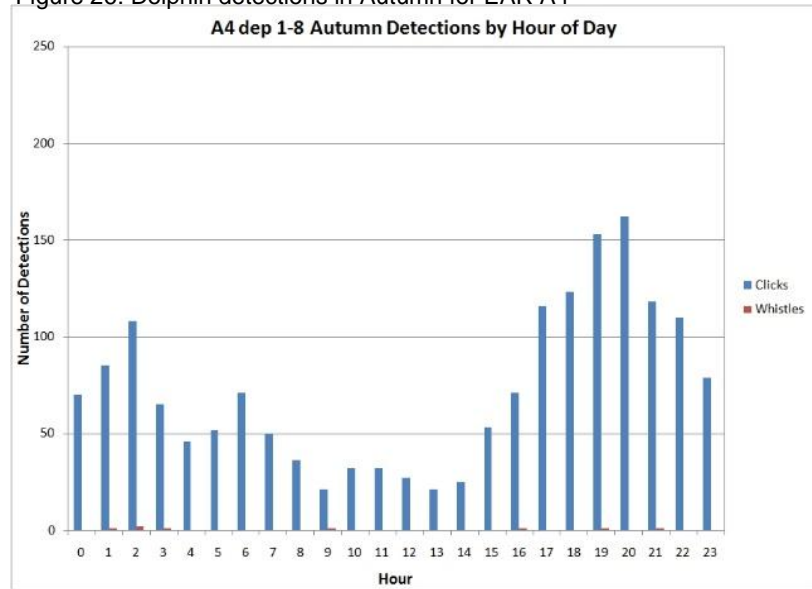


Figure 27: Dolphin detections in Dry Season for EAR A4

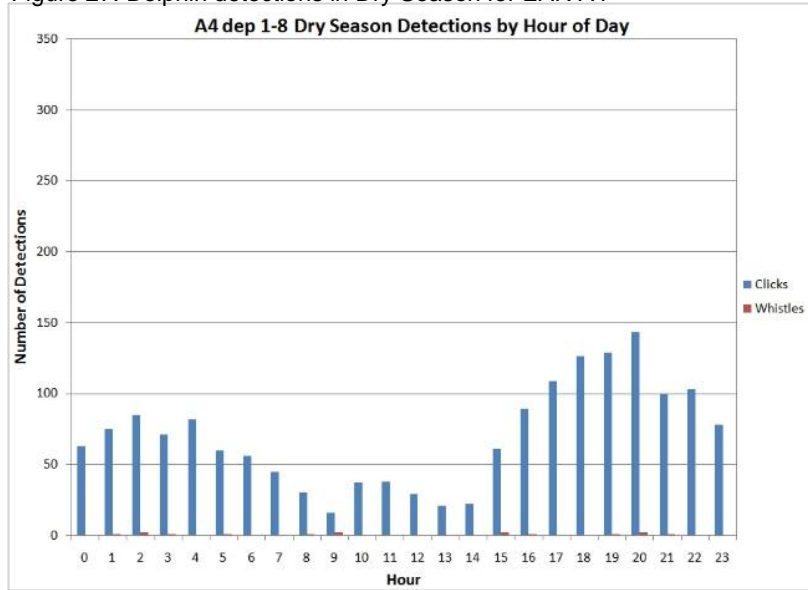
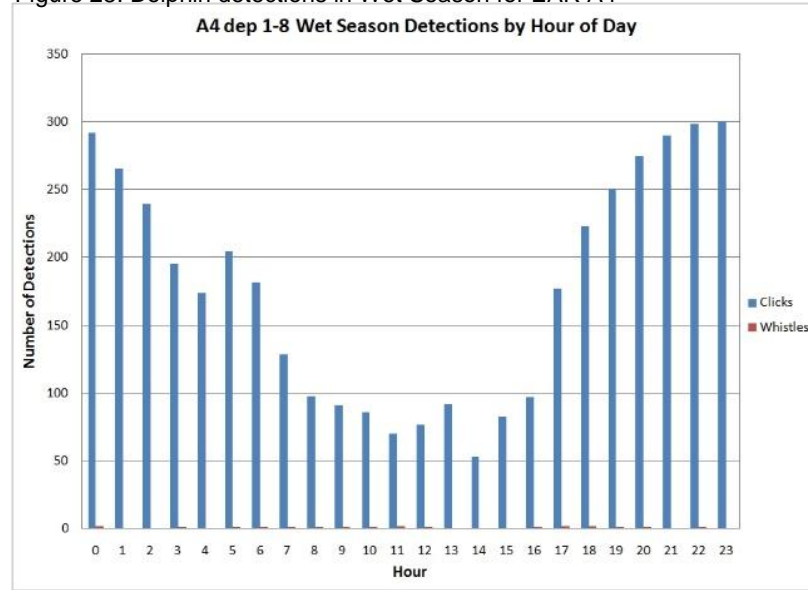


Figure 28: Dolphin detections in Wet Season for EAR A4



Figures 29: Dolphin detections for EAR A5.

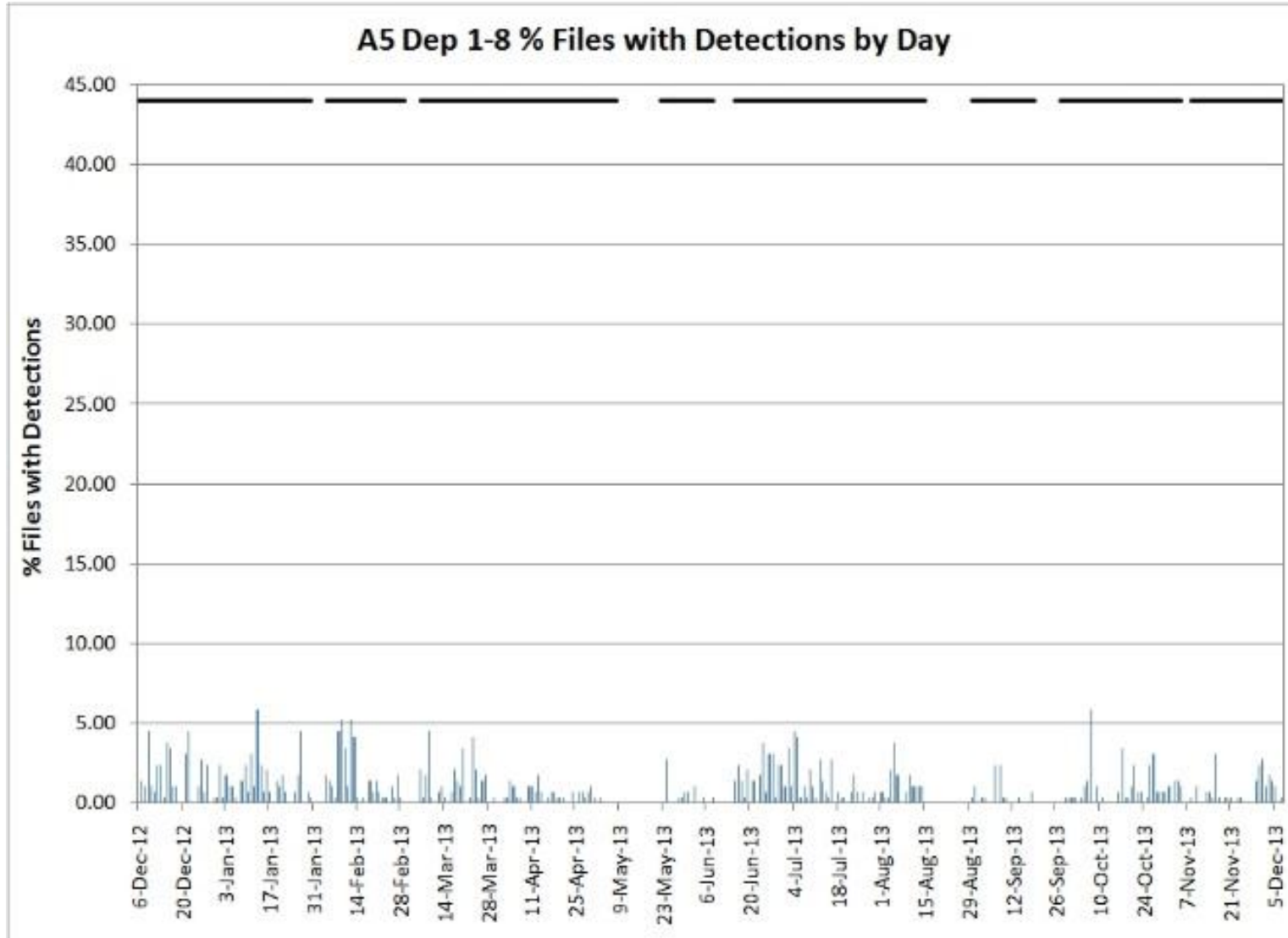


Figure 30: Dolphin detections in Winter for EAR A5

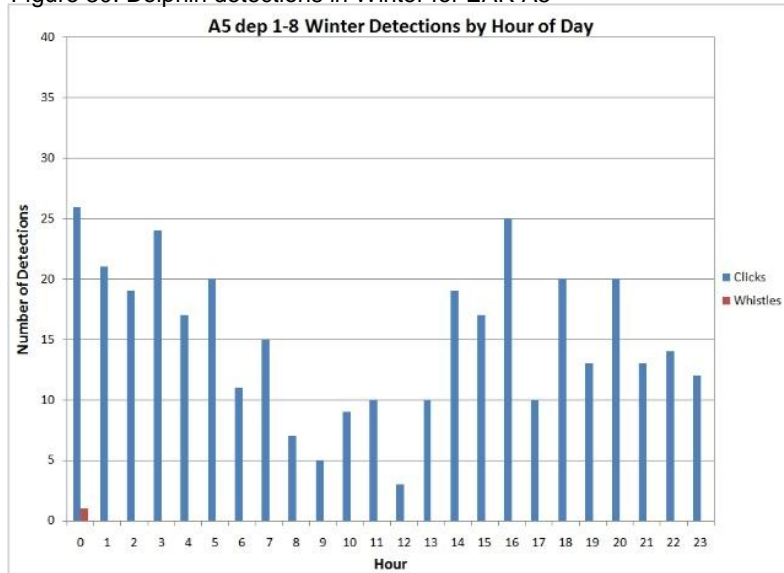


Figure 31: Dolphin detections in Spring for EAR A5

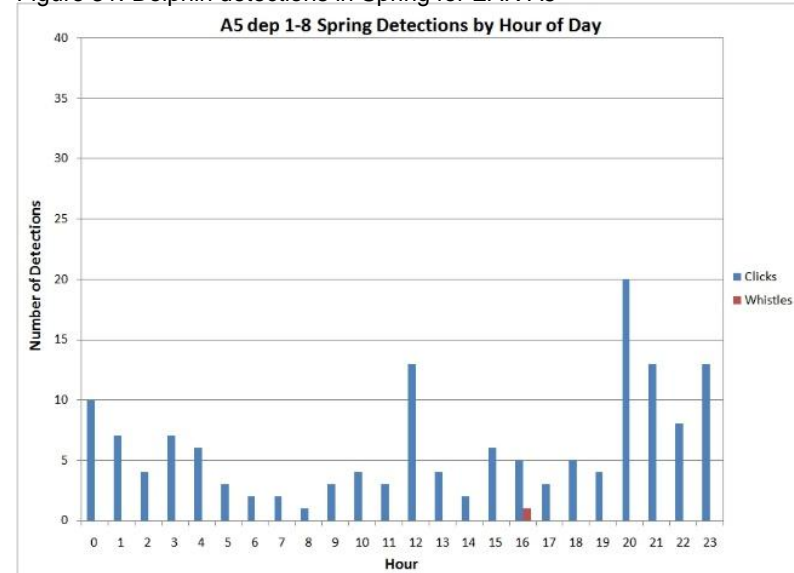


Figure 32: Dolphin detections in Summer for EAR A5

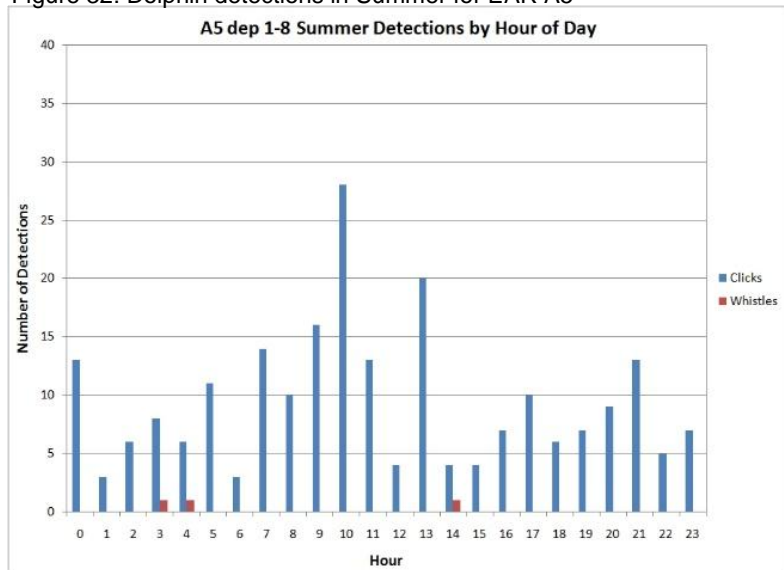


Figure 33: Dolphin detections in Autumn for EAR A5

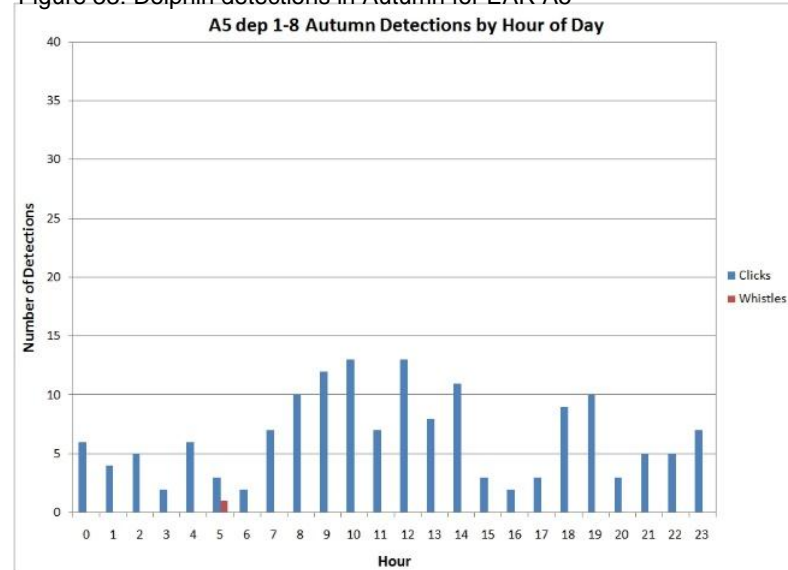


Figure 34: Dolphin detections in Dry Season for EAR A5

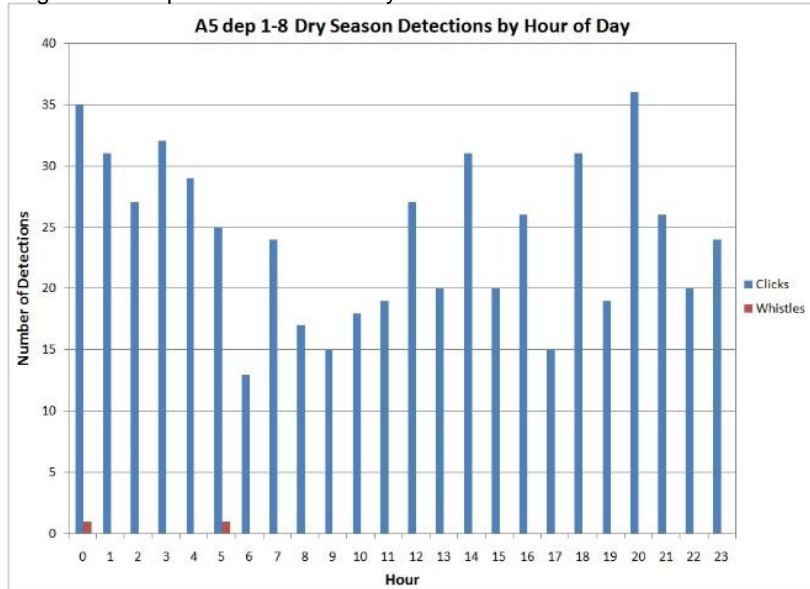
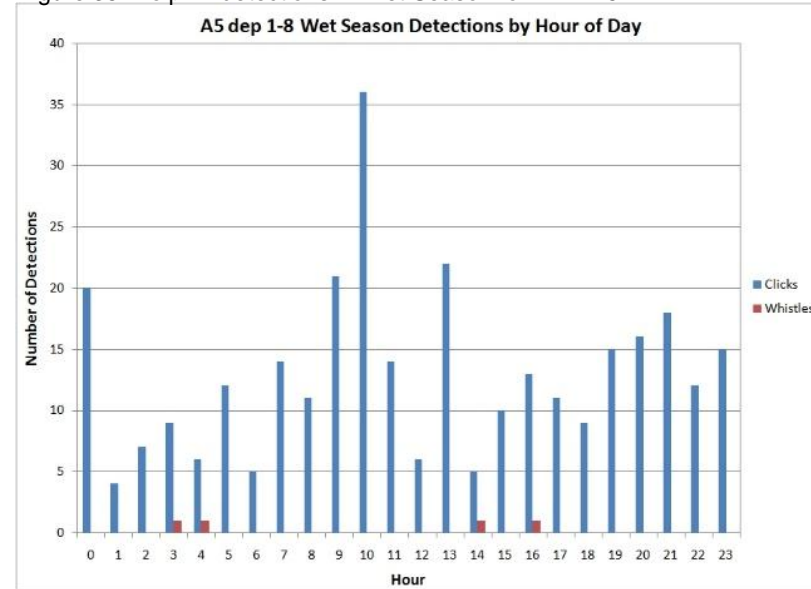


Figure 35: Dolphin detections in Wet Season for EAR A5



## Appendix 13.12 Raw Data from Dolphin Field Survey

### Appendix 13.12ai Raw Data from Dolphin Vessel Surveys in 2012

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	Set
11-Oct-12	AIRPORT NORTH	2	32.80	AUTUMN	FRANTONIOS	A
11-Oct-12	AIRPORT NORTH	2	12.70	AUTUMN	FRANTONIOS	B
11-Oct-12	AIRPORT WEST	1	3.91	AUTUMN	FRANTONIOS	C
11-Oct-12	AIRPORT WEST	2	1.75	AUTUMN	FRANTONIOS	C
30-Oct-12	AIRPORT NORTH	2	21.38	AUTUMN	FRANTONIOS	A
30-Oct-12	AIRPORT NORTH	3	11.82	AUTUMN	FRANTONIOS	A
30-Oct-12	AIRPORT NORTH	2	12.90	AUTUMN	FRANTONIOS	B
30-Oct-12	AIRPORT WEST	2	6.02	AUTUMN	FRANTONIOS	C
01-Nov-12	AIRPORT NORTH	2	17.46	AUTUMN	FRANTONIOS	A
01-Nov-12	AIRPORT NORTH	3	9.91	AUTUMN	FRANTONIOS	A
01-Nov-12	AIRPORT NORTH	4	6.47	AUTUMN	FRANTONIOS	A
01-Nov-12	AIRPORT NORTH	2	11.01	AUTUMN	FRANTONIOS	B
01-Nov-12	AIRPORT NORTH	3	1.31	AUTUMN	FRANTONIOS	B
01-Nov-12	AIRPORT WEST	2	0.37	AUTUMN	FRANTONIOS	C
01-Nov-12	AIRPORT WEST	3	2.71	AUTUMN	FRANTONIOS	C
01-Nov-12	AIRPORT WEST	4	2.51	AUTUMN	FRANTONIOS	C
07-Nov-12	AIRPORT NORTH	2	1.54	AUTUMN	FRANTONIOS	A
07-Nov-12	AIRPORT NORTH	3	19.49	AUTUMN	FRANTONIOS	A
07-Nov-12	AIRPORT NORTH	4	13.41	AUTUMN	FRANTONIOS	A
07-Nov-12	AIRPORT NORTH	4	10.31	AUTUMN	FRANTONIOS	B
07-Nov-12	AIRPORT NORTH	5	2.69	AUTUMN	FRANTONIOS	B
07-Nov-12	AIRPORT WEST	3	1.87	AUTUMN	FRANTONIOS	C
07-Nov-12	AIRPORT WEST	4	3.67	AUTUMN	FRANTONIOS	C
08-Nov-12	AIRPORT NORTH	3	10.88	AUTUMN	FRANTONIOS	A
08-Nov-12	AIRPORT NORTH	4	23.82	AUTUMN	FRANTONIOS	A
08-Nov-12	AIRPORT NORTH	3	0.60	AUTUMN	FRANTONIOS	B
08-Nov-12	AIRPORT NORTH	4	12.30	AUTUMN	FRANTONIOS	B
08-Nov-12	AIRPORT WEST	2	1.16	AUTUMN	FRANTONIOS	C
08-Nov-12	AIRPORT WEST	3	3.23	AUTUMN	FRANTONIOS	C
08-Nov-12	AIRPORT WEST	4	1.77	AUTUMN	FRANTONIOS	C
14-Nov-12	AIRPORT NORTH	2	3.43	AUTUMN	FRANTONIOS	A
14-Nov-12	AIRPORT NORTH	3	30.68	AUTUMN	FRANTONIOS	A
14-Nov-12	AIRPORT NORTH	2	7.90	AUTUMN	FRANTONIOS	B
14-Nov-12	AIRPORT NORTH	3	4.50	AUTUMN	FRANTONIOS	B
14-Nov-12	AIRPORT WEST	3	6.00	AUTUMN	FRANTONIOS	C
21-Nov-12	AIRPORT NORTH	3	15.61	AUTUMN	FRANTONIOS	A
21-Nov-12	AIRPORT NORTH	4	18.19	AUTUMN	FRANTONIOS	A
21-Nov-12	AIRPORT NORTH	4	10.94	AUTUMN	FRANTONIOS	B
21-Nov-12	AIRPORT NORTH	5	2.06	AUTUMN	FRANTONIOS	B
21-Nov-12	AIRPORT WEST	2	0.60	AUTUMN	FRANTONIOS	C
21-Nov-12	AIRPORT WEST	3	2.98	AUTUMN	FRANTONIOS	C
21-Nov-12	AIRPORT WEST	4	2.33	AUTUMN	FRANTONIOS	C
22-Nov-12	AIRPORT NORTH	2	29.15	AUTUMN	FRANTONIOS	A
22-Nov-12	AIRPORT NORTH	3	4.55	AUTUMN	FRANTONIOS	A
22-Nov-12	AIRPORT NORTH	2	4.65	AUTUMN	FRANTONIOS	B
22-Nov-12	AIRPORT NORTH	3	8.65	AUTUMN	FRANTONIOS	B
22-Nov-12	AIRPORT WEST	3	5.96	AUTUMN	FRANTONIOS	C
04-Dec-12	AIRPORT NORTH	2	19.34	WINTER	FRANTONIOS	A
04-Dec-12	AIRPORT NORTH	3	12.96	WINTER	FRANTONIOS	A
04-Dec-12	AIRPORT NORTH	4	0.80	WINTER	FRANTONIOS	A
04-Dec-12	AIRPORT NORTH	2	5.85	WINTER	FRANTONIOS	B

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	Set
04-Dec-12	AIRPORT NORTH	3	7.05	WINTER	FRANTONIOS	B
04-Dec-12	AIRPORT WEST	3	5.58	WINTER	FRANTONIOS	C
08-Dec-12	AIRPORT WEST	2	3.94	WINTER	FRANTONIOS	C
08-Dec-12	AIRPORT WEST	3	2.18	WINTER	FRANTONIOS	C
08-Dec-12	AIRPORT NORTH	2	32.32	WINTER	FRANTONIOS	A
08-Dec-12	AIRPORT NORTH	3	1.08	WINTER	FRANTONIOS	A
08-Dec-12	AIRPORT NORTH	2	12.90	WINTER	FRANTONIOS	B
15-Dec-12	AIRPORT NORTH	1	13.40	WINTER	FRANTONIOS	A
15-Dec-12	AIRPORT NORTH	2	20.30	WINTER	FRANTONIOS	A
15-Dec-12	AIRPORT WEST	2	5.24	WINTER	FRANTONIOS	C
15-Dec-12	AIRPORT NORTH	2	13.30	WINTER	FRANTONIOS	B
22-Dec-12	AIRPORT NORTH	3	5.55	WINTER	FRANTONIOS	A
22-Dec-12	AIRPORT NORTH	4	23.40	WINTER	FRANTONIOS	A
22-Dec-12	AIRPORT NORTH	5	4.55	WINTER	FRANTONIOS	A
22-Dec-12	AIRPORT NORTH	3	5.65	WINTER	FRANTONIOS	B
22-Dec-12	AIRPORT NORTH	4	2.89	WINTER	FRANTONIOS	B
22-Dec-12	AIRPORT NORTH	5	4.06	WINTER	FRANTONIOS	B
22-Dec-12	AIRPORT WEST	5	5.74	WINTER	FRANTONIOS	C

## Appendix 13.12 Raw Data from Dolphin Field Survey

### Appendix 13.12aii Raw Data from Dolphin Vessel Surveys in 2013

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	Set
07-Jan-13	AIRPORT NORTH	3	27.80	WINTER	FRANTONIOS	A
07-Jan-13	AIRPORT NORTH	4	5.30	WINTER	FRANTONIOS	A
07-Jan-13	AIRPORT NORTH	3	12.80	WINTER	FRANTONIOS	B
07-Jan-13	AIRPORT WEST	3	5.35	WINTER	FRANTONIOS	C
17-Jan-13	AIRPORT NORTH	0	2.29	WINTER	FRANTONIOS	A
17-Jan-13	AIRPORT NORTH	1	9.07	WINTER	FRANTONIOS	A
17-Jan-13	AIRPORT NORTH	2	18.17	WINTER	FRANTONIOS	A
17-Jan-13	AIRPORT NORTH	3	4.41	WINTER	FRANTONIOS	A
17-Jan-13	AIRPORT NORTH	1	5.06	WINTER	FRANTONIOS	B
17-Jan-13	AIRPORT NORTH	2	5.21	WINTER	FRANTONIOS	B
17-Jan-13	AIRPORT NORTH	3	2.60	WINTER	FRANTONIOS	B
17-Jan-13	AIRPORT WEST	2	5.77	WINTER	FRANTONIOS	C
21-Jan-13	AIRPORT NORTH	1	13.07	WINTER	FRANTONIOS	A
21-Jan-13	AIRPORT NORTH	2	20.05	WINTER	FRANTONIOS	A
21-Jan-13	AIRPORT NORTH	1	4.53	WINTER	FRANTONIOS	B
21-Jan-13	AIRPORT NORTH	2	3.11	WINTER	FRANTONIOS	B
21-Jan-13	AIRPORT NORTH	3	5.16	WINTER	FRANTONIOS	B
21-Jan-13	AIRPORT WEST	3	5.87	WINTER	FRANTONIOS	C
25-Jan-13	AIRPORT NORTH	1	2.2	WINTER	FRANTONIOS	A
25-Jan-13	AIRPORT NORTH	2	15.5	WINTER	FRANTONIOS	A
25-Jan-13	AIRPORT NORTH	3	16.1	WINTER	FRANTONIOS	A
25-Jan-13	AIRPORT NORTH	3	12.4	WINTER	FRANTONIOS	B
25-Jan-13	AIRPORT WEST	3	5.67	WINTER	FRANTONIOS	C
02-Feb-13	AIRPORT NORTH	0	1.2	WINTER	FRANTONIOS	A
02-Feb-13	AIRPORT NORTH	1	14.3	WINTER	FRANTONIOS	A
02-Feb-13	AIRPORT NORTH	2	16.4	WINTER	FRANTONIOS	A
02-Feb-13	AIRPORT NORTH	1	8	WINTER	FRANTONIOS	B
02-Feb-13	AIRPORT NORTH	2	3.7	WINTER	FRANTONIOS	B
02-Feb-13	AIRPORT WEST	0	5	WINTER	FRANTONIOS	C
02-Feb-13	AIRPORT WEST	1	0.39	WINTER	FRANTONIOS	C
06-Feb-13	AIRPORT NORTH	1	5.5	WINTER	FRANTONIOS	A
06-Feb-13	AIRPORT NORTH	2	27.6	WINTER	FRANTONIOS	A
06-Feb-13	AIRPORT NORTH	1	1.42	WINTER	FRANTONIOS	B
06-Feb-13	AIRPORT NORTH	2	11.48	WINTER	FRANTONIOS	B
06-Feb-13	AIRPORT WEST	1	5.77	WINTER	FRANTONIOS	C
15-Feb-13	AIRPORT NORTH	2	33.9	WINTER	FRANTONIOS	A
15-Feb-13	AIRPORT NORTH	2	12.9	WINTER	FRANTONIOS	B
15-Feb-13	AIRPORT WEST	2	5.95	WINTER	FRANTONIOS	C
22-Feb-13	AIRPORT NORTH	3	22.3	WINTER	FRANTONIOS	A
22-Feb-13	AIRPORT NORTH	4	10.7	WINTER	FRANTONIOS	A
22-Feb-13	AIRPORT NORTH	2	7.66	WINTER	FRANTONIOS	B
22-Feb-13	AIRPORT NORTH	3	5.04	WINTER	FRANTONIOS	B
22-Feb-13	AIRPORT WEST	3	6.03	WINTER	FRANTONIOS	C
05-Mar-13	AIRPORT NORTH	3	11.03	SPRING	FRANTONIOS	A
05-Mar-13	AIRPORT NORTH	4	10.97	SPRING	FRANTONIOS	A
05-Mar-13	AIRPORT NORTH	5	10.9	SPRING	FRANTONIOS	A
05-Mar-13	AIRPORT NORTH	1	1.67	SPRING	FRANTONIOS	B
05-Mar-13	AIRPORT NORTH	2	6.86	SPRING	FRANTONIOS	B
05-Mar-13	AIRPORT NORTH	3	3.44	SPRING	FRANTONIOS	B
05-Mar-13	AIRPORT WEST	2	2.21	SPRING	FRANTONIOS	C



DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	Set
05-Mar-13	AIRPORT WEST	3	3.78	SPRING	FRANTONIOS	C
14-Mar-13	AIRPORT NORTH	3	11.43	SPRING	FRANTONIOS	A
14-Mar-13	AIRPORT NORTH	4	14.17	SPRING	FRANTONIOS	A
14-Mar-13	AIRPORT NORTH	5	7.5	SPRING	FRANTONIOS	A
14-Mar-13	AIRPORT NORTH	5	13.6	SPRING	FRANTONIOS	B
14-Mar-13	AIRPORT WEST	4	3.83	SPRING	FRANTONIOS	C
14-Mar-13	AIRPORT WEST	5	1.99	SPRING	FRANTONIOS	C
12-Apr-13	AIRPORT NORTH	1	1.97	SPRING	FRANTONIOS	A
12-Apr-13	AIRPORT NORTH	2	29.42	SPRING	FRANTONIOS	A
12-Apr-13	AIRPORT NORTH	3	2.00	SPRING	FRANTONIOS	A
12-Apr-13	AIRPORT NORTH	2	10.20	SPRING	FRANTONIOS	B
12-Apr-13	AIRPORT NORTH	3	2.50	SPRING	FRANTONIOS	B
12-Apr-13	AIRPORT WEST	2	5.90	SPRING	FRANTONIOS	C
16-Apr-13	AIRPORT NORTH	1	2.70	SPRING	FRANTONIOS	A
16-Apr-13	AIRPORT NORTH	2	26.55	SPRING	FRANTONIOS	A
16-Apr-13	AIRPORT NORTH	3	3.25	SPRING	FRANTONIOS	A
16-Apr-13	AIRPORT NORTH	2	8.30	SPRING	FRANTONIOS	B
16-Apr-13	AIRPORT NORTH	3	4.50	SPRING	FRANTONIOS	B
16-Apr-13	AIRPORT WEST	1	1.80	SPRING	FRANTONIOS	C
16-Apr-13	AIRPORT WEST	2	4.07	SPRING	FRANTONIOS	C
18-Apr-13	AIRPORT NORTH	2	23.80	SPRING	FRANTONIOS	A
18-Apr-13	AIRPORT NORTH	3	9.10	SPRING	FRANTONIOS	A
18-Apr-13	AIRPORT NORTH	2	11.46	SPRING	FRANTONIOS	B
18-Apr-13	AIRPORT NORTH	3	1.34	SPRING	FRANTONIOS	B
18-Apr-13	AIRPORT WEST	2	5.86	SPRING	FRANTONIOS	C
24-Apr-13	AIRPORT NORTH	0	1.60	SPRING	FRANTONIOS	A
24-Apr-13	AIRPORT NORTH	1	28.90	SPRING	FRANTONIOS	A
24-Apr-13	AIRPORT NORTH	2	2.70	SPRING	FRANTONIOS	A
24-Apr-13	AIRPORT NORTH	1	12.70	SPRING	FRANTONIOS	B
24-Apr-13	AIRPORT WEST	1	5.97	SPRING	FRANTONIOS	C
29-Apr-13	AIRPORT NORTH	2	6.02	SPRING	FRANTONIOS	A
29-Apr-13	AIRPORT NORTH	3	24.78	SPRING	FRANTONIOS	A
29-Apr-13	AIRPORT NORTH	4	2.30	SPRING	FRANTONIOS	A
29-Apr-13	AIRPORT NORTH	3	12.65	SPRING	FRANTONIOS	B
29-Apr-13	AIRPORT WEST	3	5.73	SPRING	FRANTONIOS	C
03-May-13	AIRPORT NORTH	1	1.31	SPRING	FRANTONIOS	A
03-May-13	AIRPORT NORTH	2	31.29	SPRING	FRANTONIOS	A
03-May-13	AIRPORT NORTH	2	12.50	SPRING	FRANTONIOS	B
03-May-13	AIRPORT WEST	2	6.00	SPRING	FRANTONIOS	C
09-May-13	AIRPORT NORTH	1	17.60	SPRING	FRANTONIOS	A
09-May-13	AIRPORT NORTH	2	16.00	SPRING	FRANTONIOS	A
09-May-13	AIRPORT NORTH	1	1.50	SPRING	FRANTONIOS	B
09-May-13	AIRPORT NORTH	2	9.83	SPRING	FRANTONIOS	B
09-May-13	AIRPORT NORTH	3	1.77	SPRING	FRANTONIOS	B
09-May-13	AIRPORT WEST	1	4.85	SPRING	FRANTONIOS	C
09-May-13	AIRPORT WEST	2	0.91	SPRING	FRANTONIOS	C
13-May-13	AIRPORT NORTH	1	23.69	SPRING	FRANTONIOS	A
13-May-13	AIRPORT NORTH	2	9.69	SPRING	FRANTONIOS	A
13-May-13	AIRPORT NORTH	1	4.26	SPRING	FRANTONIOS	B
13-May-13	AIRPORT NORTH	2	8.14	SPRING	FRANTONIOS	B
13-May-13	AIRPORT NORTH	3	0.79	SPRING	FRANTONIOS	B
13-May-13	AIRPORT WEST	2	6.05	SPRING	FRANTONIOS	C
20-May-13	AIRPORT NORTH	3	18.41	SPRING	FRANTONIOS	A
20-May-13	AIRPORT NORTH	4	10.88	SPRING	FRANTONIOS	A
20-May-13	AIRPORT NORTH	5	4.21	SPRING	FRANTONIOS	A

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	Set
20-May-13	AIRPORT NORTH	3	0.96	SPRING	FRANTONIOS	B
20-May-13	AIRPORT NORTH	4	5.35	SPRING	FRANTONIOS	B
20-May-13	AIRPORT NORTH	5	6.77	SPRING	FRANTONIOS	B
20-May-13	AIRPORT WEST	3	0.91	SPRING	FRANTONIOS	C
20-May-13	AIRPORT WEST	4	0.98	SPRING	FRANTONIOS	C
20-May-13	AIRPORT WEST	5	3.9	SPRING	FRANTONIOS	C
24-May-13	AIRPORT NORTH	1	8.92	SUMMER	FRANTONIOS	A
24-May-13	AIRPORT NORTH	2	20.49	SUMMER	FRANTONIOS	A
24-May-13	AIRPORT NORTH	3	2.5	SUMMER	FRANTONIOS	A
24-May-13	AIRPORT NORTH	1	3.25	SUMMER	FRANTONIOS	B
24-May-13	AIRPORT NORTH	2	1.81	SUMMER	FRANTONIOS	B
24-May-13	AIRPORT NORTH	3	7.84	SUMMER	FRANTONIOS	B
24-May-13	AIRPORT WEST	2	1.07	SUMMER	FRANTONIOS	C
24-May-13	AIRPORT WEST	3	3.22	SUMMER	FRANTONIOS	C
24-May-13	AIRPORT WEST	4	1.45	SUMMER	FRANTONIOS	C
06-Jun-13	AIRPORT NORTH	1	13.38	SUMMER	FRANTONIOS	A
06-Jun-13	AIRPORT NORTH	2	19.92	SUMMER	FRANTONIOS	A
06-Jun-13	AIRPORT NORTH	1	6.4	SUMMER	FRANTONIOS	B
06-Jun-13	AIRPORT NORTH	2	4.793	SUMMER	FRANTONIOS	B
06-Jun-13	AIRPORT NORTH	3	1.607	SUMMER	FRANTONIOS	B
06-Jun-13	AIRPORT WEST	1	5.89	SUMMER	FRANTONIOS	C
11-Jun-13	AIRPORT NORTH	2	2.65	SUMMER	FRANTONIOS	A
11-Jun-13	AIRPORT NORTH	3	14.58	SUMMER	FRANTONIOS	A
11-Jun-13	AIRPORT NORTH	4	9.23	SUMMER	FRANTONIOS	A
11-Jun-13	AIRPORT NORTH	5	5.45	SUMMER	FRANTONIOS	A
11-Jun-13	AIRPORT NORTH	3	5.29	SUMMER	FRANTONIOS	B
11-Jun-13	AIRPORT NORTH	4	7.81	SUMMER	FRANTONIOS	B
11-Jun-13	AIRPORT WEST	3	2.21	SUMMER	FRANTONIOS	C
11-Jun-13	AIRPORT WEST	4	3.82	SUMMER	FRANTONIOS	C
18-Jun-13	AIRPORT NORTH	1	28.7	SUMMER	FRANTONIOS	A
18-Jun-13	AIRPORT NORTH	2	4.3	SUMMER	FRANTONIOS	A
18-Jun-13	AIRPORT NORTH	1	1.51	SUMMER	FRANTONIOS	B
18-Jun-13	AIRPORT NORTH	2	11.29	SUMMER	FRANTONIOS	B
18-Jun-13	AIRPORT WEST	0	0.42	SUMMER	FRANTONIOS	C
18-Jun-13	AIRPORT WEST	1	5.43	SUMMER	FRANTONIOS	C
21-Jun-13	AIRPORT NORTH	1	11.46	SUMMER	FRANTONIOS	A
21-Jun-13	AIRPORT NORTH	2	19.072	SUMMER	FRANTONIOS	A
21-Jun-13	AIRPORT NORTH	3	0.928	SUMMER	FRANTONIOS	A
21-Jun-13	AIRPORT NORTH	2	0.5	SUMMER	FRANTONIOS	B
21-Jun-13	AIRPORT NORTH	3	0.92	SUMMER	FRANTONIOS	B
21-Jun-13	AIRPORT NORTH	4	5.29	SUMMER	FRANTONIOS	B
21-Jun-13	AIRPORT NORTH	5	5.77	SUMMER	FRANTONIOS	B
21-Jun-13	AIRPORT WEST	1	1.51	SUMMER	FRANTONIOS	C
21-Jun-13	AIRPORT WEST	2	4.579	SUMMER	FRANTONIOS	C
03-Jul-13	AIRPORT NORTH	2	11.02	SUMMER	FRANTONIOS	A
03-Jul-13	AIRPORT NORTH	3	19.38	SUMMER	FRANTONIOS	A
03-Jul-13	AIRPORT NORTH	4	2.6	SUMMER	FRANTONIOS	A
03-Jul-13	AIRPORT NORTH	3	8.4	SUMMER	FRANTONIOS	B
03-Jul-13	AIRPORT NORTH	4	4.5	SUMMER	FRANTONIOS	B
03-Jul-13	AIRPORT WEST	3	3.6	SUMMER	FRANTONIOS	C
03-Jul-13	AIRPORT WEST	4	2.2	SUMMER	FRANTONIOS	C
08-Jul-13	AIRPORT NORTH	1	2.15	SUMMER	FRANTONIOS	A
08-Jul-13	AIRPORT NORTH	2	14.28	SUMMER	FRANTONIOS	A
08-Jul-13	AIRPORT NORTH	3	16.02	SUMMER	FRANTONIOS	A
08-Jul-13	AIRPORT NORTH	2	1.8	SUMMER	FRANTONIOS	B

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	Set
08-Jul-13	AIRPORT NORTH	3	11	SUMMER	FRANTONIOS	B
08-Jul-13	AIRPORT WEST	3	3.78	SUMMER	FRANTONIOS	C
08-Jul-13	AIRPORT WEST	4	1.93	SUMMER	FRANTONIOS	C
12-Jul-13	AIRPORT NORTH	2	31.86	SUMMER	FRANTONIOS	A
12-Jul-13	AIRPORT NORTH	2	12.7	SUMMER	FRANTONIOS	B
12-Jul-13	AIRPORT WEST	2	5.172	SUMMER	FRANTONIOS	C
19-Jul-13	AIRPORT NORTH	2	7.2	SUMMER	FRANTONIOS	A
19-Jul-13	AIRPORT NORTH	3	14.9	SUMMER	FRANTONIOS	A
19-Jul-13	AIRPORT NORTH	4	6.2	SUMMER	FRANTONIOS	A
19-Jul-13	AIRPORT NORTH	5	5	SUMMER	FRANTONIOS	A
19-Jul-13	AIRPORT NORTH	2	1.38	SUMMER	FRANTONIOS	B
19-Jul-13	AIRPORT NORTH	3	11.02	SUMMER	FRANTONIOS	B
19-Jul-13	AIRPORT WEST	2	1.36	SUMMER	FRANTONIOS	C
19-Jul-13	AIRPORT WEST	3	4.38	SUMMER	FRANTONIOS	C
05-Aug-13	AIRPORT NORTH	2	27.67	SUMMER	FRANTONIOS	A
05-Aug-13	AIRPORT NORTH	3	4.9	SUMMER	FRANTONIOS	A
05-Aug-13	AIRPORT NORTH	2	5.15	SUMMER	FRANTONIOS	B
05-Aug-13	AIRPORT NORTH	3	7.65	SUMMER	FRANTONIOS	B
05-Aug-13	AIRPORT WEST	1	4.38	SUMMER	FRANTONIOS	C
05-Aug-13	AIRPORT WEST	2	1.35	SUMMER	FRANTONIOS	C
09-Aug-13	AIRPORT NORTH	2	32.05	SUMMER	FRANTONIOS	A
09-Aug-13	AIRPORT NORTH	2	11.6	SUMMER	FRANTONIOS	B
09-Aug-13	AIRPORT NORTH	3	1	SUMMER	FRANTONIOS	B
09-Aug-13	AIRPORT WEST	3	5.91	SUMMER	FRANTONIOS	C
20-Aug-13	AIRPORT NORTH	2	23.57	SUMMER	FRANTONIOS	A
20-Aug-13	AIRPORT NORTH	3	8.2	SUMMER	FRANTONIOS	A
20-Aug-13	AIRPORT NORTH	1	2.37	SUMMER	FRANTONIOS	B
20-Aug-13	AIRPORT NORTH	2	8.22	SUMMER	FRANTONIOS	B
20-Aug-13	AIRPORT NORTH	3	1.81	SUMMER	FRANTONIOS	B
20-Aug-13	AIRPORT WEST	1	0.2	SUMMER	FRANTONIOS	C
20-Aug-13	AIRPORT WEST	2	6.13	SUMMER	FRANTONIOS	C
22-Aug-13	AIRPORT NORTH	2	11.89	SUMMER	FRANTONIOS	A
22-Aug-13	AIRPORT NORTH	3	20.76	SUMMER	FRANTONIOS	A
22-Aug-13	AIRPORT NORTH	2	12.7	SUMMER	FRANTONIOS	B
22-Aug-13	AIRPORT WEST	2	4.15	SUMMER	FRANTONIOS	C
22-Aug-13	AIRPORT WEST	3	1.9	SUMMER	FRANTONIOS	C
03-Sep-13	AIRPORT NORTH	1	5.15	AUTUMN	FRANTONIOS	A
03-Sep-13	AIRPORT NORTH	2	26.05	AUTUMN	FRANTONIOS	A
03-Sep-13	AIRPORT NORTH	3	1.96	AUTUMN	FRANTONIOS	A
03-Sep-13	AIRPORT NORTH	2	12.80	AUTUMN	FRANTONIOS	B
03-Sep-13	AIRPORT WEST	2	2.30	AUTUMN	FRANTONIOS	C
03-Sep-13	AIRPORT WEST	3	3.66	AUTUMN	FRANTONIOS	C
09-Sep-13	AIRPORT NORTH	2	19.32	AUTUMN	FRANTONIOS	A
09-Sep-13	AIRPORT NORTH	3	13.78	AUTUMN	FRANTONIOS	A
09-Sep-13	AIRPORT NORTH	2	2.51	AUTUMN	FRANTONIOS	B
09-Sep-13	AIRPORT NORTH	3	7.55	AUTUMN	FRANTONIOS	B
09-Sep-13	AIRPORT NORTH	4	2.64	AUTUMN	FRANTONIOS	B
09-Sep-13	AIRPORT WEST	2	5.45	AUTUMN	FRANTONIOS	C
13-Sep-13	AIRPORT NORTH	2	29.14	AUTUMN	FRANTONIOS	A
13-Sep-13	AIRPORT NORTH	3	5.49	AUTUMN	FRANTONIOS	A
13-Sep-13	AIRPORT NORTH	2	9.50	AUTUMN	FRANTONIOS	B
13-Sep-13	AIRPORT NORTH	3	3.60	AUTUMN	FRANTONIOS	B
13-Sep-13	AIRPORT WEST	2	4.00	AUTUMN	FRANTONIOS	C
13-Sep-13	AIRPORT WEST	3	2.44	AUTUMN	FRANTONIOS	C
25-Sep-13	AIRPORT NORTH	2	0.64	AUTUMN	FRANTONIOS	A

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	Set
25-Sep-13	AIRPORT NORTH	3	29.80	AUTUMN	FRANTONIOS	A
25-Sep-13	AIRPORT NORTH	4	2.60	AUTUMN	FRANTONIOS	A
25-Sep-13	AIRPORT NORTH	2	3.91	AUTUMN	FRANTONIOS	B
25-Sep-13	AIRPORT NORTH	3	8.59	AUTUMN	FRANTONIOS	B
25-Sep-13	AIRPORT WEST	2	3.79	AUTUMN	FRANTONIOS	C
25-Sep-13	AIRPORT WEST	3	1.90	AUTUMN	FRANTONIOS	C
03-Oct-13	AIRPORT NORTH	2	26.20	AUTUMN	FRANTONIOS	A
03-Oct-13	AIRPORT NORTH	3	6.70	AUTUMN	FRANTONIOS	A
03-Oct-13	AIRPORT NORTH	2	5.87	AUTUMN	FRANTONIOS	B
03-Oct-13	AIRPORT NORTH	3	6.93	AUTUMN	FRANTONIOS	B
03-Oct-13	AIRPORT WEST	2	1.81	AUTUMN	FRANTONIOS	C
03-Oct-13	AIRPORT WEST	3	3.99	AUTUMN	FRANTONIOS	C
18-Oct-13	AIRPORT NORTH	2	18.04	AUTUMN	FRANTONIOS	A
18-Oct-13	AIRPORT NORTH	3	14.46	AUTUMN	FRANTONIOS	A
18-Oct-13	AIRPORT NORTH	2	9.09	AUTUMN	FRANTONIOS	B
18-Oct-13	AIRPORT NORTH	3	3.90	AUTUMN	FRANTONIOS	B
18-Oct-13	AIRPORT WEST	3	5.80	AUTUMN	FRANTONIOS	C
23-Oct-13	AIRPORT NORTH	2	9.73	AUTUMN	FRANTONIOS	A
23-Oct-13	AIRPORT NORTH	3	20.41	AUTUMN	FRANTONIOS	A
23-Oct-13	AIRPORT NORTH	4	2.44	AUTUMN	FRANTONIOS	A
23-Oct-13	AIRPORT NORTH	2	4.80	AUTUMN	FRANTONIOS	B
23-Oct-13	AIRPORT NORTH	3	8.17	AUTUMN	FRANTONIOS	B
23-Oct-13	AIRPORT WEST	3	5.60	AUTUMN	FRANTONIOS	C
29-Oct-13	AIRPORT NORTH	2	24.63	AUTUMN	FRANTONIOS	A
29-Oct-13	AIRPORT NORTH	3	7.55	AUTUMN	FRANTONIOS	A
29-Oct-13	AIRPORT NORTH	2	12.80	AUTUMN	FRANTONIOS	B
29-Oct-13	AIRPORT WEST	2	5.49	AUTUMN	FRANTONIOS	C
06-Nov-13	AIRPORT NORTH	2	21.93	AUTUMN	FRANTONIOS	A
06-Nov-13	AIRPORT NORTH	3	10.63	AUTUMN	FRANTONIOS	A
06-Nov-13	AIRPORT NORTH	1	0.98	AUTUMN	FRANTONIOS	B
06-Nov-13	AIRPORT NORTH	2	11.62	AUTUMN	FRANTONIOS	B
06-Nov-13	AIRPORT WEST	2	5.03	AUTUMN	FRANTONIOS	C
06-Nov-13	AIRPORT WEST	3	0.99	AUTUMN	FRANTONIOS	C
20-Nov-13	AIRPORT NORTH	2	12.75	AUTUMN	FRANTONIOS	A
20-Nov-13	AIRPORT NORTH	3	20.30	AUTUMN	FRANTONIOS	A
20-Nov-13	AIRPORT NORTH	2	12.59	AUTUMN	FRANTONIOS	B
20-Nov-13	AIRPORT WEST	3	5.98	AUTUMN	FRANTONIOS	C
22-Nov-13	AIRPORT NORTH	2	24.6	AUTUMN	FRANTONIOS	A
22-Nov-13	AIRPORT NORTH	3	7.9	AUTUMN	FRANTONIOS	A
22-Nov-13	AIRPORT NORTH	2	12.2	AUTUMN	FRANTONIOS	B
22-Nov-13	AIRPORT WEST	2	5.82	AUTUMN	FRANTONIOS	C
27-Nov-13	AIRPORT NORTH	2	5.44	AUTUMN	FRANTONIOS	A
27-Nov-13	AIRPORT NORTH	3	12.64	AUTUMN	FRANTONIOS	A
27-Nov-13	AIRPORT NORTH	4	4.7	AUTUMN	FRANTONIOS	A
27-Nov-13	AIRPORT NORTH	5	9.6	AUTUMN	FRANTONIOS	A
27-Nov-13	AIRPORT NORTH	1	4.63	AUTUMN	FRANTONIOS	B
27-Nov-13	AIRPORT NORTH	2	8.07	AUTUMN	FRANTONIOS	B
27-Nov-13	AIRPORT WEST	2	5.94	AUTUMN	FRANTONIOS	C

Appendix 13.12 Raw Data from Dolphin Field Survey

13.12b Raw Data from Field Survey (VesselStgs)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	Set	ID INDIVIDUALS
11-Oct-12	1	1353	4	AIRPORT NORTH	2	42	OFF	AA	22.3360	113.9167	AUTUMN	NONE		NL242, NL244, NL295, WL04
11-Oct-12	1	1025	4	AIRPORT WEST	2	440	ON	AA	22.3027	113.8715	AUTUMN	NONE	C	
11-Oct-12	2	1143	3	AIRPORT NORTH	2	ND	OFF	AA	22.3306	113.8904	AUTUMN	NONE		
30-Oct-12	1	1337	4	AIRPORT NORTH	2	186	ON	AA	22.3199	113.8730	AUTUMN	NONE	A	NL244, NL295, NL296
01-Nov-12	1	0851	7	AIRPORT WEST	2	106	ON	AA	22.2926	113.8885	AUTUMN	NONE	C	CH34, NL156, NL275, SL35, WL15
01-Nov-12	2	1000	1	AIRPORT WEST	3	64	ON	AA	22.2927	113.8846	AUTUMN	NONE	C	
01-Nov-12	3	1103	3	AIRPORT NORTH	4	136	ON	AA	22.3123	113.8906	AUTUMN	NONE	A	NL275, SL35, WL15
01-Nov-12	4	1200	14	AIRPORT NORTH	2	65	ON	AA	22.3396	113.9104	AUTUMN	NONE	A	NL93, NL104, NL226, NL259, NL260, NL264, NL272, NL288, NL292, NL295, NL296, WL04
01-Nov-12	5	1327	7	AIRPORT NORTH	2	101	ON	AA	22.3301	113.9170	AUTUMN	NONE	B	NL33, NL260, NL295, NL296
01-Nov-12	6	1403	1	AIRPORT NORTH	2	797	ON	AA	22.3202	113.8783	AUTUMN	NONE	B	
07-Nov-12	1	1123	5	AIRPORT NORTH	4	167	ON	AA	22.3325	113.8989	AUTUMN	NONE	A	EL01, NL123, NL261, NL285
07-Nov-12	2	1247	1	AIRPORT NORTH	3	133	ON	AA	22.3296	113.9329	AUTUMN	NONE	A	
14-Nov-12	1	1014	1	AIRPORT NORTH	3	86	ON	AA	22.3146	113.8801	AUTUMN	NONE	A	
14-Nov-12	2	1256	7	AIRPORT NORTH	3	64	ON	AA	22.3358	113.9065	AUTUMN	NONE	B	NL123, NL179, NL244, NL246, NL261, NL285, NL295
22-Nov-12	1	1501	2	AIRPORT NORTH	2	ND	OFF	AA	22.3415	113.9077	AUTUMN	NONE		NL123, NL285
04-Dec-12	1	1437	2	AIRPORT WEST	3	ND	OFF	AA	22.2952	113.8767	WINTER	NONE		SL35, WL15
15-Dec-12	1	1148	1	AIRPORT WEST	2	199	ON	AA	22.2923	113.8914	WINTER	NONE	C	SL35
22-Dec-12	1	1116	1	AIRPORT NORTH	4	41	ON	AA	22.3172	113.8987	WINTER	NONE	A	
07-Jan-13	1	1029	4	AIRPORT WEST	3	347	ON	AA	22.3031	113.8836	WINTER	NONE	C	NL242, WL05
17-Jan-13	1	1015	8	AIRPORT NORTH	1	86	ON	AA	22.3109	113.8824	WINTER	NONE	A	NL18, NL33, NL120, NL226, NL246
17-Jan-13	2	1038	3	AIRPORT NORTH	2	ND	OFF	AA	22.3184	113.8871	WINTER	NONE		
17-Jan-13	3	1226	3	AIRPORT NORTH	2	214	ON	AA	22.3419	113.8986	WINTER	NONE	A	NL139
17-Jan-13	4	1428	5	AIRPORT NORTH	2	242	ON	AA	22.3155	113.8998	WINTER	NONE	B	NL118, SL35, WL15
21-Jan-13	1	1152	3	AIRPORT NORTH	1	146	ON	AA	22.3254	113.9317	WINTER	NONE	A	
21-Jan-13	2	1251	1	AIRPORT NORTH	1	387	ON	AA	22.3376	113.9063	WINTER	NONE	A	
05-Mar-13	1	1025	3	AIRPORT NORTH	1	814	ON	AA	22.3229	113.9077	SPRING	NONE	B	NL188, NL242
12-Apr-13	1	1207	8	AIRPORT NORTH	3	53	ON	AA	22.3120	113.8819	SPRING	NONE	A	NL24, NL98, NL120, NL226, NL242, NL259
16-Apr-13	1	1404	2	AIRPORT NORTH	2	238	ON	AA	22.3186	113.8769	SPRING	NONE	A	NL244, NL284
18-Apr-13	1	1316	6	AIRPORT WEST	2	408	ON	AA	22.2928	113.8760	SPRING	NONE	C	NL24, NL33, NL98, NL128, NL226
13-May-13	1	1401	4	AIRPORT NORTH	1	88	ON	AA	22.3413	113.9309	SPRING	NONE	B	NL33, NL120, NL179
20-May-13	1	1129	4	AIRPORT NORTH	3	48	ON	AA	22.3342	113.8984	SPRING	NONE	A	NL123, NL179, NL285
24-May-13	1	1022	2	AIRPORT NORTH	1	259	ON	AA	22.3308	113.9167	SUMMER	NONE	A	NL123, NL285
24-May-13	2	1153	2	AIRPORT NORTH	1	ND	OFF	AA	22.3297	113.8785	SUMMER	NONE		NL262, NL272
21-Jun-13	1	0941	4	AIRPORT NORTH	1	115	ON	AA	22.3344	113.9332	SUMMER	NONE	A	NL261
21-Jun-13	2	1223	1	AIRPORT NORTH	2	151	ON	AA	22.3371	113.9181	SUMMER	NONE	A	
21-Jun-13	3	1247	3	AIRPORT NORTH	2	22	ON	AA	22.3277	113.9122	SUMMER	NONE	A	NL179, NL264, NL288
21-Jun-13	4	1442	4	AIRPORT WEST	1	339	ON	AA	22.3027	113.8737	SUMMER	NONE	C	NL300, WL46
08-Jul-13	1	0946	4	AIRPORT NORTH	2	217	ON	AA	22.3299	113.9338	SUMMER	NONE	A	NL224, WL172
08-Jul-13	2	1009	6	AIRPORT NORTH	1	ND	OFF	AA	22.3407	113.9339	SUMMER	NONE	A	NL120, NL165, NL264, NL288, NL296, WL05
08-Jul-13	3	1150	1	AIRPORT NORTH	1	566	ON	AA	22.3246	113.9248	SUMMER	NONE	A	
12-Jul-13	1	0923	12	AIRPORT WEST	2	385	ON	AA	22.2927	113.8837	SUMMER	NONE	C	NL24, NL123, NL145, NL242, NL244, NL259, NL262, NL272, NL284, NL285, NL287
12-Jul-13	2	1114	1	AIRPORT WEST	2	242	ON	AA	22.3027	113.8714	SUMMER	NONE	C	
12-Jul-13	3	1206	1	AIRPORT NORTH	2	150	ON	AA	22.3122	113.8814	SUMMER	NONE	A	NL210
12-Jul-13	4	1240	3	AIRPORT NORTH	2	201	ON	AA	22.3198	113.8858	SUMMER	NONE	A	
05-Aug-13	1	1035	2	AIRPORT WEST	1	860	ON	AA	22.3096	113.8846	SUMMER	NONE	C	
05-Aug-13	2	1101	1	AIRPORT NORTH	2	ND	OFF	AA	22.3046	113.8729	SUMMER	NONE		
05-Aug-13	3	1108	1	AIRPORT NORTH	2	ND	OFF	AA	22.3041	113.8734	SUMMER	HANG		
05-Aug-13	4	1116	4	AIRPORT NORTH	2	236	ON	AA	22.3105	113.8736	SUMMER	NONE	A	
05-Aug-13	5	1230	1	AIRPORT WEST	2	ND	OFF	AA	22.3122	113.8652	SUMMER	NONE		
05-Aug-13	6	1243	2	AIRPORT NORTH	2	88	ON	AA	22.3198	113.8723	SUMMER	NONE	A	
05-Aug-13	7	1300	1	AIRPORT NORTH	2	477	ON	AA	22.3108	113.8814	SUMMER	NONE	A	
05-Aug-13	8	1555	2	AIRPORT NORTH	3	ND	OFF	AA	22.3180	113.8813	SUMMER	NONE		NL210
09-Aug-13	1	1156	6	AIRPORT NORTH	2	283	ON	AA	22.3258	113.9246	SUMMER	NONE	A	NL264, NL288, WL05, WL46
20-Aug-13	1	0947	7	AIRPORT NORTH	2	498	ON	AA	22.3377	113.9319	SUMMER	NONE	A	CH34, NL150, NL179, NL188, NL259, WL05

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	Set	ID INDIVIDUALS
22-Aug-13	1	1032	2	AIRPORT NORTH	2	111	ON	AA	22.3300	113.8900	SUMMER	NONE	A	
22-Aug-13	2	1135	3	AIRPORT NORTH	3	107	ON	AA	22.3211	113.9167	SUMMER	NONE	A	NL288
03-Sep-13	1	1228	7	AIRPORT NORTH	2	537	ON	AA	22.3301	113.9249	AUTUMN	NONE	A	NL33, NL104, NL179, NL288
09-Sep-13	1	1333	1	AIRPORT WEST	2	132	ON	AA	22.3033	113.8761	AUTUMN	NONE	C	
09-Sep-13	2	1453	4	AIRPORT NORTH	2	ND	OFF	AA	22.3442	113.9046	AUTUMN	NONE		NL179, NL244, NL264, NL288
13-Sep-13	1	1200	2	AIRPORT NORTH	2	95	ON	AA	22.3227	113.8747	AUTUMN	NONE	A	
25-Sep-13	1	1021	2	AIRPORT NORTH	3	5	ON	AA	22.3247	113.8803	AUTUMN	NONE	A	
25-Sep-13	2	1246	1	AIRPORT NORTH	4	108	ON	AA	22.3315	113.9300	AUTUMN	NONE	A	
18-Oct-13	1	1327	5	AIRPORT NORTH	3	150	ON	AA	22.3302	113.9039	AUTUMN	NONE	B	CH34, NL24, NL139, NL191, NL242
18-Oct-13	2	1627	1	AIRPORT WEST	2	ND	OFF	AA	22.2936	113.8898	AUTUMN	NONE		
23-Oct-13	1	1015	7	AIRPORT NORTH	2	165	ON	AA	22.3311	113.9160	AUTUMN	NONE	B	CH34, NL226
23-Oct-13	2	1318	1	AIRPORT NORTH	3	248	ON	AA	22.3135	113.8893	AUTUMN	NONE	A	
23-Oct-13	3	1554	2	AIRPORT WEST	3	ND	OFF	AA	22.3001	113.8864	AUTUMN	NONE		SL35, WL15
29-Oct-13	1	1156	1	AIRPORT NORTH	2	ND	OFF	AA	22.3198	113.8726	AUTUMN	NONE	A	NL191
29-Oct-13	2	1240	1	AIRPORT WEST	2	ND	OFF	AA	22.3023	113.8723	AUTUMN	NONE	C	NL191
29-Oct-13	3	1259	10	AIRPORT WEST	2	ND	OFF	AA	22.2963	113.8746	AUTUMN	NONE		NL226, NL24, NL33, NL242, NL188, NL98, NL295
06-Nov-13	1	1044	10	AIRPORT NORTH	3	81	ON	AA	22.3179	113.8818	AUTUMN	NONE	A	CH34, NL24, NL49, NL105, NL139, NL156, NL242, NL260, WL05
06-Nov-13	2	1426	2	AIRPORT WEST	2	67	ON	AA	22.3024	113.8710	AUTUMN	NONE	C	
20-Nov-13	1	1212	6	AIRPORT NORTH	3	25	ON	AA	22.3368	113.9067	AUTUMN	NONE	A	NL37, NL103, NL210
20-Nov-13	2	1314	1	AIRPORT NORTH	2	78	ON	AA	22.3375	113.9177	AUTUMN	NONE	A	NL261
20-Nov-13	3	1519	4	AIRPORT NORTH	2	155	ON	AA	22.3311	113.9156	AUTUMN	NONE	B	NL24, NL136, NL242, NL260
22-Nov-13	1	1115	7	AIRPORT WEST	2	480	ON	AA	22.3319	113.8895	AUTUMN	NONE	A	CH105, NL139, NL295, WL179
27-Nov-13	1	1128	4	AIRPORT NORTH	2	280	ON	AA	22.3213	113.8723	AUTUMN	NONE	A	NL244, NL261, NL284

**Appendix 13.12 Raw Data from Dolphin Field Survey**

**13.12b Raw Data from Field Survey (VesselStgs) - ID individual**

ID	DATE	STG #	LOCATION	ID	DATE	STG #	LOCATION	# of re-sightings		50% core area					
								ID	AA surveys 1995-2013	Residency	MP	BR	CLK	WL	
NL242	11-Oct-12	1	AIRPORT N	CH105	22-Nov-13	1	AIRPORT W	CH34	5	80	Year-round Resident	Y	Y		MP, BR
NL244	11-Oct-12	1	AIRPORT N	CH34	01-Nov-12	1	AIRPORT W	CH105	1	??					
NL295	11-Oct-12	1	AIRPORT N		20-Aug-13	1	AIRPORT N	EL01	1	88	Year-round Resident	Y	Y		MP, BR
WL04	11-Oct-12	1	AIRPORT N		18-Oct-13	1	AIRPORT N	NL18	1	107	Year-round Resident	Y	Y		MP, BR
NL244	30-Oct-12	1	AIRPORT N		23-Oct-13	1	AIRPORT N	NL24	7	201	Year-round Resident	Y	Y		MP, BR
NL295	30-Oct-12	1	AIRPORT N		06-Nov-13	1	AIRPORT N	NL33	6	96	Year-round Resident	Y	Y		MP, BR
NL296	30-Oct-12	1	AIRPORT N	EL01	07-Nov-12	1	AIRPORT N	NL37	1	??					
CH34	01-Nov-12	1	AIRPORT W	NL103	20-Nov-13	1	AIRPORT N	NL49	1	??					
NL156	01-Nov-12	1	AIRPORT W	NL104	01-Nov-12	4	AIRPORT N	NL93	1	51	Seasonal Resident	Y	Y		MP, BR
NL275	01-Nov-12	1	AIRPORT W		03-Sep-13	1	AIRPORT N	NL98	3	117	Year-round Resident	Y	Y	Y	MP, BR, CLK
SL35	01-Nov-12	1	AIRPORT W	NL105	06-Nov-13	1	AIRPORT N	NL103	1	??					
WL15	01-Nov-12	1	AIRPORT W	NL118	17-Jan-13	4	AIRPORT N	NL104	2	83	Year-round Resident	Y	Y	Y	MP, BR, CLK
NL275	01-Nov-12	3	AIRPORT N	NL120	17-Jan-13	1	AIRPORT N	NL105	1	??					
SL35	01-Nov-12	3	AIRPORT N		12-Apr-13	1	AIRPORT N	NL118	1	58	Year-round Resident	Y	Y		MP, BR
WL15	01-Nov-12	3	AIRPORT N		13-May-13	1	AIRPORT N	NL120	4	94	Year-round Resident		Y		BR
NL93	01-Nov-12	4	AIRPORT N		08-Jul-13	2	AIRPORT N	NL123	6	119	Year-round Resident	Y	Y	Y	MP, BR, CLK
NL104	01-Nov-12	4	AIRPORT N	NL123	07-Nov-12	1	AIRPORT N	NL128	1	46	Year-round Resident				Y WL
NL226	01-Nov-12	4	AIRPORT N		14-Nov-12	2	AIRPORT N	NL136	1	??					
NL259	01-Nov-12	4	AIRPORT N		22-Nov-12	1	AIRPORT N	NL139	4	109	Year-round Resident		Y		BR
NL260	01-Nov-12	4	AIRPORT N		20-May-13	1	AIRPORT N	NL145	1	30	Seasonal Resident	Y			MP
NL264	01-Nov-12	4	AIRPORT N		24-May-13	1	AIRPORT N	NL150	1	23	Seasonal Resident	Y			MP
NL272	01-Nov-12	4	AIRPORT N		12-Jul-13	1	AIRPORT W	NL156	2	32	Seasonal Resident	Y		Y	MP, WL
NL288	01-Nov-12	4	AIRPORT N	NL128	18-Apr-13	1	AIRPORT W	NL165	1	63	Year-round Resident	Y	Y		MP, BR
NL292	01-Nov-12	4	AIRPORT N	NL136	20-Nov-13	3	AIRPORT N	NL179	7	68	Year-round Resident		Y	Y	BR, CLK
NL295	01-Nov-12	4	AIRPORT N	NL139	17-Jan-13	3	AIRPORT N	NL188	3	55	Seasonal Resident	Y			MP
NL296	01-Nov-12	4	AIRPORT N		18-Oct-13	1	AIRPORT N	NL191	3	?					
WL04	01-Nov-12	4	AIRPORT N		06-Nov-13	1	AIRPORT N	NL210	3	34	Seasonal Resident	Y			MP
NL33	01-Nov-12	5	AIRPORT N		22-Nov-13	1	AIRPORT W	NL224	1	36	Year-round Visitor	Y			MP
NL260	01-Nov-12	5	AIRPORT N	NL145	12-Jul-13	1	AIRPORT W	NL226	6	41	Seasonal Visitor		Y		BR
NL295	01-Nov-12	5	AIRPORT N	NL150	20-Aug-13	1	AIRPORT N	NL242	9	61	Year-round Resident	Y	Y		MP, BR
NL296	01-Nov-12	5	AIRPORT N	NL156	01-Nov-12	1	AIRPORT W	NL244	7	59	Year-round Resident	Y			MP
EL01	07-Nov-12	1	AIRPORT N		06-Nov-13	1	AIRPORT N	NL246	2	41	Seasonal Resident	Y	Y	Y	MP, BR, CLK
NL123	07-Nov-12	1	AIRPORT N	NL165	08-Jul-13	2	AIRPORT N	NL259	4	47	Year-round Resident	Y		Y	MP, WL
NL261	07-Nov-12	1	AIRPORT N	NL179	14-Nov-12	2	AIRPORT N	NL260	4	48	Seasonal Resident	Y	Y		MP, BR
NL285	07-Nov-12	1	AIRPORT N		13-May-13	1	AIRPORT N	NL261	5	41	Year-round Resident		Y		BR
NL123	14-Nov-12	2	AIRPORT N		20-May-13	1	AIRPORT N	NL262	2	31	Seasonal Resident	Y			MP
NL179	14-Nov-12	2	AIRPORT N		21-Jun-13	3	AIRPORT N	NL264	5	47	Year-round Resident	Y	Y		MP, BR
NL244	14-Nov-12	2	AIRPORT N		20-Aug-13	1	AIRPORT N	NL272	3	37	Not assessed				
NL246	14-Nov-12	2	AIRPORT N		03-Sep-13	1	AIRPORT N	NL275	2	11	Not assessed				
NL261	14-Nov-12	2	AIRPORT N		09-Sep-13	2	AIRPORT N	NL284	3	40	Not assessed				
NL285	14-Nov-12	2	AIRPORT N	NL18	17-Jan-13	1	AIRPORT N	NL285	6	46	Not assessed				
NL295	14-Nov-12	2	AIRPORT N	NL188	05-Mar-13	1	AIRPORT N	NL287	1	21	Not assessed				
NL123	22-Nov-12	1	AIRPORT N		20-Aug-13	1	AIRPORT N	NL288	7	35	Not assessed				
NL285	22-Nov-12	1	AIRPORT N		29-Oct-13	3	AIRPORT N	NL292	1	2	Not assessed				
SL35	04-Dec-12	1	AIRPORT W	NL191	18-Oct-13	1	AIRPORT N	NL295	7	26	Not assessed				
WL15	04-Dec-12	1	AIRPORT W		29-Oct-13	1	AIRPORT N	NL296	4	31	Not assessed				
SL35	15-Dec-12	1	AIRPORT W		29-Oct-13	2	AIRPORT W	NL300	1	5	Not assessed				

ID	DATE	STG #	LOCATION	ID	DATE	STG #	LOCATION	# of re-sightings		50% core area				
								ID	AA surveys	1995-2013	Residency	MP	BR	CLK
NL242	07-Jan-13	1	AIRPORT W	NL210	12-Jul-13	3	AIRPORT N	SL35	6	79	Year-round Resident		Y	WL
WL05	07-Jan-13	1	AIRPORT W		05-Aug-13	8	AIRPORT N	WL04	2	41	Seasonal Resident	Y		MP
NL18	17-Jan-13	1	AIRPORT N		20-Nov-13	1	AIRPORT N	WL05	5	53	Year-round Resident	Y		MP
NL33	17-Jan-13	1	AIRPORT N	NL224	08-Jul-13	1	AIRPORT N	WL15	5	65	Year-round Resident		Y	WL
NL120	17-Jan-13	1	AIRPORT N	NL226	01-Nov-12	4	AIRPORT N	WL46	2	39	Seasonal Resident		Y	WL
NL226	17-Jan-13	1	AIRPORT N		17-Jan-13	1	AIRPORT N	WL172	1	5	Not assessed			
NL246	17-Jan-13	1	AIRPORT N		12-Apr-13	1	AIRPORT N	WL179	1	??	Not assessed			
NL139	17-Jan-13	3	AIRPORT N		18-Apr-13	1	AIRPORT W							
NL118	17-Jan-13	4	AIRPORT N		23-Oct-13	1	AIRPORT N							
SL35	17-Jan-13	4	AIRPORT N		29-Oct-13	3	AIRPORT N							
WL15	17-Jan-13	4	AIRPORT N	NL24	12-Apr-13	1	AIRPORT N							
NL188	05-Mar-13	1	AIRPORT N		18-Apr-13	1	AIRPORT W							
NL242	05-Mar-13	1	AIRPORT N		12-Jul-13	1	AIRPORT W							
NL24	12-Apr-13	1	AIRPORT N		18-Oct-13	1	AIRPORT N							
NL98	12-Apr-13	1	AIRPORT N		29-Oct-13	3	AIRPORT N							
NL120	12-Apr-13	1	AIRPORT N		06-Nov-13	1	AIRPORT N							
NL226	12-Apr-13	1	AIRPORT N		20-Nov-13	3	AIRPORT N							
NL242	12-Apr-13	1	AIRPORT N	NL242	11-Oct-12	1	AIRPORT N							
NL259	12-Apr-13	1	AIRPORT N		07-Jan-13	1	AIRPORT W							
NL244	16-Apr-13	1	AIRPORT N		05-Mar-13	1	AIRPORT N							
NL284	16-Apr-13	1	AIRPORT N		12-Apr-13	1	AIRPORT N							
NL24	18-Apr-13	1	AIRPORT W		12-Jul-13	1	AIRPORT W							
NL33	18-Apr-13	1	AIRPORT W		18-Oct-13	1	AIRPORT N							
NL98	18-Apr-13	1	AIRPORT W		29-Oct-13	3	AIRPORT N							
NL128	18-Apr-13	1	AIRPORT W		06-Nov-13	1	AIRPORT N							
NL226	18-Apr-13	1	AIRPORT W		20-Nov-13	3	AIRPORT N							
NL33	13-May-13	1	AIRPORT N	NL244	11-Oct-12	1	AIRPORT N							
NL120	13-May-13	1	AIRPORT N		30-Oct-12	1	AIRPORT N							
NL179	13-May-13	1	AIRPORT N		14-Nov-12	2	AIRPORT N							
NL123	20-May-13	1	AIRPORT N		16-Apr-13	1	AIRPORT N							
NL179	20-May-13	1	AIRPORT N		12-Jul-13	1	AIRPORT W							
NL285	20-May-13	1	AIRPORT N		09-Sep-13	2	AIRPORT N							
NL123	24-May-13	1	AIRPORT N		27-Nov-13	1	AIRPORT N							
NL285	24-May-13	1	AIRPORT N	NL246	14-Nov-12	2	AIRPORT N							
NL262	24-May-13	2	AIRPORT N		17-Jan-13	1	AIRPORT N							
NL272	24-May-13	2	AIRPORT N	NL259	01-Nov-12	4	AIRPORT N							
NL261	21-Jun-13	1	AIRPORT N		12-Apr-13	1	AIRPORT N							
NL179	21-Jun-13	3	AIRPORT N		12-Jul-13	1	AIRPORT W							
NL264	21-Jun-13	3	AIRPORT N		20-Aug-13	1	AIRPORT N							
NL288	21-Jun-13	3	AIRPORT N	NL260	01-Nov-12	4	AIRPORT N							
NL300	21-Jun-13	4	AIRPORT W		01-Nov-12	5	AIRPORT N							
WL46	21-Jun-13	4	AIRPORT W		06-Nov-13	1	AIRPORT N							
NL224	08-Jul-13	1	AIRPORT N		20-Nov-13	3	AIRPORT N							
WL172	08-Jul-13	1	AIRPORT N	NL261	07-Nov-12	1	AIRPORT N							
NL120	08-Jul-13	2	AIRPORT N		14-Nov-12	2	AIRPORT N							
NL165	08-Jul-13	2	AIRPORT N		21-Jun-13	1	AIRPORT N							
NL264	08-Jul-13	2	AIRPORT N		20-Nov-13	2	AIRPORT N							
NL288	08-Jul-13	2	AIRPORT N		27-Nov-13	1	AIRPORT N							
NL296	08-Jul-13	2	AIRPORT N	NL262	24-May-13	2	AIRPORT N							
WL05	08-Jul-13	2	AIRPORT N		12-Jul-13	1	AIRPORT W							



ID	DATE	STG #	LOCATION
NL24	12-Jul-13	1	AIRPORT W
NL123	12-Jul-13	1	AIRPORT W
NL145	12-Jul-13	1	AIRPORT W
NL242	12-Jul-13	1	AIRPORT W
NL244	12-Jul-13	1	AIRPORT W
NL259	12-Jul-13	1	AIRPORT W
NL262	12-Jul-13	1	AIRPORT W
NL272	12-Jul-13	1	AIRPORT W
NL284	12-Jul-13	1	AIRPORT W
NL285	12-Jul-13	1	AIRPORT W
NL287	12-Jul-13	1	AIRPORT W
NL210	12-Jul-13	3	AIRPORT N
NL210	05-Aug-13	8	AIRPORT N
NL264	09-Aug-13	1	AIRPORT N
NL288	09-Aug-13	1	AIRPORT N
WL05	09-Aug-13	1	AIRPORT N
WL46	09-Aug-13	1	AIRPORT N
CH34	20-Aug-13	1	AIRPORT N
NL150	20-Aug-13	1	AIRPORT N
NL179	20-Aug-13	1	AIRPORT N
NL188	20-Aug-13	1	AIRPORT N
NL259	20-Aug-13	1	AIRPORT N
WL05	20-Aug-13	1	AIRPORT N
NL288	22-Aug-13	2	AIRPORT N
NL33	03-Sep-13	1	AIRPORT N
NL104	03-Sep-13	1	AIRPORT N
NL179	03-Sep-13	1	AIRPORT N
NL288	03-Sep-13	1	AIRPORT N
NL179	09-Sep-13	2	AIRPORT N
NL244	09-Sep-13	2	AIRPORT N
NL264	09-Sep-13	2	AIRPORT N
NL288	09-Sep-13	2	AIRPORT N
CH34	18-Oct-13	1	AIRPORT N
NL24	18-Oct-13	1	AIRPORT N
NL139	18-Oct-13	1	AIRPORT N
NL191	18-Oct-13	1	AIRPORT N
NL242	18-Oct-13	1	AIRPORT N
CH34	23-Oct-13	1	AIRPORT N
NL226	23-Oct-13	1	AIRPORT N
SL35	23-Oct-13	3	AIRPORT W
WL15	23-Oct-13	3	AIRPORT W
NL191	29-Oct-13	1	AIRPORT N
NL191	29-Oct-13	2	AIRPORT W
NL226	29-Oct-13	3	AIRPORT N
NL24	29-Oct-13	3	AIRPORT N
NL33	29-Oct-13	3	AIRPORT N
NL242	29-Oct-13	3	AIRPORT N
NL188	29-Oct-13	3	AIRPORT N
NL98	29-Oct-13	3	AIRPORT N
NL295	29-Oct-13	3	AIRPORT N

ID	DATE	STG #	LOCATION
NL264	01-Nov-12	4	AIRPORT N
	21-Jun-13	3	AIRPORT N
	08-Jul-13	2	AIRPORT N
	09-Aug-13	1	AIRPORT N
	09-Sep-13	2	AIRPORT N
NL272	01-Nov-12	4	AIRPORT N
	24-May-13	2	AIRPORT N
	12-Jul-13	1	AIRPORT W
NL275	01-Nov-12	1	AIRPORT W
	01-Nov-12	3	AIRPORT N
NL284	16-Apr-13	1	AIRPORT N
	12-Jul-13	1	AIRPORT W
	27-Nov-13	1	AIRPORT N
NL285	07-Nov-12	1	AIRPORT N
	14-Nov-12	2	AIRPORT N
	22-Nov-12	1	AIRPORT N
	20-May-13	1	AIRPORT N
	24-May-13	1	AIRPORT N
	12-Jul-13	1	AIRPORT W
NL287	12-Jul-13	1	AIRPORT W
NL288	01-Nov-12	4	AIRPORT N
	21-Jun-13	3	AIRPORT N
	08-Jul-13	2	AIRPORT N
	09-Aug-13	1	AIRPORT N
	22-Aug-13	2	AIRPORT N
	03-Sep-13	1	AIRPORT N
	09-Sep-13	2	AIRPORT N
NL292	01-Nov-12	4	AIRPORT N
NL295	11-Oct-12	1	AIRPORT N
	30-Oct-12	1	AIRPORT N
	01-Nov-12	4	AIRPORT N
	01-Nov-12	5	AIRPORT N
	14-Nov-12	2	AIRPORT N
	29-Oct-13	3	AIRPORT N
	22-Nov-13	1	AIRPORT W
NL296	30-Oct-12	1	AIRPORT N
	01-Nov-12	4	AIRPORT N
	01-Nov-12	5	AIRPORT N
	08-Jul-13	2	AIRPORT N
NL300	21-Jun-13	4	AIRPORT W
NL33	01-Nov-12	5	AIRPORT N
	17-Jan-13	1	AIRPORT N
	18-Apr-13	1	AIRPORT W
	13-May-13	1	AIRPORT N
	03-Sep-13	1	AIRPORT N
	29-Oct-13	3	AIRPORT N
NL37	20-Nov-13	1	AIRPORT N
NL49	06-Nov-13	1	AIRPORT N
NL93	01-Nov-12	4	AIRPORT N
NL98	12-Apr-13	1	AIRPORT N

ID	# of re-sightings		50% core area			
	AA surveys	1995-2013	Residency	MP	BR	CLK WL

ID	DATE	STG #	LOCATION
CH34	06-Nov-13	1	AIRPORT N
NL24	06-Nov-13	1	AIRPORT N
NL49	06-Nov-13	1	AIRPORT N
NL105	06-Nov-13	1	AIRPORT N
NL139	06-Nov-13	1	AIRPORT N
NL156	06-Nov-13	1	AIRPORT N
NL242	06-Nov-13	1	AIRPORT N
NL260	06-Nov-13	1	AIRPORT N
WL05	06-Nov-13	1	AIRPORT N
NL37	20-Nov-13	1	AIRPORT N
NL103	20-Nov-13	1	AIRPORT N
NL210	20-Nov-13	1	AIRPORT N
NL261	20-Nov-13	2	AIRPORT N
NL24	20-Nov-13	3	AIRPORT N
NL136	20-Nov-13	3	AIRPORT N
NL242	20-Nov-13	3	AIRPORT N
NL260	20-Nov-13	3	AIRPORT N
CH105	22-Nov-13	1	AIRPORT W
NL139	22-Nov-13	1	AIRPORT W
NL295	22-Nov-13	1	AIRPORT W
WL179	22-Nov-13	1	AIRPORT W
NL244	27-Nov-13	1	AIRPORT N
NL261	27-Nov-13	1	AIRPORT N
NL284	27-Nov-13	1	AIRPORT N

ID	DATE	STG #	LOCATION
	18-Apr-13	1	AIRPORT W
	29-Oct-13	3	AIRPORT N
SL35	01-Nov-12	1	AIRPORT W
	01-Nov-12	3	AIRPORT N
	04-Dec-12	1	AIRPORT W
	15-Dec-12	1	AIRPORT W
	17-Jan-13	4	AIRPORT N
	23-Oct-13	3	AIRPORT W
WL04	11-Oct-12	1	AIRPORT N
	01-Nov-12	4	AIRPORT N
WL05	07-Jan-13	1	AIRPORT W
	08-Jul-13	2	AIRPORT N
	09-Aug-13	1	AIRPORT N
	20-Aug-13	1	AIRPORT N
	06-Nov-13	1	AIRPORT N
WL15	01-Nov-12	1	AIRPORT W
	01-Nov-12	3	AIRPORT N
	04-Dec-12	1	AIRPORT W
	17-Jan-13	4	AIRPORT N
	23-Oct-13	3	AIRPORT W
WL172	08-Jul-13	1	AIRPORT N
WL179	22-Nov-13	1	AIRPORT W
WL46	21-Jun-13	4	AIRPORT W
	09-Aug-13	1	AIRPORT N

ID	# of re-sightings		50% core area			
	AA surveys	1995-2013	Residency	MP	BR	CLK WL

Appendix 13.12 Raw Data from Dolphin Field Survey

Appendix 13.12c Raw Data from Field Surveys (Focal Follows)

Date	Stg #	Area	Type	Individual ID	Time	Lat	Long	Beau	Reaction	Boat Assoc	Sub-grp size			Sub-grp Composition					Boat # & Type					Beh Stat	Note #			
											B	H	L	UC	UJ	SJ	SS	SA	U	#	W	H	F			C	O	
11/10/12	1	AIRPORT NORTH	AA	GROUP	1353	22.3360	113.9167	2	N/A	N	4	4	4			1	1	1	1								Traveling slowly; cohesive group moving inside the exclusion zone heading eastward	
					1419	22.3268	113.9236	2	N/A	N	4	4	4			1	1	1	1									
					1425	22.3249	113.9239	2	N/A	N	4	4	4			1	1	1	1									
					1431	22.3254	113.9259	2	N/A	N	4	4	4			1	1	1	1									
					1434	22.3251	113.9268	2	N/A	N	4	4	4			1	1	1	1									
11/10/12	1	AIRPORT WEST	AA	GROUP	1025	22.3027	113.8715	2	N/A	N	4	5	4		1	1		1									T? hanging around some gillnets	
					1030	22.3060	113.8635	2	N/A	N	4	5	4		1	1		1									T?	
					1035	22.3070	113.8648	2	Neu	N	4	5	4		1	1		1										
					1039	22.3080	113.8656	2	Neu	N	3	4	3		1	1		1									F?	
					1044	22.3083	113.8666	2	Neu	N	3	4	3		1	1		1									F?	
01/11/12	1	AIRPORT WEST	AA	GROUP	856	22.2946	113.8891	3	Neu	N	2	3	2				1	1									CH34, NL156	
					901	22.2961	113.8912	3	Neu	N	2	3	2				1	1										
					905	22.2977	113.8911	3	Neu	N	3	4	3				1	1	1	2							Unknown individual 1 joined CH34 and NL156, head towards HAECO	
					911	22.3008	113.8920	3	Neu	N	6	7	6		1		2	2									1SJ, 1UA joined the group (CH34, NL156, individual 1, WL15, NL275, SL35)	
					916	22.2993	113.8908	3	Neu	N	6	7	6		1		2	2										
					921	22.2989	113.8912	3	Neu	N	6	7	6		1	2	1	1									S Atight group formed and socialized, CH34 left this group (NL156, individual 1, WL15, NL275, SL35)	
					927	22.2977	113.8912	3	Neu	N	6	7	6		1	2	1	1									S	
					933	22.2964	113.8914	3	Neu	N	6	7	6		1	2	1	1										
					938	22.2967	113.8916	2	Neu	N	6	7	6		1	2	1	1										Still the same sub-group, same composition, just outside HAECO
					943	22.3011	113.8925	2	Neu	N	6	7	6		1	2	1	1									S Same sub-group, very active with lots of breaching, close to the shore	
					948	22.3031	113.8925	2	Neu	N	4	5	4		1	1	1										Fewer animals, confirmed SL35 still there	
					952	22.3037	113.8922	3	Neu	N	4	5	4		1	1	1										Very close to the shore at airport NW corner, abandoned follow and back to transect line	
14/11/12	2	AIRPORT NORTH	AA	GROUP	1300	22.3368	113.9053	2	Neu	N	5	5	5		4		1										F NL123, NL179, NL246, NL261, NL285	
					1305	22.3368	113.9054	2	Neu	N	5	5	5		4		1										Tail slapping, fluke up	
					1310	22.3372	113.9062	2	Neu	N	5	5	5		4		1										Tail slapping	
					1315	22.3365	113.9062	2	Neu	N	5	5	5		4		1										Tail slapping; NL261 in the group; NL246 left this group	
					1320	22.3369	113.9076	2	Neu	N	4	4	4		3		1										F NL123, NL179, NL261, NL285	
					1325	22.3371	113.9083	2	Neu	N	5	5	5		4		1										Tail slapping (possibly by NL261 throughout the focal follow)	
					1330	22.3366	113.9076	2	Neu	N	4	4	4		3		1										NL261(?) left the group	
					1335	22.3370	113.9067	2	Neu	N	5	5	5		4		1										NL123, NL179, NL246, NL261, NL285; Breaching	
					1340	22.3382	113.9058	2	Neu	N	3	3	3		2		1										S NL295 and NL244 new to focal group; NL179 spread out	
					1345	22.3398	113.9062	2	Neu	N	2	2	2		2												NL179, NL246	
					1350	22.3397	113.9067	2	Neu	N	2	2	2		2													
					1355	22.3386	113.9084	2	Neu	N	2	3	2		2													
					1400	22.3390	113.9117	2	Neu	N	2	2	2		2												F NL179 and NL246 in the group	
					1405	22.3391	113.9136	3	Neu	N	2	2	2		2				1	1							F Mud on NL246; 1 individual next to the group	
					1410	22.3389	113.9152	3	Neu	N	2	2	2		2												Breaching	
					1415	22.3390	113.9184	3	Neu	N	2	2	2		2												NL246, NL179	
					1420	22.3388	113.9189																				Focal follow abandoned	
04/12/12	1	AIRPORT WEST	AA	GROUP	1442	22.2924	113.8743	3	Neu	N	2	2	2				1	1										
					1447	22.2916	113.8718	3	Neu	N	2	2	2				1	1										
					1452	22.2923	113.8692	3	Neu	N	2	2	2				1	1										
					1457	22.2908	113.8666	3																			Dolphins lost track. Focal follow abandoned.	
15/12/12	1	AIRPORT WEST	AA	SL35	1148	22.2923	113.8914	2	Neu	N							1											
					1153	22.2971	113.8863	2	Neu	N							1											
					1158	22.3016	113.8853	2	Neu	N							1											
					1203	22.3064	113.8867	2	Neu	N							1											Breaching
					1208	22.3094	113.8889	2	Neu	N							1											Breaching
					1213	22.3108	113.8889	2	Neu	N							1											
					1218	22.3107	113.8898	2																				Lost track of the dolphin in the glare
					1223	22.3104	113.8896	2																				Lost track of the dolphin in the glare
07/01/13	1	AIRPORT WEST	AA	GROUP	1033	22.3047	113.8844	3	Neu	N	3	4	3				2										M	
					1038	22.3024	113.8821	3	Neu	N	3	4	3				2											M
					1043	22.3003	113.8784	3	Neu	N	1	1	1				1										T Spread out, 2 dolphins heading west	
					1048	22.3024	113.8757	3	Neu	N	1	1	1				1											M















Date	Stg #	Area	Type	Individual ID	Time	Lat	Long	Beau	Reaction	Boat Assoc	Sub-grp size			Sub-grp Composition						Boat # & Type					Beh Stat	Note #		
											B	H	L	UC	UJ	SJ	SS	SA	U	#	W	H	F	C			O	
					1357	22.3394	113.9205	2	Neu	N	1	1	1														F	Keep Breaching
					1402	22.3398	113.9205	2	Neu	N	1	1	1														F	Breaching
					1407	22.3400	113.9191	2	Neu	N	1	1	1														F	Spy-hopping, breaching
					1412	22.3415	113.9224	2	Neu	N	1	1	1														F	Spy-hopping, keep breaching
					1417	22.3406	113.9232	2	Neu	N	1	1	1														F	Spy-hopping, breaching
					1422	22.3446	113.9260	2	Neu	N	1	1	1														T	
					1426	22.3442	113.9268	2	Neu	N	1	1	1														T	Spy-hopping, breaching
20/11/13	3	AIRPORT NORTH	AA	GROUP	1522	22.3321	113.9175	2	Neu	N	4	4	4														M	NL24, NL136, NL242, NL259
					1527	22.3328	113.9205	2	Neu	N	4	4	4														M	
					1532	22.3316	113.9232	2	Neu	N	4	4	4														M	Fluke up
					1537	22.3317	113.9254	2	Neu	N	3	4	3														M	2 Tugboats, 1 Construction boat, 1 Custom excise
					1542	22.3335	113.9242	2	Neu	N	3	3	3														M	Synchronized fluke up, end focal follow due to lack of time
22/11/13	1	AIRPORT WEST	AA	GROUP	1121	22.3284	113.8838	2	Neu	N	6	7	6														T	Other: speedboat
					1126	22.3268	113.8799	2	Neu	N	6	7	6														T	
					1131	22.3264	113.8780	2	Neu	N	6	7	6														T	1SS swims farther away from the group
					1136	22.3292	113.8728	2	Neu	N	6	7	6														M	Spy-hopping, breaching
					1141	22.3274	113.8717	2	Neu	N	2	3	2														T	Dolphins split into 3 groups
					1146	22.3290	113.8686	2	Neu	N	2	3	2														T	Spy-hopping, follow mother and calf and 1SS
					1151	22.3326	113.8664	2	Neu	N	2	3	2														T	
					1156	22.3356	113.8641	2	Neu	N	2	3	2														T	
					1201	22.3336	113.8626	2	Neu	N	2	3	2														M	Spy-hopping, breaching
27/11/13	1	AIRPORT NORTH	AA	INDIVIDUAL (NL48)	1132	22.3213	113.8700	2	Neu	N	1	1	1														M	
					1137	22.3194	113.8684	2	Neu	H	1	1	1														T	Hang trawler (non-operating, travelling)
					1142	22.3171	113.8696	2	Neu	N	2	2	2														M	Purse seine, 1 dolphin passes by
					1147	22.3164	113.8715	2	Neu	N	1	1	1														M	
					1152	22.3169	113.8737	2	Neu	N	1	1	1														M	
					1157	22.3194	113.8743	2	Neu	N	1	1	1														T	Fluke up
					1202	22.3216	113.8755	2	Neu	N	1	1	1														T	Fluke up
					1207	22.3254	113.8759	2	Neu	N	1	1	1														T	Fluke up
					1212	22.3280	113.8760	2	Neu	N	1	1	1														T	2SJs pass by
					1217	22.3328	113.8775	2	Neu	N	1	1	1														T	Fluke up
					1222	22.3367	113.8785	2	Neu	N	1	1	1														T	

**Appendix 13.12d CWD data for swimming speed, reorientation rate, and linearity, including 10-minute segments post-autocorrelation analysis.**

CWD data for swimming speed, reorientation rate, and linearity, including 10-minute segments post-autocorrelation analysis. Speed in km/hr; reorientation in degrees per minute; linearity ranges 0-1, as discussed in the EIA; time of day 1 = morning, 2 = midday, and 3 = afternoon, as discussed in the EIA; Season is solar (i.e Winter is 21 Dec.-20Mar.); and HSF = High speed ferry.

Dolphin Segment ID	BoatFlag	Station	Speed	ReorientationRate	Linearity	TimeOfDay	Season	HSF_Flag
Dolphin_C_C415511_	Absent	C	1.058239694	60.35469221	0.385038851	1	Autumn	Absent
Dolphin_C_C412181_	Absent	C	1.229626677	17.42101077	0.861041656	1	Autumn	Absent
Dolphin_C_C412551_s1	Absent	C	2.129972968	18.52731856	0.943049902	1	Autumn	Absent
Dolphin_C_C412551_s2	Absent	C	0.662937323	31.41832291	0.090597715	1	Autumn	Absent
Dolphin_C_C415991_s1	Present	C	1.052129809	19.35867052	0.972413486	1	Autumn	Absent
Dolphin_C_C412181_s1	Present	C	2.74534936	7.742192416	0.86959981	1	Autumn	Absent
Dolphin_C_C413542_s1	Absent	C	0.812123375	41.00151058	0.10767749	1	Spring	Absent
Dolphin_A_A412671_	Absent	A	0.961946661	53.04025851	0.113114581	1	Winter	Absent
Dolphin_C_C412701_	Absent	C	1.897915402	11.41864088	0.934684144	1	Winter	Absent
Dolphin_C_C412771_	Absent	C	0.988726163	11.28240399	0.939076751	1	Winter	Absent
Dolphin_C_C412772_s1	Absent	C	1.234580756	37.8001176	0.818373839	1	Winter	Absent
Dolphin_C_C412811_	Absent	C	1.384759861	33.23753692	0.664641087	1	Winter	Absent
Dolphin_C_C412901_	Absent	C	1.759628993	28.32877734	0.614930434	1	Winter	Absent
Dolphin_C_C413461_	Absent	C	3.477442019	5.927084617	0.981158713	1	Winter	Absent
Dolphin_C_C412772_s1b3	Present	C	1.467546045	26.66707496	0.175893912	1	Winter	Absent
Dolphin_C_C414281_	Absent	C	0.614479474	37.92050035	0.279178594	1	Spring	Absent
Dolphin_C_C414281_b1	Absent	C	0.706576343	38.91519928	0.148902123	1	Spring	Absent
Dolphin_C_C414281_s3	Absent	C	4.902052018	25.60776874	0.947933557	1	Spring	Absent
Dolphin_A_A414601_	Absent	A	2.404824794	3.543603015	0.973064097	1	Summer	Absent
Dolphin_C_C414601_	Absent	C	3.139840634	5.272796127	0.940337539	1	Summer	Absent
Dolphin_C_C414602_s1	Absent	C	2.38198137	38.01470776	0.575094848	1	Summer	Absent
Dolphin_C_C414651_s1	Absent	C	1.380093849	25.30940425	0.903704761	1	Summer	Absent

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Dolphin Segment ID	BoatFlag	Station	Speed	ReorientationRate	Linearity	TimeOfDay	Season	HSF_Flag
Dolphin_C_C414841a_s1	Absent	C	1.72759275	9.141909939	0.956757983	1	Summer	Absent
Dolphin_C_C414921_s1	Absent	C	2.366847413	25.92077579	0.572912891	1	Summer	Absent
Dolphin_B_B415061_	Present	B	3.24007541	12.50968159	0.938107597	1	Summer	Absent
Dolphin_C_C414652_	Present	C	3.921346137	20.57024983	0.788667314	1	Summer	Absent
Dolphin_A_A416041_b3	Absent	A	4.519598642	40.44443716	0.671583685	2	Autumn	Absent
Dolphin_A_A416041_b4	Absent	A	1.477381485	105.9860274	0.18063238	2	Autumn	Absent
Dolphin_A_A412492_s1	Absent	A	3.941353952	3.329556935	0.990906456	2	Autumn	Absent
Dolphin_A_A412492_s2	Absent	A	1.820143976	33.78645943	0.63459883	2	Autumn	Absent
Dolphin_A_A412541_	Absent	A	4.761257495	1.144825667	0.998644626	2	Autumn	Absent
Dolphin_C_C412181_s4	Absent	C	1.664491213	29.04915034	0.607589582	2	Autumn	Absent
Dolphin_C_C412551_s12	Absent	C	0.463626303	36.14909667	0.368365404	2	Autumn	Absent
Dolphin_C_C412571_	Absent	C	1.965836176	13.72859478	0.782548384	2	Autumn	Absent
Dolphin_D_D415652_s2	Absent	D	4.160691369	3.285471507	0.992843259	2	Autumn	Absent
Dolphin_A_A416041_b1	Present	A	1.26053038	87.33304292	0.216672062	2	Autumn	Absent
Dolphin_A_A416041_b2	Present	A	2.59577833	83.70352544	0.334315543	2	Autumn	Absent
Dolphin_A_A412501_s1	Present	A	2.486924151	46.65127148	0.149134452	2	Autumn	Absent
Dolphin_C_C412181_s2	Present	C	2.268821374	30.57700649	0.465891086	2	Autumn	Absent
Dolphin_C_C412551_s6	Present	C	0.782865413	30.39990412	0.758578076	2	Autumn	Absent
Dolphin_D_D411941_	Present	D	1.821174899	31.46161499	0.059733301	2	Autumn	Absent
Dolphin_D_D412351_	Present	D	5.143126438	29.16584242	0.491298315	2	Autumn	Absent
Dolphin_A_A416041_b5	Present	A	1.267734741	58.37824561	0.720154799	2	Autumn	Present
Dolphin_A_A416041_	Present	A	1.878592777	54.09035537	0.444230765	2	Autumn	Present
Dolphin_A_A412492_	Present	A	1.69808562	25.49309073	0.313293829	2	Autumn	Present
Dolphin_A_A412671_b3	Absent	A	1.568550772	27.33427611	0.426278875	2	Winter	Absent
Dolphin_A_A412821_	Absent	A	2.337767761	9.38093237	0.989554257	2	Winter	Absent
Dolphin_A_A413261_	Absent	A	2.950345009	7.753995461	0.941079463	2	Winter	Absent
Dolphin_A_A413261_s5	Absent	A	0.500314474	24.71448726	0.584698633	2	Winter	Absent
Dolphin_B_B413373_	Absent	B	1.442364753	39.76053185	0.116731637	2	Winter	Absent

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Dolphin Segment ID	BoatFlag	Station	Speed	ReorientationRate	Linearity	TimeOfDay	Season	HSF_Flag
Dolphin_B_B413411_	Absent	B	3.22796959	17.12486775	0.550575287	2	Winter	Absent
Dolphin_D_D413062_	Absent	D	1.615126312	4.989365332	0.990506455	2	Winter	Absent
Dolphin_A_A413261_s3	Present	A	1.086315431	24.23589661	0.933774722	2	Winter	Absent
Dolphin_B_B413031_s1	Present	B	1.815730532	5.210197854	0.972577157	2	Winter	Absent
Dolphin_B_B413371_s1	Present	B	2.320013822	32.14195214	0.932021105	2	Winter	Absent
Dolphin_C_C413462_s2	Present	C	0.983722888	39.62332965	0.101620371	2	Winter	Absent
Dolphin_D_D413062_s1	Present	D	3.718034562	4.285300351	0.960611927	2	Winter	Absent
Dolphin_C_C414281_s3b3	Absent	C	0.956297845	29.54035053	0.140857944	2	Spring	Absent
Dolphin_D_D413881_	Absent	D	2.225203016	4.234521567	0.96348733	2	Spring	Absent
Dolphin_D_D413881_b3	Absent	D	1.757146905	5.869460944	0.974934031	2	Spring	Absent
Dolphin_D_D414431_	Absent	D	1.545656412	24.33619209	0.61971527	2	Spring	Absent
Dolphin_D_D414431a_	Absent	D	1.319098644	38.16738416	0.172746984	2	Spring	Absent
Dolphin_D_D414072_	Present	D	4.828445992	14.25462821	0.889839264	2	Spring	Absent
Dolphin_B_B414921_	Absent	B	4.219012279	3.053805708	0.994093274	2	Summer	Absent
Dolphin_B_B415232_	Absent	B	5.492047538	44.50066996	0.635842787	2	Summer	Absent
Dolphin_C_C414842_s2	Absent	C	2.513178802	20.27090327	0.850657874	2	Summer	Absent
Dolphin_D_D414912A_	Absent	D	2.334326197	31.50808719	0.686147137	2	Summer	Absent
Dolphin_C_C414602_s2	Present	C	1.444617852	32.7232197	0.089552282	2	Summer	Absent
Dolphin_C_C414602_s6	Present	C	0.67144359	57.1544954	0.529144748	2	Summer	Absent
Dolphin_A_A414851_	Present	A	4.136784524	16.86314691	0.846113649	2	Summer	Present
Dolphin_A_A412494_	Absent	A	0.540416079	36.22267794	0.542925406	3	Autumn	Absent
Dolphin_C_C413612_	Absent	C	1.303102417	15.52961492	0.908853861	3	Spring	Absent
Dolphin_D_D413062_s2	Absent	D	1.21195681	10.15475045	0.92754692	3	Winter	Absent
Dolphin_D_D413064_	Absent	D	3.376946203	3.16211788	0.991457474	3	Winter	Absent
Dolphin_D_D413066_	Absent	D	3.375640321	18.84236213	0.915470036	3	Winter	Absent
Dolphin_A_A412761_	Present	A	2.521174835	25.92555015	0.755425055	3	Winter	Present
Dolphin_D_D414955_	Absent	D	0.797818637	37.78922194	0.700894798	3	Summer	Absent
Dolphin_D_D415263_	Present	D	1.488819994	26.04450561	0.772631593	3	Summer	Absent

<b>Dolphin Segment ID</b>	<b>BoatFlag</b>	<b>Station</b>	<b>Speed</b>	<b>ReorientationRate</b>	<b>Linearity</b>	<b>TimeOfDay</b>	<b>Season</b>	<b>HSF_Flag</b>
Dolphin_D_D415263a_	Present	D	1.591641208	14.50797485	0.78656021	3	Summer	Absent