Monitoring of Chinese White Dolphins in Southwest Lantau Waters

7th Monthly Progress Report (September 2015)
submitted to Environmental Project Office for the HZMB HKLR, HZMB HKBCF and TM-CLKL – Investigation

Submitted by
Samuel K.Y. Hung, Ph.D.
Hong Kong Cetacean Research Project

29 September 2015

1. Introduction

1.1. In March 2015, Hong Kong Cetacean Research Project (HKCRP) was appointed by the Environmental Project Office for the HZMB Hong Kong Projects to undertake a monitoring study of Chinese White Dolphins in Southwest Lantau (SWL) waters.

1.2. The objectives of the monitoring study are to quantify the abundance and density of Chinese White Dolphins in SWL waters, to identify individuals during the monitoring surveys, and to analyze their range use and movement patterns in Hong Kong and the wider Pearl River Estuary waters.

1.3. The monitoring study will supplement the on-going EM&A monitoring results of the HZMB Hong Kong Projects in North and West Lantau waters, and provide a more complete picture of dolphin usage and movements between different survey areas in western Hong Kong waters.

1.4. The present report is the seventh monthly progress report under this dolphin monitoring study submitted to the Environmental Project Office, summarizing the results of the surveys findings during the month of September 2015.

2. Monitoring Methodology

2.1. Vessel-based Line-transect Survey

2.1.1. According to the requirement of the technical proposal submitted to the Environmental

Project Office, dolphin monitoring programme should cover all transect lines in SWL survey area (see Figure 1) once per month upon instruction. The co-ordinates of all transect lines conducted during the dolphin monitoring survey are shown in Table 1.

Table 1. Co-ordinates of transect lines in SWL survey area (corresponding to transect line layout as shown in Figure 1)

Line #		Northing	Easting		Line #		Northing	Easting
SWL001	1	806180	802510		SWL007	13	807380	808520
	2	804250	802510			14	805600	808520
SWL002	3	806710	803480			15	804400	808520
	4	803450	803480			16	803000	808520
SWL003	5	807270	804500			17	802100	808520
	6	802690	804500			18	800470	808520
SWL004	7	807590	805450		SWL008	19	807380	809550
	8	802295	805450			20	805050	809550
SWL005	9	808490	806500			21	804400	809550
	10	801410	806500			22	800470	809550
SWL006	11	808500	807430		SWL009	23	807380	810550
	12	801250	807430			24	800470	810550
					SWL010	25	809410	811510
						26	801470	811510

2.1.2. The HKCRP survey team used standard line-transect methods (Buckland et al. 2001) to conduct the systematic vessel surveys, and followed the same technique of data collection that has been adopted over the last 17 years of marine mammal monitoring surveys in Hong Kong developed by HKCRP (see Hung 2014). For each monitoring vessel survey, a 15-m inboard vessel with an open upper deck (about 4.5 m above water surface) was used to make observations from the flying bridge area.

2.1.3. Two experienced observers from HKCRP (a data recorder and a primary observer) made up the on-effort survey team, and the survey vessel transited different transect lines at a

constant speed of 13-15 km per hour. The data recorder searched with unaided eyes and filled out the datasheets, while the primary observer searched for dolphins and porpoises continuously through 7 x 50 *Fujinon* marine binoculars. Both observers searched the sea ahead of the vessel, between 270^{o} and 90^{o} (in relation to the bow, which is defined as 0^{o}). One to two additional experienced observer was available on the boat to work in shift (i.e. rotate every 30 minutes) in order to minimize fatigue of the survey team members. All observers were experienced in small cetacean survey techniques and identifying local cetacean species.

2.1.4. During on-effort survey periods, the survey team recorded effort data including time, position (latitude and longitude), weather conditions (Beaufort sea state and visibility), and distance traveled in each series (a continuous period of search effort) with the assistance of a handheld GPS (*Garmin eTrex Legend*).

2.1.5. Data including time, position and vessel speed were also automatically and continuously logged by handheld GPS throughout the entire survey for subsequent review.

2.1.6. When dolphins were sighted, the survey team would end the survey effort, and immediately record the initial sighting distance and angle of the dolphin group from the survey vessel, as well as the sighting time and position. Then the research vessel was diverted from its course to approach the animals for species identification, group size estimation, assessment of group composition, and behavioural observations. The perpendicular distance (PSD) of the dolphin group to the transect line was later calculated from the initial sighting distance and angle.

2.1.7. Survey effort being conducted along the parallel transect lines that were perpendicular to the coastlines (as indicated in Figure 1) was labeled as “primary” survey effort, while the survey effort conducted along the connecting lines between parallel lines as well as the section around the Soko Islands was labeled as “secondary” survey effort. Both primary and secondary survey effort were presented as on-effort survey effort in this report.

2.1.8. Encounter rates of Chinese White Dolphins (number of on-effort sightings per 100 km of survey effort and number of dolphins from all on-effort sightings per 100 km of survey effort) were calculated in SWL survey area in relation to the amount of survey effort conducted during each month of monitoring survey. Only data collected under Beaufort 3 or below condition would be used for encounter rate analysis. Dolphin encounter rates were calculated using the combined survey effort from both primary and secondary lines for comparison to the historical data collected by HKCRP in this survey area. For the historical data, the encounter rates were calculated by pooling all relevant survey effort

and dolphin sightings to calculate a single index.

2.2. Photo-identification Work

2.2.1. When a group of Chinese White Dolphins were sighted during the line-transect survey, the survey team would end effort and approach the group slowly from the side and behind to take photographs of them. Every attempt was made to photograph every dolphin in the group, and even photograph both sides of the dolphins, since the colouration and markings on both sides may not be symmetrical.

2.2.2. A professional digital camera (*Canon* EOS 7D model), equipped with long telephoto lenses (100-400 mm zoom), were available on board for researchers to take sharp, close-up photographs of dolphins as they surfaced. The images were shot at the highest available resolution and stored on Compact Flash memory cards for downloading onto a computer.

2.2.3. All digital images taken in the field were first examined, and those containing potentially identifiable individuals were sorted out. These photographs would then be examined in greater detail, and were carefully compared to the existing Chinese White Dolphin photo-identification catalogue maintained by HKCRP since 1995. For individual dolphins that are not readily identifiable from the catalogue but have distinct features on their bodies, they will be placed in a pool of "potential new individuals", with decision being made at the end of each year on whether any of them should be incorporated into the photo-ID catalogue.

2.2.4. Chinese White Dolphins can be identified by their natural markings, such as nicks, cuts, scars and deformities on their dorsal fin and body, and their unique spotting patterns were also used as secondary identifying features (Jefferson 2000).

2.2.5. All photographs of each individual were then compiled and arranged in chronological order, with data including the date and location first identified (initial sighting), re-sightings, associated dolphins, distinctive features, and age classes entered into a computer database.

3. Monitoring Results

3.1. Vessel-based Line-transect Survey

3.1.1. One set of systematic line-transect vessel survey was conducted under the present

monitoring study on September 21st, 2015, to cover all transect lines in SWL survey area once (the survey route and track log are presented in Figure 2 and Appendix I respectively).

3.1.2. In addition, three line-transect surveys were also conducted under the AFCD long-term marine mammal monitoring programme in SWL survey area on September 7th (with lines no. SWL005 and SWL007 covered), September 18th (with lines no. SWL003, SWL005, SWL007 and SWL009 covered), and September 25th (with lines no. SWL004, SWL006, SWL008 and SWL010 covered). Such monitoring data were also incorporated into the present study for various analyses.

3.1.3. For the present study alone, a total of 70.72 km of survey effort was collected from 11:08 to 16:43 (i.e. 5 hours and 35 minutes of survey time) on September 21st, with 100% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) (Appendix II). The total survey effort conducted on primary and secondary lines were 56.22 km and 14.50 km respectively.

3.1.4. For the combined monitoring dataset from both the present study and AFCD monitoring study, a total of 149.18 km of survey effort was collected SWL waters in September 2015.

3.1.5. During this month, 13 groups of 67 Chinese White Dolphins were sighted from the present study's survey and AFCD monitoring surveys conducted in SWL survey area (Appendix III). All except three dolphin sightings were made during on-effort search, while four of the ten on-effort sightings were made on primary lines. None of these dolphin groups was associated with an operating fishing vessel.

3.1.6. Distribution of dolphin sightings made in September 2015 is shown in Figure 3. The dolphin groups were mostly sighted along the stretch of coastline between Fan Lau and Kau Ling Chung. A few other dolphin sightings were made around the Soko Islands as well (Figure 3).

3.1.7. Encounter rates of Chinese White Dolphins deduced from the survey effort and on-effort sighting data made under favourable conditions (Beaufort 3 or below) in September 2015 are shown in Table 2. Comparison of encounter rates was also made to the one deduced in autumn months (September-November) in the past decade (2005-14) (Table 2).

3.1.8. The overall dolphin encounter rates deduced in September 2015 in Southwest Lantau waters were higher than the ones deduced from the historical data during the autumn months of 2004-15 (Table 2).

Table 2. Overall dolphin encounter rates (sightings per 100 km of survey effort) from the present monitoring survey and combined database with AFCD monitoring survey conducted in September 2015 (primary lines only, as well as both primary lines and secondary lines were used) in Southwest Lantau survey area in comparison to the ones deduced during autumn months (September-November 2005-14) in the past decade

	Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)		**Encounter rate (ANI)** (no. of dolphins from all on-effort sightings per 100 km of survey effort)	
	Primary Lines Only	Both Primary and Secondary Lines	Primary Lines Only	Both Primary and Secondary Lines
HYD-HZMB data (September 2015)	1.78	4.24	8.89	15.55
Combined data (September 2015)	3.81	6.85	13.33	29.48
Historical Data (Autumn 2005-14)		4.29		17.05

3.1.9. The average group size of Chinese White Dolphins in September 2015 was 5.2 individuals per group, which was higher than the average group size in autumn months of 2005-14 (4.0). Only two groups were very small (with 1-2 animals only), while the majority of the dolphin groups were medium in size (4-6 animals per group). Notably, one large group of 14 dolphins was sighted between the Soko Islands during this monitoring month (Figure 3).

3.2. Photo-identification Work

3.2.1. Attempts were made to photograph the dolphins sighted during all surveys conducted in September 2015.

3.2.2. Among the 67 dolphins sighted during this month's surveys, 27 individual dolphins were identified and they were re-sighted 42 times in total (Appendices IV and V). None of these individuals were accompanied by their young calves.

3.2.3. The locations where the majority of individuals were re-sighted were well within their past home ranges in Southwest and West Lantau waters. However, two individuals (NL120 and NL226) were primarily sighted in North Lantau waters in the past, but have shown up in SWL survey area for during this month's surveys. In fact, NL226 has shown up consistently in SWL waters but not elsewhere in the past consecutive months since June 2015, and it has apparently shifted its home range to this area recently.

3.2.4. Notably, WL168, WL190 and WL229 were all sighted in SWL waters for the first time

during this month's surveys. All three individuals were only sighted in West Lantau in the past, but have extended their range use to Southwest Lantau waters recently. Their future usage of SWL area should be continuously monitored.

4. References

Buckland, S. T., Anderson, D. R., Burnham, K. P., Laake, J. L., Borchers, D. L., and Thomas, L. 2001. Introduction to distance sampling: estimating abundance of biological populations. Oxford University Press, London.

Hung, S. K. 2014. Monitoring of Marine Mammals in Hong Kong waters: final report (2013-14). An unpublished report submitted to the Agriculture, Fisheries and Conservation Department, 231 pp.

Jefferson, T. A. 2000. Population biology of the Indo-Pacific hump-backed dolphin in Hong Kong waters. Wildlife Monographs 144:1-65.

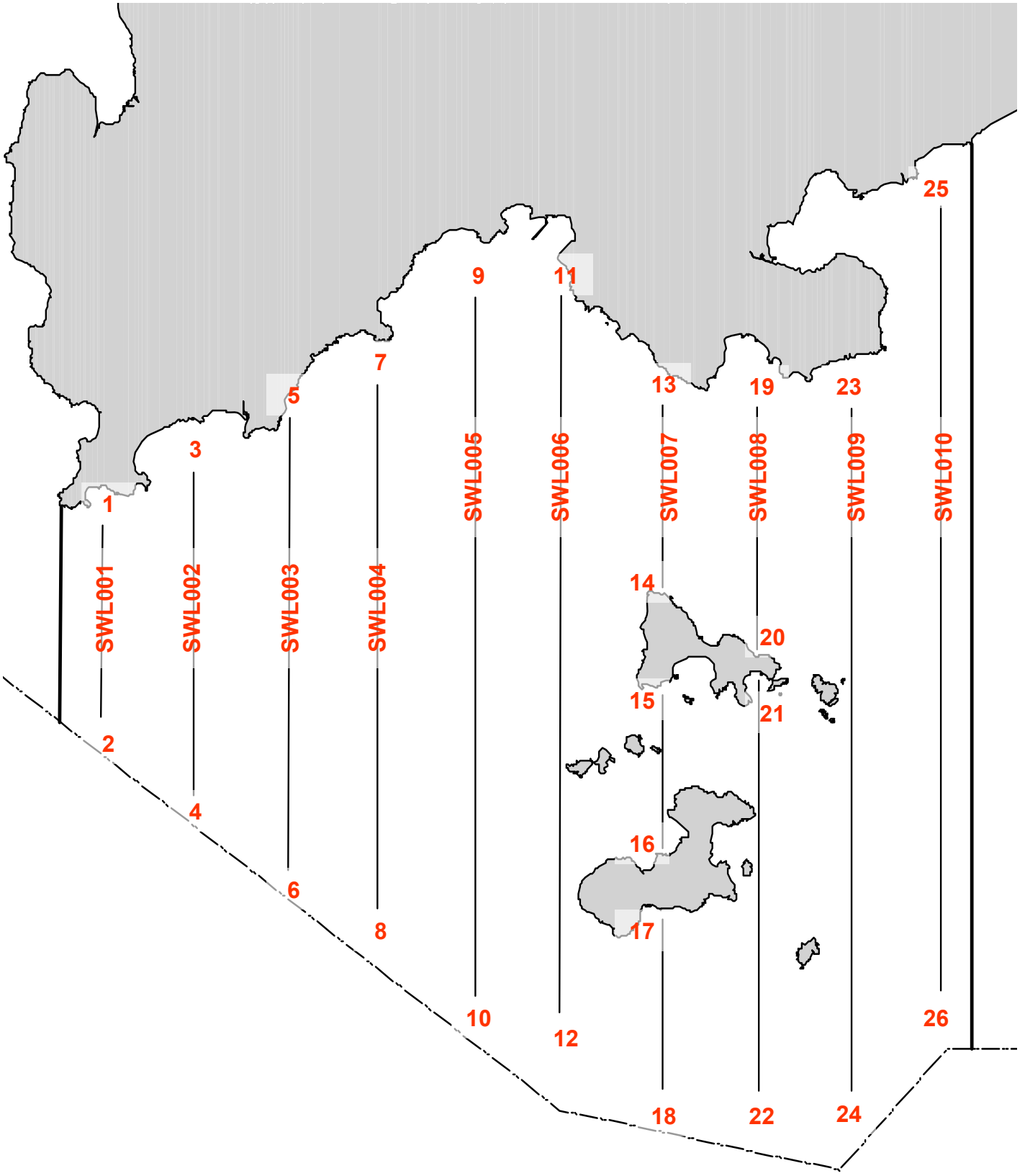


Figure 1. Survey Lines and associated coordinates in Southwest Lantau survey area

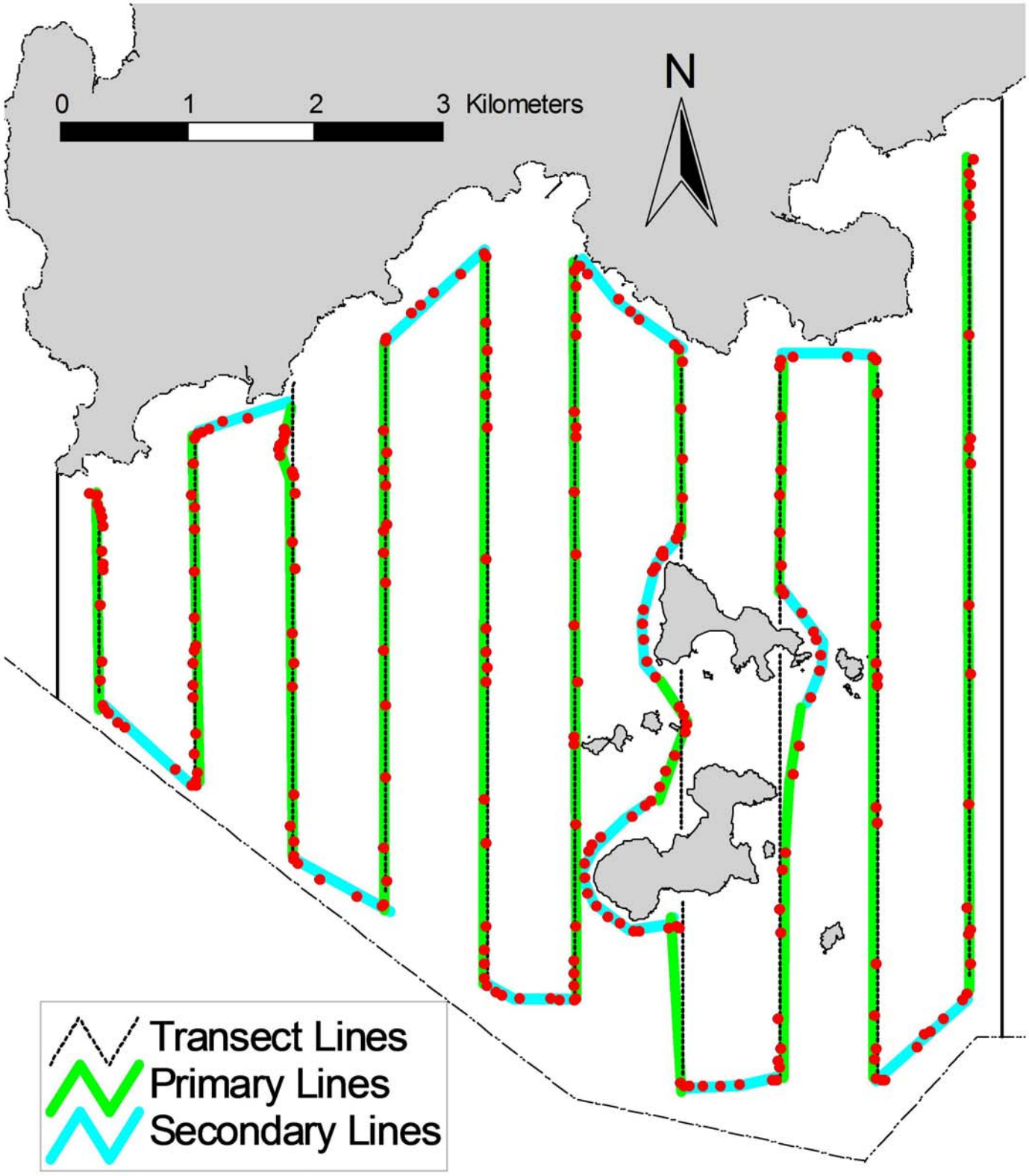


Figure 2. Survey Route on September 21st, 2015 (note: red dots represent the tracked positions of survey boat logged continuously by GPS throughout the course of the survey)

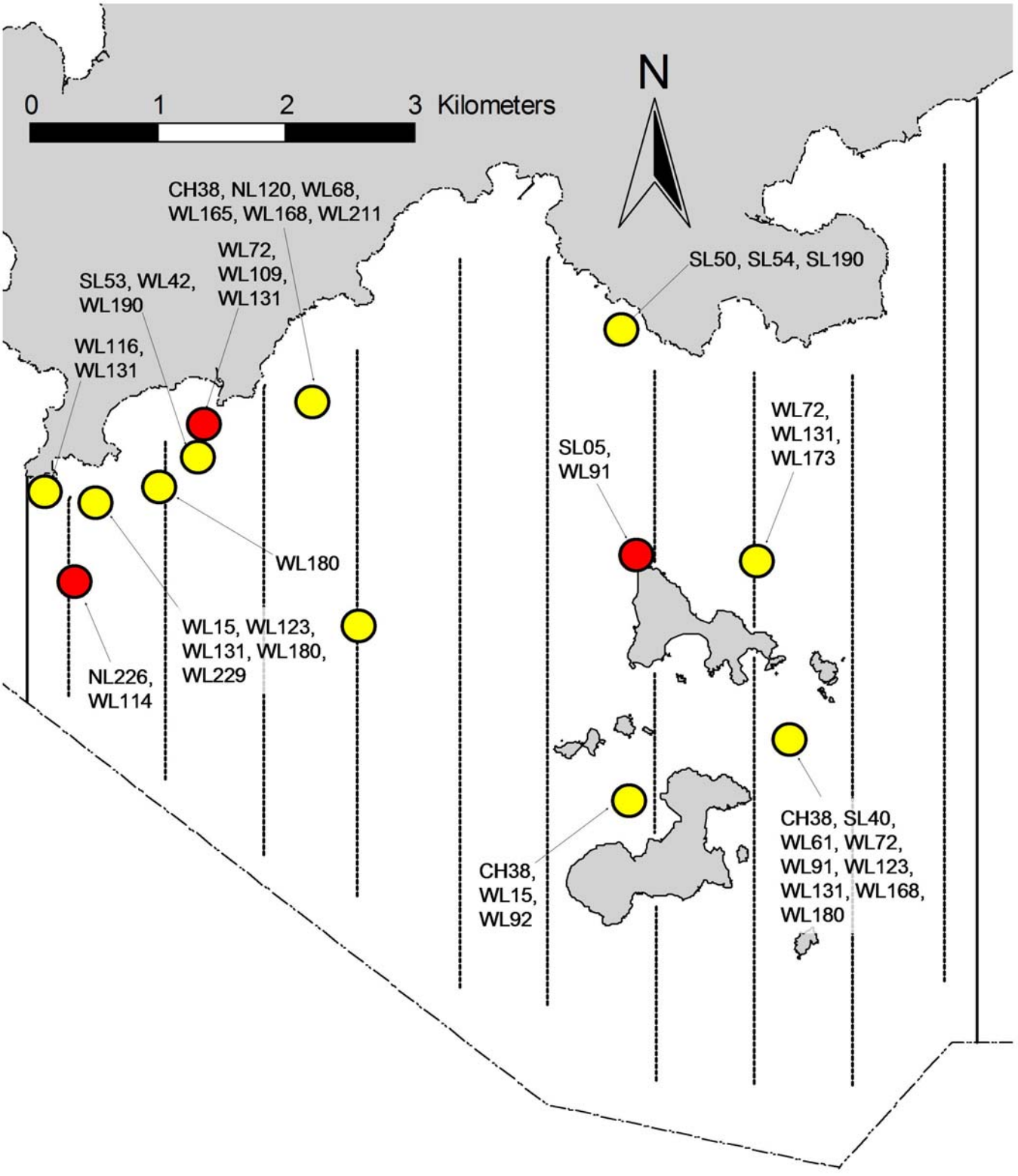


Figure 3. Distribution of Chinese White Dolphin sightings during September 2015 monitoring surveys in Southwest Lantau survey area, with identified individuals indicated for their corresponding sightings (red dot: HYD-HZMB sighting; yellow dot: AFCD sighting)

Appendix I. Track Log of Southwest Lantau Survey on Sept. 21st, 2015

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 11:08	ON	N22.19391 E113.84840			
21/9/2015 11:08	ON	N22.19384 E113.84899	61 m	0:00:16	14 kph
21/9/2015 11:08	ON	N22.19372 E113.84909	17 m	0:00:05	12 kph
21/9/2015 11:09	ON	N22.19330 E113.84910	46 m	0:00:14	12 kph
21/9/2015 11:09	ON	N22.19288 E113.84914	47 m	0:00:13	13 kph
21/9/2015 11:09	ON	N22.19236 E113.84939	63 m	0:00:16	14 kph
21/9/2015 11:09	ON	N22.19184 E113.84964	64 m	0:00:16	14 kph
21/9/2015 11:10	ON	N22.19136 E113.84970	54 m	0:00:14	14 kph
21/9/2015 11:10	ON	N22.19090 E113.84978	51 m	0:00:13	14 kph
21/9/2015 11:10	ON	N22.19029 E113.84973	69 m	0:00:17	15 kph
21/9/2015 11:10	ON	N22.18972 E113.84967	64 m	0:00:16	14 kph
21/9/2015 11:11	ON	N22.18922 E113.84963	55 m	0:00:14	14 kph
21/9/2015 11:11	ON	N22.18873 E113.84958	55 m	0:00:14	14 kph
21/9/2015 11:11	ON	N22.18815 E113.84957	65 m	0:00:16	15 kph
21/9/2015 11:11	ON	N22.18761 E113.84965	61 m	0:00:15	15 kph
21/9/2015 11:12	ON	N22.18713 E113.84973	54 m	0:00:13	15 kph
21/9/2015 11:12	ON	N22.18670 E113.84972	48 m	0:00:16	11 kph
21/9/2015 11:12	ON	N22.18649 E113.84971	24 m	0:00:13	7 kph
21/9/2015 11:12	OFF	N22.18631 E113.84972	20 m	0:00:15	5 kph
21/9/2015 11:13	OFF	N22.18618 E113.84973	14 m	0:00:14	4 kph
21/9/2015 11:13	OFF	N22.18610 E113.84975	10 m	0:00:13	3 kph
21/9/2015 11:13	OFF	N22.18603 E113.84979	8 m	0:00:12	3 kph
21/9/2015 11:13	OFF	N22.18596 E113.84983	9 m	0:00:15	2 kph
21/9/2015 11:13	OFF	N22.18593 E113.84986	4 m	0:00:13	1.1 kph
21/9/2015 11:14	OFF	N22.18589 E113.84990	6 m	0:00:10	2 kph
21/9/2015 11:14	OFF	N22.18586 E113.84993	5 m	0:00:11	2 kph
21/9/2015 11:14	OFF	N22.18585 E113.84993	1 m	0:00:01	3 kph
21/9/2015 11:14	OFF	N22.18566 E113.84977	27 m	0:00:18	5 kph
21/9/2015 11:14	OFF	N22.18563 E113.84968	10 m	0:00:05	7 kph
21/9/2015 11:14	OFF	N22.18559 E113.84945	24 m	0:00:11	8 kph
21/9/2015 11:15	OFF	N22.18557 E113.84913	33 m	0:00:15	8 kph
21/9/2015 11:15	OFF	N22.18555 E113.84881	34 m	0:00:15	8 kph
21/9/2015 11:15	OFF	N22.18550 E113.84854	28 m	0:00:16	6 kph
21/9/2015 11:15	OFF	N22.18544 E113.84830	26 m	0:00:17	6 kph
21/9/2015 11:16	OFF	N22.18539 E113.84810	21 m	0:00:15	5 kph
21/9/2015 11:16	OFF	N22.18538 E113.84806	4 m	0:00:03	5 kph
21/9/2015 11:16	OFF	N22.18535 E113.84792	15 m	0:00:13	4 kph
21/9/2015 11:16	OFF	N22.18533 E113.84785	7 m	0:00:06	4 kph
21/9/2015 11:16	OFF	N22.18532 E113.84781	5 m	0:00:04	4 kph
21/9/2015 11:16	OFF	N22.18530 E113.84776	6 m	0:00:05	4 kph
21/9/2015 11:16	OFF	N22.18528 E113.84771	6 m	0:00:05	4 kph
21/9/2015 11:16	OFF	N22.18526 E113.84767	4 m	0:00:04	4 kph
21/9/2015 11:16	OFF	N22.18524 E113.84760	8 m	0:00:07	4 kph
21/9/2015 11:17	OFF	N22.18523 E113.84753	7 m	0:00:05	5 kph
21/9/2015 11:17	OFF	N22.18527 E113.84738	16 m	0:00:11	5 kph
21/9/2015 11:17	OFF	N22.18539 E113.84735	14 m	0:00:12	4 kph
21/9/2015 11:17	OFF	N22.18564 E113.84745	30 m	0:00:21	5 kph
21/9/2015 11:18	OFF	N22.18587 E113.84759	29 m	0:00:17	6 kph
21/9/2015 11:18	OFF	N22.18604 E113.84769	22 m	0:00:13	6 kph
21/9/2015 11:18	OFF	N22.18623 E113.84780	23 m	0:00:15	6 kph
21/9/2015 11:18	OFF	N22.18646 E113.84794	30 m	0:00:20	5 kph
21/9/2015 11:19	OFF	N22.18665 E113.84806	24 m	0:00:16	5 kph
21/9/2015 11:19	OFF	N22.18681 E113.84817	21 m	0:00:14	5 kph
21/9/2015 11:19	OFF	N22.18703 E113.84830	28 m	0:00:19	5 kph
21/9/2015 11:19	OFF	N22.18708 E113.84832	6 m	0:00:04	5 kph
21/9/2015 11:19	OFF	N22.18716 E113.84837	10 m	0:00:07	5 kph
21/9/2015 11:20	OFF	N22.18727 E113.84844	15 m	0:00:13	4 kph
21/9/2015 11:20	OFF	N22.18736 E113.84851	12 m	0:00:13	3 kph
21/9/2015 11:20	OFF	N22.18744 E113.84861	13 m	0:00:17	3 kph
21/9/2015 11:20	OFF	N22.18755 E113.84871	16 m	0:00:16	4 kph
21/9/2015 11:21	OFF	N22.18774 E113.84896	32 m	0:00:13	9 kph
21/9/2015 11:21	OFF	N22.18767 E113.84937	43 m	0:00:14	11 kph
21/9/2015 11:21	OFF	N22.18733 E113.84945	39 m	0:00:13	11 kph
21/9/2015 11:21	OFF	N22.18714 E113.84939	21 m	0:00:06	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 11:21	ON	N22.18668 E113.84933	51 m	0:00:13	14 kph
21/9/2015 11:22	ON	N22.18616 E113.84940	59 m	0:00:14	15 kph
21/9/2015 11:22	ON	N22.18561 E113.84953	63 m	0:00:15	15 kph
21/9/2015 11:22	ON	N22.18528 E113.84957	37 m	0:00:09	15 kph
21/9/2015 11:22	ON	N22.18473 E113.84953	62 m	0:00:15	15 kph
21/9/2015 11:22	ON	N22.18413 E113.84946	66 m	0:00:16	15 kph
21/9/2015 11:23	ON	N22.18360 E113.84945	59 m	0:00:14	15 kph
21/9/2015 11:23	ON	N22.18300 E113.84951	67 m	0:00:16	15 kph
21/9/2015 11:23	ON	N22.18245 E113.84956	61 m	0:00:15	15 kph
21/9/2015 11:23	ON	N22.18192 E113.84953	60 m	0:00:15	14 kph
21/9/2015 11:24	ON	N22.18144 E113.84946	53 m	0:00:13	15 kph
21/9/2015 11:24	ON	N22.18092 E113.84946	58 m	0:00:14	15 kph
21/9/2015 11:24	ON	N22.18031 E113.84950	68 m	0:00:16	15 kph
21/9/2015 11:25	ON	N22.17954 E113.84958	86 m	0:00:20	15 kph
21/9/2015 11:25	ON	N22.17899 E113.84959	62 m	0:00:15	15 kph
21/9/2015 11:25	ON	N22.17851 E113.84958	53 m	0:00:13	15 kph
21/9/2015 11:25	ON	N22.17797 E113.84951	61 m	0:00:15	15 kph
21/9/2015 11:25	ON	N22.17739 E113.84948	65 m	0:00:16	15 kph
21/9/2015 11:26	ON	N22.17691 E113.84952	54 m	0:00:13	15 kph
21/9/2015 11:26	ON	N22.17631 E113.84954	67 m	0:00:16	15 kph
21/9/2015 11:26	ON	N22.17570 E113.84962	68 m	0:00:16	15 kph
21/9/2015 11:26	ON	N22.17522 E113.84969	55 m	0:00:13	15 kph
21/9/2015 11:27	ON	N22.17485 E113.84994	49 m	0:00:12	15 kph
21/9/2015 11:27	ON	N22.17453 E113.85036	56 m	0:00:13	15 kph
21/9/2015 11:27	ON	N22.17411 E113.85088	71 m	0:00:16	16 kph
21/9/2015 11:27	ON	N22.17372 E113.85131	62 m	0:00:14	16 kph
21/9/2015 11:28	ON	N22.17320 E113.85195	88 m	0:00:20	16 kph
21/9/2015 11:28	ON	N22.17285 E113.85248	67 m	0:00:15	16 kph
21/9/2015 11:28	ON	N22.17240 E113.85315	85 m	0:00:19	16 kph
21/9/2015 11:29	ON	N22.17200 E113.85364	67 m	0:00:15	16 kph
21/9/2015 11:29	ON	N22.17153 E113.85417	76 m	0:00:17	16 kph
21/9/2015 11:29	ON	N22.17113 E113.85471	72 m	0:00:16	16 kph
21/9/2015 11:29	ON	N22.17099 E113.85493	27 m	0:00:06	16 kph
21/9/2015 11:29	ON	N22.17060 E113.85552	75 m	0:00:17	16 kph
21/9/2015 11:30	ON	N22.17026 E113.85600	62 m	0:00:14	16 kph
21/9/2015 11:30	ON	N22.16986 E113.85655	72 m	0:00:16	16 kph
21/9/2015 11:30	ON	N22.16948 E113.85707	68 m	0:00:15	16 kph
21/9/2015 11:30	ON	N22.16904 E113.85763	77 m	0:00:17	16 kph
21/9/2015 11:31	ON	N22.16854 E113.85821	81 m	0:00:18	16 kph
21/9/2015 11:31	ON	N22.16815 E113.85868	65 m	0:00:15	16 kph
21/9/2015 11:31	ON	N22.16822 E113.85906	40 m	0:00:12	12 kph
21/9/2015 11:31	ON	N22.16860 E113.85924	46 m	0:00:15	11 kph
21/9/2015 11:32	ON	N22.16915 E113.85929	62 m	0:00:18	12 kph
21/9/2015 11:32	ON	N22.16970 E113.85918	61 m	0:00:19	12 kph
21/9/2015 11:32	ON	N22.17021 E113.85912	57 m	0:00:17	12 kph
21/9/2015 11:33	ON	N22.17090 E113.85897	78 m	0:00:24	12 kph
21/9/2015 11:33	ON	N22.17145 E113.85904	62 m	0:00:18	12 kph
21/9/2015 11:33	ON	N22.17204 E113.85904	65 m	0:00:19	12 kph
21/9/2015 11:34	ON	N22.17266 E113.85905	69 m	0:00:20	12 kph
21/9/2015 11:34	ON	N22.17320 E113.85900	60 m	0:00:18	12 kph
21/9/2015 11:34	ON	N22.17371 E113.85894	57 m	0:00:17	12 kph
21/9/2015 11:35	ON	N22.17427 E113.85898	63 m	0:00:18	13 kph
21/9/2015 11:35	ON	N22.17484 E113.85892	64 m	0:00:19	12 kph
21/9/2015 11:35	ON	N22.17536 E113.85886	58 m	0:00:17	12 kph
21/9/2015 11:36	ON	N22.17593 E113.85891	64 m	0:00:18	13 kph
21/9/2015 11:36	ON	N22.17638 E113.85888	50 m	0:00:15	12 kph
21/9/2015 11:36	ON	N22.17699 E113.85883	68 m	0:00:20	12 kph
21/9/2015 11:36	ON	N22.17755 E113.85886	63 m	0:00:18	13 kph
21/9/2015 11:37	ON	N22.17810 E113.85883	61 m	0:00:18	12 kph
21/9/2015 11:37	ON	N22.17849 E113.85881	43 m	0:00:15	10 kph
21/9/2015 11:37	ON	N22.17894 E113.85892	51 m	0:00:18	10 kph
21/9/2015 11:38	ON	N22.17940 E113.85895	52 m	0:00:18	10 kph
21/9/2015 11:38	ON	N22.18003 E113.85900	70 m	0:00:20	13 kph
21/9/2015 11:38	ON	N22.18048 E113.85906	51 m	0:00:14	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 11:38	ON	N22.18100 E113.85900	58 m	0:00:17	12 kph
21/9/2015 11:39	ON	N22.18157 E113.85887	65 m	0:00:19	12 kph
21/9/2015 11:39	ON	N22.18195 E113.85890	43 m	0:00:12	13 kph
21/9/2015 11:39	ON	N22.18247 E113.85889	58 m	0:00:16	13 kph
21/9/2015 11:39	ON	N22.18293 E113.85885	52 m	0:00:15	12 kph
21/9/2015 11:40	ON	N22.18351 E113.85886	64 m	0:00:18	13 kph
21/9/2015 11:40	ON	N22.18410 E113.85891	66 m	0:00:18	13 kph
21/9/2015 11:40	ON	N22.18462 E113.85894	57 m	0:00:16	13 kph
21/9/2015 11:41	ON	N22.18505 E113.85900	49 m	0:00:13	13 kph
21/9/2015 11:41	ON	N22.18565 E113.85898	66 m	0:00:18	13 kph
21/9/2015 11:41	ON	N22.18636 E113.85894	80 m	0:00:22	13 kph
21/9/2015 11:42	ON	N22.18701 E113.85904	73 m	0:00:19	14 kph
21/9/2015 11:42	ON	N22.18764 E113.85903	71 m	0:00:19	13 kph
21/9/2015 11:42	ON	N22.18830 E113.85901	73 m	0:00:19	14 kph
21/9/2015 11:42	ON	N22.18895 E113.85897	73 m	0:00:19	14 kph
21/9/2015 11:43	ON	N22.18959 E113.85887	72 m	0:00:19	14 kph
21/9/2015 11:43	ON	N22.19022 E113.85890	70 m	0:00:18	14 kph
21/9/2015 11:43	ON	N22.19070 E113.85885	54 m	0:00:14	14 kph
21/9/2015 11:44	ON	N22.19141 E113.85888	79 m	0:00:20	14 kph
21/9/2015 11:44	ON	N22.19197 E113.85896	62 m	0:00:16	14 kph
21/9/2015 11:44	ON	N22.19263 E113.85896	74 m	0:00:19	14 kph
21/9/2015 11:45	ON	N22.19324 E113.85878	71 m	0:00:18	14 kph
21/9/2015 11:45	ON	N22.19376 E113.85867	58 m	0:00:15	14 kph
21/9/2015 11:45	ON	N22.19441 E113.85877	74 m	0:00:19	14 kph
21/9/2015 11:45	ON	N22.19501 E113.85881	67 m	0:00:17	14 kph
21/9/2015 11:46	ON	N22.19546 E113.85876	50 m	0:00:13	14 kph
21/9/2015 11:46	ON	N22.19598 E113.85869	58 m	0:00:16	13 kph
21/9/2015 11:46	ON	N22.19652 E113.85880	62 m	0:00:18	12 kph
21/9/2015 11:46	ON	N22.19711 E113.85887	66 m	0:00:19	13 kph
21/9/2015 11:47	ON	N22.19770 E113.85885	65 m	0:00:18	13 kph
21/9/2015 11:47	ON	N22.19833 E113.85890	71 m	0:00:20	13 kph
21/9/2015 11:47	ON	N22.19874 E113.85896	46 m	0:00:13	13 kph
21/9/2015 11:48	ON	N22.19910 E113.85923	49 m	0:00:16	11 kph
21/9/2015 11:48	ON	N22.19928 E113.85965	47 m	0:00:16	11 kph
21/9/2015 11:48	ON	N22.19945 E113.86000	41 m	0:00:14	11 kph
21/9/2015 11:48	ON	N22.19962 E113.86036	41 m	0:00:14	11 kph
21/9/2015 11:49	ON	N22.19979 E113.86078	47 m	0:00:16	11 kph
21/9/2015 11:49	ON	N22.19998 E113.86126	54 m	0:00:18	11 kph
21/9/2015 11:49	ON	N22.20016 E113.86177	57 m	0:00:19	11 kph
21/9/2015 11:49	ON	N22.20030 E113.86224	51 m	0:00:17	11 kph
21/9/2015 11:50	OFF	N22.20039 E113.86262	40 m	0:00:18	8 kph
21/9/2015 11:50	OFF	N22.20043 E113.86277	17 m	0:00:17	3 kph
21/9/2015 11:50	OFF	N22.20046 E113.86281	5 m	0:00:17	1.1 kph
21/9/2015 11:51	OFF	N22.20048 E113.86281	2 m	0:00:18	0.4 kph
21/9/2015 11:51	OFF	N22.20050 E113.86281	3 m	0:00:13	0.7 kph
21/9/2015 11:51	OFF	N22.20056 E113.86306	26 m	0:00:17	6 kph
21/9/2015 11:51	OFF	N22.20059 E113.86337	32 m	0:00:16	7 kph
21/9/2015 11:52	OFF	N22.20064 E113.86360	25 m	0:00:19	5 kph
21/9/2015 11:52	OFF	N22.20066 E113.86369	9 m	0:00:16	2 kph
21/9/2015 11:52	OFF	N22.20068 E113.86375	7 m	0:00:16	1.5 kph
21/9/2015 11:52	OFF	N22.20068 E113.86380	5 m	0:00:05	3 kph
21/9/2015 11:52	OFF	N22.20067 E113.86382	2 m	0:00:02	4 kph
21/9/2015 11:52	OFF	N22.20067 E113.86384	2 m	0:00:02	4 kph
21/9/2015 11:53	OFF	N22.20063 E113.86394	11 m	0:00:09	5 kph
21/9/2015 11:53	OFF	N22.20061 E113.86399	6 m	0:00:04	5 kph
21/9/2015 11:53	OFF	N22.20052 E113.86418	22 m	0:00:15	5 kph
21/9/2015 11:53	OFF	N22.20047 E113.86429	12 m	0:00:10	4 kph
21/9/2015 11:53	OFF	N22.20044 E113.86435	7 m	0:00:06	4 kph
21/9/2015 11:53	OFF	N22.20038 E113.86446	14 m	0:00:12	4 kph
21/9/2015 11:54	OFF	N22.20034 E113.86467	22 m	0:00:16	5 kph
21/9/2015 11:54	OFF	N22.20034 E113.86478	11 m	0:00:09	5 kph
21/9/2015 11:54	OFF	N22.20035 E113.86483	6 m	0:00:05	4 kph
21/9/2015 11:54	OFF	N22.20038 E113.86491	8 m	0:00:08	4 kph
21/9/2015 11:54	OFF	N22.20045 E113.86504	15 m	0:00:16	3 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 11:55	OFF	N22.20049 E113.86517	14 m	0:00:17	3 kph
21/9/2015 11:55	OFF	N22.20049 E113.86529	13 m	0:00:17	3 kph
21/9/2015 11:55	OFF	N22.20047 E113.86541	12 m	0:00:16	3 kph
21/9/2015 11:55	OFF	N22.20045 E113.86554	14 m	0:00:16	3 kph
21/9/2015 11:55	OFF	N22.20042 E113.86564	11 m	0:00:08	5 kph
21/9/2015 11:56	OFF	N22.20040 E113.86573	10 m	0:00:06	6 kph
21/9/2015 11:56	OFF	N22.20034 E113.86595	23 m	0:00:13	6 kph
21/9/2015 11:56	OFF	N22.20029 E113.86612	19 m	0:00:10	7 kph
21/9/2015 11:56	OFF	N22.20025 E113.86623	12 m	0:00:07	6 kph
21/9/2015 11:56	OFF	N22.20021 E113.86634	12 m	0:00:08	5 kph
21/9/2015 11:56	OFF	N22.20020 E113.86637	3 m	0:00:02	5 kph
21/9/2015 11:56	OFF	N22.20018 E113.86642	5 m	0:00:04	5 kph
21/9/2015 11:56	OFF	N22.20015 E113.86649	8 m	0:00:06	5 kph
21/9/2015 11:57	OFF	N22.20010 E113.86664	16 m	0:00:13	5 kph
21/9/2015 11:57	OFF	N22.20010 E113.86665	1 m	0:00:01	5 kph
21/9/2015 11:57	OFF	N22.20007 E113.86673	9 m	0:00:07	4 kph
21/9/2015 11:57	OFF	N22.20006 E113.86675	3 m	0:00:02	5 kph
21/9/2015 11:57	OFF	N22.19999 E113.86690	17 m	0:00:14	4 kph
21/9/2015 11:57	OFF	N22.19997 E113.86698	9 m	0:00:06	5 kph
21/9/2015 11:57	OFF	N22.19996 E113.86704	6 m	0:00:04	6 kph
21/9/2015 11:57	OFF	N22.19994 E113.86720	17 m	0:00:10	6 kph
21/9/2015 11:58	OFF	N22.19991 E113.86745	26 m	0:00:17	5 kph
21/9/2015 11:58	OFF	N22.19989 E113.86758	14 m	0:00:11	5 kph
21/9/2015 11:58	OFF	N22.19988 E113.86763	5 m	0:00:04	4 kph
21/9/2015 11:58	OFF	N22.19987 E113.86770	7 m	0:00:06	4 kph
21/9/2015 11:58	OFF	N22.19987 E113.86772	2 m	0:00:02	4 kph
21/9/2015 11:58	OFF	N22.19983 E113.86785	15 m	0:00:15	4 kph
21/9/2015 11:59	OFF	N22.19980 E113.86796	11 m	0:00:18	2 kph
21/9/2015 11:59	OFF	N22.19980 E113.86797	1 m	0:00:12	0.4 kph
21/9/2015 11:59	OFF	N22.19979 E113.86798	1 m	0:00:11	0.3 kph
21/9/2015 11:59	OFF	N22.19979 E113.86798	1 m	0:00:12	0.2 kph
21/9/2015 11:59	OFF	N22.19978 E113.86798	1 m	0:00:11	0.3 kph
21/9/2015 11:59	OFF	N22.19976 E113.86798	3 m	0:00:08	1.2 kph
21/9/2015 12:00	OFF	N22.19973 E113.86799	3 m	0:00:14	0.8 kph
21/9/2015 12:00	OFF	N22.19970 E113.86799	3 m	0:00:12	0.9 kph
21/9/2015 12:00	OFF	N22.19967 E113.86797	3 m	0:00:13	0.9 kph
21/9/2015 12:00	OFF	N22.19965 E113.86796	3 m	0:00:14	0.7 kph
21/9/2015 12:01	OFF	N22.19963 E113.86796	2 m	0:00:11	0.8 kph
21/9/2015 12:01	OFF	N22.19961 E113.86796	2 m	0:00:02	4 kph
21/9/2015 12:01	OFF	N22.19942 E113.86810	25 m	0:00:13	7 kph
21/9/2015 12:01	ON	N22.19932 E113.86812	11 m	0:00:04	10 kph
21/9/2015 12:01	ON	N22.19895 E113.86800	43 m	0:00:13	12 kph
21/9/2015 12:01	ON	N22.19851 E113.86784	52 m	0:00:14	13 kph
21/9/2015 12:02	ON	N22.19820 E113.86751	48 m	0:00:13	13 kph
21/9/2015 12:02	ON	N22.19778 E113.86736	49 m	0:00:14	13 kph
21/9/2015 12:02	ON	N22.19715 E113.86757	73 m	0:00:18	15 kph
21/9/2015 12:02	ON	N22.19671 E113.86787	58 m	0:00:14	15 kph
21/9/2015 12:03	ON	N22.19622 E113.86831	71 m	0:00:18	14 kph
21/9/2015 12:03	ON	N22.19590 E113.86867	50 m	0:00:13	14 kph
21/9/2015 12:03	ON	N22.19542 E113.86885	57 m	0:00:15	14 kph
21/9/2015 12:03	ON	N22.19498 E113.86883	49 m	0:00:13	14 kph
21/9/2015 12:04	ON	N22.19449 E113.86890	56 m	0:00:15	13 kph
21/9/2015 12:04	ON	N22.19385 E113.86896	71 m	0:00:19	14 kph
21/9/2015 12:04	ON	N22.19341 E113.86894	48 m	0:00:13	13 kph
21/9/2015 12:04	ON	N22.19296 E113.86887	50 m	0:00:14	13 kph
21/9/2015 12:05	ON	N22.19249 E113.86890	52 m	0:00:14	13 kph
21/9/2015 12:05	ON	N22.19206 E113.86893	48 m	0:00:13	13 kph
21/9/2015 12:05	ON	N22.19146 E113.86891	67 m	0:00:18	13 kph
21/9/2015 12:05	ON	N22.19087 E113.86893	66 m	0:00:18	13 kph
21/9/2015 12:06	ON	N22.19010 E113.86892	85 m	0:00:23	13 kph
21/9/2015 12:06	ON	N22.18963 E113.86884	54 m	0:00:15	13 kph
21/9/2015 12:06	ON	N22.18906 E113.86886	63 m	0:00:17	13 kph
21/9/2015 12:07	ON	N22.18842 E113.86893	72 m	0:00:19	14 kph
21/9/2015 12:07	ON	N22.18782 E113.86898	68 m	0:00:18	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 12:07	ON	N22.18728 E113.86900	60 m	0:00:16	13 kph
21/9/2015 12:07	ON	N22.18669 E113.86896	66 m	0:00:18	13 kph
21/9/2015 12:08	ON	N22.18607 E113.86892	68 m	0:00:18	14 kph
21/9/2015 12:08	ON	N22.18554 E113.86888	60 m	0:00:16	14 kph
21/9/2015 12:08	ON	N22.18504 E113.86890	55 m	0:00:14	14 kph
21/9/2015 12:09	ON	N22.18445 E113.86890	66 m	0:00:17	14 kph
21/9/2015 12:09	ON	N22.18390 E113.86892	62 m	0:00:16	14 kph
21/9/2015 12:09	ON	N22.18326 E113.86888	71 m	0:00:19	13 kph
21/9/2015 12:09	ON	N22.18274 E113.86885	58 m	0:00:15	14 kph
21/9/2015 12:10	ON	N22.18223 E113.86885	57 m	0:00:15	14 kph
21/9/2015 12:10	ON	N22.18162 E113.86882	69 m	0:00:18	14 kph
21/9/2015 12:10	ON	N22.18115 E113.86884	53 m	0:00:14	14 kph
21/9/2015 12:10	ON	N22.18054 E113.86883	67 m	0:00:17	14 kph
21/9/2015 12:11	ON	N22.18006 E113.86883	54 m	0:00:14	14 kph
21/9/2015 12:11	ON	N22.17945 E113.86887	67 m	0:00:17	14 kph
21/9/2015 12:11	ON	N22.17886 E113.86888	66 m	0:00:17	14 kph
21/9/2015 12:12	ON	N22.17813 E113.86886	81 m	0:00:21	14 kph
21/9/2015 12:12	ON	N22.17751 E113.86883	70 m	0:00:18	14 kph
21/9/2015 12:12	ON	N22.17691 E113.86878	66 m	0:00:17	14 kph
21/9/2015 12:12	ON	N22.17637 E113.86882	61 m	0:00:15	15 kph
21/9/2015 12:13	ON	N22.17588 E113.86881	54 m	0:00:14	14 kph
21/9/2015 12:13	ON	N22.17523 E113.86884	73 m	0:00:18	15 kph
21/9/2015 12:13	ON	N22.17463 E113.86890	67 m	0:00:17	14 kph
21/9/2015 12:14	ON	N22.17393 E113.86888	78 m	0:00:20	14 kph
21/9/2015 12:14	ON	N22.17338 E113.86888	61 m	0:00:15	15 kph
21/9/2015 12:14	ON	N22.17270 E113.86889	76 m	0:00:19	14 kph
21/9/2015 12:14	ON	N22.17223 E113.86888	52 m	0:00:13	14 kph
21/9/2015 12:15	ON	N22.17162 E113.86885	68 m	0:00:17	14 kph
21/9/2015 12:15	ON	N22.17113 E113.86882	55 m	0:00:14	14 kph
21/9/2015 12:15	ON	N22.17036 E113.86883	86 m	0:00:21	15 kph
21/9/2015 12:15	ON	N22.16979 E113.86885	64 m	0:00:16	14 kph
21/9/2015 12:16	ON	N22.16921 E113.86883	64 m	0:00:16	14 kph
21/9/2015 12:16	ON	N22.16856 E113.86883	72 m	0:00:18	14 kph
21/9/2015 12:16	ON	N22.16791 E113.86886	73 m	0:00:18	15 kph
21/9/2015 12:17	ON	N22.16732 E113.86890	65 m	0:00:16	15 kph
21/9/2015 12:17	ON	N22.16671 E113.86886	69 m	0:00:17	15 kph
21/9/2015 12:17	ON	N22.16613 E113.86880	65 m	0:00:16	15 kph
21/9/2015 12:17	ON	N22.16551 E113.86881	69 m	0:00:17	15 kph
21/9/2015 12:18	ON	N22.16504 E113.86880	53 m	0:00:13	15 kph
21/9/2015 12:18	ON	N22.16461 E113.86874	48 m	0:00:12	14 kph
21/9/2015 12:18	ON	N22.16418 E113.86877	48 m	0:00:12	14 kph
21/9/2015 12:18	ON	N22.16363 E113.86889	63 m	0:00:15	15 kph
21/9/2015 12:19	ON	N22.16319 E113.86896	49 m	0:00:12	15 kph
21/9/2015 12:19	ON	N22.16255 E113.86889	72 m	0:00:18	14 kph
21/9/2015 12:19	ON	N22.16200 E113.86889	62 m	0:00:15	15 kph
21/9/2015 12:19	ON	N22.16155 E113.86901	52 m	0:00:13	14 kph
21/9/2015 12:20	ON	N22.16117 E113.86940	58 m	0:00:14	15 kph
21/9/2015 12:20	ON	N22.16082 E113.86996	70 m	0:00:16	16 kph
21/9/2015 12:20	ON	N22.16063 E113.87029	40 m	0:00:09	16 kph
21/9/2015 12:20	ON	N22.16037 E113.87077	57 m	0:00:13	16 kph
21/9/2015 12:20	ON	N22.16000 E113.87143	79 m	0:00:18	16 kph
21/9/2015 12:21	ON	N22.15990 E113.87161	22 m	0:00:05	16 kph
21/9/2015 12:21	ON	N22.15963 E113.87222	69 m	0:00:16	16 kph
21/9/2015 12:21	ON	N22.15940 E113.87285	70 m	0:00:16	16 kph
21/9/2015 12:21	ON	N22.15908 E113.87358	83 m	0:00:19	16 kph
21/9/2015 12:21	ON	N22.15901 E113.87373	18 m	0:00:04	16 kph
21/9/2015 12:22	ON	N22.15877 E113.87427	61 m	0:00:14	16 kph
21/9/2015 12:22	ON	N22.15852 E113.87484	65 m	0:00:15	16 kph
21/9/2015 12:22	ON	N22.15833 E113.87530	53 m	0:00:12	16 kph
21/9/2015 12:22	ON	N22.15804 E113.87605	84 m	0:00:19	16 kph
21/9/2015 12:23	ON	N22.15785 E113.87661	61 m	0:00:14	16 kph
21/9/2015 12:23	ON	N22.15764 E113.87725	70 m	0:00:16	16 kph
21/9/2015 12:23	ON	N22.15750 E113.87790	70 m	0:00:17	15 kph
21/9/2015 12:23	ON	N22.15774 E113.87814	36 m	0:00:12	11 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 12:24	ON	N22.15821 E113.87820	53 m	0:00:16	12 kph
21/9/2015 12:24	ON	N22.15877 E113.87815	63 m	0:00:18	13 kph
21/9/2015 12:24	ON	N22.15932 E113.87826	62 m	0:00:17	13 kph
21/9/2015 12:25	ON	N22.15977 E113.87832	50 m	0:00:14	13 kph
21/9/2015 12:25	ON	N22.16025 E113.87831	53 m	0:00:15	13 kph
21/9/2015 12:25	ON	N22.16078 E113.87826	60 m	0:00:17	13 kph
21/9/2015 12:25	ON	N22.16139 E113.87819	68 m	0:00:19	13 kph
21/9/2015 12:26	ON	N22.16200 E113.87816	69 m	0:00:19	13 kph
21/9/2015 12:26	ON	N22.16258 E113.87812	64 m	0:00:18	13 kph
21/9/2015 12:26	ON	N22.16303 E113.87816	51 m	0:00:14	13 kph
21/9/2015 12:26	ON	N22.16352 E113.87814	54 m	0:00:15	13 kph
21/9/2015 12:27	ON	N22.16410 E113.87815	65 m	0:00:18	13 kph
21/9/2015 12:27	ON	N22.16459 E113.87820	54 m	0:00:15	13 kph
21/9/2015 12:27	ON	N22.16517 E113.87820	65 m	0:00:18	13 kph
21/9/2015 12:28	ON	N22.16583 E113.87818	73 m	0:00:20	13 kph
21/9/2015 12:28	ON	N22.16642 E113.87812	66 m	0:00:18	13 kph
21/9/2015 12:28	ON	N22.16698 E113.87816	63 m	0:00:17	13 kph
21/9/2015 12:29	ON	N22.16764 E113.87813	73 m	0:00:20	13 kph
21/9/2015 12:29	ON	N22.16831 E113.87815	74 m	0:00:20	13 kph
21/9/2015 12:29	ON	N22.16891 E113.87823	68 m	0:00:18	14 kph
21/9/2015 12:29	ON	N22.16943 E113.87818	58 m	0:00:16	13 kph
21/9/2015 12:30	ON	N22.17006 E113.87815	70 m	0:00:19	13 kph
21/9/2015 12:30	ON	N22.17071 E113.87819	72 m	0:00:19	14 kph
21/9/2015 12:30	ON	N22.17136 E113.87815	72 m	0:00:20	13 kph
21/9/2015 12:31	ON	N22.17202 E113.87810	74 m	0:00:20	13 kph
21/9/2015 12:31	ON	N22.17259 E113.87812	64 m	0:00:17	14 kph
21/9/2015 12:31	ON	N22.17319 E113.87811	67 m	0:00:18	13 kph
21/9/2015 12:32	ON	N22.17393 E113.87811	82 m	0:00:22	13 kph
21/9/2015 12:32	ON	N22.17453 E113.87807	67 m	0:00:18	13 kph
21/9/2015 12:32	ON	N22.17519 E113.87809	73 m	0:00:19	14 kph
21/9/2015 12:33	ON	N22.17577 E113.87810	65 m	0:00:17	14 kph
21/9/2015 12:33	ON	N22.17647 E113.87805	79 m	0:00:21	14 kph
21/9/2015 12:33	ON	N22.17727 E113.87801	88 m	0:00:23	14 kph
21/9/2015 12:34	ON	N22.17793 E113.87802	74 m	0:00:19	14 kph
21/9/2015 12:34	ON	N22.17868 E113.87797	84 m	0:00:22	14 kph
21/9/2015 12:34	ON	N22.17932 E113.87802	71 m	0:00:18	14 kph
21/9/2015 12:35	ON	N22.18011 E113.87797	89 m	0:00:23	14 kph
21/9/2015 12:35	ON	N22.18089 E113.87804	87 m	0:00:22	14 kph
21/9/2015 12:36	ON	N22.18178 E113.87810	99 m	0:00:25	14 kph
21/9/2015 12:36	ON	N22.18264 E113.87806	96 m	0:00:25	14 kph
21/9/2015 12:36	ON	N22.18333 E113.87803	77 m	0:00:20	14 kph
21/9/2015 12:37	ON	N22.18396 E113.87810	70 m	0:00:18	14 kph
21/9/2015 12:37	ON	N22.18448 E113.87820	59 m	0:00:15	14 kph
21/9/2015 12:37	ON	N22.18496 E113.87820	53 m	0:00:14	14 kph
21/9/2015 12:37	ON	N22.18559 E113.87818	70 m	0:00:18	14 kph
21/9/2015 12:38	ON	N22.18614 E113.87822	61 m	0:00:16	14 kph
21/9/2015 12:38	ON	N22.18664 E113.87815	57 m	0:00:15	14 kph
21/9/2015 12:38	ON	N22.18723 E113.87806	66 m	0:00:17	14 kph
21/9/2015 12:38	ON	N22.18790 E113.87808	74 m	0:00:19	14 kph
21/9/2015 12:39	ON	N22.18864 E113.87803	83 m	0:00:21	14 kph
21/9/2015 12:39	ON	N22.18924 E113.87803	66 m	0:00:17	14 kph
21/9/2015 12:39	ON	N22.19003 E113.87799	88 m	0:00:22	14 kph
21/9/2015 12:40	ON	N22.19063 E113.87804	68 m	0:00:17	14 kph
21/9/2015 12:40	ON	N22.19120 E113.87817	64 m	0:00:16	14 kph
21/9/2015 12:40	ON	N22.19186 E113.87815	74 m	0:00:19	14 kph
21/9/2015 12:41	ON	N22.19243 E113.87811	64 m	0:00:16	14 kph
21/9/2015 12:41	ON	N22.19311 E113.87817	75 m	0:00:19	14 kph
21/9/2015 12:41	ON	N22.19386 E113.87816	83 m	0:00:21	14 kph
21/9/2015 12:42	ON	N22.19459 E113.87809	82 m	0:00:20	15 kph
21/9/2015 12:42	ON	N22.19528 E113.87807	77 m	0:00:19	15 kph
21/9/2015 12:42	ON	N22.19604 E113.87799	85 m	0:00:21	15 kph
21/9/2015 12:43	ON	N22.19677 E113.87803	81 m	0:00:20	15 kph
21/9/2015 12:43	ON	N22.19748 E113.87817	80 m	0:00:20	14 kph
21/9/2015 12:43	ON	N22.19806 E113.87816	65 m	0:00:17	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 12:44	ON	N22.19871 E113.87795	75 m	0:00:20	14 kph
21/9/2015 12:44	ON	N22.19935 E113.87792	71 m	0:00:19	14 kph
21/9/2015 12:44	ON	N22.20001 E113.87793	73 m	0:00:20	13 kph
21/9/2015 12:45	ON	N22.20083 E113.87797	92 m	0:00:25	13 kph
21/9/2015 12:45	ON	N22.20140 E113.87794	63 m	0:00:17	13 kph
21/9/2015 12:45	ON	N22.20219 E113.87803	88 m	0:00:23	14 kph
21/9/2015 12:46	ON	N22.20291 E113.87805	81 m	0:00:22	13 kph
21/9/2015 12:46	ON	N22.20370 E113.87807	88 m	0:00:24	13 kph
21/9/2015 12:46	ON	N22.20440 E113.87803	78 m	0:00:21	13 kph
21/9/2015 12:47	ON	N22.20515 E113.87807	84 m	0:00:23	13 kph
21/9/2015 12:47	ON	N22.20583 E113.87808	76 m	0:00:21	13 kph
21/9/2015 12:48	ON	N22.20661 E113.87807	87 m	0:00:24	13 kph
21/9/2015 12:48	ON	N22.20726 E113.87807	72 m	0:00:20	13 kph
21/9/2015 12:48	ON	N22.20771 E113.87826	54 m	0:00:16	12 kph
21/9/2015 12:48	ON	N22.20812 E113.87872	66 m	0:00:19	13 kph
21/9/2015 12:49	ON	N22.20851 E113.87922	67 m	0:00:19	13 kph
21/9/2015 12:49	ON	N22.20880 E113.87958	50 m	0:00:14	13 kph
21/9/2015 12:49	ON	N22.20906 E113.87987	42 m	0:00:12	13 kph
21/9/2015 12:49	ON	N22.20934 E113.88014	41 m	0:00:12	12 kph
21/9/2015 12:50	ON	N22.20959 E113.88041	39 m	0:00:11	13 kph
21/9/2015 12:50	ON	N22.20992 E113.88078	54 m	0:00:15	13 kph
21/9/2015 12:50	ON	N22.21021 E113.88116	50 m	0:00:14	13 kph
21/9/2015 12:50	ON	N22.21050 E113.88162	58 m	0:00:16	13 kph
21/9/2015 12:51	ON	N22.21082 E113.88205	57 m	0:00:16	13 kph
21/9/2015 12:51	ON	N22.21115 E113.88240	51 m	0:00:14	13 kph
21/9/2015 12:51	ON	N22.21162 E113.88295	77 m	0:00:21	13 kph
21/9/2015 12:52	ON	N22.21200 E113.88356	76 m	0:00:20	14 kph
21/9/2015 12:52	ON	N22.21236 E113.88410	68 m	0:00:18	14 kph
21/9/2015 12:52	ON	N22.21266 E113.88454	57 m	0:00:15	14 kph
21/9/2015 12:52	ON	N22.21299 E113.88506	64 m	0:00:17	14 kph
21/9/2015 12:53	ON	N22.21333 E113.88557	65 m	0:00:17	14 kph
21/9/2015 12:53	ON	N22.21367 E113.88605	62 m	0:00:16	14 kph
21/9/2015 12:53	ON	N22.21396 E113.88651	58 m	0:00:15	14 kph
21/9/2015 12:53	ON	N22.21423 E113.88690	50 m	0:00:13	14 kph
21/9/2015 12:54	ON	N22.21481 E113.88751	89 m	0:00:23	14 kph
21/9/2015 12:54	ON	N22.21505 E113.88796	54 m	0:00:16	12 kph
21/9/2015 12:54	ON	N22.21485 E113.88821	34 m	0:00:12	10 kph
21/9/2015 12:54	ON	N22.21437 E113.88818	54 m	0:00:16	12 kph
21/9/2015 12:55	ON	N22.21374 E113.88814	70 m	0:00:19	13 kph
21/9/2015 12:55	ON	N22.21301 E113.88811	82 m	0:00:22	13 kph
21/9/2015 12:55	ON	N22.21234 E113.88815	74 m	0:00:20	13 kph
21/9/2015 12:56	ON	N22.21167 E113.88822	75 m	0:00:20	14 kph
21/9/2015 12:56	ON	N22.21092 E113.88819	83 m	0:00:22	14 kph
21/9/2015 12:57	ON	N22.21028 E113.88817	71 m	0:00:19	13 kph
21/9/2015 12:57	ON	N22.20960 E113.88819	75 m	0:00:20	14 kph
21/9/2015 12:57	ON	N22.20900 E113.88818	68 m	0:00:18	14 kph
21/9/2015 12:57	ON	N22.20835 E113.88820	72 m	0:00:19	14 kph
21/9/2015 12:58	ON	N22.20766 E113.88826	77 m	0:00:20	14 kph
21/9/2015 12:58	ON	N22.20704 E113.88830	69 m	0:00:18	14 kph
21/9/2015 12:58	ON	N22.20648 E113.88835	63 m	0:00:16	14 kph
21/9/2015 12:59	ON	N22.20584 E113.88829	71 m	0:00:19	14 kph
21/9/2015 12:59	ON	N22.20530 E113.88829	60 m	0:00:16	14 kph
21/9/2015 12:59	ON	N22.20467 E113.88824	70 m	0:00:19	13 kph
21/9/2015 13:00	ON	N22.20418 E113.88822	55 m	0:00:15	13 kph
21/9/2015 13:00	ON	N22.20341 E113.88821	86 m	0:00:24	13 kph
21/9/2015 13:00	ON	N22.20273 E113.88816	76 m	0:00:21	13 kph
21/9/2015 13:01	ON	N22.20212 E113.88818	67 m	0:00:19	13 kph
21/9/2015 13:01	ON	N22.20158 E113.88822	61 m	0:00:17	13 kph
21/9/2015 13:01	ON	N22.20090 E113.88821	76 m	0:00:21	13 kph
21/9/2015 13:01	ON	N22.20040 E113.88825	55 m	0:00:16	12 kph
21/9/2015 13:02	ON	N22.19983 E113.88829	64 m	0:00:18	13 kph
21/9/2015 13:02	ON	N22.19918 E113.88825	72 m	0:00:20	13 kph
21/9/2015 13:02	ON	N22.19862 E113.88828	63 m	0:00:18	13 kph
21/9/2015 13:03	ON	N22.19791 E113.88831	79 m	0:00:22	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 13:03	ON	N22.19729 E113.88823	69 m	0:00:19	13 kph
21/9/2015 13:03	ON	N22.19679 E113.88821	56 m	0:00:16	13 kph
21/9/2015 13:04	ON	N22.19643 E113.88824	39 m	0:00:13	11 kph
21/9/2015 13:04	ON	N22.19581 E113.88823	69 m	0:00:19	13 kph
21/9/2015 13:04	ON	N22.19534 E113.88823	53 m	0:00:15	13 kph
21/9/2015 13:04	ON	N22.19467 E113.88821	74 m	0:00:21	13 kph
21/9/2015 13:05	ON	N22.19406 E113.88822	67 m	0:00:19	13 kph
21/9/2015 13:05	ON	N22.19345 E113.88821	68 m	0:00:19	13 kph
21/9/2015 13:05	ON	N22.19290 E113.88823	61 m	0:00:17	13 kph
21/9/2015 13:06	ON	N22.19222 E113.88822	76 m	0:00:21	13 kph
21/9/2015 13:06	ON	N22.19157 E113.88818	72 m	0:00:20	13 kph
21/9/2015 13:06	ON	N22.19096 E113.88824	69 m	0:00:19	13 kph
21/9/2015 13:07	ON	N22.19037 E113.88829	66 m	0:00:18	13 kph
21/9/2015 13:07	ON	N22.18978 E113.88827	65 m	0:00:18	13 kph
21/9/2015 13:07	ON	N22.18917 E113.88822	69 m	0:00:19	13 kph
21/9/2015 13:08	ON	N22.18864 E113.88822	58 m	0:00:16	13 kph
21/9/2015 13:08	ON	N22.18805 E113.88818	66 m	0:00:18	13 kph
21/9/2015 13:08	ON	N22.18744 E113.88819	69 m	0:00:19	13 kph
21/9/2015 13:09	ON	N22.18673 E113.88823	79 m	0:00:22	13 kph
21/9/2015 13:09	ON	N22.18610 E113.88828	70 m	0:00:19	13 kph
21/9/2015 13:09	ON	N22.18568 E113.88827	48 m	0:00:13	13 kph
21/9/2015 13:09	ON	N22.18508 E113.88823	66 m	0:00:18	13 kph
21/9/2015 13:10	ON	N22.18466 E113.88823	47 m	0:00:13	13 kph
21/9/2015 13:10	ON	N22.18395 E113.88826	79 m	0:00:21	13 kph
21/9/2015 13:10	ON	N22.18337 E113.88825	65 m	0:00:17	14 kph
21/9/2015 13:11	ON	N22.18271 E113.88826	73 m	0:00:19	14 kph
21/9/2015 13:11	ON	N22.18201 E113.88834	78 m	0:00:20	14 kph
21/9/2015 13:11	ON	N22.18131 E113.88829	78 m	0:00:20	14 kph
21/9/2015 13:12	ON	N22.18058 E113.88824	82 m	0:00:21	14 kph
21/9/2015 13:12	ON	N22.17993 E113.88817	73 m	0:00:19	14 kph
21/9/2015 13:12	ON	N22.17932 E113.88821	68 m	0:00:18	14 kph
21/9/2015 13:13	ON	N22.17864 E113.88838	77 m	0:00:20	14 kph
21/9/2015 13:13	ON	N22.17794 E113.88831	78 m	0:00:20	14 kph
21/9/2015 13:13	ON	N22.17730 E113.88817	73 m	0:00:19	14 kph
21/9/2015 13:13	ON	N22.17671 E113.88817	67 m	0:00:17	14 kph
21/9/2015 13:14	ON	N22.17608 E113.88820	70 m	0:00:18	14 kph
21/9/2015 13:14	ON	N22.17544 E113.88823	71 m	0:00:18	14 kph
21/9/2015 13:14	ON	N22.17481 E113.88823	71 m	0:00:18	14 kph
21/9/2015 13:15	ON	N22.17414 E113.88826	74 m	0:00:19	14 kph
21/9/2015 13:15	ON	N22.17340 E113.88824	82 m	0:00:21	14 kph
21/9/2015 13:15	ON	N22.17277 E113.88822	70 m	0:00:18	14 kph
21/9/2015 13:16	ON	N22.17224 E113.88823	59 m	0:00:15	14 kph
21/9/2015 13:16	ON	N22.17157 E113.88820	75 m	0:00:19	14 kph
21/9/2015 13:16	ON	N22.17084 E113.88820	82 m	0:00:21	14 kph
21/9/2015 13:17	ON	N22.17017 E113.88816	75 m	0:00:19	14 kph
21/9/2015 13:17	ON	N22.16950 E113.88820	74 m	0:00:19	14 kph
21/9/2015 13:17	ON	N22.16883 E113.88824	75 m	0:00:19	14 kph
21/9/2015 13:17	ON	N22.16822 E113.88821	67 m	0:00:17	14 kph
21/9/2015 13:18	ON	N22.16755 E113.88818	75 m	0:00:19	14 kph
21/9/2015 13:18	ON	N22.16688 E113.88824	75 m	0:00:19	14 kph
21/9/2015 13:18	ON	N22.16620 E113.88824	75 m	0:00:19	14 kph
21/9/2015 13:19	ON	N22.16549 E113.88822	79 m	0:00:20	14 kph
21/9/2015 13:19	ON	N22.16482 E113.88826	75 m	0:00:19	14 kph
21/9/2015 13:19	ON	N22.16436 E113.88827	51 m	0:00:13	14 kph
21/9/2015 13:20	ON	N22.16373 E113.88829	71 m	0:00:18	14 kph
21/9/2015 13:20	ON	N22.16312 E113.88834	68 m	0:00:17	14 kph
21/9/2015 13:20	ON	N22.16245 E113.88831	74 m	0:00:19	14 kph
21/9/2015 13:20	ON	N22.16192 E113.88826	59 m	0:00:15	14 kph
21/9/2015 13:21	ON	N22.16136 E113.88826	63 m	0:00:16	14 kph
21/9/2015 13:21	ON	N22.16078 E113.88829	64 m	0:00:16	14 kph
21/9/2015 13:21	ON	N22.16018 E113.88827	67 m	0:00:17	14 kph
21/9/2015 13:22	ON	N22.15946 E113.88826	80 m	0:00:20	14 kph
21/9/2015 13:22	ON	N22.15877 E113.88830	77 m	0:00:19	15 kph
21/9/2015 13:22	ON	N22.15815 E113.88834	69 m	0:00:17	15 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 13:22	ON	N22.15757 E113.88833	65 m	0:00:16	15 kph
21/9/2015 13:23	ON	N22.15697 E113.88826	68 m	0:00:17	14 kph
21/9/2015 13:23	ON	N22.15628 E113.88826	76 m	0:00:19	14 kph
21/9/2015 13:23	ON	N22.15570 E113.88832	65 m	0:00:16	15 kph
21/9/2015 13:24	ON	N22.15509 E113.88828	68 m	0:00:17	14 kph
21/9/2015 13:24	ON	N22.15461 E113.88815	55 m	0:00:14	14 kph
21/9/2015 13:24	ON	N22.15404 E113.88810	64 m	0:00:16	14 kph
21/9/2015 13:24	ON	N22.15356 E113.88814	53 m	0:00:13	15 kph
21/9/2015 13:25	ON	N22.15294 E113.88815	69 m	0:00:17	15 kph
21/9/2015 13:25	ON	N22.15242 E113.88820	58 m	0:00:14	15 kph
21/9/2015 13:25	ON	N22.15180 E113.88821	69 m	0:00:17	15 kph
21/9/2015 13:25	ON	N22.15122 E113.88820	65 m	0:00:16	15 kph
21/9/2015 13:26	ON	N22.15047 E113.88836	85 m	0:00:21	15 kph
21/9/2015 13:26	ON	N22.15013 E113.88883	61 m	0:00:15	15 kph
21/9/2015 13:26	ON	N22.14988 E113.88942	67 m	0:00:16	15 kph
21/9/2015 13:26	ON	N22.14973 E113.88989	51 m	0:00:12	15 kph
21/9/2015 13:27	ON	N22.14962 E113.89044	58 m	0:00:14	15 kph
21/9/2015 13:27	ON	N22.14947 E113.89108	68 m	0:00:16	15 kph
21/9/2015 13:27	ON	N22.14937 E113.89176	72 m	0:00:17	15 kph
21/9/2015 13:28	ON	N22.14936 E113.89249	75 m	0:00:18	15 kph
21/9/2015 13:28	ON	N22.14934 E113.89338	92 m	0:00:22	15 kph
21/9/2015 13:28	ON	N22.14936 E113.89417	81 m	0:00:19	15 kph
21/9/2015 13:29	ON	N22.14939 E113.89478	63 m	0:00:18	13 kph
21/9/2015 13:29	ON	N22.14937 E113.89517	40 m	0:00:18	8 kph
21/9/2015 13:29	ON	N22.14933 E113.89543	28 m	0:00:17	6 kph
21/9/2015 13:29	ON	N22.14930 E113.89562	19 m	0:00:14	5 kph
21/9/2015 13:30	ON	N22.14927 E113.89579	18 m	0:00:15	4 kph
21/9/2015 13:30	ON	N22.14925 E113.89596	18 m	0:00:17	4 kph
21/9/2015 13:30	ON	N22.14922 E113.89609	14 m	0:00:15	3 kph
21/9/2015 13:30	ON	N22.14920 E113.89623	15 m	0:00:14	4 kph
21/9/2015 13:31	ON	N22.14916 E113.89657	35 m	0:00:13	10 kph
21/9/2015 13:31	ON	N22.14915 E113.89717	61 m	0:00:19	12 kph
21/9/2015 13:31	ON	N22.14944 E113.89744	43 m	0:00:14	11 kph
21/9/2015 13:31	ON	N22.14984 E113.89738	45 m	0:00:14	12 kph
21/9/2015 13:32	ON	N22.15048 E113.89721	73 m	0:00:20	13 kph
21/9/2015 13:32	ON	N22.15101 E113.89729	60 m	0:00:16	13 kph
21/9/2015 13:32	ON	N22.15159 E113.89734	65 m	0:00:18	13 kph
21/9/2015 13:33	ON	N22.15213 E113.89730	61 m	0:00:17	13 kph
21/9/2015 13:33	ON	N22.15269 E113.89716	63 m	0:00:18	13 kph
21/9/2015 13:33	ON	N22.15321 E113.89718	58 m	0:00:16	13 kph
21/9/2015 13:33	ON	N22.15380 E113.89720	66 m	0:00:18	13 kph
21/9/2015 13:34	ON	N22.15439 E113.89716	66 m	0:00:18	13 kph
21/9/2015 13:34	ON	N22.15496 E113.89722	63 m	0:00:17	13 kph
21/9/2015 13:34	ON	N22.15565 E113.89725	77 m	0:00:21	13 kph
21/9/2015 13:35	ON	N22.15622 E113.89727	64 m	0:00:17	13 kph
21/9/2015 13:35	ON	N22.15688 E113.89727	74 m	0:00:20	13 kph
21/9/2015 13:35	ON	N22.15755 E113.89729	75 m	0:00:20	13 kph
21/9/2015 13:36	ON	N22.15821 E113.89728	73 m	0:00:20	13 kph
21/9/2015 13:36	ON	N22.15883 E113.89726	69 m	0:00:19	13 kph
21/9/2015 13:36	ON	N22.15957 E113.89726	82 m	0:00:22	13 kph
21/9/2015 13:37	ON	N22.16034 E113.89727	86 m	0:00:23	13 kph
21/9/2015 13:37	ON	N22.16108 E113.89728	83 m	0:00:22	14 kph
21/9/2015 13:37	ON	N22.16175 E113.89727	74 m	0:00:20	13 kph
21/9/2015 13:38	ON	N22.16241 E113.89725	74 m	0:00:20	13 kph
21/9/2015 13:38	ON	N22.16318 E113.89728	86 m	0:00:23	13 kph
21/9/2015 13:39	ON	N22.16395 E113.89729	85 m	0:00:23	13 kph
21/9/2015 13:39	ON	N22.16465 E113.89734	79 m	0:00:21	14 kph
21/9/2015 13:39	ON	N22.16554 E113.89731	98 m	0:00:26	14 kph
21/9/2015 13:40	ON	N22.16635 E113.89729	91 m	0:00:24	14 kph
21/9/2015 13:40	ON	N22.16720 E113.89728	94 m	0:00:25	14 kph
21/9/2015 13:41	ON	N22.16801 E113.89724	90 m	0:00:24	13 kph
21/9/2015 13:41	ON	N22.16882 E113.89725	91 m	0:00:24	14 kph
21/9/2015 13:41	ON	N22.16954 E113.89725	80 m	0:00:21	14 kph
21/9/2015 13:42	ON	N22.17027 E113.89722	81 m	0:00:21	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 13:42	ON	N22.17106 E113.89722	88 m	0:00:23	14 kph
21/9/2015 13:42	ON	N22.17179 E113.89722	81 m	0:00:21	14 kph
21/9/2015 13:43	ON	N22.17245 E113.89722	73 m	0:00:19	14 kph
21/9/2015 13:43	ON	N22.17310 E113.89731	74 m	0:00:19	14 kph
21/9/2015 13:43	ON	N22.17394 E113.89734	93 m	0:00:24	14 kph
21/9/2015 13:44	ON	N22.17456 E113.89732	70 m	0:00:18	14 kph
21/9/2015 13:44	ON	N22.17527 E113.89725	79 m	0:00:20	14 kph
21/9/2015 13:44	ON	N22.17590 E113.89732	70 m	0:00:18	14 kph
21/9/2015 13:45	ON	N22.17653 E113.89739	71 m	0:00:18	14 kph
21/9/2015 13:45	ON	N22.17739 E113.89741	95 m	0:00:24	14 kph
21/9/2015 13:45	ON	N22.17810 E113.89739	79 m	0:00:20	14 kph
21/9/2015 13:46	ON	N22.17878 E113.89736	77 m	0:00:20	14 kph
21/9/2015 13:46	ON	N22.17951 E113.89726	81 m	0:00:21	14 kph
21/9/2015 13:46	ON	N22.18025 E113.89724	82 m	0:00:21	14 kph
21/9/2015 13:47	ON	N22.18108 E113.89725	93 m	0:00:24	14 kph
21/9/2015 13:47	ON	N22.18175 E113.89723	75 m	0:00:20	13 kph
21/9/2015 13:47	ON	N22.18240 E113.89719	72 m	0:00:19	14 kph
21/9/2015 13:48	ON	N22.18292 E113.89722	57 m	0:00:15	14 kph
21/9/2015 13:48	ON	N22.18354 E113.89723	70 m	0:00:18	14 kph
21/9/2015 13:48	ON	N22.18424 E113.89723	78 m	0:00:20	14 kph
21/9/2015 13:49	ON	N22.18503 E113.89722	87 m	0:00:22	14 kph
21/9/2015 13:49	ON	N22.18577 E113.89724	83 m	0:00:21	14 kph
21/9/2015 13:49	ON	N22.18659 E113.89728	91 m	0:00:23	14 kph
21/9/2015 13:50	ON	N22.18727 E113.89724	76 m	0:00:19	14 kph
21/9/2015 13:50	ON	N22.18800 E113.89729	81 m	0:00:20	15 kph
21/9/2015 13:50	ON	N22.18862 E113.89729	69 m	0:00:17	15 kph
21/9/2015 13:51	ON	N22.18932 E113.89729	78 m	0:00:19	15 kph
21/9/2015 13:51	ON	N22.19005 E113.89728	81 m	0:00:20	15 kph
21/9/2015 13:51	ON	N22.19071 E113.89728	73 m	0:00:18	15 kph
21/9/2015 13:52	ON	N22.19122 E113.89727	57 m	0:00:14	15 kph
21/9/2015 13:52	ON	N22.19184 E113.89728	69 m	0:00:17	15 kph
21/9/2015 13:52	ON	N22.19272 E113.89728	98 m	0:00:24	15 kph
21/9/2015 13:53	ON	N22.19345 E113.89716	82 m	0:00:20	15 kph
21/9/2015 13:53	ON	N22.19408 E113.89716	71 m	0:00:17	15 kph
21/9/2015 13:53	ON	N22.19513 E113.89723	117 m	0:00:28	15 kph
21/9/2015 13:54	ON	N22.19595 E113.89724	92 m	0:00:22	15 kph
21/9/2015 13:54	ON	N22.19673 E113.89720	87 m	0:00:21	15 kph
21/9/2015 13:54	ON	N22.19733 E113.89723	67 m	0:00:16	15 kph
21/9/2015 13:55	ON	N22.19812 E113.89724	88 m	0:00:21	15 kph
21/9/2015 13:55	ON	N22.19899 E113.89731	97 m	0:00:23	15 kph
21/9/2015 13:55	ON	N22.19980 E113.89734	91 m	0:00:22	15 kph
21/9/2015 13:56	ON	N22.20043 E113.89723	71 m	0:00:17	15 kph
21/9/2015 13:56	ON	N22.20118 E113.89723	84 m	0:00:20	15 kph
21/9/2015 13:56	ON	N22.20198 E113.89722	88 m	0:00:21	15 kph
21/9/2015 13:57	ON	N22.20283 E113.89726	95 m	0:00:23	15 kph
21/9/2015 13:57	ON	N22.20372 E113.89727	99 m	0:00:24	15 kph
21/9/2015 13:58	ON	N22.20457 E113.89728	95 m	0:00:23	15 kph
21/9/2015 13:58	ON	N22.20544 E113.89727	97 m	0:00:24	15 kph
21/9/2015 13:58	ON	N22.20620 E113.89729	85 m	0:00:21	15 kph
21/9/2015 13:59	ON	N22.20706 E113.89726	96 m	0:00:24	14 kph
21/9/2015 13:59	ON	N22.20787 E113.89719	91 m	0:00:23	14 kph
21/9/2015 13:59	ON	N22.20857 E113.89720	78 m	0:00:20	14 kph
21/9/2015 14:00	ON	N22.20946 E113.89731	100 m	0:00:25	14 kph
21/9/2015 14:00	ON	N22.21027 E113.89730	90 m	0:00:22	15 kph
21/9/2015 14:01	ON	N22.21128 E113.89729	112 m	0:00:28	14 kph
21/9/2015 14:01	ON	N22.21217 E113.89732	99 m	0:00:25	14 kph
21/9/2015 14:01	ON	N22.21296 E113.89718	89 m	0:00:23	14 kph
21/9/2015 14:02	ON	N22.21359 E113.89710	71 m	0:00:19	13 kph
21/9/2015 14:02	ON	N22.21413 E113.89736	65 m	0:00:19	12 kph
21/9/2015 14:02	ON	N22.21406 E113.89770	36 m	0:00:13	10 kph
21/9/2015 14:03	ON	N22.21369 E113.89804	53 m	0:00:15	13 kph
21/9/2015 14:03	ON	N22.21327 E113.89850	67 m	0:00:18	13 kph
21/9/2015 14:03	ON	N22.21296 E113.89894	57 m	0:00:15	14 kph
21/9/2015 14:03	ON	N22.21263 E113.89942	61 m	0:00:16	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 14:04	ON	N22.21228 E113.89991	64 m	0:00:17	14 kph
21/9/2015 14:04	ON	N22.21199 E113.90032	53 m	0:00:14	14 kph
21/9/2015 14:04	ON	N22.21169 E113.90071	52 m	0:00:14	13 kph
21/9/2015 14:04	ON	N22.21137 E113.90114	56 m	0:00:15	14 kph
21/9/2015 14:05	ON	N22.21106 E113.90157	57 m	0:00:15	14 kph
21/9/2015 14:05	ON	N22.21065 E113.90203	65 m	0:00:17	14 kph
21/9/2015 14:05	ON	N22.21036 E113.90233	45 m	0:00:12	14 kph
21/9/2015 14:05	ON	N22.20999 E113.90276	61 m	0:00:16	14 kph
21/9/2015 14:06	ON	N22.20960 E113.90324	66 m	0:00:17	14 kph
21/9/2015 14:06	ON	N22.20927 E113.90372	61 m	0:00:16	14 kph
21/9/2015 14:06	ON	N22.20900 E113.90419	58 m	0:00:15	14 kph
21/9/2015 14:06	ON	N22.20875 E113.90460	50 m	0:00:13	14 kph
21/9/2015 14:07	ON	N22.20848 E113.90503	54 m	0:00:14	14 kph
21/9/2015 14:07	ON	N22.20815 E113.90557	66 m	0:00:17	14 kph
21/9/2015 14:07	ON	N22.20791 E113.90593	46 m	0:00:12	14 kph
21/9/2015 14:07	ON	N22.20764 E113.90632	50 m	0:00:13	14 kph
21/9/2015 14:08	ON	N22.20738 E113.90671	50 m	0:00:13	14 kph
21/9/2015 14:08	ON	N22.20706 E113.90720	62 m	0:00:16	14 kph
21/9/2015 14:08	ON	N22.20666 E113.90759	60 m	0:00:16	13 kph
21/9/2015 14:08	ON	N22.20608 E113.90777	67 m	0:00:18	13 kph
21/9/2015 14:09	ON	N22.20555 E113.90787	60 m	0:00:16	13 kph
21/9/2015 14:09	ON	N22.20505 E113.90784	56 m	0:00:15	13 kph
21/9/2015 14:09	ON	N22.20445 E113.90790	67 m	0:00:18	13 kph
21/9/2015 14:09	ON	N22.20395 E113.90790	56 m	0:00:15	13 kph
21/9/2015 14:10	ON	N22.20342 E113.90785	59 m	0:00:16	13 kph
21/9/2015 14:10	ON	N22.20276 E113.90787	74 m	0:00:20	13 kph
21/9/2015 14:10	ON	N22.20234 E113.90786	47 m	0:00:15	11 kph
21/9/2015 14:10	ON	N22.20200 E113.90784	37 m	0:00:12	11 kph
21/9/2015 14:11	ON	N22.20141 E113.90780	66 m	0:00:18	13 kph
21/9/2015 14:11	ON	N22.20092 E113.90786	55 m	0:00:15	13 kph
21/9/2015 14:11	ON	N22.20041 E113.90790	58 m	0:00:16	13 kph
21/9/2015 14:12	ON	N22.19992 E113.90789	55 m	0:00:15	13 kph
21/9/2015 14:12	ON	N22.19938 E113.90794	60 m	0:00:16	13 kph
21/9/2015 14:12	ON	N22.19889 E113.90798	55 m	0:00:15	13 kph
21/9/2015 14:12	ON	N22.19833 E113.90797	63 m	0:00:17	13 kph
21/9/2015 14:13	ON	N22.19764 E113.90797	77 m	0:00:21	13 kph
21/9/2015 14:13	ON	N22.19704 E113.90798	66 m	0:00:18	13 kph
21/9/2015 14:13	ON	N22.19644 E113.90793	67 m	0:00:18	13 kph
21/9/2015 14:14	ON	N22.19599 E113.90791	50 m	0:00:14	13 kph
21/9/2015 14:14	ON	N22.19541 E113.90801	66 m	0:00:18	13 kph
21/9/2015 14:14	ON	N22.19480 E113.90797	68 m	0:00:18	14 kph
21/9/2015 14:14	ON	N22.19419 E113.90797	68 m	0:00:18	14 kph
21/9/2015 14:15	ON	N22.19362 E113.90801	63 m	0:00:17	13 kph
21/9/2015 14:15	ON	N22.19299 E113.90792	72 m	0:00:19	14 kph
21/9/2015 14:15	ON	N22.19236 E113.90782	71 m	0:00:19	13 kph
21/9/2015 14:16	ON	N22.19161 E113.90776	83 m	0:00:22	14 kph
21/9/2015 14:16	ON	N22.19101 E113.90778	67 m	0:00:18	13 kph
21/9/2015 14:16	ON	N22.19046 E113.90770	62 m	0:00:16	14 kph
21/9/2015 14:17	ON	N22.18996 E113.90740	64 m	0:00:17	13 kph
21/9/2015 14:17	OFF	N22.18946 E113.90679	84 m	0:00:22	14 kph
21/9/2015 14:17	OFF	N22.18913 E113.90628	64 m	0:00:18	13 kph
21/9/2015 14:17	OFF	N22.18893 E113.90604	34 m	0:00:16	8 kph
21/9/2015 14:18	OFF	N22.18877 E113.90589	24 m	0:00:20	4 kph
21/9/2015 14:18	OFF	N22.18868 E113.90582	13 m	0:00:17	3 kph
21/9/2015 14:18	OFF	N22.18861 E113.90578	9 m	0:00:20	2 kph
21/9/2015 14:19	OFF	N22.18858 E113.90576	4 m	0:00:15	0.8 kph
21/9/2015 14:19	OFF	N22.18856 E113.90576	2 m	0:00:18	0.4 kph
21/9/2015 14:19	OFF	N22.18855 E113.90576	1 m	0:00:19	0.2 kph
21/9/2015 14:20	OFF	N22.18855 E113.90576	1 m	0:00:14	0.1 kph
21/9/2015 14:20	OFF	N22.18854 E113.90577	2 m	0:00:13	0.4 kph
21/9/2015 14:20	OFF	N22.18854 E113.90577	1 m	0:00:14	0.2 kph
21/9/2015 14:20	OFF	N22.18855 E113.90579	2 m	0:00:12	0.5 kph
21/9/2015 14:20	OFF	N22.18856 E113.90581	3 m	0:00:14	0.7 kph
21/9/2015 14:21	OFF	N22.18857 E113.90584	3 m	0:00:13	0.8 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 14:21	OFF	N22.18859 E113.90585	3 m	0:00:15	0.7 kph
21/9/2015 14:21	OFF	N22.18862 E113.90587	3 m	0:00:14	0.9 kph
21/9/2015 14:21	OFF	N22.18864 E113.90590	4 m	0:00:16	0.9 kph
21/9/2015 14:22	OFF	N22.18867 E113.90595	6 m	0:00:17	1.2 kph
21/9/2015 14:22	OFF	N22.18839 E113.90600	31 m	0:00:17	7 kph
21/9/2015 14:22	ON	N22.18810 E113.90573	42 m	0:00:14	11 kph
21/9/2015 14:23	ON	N22.18753 E113.90536	75 m	0:00:21	13 kph
21/9/2015 14:23	ON	N22.18695 E113.90514	69 m	0:00:19	13 kph
21/9/2015 14:23	ON	N22.18635 E113.90495	69 m	0:00:19	13 kph
21/9/2015 14:23	ON	N22.18579 E113.90473	67 m	0:00:18	13 kph
21/9/2015 14:24	ON	N22.18511 E113.90450	80 m	0:00:22	13 kph
21/9/2015 14:24	ON	N22.18442 E113.90431	79 m	0:00:22	13 kph
21/9/2015 14:25	ON	N22.18372 E113.90410	81 m	0:00:23	13 kph
21/9/2015 14:25	ON	N22.18314 E113.90402	66 m	0:00:18	13 kph
21/9/2015 14:25	ON	N22.18246 E113.90397	76 m	0:00:21	13 kph
21/9/2015 14:26	ON	N22.18178 E113.90401	76 m	0:00:20	14 kph
21/9/2015 14:26	ON	N22.18109 E113.90409	77 m	0:00:21	13 kph
21/9/2015 14:26	ON	N22.18036 E113.90422	82 m	0:00:22	13 kph
21/9/2015 14:27	ON	N22.17970 E113.90433	75 m	0:00:20	13 kph
21/9/2015 14:27	ON	N22.17905 E113.90454	75 m	0:00:20	14 kph
21/9/2015 14:27	ON	N22.17840 E113.90497	85 m	0:00:22	14 kph
21/9/2015 14:28	ON	N22.17781 E113.90544	82 m	0:00:21	14 kph
21/9/2015 14:28	ON	N22.17711 E113.90603	99 m	0:00:25	14 kph
21/9/2015 14:28	ON	N22.17652 E113.90656	86 m	0:00:22	14 kph
21/9/2015 14:29	ON	N22.17586 E113.90718	98 m	0:00:25	14 kph
21/9/2015 14:29	ON	N22.17519 E113.90775	94 m	0:00:24	14 kph
21/9/2015 14:30	ON	N22.17440 E113.90822	101 m	0:00:26	14 kph
21/9/2015 14:30	ON	N22.17364 E113.90846	89 m	0:00:23	14 kph
21/9/2015 14:30	ON	N22.17288 E113.90836	85 m	0:00:23	13 kph
21/9/2015 14:31	ON	N22.17224 E113.90805	78 m	0:00:21	13 kph
21/9/2015 14:31	ON	N22.17147 E113.90764	96 m	0:00:26	13 kph
21/9/2015 14:32	ON	N22.17084 E113.90733	77 m	0:00:21	13 kph
21/9/2015 14:32	ON	N22.17018 E113.90693	84 m	0:00:23	13 kph
21/9/2015 14:32	ON	N22.16954 E113.90644	88 m	0:00:24	13 kph
21/9/2015 14:33	ON	N22.16886 E113.90608	84 m	0:00:23	13 kph
21/9/2015 14:33	ON	N22.16812 E113.90577	88 m	0:00:24	13 kph
21/9/2015 14:34	ON	N22.16746 E113.90531	87 m	0:00:24	13 kph
21/9/2015 14:34	ON	N22.16694 E113.90488	73 m	0:00:20	13 kph
21/9/2015 14:34	ON	N22.16639 E113.90437	81 m	0:00:22	13 kph
21/9/2015 14:35	ON	N22.16583 E113.90370	92 m	0:00:25	13 kph
21/9/2015 14:35	ON	N22.16537 E113.90296	92 m	0:00:25	13 kph
21/9/2015 14:36	ON	N22.16494 E113.90222	90 m	0:00:25	13 kph
21/9/2015 14:36	ON	N22.16460 E113.90156	78 m	0:00:21	13 kph
21/9/2015 14:36	ON	N22.16432 E113.90095	70 m	0:00:19	13 kph
21/9/2015 14:36	ON	N22.16398 E113.90037	71 m	0:00:19	14 kph
21/9/2015 14:37	ON	N22.16365 E113.89985	64 m	0:00:17	14 kph
21/9/2015 14:37	ON	N22.16331 E113.89941	60 m	0:00:16	13 kph
21/9/2015 14:37	ON	N22.16291 E113.89900	61 m	0:00:16	14 kph
21/9/2015 14:38	ON	N22.16241 E113.89866	65 m	0:00:17	14 kph
21/9/2015 14:38	ON	N22.16187 E113.89841	65 m	0:00:17	14 kph
21/9/2015 14:38	ON	N22.16133 E113.89824	63 m	0:00:16	14 kph
21/9/2015 14:38	ON	N22.16062 E113.89820	79 m	0:00:20	14 kph
21/9/2015 14:39	ON	N22.15997 E113.89822	73 m	0:00:18	15 kph
21/9/2015 14:39	ON	N22.15932 E113.89834	73 m	0:00:18	15 kph
21/9/2015 14:39	ON	N22.15870 E113.89862	74 m	0:00:18	15 kph
21/9/2015 14:40	ON	N22.15811 E113.89903	79 m	0:00:19	15 kph
21/9/2015 14:40	ON	N22.15762 E113.89947	70 m	0:00:17	15 kph
21/9/2015 14:40	ON	N22.15707 E113.90007	88 m	0:00:21	15 kph
21/9/2015 14:41	ON	N22.15663 E113.90062	75 m	0:00:18	15 kph
21/9/2015 14:41	ON	N22.15628 E113.90114	66 m	0:00:16	15 kph
21/9/2015 14:41	ON	N22.15596 E113.90176	73 m	0:00:18	15 kph
21/9/2015 14:42	ON	N22.15564 E113.90243	77 m	0:00:19	15 kph
21/9/2015 14:42	ON	N22.15544 E113.90311	74 m	0:00:18	15 kph
21/9/2015 14:42	ON	N22.15540 E113.90374	66 m	0:00:16	15 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 14:42	ON	N22.15546 E113.90447	75 m	0:00:18	15 kph
21/9/2015 14:43	ON	N22.15558 E113.90530	87 m	0:00:21	15 kph
21/9/2015 14:43	ON	N22.15568 E113.90609	82 m	0:00:20	15 kph
21/9/2015 14:43	ON	N22.15573 E113.90681	75 m	0:00:18	15 kph
21/9/2015 14:44	ON	N22.15578 E113.90739	61 m	0:00:15	15 kph
21/9/2015 14:44	ON	N22.15562 E113.90773	39 m	0:00:12	12 kph
21/9/2015 14:44	ON	N22.15516 E113.90778	51 m	0:00:15	12 kph
21/9/2015 14:44	ON	N22.15453 E113.90773	71 m	0:00:19	14 kph
21/9/2015 14:45	ON	N22.15401 E113.90776	57 m	0:00:15	14 kph
21/9/2015 14:45	ON	N22.15346 E113.90780	61 m	0:00:16	14 kph
21/9/2015 14:45	ON	N22.15285 E113.90777	69 m	0:00:18	14 kph
21/9/2015 14:45	ON	N22.15226 E113.90775	65 m	0:00:17	14 kph
21/9/2015 14:46	ON	N22.15167 E113.90780	66 m	0:00:17	14 kph
21/9/2015 14:46	ON	N22.15106 E113.90786	68 m	0:00:17	14 kph
21/9/2015 14:46	ON	N22.15047 E113.90784	66 m	0:00:17	14 kph
21/9/2015 14:47	ON	N22.14990 E113.90783	63 m	0:00:16	14 kph
21/9/2015 14:47	ON	N22.14936 E113.90783	60 m	0:00:15	14 kph
21/9/2015 14:47	ON	N22.14886 E113.90784	57 m	0:00:14	15 kph
21/9/2015 14:47	ON	N22.14828 E113.90787	65 m	0:00:16	15 kph
21/9/2015 14:48	ON	N22.14759 E113.90786	77 m	0:00:19	15 kph
21/9/2015 14:48	ON	N22.14705 E113.90782	60 m	0:00:15	14 kph
21/9/2015 14:48	ON	N22.14641 E113.90783	72 m	0:00:18	14 kph
21/9/2015 14:48	ON	N22.14586 E113.90790	61 m	0:00:15	15 kph
21/9/2015 14:49	ON	N22.14535 E113.90795	57 m	0:00:14	15 kph
21/9/2015 14:49	ON	N22.14478 E113.90792	64 m	0:00:16	14 kph
21/9/2015 14:49	ON	N22.14424 E113.90787	60 m	0:00:15	14 kph
21/9/2015 14:50	ON	N22.14351 E113.90787	80 m	0:00:20	14 kph
21/9/2015 14:50	ON	N22.14304 E113.90790	53 m	0:00:13	15 kph
21/9/2015 14:50	ON	N22.14253 E113.90790	57 m	0:00:14	15 kph
21/9/2015 14:50	ON	N22.14200 E113.90794	59 m	0:00:15	14 kph
21/9/2015 14:50	ON	N22.14170 E113.90833	52 m	0:00:14	13 kph
21/9/2015 14:51	ON	N22.14158 E113.90894	65 m	0:00:16	15 kph
21/9/2015 14:51	ON	N22.14167 E113.90956	65 m	0:00:16	15 kph
21/9/2015 14:51	ON	N22.14173 E113.91020	66 m	0:00:16	15 kph
21/9/2015 14:52	ON	N22.14169 E113.91085	67 m	0:00:16	15 kph
21/9/2015 14:52	ON	N22.14168 E113.91138	55 m	0:00:13	15 kph
21/9/2015 14:52	ON	N22.14164 E113.91196	60 m	0:00:14	15 kph
21/9/2015 14:52	ON	N22.14165 E113.91254	60 m	0:00:14	15 kph
21/9/2015 14:53	ON	N22.14173 E113.91328	77 m	0:00:18	15 kph
21/9/2015 14:53	ON	N22.14179 E113.91385	59 m	0:00:14	15 kph
21/9/2015 14:53	ON	N22.14182 E113.91463	80 m	0:00:19	15 kph
21/9/2015 14:53	ON	N22.14188 E113.91515	54 m	0:00:13	15 kph
21/9/2015 14:54	ON	N22.14200 E113.91575	63 m	0:00:15	15 kph
21/9/2015 14:54	ON	N22.14211 E113.91635	63 m	0:00:15	15 kph
21/9/2015 14:54	ON	N22.14215 E113.91708	76 m	0:00:18	15 kph
21/9/2015 14:54	ON	N22.14229 E113.91762	58 m	0:00:15	14 kph
21/9/2015 14:55	ON	N22.14266 E113.91776	43 m	0:00:13	12 kph
21/9/2015 14:55	ON	N22.14333 E113.91787	75 m	0:00:20	14 kph
21/9/2015 14:55	ON	N22.14388 E113.91782	62 m	0:00:17	13 kph
21/9/2015 14:55	ON	N22.14442 E113.91790	61 m	0:00:16	14 kph
21/9/2015 14:56	ON	N22.14500 E113.91796	64 m	0:00:17	14 kph
21/9/2015 14:56	ON	N22.14566 E113.91789	74 m	0:00:20	13 kph
21/9/2015 14:56	ON	N22.14626 E113.91782	68 m	0:00:18	14 kph
21/9/2015 14:57	ON	N22.14685 E113.91786	65 m	0:00:17	14 kph
21/9/2015 14:57	ON	N22.14763 E113.91780	87 m	0:00:23	14 kph
21/9/2015 14:57	ON	N22.14830 E113.91786	74 m	0:00:19	14 kph
21/9/2015 14:58	ON	N22.14895 E113.91790	73 m	0:00:19	14 kph
21/9/2015 14:58	ON	N22.14964 E113.91786	76 m	0:00:20	14 kph
21/9/2015 14:58	ON	N22.15033 E113.91787	77 m	0:00:20	14 kph
21/9/2015 14:59	ON	N22.15106 E113.91789	82 m	0:00:21	14 kph
21/9/2015 14:59	ON	N22.15166 E113.91784	66 m	0:00:17	14 kph
21/9/2015 14:59	ON	N22.15244 E113.91784	87 m	0:00:22	14 kph
21/9/2015 15:00	ON	N22.15319 E113.91788	83 m	0:00:21	14 kph
21/9/2015 15:00	ON	N22.15379 E113.91791	67 m	0:00:17	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 15:00	ON	N22.15454 E113.91792	83 m	0:00:21	14 kph
21/9/2015 15:01	ON	N22.15532 E113.91799	87 m	0:00:22	14 kph
21/9/2015 15:01	ON	N22.15612 E113.91795	89 m	0:00:23	14 kph
21/9/2015 15:01	ON	N22.15672 E113.91789	67 m	0:00:17	14 kph
21/9/2015 15:02	ON	N22.15727 E113.91789	62 m	0:00:16	14 kph
21/9/2015 15:02	ON	N22.15795 E113.91799	76 m	0:00:19	14 kph
21/9/2015 15:02	ON	N22.15859 E113.91804	71 m	0:00:18	14 kph
21/9/2015 15:03	ON	N22.15927 E113.91807	76 m	0:00:19	14 kph
21/9/2015 15:03	ON	N22.15991 E113.91808	72 m	0:00:18	14 kph
21/9/2015 15:03	ON	N22.16081 E113.91814	100 m	0:00:25	14 kph
21/9/2015 15:04	ON	N22.16144 E113.91829	72 m	0:00:18	14 kph
21/9/2015 15:04	ON	N22.16228 E113.91849	96 m	0:00:24	14 kph
21/9/2015 15:04	ON	N22.16299 E113.91863	80 m	0:00:20	14 kph
21/9/2015 15:05	ON	N22.16367 E113.91870	76 m	0:00:19	14 kph
21/9/2015 15:05	ON	N22.16438 E113.91875	79 m	0:00:20	14 kph
21/9/2015 15:05	ON	N22.16519 E113.91879	91 m	0:00:23	14 kph
21/9/2015 15:06	ON	N22.16589 E113.91887	78 m	0:00:20	14 kph
21/9/2015 15:06	ON	N22.16662 E113.91894	81 m	0:00:21	14 kph
21/9/2015 15:06	ON	N22.16733 E113.91901	80 m	0:00:21	14 kph
21/9/2015 15:07	ON	N22.16787 E113.91906	60 m	0:00:16	13 kph
21/9/2015 15:07	ON	N22.16850 E113.91913	71 m	0:00:19	13 kph
21/9/2015 15:07	ON	N22.16921 E113.91920	79 m	0:00:21	14 kph
21/9/2015 15:08	ON	N22.16975 E113.91931	60 m	0:00:16	14 kph
21/9/2015 15:08	ON	N22.17042 E113.91944	76 m	0:00:20	14 kph
21/9/2015 15:08	ON	N22.17103 E113.91957	69 m	0:00:18	14 kph
21/9/2015 15:09	ON	N22.17173 E113.91974	81 m	0:00:21	14 kph
21/9/2015 15:09	ON	N22.17234 E113.91991	70 m	0:00:18	14 kph
21/9/2015 15:09	ON	N22.17295 E113.92007	70 m	0:00:18	14 kph
21/9/2015 15:09	ON	N22.17356 E113.92024	70 m	0:00:18	14 kph
21/9/2015 15:10	ON	N22.17417 E113.92041	70 m	0:00:18	14 kph
21/9/2015 15:10	ON	N22.17476 E113.92056	67 m	0:00:17	14 kph
21/9/2015 15:10	ON	N22.17527 E113.92070	58 m	0:00:15	14 kph
21/9/2015 15:11	ON	N22.17599 E113.92094	84 m	0:00:21	14 kph
21/9/2015 15:11	ON	N22.17672 E113.92126	88 m	0:00:22	14 kph
21/9/2015 15:11	ON	N22.17745 E113.92158	88 m	0:00:22	14 kph
21/9/2015 15:12	ON	N22.17827 E113.92186	95 m	0:00:24	14 kph
21/9/2015 15:12	ON	N22.17890 E113.92198	71 m	0:00:18	14 kph
21/9/2015 15:12	ON	N22.17965 E113.92200	83 m	0:00:21	14 kph
21/9/2015 15:13	ON	N22.18043 E113.92187	88 m	0:00:22	14 kph
21/9/2015 15:13	ON	N22.18122 E113.92164	91 m	0:00:23	14 kph
21/9/2015 15:13	ON	N22.18181 E113.92132	74 m	0:00:19	14 kph
21/9/2015 15:14	ON	N22.18238 E113.92092	75 m	0:00:19	14 kph
21/9/2015 15:14	ON	N22.18292 E113.92050	74 m	0:00:19	14 kph
21/9/2015 15:14	ON	N22.18349 E113.92002	81 m	0:00:21	14 kph
21/9/2015 15:15	ON	N22.18403 E113.91948	81 m	0:00:21	14 kph
21/9/2015 15:15	ON	N22.18463 E113.91884	94 m	0:00:24	14 kph
21/9/2015 15:16	ON	N22.18522 E113.91818	94 m	0:00:24	14 kph
21/9/2015 15:16	ON	N22.18564 E113.91787	57 m	0:00:15	14 kph
21/9/2015 15:16	ON	N22.18620 E113.91795	63 m	0:00:17	13 kph
21/9/2015 15:16	ON	N22.18690 E113.91798	78 m	0:00:20	14 kph
21/9/2015 15:17	ON	N22.18761 E113.91799	79 m	0:00:20	14 kph
21/9/2015 15:17	ON	N22.18828 E113.91793	74 m	0:00:19	14 kph
21/9/2015 15:17	ON	N22.18902 E113.91787	83 m	0:00:21	14 kph
21/9/2015 15:18	ON	N22.18974 E113.91784	80 m	0:00:20	14 kph
21/9/2015 15:18	ON	N22.19045 E113.91776	79 m	0:00:20	14 kph
21/9/2015 15:18	ON	N22.19115 E113.91781	79 m	0:00:20	14 kph
21/9/2015 15:19	ON	N22.19186 E113.91780	79 m	0:00:20	14 kph
21/9/2015 15:19	ON	N22.19265 E113.91785	87 m	0:00:22	14 kph
21/9/2015 15:19	ON	N22.19331 E113.91781	74 m	0:00:19	14 kph
21/9/2015 15:20	ON	N22.19390 E113.91779	65 m	0:00:17	14 kph
21/9/2015 15:20	ON	N22.19465 E113.91783	84 m	0:00:22	14 kph
21/9/2015 15:20	ON	N22.19538 E113.91784	80 m	0:00:21	14 kph
21/9/2015 15:21	ON	N22.19606 E113.91785	77 m	0:00:20	14 kph
21/9/2015 15:21	ON	N22.19668 E113.91786	69 m	0:00:18	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 15:21	ON	N22.19744 E113.91781	84 m	0:00:22	14 kph
21/9/2015 15:22	ON	N22.19805 E113.91785	69 m	0:00:18	14 kph
21/9/2015 15:22	ON	N22.19861 E113.91792	62 m	0:00:16	14 kph
21/9/2015 15:22	ON	N22.19920 E113.91791	66 m	0:00:17	14 kph
21/9/2015 15:23	ON	N22.20004 E113.91788	94 m	0:00:24	14 kph
21/9/2015 15:23	ON	N22.20079 E113.91800	85 m	0:00:22	14 kph
21/9/2015 15:23	ON	N22.20141 E113.91795	69 m	0:00:18	14 kph
21/9/2015 15:24	ON	N22.20220 E113.91791	88 m	0:00:23	14 kph
21/9/2015 15:24	ON	N22.20292 E113.91784	80 m	0:00:21	14 kph
21/9/2015 15:25	ON	N22.20372 E113.91790	89 m	0:00:23	14 kph
21/9/2015 15:25	ON	N22.20433 E113.91782	69 m	0:00:18	14 kph
21/9/2015 15:25	ON	N22.20519 E113.91782	95 m	0:00:24	14 kph
21/9/2015 15:25	ON	N22.20565 E113.91801	55 m	0:00:15	13 kph
21/9/2015 15:26	ON	N22.20586 E113.91853	59 m	0:00:15	14 kph
21/9/2015 15:26	ON	N22.20596 E113.91912	62 m	0:00:15	15 kph
21/9/2015 15:26	ON	N22.20600 E113.92003	93 m	0:00:23	15 kph
21/9/2015 15:27	ON	N22.20603 E113.92090	90 m	0:00:22	15 kph
21/9/2015 15:27	ON	N22.20603 E113.92167	79 m	0:00:19	15 kph
21/9/2015 15:27	ON	N22.20602 E113.92256	92 m	0:00:22	15 kph
21/9/2015 15:28	ON	N22.20600 E113.92329	75 m	0:00:18	15 kph
21/9/2015 15:28	ON	N22.20602 E113.92391	63 m	0:00:15	15 kph
21/9/2015 15:28	ON	N22.20606 E113.92461	72 m	0:00:17	15 kph
21/9/2015 15:29	ON	N22.20606 E113.92534	76 m	0:00:18	15 kph
21/9/2015 15:29	ON	N22.20604 E113.92592	59 m	0:00:14	15 kph
21/9/2015 15:29	ON	N22.20601 E113.92641	51 m	0:00:12	15 kph
21/9/2015 15:29	ON	N22.20596 E113.92705	67 m	0:00:16	15 kph
21/9/2015 15:29	ON	N22.20577 E113.92742	44 m	0:00:12	13 kph
21/9/2015 15:30	ON	N22.20532 E113.92753	51 m	0:00:15	12 kph
21/9/2015 15:30	ON	N22.20477 E113.92750	61 m	0:00:16	14 kph
21/9/2015 15:30	ON	N22.20402 E113.92756	84 m	0:00:22	14 kph
21/9/2015 15:31	ON	N22.20336 E113.92758	73 m	0:00:19	14 kph
21/9/2015 15:31	ON	N22.20287 E113.92758	54 m	0:00:14	14 kph
21/9/2015 15:31	ON	N22.20222 E113.92755	73 m	0:00:18	15 kph
21/9/2015 15:32	ON	N22.20146 E113.92754	85 m	0:00:21	15 kph
21/9/2015 15:32	ON	N22.20072 E113.92750	82 m	0:00:20	15 kph
21/9/2015 15:32	ON	N22.19992 E113.92758	89 m	0:00:22	15 kph
21/9/2015 15:32	ON	N22.19934 E113.92756	65 m	0:00:16	15 kph
21/9/2015 15:33	ON	N22.19863 E113.92757	79 m	0:00:19	15 kph
21/9/2015 15:33	ON	N22.19797 E113.92755	73 m	0:00:18	15 kph
21/9/2015 15:33	ON	N22.19720 E113.92756	86 m	0:00:21	15 kph
21/9/2015 15:34	ON	N22.19654 E113.92756	74 m	0:00:18	15 kph
21/9/2015 15:34	ON	N22.19577 E113.92758	85 m	0:00:21	15 kph
21/9/2015 15:34	ON	N22.19498 E113.92757	88 m	0:00:22	14 kph
21/9/2015 15:35	ON	N22.19408 E113.92760	100 m	0:00:25	14 kph
21/9/2015 15:35	ON	N22.19346 E113.92757	69 m	0:00:17	15 kph
21/9/2015 15:35	ON	N22.19281 E113.92751	73 m	0:00:18	15 kph
21/9/2015 15:36	ON	N22.19231 E113.92753	56 m	0:00:14	14 kph
21/9/2015 15:36	ON	N22.19167 E113.92756	71 m	0:00:18	14 kph
21/9/2015 15:36	ON	N22.19106 E113.92758	68 m	0:00:17	14 kph
21/9/2015 15:37	ON	N22.19041 E113.92759	72 m	0:00:18	14 kph
21/9/2015 15:37	ON	N22.18962 E113.92754	88 m	0:00:22	14 kph
21/9/2015 15:37	ON	N22.18893 E113.92756	77 m	0:00:19	15 kph
21/9/2015 15:38	ON	N22.18824 E113.92755	76 m	0:00:19	14 kph
21/9/2015 15:38	ON	N22.18759 E113.92751	73 m	0:00:18	15 kph
21/9/2015 15:38	ON	N22.18701 E113.92750	64 m	0:00:16	14 kph
21/9/2015 15:39	ON	N22.18625 E113.92749	85 m	0:00:21	15 kph
21/9/2015 15:39	ON	N22.18568 E113.92754	64 m	0:00:16	14 kph
21/9/2015 15:39	ON	N22.18501 E113.92761	75 m	0:00:19	14 kph
21/9/2015 15:39	ON	N22.18436 E113.92759	72 m	0:00:18	14 kph
21/9/2015 15:40	ON	N22.18372 E113.92757	71 m	0:00:18	14 kph
21/9/2015 15:40	ON	N22.18297 E113.92752	84 m	0:00:21	14 kph
21/9/2015 15:40	ON	N22.18235 E113.92752	69 m	0:00:17	15 kph
21/9/2015 15:41	ON	N22.18174 E113.92754	67 m	0:00:17	14 kph
21/9/2015 15:41	ON	N22.18095 E113.92755	88 m	0:00:22	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 15:41	ON	N22.18034 E113.92755	68 m	0:00:17	14 kph
21/9/2015 15:42	ON	N22.17972 E113.92752	69 m	0:00:17	15 kph
21/9/2015 15:42	ON	N22.17907 E113.92746	73 m	0:00:18	15 kph
21/9/2015 15:42	ON	N22.17839 E113.92750	75 m	0:00:19	14 kph
21/9/2015 15:42	ON	N22.17779 E113.92762	68 m	0:00:17	14 kph
21/9/2015 15:43	ON	N22.17714 E113.92763	72 m	0:00:19	14 kph
21/9/2015 15:43	ON	N22.17658 E113.92760	63 m	0:00:16	14 kph
21/9/2015 15:43	ON	N22.17595 E113.92757	71 m	0:00:18	14 kph
21/9/2015 15:44	ON	N22.17525 E113.92753	78 m	0:00:20	14 kph
21/9/2015 15:44	ON	N22.17466 E113.92757	66 m	0:00:17	14 kph
21/9/2015 15:44	ON	N22.17409 E113.92757	63 m	0:00:16	14 kph
21/9/2015 15:44	ON	N22.17355 E113.92754	60 m	0:00:15	14 kph
21/9/2015 15:45	ON	N22.17287 E113.92754	75 m	0:00:19	14 kph
21/9/2015 15:45	ON	N22.17227 E113.92750	68 m	0:00:17	14 kph
21/9/2015 15:45	ON	N22.17169 E113.92752	64 m	0:00:16	14 kph
21/9/2015 15:46	ON	N22.17108 E113.92749	68 m	0:00:17	14 kph
21/9/2015 15:46	ON	N22.17061 E113.92747	52 m	0:00:13	14 kph
21/9/2015 15:46	ON	N22.16993 E113.92745	77 m	0:00:19	15 kph
21/9/2015 15:46	ON	N22.16931 E113.92748	68 m	0:00:17	14 kph
21/9/2015 15:47	ON	N22.16874 E113.92749	64 m	0:00:16	14 kph
21/9/2015 15:47	ON	N22.16802 E113.92742	80 m	0:00:20	14 kph
21/9/2015 15:47	ON	N22.16742 E113.92739	67 m	0:00:17	14 kph
21/9/2015 15:48	ON	N22.16684 E113.92743	64 m	0:00:16	14 kph
21/9/2015 15:48	ON	N22.16628 E113.92745	62 m	0:00:16	14 kph
21/9/2015 15:48	ON	N22.16561 E113.92755	75 m	0:00:19	14 kph
21/9/2015 15:48	ON	N22.16501 E113.92760	67 m	0:00:17	14 kph
21/9/2015 15:49	ON	N22.16441 E113.92759	67 m	0:00:17	14 kph
21/9/2015 15:49	ON	N22.16374 E113.92757	75 m	0:00:19	14 kph
21/9/2015 15:49	ON	N22.16321 E113.92758	59 m	0:00:15	14 kph
21/9/2015 15:50	ON	N22.16269 E113.92754	58 m	0:00:15	14 kph
21/9/2015 15:50	ON	N22.16209 E113.92751	67 m	0:00:17	14 kph
21/9/2015 15:50	ON	N22.16160 E113.92751	55 m	0:00:14	14 kph
21/9/2015 15:50	ON	N22.16096 E113.92755	71 m	0:00:18	14 kph
21/9/2015 15:51	ON	N22.16041 E113.92754	62 m	0:00:16	14 kph
21/9/2015 15:51	ON	N22.15996 E113.92753	50 m	0:00:13	14 kph
21/9/2015 15:51	ON	N22.15923 E113.92761	82 m	0:00:21	14 kph
21/9/2015 15:52	ON	N22.15858 E113.92755	73 m	0:00:19	14 kph
21/9/2015 15:52	ON	N22.15794 E113.92752	71 m	0:00:18	14 kph
21/9/2015 15:52	ON	N22.15738 E113.92756	63 m	0:00:16	14 kph
21/9/2015 15:52	ON	N22.15674 E113.92757	71 m	0:00:18	14 kph
21/9/2015 15:53	ON	N22.15615 E113.92759	66 m	0:00:17	14 kph
21/9/2015 15:53	ON	N22.15551 E113.92757	71 m	0:00:18	14 kph
21/9/2015 15:53	ON	N22.15485 E113.92756	74 m	0:00:19	14 kph
21/9/2015 15:54	ON	N22.15429 E113.92754	62 m	0:00:16	14 kph
21/9/2015 15:54	ON	N22.15373 E113.92757	62 m	0:00:16	14 kph
21/9/2015 15:54	ON	N22.15310 E113.92761	70 m	0:00:18	14 kph
21/9/2015 15:54	ON	N22.15246 E113.92762	71 m	0:00:18	14 kph
21/9/2015 15:55	ON	N22.15182 E113.92755	72 m	0:00:19	14 kph
21/9/2015 15:55	ON	N22.15129 E113.92752	59 m	0:00:15	14 kph
21/9/2015 15:55	ON	N22.15067 E113.92747	70 m	0:00:18	14 kph
21/9/2015 15:55	ON	N22.15020 E113.92750	52 m	0:00:13	14 kph
21/9/2015 15:56	ON	N22.14961 E113.92747	66 m	0:00:17	14 kph
21/9/2015 15:56	ON	N22.14905 E113.92744	63 m	0:00:16	14 kph
21/9/2015 15:56	ON	N22.14855 E113.92744	55 m	0:00:14	14 kph
21/9/2015 15:57	ON	N22.14788 E113.92743	75 m	0:00:19	14 kph
21/9/2015 15:57	ON	N22.14728 E113.92749	67 m	0:00:17	14 kph
21/9/2015 15:57	ON	N22.14678 E113.92754	56 m	0:00:14	14 kph
21/9/2015 15:57	ON	N22.14623 E113.92755	61 m	0:00:15	15 kph
21/9/2015 15:58	ON	N22.14564 E113.92757	67 m	0:00:17	14 kph
21/9/2015 15:58	ON	N22.14504 E113.92758	67 m	0:00:17	14 kph
21/9/2015 15:58	ON	N22.14449 E113.92748	61 m	0:00:16	14 kph
21/9/2015 15:58	ON	N22.14403 E113.92744	51 m	0:00:13	14 kph
21/9/2015 15:59	ON	N22.14346 E113.92747	64 m	0:00:16	14 kph
21/9/2015 15:59	ON	N22.14289 E113.92749	63 m	0:00:16	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 15:59	ON	N22.14238 E113.92761	58 m	0:00:15	14 kph
21/9/2015 15:59	ON	N22.14220 E113.92805	50 m	0:00:14	13 kph
21/9/2015 16:00	ON	N22.14228 E113.92848	45 m	0:00:12	13 kph
21/9/2015 16:00	ON	N22.14260 E113.92886	53 m	0:00:14	14 kph
21/9/2015 16:00	ON	N22.14309 E113.92932	72 m	0:00:18	14 kph
21/9/2015 16:00	ON	N22.14347 E113.92979	65 m	0:00:16	15 kph
21/9/2015 16:01	ON	N22.14388 E113.93028	68 m	0:00:17	14 kph
21/9/2015 16:01	ON	N22.14436 E113.93075	72 m	0:00:18	14 kph
21/9/2015 16:01	ON	N22.14477 E113.93114	60 m	0:00:15	15 kph
21/9/2015 16:02	ON	N22.14518 E113.93165	70 m	0:00:17	15 kph
21/9/2015 16:02	ON	N22.14569 E113.93215	77 m	0:00:19	15 kph
21/9/2015 16:02	ON	N22.14617 E113.93253	66 m	0:00:17	14 kph
21/9/2015 16:02	ON	N22.14647 E113.93308	66 m	0:00:16	15 kph
21/9/2015 16:03	ON	N22.14691 E113.93359	71 m	0:00:18	14 kph
21/9/2015 16:03	ON	N22.14738 E113.93406	71 m	0:00:18	14 kph
21/9/2015 16:03	ON	N22.14774 E113.93444	56 m	0:00:14	14 kph
21/9/2015 16:04	ON	N22.14817 E113.93492	68 m	0:00:17	14 kph
21/9/2015 16:04	ON	N22.14857 E113.93542	68 m	0:00:17	14 kph
21/9/2015 16:04	ON	N22.14892 E113.93587	61 m	0:00:15	15 kph
21/9/2015 16:04	ON	N22.14927 E113.93627	56 m	0:00:14	15 kph
21/9/2015 16:05	ON	N22.14981 E113.93676	79 m	0:00:20	14 kph
21/9/2015 16:05	ON	N22.15030 E113.93682	55 m	0:00:15	13 kph
21/9/2015 16:05	ON	N22.15096 E113.93693	74 m	0:00:19	14 kph
21/9/2015 16:06	ON	N22.15163 E113.93698	76 m	0:00:19	14 kph
21/9/2015 16:06	ON	N22.15250 E113.93696	96 m	0:00:25	14 kph
21/9/2015 16:06	ON	N22.15335 E113.93693	94 m	0:00:24	14 kph
21/9/2015 16:07	ON	N22.15415 E113.93689	89 m	0:00:23	14 kph
21/9/2015 16:07	ON	N22.15453 E113.93689	43 m	0:00:17	9 kph
21/9/2015 16:07	OFF	N22.15480 E113.93689	31 m	0:00:21	5 kph
21/9/2015 16:08	OFF	N22.15498 E113.93688	19 m	0:00:22	3 kph
21/9/2015 16:08	OFF	N22.15505 E113.93687	8 m	0:00:15	2 kph
21/9/2015 16:08	OFF	N22.15511 E113.93687	7 m	0:00:21	1.2 kph
21/9/2015 16:09	OFF	N22.15512 E113.93687	1 m	0:00:17	0.2 kph
21/9/2015 16:09	OFF	N22.15515 E113.93689	3 m	0:00:24	0.4 kph
21/9/2015 16:09	OFF	N22.15516 E113.93688	2 m	0:00:16	0.4 kph
21/9/2015 16:10	OFF	N22.15517 E113.93688	1 m	0:00:20	0.3 kph
21/9/2015 16:10	OFF	N22.15517 E113.93688	0 m	0:00:16	0.1 kph
21/9/2015 16:10	OFF	N22.15517 E113.93689	1 m	0:00:22	0.2 kph
21/9/2015 16:10	OFF	N22.15524 E113.93693	9 m	0:00:15	2 kph
21/9/2015 16:10	ON	N22.15525 E113.93693	2 m	0:00:01	7 kph
21/9/2015 16:11	ON	N22.15558 E113.93698	37 m	0:00:12	11 kph
21/9/2015 16:11	ON	N22.15621 E113.93694	70 m	0:00:19	13 kph
21/9/2015 16:11	ON	N22.15682 E113.93692	69 m	0:00:19	13 kph
21/9/2015 16:12	ON	N22.15746 E113.93680	73 m	0:00:20	13 kph
21/9/2015 16:12	ON	N22.15814 E113.93682	76 m	0:00:20	14 kph
21/9/2015 16:12	ON	N22.15896 E113.93687	91 m	0:00:24	14 kph
21/9/2015 16:13	ON	N22.15971 E113.93683	83 m	0:00:22	14 kph
21/9/2015 16:13	ON	N22.16034 E113.93687	70 m	0:00:18	14 kph
21/9/2015 16:13	ON	N22.16116 E113.93689	91 m	0:00:24	14 kph
21/9/2015 16:14	ON	N22.16190 E113.93689	82 m	0:00:21	14 kph
21/9/2015 16:14	ON	N22.16260 E113.93691	78 m	0:00:20	14 kph
21/9/2015 16:14	ON	N22.16323 E113.93692	70 m	0:00:18	14 kph
21/9/2015 16:15	ON	N22.16391 E113.93695	76 m	0:00:20	14 kph
21/9/2015 16:15	ON	N22.16459 E113.93691	76 m	0:00:20	14 kph
21/9/2015 16:15	ON	N22.16528 E113.93688	76 m	0:00:20	14 kph
21/9/2015 16:16	ON	N22.16595 E113.93692	75 m	0:00:19	14 kph
21/9/2015 16:16	ON	N22.16662 E113.93691	74 m	0:00:19	14 kph
21/9/2015 16:16	ON	N22.16729 E113.93691	75 m	0:00:19	14 kph
21/9/2015 16:17	ON	N22.16795 E113.93693	74 m	0:00:19	14 kph
21/9/2015 16:17	ON	N22.16865 E113.93693	78 m	0:00:20	14 kph
21/9/2015 16:17	ON	N22.16931 E113.93696	73 m	0:00:19	14 kph
21/9/2015 16:18	ON	N22.16993 E113.93693	69 m	0:00:18	14 kph
21/9/2015 16:18	ON	N22.17063 E113.93693	78 m	0:00:20	14 kph
21/9/2015 16:18	ON	N22.17126 E113.93694	70 m	0:00:18	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 16:19	ON	N22.17200 E113.93690	82 m	0:00:21	14 kph
21/9/2015 16:19	ON	N22.17276 E113.93686	85 m	0:00:22	14 kph
21/9/2015 16:19	ON	N22.17339 E113.93686	70 m	0:00:18	14 kph
21/9/2015 16:20	ON	N22.17409 E113.93686	78 m	0:00:20	14 kph
21/9/2015 16:20	ON	N22.17477 E113.93688	75 m	0:00:19	14 kph
21/9/2015 16:20	ON	N22.17530 E113.93693	59 m	0:00:15	14 kph
21/9/2015 16:21	ON	N22.17606 E113.93697	86 m	0:00:22	14 kph
21/9/2015 16:21	ON	N22.17676 E113.93693	78 m	0:00:20	14 kph
21/9/2015 16:21	ON	N22.17739 E113.93690	70 m	0:00:18	14 kph
21/9/2015 16:22	ON	N22.17805 E113.93696	74 m	0:00:19	14 kph
21/9/2015 16:22	ON	N22.17876 E113.93695	79 m	0:00:20	14 kph
21/9/2015 16:22	ON	N22.17936 E113.93693	67 m	0:00:17	14 kph
21/9/2015 16:23	ON	N22.18017 E113.93686	91 m	0:00:23	14 kph
21/9/2015 16:23	ON	N22.18089 E113.93685	80 m	0:00:20	14 kph
21/9/2015 16:23	ON	N22.18149 E113.93690	67 m	0:00:17	14 kph
21/9/2015 16:23	ON	N22.18219 E113.93684	79 m	0:00:20	14 kph
21/9/2015 16:24	ON	N22.18295 E113.93685	84 m	0:00:21	14 kph
21/9/2015 16:24	ON	N22.18354 E113.93682	66 m	0:00:17	14 kph
21/9/2015 16:24	ON	N22.18423 E113.93677	78 m	0:00:20	14 kph
21/9/2015 16:25	ON	N22.18487 E113.93677	71 m	0:00:18	14 kph
21/9/2015 16:25	ON	N22.18558 E113.93678	79 m	0:00:20	14 kph
21/9/2015 16:25	ON	N22.18639 E113.93679	90 m	0:00:23	14 kph
21/9/2015 16:26	ON	N22.18702 E113.93684	70 m	0:00:18	14 kph
21/9/2015 16:26	ON	N22.18770 E113.93681	76 m	0:00:19	14 kph
21/9/2015 16:26	ON	N22.18841 E113.93684	80 m	0:00:20	14 kph
21/9/2015 16:27	ON	N22.18900 E113.93688	66 m	0:00:17	14 kph
21/9/2015 16:27	ON	N22.18966 E113.93689	74 m	0:00:19	14 kph
21/9/2015 16:27	ON	N22.19022 E113.93691	62 m	0:00:16	14 kph
21/9/2015 16:28	ON	N22.19085 E113.93688	70 m	0:00:18	14 kph
21/9/2015 16:28	ON	N22.19147 E113.93683	69 m	0:00:18	14 kph
21/9/2015 16:28	ON	N22.19209 E113.93686	70 m	0:00:18	14 kph
21/9/2015 16:28	ON	N22.19265 E113.93690	62 m	0:00:16	14 kph
21/9/2015 16:29	ON	N22.19335 E113.93685	78 m	0:00:20	14 kph
21/9/2015 16:29	ON	N22.19409 E113.93688	82 m	0:00:21	14 kph
21/9/2015 16:29	ON	N22.19482 E113.93687	81 m	0:00:21	14 kph
21/9/2015 16:30	ON	N22.19548 E113.93691	75 m	0:00:19	14 kph
21/9/2015 16:30	ON	N22.19603 E113.93694	61 m	0:00:16	14 kph
21/9/2015 16:30	ON	N22.19659 E113.93696	62 m	0:00:16	14 kph
21/9/2015 16:31	ON	N22.19725 E113.93689	74 m	0:00:19	14 kph
21/9/2015 16:31	ON	N22.19801 E113.93676	86 m	0:00:22	14 kph
21/9/2015 16:31	ON	N22.19894 E113.93687	104 m	0:00:27	14 kph
21/9/2015 16:32	ON	N22.19973 E113.93687	88 m	0:00:23	14 kph
21/9/2015 16:32	ON	N22.20048 E113.93683	84 m	0:00:22	14 kph
21/9/2015 16:33	ON	N22.20118 E113.93687	78 m	0:00:20	14 kph
21/9/2015 16:33	ON	N22.20182 E113.93681	71 m	0:00:18	14 kph
21/9/2015 16:33	ON	N22.20258 E113.93683	86 m	0:00:22	14 kph
21/9/2015 16:34	ON	N22.20339 E113.93681	90 m	0:00:23	14 kph
21/9/2015 16:34	ON	N22.20425 E113.93680	96 m	0:00:25	14 kph
21/9/2015 16:34	ON	N22.20484 E113.93684	65 m	0:00:17	14 kph
21/9/2015 16:35	ON	N22.20570 E113.93687	96 m	0:00:25	14 kph
21/9/2015 16:35	ON	N22.20651 E113.93687	90 m	0:00:23	14 kph
21/9/2015 16:35	ON	N22.20722 E113.93686	78 m	0:00:20	14 kph
21/9/2015 16:36	ON	N22.20803 E113.93684	91 m	0:00:23	14 kph
21/9/2015 16:36	ON	N22.20888 E113.93685	94 m	0:00:24	14 kph
21/9/2015 16:37	ON	N22.20974 E113.93682	95 m	0:00:24	14 kph
21/9/2015 16:37	ON	N22.21066 E113.93684	103 m	0:00:26	14 kph
21/9/2015 16:38	ON	N22.21179 E113.93688	126 m	0:00:32	14 kph
21/9/2015 16:38	ON	N22.21264 E113.93679	95 m	0:00:24	14 kph
21/9/2015 16:38	ON	N22.21337 E113.93685	82 m	0:00:21	14 kph
21/9/2015 16:39	ON	N22.21415 E113.93686	87 m	0:00:22	14 kph
21/9/2015 16:39	ON	N22.21493 E113.93680	87 m	0:00:22	14 kph
21/9/2015 16:39	ON	N22.21585 E113.93685	102 m	0:00:26	14 kph
21/9/2015 16:40	ON	N22.21665 E113.93682	90 m	0:00:23	14 kph
21/9/2015 16:40	ON	N22.21768 E113.93678	114 m	0:00:29	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
21/9/2015 16:41	ON	N22.21854 E113.93686	97 m	0:00:25	14 kph
21/9/2015 16:41	ON	N22.21948 E113.93675	105 m	0:00:27	14 kph
21/9/2015 16:42	ON	N22.22048 E113.93684	112 m	0:00:28	14 kph
21/9/2015 16:42	ON	N22.22132 E113.93686	93 m	0:00:24	14 kph
21/9/2015 16:43	ON	N22.22223 E113.93682	102 m	0:00:26	14 kph
21/9/2015 16:43	ON	N22.22303 E113.93698	90 m	0:00:23	14 kph
21/9/2015 16:43	ON	N22.22352 E113.93720	59 m	0:00:16	13 kph
21/9/2015 16:43	ON	N22.22352 E113.93720	0 m		

Appendix II. Survey Effort Database in SWL (September 2015)

(Abbreviations: BEAU = Beaufort Sea State; P = Primary Line Effort; S = Secondary Line Effort)

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
7-Sep-15	SW LANTAU	1	1.60	AUTUMN	STANDARD31516	HKCRP	P
7-Sep-15	SW LANTAU	2	6.87	AUTUMN	STANDARD31516	HKCRP	P
7-Sep-15	SW LANTAU	1	2.40	AUTUMN	STANDARD31516	HKCRP	S
7-Sep-15	SW LANTAU	2	4.73	AUTUMN	STANDARD31516	HKCRP	S
7-Sep-15	SW LANTAU	3	0.17	AUTUMN	STANDARD31516	HKCRP	S
18-Sep-15	SW LANTAU	3	18.77	AUTUMN	STANDARD31516	HKCRP	P
18-Sep-15	SW LANTAU	4	1.50	AUTUMN	STANDARD31516	HKCRP	P
18-Sep-15	SW LANTAU	2	3.60	AUTUMN	STANDARD31516	HKCRP	S
18-Sep-15	SW LANTAU	3	6.23	AUTUMN	STANDARD31516	HKCRP	S
18-Sep-15	SW LANTAU	4	1.80	AUTUMN	STANDARD31516	HKCRP	S
21-Sep-15	SW LANTAU	1	25.61	AUTUMN	STANDARD31516	HYD-HZMB	P
21-Sep-15	SW LANTAU	2	30.61	AUTUMN	STANDARD31516	HYD-HZMB	P
21-Sep-15	SW LANTAU	1	7.39	AUTUMN	STANDARD31516	HYD-HZMB	S
21-Sep-15	SW LANTAU	2	7.11	AUTUMN	STANDARD31516	HYD-HZMB	S
25-Sep-15	SW LANTAU	2	19.31	AUTUMN	STANDARD31516	HKCRP	P
25-Sep-15	SW LANTAU	3	2.23	AUTUMN	STANDARD31516	HKCRP	P
25-Sep-15	SW LANTAU	1	1.16	AUTUMN	STANDARD31516	HKCRP	S
25-Sep-15	SW LANTAU	2	7.34	AUTUMN	STANDARD31516	HKCRP	S
25-Sep-15	SW LANTAU	3	0.75	AUTUMN	STANDARD31516	HKCRP	S

Appendix III. Chinese White Dolphin Sighting Database in SWL (September 2015)

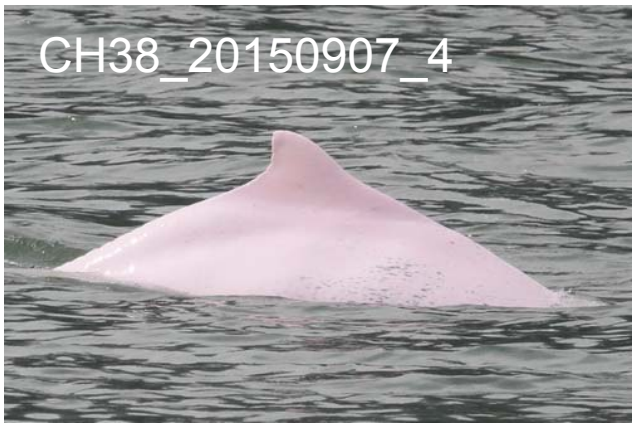
(Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; ND = Not Determined; BOAT ASSOC. = Fishing Boat Association; P/S: Sighting Made on Primary/Secondary Lines)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
07-Sep-15	1	1339	6	SW LANTAU	3	11	ON	HKCRP	806127	802745	AUTUMN	NONE	S
07-Sep-15	2	1404	6	SW LANTAU	2	ND	OFF	HKCRP	806270	803405	AUTUMN	NONE	
07-Sep-15	3	1425	5	SW LANTAU	2	482	ON	HKCRP	806568	803797	AUTUMN	NONE	S
07-Sep-15	4	1442	6	SW LANTAU	2	117	ON	HKCRP	807097	804984	AUTUMN	NONE	S
10-Sep-15	6	1159	4	SW LANTAU	2	ND	OFF	HKCRP	806228	802219	AUTUMN	NONE	
21-Sep-15	1	1112	5	SW LANTAU	2	100	ON	HYD-HZMB	805353	802526	AUTUMN	NONE	P
21-Sep-15	2	1150	4	SW LANTAU	1	47	ON	HYD-HZMB	806889	803860	AUTUMN	NONE	S
21-Sep-15	3	1417	2	SW LANTAU	1	70	ON	HYD-HZMB	805618	808323	AUTUMN	NONE	S
25-Sep-15	6	1141	1	SW LANTAU	2	865	ON	HKCRP	804926	805454	AUTUMN	NONE	P
25-Sep-15	7	1209	4	SW LANTAU	2	1058	ON	HKCRP	803226	808236	AUTUMN	NONE	P
25-Sep-15	8	1257	6	SW LANTAU	2	82	ON	HKCRP	807811	808172	AUTUMN	NONE	S
25-Sep-15	9	1320	4	SW LANTAU	2	181	ON	HKCRP	805560	809560	AUTUMN	NONE	P
25-Sep-15	10	1331	14	SW LANTAU	2	ND	OFF	HKCRP	803832	809898	AUTUMN	NONE	

Appendix IV. Individual dolphins identified during HYD-HZMB and AFCD monitoring surveys in SWL waters in September 2015

ID#	DATE	STG#	TYPE	AREA
CH38	07/09/15	4	HKCRP	SW LANTAU
	25/09/15	7	HKCRP	SW LANTAU
	25/09/15	10	HKCRP	SW LANTAU
NL120	07/09/15	4	HKCRP	SW LANTAU
NL226	21/09/15	1	HYD-HZMB	SW LANTAU
SL05	21/09/15	3	HYD-HZMB	SW LANTAU
SL40	25/09/15	10	HKCRP	SW LANTAU
SL50	25/09/15	8	HKCRP	SW LANTAU
SL53	07/09/15	3	HKCRP	SW LANTAU
SL54	25/09/15	8	HKCRP	SW LANTAU
WL15	07/09/15	1	HKCRP	SW LANTAU
	25/09/15	7	HKCRP	SW LANTAU
WL42	07/09/15	3	HKCRP	SW LANTAU
WL61	25/09/15	10	HKCRP	SW LANTAU
WL68	07/09/15	4	HKCRP	SW LANTAU
WL72	21/09/15	2	HYD-HZMB	SW LANTAU
	25/09/15	9	HKCRP	SW LANTAU
	25/09/15	10	HKCRP	SW LANTAU
WL91	21/09/15	3	HYD-HZMB	SW LANTAU
	25/09/15	10	HKCRP	SW LANTAU
WL92	25/09/15	7	HKCRP	SW LANTAU
WL109	21/09/15	2	HYD-HZMB	SW LANTAU
WL114	21/09/15	1	HYD-HZMB	SW LANTAU
WL116	10/09/15	6	HKCRP	SW LANTAU
WL123	07/09/15	1	HKCRP	SW LANTAU
	25/09/15	10	HKCRP	SW LANTAU
WL131	07/09/15	1	HKCRP	SW LANTAU
	10/09/15	6	HKCRP	SW LANTAU
	21/09/15	2	HYD-HZMB	SW LANTAU
	25/09/15	9	HKCRP	SW LANTAU
	25/09/15	10	HKCRP	SW LANTAU
WL165	07/09/15	4	HKCRP	SW LANTAU
WL168	07/09/15	4	HKCRP	SW LANTAU
	25/09/15	10	HKCRP	SW LANTAU
WL173	25/09/15	9	HKCRP	SW LANTAU
WL180	07/09/15	1	HKCRP	SW LANTAU
	07/09/15	2	HKCRP	SW LANTAU
	25/09/15	10	HKCRP	SW LANTAU
WL190	07/09/15	3	HKCRP	SW LANTAU
	25/09/15	8	HKCRP	SW LANTAU
WL211	07/09/15	4	HKCRP	SW LANTAU
WL229	07/09/15	1	HKCRP	SW LANTAU

Appendix V. Photographs of Identified Individual Dolphins in September 2015 in SWL waters



Appendix V (cont'd).

Appendix V (cont'd).

Appendix V (cont'd).

Appendix V (cont'd).