SECONDARY PORTS TABLE

	Lat.	S.	Long.	E.		Time ences	Mean S _l	oring, Ne	ap and S (metres)	Sea Level	Heights	Range Ratio
Port	0	,	3 -	,	HW	LW	MHWS	MHWN	MLWN		MSL	
AUCKLAND	36	51	174	46	hhmm	hhmm	3.3	2.8	1.0	0.4	1.86	
Maraetai	36	57	175	03	-0015	-0015	-	-	-	-	-	-
Onetaunga Bay	36	49	174	42	+0004	-0007	3.4	2.9	0.9	0.5	2.0	1.00
Coromandel Peninsula												
Coromandel Harbour	36	47	175	27	-0021	-0015	2.9	2.5	0.7	0.2	1.6	0.93
Thames – Rocky Point	37	06	175	31	-0031	-0024	3.3	3.0	0.9	0.6	2.0	0.93
Hauraki Gulf												
Mahurangi Harbour	36	29	174	43	+0002	+0012	-	-	-	-	-	-
Mangawhai Heads	36	05	174	36	+0005	+0005	-	-		-	-	-
Matakana River – Sandspit	36	24	174	44	+0005	+0005	2.7	2.4	0.9	0.5	1.6	0.76
Murray Bay	36	44	174	45	-0025	-0003	2.9	2.6 2.5	0.7	0.5	1.7 1.6	0.83
Tiritiri Matangi Island Weiti River Entrance	36 36	36 39	174 174	53 44	+0010 +0001	-0003 +0007	3.0 3.0	2.5 2.5	0.8 0.8	0.3 0.2	1.6	0.93 0.97
Whangateau Harbour	36	19	174	47	+0001	+0007	2.7	2.3	0.6	0.2	1.7	0.86
Kawau Island	00	10	174	71			2.,	2.0	0.0	0.2	1.0	0.00
Mansion House Bay – Bon Accord	36	26	174	49	-0015	-0004	2.7	2.3	0.8	0.3	1.5	0.83
Harbour	00	20	174	70	0010	0004	2.,	2.0	0.0	0.0	1.0	0.00
Waiheke Island												
Man o'War Bay	36	47	175	09	-0018	-0018	3.0	2.5	0.7	0.2	1.6	0.97
Matiatia Bay	36	47	173	59	0000	+0010	2.9	2.4	0.7	0.2	1.5	0.93
BLUFF _	46	36	168	21	hhmm	hhmm	2.8	2.4	1.0	0.6	1.74	
Colac Bay/Ōraka	46	22	167	54	-0044	-0039	2.3	1.8	0.9	0.4	1.3	0.86
Dog Island	46	39	168	25	-0017	-0035	2.8	2.3	1.0	0.5	1.7	1.05
Kawakaputa Bay	46	23	167	49	-0115	-0119	2.8	2.3	0.9	0.4	1.6	1.09
New River Entrance	46 46	32	168	15	-0022	-0022	2.8	2.5	0.7	0.4	1.6	1.09
Nugget Point Port Craig	46 46	27 13	169	49 22	+0107 -0203	+0108 -0205	2.4 3.1	2.1 2.6	1.0 1.3	0.5 0.7	1.5 1.9	0.86 1.09
Riverton/Aparima	46	22	167 168	01	-0203	-0203	2.9	2.4	1.2	0.7	1.8	1.00
Ruapuke Island	46	47	168	30	-0011	-0019	2.7	2.3	0.9	0.5	1.6	1.00
Waikawa Harbour	46	39	169	10	+0017	+0021	2.3	2.0	1.0	0.4	1.4	0.86
Waipapa Point	46	39	168	51	+0017	+0016	2.7	2.5	0.9	0.6	1.7	0.95
South Offshore Islands												
Antipodes Island	49	40	178	48	+0210	-	1.8	-	-	-	1.1	-
Auckland Island - Carnley	50	50	166	03	-0036	-0043	1.1	0.8	0.3	0.1	0.6	0.45
Harbour												
Campbell Island/Motu Ihupuku -	52	33	169	80	+0013	+0020	1.7	1.4	0.9	0.6	1.2	0.50
Perseverance Harbour												
Snares Island	48	02	166	36	-0109	-0109	1.9	1.7	0.8	0.5	1.2	0.64
Solander Island (Hautere)	46	35	166	53	-0134	-0134	2.3	2.0	0.9	0.6	1.5	0.77
Stewart Island/Rakiura												
Easy Harbour	47	09	167	34	-0200	-0201	2.6	2.2	0.9	0.4	1.6	1.00
Ernest Islands	46	58	167	41	-0200	-0203 -0136	2.2	1.8	0.7	0.2	1.2	0.91
Flour Cask Bay Golden Bay	47 46	17 54	167 168	29 07	-0124 -0001	-0130	2.8 2.7	2.4 2.2	1.0 1.1	0.5 0.6	1.7 1.7	1.05 0.95
Halfmoon Bay – Oban	46	54	168	08	-0001	-0012	2.6	2.2	1.1	0.6	1.6	0.93
Port Adventure	47	05	168	11	-0017	-0017	3.0	2.5	1.1	0.6	1.8	1.09
Small Craft Retreat	47	15	167	39	-0108	-0108	2.8	2.5	1.1	0.7	1.8	0.95
Yankee River	46	41	167	53	-0103	-0117	2.3	1.9	0.9	0.5	1.4	0.82
LYTTELTON	40	-00	4=0	40	la la co	h.l.	0.5		^-	2.0	4.0-	
LYTTELTON	43	36	172	43	hhmm	hhmm	2.5	2.0	0.7	0.2	1.37	0.07
Akaroa Cape Campbell	43 41	48 44	172 174	55 15	-0043 +0050	-0042 +0050	2.6 1.7	2.2 1.6	0.9 0.5	0.6 0.4	1.5 1.1	0.87 0.57
Kaikoura	41 42	44 25	174	15 42	+0050	+0030	2.0	1.6	0.5	0.4	1.1	0.57
Lucky Bay	41	16	173	17	+0230	+0017	1.3	1.0	0.5	0.2	0.9	0.78
Port Underwood	41	20	174	06	+0142	+0148	1.5	1.1	0.6	0.3	0.9	0.52
Rakaia River Mouth	43	54	172	13	-0046	-	-	-	-	-	-	-
Chatham Island 1												
Owenga	44	02	176	22W	+0022	+0021	1.3	1.0	0.3	0.0	0.7	0.57
Waitangi	43	57		34W	+0022	+0021	0.9	0.6	0.2	0.0	0.4	0.39
MADODEN DON'T												
MARSDEN POINT	35	50	174		hhmm	hhmm	2.7	2.3	0.9	0.4	1.57	0.00
Mangonui	34	59	173	32	+0033	+0049	2.6	2.2	0.9	0.4	1.5	0.96
North Cape (Otou) Portland Wharf	34 35	25 48	173 174	03 21	+0013 +0019	+0017 +0013	2.4 3.1	1.9 2.6	0.8 1.1	0.3 0.4	1.4 1.8	0.91 1.17
Tutukaka Harbour	35 35	46 37	174	32	-0015	-0010	2.3	∠.6 1.9	0.8	0.4	1.6	0.87
Whangamumu Harbour	35	15	174	18	+0014	+0031	2.1	1.9	0.6	0.3	1.2	0.83
Whangarei	35	46	174	21	+0014	+0014	3.1	2.6	1.1	0.5	1.8	1.13
Awanui River		-		-								
Dairy Factory Wharf	35	02	173	15	+0122	+0223	2.3	1.8	0.6	0.1	1.2	0.96
			-	-								

¹ Add a further 45 minutes to NZST to obtain Chatham Island Standard Time

^{*} Data Approximate - No Data

SECONDARY PORTS TABLE – continued

	Lat.	S.	Long.	E.		Time ences	Mean S _l	oring, Ne	ap and S (metres)	Sea Level	Heights	Range Ratio
Port	0	•	٥	,	HW	LW	MHWS	MHWN	MLWN	MLWS	MSL	
MARSDEN POINT continued	35	50	174	30	hhmm	hhmm	2.7	2.3	0.9	0.4	1.57	
Bay of Islands												
Poves Bay	35	12	174	02	-0002	-0002	2.4	2.2	8.0	0.6	1.5	0.78
Kerikeri	35	13	173	56	+0005	+0009	-	-	-	-	-	-
Opua	35	19	174	07	+0002	+0006	2.5	2.1	8.0	0.4	1.4	0.91
Russell	35	16	174	07	+0006	+0006	2.4	2.0	0.8	0.3	1.4	0.91
Vaitangi	35	16	174	05	+0022	+0022	2.3	2.0	0.6	0.4	1.4	0.83
Coromandel Peninsula Port Jackson	36	29	175	20	-0030	-0017	2.6	2.1	0.8	0.2	1.4	1.04
Great Barrier Island (Aotea Island)												
Nagle Cove	36	09	175	19	-0031	-0027	2.6	2.2	1.0	0.4	1.5	0.96
Tryphena	36	19	175	29	-0029	-0025	2.6	2.2	0.9	0.4	1.5	0.96
louhora Harbour	0.4		470		0000	0000	0.0	4.0	0.7	0.0	4.0	0.00
Houhora Harbour Entrance	34	50	173	09	+0039	+0032	2.2 2.1	1.9	0.7	0.3 0.1	1.3 1.1	0.83
Pukenui Wharf	34	49	173	07	+0042	+0035	2.1	1.9	0.3	0.1	1.1	0.87
Kermadec Islands - Raoul Island	00	45	477	\A/	0007	0015	1.0	1.0	0.0	0.5	1.0	0.57
Fishing Rock	29	15		55W	-0027	-0015	1.8	1.6	0.8	0.5	1.2	0.57
Boat Cove	29	17	1//	54W	-0034	-0027	1.7	1.5	0.7	0.4	1.1	0.57
Mokohinau Islands Burgess Island (Pokohinu)	35	54	175	07	-0024	-0020	2.5	2.1	0.9	0.4	1.5	0.91
` ,	33	54	173	U1	0024	0020	۷.5	۷.۱	0.3	0.4	1.5	0.31
Motukawanui Island	O.F.	04	170	56	+0013	+0009	2.2	2.0	0.7	0.5	1.3	0.74
Vaiiti Bay	35	01	173	56	+0013	+0009	2.2	∠.∪	0.7	0.5	1.3	0.74
Parengarenga Harbour	0.4	21	170	57	LO140	⊥01 <i>4E</i>	9 F	0 1	0.7	0.4	1.4	0.01
Ngatehe Point	34	31	172	57	+0140	+0145	2.5	2.1	0.7	0.4	1.4	0.91
Rangaunu Harbour	0.5	00	470	10			0.0	0.0	0.5	0.0	4.0	0.01
Omaia Island	35	00	173	16	- 0015	-	2.3	2.0	0.5	0.2	1.3	0.91
Scheigis Rock	34 35	54 00	173	18 15	+0015 +0102	-0003 +0129	2.3 2.3	1.9 1.9	0.6 0.6	0.2 0.2	1.3 1.3	0.91 0.91
Jnahi Jetty	35	UU	173	15	+0102	+0129	۷.3	1.9	0.0	0.2	1.3	0.91
Whangaroa Harbour	0.5	04	170	<i>1</i> =	. 0000	.0000	0.5	0.0	0.0	0.5	4 E	0.07
Whangaroa	35	01	173	45	+0032	+0028	2.5	2.2	0.8	0.5	1.5	0.87
Whangaruru Harbour	<u> </u>	00		0.1			0.0	0.0	0.0	0.0	4.0	0.00
Rocky Point	35	22	174	21	-	-	2.2	2.0	0.6	0.3	1.3	0.83
NAPIER	39	29	176	55	hhmm	hhmm	1.8	1.5	0.4	0.0	0.94	
Hawke Bay												
Cape Kidnappers	39	38	177	05	-0020	-0020	-	-	-	-	-	-
Portland Island	39	17	177	52	-0015	-0015	-	-	-	-	-	-
Waikokopu	39	04	177	50	+0005	+0005	1.6	1.5	0.4	0.2	0.9	0.78
Vairoa River Mouth	39	03	177	26	0000	0000	1.6	1.5	0.3	0.2	0.9	0.78
Vairarapa Coast												
Akitio River Entrance	40	36	176	25	-0100	-0100	-	-	-	-	-	-
Bare Island (Motu o Kura)	39	50	177	02	-0017	-0017	-	-	-	-	-	-
Cape Turnagain	40	30	176	37	-0049	-0049	-	-	-	-	-	-
Castlepoint	40	55	176	13	-0018	-0018	1.2	1.1	0.1	0.0	0.6	0.67
Porangahau River Entrance	40	15	176	42	-0038	-0038	-	-	-	-	-	-
Punawaitai	40	06	176	52	-0030	-0030	-	-	-	-	-	-
NELSON	41	16	173	16	hhmm	hhmm	4.2	3.2	1.4	0.5	2.32	
Stephens Island (Takapourewa)	40	40	173	00	hhmm -0030	-0030	2.8	2.3	1.1	0.6	1.7	0.59
,	40	+∪	174	00	3000	5000	2.0	۷.٥	1.1	0.0	1.7	5.55
Golden Bay	40	40	172	40	_	_	4.7	3.8	1.4	0.5	2.6	1.14
Collingwood Motupipi Inlet	40	50	172	40 51	-	_	5.0	3.6 4.1	1.4	0.5	2.8	1.14
Tarakohe	40	49	172	54	+0002	+0008	4.0	3.0	1.3	0.3	2.0	1.00
	40	73	112	J+	10002	, 5555	7.0	0.0	1.0	0.0	۲.۱	1.00
<i>Marlborough Sounds</i> Catherine Cove	40	52	173	53	-0031	-0032	2.6	1.9	0.8	0.2	1.4	0.65
Catherine Cove Current Basin	40 40	52 56	173	53 50	-0031	-0032	2.6 3.9	3.1	1.4	0.2 0.6	2.3	0.89
Elaine Bay	41	03	173	46	-0035	-0035	2.6	1.9	1.4	0.6	1.5	0.59
Elmslie Bay	40	56	173	51	-0033	-0032	3.1	2.2	1.4	0.6	1.8	0.68
Havelock	41	17	173	46	-0014	-0014	3.1	2.4	1.2	0.5	1.8	0.70
Pelorus Sound Entrance	40	55	173	59	-0100	-0120	2.8	2.2	1.1	0.5	1.6	0.62
Portage	41	12	174	02	-0028	-0028	3.1	2.4	1.2	0.4	1.8	0.73
Vhakatahuri	41	01	174	03	-0100	-0100	2.7	2.1	1.1	0.6	1.6	0.57
Rangitoto ki te Tonga/D'Urville												
-												
siand	40	52	173	48	-0020	-0020	3.8	2.9	1.5	0.6	2.2	0.86
		J_	.,,	.0	2020	3020	0.0			0.0		2.55
Greville Harbour	10					0000	4.0	2.0	1.2	0.2	2.5	1.24
Greville Harbour Tasman Bay		58	172	OЗ	-0020	-(1020	4 ×					1.44
Greville Harbour <i>Tasman Bay</i> Astrolabe Roadstead	40	58 05	173 173	03 42	-0020 -0018	-0020 -0002	4.8 3.6	3.8 3.0				
Greville Harbour <i>Tasman Bay</i> Astrolabe Roadstead Croisilles Harbour	40 41	05	173	42	-0018	-0002	3.6	3.0	1.2	0.7	2.1	0.78
island Greville Harbour Tasman Bay Astrolabe Roadstead Croisilles Harbour Kaiteriteri Mapua	40 41 41	05 03	173 173	42 01	-0018 +0001	-0002 +0005	3.6 3.9	3.0 2.9	1.2 1.3	0.7 0.3		0.78 0.97
Greville Harbour <i>Tasman Bay</i> Astrolabe Roadstead Croisilles Harbour	40 41	05	173	42	-0018	-0002	3.6	3.0	1.2	0.7	2.1 2.1	0.78

SECONDARY PORTS TABLE – continued

	Lat.	S.	Long.	E.		Time ences	Mean S _l		ap and S (metres)	ea Level	Heights	Range Ratio
Port	0	•	٥	•	HW	LW	MHWS	MHWN	MLWN	MLWS	MSL	
ONEHUNGA	36	56	174	47	hhmm	hhmm	4.2	3.4	1.4	0.5	2.42	
Manukau Harbour												
Cornwallis	37	00	174	36	-0020	-0011	3.5	2.9	1.1	0.5	2.0	0.81
Papakura Channel – LPG Terminal	37	02	174	50	+0005	-0004	3.9	3.2	1.1	0.4	2.1	0.95
Paratutae Island	37	03	174	31	-0031	-0020	3.1	2.5	1.0	0.4	1.8	0.73
Vaiuku	37	15	174	44	+0030	-	-	-	-	-	-	-
West Coast Beaches												
Muriwai Beach	36	50	174	26	-0040	-0030	_	_	_	_	_	_
Piha Beach	36	57	174	28	-0045	-0035	_	_	_	_	_	_
Ге Henga (Bethells Beach)	36	53	174	27	-0040	-0050	_	_	_	_	_	_
re rienga (Detriens Deach)			174	21	-0040	-0050		_				
PICTON	41	17	174	00	hhmm	hhmm	1.5	1.0	0.5	0.0	0.74	
Cook Strait	41	04	174	26	0000	0000	1 5	1.0	0.5	0.0	0.7	1.00
ishermans Rock	41	04	174	36	0000	0000	1.5	1.0	0.5	0.0	0.7	1.00
Queen Charlotte Sound												
Totaranui)												
East Bay	41	14	174	80	-0012	-0019	1.4	1.0	0.4	0.0	0.7	0.93
ong Island	41	07	174	17	-0004	-0003	1.5	1.0	0.4	0.1	0.7	0.93
Okiwa Bay	41	17	173	55	-0003	-0006	1.5	1.0	0.5	0.0	0.7	1.00
Tory Channel												
Okukari Bay	41	12	174	19	-0053	-0034	1.4	1.1	0.7	0.4	0.9	0.67
Te Iro Bay	41	14	174	11	-0019	-0010	1.3	0.9	0.4	0.0	0.7	0.87
PORT CHALMERS	45	49	170	39	hhmm	hhmm	2.1	1.8	0.5	0.2	1.12	
Damaru	45	06	170	59	+0002	+0002	2.3	1.9	0.8	0.5	1.4	0.95
Otago Harbour Entrance – Spit	45	47	170	43	-0013	-0024	2.0	1.7	0.5	0.3	1.1	0.89
Wharf	-10	77	170	70	0010	002 1	2.0	•••	0.0	0.0	•••	0.00
PORT TARANAKI	39	04	174	02	hhmm	hhmm	3.5	2.7	1.1	0.3	1.94	1.10
Ahipara Bay	35	10	173	07	-0015	-0015	3.6	2.9	1.1	0.4	2.0	1.00
Notea Harbour	38	00	174	50	-0004	-0004	3.7	2.9	1.2	0.4	2.1	1.03
Cape Maria van Diemen	34	29	172	38	-0035	-0035	2.4	2.1	0.6	0.3	1.4	0.66
Karehana Bay - Plimmerton	41	04	174	51	-0033	-0033	1.5	0.9	0.8	0.3	0.8	0.41
-	41	04	174	31	-0013	-0022	1.5	0.9	0.6	0.2	0.0	0.41
Boating Club	00	0.4	474	40	0040	0004	0.0	0.0		0.0	0.0	4 00
Kawhia	38	04	174	49	+0018	-0004	3.6	2.8	1.1	0.3	2.0	1.03
Makara Beach	41	13	174	42	-0040	-0040	1.3	0.9	0.7	0.3	0.8	0.31
Manawatu River Entrance	40	28	175	13	-0020	-0020	2.4	1.8	0.9	0.2	1.3	0.69
Otaki River Entrance	40	45	175	06	-0020	-0020	-	-	-	-	-	-
Paraparaumu Beach	40	54	174	59	-0020	-0020	. - _		-	<u>-</u> .		
Porirua Harbour – Mana Cruising	41	06	174	52	0000	-0016	1.7	1.2	0.9	0.4	1.0	0.41
Club												
Raglan	37	48	174	53	+0023	+0008	3.2	2.5	0.9	0.1	1.8	0.97
Vaikanae River Entrance	40	52	175	00	+0008	+0004	-	-	-	-	-	-
Vaikato River Entrance	37	24	174	45	-0004	-0004	3.7	3.0	1.2	0.5	2.1	1.00
Vaitarere Beach	40	34	175	11	-0020	-0020	-	-	-	-	-	-
Hokianga Harbour												
Kohukohu	35	22	173	32	+0015	+0015	3.3	2.8	0.8	0.3	1.8	0.94
Opononi	35	30	173	24	+0005	+0002	2.9	2.3	0.7	0.1	1.5	0.88
Rawene	35	24	173	30	+0026	+0016	3.3	2.7	1.0	0.4	1.9	0.91
Kaipara Harbour				-								
Dargaville	35	56	173	52	+0228	+0346	_	_	-	_	_	_
Helensville	36	40	173	27	+0222	+0249	_	-	_	-	_	_
Island Point	36		174		+0222	+0249	3.6	2.8	- 1.1	0.3	- 1.9	1.03
		14										
Pouto Point	36	22	174	11	+0039	+0035	3.3	2.7	8.0	0.3	1.8	0.94
Shelly Beach	36	34	174	23	+0053	+0050	3.8	3.1	8.0	0.1	2.0	1.16
Te Kopuru	36	02	173	56	+0156	+0236	3.4	3.0	-	-	-	-
Γikinui 	36	07	173	58	+0138	+0155	3.8	2.9	8.0	0.1	2.0	1.16
[inopai	36	15	174	15	+0059	+0059	3.8	2.7	0.9	0.1	1.9	1.16
Vhakapirau	36	09	174	15	+0125	+0107	3.9	3.0	1.2	0.3	2.1	1.13
Kapiti Island												
Naiorua Bay	40	50	174	57	-0017	-0017	1.7	1.2	0.9	0.4	1.1	0.41
Manawatāwhi/Three Kings Islands												
Great Island - North West Bay	34	09	172	09	-0136	-0133	2.4	2.0	0.7	0.4	1.4	0.63
North Taranaki Bight												
	38	59	174	14	0000	0000	3.5	2.9	1.1	0.4	2.0	0.97
Waitara River Entrance												
South Taranaki Bight Opunake Bay	39	28	173	51	-0005	-0005	3.3	2.7	1.0	0.3	1.8	0.94
<i>N</i> aitara River Entrance South Taranaki Bight Opunake Bay Patea Whanganui River Entrance		28 47 57	173 174 174	51 29 59	-0005 -0010	-0005 -0010	3.3 2.5 2.8	2.7 1.9 2.2	1.0 0.8	0.3 0.2 0.7	1.8 1.3 1.7	0.94 0.72 0.66

^{*} Data Approximate - No Data

SECONDARY PORTS TABLE – continued

New Part P		Lat.	S.	Long.	E.	Mean Differ	Time ences	Mean S		ap and S (metres)	ea Level	Heights	Range Ratio
Name	Port	0	,	_	•	HW	LW	MHWS	MHWN	MLWN	MLWS	MSL	
Same proint 37 58 177 27 -0.025 -0.034 -0.03 -0.0 -0	TAURANGA	37	39	176	11	hhmm	hhmm	1.9	1.6	0.5	0.1	1.04	
Section Floating 37 33 78 10 -0.037 -0.031 1.9 1.6 0.5 0.2 1.0 0.94	Bay of Plenty												
Alaketu Estuary Entrance Alaketu Estuary En	Haurere Point	37	58	177	27	-0025	-0030	-	-	-	-	-	-
Mountports Island Whale Island 37 52 176 59	₋ottin Point	37	33	178	10	-0037	-0031	1.9	1.6	0.5	0.2	1.0	0.94
Draio Bay - Motunui Island 37 47 177 39 -0033 -0024 2.1 1,9 0.7 0.5 1.3 0.89 38 02 177 14 -0023 -0001 2.0 1.6 0.6 0.3 1.1 0.94 Pagamana Beach 37 43 176 20 -0040	Maketu Estuary Entrance	37		176	27	-0040	-	-	-	-		-	-
Special Winard 38 Q2	Moutohora Island – Whale Island ¹	37		176	59					0.4			0.94
**Pamenda Beach 37 43 176 20 -0.040	Omaio Bay – Motunui Island	37	47	177	39	-0033	-0024	2.1	1.9	0.7	0.5	1.3	0.89
Prof. Orgo Wharf 37 59 177 06 0.002 10.002 1.1 1.7 0.6 0.2 1.2 1.0 0.0 Fine Kahan 37 46 177 40 0.003 0.0040 Walhi Beach 37 24 175 56 -0.015 Walhi Beach 37 24 175 56 -0.015 Walhi Beach 37 24 175 56 -0.015 Whakakari 37 37 177 11 -0.022 -0.010 2.0 1.7 0.6 0.3 1.1 0.94 Drozomandel Peninsula Tausanii 37 04 175 57 -0.038 -0.004 -0.022 Tausanii 37 04 175 57 -0.038 -0.004 -0.021 Tausanii 37 04 175 57 -0.038 -0.004 -0.021 Tausanii 37 04 175 57 -0.038 -0.004 -0.021 Tausanii 37 05 175 57 -0.038 -0.001 Tausanii 37 05 175 57 -0.038 -0.001 Tausanii 37 05 175 57 -0.038 -0.001 Tausanii 37 37 37 37 37 37 37	Opotiki Wharf	38	02	177	14		+0001	2.0	1.6	0.6	0.3	1.1	0.94
is Kaha	Papamoa Beach			176									
Vashi Beach	Port Ohope Wharf							2.1	1.7	0.6	0.2		1.06
Visited sland Myhle Island I 177 11 -0.022 - 0.017 -0	Te Kaha						-0040	-	-	-	-	-	-
\text{Vhakatatare} \ 37 \ 57 \ 177 \ 00 \ 0-0022 \ 0-0101 \ 2.0 \ 1.7 \ 0.6 \ 0.3 \ 3.1.1 \ 0.94 \ \text{Doromanded Peninsulus} \ \text{2 auanui} \ 37 \ 04 \ 175 \ 53 \ -0004 \ -0002 \ -0.0 \ 2.0 \ 1.8 \ 0.5 \ 0.4 \ 1.2 \ 0.89 \ \ \text{airon} \ \text{airon} \ \text{3 aranui} \ 37 \ 03 \ 175 \ 57 \ -0038 \ 0-0010 \ 2.0 \ 1.8 \ 0.5 \ 0.4 \ 0.1 \ 1.0 \ 1.0 \ 0.89 \ \ \text{airon} \ \text{airon} \ \text{airon} \ \text{3 aranui} \ 37 \ 03 \ 175 \ 57 \ -0038 \ 0-0010 \ 2.0 \ 1.8 \ 0.6 \ 0.5 \ 0.4 \ 0.1 \ 1.0 \ 0.89 \ \ \text{airon} \ \text{airon} \ \text{airon} \ \text{airon} \ \text{3 aranui} \ 37 \ 03 \ 175 \ 57 \ 0.0024 \ 0.0024 \ 0.0024 \ 1.8 \ 1.6 \ 0.6 \ 0.2 \ 0.1 \ 1.0 \ 0.6 \ 0.2 \ 1.1 \ 0.94 \ \ \text{bridingal match Markury Island (Ahuahu)} \ \text{uruth Harboru} \ \text{4 aranui match Markury Island (Ahuahu)} \ \text{uruth Harboru} \ \ \text{3 5 aranui match Markury Island (Ahuahu)} \ \text{uruth Harboru} \ \ \text{3 5 aranui match Markury Island (Ahuahu)} \ \text{uruth Harboru} \ \text{3 7 41 178 33 -0045 \ 0.001 \ 0.001 \ 0.2 \ 0.1 \ 8 \ 0.6 \ 0.5 \ 0.5 \ 1.3 \ 0.89 \ \ \text{elicks Bay} \ 37 \ 35 \ 178 19 \ -0.045 \ 0.002 \ 0.002 \ 0.002 \ 0.001 \ 0.7 \ 0.5 \ 1.3 \ 0.89 \ \ \text{elicks Bay} \ 37 \ 35 \ 178 19 \ 0.005 \ 0.002 \ 0.005 \ 0.002 \ 0.005 \ 0.0000 \ 0.000 \ 0.00000 \ 0.00000 \ 0.00000 \ 0.00000 \ 0.00000 \ 0.00000 \ 0.00000 \ 0.00000 \ 0.000000 \ 0.00000 \ 0.00000000	Vaihi Beach			175			-	-	-	-	-	-	-
Second Peninsula								-			-		-
Palamanii 37 04 175 53 -0004 -0002	Vhakatane	37	57	177	00	-0022	-0010	2.0	1.7	0.6	0.3	1.1	0.94
Silpper Island (Whakahau)	Coromandel Peninsula												
airuia ariua 37 00 175 51 -0003 -0003 1.9 1.6 0.4 0.1 1.0 1.0 1.00 apuauetahi Bay (Boat Harbour) 36 56 175 51 -0003 -0004 1.8 1.6 0.6 0.3 1.1 0.83 whangamata 37 12 175 53 -0010 -0010	Pauanui	37	04	175	53	-0004	-0002	-	-	-	-		-
agualenti Bay (Boat Harbour)	Slipper Island (Whakahau)	37	03	175	57	-0038	-0010	2.0	1.8	0.5	0.4	1.2	0.89
\text{Vishangamata} \text{Vishangamata} \text{Vishangamata} \text{37} 2 175 53 -0010 -0010 -0 -0 -0 -0 -	Tairua Tairua	37	00	175	51	-0003	-0003	1.9	1.6	0.4	0.1	1.0	1.00
Whitianga 36 50 175 42 -0006 -0009 1.9 1.8 0.6 0.2 1.1 0.94 Great Mercury Island (Ahushu) Warnuch Harbour Warnuch Warn	Tapuaetahi Bay (Boat Harbour)	36	56	175	51	-0024	-0024	1.8	1.6	0.6	0.3	1.1	0.83
Whitelanga	Vhangamata	37	12	175	53	-0010	-0010	-	-	-	-	-	-
Streat Mercury Island (Ahuahu)	Vhitianga	36		175		-0006	-0009	1.9	1.6	0.6	0.2	1.1	0.94
Huruhi Harbour	· ·												
North Island East Coast 37		36	36	175	46	_	_	20	1.8	0.4	0.2	11	1 00
East Cape 37		30	50	173	70			2.0	1.5	J.⊣r	5.2		1.50
Idea Bay		07	44	170	20	0045	0041	0.1	1.0	0.7	0.5	1.0	0.00
okomanu Bay 38 08 178 20 - - 1,9 1,8 0.6 0.5 - 0.7 0.78 0.0 0.04 - 1,0 0.78 0.0 <td>•</td> <td></td>	•												
olaga Bay - Cooks Cove 38 23 178 20 -0104 -0110 1.7 1.6 0.4 0.3 1.0 0.78 Walipino Bay 38 02 178 20 -0052 -0058 2.0 1.8 0.6 0.5 1.2 0.83 Walipino Bay 38 02 178 20 -0052 -0058 2.0 1.8 0.6 0.5 1.2 0.83 Walipino Bay 37 30 175 59 -0005 - - Wendrown - Katikati Entrance 37 28 175 59 +0003 - - - - - - Wendrown - Katikati Fatrance 37 28 175 59 +0003 - - - - - - - - -	•												
Najūro Bay Najūro Bay Najūro Bay Najūro Bay Najūro Bay Najūro Bay Sauranga Harbour Sauranga Harbour Sauranga Harbour Sauranga Harbour Sauranga Harbour Sauranga Harbour Najūro Majūro Ma													
Samanga Harbour													
Sowentown - Katikati Entrance 37 28 175 59 -0005 - - - - - - - - -	•	38	02	1/8	∠∪	-0052	-0058	2.0	1.8	0.0	0.5	1.2	0.83
Adtikatir Kauri Point 37 31 175 59 +0030													
Drokkora Beach 37 40 176 03 +0100 - - - - - - - - -							-	-	-	-	-	-	-
TIMARU 44 23 171 15 hhmm hhmm 2.4 2.0 0.8 0.5 1.44 Ashburton River Entrance 44 0.3 171 48 +0031							-	-		-	-	-	-
MARU							-	-		-	-	-	
Ashburton River Entrance	own Wharf	37	40	176	09	+0020	-	-	-	-	-	-	-
Ashburton River Entrance	CIMADII		02	171	45	hhmm	bb mana	0.4	2.0	0.0	0.5	4 44	
Rangitata River Entrance													
VELLINGTON 41 17 174 47 hhmm hhmm 1.8 1.4 0.7 0.4 1.08							=						_
Cook Strait Cape Terawhiti - Oteranga Bay	angitata river Littrance	44		171	31	T0013							
Cape Terawhiti - Oteranga Bay 41 18 174 37 +0107 +0113 0.9 0.7 0.5 0.3 0.6 0.43 (arrori Rock Light 41 21 174 39 +0045 +0045	WELLINGTON	41	17	174	47	hhmm	hhmm	1.8	1.4	0.7	0.4	1.08	
Karori Rock Light 41 21 174 39 +0045 +0045	Cook Strait												
Variarapa Coast Cape Palliser (Matakitakiakupe)	Cape Terawhiti - Oteranga Bay	41	18	174	37	+0107	+0113	0.9	0.7	0.5	0.3	0.6	0.43
Cape Palliser (Matakitakiakupe)	Karori Rock Light	41	21	174	39	+0045	+0045	-	-	-	-	-	-
Cape Palliser (Matakitakiakupe)	o												
NestPort 41 45 171 36 Num Num 3.2 2.5 0.9 0.2 1.76	-	41	37	175	17	±0010	⊥ 0010	15	1 /	0.5	0.3	nα	0.86
Raramea River Entrance 41 15 172 06 -0035	vape i amser (watakitakiakupe)			175	17	+0010	+0010	1.0	17	0.5	0.0		0.00
Aramea River Entrance 41 15 172 06 -0035	VESTPORT	41	45	171	36	hhmm	hhmm	3.2	2.5	0.9	0.2	1.76	
Whanganui Inlet 40 35 172 35 -0105 -0105 2.9 2.3 0.8 0.0 1.4 0.97 Fiordland Sounds Sligh Sound 44 53 167 32 +0100 +0100 2.1 1.8 0.6 0.3 1.2 0.60 Charles Sound 45 05 167 06 +0033 +0035 3.1 2.6 1.1 0.4 1.8 0.90 George Sound 44 52 167 22 +0034 +0034 2.5 2.1 0.9 0.5 1.5 0.67 Greaksea Sound Silbert Islands 45 36 166 41 +0037 +0039 2.3 1.8 0.7 0.2 1.3 0.70 Greaksea Sound Silbert Islands 45 36 166 33 +0053 +0054 2.6 2.1 1.0 0.4 1.5 0.73 Greak Islands 45 58 166 40 +0105 +0058 2.4 1.9 0.8 0.3 1.3 0.70 Greak Islands Group Group 45 28 167 09 +0112 +0110 2.3 1.8 0.8 0.3 1.3 0.67 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.7 0.6 0.2 1.2 0.67 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.3 1.3 0.63 Greak Water Basin 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 Greak Water Basin	Buller Coast												
Whanganui Inlet 40 35 172 35 -0105 -0105 2.9 2.3 0.8 0.0 1.4 0.97 Fiordland Sounds Sligh Sound 44 53 167 32 +0100 +0100 2.1 1.8 0.6 0.3 1.2 0.60 Charles Sound 45 05 167 06 +0033 +0035 3.1 2.6 1.1 0.4 1.8 0.90 George Sound 44 52 167 22 +0034 +0034 2.5 2.1 0.9 0.5 1.5 0.67 Greaksea Sound Silbert Islands 45 36 166 41 +0037 +0039 2.3 1.8 0.7 0.2 1.3 0.70 Greaksea Sound Silbert Islands 45 36 166 33 +0053 +0054 2.6 2.1 1.0 0.4 1.5 0.73 Greak Islands 45 58 166 40 +0105 +0058 2.4 1.9 0.8 0.3 1.3 0.70 Greak Islands Group Group 45 28 167 09 +0112 +0110 2.3 1.8 0.8 0.3 1.3 0.67 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.7 0.6 0.2 1.2 0.67 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Greak Islands 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.73 Greak Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.3 1.3 0.63 Greak Water Basin 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 Greak Water Basin													
Fiordland Sounds Bilgh Sound	Karamea River Entrance	41	15	172	06	-0035	-	-	_	_	-	_	-
Bigh Sound	Karamea River Entrance Whanganui Inlet						- -0105	- 2.9	- 2.3	- 0.8	- 0.0	- 1.4	- 0.97
Charles Sound 45 05 167 06 +0033 +0035 3.1 2.6 1.1 0.4 1.8 0.90 George Sound 44 52 167 22 +0034 +0034 2.5 2.1 0.9 0.5 1.5 0.67 (32 +0034 +	Vhanganui Inlet						- -0105	- 2.9	- 2.3	0.8	0.0	- 1.4	- 0.97
Reorge Sound 44 52 167 22 +0034 +0034 2.5 2.1 0.9 0.5 1.5 0.67 (Reaksea Sound Bilbert Islands 45 36 166 41 +0037 +0039 2.3 1.8 0.7 0.2 1.3 0.70 (Reaksea Sound Bilbert Islands 45 36 166 41 +0037 +0039 2.3 1.8 0.7 0.2 1.3 0.70 (Reaksea Sound Bilbert Islands 45 36 166 33 +0053 +0054 2.6 2.1 1.0 0.4 1.5 0.73 (Reaksea Sound Bilbert Islands 45 58 166 40 +0105 +0058 2.4 1.9 0.8 0.3 1.3 0.70 (Reaksea Sound Plands Pates Bay 45 18 166 59 +0036 +0037 2.3 1.7 0.7 0.1 1.2 0.73 (Reaksea Sound Bilbert Islands 45 28 167 09 +0112 +0110 2.3 1.8 0.8 0.3 1.3 0.67 (Reaksea Sound Bilbert Islands 45 44 166 44 +0055 +0056 2.2 1.7 0.6 0.2 1.2 0.67 (Reaksea Sound Bilbert Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 (Reaksea Sound Bilbert Islands Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 (Reaksea Sound Bilbert Islands Bay 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63 (Reaksea Sound Bilbert Islands Bay 46 06 166 39 +0100 +0100	Vhanganui Inlet <i>Fiordland Sounds</i>	40	35	172	35	-0105							
Streaksea Sound Gilbert Islands 45 36 166 41 +0037 +0039 2.3 1.8 0.7 0.2 1.3 0.70	Vhanganui Inlet Fiordland Sounds Bligh Sound	40 44	35 53	172 167	35 32	-0105 +0100	+0100	2.1	1.8	0.6	0.3	1.2	0.60
Chalky Inlet Chalky Island - Sealers Bay Chalky Island - S	Vhanganui Inlet Fiordland Sounds Bligh Sound Charles Sound	40 44 45	35 53 05	172 167 167	35 32 06	-0105 +0100 +0033	+0100 +0035	2.1 3.1	1.8 2.6	0.6 1.1	0.3 0.4	1.2 1.8	0.60 0.90
Chalky Inlet Chalky Island - Sealers Bay Chalky Islands C	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound	40 44 45	35 53 05	172 167 167	35 32 06	-0105 +0100 +0033	+0100 +0035	2.1 3.1	1.8 2.6	0.6 1.1	0.3 0.4	1.2 1.8	0.60 0.90
Chalky Island - Sealers Bay 46 03 166 33 +0053 +0054 2.6 2.1 1.0 0.4 1.5 0.73 cmall Craft Harbour Islands 45 58 166 40 +0105 +0058 2.4 1.9 0.8 0.3 1.3 0.70 cmall Craft Harbour Islands 45 58 166 40 +0105 +0058 2.4 1.9 0.8 0.3 1.3 0.70 cmbtful Sound/Patea cmall Slanket Bay 45 18 166 59 +0036 +0037 2.3 1.7 0.7 0.1 1.2 0.73 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound	40 44 45 44	35 53 05 52	172 167 167 167	35 32 06 22	-0105 +0100 +0033 +0034	+0100 +0035 +0034	2.1 3.1 2.5	1.8 2.6 2.1	0.6 1.1 0.9	0.3 0.4 0.5	1.2 1.8 1.5	0.60 0.90 0.67
Small Craft Harbour Islands 45 58 166 40 +0105 +0058 2.4 1.9 0.8 0.3 1.3 0.70 Doubtful Sound/Patea Blanket Bay 45 18 166 59 +0036 +0037 2.3 1.7 0.7 0.1 1.2 0.73 Deep Cove 45 28 167 09 +0112 +0110 2.3 1.8 0.8 0.3 1.3 0.67 Dusky Sound Front Islands 45 44 166 44 +0055 +0056 2.2 1.7 0.6 0.2 1.2 0.67 Many Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Milford Sound/Piopiotahi Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands	40 44 45 44	35 53 05 52	172 167 167 167	35 32 06 22	-0105 +0100 +0033 +0034	+0100 +0035 +0034	2.1 3.1 2.5	1.8 2.6 2.1	0.6 1.1 0.9	0.3 0.4 0.5	1.2 1.8 1.5	0.60 0.90 0.67
Solutiful Sound/Patea Stanket Bay 45 18	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet	40 44 45 44 45	35 53 05 52 36	172 167 167 167 166	35 32 06 22 41	-0105 +0100 +0033 +0034 +0037	+0100 +0035 +0034 +0039	2.1 3.1 2.5	1.8 2.6 2.1	0.6 1.1 0.9	0.3 0.4 0.5	1.2 1.8 1.5	0.60 0.90 0.67
Blanket Bay 45 18 166 59 +0036 +0037 2.3 1.7 0.7 0.1 1.2 0.73 Deep Cove 45 28 167 09 +0112 +0110 2.3 1.8 0.8 0.3 1.3 0.67 Dusky Sound Front Islands 45 44 166 44 +0055 +0056 2.2 1.7 0.6 0.2 1.2 0.67 Many Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Milford Sound/Piopiotahi Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Island - Sealers Bay	40 44 45 44 45 46	35 53 05 52 36	172 167 167 167 166	35 32 06 22 41 33	-0105 +0100 +0033 +0034 +0037 +0053	+0100 +0035 +0034 +0039 +0054	2.1 3.1 2.5 2.3	1.8 2.6 2.1 1.8	0.6 1.1 0.9 0.7	0.3 0.4 0.5 0.2	1.2 1.8 1.5 1.3	0.60 0.90 0.67 0.70
Blanket Bay 45 18 166 59 +0036 +0037 2.3 1.7 0.7 0.1 1.2 0.73 Deep Cove 45 28 167 09 +0112 +0110 2.3 1.8 0.8 0.3 1.3 0.67 Dusky Sound Front Islands 45 44 166 44 +0055 +0056 2.2 1.7 0.6 0.2 1.2 0.67 Many Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Milford Sound/Piopiotahi Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet	40 44 45 44 45 46	35 53 05 52 36	172 167 167 167 166	35 32 06 22 41 33	-0105 +0100 +0033 +0034 +0037 +0053	+0100 +0035 +0034 +0039 +0054	2.1 3.1 2.5 2.3	1.8 2.6 2.1 1.8	0.6 1.1 0.9 0.7	0.3 0.4 0.5 0.2	1.2 1.8 1.5 1.3	0.60 0.90 0.67 0.70
Deep Cove 45 28 167 09 +0112 +0110 2.3 1.8 0.8 0.3 1.3 0.67 Dusky Sound Front Islands 45 44 166 44 +0055 +0056 2.2 1.7 0.6 0.2 1.2 0.67 Many Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Milford Sound/Piopiotahi Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Island - Sealers Bay	40 44 45 44 45 46	35 53 05 52 36	172 167 167 167 166	35 32 06 22 41 33	-0105 +0100 +0033 +0034 +0037 +0053	+0100 +0035 +0034 +0039 +0054	2.1 3.1 2.5 2.3	1.8 2.6 2.1 1.8	0.6 1.1 0.9 0.7	0.3 0.4 0.5 0.2	1.2 1.8 1.5 1.3	0.60 0.90 0.67 0.70
Dusky Sound Front Islands 45 44 166 44 +0055 +0056 2.2 1.7 0.6 0.2 1.2 0.67 Many Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Milford Sound/Piopiotahi Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Island - Sealers Bay Gmall Craft Harbour Islands	40 44 45 44 45 46 45	35 53 05 52 36 03 58	172 167 167 167 166 166	35 32 06 22 41 33 40	-0105 +0100 +0033 +0034 +0037 +0053 +0105	+0100 +0035 +0034 +0039 +0054 +0058	2.1 3.1 2.5 2.3 2.6 2.4	1.8 2.6 2.1 1.8 2.1 1.9	0.6 1.1 0.9 0.7 1.0 0.8	0.3 0.4 0.5 0.2 0.4 0.3	1.2 1.8 1.5 1.3 1.5	0.60 0.90 0.67 0.70 0.73 0.70
Front Islands 45 44 166 44 +0055 +0056 2.2 1.7 0.6 0.2 1.2 0.67 Many Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Milford Sound/Piopiotahi Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Bilbert Islands Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Coubtful Sound/Patea Blanket Bay	40 44 45 44 45 46 45 46 45	35 53 05 52 36 03 58	172 167 167 166 166 166	35 32 06 22 41 33 40 59	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036	+0100 +0035 +0034 +0039 +0054 +0058	2.1 3.1 2.5 2.3 2.6 2.4 2.3	1.8 2.6 2.1 1.8 2.1 1.9	0.6 1.1 0.9 0.7 1.0 0.8	0.3 0.4 0.5 0.2 0.4 0.3	1.2 1.8 1.5 1.3 1.5 1.3	0.60 0.90 0.67 0.70 0.73 0.70
Many Islands 45 46 166 31 +0042 +0043 2.6 2.2 1.1 0.5 1.6 0.70 Milford Sound/Piopiotahi Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove	40 44 45 44 45 46 45 46 45	35 53 05 52 36 03 58	172 167 167 166 166 166	35 32 06 22 41 33 40 59	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036	+0100 +0035 +0034 +0039 +0054 +0058	2.1 3.1 2.5 2.3 2.6 2.4 2.3	1.8 2.6 2.1 1.8 2.1 1.9	0.6 1.1 0.9 0.7 1.0 0.8	0.3 0.4 0.5 0.2 0.4 0.3	1.2 1.8 1.5 1.3 1.5 1.3	0.60 0.90 0.67 0.70 0.73 0.70
Milford Sound/Piopiotahi Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove	40 44 45 44 45 46 45 45 45 45	35 53 05 52 36 03 58 18 28	172 167 167 167 166 166 166 166	35 32 06 22 41 33 40 59 09	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036 +0112	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3	1.8 2.6 2.1 1.8 2.1 1.9 1.7	0.6 1.1 0.9 0.7 1.0 0.8 0.7	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3	0.60 0.90 0.67 0.70 0.73 0.70 0.73 0.67
Anita Bay 44 35 167 48 +0026 +0027 2.5 1.9 0.9 0.3 1.4 0.73 Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Blibert Islands Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove Dusky Sound Front Islands	40 44 45 44 45 46 45 45 45 45	35 53 05 52 36 03 58 18 28	172 167 167 167 166 166 166 166 167	35 32 06 22 41 33 40 59 09	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036 +0112 +0055	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110 +0056	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3 2.2	1.8 2.6 2.1 1.8 2.1 1.9 1.7 1.8	0.6 1.1 0.9 0.7 1.0 0.8 0.7 0.8	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3	0.60 0.90 0.67 0.70 0.73 0.70 0.73 0.67
Fresh Water Basin 44 40 167 56 +0028 +0029 2.5 1.9 0.8 0.4 1.4 0.70 Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove Dusky Sound Front Islands Many Islands	40 44 45 44 45 46 45 45 45 45	35 53 05 52 36 03 58 18 28	172 167 167 167 166 166 166 166 167	35 32 06 22 41 33 40 59 09	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036 +0112 +0055	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110 +0056	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3 2.2	1.8 2.6 2.1 1.8 2.1 1.9 1.7 1.8	0.6 1.1 0.9 0.7 1.0 0.8 0.7 0.8	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3	0.60 0.90 0.67 0.70 0.73 0.70 0.73 0.67
Preservation Inlet Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove Dusky Sound Front Islands Many Islands	40 44 45 44 45 46 45 45 45 45 45 45	35 53 05 52 36 03 58 18 28 44 46	172 167 167 167 166 166 166 166 166	35 32 06 22 41 33 40 59 09 44 31	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036 +0112 +0055 +0042	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110 +0056 +0043	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3 2.2 2.6	1.8 2.6 2.1 1.8 2.1 1.9 1.7 1.8	0.6 1.1 0.9 0.7 1.0 0.8 0.7 0.8	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3 0.2 0.5	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3	0.60 0.90 0.67 0.70 0.73 0.70 0.73 0.67 0.67
Coal Island - Fishing Bay 46 06 166 39 +0100 +0100 2.2 1.8 0.8 0.3 1.3 0.63	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove Dusky Sound Front Islands Many Islands Milford Sound/Piopiotahi Anita Bay	40 44 45 44 45 46 45 45 45 45 45 45 45	35 53 05 52 36 03 58 18 28 44 46	172 167 167 167 166 166 166 167 166 166	35 32 06 22 41 33 40 59 09 44 31 48	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0112 +0055 +0042 +0026	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110 +0056 +0043 +0027	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3 2.2 2.6 2.5	1.8 2.6 2.1 1.8 2.1 1.9 1.7 1.8 1.7 2.2	0.6 1.1 0.9 0.7 1.0 0.8 0.7 0.8 0.6 1.1	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3 0.2 0.5	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3 1.2 1.6	0.60 0.90 0.67 0.70 0.73 0.70 0.73 0.67 0.67 0.70
	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove Dusky Sound Front Islands Many Islands	40 44 45 44 45 46 45 45 45 45 45 45 45	35 53 05 52 36 03 58 18 28 44 46	172 167 167 167 166 166 166 167 166 166	35 32 06 22 41 33 40 59 09 44 31 48	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0112 +0055 +0042 +0026	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110 +0056 +0043 +0027	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3 2.2 2.6 2.5	1.8 2.6 2.1 1.8 2.1 1.9 1.7 1.8 1.7 2.2	0.6 1.1 0.9 0.7 1.0 0.8 0.7 0.8 0.6 1.1	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3 0.2 0.5	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3 1.2 1.6	0.60 0.90 0.67 0.70 0.73 0.70 0.73 0.67 0.67 0.70
	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove Dusky Sound Front Islands Many Islands Milford Sound/Piopiotahi Anita Bay Fresh Water Basin Preservation Inlet	40 44 45 44 45 46 45 45 45 45 45 44 44	35 53 05 52 36 03 58 18 28 44 46 35 40	172 167 167 167 166 166 166 167 166 167	35 32 06 22 41 33 40 59 09 44 31 48 56	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036 +0112 +0055 +0042 +0026 +0028	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110 +0056 +0043 +0027 +0029	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3 2.2 2.6 2.5 2.5	1.8 2.6 2.1 1.8 2.1 1.9 1.7 1.8 1.7 2.2	0.6 1.1 0.9 0.7 1.0 0.8 0.7 0.8 0.6 1.1	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3 0.2 0.5	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3 1.2 1.6 1.4	0.60 0.90 0.67 0.70 0.73 0.70 0.67 0.67 0.70 0.73 0.70
	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Breaksea Sound Gilbert Islands Chalky Inlet Chalky Island - Sealers Bay Small Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove Dusky Sound Front Islands Many Islands Milford Sound/Piopiotahi Anita Bay Fresh Water Basin	40 44 45 44 45 46 45 45 45 45 45 44 44	35 53 05 52 36 03 58 18 28 44 46 35 40	172 167 167 167 166 166 166 167 166 167	35 32 06 22 41 33 40 59 09 44 31 48 56	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036 +0112 +0055 +0042 +0026 +0028	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110 +0056 +0043 +0027 +0029	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3 2.2 2.6 2.5 2.5	1.8 2.6 2.1 1.8 2.1 1.9 1.7 1.8 1.7 2.2	0.6 1.1 0.9 0.7 1.0 0.8 0.7 0.8 0.6 1.1	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3 0.2 0.5	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3 1.2 1.6 1.4	0.60 0.90 0.67 0.70 0.73 0.70 0.67 0.67 0.70 0.73 0.70
Name not official * Data Approximate - No Data	Whanganui Inlet Fiordland Sounds Bligh Sound Charles Sound George Sound Greaksea Sound Gilbert Islands Chalky Inlet Chalky Island - Sealers Bay Gmall Craft Harbour Islands Doubtful Sound/Patea Blanket Bay Deep Cove Dusky Sound Front Islands Many Islands Milford Sound/Piopiotahi Anita Bay Fresh Water Basin Preservation Inlet	40 44 45 44 45 46 45 45 45 45 45 44 44	35 53 05 52 36 03 58 18 28 44 46 35 40	172 167 167 167 166 166 166 167 166 167	35 32 06 22 41 33 40 59 09 44 31 48 56	-0105 +0100 +0033 +0034 +0037 +0053 +0105 +0036 +0112 +0055 +0042 +0026 +0028	+0100 +0035 +0034 +0039 +0054 +0058 +0037 +0110 +0056 +0043 +0027 +0029	2.1 3.1 2.5 2.3 2.6 2.4 2.3 2.3 2.2 2.6 2.5 2.5	1.8 2.6 2.1 1.8 2.1 1.9 1.7 1.8 1.7 2.2	0.6 1.1 0.9 0.7 1.0 0.8 0.7 0.8 0.6 1.1	0.3 0.4 0.5 0.2 0.4 0.3 0.1 0.3 0.2 0.5	1.2 1.8 1.5 1.3 1.5 1.3 1.2 1.3 1.2 1.6 1.4	0.60 0.90 0.67 0.70 0.73 0.70 0.67 0.67 0.70 0.73 0.70