SECONDARY PORTS TABLE

	Lat.	S.	Long.	E.	Mean Time Differences		Mean S _l	Range Ratio				
Port	0	,	•	-	HW	LW	MHWS	MHWN	(metres) 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	0.7	0.5	1.7	0.83
Tiritiri Matangi Island Weiti River Entrance	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 1.7	0.93 0.97
Whangateau Harbour	36 36	19	174	44 47	+0001	+0007	2.7	2.3	0.6	0.2	1.7	0.86
•	30	19	174	41			2.1	2.0	0.0	0.2	1.5	0.00
Kawau Island Mansion House Bay – Bon Accord	36	26	174	49	-0015	-0004	2.7	2.3	0.8	0.3	1.5	0.83
Harbour	30	20	174	43	0013	0004	2.1	2.0	0.0	0.0	1.5	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	0.91
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
INTELLON			454			1.1			^-		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	42 17	+0017	+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 DOINE												
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)	34 35	25 48	173	03	+0013	+0017	2.4	1.9	0.8	0.3	1.4	0.91
Portland Wharf Tutukaka Harbour	35 35	48 37	174 174	21 32	+0019 -0015	+0013 -0010	3.1 2.3	2.6 1.9	1.1 0.8	0.4 0.3	1.8 1.4	1.17 0.87
Whangamumu Harbour	35	37 15	174	32 18	+0014	+0031	2.3 2.1	1.9	0.6	0.3	1.4	0.83
Whangarei	35	46	174	21	+0014	+0031	3.1	2.6	1.1	0.2	1.8	1.13
Awanui River	00				. 5021	. 5517				0.0		0
Dairy Factory Wharf	35	02	173	15	+0122	+0223	2.3	1.8	0.6	0.1	1.2	0.96
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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.	Mean Time Differences		Mean Spring, Neap and Sea Level Heights (metres)					
Port	0	•		•	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												
Doves 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		<u>-</u> .	-	<u>-</u> .		<u>-</u> .
Opua	35	19	174	07	+0002	+0006	2.5	2.1	0.8	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 Tryphena	36 36	09 19	175 175	19 29	-0031 -0029	-0027 -0025	2.6 2.6	2.2 2.2	1.0 0.9	0.4 0.4	1.5 1.5	0.96 0.96
Houhora Harbour												
Houhora Harbour Entrance	34	50	173	09	+0039	+0032	2.2	1.9	0.7	0.3	1.3	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												
Fishing Rock	29	15	177	55W	-0027	-0015	1.8	1.6	0.8	0.5	1.2	0.57
Boat Cove	29	17		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
Motukawanui Island			. =				-	•		- •	-	
Vaiiti Bay	35	01	173	56	+0013	+0009	2.2	2.0	0.7	0.5	1.3	0.74
Parengarenga Harbour								-			-	•
Ngatehe Point	34	31	172	57	+0140	+0145	2.5	2.1	0.7	0.4	1.4	0.91
Rangaunu Harbour Dmaia Island	35	00	173	16	_		2.3	2.0	0.5	0.2	1.3	0.91
Omaia Island Scheigis Rock	35 34	54	173	18	- +0015	-0003	2.3	2.0 1.9	0.5 0.6	0.2	1.3	0.91
Scheigis Rock Jnahi Jetty	34 35	54 00	173	15	+0015	+0129	2.3 2.3	1.9	0.6	0.2	1.3	0.91
•	33	00	173	10	10102	10123	۷.5	1.0	0.0	٥.٢	1.0	5.51
Vhangaroa Harbour Vhangaroa	35	01	173	45	+0032	+0028	2.5	2.2	0.8	0.5	1.5	0.87
Vhangaruru Harbour 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	
	39	29	170	55	11111111111	11111111111	1.0	1.5	0.4	0.0	0.54	
Hawke Bay		00	477	0.5	0000	0000						
Cape Kidnappers	39	38	177	05	-0020	-0020	-	-	-	-	-	-
Portland Island	39	17	177	52	-0015	-0015	-	-	-	-	-	-
Vaikokopu	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					0400	0400						
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	174	00	-0030	-0030	2.8	2.3	1.1	0.6	1.7	0.59
Golden Bay												
Collingwood	40	40	172	40	-	-	4.7	3.8	1.4	0.5	2.6	1.14
Motupipi Inlet	40	50	172	51	-	-	5.0	4.1	1.5	0.6	2.8	1.19
Tarakohe	40	49	172	54	+0002	+0008	4.0	3.0	1.3	0.3	2.1	1.00
Marlborough Sounds												
Catherine Cove	40	52	173	53	-0031	-0032	2.6	1.9	8.0	0.2	1.4	0.65
Current Basin	40	56	173	50	-	-	3.9	3.1	1.4	0.6	2.3	0.89
Elaine Bay	41	03	173	46	-0035	-0035	2.6	1.9	1.0	0.4	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
ortage	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												
sland												
Greville Harbour	40	52	173	48	-0020	-0020	3.8	2.9	1.5	0.6	2.2	0.86
asman Bay												
Astrolabe Roadstead	40	58	173	03	-0020	-0020	4.8	3.8	1.2	0.2	2.5	1.24
Croisilles Harbour	41	05	173	42	-0018	-0002	3.6	3.0	1.2	0.7	2.1	0.78
Kaiteriteri	41	03	173	01	+0001	+0005	3.9	2.9	1.3	0.3	2.1	0.97
Mapua	41	15	173	06	+0019	+0019	4.1	3.3	1.6	0.6	2.4	0.95
•										0.8	2.4	0.84
Motueka	41	80	173	01	+0006	+0005	3.9	3.3	1.4	0.0	2.4	0.04