



# SUPPLEMENT

TO THE

# NEW ZEALAND GAZETTE

OF

THURSDAY, 12 MAY 1983

*Published by Authority*

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WELLINGTON: MONDAY, 16 MAY 1983

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# CLIMATOLOGICAL TABLE FOR MARCH 1983

NEW ZEALAND METEOROLOGICAL SERVICE

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for March 1983

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius								Rainfall in Millimetres					Bright Sunshine Hrs
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount	Date	
Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	mm		
Cape Reinga	191	22.2	15.5	18.9	+0.7	25.5	13	12.4	18	28	14	-41	17	19	..
Kaitaia Airport	80	23.3	15.1	19.2	+0.4	26.8	24	9.0	31	45	13	-39	14	19	186
Aupouri Forest	69	22.5	16.0	19.3	+0.3	25.6	24	11.8	31	61	10	-18	25	21	..
Kaitaia	8	23.8	14.7	19.3	..	27.5	22	8.0	31	42	9	..	14	19	..
Kerikeri M A F	79	23.8	14.3	19.1	..	27.0	9	9.5	31	99	11	..	66	19	..
Kerikeri Downs	79	..	..	..	..	..	..	..	..	92	12	..	61	19	..
Kerikeri Aerodrome	150	23.7	13.7	18.7	..	28.5	24	8.5	31	80	8	..	53	19	..
Umawera	9	24.3	13.2	18.8	+0.7	28.7	24	7.0	18	42	13	-52	24	19	..
Kaikohe	204	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waiootemarama	229	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waipoua Forest	88	22.3	13.7	18.0	+0.7	27.1	12	5.8	31	52	14	-55	18	16	..
Dargaville	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waitangi Forest	55	23.9	14.4	19.2	+0.4	28.4	9	9.3	31	72	8	-25	36	19	159
Glenbervie Forest	107	22.6	12.9	17.8	+1.1	29.1	24	4.4	31	111	13	-39	31	19	..
Whangarei Airport	37	23.1	14.8	19.0	+0.4	27.9	24	8.7	31	68	15	-49	17	19	..
Whangarei	29	23.4	13.6	18.5	+0.2	29.0	24	7.0	31	69	14	..	16	19	159*
Marsden Power Station	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pouo	97	21.6	15.5	18.6	..	25.9	11	10.7	31	45	15	..	12	16	..
Leigh	27	21.9	16.1	19.0	+0.4	24.8	25	12.2	4	85	14	-9	28	13	150
Warkworth	72	21.9	14.4	18.2	+0.9	26.1	24	7.8	31	107	20	..	32	13	..
Oyster Point	0	22.5	14.9	18.7	..	26.5	11	7.4	31	58	17	..	20	16	..
Woodhill Forest	30	21.3	15.2	18.3	+0.6	25.0	13	8.5	31	62	20	-29	16	16	..
Riverhead Forest	28	21.8	14.2	18.0	+1.1	24.9	24	7.0	4	55	13	-49	16	16	..
Kumeu	32	22.0	14.3	18.2	..	25.7	13	6.1	31	55	20	..	13	16	..
Whenuapai	26	22.4	14.6	18.5	+1.0	26.3	24	8.1	31	46	18	-48	15	13	..
Albert Park, Auckland	49	22.4	16.0	19.2	+0.3	25.9	24	12.6	27	54	19	-32	27	13	137*
OWairaka, Auckland	41	22.0	15.4	18.7	+0.7	25.4	24	10.9	31	46	14	-45	22	13	..
Port Fitzroy	4	22.3	15.9	19.1	+0.5	25.3	25	9.8	31	98	14	-37	21	13	..
Little Barrier Island	2	22.2	16.2	19.2	..	25.1	11	11.6	18	80	14	-32	30	13	..
Coromandel	43	22.6	15.0	18.8	..	26.0	11	6.8	4	110	16	..	44	13	..
Whangapoua Forest	4	23.0	15.1	19.1	+1.8	26.2	21	7.8	18	93	20	-75	35	13	..
Thames	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tairua Forest	3	23.0	14.6	18.8	+1.1	27.4	21	7.0	31	85	7	-70	56	13	..
Paeroa	4	23.6	13.9	18.8	+1.5	27.5	11	5.0	4	56	8	-51	24	13	..
Waihi	91	22.4	14.1	18.3	+1.3	27.4	11	5.5	31	99	16	-79	66	13	139
Te Aroha	18	23.4	14.2	18.8	+0.9	28.2	11	4.2	4	66	14	-56	39	13	..
Katikati	2	23.6	13.9	18.8	..	28.1	21	5.4	4	92	14	..	74	13	..
Tauranga	2	23.1	14.8	19.0	+1.0	27.5	10	7.9	31	86	10	..	76	13	..
Tauranga Airport	4	23.3	13.7	18.5	+0.9	27.4	9	6.2	31	79	10	-35	66	13	184
Te Puke	91	22.7	12.4	17.6	+0.4	28.2	21	4.2	31	57	10	..	44	13	200
Rotoehu Forest	72	23.5	10.9	17.2	+0.9	28.7	9	0.9	31	47	9	-90	32	13	..
Whakatane	2	23.8	14.0	18.9	+1.1	31.0	9	6.5	4	40	6	-77	25	13	223
Whakatane Airport	6	23.6	12.3	18.0	..	31.0	9	2.0	31	38	6	..	27	13	..
Te Kaha	6	22.7	14.5	18.6	..	..	..	8.0	31	13	5	..	7	13	..
Port Ohope	9	23.0	14.0	18.5	..	27.4	8	6.8	31	22	7	..	7	14	225
Kinleith	383	20.8	11.0	15.9	+0.5	26.4	11	3.0	4	33	11	-60	16	16	..
Tikitere	338	21.1	12.3	16.7	..	26.8	21	3.8	31	51	9	..	25	13	..
Kawerau	30	24.6	13.0	18.8	+1.0	31.5	11	4.5	31	51	8	-104	27	13	..
Te Teko	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rotorua Airport	287	21.8	12.0	16.9	+0.8	26.9	9	3.0	31	38	9	-81	23	13	204
Waioapu Forest	435	21.4	10.2	15.8	+1.0	26.8	9	-0.5	31	26	10	-81	12	16	..
Atiamuri Power Station	253	23.0	10.4	16.7	+1.1	28.0	7	0.5	31	26	9	-67	14	16	..
Kaingaroa Forest	544	20.8	9.5	15.2	+0.7	26.0	9	-1.9	31	24	9	-88	14	16	..
Murupara	198	24.1	10.4	17.3	..	30.0	9	0.5	31	25	8	-64	12	16	..
Wairapukao Forest	437	21.9	8.1	15.0	+0.7	27.7	21	-3.6	31	14	7	-83	10	16	..
Taupo	376	21.6	10.2	15.9	+0.4	25.8	9	-0.4	31	16	10	-60	11	16	185
Wairakei Power Station	342	22.4	10.2	16.3	+0.7	27.2	9	0.0	31	24	8	-60	13	16	..
Wairakei Research Station	402	23.3	8.8	16.1	+1.3	28.7	7	-2.6	31	21	8	-60	13	16	..
Minginui Forest	366	22.3	8.2	15.3	+0.6	28.0	9	-3.1	31	18	7	-86	12	16	..
Taupo Airport	407	20.6	10.2	15.4	..	25.3	11	-1.5	31	15	7	..	11	16	..
Waimihia Forest	743	17.7	8.2	13.0	+0.2	23.0	21	-2.0	31	41	13	-68	10	16	..
Opotiki	6	22.4	12.7	17.6	+0.2	25.6	12	5.0	4	29	8	-98	12	14	209
Waimana	37	24.3	10.9	17.6	+0.5	30.0	10	1.0	31	48	9	-109	23	14	..
Mangere, Auckland	4	21.6	15.9	18.8	+0.6	25.0	11	9.7	18	47	17	-37	20	13	147
Otara, Auckland	12	22.4	14.7	18.6	+0.9	25.6	11	8.1	4	56	18	-30	27	13	..
Auckland Airport	8	22.1	15.7	18.9	+0.6	26.1	11	10.9	18	44	17	-37	18	13	153
Ardmore	30	22.9	13.6	18.3	+0.7	27.0	11	5.5	4	56	13	-38	29	13	..
Pukekohe	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maioro Forest	52	21.7	14.4	18.1	+0.4	27.2	13	7.4	18	39	12	-50	15	16	..
Hunua	122	21.9	12.8	17.4	..	25.2	11	4.2	4	77	18	..	34	13	..
Maramarua Forest	38	22.6	12.5	17.6	+0.9	27.5	11	3.5	4	65	15	-32	26	13	..
Te Kauwhata	32	..	13.1	..	..	..	..	6.3	4	42	20	-42	16	16	128
Huntly	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taupiri	23	23.4	..	..	..	28.0	11	..	..	45	18	..	14	16	..

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		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount		Date
Metres	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs			
Christchurch	7	..	..	..	..	..	..	..	..	..	..	..	..	..	
Bromley, Christchurch	9	20.4	10.7	15.6	+0.6	31.5	24	3.5	17	23	7	-33	12	3	
Mt Pleasant	137	20.4	11.1	15.8	+0.8	31.0	24	4.2	17	19	8	-34	6	3	
Lincoln	11	21.4	9.0	15.2	+0.8	32.1	6	1.7	17	24	7	-42	7	16	
Akaroa	3	..	..	..	..	..	..	..	..	..	..	..	..	..	
Lake Tekapo	683	19.0	6.7	12.9	-0.2	27.5	7	-1.8	30	39	10	-9	25	10	
Lake Pukaki	556	19.3	7.4	13.4	-0.2	27.8	8	-1.0	17	51	9	..	20	10	
Fairlie	304	20.1	6.2	13.2	..	28.9	24	-3.3	31	68	8	..	35	10	
Twizel	457	20.4	5.4	12.9	-0.1	28.5	8	-4.2	31	48	9	..	23	10	
Ikawai	70	18.6	6.9	12.8	-0.4	28.5	24	-1.5	31	67	9	..	23	10	
Geraldine	119	20.8	7.6	14.2	..	30.2	24	-1.0	31	82	8	..	26	16	
Orari Estate	81	20.2	7.3	13.8	-0.1	31.1	24	-0.8	31	78	8	+4	28	16	
Temuka	24	19.7	7.8	13.8	-0.3	30.5	24	0.5	30	79	7	+15	32	16	
Timaru Airport	26	19.7	7.5	13.6	-0.2	31.2	24	-0.8	30	70	7	+14	26	16	
Adair	85	19.0	8.5	13.8	+0.0	30.2	6	1.7	31	66	12	+8	18	10	
Timaru	17	18.8	8.8	13.8	-0.4	30.3	6	0.7	30	46	10	-12	19	10	
Waimate	61	..	..	..	..	..	..	..	..	..	..	..	..	..	
Kurou	207	19.8	7.6	13.7	..	28.3	24	0.1	31	71	12	..	28	9	
Oamaru Airport	30	17.9	8.0	13.0	-0.6	28.4	6	2.2	31	40	9	-13	16	9	
Knobs Flat	360	15.1	5.4	10.3	..	24.5	12	-4.0	31	452	20	+261	112	9	
Tara Hills, Omarama	488	19.8	6.4	13.1	-0.1	28.6	7	-3.0	30	44	7	-9	19	9	
Lake Hawea	350	18.0	8.0	13.0	-1.4	23.7	8	-0.8	30	68	9	-3	39	9	
Wanaka	296	19.8	7.7	13.8	-0.7	27.0	8	-1.7	30	55	8	-6	37	9	
Queensberry	277	20.0	7.8	13.9	..	27.9	8	-1.4	30	57	8	..	41	9	
Bendigo	200	20.7	8.3	14.5	..	28.6	8	-0.7	17	52	9	..	37	9	
Naseby Forest	610	17.7	3.4	10.6	-0.9	26.2	8	-4.2	17	88	10	+22	45	9	
Windsor	88	..	..	..	..	..	..	..	..	..	..	..	..	..	
Oamaru	5	18.1	8.3	13.2	..	28.8	24	2.1	17	65	10	..	25	9	
Ranfurly	427	18.2	5.1	11.7	..	27.3	8	-3.0	17	89	9	..	39	9	
Herbert Forest	61	..	..	..	..	..	..	..	..	..	..	..	..	..	
Palmerston	21	18.0	6.3	12.2	-0.5	27.7	6	-1.8	31	114	11	..	68	9	
Cherry Farm Hospital	6	17.5	6.9	12.2	-1.0	28.0	24	-0.6	28	108	15	+50	56	9	
Taiaroa Head	72	..	8.2	..	..	..	..	1.0	30	82	17	+18	35	9	
Invermay, Taieri	30	16.9	6.1	11.5	..	26.5	24	-0.5	31	107	18	..	54	9	
Berwick Forest	18	17.2	6.7	12.0	-1.2	25.3	24	0.8	31	142	19	+71	82	9	
Dunedin Airport	1	17.4	6.3	11.9	-1.0	26.8	24	0.5	17	120	16	+56	74	9	
Musselburgh, Dunedin	2	16.1	8.7	12.4	-1.3	27.1	24	3.0	29	113	15	+37	62	9	
Te Anau	215	16.4	7.3	11.9	-0.9	24.6	12	-1.6	30	145	15	+46	66	9	
West Arm, Manapouri	232	13.6	6.7	10.2	-2.2	21.0	12	-0.5	30	542	25	..	111	9	
Borland Burn	183	..	..	..	..	..	..	..	..	..	..	..	..	..	
Queenstown	329	18.6	8.1	13.4	-0.4	28.2	8	0.8	30	123	12	+47	71	9	
Queenstown Airport	349	17.4	6.3	11.9	-1.1	26.0	8	-0.9	17	101	10	+32	61	9	
Otama	183	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cromwell	213	20.3	7.3	13.8	-1.1	29.0	8	-1.3	17	62	11	+21	40	9	
Northburn	210	20.1	7.7	13.9	..	28.0	8	-0.4	17	59	11	..	40	9	
Lauder	370	19.0	6.0	12.5	..	27.7	8	-3.0	17	78	16	..	36	9	
Clyde Dam	160	20.0	7.8	13.9	..	29.4	7	1.3	17	92	11	..	61	9	
Ophir	305	..	..	..	..	..	..	..	..	..	..	..	..	..	
Moa Creek	427	..	..	..	..	..	..	..	..	..	..	..	..	..	
Earnsclough	152	..	..	..	..	..	..	..	..	..	..	..	..	..	
Clyde	171	20.0	7.3	13.7	..	29.9	7	-0.8	17	84	11	..	61	9	
Roxburgh Power Station	110	19.2	6.3	12.8	-1.4	28.0	6	0.0	17	124	10	+76	63	9	
Deep Stream	396	..	..	..	..	..	..	..	..	..	..	..	..	..	
Beaumont	46	17.1	6.6	11.9	..	25.5	24	0.0	17	173	19	+89	72	9	
Mahinerangi Dam	396	14.6	5.5	10.1	-1.3	23.0	24	-0.2	17	147	17	+56	57	9	
Tapanui	226	15.6	5.6	10.6	-2.3	24.1	24	0.5	31	131	17	+47	53	9	
Taieri Mouth	15	15.8	6.9	11.4	-1.1	23.7	24	0.6	31	127	14	+58	67	9	
Tuatapere	27	16.2	6.5	11.4	..	24.2	13	1.8	29	122	19	..	56	9	
Otautau	55	16.0	6.6	11.3	-1.3	23.8	24	1.2	11	143	15	+52	61	9	
Winton	44	15.9	6.2	11.1	-2.0	23.7	13	1.0	31	106	15	+37	59	9	
Gore	123	15.5	6.6	11.1	-1.6	24.0	24	2.0	17	128	21	..	64	9	
Hokonui Forest	46	16.2	6.6	11.4	-1.8	23.3	24	1.6	30	131	20	+37	59	9	
Woodlands	47	15.7	6.9	11.3	-1.5	..	..	..	..	132	23	..	52	9	
Invercargill Airport	0	15.0	7.0	11.0	-1.4	22.9	24	0.6	11	137	20	+43	52	9	
Tiwai Point, Bluff	5	14.4	8.9	11.7	-1.7	20.8	24	2.3	31	137	22	..	45	9	
Stewart Island	3	13.8	7.3	10.6	..	19.6	24	0.7	31	212	30	..	46	9	
Milton	18	16.4	6.1	11.3	-1.7	23.1	24	0.0	31	123	15	+59	61	9	
Finegand, Balclutha	6	16.7	7.5	12.1	-1.1	23.3	24	2.4	31	84	14	..	52	9	
Owaka	5	16.1	6.0	11.1	..	24.5	24	0.1	31	119	19	..	54	9	
Nugget Point	129	14.9	6.9	10.9	-1.9	22.1	24	2.9	30	112	20	+43	51	9	
Tautuku	61	15.4	7.1	11.3	..	24.1	24	1.5	29	168	21	..	56	9	
Nandi Airport, Fiji	19	32.0	22.8	27.4	+0.6	34.0	15	19.8	9	349	12	..	301	1	
Rarotonga Airport	7	30.4	23.6	27.0	+1.3	32.0	9	22.1	6	23	5	-223	8	26	
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..	
Raoul Island	38	24.2	19.6	21.9	+0.0	25.6	15	16.3	9	203	14	+71	123	29	
Campbell Island	15	9.5	4.8	7.2	-1.3	12.5	23	0.2	27	150	30	+20	20	5	
Waitangi, Chatham Island	44	15.9	10.6	13.3	-0.9	18.9	15	2.7	22	59	20	-25	32	1	

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		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount	Date	
		C	C	C	C	C		C		mm		mm	mm		
Ruakura, Hamilton	40	22.4	12.6	17.5	+0.8	28.1	11	3.0	4	58	13	-26	20	16	159
Whatawhata	104	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rukuhia	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hamilton Airport	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cambridge	76	22.7	12.1	17.4	..	28.0	11	2.8	4	44	11	..	16	16	..
Port Taharoa	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mohakatino Station Mokau	46	19.6	13.2	16.4	-0.7	23.9	13	6.3	4	80	16	-29	29	24	..
Arapuni Power Station	123	22.4	10.9	16.7	-0.2	28.9	11	3.0	4	44	14	-47	15	16	..
Waikeria	46	22.8	11.3	17.1	..	28.2	11	2.0	4	51	10	..	19	16	..
Te Kuiti	61	22.0	11.8	16.9	+0.2	27.5	11	3.4	4	41	16	-58	11	16	138
Wairere	122	21.1	10.9	16.0	..	26.8	11	1.3	4	53	17	-46	11	13	..
Pureora Forest	549	18.5	9.9	14.2	+0.6	24.0	11	0.7	31	51	19	-61	11	16	..
Mangakahu Valley	397	19.6	10.6	15.1	..	25.0	11	3.5	31	65	16	..	11	16	..
Taumarunui	171	22.3	10.6	16.5	+0.0	29.0	11	1.4	18	49	16	-35	11	24	143
Tokirima	152	21.6	9.2	15.4	..	27.2	22	0.3	18	90	14	..	36	13	..
Omata	61	19.8	12.8	16.3	-1.1	23.2	14	7.5	4	96	13	..	32	23	..
New Plymouth	55	19.7	12.6	16.2	..	23.9	20	4.6	18	95	14	..	35	23	..
New Plymouth Airport	27	20.1	12.2	16.2	-0.1	24.3	13	3.6	4	57	14	-45	22	23	170
Tikorangi	77	20.3	11.0	15.7	..	25.5	11	3.4	4	81	18	..	26	23	..
North Egmont	955	15.4	7.7	11.6	..	21.0	9	0.7	30	231	21	..	68	23	..
Te Wera Forest	180	20.1	9.5	14.8	+0.1	25.0	22	0.4	18	68	13	-44	23	23	..
Lower Retaruke	223	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turangi	366	21.0	9.9	15.5	+0.2	25.8	21	0.0	31	41	14	..	8	16	206
Mt Bruce Reserve	305	20.3	..	..	..	26.1	9	..	..	129	13	..	28	23	..
Waingawa, Masterton	114	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kopua	311	21.2	10.9	16.1	+1.1	26.0	9	0.2	31	30	7	-67	13	16	..
Waipukurau	137	23.6	10.3	17.0	+1.2	28.9	9	-1.2	31	9	5	-57	6	16	223*
Dannevirke	207	21.1	10.9	16.0	+0.4	27.4	22	0.0	31	43	10	-41	15	3	..
Porangahau	8	23.0	12.6	17.8	..	29.1	9	2.3	31	22	7	..	7	3	..
Castlepoint	3	21.0	14.0	17.5	+1.0	27.5	9	6.4	31	42	6	-29	23	16	..
Ngaumu Forest	244	22.3	10.1	16.2	+1.9	29.6	9	0.5	18	40	7	-46	22	16	..
Tauherenikau, Alloa	43	23.0	11.2	17.1	+1.3	30.1	9	0.3	31	67	7	-17	31	16	..
Waiorongomai	21	20.4	12.2	16.3	+0.9	26.6	9	-0.2	31	82	13	-30	37	16	..
Cape Palliser	10	21.7	13.7	17.7	+1.3	29.8	9	6.0	31	74	7	-12	42	16	..
East Cape	17	22.6	15.2	18.9	+0.7	31.0	10	10.5	18	9	7	-90	4	3	..
Ruatoria	61	25.3	13.7	19.5	+2.0	35.0	10	6.2	18	1	3	-151	1	19	..
Mangatu Forest	182	24.6	11.7	18.2	+1.6	31.6	10	3.6	18	17	3	-87	10	16	..
Manutuke Gisborne	9	25.3	11.3	18.3	+1.4	34.5	10	3.2	18	8	2	-78	7	16	..
Gisborne Airport	4	25.6	12.6	19.1	+2.0	35.1	10	3.8	18	11	5	-80	9	16	239
Onepoto, Waikaremoana	643	21.5	10.7	16.1	+1.5	29.1	9	4.0	31	34	4	-134	16	11	..
Wharerata Forest	439	21.5	11.9	16.7	..	31.4	10	6.0	4	36	7	..	16	16	..
Esk Forest	427	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kaweka Forest	414	22.7	12.0	17.4	+1.7	29.4	24	4.0	31	17	5	..	7	11	..
Napier Airport	2	24.7	12.2	18.5	..	32.3	9	3.4	31	9	3	-65	4	16	..
Napier	2	24.8	12.5	18.7	+1.3	31.8	9	2.4	31	7	3	-59	4	16	241
Hastings	16	24.4	11.4	17.9	..	31.8	9	2.0	31	4	2	..	4	16	..
Havelock North	9	24.1	10.1	17.1	+1.1	31.0	9	0.2	31	5	2	-56	4	16	227
Whakatu	6	24.1	10.5	17.3	..	31.1	9	0.5	31	7	4	..	5	16	..
Gwavas Forest	335	22.6	9.3	16.0	+1.6	28.7	9	..	..	9	4	-100	3	3	..
Makaretu	335	23.1	9.8	16.5	+1.3	28.6	9	-1.3	31	15	7	..	5	3	..
Mohaka Forest	286	23.3	11.4	17.4	+1.5	31.1	9	2.3	31	24	5	-84	15	11	..
Frasertown, Wairoa	8	25.2	11.9	18.6	+1.4	33.0	10	5.0	18	28	7	-84	8	29	..
Wairoa	20	24.6	12.1	18.4	+1.2	32.5	10	4.5	18	17	4	..	8	29	234
Kapiti Island	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paraparaumu Airport	7	19.0	12.0	15.5	-0.5	23.5	22	1.4	31	100	13	+24	39	23	165
Flockhouse, Bulls	9	20.1	11.9	16.0	-0.2	25.7	12	0.3	31	28	15	-33	10	16	..
Ohakea	48	20.2	12.4	16.3	-0.3	25.0	12	2.9	31	41	14	-25	13	16	179
Wharite Peak	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kairanga Palmerston North	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palmerston North Airport	45	20.5	11.5	16.0	+0.0	25.8	22	0.5	18	39	15	-27	9	16	..
Palmerston North D S I R	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tiritea	100	19.7	11.5	15.6	..	24.8	22	2.1	31	56	15	..	12	16	..
Waitarere Forest	3	19.0	11.9	15.5	-0.5	23.1	13	2.0	31	77	13	+16	33	23	..
Levin	46	18.8	12.1	15.5	-0.5	24.1	12	3.1	31	112	14	+36	41	23	137
Titahi Bay	31	19.3	12.7	16.0	..	22.8	9	2.2	31	59	8	..	20	10	..
Avalon, Lower Hutt	15	19.7	12.5	16.1	+0.2	24.8	12	2.8	31	64	13	-35	18	16	..
Kelburn, Wellington	125	19.1	12.3	15.7	+0.1	24.5	13	4.6	31	85	12	-9	39	16	206
Somes Island	43	18.7	13.0	15.9	..	23.5	13	6.0	31	63	9	..	24	16	..
Gracefield, Lower Hutt	34	19.7	12.8	16.3	+0.3	25.4	9	4.0	31	87	10	-12	31	25	..
Wainuiomata	82	19.3	11.8	15.6	+0.4	24.6	9	1.5	31	93	12	..	37	16	..
Wellington Airport	6	19.8	13.7	16.8	+0.6	24.5	13	6.4	31	69	9	-7	34	16	..
Rimutaka Forest	40	19.8	11.8	15.8	..	26.0	9	1.7	31	73	10	..	47	16	..
Kaitoke	223	19.2	9.9	14.6	+0.6	25.1	9	-3.5	31	98	17	-52	34	16	183
Wallaceville	56	20.3	10.8	15.6	+0.3	25.5	13	-1.5	31	63	12	-26	22	16	189
Cape Egmont	8	19.4	13.1	16.3	-0.6	24.6	12	3.5	31	56	16	-30	26	23	..
Stratford Mountain House	846	16.7	7.6	12.2	+0.6	21.3	24	-0.3	18	135	16	-294	39	23	..
Stratford Dem. Farm	311	19.5	10.0	14.8	+0.2	23.9	13	1.7	31	37	12	-100	15	23	166

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for March 1983—continued

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius								Rainfall in Millimetres					Bright Sunshine Hrs		
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall				
		A	B			Maxi- mum	Date	Mini- mum	Date				Amount	Date			
		Max.	Min.	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	mm			
Kapuni	173	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manaia Dem. Farm	98	19.5	11.7	15.6	-0.1	25.0	23	2.1	31	69	18	-12	17	13	172	..	
Normanby	122	19.9	11.3	15.6	..	25.0	10	2.0	31	37	18	..	11	23	..	..	
Patea	43	19.3	12.5	15.9	-0.6	25.0	13	4.5	31	47	12	-35	16	23	..	..	
Ruatiti	354	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ohakune Junction	629	18.1	8.9	13.5	..	23.0	22	-0.5	31	49	14	..	11	24	..	..	
Karioi	648	18.8	8.4	13.6	+0.2	24.1	22	0.0	18	34	10	-45	9	16	..	..	
Waiouru	823	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waiouru Military Camp	823	17.1	7.5	12.3	+0.6	21.5	22	-0.6	31	28	10	-43	10	16	..	..	
Ahu Ahu Valley	85	21.7	10.6	16.2	..	27.9	22	0.7	31	50	10	..	13	16	..	..	
Taihape	433	20.9	9.4	15.2	+0.5	27.1	22	-1.7	31	41	12	..	9	16	..	..	
Kahui, Taihape	518	20.7	10.3	15.5	+0.6	25.4	22	2.6	31	34	11	..	8	16	..	..	
Wanganui	22	20.5	13.2	16.9	+0.1	25.0	10	5.1	31	37	12	-24	14	16	182	..	
Wanganui Airport	9	20.7	12.8	16.8	..	24.8	10	5.0	31	32	11	..	12	16	..	..	
Farewell Spit	3	20.2	11.3	15.8	-0.3	24.3	9	4.0	17	138	11	+54	61	23	..	..	
Totaranui	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Westport Airport	2	17.0	10.6	13.8	-1.3	21.9	12	4.0	30	133	22	-24	31	23	130	..	
Cobb Dam	823	16.9	7.3	12.1	+0.3	23.3	9	-0.5	30	106	13	-62	34	10	..	..	
Arapito	20	18.2	10.4	14.3	..	23.5	13	3.6	19	235	19	..	41	10	136	..	
Lake Rotoroa	443	17.7	7.8	12.8	..	24.0	24	-1.0	30	137	16	..	26	28	..	..	
Lake Rototiti	634	18.0	6.3	12.2	-0.4	23.6	7	-3.2	30	108	16	-14	29	28	..	..	
Hokitika Airport	39	16.3	9.8	13.1	-1.4	22.7	13	2.3	30	237	20	-2	88	23	129	..	
Punakaiki	4	17.2	11.6	14.4	..	22.0	13	6.5	30	193	25	..	48	28	..	..	
Reefton	198	18.6	8.6	13.6	-1.0	24.7	24	-0.2	17	140	18	-2	25	27	..	..	
Barrytown	30	17.1	10.9	14.0	..	22.6	13	5.5	30	222	22	..	60	23	..	..	
Totara Flat	77	18.6	8.7	13.7	-0.9	24.4	12	0.0	30	188	17	+53	36	23	..	..	
Greymouth	4	16.4	10.4	13.4	-1.8	22.6	13	4.0	30	250	20	+57	49	28	108	..	
Otira Substation	383	16.9	8.0	12.5	..	23.5	12	-1.0	30	647	22	+304	122	24	..	..	
Spring Junction	421	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pukekura	86	16.8	7.7	12.3	..	26.0	11	-1.0	30	354	21	..	64	23	..	..	
Hari Hari	45	17.2	8.4	12.8	-1.4	23.0	13	-1.5	30	402	20	+62	86	9	..	..	
Okarito	10	16.1	9.5	12.8	..	21.2	13	0.9	30	356	20	..	118	9	..	..	
Franz Josef	122	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Franz Josef	155	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fox Glacier	152	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Milford Sound	3	15.5	7.9	11.7	-1.8	21.6	11	0.6	30	1119	24	+489	360	9	..	..	
Puyssegur Point	43	13.5	8.5	11.0	..	21.2	23	4.0	29	190	28	-26	53	9	..	..	
Stephens Island	187	17.4	12.3	14.9	..	21.7	13	7.4	17	93	10	+35	39	23	..	..	
Riwaka, Motueka	8	21.7	9.4	15.6	-0.1	27.8	8	1.8	17	57	7	-47	31	10	228	..	
Tapawera	146	22.3	8.6	15.5	..	29.7	9	0.5	30	74	12	..	24	10	..	..	
Crail Bay Pelorus Sd	13	20.0	13.4	16.7	..	26.2	9	6.1	31	57	9	..	21	10	..	..	
Appleby	17	21.6	10.7	16.2	+0.1	28.2	8	3.3	17	37	7	-44	17	10	..	..	
Nelson Airport	2	21.2	10.4	15.8	+0.1	28.5	8	1.7	30	39	10	-42	17	10	229	..	
Rai Valley	79	21.9	9.3	15.6	+0.5	30.0	9	-0.4	4	52	4	-88	23	10	..	..	
Moutere Hills	110	21.3	12.1	16.7	+0.6	27.5	9	5.3	31	51	9	-38	20	10	..	..	
Blenheim Airport	27	23.7	11.2	17.5	+1.8	32.3	6	2.0	4	22	5	-31	9	16	..	..	
Brancott Valley	64	23.8	9.6	16.7	..	32.8	9	0.2	30	22	5	..	10	16	..	..	
Blenheim	4	24.0	11.2	17.6	+1.6	32.0	6	3.2	4	27	5	-24	11	16	251	..	
Waihopai Power Station	262	23.0	8.0	15.5	+0.3	30.2	8	0.8	18	44	9	-20	23	16	..	..	
Vernon Lagoons	2	23.4	10.5	17.0	+1.5	31.7	6	0.7	30	29	4	..	13	16	235	..	
Lake Grassmere	2	21.9	12.3	17.1	+1.5	30.5	24	4.8	17	35	5	-8	19	16	219	..	
Cape Campbell	3	19.1	13.1	16.1	+0.8	22.6	24	7.1	17	29	4	-19	18	16	..	..	
Hanmer Forest	387	22.2	7.4	14.8	+1.0	29.3	8	-2.0	30	78	11	-13	30	16	210	..	
Molesworth	893	20.9	5.8	13.4	+1.5	27.1	7	-5.5	31	35	7	-13	14	16	..	..	
Kaikoura Flats	24	20.2	7.7	14.0	..	28.7	24	2.0	9	90	8	..	63	16	..	..	
Kaikoura	108	19.8	11.2	15.5	+0.6	27.7	24	4.9	17	55	7	-21	38	16	209	..	
Arthurs Pass	738	14.4	6.1	10.3	..	20.5	12	-4.2	30	524	16	+257	128	24	..	..	
Culverden	174	23.7	8.5	16.1	..	..	..	-1.8	31	28	6	..	19	16	..	..	
Balmoral Forest	198	23.0	8.7	15.9	+1.5	30.0	8	-0.2	17	27	10	-24	15	16	..	..	
Waiau	137	23.9	8.9	16.4	..	30.6	8	-0.9	30	19	6	..	6	10	..	..	
Cheviot	85	22.8	8.6	15.7	..	31.9	8	-1.0	31	50	7	..	30	16	..	..	
The Hermitage, Mt Cook	765	17.0	6.8	11.9	-0.4	25.6	7	-2.3	30	578	18	+225	161	9	147	..	
Mt John	1027	17.3	5.6	11.5	+0.2	24.9	7	-2.1	30	35	8	-13	16	10	..	..	
Craigieburn Forest	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Coleridge	364	20.4	7.1	13.8	+0.1	28.0	7	-2.0	30	55	12	-3	17	10	..	..	
Highbank Power Station	336	19.9	7.7	13.8	+0.1	27.5	24	0.9	30	59	10	-27	19	10	211	..	
Hororata Substation	192	22.4	7.4	14.9	+1.0	31.1	6	-3.2	31	45	10	-26	13	10	..	..	
Winchmore	160	21.1	7.6	14.4	+0.7	30.3	24	-1.8	31	43	9	-31	16	10	..	..	
Peel Forest	274	20.1	6.7	13.4	..	28.6	6	-2.2	30	138	18	..	32	10	..	..	
Ashburton	101	21.7	7.9	14.8	+0.0	31.9	24	-1.3	31	35	7	-41	12	10	174	..	
Waipara	64	22.6	9.7	16.2	..	32.6	8	1.7	17	26	9	..	18	16	..	..	
Ashley Forest	107	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rangiora	46	21.2	8.7	15.0	+0.5	32.5	24	-1.0	31	24	8	-32	11	16	..	..	
Darfield	195	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eyrewell Forest	158	22.1	8.1	15.1	+1.0	31.2	8	-2.5	31	34	7	-45	15	16	..	..	
Christchurch Airport	30	21.0	9.4	15.2	+0.6	32.3	6	0.1	31	27	8	-26	12	16	209	..	
Templeton	46	21.2	9.3	15.3	..	31.9	24	1.1	17	19	8	..	7	16	..	..	

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for March 1983—continued

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius								Rainfall in Millimetres				Bright Sunshine	
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount		Date
Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs		
Scott Base, Antarctica	16	-14.1	-26.2	-20.2	+0.0	-6.0	30	-35.8	23	..	..	..	..	..	
<b>LATE RETURNS AND CORRECTIONS</b>															
Waiotemarama 01/1983	229	20.1	13.2	16.7	..	23.8	11	9.4	3	67	15	..	31	13	
Waiotemarama 02/1983	229	20.8	13.6	17.2	..	24.2	14	10.1	24	18	10	..	8	17	
Dargaville 12/1982	20	21.8	11.4	16.6	-0.3	27.3	3	4.1	2	29	12	-50	7	26	
Dargaville 01/1983	20	22.3	13.4	17.9	-0.4	25.6	11	7.0	3	75	10	+9	33	12	
Little Barrier Island 02/1983	2	..	..	..	..	..	..	..	..	49	5	-53	36	15	
Tauranga Airport 02/1983	4	23.3	13.6	18.5	-0.5	29.7	3	7.7	1	29	5	-55	25	14	
Whakatane 02/1983	2	23.4	13.5	18.5	-0.8	28.0	4	7.5	6	28	3	-71	21	14	
Opoiki 02/1983	6	22.3	13.1	17.7	-1.0	24.5	15	7.5	9	33	6	-74	22	14	
Pukekohe 11/1982	82	19.5	11.6	15.6	+0.8	23.7	9	5.6	14	25	10	..	14	11	
Pukekohe 12/1982	82	20.0	11.5	15.8	-0.6	25.0	10	5.0	2	69	13	..	34	11	
Pukekohe 01/1983	82	21.1	12.5	16.8	-1.2	26.4	11	8.8	2	70	17	..	22	12	
Maioro Forest 02/1983	52	21.4	14.3	17.9	-0.8	25.2	16	10.2	27	24	5	-67	13	14	
Huntly 02/1983	34	22.6	13.8	18.2	..	25.0	24	10.0	12	45	5	..	27	14	
Arapuni Power Station 02/1983	123	23.3	10.6	17.0	-1.7	27.2	27	4.0	6	20	5	-79	10	8	
Hastings 02/1983	16	23.0	11.9	17.5	..	30.2	4	6.8	6	17	4	..	16	13	
Wharite Peak 02/1983	914	13.9	7.0	10.5	-1.2	19.2	16	2.0	6	103	18	-32	41	8	
Kairanga Palmerston North 02/1983	15	21.4	10.7	16.1	-1.1	25.2	17	3.5	6	30	6	..	20	8	
Palmerston North D S I R 02/1983	34	21.5	12.1	16.8	-0.8	25.4	18	5.2	6	30	8	-39	14	8	
Wanganui Airport 02/1983	9	20.2	12.5	16.4	..	22.3	18	8.8	1	28	3	..	17	13	
Springs Junction 12/1982	421	..	..	..	..	..	..	..	..	326	24	+141	50	11	
Springs Junction 01/1983	421	17.2	6.7	12.0	..	26.3	10	1.7	21	308	21	+140	52	4	
Springs Junction 02/1983	421	20.5	8.4	14.5	..	26.5	14	4.9	16	50	10	-120	14	4	
Franz Josef 02/1983	122	18.3	9.8	14.1	-0.8	25.0	17	5.5	10	119	10	-376	34	4	
Tapawera 02/1983	146	23.8	9.6	16.7	..	26.7	17	5.5	11	11	2	..	8	20	
Rai Valley 02/1983	79	22.8	7.6	15.2	-1.2	27.4	4	1.6	6	0	0	-127	0	..	
Culverden 02/1983	174	22.9	8.8	15.9	..	34.3	2	2.5	1	20	5	..	9	5	
Craigieburn Forest 02/1983	914	19.7	6.2	13.0	-0.5	28.6	2	1.0	6	13	10	-91	5	19	
Eyrewell Forest 02/1983	158	20.9	9.1	15.0	-1.1	26.2	18	3.8	6	29	10	-45	13	12	
Lincoln 02/1983	11	19.6	9.9	14.8	-1.6	27.3	18	4.8	6	19	11	-37	5	6	
Akaroa 02/1983	3	20.1	10.1	15.1	..	25.5	18	6.5	22	17	5	..	8	6	
Windsor 02/1983	88	18.8	9.1	14.0	..	28.2	18	4.5	11	38	8	..	9	6	
Ranfurlly 02/1983	427	20.1	6.3	13.2	..	30.9	2	1.0	22	31	11	..	7	28	
Herbert Forest 02/1983	61	18.7	7.8	13.3	-1.0	26.7	2	5.0	25	54	11	+2	16	28	
Taiaroa Head 02/1983	72	15.3	9.4	12.4	-1.5	20.7	18	6.0	5	51	13	+5	13	28	
Otama 08/1982	183	11.4	2.1	6.8	..	16.2	24	-3.9	26	61	14	+18	16	25	
Otama 09/1982	183	13.1	2.4	7.8	..	18.7	23	-2.2	28	18	12	-30	3	5	
Otama 10/1982	183	13.0	3.4	8.2	..	18.7	30	-1.8	3	113	19	+52	24	23	
Otama 11/1982	183	16.5	5.9	11.2	..	22.4	9	0.8	12	57	15	-14	11	6	
Otama 12/1982	183	16.2	6.1	11.2	..	26.3	17	0.4	4	159	21	+85	46	24	
Otama 01/1983	183	17.9	7.3	12.6	..	29.1	10	4.2	1	131	22	+57	55	12	
Otama 02/1983	183	17.9	7.8	12.9	..	29.8	2	2.7	22	78	14	+12	21	6	
Moa Creek 02/1983	427	..	..	..	..	..	..	..	..	21	9	-20	5	18	
Roxburgh Power Station 02/1983	110	21.2	8.9	15.1	-0.9	35.0	2	4.0	22	36	9	-7	15	6	
Deep Stream 01/1983	396	17.7	6.5	12.1	..	27.3	10	-0.4	24	76	22	..	50	12	
Rarotonga Airport 02/1983	7	30.3	23.9	27.1	+1.1	31.8	21	21.9	28	141	14	-67	111	3	
Totokoitu, Rarotonga 02/1983	9	29.6	24.2	26.9	..	31.8	2	21.5	28	198	14	..	140	3	
Campbell Island 01/1983	15	11.9	7.1	9.5	+0.2	15.5	11	2.2	19	182	29	+58	52	13	
Scott Base, Antarctica 12/1982	16	0.1	-6.7	-3.3	+2.0	3.3	26	-15.5	1	..	..	..	..	..	
Scott Base, Antarctica 01/1983	16	-1.2	-8.5	-4.9	+0.2	3.1	5	-14.6	31	..	..	..	..	..	

The "normal" refers to the present site of the instruments. Standard period for normals is 1941-1970. No normals are available for stations with only short records.

\*Indicates that the sunshine recorder is not located at the station but is in the near vicinity.

A rainy day is a day with rainfall equal to or greater than 0.1 mm.

Where the extremes of temperature and rainfall have occurred more than once during the month, the date of the first occurrence is given.

## THE WEATHER IN NEW ZEALAND IN MARCH 1983

*General*—March was cool and wet in the south and west of the South Island but mild and dry elsewhere.

Winds from the south-west were most frequent in the north, with the highest frequency of winds from this direction for March since 1969 reported at Auckland. In contrast Invercargill reported the highest frequency of north-westerly winds for March since recording began 28 years ago. There were also more strong winds than normal in the south.

Severe shortages of stock feed developed in northern and eastern areas of the North Island where extremely dry conditions persisted for the 4th consecutive month.

Farmers continued drying off herds early and some stock from the Gisborne region was transported out of the area in an attempt to ease the feed situation. Farmers in northern and eastern areas of the South Island also reported low feed reserves.

Local flooding from blocked drains occurred in Christchurch on the 3rd when a hailstorm was followed by rain. There was minor hail damage to some crops and market gardens.

*Rainfall*—Rainfall was below normal or normal for the whole of the North Island except Horowhenua, where it was slightly wetter than usual.

Conditions in eastern areas between East Cape and Napier continued very dry, with less than 15 percent of normal rainfall in most areas. For the 4-month period December 1982 to March 1983, rainfall at Gisborne Airport has been only 37mm, the lowest total for 4 months since the station opened in 1937. Water became scarce and emergency procedures were implemented for maintenance of urban and industrial water supply.

In the South Island eastern and northern areas had between 50 percent and 90 percent of normal rainfall while western, central, and southern areas had between 100 percent and 250 percent of their usual March rainfall.

Heavy rainfall in Fiordland, Southland, and Otago on the 9th and 10th led to extensive surface flooding of low-lying areas in Southland and Otago. The main railway and several major roads in the area were closed by floods and some homes and business premises in the Strath Taieri area were also affected by floodwaters.

*Temperature*—Mean temperatures in the North Island were between normal and 2°C above normal apart from Horowhenua and southern Manawatu where they were between normal and 0.5°C below.

Temperatures were also between normal and 2°C above normal in the north and east of the South Island as far south as Timaru, while the rest of the South Island was between normal and 2°C below normal.

Temperatures in the Gisborne-Hawke's Bay area were particularly mild. The mean temperature at Gisborne was the second highest for March since recording began in 1938 and the maximum temperature of 35.1°C recorded on the 10th was the highest for March on record. The maximum temperature of 31.8°C at Napier on the 9th was the second highest for March since 1868, being exceeded only in March 1945.

In contrast, the south of the country was very cool. Invercargill had its lowest mean temperature for March since records began in 1948 and Dunedin its second coldest March since recording began at the airport in 1963.

*Sunshine*—Sunshine hours were normal or above normal in most of the North Island apart from central and some south-western areas. In the South Island northern and eastern areas as far south as Oamaru were also sunnier than usual, while southern and western areas had less sun than usual. Invercargill had its lowest March sunshine total since the station opened in 1948. Among those stations recording the greatest departures from normal were:

Gisborne Airport (+41 hours), Christchurch Airport (+41 hours), Blenheim (+35 hours), Invercargill (-57 hours), Hokitika (-42 hours), and Westport (-39 hours).

## THE WEATHER SEQUENCE—MARCH 1983

## 1-7 March

A southeast airstream covered the country and a weak cold front lay over central New Zealand on the 1st; this passed off to the east during the second bringing a few showers to the west. A second cold front moved onto Southland on the 3rd accompanied by scattered showers and cool temperatures. It passed quickly over New Zealand, lying to the east by the 4th.

A large anticyclone, which had been stationary over the western Tasman Sea at the beginning of the month advanced slowly towards the North Island, bringing fine, cool weather to the country. A cold front reached Southland during the 6th and lay east of the country early on the 7th. The front brought scattered rain to the south of the country, and was followed by an intensification of the anticyclone in the central Tasman Sea.

## 8-14 March

The anticyclone moved northwards as a weak cold front in the south-west Tasman Sea moved onto New Zealand on the 8th. Rain fell in Westland and Fiordland. A trough of low pressure developed near Tasmania during the 10th and by the following day lay west of Taranaki. This depression and associated fronts brought widespread rain to the South Island and southern parts of the North Island.

The depression began to weaken on the 11th as it moved eastwards, with showers falling in northern areas of the North Island. An anticyclone which lay to the south and west moved north-eastward and by the 13th lay north of Chatham Island. A cold front, with rain, approached the South Island from the west.

## 15-21 March

The cold front moved onto New Zealand during the 14th and lay across central New Zealand early on the 15th where it became slow moving and weakened. Rain fell, mainly in the South Island. Another cold front moved onto the country late on the 15th and by the 17th both fronts lay east of the country. Rain was widespread.

A ridge of high pressure followed the fronts and an anticyclone crossed central New Zealand on the 19th. This lay well to the east by the 21st. A westerly to south-westerly flow developed to the south of the anticyclone and scattered showers fell in Fiordland from the 19th as weak cold fronts affected the south of the country.

On the 21st a large ridge of high pressure extended from an anticyclone in the South Australian Bight and the strong westerly flow over southern New Zealand weakened.

## 22-31 March

A belt of high pressure extended across the country by the 22nd and apart from showers in some northern areas the weather was generally fine and mild. A depression which had lain over south-eastern Australia moved over the Tasman Sea during the 23rd and a front preceding this brought rain to southern and western areas as it crossed the country during the 23rd and 24th.

The depression developed into a trough of low pressure and as this crossed the country over the next 3 days there were showers in western and southern areas of both Islands. Showers persisted in some western areas on the 29th as a disturbed westerly flow followed the trough.

An extensive anticyclone began to move onto the country during the 30th, bringing a clearance to most areas. A front approached the South Island on the 31st, bringing rain in some southern and western areas.

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J. S. HICKMAN, Director.

