



LAND & DEEDS OFFICE
22 APR 1980
GISBORNE

SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, 10 APRIL 1980

Published by Authority

WELLINGTON: TUESDAY, 15 APRIL 1980

CLIMATOLOGICAL TABLE FOR FEBRUARY 1980

NEW ZEALAND METEOROLOGICAL SERVICE

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for February 1980

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	Hrs	
Cape Reinga	191	21.9	15.7	18.8	-0.1	25.7	9	11.1	14	417	16	+359	124	14	
Kaitaia Airport	80	23.5	16.2	19.9	+0.0	28.3	6	11.0	12	268	16	+174	142	13	
Aupouri Forest	69	22.7	16.9	19.8	-0.1	25.7	5	12.0	12	176	14	+88	93	13	
Kerikeri Aerodrome	150	23.1	14.7	18.9	..	28.4	8	8.5	12	366	15	..	138	13	
Umawera	50	23.6	15.5	19.6	..	28.4	1	8.1	25	204	15	..	73	13	
Kaikohe	204	22.2	14.9	18.6	-0.4	27.8	6	8.6	12	300	18	..	127	13	
Waiotemarama	229	21.2	15.2	18.2	..	25.6	9	9.2	25	258	14	..	111	13	
Waipoua Forest	88	22.5	14.6	18.6	+0.3	28.6	9	7.5	12	209	17	+97	80	13	
Dargaville	20	22.7	15.2	19.0	+0.2	27.9	9	7.0	25	148	13	+64	45	13	
Waitangi Forest	55	23.4	15.5	19.5	-0.2	28.2	6	9.0	12	245	16	+138	75	13	
Glenbervie Forest	107	22.9	14.1	18.5	+0.7	27.9	6	4.8	12	383	15	+228	171	13	
Whangarei Airport	37	23.4	16.2	19.8	+0.0	28.3	6	9.8	12	304	14	+187	141	13	
Whangarei	29	24.0	15.1	19.6	+0.0	28.8	7	7.9	12	243	14	..	100	13	
Marsden Power Station	3	23.8	..	..	..	27.9	7	..	..	204	11	..	102	13
Mokohinau	102	..	..	..	..	..	..	..	..	..	..	..	..	..
Te Hana	10	23.8	14.6	19.2	..	27.3	7	7.7	26	185	14	..	71	13	
Leigh	27	22.3	15.9	19.1	-0.3	25.8	6	11.8	12	108	13	+14	34	13	
Warkworth	72	22.9	14.1	18.5	+0.1	27.7	7	7.5	12	181	15	..	75	13	
Oyster Point	0	22.7	15.1	18.9	..	26.3	7	6.6	12	122	16	..	40	13	
Woodhill Forest	30	22.5	14.8	18.7	+0.0	27.4	4	7.1	12	109	14	+18	29	13	
Riverhead Forest	28	23.0	14.4	18.7	+0.3	27.5	5	6.2	12	125	12	+26	58	13	
Kumeu	32	22.8	13.9	18.4	..	26.9	5	4.5	12	125	15	..	55	13	
Whenuapai	26	23.2	14.8	19.0	+0.3	27.2	6	8.3	12	121	15	+27	54	13	
Albert Park, Auckland	49	23.2	16.7	20.0	+0.0	27.6	5	12.5	12	98	14	+4	32	13	
Owairaka, Auckland	41	22.7	16.0	19.4	+0.2	27.0	7	10.9	25	97	14	-2	30	13	
Port Fitzroy	4	23.7	16.3	20.0	+0.7	27.5	5	10.3	12	148	18	+18	64	13	
Coromandel	43	23.3	15.3	19.3	..	27.6	5	8.0	12	219	16	..	116	13	
Whangapoua Forest	4	24.2	15.5	19.9	+1.5	28.0	5	8.7	12	176	16	+59	61	13	
Thames	3	23.5	16.4	20.0	+0.1	28.3	6	11.4	12	122	18	+28	40	13	
Tairua Forest	3	23.5	15.5	19.5	+0.5	28.2	7	10.8	12	91	10	-23	47	13	
Paeroa	4	25.1	14.9	20.0	+1.1	31.6	6	8.5	24	114	17	+23	30	13	
Waihi	91	23.4	14.7	19.1	+0.5	28.5	1	10.2	29	136	17	+6	64	13	
Te Aroha	12	24.2	15.3	19.8	+0.2	29.8	6	9.2	12	134	17	+35	51	13	
Katikati	2	23.7	14.7	19.2	..	27.8	1	9.4	29	52	10	..	26	29	
Tauranga	2	23.0	16.0	19.5	+0.3	27.3	7	12.5	24	62	9	..	29	13	
Tauranga Airport	4	23.6	15.1	19.4	+0.4	27.4	6	11.8	11	61	12	-23	29	13	
Te Puke	91	23.8	13.6	18.7	+0.2	28.2	6	10.1	7	67	10	..	31	29	
Rotoehu Forest	72	23.4	12.6	18.0	+0.0	28.6	7	7.9	29	49	9	-75	17	29	
Edgumbe	5	24.3	14.1	19.2	+0.7	26.9	9	9.6	29	52	10	..	29	13	
Whakatane	2	24.6	15.2	19.9	+0.6	29.1	6	11.0	11	17	8	-82	5	29	
Whakatane Airport	6	24.1	13.9	19.0	..	27.7	6	8.0	29	16	9	..	6	29	
Port Ohope	9	24.2	16.2	20.2	..	29.7	6	12.2	28	18	7	..	7	29	
Kinleith	383	22.0	11.7	16.9	-0.3	27.3	6	6.3	24	83	11	-40	30	22	
Tokoroa	305	22.8	..	..	..	28.8	6	..	..	84	13	..	27	22
Tikitere	338	22.0	13.4	17.7	..	27.5	6	9.5	29	51	12	..	21	29	
Kawerau	30	25.2	14.6	19.9	+0.4	32.0	6	9.0	29	34	9	-103	11	29	
Te Teko	8	25.8	13.3	19.6	+0.5	31.2	7	8.9	11	21	6	-93	7	29	
Whakarewarewa	307	22.8	12.9	17.9	+0.3	28.4	6	9.5	29	63	13	-51	18	29	
Rotorua Airport	287	22.9	13.0	18.0	+0.3	28.9	6	9.0	29	54	14	-60	15	29	
Tarawera Forest	61	25.3	12.8	19.1	+1.0	31.8	6	7.7	29	68	10	-92	21	29	
Waiotapu Forest	435	21.8	11.1	16.5	-0.3	27.2	1	6.6	29	70	12	-42	22	29	
Atiamuri Power Station	253	23.6	11.8	17.7	+0.0	29.6	6	7.2	11	72	14	-11	23	29	
Kaingaroa Forest	544	21.8	10.8	16.3	+0.1	27.7	1	5.2	29	47	10	-85	18	29	
Murupara	198	24.9	12.3	18.6	..	29.6	6	6.8	28	39	11	-83	16	29	
Broadlands	305	..	..	..	..	..	..	..	..	..	..	..	..	..
Wairapukao Forest	437	22.8	9.0	15.9	-0.5	28.3	1	3.0	28	61	13	-56	17	29	
Taupo	376	23.3	11.2	17.3	+0.1	29.4	1	6.1	28	60	11	-34	17	29	
Wairakei Power Station	342	23.1	11.1	17.1	-0.2	29.0	1	6.5	28	58	12	-44	19	29	
Wairakei Research Station	402	23.4	9.9	16.7	+0.1	28.9	1	4.4	28	60	11	-39	19	29	
Minginui Forest	366	23.0	11.6	17.3	+0.6	29.0	1	4.5	29	69	11	-63	16	25	
Taupo Airport	407	22.3	11.3	16.8	..	28.2	1	5.0	28	72	11	..	18	18	
Waimihia Forest	743	19.3	10.0	14.7	+0.2	27.0	2	5.0	28	112	9	-20	31	25	
Opotiki	6	23.8	15.2	19.5	+0.8	28.2	6	9.3	28	24	7	-83	12	25	
Waimana	37	24.7	13.4	19.1	+0.5	30.0	6	8.9	29	55	11	-80	14	25	
Mangere, Auckland	4	22.6	16.3	19.5	+0.2	26.6	7	9.6	12	90	15	+1	30	13	
Otara, Auckland	12	23.1	15.4	19.3	+0.4	27.4	7	9.5	12	88	14	-9	28	14	
Orere Point	30	..	..	..	..	..	..	..	..	..	..	..	..	..
Auckland Airport	8	22.6	16.5	19.6	+0.1	26.6	4	11.6	12	83	13	-6	27	13	
Ardmore	30	23.3	13.8	18.6	+0.0	27.6	5	6.7	12	99	13	-5	27	13	
Pukekohe	82	..	..	..	..	..	..	..	..	..	..	..	..	..
Maioro Forest	52	22.2	15.1	18.7	+0.0	27.6	9	8.4	12	85	14	-6	22	22	
Hunua	122	22.8	13.4	18.1	..	27.0	5	6.3	12	115	15	..	29	13	
Mercer	35	23.5	13.8	18.7	..	27.6	8	6.2	12	69	12	..	21	13	
Maramarua Forest	38	23.6	12.9	18.3	+0.1	28.0	5	5.5	12	113	13	+16	41	13	

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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			
Te Kauwhata	32	23.7	14.7	19.2	+0.4	28.2	4	10.0	12	27	10	-49	9	23	154
Ruakura, Hamilton	40	23.5	13.0	18.3	+0.2	28.0	6	7.3	24	83	11	+2	28	19	159
Whatawhata	104	22.7	13.7	18.2	+0.0	27.0	9	7.8	12	114	12	+2	34	13	169
Rukuhia	66	23.7	13.7	18.7	+0.1	28.4	6	8.9	12	72	11	-14	19	13	167
Hamilton Airport	50	23.9	12.2	18.1	+0.0	28.5	6	6.0	24	80	11	-1	22	22	..
Cambridge	76	23.7	12.9	18.3	..	28.5	6	6.2	24	77	12	..	21	22	..
Port Taharoa	27	23.0	16.1	19.6	+0.6	28.6	9	11.2	12	84	9	..	19	13	..
Mohakatino Station Mokau	46	21.9	14.2	18.1	+0.1	27.3	17	10.0	12	98	10	-21	31	25	..
Arapuni Power Station	123	24.3	12.9	18.6	-0.1	29.0	6	7.6	24	120	13	+21	38	22	..
Waikeria	46	23.9	12.4	18.2	..	28.3	1	6.0	12	77	11	..	32	22	..
Te Kuiti	61	24.0	12.6	18.3	+0.0	28.5	6	6.4	12	91	13	-3	23	18	147
Pureora Forest	549	20.3	10.5	15.4	+0.1	26.8	6	4.5	24	118	10	-4	24	29	..
Taumarunui	171	24.2	11.6	17.9	-0.4	29.2	1	3.6	12	79	13	-20	22	13	167
Omata	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Plymouth	55	22.0	13.5	17.8	..	26.5	17	7.4	25	98	10	..	22	25	..
New Plymouth Airport	27	21.9	13.6	17.8	+0.5	26.1	17	6.9	25	93	12	-9	22	25	171
Tikorangi	77	21.9	12.2	17.1	..	27.0	17	7.0	25	102	14	..	31	25	..
Te Wera Forest	180	21.8	10.1	16.0	-0.1	26.7	17	2.7	12	114	11	-5	22	9	..
Lower Retaruke	223	23.6	10.7	17.2	+0.2	28.5	1	1.6	12	86	10	..	17	13	..
Turangi	366	22.6	11.2	16.9	+0.0	28.5	5	3.7	12	110	9	..	29	25	184
Chateau, Mt Ruapehu	1119	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mangamutu, Pahiatua	116	21.6	12.3	17.0	+0.3	28.0	9	1.4	12	67	12	-19	20	21	..
Mt Bruce Reserve	305	21.2	10.9	16.1	+0.4	28.9	1	5.5	12	131	17	..	24	25	..
Waingawa, Masterton	114	22.7	12.1	17.4	+0.1	29.0	1	5.0	12	34	13	-24	10	13	159
Kopua	311	21.6	12.1	16.9	+0.2	29.0	6	3.6	12	55	11	-24	17	14	..
Waipukurau	137	23.9	12.7	18.3	+0.7	31.8	1	6.6	12	32	8	-29	16	13	171*
Dannevirke	207	22.1	12.2	17.2	+0.2	28.8	9	4.1	12	59	11	-7	23	18	160
Castlepoint	3	21.0	15.4	18.2	+0.8	26.7	7	11.3	24	30	8	-28	17	13	..
Ngaumu Forest	244	21.8	11.1	16.5	+0.5	29.4	1	3.8	12	56	13	-10	12	21	..
Tauherenikau, Alloa	43	..	11.1	..	..	..	..	4.4	25	32	11	-34	6	21	..
Gladstone, Arahura	116	22.1	11.1	16.6	-0.3	28.6	1	3.5	12	21	8	-32	11	21	..
Waiorongomai	21	20.9	12.3	16.6	-0.2	27.5	6	5.4	12	73	12	-26	21	21	..
Cape Palliser	10	20.7	14.3	17.5	+0.2	27.9	3	10.0	25	28	16	-41	12	23	..
East Cape	17	22.9	16.2	19.6	+0.4	25.1	21	12.0	25	34	11	-65	22	13	..
Ruatoria	61	25.1	15.0	20.1	+1.2	33.8	10	8.5	28	60	13	-75	28	13	..
Mangatu Forest	182	23.9	13.7	18.8	+0.5	31.6	1	7.2	28	35	13	-49	12	13	..
Manutuke Gisborne	9	24.1	14.1	19.1	+0.6	31.5	10	8.1	28	39	10	-22	20	13	..
Gisborne Airport	4	24.7	14.9	19.8	+1.1	33.3	10	8.0	28	57	12	-4	32	13	206
Onepoto, Waikaremoana	643	21.1	11.6	16.4	+0.3	31.5	2	6.3	12	117	17	-23	26	13	..
Wharerata Forest	439	19.9	13.1	16.5	..	29.6	3	8.6	12	127	10	..	63	13	..
Esk Forest	427	21.1	12.5	16.8	+0.2	29.5	1	5.0	12	136	14	+34	55	13	..
Kaweka Forest	414	22.0	12.5	17.3	+0.1	30.0	3	7.4	12	165	10	..	53	14	..
Napier Airport	2	23.5	14.7	19.1	..	28.8	10	8.4	25	43	9	-18	26	13	..
Napier	2	..	15.4	..	..	..	..	9.3	12	40	8	-18	22	13	197
Hastings	12	24.1	14.4	19.3	+0.4	30.5	3	7.8	12	76	10	+23	33	19	..
Havelock North	9	23.8	13.3	18.6	+0.8	30.5	3	6.5	12	91	9	+33	34	19	186
Gwavas Forest	335	22.0	10.9	16.5	+0.5	30.6	3	3.2	12	96	8	-3	57	13	..
Makaretu	335	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mohaka Forest	286	22.8	12.8	17.8	+0.7	31.6	3	6.0	28	73	14	-78	42	13	..
Frasertown, Wairoa	8	24.6	14.4	19.5	+0.7	32.7	3	9.5	28	50	13	-41	11	13	..
Wairoa	20	..	14.8	..	..	..	..	10.0	11	32	12	..	10	13	197
Portland Island	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kapiti Island	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paraparaumu Aerodrome	7	21.2	13.2	17.2	+0.1	25.6	9	7.5	12	64	10	-10	21	22	182
Flockhouse, Bulls	9	21.6	12.4	17.0	-0.2	27.9	9	3.2	12	39	10	-22	14	21	..
Ohakea	48	22.1	13.3	17.7	-0.1	28.9	9	6.3	12	40	8	-24	13	21	177
Wharite Peak	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kairanga Palmerston North	15	22.1	12.7	17.4	+0.2	28.4	9	4.7	25	34	9	..	13	21	159
Palmerston North Airport	45	22.0	11.7	16.9	-0.3	28.7	9	4.6	25	36	9	-25	13	21	..
Palmerston North D S I R	34	21.9	13.7	17.8	+0.2	29.4	9	7.0	25	36	10	-33	14	21	149
Massey University	61	22.1	13.2	17.7	..	29.0	9	6.2	25	38	9	-31	14	21	..
Foxton	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waitarere Forest	3	21.0	13.1	17.1	+0.1	25.9	9	3.0	12	64	10	+3	17	9	..
Levin	46	21.2	12.9	17.1	-0.1	26.8	9	5.5	12	93	11	+17	22	9	156
Porirua	94	20.3	12.4	16.4	-0.5	25.5	17	6.9	13	60	11	-14	21	21	..
Taita, Lower Hutt	65	20.6	13.0	16.8	-0.1	25.9	17	5.7	12	61	13	-33	18	22	170
Avalon, Lower Hutt	15	21.1	13.8	17.5	+0.4	26.4	17	6.8	12	53	11	-26	17	22	..
Keiburn, Wellington	125	19.6	13.4	16.5	-0.2	24.9	17	10.0	13	43	12	-41	15	22	160
Somes Island	43	19.6	14.4	17.0	..	25.2	17	9.0	12	35	12	..	14	22	..
Gracefield, Lower Hutt	34	20.4	13.8	17.1	-0.1	25.9	17	7.0	12	46	11	-35	13	22	..
Wainuiomata	82	20.1	12.3	16.2	-0.2	24.7	17	5.1	12	62	14	..	17	21	..
Wellington Airport	6	20.9	14.3	17.6	+0.3	25.7	9	9.3	12	30	15	-36	11	22	..
Kaitoke	223	19.6	10.9	15.3	+0.0	25.1	2	3.0	25	119	15	-33	40	25	151
Wallaceville	56	21.2	11.6	16.4	-0.2	26.2	9	3.4	12	75	10	-16	21	25	168
Cape Egmont	8	21.0	14.0	17.5	+0.1	25.0	17	7.8	25	101	14	+10	24	13	..
Stratford Mountain House	846
Stratford Dem. Farm	311	20.1	10.5	15.3	-0.4	23.6	8	3.7	25	122	12	-25	30	9	158

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	Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs	
Manaia Dem. Farm	98	20.2	11.8	16.0	-0.4	24.9	9	5.2	12	65	13	-14	18	13	163
Normanby	122	20.7	11.2	16.0	..	24.2	9	3.5	12	70	19	..	19	13	..
Patea	43	20.9	13.8	17.4	+0.2	27.0	9	9.0	12	75	11	+3	21	9	..
Ohakune Junction	629	20.6	9.7	15.2	..	25.4	6	2.6	12	81	..	..	..	..	..
Karioi	648	20.7	9.5	15.1	+0.2	26.4	1	1.4	25	81	11	+0	35	18	..
Waiouru	823	19.2	8.4	13.8	+0.4	25.1	1	-0.1	12	52	10	-29	13	26	..
Waiouru Military Camp	823	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taihape	433	22.4	10.0	16.2	-0.4	28.8	9	0.3	12	40	10	..	9	21	..
Kahui, Taihape	518	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wanganui	22	22.4	13.9	18.2	+0.2	30.5	9	8.3	12	34	9	-30	7	21	188
Wanganui Airport	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Farewell Spit	3	21.3	13.5	17.4	+0.4	24.8	5	7.3	12	54	12	-25	12	22	..
Totaranui	10	20.7	12.6	16.7	..	25.2	18	6.9	12	98	13	..	33	22	..
Westport Airport	2	19.7	11.7	15.7	-0.3	24.7	15	7.1	25	236	11	+68	61	9	188
Cobb Dam	823	17.5	7.1	12.3	-1.5	28.4	1	1.9	8	177	14	+47	57	14	..
Arapito	20	20.5	11.7	16.1	..	25.6	16	6.5	8	173	9	..	38	26	142
Karamea	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Rotoroa	443	20.0	8.6	14.3	..	28.0	1	1.7	12	169	11	..	37	25	..
Lake Rotoiti	634	19.1	7.3	13.2	-1.3	28.7	2	1.1	12	175	13	+68	39	9	..
Hokitika Airport	39	19.5	11.3	15.4	+0.0	27.5	15	6.4	8	183	13	-68	41	22	186
Reefton	198	21.5	9.7	15.6	-0.8	27.0	2	2.7	12	206	12	+54	63	9	..
Totara Flat	77	21.3	9.9	15.6	-0.4	26.3	15	3.9	12	195	10	+50	42	9	..
Greymouth	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Otira Substation	383	19.4	9.1	14.3	..	26.0	17	3.0	12	461	12	+44	120	25	..
Springs Junction	421	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hari Hari	45	21.2	9.8	15.5	+0.1	29.0	15	3.3	12	274	13	-110	70	25	..
Franz Josef	122	19.1	9.6	14.4	-0.5	24.5	14	4.5	11	319	12	-176	87	25	..
Fox Glacier	152	19.0	9.5	14.3	..	26.2	15	4.1	11	300	14	-145	73	25	..
Milford Sound	3	19.4	8.9	14.2	-0.3	25.8	15	4.4	11	519	10	-50	141	25	..
Puyssegur Point	43	16.7	10.4	13.6	..	22.4	15	5.2	11	168	18	-33	36	3	..
Stephens Island	187	18.0	13.2	15.6	..	21.3	9	8.4	12	26	12	-27	8	25	..
Riwaka, Motueka	8	21.7	10.9	16.3	-0.9	26.4	21	5.5	24	49	13	-50	8	14	196
Tapawera	146	22.1	9.2	15.7	..	27.4	2	3.4	24	51	12	..	10	14	..
Golden Downs Forest	274	21.2	8.5	14.9	-0.9	27.4	2	2.9	12	61	11	-36	13	22	..
Appleby	17	21.6	11.7	16.7	-0.8	26.2	21	5.9	12	17	9	-49	4	22	..
Nelson Airport	2	21.4	12.3	16.9	-0.2	26.4	21	6.9	24	30	14	-44	6	7	182
Rai Valley	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Moutere Hills	110	21.4	12.7	17.1	-0.6	25.6	5	8.1	12	23	12	-53	5	22	..
Blenheim Airport	27	..	10.7	..	..	..	..	3.1	12	34	10	-14	10	28	..
Blenheim	4	22.6	11.6	17.1	-0.6	28.8	20	3.5	12	24	9	-19	6	28	185
Waihopai Power Station	262	22.1	10.2	16.2	-0.9	30.2	3	3.2	12	82	11	+18	21	28	..
Vernon Lagoons	2	21.9	10.5	16.2	-0.4	27.9	5	1.2	12	18	8	..	6	13	172
Lake Grassmere	2	20.4	13.7	17.1	-0.1	27.7	18	4.6	12	20	6	-18	9	14	179
Cape Campbell	3	19.2	13.6	16.4	+0.0	23.5	10	9.7	12	27	6	-16	13	14	..
Hanmer Forest	387	21.0	7.6	14.3	-1.4	32.4	2	-1.6	12	59	11	-22	13	21	157
Molesworth	893	19.6	5.4	12.5	-1.4	30.2	1	-4.1	12	25	5	-21	11	19	..
Kaikoura	99	19.3	12.6	16.0	-0.3	28.0	3	6.8	12	43	9	-21	28	14	171
Arthurs Pass	738	16.9	6.3	11.6	..	23.5	17	-1.0	12	340	..	+15	100	25	..
Balmoral Forest	198	22.1	9.4	15.8	-0.5	34.0	2	1.0	12	26	11	-25	7	10	..
Hawarden	244	21.6	8.9	15.3	..	34.0	2	-0.7	12	20	9	..	4	4	..
Waiau	137	23.0	9.2	16.1	..	34.9	2	0.0	12	33	12	..	6	13	..
The Hermitage, Mt Cook	765	19.2	7.7	13.5	-0.5	29.0	1	1.0	8	365	17	-26	93	3	142
Mt John	1027	17.3	7.4	12.4	-1.1	27.7	2	-0.4	11	18	7	-28	5	25	214
Craigieburn Forest	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Coleridge	364	19.7	8.6	14.2	-1.3	32.7	2	1.5	11	61	11	+0	21	10	..
Highbank Power Station	336	18.8	9.4	14.1	-1.3	31.5	2	2.5	11	93	16	+12	17	10	158
Hororata Substation	192	20.7	9.3	15.0	-1.1	33.2	2	2.0	12	83	16	+17	18	10	..
Winchmore	160	20.1	9.8	15.0	-0.6	31.7	2	3.4	12	68	14	+4	22	10	..
Peel Forest	274	19.5	8.9	14.2	..	32.8	2	2.5	24	72	17	..	19	10	..
Ashburton	101	21.2	10.5	15.9	-0.7	34.0	2	3.4	8	60	11	-6	12	10	146
Waipara	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ashley Forest	107	19.7	10.2	15.0	-1.2	28.7	9	3.5	23	44	13	-22	9	29	154
Rangiora	46	20.9	10.3	15.6	-0.5	31.0	3	3.6	12	42	17	-9	10	29	..
Darfield	195	21.2	9.8	15.5	-1.0	32.8	2	3.3	12	86	14	+20	30	10	..
Eyrewell Forest	158	20.6	9.3	15.0	-1.1	29.0	2	2.6	12	51	13	-23	12	10	..
Christchurch Airport	30	21.2	11.0	16.1	-0.4	31.6	3	2.7	12	42	12	-1	8	14	179
Templeton	46	20.8	10.4	15.6	..	31.3	3	3.1	12	40	11	..	10	10	..
Christchurch	7	21.1	11.7	16.4	-0.4	31.2	3	4.3	12	66	12	+20	12	14	..
Bromley, Christchurch	9	20.6	12.7	16.7	+0.2	32.0	3	5.5	12	61	13	+15	13	10	..
Mt Pleasant	137	19.7	12.5	16.1	-0.4	29.0	3	5.3	11	57	14	+9	17	14	..
Lincoln	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Broadfield, Lincoln	12	..	..	..	..	..	..	..	..	60	13	..	18	10	..
Akaroa	3	21.0	11.7	16.4	..	30.8	3	5.8	13	100	11	..	32	10	..
Lake Tekapo	683	19.3	7.3	13.3	-1.9	27.0	2	1.0	8	15	6	-28	6	25	205
Lake Pukaki	556	19.3	8.5	13.9	-1.8	27.6	2	1.9	24	25	12	..	9	9	..
Fairlie	304	20.8	8.3	14.6	..	31.8	2	2.5	11	36	9	..	11	10	..
Twizel	457	20.9	7.1	14.0	-1.1	29.3	2	-1.7	24	30	8	..	12	9	..

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for February 1980—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	mm	mm	mm	Hrs			
Ikawai	70	20.1	9.0	14.6	+0.0	28.5	3	2.0	8	27	7	..	8	7	..
Geraldine	119	20.7	9.6	15.2	..	31.0	2	4.3	12	44	14	..	10	3	..
Orari Estate	81	20.5	9.4	15.0	-0.3	29.9	2	3.3	24	43	15	-31	8	3	..
Temuka	24	19.9	9.8	14.9	-0.5	29.6	9	3.6	8	30	11	-34	6	7	..
Timaru Airport	26	20.1	9.3	14.7	-0.5	29.9	9	2.9	8	26	10	-32	7	29	..
Adair	85	20.0	10.3	15.2	-0.2	29.4	9	5.5	24	28	11	-30	6	10	..
Timaru	17	20.1	11.0	15.6	-0.1	30.0	9	5.0	8	36	14	-22	12	10	163
Waimate	61	20.5	10.5	15.5	-0.4	30.3	3	4.6	8	46	11	-18	14	10	..
Kurow	207	21.0	9.1	15.1	..	31.9	2	2.5	24	47	16	..	15	7	..
Oamaru Airport	30	19.2	10.2	14.7	+0.0	28.7	3	4.3	8	38	10	-15	9	10	158
Tara Hills, Omarama	488	20.8	7.7	14.3	-1.1	29.7	2	-0.2	24	23	8	-33	10	9	190
Lake Hawea	350	19.9	8.9	14.4	-2.3	26.1	1	2.2	11	72	8	+11	29	9	..
Wanaka	296	21.8	9.3	15.6	-1.0	27.5	18	2.0	24	59	7	+6	21	9	..
Queensberry	277	21.6	9.1	15.4	..	28.1	2	2.0	24	48	9	..	18	7	..
Bendigo	200	22.6	9.1	15.9	..	28.6	18	0.0	24	27	10	..	16	7	..
Naseby Forest	610	18.6	6.2	12.4	-1.0	28.8	2	-0.4	8	66	11	+5	22	7	..
Ranfurly	427	19.8	6.7	13.3	..	28.5	2	-0.2	24	33	8	..	14	7	174
Herbert Forest	61	18.9	8.7	13.8	-0.5	28.0	3	4.0	24	37	14	-15	12	10	..
Palmerston	21	19.1	9.4	14.3	+0.4	26.7	3	2.0	8	42	12	..	13	3	166
Cherry Farm Hospital	6	18.7	9.2	14.0	-0.2	27.0	3	0.9	12	31	15	-12	10	3	..
Taiaroa Head	72	16.1	10.7	13.4	-0.5	25.1	3	6.6	11	55	16	+9	10	10	..
Invermay, Taieri	30	18.4	9.5	14.0	..	27.2	3	3.0	12	81	14	..	19	7	139
Berwick Forest	18	19.3	9.2	14.3	-0.1	27.8	3	2.5	12	63	14	+2	18	7	..
Dunedin Airport	1	19.3	9.0	14.2	-0.2	27.0	2	0.6	12	72	15	+24	22	7	147
Musselburgh, Dunedin	2	17.9	11.4	14.7	-0.3	27.7	3	6.0	12	79	16	+18	21	10	140
Te Anau	215	19.0	8.6	13.8	-0.1	26.6	15	1.4	12	114	9	+30	34	25	181
West Arm, Manapouri	232	17.6	9.2	13.4	-0.5	28.2	17	3.3	11	336	16	..	70	25	..
Borland Burn	183	18.8	7.1	13.0	..	27.2	15	0.8	11	124	18	..	25	3	..
Queenstown	329	21.0	9.4	15.2	-0.4	28.0	15	3.9	24	84	9	+18	24	9	185
Queenstown Airport	349	19.2	7.8	13.5	-1.1	26.1	3	0.5	24	73	8	+16	17	3	..
Cromwell	213	22.3	8.9	15.6	-1.6	29.4	1	0.4	24	29	10	-7	11	7	199
Northburn	210	22.0	9.0	15.5	..	29.0	1	1.8	24	33	10	..	11	7	..
Clyde Dam	160	22.0	9.5	15.8	..	29.0	1	3.3	24	40	12	..	16	7	..
Ophir	305	21.7	6.7	14.2	-1.3	28.5	1	-0.5	24	52	7	+9	22	7	..
Moa Creek	427	20.2	5.7	13.0	-1.3	28.0	3	-3.0	24	40	7	-1	21	7	..
Earnsclough	152	22.0	7.9	15.0	-0.9	29.0	1	0.3	24	32	9	-6	13	7	..
Alexandra	141	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Roxburgh Power Station	110	20.3	8.7	14.5	-1.5	27.9	16	3.0	12	29	7	-14	13	7	..
Moa Flat	410	18.6	7.3	13.0	-0.2	26.0	1	1.6	12	69	11	+0	18	7	..
Mahinerangi Dam	396	16.7	7.7	12.2	-0.7	25.0	2	1.2	12	80	16	+1	22	7	..
Tapanui	226	18.8	8.1	13.5	-0.8	26.5	1	2.6	12	79	15	+8	15	7	..
Rankleburn Forest	255	18.3	8.1	13.2	-0.2	26.5	3	3.2	11	71	15	-5	12	20	..
Taieri Mouth	15	17.4	9.4	13.4	+0.0	25.0	2	3.4	13	54	15	-12	13	7	..
Otautau	55	18.9	7.9	13.4	-0.5	27.2	1	2.0	11	76	15	-5	15	3	130
Winton	44	18.8	8.4	13.6	-0.8	26.9	15	2.2	13	81	13	+20	18	3	139
Gore	123	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hokonui Forest	46	19.9	8.6	14.3	-0.2	26.9	15	2.8	9	80	14	-1	21	3	..
Woodlands	47	18.9	8.2	13.6	-0.5	26.2	1	2.2	11	65	22	..	10	20	..
Invercargill Airport	0	18.8	9.0	13.9	+0.4	26.5	15	1.9	11	57	13	-22	15	3	162
Tiwai Point, Bluff	5	18.3	10.4	14.4	-0.1	25.2	1	5.4	13	50	18	..	9	20	..
Stewart Island	3	16.9	8.4	12.7	..	24.9	1	3.1	12	73	20	..	16	20	..
Milton	18	18.7	8.9	13.8	-0.7	27.7	2	1.8	13	78	16	+20	24	7	..
Finegand, Balclutha	6	19.3	9.4	14.4	+0.1	27.4	2	3.3	13	57	17	..	16	7	162
Owaka	5	17.9	8.4	13.2	..	26.4	2	0.8	13	51	16	..	9	7	..
Nugget Point	129	17.0	10.0	13.5	+0.3	25.6	2	4.7	11	70	21	+4	13	7	..
Tautuku	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rarotonga Airport	7	29.2	24.0	26.6	+0.6	30.6	29	22.4	27	222	17	+14	100	1	202
Raoul Island	38	25.7	20.9	23.3	+0.9	27.2	19	17.8	29	213	19	+58	112	4	141
Waitangi, Chatham Island	44	19.6	12.2	15.9	+1.1	22.5	5	7.3	9	48	17	-16	9	28	187
Campbell Island	15	12.8	8.2	10.1	+0.9	15.9	14	2.0	12	102	24	-12	15	23	96
Nandi Airport, Fiji	15	32.6	23.6	28.1	+0.9	35.4	16	22.1	2	352	22	..	73	21	186
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scott Base, Antarctica	16	-6.1	-13.9	-10.0	-0.6	1.1	11	-23.5	28	..	..	..	..	..	..
LATE RETURNS AND CORRECTIONS															
Waiotemarama 01/1980	229	21.3	14.4	17.9	..	26.2	29	9.5	18	185	16	..	50	21	..
Kumeu 01/1980	32	23.2	13.7	18.5	..	27.1	11	7.6	4	91	12	..	26	21	..
Port Ohope 01/1980	9	22.9	14.9	18.9	..	29.6	13	9.8	3	90	10	..	52	22	193
Broadlands 01/1980	305	22.6	11.9	17.3	..	29.0	31	3.3	4	125	..	..	..	..	..
Maioro Forest 01/1980	52	22.5	14.3	18.4	+0.3	26.7	29	9.9	4	135	15	+61	35	21	..
Mohakaitino Station Mokau 01/1980	46	21.0	14.9	18.0	+0.5	24.6	30	10.5	18	140	12	+38	24	16	..
Lower Retaruke 11/1979	223	20.9	9.0	15.0	+1.3	24.6	25	2.9	16	102	12	..	20	14	..
Lower Retaruke 12/1979	223	20.9	9.7	15.3	-0.2	27.3	10	2.7	5	203	17	..	42	26	..
Lower Retaruke 01/1980	223	23.0	11.9	17.5	+0.6	29.9	30	4.5	6	152	14	..	41	16	..
Makaretu 01/1980	335	23.3	12.2	17.8	+1.3	30.6	31	7.4	18	33	14	..	13	22	..
Portland Island 01/1980	78	21.9	15.8	18.9	+0.8	29.0	27	11.8	4	29	8	-29	11	4	..

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for February 1980—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
		°C	°C	°C	°C	°C	°C	mm	mm	mm	Hrs				
LATE RETURNS AND CORRECTIONS															
Kapiti Island 09/1979	16	13.3	9.0	11.2	+0.2	15.1	7	4.2	27	67	22	-17	17	1	..
Kapiti Island 11/1979	16	18.8	12.7	15.8	+1.8	20.9	25	9.4	11	166	12	+82	90	14	..
Kapiti Island 12/1979	16	19.5	13.5	16.5	+0.6	25.5	10	8.6	9	114	14	+28	34	26	..
Wharite Peak 12/1979	914	13.3	6.8	10.1	+0.0	19.5	25	3.0	8	283	..	+75	65	26	..
Wharite Peak 01/1980	914	14.5	8.7	11.6	+0.2	20.8	27	3.6	18	160	21	+3	35	22	..
Waiouru 01/1980	823	18.9	8.8	13.9	+0.6	27.0	29	3.2	26	97	12	+21	34	22	..
Karamea 12/1979	5	..	..	..	..	..	..	..	..	288	..	..	..	..	..
Hari Hari 01/1980	45	20.6	10.7	15.7	+0.7	25.7	11	2.5	18	390	20	+50	108	26	..
Franz Josef 01/1980	122	20.3	10.2	15.3	+0.5	25.5	11	4.5	18	512	..	+55	162	26	..
Craigieburn Forest 01/1980	914	19.4	7.1	13.3	+0.2	29.4	13	-0.3	5	201	18	+99	38	26	..
Lincoln 01/1980	11	22.4	10.6	16.5	+0.2	31.7	31	4.6	18	135	9	+79	109	2	211
Adair 01/1980	85	20.4	10.9	15.7	+0.3	31.2	30	6.4	18	87	14	+29	55	2	..
Herbert Forest 01/1980	61	19.6	9.6	14.6	-0.2	29.6	30	5.2	21	77	12	+13	17	23	..
Invermay, Taieri 01/1980	30	19.5	9.7	14.6	..	33.3	30	3.4	4	99	18	..	24	14	162
Te Anau 01/1980	215	19.7	8.8	14.3	+0.3	26.9	11	2.0	18	166	..	+77	39	26	160
Moa Creek 01/1980	427	22.1	7.2	14.7	+0.0	29.0	12	-2.0	4	63	..	+10	17	16	..
Gore 01/1980	123	19.1	9.4	14.3	-0.4	27.9	30	3.3	4	181	19	..	87	16	177
Nugget Point 01/1980	129	16.7	10.1	13.4	+0.1	26.2	30	5.8	17	151	22	+77	72	16	..
Campbell Island 01/1980	15	12.5	7.3	9.9	+0.6	16.4	29	1.4	6	88	22	-36	17	30	100
Totokoitu, Rarotonga 01/1980	9	28.9	23.5	26.2	..	31.1	31	20.6	24	820	28	..	239	26	..
Scott Base, Antarctica 12/1979	16	-1.9	-7.8	-4.9	+0.4	1.8	25	-12.8	23	..	..	..	..	..	..
Scott Base, Antarctica 01/1980	16	-2.5	-8.3	-5.4	-0.3	2.7	17	-15.5	12	..	..	..	..	..	..

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 rainday 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.

WEATHER NOTES FOR FEBRUARY 1980

General—February was the third consecutive month with pressures below normal over the whole of New Zealand, although they were higher than usual to the south of the country. There was a greater frequency than usual of south-west winds over the North Island, but in the South Island both wind direction and speed frequencies were about normal for the month. Apart from Northland, conditions were dry in most districts, and cooler than average in the South Island. From the 14th to the 16th a depression lying to the north-west of Northland caused north-easterly winds gusting to more than 130 km/h (70 knots). Many yachts in the around - the North Island Race had to shelter in bays in the area north of Mangonui.

Most farmers throughout the country reported good grass growth and stock in good condition. Milk production was higher than in February last year in many areas, but lamb fattening was slow. Shearing and haymaking were delayed by rain towards the end of the month.

Rainfall—The only areas with rainfall totals appreciably above normal were Northland, Auckland, parts of Hawke's Bay, and Banks Peninsula. In Northland totals ranged from 100 percent to more than 300 percent above average. In eastern Bay of Plenty, parts of Manawatu, and southern Wairarapa less than 25 percent of the normal February rainfall was recorded, and in Poverty Bay and some areas of Canterbury less than 50 percent.

The depression that caused the strong winds in Northland also brought heavy rain to the area between the 13th and 17th. From 9 a.m./13th to 9 a.m./18th inclusive the following rainfall totals were recorded: Cape View 256 mm, Kaitaia 199 mm, Aupouri 134 mm, Kaikohe 235 mm, and Whangarei 255 mm. At Cape Reinga in the same period more than 350 mm were recorded, and the total for the month was the highest at this station for any February since reporting began in 1941. Many stations in Northland recorded falls in excess of 120 mm in the 24-hour period up to 9 a.m. on the 14th, and this caused flooding over a widespread area.

Temperatures—Temperatures were near or above normal throughout the North Island, but in Poverty Bay and Hawke's Bay they were above by 1.0°C. In the South Island parts of Marlborough, Canterbury, and Otago were below normal by 0.5°C to 1.0°C. Most of New Zealand had cooler day time temperatures, but in the South Island nighttime temperatures were also below average. There were two cold spells during the month from 11th to 14th and 22nd to 29th with maximum temperatures below average by 5.0°C in eastern districts.

Sunshine—The only areas with above normal sunshine were the West Coast and parts of Southland. In Northland, Auckland, Taranaki, Manawatu, Wellington, and Marlborough the totals for the month were 30 to 40 hours less than usual. In Wellington this was the lowest February sunshine since 1966.

WEATHER SEQUENCE FOR FEBRUARY 1980

An anticyclone which had moved onto New Zealand at the end of January became almost stationary and persisted until late on the 3rd, most districts experiencing fine warm weather. During the evening of the 3rd a cold front associated with a depression moving to the south of the country moved onto the South Island an later crossed the North Island. Very heavy rain was recorded in Fiordland and Westland with moderate falls in Otago, Southland, and parts of Canterbury. More than 120 mm were reported in 24 hours at Milford Sound, and in excess of 50 mm in parts of Westland. The front

became weak as it moved across the North Island, and only light showers were reported in some areas. Early on the 5th an anticyclone moved onto the country from the Tasman Sea but progressed quickly eastwards. On the 7th a cold front moved across the country bringing moderate rain to most of the South Island and lighter falls to the North Island. Temperatures were warmer than usual during the first week of the month, maximum temperatures being more than 5°C above normal along the east coast.

On the 8th an anticyclone had become established over the country and this persisted until early on the 9th, when a cold front moved onto the South Island. Parts of Fiordland, Westland, and Buller had more than 50 mm of rain in 24 hours. The only areas that did not record rain were parts of Northland, Bay of Plenty, Poverty Bay, Wairarapa, Manawatu, and Marlborough. Elsewhere light to moderate falls were reported. An anticyclone brought fine weather to most districts as it crossed New Zealand between the 10th and 12th. Temperatures were very cold on the 11th and 12th throughout most of the country. In some eastern districts maximum temperatures were below normal by more than 5°C.

Early on the 13th a trough of low pressure was approaching the North Island and had moved onto Northland later in the day. During the morning of the 14th a depression formed within the trough to the north-west of the country, and began to move slowly southwards. In the 24 hours up to 9 a.m. on the 14th some stations in Northland recorded more than 140 mm, and many measured more than 100 mm. Many parts of the North Island and northern districts of the South Island had moderate to heavy falls. The depression continued to lie near the North Island until early on the 19th. Heavy rain was reported in Northland until late on the 18th, and some stations recorded more than 250 mm in 72 hours during the period that the depression was almost stationary. Most of the South Island and southern areas of the North Island had fine weather as a ridge of high pressure extended onto the country from the east.

A ridge of high pressure extended onto the country from an anticyclone centred in the Tasman Sea from late on the 19th to the morning of the 21st. A cold front associated with a depression to the South of the country, brought heavy rain to Fiordland and Westland as it passed over these districts. Light to moderate rain was recorded throughout New Zealand as the front moved northwards. On the 22nd a depression that had formed near Tasmania was lying to the west of the South Island and moving eastwards. Early on the 23rd the depression moved across the South Island, bringing heavy rain to Westland and later to central districts of the North Island. The only areas that did not record rain were parts of Northland, Poverty Bay, Hawke's Bay, Fiordland, and inland Otago. On the 23rd and 24th an anticyclone moved quickly across the country, and was replaced by a trough of low pressure early on the 25th. Temperatures were very cold on the 24th throughout the whole of the country.

As the trough of low pressure moved across New Zealand it brought heavy rain to the West Coast, and light to moderate falls to areas west of the main ranges. In Fiordland and Westland some stations recorded 24 hour falls of more than 100 mm. The trough had moved to the east of the country by the evening of the 26th and was replaced by a ridge of high pressure early on the 27th. A cool southerly airflow ahead of the ridge brought cooler temperatures to most districts. The ridge persisted until early on the 29th and most of the country had fine weather apart from some eastern districts where isolated showers were reported. By the afternoon of the 29th a depression of tropical origin was moving towards the North Island from the north Tasman Sea. Temperatures were colder than normal throughout most of the country from the 26th to 29th.

J. S. HICKMAN, Director.

(N.Z. Met. S. Pub. 107)

