



SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, 17 JULY 1980

Published by Authority

WELLINGTON: WEDNESDAY, 23 JULY 1980

CLIMATOLOGICAL TABLE FOR MAY 1980

NEW ZEALAND METEOROLOGICAL SERVICE

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for May 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	17.9	12.3	15.1	+0.4	21.9	15	10.2	30	37	16	-70	15	18	
Kaitaia Airport	80	17.7	10.6	14.2	-0.3	19.6	15	6.5	30	65	14	-87	25	18	
Aupouri Forest	69	17.9	11.9	14.9	-0.2	19.8	10	7.9	30	50	8	-85	15	17	
Kerikeri Aerodrome	150	17.3	8.9	13.1	..	18.9	11	4.1	30	85	11	..	46	18	
Umawera	50	17.9	8.8	13.4	..	19.8	10	2.9	10	54	8	..	22	18	
Kaikohe	204	16.5	9.4	13.0	-0.5	18.8	14	5.5	10	76	12	..	38	18	
Waiotemarama	229	..	..	..	..	..	..	..	..	86	14	..	21	18
Waipoua Forest	88	17.2	8.6	12.9	-0.3	21.0	14	2.0	30	108	12	-70	41	16	
Dargaville	20	17.5	9.0	13.3	-0.2	21.0	14	-0.4	30	53	14	-79	14	26	
Waitangi Forest	55	18.3	9.3	13.8	-0.5	21.1	15	3.9	30	43	7	-109	13	18	
Glenbervie Forest	107	17.0	6.5	11.8	-0.5	19.9	14	-0.6	30	59	12	-132	32	18	
Whangarei Airport	37	17.5	9.5	13.5	-0.7	20.5	14	3.6	30	48	12	-97	15	18	
Whangarei	29	..	..	..	..	..	..	..	..	..	..	..	..	..
Marsden Power Station	3	18.0	10.0	14.0	-0.3	21.0	14	4.0	14	51	13	..	18	18	
Mokohinau	102	..	..	..	..	..	..	..	..	..	..	..	..	..
Te Hana	10	..	..	..	..	..	..	..	..	..	..	..	..	..
Leigh	27	17.7	10.9	14.3	-0.3	20.5	14	7.6	29	40	10	-67	11	15	
Warkworth	72	17.0	8.5	12.8	+0.0	19.4	10	1.0	30	58	13	..	15	18	
Oyster Point	0	17.0	8.3	12.7	..	19.9	14	0.4	30	50	17	..	14	21	
Woodhill Forest	30	17.3	9.1	13.2	+0.0	20.0	15	0.8	30	72	10	-65	25	21	
Riverhead Forest	28	16.8	8.1	12.5	+0.0	19.9	10	0.3	30	68	10	-87	20	21	
Kumeu	32	16.9	7.9	12.4	..	19.3	14	-0.3	30	79	16	..	26	21	
Whenuapai	26	16.8	8.6	12.7	-0.1	19.1	14	0.8	30	64	17	-78	24	21	
Albert Park, Auckland	49	17.0	11.0	14.0	-0.1	19.2	14	5.8	30	49	16	-78	17	21	
Owairaka, Auckland	41	16.8	10.0	13.4	+0.2	19.5	14	3.2	30	61	17	-76	19	21	
Port Fitzroy	4	17.8	11.1	14.5	+0.2	20.4	14	5.4	29	108	15	-77	39	18	
Coromandel	43	17.4	8.5	13.0	..	19.4	15	2.3	30	91	10	..	26	18	
Whangapoua Forest	4	18.0	7.9	13.0	+0.3	21.0	10	1.6	30	97	10	-88	36	16	
Thames	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Tairua Forest	3	17.4	8.3	12.9	+0.2	20.6	10	2.8	9	62	6	-129	25	16	
Paeroa	4	17.5	7.3	12.4	+0.6	20.8	14	-0.1	30	30	14	-102	9	21	
Waihi	91	16.2	7.3	11.8	+0.1	18.0	10	0.6	9	133	13	-91	60	16	
Te Aroha	12	17.0	7.4	12.2	-0.1	19.4	4	0.6	30	29	10	-123	12	21	
Katikati	2	17.3	7.4	12.4	..	20.9	10	1.2	30	90	6	..	45	16	
Tauranga	2	17.1	9.8	13.5	+0.5	19.6	11	6.5	30	61	7	..	24	17	
Tauranga Airport	4	17.2	8.8	13.0	+0.7	19.8	10	4.0	30	45	8	-92	16	18	
Te Puke	91	17.1	7.8	12.5	+0.7	21.4	10	3.4	10	57	6	..	25	18	
Rotoehu Forest	72	16.9	6.2	11.6	+0.7	20.8	10	1.0	9	42	7	-141	25	18	
Edgecumbe	5	18.0	6.9	12.5	+0.7	20.4	10	3.7	3	48	10	..	28	18	
Whakatane	2	17.8	7.5	12.7	+0.4	20.0	3	3.0	30	32	7	-103	14	18	
Whakatane Airport	6	16.9	6.2	11.6	..	18.7	3	1.5	30	20	7	..	11	18	
Port Ohope	9	17.6	9.2	13.4	..	22.1	6	6.4	30	19	6	..	9	18	
Kinleith	383	14.1	5.7	9.9	+0.3	17.6	10	0.6	30	54	10	-92	31	21	
Tokoroa	305	14.9	4.6	9.8	+0.0	18.0	4	-1.3	30	61	13	..	32	21	
Tikitere	338	14.4	7.6	11.0	..	17.5	10	4.1	30	40	8	..	14	18	
Kawerau	30	17.3	7.6	12.5	+0.3	21.0	10	3.0	30	32	6	-161	18	18	
Te Teko	8	17.8	6.9	12.4	+0.4	21.0	10	2.8	20	38	9	-125	24	18	
Whakarewarewa	307	14.9	6.4	10.7	+0.3	18.3	10	2.5	30	41	9	-109	17	21	
Rotorua Airport	287	15.1	6.6	10.9	+0.5	18.5	10	1.3	30	33	9	-124	12	21	
Tarawera Forest	61	16.9	5.2	11.1	+0.6	20.0	10	-0.7	30	44	8	-180	19	18	
Waiotapu Forest	435	13.5	4.6	9.1	+0.2	17.1	10	-0.3	11	35	10	-102	16	21	
Atiamuri Power Station	253	15.0	5.5	10.3	+0.2	18.2	10	0.0	9	38	10	-90	19	21	
Kaingaroa Forest	544	12.9	3.9	8.4	-0.4	16.0	10	-0.7	30	35	11	-115	15	21	
Murupara	198	15.7	4.4	10.1	..	19.6	10	-0.6	6	24	8	-113	10	21	
Broadlands	305	..	..	..	..	..	..	..	..	..	..	..	..	..
Wairapukao Forest	437	13.9	1.6	7.8	-0.4	18.3	10	-3.9	30	36	11	-104	16	21	
Taupo	376	14.2	5.3	9.8	+0.2	17.4	4	0.3	9	39	12	-70	25	21	
Wairakei Power Station	342	14.5	5.3	9.9	+0.1	17.0	4	0.3	9	43	11	-74	25	21	
Wairakei Research Station	402	14.7	4.3	9.5	+0.5	19.0	10	-1.6	9	44	10	-68	25	21	
Minginui Forest	366	14.7	3.2	9.0	+0.3	18.5	10	-3.3	30	24	8	-131	13	21	
Taupo Airport	407	13.9	4.6	9.3	..	17.9	10	-1.6	30	26	11	..	18	21	
Waimihia Forest	743	11.1	3.1	7.1	+0.0	15.0	10	-0.6	30	66	11	-91	31	21	
Opotiki	6	17.5	7.8	12.7	+0.4	20.0	4	3.0	22	37	7	-108	17	18	
Waimana	37	17.6	4.2	10.9	+0.0	21.4	10	-0.8	30	50	9	-130	25	18	
Mangere, Auckland	4	16.7	10.0	13.4	+0.2	19.3	14	3.2	30	58	18	-66	16	21	
Otara, Auckland	12	17.1	8.6	12.9	+0.2	20.0	14	1.0	30	51	15	-68	13	21	
Orere Point	30	..	..	..	..	..	..	..	..	..	..	..	..	..
Auckland Airport	8	16.6	10.1	13.4	+0.1	19.4	14	3.7	30	55	14	-64	13	21	
Ardmore	30	17.0	7.9	12.5	+0.1	19.5	4	0.5	30	50	13	-80	13	21	
Pukekohe	82	16.2	8.9	12.6	+0.1	18.7	14	3.5	30	55	16	..	16	21	
Maioro Forest	52	16.8	9.1	13.0	-0.1	19.6	14	3.5	29	48	16	-87	17	21	
Hunua	122	16.1	6.8	11.5	..	19.0	14	-0.5	30	60	13	..	11	21	
Mercer	7	
Maramarua Forest	38	16.6	6.3	11.5	+0.0	18.8	14	-0.9	29	32	13	-87	9	21	

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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	mm	mm	mm	Hrs					
Te Kauwhata	32	16.3	7.9	12.1	+0.0	19.0	14	0.7	30	32	14	-82	17	21	108
Ruakura, Hamilton	40	16.3	6.8	11.6	+0.3	18.9	4	-0.8	30	35	12	-77	18	21	107
Whatawhata	104	16.1	7.6	11.9	+0.2	18.9	10	0.7	29	50	15	-100	19	21	110
Rukuhia	66	16.4	7.2	11.8	+0.2	18.7	10	-0.5	30	40	14	-74	16	21	104
Hamilton Airport	50	16.5	5.6	11.1	+0.2	20.5	4	-2.6	30	38	13	-74	13	21	..
Cambridge	76	16.2	6.6	11.4	..	18.7	4	-0.8	30	31	12	..	12	21	..
Port Taharoa	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mohakatino Station Mokau	46	15.8	9.1	12.5	-0.1	17.6	9	4.8	10	83	10	-90	34	21	..
Arapuni Power Station	123	16.0	6.2	11.1	+0.1	19.0	4	1.0	30	40	14	-87	21	21	..
Waikeria	46	16.3	5.5	10.9	..	20.0	4	-2.1	30	45	12	..	28	21	..
Te Kuiti	61	16.4	6.3	11.4	+0.4	19.0	4	0.0	29	74	15	-68	29	21	110
Pureora Forest	549	12.8	3.2	8.0	-0.2	15.5	4	-3.3	29	83	14	-82	39	21	..
Taumarunui	171	15.6	4.8	10.2	-0.1	18.9	16	-1.4	29	72	13	-60	36	21	88
Omata	61	16.6	10.2	13.4	+0.3	18.9	10	8.3	13	109	11	..	41	18	..
New Plymouth	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Plymouth Airport	27	16.2	8.0	12.1	+0.3	19.1	10	4.3	13	87	13	-76	29	21	169
Tikorangi	77	15.9	7.7	11.8	..	18.7	10	3.8	30	92	12	..	32	21	..
Te Wera Forest	180	15.2	4.6	9.9	+0.4	18.4	4	-0.5	9	74	8	-101	38	21	..
Lower Retaruke	223	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turangi	366	14.6	4.6	9.6	+0.1	18.3	10	-2.3	30	86	11	..	30	21	154
Chateau, Mt Ruapehu	1119	9.8	1.0	5.4	-0.1	15.4	10	-3.0	29	144	11	-113	47	21	..
Mangamutu, Pahiatua	116	14.9	6.0	10.5	+0.6	18.3	18	0.0	2	52	11	-62	28	21	..
Mt Bruce Reserve	305	14.2	5.2	9.7	+0.8	18.1	3	-0.4	10	90	13	..	35	21	..
Waingawa, Masterton	114	15.4	5.4	10.4	+0.3	18.5	3	2.0	5	29	10	-73	12	21	125
Kopua	311	13.9	6.4	10.2	+0.5	18.8	14	1.7	14	21	7	-81	11	26	..
Waipukurau	137	14.9	6.2	10.6	+0.6	18.3	14	1.1	5	17	7	-67	9	26	145*
Dannevirke	207	14.8	6.4	10.6	+0.5	19.1	14	1.5	30	28	11	-74	11	21	123
Castlepoint	3	..	..	..	..	..	..	..	..	11	8	-103	7	27	..
Ngaumu Forest	244	15.0	4.5	9.8	+0.7	19.0	3	-0.1	30	23	9	-117	8	26	..
Tauherenikau, Alloa	43	16.3	4.9	10.6	+0.1	19.1	17	1.2	17	39	6	-68	16	21	..
Gladstone, Arahura	116	15.4	4.6	10.0	+0.0	18.4	23	0.0	30	21	7	-91	7	18	..
Waiorongomai	21	15.4	6.6	11.0	+0.7	18.0	3	1.7	2	99	10	-56	42	21	..
Cape Palliser	10	15.8	10.1	13.0	+0.3	19.2	24	6.3	16	33	6	-86	15	26	..
East Cape	17	17.4	10.2	13.8	-0.1	20.5	5	7.0	5	83	11	-59	40	26	..
Ruatoria	61	18.4	7.2	12.8	+0.3	22.2	15	2.5	5	87	7	-119	51	26	..
Mangatu Forest	182	16.4	7.1	11.8	+0.7	20.5	11	3.4	31	67	11	-65	36	26	..
Manutuke Gisborne	9	17.6	7.3	12.5	+0.7	22.0	15	2.1	3	43	10	-61	29	26	..
Gisborne Airport	4	17.4	7.6	12.5	+0.4	21.9	15	3.0	14	46	12	-63	33	26	149
Onepoto, Waikaremoana	643	13.5	5.7	9.6	+0.4	20.0	3	3.5	13	89	9	-122	21	26	..
Whararata Forest	439	..	7.1	..	..	..	..	5.5	26	68	10	..	36	26	..
Esk Forest	427	13.8	6.6	10.2	+0.3	18.0	23	2.8	2	55	8	-118	25	26	..
Kaweka Forest	414	14.2	7.6	10.9	+0.5	19.9	14	4.3	23	44	7	..	25	26	..
Napier Airport	2	16.9	7.0	12.0	..	20.1	14	2.0	5	24	6	-65	23	26	..
Napier	2	17.2	7.8	12.5	+0.5	20.2	14	2.6	5	25	5	-59	23	26	142
Hastings	12	16.8	7.0	11.9	+0.2	20.6	14	1.4	5	18	5	-63	16	26	..
Havelock North	9	16.7	5.2	11.0	+0.5	20.0	14	0.0	5	18	5	-61	17	26	137
Gwavas Forest	335	14.3	4.8	9.6	+0.6	18.0	18	0.4	30	28	7	-81	18	26	..
Makaretu	335	15.1	5.7	10.4	+0.6	19.0	14	0.8	5	16	7	..	8	26	..
Mohaka Forest	286	15.7	7.0	11.4	+0.7	19.7	23	3.9	9	41	8	-111	19	26	..
Frasertown, Wairoa	8	17.1	8.2	12.7	+0.8	21.8	15	3.1	5	36	12	-111	10	26	..
Wairoa	20	..	7.9	..	..	..	..	3.0	14	38	14	..	16	26	136
Portland Island	78	15.3	11.5	13.4	+0.2	17.8	14	9.3	31	28	8	-81	22	26	..
Kapiti Island	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paraparaumu Aerodrome	7	15.6	7.7	11.7	+0.6	18.5	27	3.4	17	116	14	+12	46	21	146
Flockhouse, Bulls	9	15.9	6.3	11.1	+0.2	18.4	18	0.7	30	37	9	-47	19	21	..
Ohakea	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wharite Peak	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kairanga Palmerston North	15	15.8	6.4	11.1	+0.5	19.0	18	1.2	9	34	7	..	18	21	124
Palmerston North Airport	45	15.7	6.0	10.9	+0.4	18.1	15	-0.2	30	37	9	-42	21	21	..
Palmerston North D S I R	34	15.4	8.0	11.7	+0.7	18.1	14	3.2	8	32	7	-54	16	21	100
Massey University	61	15.3	7.8	11.6	..	17.7	14	2.8	2	38	8	-51	17	21	..
Foxton	3	..	..	..	..	..	..	..	..	38	9	-48	18	21	..
Waitarere Forest	3	15.5	6.8	11.2	+0.5	18.0	18	0.5	29	49	8	-35	28	21	..
Levin	46	15.3	7.7	11.5	+0.3	18.1	18	4.3	30	51	10	-53	23	21	119
Porirua	94	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taita, Lower Hutt	65	15.6	7.0	11.3	+0.4	18.0	10	2.6	17	109	11	-38	34	17	118
Avalon, Lower Hutt	15	15.5	7.3	11.4	+0.4	17.7	4	..	..	106	10	-62	32	21	..
Kelburn, Wellington	125	14.8	8.4	11.6	+0.6	18.1	3	5.0	22	97	9	-35	45	26	130
Somes Island	43	14.9	8.8	11.9	..	17.0	3	5.5	2	83	11	..	38	26	..
Gracefield, Lower Hutt	34	15.3	7.9	11.6	+0.3	17.8	3	4.5	17	89	7	-66	28	26	..
Wainuiomata	82	15.0	5.6	10.3	+0.1	17.0	23	1.4	23	162	9	..	78	26	..
Wellington Airport	6	15.1	8.5	11.8	+0.1	17.6	23	4.1	28	80	9	-29	33	26	..
Kaitoke	223	14.4	4.8	9.6	+0.4	17.5	3	-1.1	17	146	14	-80	82	21	120
Wallaceville	56	15.3	5.0	10.2	-0.1	17.6	3	-0.2	17	113	12	-24	50	21	125
Cape Egmont	8	16.0	8.8	12.4	-0.4	17.4	2	3.2	30	96	12	-39	51	18	..
Stratford Mountain House	846	10.6	3.2	6.9	+0.3	15.5	10	0.3	7	424	15	-231	160	18	..
Stratford Dem. Farm	311	14.4	5.1	9.8	-0.1	17.2	4	2.0	5	109	10	-97	40	18	130

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		A Max.	B Min.			Maximum	Date	Minimum	Date					Amount	Date
Metres	°C	°C	°C	°C	°C		°C	mm		mm	mm				
Manaia Dem. Farm	98	15.3	6.8	11.1	-0.1	17.7	4	1.8	30	57	10	-70	18	21	129
Normanby	122	15.0	6.1	10.6	..	17.0	4	0.6	30	76	16	..	25	18	..
Patea	43	15.6	8.8	12.2	+0.1	17.5	14	5.0	30	76	10	-61	24	21	..
Ohakune Junction	629	12.1	3.4	7.8	..	15.2	10	-1.2	13	68	11	..	39	21	..
Karioi	648	12.8	2.9	7.9	+0.1	17.9	18	-2.0	14	54	7	-58	29	21	..
Waiouru	823	11.2	1.7	6.5	-0.2	14.1	4	-3.4	5	42	10	-67	18	21	..
Waiouru Military Camp	823	10.7	2.1	6.4	-0.1	13.5	4	-2.4	30	42	10	-55	16	21	..
Taihape	433	13.9	3.4	8.7	+0.2	18.0	14	-3.3	30	41	11	..	21	21	..
Kahui, Taihape	518	13.3	5.0	9.2	+0.3	16.8	14	0.7	29	35	10	..	16	21	..
Wanganui	22	15.9	8.4	12.2	+0.4	19.5	18	3.5	30	37	8	-49	15	21	134
Wanganui Airport	9	16.2	8.2	12.2	..	19.7	18	3.6	30	34	6	..	18	21	..
Farewell Spit	3	16.1	7.3	11.7	+0.3	18.0	23	2.4	30	68	8	-74	27	18	..
Totaranui	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Westport Airport	2	14.9	7.4	11.2	+0.4	17.3	14	3.6	29	206	12	+5	49	18	103
Cobb Dam	823	11.8	1.6	6.7	+0.5	16.6	10	-2.5	29	159	13	-85	45	18	..
Arapito	20	15.3	7.2	11.3	..	17.3	9	3.5	29	267	11	..	71	21	103
Karamea	5	..	..	..	..	..	..	..	..	215	..	..	..	..	..
Lake Rotoroa	443	11.9	3.9	7.9	..	14.5	15	0.0	30	157	10	..	50	20	..
Lake Rototiti	634	11.7	1.3	6.5	+0.3	16.9	10	-3.1	29	143	11	-30	47	20	..
Hokitika Airport	39	14.2	6.9	10.6	+0.8	17.1	14	2.2	29	167	11	-105	39	18	110
Reefton	198	12.2	4.6	8.4	+0.5	17.0	14	0.0	29	187	11	+9	35	18	..
Totara Flat	77	12.6	4.8	8.7	+0.1	16.0	14	-1.2	28	197	12	+27	39	20	..
Greymouth	4	14.4	7.6	11.0	+0.6	17.5	14	2.6	29	155	12	-69	32	18	93
Otira Substation	383	12.1	3.9	8.0	..	16.0	15	0.5	28	427	10	-10	152	20	..
Springs Junction	421	11.3	2.1	6.7	..	14.2	8	-3.9	28	282	12	+84	57	20	..
Hari Hari	45	14.9	4.8	9.9	+1.3	17.5	3	-0.8	29	231	11	-94	47	22	..
Franz Josef	122	14.2	5.3	9.8	+0.4	17.5	13	1.0	22	414	13	+3	105	20	..
Fox Glacier	152	13.9	5.4	9.7	..	16.0	8	1.4	22	360	12	-37	100	20	..
Milford Sound	3	13.1	4.6	8.9	+0.5	16.1	5	1.0	28	628	12	+145	172	23	..
Puysegur Point	43	12.7	8.6	10.7	..	16.6	13	5.2	27	196	24	-7	54	20	..
Stephens Island	187	14.0	10.3	12.2	..	15.9	3	8.7	1	83	9	+4	41	18	..
Riwaka, Motueka	8	16.1	4.9	10.5	+0.5	19.4	23	0.8	29	72	10	-83	45	18	158
Tapawera	146	15.6	2.3	9.0	..	18.8	8	-2.1	29	66	9	..	20	20	..
Appleby	17	15.9	5.5	10.7	+0.3	18.7	23	1.5	29	57	5	-52	40	18	..
Nelson Airport	2	15.5	5.3	10.4	+0.8	18.4	3	0.9	29	54	7	-58	36	18	171
Rai Valley	79	16.1	4.7	10.4	+1.3	19.8	3	1.6	9	181	5	-37	86	18	..
Moutere Hills	110	15.3	8.1	11.7	+1.0	18.3	11	5.3	22	54	7	-68	32	18	..
Blenheim Airport	27	16.0	5.1	10.6	+0.9	19.6	23	1.0	30	47	4	-37	22	18	..
Blenheim	4	16.3	5.6	11.0	+0.8	19.8	23	1.6	30	27	4	-49	13	18	162
Waihapai Power Station	262	14.6	4.4	9.5	+0.4	17.8	9	1.0	8	55	6	-34	33	18	..
Vernon Lagoons	2	16.2	4.7	10.5	+0.8	19.7	23	0.7	30	19	5	..	9	21	143
Lake Grassmere	2	15.1	7.5	11.3	+0.8	19.6	23	4.0	3	15	5	-54	4	18	156
Cape Campbell	3	15.1	9.6	12.4	+1.3	17.6	10	7.2	22	18	6	-63	6	26	..
Hanmer Forest	387	14.3	1.2	7.8	+0.6	19.0	14	-3.5	29	106	7	-11	50	20	111
Molesworth	893	12.0	-0.5	5.8	+0.7	15.9	3	-4.4	17	58	4	-11	27	20	..
Kaikoura	99	14.5	8.8	11.7	+1.4	20.2	14	6.1	29	26	5	-76	16	26	141
Arthurs Pass	738	9.9	1.0	5.5	..	14.5	9	-3.5	29	330	10	-10	160	20	..
Balmoral Forest	198	15.0	..	..	..	21.0	14	..	..	88	6	+27	80	20	..
Hawarden	244	14.7	2.0	8.4	..	20.8	14	-3.3	28	18	7	..	13	20	..
Waiiau	137	15.1	2.5	8.8	..	22.4	14	-2.4	29	33	7	..	17	26	..
The Hermitage, Mt Cook	765	11.9	2.0	7.0	+1.6	17.0	10	-1.0	28	303	10	-20	126	20	96
Mt John	1027	10.2	2.9	6.6	+1.8	13.8	9	0.1	19	25	5	-28	17	20	166
Craigieburn Forest	914	11.7	1.2	6.5	+1.6	16.3	10	-1.6	1	106	12	-31	54	20	..
Lake Coleridge	364	13.8	2.2	8.0	+0.7	19.3	14	-1.9	28	30	7	-49	16	20	..
Highbank Power Station	336	13.7	5.2	9.5	+1.2	19.4	14	2.0	28	16	9	-65	4	20	143
Hororata Substation	192	15.2	1.7	8.5	+0.9	24.2	14	-3.5	28	21	8	-55	8	14	..
Winchmore	160	14.5	3.9	9.2	+1.6	20.6	9	0.4	17	12	5	-62	3	14	..
Peel Forest	274	14.3	2.5	8.4	..	19.6	9	-0.8	28	26	9	..	14	20	..
Ashburton	101	15.1	3.8	9.5	+1.2	22.1	9	-2.4	28	13	6	-58	5	20	134
Waipara	64	..	3.8	..	..	22.0	14	-0.1	29	8	3	..	4	25	..
Ashley Forest	107	15.2	4.6	9.9	+0.7	22.3	14	2.0	28	33	3	-51	27	26	140
Rangiora	46	15.3	3.2	9.3	+0.7	22.3	14	-2.6	22	23	7	-43	12	25	..
Darfield	195	15.6	4.2	9.9	+1.8	21.9	14	-0.3	22	20	5	-61	8	14	..
Eyrewell Forest	158	14.7	2.6	8.7	+0.8	20.5	14	-3.7	17	21	5	-60	6	20	..
Christchurch Airport	30	14.9	2.9	8.9	+0.2	22.7	14	-2.3	22	16	7	-65	9	25	163
Templeton	46	15.0	3.3	9.2	..	22.3	14	-1.6	28	10	5	..	3	24	..
Christchurch	7	15.4	4.0	9.7	+0.6	25.2	14	-0.5	22	14	5	-70	9	25	..
Bromley, Christchurch	9	15.2	5.2	10.2	+0.7	23.1	14	0.5	18	16	8	-65	10	25	..
Mt Pleasant	137	14.9	8.1	11.5	+1.3	22.0	14	5.0	22	17	5	-69	12	25	..
Lincoln	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Broadfield, Lincoln	12	..	..	..	..	..	..	..	..	12	16	..	3	24	..
Akaroa	3	15.6	4.6	10.1	..	22.8	14	0.5	22	17	4	..	8	25	..
Lake Tekapo	683	11.9	1.8	6.9	+1.1	16.5	14	-3.0	29	27	6	-26	18	20	147
Lake Pukaki	556	11.6	2.3	7.0	+1.2	17.7	23	-1.3	29	30	10	..	14	20	..
Fairlie	304	14.6	-0.6	7.0	..	19.9	10	-4.4	28	25	4	..	19	20	..
Twizel	457	12.5	-0.7	5.9	+0.3	17.3	23	-5.3	29	36	7	..	16	20	..
Ikawai	70	14.8	2.6	8.7	+1.2	21.0	9	-2.5	28	15	4	..	9	24	..

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for May 1980—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 Max.	B Min.			Maximum	Date	Minimum	Date				Amount		Date
	Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs	
Geraldine	119	14.9	2.6	8.8	..	22.5	10	-1.5	28	25	5	..	16	20	..
Orari Estate	81	14.8	2.6	8.7	+1.2	21.5	9	-1.2	29	27	5	-34	16	20	..
Temuka	24	15.5	3.4	9.5	+1.6	21.0	9	-0.9	28	20	4	-31	12	20	..
Timaru Airport	26	14.7	2.5	8.6	+1.0	20.5	9	-1.3	28	22	4	-24	13	20	..
Adair	85	14.2	5.8	10.0	+1.5	20.8	14	1.6	31	21	4	-27	11	24	..
Timaru	17	14.2	4.2	9.2	+0.8	19.0	14	0.5	28	25	6	-23	11	24	126
Waimate	61	15.6	4.5	10.1	+1.2	21.7	9	1.3	28	17	5	-36	12	24	..
Kurow	207	14.8	3.6	9.2	..	19.4	14	-0.7	28	16	6	..	9	20	..
Oamaru Airport	30	14.3	4.1	9.2	+1.4	19.8	9	0.7	22	21	7	-20	8	25	151
Tara Hills, Omarama	488	12.7	0.0	6.4	+1.0	16.8	4	-4.2	28	27	5	-14	17	20	139
Lake Hawea	350	11.6	3.2	7.4	+0.2	16.1	14	-0.7	28	65	6	-6	36	20	..
Wanaka	296	12.6	1.2	6.9	+0.4	16.0	3	-2.3	27	47	8	-14	23	20	..
Queensberry	277	12.1	2.4	7.3	..	18.2	23	-1.4	28	40	12	..	26	20	..
Bendigo	200	12.7	1.8	7.3	..	19.4	23	-2.6	27	15	12	..	9	20	..
Naseby Forest	610	11.6	0.4	6.0	+1.1	16.5	14	-3.8	27	33	8	-13	11	20	..
Ranfurly	427	12.1	0.4	6.3	..	16.7	9	-4.2	31	24	8	..	6	24	98
Herbert Forest	61	15.0	2.6	8.8	+0.8	21.4	11	0.6	31	12	8	-41	3	20	..
Palmerston	21	14.9	2.2	8.6	+1.2	20.5	9	-2.2	31	18	7	..	6	24	109
Cherry Farm Hospital	6	14.2	3.1	8.7	+0.6	19.1	10	..	..	33	11	-25	9	24	..
Taiaroa Head	72	12.7	8.1	10.4	+1.7	16.7	9	3.9	23	47	10	-22	25	25	..
Invermay, Taieri	30	13.0	4.3	8.7	..	18.3	16	-0.6	27	55	10	..	18	25	90
Berwick Forest	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunedin Airport	1	13.5	3.6	8.6	+1.2	18.8	16	-2.6	28	63	10	+7	24	25	107
Musselburgh, Dunedin	2	13.3	6.7	10.0	+1.1	18.2	16	2.8	28	57	11	-14	24	25	93
Te Anau	215	12.5	3.8	8.2	+1.7	15.7	8	0.3	4	101	9	+2	30	23	99
West Arm, Manapouri	232	10.4	5.1	7.8	+1.4	14.0	10	1.0	27	395	14	..	104	23	..
Borland Burn	183	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queenstown	329	12.1	3.7	7.9	+1.0	16.1	17	0.4	29	85	10	+6	49	20	95
Queenstown Airport	349	11.3	1.4	6.4	+0.3	16.3	14	-2.3	28	64	10	+3	37	20	..
Cromwell	213	12.3	1.0	6.7	+0.2	17.9	23	-3.3	27	24	11	-12	14	20	110
Northburn	210	12.6	2.0	7.3	..	18.6	23	-1.9	27	16	13	..	8	20	..
Clyde Dam	160	12.4	1.7	7.1	..	18.3	23	-1.8	28	32	9	..	14	20	..
Ophir	305	13.1	-0.7	6.2	+1.0	18.0	17	-5.6	28	15	6	-15	7	20	..
Moa Creek	427	..	..	..	..	..	..	..	..	25	8	-3	11	20	..
Earnsclough	152	12.9	0.3	6.6	+0.8	19.6	23	-4.2	28	27	9	-1	15	20	..
Alexandra	141	13.1	1.4	7.3	+1.0	20.4	23	-3.0	28	25	11	-3	13	20	122
Roxburgh Power Station	110	13.1	4.0	8.6	+1.1	18.0	23	1.0	17	42	8	+4	18	24	..
Moa Flat	410	11.4	3.2	7.3	+1.2	16.4	9	-0.2	28	79	14	+21	22	24	..
Mahinerangi Dam	396	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tapanui	226	12.0	4.8	8.4	+0.8	16.7	9	0.7	27	92	18	+8	31	23	..
Rankleburn Forest	255	11.6	4.7	8.2	+1.3	16.4	9	-0.7	27	140	14	+49	47	23	..
Taieri Mouth	15	13.3	5.8	9.6	+1.7	18.7	16	0.7	27	95	14	+21	27	23	..
Otautau	55	13.2	4.2	8.7	+1.5	18.4	9	-1.0	27	131	14	+34	48	23	62
Winton	44	12.8	4.3	8.6	+1.2	17.8	16	-0.1	28	98	15	+32	38	23	70
Gore	123	11.9	4.7	8.3	+1.5	16.3	15	-0.4	28	103	24	..	36	23	80
Hokonui Forest	46	12.8	4.5	8.7	+1.2	17.6	16	-1.5	27	124	17	+38	47	23	..
Woodlands	47	12.5	5.0	8.8	+1.8	16.7	16	-0.9	27	156	25	..	48	23	..
Invercargill Airport	0	12.6	5.3	9.0	+1.8	16.0	17	0.6	27	138	19	+47	46	23	60
Tiwai Point, Bluff	5	12.4	7.0	9.7	+1.3	15.0	8	2.1	27	119	19	..	37	23	..
Stewart Island	3	12.2	6.2	9.2	..	15.3	9	-0.5	24	137	28	..	34	20	..
Milton	18	12.5	3.9	8.2	+1.0	17.0	16	-1.0	27	85	13	+19	22	23	..
Finegand, Balclutha	6	13.2	5.5	9.4	+1.8	17.8	9	0.2	20	56	13	..	18	22	77
Owaka	5	13.1	5.1	9.1	..	17.4	16	-1.5	27	83	14	..	30	23	..
Nugget Point	129	12.0	6.6	9.3	+1.4	16.0	9	1.7	22	79	19	+3	22	23	..
Tautuku	61	12.7	5.8	9.3	..	21.2	17	1.6	12	129	20	..	52	23	..
Rarotonga Airport	7	26.2	20.6	23.4	+0.0	28.6	14	16.0	25	261	17	+78	55	14	129
Raoul Island	38	21.0	15.3	18.2	-0.6	23.1	1	13.2	28	130	19	-15	94	19	173
Waitangi, Chatham Island	44	12.3	6.9	9.6	-0.8	14.7	18	1.4	26	79	22	-38	22	19	70
Campbell Island	15	8.7	3.6	6.4	+0.3	11.0	17	-2.5	25	68	27	-72	10	27	27
Nandi Airport, Fiji	15	30.0	18.4	24.2	-0.6	32.0	2	14.7	30	4	2	..	4	1	238
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scott Base, Antarctica	16	-16.5	-27.8	-22.2	+6.2	-7.1	16	-41.3	27	..	..	..	..	..	..
LATE RETURNS AND CORRECTIONS															
Oyster Point 04/1980	0	19.3	9.4	14.4	..	22.4	27	4.6	12	64	14	..	14	27	..
Tokoroa 04/1980	305	17.4	6.8	12.1	-0.5	20.0	22	0.5	20	134	15	..	30	27	..
Tarawera Forest 04/1980	61	19.3	6.8	13.1	+0.0	24.4	25	0.4	20	265	12	+95	67	27	..
Waimihia Forest 04/1980	743	13.9	5.0	9.5	-0.2	19.6	25	-1.0	4	140	12	+8	41	27	..
Orere Point 12/1979	30	22.1	..	..	..	25.0	9	..	..	96	9	..	29	6	..
Tauherenikau, Alloa 04/1980	43	18.5	7.2	12.9	-0.2	25.0	25	0.8	20	141	12	+62	55	9	..
Hastings 04/1980	12	18.9	8.5	13.7	-0.7	24.1	25	1.0	20	119	7	+71	73	10	..
Makaretu 04/1980	335	17.4	6.5	12.0	-0.5	23.0	24	0.0	20	169	14	..	82	10	..
Portland Island 04/1980	78	17.3	12.5	14.9	-0.3	21.4	24	9.6	4	100	12	+11	41	9	..
Wharite Peak 04/1980	914	10.7	6.0	8.4	+0.4	16.6	27	2.0	12	212	17	+62	62	9	..
Kairanga Palmerston North 04/1980	15	17.7	7.8	12.8	-0.6	21.5	8	0.9	20	77	13	..	19	9	115
Palmerston North D S I R 04/1980	34	17.1	9.4	13.3	-0.4	20.2	28	3.0	23	97	13	+23	27	10	97

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for May 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	°C	°C	mm	mm	mm	mm	Hrs		
LATE RETURNS AND CORRECTIONS															
Karamea 04/1980	5	16.6	9.5	13.1	..	18.9	27	4.5	23	109	..	..	..	..
Greymouth 02/1980	4	19.7	10.0	14.9	-1.0	28.0	15	1.5	16	158	13	-45	26	9	
Greymouth 03/1980	4	18.4	10.3	14.4	-0.8	25.0	3	3.8	18	200	16	+7	43	31	
Greymouth 04/1980	4	16.9	8.5	12.7	-0.2	21.5	9	3.5	4	127	12	-89	31	28	
Franz Josef 04/1980	122	16.9	7.2	12.1	+0.4	23.0	10	3.0	4	412	13	+11	185	24	
Craigieburn Forest 04/1980	914	14.2	4.5	9.4	+1.1	22.8	25	-1.0	4	68	13	-54	27	28	
Winchmore 04/1980	160	15.8	6.8	11.3	+0.5	27.1	24	-1.5	19	124	15	+58	41	28	
Ashley Forest 04/1980	107	15.9	8.1	12.0	-0.1	25.6	24	4.0	23	96	12	+22	32	28	
Eyrewell Forest 04/1980	158	16.1	6.0	11.1	-0.1	26.6	24	0.0	2	103	12	+32	36	28	
Christchurch 03/1980	7	18.8	10.1	14.5	-0.5	26.0	30	1.6	18	119	13	+61	50	2	
Christchurch 04/1980	7	17.0	8.1	12.6	+0.4	25.4	25	2.8	2	83	15	+25	29	28	
Lincoln 04/1980	11	16.3	7.2	11.8	+0.3	25.1	24	1.5	2	52	14	-6	33	28	
Moa Creek 04/1980	427	16.2	1.3	8.8	+0.5	23.0	27	-5.6	21	42	7	+14	25	28	
Tautuku 02/1980	61	18.4	9.7	14.1	..	26.0	2	4.4	8	80	17	..	12	20	
Tautuku 03/1980	61	16.6	8.1	12.4	..	24.5	19	4.6	18	85	19	..	25	2	
Tautuku 04/1980	61	14.6	7.3	11.0	..	25.5	24	2.9	19	66	17	..	13	27	
Nandi Airport, Fiji 04/1980	15	31.0	22.8	26.9	+0.9	33.7	17	18.2	28	123	14	..	45	3	
Totokoitu, Rarotonga 04/1980	9	27.6	23.1	25.4	..	30.2	9	18.2	22	120	17	..	30	16	

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 MAY 1980

General—May was considerably drier and milder than usual throughout most of New Zealand. Mean monthly pressures were the highest over the whole country since June 1979, and on the 9th, Kelburn, Wellington recorded 1036.4 millibars, its highest May 9 a.m. pressure since 1934. There was a marked absence of strong winds over the North Island, but westerly winds were stronger than usual in southern areas of the South Island.

Mild drier conditions produced good grass growth in most districts, and stock was reported to be in excellent condition. Some farmers have experienced one of their best dairying seasons for many years.

Rainfall—The only areas that recorded above normal rainfall totals for the month were parts of Westland and Southland. Even here the excesses were less than 50 percent. The greatest departures below normal occurred in Bay of Plenty, Hawke's Bay, Wairarapa, and Canterbury. Many stations in these districts recorded less than 25 percent of their usual May rainfall, and on Banks Peninsula, Okuti measured only 4 mm for the month, the lowest May total since 1927. The station at Castle Point, Wairarapa, recorded 11 mm, the lowest in May since observations began in 1902.

On the 21st, heavy rain in the Otira area caused a major washout on the main railway line between Greymouth and Christchurch. Three locomotives plunged into the Otira River, killing the driver of the first. From 9 a.m. on the 20th to 9 a.m. on the 21st 152 mm of rain were recorded at Otira, and the washout occurred during the period of heaviest rain between 8 p.m. on the 20th and 7 a.m. on the 21st when nearly 130 mm of rain fell.

Invercargill city and surrounding areas suffered surface flooding on the 24th when 36 mm were recorded between midnight and 7 a.m. The total daily fall of 45 mm made this the highest May one-day fall since the station at Invercargill Airport began in 1941. The town of Kelso was flooded once again during this heavy rain.

Temperatures—Temperatures were warmer than usual throughout New Zealand apart from some areas in Northland and Bay of Plenty. In the North Island temperatures were above normal by 0.5°C and in the South Island by more than 1.0°C. At Invercargill the highest May mean temperature of 9.0°C since 1954 (also 9.0°C) was recorded. In eastern districts daytime temperatures were colder than usual by 2.0° to 4.0°C from the 28th to the 31st. During a warm spell from the 23rd to the 25th maximum temperatures were generally above normal by 3.0°C.

Sunshine—Total sunshine hours for the month were near normal in most districts. On the West Coast they were below average by about 10 to 20 hours, but in eastern districts of both islands they were above by the same amount. Apart from 1975 (164 hours) Christchurch Airport, with 163 hours, recorded its sunniest May since the station began in 1949.

WEATHER SEQUENCE FOR MAY 1980

The ridge of high pressure that extended onto New Zealand from the Tasman Sea at the end of April moved slowly east, and by the morning of the 3rd an anticyclone had become established over the whole country. This anticyclone persisted until the morning of the 12th, with most of the country experiencing fine weather during this

period. Some districts in both islands had some showery conditions, but they were of short duration. During the evening of the 12th a trough of low pressure in the Tasman Sea began to move eastwards towards the South Island, and by the morning of the 13th had reached the West Coast. Heavy rain was reported in Fiordland and Westland, and moderate falls in areas west of the main ranges in both islands. More than 40 mm were recorded at Milford Sound in the 24 hours up to 9 a.m. on the 14th, and 30 to 40 mm in some parts of Westland in the same period. Temperatures were cooler than usual during the first week of the month, but then became milder than average.

By the morning of the 15th the trough of low pressure had moved to the east of New Zealand, and had been replaced by an anticyclone moving from the Tasman Sea. During the morning of the 17th depressions formed in the north and south Tasman Sea and began to move east towards the country. One depression had moved onto Northland, and the other onto Fiordland by the afternoon of the 18th. Heavy rain was recorded in Northland, Auckland, Taranaki, Manawatu, Nelson, Westland, inland Canterbury, and Fiordland. At Otira more than 70 mm were recorded in the 24 hours up to 9 a.m. on the 19th, and many of the above districts had in excess of 50 mm. Moderate rain was reported in all areas west of the main ranges and lighter falls in the east. Temperatures remained warmer than usual throughout the country.

On the morning of the 20th a cold front, associated with a depression moving to the south of New Zealand, had moved onto the South Island and this brought very heavy rain to western districts of the South Island. Again at Otira the heaviest falls were recorded, more than 150 mm in 24 hours. In other areas on the West Coast 100 mm were recorded in the same period. The only areas that did not report rain were parts of Hawke's Bay and Wairarapa. From the 21st to the 24th a strong westerly airstream covered New Zealand, and disturbances in this flow brought heavy rain to the West Coast and Southland, and moderate rain to many areas west of the main ranges. Most eastern districts had fine weather during this period.

A ridge of high pressure extended onto the South Island on the 25th, and two small depressions had formed within a trough of low pressure, and were lying to the east and west of the North Island by the morning of the 26th. As the depression to the west moved across central districts of New Zealand during the 26th, heavy rain was reported in Wellington and Poverty Bay, with moderate falls in Wairarapa and Hawke's Bay. Some areas recorded 24 hour falls of more than 40 mm. Temperatures were warmer than usual throughout New Zealand from the 21st to the 25th, especially along the east coasts of both islands. By the 27th an anticyclone in the Tasman Sea had begun to move eastwards onto the country bringing fine weather to most districts. Some areas east of the main ranges in the North Island did report some showers.

From the 27th until the end of the month an anticyclone covered the whole of New Zealand and most of the country experienced fine weather. Showers were reported in Poverty Bay, Hawke's Bay, and Wairarapa as small disturbances in the southerly airflow onto these regions persisted for 2 days. By the 31st a depression that had formed in the Tasman Sea was moving south-east towards the country.

J. S. HICKMAN, Director.

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