



311
8 FEB 1982

SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, 28 JANUARY 1982

Published by Authority

WELLINGTON: MONDAY, 1 FEBRUARY 1982

CLIMATOLOGICAL TABLE

FOR NOVEMBER 1981

NEW ZEALAND METEOROLOGICAL SERVICE

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for November 1981

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	17.6	12.0	14.8	-0.4	21.9	5	10.2	2	157	25	+96	38	17	..
Kaitaia Airport	80	18.7	12.4	15.6	-0.3	21.7	29	7.5	5	221	18	+119	37	28	129
Aupouri Forest	69	18.1	12.8	15.5	-0.6	21.4	30	9.6	5	171	16	+79	39	28	..
Kaitaia	8	19.4	12.4	15.9	..	23.2	30	7.3	5	184	16	..	30	14	..
Kerikeri Aerodrome	150	18.8	11.4	15.1	..	22.4	13	7.2	12	273	16	..	116	28	..
Umawera	50	19.1	11.3	15.2	..	24.0	29	5.7	26	154	12	..	48	14	..
Kaikohu	204	17.8	11.5	14.7	-0.3	21.7	30	8.1	25	225	22	..	64	28	107
Waiootemarama	229	17.1	11.3	14.2	..	23.5	29	7.5	26	204	22	..	49	14	..
Waipoua Forest	88	18.7	10.9	14.8	+0.1	26.0	29	5.5	26	138	15	+24	34	14	..
Dargaville	20	19.4	11.4	15.4	+0.3	26.0	29	4.6	26	79	15	-5	28	28	131
Waitangi Forest	55	19.3	12.4	15.9	-0.5	22.5	13	8.6	26	184	15	+100	71	28	137
Glenberrie Forest	107	18.9	9.9	14.4	+0.0	23.5	13	4.1	26	251	17	+134	74	28	..
Whangarei Airport	37	19.5	12.3	15.9	-0.3	24.3	13	8.1	26	135	17	+38	37	28	..
Whangarei	29	19.9	11.9	15.9	-0.2	24.8	13	7.2	26	189	14	..	47	1	130*
Marsden Power Station	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poua	97	18.7	12.0	15.4	..	25.7	30	8.2	9	58	13	..	16	28	..
Leigh	27	18.0	12.3	15.2	-0.4	20.4	30	9.2	2	99	12	+25	26	7	143
Warkworth	72	18.4	11.2	14.8	-0.5	23.1	30	4.7	25	178	13	..	52	7	..
Oyster Point	0	19.4	11.5	15.5	..	24.5	30	6.3	27	93	15	..	19	15	..
Woodhill Forest	30	19.1	11.3	15.2	+0.1	25.2	30	5.4	25	91	16	-3	23	15	..
Riverhead Forest	28	19.2	10.6	14.9	+0.2	24.7	30	4.7	27	107	13	+5	33	15	..
Kumeu	32	19.3	10.9	15.1	..	25.0	30	3.8	27	107	16	..	36	15	..
Whenuapai	26	19.1	11.3	15.2	+0.2	24.0	30	5.8	25	120	17	+23	38	7	..
Albert Park, Auckland	49	19.4	13.2	16.3	+0.1	23.1	30	10.2	2	107	14	+23	32	7	158*
Owairaka, Auckland	41	19.1	12.3	15.7	+0.3	23.0	30	8.3	27	131	18	+37	40	10	..
Port Fitzroy	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coromandel	43	19.8	11.7	15.8	..	25.6	30	5.7	25	280	18	..	106	15	..
Whangapoua Forest	4	19.9	11.5	15.7	+0.5	23.6	13	5.2	27	169	17	+60	39	15	..
Thames	3	20.1	12.9	16.5	+0.2	24.1	8	8.1	24	117	17	+23	29	7	..
Tairua Forest	3	19.3	11.5	15.4	-0.2	22.9	16	6.9	25	300	18	+203	74	15	..
Paeroa	4	20.9	12.2	16.6	+1.3	24.4	30	8.2	18	94	14	+5	18	7	..
Waihi	91	19.3	11.2	15.3	+0.2	22.1	16	6.6	25	320	18	+188	94	15	154
Te Aroha	18	20.8	12.3	16.6	+0.8	25.8	30	7.4	24	143	16	+44	38	7	..
Katikati	2	19.5	11.3	15.4	..	22.1	16	5.8	24	195	14	..	61	29	..
Tauranga	2	19.1	12.4	15.8	+0.1	21.5	3	8.6	25	199	13	..	58	29	..
Tauranga Airport	4	18.9	11.7	15.3	+0.0	21.1	19	6.3	2	191	14	+107	53	29	186
Te Puke	91	18.8	10.5	14.7	-0.4	22.1	3	3.3	2	258	11	..	76	29	183
Rotochu Forest	72	18.6	8.7	13.7	-0.6	21.8	4	1.0	2	228	10	+126	78	15	..
Edgumbe	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whakatane	2	19.8	11.7	15.8	+0.2	22.0	20	4.5	2	170	12	+86	45	29	191
Whakatane Airport	6	18.8	10.6	14.7	..	20.4	27	3.0	2	155	11	..	50	29	..
Port Ohope	9	19.1	12.1	15.6	..	21.5	20	5.2	2	122	10	..	44	29	189
Kinleith	383	18.3	9.5	13.9	+0.5	21.7	30	4.4	24	172	14	+38	54	15	..
Tikitere	338	17.3	9.7	13.5	..	20.0	27	4.5	24	305	12	..	93	15	..
Kawerau	30	20.4	11.1	15.8	-0.1	24.5	27	3.7	2	241	12	+127	59	29	..
Te Teko	8	21.6	10.5	16.1	+0.7	25.3	4	3.2	2	198	9	+104	51	15	190
Whakarewarewa	307	18.3	9.5	13.9	+0.0	20.8	27	3.4	2	230	13	+126	66	15	..
Rotorua Airport	287	18.3	9.8	14.1	+0.1	20.8	27	3.2	24	270	14	+171	82	15	175
Tarawera Forest	61	20.1	9.6	14.9	+0.3	24.2	4	2.6	24	365	12	+233	86	15	..
Waioatapu Forest	435	18.1	8.6	13.4	+0.3	22.6	2	3.5	2	186	15	+87	53	29	..
Atiamuri Power Station	253	19.4	8.8	14.1	+0.1	22.5	27	2.6	25	140	16	+15	40	15	..
Kaingaroa Forest	544	17.6	7.2	12.4	-0.1	21.8	27	2.0	21	265	13	+156	57	15	..
Murupara	198	20.3	8.9	14.6	..	24.4	4	0.5	2	178	13	+81	48	15	..
Wairapukao Forest	437	18.9	7.7	13.3	+0.6	23.0	27	-0.4	2	191	14	+82	45	29	..
Taupo	376	18.9	8.7	13.8	+0.5	21.7	27	3.5	25	160	13	+76	49	15	191
Wairakei Power Station	342	19.3	8.8	14.1	+0.4	23.0	27	3.5	25	150	9	+59	50	15	..
Wairakei Research Station	402	19.3	8.0	13.7	+0.9	22.3	27	1.5	25	158	11	+69	53	15	..
Minginui Forest	366	19.1	8.1	13.6	+0.7	23.1	4	-2.1	2	160	11	+46	42	29	..
Taupo Airport	407	18.4	8.5	13.5	..	21.5	27	1.9	25	137	8	..	44	29	..
Waimihia Forest	743	15.2	6.4	10.8	+0.0	19.5	27	-1.5	2	181	13	+46	49	15	..
Opotiki	6	19.0	11.4	15.2	+0.3	22.2	30	3.6	2	163	13	+74	53	8	166
Waimana	37	19.8	10.0	14.9	-0.1	23.4	30	2.2	2	260	14	+148	67	8	..
Mangere, Auckland	4	19.1	13.0	16.1	+0.4	22.8	29	8.5	21	109	17	+23	36	7	148
Otara, Auckland	12	19.3	12.0	15.7	+0.6	23.3	29	6.6	27	146	14	+65	37	10	..
Auckland Airport	8	19.0	12.7	15.9	+0.1	23.0	29	9.4	21	85	17	+1	28	7	152
Ardmore	30	19.5	11.6	15.6	+0.7	23.1	30	7.4	21	112	15	+18	32	7	..
Pukekohe	82	18.9	11.0	15.0	+0.2	24.0	29	6.9	24	113	15	..	30	29	137
Maioro Forest	52	19.3	11.7	15.5	+0.5	25.0	29	7.4	24	92	14	-2	20	7	..
Hunua	122	19.1	10.8	15.0	..	25.0	27	5.4	27	135	17	..	33	7	..
Maramarua Forest	38	20.2	10.7	15.5	+1.0	24.7	30	4.9	27	131	16	+40	47	7	..
Te Kauwhata	32	20.0	11.9	16.0	+0.8	24.2	30	7.4	18	75	19	-14	18	7	151
Huntly	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruakura, Hamilton	40	19.9	11.0	15.5	+1.1	24.0	30	6.0	18	88	14	-3	21	29	159
Whatawhata	104	19.1	11.0	15.1	+0.6	23.0	8	6.5	27	128	14	+9	39	7	174

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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	°C	mm	mm	mm	mm	Hrs		
Patea	43	17.9	10.6	14.3	+0.2	22.0	15	6.0	19	39	8	-54	14	9	..
Ohakune Junction	629	..	..	..	..	..	..	..	..	61	9	..	22	9	..
Karioi	648	17.7	6.0	11.9	+0.5	23.1	30	2.2	24	61	8	-41	35	9	..
Waiouru	823	16.1	5.1	10.6	+0.6	24.2	16	-1.3	5	57	7	-40	20	29	..
Waiouru Military Camp	823	15.4	5.6	10.5	+0.9	19.8	30	-0.7	5	61	10	-28	22	29	..
Ahu Ahu Valley	85	20.3	8.2	14.3	..	25.9	30	1.4	24	70	13	..	24	9	..
Taihape	433	19.3	6.9	13.1	+0.8	25.0	30	0.8	24	55	9	..	30	29	..
Kahui, Taihape	518	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wanganui	22	19.2	10.7	15.0	+0.3	24.6	30	5.5	24	79	10	+10	25	9	203
Wanganui Airport	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Farewell Spit	3	17.7	10.3	14.0	+0.6	20.8	26	5.7	4	99	13	+15	31	7	..
Totaranui	10	17.9	9.9	13.9	..	21.7	22	5.4	2	220	10	..	77	14	..
Westport Airport	2	17.1	11.1	14.1	+1.3	24.6	29	8.5	5	197	16	-4	35	6	132
Cobb Dam	823	13.7	5.4	9.6	+0.1	20.6	4	2.3	24	463	16	+288	226	15	..
Arapito	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Rotoroa	443	17.3	7.7	12.5	..	21.9	25	3.5	2	188	14	..	63	15	..
Lake Rototiti	634	16.7	6.4	11.6	+0.9	21.9	4	2.6	5	120	17	-4	29	15	..
Hokitika Airport	39	17.4	10.2	13.8	+1.6	26.0	29	6.9	10	248	18	-29	76	16	152
Reefton	198	18.4	9.4	13.9	+1.0	26.6	30	6.0	10	128	18	-68	24	15	..
Barrytown	30	17.2	11.3	14.3	..	24.6	30	8.0	1	275	16	..	59	16	..
Totara Flat	77	19.0	9.6	14.3	+1.4	27.7	30	5.3	10	125	17	-63	28	6	..
Greymouth	4	17.8	10.8	14.3	+1.6	26.5	29	7.1	8	225	17	-11	56	16	116
Otira Substation	383	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Springs Junction	421	17.6	7.9	12.8	..	23.9	30	2.9	2	120	14	-104	30	6	..
Hari Hari	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Franz Josef	122	17.7	8.8	13.3	+1.6	25.0	29	5.0	1	457	15	-56	128	16	..
Fox Glacier	152	17.2	9.1	13.2	..	24.5	29	4.1	1	312	16	-148	90	16	..
Milford Sound	3	17.5	8.3	12.9	+1.5	23.7	29	3.6	19	209	10	-429	84	5	..
Puyssegur Point	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stephens Island	187	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Riwaka, Motueka	8	18.8	9.6	14.2	+0.2	22.5	26	4.2	2	257	11	+168	92	15	170
Tapawera	146	19.3	7.9	13.6	..	24.3	4	3.9	4	112	14	..	38	7	..
Appleby	17	18.0	10.4	14.2	+0.1	21.8	29	6.5	4	125	11	+54	42	14	..
Nelson Airport	2	18.0	10.1	14.1	+0.5	21.3	30	6.0	4	106	13	+32	29	14	186
Rai Valley	79	18.2	7.6	12.9	-0.4	23.3	4	1.9	24	254	11	+86	59	14	..
Moutere Hills	110	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blenheim Airport	27	18.7	8.8	13.8	-0.3	24.3	26	3.6	19	78	9	+20	29	7	..
Blenheim	4	19.5	9.1	14.3	-0.2	24.6	26	3.9	21	68	9	+20	27	7	204
Waihopai Power Station	262	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vernon Lagoons	2	18.6	8.0	13.3	-0.4	23.2	26	1.5	21	55	9	..	20	7	191
Lake Grassmere	2	17.5	10.4	14.0	-0.3	22.1	14	4.6	30	50	9	+4	20	7	190
Cape Campbell	3	16.0	10.8	13.4	+0.1	19.2	27	7.2	2	56	9	+10	19	7	..
Hanmer Forest	387	18.3	6.5	12.4	+0.1	26.5	5	1.7	2	56	11	-33	26	7	146
Molesworth	893	16.4	4.4	10.4	+0.2	23.4	4	-1.1	4	65	8	+7	19	7	..
Kaikoura Flats	24	17.2	7.7	12.5	..	23.2	5	2.5	2	76	11	..	20	8	..
Kaikoura	108	15.8	9.8	12.8	-0.4	21.9	5	5.6	1	69	11	+3	15	8	198
Arthurs Pass	738	14.6	5.6	10.1	..	23.1	30	0.0	8	..	..	..	..	..	..
Balmoral Forest	198	19.4	7.6	13.5	+0.7	27.0	5	2.1	11	32	8	-19	17	7	..
Hawarden	244	19.0	7.2	13.1	..	25.0	5	0.1	9	38	9	..	21	7	..
Waiau	137	20.0	7.7	13.9	..	28.1	5	1.9	11	33	7	..	17	7	..
The Hermitage, Mt Cook	765	17.2	6.9	12.1	+1.7	23.9	28	1.8	1	180	16	-219	58	16	153
Mt John	1027	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Craigieburn Forest	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Coleridge	364	18.4	7.4	12.9	+0.6	25.3	4	2.5	9	38	11	-38	10	14	..
Highbank Power Station	336	16.5	8.1	12.3	-0.2	21.0	4	3.5	9	47	10	-50	17	17	152
Hororata Substation	192	18.6	7.0	12.8	+0.0	26.2	5	0.6	10	51	13	-18	16	17	..
Winchmore	160	17.8	8.0	12.9	+0.4	25.3	5	1.0	10	31	10	-35	12	17	..
Peel Forest	274	17.6	6.9	12.3	..	27.0	5	1.0	10	65	14	..	30	17	..
Ashburton	101	18.9	8.6	13.8	+0.1	28.8	5	2.0	10	23	9	-46	6	17	166
Waipara	64	..	..	..	..	..	..	..	..	45	7	..	21	7	..
Ashley Forest	107	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rangiora	46	18.9	7.9	13.4	+0.0	29.5	5	2.5	2	46	12	-2	12	7	..
Darfield	195	19.5	7.8	13.7	+0.3	24.8	27	2.4	10	56	10	-13	13	17	..
Eyrewell Forest	158	18.9	7.1	13.0	-0.2	27.5	5	0.9	11	56	9	-18	14	19	..
Christchurch Airport	30	18.5	9.0	13.8	+0.0	29.5	5	2.3	2	36	9	-7	9	8	202
Templeton	46	18.0	8.2	13.1	..	26.8	5	2.6	2	33	8	..	9	8	..
Christchurch	7	18.9	10.0	14.5	+0.5	29.3	5	4.5	2	34	9	-12	10	8	..
Bromley, Christchurch	9	17.8	10.8	14.3	+0.3	25.7	5	5.5	2	39	8	-7	8	23	..
Mt Pleasant	137	17.4	10.5	14.0	+0.3	27.0	5	5.7	9	35	10	-11	8	29	..
Lincoln	11	17.8	9.1	13.5	+0.4	26.9	5	3.0	2	35	8	-18	9	8	195
Akaroa	3	18.4	9.0	13.7	..	28.0	5	3.5	11	40	9	..	16	16	..
Lake Tekapo	683	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Pukaki	556	17.9	7.6	12.8	+1.0	22.2	4	1.9	18	34	12	..	11	19	..
Fairlie	304	17.8	6.2	12.0	..	28.4	5	2.1	4	30	5	..	15	17	..
Twizel	457	19.0	6.1	12.6	+1.3	23.3	4	-1.2	18	32	12	..	10	19	..
Ikawai	70	18.1	7.7	12.9	+0.6	26.0	5	1.0	10	19	5	..	7	19	..
Geraldine	119	18.8	8.2	13.5	..	29.0	5	1.9	10	31	11	..	10	17	..

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Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs		
Orari Estate	81	18.1	7.6	12.9	-0.2	28.1	5	1.2	10	27	12	-44	8	16	
Temuka	24	18.2	7.9	13.1	+0.3	25.9	5	1.9	10	22	7	-42	7	16	
Timaru Airport	26	17.6	7.3	12.5	+0.0	25.8	5	0.7	10	16	8	-37	5	17	
Adair	85	..	8.4	..	..	..	..	3.7	10	28	11	-28	12	16
Timaru	17	17.3	9.1	13.2	+0.0	23.6	5	3.6	10	20	10	-38	7	16	
Waimate	61	18.3	8.6	13.5	+0.2	25.6	5	2.6	18	21	9	-43	5	19	
Kurow	207	19.4	8.2	13.8	..	..	..	0.5	18	18	12	..	8	19
Oamaru Airport	30	16.8	8.3	12.6	+0.6	26.7	5	2.8	18	11	8	-42	4	19	
Tara Hills, Oamarua	488	19.2	6.2	12.7	+0.8	24.6	4	-3.0	18	22	11	-26	4	23	
Lake Hawea	350	18.5	8.5	13.5	+0.6	24.3	29	0.8	18	36	8	-35	17	16	
Wanaka	296	20.2	7.7	14.0	+1.0	27.7	30	0.5	18	24	9	-37	14	16	
Queensberry	277	20.8	8.2	14.5	..	28.9	30	0.8	18	13	6	..	6	16	
Bendigo	200	22.0	8.4	15.2	..	30.7	30	-0.3	18	12	6	..	5	16	
Naseby Forest	610	17.3	4.5	10.9	+0.5	23.6	30	-2.6	8	24	7	-29	10	14	
Windsor	88	17.3	7.9	12.6	..	25.4	5	0.4	18	17	6	..	9	19	
Ranfurly	427	19.1	5.9	12.5	..	25.6	30	-1.5	18	5	6	..	2	14	
Herbert Forest	61	..	..	..	..	..	..	..	..	..	..	..	..	..
Palmerston	21	18.3	7.1	12.7	+1.0	27.1	5	0.1	10	8	7	..	2	6	
Cherry Farm Hospital	6	17.7	7.7	12.7	+0.8	26.1	5	0.5	18	13	8	-45	4	6	
Taiaroa Head	72	..	..	..	..	..	..	..	..	..	..	..	..	..
Invermay, Taieri	30	17.6	7.9	12.8	..	25.6	5	1.6	8	19	12	..	5	14	
Berwick Forest	18	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunedin Airport	1	18.5	7.5	13.0	+1.1	24.7	5	1.0	8	18	11	-40	5	27	
Musselburgh, Dunedin	2	16.7	9.7	13.2	+0.7	25.5	5	4.1	2	24	12	-47	7	19	
Te Anau	215	18.3	7.5	12.9	+1.8	27.4	29	0.0	18	29	7	-68	10	5	
West Arm, Manapouri	232	16.4	7.7	12.1	+1.7	26.5	29	1.5	8	148	14	..	49	5	
Borland Burn	183	19.1	6.3	12.7	..	27.0	29	-1.5	8	19	..	..	5	5
Queenstown	329	19.9	8.4	14.2	+1.9	29.2	29	1.8	18	28	11	-48	14	5	
Queenstown Airport	349	18.6	6.5	12.6	+1.0	27.3	29	-1.0	18	20	6	-34	14	5	
Otama	183	18.0	7.2	12.6	..	26.3	29	1.2	8	84	15	+13	49	16	
Cromwell	213	21.3	7.7	14.5	+0.7	29.7	30	0.4	18	22	7	-14	8	14	
Northburn	210	21.0	8.3	14.7	..	29.5	30	0.4	18	11	8	..	3	30	
Lauder	112	..	..	..	..	..	..	..	..	..	..	..	..	..
Clyde Dam	160	21.3	8.3	14.8	..	29.2	30	1.4	18	40	9	..	28	30	
Ophir	305	20.5	5.8	13.2	+0.8	27.6	30	-3.2	18	11	4	-27	7	22	
Moa Creek	427	20.2	5.2	12.7	+1.9	26.0	30	-4.2	18	18	8	-20	6	22	
Earnsclough	152	21.7	6.9	14.3	+1.4	30.0	3	-0.8	18	25	8	-8	13	30	
Alexandra	141	21.5	8.4	15.0	+1.2	29.4	30	0.6	18	27	10	-6	9	30	
Roxburgh Power Station	110	20.3	7.3	13.8	+0.5	28.0	29	1.0	8	42	9	-4	13	30	
Beaumont	46	19.5	7.7	13.6	..	27.3	29	0.7	8	61	13	-30	18	24	
Mahinerangi Dam	396	15.9	6.6	11.3	+1.2	21.9	30	0.5	1	53	12	-36	17	6	
Tapanui	226	17.4	6.9	12.2	+0.4	25.5	29	0.6	1	42	14	-39	9	24	
Taieri Mouth	15	16.2	8.6	12.4	+1.3	24.4	5	2.1	8	28	8	-51	10	1	
Tuatapere	27	17.8	7.7	12.8	..	26.1	29	0.5	8	21	11	..	7	15	
Otautau	55	17.6	7.2	12.4	+1.0	25.5	29	-1.0	8	29	13	-62	6	2	
Winton	44	17.6	7.6	12.6	+0.7	25.8	29	0.2	8	45	9	-26	31	23	
Gore	123	17.5	8.2	12.9	+1.3	24.3	30	1.4	8	48	19	..	13	16	
Hokonui Forest	46	18.4	7.7	13.1	+1.1	26.6	30	0.0	8	35	15	-62	7	23	
Woodlands	47	18.0	8.0	13.0	+1.6	26.1	30	0.1	8	64	23	..	35	23	
Invercargill Airport	0	16.9	8.1	12.5	+1.3	25.6	29	-0.5	8	47	15	-47	14	12	
Tiwai Point, Bluff	5	16.4	8.9	12.7	+0.7	24.7	30	2.0	8	34	15	..	14	12	
Stewart Island	3	15.5	7.8	11.7	..	24.2	30	0.5	8	64	25	..	10	26	
Milton	18	18.1	7.9	13.0	+1.0	25.0	5	1.4	21	53	11	-16	29	16	
Finegand, Balclutha	6	18.0	8.7	13.4	+1.6	26.2	30	1.3	21	43	12	..	17	24	
Owaka	5	16.7	8.5	12.6	..	22.5	30	0.4	8	40	15	..	9	24	
Nugget Point	129	..	8.3	..	..	..	..	1.9	1	34	19	-45	6	24
Tautuku	61	16.9	7.7	12.3	..	24.3	30	1.4	8	48	16	..	12	5	
Nandi Airport, Fiji	19	..	..	..	..	..	..	..	..	..	..	..	..	..
Rarotonga Airport	7	27.7	22.2	25.0	+1.0	29.5	23	20.0	21	151	18	-1	36	4	
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..
Raoul Island	38	20.5	15.9	18.2	-0.6	22.6	11	13.0	1	140	13	+59	50	18	
Campbell Island	15	10.6	4.6	7.6	+0.4	13.7	30	-0.9	23	104	22	+43	23	16	
Waitangi, Chatham Island	44	14.4	9.1	11.8	+0.2	16.6	5	4.1	2	23	13	-38	4	11	
Scott Base, Antarctica	16	-9.5	-18.6	-14.0	-2.0	-1.0	30	-31.5	3	..	..	..	..	..

LATE RETURNS AND CORRECTIONS

Waiotemarama 10/1981	229	15.6	8.9	12.3	..	18.7	22	5.7	10	95	10	..	28	23	..
Pukekohe 09/1981	82	14.5	7.8	11.2	-0.5	17.8	24	3.5	18	125	27	..	23	24	118
Pukekohe 10/1981	82	16.6	8.2	12.4	-0.7	19.8	23	3.3	28	70	14	..	16	24	148
Pureora Forest 10/1981	549	14.4	5.3	9.9	+0.1	18.3	30	-1.9	29	108	14	-70	31	17	..
Lower Retaruke 07/1981	223	11.5	2.8	7.2	+0.6	15.4	1	-4.1	14	210	18	..	30	7	..
Lower Retaruke 08/1981	223	12.0	2.1	7.1	-0.7	15.3	6	-4.6	30	128	17	..	24	23	..
Lower Retaruke 09/1981	223	13.2	5.3	9.3	-0.5	15.3	30	-2.4	18	216	22	..	39	24	..
Lower Retaruke 10/1981	223	16.9	6.4	11.7	-0.2	20.6	30	-1.8	29	93	13	..	23	24	..
Chateau, Mt Ruapehu 06/1981	1119	8.1	..	..	..	..	..	..	..	..	..	..	..	..	..
Chateau, Mt Ruapehu 09/1981	1119	6.8	0.4	3.6	-1.0	10.5	10	-4.6	16	360	24	+116	69	24	..

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for November 1981—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	mm	mm	mm	Hrs		
LATE RETURNS AND CORRECTIONS															
Chateau, Mt Ruapehu 10/1981	1119	11.5	1.7	6.6	+0.2	16.2	30	-4.6	29	172	14	-107	41	16	..
Tauherenikau, Alloa 10/1981	43	17.2	6.7	12.0	-0.2	21.5	3	0.3	29	151	15	+62	68	24	..
Wharerata Forest 10/1981	439	15.8	6.8	11.3	..	23.9	3	2.2	28	145	13	..	69	17	..
Esk Forest 10/1981	427	16.1	6.8	11.5	+0.1	21.7	31	-0.2	30	223	15	+111	124	17	..
Wanganui Airport 10/1981	9	16.3	8.5	12.4	..	22.9	5	1.5	29	55	9	..	16	17	..
Otira Substation 10/1981	383	13.9	4.8	9.4	..	21.0	25	0.5	13	802	19	+309	174	4	..
Franz Josef 10/1981	122	14.9	6.2	10.6	+0.2	19.0	29	1.5	9	486	14	-2	131	22	..
Waihopai Power Station 10/1981	262	17.9	..	..	..	23.5	3	..	..	103	9	+27	54	5	..
Molesworth 10/1981	893	15.5	2.6	9.1	+0.9	22.6	3	-2.0	7	72	5	+14	49	5	..
Balmoral Forest 10/1981	198	18.0	6.4	12.2	+1.4	25.0	7	-0.4	7	60	9	+7	23	5	..
Craigieburn Forest 10/1981	914	..	2.9	..	..	..	..	-2.0	9	217	16	+82	59	4	..
Waipara 10/1981	64	..	..	..	..	..	..	..	..	58	9	..	15	5	..
Temuka 10/1981	24	18.4	5.4	11.9	+1.1	27.8	7	1.0	27	85	6	+32	26	4	..
Tara Hills, Omarama 10/1981	488	17.7	3.3	10.5	+0.7	23.4	3	-2.0	18	32	9	-16	20	23	196
Windsor 10/1981	88	15.5	6.1	10.8	..	26.5	3	1.0	1	36	5	..	19	23	..
Herbert Forest 10/1981	61	16.9	5.3	11.1	+1.0	28.9	3	0.6	25	60	8	+8	25	4	..
Cherry Farm Hospital 10/1981	6	16.5	6.1	11.3	+1.0	27.1	3	1.5	13	44	13	-2	17	23	..
Alexandra 10/1981	141	19.0	6.3	12.7	+1.1	24.0	29	0.6	18	19	9	-9	9	23	221
Winton 10/1981	44	15.3	5.6	10.5	-0.1	23.4	3	0.6	17	49	11	-12	8	26	170
Rarotonga Airport 10/1981	7	26.2	20.5	23.4	+0.4	28.7	18	17.5	10	131	16	+1	59	15	153
Totokoitu, Rarotonga 09/1981	9	26.1	19.8	23.0	..	28.7	27	17.1	13	239	16	..	70	9	..
Raoul Island 10/1981	38	19.5	14.1	16.8	-0.7	21.4	25	10.9	29	52	20	-34	22	24	157
Campbell Island 09/1981	15	7.9	2.5	5.2	-0.3	9.6	27	-2.6	6	170	29	+68	28	4	39
Campbell Island 10/1981	15	9.0	4.4	6.7	+0.5	11.4	29	-0.2	27	159	27	+42	46	7	74

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.

THE WEATHER IN NEW ZEALAND IN NOVEMBER 1981

General—November was dull and mild in most parts of New Zealand.

North-easterly winds were more frequent than normal in the north while westerlies predominated in the south of the country this month. There was higher frequency than normal of winds that were either stronger or lighter than usual over the whole country.

Farmers in most areas reported stock to be in good health as a result of the good pasture growth made this month. Some early hay was made in the drier areas of both Islands but in areas of high rainfall some post-shearing sheep losses and crop losses were reported.

Pressures were high in the south and south-east this month. Stations throughout New Zealand reported pressures above 1030mb on the 23rd and 24th due to an intense anticyclone lying to the south-east of the country.

Rainfall—Rainfall was above normal over the North Island except in south-western and central areas where many stations had less than half their normal rainfall, and locally around Hamilton and Auckland where rainfall was slightly below normal. Northland had more than 200 percent of normal rainfall and areas around Rotorua, Bay of Plenty and Coromandel had over 300 percent of normal rainfall.

In the South Island, northern Westland, Buller Nelson, Marlborough and the Kaikoura Coast had normal or above normal rainfall while the remainder had less rainfall than usual for November. Areas around Dunedin, Timaru, Oamaru and Milford Sound had only about 30 percent of normal rainfall.

Heavy rain in north-west Nelson between the 14th and 16th caused local flooding. A slip on the Cobb Valley damaged water pipelines to the Cobb Power Station which is now expected to be out of action for several months. The Takaka hill road was closed for some time by slips and slips also closed roads around Motueka.

Temperatures—Temperatures were above normal for November over most of New Zealand. Areas having lower mean temperatures than usual were Northland, Whakatane to East Cape, Napier, Blenheim and Kaikoura, which were up to 1°C below normal. Southern and south-western areas of the South Island were between 1° and 2°C above normal while the rest of the country had mean temperatures up to 1°C above normal.

Eastern districts had warm temperatures during a period of north-westerlies on the 4th and 5th with Christchurch reaching 29.5°C on the 5th. Cooler weather followed and between the 8th and 10th maximum temperatures were 5°C to 10°C below the monthly average in many places. Some record November high temperatures were observed in Westland at the end of the month. Record maximum temperatures on the 29th (with the year recording began) were: Greymouth 26.5° (1947) Hokitika 26° (1963) Fox Glacier 24.5° (1973). New Plymouth, on the west coast of the North Island, reached 25.5° on the same day, a record for November since the station opened in 1944.

Sunshine—Sunshine figures were low over the whole country with many areas having a shortfall from the November average of more than 40 hours. Northern areas had particularly low totals, Kaitaia had 129 hours sunshine which was 75 hours less than usual and its second lowest November total since 1951. Other centres with large deficits were: Rotorua Airport (66 hrs) Auckland City (56 hrs) Nelson (45 hrs) Dunedin (44 hrs) and Tauranga (43 hrs). Areas around Christchurch and Ohakea had only slightly less sun than normal.

THE WEATHER SEQUENCE—NOVEMBER 1981

1st–7th

The dominant influence on the weather in New Zealand during the first week of November was the passage of an extensive anticyclone over the country. However this was preceded during the first 2 days by the passage of 2 cold fronts within a shallow trough which brought some light rain to south-western areas, about Cook Strait and in Northland. As the anticyclone crossed the country over the next 4 days the weather became generally fine, and some high temperatures were recorded in eastern districts in north-westerly conditions on the 4th. Some rain fell in south-western areas on the 5th and 6th as a front within a moist west to north-west airstream moved onto the south of the country. Rain became widespread on the 7th with the approach of a cold front associated with a depression in the Tasman Sea.

8th–14th

The depression that brought cold, wet weather on the 7th continued in influence the weather in the beginning of the second week as it deepened and then moved south-east across the country. By the 10th an anticyclone near Lord Howe Island had extended a ridge over New Zealand, bringing a general clearance to the weather. On the 12th a deep depression which had lain south-east of Tasmania moved eastwards. Although it had weakened by the time it began to spread over the country it brought some rain to southern and western areas of the South Island and the north of the North Island. By the 14th rain had become widespread with moderately heavy falls about Cook Strait and in the north of the North Island.

15th–21st

A shallow depression began to form near Lord Howe Island on the 14th, and moved south-east to lie west of the North Island on the 15th. Two fronts were associated with this; one lay across the north of the South Island and the second lay off the west coast of the North Island. This system moved south-east over the next 3 days and heavy rain fell in most parts of the country. Some very heavy falls were recorded in some North Island areas, particularly around Rotorua and the Bay of Plenty, on the 15th. An extensive anticyclone began to move onto the country during the last 2 days of this week and brought generally fine, mild weather to all districts.

22nd–30th

The weather during the last 9 days of the month was strongly influenced by the anticyclone which moved onto the country at the end of the third week. By the 24th it had intensified to over 1035 mb and lay to the south-east of the country. Pressures over most of New Zealand were over 1030 mb and all districts had fine, settled weather. By the 26th it had moved away to the south-east but a second high pressure centre had developed off East Cape and fine weather was maintained. On the 28th a complex frontal system associated with depressions near Lord Howe Island and in the central Tasman Sea lay to the west of New Zealand. Heavy rain fell in the central and northern areas of the North Island on the 28th spreading northward over the North Island on the 29th. By the 30th light rain was falling over most of the country.

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

J. S. HICKMAN, Director.

