



LAW
13 JAN 1984

SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, 8 MARCH 1984

Published by Authority

WELLINGTON: MONDAY, 12 MARCH 1984

CLIMATOLOGICAL TABLE
FOR JANUARY 1984

NEW ZEALAND METEOROLOGICAL SERVICE

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for January 1984

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			
Cape Reinga	191	21.7	14.0	17.9	-0.3	23.7	12	12.0	17	66	11	+5	16	19	..
Kaitaia Airport	80	22.1	13.4	17.8	-1.4	24.1	4	10.3	15	86	14	+7	21	11	215
Aupouri Forest	69	21.5	14.0	17.8	-1.6	23.9	31	11.3	26	76	11	+15	24	11	..
Kaitaia	8	22.9	12.8	17.9	..	25.2	9	8.3	15	78	11	..	21	11	..
Kerikeri M A F	79	22.2	12.6	17.4	..	25.3	5	8.7	15	75	15	..	10	11	..
Kerikeri Downs	79	22.0	12.8	17.4	..	25.0	5	9.2	7	71	16	..	10	11	..
Kerikeri Aerodrome	150	22.4	12.1	17.3	..	26.0	4	9.0	13	49	13	..	9	11	..
Umawera	9	23.1	11.0	17.1	-1.3	27.0	3	4.5	16	73	15	-6	17	11	..
Kaikohu	204	20.9	12.4	16.7	-1.7	24.4	4	8.6	15	71	15	..	11	11	177
Waiotemarama	229	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waipoua Forest	88	21.1	11.4	16.3	-1.3	24.0	11	6.0	26	75	15	-4	16	19	..
Dargaville	20	22.0	12.0	17.0	-1.3	25.8	11	7.7	26	79	13	+13	24	11	211
Waitangi Forest	55	22.3	12.7	17.5	-1.8	25.0	27	8.5	15	55	12	-9	10	11	187
Glenbervie Forest	107	21.8	10.8	16.3	-1.2	25.1	4	4.1	15	98	15	+9	22	11	..
Whangarei Airport	37	22.4	13.3	17.9	-1.7	25.8	4	8.1	15	71	13	-3	23	11	..
Whangarei	29	23.1	13.0	18.1	-1.1	26.8	4	8.0	15	120	13	..	60	30	179*
Marsden Power Stn	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poua	97	21.0	13.9	17.5	..	24.0	23	10.7	13	69	11	..	22	11	..
Leigh	27	20.8	14.7	17.8	-1.0	23.1	5	11.9	15	71	13	+11	23	11	210
Warkworth	72	21.8	11.4	16.6	-1.5	24.7	3	6.5	15	79	16	..	25	11	..
Oyster Point	0	..	..	..	..	..	..	..	..	116	11	..	32	23	..
Woodhill Forest	30	21.1	12.1	16.6	-1.6	24.1	23	7.6	15	142	14	+71	38	11	..
Riverhead Forest	28	22.1	11.0	16.6	-1.2	25.4	18	6.0	15	105	10	+24	34	11	..
Kumeu	32	22.2	10.9	16.6	..	25.4	11	4.4	16	111	13	..	27	23	..
Whenuapai	26	22.3	11.9	17.1	-1.0	24.6	11	7.1	15	95	14	+21	31	11	..
Albert Park Auckland	49	22.2	14.4	18.3	-1.2	24.7	10	11.5	15	108	15	+44	40	11	225*
Owairaka, Auckland	41	21.5	13.5	17.5	-1.2	23.7	31	9.4	15	112	13	+43	45	11	..
Port Fitzroy	4	21.8	13.7	17.8	-1.1	23.7	22	9.1	15	59	13	-35	12	7	..
Little Barrier Is	2	21.5	14.5	18.0	..	24.2	23	12.1	17	68	15	-8	18	11	..
Rotorua Is	30	21.4	14.7	18.1	..	23.2	10	12.3	15	77	8	..	25	11	..
Manukau Heads	244	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coromandel	43	22.7	12.7	17.7	..	25.3	11	7.1	15	129	13	..	31	23	..
Whangapoua Forest	4	23.2	12.2	17.7	-0.5	25.2	3	7.2	26	140	11	+28	29	15	..
Thames	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tairua Forest	3	22.7	12.1	17.4	-1.3	26.0	3	7.5	15	120	10	+23	36	6	..
Ngatea	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paeoa	4	23.8	12.2	18.0	-0.4	26.8	22	6.8	26	116	13	+45	39	19	..
Waihi	91	22.7	11.7	17.2	-1.1	27.1	2	6.2	15	137	14	+20	55	7	204
Te Aroha	18	23.7	11.6	17.7	-1.6	27.3	2	7.5	18	144	13	+50	50	7	..
Katikati	2	23.2	12.1	17.7	..	27.4	3	6.9	18	94	12	..	27	7	..
Waharoa	60	22.8	9.6	16.2	..	26.3	3	3.5	18	67	9	..	16	11	..
Tauranga	2	22.5	13.4	18.0	-0.8	26.8	4	9.1	18	81	10	..	33	11	..
Tauranga Airport	4	22.5	12.5	17.5	-1.1	26.3	4	7.3	18	83	9	-1	30	11	248
Te Puke	91	22.2	11.1	16.7	-1.5	25.7	4	6.0	18	116	11	..	36	11	252
Rotoehu Forest	72	22.5	10.0	16.3	-1.3	27.1	4	4.0	16	98	10	-1	22	2	..
Whakatane Airport	6	22.3	11.4	16.9	..	25.4	24	6.2	16	80	9	..	22	23	243
Te Kaha	6	22.2	14.3	18.3	..	24.6	30	8.5	17	78	8	..	21	19	..
Port Ohope	9	22.6	13.8	18.2	..	25.8	31	9.3	18	86	8	..	35	12	252
Kinleith	383	21.0	9.5	15.3	-1.5	24.7	3	3.1	18	111	10	+7	26	19	..
Tikitike	338	20.7	10.9	15.8	..	25.0	3	6.4	18	141	11	..	36	2	..
Kawerau	30	24.2	11.7	18.0	-1.3	29.2	4	7.4	18	72	8	-40	31	11	..
Te Teko	8	25.3	11.2	18.3	-0.6	31.0	4	5.4	16	112	9	+18	26	6	224
Rotorua Airport	287	21.5	10.2	15.9	-1.6	25.4	2	4.3	18	130	11	+33	33	2	253
Waiotapu Forest	435	20.6	8.1	14.4	-2.2	25.0	2	0.9	29	103	13	+9	29	11	..
Atiamuri Power Stn	253	22.8	8.5	15.7	-1.7	28.2	2	1.9	18	84	12	+3	18	11	..
Kaingaroa Forest	544	20.5	7.9	14.2	-1.8	25.5	3	0.6	18	101	10	-13	28	19	..
Murupara	198	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wairapukao Forest	437	21.4	6.9	14.2	-2.1	26.9	3	-1.0	18	91	11	-13	25	19	..
Taupo	376	22.1	8.9	15.5	-1.4	28.0	2	2.0	18	76	12	-5	19	11	242
Wairakei Power Stn	342	22.2	8.2	15.2	-2.0	28.0	3	0.5	18	73	10	-16	18	11	..
Wairakei Research Stn	402	22.8	7.5	15.2	-1.2	28.9	3	-0.5	18	75	9	-11	21	11	..
Minginui Forest	366	21.8	7.3	14.6	-1.8	27.1	3	0.6	18	101	11	-16	27	11	..
Taupo Airport	407	20.8	9.0	14.9	..	26.3	3	1.7	18	83	7	..	23	11	..
Waimihia Forest	743	18.0	7.1	12.6	-1.7	23.5	3	0.5	18	96	10	-16	25	19	..
Opotiki	6	22.0	12.6	17.3	-0.9	25.0	24	8.3	17	112	9	+23	47	23	212
Waimana	37	22.8	11.5	17.2	-1.5	27.0	3	6.1	18	124	12	+12	32	11	..
Mangere Auckland	4	21.7	13.6	17.7	-1.3	24.8	31	7.7	15	99	14	+35	42	11	226
Otara Auckland	12	21.6	12.2	16.9	-1.4	24.5	22	7.1	15	110	14	+46	44	11	..
Auckland Airport	8	21.6	14.0	17.8	-1.2	24.9	11	10.2	15	97	14	+31	37	11	240
Ardmore	30	22.2	11.1	16.7	-1.5	25.2	31	5.1	15	112	12	+36	30	11	..
Pukekohe	82	21.1	11.7	16.4	-1.6	23.8	31	8.8	15	140	15	..	48	11	215
Maioro Forest	52	21.2	12.7	17.0	-1.1	26.0	31	8.5	15	89	10	+15	26	11	..
Hunua	122	21.6	10.0	15.8	..	24.0	8	3.0	15	122	13	..	32	19	..
Maramarua Forest	38	22.4	9.9	16.2	-1.5	25.1	22	4.0	15	106	11	+40	26	11	..
Te Kauwhata	32	22.2	10.6	16.4	-1.9	25.2	22	6.1	15	126	12	+62	33	11	242

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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		
untly	34	..	..	..	..	..	..	..	..	..	..	..	..	..
aupiri	23	..	..	..	..	..	..	..	..	..	..	..	..	..
akura Hamilton	40	22.2	10.3	16.3	-1.2	24.6	23	5.0	18	105	9	+34	37	11	243
hatawhata	104	..	..	..	..	..	..	..	..	..	..	..	..	..	..
ukuhia	66	22.7	10.7	16.7	-1.3	25.4	2	6.0	18	104	13	+33	34	11	230
amilton Airport	50	22.9	9.4	16.2	-0.9	26.4	30	5.0	26	102	10	+31	31	11	..
ambridge	76	22.8	10.4	16.6	..	26.3	30	4.8	18	107	12	..	32	11	..
ort Taharoa	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
lohakaiti Stn Mokau	46	20.2	12.3	16.3	-1.2	23.0	7	7.8	17	118	10	+16	39	11	..
rapuni Power Stn	123	23.8	9.5	16.7	-1.6	27.5	2	3.5	18	107	11	+26	30	18	..
raikeria	46	22.9	9.5	16.2	..	26.6	8	3.0	18	96	10	..	33	11	..
re Kuiti	61	22.4	10.3	16.4	-1.4	25.8	3	6.1	16	92	13	+1	36	11	213
rairere	122	21.4	9.4	15.4	..	25.0	3	3.9	18	96	11	-1	32	18	..
reora Forest	549	..	..	..	..	..	..	..	..	..	..	..	..	..	..
rangakahu Valley	397	20.4	10.0	15.2	..	25.5	3	6.5	12	128	10	..	35	11	..
aumarunui	171	23.2	8.9	16.1	-2.0	28.6	3	0.4	16	107	11	+18	41	18	199
okirima	152	22.6	7.5	15.1	..	27.6	3	1.0	18	97	11	..	46	18	..
omata	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
ow Plymouth	55	20.8	11.4	16.1	..	25.3	31	4.7	17	168	12	..	46	5	..
ow Plymouth Airport	27	20.0	11.4	15.7	-1.2	23.7	31	6.2	17	145	11	+38	38	23	248
orth Egmont	955	15.0	6.2	10.6	..	20.0	31	0.6	17	310	13	..	101	18	..
re Wera Forest	180	20.4	8.3	14.4	-1.4	25.9	31	2.0	15	150	10	+28	41	11	..
ower Retaruke	223	22.2	8.4	15.3	-1.6	27.5	3	2.8	15	84	10	..	36	18	..
urangi	366	21.4	8.5	15.0	-1.9	28.0	3	2.0	18	74	10	..	27	18	228
hateau, Mt Ruapehu	1097	15.2	3.9	9.6	..	21.7	3	-1.1	18	115	14	..	30	11	..
hukanui	235	..	..	..	..	..	..	..	..	..	..	..	..	..	..
nt Bruce Res	305	20.1	7.9	14.0	-1.5	26.0	3	2.3	22	84	14	..	19	18	..
vaingawa Masterton	114	21.7	8.6	15.2	-1.9	27.0	3	3.0	8	30	8	-34	15	16	228
topua	311	20.5	9.1	14.8	-1.4	27.3	23	3.3	17	16	7	-75	5	13	..
vaipukurau	137	23.2	8.6	15.9	-1.5	28.5	23	2.5	17	10	6	-56	5	23	216*
annevirke	207	..	..	..	..	..	..	..	..	..	..	..	..	..	..
orangahau	8	22.2	11.7	17.0	..	28.9	11	6.1	3	9	6	..	4	23	..
astlepoint	3	20.5	12.8	16.7	-1.1	25.6	11	7.3	17	9	5	-55	5	16	..
ngaumu Forest	244	20.9	7.9	14.4	-1.5	25.5	3	1.3	15	21	5	-53	10	16	..
auherenikau, Alloa	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..
vaorongomai	21	19.4	10.4	14.9	-1.7	23.9	22	4.6	8	91	11	-3	24	16	..
ape Palliser	10	19.6	12.8	16.2	-0.9	24.2	10	8.6	17	38	8	-33	13	17	..
ast Cape	17	20.9	14.1	17.5	-1.3	24.6	28	6.6	17	69	12	-20	14	16	..
uatoria	61	23.5	12.1	17.8	-0.8	30.2	10	6.3	17	81	10	-46	32	30	..
angatu Forest	182	22.8	10.7	16.8	-1.4	29.9	4	5.4	17	97	11	+3	34	6	..
anutuke Gisborne	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
isborne Airport	4	23.0	11.4	17.2	-1.4	29.4	10	6.3	3	67	9	-7	19	14	271
nepoti, Waikaremoana	643	19.6	9.4	14.5	-1.4	26.6	4	4.1	17	147	16	-3	32	6	..
harekata Forest	439	18.6	10.8	14.7	..	25.5	26	3.6	17	79	11	..	16	29	..
sk Forest	427	20.1	9.9	15.0	-1.5	26.0	4	3.5	17	100	12	-17	30	6	..
aweka Forest	414	20.6	10.6	15.6	-1.3	26.7	10	5.3	17	63	11	..	15	6	..
apier Airport	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
apier	2	23.2	12.1	17.7	-1.2	29.5	27	6.4	17	41	10	-10	20	12	246
astings	16	22.9	10.8	16.9	..	29.4	27	5.5	17	26	6	..	12	12	..
hakatu	6	22.1	10.1	16.1	..	28.8	27	4.0	17	37	5	..	16	14	..
gwasas Forest	335	21.2	7.4	14.3	-1.6	27.6	10	0.9	17	19	9	-80	7	14	..
akaretu	335	22.0	8.0	15.0	-1.5	28.8	23	3.2	15	23	11	..	11	6	..
ohaka Forest	286	21.1	10.2	15.7	-1.4	27.8	10	3.9	17	98	10	-2	31	29	..
rasertown, Wairoa	8	22.2	11.4	16.8	-2.0	27.8	26	6.8	17	184	12	+82	56	14	..
airoa	20	22.0	11.6	16.8	-2.0	28.1	26	6.3	17	180	12	..	58	29	251
apiti Is	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
araparaumu Airport	7	19.7	11.7	15.7	-1.1	23.2	30	6.0	8	39	9	-30	11	16	259
lockhouse Bulls	9	20.7	11.1	15.9	-1.1	26.9	31	4.9	15	39	12	-25	10	18	..
hakea	48	20.9	11.5	16.2	-1.3	27.3	31	6.9	15	29	12	-42	8	11	244
harite Peak	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
airanga Palmerston N	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
almerston N Airport	45	21.1	11.0	16.1	-0.8	25.8	31	5.6	17	36	11	-43	10	11	..
almerston N D S I R	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..
iritea	100	20.7	10.9	15.8	..	25.0	31	6.0	17	34	12	..	11	18	..
waitarere Forest	3	20.0	11.4	15.7	-1.5	26.7	31	2.0	15	28	7	-33	8	11	..
evin	46	19.8	11.2	15.5	-1.3	25.4	31	5.0	15	46	10	-30	18	18	227
itahi Bay	31	19.9	11.9	15.9	..	25.4	31	6.9	15	55	8	..	30	16	..
avalon, Lower Hutt	15	19.8	11.6	15.7	-1.2	23.0	2	6.3	15	69	10	-5	35	16	..
elburn, Wellington	125	18.7	11.4	15.1	-1.3	23.1	31	6.3	17	70	9	-11	47	16	281
omes Is	43	18.6	12.4	15.5	..	21.0	2	7.5	17	67	10	..	39	16	..
racefield Lower Hutt	34	19.2	11.9	15.6	-1.4	22.6	3	6.5	15	69	10	-12	32	16	..
ainuiomata	82	19.0	9.9	14.5	-1.7	23.8	31	4.1	15	84	9	..	37	16	..
Wellington Airport	6	20.0	13.1	16.6	-0.6	23.2	11	7.3	17	59	8	-7	41	16	..
rimutaka Forest	37	19.4	9.7	14.6	..	23.9	31	3.0	8	74	9	..	31	16	..
kaitoke	223	18.7	8.9	13.8	-1.4	24.0	31	0.8	15	84	13	-56	23	16	226

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		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount		Date
Metres	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs			
Wallaceville	56	19.8	10.1	15.0	-1.5	25.0	31	3.2	15	63	10	-23	23	16	239
Cape Egmont	8	19.8	12.7	16.3	-0.8	22.5	30	4.0	17	124	9	+25	58	5	..
Stratford Mtn House	846	15.7	5.2	10.5	-2.2	20.5	31	0.0	17	243	11	-174	99	18	..
Stratford Dem Farm	311	18.8	8.6	13.7	-1.8	23.6	31	2.7	17	142	13	+7	47	18	247
Kapuni	173	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manaia Dem Farm	98	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Normanby	122	19.0	9.4	14.2	..	24.3	31	2.8	17	64	14	..	26	5	..
Patea	43	19.4	11.8	15.6	-1.5	24.0	23	6.0	17	83	10	-11	29	5	..
Ruatiti	354	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ohakune Junction	629	18.4	7.5	13.0	..	23.1	3	2.5	15	89	11	..	27	11	..
Karioi	648	18.9	6.8	12.9	-1.8	23.2	3	1.5	18	64	12	-10	18	11	..
Waiouru	823	..	6.9	..	..	..	..	0.4	18	45	12	-31	16	11	..
Waiouru Military Camp	823	17.1	5.8	11.5	-1.4	21.1	3	0.1	18	50	13	-29	17	11	..
Ahu Ahu Valley	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taihape	433	20.5	7.7	14.1	-2.3	24.6	23	2.2	25	43	12	..	14	11	..
Kahui, Taihape	518	19.6	8.4	14.0	-2.0	24.2	23	4.6	18	41	9	..	20	11	..
Wanganui	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wanganui Airport	9	20.4	11.5	16.0	..	26.0	11	6.3	8	48	11	..	14	11	..
Farewell Spit	3	20.5	10.8	15.7	-1.0	22.8	24	4.6	17	59	13	-15	13	16	..
Totaranui	10	20.5	10.1	15.3	..	23.5	9	5.4	17	78	8	..	21	18	..
Westport Airport	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cobb Dam	823	16.4	5.8	11.1	-1.9	22.5	4	0.5	17	61	12	-56	22	5	..
Arapito	20	18.9	10.2	14.6	..	22.8	31	5.0	17	116	12	..	24	5	165
Lake Rotoroa	443	19.5	6.7	13.1	..	26.4	3	2.5	17	91	16	..	22	5	..
Lake Rotoiti	634	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hokitika Airport	39	18.3	9.8	14.1	-1.0	22.6	31	5.3	14	145	15	-86	27	23	228
Punakaiki	4	19.8	11.9	15.9	..	23.0	31	7.8	17	146	14	..	27	18	..
Reefton	198	20.6	8.9	14.8	-1.4	26.7	30	3.6	17	131	15	-19	46	5	..
Barrytown	30	18.8	11.3	15.1	..	22.0	6	7.0	14	210	13	..	38	5	..
Totara Flat	77	21.0	8.6	14.8	-1.1	26.6	31	1.2	17	111	14	-34	26	5	..
Greymouth	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Otira Substation	383	18.6	8.6	13.6	..	26.0	2	3.5	14	436	16	+37	110	27	..
Springs Junction	421	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pukekura	86	18.2	8.2	13.2	..	22.7	31	2.6	15	279	18	..	86	10	..
Hari Hari	45	18.8	9.2	14.0	-1.0	23.4	31	3.7	14	333	21	-7	115	10	..
Okarito	10	18.4	10.0	14.2	..	21.1	31	5.3	14	245	15	..	103	10	..
Franz Josef	155	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fox Glacier	152	17.9	8.8	13.4	..	23.1	31	4.4	14	534	16	+129	195	10	..
Milford Sound	3	18.1	9.0	13.6	-0.9	24.6	31	5.7	14	976	16	+445	345	26	..
Puyssegur Point	43	15.2	9.6	12.4	..	19.1	9	6.4	17	314	19	+118	110	26	..
Stephens Is	187	17.4	11.7	14.6	..	20.5	31	6.8	28	40	13	-16	10	11	..
Riwaka Motueka	8	21.2	9.4	15.3	-1.7	25.3	27	3.8	17	57	7	-17	39	5	251
Tapawera	146	21.4	7.8	14.6	..	24.1	27	2.2	17	49	11	..	30	5	..
Crail Bay Pelorus Sd	13	19.3	11.8	15.6	..	22.1	28	7.0	17	64	9	..	23	11	..
Appleby	17	20.4	10.3	15.4	-2.0	23.8	27	4.5	17	24	6	-40	19	5	..
Neison Airport	2	20.3	10.3	15.3	-1.7	23.6	20	4.9	17	32	9	-42	11	5	269
Rai Valley	79	20.5	8.2	14.4	-2.1	24.5	31	3.0	31	83	11	-52	31	18	..
Moutere Hills	110	20.1	11.1	15.6	-1.7	23.3	30	5.9	17	26	7	-48	16	5	..
Blenheim Airport	27	21.7	9.9	15.8	-1.6	27.8	9	3.2	17	12	8	-41	4	14	..
Brancoft Valley	64	22.0	8.7	15.4	..	27.0	9	4.4	15	14	7	..	8	14	..
Blenheim	4	21.9	10.0	16.0	-1.6	26.0	9	4.9	17	10	6	-41	4	11	257
Wither Hills Blenheim	32	22.0	9.7	15.9	-1.9	27.5	4	4.5	15	12	7	-41	4	24	..
Waihopai Power Stn	262	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vernon Lagoons	2	21.4	9.1	15.3	-1.5	27.3	26	3.2	30	4	4	..	2	15	242
Lake Grassmere	2	20.2	11.7	16.0	-1.1	26.4	26	4.8	28	10	5	-38	4	27	243
Cape Campbell	3	19.2	12.8	16.0	+0.1	22.3	26	8.2	17	21	4	-27	15	16	..
Boyle River Lodge	600	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hanmer Forest	387	20.6	6.8	13.7	-1.9	27.3	4	1.2	15	69	11	-17	35	5	216
Molesworth	893	18.6	3.8	11.2	-2.9	26.1	4	-1.4	15	26	4	-27	12	16	..
Kaikoura Flats	24	19.8	8.6	14.2	..	28.4	27	4.6	15	63	10	..	22	5	..
Kaikoura	108	19.0	11.3	15.2	-0.8	29.0	27	6.7	16	26	9	-43	7	16	254
Arthur's Pass	738	15.7	6.1	10.9	..	24.5	2	0.3	15	458	15	+148	126	27	..
Culverden	174	21.5	8.2	14.9	..	29.2	4	2.2	30	29	8	..	9	16	..
Balmoral Forest	198	21.8	8.9	15.4	-0.9	28.8	4	2.8	30	32	6	-14	11	5	..
Waiau	137	22.8	8.3	15.6	..	29.4	9	3.4	31	46	6	..	22	16	..
Cheviot	85	20.9	8.0	14.5	..	28.5	4	1.4	30	30	8	..	12	5	255
The Hermitage Mt Cook	765	18.0	6.7	12.4	-1.7	26.1	8	1.3	17	575	13	+174	194	27	198
Mt John	1027	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Craigieburn Forest	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Coleridge	364	20.1	7.9	14.0	-1.5	26.8	4	2.9	14	54	14	-7	18	27	..
Highbank Power Stn	336	18.8	8.5	13.7	-1.7	26.4	4	3.5	14	89	16	+0	34	13	252
Hororata Substation	192	20.7	8.1	14.4	-1.6	28.8	4	2.7	30	78	14	+7	28	5	..
Winchmore	160	20.1	8.7	14.4	-1.2	29.0	4	3.8	24	96	10	+35	29	13	..
Peel Forest	274	20.2	7.3	13.8	..	26.5	4	2.9	24	158	22	..	46	5	..
Ashburton	101	21.5	9.4	15.5	-1.2	29.6	4	4.8	30	99	10	+35	34	13	221

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for January 1984—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	mm	Hrs		
Tiwai Point, Bluff	5	16.3	10.1	13.2	-1.0	21.7	9	5.7	17	252	18	..	133	26	..
Stewart Is	3	15.5	9.0	12.3	..	20.7	9	5.8	30	227	26	..	132	26	..
Milton	18	18.6	8.2	13.4	-1.2	25.9	9	1.8	17	107	15	+38	18	26	..
Clinton School	120	18.4	..	..	..	25.1	9	..	..	156	19	..	48	10	..
Finegand Balclutha	6	18.6	9.2	13.9	-0.6	26.0	9	4.5	17	93	15	..	29	26	158
Owaka	5	17.7	8.9	13.3	..	26.0	9	3.7	17	131	19	..	36	26	..
Nugget Point	129	15.9	9.2	12.6	-0.7	22.2	26	7.1	24	107	23	+33	27	26	..
Tautuku	61	16.2	8.8	12.5	..	24.1	9	6.0	30	160	20	..	47	10	..
Nandi Airport, Fiji	19	31.4	22.5	27.0	-0.1	33.6	24	21.1	29	323	24	..	73	28	186
Rarotonga Airport	7	28.7	23.1	25.9	+0.1	29.7	5	20.0	22	188	22	-71	71	20	180
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raoul Is	38	24.0	18.6	21.3	-0.3	26.2	24	15.0	17	118	12	+27	26	12	217
Campbell Is	15	12.0	6.8	9.4	+0.1	14.2	31	2.8	17	82	24	-42	16	25	92
Waitangi, Chatham Is	44	17.0	10.8	13.9	-0.5	20.1	21	6.8	16	79	10	+26	40	24	220
Scott Base Antarctica	16	-1.1	-7.7	-4.4	+0.7	5.8	22	-12.1	13	..	..	..	..	..	..
LATE RETURNS AND CORRECTIONS															
Umawera 12/1983	9	22.1	11.8	17.0	-0.4	24.7	26	3.5	30	97	13	+3	35	6	..
Woodhill Forest 12/1983	30	20.1	13.2	16.7	-0.1	23.8	5	6.0	2	100	17	+14	27	6	..
Kumeu 12/1983	32	20.8	11.5	16.2	..	23.2	5	4.3	2	164	12	..	47	6	..
Port Ohope 12/1983	9	21.1	12.9	17.0	..	25.8	23	8.7	1	121	12	..	30	9	235
Murupara 12/1983	198	23.6	9.7	16.7	..	28.6	3	3.0	18	99	11	-25	29	11	..
Taupo 12/1983	376	20.2	9.3	14.8	-0.7	24.0	10	2.2	30	72	14	-40	26	9	219
Pukekohe 08/1983	82	14.2	6.9	10.6	+0.4	16.3	3	-0.2	14	75	18	..	31	20	135
Pukekohe 09/1983	82	16.1	8.6	12.4	+0.7	19.0	9	3.4	5	107	23	..	24	14	134
Pukekohe 10/1983	82	17.6	10.4	14.0	+0.9	22.0	29	4.3	14	152	21	..	23	23	105
Pukekohe 11/1983	82	19.4	10.3	14.9	+0.1	22.9	11	5.3	16	46	11	..	11	7	203
Pukekohe 12/1983	82	20.2	11.7	16.0	-0.4	24.2	5	7.5	1	102	20	..	17	6	175
Te Kauwhata 12/1983	32	21.4	10.9	16.2	-0.8	27.0	27	5.4	2	63	11	-28	16	19	196
Huntly 12/1983	34	21.2	12.1	16.7	..	25.8	5	7.8	2	73	15	..	18	3	..
Port Taharoa 12/1983	27	20.8	13.8	17.3	-0.3	26.0	8	8.8	30	46	..	..	..	..	..
Lower Retaruke 11/1983	223	19.0	7.4	13.2	-0.5	23.3	17	0.8	16	130	10	..	36	7	..
Lower Retaruke 12/1983	223	20.6	9.1	14.9	-0.6	26.2	15	2.5	30	84	19	..	24	9	..
Chateau, Mt Ruapehu 12/1983	1097	14.0	4.4	9.2	..	18.3	4	-0.8	31	208	..	..	43	9	..
Kairanga Palmerston N 12/1983	15	19.7	10.3	15.0	-0.8	29.0	8	2.1	1	82	16	..	19	9	196
Palmerston N D S I R 12/1983	34	19.7	11.3	15.5	-0.6	29.4	8	5.0	1	68	20	-36	18	16	167
Kelburn, Wellington 12/1983	125	18.1	11.6	14.9	-0.3	25.4	8	6.4	30	124	14	+38	70	9	222
Wellington Airport 11/1983	6	16.9	11.2	14.1	-0.3	19.4	26	6.8	2	85	12	+16	25	4	..
Kaitoke 12/1983	223	17.8	9.7	13.8	-0.2	26.4	8	0.6	1	196	21	+33	89	9	164
Wallaceville 12/1983	56	18.8	11.0	14.9	-0.4	26.4	8	2.2	30	169	17	+72	103	9	185
Manaia Dem Farm 12/1983	98	18.8	11.0	14.9	+0.0	25.6	8	5.1	30	84	20	-15	22	16	199
Lake Rototiti 12/1983	634	16.5	6.4	11.5	-1.5	23.2	5	-0.5	20	184	21	+67	26	16	..
Springs Junction 12/1983	421	..	..	..	..	..	..	..	..	275	..	+90	..	..	..
Tapawera 12/1983	146	19.9	8.8	14.4	..	24.5	22	3.4	29	103	15	..	18	3	..
Wither Hills Blenheim 11/1983	32	18.9	8.9	13.9	-0.5	23.6	11	2.0	15	32	7	-19	12	14	..
The Hermitage Mt Cook 12/1983	765	15.6	6.0	10.8	-1.7	24.8	21	0.0	10	398	24	+12	88	8	135
Winchmore 09/1983	160	13.8	3.8	8.8	+0.4	22.0	30	-1.8	1	118	12	+67	32	25	..
Winchmore 10/1983	160	15.5	6.1	10.8	+0.2	22.3	21	-2.2	6	40	14	-21	12	21	..
Ashley Forest 12/1983	107	19.1	8.7	13.9	-0.9	28.5	8	5.5	1	125	14	+39	21	9	196
Darfield 12/1983	195	19.9	8.2	14.1	-1.0	29.2	8	4.0	30	126	15	+50	23	8	..
Eyrewell Forest 09/1983	158	14.8	4.1	9.5	+1.0	23.2	30	-1.0	5	141	11	+83	33	25	..
Eyrewell Forest 10/1983	158	16.5	5.9	11.2	+0.2	24.2	21	-2.1	6	46	13	-28	17	21	..
Eyrewell Forest 11/1983	158	18.9	7.6	13.3	+0.1	26.0	16	0.6	15	38	9	-36	21	21	..
Eyrewell Forest 12/1983	158	20.0	8.0	14.0	-0.8	30.0	8	2.3	30	138	15	+47	24	19	..
Christchurch 12/1983	7	20.0	10.9	15.5	+0.0	27.4	26	7.8	25	85	14	+29	24	16	..
Temuka 12/1983	24	18.5	8.2	13.4	-0.9	28.6	26	4.0	24	133	14	+64	30	13	..
Knobs Flat 12/1983	360	..	..	..	..	..	..	..	..	241	11	+40	54	28	..
Ranfurlly 12/1983	427	17.8	6.1	12.0	..	25.5	8	0.0	25	56	11	..	12	8	145
Taiaroa Head 12/1983	72	14.6	9.0	11.8	-0.6	18.8	26	4.8	29	82	16	+21	25	27	..
Winton 12/1983	44	16.6	7.8	12.2	-1.2	26.3	21	4.5	28	117	22	+51	21	8	153
Tautuku 12/1983	61	15.7	8.0	11.9	..	23.0	8	3.4	21	112	24	..	18	2	..
Rarotonga Airport 12/1983	7	28.1	22.7	25.4	+0.6	30.7	3	17.8	8	280	16	+54	97	10	158
Totokoitu, Rarotonga 11/1983	9	27.3	21.0	24.2	..	30.0	30	15.1	8	29	11	..	9	18	..
Raoul Is 11/1983	38	21.4	16.5	19.0	+0.2	23.9	21	14.6	2	97	16	+16	44	26	144
Raoul Is 12/1983	38	22.6	17.8	20.2	-0.3	24.6	29	13.4	1	72	10	-17	36	7	187
Campbell Is 12/1983	15	11.0	5.6	8.3	-0.3	15.6	21	2.6	28	135	26	+33	17	23	85

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 NEW ZEALAND WEATHER DURING JANUARY 1984

General—January was a very cool month and while some areas were sunny and dry, others were cloudy and very wet.

Extremely heavy rain in Fiordland and Southland during the 26th caused severe flooding, especially at Invercargill where the worst floods on record were experienced. Damages with the flood have been estimated to be in excess of \$20 million.

South-westerly winds were more frequent than usual over the whole country and there was a marked lack of strong winds, although there were some windy days.

A man drowned in Lake Tarawera on the 2nd when his boat was overturned during strong winds, and 3 people are presumed to have drowned after their small craft was swept out to sea by strong winds in Palliser Bay.

A severe hailstorm affected parts of Canterbury on the 13th. Stones the "size of small plums" caused damage estimated at about \$1 million in an area 25 km long and 2 km wide between Sheffield and Halkett. Heavy rain on the same day caused surface flooding in Christchurch.

Farmers reported very good conditions for stock and plants over the northern half of the North Island and in the west of the South Island. Over much of the remainder of the country however, rather dry conditions resulted in slow growth.

Rainfall—Rainfalls were well above average in Fiordland and Southland, and over the northern half of the North Island. Invercargill had recorded 285 mm (more than 3 times its usual January rainfall), before the Meteorological Office there closed as a result of flooding, on the 27th.

In spite of the incomplete record, this has been Invercargill's wettest month in more than 40 years, and the 24-hour total of 134 mm recorded on 26th is the highest on record. Auckland too, was very wet, recording about 150 percent of its usual January rainfall and its wettest January since 1976. Parts of Canterbury, notably Christchurch, were also much wetter than usual, although rainfalls in this area varied widely; Christchurch received almost twice its average January rainfall while Oamaru and Kaikoura received only 60 percent and 40 percent respectively of their January averages.

The north of the South Island and the southern half of the North Island were also drier than usual, with many areas recording less than half of their normal January rain and Blenheim recording only 20 percent of its average.

Temperature—Temperatures were much cooler than usual over most of the country, especially in inland parts of the South Island and some eastern and central North Island areas where they ranged between 1.5°C and 2°C below average. Over the remainder of the country temperatures were between 0.5°C and 1.5°C below average.

Temperatures were fairly consistently below average throughout the month. Between the 13th and the 18th it was particularly cool and many areas record maximum temperatures that were 8°C to 10°C below average.

Sunshine—The northern half of the North Island, along with the south of the South Island, was slightly cloudier than usual during January. However, over the remainder of the country it was sunny,

compensating to some extent for the cool temperatures. Wellington and Timaru were particularly sunny, recording 120 percent and 130 percent respectively of their usual January sunshine.

THE WEATHER SEQUENCE—JANUARY 1984

1–7 January

A large anticyclone dominated New Zealand's weather during the first 4 days of 1984, giving fine, although rather cool weather. However, a cold front moved onto Fiordland late on the 4th and then moved north-east. A low formed on the front, west of central New Zealand, on the 5th and moved north to lie near Northland on the 7th. Rain developed over the South Island on the 5th and became widespread on the 6th. During the 7th a ridge spread onto the South Island, bringing fine weather, while the low continued to give rain to the northern half of the North Island.

8–14 January

The ridge spread across the remainder of New Zealand and gave fine weather to the whole country during the 8th and 9th. On the 10th a cold front moved onto the South Island and due to the formation of a low over Fiordland, remained slow moving, giving heavy rain to western and southern South Island areas during the 10th and the morning of the 11th. The low and its associated front moved across the North Island during the night of the 11th/12th and the rain became widespread over the North Island but eased over the South Island. Another cold front moved quickly north-east across New Zealand during the 13th, followed by a cold southerly airstream with showers in most areas.

15–21 January

Cold southerlies continued to give showers to eastern areas during the 15th, 16th, and 17th, while a complex low lay east of the North Island. This low moved south-west, merging with a trough which had moved rapidly east across the south Tasman Sea on the 18th, resulting in widespread rain over most of the country. During the 19th the trough gradually moved off to the east, but rain persisted, particularly in northern North Island and western South Island areas. An anticyclone spread over the country during the 20th and 21st, and the weather became fine, but remained cool.

22–30 January

The anticyclone continued to give fine weather during the 22nd and the morning of the 23rd, but a cold front moved rapidly north-east during the latter part of the 23rd giving fairly widespread rain. Another anticyclone gave fine weather during the 24th and 25th. However a cold front which had moved quickly east across the south Tasman Sea during the 25th became slow moving over Fiordland and Southland on the 26th. Heavy rain commenced falling over the south of the South Island early to the 26th and persisted throughout that day and much of the 27th also, producing record rainfalls in many places and causing extensive flooding in Southland. The front began moving north-east on the 27th, and weakened. A south-westerly flow spread over the country on the 28th, with only a few isolated showers, and during the 29th, 30th and 31st a large anticyclone moved eastwards across New Zealand, giving fine weather in most places although a few showers persisted.

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

J. S. HICKMAN, Director.

