



SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, 10 FEBRUARY 1983

Published by Authority

WELLINGTON: MONDAY, 14 FEBRUARY 1983

CLIMATOLOGICAL TABLE FOR DECEMBER 1982

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for December 1982—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		
Taupiri	23	21.4	10.4	15.9	..	26.0	9	1.9	2	93	16	..	38	11	..
Ruakura, Hamilton	40	20.5	10.0	15.3	-0.9	24.8	20	1.7	2	114	13	+25	45	11	202
Whatawhata	104	19.6	11.1	15.4	-0.9	26.1	22	3.3	2	117	17	+3	29	21	177
Rukuhia	66	21.0	10.3	15.7	-0.8	25.4	9	2.7	2	73	24	-24	18	21	179
Hamilton Airport	50	20.8	8.7	14.8	-1.2	25.4	20	-0.8	2	102	13	+13	34	11	..
Cambridge	76	20.8	9.7	15.3	..	24.7	17	2.1	2	104	13	..	51	11	..
Port Taharoa	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mohakatino Station Mokau	46	17.9	11.9	14.9	-1.3	20.2	19	7.0	1	158	15	+8	30	5	..
Arapuni Power Station	123	21.4	9.2	15.3	-1.5	25.4	20	2.0	2	130	14	+18	43	11	..
Waikeria	46	20.9	8.4	14.7	..	24.6	9	0.3	2	128	15	..	36	21	..
Te Kuiti	61	20.1	10.0	15.1	-1.4	23.8	17	4.4	31	122	19	+3	24	21	162
Wairere	122	19.0	9.1	14.1	..	22.3	6	1.7	2	118	17	-14	23	21	..
Pureora Forest	549	16.8	7.1	12.0	-1.6	21.6	17	0.1	2	141	18	-16	33	11	..
Mangakahu Valley	397	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taumarunui	171	20.4	9.4	14.9	-1.9	25.7	17	2.2	2	154	19	+24	33	11	160
Tokirima	152	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Omata	61	18.0	10.6	14.3	-1.8	21.0	19	6.6	2	173	15	..	35	10	..
New Plymouth	55	18.3	10.9	14.6	..	21.0	19	2.9	2	199	17	..	34	10	..
New Plymouth Airport	27	18.3	10.8	14.6	-1.0	20.2	19	2.1	2	150	17	+18	21	25	206
Tikorangi	77	18.4	10.0	14.2	..	20.8	4	2.8	2	157	18	..	24	11	..
North Egmont	955	13.9	5.1	9.5	..	17.9	16	0.6	1	1017	19	..	237	11	..
Te Wera Forest	180	18.0	8.0	13.0	-1.7	21.5	17	0.5	2	279	14	+134	63	11	..
Lower Retaruke	223	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turangi	366	19.2	8.5	13.9	-1.4	25.9	17	-0.4	2	133	16	..	34	21	183
Chateau, Mt Ruapehu	1119	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mt Bruce Reserve	305	17.6	8.4	13.0	-1.2	23.0	16	0.6	1	408	18	..	141	11	..
Waingawa, Masterton	114	20.3	8.5	14.4	-1.3	27.0	17	1.3	1	89	17	+13	19	10	..
Kopua	311	18.8	9.3	14.1	-0.8	24.4	19	0.7	2	56	14	-53	16	3	..
Waipukurau	137	21.6	9.2	15.4	-0.6	29.0	19	1.1	2	21	6	-55	10	3	..
Dannevirke	207	18.8	9.8	14.3	-1.0	24.8	19	0.6	2	100	14	-19	22	3	175
Porangahau	8	21.1	11.2	16.2	..	28.6	19	4.1	2	34	10	..	16	3	..
Castlepoint	3	19.5	12.2	15.9	-0.5	24.2	17	4.7	2	44	11	-30	12	29	..
Ngaumu Forest	244	19.5	7.4	13.5	-1.1	24.7	17	0.0	1	31	12	-55	6	11	..
Tauherenikau, Alloa	43	20.0	9.4	14.7	-1.2	27.7	16	2.1	4	142	13	+58	51	11	..
Gladstone, Arahura	116	20.6	7.3	14.0	-1.3	26.1	16	0.0	7	55	11	-14	30	12	..
Waiorongomai	21	17.6	10.2	13.9	-1.6	20.9	16	1.9	4	242	16	+128	83	11	..
Cape Palliser	10	19.6	12.2	15.9	-0.4	26.3	17	6.2	1	93	15	+14	23	20	..
East Cape	17	20.2	12.8	16.5	-1.0	24.0	19	6.6	2	46	8	-35	19	30	..
Ruatoria	61	23.8	11.5	17.7	+0.2	31.0	17	5.0	1	48	7	-71	21	30	..
Mangatu Forest	182	22.3	10.4	16.4	-0.4	29.6	17	1.2	1	48	6	-46	21	11	..
Manutuke Gisborne	9	22.8	9.4	16.1	-1.0	..	..	2.2	1	6	5	-58	2	5	..
Gisborne Airport	4	23.4	10.9	17.2	-0.1	30.3	18	3.0	1	11	6	-53	4	5	268
Onepoto, Waikaremoana	643	..	9.0	..	..	..	..	0.4	1	83	12	-69	17	11	..
Wharerata Forest	439	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Esk Forest	427	20.0	9.8	14.9	-0.1	26.5	16	-0.3	1	46	8	-78	17	30	..
Kaweka Forest	414	20.4	10.5	15.5	+0.0	27.8	17	2.2	1	32	9	..	10	3	..
Napier Airport	2	22.4	10.6	16.5	..	30.7	19	1.7	1	9	4	-60	6	30	..
Napier	2	22.7	12.0	17.4	-0.2	29.8	19	3.8	2	10	6	-54	6	30	237
Hastings	16	22.6	11.2	16.9	..	..	..	2.2	1	10	6	..	4	3	..
Havelock North	9	22.5	9.6	16.1	-0.3	29.0	19	0.6	1	6	5	-55	3	3	206
Whakatu	6	22.1	10.0	16.1	..	29.0	18	1.8	2	10	6	..	3	30	..
Gwavas Forest	335	20.3	7.7	14.0	-0.5	28.4	17	0.0	2	51	10	-66	19	3	..
Makaretu	335	20.3	8.4	14.4	-0.7	27.4	17	0.2	2	47	16	..	14	3	..
Mohaka Forest	286	21.5	10.0	15.8	-0.1	28.0	18	0.5	1	29	7	-90	11	30	..
Frasertown, Wairoa	8	22.8	11.3	17.1	-0.4	28.1	19	3.5	1	28	11	-76	8	3	..
Wairoa	20	22.2	11.1	16.7	-0.5	28.1	10	3.1	1	17	7	..	5	3	250
Kapiti Island	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paraparaumu Airport	7	17.2	10.8	14.0	-1.7	19.6	23	2.6	4	230	16	+144	56	20	172
Flockhouse, Bulls	9	17.9	10.5	14.2	-1.5	22.6	10	2.1	2	163	17	+79	36	11	..
Ohakea	48	18.2	10.8	14.5	-1.7	23.2	10	4.6	2	159	16	+70	40	21	213
Wharite Peak	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kairanga Palmerston North	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palmerston North Airport	45	18.6	9.7	14.2	-1.4	23.0	19	1.5	2	165	14	+68	39	21	..
Palmerston North D S I R	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tiritea	100	17.5	9.5	13.5	..	..	..	1.8	1	172	15	..	35	11	..
Waitarere Forest	3	17.7	10.7	14.2	-1.6	21.1	10	2.0	2	156	13	+77	36	11	..
Levin	46	17.2	10.5	13.9	-1.7	20.4	19	2.1	1	199	13	+100	51	25	155
Titahi Bay	31	17.2	11.2	14.2	..	20.0	23	4.9	4	188	16	..	52	20	..
Avalon, Lower Hutt	15	17.3	10.8	14.1	-1.5	20.3	23	3.7	1	230	17	+144	66	11	..
Kelburn, Wellington	125	16.8	10.4	13.6	-1.6	20.8	23	5.6	4	110	15	+24	36	20	202
Somes Island	43	16.5	11.2	13.9	..	19.0	23	5.5	4	126	14	..	45	11	..
Gracefield, Lower Hutt	34	17.3	10.9	14.1	-1.6	20.0	23	4.0	4	185	15	+94	67	11	..
Wainuiomata	82	17.0	10.2	13.6	-1.3	20.5	16	2.0	4	178	14	..	59	11	..
Wellington Airport	6	17.9	11.8	14.9	-1.1	21.0	23	4.9	4	94	13	+20	29	11	..
Rimutaka Forest	40	17.4	9.9	13.7	..	23.0	23	2.1	4	85	12	..	23	20	..
Kaitoke	223	16.7	8.5	12.6	-1.4	20.5	16	0.0	4	381	18	+218	140	11	189
Wallaceville	56	17.4	9.7	13.6	-1.7	20.2	23	1.0	4	239	16	+142	77	11	192

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		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 Egmont	8	..	..	..	..	..	..	..	..	..	..	..	..	..
Stratford Mountain House	846	14.9	5.2	10.1	-1.1	19.8	19	-1.5	2	902	18	+397	218	11	
Stratford Dem. Farm	311	17.2	7.8	12.5	-1.5	19.6	17	-0.3	2	286	16	+116	86	11	
Kapuni	173	..	..	..	..	..	..	..	..	..	..	..	..	..
Manaia Dem. Farm	98	..	..	..	..	..	..	..	..	..	..	..	..	..
Normanby	122	17.9	9.2	13.6	..	23.0	19	1.5	2	101	19	..	24	20	
Patea	43	18.0	11.5	14.8	-0.9	23.5	19	3.5	2	131	12	+55	49	20	
Ruatiti	354	18.2	8.2	13.2	..	23.0	17	0.1	2	219	18	..	57	11	
Ohakune Junction	629	16.8	7.4	12.1	..	22.5	16	-0.6	2	159	19	..	35	11	
Karioi	648	17.2	6.9	12.1	-1.3	23.2	16	-0.2	2	121	14	+12	23	11	
Waiouru	823	16.0	5.3	10.7	-1.2	21.5	16	-2.5	2	65	16	-42	14	11	
Waiouru Military Camp	823	15.4	5.9	10.7	-0.9	21.6	19	-2.0	2	64	16	-58	14	12	
Ahu Ahu Valley	85	20.0	8.8	14.4	..	25.2	16	0.1	2	128	17	..	30	25	
Taihape	433	19.4	8.1	13.8	-0.5	25.0	16	-1.3	2	66	18	..	14	26	
Kahui, Taihape	518	..	..	..	..	..	..	..	..	..	..	..	..	..
Wanganui	22	19.1	11.5	15.3	-1.2	26.0	19	4.9	2	103	14	+14	20	25	
Wanganui Airport	9	..	..	..	..	..	..	..	..	..	..	..	..	202
Farewell Spit	3	18.6	10.8	14.7	-1.1	21.3	15	5.9	28	96	17	+7	30	11	
Totaranui	10	..	..	..	..	..	..	..	..	..	..	..	..	..
Westport Airport	2	16.5	9.6	13.1	-1.4	19.0	16	4.5	1	213	23	+28	27	10	
Cobb Dam	823	14.5	5.8	10.2	-1.3	23.0	16	-0.3	2	133	18	-30	28	11	
Arapito	20	17.1	9.2	13.2	..	20.7	10	4.0	1	274	21	..	42	18	
Lake Rotoroa	443	16.2	6.7	11.5	..	22.8	16	-1.8	1	191	24	..	50	11	
Lake Rototoi	634	16.4	5.5	11.0	-2.0	25.1	16	-3.2	1	163	19	+46	57	11	
Hokitika Airport	39	16.2	8.7	12.5	-1.4	18.4	18	3.5	1	297	24	+63	57	10	
Punakaiki	9	16.9	10.6	13.8	..	20.0	17	5.6	1	288	22	..	41	11	
Reefton	198	17.7	7.4	12.6	-2.4	23.5	18	1.9	1	213	21	+48	40	11	
Barrytown	30	16.6	10.2	13.4	..	19.5	16	6.0	27	342	23	..	47	10	
Totara Flat	77	18.1	8.2	13.2	-1.6	23.7	18	1.0	1	276	22	+119	48	10	
Greymouth	4	16.3	9.4	12.9	-1.7	19.0	17	4.0	13	325	22	+112	57	11	
Otira Substation	383	15.3	6.4	10.9	..	19.5	16	1.3	1	635	24	+203	178	24	
Springs Junction	421	..	..	..	..	..	..	..	..	..	..	..	..	..
Pukekura	86	..	..	..	..	..	..	..	..	..	..	..	..	..
Hari Hari	45	16.7	8.0	12.4	-1.7	21.0	16	1.6	1	369	22	+69	67	24	
Franz Josef	122	16.5	7.3	11.9	-1.8	20.5	16	2.5	1	387	18	-68	71	17	
Franz Josef	155	16.0	7.5	11.8	..	19.3	16	3.1	27	552	25	..	169	24	
Fox Glacier	152	15.6	7.5	11.6	..	18.8	16	2.4	28	442	22	+54	119	24	
Milford Sound	3	15.6	7.3	11.5	-1.8	19.2	3	2.3	13	855	23	+301	212	24	
Puysgur Point	43	..	..	..	..	..	..	..	..	..	..	..	..	..
Stephens Island	187	15.6	10.5	13.1	..	19.5	17	5.7	4	173	15	+112	72	11	
Riwaka, Motueka	8	20.1	9.1	14.6	-1.3	25.7	17	3.4	2	39	11	-52	13	11	
Tapawera	146	20.1	7.7	13.9	..	26.4	15	1.8	1	53	13	..	11	20	
Crail Bay Pelorus Sd	13	18.1	10.3	14.2	..	22.5	23	2.9	28	178	13	..	65	11	
Appleby	17	19.9	9.9	14.9	-1.1	25.8	15	2.9	1	33	12	-33	14	20	
Nelson Airport	2	19.8	9.7	14.8	-0.8	25.3	15	2.9	1	35	13	-39	12	20	
Rai Valley	79	19.3	8.4	13.9	-1.2	24.2	15	0.7	28	157	13	+12	79	11	
Moutere Hills	110	19.3	10.5	14.9	-1.0	25.4	17	3.7	1	51	14	-30	17	20	
Blenheim Airport	27	21.3	10.3	15.8	-0.3	30.7	16	1.4	1	32	9	-21	11	20	
Brancott Valley	64	21.4	8.8	15.1	..	31.1	16	0.7	1	28	6	..	9	20	
Blenheim	4	21.6	10.0	15.8	-0.6	30.1	16	1.6	1	36	9	-15	13	11	
Waihopai Power Station	262	20.7	8.7	14.7	-0.9	30.4	16	0.6	1	33	10	-43	10	11	
Vernon Lagoons	2	21.0	8.5	14.8	-0.7	28.8	17	0.0	1	37	8	..	12	11	
Lake Grassmere	2	20.3	11.0	15.7	-0.2	28.6	17	4.8	1	30	6	-18	9	29	
Cape Campbell	3	18.2	11.5	14.9	+0.2	24.2	23	7.2	4	41	10	-7	10	11	
Hanmer Forest	387	19.2	6.5	12.9	-1.2	28.2	16	-1.3	28	71	11	-28	23	11	
Molesworth	893	17.2	3.2	10.2	-2.1	26.2	16	-4.6	28	30	5	-26	21	11	
Kaikoura Flats	24	19.4	8.0	13.7	..	29.9	19	0.2	4	58	10	..	16	29	
Kaikoura	108	18.6	10.4	14.5	-0.2	30.2	19	5.1	1	36	11	-38	16	29	
Arthurs Pass	738	13.0	4.4	8.7	..	18.0	16	-1.3	1	465	23	+127	150	24	
Balmoral Forest	198	20.4	8.2	14.3	-0.4	29.4	16	0.4	1	62	11	-2	23	11	
Waiau	137	21.6	8.0	14.8	..	32.1	16	0.2	4	36	6	..	18	11	
Cheviot	85	20.2	7.8	14.0	..	31.1	16	-0.3	2	45	11	..	14	11	
The Hermitage, Mt Cook	765	15.9	5.7	10.8	-1.7	23.2	15	-0.3	13	504	19	+118	225	24	
Mt John	1027	15.2	3.2	9.2	-2.5	22.4	16	-4.3	26	47	7	+4	21	24	
Craigieburn Forest	914	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Coleridge	364	18.9	6.9	12.9	-1.1	26.1	16	0.3	28	86	16	+15	23	11	
Highbank Power Station	336	17.7	7.3	12.5	-1.4	26.4	16	2.0	12	90	13	-4	27	11	
Hororata Substation	192	21.1	7.1	14.1	-0.4	31.6	16	0.1	1	88	15	+12	22	11	
Winchmore	160	19.5	7.2	13.4	-0.8	29.4	16	1.7	28	80	12	+4	19	6	
Peel Forest	274	19.0	6.0	12.5	..	29.2	16	0.6	4	85	15	..	27	11	
Ashburton	101	20.8	7.6	14.2	-1.0	32.7	16	1.7	2	48	10	-26	13	11	
Waipara	64	20.8	..	..	..	31.2	16	..	..	63	12	..	16	29
Ashley Forest	107	..	..	..	..	..	..	..	..	..	..	..	..	..
Rangiora	46	20.9	7.9	14.4	-0.7	31.1	16	1.5	2	53	11	-11	16	29	
Darfield	195	21.4	7.5	14.5	-0.6	30.6	16	0.6	1	100	13	+24	23	11	
Eyrewell Forest	158	
Christchurch Airport	30	20.5	8.5	14.5	-0.7	31.4	19	2.4	1	63	18	+15	13	29	

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		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount	Date	
Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs		
Templeton	46	20.1	7.9	14.0	..	29.8	16	1.9	2	71	13	..	17	11	..
Christchurch	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bromley, Christchurch	9	19.6	9.8	14.7	-0.6	30.3	19	4.0	1	74	15	+21	17	12	..
Mt Pleasant	137	19.2	10.0	14.6	-0.1	28.7	19	4.8	13	101	15	+53	24	12	..
Lincoln	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Akaroa	3	20.5	8.6	14.6	..	30.0	16	2.5	2	106	12	..	22	12	..
Lake Tekapo	683	17.3	6.1	11.7	-2.0	24.5	16	0.0	27	47	7	-4	20	24	..
Lake Pukaki	556	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fairlie	304	20.3	6.3	13.3	..	30.2	17	-0.2	4	63	8	..	21	11	..
Twizel	457	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ikawai	70	18.9	7.5	13.2	-0.4	30.5	16	0.5	4	85	12	..	24	26	..
Geraldine	119	20.2	7.8	14.0	..	31.3	16	2.0	4	59	12	..	25	11	..
Orari Estate	81	19.8	7.4	13.6	-0.5	31.2	16	1.9	4	59	13	-22	22	11	..
Temuka	24	19.0	7.9	13.5	-0.8	30.5	16	2.3	13	87	13	+18	21	11	..
Timaru Airport	26	19.3	7.8	13.6	-0.4	32.1	16	2.1	4	70	13	+4	21	11	..
Adair	85	18.7	8.5	13.6	-0.3	31.2	16	4.1	13	82	17	+13	18	11	..
Timaru	17	18.7	9.2	14.0	-0.7	30.7	16	4.2	27	75	15	+6	19	11	214
Waimate	61	18.6	8.8	13.7	-0.9	31.5	16	2.9	29	84	11	+13	24	11	..
Kurow	207	19.7	8.0	13.9	..	29.1	17	1.5	26	93	16	..	34	24	..
Oamaru Airport	30	17.7	8.4	13.1	-0.4	28.8	16	3.2	14	74	13	+16	16	25	204
Knobs Flat	360	15.9	5.0	10.5	..	20.0	31	-1.4	1	212	19	+11	62	24	..
Tara Hills, Omarama	488	19.0	6.0	12.5	-1.6	25.6	17	0.5	27	54	13	-2	29	24	228
Lake Hawea	350	17.5	6.8	12.2	-3.2	21.2	19	-0.5	27	43	8	-15	19	24	..
Wanaka	296	19.7	7.9	13.8	-1.6	24.5	14	1.8	1	39	9	-12	17	11	..
Queensberry	277	19.2	7.9	13.6	..	24.2	18	1.2	27	47	11	..	24	24	..
Bendigo	200	20.4	8.3	14.4	..	26.4	18	1.9	1	42	11	..	17	24	..
Naseby Forest	610	17.2	3.3	10.3	-1.9	25.4	17	-2.4	4	98	12	+40	26	24	..
Windsor	88	..	..	..	..	..	..	..	..	93	12	..	23	26	..
Oamaru	5	17.5	9.1	13.3	..	30.3	16	4.5	4	97	13	..	22	25	..
Ranfurly	427	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herbert Forest	61	18.4	6.3	12.4	-0.7	31.2	17	1.2	27	126	18	+60	24	24	..
Palmerston	21	18.1	7.6	12.9	-0.2	30.3	17	1.4	4	100	17	..	28	24	185
Cherry Farm Hospital	6	17.1	7.5	12.3	-0.8	30.0	17	1.9	28	104	24	+48	23	24	..
Taiaroa Head	72	15.1	8.8	12.0	-0.4	27.5	16	3.7	14	87	20	+26	30	24	..
Invermay, Taieri	30	16.7	7.4	12.1	..	29.1	16	2.0	4	130	24	..	31	24	139
Berwick Forest	18	17.4	7.2	12.3	-0.9	31.0	16	0.9	1	127	20	+56	39	24	..
Dunedin Airport	1	17.0	6.7	11.9	-1.4	28.1	17	0.7	4	132	22	+76	34	24	140
Musselburgh, Dunedin	2	15.7	9.2	12.5	-1.3	29.0	17	4.5	13	140	23	+69	35	11	147
Te Anau	215	16.9	6.5	11.7	-1.1	23.2	17	-0.6	3	60	15	-29	24	24	177
West Arm, Manapouri	232	14.6	6.2	10.4	-2.1	21.0	31	1.3	3	371	26	..	41	24	..
Borland Burn	183	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queenstown	329	18.9	7.8	13.4	-0.9	24.9	15	3.3	1	73	11	+9	35	24	209
Queenstown Airport	349	17.7	6.6	12.2	-1.5	23.8	17	1.3	1	55	8	+0	27	24	..
Otama	183	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cromwell	213	20.9	7.7	14.3	-1.7	26.3	15	2.2	3	47	13	+11	22	24	236
Northburn	210	20.0	7.9	14.0	..	25.0	15	2.6	4	40	14	..	16	24	..
Lauder	370	18.6	6.4	12.5	..	25.0	18	-0.2	27	84	16	..	24	24	..
Clyde Dam	160	20.2	8.3	14.3	..	27.3	15	3.0	27	58	14	..	35	24	..
Ophir	305	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Moa Creek	427	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Earnsclough	152	20.7	6.8	13.8	-1.2	29.4	15	0.3	3	52	14	+19	29	24	..
Roxburgh Power Station	110	19.0	7.0	13.0	-2.0	28.0	15	1.0	4	77	18	+31	24	24	..
Deep Stream	396	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beaumont	46	17.8	6.7	12.3	..	27.0	17	0.0	4	155	20	+66	41	24	..
Mahinerangi Dam	396	14.5	5.3	9.9	-1.7	24.0	16	-1.0	1	160	21	+69	47	24	..
Tapanui	226	15.8	5.9	10.9	-2.6	24.5	17	0.3	1	154	26	+75	38	24	..
Taieri Mouth	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuatapere	27	16.9	7.1	12.0	..	26.3	17	1.7	1	109	22	..	19	11	..
Otautau	55	16.8	6.5	11.7	-1.3	25.6	17	0.6	4	130	21	+46	20	12	162
Winton	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gore	123	16.0	7.2	11.6	-1.7	26.5	17	1.0	1	159	22	..	36	24	155
Hokonui Forest	46	17.0	6.5	11.8	-1.7	25.4	17	-1.1	1	159	21	+70	32	11	..
Woodlands	47	16.5	7.2	11.9	-1.2	25.5	17	1.5	4	140	26	..	23	11	..
Invercargill Airport	0	15.8	7.5	11.7	-0.9	25.9	17	0.9	4	128	24	+39	23	10	166
Tiwai Point, Bluff	5	15.4	8.3	11.9	-1.4	24.1	17	0.4	4	109	20	..	28	10	..
Stewart Island	3	14.5	7.1	10.8	..	22.2	17	1.7	1	124	29	..	16	10	..
Milton	18	16.9	6.7	11.8	-1.5	27.3	17	0.2	1	103	19	+34	33	24	..
Finegand, Balclutha	6	16.7	7.7	12.2	-1.0	27.5	17	0.9	1	118	22	..	39	24	125
Owaka	5	16.1	6.4	11.3	..	25.2	17	0.5	1	154	23	..	30	24	..
Nugget Point	129	14.7	7.2	11.0	-1.0	24.3	17	2.0	13	150	24	+74	33	24	..
Tautuku	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nandi Airport, Fiji	19	31.3	21.6	26.5	-0.1	33.3	12	18.0	3	135	11	..	46	26	243
Rarotonga Airport	7	27.0	20.6	24.2	-0.6	29.6	5	16.4	19	20	13	-206	6	11	215
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raoul Island	38	23.1	18.0	20.6	+0.1	25.1	27	15.6	7	134	9	+45	70	28	232
Campbell Island	15	10.3	4.8	7.6	-1.0	12.8	7	1.3	27	72	28	-30	18	2	90
Waitangi, Chatham Island	44	15.3	9.7	12.5	-0.9	19.0	21	5.3	14	61	20	-5	12	29	191

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for December 1982—continued

Station	Height of Station Above M.S.L. Metres	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	
Scott Base, Antarctica	16	0.1	-6.7	-3.3	+2.0	+3.3	26	-15.5	1	..	..	..	..	..	..
LATE RETURNS AND CORRECTIONS															
Kerikeri M A F 10/1982	79	17.3	8.2	12.8	..	19.5	13	4.5	25	135	25	..	47	1	..
Kerikeri M A F 11/1982	79	21.6	11.0	16.3	..	26.2	7	4.8	30	11	9	..	3	5	..
Kerikeri Downs 10/1982	79	17.1	8.2	12.7	..	19.5	30	4.7	25	125	23	..	43	1	..
Kerikeri Downs 11/1982	79	..	11.2	..	..	..	..	5.4	30	12	9	..	4	11	..
Waiotemarama 05/1982	229	16.4	10.5	13.5	..	18.5	8	6.1	3	87	19	..	18	14	..
Waiotemarama 06/1982	229	14.3	7.8	11.1	..	17.0	5	2.8	19	91	16	..	36	21	..
Dargaville 10/1982	20	16.6	9.0	12.8	-0.9	20.3	21	3.3	7	87	21	-22	11	18	187
Dargaville 11/1982	20	19.9	11.5	15.7	+0.6	24.5	28	7.0	30	15	7	-69	4	29	209
Port Fitzroy 11/1982	4	20.7	12.9	16.8	+0.8	23.8	8	8.6	20	57	7	-70	21	28	..
Te Teko 11/1982	8	24.8	10.6	17.7	+2.3	31.2	7	4.5	14	23	5	-71	17	28	206
Tarawera Forest 10/1982	61	18.1	5.6	11.9	-0.6	22.3	28	0.5	21	82	11	-88	27	18	..
Huntly 11/1982	34	20.1	11.8	16.0	..	24.4	11	6.0	30	35	9	..	24	11	..
Port Taharoa 10/1982	27	15.5	9.8	12.7	-1.3	18.3	31	5.0	25	91	..	..	27	18	..
Port Taharoa 11/1982	27	18.4	13.3	15.9	+0.3	22.0	28	7.0	30	25	..	..	18	11	..
Esk Forest 11/1982	427	21.2	11.3	16.3	+3.0	28.8	7	4.8	30	75	8	-29	36	29	..
Hastings 11/1982	16	23.9	12.2	18.1	..	30.4	7	2.3	14	36	4	..	17	12	..
Whakatu 11/1982	6	23.6	11.4	17.5	..	30.3	7	1.8	14	38	4	..	25	12	..
Kairanga Palmerston North 11/1982	15	18.2	11.4	14.8	+1.0	23.3	26	3.4	14	53	10	..	16	28	162
Palmerston North D S I R 11/1982	34	18.3	11.8	15.1	+0.9	24.0	26	4.5	14	61	11	-18	17	28	122
Cape Egmont 11/1982	8	17.4	12.4	14.9	+0.6	20.0	11	6.8	30	121	19	+19	36	27	..
Kapuni 10/1982	173	..	6.0	..	..	..	7	0.0	20	96	20	..	24	25	..
Kahui, Taihape 11/1982	518	17.8	9.4	13.6	+0.8	24.3	7	1.6	14	66	9	..	19	12	..
Wanganui Airport 11/1982	9	19.3	11.6	15.5	..	24.5	11	5.6	30	81	12	..	23	28	..
Stephens Island 11/1982	187	15.0	10.6	12.8	..	16.8	18	7.4	13	47	11	-17	14	27	..
Cheviot 11/1982	85	21.1	9.0	15.1	..	27.4	16	0.2	22	45	9	..	12	11	..
Craigieburn Forest 11/1982	914	16.3	5.1	10.7	+1.2	24.5	7	-2.0	22	222	16	+82	68	18	..
Ashley Forest 11/1982	107	20.3	9.2	14.8	+1.5	27.1	25	0.7	22	61	8	-5	30	28	224
Rangiora 11/1982	46	21.6	9.1	15.4	+2.0	29.8	25	-0.4	22	48	9	+0	24	28	..
Eyrewell Forest 11/1982	158	21.6	8.6	15.1	+1.9	28.1	25	-0.3	22	56	8	-18	15	12	..
Christchurch 11/1982	7	22.1	10.2	16.2	+2.2	29.1	25	2.0	22	38	6	-8	15	28	..
Knobs Flat 09/1982	360	11.8	1.1	6.5	..	16.5	22	-5.0	2	84	13	-127	28	18	..
Knobs Flat 10/1982	360	12.0	1.4	6.7	..	19.3	28	-4.1	19	280	20	+46	43	22	..
Naseby Forest 11/1982	610	16.7	3.7	10.2	-0.2	23.2	18	-1.4	12	85	11	+32	27	28	..
Windsor 11/1982	88	..	..	..	..	..	..	..	..	42	6	..	22	28	..
Ophir 11/1982	305	18.1	6.2	12.2	-0.2	23.7	7	-1.8	22	45	10	+7	11	10	..
Moa Creek 11/1982	427	..	..	..	..	..	..	..	..	40	9	+2	10	28	..
Roxburgh Power Station 11/1982	110	19.5	5.9	12.7	-0.6	24.0	9	1.0	22	60	15	+14	9	27	..
Deep Stream 11/1982	396	16.7	4.6	10.7	..	23.7	10	-1.6	12	41	15	..	15	20	..
Taiari Mouth 11/1982	15	16.9	6.4	11.7	+0.6	24.3	25	0.5	12	66	15	-13	13	6	..
Totokoitu, Rarotonga 11/1982	9	25.8	20.3	23.1	..	29.0	12	16.2	16	23	15	..	11	6	..
Raoul Island 10/1982	38	20.3	14.8	17.6	+0.1	22.1	26	11.5	4	28	20	-58	9	1	185
Raoul Island 11/1982	38	22.2	16.2	19.2	+0.4	24.2	28	13.2	1	120	7	+39	64	30	206
Scott Base, Antarctica 02/1982	16	-6.5	-13.2	-9.9	+0.7	0.4	3	-26.3	28	..	..	..	..	..	..
Scott Base, Antarctica 03/1982	16	-19.3	-29.5	-24.4	-4.2	-14.8	12	-42.2	27	..	..	..	..	..	..
Scott Base, Antarctica 04/1982	16	-21.7	-35.0	-28.4	-4.1	-6.6	17	-47.4	11	..	..	..	..	..	..
Scott Base, Antarctica 05/1982	16	-21.9	-34.3	-28.1	+0.3	-7.2	21	-41.2	19	..	..	..	..	..	..
Scott Base, Antarctica 06/1982	16	-22.7	-35.5	-29.1	-2.9	-6.4	10	-51.4	24	..	..	..	..	..	..
Scott Base, Antarctica 07/1982	16	-25.6	-40.3	-33.0	-3.2	-16.0	4	-51.3	20	..	..	..	..	..	..
Scott Base, Antarctica 08/1982	16	-19.8	-32.3	-26.1	+5.1	-9.6	11	-52.4	24	..	..	..	..	..	..
Scott Base, Antarctica 09/1982	16	-24.4	-38.1	-31.3	-3.1	-10.6	30	-49.3	6	..	..	..	..	..	..
Scott Base, Antarctica 10/1982	16	-17.1	-27.7	-22.4	+0.4	-5.6	31	-33.5	22	..	..	..	..	..	..
Scott Base, Antarctica 11/1982	16	-6.4	-14.6	-10.5	+1.5	-0.1	27	-24.5	2	..	..	..	..	..	..

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 DECEMBER 1982

General—December was a cool month, dry in northern and eastern areas of the North Island and the north of the South Island but wet elsewhere.

Winds from a westerly quarter were most frequent in both the north and south of the country this month. Auckland had westerly or south-westerly winds on 22 days while Invercargill had 24 days with westerly or north-westerly winds. Strong to gale force winds were widespread on the 12th and 13th and caused structural damage to energy installations in Taranaki and damage to berry fruit crops in Hawke's Bay and stonefruit in the Levin-Otaki area.

Farmers reported good grass growth in areas with good rainfall this month but in drier areas, especially the north and east of the North Island, feed became scarce and cows were dried off early.

A hailstorm in the Christchurch area on the 7th caused considerable damage to market gardens. Losses have been estimated to be as high as \$20,000 on some farms.

Rainfall—Rainfall was above normal in western and southern areas of the North Island and for all of the South Island except Nelson, Marlborough, and the Kaikoura Coast. Eastern areas of the North Island were very dry; Gisborne Airport recorded 11 mm and Napier Airport only 9 mm of rainfall for the month. In contrast western areas of both Islands were very wet. In the North Island Paraparaumu Airport had 250 percent of normal rainfall while Palmerston North and Ohakea had 170 percent and 180 percent respectively. In the South Island western areas had between 125 percent and 160 percent of normal, while some areas around Dunedin and Alexandra had more than twice their normal December rainfall.

Heavy rainfall associated with a slow-moving frontal system crossing the country between the 11th and 13th, caused extensive surface flooding in the south of the North Island. Two people drowned near Pauatahanui, 30 kilometres north of Wellington, when the car they were travelling in was swept away in floodwaters.

There was flooding in Southland on the 24th and in southern Wairarapa on the 26th, again due to frontal activity.

Temperatures—Apart from isolated areas of Northland, Gisborne, and the Kaikoura Coast, where mean temperatures were normal, the whole country was cooler than usual in December. Mean temperatures in the south of the North Island and south and west of the South Island were between 1°C and 2°C below average, with Taupo, New Plymouth, Ohakea, and Wellington recording their lowest mean temperatures for December for 30 years. The rest of the country had temperatures less than 1°C below average.

There were several cold spells contributing to the low temperatures this month. Between the 1st and 3rd mean temperatures for the country were as much as 7°C below average, and there were frosts in some inland areas on the 1st. On the 12th temperatures were between 5°C and 10°C below average in the South Island and 2°C–5°C below in the North Island. The last week of the month was very cool. Temperatures in the North Island were 2°C–4°C below average and 3°C–7°C below average in the South Island. Snow fell on high ground in the South Island on the 25th and in both Islands on the 26th.

Sunshine—Eastern areas of both Islands had more sunshine than normal this month. Western, central, and southern regions had average or slightly less than average sunshine for December. Among

those stations with the greatest departures in sunshine for the month were: Timaru (+42 hours), Christchurch (+36 hours), Gisborne (+30 hours), Dunedin (–30 hours), Wellington (–22 hours), and Invercargill (–21 hours).

THE WEATHER SEQUENCE FOR DECEMBER 1982

1–7 December

A ridge of high pressure over the South Island at the beginning of the month moved north-east of the country on the 3rd as a cold front from the Tasman Sea passed over New Zealand accompanied by rain. The front was followed by a large anticyclone which crossed the country on the 4th. A shallow trough of low pressure to the west of the country brought rain to western districts of both Islands as it crossed on the 5th. A weak west to south-west airstream followed the front with showers along the west coast of the South Island, and mostly dry, mild weather elsewhere.

8–14 December

A complex depression developed near the east coast of Australia during the 8th, while a ridge of high pressure and fine weather covered New Zealand. This system moved slowly eastward. A cold front associated with the depression spread rain into most western areas by the 11th. During the 11th pressures rose quickly in the western Tasman Sea as an anticyclone moved east of Tasmania. The airflow over the eastern Tasman Sea turned south-westerly and these conditions spread over New Zealand during the 12th, bringing colder, showery weather. The south-westerly conditions had moderated by the 14th as the anticyclone moved north-east towards northern New Zealand.

15–21 December

During this period a belt of high pressure remained just to the north of the North Island, while disturbed westerlies covered most of the country. Weak, transient cold fronts in the westerly airstream brought brief periods of rain to the west of the South Island. Frontogenesis occurred during the 19th and 20th over the north-west Tasman Sea and central New Zealand. Some heavy falls of rain were reported in southern districts of the North Island and parts of southern Wairarapa were flooded on the 21st.

22–31 December

The cold front brought rain to the rest of the North Island as it moved off the country during the afternoon of the 22nd. Another cold front approached the south-west of New Zealand late on the 23rd. It remained slow moving over southern New Zealand on the 24th, accompanied by very heavy falls of rain about the Alps. Local flooding resulted in parts of Southland. The front moved north-east over the rest of the country on the 25th and 26th bringing widespread rain, and snow about the mountains. Further localised flooding resulted on the 26th in southern Wairarapa. Behind the cold front a south-west airflow spread over the country. Scattered showers occurred chiefly in southern districts of the South Island, with mainly fine, cool weather predominating elsewhere.

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

J. S. HICKMAN, Director.

