



SUPPLEMENT
TO THE
NEW ZEALAND GAZETTE
OF
THURSDAY, 10 NOVEMBER 1983

Published by Authority

WELLINGTON: FRIDAY, 11 NOVEMBER 1983

CLIMATOLOGICAL TABLE
FOR SEPTEMBER 1983

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for September 1983—continued

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius								Rainfall in Millimetres				Bright Sunshine	
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount		Date
	Metres	°C	°C	°C	°C	°C	°C		mm	mm	mm		Hrs		
Ruakura Hamilton	40	16.7	6.7	11.7	+0.8	19.6	10	-1.7	5	117	21	+20	33	9	133
Whatawhata	104	15.7	8.1	11.9	+0.7	19.1	10	1.1	5	156	20	+29	43	9	127
Rukuhia	66	16.8	7.5	12.2	+0.9	19.2	10	-0.6	5	127	23	+28	33	9	118
Hamilton Airport	50	16.8	6.1	11.5	+1.0	19.4	30	-2.5	5	127	15	+30	35	9	..
Cambridge	76	16.4	6.5	11.5	..	18.9	10	-0.4	16	147	19	..	31	9	..
Port Taharoa	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mohakatino Stn Mokau	46	15.0	8.8	11.9	+0.5	17.0	25	2.8	16	140	17	+10	20	9	..
Arapuni Power Stn	123	16.8	6.2	11.5	+0.5	19.0	27	-2.0	5	160	18	+46	37	9	..
Waikeria	46	16.6	6.2	11.4	..	19.1	30	-1.4	5	116	17	..	30	9	..
Te Kuiti	61	16.4	7.4	11.9	+1.0	18.8	30	0.5	5	155	25	+28	29	14	111
Wairere	122	15.4	7.0	11.2	..	17.8	27	0.0	5	189	24	+67	30	9	..
Pureora Forest	549	12.4	4.5	8.5	+0.6	14.6	10	..	..	182	25	+32	32	10	..
Mangakahu Valley	397	13.7	..	..	..	15.7	30	..	..	204	23	..	28	14	..
Taumarunui	171	16.1	6.2	11.2	+0.6	18.7	10	-2.3	5	171	21	+54	28	14	106
Tokirima	152	16.1	5.6	10.9	..	18.0	27	-2.5	5	170	21	..	31	14	..
Omata	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Plymouth	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Plymouth Airport	27	15.1	8.8	12.0	+1.1	17.0	30	0.7	16	186	20	+74	52	14	134
North Egmont	955	9.1	2.4	5.8	..	14.7	30	-1.0	16	782	28	..	91	10	..
Te Wera Forest	180	14.7	5.7	10.2	+0.9	19.0	30	-0.6	5	236	20	+91	28	14	..
Lower Retaruke	223	15.3	5.8	10.6	+0.8	17.9	27	-2.9	5	191	21	..	27	14	..
Turangi	366	14.7	5.5	10.1	+0.8	17.9	30	-3.3	5	182	19	..	36	14	166
Chateau, Mt Ruapehu	1097	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hukanui	235	13.4	6.4	9.9	..	18.0	25	-1.6	5	279	26	+124	39	9	..
Mt Bruce Res	305	14.3	5.1	9.7	+1.2	19.9	30	-3.9	5	350	20	..	55	24	..
Waingawa Masterton	114	15.6	5.5	10.6	+0.6	21.2	10	-1.8	17	169	18	+95	34	10	163
Kopua	311	14.3	6.1	10.2	+0.9	19.4	10	-0.8	16	97	16	+33	23	14	..
Waipukurau	137	15.6	5.3	10.5	+0.6	20.4	10	-1.5	18	54	12	+3	17	26	172*
Dannevirke	207	14.7	7.1	10.9	+0.9	20.1	10	-0.8	16	130	21	+54	27	14	147
Porangahau	8	16.0	7.4	11.7	..	21.1	10	2.5	18	42	13	..	14	14	..
Castlepoint	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ngaumu Forest	244	15.1	5.1	10.1	+1.3	21.4	30	-1.4	17	108	14	+19	21	24	..
Tauherenikau, Alloa	43	15.5	5.7	10.6	+0.3	22.2	30	-0.1	18	184	18	+95	39	10	..
Waiorongomai	21	14.3	7.3	10.8	+0.6	18.3	30	-0.4	17	225	16	+95	44	24	..
Cape Palliser	10	15.1	8.8	12.0	+0.2	19.5	30	5.3	1	132	17	+58	41	10	..
East Cape	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruatoria	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mangatu Forest	182	17.4	6.4	11.9	+1.1	19.9	15	0.4	17	71	11	-43	31	27	..
Manutuke Gisborne	9	18.0	6.0	12.0	+0.6	21.7	16	0.4	17	19	10	-52	5	27	..
Gisborne Airport	4	17.8	6.2	12.0	+0.5	21.9	15	0.9	18	17	9	-57	6	27	209
Onepoto, Waikaremoana	643	14.3	4.8	9.6	+1.0	18.7	30	-0.1	16	107	14	-43	19	27	..
Wharerata Forest	439	15.0	6.3	10.7	..	19.5	10	-0.9	4	59	11	..	24	15	..
Esk Forest	427	15.1	6.2	10.7	+1.2	19.6	30	-1.8	5	52	11	-65	12	14	..
Kaweka Forest	414	15.1	6.6	10.9	+0.7	19.8	10	0.1	5	62	13	..	37	27	..
Napier Airport	2	17.5	5.7	11.6	..	22.7	10	-0.8	16	13	6	-38	5	26	..
Napier	2	17.8	6.8	12.3	+0.6	24.2	10	-0.1	17	14	7	-37	4	26	182
Hastings	16	17.7	5.8	11.8	..	23.1	10	-0.5	17	23	9	..	7	27	..
Whakatu	6	16.9	5.4	11.2	..	22.6	10	-1.0	17	18	10	..	4	21	..
Gwavas Forest	335	15.2	3.9	9.6	+0.9	21.0	10	-2.2	5	48	14	-26	19	27	..
Makaretu	335	15.1	5.2	10.2	+0.7	20.6	10	-2.0	5	78	18	..	16	27	..
Mohaka Forest	286	16.5	6.4	11.5	+1.2	20.6	30	0.0	16	33	11	-59	7	15	..
Frasertown, Wairoa	8	17.6	7.6	12.6	+0.9	22.2	10	2.2	23	33	11	-64	19	15	..
Wairoa	20	17.4	7.1	12.3	+0.8	21.6	10	1.4	16	24	11	..	14	15	194
Kapiti Is	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paraparaumu Airport	7	14.3	8.3	11.3	+0.7	17.3	10	0.7	16	181	19	+97	56	10	133
Flockhouse Bulls	9	14.8	7.8	11.3	+0.8	19.6	10	-0.3	5	119	21	+58	15	10	..
Ohakea	48	14.9	8.2	11.6	+0.6	19.9	10	3.0	16	103	20	+37	13	11	112
Wharite Peak	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kairanga Palmerston N	15	15.2	7.1	11.2	+0.6	19.5	10	-1.3	5	113	21	..	18	10	125
Palmerston N Airport	45	15.2	6.8	11.0	+0.5	19.8	10	-0.6	16	116	18	+52	17	11	..
Palmerston N D S I R	34	15.1	7.7	11.4	+0.6	19.5	10	0.3	5	117	21	+48	15	10	93
Tiritea	100	14.4	7.1	10.8	..	18.7	10	0.5	16	138	21	..	19	10	..
Waitare Forest	3	14.9	7.8	11.4	+0.8	18.9	10	-1.5	5	121	18	+55	21	10	..
Levin	46	14.5	7.8	11.2	+0.5	18.5	10	1.6	16	173	19	+89	28	19	105
Titahi Bay	31	14.4	8.1	11.3	..	16.1	6	0.5	16	174	19	..	42	10	..
Avalon, Lower Hutt	15	14.5	8.0	11.3	+0.5	17.3	26	1.9	16	174	18	+60	43	10	..
Kelburn, Wellington	125	13.7	7.9	10.8	+0.4	16.0	26	3.1	16	167	16	+65	43	10	142
Somes Is	43	13.7	8.0	10.9	..	15.5	26	3.5	16	137	16	..	48	10	..
Gracefield Lower Hutt	34	14.4	9.0	11.7	+0.8	17.0	26	1.6	16	157	16	+45	45	10	..
Wainuiomata	82	13.9	6.8	10.4	+0.3	17.6	30	0.4	17	159	16	..	38	10	..
Wellington Airport	6	14.6	8.9	11.8	+0.7	16.7	23	4.0	16	155	14	+71	43	30	..
Rimutaka Forest	37	14.4	6.7	10.6	..	18.8	30	-0.5	16	162	16	..	45	10	..
Kaitoke	223	13.5	5.7	9.6	+0.7	17.8	30	-2.7	17	279	21	+106	58	10	132
Wallaceville	56	14.5	6.4	10.5	+0.5	18.2	30	-1.6	17	170	18	+66	36	10	136
Cape Egmont	8	15.0	9.5	12.3	+0.6	16.8	30	2.0	16	159	22	+42	23	14	..

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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					
Stratford Mtn House	846	9.9	2.9	6.4	+0.7	15.0	30	-2.4	5	705	25	+144	104	21	..
Stratford Dem Farm	311	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kapuni	173	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manaiia Dem Farm	98	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Normanby	122	14.4	7.3	10.9	..	17.6	8	0.5	16	97	24	..	19	7	..
Patea	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruatiti	354	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ohakune Junction	629	11.7	4.7	8.2	..	15.2	25	-2.6	5	200	23	..	32	10	..
Karioi	648	12.3	4.0	8.2	+0.6	17.2	25	-2.2	16	137	24	+48	23	10	..
Waiouru	823	..	2.4	..	..	..	..	-5.1	16	105	21	+19	15	13	..
Waiouru Military Camp	823	10.6	2.9	6.8	+0.8	14.8	10	-4.7	16	113	21	+27	16	13	..
Ahu Ahu Valley	85	15.7	6.7	11.2	..	19.4	30	1.6	17	108	21	..	16	21	..
Taihape	433	13.8	5.3	9.6	+0.6	17.2	10	-1.5	5	88	23	..	15	14	..
Kahui, Taihape	518	13.1	5.4	9.3	+0.4	17.1	10	-0.4	16	81	17	..	12	14	..
Wanganui	22	15.7	9.2	12.5	+1.2	20.5	10	3.2	16	75	20	+17	14	14	131
Wanganui Airport	9	15.7	8.9	12.3	..	20.4	10	3.2	16	86	17	..	16	13	..
Farewell Spit	3	15.5	7.8	11.7	+0.8	19.7	30	1.5	16	261	24	+170	72	24	..
Totaranui	10	15.2	6.5	10.9	..	21.8	30	2.6	16	220	18	..	47	25	..
Westport Airport	2	13.8	7.3	10.6	+0.5	16.5	26	2.4	16	223	25	+53	31	23	93
Cobb Dam	823	10.2	2.6	6.4	+0.7	17.0	30	-1.7	4	383	20	+195	110	25	..
Arapito	20	14.8	6.9	10.9	..	18.7	30	2.5	16	221	23	..	32	23	103
Lake Rotoroa	443	11.8	3.2	7.5	..	18.2	30	-2.6	16	340	26	..	38	25	..
Lake Rotoiti	634	11.4	1.6	6.5	+0.1	19.4	30	-4.5	16	218	20	+86	30	12	..
Hokitika Airport	39	12.9	6.4	9.7	+0.1	18.7	26	2.5	16	360	24	+121	44	8	110
Punakaiki	4	14.3	8.6	11.5	..	17.9	26	6.2	14	244	24	..	36	23	..
Reefton	198	13.5	5.0	9.3	+0.4	18.2	24	0.5	16	245	22	+70	30	23	..
Barrytown	30	13.7	8.2	11.0	..	17.0	26	4.5	15	309	24	..	46	23	..
Totara Flat	77	14.3	5.1	9.7	+0.2	18.9	27	-0.5	16	264	22	+96	36	8	..
Greymouth	4	13.1	6.5	9.8	-0.4	17.0	27	4.0	15	343	25	+142	59	10	79
Otira Substation	383	10.9	3.8	7.4	..	15.0	4	-1.3	16	811	27	+339	126	23	..
Springs Junction	421	12.1	2.3	7.2	..	17.0	30	-2.1	16	313	18	+107	45	23	..
Pukekura	86	12.9	4.7	8.8	..	18.5	26	-1.4	16	361	23	..	54	23	..
Hari Hari	45	13.4	5.2	9.3	+0.2	19.5	26	-1.6	16	459	24	+114	81	23	..
Okarito	10	13.1	6.3	9.7	..	17.0	27	1.5	16	359	23	..	38	7	..
Franz Josef	122	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Franz Josef	155	12.5	5.2	8.9	..	17.9	26	1.0	15	636	25	..	101	23	73
Fox Glacier	152	12.5	5.0	8.8	..	17.0	26	-0.9	15	601	23	+173	124	23	..
Milford Sound	3	12.3	3.7	8.0	-0.6	17.8	27	-1.0	16	809	23	+271	160	20	..
Puyssegur Point	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stephens Is	187	12.8	8.1	10.5	..	15.0	30	4.7	15	146	20	+80	34	10	..
Riwaka Motueka	8	15.4	5.4	10.4	+0.4	19.8	21	0.4	16	210	16	+93	62	25	184
Tapawera	146	15.4	4.7	10.1	..	22.8	30	-2.0	16	197	19	..	46	25	..
Craik Bay Pelorus Sd	13	14.4	7.6	11.0	..	19.0	30	2.5	16	242	19	..	61	10	..
Appleby	17	15.1	6.6	10.9	+0.6	17.8	21	1.5	16	131	18	+52	27	25	..
Nelson Airport	2	14.8	5.8	10.3	+0.7	17.7	24	0.2	16	125	18	+49	21	25	168
Rai Valley	79	15.1	5.3	10.2	+0.8	23.2	30	-0.5	17	202	17	+39	28	25	..
Moutere Hills	110	14.5	7.1	10.8	+0.6	17.8	6	3.2	16	130	18	+41	29	25	..
Blenheim Airport	27	15.3	5.2	10.3	+0.4	21.1	30	-1.2	4	100	15	+36	23	30	..
Brancott Valley	64	15.7	4.5	10.1	..	19.9	20	-1.2	4	99	14	..	21	30	..
Blenheim	4	16.0	5.2	10.6	+0.2	20.5	20	-0.7	4	99	14	+46	21	30	173
Wither Hills Blenheim	32	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waihopai Power Stn	262	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vernon Lagoons	2	15.8	5.1	10.5	+0.5	22.0	24	-1.3	4	80	12	..	23	30	151
Lake Grassmere	2	15.1	6.1	10.6	+0.3	19.6	30	0.8	1	62	11	+19	20	30	158
Cape Campbell	3	14.6	8.0	11.3	+1.4	19.1	23	4.2	16	77	12	+29	24	30	..
Boyle River Lodge	600	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hanmer Forest	387	13.8	2.2	8.0	-0.1	21.5	30	-3.5	16	131	17	+42	23	13	137
Molesworth	893	11.0	-0.1	5.5	-0.3	19.1	30	-5.1	5	98	13	+45	16	13	..
Kaikoura Flats	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kaikoura	108	13.7	6.9	10.3	+0.5	22.7	21	4.4	16	73	11	+22	17	9	166
Arthurs Pass	738	8.3	..	..	..	13.5	4	..	..	560	23	+192	93	21	..
Culverden	174	15.0	3.4	9.2	..	22.3	30	-4.0	1	91	13	..	17	24	..
Balmoral Forest	198	14.5	3.0	8.8	+0.3	23.2	30	-3.0	1	99	15	+53	20	9	..
Waiau	137	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cheviot	85	15.1	4.6	9.9	..	24.6	30	-2.6	1	100	10	..	30	10	..
The Hermitage Mt Cook	765	9.2	1.1	5.2	-1.2	15.3	29	-2.7	15	582	23	+252	110	20	91
Mt John	1027	8.7	0.6	4.7	-0.6	15.6	30	-3.0	26	87	13	+41	20	25	..
Craigieburn Forest	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Coleridge	364	13.5	2.9	8.2	-0.1	20.6	30	-1.6	16	144	17	+70	27	23	..
Highbank Power Stn	336	12.8	4.1	8.5	-0.3	19.8	30	-0.5	26	136	16	+70	31	25	133
Hororata Substation	192	14.5	3.6	9.1	+0.6	22.8	30	-3.0	1	113	16	+60	28	25	..
Winchmore	160	13.8	3.8	8.8	+0.4	22.0	30	-1.8	1	118	12	+67	32	25	..
Peel Forest	274	13.8	2.7	8.3	..	19.6	30	-2.2	16	172	22	..	44	9	..
Ashburton	101	14.6	4.2	9.4	+0.0	21.4	30	-1.7	1	126	12	+75	31	25	119
Waipara	64	14.8	5.2	10.0	..	23.2	30	-2.2	1	85	11	..	28	9	..

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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	Hrs			
Ashley Forest	107	..	..	..	..	..	..	..	..	..	..	..	..	..
Rangiora	46	15.2	4.2	9.7	+0.6	23.6	21	-1.0	17	128	13	+90	35	25	
Darfield	195	14.3	4.2	9.3	+0.2	22.3	30	-1.0	1	113	12	+57	26	9	
Eyrewell Forest	158	..	..	..	..	..	..	..	..	..	..	..	..	..
Christchurch Airport	30	14.7	4.3	9.5	+0.4	24.0	21	-1.9	17	104	10	+61	35	25	
Templeton	46	14.1	4.6	9.4	..	22.6	21	-0.8	16	95	10	..	26	25	
Christchurch	7	..	..	..	..	..	..	..	..	..	..	..	..	..
Bromley Christchurch	9	14.5	5.5	10.0	+0.3	23.0	21	-0.1	16	97	11	+54	30	25	
Mt Pleasant	137	13.9	6.5	10.2	+0.3	21.3	21	3.0	5	124	11	+78	35	25	
Lincoln	11	14.1	4.1	9.1	+0.2	22.5	21	-1.5	16	107	10	+61	28	26	
Quail Island	75	13.5	6.3	9.9	..	26.1	21	3.5	26	116	10	..	29	25	
Akaroa	3	14.8	5.0	9.9	..	24.0	30	-1.0	5	153	9	..	38	9	
Lake Tekapo	683	10.4	1.7	6.1	-0.9	17.7	30	-2.5	15	108	14	+52	24	23	
Lake Pukaki	556	11.1	1.8	6.5	+0.0	16.8	29	-2.0	1	110	15	..	34	23	
Fairlie	304	14.0	1.3	7.7	..	20.3	23	-3.6	1	97	14	..	33	25	
Twizel	457	12.3	0.4	6.4	-0.5	18.2	29	-4.7	16	101	16	..	28	23	
Ikawai	70	13.9	3.5	8.7	+0.2	19.5	20	-2.5	1	92	9	..	23	25	
Geraldine	119	14.3	3.6	9.0	..	19.5	29	-2.0	1	143	13	..	33	25	
Orari Estate	81	14.1	3.1	8.6	-0.1	20.5	23	-1.6	1	147	11	+94	44	10	
Temuka	24	..	..	..	..	..	..	..	..	..	..	..	..	..
Timaru Airport	26	14.1	2.7	8.4	+0.1	20.4	20	-2.0	1	136	10	+95	38	25	
Adair	85	13.8	4.6	9.2	+0.5	19.8	20	0.1	1	132	13	+91	39	25	
Timaru	17	14.0	4.5	9.3	+0.1	20.0	21	-0.5	1	117	13	+76	32	25	
Waimate	61	13.8	4.1	9.0	-0.4	20.9	20	-0.6	1	94	11	+48	27	25	
Aviemore	241	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurow	207	14.2	4.4	9.3	..	18.9	29	-0.5	4	72	15	..	11	21	
Oamaru Airport	30	13.3	4.0	8.7	+0.4	20.0	20	-0.7	4	30	12	-8	7	25	
Knobs Flat	360	..	..	..	..	..	..	..	..	..	..	..	..	..
Tara Hills Omarama	488	11.8	1.2	6.5	-0.5	16.8	29	-2.3	1	95	14	+59	26	23	
Lake Hawea	350	11.7	3.5	7.6	-0.7	15.3	30	-2.0	15	119	14	+48	32	23	
Wanaka	296	13.3	3.1	8.2	-0.1	17.5	30	-2.5	15	101	15	+40	24	23	
Queensberry	277	13.1	3.6	8.4	..	18.5	30	-1.8	15	139	16	..	55	23	
Bendigo	200	13.8	3.6	8.7	..	18.4	30	-2.7	15	56	14	..	12	23	
Naseby Forest	610	..	..	..	..	..	..	..	..	..	..	..	..	..
Windsor	88	..	..	..	..	..	..	..	..	..	..	..	..	..
Oamaru	5	13.4	4.9	9.2	..	19.8	23	-1.0	4	71	13	..	17	25	
Ranfurlly	427	..	..	..	..	..	..	..	..	..	..	..	..	..
Herbert Forest	61	14.6	2.9	8.8	+0.8	20.2	23	-0.5	14	129	16	+78	26	10	
Palmerston	21	13.1	3.8	8.5	+0.6	19.0	23	-1.9	4	98	12	..	20	10	
Cherry Farm Hospital	6	12.9	3.7	8.3	+0.0	20.0	23	-1.6	4	89	18	+53	19	10	
Taiaroa Head	72	..	..	..	..	..	..	..	..	..	..	..	..	..
Invermay, Taieri	30	12.4	4.0	8.2	..	19.6	29	-0.5	15	78	20	..	11	20	
Berwick Forest	18	12.7	3.3	8.0	-0.3	21.4	29	-2.1	15	75	22	+32	16	2	
Dunedin Airport	1	12.9	3.8	8.4	+0.0	20.6	29	-2.1	4	62	18	+24	11	13	
Musselburgh Dunedin	2	11.7	5.6	8.7	-0.5	19.5	20	1.5	15	81	18	+33	22	21	
Te Anau	215	11.7	3.5	7.6	+0.0	16.7	29	-1.7	15	153	15	+59	37	23	
West Arm, Manapouri	232	..	3.3	..	..	..	..	0.5	13	459	25	..	139	23
Borland Burn	183	..	..	..	..	..	..	..	..	..	..	..	..	..
Queenstown	329	12.6	3.7	8.2	+0.1	18.2	29	-0.6	15	131	17	+55	45	23	
Queenstown Airport	349	12.0	2.8	7.4	+0.0	17.2	20	-1.6	16	84	15	+27	28	23	
Otama	183	..	..	..	..	..	..	..	..	..	..	..	..	..
Cromwell Sub Stn	213	13.6	3.0	8.3	..	18.5	30	-3.3	15	57	13	..	10	8	
Cromwell	213	13.8	3.2	8.5	-0.3	18.0	29	-2.6	15	64	16	+36	13	8	
Northburn	210	13.7	3.5	8.6	..	17.7	30	-2.2	15	47	14	..	8	21	
Lauder	370	12.4	3.1	7.8	..	17.8	29	-3.3	15	60	19	..	15	30	
Clyde Dam	160	13.6	3.3	8.5	..	18.8	30	-2.0	15	85	16	..	28	23	
Ophir	305	..	..	..	..	..	..	..	..	..	..	..	..	..
Moa Creek	427	..	..	..	..	..	..	..	..	..	..	..	..	..
Alexandra	141	14.1	3.4	8.8	+0.0	19.6	29	-2.7	15	62	15	+42	14	23	
Clyde	171	13.5	2.8	8.2	..	19.4	29	-3.0	15	76	16	..	24	23	
Roxburgh Power Stn	110	13.6	3.6	8.6	-0.4	20.0	20	-3.0	1	64	15	+36	17	13	
Ettrick	83	14.3	3.5	8.9	..	19.5	20	-3.0	15	70	17	..	16	13	
Deep Stream	396	..	..	..	..	..	..	..	..	..	..	..	..	..
Beaumont	46	13.2	2.9	8.1	..	20.5	29	-1.5	15	125	23	+61	35	2	
Mahinerangi Dam	396	9.9	2.3	6.1	-0.2	17.8	29	-3.0	15	91	22	+35	19	2	
Tapanui	226	11.5	2.8	7.2	-1.3	18.3	29	-1.3	15	98	25	+42	19	2	
Taieri Mouth	15	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuatapere	27	12.8	4.2	8.5	..	19.1	29	-0.5	15	83	21	..	17	23	
Otautau	55	12.4	3.3	7.9	-0.3	19.0	29	-1.4	15	125	23	+49	20	20	
Winton	44	12.2	4.0	8.1	-0.4	19.2	29	-1.1	25	100	17	+49	25	20	
Gore	123	11.6	4.2	7.9	-0.2	19.4	29	0.3	14	106	27	..	28	20	
Hokonui Forest	46	12.3	4.3	8.3	-0.3	19.2	29	-1.1	1	105	20	+39	28	20	
Woodlands	47	12.2	4.0	8.1	-0.1	18.8	29	-0.7	25	123	26	..	32	20	
Invercargill Airport	0	12.1	4.5	8.3	+0.1	19.2	29	-0.6	25	99	24	+25	30	20	
Tiwai Point, Bluff	5	12.1	5.3	8.7	-0.1	19.0	29	1.5	25	94	22	..	29	20	

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for September 1983—continued

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius							Rainfall in Millimetres					Bright Sunshine	
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount		Date
Metres	°C	°C	°C	°C	°C	°C	mm	mm	mm	Hrs					
Stewart Is	3	11.2	4.5	7.9	..	16.9	29	-0.2	25	139	28	..	22	20	..
Milton	18	12.5	3.3	7.9	-0.3	20.9	29	-2.9	4	74	20	+31	11	2	..
Finegand Balclutha	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Owaka	5	11.9	3.8	7.9	..	18.8	20	0.0	25	100	24	..	15	2	..
Nugget Point	129	10.4	4.4	7.4	-0.3	16.2	20	1.4	15	74	27	+21	14	2	..
Tautuku	61	11.8	3.8	7.8	..	20.8	29	0.0	15	112	25	..	18	20	..
Nandi Airport, Fiji	19	30.0	18.8	24.4	-0.2	32.8	23	14.4	1	15	1	..	15	6	242
Rarotonga Airport	7	25.9	20.3	23.1	+1.0	27.2	18	16.5	3	72	9	-37	28	29	202
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raoul Is	38	19.3	13.9	16.6	+0.3	22.3	16	10.5	21	95	16	-22	41	23	170
Campbell Is	15	6.8	2.6	4.7	-0.8	9.7	18	-2.4	18	137	24	+35	35	23	31
Waitangi, Chatham Is	44	11.8	6.8	9.3	+0.2	14.6	28	2.0	19	65	22	+4	10	10	108
Scott Base Antarctica	16	-22.0	-34.2	-28.1	+0.1	-9.6	11	-48.0	30	..	..	..	..	..	..
LATE RETURNS AND CORRECTIONS															
Dargaville 08/1983	20	15.3	8.0	11.7	+0.8	19.0	19	0.0	26	87	16	-50	34	20	120
Kumeu 08/1983	32	15.3	5.4	10.4	..	17.5	19	-1.6	14	61	16	..	28	20	..
Little Barrier Is 08/1983	2	15.0	9.7	12.4	..	17.4	3	6.5	26	92	17	-83	35	20	..
Waihi 08/1983	91	14.6	4.7	9.7	+0.1	17.7	10	-2.0	17	117	13	-122	47	29	132
Waharoa 08/1983	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Port Ohope 08/1983	9	15.5	6.6	11.1	..	18.5	11	2.6	15	48	12	..	23	20	165
Te Teko 08/1983	8	16.6	4.1	10.4	+0.5	19.7	10	-1.0	14	116	9	-39	72	20	139
Huntly 07/1983	34	12.8	2.7	7.8	..	16.1	9	-2.8	27	29	9	..	24	9	..
Huntly 08/1983	34	14.6	6.6	10.6	..	17.5	4	-0.3	1	71	11	..	38	20	..
Whatawhata 08/1983	104	14.1	5.8	10.0	+0.3	16.5	2	-0.3	26	91	13	-66	37	20	125
Hamilton Airport 07/1983	50	13.5	-0.3	6.6	-1.2	16.3	14	-5.0	21	32	4	-85	29	9	..
Hamilton Airport 08/1983	50	15.0	3.3	9.2	+0.2	17.0	2	-2.5	16	72	9	-45	36	20	..
Port Taharoa 08/1983	27	14.1	8.0	11.1	+0.2	17.2	2	2.6	14	77	..	..	..	..	..
Chateau, Mt Ruapehu 08/1983	1097	7.5	-0.2	3.7	..	12.2	16	-4.0	16	139	16	..	58	20	..
Wharerata Forest 07/1983	439	..	3.1	..	..	..	..	0.2	3	409	..	..	51	4	..
Wharerata Forest 08/1983	439	..	..	..	..	..	..	..	..	169	..	..	..	..	..
Wharite Peak 07/1983	914	4.3	0.8	2.6	-0.3	12.3	9	-3.0	26	126	17	-67	42	11	..
Wharite Peak 08/1983	914	5.6	1.7	3.7	+0.0	10.0	2	-3.0	14	123	23	-62	32	3	..
Palmerston N D S I R 08/1983	34	13.3	6.1	9.7	+0.6	17.5	3	1.1	15	64	13	-20	27	20	81
Stratford Dem Farm 08/1983	311	12.1	4.5	8.3	+0.5	16.5	1	-0.8	15	143	14	-70	51	20	151
Manaia Dem Farm 07/1983	98	..	4.1	..	..	..	..	-2.3	26	56	17	-76	27	9	109
Ahu Ahu Valley 08/1983	85	13.8	4.2	9.0	..	17.6	1	-0.7	26	79	15	..	19	13	..
Springs Junction 08/1983	421	10.7	0.2	5.5	..	13.4	28	-4.2	26	127	17	-61	26	2	..
Okarito 07/1983	10	..	..	..	..	..	..	..	..	279	10	..	85	31	..
Okarito 08/1983	10	..	..	..	..	..	..	..	..	218	11	..	80	2	..
Franz Josef 08/1983	122	12.7	2.6	7.7	+0.1	14.5	4	-1.5	14	357	14	-24	91	20	..
Cape Campbell 08/1983	3	12.6	7.3	10.0	+1.3	15.6	8	4.4	14	27	8	-37	14	3	..
Craigieburn Forest 08/1983	914	9.4	-1.0	4.2	+1.1	13.4	28	-4.5	26	278	25	+154	108	10	..
Waipara 08/1983	64	13.1	3.3	8.2	..	18.3	9	-2.2	28	28	8	..	12	24	..
Adair 08/1983	85	11.7	3.6	7.7	+0.9	18.2	19	0.6	27	32	7	-9	16	21	..
Aviemore 08/1983	241	..	..	..	..	..	..	..	..	19	7	-11	12	21	..
Knobs Flat 08/1983	360	10.0	-0.4	4.8	..	13.9	16	-4.0	29	142	11	-28	32	9	..
Windsor 07/1983	88	9.4	1.6	5.5	..	17.3	31	-2.0	4	29	4	..	18	9	..
Windsor 08/1983	88	12.0	2.5	7.3	..	18.4	19	-1.4	15	24	6	..	8	1	..
Taiaroa Head 08/1983	72	11.0	5.2	8.1	+0.8	17.0	19	1.3	14	27	12	-11	7	23	..
Borland Burn 08/1983	183	11.2	-0.2	5.5	..	15.1	9	..	..	129	18	..	45	9	..
Moa Creek 08/1983	427	..	..	..	..	..	..	..	..	16	7	+1	6	2	..
Roxburgh Power Stn 08/1983	110	12.3	0.9	6.6	+0.2	18.0	9	-3.5	26	25	9	+0	6	12	..
Deep Stream 08/1983	396	10.3	-0.5	4.9	..	15.2	9	-7.5	26	21	10	..	6	11	..
Rarotonga Airport 08/1983	7	24.4	17.8	21.1	-0.4	27.1	28	13.8	4	89	15	-33	33	8	180
Totokoitu, Rarotonga 08/1983	9	23.7	17.7	20.7	..	26.4	28	13.9	1	126	17	..	30	29	..
Scott Base Antarctica 02/1983	16	-9.5	-17.9	-13.7	-3.1	0.7	5	-30.9	23	..	..	..	..	..	..
Scott Base Antarctica 03/1983	16	-14.7	-26.2	-20.5	-0.3	-6.0	30	-35.8	23	..	..	..	..	..	..
Scott Base Antarctica 04/1983	16	-13.6	-23.2	-18.4	+5.9	-4.4	30	-32.6	7	..	..	..	..	..	..
Scott Base Antarctica 05/1983	16	-14.4	-21.8	-18.1	+0.3	-4.9	2	-37.5	16	..	..	..	..	..	..
Scott Base Antarctica 06/1983	16	-22.0	-35.2	-28.6	-2.4	-4.2	25	-46.5	16	..	..	..	..	..	..
Scott Base Antarctica 07/1983	16	-24.8	-36.6	-30.7	-0.9	-14.6	2	-47.6	17	..	..	..	..	..	..

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 rainy day 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 IN SEPTEMBER 1983

General—September was a mild, cloudy, and wet month in most parts of New Zealand, although some eastern North Island areas remained very dry.

Strong winds were more frequent than usual over the whole country, and south-westerlies were more frequent than usual over the North Island. Strong north-westerlies, gusting to around 50 knots on the 10th at Auckland, caused some 20 to 30 boats to break their moorings on the Waitemata Harbour, and also caused numerous power cuts.

Strong to gale force north-westerlies on the 20th, 21st, and 23rd caused disruptions in the Wellington, South Canterbury, Otago, and Southland areas. Power supplies were interrupted, trees and buildings damaged and driving conditions made hazardous. At least 2 people (in Wellington and Ashburton) required hospital treatment after being blown over. Both Wellington the Dunedin airports were closed for a time as a result of high winds.

Heavy snow fell over the Fiordland area during the period 19 to 23 September, resulting in numerous avalanches, one of which killed a Ministry of Works and Development Overseer on the Milford Road. Avalanches and floodwaters also badly damaged Pompolona Hut on the Milford Track.

Good lambing conditions were reported in most North Island areas, but snow and wet weather resulted in heavy losses in some parts of the South Island. Farmers in most areas reported good grass growth although ground conditions remained very dry in some eastern North Island areas.

Rainfall—Much of the North Island's east coast experienced another very dry month. Napier recorded only 14 mm of rain, only slightly more than the record low rainfall recorded there in September 1951. A total of 17 mm was recorded at Gisborne, their lowest September rainfall since 1973 and the third lowest in the past 46 years.

On the other hand most of the South Island and western areas of the North Island experienced very high rainfalls. Timaru and Alexandra both received more than 3 times their usual September rainfalls, with Timaru receiving its highest September total since 1946. The 64 mm recorded at Alexandra has only been exceeded in one other September since 1922. The rainfall distribution over the South Island however was rather patchy, with Oamaru recording only about 85 percent of its usual September rain.

Temperatures—With the exception of some inland and western South Island areas, temperatures were warmer than usual over New Zealand during September. Much of the North Island and the north of the South Island had temperatures around 1°C above average, while eastern South Island areas recorded temperatures around 0.5°C warmer than usual. Some inland and western parts of the South Island experienced temperatures around 0.5°C below average.

Temperatures on the 1st and 2nd were close to normal but the following 4 days were cool. Above average temperatures were experienced over the South Island between the 7th and 14th, following by a return to cooler conditions between the 15th and 19th. The North Island however, had below average temperatures for much of the period from the 7th to the 19th.

Temperatures were generally close to average for the rest of the month, although Christchurch recorded a record low maximum of 5.9°C on the 25th.

Sunshine—Although eastern North Island areas and parts of Northland recorded more sunshine than usual during September, most of the country was cloudier than usual. Ohakea and Dunedin airports both recorded their lowest September sunshine totals since readings were first taken (in 1954 and 1962 respectively). Most of the South Island with the exception of Nelson, Marlborough, and North Canterbury, recorded less than 75 percent of the usual September sunshine.

THE WEATHER SEQUENCE—SEPTEMBER 1983

1–7 September

A complex trough moved across New Zealand during the 1st, bringing rain to western areas from Taranaki southwards, and also to Southland and Otago. The rain eased to showers on the 2nd and on the 3rd the flow turned southerly with the remaining showers clearing. A ridge spread over New Zealand and gave generally dry, cool weather on the 4th, 5th, and 6th, although a weak front crossed the country giving a few showers to areas about the west of the main ranges in both islands. A complex low moved onto the South Island during the 7th and its associated cold front brought rain to much of New Zealand, with heavy falls in areas about the west of the South Island high county. Eastern areas however remained dry.

8–14 September

The weather remained dry in the east on the 8th, but most other areas received further rain as the low and its front moved off the country. Another complex low moved onto New Zealand on the 10th, bringing widespread rain, with some heavy falls. Strong westerlies spread onto the country as this low moved away. Disturbances in the westerlies gave frequent showers to northern and western areas during the 11th, 12th, 13th, and 14th, with a few showers spreading to eastern areas at times.

15–21 September

Heavy showers, thunderstorms, and strong winds caused power cuts and disrupted communications at Auckland in the early hours of the 15th. However the weather cleared during the day as a cold southerly flow spread over the country. An anticyclone moved onto the North Island bringing fine weather to most of the country during the 16th, 17th, and 18th, although a few showers were recorded on the western and southern coasts of the South Island.

A cold front moved onto the South Island early on the 19th and brought rain to western areas of both islands before moving off to the east during the following morning. Another cold front moved across the South Island during the 21st preceded by a warm north-westerly flow, and gave rain to much of the country, although only a few showers fell east of the ranges. North-westerly gales ahead of this front caused damage at Wellington and in parts of South Canterbury.

20–30 September

The front moved off to the east on the 22nd and an anticyclone moved onto the North Island, bringing fine weather to most of the country, although strong westerlies continued to give showers to western South Island areas. Another front moved onto Fiordland on the 23rd, bringing heavy rain and snow to the area. Strong north-westerlies ahead of the front caused further damage in South Canterbury. A low developed on the front, west of central New Zealand, during the 24th and brought widespread rain to the country before moving off to the east on the 27th. A cool southerly flow spread over the country, bringing clearing weather as the low moved away.

An anticyclone moved onto New Zealand during the 28th and 29th with fine weather in most places. A cold front moved quickly south-east across the South Island on the 29th, bringing showers to areas west of the alps. Another cold front moved onto the South Island early on the 30th and gave rain to western areas of both islands and a few showers to Canterbury.

(N.Z. Mets. Pub. 107)

J. S. HICKMAN, Director.

