



The New Zealand
Gazette

OF THURSDAY, 19 NOVEMBER 1987

WELLINGTON: MONDAY, 23 NOVEMBER 1987 — ISSUE NO. 205

CLIMATOLOGICAL TABLE

FOR SEPTEMBER 1987

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for September 1987

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	B			Maximum	Date	Minimum	Date				Amount		Date
		Max.	Min.	°C	°C	°C	°C	°C	°C	mm	mm	mm	Hrs		
Aupouri Forest	69	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kaitaia	8	17.4	10.1	13.8	..	19.6	23	6.1	1	102	20	..	33	8	..
Kaitaia Observatory	85	16.2	10.3	13.3	..	17.6	23	6.5	1	112	17	..	33	8	129
Kerikeri M A F	79	17.4	8.8	13.1	..	21.4	30	4.4	1	117	21	..	27	8	..
Kerikeri Aero 2	150	17.0	8.3	12.7	..	21.6	30	5.0	1	162	18	..	28	1	..
Panguru	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kaikohe DSIR EDR	204	14.5	8.9	11.7	..	17.3	3	5.1	1	127	21	..	25	8	..
Waiotemarama	229	15.2	9.6	12.4	+0.5	20.0	30	6.5	1	148	24	..	18	14	..
Waipoua Forest	88	15.7	9.0	12.4	+0.5	21.0	30	2.5	1	158	23	+18	20	4	..
Dargaville MAF	20	16.0	9.9	13.0	+0.7	19.3	30	2.2	1	106	19	+12	22	15	132
Glenberrie Forest	107	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whangarei Aero	37	16.9	9.7	13.3	+0.4	24.2	30	5.0	1	85	18	-37	21	2	..
Whangarei Hospital	29	17.3	8.8	13.1	+0.5	24.6	30	3.0	1	104	17	..	17	15	140
Marsden Power Stn	3	17.1	9.7	13.4	+0.4	19.0	29	4.8	1	98	..	-13	22	15	..
Poua	97	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leigh 2	27	16.5	10.4	13.5	+0.6	20.7	30	7.8	7	82	19	-27	20	2	141
Warkworth	72	16.3	8.6	12.5	+0.5	19.6	30	2.3	1	167	20	+22	39	2	..
Woodhill Forest	30	16.4	8.9	12.7	+0.5	19.6	5	1.9	1	104	19	-7	17	14	..
Kumeu	32	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whenuapai Aero	26	16.1	9.1	12.6	+0.6	18.5	30	1.8	1	138	21	+25	31	2	..
Henderson, River Pk	4	17.0	8.6	12.8	..	20.1	30	1.4	1	144	21	..	29	2	..
Auckland Albert Park	49	..	..	..	..	..	..	..	..	130	21	+29	25	2	141
Auckland Owairaka	41	16.0	9.8	12.9	+0.6	18.9	30	4.8	1	146	20	+36	41	2	..
Port Fitzroy	4	16.4	9.6	13.0	-0.2	19.5	30	5.0	1	127	17	-37	59	2	..
Little Barrier Is	2	16.4	10.7	13.6	..	21.1	30	7.4	1	95	19	-26	40	2	..
Rotorua Is	30	15.3	10.6	13.0	..	18.2	30	7.2	13	84	14	..	17	14	..
Awaroa Valley	30	16.1	9.0	12.6	..	19.5	30	2.8	1	123	19	..	25	2	..
Manukau Heads 2	244	14.3	9.2	11.8	..	16.7	3	5.2	16	78	17	-3	32	2	..
Coromandel	43	16.6	8.9	12.8	..	19.2	30	3.3	1	148	18	..	65	2	..
Whangapoua Forest	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Thames 2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tairua Forest	3	16.8	8.5	12.7	+0.6	21.4	30	2.3	1	125	13	-36	38	2	..
Ngatea 3	1	17.2	7.6	12.4	..	20.0	30	0.2	6	108	15	..	21	2	..
Paeroa	4	17.0	8.0	12.5	+0.7	20.6	30	0.9	1	85	21	-38	14	11	..
Waihi	91	16.0	8.6	12.3	+0.7	19.5	3	0.9	1	165	19	-31	40	2	141
Te Aroha	18	16.7	8.8	12.8	+0.4	20.2	30	2.6	1	104	20	-36	26	2	..
Katikati	2	17.0	8.7	12.9	..	20.6	30	2.6	6	109	14	..	47	2	..
Waitoa	18	16.9	7.4	12.2	..	19.0	30	2.4	1	92	14	..	17	4	..
Tauranga	2	16.6	9.2	12.9	+0.5	19.2	30	6.0	6	52	15	-61	14	2	..
Tauranga Aero	4	16.4	7.8	12.1	+0.3	19.4	30	4.7	20	50	14	-66	12	8	184
Te Puke	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Te Puke EDR	91	16.5	6.5	11.5	..	..	..	..	..	..	..	..	..	..	..
Whakatane Aero	6	16.7	6.4	11.6	+0.6	19.8	24	1.9	7	187	11	+89	128	8	200
Te Kaha	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Port Ohope	9	16.8	8.3	12.6	+0.5	20.0	24	4.8	26	15	6	..	5	8	189
Kinleith 2	383	13.8	6.1	10.0	+0.5	16.5	29	1.7	20	138	18	-5	22	3	..
Tikitere	338	13.8	6.5	10.2	+0.2	16.3	29	3.1	20	109	17	..	27	2	..
Kawerau	30	17.5	..	..	..	23.0	29	..	..	89	9	-54	21	3	..
Te Teko	8	18.3	6.1	12.2	+0.6	22.0	26	2.2	7	57	9	-73	18	3	176
Rotorua Aero 2	287	14.7	6.4	10.6	+0.4	18.2	26	1.5	20	101	18	-21	19	2	165
Atiamuri Power Stn	253	15.4	5.1	10.3	+0.5	18.3	26	-1.0	6	86	18	-31	22	11	..
Kaingaroa Forest	544	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Murupara	198	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Galatea	190	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ohaaki	350	14.9	5.2	10.1	..	18.7	29	-1.0	20	51	17	..	17	11	..
Taupo NZED	376	13.8	5.5	9.7	+0.3	17.0	30	0.0	21	71	14	-26	16	11	157
Wairakei Power Stn	342	14.6	5.0	9.8	+0.2	18.0	26	-0.6	20	71	15	-33	17	11	..
Wairakei Research Stn	402	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Minginui Forest	366	15.2	4.3	9.8	+0.9	21.0	26	-2.1	21	90	..	-38	14	3	..
Taupo Aero	400	13.1	4.9	9.0	-0.1	16.7	30	-1.6	21	65	13	-12	12	8	..
Waimihia Forest	762	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Opotiki	6	16.6	6.9	11.8	+0.3	19.4	24	1.3	7	78	10	-35	50	3	175
Waimana	37	17.1	5.4	11.3	+0.3	20.5	26	-1.0	20	119	8	-21	39	8	..
Matawai MAF EDL	580	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Auckland Mangere	4	15.9	10.5	13.2	+0.6	18.4	3	4.9	1	112	18	+16	24	2	135
Auckland Aero	8	15.7	10.1	12.9	+0.3	19.2	30	5.4	1	103	17	+8	20	2	157
Ardmore	30	15.9	8.2	12.1	+0.4	19.0	30	2.8	21	124	25	+16	21	15	..
Pukekohe MAF	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pukekohe EDR	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maioro Forest	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hunua	122	15.4	7.6	11.5	..	18.9	30	1.4	1	135	20	..	21	14	..
Maramarua Forest	38	16.0	6.9	11.5	+0.3	19.3	30	1.0	1	124	18	+17	16	12	..
Te Kauwhata MAF	32	15.9	8.3	12.1	+0.2	18.5	3	2.8	1	109	20	+14	15	13	138
Ruakura	40	16.0	7.5	11.8	+0.6	17.9	30	1.7	6	100	16	-1	16	2	161
Whatawhata	104	15.2	8.5	11.9	+0.5	17.6	3	2.8	6	167	20	+33	25	12	135
Hamilton Aero	50	16.2	6.4	11.3	+0.5	17.9	30	0.4	21	105	16	+0	18	14	..
Cambridge	76	16.0	6.6	11.3	+0.5	18.1	30	0.8	6	109	17	+18	25	14	..
Mokau Mohakato Stn	46	14.7	8.7	11.7	+0.1	16.0	1	3.4	6	139	16	+23	26	8	..
Arapuni Power Stn	123	15.1	6.8	11.0	-0.2	18.1	30	1.5	20	131	16	+6	26	11	..

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for September 1987—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				
Waikeria	46	15.9	6.6	11.3	+0.6	18.5	30	-0.2	6	107	18	..	22	11	..
Te Kuiti WEPB	61	15.8	7.3	11.6	+0.5	18.4	30	2.2	20	156	17	+27	35	2	121
Wairere	122	14.9	6.9	10.9	..	18.1	27	1.6	6	146	20	+13	23	8	..
Pureora Forest	549	11.7	4.5	8.1	+0.0	14.5	6	-2.0	1	167	25	+7	28	2	..
Mangakahu Valley	397	13.1	5.9	9.5	..	16.0	30	0.8	1	140	23	..	27	12	..
Taumarunui	171	15.7	6.1	10.9	+0.2	19.0	30	0.0	6	135	21	+8	42	11	105
Tokirima	152	15.4	4.6	10.0	..	17.5	27	0.5	21	158	18	..	40	11	..
Omata	61	15.4	9.0	12.2	+0.3	18.1	27	6.2	21	156	21	+37	32	4	..
New Plymouth	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Plymouth Aero	27	14.7	8.4	11.6	+0.4	16.0	20	3.4	10	108	20	-1	21	11	153
North Egmont	955	8.6	2.5	5.6	..	15.7	29	-0.1	6	729	24	..	160	8	..
Lower Retaruke	223	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turangi	366	13.5	5.1	9.3	-0.1	17.6	26	-1.1	1	148	19	+6	46	8	121
Mt Ruapehu Chateau	21097	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruapehu The Chalet	1941	2.4	-3.5	-0.6	..	11.8	27	-7.5	19	..	..	..	..	..	..
Tukino	1650	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mt Bruce Res	305	14.1	4.2	9.2	+0.4	18.8	27	-1.1	6	119	22	-96	19	12	..
Waingawa	114	15.7	5.1	10.4	+0.3	20.1	27	0.0	6	43	18	-33	10	15	173
Kopua	311	13.9	5.3	9.6	+0.1	19.0	30	-0.5	6	43	17	-33	9	15	..
Waipukurau Aero	137	15.3	5.0	10.2	+0.1	20.8	30	0.7	15	25	12	-37	7	9	172*
Dannevirke	207	14.0	5.6	9.8	-0.3	18.3	30	-0.3	6	69	19	-15	11	12	144
Porangahau	8	15.8	6.5	11.2	..	21.7	30	1.4	1	35	14	..	8	30	..
Castlepoint Light	3	15.5	8.4	12.0	+0.3	20.0	30	4.2	6	24	15	-53	4	15	..
Ngaumu Forest	244	15.3	3.8	9.6	+0.5	19.5	27	-2.1	6	21	15	-75	5	15	..
Tauherenikau	43	15.6	5.8	10.7	+0.2	19.6	28	0.4	15	49	13	-38	11	15	172
Waiorongomai	21	14.9	6.1	10.5	+0.2	18.1	29	0.3	6	73	14	-56	13	15	..
Martinborough	30	16.0	5.7	10.9	..	20.2	30	-0.5	6	16	12	..	5	11	168
Ruatoria	61	17.1	6.5	11.8	-0.2	21.2	24	1.0	26	71	14	-97	37	3	..
Mangatu Forest	182	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gisborne, Manutuke	90	17.4	5.4	11.4	-0.2	21.6	24	0.7	26	21	7	-61	15	3	..
Gisborne Aero	4	17.1	6.1	11.6	+0.0	21.4	24	0.4	7	24	10	-67	11	3	204
Waikaremoana Onepoto	643	14.0	4.6	9.3	+0.6	19.2	26	1.5	6	74	15	-100	13	7	..
Wharerata Forest	439	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tokomaru Bay MAF EDL	244	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Esk Forest	427	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ngamatea NZFS	885	10.6	1.0	5.8	..	16.1	30	-3.8	6	37	22	..	9	9	..
Kaweka Forest	414	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Napier Aero	2	..	6.5	..	..	..	..	1.6	1	23	8	-41	6	9	..
Napier Nelson Pk	2	17.6	7.1	12.4	+0.5	23.2	30	2.3	7	22	8	-39	7	9	209
Havelock Nth DSIR 2	9	17.3	4.7	11.0	..	24.9	30	-0.1	7	14	7	..	6	9	195
Havelock Nth EDR	9	17.3	4.3	10.8	..	24.6	30	-0.3	7	13	8	..	6	9	..
Hastings Civic Sq.	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whakatu	6	17.2	5.3	11.3	..	24.4	30	0.3	7	16	7	..	6	9	..
Gwavas Forest	335	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Makaretu	335	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ongaonga Thornton	190	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mohaka Forest	286	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wairoa Frasertown	8	17.7	5.7	11.7	-0.1	22.1	30	1.2	7	47	13	-53	12	30	..
Wairoa Hospital	20	17.2	7.8	12.5	+0.8	21.8	30	3.8	26	33	12	-67	11	30	200
Kapiti Is	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paraparaumu Aero	7	14.8	7.5	11.2	+0.5	17.2	2	1.2	6	53	16	-33	9	11	150
Bulls Flockhouse	9	15.2	6.8	11.0	+0.3	18.9	2	1.5	1	38	17	-27	13	3	..
Ohakea Aero	48	15.0	7.7	11.4	+0.3	19.2	2	3.9	15	50	16	-17	7	22	141
Palmerston N Kairanga	15	15.0	6.5	10.8	+0.1	17.4	11	1.1	1	42	18	-32	9	12	151
Palmerston N Aero	45	14.9	6.6	10.8	+0.2	18.0	30	1.3	19	71	19	-1	14	12	..
Palmerston N DSIR	34	15.4	7.1	11.3	+0.3	20.6	26	2.0	6	67	22	-7	19	12	122
Foxton	9	15.4	6.9	11.2	..	18.0	30	0.5	10	67	19	..	11	12	141
Waitare Forest	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Levin MAF	46	14.7	7.1	10.9	+0.0	17.2	2	2.0	10	70	20	-16	12	11	126
Titahi Bay Te Pene Av	31	15.1	7.2	11.2	..	17.2	29	0.5	6	29	10	..	9	9	..
Lower Hutt Avalon	15	15.2	7.1	11.2	+0.3	17.8	2	1.9	6	37	17	-65	10	9	..
Wellington Kelburn	125	14.3	7.8	11.1	+0.6	17.5	29	3.4	6	42	14	-62	16	9	162
Somes Is	43	14.3	8.3	11.3	+0.4	17.0	29	4.0	6	38	12	-44	15	9	..
Lower Hutt Gracefield	34	14.8	7.6	11.2	+0.2	18.0	2	2.5	6	38	9	-72	16	9	..
Wainuiomata Coast Rd	82	14.6	6.0	10.3	+0.2	17.5	2	1.0	6	52	16	-102	18	9	..
Wellington Aero	6	15.2	8.8	12.0	+0.9	18.1	29	4.6	16	27	13	-58	11	9	..
Rimutaka Forest	37	15.0	6.3	10.7	..	18.0	29	-0.6	6	26	11	..	9	9	..
Kaitoke	223	14.0	5.3	9.7	+0.5	16.3	29	-2.6	6	62	20	-111	9	11	126
Wallaceville	56	15.1	5.9	10.5	+0.5	18.1	22	0.0	1	42	19	-59	8	11	132
Stratford Dem Farm	311	13.5	5.8	9.7	+0.4	17.4	26	1.6	1	156	19	-12	28	2	147
Kapuni	173	14.4	6.8	10.6	..	17.6	29	1.0	1	100	22	..	16	8	..
Manaia Dem Farm	98	14.4	7.1	10.8	+0.4	16.9	22	0.6	1	84	17	-15	15	12	134
Normanby EDR	122	14.0	7.4	10.7	..	17.0	3	2.2	6	77	17	..	14	8	..
Normanby MAF	122	14.4	6.9	10.7	+0.5	17.1	30	2.0	6	83	21	..	14	8	..
Patea Hospital	43	14.7	..	..	..	17.5	3	..	..	71	14	-14	15	22	..
Turoa, The Giant	2052	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ohakune Junction 2	629	11.7	..	..	..	15.2	29	..	..	126	18	+6	20	12	..
Karioi 2	648	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waiouru MWD	823	10.6	2.5	6.6	+0.0	14.0	29	-2.5	6	82	21	+0	16	9	..
Waiouru Military Camp	823	9.8	2.2	6.0	-0.3	14.0	30	-3.0	6	78	19	-14	16	9	..

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for September 1987—continued

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius							Rainfall in Millimetres					Bright Sunshine Hrs	
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount		Date
Metres	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs			
Ahu Ahu Valley	85	15.7	6.3	11.0	..	19.2	29	1.1	20	83	19	..	14	12	..
Taihape Rec	433	14.1	4.5	9.3	+0.5	18.2	27	-0.9	1	76	21	-6	14	9	..
Wanganui Cooks Gdns	22	15.7	8.7	12.2	+0.8	19.6	30	5.3	2	37	17	-26	8	9	148
Wanganui Aero	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Takaka Kotinga 2	25	16.2	5.1	10.7	..	22.0	30	1.6	6	242	13	..	93	8	188
Totaranui	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Westport Aero	2	14.0	7.4	10.7	+0.4	15.5	1	4.4	25	218	25	+42	45	4	108
Westport Te Kuha EDL	680	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cobb Dam	823	10.3	1.6	6.0	+0.2	18.2	28	-2.2	1	250	19	+74	74	2	..
Arapito	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Rotoroa	443	12.5	3.5	8.0	..	18.0	26	-0.2	1	182	..	..	32	8	..
Lake Rotoiti	634	11.4	1.9	6.7	+0.1	15.9	27	-3.4	19	122	21	-12	23	11	..
Hokitika Aero	39	13.1	6.6	9.9	+0.2	15.5	7	2.6	25	306	25	+70	54	21	121
Punakaiki Rocks	4	13.9	9.0	11.5	..	17.2	2	6.9	6	263	26	..	34	12	..
Reefton NZFS	198	13.5	5.1	9.3	+0.2	17.1	27	-0.4	6	210	24	+33	25	11	..
Barrytown	30	13.5	8.2	10.9	..	17.0	2	6.0	6	303	24	+88	36	11	..
Totara Flat	77	13.3	5.0	9.2	-0.3	16.4	26	0.1	2	177	22	+16	27	11	..
Greymouth Aero	4	..	..	..	..	..	..	..	..	208	..	+14	24	11	..
Springs Junction	421	11.9	2.9	7.4	+0.3	18.1	26	-1.8	6	242	24	+49	36	3	..
Pukekura	86	13.3	4.3	8.8	..	15.7	25	-0.2	19	303	27	..	63	2	..
Harihari NZFS	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okarito	10	13.2	6.5	9.9	..	15.8	23	2.4	19	299	22	..	58	11	..
Franz Josef	155	13.1	5.2	9.2	..	15.7	19	0.6	16	490	23	..	83	2	77
Fox Glacier Main Rd	152	12.4	4.8	8.6	+0.0	15.5	19	-0.3	16	430	26	-7	86	2	..
Milford Sound	3	12.5	4.0	8.3	-0.4	16.0	19	1.3	25	597	23	+31	135	29	..
Deep Cove 2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stephens Is	187	13.3	8.0	10.7	+0.8	15.5	24	5.0	8	38	6	-24	12	8	..
Motueka DSIR	8	16.5	4.5	10.5	+0.4	23.4	30	0.9	19	156	13	+50	59	2	208
Tapawera	146	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pelorous Sd Crail Bay	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Appleby	17	15.4	6.0	10.7	+0.3	19.8	30	2.6	6	99	13	+29	44	2	..
Nelson Aero	2	15.1	5.6	10.4	+0.5	18.8	30	1.7	19	92	15	+21	42	2	195
Rai Valley	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blenheim Research	4	16.4	5.2	10.8	..	24.0	28	0.3	16	34	7	..	10	2	199
Wairau Valley	162	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blenheim Aero	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brancott Valley	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Spray Point Waihopai	457	14.9	..	..	..	24.2	28	..	..	81	15	-3	39	2	..
Duntroon	350	..	..	..	..	..	..	..	..	63	..	-2	30	2	..
Grassmere Salt Works	2	15.7	6.8	11.3	+0.8	23.9	28	0.4	7	15	7	-22	4	2	176
Boyle River Lodge	600	12.3	2.3	7.3	..	16.8	27	-4.6	5	130	23	..	21	30	..
Hanmer Forest	387	15.5	1.6	8.6	+0.5	20.8	28	-3.0	1	39	11	-55	7	30	161
Molesworth	893	12.7	-0.3	6.2	+0.4	21.4	28	-5.7	6	19	7	-26	8	2	..
Kaikoura Weather Stn	108	14.1	6.8	10.5	+0.7	25.3	30	3.3	6	20	12	-33	5	30	164
Arthurs Pass	738	9.4	1.8	5.6	..	15.7	26	-2.5	25	442	23	+96	70	11	..
Culverden MWD	174	15.9	3.0	9.5	..	22.0	28	-3.0	6	26	..	..	..	..	..
Balmoral Forest	198	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waiau Lyndon St 2	137	16.8	2.9	9.9	..	24.0	28	-2.2	6	26	6	..	8	5	..
Cheviot	85	16.1	3.4	9.8	..	24.0	28	-2.0	1	31	10	..	8	6	160
Mt Cook The Hermitage	765	12.2	1.9	7.1	+0.6	23.8	27	-1.5	8	377	22	+34	99	29	129
Mt John	1027	10.3	1.6	6.0	+0.7	19.5	27	-3.2	8	34	8	-12	11	2	..
Craigieburn Forest	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Coleridge	364	15.2	3.2	9.2	+0.8	22.0	27	-0.5	1	50	13	-19	13	30	..
Highbank Power Stn	230	14.3	4.6	9.5	+0.8	20.4	27	0.0	16	36	14	-30	8	30	..
Hororata Substation	192	15.2	2.8	9.0	+0.4	23.6	28	-3.6	6	26	14	-23	8	15	145
Winchmore MAF	160	14.4	3.6	9.0	+0.3	23.4	28	-1.5	8	32	11	-15	8	12	..
Peel Forest	274	14.1	2.8	8.5	+0.6	24.2	28	-2.0	6	58	21	+3	9	30	..
Ashburton Council	101	14.9	3.9	9.4	-0.2	24.2	28	-1.4	2	31	13	-14	7	12	133
Ashley Forest 1	107	15.0	4.3	9.7	+0.4	25.0	28	-1.0	13	30	10	-26	5	15	142
Rangiora NZFS	46	16.0	3.7	9.9	+0.7	26.4	28	-2.5	6	15	12	-32	4	15	..
Kairaki	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Darfield	195	15.9	3.6	9.8	+0.5	24.2	28	-0.8	16	28	10	-25	8	15	..
Eyrewell Forest	158	..	..	..	..	..	..	..	..	20	..	-32	5	30	..
Christchurch Aero	30	15.1	4.8	10.0	+0.7	26.2	28	-1.2	6	13	12	-29	7	15	166
Christchurch Gardens	7	15.1	5.4	10.3	+0.4	25.3	28	0.1	16	17	5	-25	10	15	..
Christchurch Bromley	9	15.0	6.6	10.8	+0.9	25.3	28	1.0	6	14	8	-21	8	15	..
Mt Pleasant	137	14.2	7.0	10.6	+0.6	24.0	28	3.0	16	18	7	-29	13	15	..
Lincoln	11	14.7	4.9	9.8	+0.6	24.5	28	-1.0	6	18	10	-23	8	15	142
Akaroa Rue Lavaud	3	15.6	4.2	9.9	+1.0	25.6	28	-3.0	10	23	8	..	9	15	..
Lake Tekapo NZED	683	12.2	1.2	6.7	-0.4	21.0	27	-3.5	25	34	7	-19	12	2	..
Fairlie Riverview Tce	304	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Twizel Substation	451	13.9	2.3	8.1	..	24.5	28	-2.7	8	51	10	..	16	2	..
Ikawai	70	14.1	3.4	8.8	+0.2	22.5	27	-3.0	6	41	10	+11	11	11	..
Geraldine NZFS	119	15.1	3.9	9.5	+0.7	26.1	28	-1.8	6	30	13	-21	6	10	..
Orari Estate	81	14.5	3.6	9.1	+0.4	26.8	28	-2.2	6	33	15	-8	9	15	..
Temuka	24	14.9	3.8	9.4	+0.6	25.6	28	-2.1	6	28	13	-13	7	10	..
Timaru Aero	26	14.6	3.8	9.2	+0.8	25.4	28	-1.9	6	25	9	-9	7	10	..
Timaru 2	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waimate	61	13.8	5.0	9.4	-0.1	24.1	28	0.5	6	37	10	+2	10	11	..
Benmore Power Stn	253	13.8	4.9	9.4	..	20.6	27	1.0	6	32	12	-2	15	2	..

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for September 1987—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			
Aviemore 2	241	14.1	4.3	9.2	..	21.9	27	-2.1	8	29	10	+1	9	11	..
Kurov	207	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Knobs Flat	375	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tara Hills EDR	488	13.0	1.7	7.4	..	20.0	27	-4.2	25	49	13	..	23	2	..
Lake Hawea	350	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wanaka	296	14.1	3.2	8.7	+0.5	20.1	26	-1.8	6	57	14	-4	17	2	..
Queensbury MWD	277	13.5	3.3	8.4	..	21.7	27	-1.2	25	53	11	..	14	29	..
Bendigo 2	200	14.4	3.2	8.8	..	22.2	28	-2.3	8	37	14	..	8	2	..
Naseby Forest 2	607	12.0	1.6	6.8	..	21.2	28	-3.8	8	30	11	..	15	30	..
Oamaru Spey St	5	13.7	4.9	9.3	..	22.5	28	-0.5	6	35	11	..	10	11	..
Ranfurly Maniototo	427	12.3	0.2	6.3	-0.8	20.1	27	-5.9	9	38	9	+16	12	21	101
Herbert Forest	61	14.5	2.9	8.7	+0.5	24.2	27	-1.8	6	76	11	+35	24	11	..
Palmerston	21	13.9	3.1	8.5	+0.4	22.2	28	-3.7	6	70	13	+36	25	11	143
Cherry Farm Hospital	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taiaroa Head	72	11.6	5.7	8.7	-0.1	21.8	27	2.1	7	69	19	+27	19	11	..
Invermay EDR	30	13.0	3.6	8.3	..	20.9	27	-2.1	6	85	21	..	19	11	..
Berwick Forest	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunedin Aero	1	13.8	2.8	8.3	-0.2	21.9	28	-3.0	2	63	20	+24	12	11	133
Dunedin Musselburgh	2	12.9	5.7	9.3	+0.0	22.5	27	1.0	6	71	19	+22	20	11	119
Te Anau Po	215	12.3	3.4	7.9	+0.2	17.5	25	-1.3	23	133	19	+31	24	2	133
Manapouri West Arm 2	232	9.9	3.5	6.7	+0.0	16.2	26	0.0	25	394	24	+68	52	29	..
Borland Burn	183	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queenstown	329	13.0	4.1	8.6	+0.3	19.9	28	0.5	8	118	17	+41	38	2	154
Queenstown Aero	349	12.3	2.6	7.5	+0.2	19.0	27	-1.7	7	83	16	+24	16	2	..
Burwood Bush	490	11.0	1.4	6.2	..	17.0	25	-3.5	8	117	18	..	17	2	..
Cromwell Sub Stn	213	14.2	3.6	8.9	..	22.5	28	-2.6	8	28	9	+2	11	21	..
Cromwell MWD	213	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Northburn	210	14.2	3.4	8.8	..	23.2	28	-1.6	8	33	12	..	8	21	..
Cromwell 2	213	13.8	3.1	8.5	..	22.5	28	-3.0	8	38	14	..	9	21	163
Lauder EDR	370	12.5	2.0	7.3	..	20.3	27	-2.7	10	49	10	..	15	21	..
Clyde Dam	160	13.8	2.7	8.3	..	22.2	28	-1.9	8	41	14	..	15	21	..
Ophir 2	305	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clyde DSIR	171	14.2	2.4	8.3	..	22.5	28	-3.4	8	37	13	..	14	21	..
Alexandra B Council	141	14.7	3.0	8.9	..	23.3	28	-2.5	8	32	13	..	14	21	133
Roxburgh Power Stn	110	13.8	3.6	8.7	-0.3	22.7	28	-1.5	8	54	19	+27	14	21	..
Etrick No 1	83	14.5	2.8	8.7	..	23.0	28	-4.0	6	79	20	..	13	21	..
Etrick No 2	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beaumont NZFS	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mahinerangi Dam	396	10.8	1.7	6.3	-0.2	19.4	27	-1.4	10	127	22	+69	17	12	..
Tapanui	226	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taieri Mouth	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton B Council	44	12.8	3.4	8.1	-0.4	20.0	27	-0.5	8	94	24	+34	20	20	104
Gore EDR	123	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wyndham	20	12.7	3.9	8.3	..	17.9	27	-1.8	7	109	23	..	20	20	..
Invercargill Aero	0	12.3	4.3	8.3	+0.1	16.9	27	0.0	10	111	22	+34	26	20	104
Tiwai Point	5	12.0	5.1	8.6	-0.2	16.6	1	0.6	8	93	22	+9	14	20	..
Stewart Is	3	11.8	3.7	7.8	-0.2	18.6	27	-1.3	8	173	28	+57	21	23	..
Clinton School	120	12.2	3.3	7.8	..	18.2	27	-2.5	8	114	20	..	13	11	..
Balclutha Finegand	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Owaka	5	13.1	3.6	8.4	+0.2	18.7	27	-3.2	8	112	21	+59	24	11	..
Nugget Point	129	10.8	4.6	7.7	-0.5	17.3	27	1.3	16	107	23	+49	19	20	..
Tautuku	40	12.1	4.3	8.2	-0.2	19.9	27	0.6	10	164	22	+74	21	29	..
Fiji Nadi Aero	15	28.9	18.5	23.7	-0.9	31.5	16	14.8	7	4	4	-88	3	15	231
Ci Rarotonga Aero	7	24.7	18.4	21.6	-0.7	26.5	19	13.9	9	25	7	-87	12	29	142
Ci Raro Totokoitu	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raoul Is	38	19.4	13.4	16.4	-0.1	21.2	14	10.4	21	52	20	-71	14	3	164
Campbell Is	15	7.3	2.5	4.9	-0.7	10.8	2	-1.2	7	172	28	+66	20	8	37
Chatham I Waitangi	44	11.7	6.1	8.9	-0.4	14.4	5	2.5	9	63	23	-3	20	12	132
Chatham I Kaiangaroa	41	12.5	6.4	9.5	..	14.8	4	2.9	25	52	26	..	13	12	..
Ant Scott Base	16	-19.1	-30.8	-25.0	+3.1	-8.5	16	-48.6	25	..	..	..	..	..	..

LATE RETURNS AND CORRECTIONS

Galatea 07/1987	190	13.3	0.8	7.1	..	15.5	15	-4.2	31	17	5	..	11	25	..
Minginui Forest 07/1987	366	12.3	0.6	6.5	+0.7	14.7	29	-8.0	29	21	8	-122	8	25	..
Minginui Forest 08/1987	366	14.5	2.1	8.3	+1.3	19.1	24	-4.1	13	114	10	-30	38	4	..
Arapuni Power Stn 08/1987	123	15.0	4.5	9.8	+0.5	17.9	23	-0.5	16	96	14	-41	22	4	..
New Plymouth 08/1987	55	15.4	6.6	11.0	+0.9	18.1	18	0.9	13	71	14	-86	35	22	..
Lower Retaruke 07/1987	223	12.1	1.5	6.8	+0.1	14.8	16	-3.6	7	37	15	-109	13	22	..
Lower Retaruke 08/1987	223	14.8	3.9	9.4	+1.4	18.2	24	-2.3	13	88	..	-48	40	4	..
Ruapehu The Chalet 07/1987	2.0	-4.5	-1.3	..	6.5	11	-8.2	20	..	..	..	..	..	..	..
Ruatoria 08/1987	61	15.6	6.1	10.9	+0.6	19.9	18	-1.0	17	141	13	-110	27	27	..
Ngamatea NZFS 08/1987	885	10.2	0.2	5.2	..	14.0	5	-4.4	13	49	14	..	17	26	..
Ongaonga Thornton 07/1986	190	11.7	0.2	6.0	..	17.5	26	-5.7	17	..	..	..	..	..	..
Ongaonga Thornton 08/1986	190	11.4	2.0	6.7	..	15.5	11	-4.0	27	101	20	..	21	25	..
Ongaonga Thornton 09/1986	190	14.5	3.1	8.8	..	19.3	29	-3.6	1	169	14	..	91	17	..
Ongaonga Thornton 10/1986	190	17.4	7.2	12.3	..	23.0	26	1.1	29	52	14	..	12	11	..
Patea Hospital 08/1987	43	14.8	8.0	11.4	+1.5	18.0	25	2.7	13	27	9	-67	8	26	..
Westport Te Kuha EDL 08/1987	680	8.9	4.2	6.6	..	12.7	27	1.9	10	458	23	..	117	21	..
Lincoln 07/1987	11	10.9	2.2	6.6	+0.9	17.3	9	-2.7	31	30	12	-38	10	12	85
Lincoln 08/1987	11	13.9	3.9	8.9	+1.9	17.6	10	-0.9	13	17	12	-42	7	5	138

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for September 1987—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	Hrs			
Timaru 2 07/1987	17	10.5	2.0	6.3	..	19.3	9	-1.4	31	20	9	..	11	12	106
Timaru 2 08/1987	17	12.3	4.5	8.4	..	18.5	10	-0.5	8	22	12	..	5	27	116
Kurow 08/1987	207	13.2	3.3	8.3	..	17.9	17	-1.2	14	22	15	..	8	27	..
Tara Hills EDR 08/1987	488	12.0	0.3	6.2	..	16.0	17	-6.7	15	23	12	..	6	21	..
Clinton School 08/1987	120	11.3	3.3	7.3	..	14.6	17	-2.0	1	46	..	..	18	21	..
Tautuku 08/1987	40	12.2	3.6	7.9	+1.2	16.7	31	0.5	31	70	18	+5	15	11	..
Ci Raro Totokoitu 07/1987	9	23.0	16.8	19.9	-1.6	26.1	15	12.4	23	62	17	..	22	15	..
Raoul Is 07/1987	38	18.9	13.4	16.2	-0.1	21.3	1	10.5	8	109	24	-68	26	25	177
Raoul Is 08/1987	38	18.7	13.3	16.0	-0.3	20.3	7	10.9	12	105	17	-33	36	23	173
Chatham I Kaiangaroa 08/1987	41	11.6	7.2	9.4	..	14.0	2	3.5	12	32	20	..	7	22	..
Ant Scott Base 02/1987	16	-9.1	-15.4	-12.3	-1.6	-0.9	1	-26.4	25	..	..	..	..	..	..
Ant Scott Base 03/1987	16	-17.9	-27.3	-22.6	-2.2	-8.1	13	-39.0	25	..	..	..	..	..	..
Ant Scott Base 04/1987	16	-20.1	-30.4	-25.3	-1.2	-10.1	12	-41.2	20	..	..	..	..	..	..
Ant Scott Base 05/1987	16	-19.3	-30.7	-25.0	+2.2	-7.0	15	-50.2	5	..	..	..	..	..	..
Ant Scott Base 06/1987	16	-17.7	-28.4	-23.1	+3.2	-9.6	7	-38.9	18	..	..	..	..	..	..
Ant Scott Base 07/1987	16	-21.3	-30.9	-26.1	+3.2	-11.3	23	-45.0	12	..	..	..	..	..	..

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 SEPTEMBER 1987

General—This September it was rather dry in many eastern regions. It was also warmer than normal in most places.

Strong winds were more frequent than usual, for the sixth consecutive month over the south of the South Island. They were also more frequent over the north of the North Island. South-westerlies predominated over the whole of New Zealand.

Mean sea level pressures were below normal over the whole of the country, especially in the far south, where they were 8 to 9 hPa below.

Rather cold conditions prevailed in Canterbury on the 7th when maximum temperatures in many places were about 7 degrees below normal, whereas extremely high temperatures, for September, were recorded in Canterbury during the afternoon of the 28th, in gusty north-westerly conditions. Record high temperatures for September were recorded at Orari Estate (26.8°C), Rangiora (26.4°C), Christchurch Airport (26.2°C), Temuka (25.6°C), and at Bromley (25.3°C). Records began at Christchurch Airport in 1953; the previous maximum recorded there for September was 24.8°C.

A small tornado affected the Awatapu—Riverside areas of Whakatane at approximately 4.30 p.m. on the 11th. It was reported to have had a path 4 km in length, and caused extensive damage to two houses and minor damage to eighteen others.

North-westerly winds up to gale force affected Wellington, the Kaikoura Coast, and Canterbury on the 30th. A car was blown off the road on the Rimutaka Hill (north of Wellington) in the high winds. A wind gust of 63 knots (117 kph) was recorded at Kaikoura.

Rainfall—Rainfall totals were as low as 30 percent of normal in Gisborne, Hawke's Bay, and along the east coast of the South Island from Cape Campbell to Christchurch. It was also drier than usual in Bay of Plenty, Wairarapa, Wellington, Horowhenua, and in South Canterbury, with rainfall between 40 and 70 percent of normal.

Only 27 mm (32 percent of normal) was recorded at Wellington Airport, making this the driest September there since records began in 1960.

In Auckland, Nelson, Southland and coastal Otago rainfall was 120 to 140 percent of normal, but in central Otago totals of up to 200 percent of normal were recorded.

Temperature—Mean daily temperatures ranged from 0.5 to 1°C above normal in most places, except for Fiordland where mean daily temperatures were 0.5°C below normal.

Sunshine—Only 75 to 80 percent of normal sunshine was recorded in Northland, Westland, and coastal Otago. It was sunnier than usual in Bay of Plenty, Taupo, and along the east coast of the North Island; especially in Gisborne, where hours of bright sunshine were 120 percent of normal.

J. S. HICKMAN, Director.

THESE MAPS ARE MEAN SEA LEVEL ANALYSES FOR 0000 HOURS. THEY WERE PREPARED BY NEW ZEALAND METEOROLOGICAL SERVICE MINISTRY OF TRANSPORT P.O. BOX 722 WELLINGTON









