LAND & DEEDS OFFICE
-7 DEC 1981
GISBORNE

SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, 26 NOVEMBER 1981

Published by Authority

WELLINGTON: FRIDAY, 27 NOVEMBER 1981

CLIMATOLOGICAL TABLE

FOR NOVEMBER 1981

NEW ZEALAND METEOROLOGICAL SERVICE

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

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius: Means of A Max.	Means of B Min.	Mean of A and B	Difference From Normal	Absolute Maximum and Minimum: Maximum	Date	Minimum	Date	Rainfall in Millimetres: Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall: Amount	Date	Bright Sunshine
	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
Cape Reinga	191	15.3	9.7	12.5	−0.4	18.3	1	7.7	15	111	20	+30	37	28	..
Kaitaia Airport	80	15.8	9.6	12.7	−0.3	20.7	24	4.7	19	108	22	−14	26	27	179
Aupouri Forest	69	15.7	10.6	13.2	−0.1	19.2	24	7.8	19	72	20	−31	24	27	..
Kaitaia	8	16.7	9.2	13.0	..	19.5	24	3.6	19	102	19	..	28	27	..
Kerikeri Aerodrome	150	16.4	7.8	12.1	..	21.5	24	4.8	14	87	18	..	22	1	..
Umawera	50	16.2	8.9	12.6	..	20.2	24	4.1	19	112	23	..	16	1	..
Kaikohe	204	14.7	8.4	11.6	−0.3	18.9	24	5.5	19	99	22	..	20	27	131
Waiotemarama	229	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waipoua Forest	88	15.6	8.0	11.8	+0.0	20.0	24	3.4	19	114	24	−23	26	24	..
Dargaville	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waitangi Forest	55	17.1	8.4	12.8	−0.2	21.5	24	5.2	6	85	16	−37	28	1	169
Glenbervie Forest	107	15.7	6.6	11.2	+0.1	20.9	24	0.5	19	94	20	−58	20	1	..
Whangarei Airport	37	16.1	8.7	12.4	−0.4	21.0	24	4.5	19	71	18	−48	17	1	..
Whangarei	29	16.6	8.5	12.6	+0.1	22.0	24	4.5	19	80	18	..	17	1	152*
Marsden Power Station	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pouto	97	14.7	9.6	12.2	..	18.1	24	5.8	6	107	19	..	16	14	..
Leigh	27	15.8	8.6	12.2	−0.7	19.5	24	5.2	7	81	21	−19	32	1	133
Warkworth	72	15.2	8.3	11.8	+0.1	19.5	24	4.3	18	100	22	..	25	1	..
Oyster Point	0	15.3	9.2	12.3	..	18.5	24	4.7	18	89	20	..	17	28	..
Woodhill Forest	30	15.2	9.4	12.3	+0.3	17.9	24	3.6	18	109	21	+10	17	1	..
Riverhead Forest	28	15.2	8.2	11.7	−0.3	18.4	24	2.5	18	99	20	−13	17	1	..
Kumeu	32	15.1	9.0	12.1	..	17.8	24	2.7	18	110	23	..	15	14	..
Whenuapai	26	15.3	8.8	12.1	+0.4	18.4	24	3.7	18	99	22	−5	13	28	..
Albert Park, Auckland	49	15.8	9.6	12.7	−0.3	19.0	24	5.9	6	109	26	+15	14	28	144*
Owairaka, Auckland	41	15.3	9.1	12.2	+0.1	18.9	24	4.4	18	106	26	+4	14	24	..
Port Fitzroy	4	16.1	10.2	13.2	+0.2	18.8	24	4.4	18	75	19	−72	27	1	..
Coromandel	43	15.6	8.9	12.3	..	18.9	28	3.6	18	103	21	..	18	2	..
Whangapoua Forest	4	16.3	9.2	12.8	+1.0	19.7	24	1.0	18	124	21	−16	20	2	..
Thames	3	15.2	9.3	12.3	−0.4	18.9	28	5.2	6	98	26	−4	31	24	..
Tairua Forest	3	15.9	8.5	12.2	+0.3	19.1	24	1.6	18	82	15	−73	17	2	..
Paeroa	4	15.8	7.3	11.6	+0.1	18.0	26	1.4	18	114	23	+2	38	28	..
Waihi	91	14.8	7.9	11.4	+0.1	18.0	24	1.1	18	143	20	−45	28	24	130
Te Aroha	18	15.5	8.7	12.1	+0.1	18.5	28	1.4	18	109	23	−10	26	24	..
Katikati	2	16.0	8.3	12.2	..	18.9	24	1.3	17	85	15	..	20	28	..
Tauranga	2	15.8	..	..	..	17.8	24	..	..	92	14	..	29	2	..
Tauranga Airport	4	15.7	7.6	11.7	+0.1	18.3	24	2.2	6	88	14	−19	36	2	160
Te Puke	91	15.6	6.9	11.3	−0.2	17.5	26	2.0	18	92	13	..	30	28	169
Rotoehu Forest	72	15.4	4.7	10.1	−0.3	17.1	30	−1.7	17	83	11	−47	30	1	..
Edgecumbe	5	16.3	5.4	10.9	−0.4	18.5	26	0.2	7	73	9	..	43	28	..
Whakatane	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whakatane Airport	6	16.1	5.6	10.9	..	18.2	26	0.3	7	54	10	..	22	1	..
Port Ohope	9	16.4	7.0	11.7	..	18.6	30	2.4	7	49	11	..	18	28	178
Kinleith	383	12.5	5.1	8.8	−0.5	14.5	18	0.6	18	132	25	−5	31	24	..
Tikitere	338	12.7	6.0	9.4	..	14.6	20	0.7	7	64	14	..	20	28	..
Kawerau	30	16.5	6.3	11.4	−0.4	18.4	20	0.4	6	59	12	−78	20	28	..
Te Teko	8	16.8	4.8	10.8	−0.6	19.6	26	−0.5	17	46	11	−68	28	28	161
Whakarewarewa	307	13.5	5.7	9.6	−0.4	15.0	18	0.0	15	71	18	−56	17	28	..
Rotorua Airport	287	13.6	5.7	9.7	−0.4	15.5	30	0.3	11	60	17	−62	19	28	144
Tarawera Forest	61	16.1	4.5	10.3	−0.1	18.7	20	−1.5	18	63	14	−97	26	28	..
Waiotapu Forest	435	12.5	5.4	9.0	+0.0	17.9	18	0.6	15	63	17	−61	14	28	..
Atiamuri Power Station	253	13.9	4.0	9.0	−0.7	17.9	29	−2.0	17	74	20	−41	16	24	..
Kaingaroa Forest	544	11.9	3.2	7.6	−0.9	14.4	18	−2.1	11	75	17	−60	18	24	..
Murupara	198	14.9	3.0	9.0	..	17.4	18	−2.5	18	59	14	−55	14	24	..
Wairapukao Forest	437	13.2	3.3	8.3	+0.1	15.2	18	−3.8	18	67	16	−50	15	24	..
Taupo	376	13.0	5.0	9.0	−0.2	15.7	20	−1.3	18	55	19	−47	17	28	139
Wairakei Power Station	342	13.8	4.8	9.3	−0.2	16.0	18	−1.3	17	53	19	−54	18	28	..
Wairakei Research Station	402	13.3	4.6	9.0	+0.1	15.4	26	−3.0	18	53	17	−51	19	28	..
Minginui Forest	366	13.6	2.3	8.0	−0.6	15.9	18	−6.4	17	75	15	−55	23	24	..
Taupo Airport	407	12.7	5.2	9.0	..	15.8	24	−2.0	18	61	15	..	15	28	..
Waimihia Forest	743	9.6	2.2	5.9	−0.9	11.4	18	−3.0	15	122	19	−20	22	28	..
Opotiki	6	15.8	5.7	10.8	−0.6	18.0	30	1.1	17	48	13	−54	23	28	153
Waimana	37	16.0	4.1	10.1	−0.8	18.0	26	−1.2	18	64	10	−63	28	28	..
Mangere, Auckland	4	14.8	10.1	12.5	+0.2	18.0	24	4.4	18	101	22	+10	17	24	146
Otara, Auckland	12	15.3	8.7	12.0	+0.3	18.9	24	2.6	18	105	24	+14	17	24	..
Auckland Airport	8	14.8	9.8	12.3	−0.1	18.7	24	5.4	17	100	24	+11	17	24	137
Ardmore	30	15.2	7.6	11.4	−0.1	18.4	24	2.2	18	130	23	+31	33	24	..
Pukekohe	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maioro Forest	52	14.7	9.1	11.9	−0.1	16.6	1	3.1	18	123	25	+24	16	24	..
Hunua	122	14.6	7.0	10.8	..	17.6	24	1.1	17	136	26	..	43	24	..
Maramarua Forest	38	15.2	6.4	10.8	+0.0	18.7	24	−0.1	18	114	26	+12	23	24	..
Te Kauwhata	32	15.1	8.2	11.7	−0.1	19.1	24	3.5	18	105	27	+16	18	24	134
Huntly	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruakura, Hamilton	40	15.0	7.2	11.1	+0.2	17.9	24	0.3	18	87	23	−10	20	28	113
Whatawhata	104	14.0	8.5	11.3	+0.1	16.2	24	1.9	18	135	23	+8	25	28	113

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	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
Rukuhia	66	15.0	7.8	11.4	+0.1	17.7	24	0.8	18	94	21	−5	24	28	102
Hamilton Airport	50	15.0	6.1	10.6	+0.1	17.1	24	−1.5	18	95	23	−2	24	28	..
Cambridge	76	14.5	6.6	10.6	..	16.9	24	−0.3	18	86	20	..	21	28	..
Port Taharoa	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mohakatino Station Mokau	46	13.7	8.0	10.9	−0.5	15.0	1	3.1	17	137	23	+7	32	24	..
Arapuni Power Station	123	14.7	6.6	10.7	−0.3	17.6	26	1.0	18	107	25	−7	19	28	..
Waikeria	46	14.8	6.3	10.6	..	16.6	26	−0.6	18	112	23	..	20	28	..
Te Kuiti	61	14.6	7.1	10.9	+0.0	16.7	28	1.0	18	131	26	+4	34	28	106
Wairere	122	13.6	6.6	10.1	..	16.6	26	−0.6	18	141	26	+19	20	28	..
Pureora Forest	549	10.7	3.7	7.2	−0.7	12.4	24	−2.3	18	169	28	+19	27	28	..
Taumarunui	171	14.1	5.8	10.0	−0.6	16.0	8	0.4	15	183	26	+66	35	24	81
Omata	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Plymouth	55	14.6	8.1	11.4	..	19.5	11	0.9	18	130	22	..	19	24	..
New Plymouth Airport	27	14.5	7.8	11.2	+0.3	16.0	10	0.3	18	109	24	−3	19	24	152
Tikorangi	77	14.3	7.2	10.8	..	15.6	1	1.8	6	134	24	..	24	24	..
North Egmont	955	8.3	1.9	5.1	..	11.9	23	−1.2	15	738	24	..	140	24	..
Te Wera Forest	180	13.5	5.2	9.4	+0.1	15.0	28	−2.5	18	183	18	+38	42	24	..
Lower Retaruke	223	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turangi	366	12.8	4.7	8.8	−0.5	15.1	20	−3.1	18	146	20	..	29	28	149
Chateau, Mt Ruapehu	1119	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mangamutu, Pahiatua	116	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mt Bruce Reserve	305	13.6	5.2	9.4	+0.9	17.0	19	−1.6	18	287	25	..	37	24	..
Waingawa, Masterton	114	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kopua	311	13.0	5.9	9.5	+0.2	17.0	19	0.4	6	64	16	+0	11	14	..
Waipukurau	137	14.4	5.3	9.9	+0.0	19.0	20	0.0	18	28	15	−23	5	1	177*
Dannevirke	207	13.5	5.8	9.7	−0.3	16.8	24	−0.9	6	104	22	+28	16	24	137
Porangahau	8	15.6	7.8	11.7	..	19.7	20	2.8	6	31	15	..	10	28	..
Castlepoint	3	15.3	8.0	11.7	+0.1	18.0	20	3.4	6	50	15	−24	18	13	..
Ngaumu Forest	244	14.7	4.0	9.4	+0.6	17.5	19	−1.5	18	39	12	−50	13	28	..
Tauherenikau, Alloa	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gladstone, Arahura	116	14.8	5.1	10.0	+0.1	18.5	19	−0.5	18	43	13	−31	10	28	..
Waiorongomai	21	14.1	6.1	10.1	−0.1	17.3	30	1.5	9	111	15	−19	25	28	..
Cape Palliser	10	15.3	8.7	12.0	+0.2	18.7	20	4.2	18	35	13	−39	12	28	..
East Cape	17	16.4	8.5	12.5	−0.1	19.6	20	3.8	18	55	9	−47	31	28	..
Ruatoria	61	16.9	6.4	11.7	−0.1	21.0	25	−0.3	16	54	7	−88	21	2	..
Mangatu Forest	182	16.1	5.8	11.0	+0.2	19.2	28	−0.5	18	34	10	−80	13	10	..
Manutuke Gisborne	9	17.0	5.4	11.2	−0.2	19.7	25	0.4	16	12	8	−59	4	28	..
Gisborne Airport	4	16.9	6.2	11.6	+0.1	20.4	19	1.0	18	17	9	−57	5	10	189
Onepoto, Waikaremoana	643	12.7	3.8	8.3	−0.3	17.7	19	−0.3	6	52	13	−98	11	28	..
Wharerata Forest	439	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Esk Forest	427	..	4.7	..	..	..	..	−0.9	6	33	10	−84	7	28	..
Kaweka Forest	414	13.9	5.8	9.9	−0.3	20.9	24	−0.5	6	47	13	..	8	5	..
Napier Airport	2	17.2	5.9	11.6	..	21.7	24	−1.0	18	15	9	−36	7	28	..
Napier	2	16.9	7.1	12.0	+0.3	21.0	24	0.2	18	21	6	−30	8	5	185
Hastings	12	17.0	5.8	11.4	+0.2	21.4	24	−0.5	18	12	8	−34	4	28	..
Havelock North	9	16.6	5.0	10.8	+0.4	20.8	20	−0.7	18	15	8	−33	5	28	176
Gwavas Forest	335	14.4	3.9	9.2	+0.5	18.7	19	−1.5	18	40	14	−34	7	14	..
Makaretu	335	14.0	5.3	9.7	+0.2	17.6	19	−1.6	18	56	19	..	7	14	..
Mohaka Forest	286	15.5	5.2	10.4	+0.1	19.9	19	0.0	18	14	11	−78	5	28	..
Frasertown, Wairoa	8	17.2	6.5	11.9	+0.2	21.0	24	1.5	16	19	11	−78	6	28	..
Wairoa	20	16.5	6.3	11.4	−0.1	20.6	24	1.5	18	19	7	..	6	28	179
Portland Island	78	14.3	8.8	11.6	+0.0	17.5	24	4.2	15	22	15	−36	8	14	..
Kapiti Island	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paraparaumu Airport	7	13.9	7.2	10.6	+0.0	15.1	24	2.1	6	53	16	−31	14	24	185
Flockhouse, Bulls	9	13.8	7.2	10.5	+0.0	15.4	28	0.5	18	82	21	+21	23	24	..
Ohakea	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wharite Peak	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kairanga Palmerston North	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palmerston North Airport	45	14.0	6.9	10.5	+0.0	16.1	20	−2.0	6	109	21	+45	23	24	..
Palmerston North D S I R	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Foxton	3	..	..	..	..	..	..	..	..	56	13	−10	16	25	..
Waitarere Forest	3	13.9	6.7	10.3	−0.3	15.4	28	0.2	18	62	15	−4	20	28	..
Levin	46	13.6	6.6	10.1	−0.6	15.0	1	1.7	6	76	14	−8	19	24	136
Taita, Lower Hutt	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Avalon, Lower Hutt	15	14.0	7.0	10.5	−0.3	17.7	30	1.2	6	84	17	−30	19	9	..
Kelburn, Wellington	125	13.8	7.0	10.4	+0.0	17.7	30	1.3	6	64	14	−38	16	28	186
Somes Island	43	13.4	7.9	10.7	..	17.0	30	4.5	6	62	16	..	17	28	..
Gracefield, Lower Hutt	34	14.0	7.6	10.8	−0.1	17.6	30	2.8	6	68	15	−44	15	9	..
Wainuiomata	82	13.9	5.8	9.9	−0.2	17.3	30	0.7	6	78	14	..	15	20	..
Wellington Airport	6	14.2	8.0	11.1	+0.0	18.2	30	3.8	6	52	13	−32	16	28	..
Kaitoke	223	13.1	4.3	8.7	−0.2	15.0	8	−3.2	6	139	22	−34	24	20	166
Wallaceville	56	14.0	5.4	9.7	−0.3	16.4	30	−1.3	6	77	21	−27	18	9	170
Cape Egmont	8	14.3	8.8	11.6	−0.1	16.5	28	2.0	18	102	26	−15	25	24	..
Stratford Mountain House	846	8.8	1.9	5.4	−0.3	14.7	19	−2.2	18	530	24	−31	102	24	..
Stratford Dem. Farm	311	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manaia Dem. Farm	98	13.4	7.4	10.4	+0.2	16.5	24	2.2	18	111	28	+14	21	24	127
Normanby	122	13.3	7.0	10.2	..	16.8	24	0.5	18	93	25	..	11	24	..

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	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
Patea	43	13.9	8.5	11.2	−0.1	17.0	28	2.5	18	104	17	+28	22	24	..
Ohakune Junction	629	..	3.4	..	..	..	..	−2.0	18	211	25	..	39	24	..
Karioi	648	10.5	3.0	6.8	−0.8	14.4	28	−2.7	18	173	25	+84	30	24	..
Waiouru	823	9.1	1.7	5.4	−1.0	13.5	24	−4.5	18	119	26	+33	14	24	..
Waiouru Military Camp	823	8.6	1.9	5.3	−0.7	13.1	24	−3.5	18	134	27	+48	17	24	..
Ahu Ahu Valley	85	14.6	5.3	10.0	..	17.0	24	−0.4	18	129	23	..	23	24	..
Taihape	433	12.4	4.7	8.6	−0.4	15.8	24	−0.7	11	116	25	..	13	29	..
Kahui, Taihape	518	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wanganui	22	14.3	7.8	11.1	−0.2	18.1	24	3.3	18	82	20	+24	20	24	131
Wanganui Airport	9	14.5	7.4	11.0	..	17.7	24	3.0	18	82	19	..	26	24	..
Farewell Spit	3	15.2	6.7	11.0	+0.1	18.0	11	2.5	15	117	18	+26	38	24	..
Totaranui	10	15.1	5.0	10.1	..	18.0	8	−1.2	6	81	14	..	20	28	..
Westport Airport	2	12.7	6.1	9.4	−0.7	14.5	25	2.0	2	265	28	+95	38	19	107
Cobb Dam	823	8.4	1.0	4.7	−1.0	12.6	19	−4.6	1	232	22	+44	26	26	..
Arapito	20	12.9	5.8	9.4	..	15.0	1	0.6	6	397	28	..	79	19	89
Lake Rotoroa	443	10.0	1.8	5.9	..	13.3	17	−4.8	1	298	26	..	35	12	..
Lake Rotoiti	634	9.9	0.9	5.4	−1.0	14.6	2	−6.1	6	192	22	+60	37	12	..
Hokitika Airport	39	12.2	4.9	8.6	−1.0	14.3	17	−1.4	6	332	27	+93	82	19	126
Reefton	198	11.7	3.5	7.6	−1.3	14.9	17	−4.6	2	260	28	+85	30	26	..
Barrytown	30	12.4	6.8	9.6	..	14.5	25	3.0	2	385	27	..	111	19	..
Totara Flat	77	12.2	4.0	8.1	−1.4	15.9	9	−3.5	2	291	26	+123	47	19	..
Greymouth	4	..	5.4	..	..	..	..	−1.0	6	333	26	+132	92	19	100
Otira Substation	383	10.1	1.0	5.6	..	15.2	17	−5.3	6	675	28	+203	106	19	..
Springs Junction	421	9.7	2.0	5.9	..	14.9	17	−5.6	1	374	26	+168	69	19	..
Hari Hari	45	12.5	3.6	8.1	−1.0	15.6	16	−4.1	1	321	23	−24	49	19	..
Franz Josef	122	11.9	3.2	7.6	−1.4	15.0	16	−2.0	1	543	24	+104	72	12	..
Fox Glacier	152	11.6	2.9	7.3	..	14.5	17	−2.0	6	487	27	+59	59	25	..
Milford Sound	3	11.1	2.3	6.7	−1.9	14.7	16	−2.1	18	752	26	+214	112	7	..
Puysegur Point	43	10.7	5.3	8.0	..	14.2	18	2.2	6	194	30	+3	19	12	..
Stephens Island	187	12.4	7.4	9.9	..	14.0	16	3.8	6	65	16	−1	16	28	..
Riwaka, Motueka	8	15.1	3.6	9.4	−0.6	18.7	19	−1.0	1	63	17	−54	13	28	199
Tapawera	146	14.1	2.4	8.3	..	18.4	9	−3.5	1	124	19	..	17	12	..
Appleby	17	14.6	5.0	9.8	−0.5	17.9	19	0.2	1	61	16	−18	12	12	..
Nelson Airport	2	14.6	4.0	9.3	−0.3	18.8	19	−1.2	6	48	15	−28	9	12	215
Rai Valley	79	15.6	3.7	9.7	+0.3	18.7	9	−1.8	1	43	11	−120	9	28	..
Moutere Hills	110	13.9	6.1	10.0	−0.2	17.9	19	2.0	15	68	16	−21	13	12	..
Blenheim Airport	27	16.5	4.1	10.3	+0.4	20.2	18	..	..	19	9	−45	8	28	..
Blenheim	4	16.6	4.8	10.7	+0.3	20.5	18	−1.3	15	24	10	−29	9	28	212
Waihopai Power Station	262	14.7	3.0	8.9	−0.5	18.1	18	−3.1	6	29	12	−45	8	28	..
Vernon Lagoons	2	16.3	3.8	10.1	+0.1	20.1	18	−3.1	15	32	10	..	12	28	203
Lake Grassmere	2	15.4	6.4	10.9	+0.6	19.7	20	2.3	15	13	6	−30	7	28	203
Cape Campbell	3	14.3	7.4	10.9	+1.0	19.2	30	2.9	6	24	6	−24	11	28	..
Hanmer Forest	387	13.7	1.1	7.4	−0.7	17.9	24	−5.2	2	77	14	−12	17	14	180
Molesworth	893	10.9	−0.8	5.1	−0.7	14.6	24	−3.8	22	37	..	−16	8	28	..
Kaikoura Flats	24	15.4	2.9	9.2	..	21.3	20	−1.0	3	36	8	..	10	28	..
Kaikoura	108	14.3	6.3	10.3	+0.5	20.0	19	0.5	6	30	7	−21	9	28	203
Arthurs Pass	738	8.0	−0.4	3.8	..	11.5	9	..	..	203	21	−165	47	19	..
Balmoral Forest	198	14.5	2.3	8.4	−0.1	18.9	19	−3.4	6	35	11	−11	9	14	..
Hawarden	244	14.3	2.9	8.6	..	18.5	19	−3.3	2	36	10	..	8	28	..
Waiau	137	15.5	2.8	9.2	..	19.5	20	−4.2	6	50	9	..	14	28	..
The Hermitage, Mt Cook	765	10.1	0.6	5.4	−1.0	16.0	18	−5.7	1	370	21	+40	95	13	106
Mt John	1027	9.5	−0.7	4.4	−0.9	13.8	20	−7.5	7	10	..	−36	2	9	..
Craigieburn Forest	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Coleridge	364	13.9	2.2	8.1	−0.2	18.0	19	−4.2	2	54	20	−20	7	20	..
Highbank Power Station	336	13.0	3.9	8.5	−0.3	18.1	19	−1.0	1	32	7	−34	18	20	193
Hororata Substation	192	15.8	1.8	8.8	+0.3	20.9	19	−4.6	1	33	13	−20	18	20	..
Winchmore	160	14.7	2.4	8.6	+0.2	22.0	19	−1.9	1	15	8	−36	6	20	..
Peel Forest	274	14.6	0.7	7.7	..	21.7	19	−4.2	1	26	12	..	11	20	..
Ashburton	101	15.6	2.6	9.1	−0.3	22.4	19	−3.9	1	16	7	−35	10	20	194
Waipara	64	15.4	2.6	9.0	..	20.1	20	−2.8	6	24	6	..	12	20	..
Ashley Forest	107	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rangiora	46	15.8	1.7	8.8	−0.3	21.1	19	−3.0	4	24	10	−14	14	20	..
Darfield	195	15.7	2.9	9.3	+0.2	20.4	18	−1.8	2	22	5	−34	13	20	..
Eyrewell Forest	158	15.1	1.8	8.5	+0.0	20.0	18	−3.1	4	32	5	−26	21	20	..
Christchurch Airport	30	15.1	2.4	8.8	−0.3	20.2	7	−3.9	1	15	6	−28	7	20	204
Templeton	46	14.7	2.6	8.7	..	20.6	19	−3.1	1	17	7	..	9	20	..
Christchurch	7	15.9	3.6	9.8	+0.0	21.6	7	−1.9	1	17	7	−29	5	20	..
Bromley, Christchurch	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mt Pleasant	137	14.6	6.1	10.4	+0.5	19.5	19	2.0	6	26	8	−20	7	20	..
Lincoln	11	14.9	2.5	8.7	−0.2	20.9	19	−3.4	1	17	9	−29	6	20	182
Akaroa	3	15.1	3.9	9.5	..	23.0	19	−0.1	1	50	10	..	15	20	..
Lake Tekapo	683	11.3	0.9	6.1	−0.9	16.0	19	−6.5	1	21	11	−35	6	25	206
Lake Pukaki	556	12.5	1.2	6.9	+0.4	18.9	19	−4.4	2	19	16	..	4	4	..
Fairlie	304	15.2	0.0	7.6	..	22.2	19	−6.2	2	11	8	..	3	9	..
Twizel	457	13.5	−0.9	6.3	−0.6	19.0	19	−8.5	2	22	12	..	7	4	..
Ikawai	70	14.8	2.3	8.6	+0.1	22.0	19	−3.5	1	14	4	..	5	4	..
Geraldine	119	15.5	2.1	8.8	..	23.6	19	−4.0	1	15	4	..	7	20	..

CLIMATOLOGICAL TABLE—*Summary of the Records of Temperature, Rainfall, and Sunshine for September 1981*—continued

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius: Means of A Max.	Means of B Min.	Mean of A and B	Difference From Normal	Absolute Maximum and Minimum: Maximum	Date	Minimum	Date	Rainfall in Millimetres: Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall: Amount	Date	Bright Sunshine
	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
Orari Estate	81	15.6	1.6	8.6	−0.1	24.2	19	−3.1	1	15	6	−38	7	9	..
Temuka	24	15.8	1.8	8.8	+0.1	24.5	19	−2.8	1	11	6	−35	7	9	..
Timaru Airport	26	15.5	1.0	8.3	+0.0	23.7	19	−3.3	1	11	6	−30	6	9	..
Adair	85	15.0	4.1	9.6	+0.9	23.6	19	−0.9	1	13	7	−28	8	9	..
Timaru	17	15.2	3.8	9.5	+0.3	21.8	19	−2.2	1	14	5	−27	7	9	187
Waimate	61	15.4	3.7	9.6	+0.2	22.1	9	−2.0	1	13	8	−33	4	20	..
Kurow	207	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oamaru Airport	30	14.4	4.3	9.4	+1.1	22.6	19	−1.2	1	10	9	−28	4	9	166
Tara Hills, Omarama	488	12.7	−0.6	6.1	−0.9	19.1	19	−7.0	2	23	12	−13	7	4	187
Lake Hawea	350	12.2	2.5	7.4	−0.9	16.9	19	−3.7	1	72	11	+1	29	25	..
Wanaka	296	13.5	1.7	7.6	−0.7	19.5	19	−5.7	1	61	13	+0	23	25	..
Queensberry	277	13.6	2.1	7.9	..	20.4	19	−4.6	1	42	15	..	12	4	..
Bendigo	200	14.4	2.0	8.2	..	21.2	19	−6.7	1	16	13	..	3	29	..
Naseby Forest	610	11.1	−0.3	5.4	−0.7	18.4	19	−7.1	2	20	9	−18	6	9	..
Windsor	88	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ranfurly	427	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herbert Forest	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palmerston	21	14.3	2.8	8.6	+0.7	21.6	19	−4.1	1	21	12	..	6	12	170
Cherry Farm Hospital	6	13.9	3.6	8.8	+0.5	20.1	9	−1.6	1	31	20	−5	6	12	..
Taiaroa Head	72	11.9	5.0	8.5	+0.1	16.9	7	−2.5	6	31	20	−7	6	12	..
Invermay, Taieri	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Berwick Forest	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunedin Airport	1	13.1	3.4	8.3	−0.1	18.4	19	−4.5	2	43	20	+5	7	9	141
Musselburgh, Dunedin	2	12.8	5.2	9.0	−0.2	18.3	19	0.0	6	49	22	+1	8	9	128
Te Anau	215	11.4	2.7	7.1	−0.5	14.9	19	−2.8	1	136	20	+42	18	25	129
West Arm, Manapouri	232	8.9	2.5	5.7	−1.0	12.2	19	−3.0	1	540	28	..	61	13	..
Borland Burn	183	12.0	1.0	6.5	..	15.5	18	−5.0	2	175	27	..	19	12	..
Queenstown	329	12.7	2.7	7.7	−0.4	18.0	19	−2.6	1	99	17	+23	34	25	154
Queenstown Airport	349	11.8	1.5	6.7	−0.7	17.6	19	−5.0	1	74	17	+17	26	25	..
Otama	183	12.0	3.1	7.6	..	16.2	19	−2.5	1	82	25	+34	11	9	..
Cromwell	213	13.8	2.1	8.0	−0.8	20.9	19	−5.3	2	28	12	+0	5	4	181
Northburn	210	14.1	2.2	8.2	..	20.5	19	−5.6	1	20	14	..	4	29	..
Lauder	112	12.9	1.6	7.3	..	18.8	19	−5.5	1	19	14	..	4	9	..
Clyde Dam	160	14.4	2.6	8.5	..	21.3	19	−4.6	1	24	15	..	6	4	..
Ophir	305	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Moa Creek	427	13.1	−1.0	6.1	+0.1	18.0	20	−6.5	1	24	9	+1	6	9	..
Earnscleugh	152	15.2	1.6	8.4	+0.2	22.0	19	−6.8	1	21	14	−2	4	7	..
Alexandra	141	14.5	2.7	8.6	−0.2	21.0	19	−5.2	1	18	14	−2	3	4	162
Roxburgh Power Station	110	14.1	2.7	8.4	−0.6	20.0	19	−5.0	1	51	15	+23	9	4	..
Beaumont	46	13.1	2.7	7.9	..	18.6	19	−4.8	1	212	26	+148	23	9	..
Mahinerangi Dam	396	10.1	1.5	5.8	−0.5	15.1	19	−4.8	1	125	25	+69	15	30	..
Tapanui	226	11.6	2.5	7.1	−1.4	16.2	19	−2.1	1	118	26	+62	13	12	..
Taieri Mouth	15	12.5	4.0	8.3	+0.3	17.8	19	−2.1	1	92	21	+49	14	30	..
Tuatapere	27	12.5	3.6	8.1	..	16.0	2	−1.4	1	146	24	..	18	12	..
Otautau	55	12.2	3.0	7.6	−0.6	16.7	19	−2.7	1	224	26	+148	22	12	106
Winton	44	12.1	3.7	7.9	−0.6	16.2	18	−2.1	1	131	23	+80	16	12	113
Gore	123	12.0	3.5	7.8	−0.3	16.2	18	−2.7	1	139	26	..	19	30	123
Hokonui Forest	46	12.4	3.6	8.0	−0.6	16.0	19	−4.3	1	158	27	+92	18	30	..
Woodlands	47	12.1	3.7	7.9	−0.3	16.1	2	−2.5	1	187	28	..	19	30	..
Invercargill Airport	0	11.9	3.7	7.8	−0.4	15.4	7	−2.4	1	173	27	+99	23	26	105
Tiwai Point, Bluff	5	11.5	4.9	8.2	−0.6	14.7	25	0.2	1	157	28	..	14	26	..
Stewart Island	3	11.3	4.4	7.9	..	15.3	18	−1.4	6	257	28	..	20	26	..
Milton	18	12.6	3.2	7.9	−0.3	17.2	19	−2.8	2	76	24	+33	11	30	..
Finegand, Balclutha	6	..	3.8	..	..	..	..	−2.7	1	90	26	..	12	12	115
Owaka	5	12.3	3.1	7.7	..	16.4	19	−4.9	1	141	26	..	16	30	..
Nugget Point	129	11.1	3.9	7.5	−0.2	15.4	19	−0.5	6	138	27	+85	14	12	..
Tautuku	61	11.9	3.9	7.9	..	15.8	18	−1.2	1	204	26	..	17	12	..
Nandi Airport, Fiji	19	28.8	18.4	23.6	−0.4	31.4	1	14.9	12	34	4	−50	22	22	209
Rarotonga Airport	7	25.9	20.0	23.0	+0.9	28.4	27	15.8	14	213	15	+104	55	9	149
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raoul Island	38	18.9	13.3	17.1	+0.8	21.7	26	11.3	22	68	15	−49	20	29	163
Campbell Island	15	7.9	2.4	5.2	−0.3	9.6	27	−2.8	6	170	29	+68	28	4	43
Waitangi, Chatham Island	44	11.5	6.0	8.8	−0.3	13.6	28	1.9	1	123	26	+62	17	28	137
Scott Base, Antarctica	16	−25.7	−37.5	−31.6	−3.4	−13.6	8	−51.5	5	..	..	..	..	..	..
LATE RETURNS AND CORRECTIONS															
Woodhill Forest 08/1981	30	14.7	6.6	10.7	+0.1	17.2	15	0.2	5	140	22	+0	15	1	..
Paeroa 08/1981	4	14.7	5.1	9.9	+0.0	17.4	11	−1.3	29	136	21	−1	32	31	..
Pukekohe 08/1981	82	13.6	5.7	9.7	−0.5	16.0	23	0.3	13	131	23	..	14	1	147
Huntly 08/1981	34	13.9	5.9	9.9	..	16.9	15	1.0	13	89	..	..	..	..	..
Port Taharoa 08/1981	27	13.8	6.9	10.4	−0.5	17.1	9	2.1	29	141	..	..	..	..	..
Omata 06/1981	61	15.0	8.9	12.0	+0.9	17.5	16	5.6	24	228	..	..	..	..	..
Chateau, Mt Ruapehu 07/1981	1119	6.7	..	..	..	10.5	2	..	..	..	..	..	..	..	..
Chateau, Mt Ruapehu 08/1981	1119	6.0	−1.4	2.3	−0.9	9.5	16	−6.2	13	..	..	..	..	..	..
Waingawa, Masterton 07/1981	114	12.2	4.6	8.4	+1.3	17.5	30	1.0	23	124	20	+22	27	5	96
Waingawa, Masterton 08/1981	114	10.9	4.1	7.5	−0.6	15.5	19	−0.5	14	145	25	+54	22	23	91

CLIMATOLOGICAL TABLE—*Summary of the Records of Temperature, Rainfall, and Sunshine for September 1981*—continued

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius: Means of A Max.	Means of B Min.	Mean of A and B	Difference From Normal	Absolute Maximum and Minimum: Maximum	Date	Minimum	Date	Rainfall in Millimetres: Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall: Amount	Date	Bright Sunshine
	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
LATE RETURNS AND CORRECTIONS															
Wharerata Forest 08/1981	439	..	..	..	..	..	..	..	..	564	22	..	74	24	..
Esk Forest 08/1981	427	9.9	3.3	6.6	−1.0	14.2	19	−2.2	13	224	18	+41	35	31	..
Wharite Peak 08/1981	914	4.0	0.4	2.2	−1.5	7.9	19	−2.0	28	180	26	−5	45	24	..
Molesworth 08/1981	893	..	..	..	..	..	..	..	..	13	..	−45	..	..	..
Balmoral Forest 08/1981	198	9.4	0.5	5.0	−0.9	16.0	19	−5.0	30	61	17	+3	22	26	..
Waiau 08/1981	137	10.2	0.8	5.5	..	16.6	18	−5.4	30	86	15	..	38	25	..
Mt John 07/1981	1027	4.4	−1.3	1.6	+0.3	10.2	1	−5.0	17	77	..	+31	23	29	..
Mt John 08/1981	1027	2.9	−2.9	0.0	−2.7	8.3	17	−7.2	5	28	..	−10	10	26	..
Waipara 08/1981	64	..	..	..	..	..	..	..	..	72	..	..	32	26	..
Ashley Forest 08/1981	107	9.5	2.4	6.0	−1.2	16.5	18	−0.8	14	78	14	+4	20	24	107
Christchurch 08/1981	7	10.1	2.2	6.2	−1.1	14.8	10	−2.0	14	120	20	+67	46	26	..
Lincoln 08/1981	11	9.6	1.5	5.6	−1.1	13.9	10	−3.8	30	123	19	+67	42	24	117
Kurow 08/1981	207	9.7	0.6	5.2	..	15.0	18	−3.0	8	7	7	..	2	25	..
Lauder 08/1981	112	8.4	−2.2	3.1	..	14.4	18	−5.8	29	7	5	..	6	10	..
Totokoitu, Rarotonga 08/1981	9	25.1	18.8	22.0	..	27.6	8	15.4	22	212	13	..	98	16	..
Scott Base, Antarctica 12/1980	16	−0.4	−6.7	−3.6	+1.7	4.4	31	−15.9	3	..	..	..	..	..	..
Scott Base, Antarctica 01/1981	16	−1.4	−8.4	−4.9	+0.2	2.5	21	−15.3	30	..	..	..	..	..	..
Scott Base, Antarctica 02/1981	16	−7.4	−13.8	−10.6	+0.0	1.2	1	−27.6	24	..	..	..	..	..	..
Scott Base, Antarctica 03/1981	16	−10.5	−20.0	−15.3	+4.9	−0.5	4	−29.9	20	..	..	..	..	..	..
Scott Base, Antarctica 04/1981	16	−22.1	−32.3	−27.2	−2.9	−4.3	2	−48.2	22	..	..	..	..	..	..
Scott Base, Antarctica 05/1981	16	−20.3	−31.2	−25.8	+2.6	−10.6	7	−47.4	4	..	..	..	..	..	..
Scott Base, Antarctica 06/1981	16	−16.2	−29.8	−23.0	+3.2	−5.3	20	−41.6	16	..	..	..	..	..	..
Scott Base, Antarctica 07/1981	16	−18.1	−32.4	−25.3	+4.5	−9.7	17	−43.6	28	..	..	..	..	..	..

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, SEPTEMBER 1981

General—September was dry and windy over most of the country. There were unprecedented numbers of south-westerly winds in both the north and south this month. Auckland had over 80 percent of its winds from a south-westerly direction and Invercargill over 50 percent; both are records for the last 25 years. The frequency of strong winds was also greater than usual over the whole country this month. The Auckland area suffered extensive damage to roofs and widespread power failures after strong winds on the 6th.

Dry, windy conditions retarded spring growth in many eastern areas, leading to some feed shortages. Growth was better in areas with normal rainfall although low temperatures and lack of sunshine caused some lambing problems.

Pressures were low over the whole country for the 4th consecutive month, particularly in southern and eastern areas.

Rainfall—Much of New Zealand had below average rainfall this month. Eastern coastal regions were particularly dry, with some areas around Gisborne, the Kaikoura Coast and south Canterbury coast having less than 25 percent of normal rainfall.

Southland, Fiordland, parts of Westland and the Wanganui-King Country areas had above average rainfall for September. Parts of Southland had more than 200 percent of normal rainfall. Many stations there reported an exceptionally high number of rain days, with 1.0 mm or more on 20 to 25 days, and some stations having only 2 or 3 days without any rain at all.

Temperatures—Temperatures in September were normal or close to normal over most of the country. The areas showing greatest departures were Wairarapa, Blenheim and North Otago, which were 1° to 1.5°C above average and Westland and Fiordland which were 1° to 2°C below.

During a cold spell between the 1st and 7th mean maximum and minimum temperatures were between 2° and 8°C below average. There were heavy snowfalls in Southland and Otago on the 6th, disrupting transport throughout both regions and closing the road to Milford Sound, isolating the settlement. Snow also fell at Rotorua for the first time in 17 years and at Taupo on the same day.

This was followed by warm weather until the 10th with temperatures over 20° recorded in some eastern areas. It was also milder during the last week of the month.

Sunshine—The east coast of both islands and Wellington, Nelson and Marlborough provinces had between 10 and 50 hours more sunshine than usual for this month. Sunshine totals for Timaru and Christchurch were the second highest for September since 1958, both having been exceeded in September 1980.

The rest of the country had below average sunshine with greatest deficits occurring in Invercargill, Westport, Ohakea and Hamilton.

THE WEATHER SEQUENCE, SEPTEMBER 1981

1–7 September.

The weather in the first week of September was dominated by a series of deep depressions passing to the south of the country. There was an associated west to south-west air flow and a series of cold fronts crossed the country under the influence of these westerlies. A complex depression with 2 associated fronts passed over the north of the country at the beginning of the week. Temperatures were cool this week and rain fell in northern areas on the 1st and 2nd, south-western areas on the 2nd and all districts exposed to the west or south-west over the next 3 days. Isolated western and southern areas had rain on the 6th and 7th.

8–14 September.

A large anticyclone lay centred close to Lord Howe Island during the second week of September bringing fine, cool weather to northern and eastern areas for most of the week. The strong west to south-west conditions continued to be a major influence on weather in the south of the country this week and a further series of cold fronts crossed the South Island. Fronts crossed both islands on the 10th and 13–14th with rainfall generally widespread. Rain was frequent in southern and south-western areas throughout the week.

15–21 September.

The anticyclone remained in the central Tasman Sea for the first 2 days of this week with strong disturbed southerly or south-westerly winds over the country. On the 17th the anticyclone covered most of the Tasman Sea and spread onto New Zealand during the next 2 days. Two fronts associated with a deep depression south of Macquarie Island crossed the country between the 19th and 21st, weakening as they moved eastward. Light rain fell in some southern and western districts of both islands during the first 2 days followed by clearer milder weather. Rain fell in most areas on the 19th and 20th, generally clearing on the 21st.

22–30 September.

A series of deep depressions passed to the south of the country during the last 9 days of the month. These were accompanied by west or south-west winds and a succession of cold fronts. A deep depression formed in the Tasman Sea on the 28th and crossed the country during the 28–29th. It was showery at times in most areas with the passage of fronts, but heavy falls were recorded in southern and central areas of the North Island on the 24th and much of the North Island and northern South Island on the 28th. Mild temperatures were recorded in Eastern districts during this period.

J. S. HICKMAN, Director.

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