



LA
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G.P.

SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, 16 AUGUST 1984

Published by Authority

WELLINGTON: FRIDAY, 17 AUGUST 1984

CLIMATOLOGICAL TABLE FOR JUNE 1984

NEW ZEALAND METEOROLOGICAL SERVICE

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

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	°C	mm	mm	mm	mm	Hrs		
Cape Reinga	191	16.5	10.7	13.6	+0.5	19.5	3	8.1	1	59	18	-64	21	29	..
Kaitaia Airport	80	16.3	8.9	12.6	-0.1	19.8	20	2.7	2	136	10	-30	76	29	101
Aupouri Forest	69	16.4	9.4	12.9	-0.4	19.6	20	4.8	1	67	7	-75	28	29	..
Kaitaia	8	17.3	8.1	12.7	..	19.8	20	2.4	2	127	8	..	61	29	..
Kerikeri M A F	79	16.5	..	..	..	21.3	20	..	..	119	15	..	53	29	..
Kerikeri Downs	79	16.1	8.1	12.1	..	21.0	20	2.0	2	118	15	..	54	29	..
Kerikeri Aerodrome	150	15.9	7.6	11.8	..	21.2	20	2.4	2	68	12	..	34	29	..
Umawera	9	..	..	..	..	..	..	..	..	112	6	-65	66	29	..
Kaikohe	204	14.8	8.1	11.5	-0.1	20.4	20	3.6	1	82	11	-109	59	29	89
Waiotemarama	229	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waipoua Forest	88	15.9	6.9	11.4	+0.0	21.0	20	0.5	27	134	16	-69	57	29	..
Dargaville	20	16.2	7.4	11.8	+0.0	21.5	20	0.0	15	95	14	-62	28	29	72
Waitangi Forest	55	16.9	7.8	12.4	-0.1	21.5	20	2.0	2	76	11	-114	31	29	85
Glenbervie Forest	107	15.5	5.8	10.7	+0.2	21.3	20	-2.1	2	150	12	-79	56	29	..
Whangarei Airport	37	15.9	8.0	12.0	-0.1	20.8	20	2.2	1	113	13	-68	36	6	..
Whangarei	29	16.4	7.8	12.1	+0.0	22.5	20	1.3	1	91	10	..	37	6	79*
Marsden Power Stn	3	..	7.8	..	..	..	..	2.1	1	86	12	-107	28	6	..
Pouo	97	15.1	9.9	12.5	..	19.5	20	5.4	1	78	15	..	42	29	..
Leigh	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Warkworth	72	15.2	7.3	11.3	+0.3	18.4	30	0.1	1	97	12	-113	28	29	..
Oyster Point	0	15.6	7.7	11.7	+0.3	18.7	21	-0.5	1	66	16	-67	23	6	..
Woodhill Forest	30	15.3	7.7	11.5	+0.1	17.7	30	-0.5	1	51	15	-104	16	20	..
Riverhead Forest	28	15.4	6.9	11.2	+0.5	17.9	4	-1.6	1	89	12	-82	28	20	..
Kumeu	32	15.5	6.8	11.2	+0.6	17.8	30	-2.3	1	75	15	..	21	20	..
Whenuapai	26	15.3	7.3	11.3	+0.5	18.4	4	-1.5	1	73	16	-87	27	20	..
Albert Park Auckland	49	15.4	9.8	12.6	+0.5	17.9	30	3.0	1	68	19	-73	22	20	80*
Owairaka, Auckland	41	15.1	8.6	11.9	+0.7	18.0	30	1.5	1	78	16	-72	28	20	..
Port Fitzroy	4	16.1	..	..	..	19.0	30	..	..	135	18	-100	29	6	..
Little Barrier Is	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rotorua Is	30	14.8	10.5	12.7	..	17.7	4	7.3	1	62	11	..	16	20	..
Manukau Heads	244	13.6	9.3	11.5	..	15.9	9	5.5	25	132	17	+4	44	29	..
Coromandel	43	15.7	8.0	11.9	..	19.4	4	0.2	1	111	14	..	46	29	..
Whangapoua Forest	4	16.3	6.4	11.4	+0.4	19.8	30	0.1	26	121	..	-111	25	6	..
Thames	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tairua Forest	3	..	7.0	..	..	..	..	0.3	1	164	11	-50	69	20	..
Ngatea	15	15.6	4.5	10.1	..	18.2	29	-5.0	26	99	19	..	26	20	..
Paeroa	4	15.3	6.4	10.9	+1.2	18.4	30	-2.2	26	63	16	-74	18	4	..
Waihi	91	14.5	7.0	10.8	+1.1	17.9	30	-2.3	25	138	15	-102	52	20	93
Te Aroha	18	15.2	7.1	11.2	+1.0	18.4	30	-1.3	1	93	16	-63	21	29	..
Katikati	2	15.6	6.6	11.1	..	19.6	30	-1.2	1	98	8	..	47	20	..
Waharoa	60	14.7	5.4	10.1	..	18.4	3	-3.2	15	58	11	..	19	4	..
Tauranga	2	15.4	7.9	11.7	+0.8	18.6	30	2.6	25	60	8	-66	27	20	..
Tauranga Airport	4	15.4	6.4	10.9	+0.7	18.9	30	-0.7	26	73	9	-57	23	20	123
Te Puke	91	15.0	5.4	10.2	+0.4	17.8	10	-0.7	15	84	9	-95	39	29	124
Rotochu Forest	72	15.0	3.0	9.0	+0.4	18.0	10	-2.4	26	81	10	-63	29	29	..
Whakatane Airport	6	15.0	3.8	9.4	+0.5	17.8	9	-2.1	15	61	9	-64	19	29	149
Te Kaha	6	16.0	8.2	12.1	..	19.6	10	3.0	16	116	9	..	29	29	..
Port Ohope	9	15.5	7.2	11.4	+0.6	19.6	10	2.3	16	51	9	..	20	30	158
Kinleith	383	12.5	4.6	8.6	+1.2	15.5	21	-2.0	25	95	13	-69	41	30	..
Tikitere	338	12.5	5.7	9.1	+0.9	16.0	30	-0.9	25	114	10	..	57	29	..
Kawerau	30	15.4	4.8	10.1	+0.4	18.9	10	-1.0	16	91	9	-72	39	29	..
Te Teko	8	15.9	4.8	10.4	+0.9	21.2	10	0.1	12	65	9	-74	21	29	146
Rotorua Airport	287	13.0	5.0	9.0	+0.9	15.6	30	-3.1	25	91	11	-49	37	29	120
Waiotapu Forest	435	12.2	3.6	7.9	+1.1	16.0	21	-5.5	25	42	10	-96	11	4	..
Atiamuri Power Stn	253	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kaingaroa Forest	544	11.4	2.5	7.0	+0.7	15.0	21	-5.3	25	81	9	-61	26	29	..
Murupara	198	13.6	2.2	7.9	+0.6	17.0	10	-4.6	25	56	9	-61	16	30	..
Wairapukao Forest	437	12.1	0.2	6.2	+0.4	15.9	21	-6.5	25	73	9	-61	21	30	..
Taupo	376	12.5	3.9	8.2	+0.9	16.2	30	-3.4	25	67	12	-47	16	20	105
Wairakei Power Stn	342	13.0	3.9	8.5	+1.0	17.0	30	-4.0	25	67	8	-48	17	29	..
Wairakei Research Stn	402	13.2	2.9	8.1	+1.3	16.7	22	-5.7	25	65	11	-48	15	30	..
Minginui Forest	366	12.7	1.3	7.0	+0.7	16.9	10	-6.1	25	103	11	-29	33	6	..
Taupo Airport	407	12.1	3.4	7.8	+0.9	15.7	30	-5.0	1	50	6	-44	12	20	..
Waimihia Forest	743	9.3	3.1	6.2	+1.4	12.1	21	-3.1	25	90	10	-80	20	29	..
Opotiki	6	15.4	5.3	10.4	+0.5	18.8	10	-1.0	16	110	9	-17	50	30	144
Waimana	37	..	..	..	..	..	..	..	..	100	..	-61	..	..	..
Mangere Auckland	4	15.2	8.8	12.0	+0.7	17.7	30	1.0	25	79	16	-59	19	20	76
Otara Auckland	12	15.3	7.2	11.3	+0.5	18.1	30	-1.0	1	77	16	-55	25	20	..
Auckland Airport	8	14.8	8.7	11.8	+0.6	17.7	30	1.8	1	97	16	-31	22	4	85
Ardmore	30	15.3	6.8	11.1	+0.7	17.4	9	-0.8	1	91	22	-55	17	20	..
Pukekohe	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maioro Forest	52	15.0	8.5	11.8	+0.7	17.7	9	0.0	25	138	17	-18	50	29	..
Hunua	122	14.6	5.7	10.2	..	17.2	30	-2.0	1	97	15	..	24	29	..
Maramarua Forest	38	14.8	5.5	10.2	+0.7	17.5	30	-2.8	26	86	17	-46	25	20	..
Te Kauwhata	32	15.1	6.1	10.6	+0.6	20.0	30	-1.2	1	60	17	-61	20	20	84

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		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount	Date	
		Metres	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	Hrs		
Huntly	34	..	..	..	..	..	..	..	..	..	..	..	..	..
Taupiri	23	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruakura Hamilton	40	14.6	5.1	9.9	+0.8	17.9	30	-2.6	1	69	15	-62	23	20	79
Whatawhata	104	..	..	..	..	..	..	..	..	..	..	..	..	..	74
Rukuhia	66	14.8	5.6	10.2	+0.8	17.7	30	-2.1	1	65	15	-69	22	20	..
Hamilton Airport	50	14.8	4.2	9.5	+0.8	17.5	30	-4.0	1	71	14	-61	26	20	..
Cambridge	76	14.3	5.9	10.1	+1.1	19.6	21	-2.1	25	59	17	-58	19	19	..
Port Taharoa	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mohakatino Stn Mokau	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arapuni Power Stn	123	14.1	4.5	9.3	+0.6	19.5	21	-2.5	25	71	17	-78	23	20	..
Waikeria	46	14.1	4.8	9.5	+1.0	18.0	21	-3.9	1	90	12	..	32	30	..
Te Kuiti	61	14.1	5.8	10.0	+1.2	17.7	22	-1.8	25	156	20	-7	65	30	58
Wairere	122	13.5	5.1	9.3	..	17.2	21	-3.2	25	124	20	-52	30	29	..
Pureora Forest	549	10.6	4.1	7.4	+1.2	14.5	7	-4.8	25	139	21	-52	51	30	..
Mangakahu Valley	397	12.2	4.2	8.2	..	16.4	21	-2.2	26	97	19	..	35	30	..
Taumarunui	171	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tokirima	152	..	3.0	..	..	..	..	-4.5	25	157	15	..	58	30	..
Omata	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Plymouth	55	15.0	8.1	11.6	+1.2	18.6	7	2.4	1	94	14	-82	41	29	..
New Plymouth Airport	27	14.5	7.4	11.0	+1.1	16.7	9	1.7	1	107	17	-43	37	29	98
North Egmont	955	9.5	2.1	5.8	..	12.7	22	-2.3	25	386	21	..	86	29	..
Te Wera Forest	180	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lower Retaruke	223	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turangi	366	12.3	2.5	7.4	+0.3	15.8	7	-5.4	25	96	11	-69	28	30	115
Chateau, Mt Ruapehu	1097	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hukanui	235	12.7	5.7	9.2	..	15.4	7	-3.4	1	139	20	-49	27	4	..
Mt Bruce Res	305	12.9	3.3	8.1	+1.3	16.5	22	-3.4	1	96	14	-136	28	30	..
Waingawa Masterton	114	14.8	3.0	8.9	+1.2	18.0	4	-3.7	25	22	8	-77	7	20	140
Kopua	311	13.0	4.0	8.5	+1.2	16.3	10	-4.0	25	17	8	-92	6	30	..
Waipukurau	137	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dannevirke	207	13.5	4.8	9.2	+1.4	15.7	4	-3.0	25	28	12	-69	9	30	122
Porangahau	8	15.8	6.0	10.9	..	19.2	4	-1.0	17	23	11	..	8	23	..
Castlepoint	3	15.1	9.9	12.5	+2.2	19.5	10	5.0	25	23	8	-82	8	29	..
Ngaumu Forest	244	13.6	2.8	8.2	+1.3	18.2	17	-2.5	2	20	8	-114	7	29	..
Tauherenikau, Alloa	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waiorongomai	21	13.9	5.1	9.5	+1.1	17.2	9	-1.0	24	49	12	-120	13	4	..
Cape Palliser	10	14.9	8.4	11.7	+1.1	19.1	9	2.4	25	19	10	-88	10	29	..
East Cape	17	15.8	7.7	11.8	+0.1	19.7	10	2.1	26	202	13	+54	98	6	..
Ruatoria	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mangatu Forest	182	14.7	..	..	..	18.2	11	..	..	60	11	-62	15	5	..
Manutuke Gisborne	9	15.9	3.4	9.7	+0.1	20.9	10	-2.0	15	165	10	+58	115	6	..
Gisborne Airport	4	15.7	4.5	10.1	+0.3	20.2	10	-1.4	15	137	10	+16	87	6	153
Onepoto, Waikaremoana	643	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wharerata Forest	439	..	..	..	..	..	..	..	..	210	..	..	135	6	..
Esk Forest	427	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ngamatea	885	9.0	1.0	5.0	..	14.3	30	-7.1	25	21	13	..	6	30	..
Kaweka Forest	414	13.0	6.2	9.6	+1.3	18.9	10	-0.2	25	25	8	-117	10	6	..
Napier Airport	2	15.6	4.1	9.9	+0.6	23.1	10	-3.7	25	6	6	-94	3	6	..
Napier	2	16.0	4.7	10.4	+0.9	22.0	10	-2.7	25	8	4	-86	5	6	154
Hastings	16	16.1	3.3	9.7	..	21.0	10	-3.5	25	5	6	..	2	6	..
Whakatou	6	15.6	3.0	9.3	..	21.7	10	-3.5	15	9	6	..	4	6	..
Gwavas Forest	335	13.6	2.3	8.0	+1.3	17.9	10	-3.7	25	13	8	-106	3	6	..
Makaretu	335	14.1	3.0	8.6	+1.1	17.8	10	-4.5	25	10	9	-91	2	30	..
Mohaka Forest	286	14.2	4.3	9.3	+0.9	18.2	9	-2.2	25	75	8	-95	41	6	..
Frasertown, Wairoa	8	15.6	3.9	9.8	+0.1	20.0	22	-1.0	15	88	11	-58	51	6	..
Wairoa	20	15.6	4.3	10.0	+0.3	20.1	22	-1.5	25	92	6	-38	68	6	141
Kapiti Is	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paraparaumu Airport	7	14.3	6.8	10.6	+1.6	16.6	20	-0.8	25	38	11	-62	10	4	104
Flockhouse Bulls	9	14.2	6.6	10.4	+1.5	17.3	4	-1.6	1	57	15	-26	21	4	..
Ohakea	48	14.1	7.2	10.7	+1.6	17.0	21	2.0	1	51	15	-34	11	30	71
Wharite Peak	914	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kairanga Palmerston N	15	14.1	5.7	9.9	+1.7	17.1	4	-3.0	25	94	13	+13	33	4	78
Palmerston N Airport	45	14.0	..	..	..	17.0	4	..	..	52	14	-30	14	4	..
Palmerston N D S I R	34	14.0	7.2	10.6	+1.8	16.8	4	-0.8	25	87	16	+0	42	4	64
Tiritea	100	13.2	7.6	10.4	..	15.8	4	1.3	25	107	15	..	49	4	..
Waitarere Forest	3	14.3	6.2	10.3	+1.6	16.2	13	-3.0	24	54	14	-32	11	30	..
Levin	46	13.8	6.5	10.2	+1.2	15.9	30	0.1	30	85	15	-20	18	26	65
Titahi Bay	31	14.4	7.5	11.0	..	16.8	7	0.5	24	45	9	..	12	4	..
Avalon, Lower Hutt	15	14.3	6.8	10.6	+1.6	16.4	9	0.3	24	38	9	-107	9	3	..
Highland Pk Wgtn	120	12.7	7.7	10.2	..	15.9	9	2.4	25	39	8	..	12	29	..
Kelburn, Wellington	125	13.5	7.9	10.7	+1.6	16.9	9	3.6	1	38	10	-101	12	29	123
Somes Is	43	13.7	7.9	10.8	+1.4	16.5	9	3.0	24	22	7	-117	6	2	..
Gracefield Lower Hutt	34	14.3	7.7	11.0	+1.6	17.1	9	1.2	24	36	8	-111	10	4	..
Wainuiomata	82	13.7	6.2	10.0	+1.7	16.7	9	-0.2	24	37	9	-155	8	29	..
Wellington Airport	6	14.3	8.7	11.5	+1.7	18.2	9	3.8	23	25	10	-91	9	29	..

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		A Max.	B Min.			Maximum	Date	Minimum				Date		Amount	Date
Metres	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs			
Rimutaka Forest	37	14.3	5.5	9.9	..	17.1	9	-0.8	24	40	11	..	18	30	..
Kaitoke	223	13.2	4.0	8.6	+1.5	16.0	7	-4.7	25	77	18	-142	19	30	99
Wallaceville	56	14.3	4.2	9.3	+1.4	16.3	7	-4.0	25	43	13	-91	9	30	111
Cape Egmont	8	14.9	9.8	12.4	+1.6	17.0	21	2.5	25	86	20	-56	33	29	..
Stratford Mtn House	846	8.2	1.2	4.7	-0.1	13.9	30	-4.5	25	324	13	-318	129	29	..
Stratford Dem Farm	311	12.8	4.8	8.8	+0.9	15.7	9	-1.9	25	131	12	-71	35	29	108
Kapuni	173	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manaia Dem Farm	98	14.2	7.4	10.8	+1.4	18.7	21	-1.4	25	37	15	-92	13	29	92
Normanby	122	13.7	7.0	10.4	+2.1	16.7	21	0.4	25	43	20	..	13	29	..
Patea	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ohakune Junction	629	10.7	3.1	6.9	+1.4	15.3	21	-3.2	25	76	11	-73	40	30	..
Karioi	648	10.5	..	..	..	16.0	21	..	..	71	12	-47	33	10	..
Waiouru	823	9.8	2.3	6.1	+1.6	15.4	21	-5.4	25	53	13	-54	17	30	..
Waiouru Military Camp	823	9.5	1.9	5.7	+1.4	15.1	21	-6.5	25	57	18	-50	20	30	..
Ahu Ahu Valley	85	14.4	4.9	9.7	..	19.7	10	-2.0	25	49	15	..	19	30	..
Taihape	433	12.4	2.5	7.5	+1.3	19.3	21	-5.8	25	40	21	-47	10	30	..
Kahui, Taihape	518	..	4.7	..	..	..	..	-3.6	25	29	10	-58	12	30	..
Wanganui	22	14.8	7.8	11.3	+1.6	18.0	21	2.9	1	37	10	-50	11	30	86
Wanganui Airport	9	15.1	7.7	11.4	..	18.1	21	0.6	24	41	10	-49	12	30	..
Farewell Spit	3	14.7	6.5	10.6	+1.2	17.2	9	1.0	15	85	12	-27	48	29	..
Totaranui	10	14.5	5.8	10.2	..	18.5	9	0.7	10	167	11	+72	107	29	..
Westport Airport	2	13.6	6.5	10.1	+1.3	16.0	9	2.4	25	194	18	+8	40	29	74
Cobb Dam	823	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arapito	20	13.6	5.6	9.6	..	16.4	30	1.2	25	208	16	..	37	30	57
Lake Rotoroa	443	10.1	2.0	6.1	..	12.9	9	-4.5	24	114	21	..	12	9	..
Lake Rotoiti	634	9.8	0.0	4.9	+1.5	14.5	7	-6.0	25	99	17	-21	37	29	..
Hokitika Airport	39	12.6	4.8	8.7	+1.1	15.4	9	0.4	24	265	18	+60	44	29	59
Punakaiki	4	14.0	8.6	11.3	..	16.9	9	5.3	7	370	18	..	157	30	..
Reefton	198	11.0	3.6	7.3	+2.5	15.5	9	-2.8	1	152	20	-9	34	30	..
Barrytown	30	13.9	8.3	11.1	..	17.0	29	5.5	7	295	17	+104	85	30	..
Totara Flat	77	11.9	3.7	7.8	+2.1	16.1	9	-2.6	1	176	18	+18	37	30	..
Greymouth	4	12.6	6.0	9.3	+0.9	15.1	9	3.0	24	221	21	+34	48	4	55
Otira Substation	383	10.0	2.8	6.4	+1.7	12.9	26	-2.5	24	457	21	+90	95	8	..
Springs Junction	421	9.3	..	..	..	12.3	9	..	..	201	19	+11	37	30	..
Pukekura	86	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hari Hari	45	12.8	2.0	7.4	+1.2	15.5	26	-4.1	24	338	16	+102	72	25	..
Okarito	10	12.9	4.5	8.7	..	15.2	9	0.1	24	290	15	..	57	30	..
Franz Josef	155	12.1	4.7	8.4	..	15.3	21	1.5	24	427	15	..	78	25	82
Fox Glacier	152	12.0	3.7	7.9	+1.2	14.5	21	0.8	1	351	16	+70	53	25	..
Milford Sound	3	9.9	2.2	6.1	+0.4	14.1	8	-2.0	25	445	21	+31	84	9	..
Puysegur Point	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stephens Is	187	12.9	9.3	11.1	+1.6	15.2	13	5.3	24	55	11	-19	11	3	..
Riwaka Motueka	8	14.1	2.4	8.3	+0.7	17.6	30	-2.2	25	160	8	+37	142	29	136
Tapawera	146	12.6	0.8	6.7	..	17.6	9	-6.2	25	65	14	..	43	29	..
Crail Bay Pelorus Sd	13	..	..	..	..	..	..	..	..	85	..	..	..	..	..
Appleby	17	14.0	3.9	9.0	+1.1	18.6	9	-1.7	25	62	8	-19	51	29	..
Nelson Airport	2	13.6	2.2	7.9	+0.7	18.2	9	-2.8	25	53	7	-26	45	29	133
Rai Valley	79	14.1	1.9	8.0	+1.3	19.2	9	-4.1	25	117	7	-37	76	29	..
Moutere Hills	110	13.3	6.3	9.8	+1.2	17.3	9	1.3	25	66	10	-24	55	29	..
Blenheim Airport	27	14.5	2.7	8.6	+1.3	20.2	9	-2.8	16	32	6	-29	25	29	..
Brancott Valley	64	14.6	2.5	8.6	..	20.2	9	-3.7	16	32	7	..	27	29	..
Blenheim	4	15.0	2.7	8.9	+1.2	20.7	9	-2.7	16	36	6	-21	30	29	143
Wither Hills Blenheim	32	14.8	3.4	9.1	+1.3	20.5	10	-2.5	16	30	5	-25	25	29	..
Waihopai Power Stn	262	13.4	1.8	7.6	+1.2	19.0	9	-4.8	25	50	8	-23	43	29	..
Vernon Lagoon	2	14.9	2.2	8.6	..	22.0	9	-4.4	16	22	4	..	19	29	..
Lake Grassmere	2	14.1	3.5	8.8	+0.8	21.5	9	-1.2	16	18	6	-33	13	29	102
Cape Campbell	3	13.9	7.8	10.9	+1.5	18.6	9	4.7	17	15	7	-45	10	29	..
Boyle River Lodge	600	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hanmer Forest	387	12.7	0.0	6.4	+2.2	18.0	8	-5.5	1	18	10	-87	10	5	107
Molesworth	893	..	..	..	..	..	..	..	..	28	5	-26	17	29	..
Kaikoura Flats	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kaikoura	108	13.1	6.9	10.0	+1.7	19.7	9	2.0	24	13	6	-55	11	23	145
Arthurs Pass	738	8.0	0.5	4.3	..	12.0	18	-6.0	24	332	17	+47	64	9	..
Culverden	174	12.9	-0.9	6.0	..	19.0	9	-6.4	24	4	3	..	2	30	..
Balmoral Forest	198	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waiau	137	13.8	0.3	7.1	..	19.6	9	-6.2	2	28	5	..	25	30	..
Cheviot	85	13.7	0.7	7.2	..	20.2	9	-4.9	2	9	6	..	2	23	109
The Hermitage Mt Cook	765	10.2	0.3	5.3	+2.4	14.4	18	-5.5	25	252	13	+11	61	8	72
Mt John	1027	8.8	0.7	4.8	+2.3	13.2	7	-5.0	24	14	6	-25	6	8	..
Craigieburn Forest	914	9.3	-0.1	4.6	+2.1	14.8	18	-6.2	24	89	13	-12	24	9	..
Lake Coleridge	364	11.9	0.3	6.1	+1.6	16.7	18	-5.6	1	37	8	-31	16	9	..
Highbank Power Stn	336	12.5	3.6	8.1	+1.7	17.5	18	-1.7	24	9	7	-55	5	5	136
Hororata Substation	192	13.4	0.5	7.0	+2.0	19.7	18	-5.8	24	9	9	-49	2	23	126
Winchmore	160	13.0	1.6	7.3	+1.9	18.1	9	-3.7	24	7	4	-46	4	5	..
Peel Forest	274	12.9	-0.2	6.4	+1.7	18.6	8	-5.8	24	10	12	-39	7	5	..

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

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius							Rainfall in Millimetres					Bright Sunshine	
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount		Date
Metres	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs			
Ashburton	101	13.3	1.8	7.6	+1.6	19.0	9	-4.1	24	7	4	-47	4	6	126
Waipara	64	13.9	2.9	8.4	+2.1	19.0	18	-2.9	2	8	6	-41	3	5	..
Ashley Forest	107	13.1	3.9	8.5	+1.6	19.5	18	-1.5	24	27	5	-28	20	5	127
Rangiora	46	13.3	1.2	7.3	+1.3	19.9	11	-5.1	24	11	8	-37	5	5	..
Darfield	195	13.4	2.9	8.2	+2.4	18.6	9	-2.3	24	9	6	-52	4	5	..
Eyrewell Forest	158	13.4	1.2	7.3	+1.8	19.0	18	-5.0	24	11	5	-45	5	23	..
Christchurch Airport	30	13.2	1.0	7.1	+1.1	19.7	9	-4.3	25	9	8	-43	4	29	141
Templeton	46	13.1	2.1	7.6	+1.7	19.0	9	-2.9	24	9	6	..	5	29	..
Christchurch	7	13.5	1.9	7.7	+1.2	20.2	9	-2.9	24	15	7	-44	6	29	..
Bromley Christchurch	9	12.7	3.0	7.9	+0.9	20.3	9	-1.8	24	15	8	-40	6	29	..
Mt Pleasant	137	13.7	6.6	10.2	+2.0	19.5	9	1.0	24	19	7	-49	8	29	..
Lincoln	11	12.8	1.5	7.2	+1.2	19.9	18	-3.3	16	13	8	-46	4	29	128
Quail Island	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Akaroa	3	14.3	0.7	7.5	+0.3	20.0	12	-3.0	23	14	8	..	3	28	..
Lake Tekapo	683	9.2	-0.9	4.2	+1.4	14.4	18	-8.0	24	18	7	-32	7	8	..
Lake Pukaki	556	9.1	-0.1	4.5	+1.7	16.0	18	-4.7	22	25	9	-20	9	8	..
Fairlie	304	12.4	-2.1	5.2	..	17.2	11	-8.3	25	10	5	..	4	5	..
Twizel	457	8.9	-3.5	2.7	+1.0	16.0	18	-9.5	24	26	11	-16	9	9	..
Ikawai	70	12.6	0.6	6.6	+1.4	18.0	11	-6.5	24	29	5	-4	18	5	..
Geraldine	119	13.2	0.5	6.9	+1.7	18.9	9	-5.5	24	8	5	-35	4	5	..
Orari Estate	81	12.7	0.1	6.4	+1.4	19.9	16	-4.8	24	9	8	-32	5	5	..
Temuka	24	12.9	0.4	6.7	+1.0	19.3	11	-4.9	24	8	5	-28	4	5	..
Timaru Airport	26	12.6	0.1	6.4	+1.0	18.8	11	-4.8	24	10	4	-23	7	5	..
Adair	85	12.4	4.2	8.3	+1.7	18.6	11	-1.6	24	22	5	-11	16	5	..
Timaru	17	12.0	2.7	7.4	+1.5	18.2	9	-3.5	24	17	5	-17	11	5	119
Waimate	61	13.3	2.3	7.8	+1.1	19.4	12	-4.1	24	17	5	-22	9	5	..
Aviemore	241	11.2	2.0	6.6	..	16.3	8	-4.5	24	8	7	-20	4	5	..
Kurow	207	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oamaru Airport	30	12.4	2.4	7.4	+1.5	18.8	11	-2.8	24	11	5	-24	5	4	121
Knobs Flat	360	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tara Hills Omarama	488	9.7	-1.4	4.2	+1.9	14.5	12	-8.4	24	10	7	-25	3	8	132
Lake Hawea	350	10.2	0.9	5.6	+1.4	14.2	18	-4.6	25	25	9	-32	8	8	..
Wanaka	296	10.7	-0.1	5.3	+1.6	15.7	18	-5.6	24	36	9	-15	16	25	..
Queensberry	277	10.4	0.7	5.6	..	15.5	12	-5.3	24	25	8	..	10	8	..
Bendigo	200	11.6	-0.4	5.6	..	17.0	18	-6.8	24	15	7	..	7	8	..
Naseby	607	10.1	-1.5	4.3	..	15.3	7	-8.3	24	13	5	..	6	8	..
Windsor	88	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oamaru	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ranfurlly	427	10.9	-3.0	4.0	+1.6	15.1	12	-9.7	24	8	3	-18	6	30	89
Herbert Forest	61	13.3	1.3	7.3	+1.6	19.0	9	-4.5	24	24	4	-17	14	5	..
Palmerston	21	13.6	0.1	6.9	+1.6	17.9	11	-7.6	24	18	3	-28	10	30	133
Cherry Farm Hospital	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taiaroa Head	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Invermay, Taieri	30	12.0	1.7	6.9	+1.5	17.0	6	-6.5	24	38	8	-39	24	30	117
Berwick Forest	18	12.4	0.8	6.6	+1.3	17.7	25	-5.7	24	30	10	-34	12	30	..
Dunedin Airport	1	12.3	0.6	6.5	+1.4	17.3	25	-7.0	24	30	11	-21	18	30	122
Musselburgh Dunedin	2	11.7	4.2	8.0	+1.1	17.0	8	-1.7	25	36	9	-35	23	30	117
Te Anau	215	10.8	3.4	7.1	+2.5	15.1	7	-4.4	24	82	12	-20	20	25	86
West Arm, Manapouri	232	8.6	4.7	6.7	+2.5	12.5	7	-2.0	24	394	21	+115	69	8	..
Borland Burn	183	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queenstown	329	11.2	2.3	6.8	+2.5	16.2	7	-3.0	24	64	10	-6	25	25	88
Queenstown Airport	349	10.5	0.7	5.6	+2.3	15.1	12	-5.6	24	45	9	-9	22	25	..
Otama	183	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cromwell Sub Stn	213	11.2	-0.7	5.3	..	17.1	12	-6.5	25	16	7	-18	6	25	..
Cromwell	213	11.3	-1.3	5.0	+1.7	17.8	12	-8.9	24	17	7	-11	6	25	118
Northburn	210	11.4	0.2	5.8	..	16.7	12	-6.7	24	16	8	..	6	25	..
Lauder	370	10.7	-1.1	4.8	..	16.2	17	-9.0	24	14	8	..	8	30	..
Clyde Dam	160	10.9	0.2	5.6	..	17.6	12	-6.7	25	23	9	..	8	25	..
Ophir	305	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Moa Creek	427	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clyde	171	10.7	-0.7	5.0	..	17.9	12	-7.8	24	24	11	..	9	25	..
Alexandra	141	11.0	-0.4	5.3	..	17.8	17	-7.5	23	26	10	..	8	25	104
Roxburgh Power Stn	110	11.3	1.4	6.4	+1.5	17.5	12	-4.0	24	11	7	-21	5	30	..
Ettrick	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Deep Stream	396	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beaumont	46	11.4	1.1	6.3	..	17.0	25	-4.7	24	45	13	-47	16	30	..
Mahinerangi Dam	396	9.9	1.2	5.6	+1.6	14.3	6	-5.6	24	35	14	-52	16	30	..
Tapanui	226	10.8	2.7	6.8	+1.6	15.1	25	-2.5	24	41	15	-49	21	30	..
Taieri Mouth	15	11.9	2.7	7.3	+1.1	15.6	8	-4.6	24	30	8	-33	12	30	..
Tuatapere	27	11.9	2.4	7.2	..	16.4	18	-1.9	28	74	19	..	19	30	..
Otautau	55	11.2	1.5	6.4	+1.0	15.5	25	-5.2	24	68	12	-47	12	30	46
Winton	44	11.2	1.9	6.6	+1.0	15.5	25	-4.4	24	43	15	-37	12	30	100
Gore	123	10.4	2.6	6.5	+1.8	14.7	8	-4.7	24	36	17	-41	7	30	100
Hokonui Forest	46	11.0	2.8	6.9	+1.4	15.0	25	-5.7	24	43	17	-50	9	22	..
Woodlands	47	10.8	2.6	6.7	+1.1	14.4	25	-3.6	24	49	23	-47	8	30	..

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

Station	Height of Station Above M.S.L.	Air Temperature in Degrees Celsius								Rainfall in Millimetres					Bright Sunshine
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount	Date	
	Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm		Hrs	
Invercargill Airport	0	11.1	2.2	6.7	+1.3	14.4	25	-5.0	24	43	19	-60	8	9	70
Tiwai Point, Bluff	5	10.8	4.8	7.8	+1.2	13.4	25	-3.3	24	38	19	-75	8	9	..
Stewart Is	3	11.1	5.0	8.1	+1.9	13.8	8	-3.2	24	128	30	-3	30	10	..
Milton	18	11.1	1.4	6.3	+1.2	15.2	9	-7.6	24	28	11	-45	15	30	..
Clinton School	120	10.7	2.2	6.5	..	15.7	11	-6.2	24	24	18	..	7	22	..
Finegand Balclutha	6	11.2	2.6	6.9	+1.5	15.0	9	-5.0	25	16	10	-46	4	4	100
Owaka	5	11.4	1.6	6.5	+0.7	14.6	6	-7.4	24	30	17	-63	6	9	..
Nugget Point	129	10.8	4.9	7.9	+1.6	14.1	6	-1.4	24	32	16	-54	6	19	..
Tautuku	40	11.5	4.1	7.8	+1.2	15.8	25	-3.7	24	52	15	-90	12	10	..
Nadi Airport Fiji	19	29.3	20.0	24.7	+0.4	31.4	10	16.7	26	63	6	-11	19	16	173
Rarotonga Airport	7	25.4	19.4	22.4	-0.2	27.4	8	16.0	24	36	17	-77	11	14	144
Totokoitu, Rarotonga	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raoul Is	38	19.7	15.5	17.6	+0.1	21.6	7	11.5	19	191	17	+35	103	5	84
Campbell Is	15	8.1	3.8	6.0	+1.2	10.0	17	-2.5	23	93	30	+27	14	11	1
Waitangi, Chatham Is	44	11.5	6.9	9.2	+0.6	13.9	5	0.3	24	25	17	-72	6	30	83
Scott Base Antarctica	16	-20.1	-29.8	-25.0	+1.3	-8.2	10	-41.0	20	..	..	..	..	..	..
LATE RETURNS AND CORRECTIONS															
Wairakei Research Stn 05/1984	402	14.5	3.1	8.8	-0.3	18.3	12	-4.3	22	79	10	-26	24	24	..
Huntly 05/1984	34	16.6	8.2	12.4	..	21.0	7	2.0	17	72	13	..	27	9	..
Whatawhata 05/1984	104	15.8	6.5	11.2	-0.6	19.9	7	-3.7	21	115	16	-44	55	25	106
Hukanui 05/1984	235	13.2	5.8	9.5	..	17.8	9	-1.0	17	185	20	-7	43	25	..
Wharite Peak 04/1984	914	10.0	5.7	7.9	-0.5	14.5	14	0.5	9	96	..	-92	15	2	..
Ahu Ahu Valley 05/1984	85	15.0	5.4	10.2	..	19.6	9	-1.1	21	80	15	..	18	24	..
Kahui, Taihape 05/1984	518	12.6	4.7	8.7	-0.2	19.1	9	-1.8	21	71	13	-18	19	24	..
Hari Hari 05/1984	45	13.8	2.1	8.0	-0.7	19.6	9	-3.7	22	174	17	-143	50	8	..
Waihopai Power Stn 05/1984	262	13.4	2.5	8.0	-1.0	20.2	5	-2.4	21	45	6	-46	19	8	..
Craigieburn Forest 05/1984	914	9.6	-1.0	4.3	-0.8	19.9	14	-5.0	21	51	13	-107	18	8	..
Quail Island 03/1984	75	19.7	13.1	16.4	..	25.9	2	7.5	23	68	8	..	17	17	..
Quail Island 04/1984	75	17.1	..	..	..	24.3	7	..	..	14	5	..	6	8	..
Quail Island 05/1984	75	12.5	..	..	..	20.0	13	..	..	67	11	..	19	24	..
Kurow 04/1984	207	18.7	6.5	12.6	..	23.9	12	0.9	29	10	6	..	4	28	..
Kurow 05/1984	207	11.9	2.1	7.0	..	17.7	14	-4.3	21	38	9	..	13	5	..
Windsor 04/1984	88	18.4	5.1	11.8	..	25.1	7	-0.6	11	14	4	..	10	28	..
Windsor 05/1984	88	11.6	2.5	7.1	..	17.6	14	-5.0	28	56	..	..	26	24	..
Oamaru 05/1984	5	12.5	4.3	8.4	..	17.8	4	-2.7	23	62	11	..	30	24	..
Herbert Forest 05/1984	61	12.7	1.8	7.3	-0.7	18.5	4	-4.2	23	87	11	+37	49	24	..
Rarotonga Airport 05/1984	7	26.5	20.4	23.5	-0.2	28.7	3	17.4	28	143	11	-40	96	6	162
Totokoitu, Rarotonga 05/1984	9	27.4	20.4	23.9	+0.5	31.7	21	17.3	12	228	12	..	151	6	..
Raoul Is 03/1984	38	25.0	21.1	23.1	+1.0	26.4	15	18.4	5	121	22	-22	26	8	113
Raoul Is 04/1984	38	23.7	18.3	21.0	+0.4	26.5	13	15.1	26	133	22	+11	41	11	165
Campbell Is 04/1984	15	9.7	5.0	7.4	+0.1	14.5	18	-0.4	29	149	29	+31	16	19	37
Campbell Is 05/1984	15	7.9	3.8	5.9	+0.0	10.5	4	-2.0	30	102	30	-32	14	14	12

The "normal" refers to the present site of the instruments. Standard period for normals is 1951-1980. 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 WEATHER IN NEW ZEALAND IN JUNE 1984

General—June was very mild, and dry in most areas. The north of the country had its lowest frequency of strong winds for June since 1966 but strong winds were a little more frequent than usual in the south. The south of the country recorded the highest frequency of north-westerly winds since 1959, with just over half of all winds from the north-westerly quarter. Gale force winds caused damage to some agricultural buildings and caused widespread power cuts in the Gisborne area on the 6th.

Pressures were very high over the whole country this month.

Farmers generally reported that the dry, mild weather was excellent for stock health, and most crops. Some farms in the south of the North Island had problems with outbreaks of porina caterpillar infestation of pasture.

Rainfall—With the exception of the East Cape—Gisborne region and the north-west Nelson, Westland and Fiordland regions, the whole country was drier than usual for June.

Hawkes Bay and Wairarapa were exceptionally dry, with many stations reporting less than 10 percent of normal rainfall. Napier recorded 8 mm of rain, the least for June since 1933, Bagshot Station (N.E. of Masterton) had its driest June since 1880 with 25 mm recorded, Ongaonga had 8 mm, the least for any month since the station opened in 1969 and Waipukurau also had 8 mm, the lowest June total since 1940, and 2nd lowest since opening in 1906.

In contrast the area between East Cape and Wairoa was wet, mainly due to heavy rainfalls on the 6th and 7th, the result of a deep depression off East Cape. Among stations recording heavy falls on the 6th were: Te Puia Springs (197 mm), Ruangarehu (190 mm), Waiwhero (181 mm), and Te Karaka (160 mm). Estimated return periods for falls in coastal areas were mostly between 5 and 10 years, but were in the vicinity of 20 years for inland areas. Many local roads were closed by slips and there were widespread disruptions to communications.

The north-west Nelson region was very dry until the 29th, when falls of between 90 mm and 120 mm brought the average rainfall for the month to normal or above normal.

Temperatures—Mean temperatures indicate that, for much of the country, this was the mildest June since 1971.

Temperatures were above normal everywhere. The north Auckland Peninsula, the east of the North Island and Fiordland were up to 1°C warmer than usual, while the rest of the country was between 1.0°C and 2.5°C warmer than normal.

The period between the 8th and 12th was particularly mild, with mean temperatures between 6° and 8°C above average in many areas. Stations in eastern areas recorded maxima above 20°C during this period, including, on the 9th, 22.0°C at Vernon Lagoons, 21.5°C at Lake Grassmere, 20.2°C at Christchurch Gardens and 20.7°C at Blenheim. Napier reached 22.0°C on the 10th.

Sunshine—Eastern areas from Gisborne to Dunedin were sunnier than normal this month, while northern and western areas of both Islands were very cloudy.

Both Hokitika, with 59 hours and Ohakea, with 70 hours, had their lowest totals for June since the stations began recording in 1935 and 1964 respectively (Hokitika had a site change in 1964).

Among those places recording the greatest departure this month were: Gisborne Airport (+29 hours), Dunedin Airport (+25 hours), Christchurch Airport (+21 hours), Hokitika (-56 hours), Ohakea (-41 hours), and Kaitaia (-26 hours).

THE WEATHER SEQUENCE, JUNE 1984

1-7 June

A large anticyclone, centred to the west of New Zealand, covered the country on the 1st. The weather was cool and fine, apart from isolated showers in some western areas. Cool, fine weather continued until the 3rd, when a shallow trough developed between the

anticyclone, now centred east of New Zealand, and a second centred over Australia. A front within this trough brought rain to Westland, Southland and central New Zealand.

Temperatures were mild. The trough developed over New Zealand and rain became widespread on the 4th and 5th, with heavy rain in some eastern areas on the 6th. A depression, which had developed off Norfolk Island on the 5th, moved southwards during the 6th and brought rain to the north of the North Island. This lay off East Cape by the 7th, with rain confined to the East Cape-Gisborne area.

8-14 June

By the 8th the depression lay to the east and a south-westerly flow covered the country. A front within this flow brought rain to the south and west of the South Island on the 8th and 9th. The flow became north-westerly during the 9th with temperatures becoming mild, especially in eastern districts. A belt of high pressure lay over the North Island on the 10th, bringing a westerly flow onto the country. Rain fell in south-western areas between the 10th and 12th as fronts passed within the flow but temperatures remained mild. By the 13th the flow had become south-westerly. A front crossed the country during the 13th and 14th, but brought only light showers to isolated areas.

15-21 June

An anticyclone lay centred in the Tasman Sea on the 15th and as this crossed the country during the 3 days from the 15th to the 17th most districts had mild, settled weather, although some rain fell in some western and southern areas of the South Island as fronts moved eastwards along the southern edge of the anticyclone. By the 18th a belt of high pressure covered the north of the country, with a westerly flow to the south. A front within this flow brought light rain to some western areas of both Islands.

A depression developed and deepened rapidly near Lord Howe Island during the 19th and as this moved eastward heavy rain fell over the north of the North Island on the 19th, spreading south over the North Island to the north of the South Island on the 20th. Rain remained widespread but became lighter on the 21st, with the depression remaining to the west.

22-30 June

There was a general clearance on the 22nd as the depression weakened and crossed the country. A ridge extended south-eastwards from an anticyclone over Australia onto the South Island during the 23rd, bringing fine weather to most areas, although rain fell in some eastern areas of both Islands. By the 24th an anticyclone had developed over the country. The weather was generally fine but cool. The anticyclone intensified during the 25th, bringing generally fine, mild weather, although a cold front passing to the south brought heavy rain to western and some southern areas. Light showers fell in isolated areas of both Islands on the 26th and 27th as this front slowly crossed the country. A depression began to form near Lord Howe Island during the 27th and by the 28th lay to the west of New Zealand. Widespread, and in some areas heavy, rain fell during the 29th and 30th as the depression moved eastward.

PROPOSED DISCONTINUATION OF THE WEATHER SEQUENCE

Daily weather information, including maps, is now available through various media. The Meteorological Service is therefore proposing to discontinue publishing the Weather Sequence as above, though the Climatological Table and written summary will continue in the Supplement to the *New Zealand Gazette*.

People having a special need for the Weather Sequence as currently published are invited to write to:

The Director,
New Zealand Meteorological Service,
P.O. Box 722,
Wellington,
by 30 September 1984.

J. S. HICKMAN, Director.

