considerable flooding occurred in places. Waian had over 6 in. in the 24 hours preceding 9 a.m. on the 10th. Many of the ranges in both Islands received a coating of snow, the fall being a very heavy one in the Tongariro National Park. The above-mentioned storm had passed away eastwards by the 11th, but pressure remained relatively low to the north-east and

ranges in both Islands received a coating of snow, the fall being a very heavy one in the Tongariro National Park. The above mentioned storm had passed away eastwards by the 11th, but pressure remained relatively low to the north-east and east of New Zealand, while an anticyclone extended from the westward on to the southern districts. Consequently, strong southerly winds continued to blow up the east coast as far as East Cape, accompanied by frequent showers in coastal areas. Over the rest of the Dominion, however, and especially in western districts, although temperatures remained cold, the weather for the most part was fine on the 11th and 12th. The anticyclone had spread over the whole Dominion by the 13th, and under its influence fine, pleasant weather prevailed generally until the 15th.

The next depression was once again a cyclone which, on the morning of the 15th, was centred north-west of Cape Maria van Diemen, bringing rain to North Auckland. It intensified and extended southwards during the night of the 15th, and consequently widespread rain fell in the North Island, many heavy downpours occurring; culminating in fleods in North Auckland and also in the Wairarapa on the 16th. Strong north-east winds blew at this time in North Auckland and south-easterlies about Cook Strait, but in the South Island winds remained light to moderate and mainly from some easterly quarter. The centre of the storm was situated off East Cape on the morning of the 17th, but its worst effects had by then reased owing to the modifying influence of a depression of the westerly type approaching across the Tasman Sea. The resulting improvement on the 17th, however, was of brief duration, for in the night the new depression advanced on to the Dominion and proved an extremely intense one. A renewal of unsettled conditions rapidly took place, with rain in most districts and heavy falls in parts of the western. On the 18th strong north-westerly winds blew, but rainfall was confined chiefly to the west coast districts. During the nigh

On the morning of the 26th a tornado passed over part of Te Aroha, unroofing a large timber-mill shed.

The northern cyclone gradually filled up while the anticyclone over and east of the Dominion intensified still further, and under its influence most parts of the Dominion experienced fine, pleasant weather until the close of the month. There was, however, considerable cloud in eastern areas and occasional light rain at isolated places.

On the last day of the month a westerly depression was approaching the South Island and rain fell in Westland.

B. V. PEMBERTON, Acting Director.

## CLIMATOLOGICAL TABLE.

SUMMARY OF THE RECORDS OF TEMPERATURE, RAINFALL, AND SUNSHINE FOR SEPTEMBER, 1935.

i di	Height of Station above M.S.L.	Air Temperatures in Degrees (Fahrenheit).								Rainfall in Inches.					
Station.		Means of		Mean		Absolute Maximum and Minimum.					• .	Most in a Day.		Bright Sun-	
		A Max.	B Min.	of A and B.	Difference from Normal.	Maximum.	Date.	Minimum.	Date.	Total Fall.	No. of Wet Days.	Difference from Normal.	Amount.	Date.	shine (Hours).
Te Paki, Te Hapua	Ft. 200	$^{\circ}\mathrm{F}$ $59\cdot2$	°F 48·9	°F 54·0	F (+0·1)	°F 63·8	30	°F 35·0	1	In. 14 · 10	23	In.	$ \begin{array}{c} \text{In.} \\ 2 \cdot 43 \end{array} $	25	122.6
Waipoua State Forest	225	59.5	45.6		(+0.6)	67.0		33.0	1	4.58	19	••	1.82	24	111.3
Riverhead Auckland	105 160	$58 \cdot 6$ $58 \cdot 6$			$egin{array}{c} (-0.9) \ -1.8 \end{array}$	66·8	$\frac{30}{29,30}$	$27 \cdot 0 \\ 38 \cdot 6$	$\frac{13}{3}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		$-1\cdot29$	$1.43 \\ 1.76$	- 15 - 15	161.3
Waihi	404	$56 \cdot 9$	41.8		$-2\cdot5$	$63 \cdot 2$		$28 \cdot 2$	13	8.96	20	$+2 \cdot 11$	2.86	15	164.1
Te Aroha	46	$59 \cdot 9$	$42 \cdot 7$	$51 \cdot 3$	$-2 \cdot 3$	$66 \cdot 0$	21	$33 \cdot 2$	2	$5 \cdot 27$	19	+0.29	1.80	15	
Tauranga	100	58.7	$42 \cdot 1$	50.4		63.5		$32 \cdot 3$	1	5.36		+1.07	1.90	15	182.9
Ruakura Farm, Hamilton	$\begin{array}{c c}  & 131 \\  & 230 \end{array}$	$60.7 \\ 59.7$	$39 \cdot 2 \\ 39 \cdot 7$	50·0 49·7	$\begin{pmatrix} -1.7 \\ (-2.4) \end{pmatrix}$	$66.0 \\ 65.2$		$28 \cdot 2$ $29 \cdot 8$	$\begin{array}{c} 14 \\ 13 \end{array}$	1.66 $2.21$	15 11	-2.09	$0.57 \\ 0.59$	$\frac{15}{9}$	165.3
Cambridge Rotorua	925					62.8		30.0		$\frac{2 \cdot 21}{3 \cdot 24}$		-1.73	$0.33 \\ 0.81$	16	147.8
Whakarewarewa	1,000		37.4	47.0		62 . 2		27.0	1	2.82	11	-1.70	0.68	8	
Onepoto, Lake Waikare- moana	2,110	47.2			••	56.0		30.6		4.29			0.46	3	
New Plymouth	$\begin{vmatrix} 60 \\ 3,670 \end{vmatrix}$	58.6	$42 \cdot 9$	50.8	-1.0	$64 \cdot 0$	24	$35 \cdot 2$		3.47	9	-1.45	0.77		$217 \cdot 1$
Chateau Tongariro Karioi	2,125	52.6	30.6	41.6	(-1.8)	$61 \cdot 3$	25	21.5	ï	2.39	ii		0.71	18	
Napier	5	56.0	42.3	49.2	$-2\cdot6'$	68.0		33.5	ī	3.20	18	+1.27	0.78	1	164.7
Hastings	45	57.5				69.0		33.4		4.63	18		1.13	1	
Taihape	2,157	$50.1 \\ 56.9$			$egin{array}{c} -2\cdot 4 \ -3\cdot 0 \end{array}$		29,30	$egin{array}{c} 27 \cdot 9 \ 26 \cdot 0 \end{array}$	$\begin{vmatrix} 1\\1 \end{vmatrix}$	$\begin{array}{ c c c c }\hline 1.54 \\ 1.92 \end{array}$	13	-1.50	0.72		
Tangimoana	100	57.6			$-3.0 \\ -1.4$	65·0	$\frac{26}{29,30}$	$\frac{20.0}{30.0}$		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	9	$egin{array}{c} -0.71 \ -0.19 \end{array}$	$0.52 \\ 0.98$	9 10	
Massey College, P.N	110	55.6				63.7		$29 \cdot 7$	2	$2 \cdot 67$	16	(-0.64)	1.02		187.9
Pahiatua	384	$55 \cdot 7$	37.6			$65 \cdot 4$		29.0		3.95	13	(-0.32)	0.88		• • •
Kapiti Island	44	54.8				$61 \cdot 0 \\ 64 \cdot 2$		38.0		3.30	11	$\pm 0.00$	0.98		104.4
Masterton Wellington	.387 415	$55 \cdot 3$ $53 \cdot 7$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			63.1		$28.8 \\ 34.2$	15 1	$\begin{vmatrix} 6.68 \\ 4.80 \end{vmatrix}$		$+3.68 \\ (+1.60)$	$2 \cdot 74$ $2 \cdot 02$	16 16	$134 \cdot 4 \\ 194 \cdot 5$
Nelson	24	57.1	38.6			61.8		28.7	$\frac{1}{2}$	0.76		-2.82	0.29		241.1
Appleby, Nelson	57	$56 \cdot 9$		47.0			9,30	$28 \cdot 4$	2	0.61	7		0.18		
Blenheim	30 900	$57.0 \\ 56.2$		$\begin{array}{ c c c c c } 46 \cdot 2 \\ 42 \cdot 7 \end{array}$	(-3.7)	$65 \cdot 2 \\ 62 \cdot 0$	$20,30 \\ 30$	$26.8 \\ 18.4$	$\frac{12}{2}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		(+1.50)	2.40	9	217.5
Golden Downs Waihopai	860	55.9				63.7		25.1	2	1.50			$0.55 \\ 1.21$	$\frac{17}{9}$	
Hanner Springs	1,225	52.3		41.2	$-5\cdot2$	66.6		17.8	- 2	3.86		-0.57	$2 \cdot 21$	9	175.8
Balmoral	743	_ <u>.</u> .									· <u>·</u>				
Hokitika	$\begin{vmatrix} 12 \\ 1,220 \end{vmatrix}$	$57 \cdot 0$ $54 \cdot 2$				$\begin{array}{ c c c }\hline 63 \cdot 0 \\ 64 \cdot 5 \end{array}$		$29 \cdot 0$ $21 \cdot 0$		$1.71 \\ 0.68$	7	$ \begin{array}{r r} -7 \cdot 31 \\ -2 \cdot 43 \end{array} $	0.71	30	246.6
Lake Coleridge Rudstone, Methven	1,220 $1,217$	52.0				62.0		$\frac{21.0}{28.0}$		3.26		-2.43 -0.18	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	30	::
Christchurch	22	52 · 2	$38 \cdot 3$	$45 \cdot 2$	-3.6	66 6	30	29 · 1	3	1.83	9	-0.10	0.95	9	174.7
Lincoln	36	53.0				66.2		21.0		2.29		-0.41	1.70	9	183 · 0
Hermitage, Mount Cook Ashburton	$\begin{vmatrix} 2,510 \\ 323 \end{vmatrix}$	$51 \cdot 4$ $53 \cdot 2$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			$62 \cdot 0 \\ 61 \cdot 7$		$25.0 \\ 23.4$		$\frac{4 \cdot 76}{2 \cdot 05}$		$\begin{bmatrix} -8 \cdot 11 \\ -0 \cdot 40 \end{bmatrix}$	$\begin{vmatrix} 2 \cdot 70 \\ 1 \cdot 32 \end{vmatrix}$	$\frac{29}{9}$	$195 \cdot 4$ $172 \cdot 4$
Ashburton Lake Tekapo	2,350	51.0	$\frac{33 \cdot 3}{29 \cdot 6}$			$62 \cdot 0$		$23.4 \\ 21.5$		0.62		-0.40	0.44	26	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
Fairlie	1,000	53.7	28.5	41.1	$(-4\cdot1)$	64.8	30	17.3	3	0.59	5		0.43	9	187.8
Timaru	56					60 · 4		23.8		0.58		-1.32	0.55	9	186 · 2
Waimate	$\begin{array}{c c} 200 \\ 23 \end{array}$	53.2	$34.6 \\ 34.8$		$-3\cdot7$	61 6	19	$egin{array}{c} 25 \cdot 2 \ 28 \cdot 0 \end{array}$	$\frac{2}{2}$	$\begin{vmatrix} 0.77 \\ 7.57 \end{vmatrix}$		-1.40	0.25	$\frac{1}{30}$	185 4
Milford Sound Queenstown	1,110	52.9	33.8	$43 \cdot 4$	(-2.6)	$62 \cdot 4$	29	27.8	2	1.37		-1.17	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	8	204 - 5
Öphir	1,000	$54 \cdot 2$	$28 \cdot 9$	41.6	$-3 \cdot 5$	65.0	29	19.1	2	0.77	2	-0.33	0.72	8	
Waipiata	1,550	53 · 4					28,29	22.4	2	0.46			0.29	8	215.5
Alexandra Manorburn Dam	$\begin{vmatrix} 520 \\ 2,448 \end{vmatrix}$		$\begin{vmatrix} 30.5 \\ 27.0 \end{vmatrix}$			66 · 5		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		$0.35 \\ 0.22$		$(-0.34) \\ -1.13$	0.27	8	207-9
Dunedin	$2,448 \\ 240$	53.4	$\frac{27.0}{38.2}$	45.8		60.8		30.0		1.38		$-1.13 \\ -1.37$	$0.17 \\ 0.85$	8	202.7
Gore	245												1		
Invercargill	12		$34 \cdot 7$	44.6	$-3 \cdot 0$	66.0	30	28.0	2	1.12	9	$-2 \cdot 12$	0.30	7	168 • 6

At stations where departures from normal are in parentheses the record has been maintained for less than Note. en years in the case of temperatures and for less than twenty years in the case of rainfall, and the normals are partly interpolated.