of the 1st and 2nd that the only typical strong north-westerly winds occurred, while the southerly winds following it on the 3rd brought the last touch of real winter weather, snow falling on the high levels and hail on parts of the east coast. In north-westerly gales on the 2nd some damage was done on the Canterbury Plains, and severe dust storms were experienced.

Another series of westerly depressions passed between the 5 th and the 8 th, but they were shallow and the winds accompanying them were not strong. Nevertheless, they brought the heaviest rains experienced during the month to the west coast of the South Island.

On the 9 th a very intense anticyclone advanced across the South Tasman Sea. The centre, as it passed on the 10 th, was just to the south of New Zealand, and barometers at several places read over 30.7 inches. At this time of year one expects the anticyclones to pass well to the north. The consequence of this departure from normal conditions was that the prevailing pressure gradient was reversed, there being a fall towards the north instead of a rise. In place of the usual westerlies or north-westerlies, winds between south and east were experienced. These conditions prevailed with only few and short breaks until the end of the month. There is no record of a similar spell of weather in past years. During the period a number of cyclones formed off the central east coast of Australia. There was much stormy weather on the New South Wales coast, and vessels crossing the Tasman Sea reported strong easterly winds of unprecedented persistence. In many cases, delays were occasioned. By the time the cyclones reached New Zealand, most of their energy was expended. The principal ones passed on the nights of the 15 th and 19th respectively, and on the afternoon of the 27 th. The last mentioned was the deepest and its centre crossed the Auckland Peninsula, while the others followed more northerly tracks. Each of them caused widespread rain. That of the 15 th was reponsible for the only really good rain experienced in the eastern portion of the South Island, Canterbury, particularly, having moderate to heavy rains. In connection with the last one, heavy thunderstorms occurred in parts of the Auckland Peninsula. There were some particularly sudden downpours, and Ruatangata experienced a hailstorm in which some of the stones reached an inch in length. This depression caused very persistent and, in places, heavy rain in Hawke's Bay, and resulted in some flooding of the low-lying areas near Napier.

EDWARD KIDSON, Director.

CLIMATOLOGICAL TABLE.
Means and Totals from Chief Stations.
September, 1932.

| $\begin{aligned} & \text { Altitude above } \\ & \text { Sea-level. } \end{aligned}$ | Name of Station and Observer. |  | Extremes. |  |  |  |  | Name of Station and Observer. |  | Extremes. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ft. | North Island. <br> Te Paki, Te Hapua . . <br> B. H. Morrison <br> Waipoua, Donnelly's Crossing <br> A. C. Forbes | Deg. | Deg. | Deg. | Poin |  | Ft | South Islan | Deg. | Deg. | Deg. | Pointr. |  |
| 200 |  | $54 \cdot 7$ | 62.1 | $47 \cdot 3$ | 85 | 5 | 34 | Nelson | $51 \cdot 1$ | $59 \cdot 2$ | 43.0 | 11 | 6 |
|  |  |  |  |  |  |  |  | O. B. Pemberton |  |  |  |  |  |
| 225 |  | $52 \cdot 9$ | 62.0 | $43 \cdot 8$ | 238 | 14 | 57 | Appleby, Nelson W. J. Biggar | $49 \cdot 9$ | $58 \cdot 2$ | $41 \cdot 6$ | 88 | 5 |
|  |  |  |  |  |  |  | . | Blenheim . . | 49.9 | $58 \cdot 1$ | 41.7 | 50 | 3 |
| 65 | Riverhead .. | 51.7 | $60 \cdot 6$ | 42.9 | 305 | 15 |  | P. J. Galliers |  |  |  |  |  |
|  | W. J. McKibbin |  |  |  |  |  | 860 | Waihopai, Blenheim | 48.0 | 56.5 | $39 \cdot 6$ | 107 | 5 |
| 160 | Auckland . | $54 \cdot 7$ | 60.9 | $48 \cdot 6$ | 239 | 15 |  | J. Stanwell |  |  |  |  |  |
|  | S. M. Yallop |  |  |  |  |  | 800 | Golden Downs, Nelson | $46 \cdot 8$ | 57.9 | $35 \cdot 7$ | 140 | 7 |
| 340 | $W_{\text {AIHI }}$ <br> M. F. Haszard | 50.9 | $59 \cdot 3$ | 42.4 | 1051 | 12 | 1220 | Forest Ranger <br> Hanmer Springs | $45 \cdot 2$ | 54-7 | $35 \cdot 6$ | 267 | 9 |
| 46 | Te Aroha .. | 53.7 | 63.6 | $43 \cdot 8$ | 376 | 12 |  | H. Roche |  |  |  |  |  |
|  | C. E. Christensen |  |  |  |  |  | 743 | Balmoral, Culverden.. | $46 \cdot 1$ | 55.3 | $37 \cdot 0$ | 87 | 6 |
| 100 | Tauranga $\quad$. | $51 \cdot 6$ | 60.7 | $42 \cdot 5$ | 293 | 11 |  | J. E. Fletcher |  |  |  |  |  |
|  | Miss K. Butcher |  |  |  |  |  | 12 | Hokitika | 50.2 | 58.4 | 42.0 | 661 | 13 |
| 131 | RUAKURA FARM, Hamlton East | 51.7 | 63.4 | $39 \cdot 9$ | 120 | 10 | 1220 | J. A. Chesney Lake Coleridar | $47 \cdot 0$ | 56.8 | 37•1 | 106 | 6 |
|  | hamilton East <br> G. K. McPherson |  |  |  |  |  | 1220 | Lake Coleridar <br> H. E. M. Hart | $47 \cdot 0$ | 56.8 | $37 \cdot 1$ | 106 | 6 |
| 230 | Cambridge H. McArthur | 52.2 | .62.9 | 41.4 | 119 | 11 | 1200 | " Runstone," Methyen James Carr | 46.3 | $53 \cdot 7$ | 38.9 | 174 | 10 |
| 925 | Rotorua W. E. Penno | $50 \cdot 6$ | 59.5 | 41.8 | 215 | 9 | 25 | Christchurch H. F. Skey | $47 \cdot 8$ | 54•1 | 41.4 | 104 | 12 |
| 1000 | Rotorua Nursery, Whakarewarewa | $49 \cdot 8$ | 60.5 | $39 \cdot 1$ | 202 | 10 | 42 | Linooln <br> E. W. Hullett | $47 \cdot 7$ | $55 \cdot 1$ | $40 \cdot 3$ | 97 | 8 |
|  | W. T. Morrison |  |  |  |  |  | 2510 | The Hfrmitage, Mount | 44.6 | $54 \cdot 3$ | $34 \cdot 8$ | 492 | 5 |
| 617 | Ongarde <br> D. J. Gardiner | $49 \cdot 7$ | 62.0 | $37 \cdot 4$ | 184 | 12 |  | Cook <br> C. Elms |  |  |  |  |  |
| 60 | New Plymouth | 53.9 | 61.0 | $46 \cdot 8$ | 198 | 14 | 323 | Ashburton | 46.5 | $55 \cdot 3$ | 37-7 | 106 | 9 |
|  | G. H. Dolby |  |  |  |  |  |  | H. P. Clayton |  |  |  |  |  |
| 3670 | Chateau Tongariro, National Park | $40 \cdot 7$ | $48 \cdot 6$ | $32 \cdot 8$ | 347 | 11 | 2350 | Lake Tekapo Miss D. C. Trott | $43 \cdot 8$ | 51.9 | $35 \cdot 8$ | 91 | 3 |
|  | L. H. Young |  |  |  |  |  | 1000 | Fairlie $\quad$. | 46.8 | 57.8 | 35.9 | 222 | 9 |
| 2125 | Kariol $\quad$. | 44 | $56 \cdot 1$ | $22 \cdot 6$ | 103 | 8 |  | C. Searle |  |  |  |  |  |
|  | I. H. Bailey |  |  |  |  |  | 56 | Timart | 46.0 | $53 \cdot 2$ | $38 \cdot 8$ | 95 | 4 |
| 5 | Napier <br> T. R. Hutton | 49-2 | $56 \cdot 4$ | 41.9 | 370 | 15 | 200 | A. W. Anderson Watmate | $45 \cdot 8$ | $54 \cdot 3$ | $37 \cdot 2$ | 81 | 6 |
| 45 | Hastinas | $49 \cdot 2$ | 58.0 | $40 \cdot 4$ | 434 | 14 |  | F. Akhurst |  |  |  |  |  |
|  | H. N. Fowler |  |  |  |  |  | 1110 | Queenstown | 46.0 | $55 \cdot 7$ | $36 \cdot 3$ | 144 | 4 |
| 2080 | Tathape | $46 \cdot 1$ | $53 \cdot 6$ | $38 \cdot 6$ | 110 | 9 |  | F. W. Bailey |  |  |  |  |  |
| 8 | A. R. Fannin Tanaimoana | $50 \cdot 2$ | 58.9 | $41 \cdot 5$ | 122 | 10 | 1000 | Ophir <br> Rev. A. Don | $45 \cdot 1$ | 57.9 | $32 \cdot 3$ | 69 | 5 |
|  | G. W. Braddell |  |  |  |  |  | 1550 | Sanatoriom, Waipiata | $45 \cdot 1$ | 56.6 | 33.5 | 69 | 6 |
| 100 | Palmerston North E. J. Werty | $51 \cdot 6$ | 59.1 | 44. | 130 | 11 |  | Dr. A. Kidd Alexandra | $46 \cdot 7$ |  | $34 \cdot 9$ | 44 |  |
| -• | Massey Agrl. Col., Pal- | $50 \cdot 3$ | 56.8 | $43 \cdot 8$ | 118 | 11 |  | Geo. Smith |  |  |  |  |  |
|  | merston North Meteorological Observer |  |  |  |  |  | 2448 | Manorburn Dam <br> S. Wragge | 40.5 | 50.5 | $30 \cdot 5$ | 88 | 8 |
| 384 | Mangamotu, Pahiatua. . A. W. Hamilton | $\cdots$ | . | $\cdots$ | . | . | 240 | Dunedin <br> D. Tannock | $46 \cdot 5$ | 54.8 | $38 \cdot 1$ | 118 | 9 |
| 44 | Kaptit Island <br> A. S. Wilkinson | $51 \cdot 4$ | 57.0 | $45 \cdot 8$ | 127 | 7 | 245 | Gore . . |  |  |  |  |  |
| 377 | Masterton . . | $48 \cdot 6$ | 56.5 | 40.7 | 141 | 15 |  | A. T. Newman |  |  |  |  |  |
|  | Miss R. Robinson |  |  |  |  |  | 12 | Invercaraill . . | $46 \cdot 0$ | $55 \cdot 3$ | $36 \cdot 7$ | 102 | 11 |
| 415 | Wellington .. .. | $48 \cdot 7$ | 53.5 | $43 \cdot 9$ | 105 | 15 |  | L. Lennie |  |  |  |  |  |

