

MINISTRY OF TRANSPORT



NEW ZEALAND METEOROLOGICAL SERVICE

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THE COOK GROUP, PITCAIRN ISLAND, NIUE ISLAND  
AND WESTERN SAMOA

A. R. SHEARER, GOVERNMENT PRINTER, WELLINGTON, NEW ZEALAND—1973

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## RAINFALL NORMALS FOR NEW ZEALAND

1941 TO 1970

### Abstract

This publication contains rainfall normals (averages) for the period January 1941 to December 1970 inclusive for over 1850 New Zealand Stations. Because most stations have not operated for the whole 30 years a large number of estimated normals are included. The average period of operation of a rainfall recording station in New Zealand is about 18 years, which emphasises the necessity of producing adjusted normals.

All records used have been checked for homogeneity. The method of computing the normals was to calculate the ratios of monthly rainfalls at the 'short record station' to those at adjacent 'long record stations' and then to multiply the 'short record station' rainfalls by the appropriate ratios. Quality indicators are given with each normal to indicate the confidence to be given to the adjusted figures.

### Introduction

A period of 30 consecutive years is recommended by the World Meteorological Organization (WMO, 1962) for the calculation of climatological normals. The 30-year period should begin on 1 January of 1901, 1911, 1921, 1931, or 1941. With the steady increase in the number of New Zealand meteorological stations there were advantages in adopting the latest period 1941-70 on which to base this latest revision of rainfall normals. The W.M.O. also emphasises the value of adjusted 30 year normals for stations with incomplete records over the 30 year period. In the 1941 to 1970 period only 18% of the following rainfall normals are unadjusted. The remaining 82% are stations with five or more years of records. About 30% have twenty or more but less than thirty years of records within the 1941 to 1970 period.

The variability of rainfall over New Zealand has been discussed by Coulter (1968) and Seelye (1950) and it is clear that the variability which exists, coupled with the comparatively short life of many recording stations combine

values were examined and if these were all less than 0.50 then normal 1 or 3 was chosen. Normals 1 and 3 were selected for about 5% of stations.

(C) If a normal was not assigned under (B) then normal 2 or 4 was chosen as appropriate. Normals 2 and 4 were selected for about 20% of stations. It is apparent that 2 and 4 represent rather more smoothed figures than 1 and 3.

Some 1300 stations had normals computed in this way. If new normals are needed in the future it is merely necessary to specify the station for which the normal is required and the two comparison base stations.

Step three brought in 217 stations which have five or more years of records up to 1970 but less than five years after 1941. All available data were used here but in general the limiting factor was to find suitable base stations with a homogeneous record back to last century. Consequently no comparisons extended prior to 1879. A minimum of five years comparison was used but in many cases only one appropriate base station could be found so that normals 3, 4 and 5 could not be calculated.

#### Interpretation of the Normals

The normals listed in this publication are of two types, actual and estimated. Because the estimates can not be made equally well in all cases they have been given a confidence rating according to the following scheme:

Type 1 Normals: This indicator signifies a 'base' station (i.e. complete record from 1941 to 1970) and represents the most reliable figures. Their values are given to the nearest millimetre.

Type 2 Normals: These are estimated normals. They are distinguished from the two categories which follow because the records from which they are estimated are homogeneous and they have a small error of estimation. For computational reasons their values are given to the nearest millimetre. For most practical purposes it would be wise to round these figures to the nearest 10 millimetres.

Type 3 Normals: These are estimated normals. Because of inhomogeneity in the observations and lack of a suitable 'base' station nearby their values cannot be estimated confidently. The deficiencies in the observations though apparent, are not

sufficiently clear to enable them to be accurately corrected. Their values are given to the nearest 10 millimetres. For practical purposes it would be wise to round the annual values to the nearest 50 millimetres.

**Type 4 Normals:** These are estimated normals. There are about fifty of them. They apply to stations whose records and distance from base stations make it unrealistic to compute monthly figures. Only annual values are given and they have been included only to help fill gaps in the station network. Their values are given to the nearest 50 millimetres.

#### Variability of Rainfall Averages

To investigate the time variation of rainfall normals, account needs to be taken of the error of estimation. Because many and often unknown errors are present in the basic data files a sound statistical estimate of the error of estimation is not available. In the case of type 2 normals it is known that this error is small. For type 3 normals the error may be larger and hence it is recommended that the annual figures in this category be rounded to the nearest 50 millimetres. Type 4 normals have an even larger error of estimation and are listed only to the nearest 50 millimetres.

Figure 2 gives the 'coefficient of variation' ( $100 \times (\text{standard error of the mean})/\text{mean}$ ) for the 30 year mean annual values and is drawn from the 'base' station records. It gives a measure of the variability of independent 30 year means of annual rainfall. There is a 95 percent probability that the percentage difference of two such means will be less than or equal to 2.8 times the 'coefficient of variation'. The similar figure for a 90 percent probability is 2.3 times the 'coefficient of variation'.

If the 'coefficient of variation' at a station is 3.0, then there is a probability of 10 percent that an independent 30 year mean annual rainfall at that station will have a percentage difference of more than 7 percent from the 1941 to 1970 value. In view of this, differences between the 1921 to 1950 normals (already in circulation) and the 1941 to 1970 normals given here, are to be expected as the result of natural fluctuations in rainfall. At a station with a coefficient of variation of 3.0, the probability of the 1921 to 1950 value being different to the 1941 to 1970 value by more than 7 percent would be less than 10 percent. Similar statements can be made for different coefficient of variation values and different probability values.

Other Records

The New Zealand Meteorological Service is at present processing the rainfall records from stations with octapent rainfall gauges. These are located mainly in remote areas of the country and consequently the records from them provide useful information. Annual rainfall normals from these stations will be available in the near future.

Acknowledgements

These tables were prepared under the direction of Mr A.I. Tomlinson. The computer programs were written by Mr H.S. Hughes.

References

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- World Meteorological Organization (1962): Guide to Climatological Practices. W.M.O. No. 100 TP. 44.

KEY TO SYMBOLS USED IN TABLES

- \* - signifies a climatological station
  - closed - signifies a station closed prior to December 1970
  - Type 1 - a station with a complete good quality record from 1941 to 1970
  - Type 2 - a station with an incomplete record but high confidence in the estimated values given.
  - Type 3 - a station with an incomplete record and only medium confidence in the estimated values given.
  - Type 4 - a station with an incomplete record and low confidence in the estimated values given.
-

### KEY TO STATION INDICATOR

The example shows how to locate a station on the map to the nearest tenth of a degree.

STATION: FCXTON, E05421.

E Section E is the southwestern part of the North Island shown by the dashed line.

0 } The first two digits show  
5 } that the station lies in the  
one-degree square labelled  
05.

4 } Starting from the northwest  
2 } corner of square 05 move 4  
tenths south then 2 tenths  
east. This locates the  
station to the nearest tenth  
of a degree.

1 The last digit has no  
positional significance and  
it may be a letter.

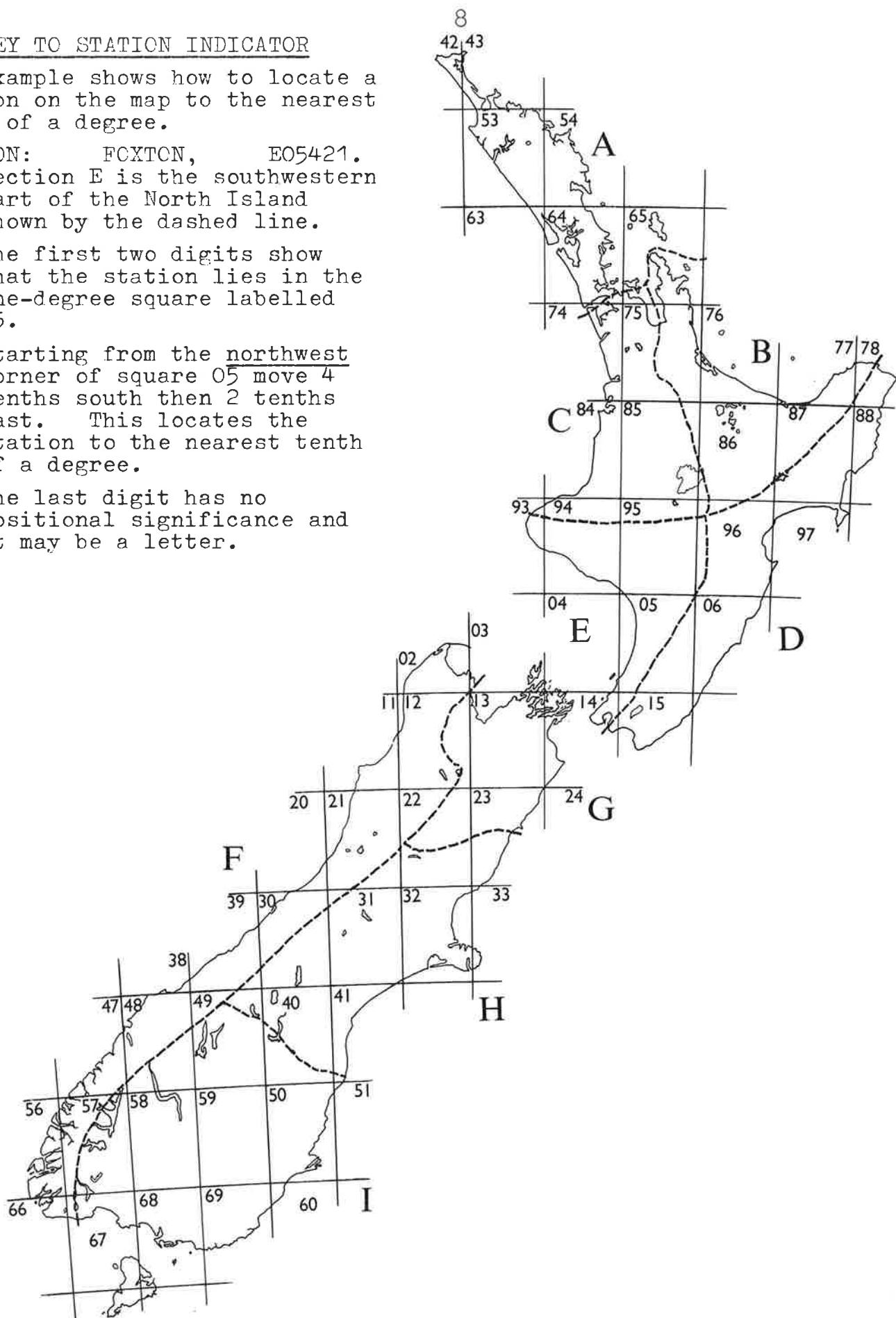
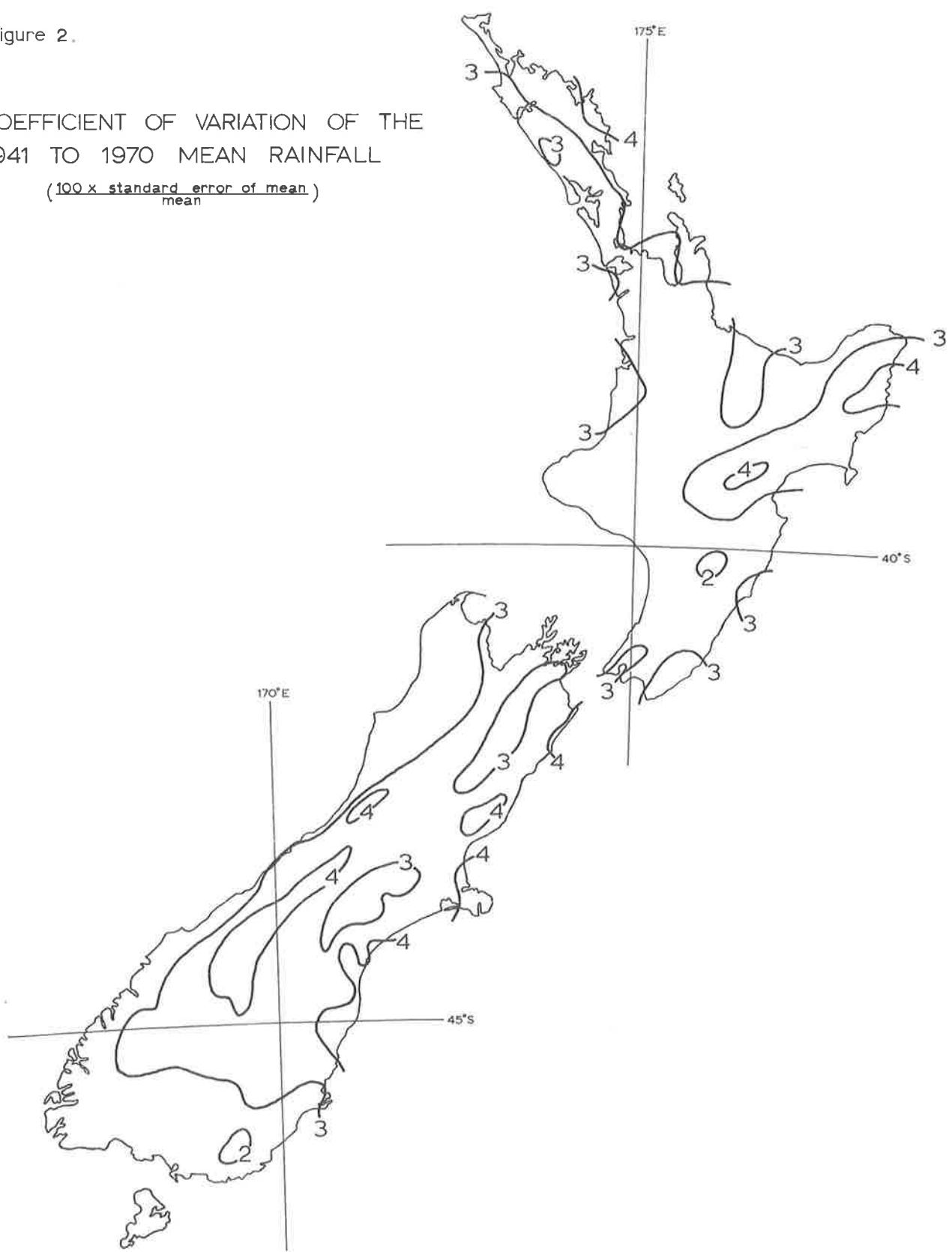


Figure 1

Figure 2.

COEFFICIENT OF VARIATION OF THE  
1941 TO 1970 MEAN RAINFALL

( $100 \times \frac{\text{standard error of mean}}{\text{mean}}$ )



NZ METEOROLOGICAL SERVICE 10 RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION               | NUMBER  | LAT S. | LONG        | HT M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC         | YEAR        |      |
|-----------------------|---------|--------|-------------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-------------|------|
| CAPE REINGA LH        | *A42461 | 34 25  | 172 41E     | 191   | 1    | 61  | 58  | 69  | 97  | 107 | 112 | 119 | 122 | 81  | 71  | 61  | 58          | 1016        |      |
| TE PAKI STN, TE HAPUA | *A42581 | 34 30  | 172 48E     | 64    | 2    | 84  | 97  | 84  | 122 | 152 | 163 | 152 | 165 | 124 | 109 | 102 | 94          | 1448        |      |
| WAITHARA              | A43921  | 34 57  | 173 12E     | 30    | 2    | 66  | 81  | 76  | 112 | 140 | 142 | 137 | 155 | 107 | 99  | 81  | 84          | 1280        |      |
| MANGONIHI             | A43951  | 34 59  | 173 32E     | 30    | 1    | 71  | 91  | 89  | 140 | 170 | 170 | 165 | 188 | 127 | 112 | 89  | 91          | 1503        |      |
| NINETY MILE BEACH     | A53011  | 35 02  | 173 10E     | 18    | 2    | 71  | 84  | 76  | 109 | 137 | 142 | 137 | 150 | 109 | 102 | 91  | 86          | CLOSED      |      |
| KAITAIA AERODROME     | *A53021 | 35 04  | 173 17E     | 80    | 2    | 79  | 94  | 84  | 119 | 152 | 157 | 150 | 165 | 122 | 112 | 102 | 94          | 1430        |      |
| WAIPAPAKAURI          | A53022  | 35 02  | 173 15E     | 6     | 2    | 74  | 86  | 79  | 112 | 140 | 145 | 140 | 152 | 112 | 104 | 94  | 89          | 1327        |      |
| KAINGAROA NORTH       | A53031  | 35 03  | 173 20E     | 30    | 2    | 76  | 91  | 89  | 117 | 150 | 155 | 150 | 168 | 119 | 114 | 99  | 94          | 1422        |      |
| ORUAITI               | A53061  | 35 01  | 173 39E     | 91    | 2    | 86  | 107 | 104 | 150 | 185 | 191 | 183 | 206 | 142 | 132 | 107 | 107         | 1700 CLOSER |      |
| MATAURI BAY           | A53081  | 35 02  | 173 53E     | 183   | 2    | 74  | 99  | 97  | 140 | 170 | 165 | 165 | 178 | 122 | 114 | 91  | 91          | 1506        |      |
| AHITPARA              | A53111  | 35 10  | 173 09E     | 5     | 2    | 71  | 81  | 74  | 104 | 135 | 137 | 132 | 145 | 107 | 99  | 89  | 84          | 1258        |      |
| KAITAIA               | A53121  | 35 07  | 173 16E     | 8     | 1    | 79  | 91  | 81  | 117 | 147 | 155 | 147 | 160 | 119 | 107 | 99  | 89          | 1391        |      |
| KAITAIA               | A53122  | 35 07  | 173 16E     | 3     | 3    | 80  | 90  | 90  | 120 | 160 | 160 | 150 | 170 | 120 | 120 | 100 | 100         | 1460 CLOSER |      |
| RANGITIHII            | A53131  | 35 06  | 173 20E     | 73    | 1    | 84  | 99  | 91  | 130 | 165 | 168 | 163 | 180 | 130 | 124 | 109 | 107         | 1550        |      |
| RANGITIHII SUB STN    | A53132  | 35 07  | 173 20E     | 37    | 2    | 86  | 107 | 102 | 135 | 170 | 178 | 173 | 191 | 137 | 130 | 114 | 109         | 1632        |      |
| FAIRBURN              | A53133  | 35 06  | 173 23E     | 76    | 1    | 91  | 112 | 109 | 142 | 178 | 191 | 180 | 203 | 142 | 137 | 117 | 109         | 1711        |      |
| HONEYMOON VALLEY      | A53151  | 35 08  | 173 30E     | 58    | 2    | 99  | 124 | 119 | 155 | 193 | 208 | 198 | 221 | 157 | 150 | 130 | 122         | 1876        |      |
| KAEO                  | A53171  | 35 06  | 173 47E     | 37    | 2    | 97  | 119 | 114 | 150 | 188 | 201 | 191 | 213 | 150 | 145 | 124 | 117         | 1809 CLOSER |      |
| HEREFINO              | A53222  | 35 16  | 173 13E     | 34    | 1    | 79  | 94  | 94  | 135 | 170 | 180 | 168 | 178 | 122 | 132 | 112 | 97          | 1561        |      |
| GLFNDOWER BROADWOOD   | A53241  | 35 15  | 173 28E     | 116   | 2    | 99  | 122 | 117 | 163 | 193 | 208 | 201 | 216 | 157 | 155 | 130 | 122         | 1883 CLOSER |      |
| BROADWOOD             | A53242  | 35 16  | 173 24E     | 85    | 1    | 97  | 122 | 114 | 168 | 191 | 208 | 198 | 208 | 152 | 160 | 130 | 122         | 1870        |      |
| MANGAMUKA BRIDGE      | A53251  | 35 14  | 173 32E     | 30    | 2    | 89  | 109 | 104 | 145 | 173 | 185 | 178 | 193 | 140 | 140 | 117 | 109         | 1682 CLOSER |      |
| OMAHUTA               | A53261  | 35 14  | 173 36E     | 70    | 3    | 90  | 120 | 110 | 160 | 190 | 200 | 190 | 210 | 150 | 150 | 120 | 120         | 1810        |      |
| UMAWERA               | *A53262 | 35 17  | 173 36E     | 116   | 2    | 86  | 124 | 104 | 155 | 165 | 180 | 170 | 183 | 137 | 140 | 102 | 97          | 1643 CLOSER |      |
| TAUS FALLS            | A53281  | 35 15  | 173 49E     | 308   | 2    | 114 | 180 | 152 | 208 | 244 | 254 | 246 | 267 | 201 | 183 | 145 | 145         | 2339        |      |
| PUKETI                | A53282  | 35 13  | 173 48E     | 347   | 3    | 130 | 180 | 160 | 240 | 270 | 290 | 270 | 300 | 220 | 200 | 160 | 160         | 2580        |      |
| KERIKERI              | *A53291 | 35 14  | 173 57E     | 73    | 2    | 76  | 124 | 112 | 142 | 178 | 183 | 196 | 142 | 114 | 99  | 104 | 1648        |             |      |
| KOHUKOHU              | A53351  | 35 22  | 173 33E     | 15    | 2    | 76  | 91  | 89  | 130 | 155 | 168 | 157 | 168 | 119 | 124 | 104 | 94          | 1475 CLOSER |      |
| UMAWERA NO 2          | *A53352 | 35 18  | 173 33E     | 64    | 3    | 80  | 110 | 90  | 140 | 150 | 170 | 160 | 170 | 120 | 130 | 100 | 90          | 1510        |      |
| RANGIAMUA             | A53361  | 35 18  | 173 40E     | 21    | 2    | 81  | 112 | 97  | 145 | 157 | 173 | 165 | 175 | 130 | 132 | 104 | 97          | 1568 CLOSER |      |
| OKAIHUA               | A53381  | 35 19  | 173 48E     | 274   | 2    | 91  | 145 | 122 | 168 | 196 | 203 | 198 | 213 | 160 | 147 | 117 | 117         | 1877 CLOSER |      |
| WARAWARA              | A53421  | 35 26  | 173 17E     | 30    | 2    | 69  | 84  | 81  | 119 | 142 | 152 | 145 | 152 | 109 | 114 | 97  | 86          | 1350 CLOSER |      |
| OTAUTU RAWENE         | A53451  | 35 25  | 173 34E     | 9     | 2    | 76  | 102 | 89  | 132 | 145 | 160 | 150 | 160 | 119 | 122 | 94  | 89          | 1438 CLOSER |      |
| KAIKOHE               | A53471  | 35 26  | 173 47E     | 162   | 1    | 84  | 122 | 102 | 152 | 163 | 178 | 165 | 180 | 135 | 137 | 99  | 94          | 1611 CLOSER |      |
| KAIKOHE AERODROME     | A53481  | 35 27  | 173 49E     | 170   | 2    | 76  | 119 | 102 | 142 | 163 | 157 | 160 | 173 | 137 | 137 | 97  | 107         | 1570        |      |
| OPONONI               | A53541  | 35 30  | 173 26E     | 9     | 2    | 79  | 86  | 84  | 132 | 160 | 160 | 168 | 180 | 142 | 124 | 112 | 94          | 1521        |      |
| WEKAWEKA              | A53551  | 35 34  | 173 33E     | 259   | 2    | 124 | 178 | 157 | 229 | 257 | 284 | 259 | 279 | 206 | 216 | 163 | 147         | 2499 CLOSER |      |
| KAUANA DOWNS          | A53559  | 35 31  | 173 55E     | 177   | 2    | 84  | 130 | 107 | 157 | 183 | 208 | 185 | 201 | 145 | 147 | 112 | 107         | 1766 CLOSER |      |
| WAIPOUA FOREST        | *A53651 | 35 39  | 173 33E     | 88    | 1    | 79  | 112 | 107 | 150 | 178 | 198 | 178 | 191 | 137 | 150 | 114 | 102         | 1696        |      |
| WHATORO               | A53661  | 35 41  | 173 41E     | 427   | 2    | 112 | 168 | 150 | 216 | 264 | 305 | 264 | 287 | 201 | 211 | 165 | 150         | 2493 CLOSER |      |
| WATMATENUI            | A53671  | 35 38  | 173 44E     | 201   | 4    | 89  | 162 | 119 | 175 | 224 | 264 | 224 | 241 | 168 | 170 | 137 | 124         | 2100 CLOSER |      |
| WATMATENUI            | A53672  | 35 38  | 173 44E     | 213   | 1    | 70  | 110 | 100 | 140 | 170 | 190 | 170 | 180 | 130 | 120 | 110 | 100         | 1590        |      |
| PIPIWAI               | A53691  | 35 39  | 173 59E     | 76    | 3    | 70  | 112 | 100 | 140 | 170 | 190 | 170 | 180 | 130 | 120 | 110 | 100         | 1590        |      |
| DONNELLYS CROSSING    | A53771  | 35 43  | 173 47E     | 2     | 71   | 112 | 91  | 137 | 173 | 206 | 175 | 188 | 130 | 132 | 107 | 97  | 1619 CLOSER |             |      |
| THE GLEN PAKOTAI      | A53781  | 35 43  | 173 49E     | 183   | 2    | 86  | 119 | 104 | 140 | 183 | 213 | 183 | 191 | 130 | 142 | 114 | 107         | 1712        |      |
| PARAKAO               | A53791  | 35 43  | 173 57E     | 55    | 3    | 70  | 110 | 100 | 130 | 160 | 180 | 170 | 170 | 120 | 120 | 110 | 90          | 1530        |      |
| MAMARANUI JUNCTION    | A53871  | 35 50  | 173 45E     | 13    | 2    | 66  | 91  | 79  | 107 | 140 | 163 | 140 | 145 | 99  | 109 | 89  | 81          | 1309 CLOSER |      |
| MAROPIU               | A53872  | 35 49  | 173 44E     | 46    | 2    | 76  | 102 | 94  | 124 | 157 | 178 | 155 | 163 | 114 | 130 | 102 | 94          | 1489 CLOSER |      |
| MAMARANUI             | A53881  | 35 52  | 173 48E     | 49    | 3    | 70  | 90  | 90  | 110 | 150 | 160 | 140 | 150 | 100 | 120 | 90  | 80          | 1350        |      |
| DARGAVILLE            | A53981  | 35 56  | 173 51E     | 46    | 1    | 74  | 89  | 81  | 102 | 137 | 155 | 135 | 135 | 91  | 109 | 86  | 84          | 1278        |      |
| DARGAVILLE EXP FARM   | *A53982 | 35 57  | 173 50E     | 20    | 2    | 66  | 84  | 79  | 104 | 132 | 150 | 132 | 137 | 97  | 109 | 84  | 79          | 1253        |      |
| DARGAVILLE            | A53983  | 35 56  | 173 53E     | 14    | 2    | 66  | 86  | 81  | 107 | 135 | 152 | 135 | 140 | 97  | 112 | 86  | 79          | 1276        |      |
| CAPE BRETT LH.        | A54131  | 35 10  | 174 20E     | 40    | 1    | 53  | 74  | 74  | 97  | 119 | 122 | 114 | 119 | 81  | 86  | 66  | 64          | 1054        |      |
| WAITANGI FOREST       | *A54201 | 35 15  | 174 04E     | 55    | 2    | 64  | 107 | 97  | 122 | 152 | 152 | 155 | 165 | 122 | 97  | 84  | 89          | 1406        |      |
| RUSSELL SCHOOL        | A54211  | 35 16  | 174 07E     | 6     | 1    | 66  | 104 | 97  | 127 | 155 | 155 | 157 | 170 | 119 | 94  | 84  | 86          | 1414        |      |
| KAWAKAWA              | A54301  | 35 23  | 174 04E     | 8     | 1    | 71  | 122 | 104 | 130 | 168 | 168 | 168 | 180 | 137 | 112 | 97  | 99          | 1556        |      |
| MOTATAU               | A54402  | 35 29  | 174 01E     | 58    | 2    | 71  | 112 | 94  | 130 | 152 | 160 | 155 | 165 | 124 | 114 | 89  | 89          | 1455        |      |
| TOWAI                 | A54411  | 35 29  | 174 08E     | 122   | 3    | 80  | 130 | 110 | 140 | 180 | 180 | 180 | 190 | 150 | 120 | 100 | 110         | 1670        |      |
| PUHIPUHI              | A54521  | 35 31  | 174 16E     | 215   | 1    | 97  | 178 | 163 | 191 | 218 | 218 | 218 | 241 | 246 | 173 | 150 | 122         | 110         | 2119 |
| OPONGA                | A54532  | 35 33  | 174 19E     | 3     | 3    | 90  | 160 | 150 | 170 | 190 | 200 | 210 | 220 | 150 | 130 | 110 | 110         | 1890 CLOSER |      |
| MATAPOURI             | A54551  | 35 34  | 174 30E     | 3     | 2    | 69  | 109 | 109 | 122 | 135 | 147 | 157 | 150 | 112 | 102 | 89  | 89          | 1390        |      |
| PUKETURUA, NORTHLAND  | *A54601 | 35 40  | 174 05E     | 101   | 2    | 71  | 109 | 102 | 130 | 160 | 183 | 168 | 170 | 122 | 119 | 107 | 97          | 1538        |      |
| RUATANGATA WEST       | A54612  | 35 37  | 174 10E     | 3     | 3    | 60  | 100 | 110 | 140 | 140 | 140 | 150 | 230 | 110 | 120 | 110 | 90          | 1500 CLOSER |      |
| RUATANGATA            | A54613  | 35 39  | 174 11E     | 183   | 2    | 79  | 122 | 124 | 140 | 163 | 178 | 180 | 175 | 130 | 122 | 112 | 104         | 1629 CLOSER |      |
| HIKURANGI APOTU       | A54621  | 35 36  | 174 16E     | 2     | 71   | 132 | 122 | 142 | 163 | 163 | 180 | 183 | 127 | 112 | 91  | 91  | 1577 CLOSER |             |      |
| HIKURANGI             | A54622  | 35 36  | 174 17E     | 107   | 2    | 84  | 132 | 135 | 150 | 165 | 183 | 193 | 185 | 137 | 124 | 109 | 107         | 1704        |      |
| RUATANGATA NO 2       | A54623  | 35 40  | 174 13E</td |       |      |     |     |     |     |     |     |     |     |     |     |     |             |             |      |

11  
NZ METEOROLOGICAL SERVICE      RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION               | NUMBER  | LAT.<br>S. | LONG.<br>E. | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YEAR        |
|-----------------------|---------|------------|-------------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|
| WAIPARERA             | A54742  | 35 43      | 174 28E     | 91       | 2    | 76  | 119 | 122 | 137 | 150 | 165 | 175 | 168 | 124 | 114 | 99  | 97  | 1546        |
| TANGIHUA              | A54811  | 35 50      | 174 07E     | 152      | 2    | 91  | 119 | 114 | 135 | 155 | 168 | 168 | 168 | 124 | 135 | 104 | 97  | 1578        |
| MAUNGAKARAMEA         | A54822  | 35 50      | 174 12E     | 119      | 2    | 74  | 132 | 109 | 132 | 152 | 157 | 165 | 170 | 127 | 119 | 114 | 117 | 1568 CLOSED |
| PUWERA                | A54831  | 35 48      | 174 18E     | 2        | 2    | 71  | 109 | 109 | 124 | 152 | 168 | 163 | 160 | 117 | 114 | 112 | 97  | 1496 CLOSED |
| RUAKAKA ONE           | A54841  | 35 52      | 174 25E     | 18       | 2    | 74  | 109 | 109 | 122 | 137 | 163 | 165 | 160 | 119 | 107 | 99  | 91  | 1455 CLOSED |
| MANGARATA             | A54901  | 35 54      | 174 00E     | 61       | 3    | 80  | 90  | 90  | 100 | 140 | 160 | 140 | 140 | 100 | 100 | 100 | 90  | 1330 CLOSED |
| OKAHU                 | A54902  | 35 59      | 174 04E     | 46       | 2    | 81  | 102 | 94  | 112 | 142 | 163 | 145 | 150 | 104 | 112 | 107 | 94  | 1406 CLOSED |
| WAIKIEKIE             | A54921  | 35 57      | 174 15E     | 107      | 2    | 81  | 114 | 114 | 130 | 147 | 165 | 163 | 165 | 119 | 112 | 112 | 99  | 1521        |
| RUAKAKA TWO           | A54941  | 35 54      | 174 27E     | 15       | 2    | 71  | 94  | 91  | 104 | 122 | 147 | 140 | 145 | 102 | 97  | 102 | 86  | 1301 CLOSED |
| APPLE CROSS WAIPU     | A54942  | 35 56      | 174 24E     | 27       | 2    | 84  | 114 | 109 | 127 | 147 | 178 | 168 | 175 | 124 | 117 | 122 | 104 | 1569        |
| MOKOHINAU LH          | *A55911 | 35 54      | 175 07E     | 102      | 2    | 53  | 74  | 76  | 91  | 104 | 122 | 114 | 122 | 84  | 76  | 74  | 66  | 1056        |
| ARAPOHUE              | A63091  | 36 00      | 173 56E     | 61       | 3    | 70  | 90  | 80  | 100 | 130 | 150 | 130 | 140 | 90  | 100 | 90  | 80  | 1250        |
| MITITAI               | A63092  | 36 01      | 173 56E     | 2        | 2    | 69  | 84  | 79  | 94  | 119 | 137 | 122 | 127 | 86  | 94  | 89  | 79  | 1179 CLOSED |
| TAIPUHA               | A64021  | 36 00      | 174 17E     | 18       | 2    | 84  | 107 | 104 | 117 | 140 | 163 | 150 | 163 | 112 | 109 | 122 | 99  | 1470        |
| WAIPU COVE            | A64051  | 36 02      | 174 30E     | 61       | 2    | 71  | 97  | 94  | 107 | 124 | 152 | 145 | 150 | 107 | 99  | 104 | 89  | 1339        |
| RUAWAI                | A64101  | 36 07      | 174 01E     | 5        | 2    | 69  | 86  | 81  | 97  | 122 | 140 | 124 | 130 | 89  | 97  | 91  | 79  | 1205        |
| MATAKOHE              | A64111  | 36 08      | 174 11E     | 3        | 3    | 70  | 90  | 90  | 100 | 130 | 160 | 150 | 140 | 100 | 100 | 90  | 86  | 1300 CLOSED |
| PAPAROA               | A64121  | 36 06      | 174 15E     | 30       | 1    | 81  | 104 | 99  | 114 | 135 | 157 | 145 | 155 | 107 | 104 | 119 | 97  | 1417 CLOSED |
| MAUNGATUROTO          | A64131  | 36 06      | 174 22E     | 91       | 2    | 86  | 112 | 109 | 124 | 147 | 170 | 157 | 170 | 117 | 114 | 130 | 104 | 1540 CLOSED |
| OTAMATEA MELFORD      | A64132  | 36 10      | 174 22E     | 17       | 3    | 70  | 100 | 100 | 110 | 130 | 160 | 160 | 160 | 110 | 100 | 100 | 90  | 1390        |
| MANGAWHAI             | A64151  | 36 08      | 174 34E     | 5        | 1    | 66  | 94  | 91  | 104 | 119 | 152 | 147 | 147 | 107 | 97  | 91  | 81  | 1296        |
| HUKATERE              | A64211  | 36 12      | 174 11E     | 134      | 4    | 70  | 80  | 80  | 90  | 120 | 140 | 120 | 130 | 90  | 90  | 90  | 80  | 1180        |
| PUKEHAWA              | A64221  | 36 12      | 174 15E     | 61       | 3    | 70  | 80  | 80  | 90  | 120 | 140 | 120 | 130 | 90  | 90  | 90  | 80  | 1180        |
| TOPUNI                | A64241  | 36 13      | 174 28E     | 15       | 2    | 76  | 102 | 99  | 112 | 132 | 160 | 150 | 155 | 109 | 104 | 107 | 91  | 1397        |
| KAIPARA HEADS         | *A64311 | 36 22      | 174 10E     | 16       | 2    | 66  | 84  | 79  | 91  | 117 | 135 | 119 | 124 | 86  | 91  | 89  | 76  | 1157 CLOSED |
| TAPORA                | A64332  | 36 23      | 174 19E     | 8        | 3    | 60  | 80  | 80  | 90  | 120 | 130 | 120 | 120 | 90  | 90  | 90  | 80  | 1150        |
| TAKATU, MATAKANA      | A64372  | 36 22      | 174 46E     | 70       | 2    | 69  | 97  | 97  | 122 | 132 | 160 | 152 | 155 | 112 | 102 | 97  | 86  | 1381        |
| WARKWORTH             | A64461  | 36 24      | 174 40E     | 15       | 1    | 76  | 104 | 109 | 150 | 157 | 180 | 168 | 175 | 127 | 114 | 112 | 97  | 1569        |
| WARKWORTH             | A64462  | 36 24      | 174 39E     | 27       | 4    | 70  | 90  | 90  | 100 | 120 | 140 | 130 | 130 | 90  | 90  | 90  | 80  | 1600        |
| MAIRETAHI             | A64531  | 36 33      | 174 20E     | 24       | 3    | 69  | 102 | 91  | 122 | 135 | 145 | 147 | 152 | 102 | 114 | 91  | 89  | 1359 CLOSED |
| DAIRY FLAT            | A64662  | 36 41      | 174 39E     | 55       | 2    | 74  | 99  | 97  | 122 | 145 | 152 | 152 | 152 | 107 | 117 | 97  | 94  | 1408        |
| OKURA POINT           | A64672  | 36 41      | 174 43E     | 14       | 2    | 69  | 94  | 91  | 112 | 135 | 142 | 142 | 140 | 99  | 109 | 89  | 86  | 1308        |
| TIRI TIRI LIGHTHOUSE  | A64691  | 36 36      | 176 54E     | 70       | 2    | 51  | 69  | 74  | 97  | 107 | 117 | 109 | 117 | 81  | 74  | 71  | 61  | 1028        |
| WOODHILL FOREST       | *A64741 | 36 45      | 174 26E     | 30       | 2    | 71  | 91  | 91  | 112 | 137 | 145 | 140 | 140 | 99  | 107 | 94  | 86  | 1313        |
| RIVERHEAD FOREST      | *A64751 | 36 46      | 174 35E     | 28       | 1    | 81  | 99  | 104 | 122 | 155 | 163 | 157 | 152 | 112 | 119 | 102 | 97  | 1463        |
| WAIMAUKU              | A64752  | 36 46      | 174 30E     | 8        | 2    | 58  | 74  | 74  | 91  | 112 | 119 | 114 | 114 | 81  | 86  | 76  | 71  | 1070 CLOSED |
| WHENUAPAI AERO        | *A64761 | 36 47      | 174 38E     | 26       | 2    | 74  | 94  | 94  | 117 | 142 | 152 | 147 | 145 | 104 | 112 | 97  | 89  | 1367        |
| LAKE PUPUKE           | A64771  | 36 47      | 174 46E     | 15       | 2    | 64  | 86  | 84  | 104 | 124 | 132 | 130 | 130 | 91  | 99  | 81  | 79  | 1204 CLOSED |
| HENDERSON             | A64861  | 36 53      | 174 38E     | 14       | 1    | 79  | 104 | 99  | 130 | 152 | 163 | 157 | 160 | 112 | 122 | 109 | 97  | 1484        |
| HENDERSON             | A64862  | 36 53      | 174 37E     | 4        | 4    | 69  | 102 | 91  | 122 | 135 | 145 | 147 | 152 | 102 | 114 | 91  | 89  | 1500 CLOSED |
| ALBERT PARK, AUCKLAND | *A64871 | 36 51      | 174 46E     | 49       | 1    | 64  | 94  | 86  | 114 | 127 | 135 | 137 | 142 | 94  | 107 | 84  | 84  | 1268        |
| MECHANICS BAY         | *A64872 | 36 51      | 174 47E     | 4        | 2    | 64  | 89  | 84  | 109 | 124 | 135 | 132 | 135 | 94  | 104 | 86  | 81  | 1237 CLOSED |
| MOUNT EDEN            | A64874  | 36 52      | 174 47E     | 2        | 2    | 71  | 107 | 97  | 117 | 132 | 142 | 147 | 147 | 102 | 109 | 89  | 89  | 1349 CLOSED |
| AUCKLAND CITY         | *A64878 | 36 51      | 174 46E     | 45       | 4    | 60  | 90  | 80  | 100 | 110 | 120 | 120 | 120 | 80  | 90  | 70  | 70  | 1300        |
| MOTUIHI ID            | A64891  | 36 48      | 174 56E     | 27       | 3    | 60  | 90  | 80  | 100 | 110 | 120 | 120 | 120 | 80  | 90  | 70  | 70  | 1110 CLOSED |
| HUIA DAM              | A64951  | 36 58      | 174 32E     | 165      | 2    | 109 | 132 | 152 | 173 | 216 | 226 | 216 | 213 | 157 | 175 | 145 | 140 | 2054        |
| WAITAKERE             | A64952  | 36 54      | 174 32E     | 210      | 2    | 94  | 127 | 119 | 157 | 185 | 198 | 191 | 193 | 135 | 150 | 132 | 117 | 1798        |
| NIHOTUPU AUX          | A64953  | 36 56      | 174 33E     | 280      | 2    | 119 | 157 | 150 | 196 | 231 | 246 | 239 | 241 | 168 | 185 | 165 | 145 | 2242        |
| NIHOTUPU GATE         | A64954  | 36 56      | 174 33E     | 283      | 2    | 122 | 157 | 147 | 191 | 221 | 241 | 234 | 234 | 163 | 185 | 160 | 150 | 2205        |
| NIHOTUPU HOUSE        | A64955  | 36 57      | 174 34E     | 198      | 2    | 117 | 150 | 142 | 183 | 211 | 234 | 224 | 224 | 155 | 178 | 155 | 145 | 2118        |
| HUIA UPPER            | A64956  | 36 57      | 174 32E     | 171      | 2    | 104 | 140 | 132 | 173 | 203 | 218 | 211 | 213 | 147 | 163 | 145 | 127 | 1976        |
| NIHOTUPU MIDDLE       | A64957  | 36 57      | 174 35E     | 152      | 2    | 94  | 127 | 119 | 155 | 183 | 196 | 191 | 193 | 135 | 147 | 130 | 114 | 1784        |
| HUIA MIDDLE           | A64958  | 36 58      | 174 33E     | 40       | 2    | 107 | 145 | 135 | 178 | 208 | 224 | 216 | 218 | 152 | 168 | 150 | 132 | 2033        |
| ANAWHATA ROAD JUNC    | A64959  | 36 57      | 174 31E     | 2        | 2    | 112 | 145 | 135 | 173 | 201 | 221 | 213 | 211 | 147 | 170 | 147 | 137 | 2012        |
| ORATIA, AUCKLAND      | *A64961 | 36 54      | 174 37E     | 41       | 2    | 81  | 114 | 107 | 140 | 160 | 170 | 170 | 173 | 119 | 132 | 109 | 104 | 1579        |
| TITIRANGI             | A64962  | 36 55      | 174 38E     | 143      | 2    | 79  | 109 | 102 | 135 | 152 | 163 | 163 | 165 | 114 | 127 | 107 | 99  | 1515        |
| NIHOTUPU LOWER        | A64963  | 36 58      | 174 37E     | 5        | 2    | 84  | 117 | 109 | 145 | 165 | 175 | 175 | 178 | 122 | 135 | 114 | 107 | 1626        |
| CORNWALLIS            | A64964  | 36 59      | 174 36E     | 15       | 2    | 74  | 104 | 97  | 127 | 145 | 155 | 155 | 157 | 107 | 119 | 99  | 94  | 1433 CLOSED |
| TITIRANGI             | A64965  | 36 57      | 174 39E     | 91       | 2    | 81  | 117 | 107 | 142 | 163 | 173 | 173 | 175 | 119 | 135 | 112 | 104 | 1601 CLOSED |
| OWAIRAKA, AUCKLAND    | *A64971 | 36 54      | 174 44E     | 41       | 2    | 69  | 99  | 91  | 119 | 137 | 147 | 145 | 150 | 102 | 114 | 94  | 89  | 1356        |
| ONEHUNGA              | A64972  | 36 55      | 174 47E     | 3        | 2    | 66  | 94  | 86  | 114 | 132 | 140 | 140 | 142 | 97  | 109 | 91  | 84  | 1295 CLOSED |
| ONEHUNGA              | A64973  | 36 55      | 174 47E     | 3        | 2    | 71  | 109 | 97  | 112 | 127 | 137 | 145 | 142 | 99  | 104 | 86  | 84  | 1313 CLOSED |
| ONEHUNGA              | A64974  | 36 56      | 174 47E     | 3        | 3    | 70  | 90  | 90  | 110 | 130 | 140 | 140 | 140 | 100 | 110 | 90  | 80  | 1290        |
| NAGLE COVE            | A65131  | 36 10      | 175 21E     | 79       | 2    | 66  | 89  | 97  | 119 | 140 | 145 | 135 | 150 | 102 | 91  | 89  | 76  | 1299 CLOSED |
| PORT FITZROY          | *A65132 | 36 11      | 175 22E     | 4        | 3    | 90  | 130 | 140 | 160 | 190 | 210 | 200 | 210 | 150 | 140 | 130 | 110 | 1860        |
| LITTLE BARRIER ID     | A65201  | 36 14      | 175 03E     | 6        | 1    | 76  | 102 | 112 | 137 | 160 | 168 | 155 | 175 | 117 | 107 | 102 | 89  | 1500        |
| GREAT BARRIER ID      | A65241  | 36 15      | 175 28E     | 3        | 2    | 104 | 142 | 155 | 193 | 224 | 234 | 216 | 244 | 163 | 147 | 142 | 124 | 2088        |
| CUVIER ISLAND         | A65471  | 36         |             |          |      |     |     |     |     |     |     |     |     |     |     |     |     |             |

NZ METEOROLOGICAL SERVICE      12 RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR   |
|----------------------|---------|-----------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|
| LOWER HUIA           | A74051  | 37 00     | 174 34E | 6        | 4    |     |     |     |     |     |     |     |     |     |     |     |      | 1500   |
| MANUKAU HEADS        | A74052  | 37 03     | 174 33E | 244      | 2    | 58  | 76  | 71  | 94  | 112 | 119 | 114 | 117 | 81  | 89  | 79  | 71   | 1081   |
| SANDY BAY            | B65541  | 36 32     | 175 27E | 8        | 2    | 107 | 112 | 157 | 157 | 175 | 206 | 188 | 188 | 135 | 135 | 104 | 109  | 1773   |
| COROMANDEL           | B65751  | 36 46     | 175 30E | 9        | 2    | 112 | 114 | 165 | 163 | 183 | 213 | 196 | 196 | 140 | 142 | 107 | 112  | 1843   |
| WHANGAPOUA FOREST    | *B65761 | 36 46     | 175 36E | 4        | 2    | 112 | 117 | 168 | 165 | 185 | 216 | 198 | 201 | 140 | 142 | 109 | 114  | 1867   |
| CHILTERN             | 865851  | 36 49     | 175 32E | 67       | 2    | 114 | 165 | 157 | 185 | 208 | 224 | 224 | 221 | 165 | 178 | 147 | 147  | 2135   |
| WHITTINGA SCHOOL     | B65872  | 36 51     | 175 42E | 2        | 2    | 99  | 109 | 152 | 157 | 175 | 193 | 180 | 188 | 140 | 132 | 97  | 109  | 1731   |
| TAIRUA               | B75082  | 37 00     | 175 51E | 6        | 1    | 114 | 119 | 170 | 168 | 188 | 218 | 201 | 201 | 142 | 145 | 112 | 114  | 1892   |
| THAMES               | B75150  | 37 08     | 175 30E | 3        | 3    | 70  | 90  | 90  | 110 | 120 | 130 | 120 | 120 | 100 | 110 | 90  | 90   | 1240   |
| THAMES               | *B75151 | 37 09     | 175 30E | 2        | 3    | 70  | 100 | 100 | 120 | 120 | 140 | 130 | 130 | 100 | 110 | 90  | 100  | CLOSED |
| THAMES               | *B75152 | 37 08     | 175 32E | 3        | 2    | 66  | 94  | 97  | 114 | 122 | 135 | 127 | 124 | 102 | 109 | 94  | 94   | 1278   |
| WARAHOE              | B75161  | 37 11     | 175 37E | 107      | 2    | 84  | 104 | 124 | 142 | 160 | 165 | 157 | 165 | 130 | 127 | 99  | 109  | 1566   |
| KAUAEARANGA FOREST   | B75162  | 37 07     | 175 38E | 53       | 2    | 112 | 142 | 170 | 191 | 213 | 224 | 213 | 224 | 173 | 173 | 132 | 147  | 2114   |
| TAIKUA FOREST        | *B75182 | 37 10     | 175 51E | 3        | 1    | 97  | 114 | 155 | 170 | 191 | 193 | 188 | 201 | 155 | 140 | 97  | 122  | 1823   |
| TURUA                | B75251  | 37 14     | 175 34E | 2        | 1    | 61  | 84  | 89  | 104 | 117 | 124 | 117 | 119 | 94  | 104 | 86  | 86   | 1185   |
| NGATEA               | *B75252 | 37 16     | 175 31E | 2        | 3    | 60  | 80  | 80  | 100 | 110 | 120 | 110 | 110 | 90  | 90  | 80  | 80   | 1110   |
| KEREPEHI             | B75351  | 37 18     | 175 33E | 9        | 1    | 61  | 89  | 89  | 107 | 107 | 119 | 114 | 109 | 91  | 97  | 84  | 86   | 1153   |
| PAEROA               | *B75361 | 37 23     | 175 40E | 4        | 2    | 71  | 91  | 107 | 122 | 132 | 137 | 135 | 137 | 112 | 112 | 89  | 94   | 1339   |
| WAIKI                | *B75381 | 37 23     | 175 51E | 91       | 1    | 117 | 130 | 178 | 193 | 224 | 218 | 224 | 239 | 188 | 180 | 132 | 140  | 2163   |
| WAITEKAURI           | B75382  | 37 21     | 175 48E | 366      | 2    | 150 | 196 | 241 | 244 | 300 | 300 | 302 | 325 | 254 | 221 | 152 | 211  | 2896   |
| HOF-O-TAINUI         | B75441  | 37 28     | 175 24E | 128      | 2    | 89  | 107 | 114 | 132 | 152 | 165 | 163 | 160 | 124 | 137 | 114 | 124  | 1581   |
| WAIHIN BEACH         | B75491  | 37 25     | 175 56E | 8        | 3    | 90  | 100 | 130 | 140 | 170 | 170 | 160 | 170 | 140 | 140 | 100 | 110  | 1620   |
| ATHENREE             | B75492  | 37 27     | 175 55E | 2        | 107  | 109 | 140 | 145 | 173 | 160 | 175 | 173 | 135 | 145 | 109 | 122 | 1693 |        |
| SPRINGDALE           | B75551  | 37 32     | 175 32E | 8        | 1    | 64  | 86  | 91  | 102 | 112 | 124 | 119 | 117 | 102 | 109 | 86  | 99   | 1211   |
| ELSTOW               | B75561  | 37 31     | 175 39E | 12       | 1    | 71  | 81  | 84  | 102 | 117 | 117 | 122 | 122 | 99  | 97  | 84  | 94   | 1190   |
| TE AROHA             | *B75571 | 37 33     | 175 43E | 12       | 1    | 94  | 99  | 122 | 127 | 152 | 137 | 160 | 155 | 119 | 130 | 99  | 104  | 1498   |
| KATIKATI             | B75591  | 37 33     | 175 55E | 9        | 1    | 99  | 117 | 140 | 157 | 185 | 203 | 180 | 191 | 157 | 155 | 117 | 132  | 1833   |
| MORRINSVILLE         | B75651  | 37 39     | 175 32E | 27       | 1    | 64  | 89  | 84  | 91  | 109 | 124 | 114 | 114 | 94  | 107 | 91  | 91   | 1172   |
| MORRINSVILLE B C     | B75653  | 37 40     | 175 32E | 29       | 2    | 66  | 89  | 76  | 89  | 107 | 122 | 119 | 119 | 89  | 104 | 89  | 91   | 1153   |
| KEREONE              | B75661  | 37 40     | 175 39E | 55       | 3    | 70  | 90  | 100 | 100 | 120 | 120 | 130 | 120 | 100 | 110 | 90  | 90   | 1240   |
| WAITOA               | B75662  | 37 36     | 175 36E | 18       | 2    | 64  | 79  | 84  | 89  | 107 | 109 | 112 | 109 | 86  | 97  | 79  | 81   | 1096   |
| NGARUA               | B75671  | 37 41     | 175 42E | 34       | 2    | 66  | 84  | 91  | 102 | 117 | 132 | 119 | 122 | 107 | 86  | 91  | 91   | 1219   |
| SHAFTESBURY          | B75681  | 37 37     | 175 48E | 55       | 2    | 114 | 127 | 155 | 168 | 201 | 201 | 203 | 203 | 163 | 168 | 130 | 140  | 1973   |
| TAUWHARE             | B75741  | 37 45     | 175 27E | 46       | 3    | 70  | 80  | 80  | 100 | 110 | 130 | 110 | 110 | 90  | 110 | 90  | 90   | 1170   |
| KIWITAH              | B75751  | 37 44     | 175 34E | 40       | 2    | 66  | 84  | 81  | 94  | 109 | 127 | 114 | 114 | 94  | 107 | 91  | 89   | 1170   |
| WAHAROA              | B75771  | 37 46     | 175 46E | 3        | 2    | 70  | 80  | 100 | 110 | 140 | 150 | 130 | 140 | 110 | 110 | 90  | 100  | 1330   |
| DUNROBIN OKAUIA      | B75781  | 37 46     | 175 51E | 37       | 2    | 84  | 102 | 109 | 127 | 145 | 165 | 152 | 155 | 124 | 132 | 109 | 114  | 1518   |
| RICHMOND DOWNS       | B75861  | 37 48     | 175 40E | 91       | 3    | 80  | 90  | 100 | 120 | 130 | 150 | 140 | 140 | 110 | 120 | 100 | 110  | 1390   |
| MATAMATA             | B75871  | 37 48     | 175 46E | 61       | 2    | 79  | 89  | 102 | 112 | 127 | 137 | 135 | 132 | 104 | 114 | 94  | 104  | 1329   |
| CALDERS FM. MATAMATA | B75872  | 37 52     | 175 45E | 79       | 2    | 79  | 89  | 102 | 109 | 127 | 135 | 135 | 132 | 104 | 114 | 94  | 104  | CLOSED |
| TURANGAOMOANA        | B75882  | 37 48     | 175 52E | 2        | 2    | 89  | 94  | 117 | 119 | 145 | 130 | 152 | 147 | 112 | 122 | 94  | 99   | 1420   |
| KAIAWI SCHOOL        | B75891  | 37 50     | 175 58E | 376      | 2    | 160 | 165 | 191 | 208 | 239 | 259 | 251 | 241 | 203 | 218 | 185 | 206  | CLOSED |
| TIRAU                | B75971  | 37 58     | 175 46E | 3        | 2    | 70  | 90  | 90  | 100 | 120 | 140 | 130 | 120 | 100 | 100 | 100 | 100  | 1270   |
| KAKAHU DOWNS         | B75991  | 37 56     | 175 54E | 122      | 3    | 90  | 90  | 110 | 120 | 140 | 150 | 150 | 140 | 110 | 130 | 100 | 110  | 1440   |
| TAURANGA AERODROME   | *B76621 | 37 40     | 176 12E | 4        | 1    | 84  | 114 | 114 | 137 | 132 | 137 | 137 | 107 | 114 | 84  | 104 | 1348 |        |
| WHAKAMARAMA          | B76701  | 37 44     | 176 00E | 256      | 3    | 130 | 140 | 180 | 190 | 230 | 230 | 220 | 230 | 190 | 190 | 140 | 170  | 2240   |
| OTUMOETAI            | B76711  | 37 42     | 176 06E | 30       | 3    | 90  | 90  | 120 | 120 | 150 | 150 | 150 | 150 | 120 | 120 | 90  | 110  | 1460   |
| TAURANGA             | B76712  | 37 42     | 176 09E | 30       | 3    | 90  | 90  | 120 | 110 | 150 | 130 | 130 | 130 | 110 | 110 | 90  | 110  | 1400   |
| TAURANGA             | B76713  | 37 42     | 176 09E | 3        | 4    | 80  | 80  | 100 | 100 | 130 | 120 | 130 | 130 | 110 | 110 | 90  | 110  | CLOSED |
| TAURANGA             | B76714  | 37 47     | 176 08E | 137      | 3    | 90  | 100 | 120 | 120 | 160 | 160 | 160 | 150 | 120 | 120 | 90  | 120  | 1490   |
| OHAUTI               | B76715  | 37 46     | 176 11E | 3        | 2    | 120 | 130 | 160 | 160 | 210 | 180 | 200 | 200 | 150 | 160 | 120 | 150  | 1940   |
| TE PUKE              | B76731  | 37 47     | 176 19E | 20       | 2    | 107 | 117 | 147 | 145 | 184 | 165 | 183 | 178 | 140 | 145 | 109 | 137  | 1761   |
| MAKETU               | B76741  | 37 46     | 176 27E | 9        | 3    | 80  | 80  | 100 | 100 | 130 | 120 | 130 | 130 | 100 | 100 | 80  | 100  | 1250   |
| NGAUPARI             | B76821  | 37 49     | 176 17E | 143      | 2    | 124 | 135 | 170 | 165 | 213 | 191 | 211 | 203 | 160 | 168 | 127 | 157  | CLOSED |
| TE PUKE              | B76832  | 37 48     | 176 19E | 61       | 2    | 99  | 107 | 135 | 132 | 170 | 152 | 168 | 163 | 127 | 132 | 99  | 124  | 1608   |
| TE PUKE NO 2         | B76833  | 37 50     | 176 19E | 122      | 2    | 107 | 124 | 150 | 142 | 198 | 165 | 193 | 183 | 142 | 147 | 114 | 142  | 1807   |
| PONGAKAWA            | B76841  | 37 49     | 176 29E | 5        | 1    | 86  | 102 | 122 | 117 | 163 | 135 | 157 | 147 | 117 | 119 | 91  | 117  | 1473   |
| MANIATUTU            | B76842  | 37 51     | 176 27E | 64       | 2    | 84  | 102 | 117 | 112 | 112 | 155 | 127 | 150 | 112 | 117 | 89  | 114  | 1424   |
| TE RANGA             | B76921  | 37 54     | 176 16E | 335      | 2    | 142 | 170 | 196 | 188 | 259 | 213 | 251 | 244 | 185 | 196 | 147 | 191  | 2382   |
| SUN VALLEY           | B76931  | 37 58     | 176 22E | 259      | 2    | 117 | 132 | 152 | 152 | 203 | 185 | 198 | 193 | 157 | 170 | 135 | 155  | 1949   |
| ROTOEHU FOREST       | *B76951 | 37 54     | 176 31E | 72       | 1    | 99  | 124 | 137 | 132 | 183 | 150 | 175 | 173 | 130 | 140 | 102 | 135  | 1680   |
| THORNTON             | B76981  | 37 56     | 176 52E | 3        | 3    | 80  | 100 | 120 | 110 | 140 | 120 | 140 | 130 | 100 | 100 | 80  | 100  | 1320   |
| KUHANUI              | B76982  | 37 57     | 176 51E | 4        | 1    | 86  | 104 | 124 | 117 | 142 | 135 | 145 | 135 | 99  | 104 | 86  | 102  | 1379   |
| EDGECEMBE            | B76983  | 37 58     | 176 48E | 8        | 1    | 97  | 117 | 137 | 122 | 155 | 142 | 160 | 150 | 112 | 114 | 97  | 112  | 1515   |
| WHAKATANE            | B76991  | 37 58     | 176 58E | 10       | 4    | 84  | 97  | 99  | 119 | 163 | 142 | 152 | 155 | 114 | 124 | 91  | 89   | 1300   |
| WHAKATANE            | *B76993 | 37 58     | 176 57E | 2        | 2    | 81  | 99  | 117 | 107 | 135 | 124 | 137 | 130 | 94  | 99  | 84  | 97   | 1304   |
| RAUKOKORE            | B77681  | 37 39     | 177 52E | 2        | 2    | 81  | 91  | 94  | 109 | 157 | 142 | 152 | 147 | 114 | 124 | 89  | 89   | 1389   |
| MARAEHAKO            | B77682  | 37 40     | 177 49E | 2        | 2    | 84  | 97  | 99  | 122 | 163 |     |     |     |     |     |     |      |        |

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NZ METEOROLOGICAL SERVICE      RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT   | LONG    | HT  |      | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC         | YEAR        |
|----------------------|---------|-------|---------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-------------|
|                      |         | S.    |         | M.  | TYPE |     |     |     |     |     |     |     |     |     |     |     |             |             |
| PUTARURU             | B85071  | 38 03 | 175 47E | 152 | 3    | 90  | 100 | 90  | 110 | 130 | 160 | 150 | 140 | 120 | 130 | 120 | 120         | 1460 CLOSED |
| ALISCRYPT TIRAU      | B85081  | 38 00 | 175 48E | 122 | 2    | 76  | 86  | 84  | 99  | 112 | 137 | 127 | 119 | 104 | 114 | 107 | 104         | 1269 CLOSED |
| LICHFIELD PUTARURU   | B85181  | 38 08 | 175 50E | 198 | 1    | 91  | 99  | 97  | 117 | 127 | 157 | 142 | 132 | 119 | 130 | 124 | 124         | 1459        |
| WAIKATO BLOCK        | B85271  | 38 13 | 175 43E | 320 | 2    | 102 | 107 | 117 | 130 | 155 | 173 | 165 | 155 | 137 | 147 | 135 | 135         | 1658 CLOSED |
| TOKOROA              | B85282  | 38 14 | 175 51E | 340 | 2    | 104 | 94  | 107 | 112 | 142 | 160 | 165 | 137 | 132 | 152 | 137 | 135         | 1577 CLOSED |
| MARAETAI BLOCK NO 1  | B85283  | 38 16 | 175 52E | 363 | 3    | 100 | 100 | 110 | 120 | 150 | 170 | 160 | 150 | 130 | 140 | 130 | 130         | 1590 CLOSED |
| TOKOROA              | *B85284 | 38 13 | 175 53E | 335 | 3    | 100 | 100 | 110 | 120 | 150 | 170 | 160 | 150 | 130 | 140 | 130 | 130         | 1590 CLOSED |
| KINLEITH             | *B85291 | 38 17 | 175 54E | 389 | 2    | 99  | 102 | 112 | 124 | 147 | 165 | 157 | 147 | 132 | 142 | 127 | 130         | 1584 CLOSED |
| MARAETAI BLOCK NO 7  | B85371  | 38 23 | 175 47E | 241 | 2    | 81  | 89  | 117 | 109 | 127 | 155 | 155 | 132 | 132 | 142 | 127 | 130         | 1496 CLOSED |
| T T T BLOCK          | B85492  | 38 25 | 175 58E | 274 | 3    | 90  | 100 | 90  | 110 | 120 | 150 | 140 | 130 | 120 | 120 | 120 | 120         | 1410 CLOSED |
| MOKAI                | B85591  | 38 32 | 175 54E |     | 2    | 104 | 119 | 97  | 117 | 140 | 157 | 150 | 140 | 130 | 130 | 109 | 145         | 1538 CLOSED |
| MAMAKU               | B86001  | 38 05 | 176 05E | 574 | 1    | 130 | 132 | 157 | 163 | 211 | 216 | 213 | 203 | 180 | 191 | 163 | 165         | 2124        |
| DALBETH RD           | B86011  | 38 04 | 176 10E | 411 | 2    | 112 | 122 | 135 | 137 | 175 | 178 | 173 | 165 | 147 | 152 | 130 | 147         | 1773        |
| KAHAROA              | B86021  | 38 00 | 176 13E | 398 | 3    | 150 | 160 | 170 | 180 | 230 | 230 | 220 | 210 | 190 | 200 | 170 | 190         | 2300        |
| NGONGOTAHIA          | B86023  | 38 02 | 176 13E | 367 | 3    | 140 | 150 | 170 | 170 | 220 | 220 | 220 | 210 | 190 | 190 | 160 | 180         | 2220 CLOSED |
| OKERE FALLS          | B86030  | 38 02 | 176 21E | 294 | 2    | 114 | 117 | 140 | 145 | 188 | 193 | 188 | 180 | 157 | 170 | 145 | 145         | 1882 CLOSED |
| LAKE ROTOMA          | B86051  | 38 04 | 176 35E | 308 | 2    | 142 | 170 | 183 | 175 | 224 | 213 | 221 | 211 | 175 | 173 | 147 | 178         | 2212 CLOSED |
| LAKE ROTOMA          | B86052  | 38 04 | 176 35E | 317 | 2    | 145 | 173 | 188 | 178 | 226 | 216 | 224 | 213 | 178 | 178 | 150 | 180         | 2249 CLOSED |
| TAUMANA              | B86053  | 38 03 | 176 34E | 326 | 2    | 135 | 165 | 183 | 178 | 244 | 198 | 234 | 234 | 175 | 188 | 137 | 180         | 2251        |
| MAHOETAHIA MANAWAHE  | B86061  | 38 01 | 176 37E | 396 | 2    | 157 | 196 | 221 | 206 | 272 | 236 | 269 | 262 | 196 | 206 | 160 | 198         | 2579        |
| KAWERAU              | *B86071 | 38 05 | 176 43E | 30  | 2    | 112 | 137 | 155 | 145 | 193 | 165 | 191 | 185 | 137 | 145 | 114 | 140         | 1819        |
| BEN VIEW             | B86081  | 38 03 | 176 50E | 15  | 2    | 94  | 112 | 130 | 122 | 160 | 140 | 157 | 152 | 112 | 122 | 94  | 117         | 1512 CLOSED |
| AWAKERI              | B86082  | 38 04 | 176 50E | 17  | 2    | 86  | 104 | 122 | 114 | 150 | 130 | 147 | 142 | 104 | 112 | 86  | 109         | 1406        |
| TE TEKO NURSERY      | *B86083 | 38 02 | 176 49E | 8   | 2    | 94  | 114 | 132 | 124 | 163 | 142 | 160 | 155 | 114 | 122 | 94  | 119         | 1533        |
| ROTORUA SOPHIA ST    | B86121  | 38 09 | 176 15E | 305 | 2    | 99  | 107 | 117 | 119 | 152 | 155 | 150 | 145 | 130 | 132 | 112 | 130         | 1548 CLOSED |
| ROTORUA GOLF LINKS   | B86122  | 38 09 | 176 15E | 290 | 2    | 94  | 102 | 112 | 114 | 147 | 147 | 145 | 137 | 124 | 127 | 107 | 122         | 1478 CLOSED |
| ROTORUA AIRFIELD     | *B86123 | 38 10 | 176 16E | 297 | 2    | 91  | 99  | 109 | 109 | 142 | 142 | 140 | 132 | 119 | 122 | 104 | 117         | 1426 CLOSED |
| WHAKAREWAREWA        | *B86124 | 38 10 | 176 16E | 307 | 1    | 99  | 114 | 117 | 117 | 150 | 150 | 142 | 137 | 127 | 122 | 104 | 132         | 1511        |
| ROTORUA SANATORIUM   | B86126  | 38 08 | 176 15E | 282 | 2    | 97  | 104 | 114 | 117 | 150 | 152 | 147 | 140 | 127 | 130 | 109 | 124         | 1511 CLOSED |
| ROTORUA AERODROME    | *B86131 | 38 07 | 176 19E | 287 | 2    | 97  | 114 | 119 | 119 | 157 | 142 | 150 | 147 | 122 | 124 | 99  | 127         | 1517        |
| LAKE OKATAINA        | B86141  | 38 06 | 176 26E | 325 | 2    | 130 | 155 | 163 | 160 | 213 | 193 | 203 | 198 | 165 | 170 | 132 | 173         | 2055        |
| TARAWERA FOREST      | *B86161 | 38 08 | 176 39E | 61  | 2    | 130 | 160 | 183 | 170 | 224 | 196 | 221 | 216 | 160 | 170 | 132 | 163         | 2125        |
| MATAHINA             | B86171  | 38 10 | 176 47E | 244 | 2    | 127 | 155 | 180 | 165 | 208 | 193 | 211 | 198 | 147 | 152 | 127 | 147         | 2010        |
| TOKOROA BLOCK        | B86201  | 38 16 | 176 01E | 485 | 3    | 110 | 110 | 130 | 140 | 180 | 180 | 180 | 170 | 150 | 160 | 140 | 140         | 1790 CLOSED |
| DUNROMIN NGAKURU     | B86211  | 38 17 | 176 11E | 366 | 3    | 90  | 90  | 100 | 110 | 140 | 140 | 140 | 130 | 120 | 120 | 100 | 110         | 1390 CLOSED |
| LAKE TARAWERA        | B86233  | 38 12 | 176 22E | 335 | 2    | 99  | 114 | 114 | 117 | 145 | 150 | 140 | 135 | 127 | 122 | 104 | 124         | 1491 CLOSED |
| WAIMANGU             | B86241  | 38 17 | 176 24E | 2   | 91   | 107 | 107 | 109 | 137 | 140 | 130 | 127 | 119 | 114 | 97  | 117 | 1395 CLOSED |             |
| REREWHAKAAITU FARM   | B86261  | 38 17 | 176 36E | 439 | 3    | 100 | 120 | 120 | 120 | 150 | 160 | 140 | 140 | 130 | 110 | 120 | 1550 CLOSED |             |
| WAIOHOU NORTH        | B86281  | 38 14 | 176 50E | 88  | 2    | 137 | 163 | 150 | 145 | 198 | 178 | 191 | 180 | 152 | 150 | 132 | 160         | 1936 CLOSED |
| UPPER ATIAMURI       | B86301  | 38 22 | 176 03E | 415 | 2    | 91  | 97  | 104 | 114 | 137 | 155 | 147 | 137 | 122 | 132 | 119 | 119         | 1474 CLOSED |
| LARCH BRAES          | B86311  | 38 19 | 176 10E | 351 | 3    | 90  | 100 | 110 | 110 | 140 | 150 | 140 | 140 | 120 | 120 | 100 | 110         | 1430 CLOSED |
| NGAKURU              | B86312  | 38 22 | 176 10E | 305 | 2    | 81  | 91  | 97  | 102 | 127 | 132 | 124 | 122 | 112 | 112 | 94  | 102         | 1296        |
| ATKINSONS BLOCK      | B86314  | 38 18 | 176 06E | 415 | 2    | 94  | 109 | 109 | 112 | 140 | 142 | 135 | 130 | 122 | 117 | 99  | 119         | 1428 CLOSED |
| WAIKITE FARM         | B86321  | 38 20 | 176 14E | 354 | 3    | 90  | 100 | 100 | 100 | 130 | 130 | 120 | 120 | 110 | 110 | 90  | 110         | 1310 CLOSED |
| WAIOTAPU FOREST      | *B86341 | 38 20 | 176 25E | 381 | 1    | 94  | 112 | 107 | 112 | 137 | 145 | 132 | 130 | 124 | 117 | 99  | 112         | 1421        |
| ROTOMAHANA           | B86342  | 38 18 | 176 24E | 442 | 2    | 97  | 114 | 112 | 114 | 145 | 147 | 137 | 135 | 127 | 119 | 102 | 122         | 1471        |
| LAKE REREWHAKAAITU   | B86351  | 38 19 | 176 32E | 451 | 2    | 107 | 124 | 114 | 117 | 147 | 150 | 142 | 140 | 132 | 124 | 107 | 124         | 1528        |
| KOPURIKI             | B86381  | 38 20 | 176 48E | 152 | 2    | 107 | 124 | 99  | 102 | 142 | 130 | 132 | 127 | 122 | 114 | 102 | 124         | 1425        |
| GRANT ROAD KOPURIKI  | B86382  | 38 21 | 176 48E | 244 | 2    | 99  | 114 | 91  | 94  | 130 | 119 | 119 | 117 | 112 | 107 | 94  | 114         | 1310        |
| KAINGAROA FOREST     | *B86451 | 38 24 | 176 34E | 544 | 1    | 114 | 132 | 112 | 114 | 150 | 145 | 142 | 142 | 135 | 127 | 109 | 127         | 1549        |
| MURUPARA             | B86471  | 38 27 | 176 42E | 259 | 1    | 104 | 122 | 89  | 94  | 137 | 122 | 124 | 117 | 114 | 109 | 97  | 124         | 1353        |
| GALATEA              | B86474  | 38 28 | 176 46E | 219 | 2    | 102 | 114 | 89  | 97  | 135 | 124 | 122 | 119 | 112 | 109 | 99  | 117         | 1339        |
| GALATEA              | B86481  | 38 25 | 176 48E | 189 | 2    | 97  | 112 | 89  | 91  | 130 | 119 | 119 | 114 | 112 | 104 | 91  | 112         | 1290        |
| TAHORAKURI           | B86521  | 38 34 | 176 14E | 332 | 4    | 91  | 104 | 86  | 97  | 119 | 124 | 119 | 117 | 104 | 102 | 94  | 112         | 1250 CLOSED |
| TAHORAKURI           | B86522  | 38 34 | 176 14E | 332 | 2    | 91  | 104 | 86  | 97  | 119 | 124 | 119 | 117 | 104 | 102 | 94  | 112         | 1269        |
| BROADLANDS           | B86531  | 38 33 | 176 20E | 302 | 3    | 80  | 90  | 70  | 80  | 100 | 110 | 100 | 100 | 90  | 90  | 80  | 100         | 1090        |
| WAIRAPUKAO FOREST    | *B86551 | 38 32 | 176 34E | 437 | 1    | 104 | 117 | 97  | 104 | 140 | 137 | 127 | 127 | 117 | 117 | 109 | 117         | 1413        |
| TAUPO                | *B86602 | 38 41 | 176 04E | 376 | 1    | 81  | 94  | 76  | 91  | 109 | 122 | 117 | 109 | 102 | 102 | 84  | 112         | 1199        |
| WAIRAKEI             | *B86603 | 38 37 | 176 04E | 389 | 2    | 91  | 104 | 84  | 102 | 119 | 132 | 127 | 119 | 109 | 107 | 94  | 122         | 1310 CLOSED |
| ORUANUI              | B86604  | 38 36 | 176 04E | 488 | 2    | 97  | 109 | 89  | 107 | 124 | 137 | 132 | 124 | 114 | 112 | 99  | 127         | 1371 CLOSED |
| WATRAKEI POWER STN   | *B86611 | 38 38 | 176 06E | 342 | 2    | 89  | 102 | 84  | 99  | 117 | 130 | 124 | 117 | 107 | 104 | 91  | 119         | 1283        |
| WAIRAKEI SOIL CON RE | *B86612 | 38 37 | 176 07E | 402 | 2    | 86  | 99  | 81  | 97  | 112 | 124 | 119 | 114 | 104 | 102 | 89  | 114         | 1241        |
| TAUHARA FOREST       | B86621  | 38 38 | 176 13E | 320 | 1    | 91  | 104 | 86  | 102 | 117 | 127 | 124 | 119 | 104 | 99  | 94  | 119         | 1286        |
| MINGINUI FOREST      | *B86671 | 38 39 | 176 44E | 366 | 3    | 120 | 130 | 100 | 110 | 160 | 150 | 140 | 140 | 130 | 120 | 110 | 140         | 1550        |
| RUATAHUNA            | B       |       |         |     |      |     |     |     |     |     |     |     |     |     |     |     |             |             |

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NZ METEOROLOGICAL SERVICE      RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT   | LONG    | HT  |      | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC          | YEAR         |
|----------------------|---------|-------|---------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------|--------------|
|                      |         | S.    |         | M.  | TYPE |     |     |     |     |     |     |     |     |     |     |     |              |              |
| SUNNYDALE WAIMANA    | B87102  | 38 07 | 177 03E | 91  | 2    | 102 | 122 | 132 | 135 | 170 | 165 | 175 | 175 | 135 | 135 | 117 | 124          | 1687 CLOSERD |
| WAIMANA              | *B87103 | 38 09 | 177 05E | 37  | 2    | 112 | 135 | 157 | 145 | 180 | 168 | 183 | 173 | 127 | 132 | 112 | 130          | 1754         |
| RUATOKI TANEATUA     | B87104  | 38 09 | 177 01E |     | 3    | 100 | 120 | 150 | 140 | 170 | 160 | 170 | 160 | 120 | 120 | 100 | 120          | 1630 CLOSERD |
| PAKIHI               | B87141  | 38 07 | 177 26E | 76  | 2    | 142 | 163 | 160 | 191 | 244 | 244 | 249 | 262 | 213 | 208 | 183 | 180          | 2439 CLOSERD |
| TOA TOA              | B87152  | 38 07 | 177 31E | 380 | 2    | 142 | 165 | 165 | 203 | 259 | 239 | 249 | 264 | 198 | 206 | 168 | 165          | 2423         |
| MATAHI               | B87212  | 38 16 | 177 07E | 183 | 3    | 150 | 170 | 150 | 160 | 220 | 210 | 220 | 220 | 190 | 180 | 160 | 190          | 2220         |
| INVERAAN             | B87231  | 38 15 | 177 18E | 207 | 2    | 130 | 155 | 165 | 170 | 216 | 208 | 221 | 221 | 173 | 173 | 150 | 157          | 2139 CLOSERD |
| OPONAE               | B87232  | 38 16 | 177 18E | 124 | 3    | 170 | 200 | 220 | 220 | 280 | 270 | 290 | 290 | 220 | 220 | 190 | 210          | 2780         |
| MOTU                 | B87255  | 38 16 | 177 33E | 488 | 2    | 109 | 122 | 130 | 175 | 234 | 201 | 226 | 213 | 178 | 188 | 173 | 163          | 2119         |
| TE MIRO MOTU         | B87256  | 38 15 | 177 34E | 463 | 3    | 130 | 150 | 150 | 170 | 220 | 220 | 240 | 190 | 190 | 170 | 170 | 2220 CLOSERD |              |
| MATAWAI              | B87351  | 38 21 | 177 32E | 530 | 1    | 112 | 127 | 127 | 150 | 193 | 193 | 196 | 208 | 168 | 165 | 145 | 142          | 1926         |
| KORANGA STN          | B87431  | 38 25 | 177 20E | 533 | 2    | 119 | 137 | 135 | 160 | 206 | 206 | 208 | 221 | 180 | 175 | 155 | 152          | 2054         |
| MOANUI STATION       | B87432  | 38 25 | 177 22E | 229 | 2    | 135 | 152 | 152 | 180 | 231 | 231 | 234 | 249 | 201 | 196 | 173 | 173          | 2307         |
| KORANGA VALLEY       | B87441  | 38 26 | 177 26E |     | 2    | 119 | 102 | 132 | 135 | 163 | 170 | 173 | 178 | 135 | 130 | 122 | 127          | 1686 CLOSERD |
| TARAWERA             | B96051  | 39 02 | 176 35E | 497 | 2    | 99  | 117 | 97  | 117 | 140 | 152 | 142 | 137 | 127 | 130 | 119 | 130          | 1507         |
| MANGERE, AUCKLAND    | *C64971 | 36 58 | 174 47E | 4   | 2    | 64  | 89  | 84  | 109 | 124 | 135 | 132 | 135 | 91  | 102 | 86  | 81           | 1232         |
| OTARA, AUCKLAND      | *C64981 | 36 57 | 174 52E | 12  | 2    | 64  | 97  | 86  | 107 | 119 | 130 | 132 | 135 | 91  | 99  | 81  | 79           | 1220         |
| MANGERE              | C74081  | 37 00 | 174 48E | 6   | 2    | 56  | 86  | 89  | 122 | 130 | 135 | 137 | 140 | 84  | 102 | 89  | 89           | 1259 CLOSERD |
| AUCKLAND AIRPORT     | *C74082 | 37 01 | 174 48E | 8   | 2    | 66  | 89  | 81  | 107 | 119 | 132 | 130 | 132 | 89  | 104 | 84  | 84           | 1217         |
| ARDMORE, AUCKLAND    | *C74091 | 37 02 | 174 58E | 30  | 3    | 80  | 100 | 90  | 110 | 130 | 150 | 150 | 140 | 100 | 110 | 90  | 90           | 1340         |
| KARAKA               | C74181  | 37 07 | 174 52E |     | 2    | 69  | 89  | 86  | 112 | 124 | 142 | 135 | 130 | 94  | 114 | 97  | 91           | 1283 CLOSERD |
| KINGSEAT             | C74182  | 37 08 | 174 48E | 9   | 3    | 70  | 90  | 90  | 110 | 130 | 140 | 130 | 139 | 90  | 110 | 90  | 90           | 1270         |
| PAERATA              | *C74191 | 37 09 | 174 54E | 46  | 2    | 69  | 89  | 86  | 109 | 124 | 142 | 135 | 130 | 94  | 114 | 97  | 91           | 1280 CLOSERD |
| WAIKU                | C74261  | 37 16 | 174 40E | 119 | 1    | 84  | 104 | 97  | 124 | 142 | 160 | 152 | 150 | 104 | 124 | 107 | 104          | 1452         |
| WAIKU                | C74271  | 37 16 | 174 44E | 27  | 2    | 79  | 97  | 91  | 117 | 135 | 152 | 142 | 142 | 102 | 117 | 99  | 99           | 1372         |
| PUKEKOHE             | C74281  | 37 12 | 174 53E | 84  | 3    | 80  | 100 | 90  | 120 | 140 | 160 | 150 | 140 | 100 | 120 | 100 | 100          | 1400 CLOSERD |
| TUAKAU               | C74291  | 37 15 | 174 56E | 61  | 2    | 64  | 79  | 84  | 109 | 122 | 142 | 130 | 122 | 91  | 114 | 94  | 91           | 1242         |
| PUKEKOHE             | C74293  | 37 13 | 174 54E | 67  | 3    | 70  | 90  | 90  | 120 | 140 | 150 | 150 | 140 | 100 | 120 | 100 | 100          | 1370         |
| MAIORO FOREST        | *C74371 | 37 21 | 174 43E | 52  | 1    | 74  | 91  | 89  | 114 | 135 | 150 | 135 | 140 | 99  | 114 | 94  | 97           | 1332         |
| ONEWHERO             | C74391  | 37 20 | 174 57E | 46  | 1    | 69  | 89  | 94  | 119 | 135 | 155 | 142 | 132 | 102 | 124 | 104 | 99           | 1364         |
| GLENIFFER ONEWHERO   | C74392  | 37 21 | 174 54E | 207 | 1    | 81  | 99  | 107 | 140 | 152 | 178 | 160 | 152 | 119 | 142 | 119 | 114          | 1563         |
| TE KARAKA STN TUAKAU | C74481  | 37 29 | 174 49E | 61  | 2    | 76  | 94  | 102 | 122 | 137 | 160 | 147 | 142 | 109 | 132 | 107 | 109          | 1437 CLOSERD |
| GLEN MURRAY          | C74491  | 37 27 | 174 59E |     | 2    | 69  | 89  | 91  | 114 | 127 | 155 | 137 | 130 | 102 | 124 | 102 | 97           | 1337 CLOSERD |
| WAINGARO             | C74791  | 37 42 | 174 59E | 30  | 3    | 90  | 90  | 100 | 120 | 150 | 170 | 150 | 160 | 110 | 130 | 110 | 110          | 1490 CLOSERD |
| RAGLAN               | C74881  | 37 48 | 174 53E | 30  | 2    | 76  | 97  | 97  | 119 | 135 | 170 | 145 | 137 | 107 | 130 | 107 | 104          | 1424         |
| RAGLAN               | C74882  | 37 49 | 174 52E |     | 2    | 71  | 91  | 91  | 114 | 127 | 160 | 140 | 130 | 102 | 122 | 102 | 99           | 1349 CLOSERD |
| TE MATA RAGLAN       | C74883  | 37 53 | 174 52E |     | 2    | 102 | 130 | 130 | 160 | 180 | 226 | 196 | 183 | 142 | 173 | 142 | 140          | 1904 CLOSERD |
| PARA ITI RAGLAN      | C74891  | 37 49 | 174 54E |     | 2    | 79  | 102 | 102 | 124 | 140 | 178 | 155 | 145 | 112 | 135 | 112 | 109          | 1493 CLOSERD |
| NETTLETON TE MATA    | C74982  | 37 57 | 174 52E | 15  | 2    | 79  | 89  | 97  | 114 | 137 | 168 | 147 | 140 | 112 | 135 | 104 | 107          | 1429         |
| HUNUA NURSERY        | C75002  | 37 05 | 175 05E |     | 2    | 76  | 109 | 104 | 127 | 142 | 160 | 157 | 150 | 109 | 127 | 104 | 102          | 1467         |
| UPPER ST PAULS       | C75010  | 37 02 | 175 09E | 427 | 2    | 102 | 130 | 135 | 173 | 193 | 224 | 208 | 193 | 145 | 183 | 152 | 145          | 1983         |
| HAULER               | C75011  | 37 03 | 175 07E | 305 | 3    | 90  | 130 | 120 | 150 | 170 | 180 | 180 | 180 | 130 | 140 | 120 | 120          | 1710         |
| ORUM HOME            | C75012  | 37 02 | 175 06E | 131 | 3    | 90  | 130 | 120 | 140 | 160 | 170 | 170 | 170 | 130 | 140 | 110 | 110          | 1640 CLOSERD |
| MANGANESE MINE       | C75013  | 37 03 | 175 10E | 396 | 4    |     |     |     |     |     |     |     |     |     |     |     |              | 2050         |
| EAST ST PAUL         | C75014  | 37 04 | 175 11E | 305 | 2    | 99  | 152 | 135 | 155 | 178 | 191 | 201 | 198 | 140 | 145 | 119 | 117          | 1830         |
| GIBBONS              | C75015  | 37 04 | 175 09E | 168 | 2    | 97  | 150 | 132 | 152 | 173 | 185 | 196 | 193 | 137 | 142 | 117 | 114          | 1788         |
| LILRURNES            | C75016  | 37 05 | 175 09E | 146 | 2    | 97  | 140 | 135 | 157 | 178 | 191 | 191 | 188 | 140 | 152 | 124 | 124          | 1817 CLOSERD |
| COSSEYS NO 1         | C75017  | 37 03 | 175 06E | 165 | 2    | 81  | 124 | 109 | 127 | 142 | 155 | 163 | 160 | 114 | 117 | 97  | 97           | 1486         |
| PARKER               | C75018  | 37 04 | 175 08E | 335 | 3    | 90  | 140 | 130 | 150 | 170 | 190 | 180 | 180 | 140 | 150 | 120 | 120          | 1760         |
| ROSE                 | C75019  | 37 01 | 175 09E | 405 | 2    | 102 | 147 | 140 | 165 | 185 | 198 | 198 | 198 | 147 | 157 | 132 | 132          | 1901         |
| MOUMOUKAI OFFICE     | C7501A  | 37 05 | 175 09E |     | 2    | 97  | 147 | 130 | 150 | 170 | 183 | 193 | 191 | 135 | 140 | 114 | 114          | 1764         |
| TRIG 1949            | C7501B  | 37 01 | 175 06E | 335 | 2    | 74  | 104 | 99  | 119 | 135 | 150 | 150 | 142 | 104 | 119 | 99  | 97           | 1392         |
| WHAREKAWA STN        | C75022  | 37 00 | 175 17E | 8   | 2    | 64  | 97  | 86  | 99  | 112 | 122 | 127 | 127 | 89  | 94  | 76  | 74           | 1167 CLOSERD |
| KOHUKOHUNUI AUCKLAND | C75023  | 37 02 | 175 13E | 671 | 2    | 130 | 198 | 175 | 203 | 231 | 249 | 262 | 259 | 183 | 191 | 157 | 152          | 2390         |
| KONINI               | C75024  | 37 04 | 175 12E | 198 | 2    | 114 | 168 | 160 | 188 | 211 | 226 | 226 | 226 | 168 | 180 | 150 | 150          | 2167         |
| ARARIMU              | C75101  | 37 08 | 175 04E | 226 | 2    | 76  | 99  | 104 | 132 | 147 | 170 | 157 | 147 | 112 | 140 | 117 | 109          | 1510         |
| PAPARIMU HEALD AK    | C75111  | 37 07 | 175 07E | 152 | 2    | 84  | 107 | 112 | 142 | 160 | 185 | 170 | 157 | 119 | 150 | 124 | 119          | 1629 CLOSERD |
| WHITELEY DAM         | C75112  | 37 06 | 175 07E | 137 | 2    | 84  | 117 | 119 | 147 | 155 | 178 | 165 | 157 | 124 | 142 | 122 | 122          | 1632         |
| MOUMOUKAI FARM       | C75113  | 37 07 | 175 10E | 122 | 2    | 86  | 119 | 122 | 152 | 160 | 183 | 170 | 163 | 130 | 147 | 127 | 124          | 1683         |
| OPITA AUCKLAND       | C75121  | 37 07 | 175 14E | 168 | 2    | 79  | 102 | 107 | 135 | 152 | 178 | 163 | 152 | 114 | 142 | 119 | 114          | 1557         |
| MANGATANGI WEIR      | C75122  | 37 07 | 175 12E |     | 2    | 86  | 112 | 117 | 147 | 168 | 193 | 178 | 165 | 124 | 157 | 132 | 124          | 1703         |
| POKENO               | C75201  | 37 15 | 175 01E | 24  | 2    | 69  | 86  | 91  | 119 | 132 | 152 | 140 | 132 | 102 | 122 | 102 | 99           | 1346         |
| PUKEKAWA             | C75301  | 37 19 | 175 02E | 58  | 2    | 66  | 81  | 86  | 104 | 119 | 137 | 130 | 122 | 91  | 114 | 94  | 94           | 1238         |
| MERE MERE            | C75302  | 37 20 | 175 04E | 24  | 2    | 61  | 76  | 84  | 99  | 112 | 132 | 122 | 114 | 86  | 107 | 89  | 89           | 1171 CLOSERD |
| MARAMARUA FOREST     | *C75321 | 37 18 | 175 15E | 38  | 2    | 66  | 97  | 97  | 117 | 119 | 132 | 124 | 122 | 102 | 107 | 91  | 97           | 1271         |
| TE KAUVHATA          | C75411  | 37 25 | 175 09E |     | 2    | 61  | 79  | 81  | 99  | 112 | 135 | 1   |     |     |     |     |              |              |

| STATION               | NUMBER  | NZ METEOROLOGICAL SERVICE |         |           | 15<br>RAINFALL NORMALS 1941-70. MILLIMETRES |     |     |     |     |     |     |     |     |     |     |     |      |        |        |
|-----------------------|---------|---------------------------|---------|-----------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|--------|
|                       |         | LAT.<br>S.                | LONG.   | HT.<br>M. | TYPE  | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR   |        |
| RUKUHIA               | *C75831 | 37 50                     | 175 18E | 66        | 2   | 71  | 86  | 86  | 102 | 114 | 137 | 127 | 122 | 99  | 112 | 99  | 97   | 1252   |        |
| HAMILTON AFRO         | *C75832 | 37 52                     | 175 20E | 50        | 2   | 71  | 81  | 84  | 99  | 112 | 132 | 117 | 117 | 97  | 109 | 91  | 89   | 1199   |        |
| CAMBRIDGE             | *C75842 | 37 53                     | 175 28E | 3         | 60  | 80  | 80  | 90  | 100 | 120 | 110 | 110 | 90  | 100 | 90  | 80  | 1110 | CLOSED |        |
| CAMBRIDGE             | C75843  | 37 53                     | 175 28E | 2         | 66  | 79  | 79  | 94  | 104 | 124 | 114 | 112 | 89  | 102 | 89  | 89  | 1141 | CLOSED |        |
| WHITEHALL CAMBRIDGE   | C75851  | 37 52                     | 175 34E | 107       | 2   | 71  | 86  | 86  | 104 | 114 | 137 | 127 | 124 | 99  | 112 | 99  | 97   | 1256   |        |
| FENCOURT              | C75852  | 37 53                     | 175 30E | 70        | 2   | 69  | 84  | 84  | 99  | 109 | 132 | 122 | 119 | 97  | 107 | 94  | 94   | 1210   | CLOSED |
| MORRINSVILLE DAM      | C75853  | 37 48                     | 175 35E | 137       | 2   | 81  | 99  | 99  | 117 | 130 | 155 | 145 | 140 | 114 | 127 | 112 | 109  | 1428   |        |
| ROTO O RANGI          | C75941  | 37 59                     | 175 27E | 61        | 2   | 74  | 89  | 86  | 104 | 114 | 137 | 127 | 124 | 102 | 114 | 99  | 99   | 1269   |        |
| GLEN OAKS             | C75943  | 37 56                     | 175 28E | 67        | 3   | 70  | 90  | 90  | 100 | 110 | 140 | 130 | 120 | 100 | 120 | 100 | 100  | 1270   | CLOSED |
| CAMBRIDGE             | C75944  | 37 54                     | 175 29E | 44        | 3   | 70  | 80  | 80  | 100 | 110 | 130 | 120 | 120 | 90  | 110 | 90  | 90   | 1190   |        |
| KARAPIRO              | C75951  | 37 56                     | 175 32E | 63        | 1   | 69  | 86  | 84  | 102 | 109 | 132 | 127 | 127 | 97  | 109 | 99  | 99   | 1235   |        |
| KAWHIA                | C84081  | 38 04                     | 174 49E | 5         | 1   | 79  | 94  | 97  | 119 | 135 | 170 | 150 | 135 | 102 | 124 | 104 | 109  | 1418   |        |
| OPARAU                | C84091  | 38 03                     | 174 55E | 2         | 97  | 109 | 102 | 135 | 145 | 185 | 165 | 150 | 122 | 142 | 124 | 127 | 1603 | CLOSED |        |
| MAROKOPA              | C84371  | 38 18                     | 174 44E | 5         | 2   | 86  | 104 | 102 | 122 | 150 | 175 | 160 | 140 | 112 | 137 | 122 | 124  | 1534   |        |
| DUMBRECK              | C84381  | 38 22                     | 174 53E | 366       | 2   | 130 | 137 | 163 | 180 | 231 | 272 | 241 | 241 | 201 | 241 | 173 | 175  | 2385   |        |
| CUMBRAE PIOPIO        | C84481  | 38 25                     | 174 51E | 152       | 3   | 170 | 190 | 180 | 210 | 280 | 310 | 290 | 250 | 210 | 250 | 240 | 240  | 2820   |        |
| MANGAOTAKI            | C84491  | 38 27                     | 174 55E | 2         | 157   | 191 | 196 | 241 | 269 | 343 | 300 | 269 | 203 | 251 | 211 | 218 | 2849 | CLOSED |        |
| PIO PIO               | C84492  | 38 28                     | 174 57E | 237       | 2   | 99  | 117 | 114 | 140 | 170 | 198 | 180 | 157 | 127 | 155 | 137 | 142  | 1736   | CLOSED |
| GLENOCHEY             | C84582  | 38 32                     | 174 52E | 213       | 2   | 135 | 137 | 135 | 157 | 188 | 226 | 213 | 201 | 173 | 208 | 175 | 175  | 2123   |        |
| AWAKINO               | C84661  | 38 39                     | 174 38E | 15        | 3   | 100 | 120 | 110 | 140 | 170 | 200 | 180 | 160 | 130 | 160 | 140 | 140  | 1750   | CLOSED |
| AWAKINO SCHOOL        | C84663  | 38 40                     | 174 39E | /         | 3   | 110 | 130 | 120 | 150 | 190 | 210 | 200 | 170 | 140 | 170 | 160 | 170  | 1920   | CLOSED |
| MOKAU RIVER           | C84671  | 38 41                     | 174 44E | 15        | 3   | 120 | 120 | 120 | 150 | 200 | 210 | 200 | 170 | 140 | 170 | 150 | 160  | 1910   |        |
| MANGATOI              | C84681  | 38 41                     | 174 49E | 2         | 132   | 150 | 130 | 165 | 201 | 231 | 203 | 188 | 178 | 208 | 191 | 196 | 2173 | CLOSED |        |
| TE MATAI ARIA         | C84691  | 38 37                     | 174 54E | 37        | 2   | 127 | 142 | 122 | 157 | 191 | 221 | 193 | 180 | 170 | 198 | 180 | 188  | 2069   | CLOSED |
| MOHAKATINO STN, MOKAU | *C84761 | 38 43                     | 174 37E | 46        | 1   | 102 | 119 | 109 | 132 | 173 | 185 | 178 | 152 | 130 | 155 | 147 | 150  | 1732   |        |
| KOTARE                | C84871  | 38 53                     | 174 44E | 30        | 3   | 130 | 140 | 140 | 160 | 210 | 230 | 210 | 190 | 150 | 190 | 170 | 180  | 2100   |        |
| OHURA                 | C84891  | 38 51                     | 174 59E | 152       | 2   | 119 | 135 | 122 | 150 | 188 | 211 | 193 | 173 | 155 | 183 | 170 | 173  | 1972   | CLOSED |
| URUTI                 | C84951  | 38 59                     | 174 34E | 104       | 2   | 135 | 142 | 137 | 165 | 221 | 234 | 221 | 196 | 155 | 191 | 170 | 185  | 2152   |        |
| URUTI                 | C84952  | 38 57                     | 174 32E | 3         | 150   | 140 | 140 | 170 | 220 | 230 | 220 | 200 | 160 | 200 | 180 | 180 | 2190 | CLOSED |        |
| MT DAMPER             | C84971  | 38 56                     | 174 47E | 320       | 2   | 145 | 168 | 155 | 185 | 246 | 264 | 251 | 216 | 183 | 221 | 208 | 211  | 2453   |        |
| NGUTUNUI              | C85011  | 38 04                     | 175 06E | 1         | 127   | 132 | 157 | 175 | 224 | 264 | 236 | 234 | 196 | 234 | 168 | 170 | 2317 |        |        |
| MT PIRONGIA MAKEOKEO  | C85012  | 38 02                     | 175 08E | 219       | 2   | 142 | 147 | 157 | 183 | 218 | 277 | 251 | 267 | 201 | 226 | 178 | 191  | 2438   |        |
| TE AWAMUTU            | C85031  | 38 01                     | 175 19E | 61        | 2   | 76  | 81  | 81  | 102 | 117 | 145 | 130 | 124 | 104 | 122 | 99  | 99   | 1280   | CLOSED |
| MAUNGATAUTARI         | C85051  | 38 03                     | 175 35E | 183       | 2   | 86  | 99  | 89  | 117 | 127 | 160 | 147 | 135 | 117 | 130 | 119 | 117  | 1443   |        |
| ARAPUNI POWER STN     | *C85061 | 38 04                     | 175 39E | 123       | 1   | 81  | 99  | 91  | 109 | 127 | 155 | 145 | 135 | 114 | 132 | 117 | 112  | 1417   |        |
| OTOROHANGA            | C85121  | 38 11                     | 175 13E | 39        | 3   | 90  | 90  | 90  | 120 | 140 | 170 | 150 | 140 | 120 | 140 | 110 | 110  | 1470   | CLOSED |
| SONOMO OTOROHANGA     | C85123  | 38 11                     | 175 13E | 3         | 100   | 120 | 110 | 140 | 150 | 190 | 180 | 160 | 140 | 160 | 140 | 140 | 1730 | CLOSED |        |
| GLENBROOK             | C85124  | 38 10                     | 175 12E | 40        | 2   | 89  | 97  | 91  | 119 | 142 | 168 | 157 | 142 | 119 | 140 | 112 | 127  | 1503   |        |
| WAIKERIA              | *C85141 | 38 07                     | 175 24E | 46        | 1   | 81  | 89  | 76  | 107 | 112 | 145 | 132 | 119 | 104 | 114 | 104 | 107  | 1290   |        |
| PUKETURUA, PUTARURU   | *C85161 | 38 07                     | 175 40E | 155       | 2   | 79  | 91  | 86  | 104 | 117 | 145 | 132 | 124 | 109 | 119 | 112 | 109  | 1327   | CLOSED |
| WAITOMO CAVES         | C85211  | 38 15                     | 175 06E | 4         | 2   | 97  | 102 | 109 | 124 | 155 | 183 | 168 | 163 | 137 | 165 | 127 | 130  | 1660   | CLOSED |
| WAITOMO SCHOOL        | C85212  | 38 16                     | 175 06E | 99        | 2   | 97  | 102 | 109 | 124 | 155 | 183 | 168 | 163 | 137 | 165 | 127 | 130  | 1660   | CLOSED |
| OTOROHANGA            | C85222  | 38 13                     | 175 14E | 37        | 2   | 79  | 81  | 86  | 99  | 122 | 145 | 132 | 130 | 109 | 130 | 102 | 102  | 1317   |        |
| TE KUITI              | C85311  | 38 20                     | 175 10E | 55        | 4   | 89  | 91  | 99  | 114 | 142 | 168 | 157 | 142 | 127 | 155 | 145 | 1500 | CLOSED |        |
| TE KUITI              | C85312  | 38 20                     | 175 10E | 46        | 2   | 89  | 91  | 99  | 114 | 142 | 168 | 152 | 147 | 124 | 150 | 117 | 119  | 1512   | CLOSED |
| TE KUITI              | C85313  | 38 20                     | 175 10E | 2         | 89  | 91  | 99  | 112 | 140 | 165 | 150 | 147 | 124 | 150 | 117 | 117 | 1501 | CLOSED |        |
| TE KUITI              | *C85314 | 38 20                     | 175 09E | 61        | 2   | 91  | 94  | 99  | 114 | 142 | 168 | 155 | 150 | 127 | 152 | 119 | 119  | 1530   |        |
| RANGITOTO             | C85331  | 38 20                     | 175 23E | 320       | 1   | 112 | 114 | 112 | 130 | 157 | 188 | 178 | 168 | 145 | 173 | 145 | 145  | 1767   |        |
| MANGAKINO             | C85371  | 38 22                     | 175 46E | 220       | 2   | 84  | 94  | 89  | 107 | 124 | 150 | 140 | 132 | 114 | 132 | 117 | 114  | 1397   | CLOSED |
| MARAETAI              | C85372  | 38 21                     | 175 45E | 198       | 2   | 86  | 97  | 91  | 109 | 130 | 155 | 145 | 137 | 117 | 137 | 119 | 117  | 1440   |        |
| PUKETITI PIO PIO      | C85402  | 38 27                     | 175 01E | 4         | 2   | 99  | 112 | 97  | 124 | 150 | 173 | 152 | 142 | 135 | 155 | 142 | 147  | 1650   | CLOSED |
| MANGAKOHI PIO PIO     | C85403  | 38 27                     | 175 01E | 2         | 99  | 112 | 97  | 124 | 150 | 173 | 152 | 142 | 135 | 155 | 142 | 147 | 1628 | CLOSED |        |
| WHAKAMARU             | C85481  | 38 25                     | 175 48E | 231       | 2   | 91  | 99  | 86  | 104 | 119 | 137 | 132 | 127 | 109 | 119 | 104 | 117  | 1344   |        |
| PUNAWAI ARIA          | C85501  | 38 35                     | 175 00E | 107       | 2   | 102 | 112 | 104 | 124 | 157 | 178 | 170 | 152 | 130 | 155 | 140 | 160  | 1664   |        |
| WAIRERE               | C85502  | 38 32                     | 175 00E | 122       | 2   | 97  | 104 | 99  | 117 | 150 | 168 | 160 | 145 | 122 | 147 | 132 | 132  | 1573   |        |
| MOKAUTI SCHOOL        | C85511  | 38 35                     | 175 10E | 183       | 3   | 100 | 100 | 90  | 120 | 140 | 170 | 150 | 140 | 130 | 150 | 140 | 140  | 1560   | CLOSED |
| TAPUWAE               | C85531  | 38 34                     | 175 21E | 610       | 2   | 117 | 124 | 114 | 140 | 170 | 198 | 180 | 170 | 152 | 180 | 157 | 160  | 1862   |        |
| PUREORA FOREST        | *C85551 | 38 31                     | 175 33E | 549       | 2   | 114 | 122 | 112 | 137 | 165 | 196 | 178 | 165 | 150 | 178 | 155 | 157  | 1829   |        |
| OTUTIRA               | *C85681 | 38 38                     | 175 49E | 579       | 2   | 94  | 107 | 89  | 109 | 132 | 152 | 137 | 122 | 130 | 114 | 135 | 1451 |        |        |
| KINLOCH STATION       | C85691  | 38 39                     | 175 57E | 381       | 2   | 76  | 86  | 71  | 84  | 99  | 109 | 104 | 99  | 89  | 89  | 79  | 102  | 1087   |        |
| ONGARUE               | C85711  | 38 45                     | 175 11E | 229       | 2   | 89  | 99  | 89  | 117 | 140 | 168 | 145 | 137 | 127 | 145 | 130 | 130  | 1516   |        |
| OTANGIWAI             | C85712  | 38 42                     | 175 10E | 244       | 3   | 110 | 120 | 110 | 140 | 180 | 200 | 180 | 160 | 140 | 170 | 160 | 160  | 1830   |        |
| OKAHUKURA             | C85721  | 38 47                     | 175 13E | 2         | 94  | 89  | 79  | 107 | 130 | 155 | 142 | 127 | 119 | 135 | 137 | 130 | 1444 | CLOSED |        |
| CLOVELLY              | C85811  | 38 53                     | 175 08E | 2         | 97  | 109 | 99  | 122 | 155 | 170 | 157 | 140 | 124 | 147 | 137 | 142 | 1599 | CLOSED |        |
| TAUMARUNUI            | *C85821 | 38 52                     | 175 16E | 171       | 1   | 89  | 99  | 84  | 109 | 132 | 152 | 135 | 124 | 117 | 137 |     |      |        |        |

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 NZ METEOROLOGICAL SERVICE      RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT S. | LONG    | HT M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YEAR        |
|----------------------|---------|--------|---------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|
| OKOKE                | C94041  | 39 01  | 174 29E | 3     |      | 160 | 160 | 150 | 180 | 220 | 230 | 230 | 210 | 180 | 220 | 200 | 200 | 2340 CLOSER |
| TANGARAKAU           | C94081  | 39 01  | 174 52E | 125   | 2    | 119 | 130 | 117 | 142 | 183 | 196 | 183 | 170 | 152 | 180 | 168 | 165 | 1905 CLOSER |
| UPPER MANGOREI       | C94102  | 39 11  | 174 04E | 366   | 2    | 262 | 249 | 239 | 272 | 371 | 381 | 381 | 340 | 272 | 318 | 290 | 300 | 3675 CLOSER |
| LOWER MANGOREI       | C94111  | 39 06  | 174 06E | 119   | 1    | 130 | 127 | 117 | 135 | 180 | 183 | 188 | 165 | 137 | 160 | 147 | 145 | 1814 CLOSER |
| EGMONT VILLAGE       | C94112  | 39 09  | 174 09E | 198   | 2    | 165 | 163 | 150 | 173 | 231 | 234 | 239 | 211 | 175 | 206 | 188 | 185 | 2320 CLOSER |
| LEPPERTON            | C94121  | 39 06  | 174 13E | 131   | 1    | 155 | 137 | 137 | 155 | 201 | 213 | 208 | 196 | 157 | 196 | 178 | 175 | 2108        |
| INGLEWOOD            | C94122  | 39 10  | 174 14E | 200   | 1    | 168 | 155 | 140 | 165 | 206 | 226 | 218 | 201 | 175 | 208 | 193 | 196 | 2251        |
| TARATA               | C94131  | 39 10  | 174 22E | 94    | 2    | 145 | 140 | 130 | 152 | 196 | 206 | 201 | 188 | 160 | 193 | 178 | 175 | 2064        |
| PURANGI              | C94151  | 39 09  | 174 31E | 206   | 1    | 142 | 145 | 137 | 163 | 216 | 218 | 216 | 203 | 170 | 208 | 191 | 180 | 2189        |
| WHANGAMOMONA         | C94171  | 39 09  | 174 45E | 155   | 4    |     |     |     |     |     |     |     |     |     |     |     |     | 2050 CLOSER |
| WHANGAMOMONA         | C94173  | 39 09  | 174 45E | 155   | 2    | 132 | 135 | 127 | 152 | 201 | 203 | 198 | 188 | 157 | 193 | 178 | 168 | 2032        |
| RIVERSDALE           | C94221  | 39 12  | 174 13E | 249   | 2    | 173 | 165 | 147 | 178 | 226 | 241 | 236 | 221 | 193 | 226 | 208 | 201 | 2415 CLOSER |
| TARIKI HYDRO         | C94222  | 39 13  | 174 16E | 235   | 1    | 170 | 163 | 145 | 180 | 234 | 244 | 239 | 231 | 201 | 229 | 213 | 193 | 2442        |
| NGATIMARU            | C94261  | 39 12  | 174 37E | 3     |      | 120 | 130 | 120 | 140 | 180 | 200 | 180 | 170 | 140 | 190 | 170 | 170 | 1910 CLOSER |
| TE WERA FOREST       | *C94262 | 39 14  | 174 36E | 180   | 2    | 122 | 119 | 112 | 135 | 175 | 180 | 178 | 168 | 145 | 170 | 157 | 145 | 1806        |
| KIRIKAU              | C95011  | 39 01  | 175 07E | 143   | 3    | 100 | 110 | 110 | 100 | 140 | 140 | 140 | 140 | 110 | 130 | 150 | 150 | 1520 CLOSER |
| KAITIEKE             | C95021  | 39 05  | 175 16E | 226   | 2    | 84  | 102 | 117 | 122 | 130 | 145 | 140 | 135 | 117 | 122 | 147 | 140 | 1501        |
| OWHANGO SCHOOL       | C95031  | 39 00  | 175 23E | 454   | 2    | 119 | 132 | 114 | 147 | 173 | 198 | 178 | 165 | 157 | 183 | 170 | 173 | 1909        |
| TONGARIRO HATCHERY   | C95081  | 39 01  | 175 49E | 411   | 1    | 130 | 132 | 119 | 130 | 173 | 196 | 180 | 170 | 152 | 163 | 142 | 168 | 1855        |
| RANGIPO              | C95082  | 39 05  | 175 49E | 518   | 1    | 147 | 147 | 142 | 157 | 203 | 221 | 224 | 203 | 180 | 193 | 168 | 206 | 2191        |
| HAUTU                | C95084  | 39 00  | 175 51E | 384   | 1    | 107 | 104 | 97  | 112 | 140 | 157 | 140 | 145 | 122 | 132 | 112 | 132 | 1500        |
| WADES LANDING        | C95101  | 39 06  | 175 04E | 137   | 2    | 99  | 109 | 97  | 122 | 142 | 165 | 147 | 137 | 132 | 152 | 140 | 142 | 1584 CLOSER |
| RETARUKF             | C95111  | 39 08  | 175 07E | 134   | 2    | 104 | 114 | 99  | 127 | 147 | 170 | 152 | 142 | 137 | 157 | 145 | 150 | 1644        |
| KAITIEKE             | C95121  | 39 06  | 175 17E | 2     |      | 109 | 99  | 107 | 117 | 155 | 188 | 132 | 160 | 124 | 168 | 130 | 124 | 1613 CLOSER |
| RAURIMU              | C95141  | 39 07  | 175 24E | 610   | 2    | 140 | 147 | 135 | 160 | 193 | 216 | 208 | 191 | 178 | 196 | 178 | 196 | 2138        |
| NATIONAL PARK        | C95142  | 39 10  | 175 24E | 823   | 2    | 163 | 163 | 155 | 191 | 221 | 249 | 208 | 203 | 193 | 229 | 221 | 231 | 2427        |
| TAUREWA LOOKOUT      | C95151  | 39 07  | 175 33E | 975   | 2    | 165 | 183 | 173 | 175 | 226 | 254 | 239 | 211 | 246 | 236 | 216 | 244 | 2568 CLOSER |
| DESERT ROAD TEAROOMS | C95171  | 39 11  | 175 45E | 906   | 3    | 200 | 200 | 190 | 210 | 270 | 290 | 300 | 270 | 240 | 250 | 220 | 270 | 2910        |
| WAIKUNE              | C95241  | 39 12  | 175 24E | 744   | 2    | 147 | 160 | 160 | 185 | 213 | 254 | 244 | 226 | 203 | 226 | 234 | 224 | 2476        |
| CHATEAU, TONGARIO    | *C95251 | 39 12  | 175 32E | 1119  | 1    | 188 | 206 | 178 | 224 | 257 | 292 | 269 | 251 | 244 | 279 | 262 | 264 | 2914        |
| TE REHUNGA           | D05291  | 40 13  | 175 59E | 271   | 2    | 109 | 99  | 107 | 112 | 132 | 152 | 137 | 132 | 107 | 140 | 124 | 150 | 1501        |
| WAIPUNA WOODVILLE    | D05381  | 40 20  | 175 50E | 67    | 1    | 104 | 89  | 91  | 99  | 112 | 127 | 117 | 107 | 91  | 127 | 109 | 135 | 1308        |
| MAKOMAKO             | D05471  | 40 28  | 175 42E | 201   | 2    | 137 | 122 | 119 | 137 | 168 | 203 | 183 | 170 | 150 | 185 | 155 | 175 | 1904        |
| MANGAMUTU, PAHIATUA  | *D05481 | 40 27  | 175 49E | 116   | 1    | 94  | 86  | 84  | 94  | 114 | 140 | 124 | 114 | 104 | 132 | 107 | 124 | 1317        |
| MANGATAINOKA         | D05491  | 40 24  | 175 58E | 183   | 2    | 89  | 79  | 79  | 86  | 102 | 119 | 109 | 99  | 86  | 117 | 97  | 117 | 1179 CLOSER |
| HILLWOOD HUKANUI     | D05561  | 40 35  | 175 40E | 235   | 2    | 127 | 114 | 119 | 142 | 178 | 206 | 185 | 175 | 155 | 180 | 160 | 163 | 1904        |
| MANGAMAIRE           | D05571  | 40 31  | 175 45E | 152   | 1    | 104 | 89  | 89  | 107 | 130 | 155 | 140 | 132 | 114 | 135 | 119 | 130 | 1444        |
| PUTARA               | D05651  | 40 40  | 175 34E | 299   | 2    | 173 | 183 | 140 | 193 | 249 | 277 | 251 | 229 | 198 | 239 | 221 | 188 | 2541        |
| EKETAHUNA            | D05671  | 40 39  | 175 42E | 235   | 1    | 97  | 94  | 99  | 122 | 155 | 170 | 152 | 147 | 130 | 150 | 135 | 130 | 1581        |
| EASTRY STATION       | D05681  | 40 36  | 175 51E | 146   | 1    | 86  | 71  | 79  | 91  | 127 | 140 | 130 | 122 | 99  | 114 | 94  | 109 | 1262        |
| TAWATAJAH, ALFREDTON | D05682  | 40 41  | 175 48E | 213   | 1    | 79  | 74  | 76  | 91  | 130 | 137 | 132 | 122 | 99  | 114 | 99  | 107 | 1260        |
| MT BRUCE             | D05751  | 40 45  | 175 35E | 457   | 2    | 168 | 157 | 191 | 203 | 279 | 292 | 277 | 272 | 216 | 224 | 198 | 206 | 2683        |
| MOUNT BRUCE          | D05763  | 40 44  | 175 38E | 308   | 2    | 140 | 132 | 137 | 165 | 224 | 241 | 224 | 213 | 180 | 208 | 183 | 185 | 2232        |
| MANGAMAHOE           | D05771  | 40 44  | 175 44E | 244   | 2    | 94  | 86  | 91  | 112 | 150 | 160 | 150 | 142 | 119 | 137 | 122 | 124 | 1487 CLOSER |
| TAKITAKI             | D05775  | 40 47  | 175 46E | 213   | 2    | 74  | 71  | 74  | 89  | 119 | 130 | 119 | 114 | 97  | 112 | 97  | 99  | 1195 CLOSER |
| WATRERE, IHURAU      | D05781  | 40 46  | 175 51E | 262   | 2    | 74  | 69  | 81  | 86  | 124 | 127 | 127 | 122 | 94  | 97  | 84  | 94  | 1179        |
| WATMAPU              | D05791  | 40 47  | 175 54E | 238   | 2    | 76  | 69  | 84  | 89  | 127 | 130 | 130 | 124 | 94  | 99  | 86  | 94  | 1202 CLOSER |
| MATAHIFI STN         | D05852  | 40 53  | 175 35E | 152   | 2    | 79  | 74  | 97  | 91  | 132 | 135 | 132 | 124 | 94  | 91  | 84  | 94  | 1227 CLOSER |
| KOPUARANGA STATION   | D05861  | 40 48  | 175 40E | 206   | 2    | 84  | 79  | 94  | 99  | 142 | 145 | 145 | 137 | 107 | 112 | 97  | 107 | 1348        |
| BAGSHOT STATION      | D05872  | 40 52  | 175 46E | 171   | 1    | 69  | 64  | 86  | 84  | 122 | 119 | 119 | 119 | 86  | 81  | 71  | 81  | 1101        |
| MAURICEVILLE         | D05873  | 40 48  | 175 43E | 213   | 2    | 86  | 79  | 107 | 104 | 163 | 155 | 160 | 157 | 107 | 102 | 86  | 104 | 1410 CLOSER |
| DITTON               | D05874  | 40 51  | 175 44E | 213   | 2    | 76  | 71  | 94  | 94  | 135 | 132 | 140 | 132 | 99  | 94  | 79  | 86  | 1232 CLOSER |
| KOWHAIBANK, BIDEFORD | D05881  | 40 51  | 175 51E | 122   | 2    | 66  | 61  | 81  | 79  | 124 | 117 | 119 | 119 | 81  | 76  | 66  | 79  | 1068        |
| MARINGI BIDEFORD     | D05891  | 40 50  | 175 56E | 152   | 2    | 58  | 58  | 79  | 79  | 132 | 119 | 122 | 124 | 79  | 74  | 61  | 76  | 1061 CLOSER |
| MANGATARIRI VALLEY   | D05941  | 40 57  | 175 28E | 244   | 2    | 188 | 165 | 216 | 203 | 284 | 295 | 292 | 259 | 218 | 218 | 198 | 216 | 2752 CLOSER |
| MASTERTON ESSEX ST   | *D05960 | 40 58  | 175 39E | 118   | 2    | 58  | 56  | 74  | 71  | 112 | 107 | 109 | 107 | 74  | 69  | 58  | 71  | 966 CLOSER  |
| LLANDAFF             | D05961  | 40 56  | 175 36E | 137   | 2    | 66  | 61  | 81  | 76  | 112 | 112 | 109 | 104 | 79  | 76  | 69  | 79  | 1024 CLOSER |
| MASTERTON            | D05962  | 40 57  | 175 40E | 102   | 2    | 61  | 61  | 81  | 69  | 104 | 104 | 104 | 104 | 71  | 79  | 66  | 79  | 983 CLOSER  |
| MASTERTON AIRFIELD   | *D05963 | 40 58  | 175 38E | 112   | 2    | 58  | 56  | 74  | 69  | 104 | 107 | 99  | 94  | 74  | 74  | 69  | 79  | 957 CLOSER  |
| WAINGAWA, MASTERTON  | *D05964 | 40 59  | 175 37E | 114   | 1    | 64  | 58  | 76  | 71  | 102 | 107 | 102 | 91  | 74  | 74  | 69  | 76  | 964         |
| MASTERTON            | D05965  | 40 57  | 175 39E | 107   | 2    | 43  | 33  | 86  | 91  | 127 | 99  | 99  | 114 | 71  | 74  | 61  | 81  | 979 CLOSER  |
| MASTERTON            | D05967  | 40 57  | 175 39E | 128   | 2    | 56  | 51  | 64  | 79  | 107 | 107 | 107 | 86  | 74  | 79  | 61  | 79  | 950 CLOSER  |
| MASTERTON COLOMBO RD | D05968  | 40 58  | 175 40E | 122   | 2    | 51  | 48  | 64  | 61  | 86  | 89  | 84  | 81  | 61  | 61  | 53  | 61  | 800         |
| TE ORE ORE           | D05971  | 40 56  | 175 42E | 119   | 2    | 56  | 51  | 69  | 66  | 94  | 97  | 91  | 89  | 66  | 66  | 58  | 66  | 869 CLOSER  |
| PURUNUI, BLAIRLOGIE  | D05991  | 40 55  | 175 57E | 119   | 1    | 64  | 58  | 79  | 76  | 127 | 117 | 124 | 122 | 76  | 76  | 61  | 79  | 1059        |
| NGAMOKO              | D06012  | 40 03  | 176 10E | 445   | 2    | 124 | 114 | 150 | 137 | 168 | 188 | 168 | 170 | 130 | 152 | 135 | 175 | 1811        |
| NORSEWOOD            | D06021  | 40 04  | 176 13E | 4     | 4    |     |     |     |     |     |     |     |     |     |     |     |     | 1450 CLOSER |
| KOPUA                | *D06022 | 40 05  | 176 17E | 311   | 2    | 91  | 79  | 97  | 81  | 102 | 104 | 99  | 112 | 64  | 79  | 71  | 10  |             |

## NZ METEOROLOGICAL SERVICE

## 17 RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION               | NUMBER  | LAT<br>S.<br>° | LONG<br>° | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC    | YEAR   |
|-----------------------|---------|----------------|-----------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|--------|
| WAIWHERO STN          | D06062  | 40 04          | 176 39E   | 192      | 2    | 91  | 81  | 89  | 81  | 112 | 112 | 117 | 117 | 49  | 74  | 71  | 104    | 1118   |
| OMAKERE STN           | D06071  | 40 05          | 176 47E   | 244      | 2    | 114 | 112 | 109 | 107 | 150 | 147 | 157 | 155 | 89  | 99  | 89  | 137    | 1465   |
| RANGITAPI             | D06081  | 40 02          | 176 48E   | 183      | 3    | 80  | 90  | 100 | 110 | 160 | 140 | 140 | 150 | 80  | 90  | 70  | 100    | CLOSED |
| RUAROA                | D06101  | 40 11          | 176 02E   | 268      | 1    | 102 | 97  | 109 | 117 | 140 | 163 | 140 | 142 | 112 | 137 | 127 | 150    | 1536   |
| BYWELL STATION        | D06121  | 40 11          | 176 17E   | 402      | 2    | 89  | 79  | 94  | 97  | 119 | 127 | 122 | 119 | 91  | 112 | 104 | 132    | 1285   |
| ORMONDVILLE           | D06122  | 40 07          | 176 16E   | 305      | 2    | 79  | 74  | 81  | 79  | 104 | 104 | 109 | 104 | 69  | 81  | 74  | 107    | 1065   |
| TOURERE               | D06141  | 40 07          | 176 25E   | 213      | 2    | 76  | 74  | 74  | 71  | 102 | 99  | 107 | 104 | 61  | 66  | 61  | 91     | 986    |
| RED OAKS, FILEMINGTON | D06142  | 40 10          | 176 27E   | 174      | 2    | 71  | 69  | 66  | 66  | 91  | 89  | 94  | 94  | 56  | 58  | 56  | 84     | 894    |
| MOTUOTARIA            | D06151  | 40 09          | 176 33E   | 62       | 2    | 74  | 69  | 69  | 69  | 94  | 91  | 99  | 97  | 56  | 61  | 58  | 89     | CLOSED |
| ROTOKAI, WALLINGFORD  | D06161  | 40 10          | 176 38E   | 82       | 3    | 70  | 70  | 80  | 80  | 110 | 110 | 110 | 110 | 60  | 70  | 60  | 90     | 1020   |
| WHAKAMUTU STN         | D06171  | 40 10          | 176 42E   | 70       | 4    | 69  | 79  | 86  | 89  | 135 | 117 | 114 | 122 | 69  | 71  | 61  | 84     | 1050   |
| ARAMOANA              | D06181  | 40 09          | 176 50E   | 27       | 1    | 69  | 79  | 86  | 89  | 135 | 117 | 114 | 122 | 69  | 71  | 61  | 84     | 1096   |
| TAHORAITI DANNEVIRKE  | D06201  | 40 13          | 176 05E   | 183      | 2    | 74  | 66  | 79  | 81  | 99  | 107 | 102 | 99  | 79  | 94  | 86  | 112    | 1078   |
| DANNEVIRKE            | *D06212 | 40 13          | 176 07E   | 207      | 1    | 76  | 66  | 84  | 81  | 102 | 102 | 107 | 99  | 76  | 91  | 86  | 119    | 1089   |
| NIKAU HILL            | D06231  | 40 15          | 176 23E   | 366      | 2    | 94  | 84  | 102 | 102 | 127 | 135 | 130 | 127 | 99  | 119 | 109 | 140    | 1368   |
| RATA FARM TE URI      | *D06233 | 40 16          | 176 23E   | 488      | 2    | 107 | 89  | 112 | 99  | 132 | 132 | 135 | 132 | 91  | 104 | 99  | 140    | 1372   |
| TE URI                | D06234  | 40 12          | 176 19E   | 287      | 2    | 84  | 71  | 91  | 89  | 112 | 112 | 114 | 109 | 84  | 102 | 94  | 130    | 1192   |
| BIRCH HILL            | D06241  | 40 15          | 176 28E   | 162      | 2    | 84  | 74  | 81  | 74  | 104 | 104 | 107 | 107 | 54  | 69  | 66  | 97     | 1031   |
| WARENUT WILDER SETT   | D06251  | 40 15          | 176 30E   | 2        | 79   | 76  | 74  | 74  | 102 | 102 | 107 | 107 | 51  | 66  | 61  | 94  | 1003   |        |
| OBAN                  | D06261  | 40 15          | 176 36E   | 2        | 66   | 76  | 86  | 89  | 132 | 114 | 114 | 122 | 69  | 71  | 61  | 81  | CLOSED |        |
| STRANGFORD            | D06262  | 40 12          | 176 37E   | 98       | 2    | 69  | 71  | 74  | 74  | 109 | 102 | 104 | 107 | 51  | 64  | 56  | 81     | 972    |
| TAIKURA STATION       | D06271  | 40 13          | 176 44E   | 6        | 3    | 60  | 60  | 80  | 80  | 120 | 110 | 110 | 110 | 60  | 70  | 60  | 80     | 1000   |
| TE NGAWA              | D06272  | 40 12          | 176 46E   | 37       | 2    | 69  | 71  | 86  | 86  | 132 | 114 | 117 | 119 | 69  | 74  | 58  | 84     | 1079   |
| TE PA WAITAHORA       | D06311  | 40 20          | 176 10E   | 244      | 2    | 94  | 76  | 79  | 102 | 124 | 132 | 137 | 130 | 91  | 91  | 114 | 97     | 122    |
| WAWEAEPKA DANNEVIRKE  | D06312  | 40 22          | 176 09E   | 3        | 100  | 100 | 90  | 110 | 130 | 140 | 140 | 130 | 100 | 100 | 100 | 100 | 1360   |        |
| GREENHILL FARM, MOTEA | D06321  | 40 19          | 176 15E   | 335      | 2    | 79  | 71  | 84  | 86  | 107 | 114 | 109 | 107 | 84  | 102 | 94  | 119    | 1156   |
| WAITAHORA             | D06322  | 40 20          | 176 12E   | 250      | 2    | 91  | 81  | 97  | 99  | 122 | 132 | 124 | 122 | 94  | 117 | 107 | 137    | 1323   |
| MOEN                  | D06323  | 40 22          | 176 17E   | 183      | 3    | 100 | 70  | 90  | 100 | 130 | 130 | 140 | 140 | 100 | 110 | 80  | 100    | 1290   |
| TE TOHE               | D06341  | 40 19          | 176 25E   | 238      | 3    | 80  | 70  | 90  | 90  | 110 | 120 | 110 | 110 | 80  | 100 | 90  | 120    | CLOSED |
| OTAMA STN, MANGAOROPA | D06351  | 40 20          | 176 30E   | 38       | 2    | 76  | 71  | 84  | 81  | 122 | 112 | 117 | 114 | 69  | 74  | 61  | 91     | 1072   |
| PORANGAHU             | D06361  | 40 18          | 176 37E   | 3        | 70   | 70  | 80  | 80  | 130 | 110 | 110 | 120 | 70  | 70  | 60  | 80  | 1050   |        |
| GLEBELANDS            | D06362  | 40 18          | 176 38E   | 2        | 64   | 66  | 81  | 81  | 124 | 107 | 109 | 112 | 66  | 69  | 56  | 76  | 1011   |        |
| PINE GROVE            | D06431  | 40 26          | 176 22E   | 162      | 3    | 90  | 80  | 100 | 100 | 140 | 130 | 140 | 130 | 90  | 100 | 90  | 120    | 1310   |
| WOODBANK              | D06451  | 40 28          | 176 33E   | 21       | 1    | 81  | 74  | 99  | 99  | 152 | 132 | 137 | 137 | 81  | 86  | 66  | 94     | 1238   |
| TAWADALE, WIMBLETON   | D06452  | 40 24          | 176 32E   | 107      | 3    | 80  | 90  | 100 | 110 | 160 | 140 | 150 | 150 | 80  | 90  | 70  | 100    | 1310   |
| HERBERTVILLE          | D06453  | 40 29          | 176 34E   | 2        | 74   | 66  | 89  | 89  | 137 | 119 | 122 | 122 | 74  | 76  | 61  | 86  | 1115   |        |
| TATARAMOA MAKURI      | D06501  | 40 32          | 176 00E   | 274      | 2    | 109 | 94  | 99  | 119 | 168 | 180 | 170 | 160 | 130 | 150 | 127 | 142    | 1648   |
| GRN. HOLLOW PONGAROA  | D06521  | 40 34          | 176 14E   | 91       | 2    | 69  | 64  | 86  | 89  | 132 | 122 | 124 | 119 | 76  | 79  | 61  | 89     | 1110   |
| PUKERURU              | D06531  | 40 31          | 176 21E   | 9        | 2    | 76  | 69  | 94  | 97  | 142 | 132 | 137 | 130 | 84  | 86  | 69  | 97     | 1213   |
| TIRAUAMEA             | D06602  | 40 38          | 176 03E   | 229      | 3    | 100 | 80  | 90  | 110 | 150 | 160 | 140 | 140 | 120 | 140 | 110 | 130    | CLOSED |
| ANNEDALE              | D06701  | 40 45          | 176 04E   | 183      | 3    | 80  | 70  | 90  | 100 | 150 | 150 | 150 | 140 | 100 | 110 | 90  | 110    | 1340   |
| GLENFALLLOCH STN      | D06721  | 40 46          | 176 15E   | 18       | 1    | 74  | 64  | 94  | 97  | 140 | 135 | 140 | 127 | 89  | 89  | 71  | 99     | 1219   |
| NO TOTARA PONGAROA    | D06722  | 40 43          | 176 15E   | 305      | 2    | 97  | 81  | 112 | 122 | 198 | 170 | 180 | 191 | 104 | 119 | 86  | 114    | 1574   |
| WAREAMA               | D06801  | 40 50          | 176 03E   | 61       | 2    | 71  | 66  | 84  | 89  | 137 | 140 | 130 | 127 | 69  | 79  | 66  | 81     | 1139   |
| THE TAIPOS            | D06811  | 40 49          | 176 10E   | 46       | 2    | 74  | 69  | 102 | 112 | 170 | 152 | 168 | 155 | 94  | 94  | 69  | 97     | 1356   |
| MARANGAI FARM         | D06901  | 40 54          | 176 00E   | 98       | 1    | 61  | 61  | 79  | 76  | 130 | 117 | 119 | 119 | 79  | 74  | 64  | 79     | 1058   |
| TINUİ DOWNS STATION   | D06902  | 40 54          | 176 04E   | 46       | 1    | 58  | 58  | 79  | 81  | 137 | 124 | 127 | 132 | 79  | 74  | 58  | 74     | 1081   |
| CASTLEPOINT LH        | *D06921 | 40 54          | 176 13E   | 3        | 1    | 64  | 58  | 71  | 79  | 114 | 109 | 107 | 104 | 74  | 64  | 53  | 74     | 971    |
| BARING HEAD LIGHT     | D14481  | 41 25          | 174 52E   | 79       | 1    | 61  | 61  | 71  | 66  | 104 | 97  | 104 | 91  | 74  | 76  | 64  | 71     | 940    |
| WOODSIDE              | D15031  | 41 05          | 175 22E   | 82       | 3    | 120 | 110 | 130 | 130 | 170 | 180 | 170 | 160 | 150 | 140 | 130 | 140    | 1730   |
| WOODSIDE              | D15032  | 41 05          | 175 23E   | 82       | 2    | 107 | 94  | 117 | 112 | 152 | 157 | 157 | 140 | 124 | 124 | 112 | 119    | 1515   |
| GREYTOWN              | D15041  | 41 05          | 175 28E   | 57       | 1    | 79  | 66  | 86  | 81  | 114 | 117 | 119 | 104 | 91  | 91  | 81  | 86     | 1115   |
| CARTERTON MORETON RD  | D15052  | 41 02          | 175 31E   | 70       | 2    | 69  | 61  | 81  | 76  | 117 | 117 | 117 | 112 | 84  | 81  | 71  | 79     | 1065   |
| WAIAKEKE              | D15053  | 41 04          | 175 34E   | 46       | 2    | 56  | 51  | 66  | 61  | 97  | 97  | 97  | 91  | 69  | 66  | 58  | 64     | 873    |
| CLAREVILLE            | D15054  | 41 01          | 175 33E   | 91       | 2    | 64  | 56  | 74  | 69  | 107 | 107 | 107 | 102 | 79  | 74  | 64  | 71     | CLOSED |
| WAIRARAPA CADET FARM  | D15061  | 41 00          | 175 38E   | 110      | 2    | 53  | 48  | 64  | 58  | 91  | 94  | 91  | 86  | 64  | 61  | 56  | 64     | 830    |
| GLADSTONE TE KOPÍ     | D15071  | 41 01          | 175 42E   | 85       | 2    | 58  | 53  | 69  | 64  | 99  | 104 | 99  | 97  | 69  | 69  | 61  | 69     | 911    |
| NGAUMU FOREST         | *D15081 | 41 02          | 175 53E   | 244      | 2    | 74  | 66  | 86  | 81  | 140 | 135 | 137 | 137 | 89  | 86  | 71  | 86     | 1188   |
| FFRNHYHURST           | D15082  | 41 02          | 175 53E   | 235      | 2    | 74  | 69  | 89  | 84  | 142 | 137 | 140 | 140 | 91  | 86  | 74  | 89     | 1215   |
| GLENLEAN              | D15091  | 41 02          | 175 56E   | 305      | 2    | 86  | 81  | 107 | 104 | 178 | 160 | 170 | 165 | 107 | 104 | 86  | 107    | CLOSED |
| SUMMIT                | D15121  | 41 09          | 175 12E   | 349      | 2    | 140 | 137 | 157 | 155 | 208 | 226 | 218 | 196 | 178 | 178 | 157 | 163    | 2113   |
| RIMUTAKA SUMMIT       | D15123  | 41 07          | 175 14E   | 561      | 2    | 132 | 140 | 155 | 155 | 213 | 234 | 231 | 201 | 183 | 185 | 160 | 160    | 2149   |
| FEATHERSTON           | D15131  | 41 07          | 175 20E   | 46       | 1    | 94  | 86  | 102 | 99  | 130 | 137 | 132 | 122 | 109 | 109 | 99  | 107    | 1326   |
| WAIPOTO               | D15132  | 41 08          | 175 22E   | 27       | 2    | 74  | 64  | 79  | 76  | 104 | 107 | 107 | 94  | 84  | 84  | 76  | 81     | 1030   |
| TAUHERENIKAU, ALLOA   | *D15134 | 41 07          | 175 23E   | 43       | 2    | 76  | 66  | 84  | 79  | 107 | 112 | 112 | 99  | 89  | 89  | 81  | 84     | 1078   |
| MORRISONS BUSH        | D15141  | 41 09          | 175 28E   | 41       | 2    | 69  | 58  | 74  | 69  | 94  | 99  | 99  | 86  | 79  | 71  | 74  | 951    | CLOSED |
| MARTINBOR. RIVERSTIDE | D15142  | 41 11          | 175 29E   | 55       | 2    | 58  | 51  | 64  | 61  | 81  | 84  | 84  | 76  | 66  | 61  | 64  | 816    |        |
| RUAMAHANGA            | D15143  | 41 11          | 175 26E   | 18       | 2    | 51  | 43  | 53  | 51  | 71  | 74  | 74  | 64  | 58  | 58  | 53  | 56     | 706    |
| GRALLAGH PONATAHI     | D15151  | 41 07          | 175 33E   | 61       | 2    | 58  | 51  | 66  | 61  | 94  | 97  | 97  | 91  | 69  | 69  | 61  | 66     | 880    |
| MANGAHUIA             | D15160  | 41 09          | 175 37E   | 152      | 2    | 94  | 81  | 91  | 107 |     |     |     |     |     |     |     |        |        |

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NZ METEOROLOGICAL SERVICE      RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT S. | LONG E. | HT M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YEAR         |
|----------------------|---------|--------|---------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------|
| PIHAUTEA             | D15232  | 41 13  | 175 22E | 30    | 2    | 61  | 58  | 56  | 61  | 104 | 122 | 86  | 102 | 66  | 61  | 81  | 69  | 927 CLOSED   |
| MARTINBOR. STH.DOWNS | D15241  | 1 16   | 175 26E | 49    | 2    | 53  | 51  | 58  | 58  | 79  | 84  | 81  | 74  | 66  | 66  | 61  | 61  | 792 CLOSED   |
| MARTINBOROUGH        | D15242  | 41 13  | 175 27E | 30    | 3    | 40  | 40  | 50  | 50  | 80  | 80  | 80  | 80  | 50  | 50  | 60  | 50  | 710 CLOSED   |
| MAHAKI               | D15244  | 41 14  | 175 26E | 24    | 3    | 50  | 50  | 60  | 60  | 80  | 80  | 80  | 70  | 70  | 70  | 60  | 60  | 790          |
| PURUATANGA MARTINBOR | D15251  | 41 14  | 175 30E | 37    | 2    | 48  | 43  | 58  | 53  | 91  | 91  | 91  | 91  | 61  | 56  | 48  | 56  | 787          |
| NGAPARA              | D15252  | 41 14  | 175 33E | 122   | 2    | 58  | 56  | 71  | 69  | 114 | 114 | 112 | 114 | 76  | 69  | 61  | 69  | 983 CLOSED   |
| CANNOCK MARTINBOR.   | *D15253 | 41 16  | 175 35E | 213   | 2    | 53  | 53  | 81  | 74  | 124 | 127 | 130 | 119 | 74  | 66  | 56  | 76  | 1033 CLOSFED |
| WAINUIORU VY NGAPUHI | D15261  | 41 13  | 175 41E | 91    | 2    | 69  | 64  | 81  | 76  | 130 | 132 | 130 | 132 | 86  | 79  | 69  | 79  | 1127         |
| MIKAWERA             | D15262  | 41 16  | 175 37E | 305   | 2    | 71  | 66  | 86  | 81  | 135 | 137 | 135 | 137 | 91  | 84  | 71  | 84  | 1178         |
| WAIKOUKOU LONGBUSH   | D15263  | 41 12  | 175 36E | 122   | 2    | 56  | 53  | 69  | 64  | 109 | 109 | 107 | 109 | 74  | 66  | 58  | 66  | 940          |
| CRAIGIE LEA STN.     | D15281  | 41 15  | 175 48E | 158   | 2    | 91  | 86  | 114 | 109 | 185 | 183 | 180 | 185 | 122 | 109 | 94  | 107 | 1565         |
| WAIMOANA TE WHARAU   | D15282  | 41 16  | 175 53E | 6     | 2    | 69  | 66  | 89  | 86  | 135 | 132 | 130 | 127 | 86  | 79  | 66  | 74  | 1139         |
| ORONGORONGO          | D15301  | 41 18  | 175 02E | 244   | 1    | 185 | 191 | 249 | 226 | 351 | 351 | 340 | 328 | 244 | 224 | 213 | 213 | 3146         |
| TE MOANA             | D15313  | 41 20  | 175 08E | 3     | 3    | 70  | 70  | 80  | 80  | 110 | 120 | 100 | 120 | 80  | 80  | 80  | 80  | 1070 CLOSED  |
| PIRINOA              | D15321  | 41 22  | 175 13E | 52    | 2    | 74  | 71  | 94  | 84  | 127 | 124 | 124 | 107 | 97  | 89  | 79  | 79  | 1149         |
| SHOOTING BOX         | D15341  | 41 19  | 175 25E | 213   | 2    | 61  | 64  | 84  | 79  | 124 | 130 | 124 | 114 | 89  | 86  | 74  | 74  | 1103 CLOSED  |
| PUKEATUA             | D15351  | 41 20  | 175 35E | 183   | 2    | 69  | 66  | 99  | 97  | 155 | 157 | 142 | 150 | 104 | 89  | 79  | 84  | 1291 CLOSED  |
| LAGOON HILL          | D15352  | 41 23  | 175 31E | 113   | 1    | 66  | 69  | 104 | 94  | 168 | 165 | 155 | 155 | 102 | 91  | 74  | 81  | 1324         |
| GLENBURN TE WHARAU   | D15381  | 41 19  | 175 51E | 15    | 1    | 71  | 66  | 91  | 94  | 135 | 132 | 130 | 117 | 84  | 79  | 64  | 71  | 1134         |
| LAKE FERRY           | D15412  | 41 24  | 175 09E | 5     | 2    | 61  | 61  | 71  | 69  | 99  | 99  | 102 | 89  | 71  | 74  | 61  | 69  | 926 CLOSED   |
| MOIKAU PIRINOA       | D15421  | 41 25  | 175 14E | 4     |      | 64  | 61  | 86  | 79  | 119 | 117 | 114 | 112 | 76  | 74  | 56  | 66  | 1200 CLOSED  |
| TE AWAITI STN        | D15451  | 41 29  | 175 35E | 9     | 1    | 64  | 61  | 86  | 79  | 119 | 117 | 114 | 112 | 76  | 74  | 56  | 66  | 1024         |
| NGAPOTOKI            | D15531  | 41 34  | 175 22E | 2     |      | 86  | 86  | 127 | 114 | 188 | 183 | 178 | 173 | 117 | 107 | 86  | 97  | 1542 CLOSED  |
| TORA STATION         | D15551  | 41 31  | 175 30E | 2     |      | 69  | 66  | 89  | 81  | 124 | 117 | 122 | 112 | 79  | 76  | 58  | 74  | 1067 CLOSED  |
| CAPE PALLISER LH     | *D15631 | 41 37  | 175 18E | 10    | 1    | 71  | 69  | 86  | 79  | 119 | 109 | 119 | 104 | 74  | 76  | 58  | 79  | 1043         |
| NGAIANU MASTERTON    | D16001  | 41 00  | 176 02E | 91    | 3    | 70  | 70  | 90  | 90  | 160 | 140 | 150 | 150 | 90  | 90  | 80  | 90  | 1270 CLOSED  |
| FERN GLEN            | D16101  | 41 08  | 176 00E | 30    | 1    | 58  | 58  | 86  | 81  | 130 | 127 | 122 | 117 | 74  | 71  | 61  | 71  | 1056         |
| TE ARAROA            | D78631  | 37 38  | 178 20E | 3     | 3    | 130 | 140 | 150 | 170 | 250 | 220 | 240 | 230 | 180 | 190 | 140 | 140 | 2180         |
| KIRITAHU             | D78711  | 37 44  | 178 09E | 3     |      | 220 | 240 | 250 | 290 | 420 | 370 | 400 | 390 | 310 | 330 | 230 | 230 | 3680 CLOSED  |
| PUKETAWHERO          | D78721  | 37 47  | 178 14E | 107   | 3    | 200 | 220 | 230 | 270 | 380 | 340 | 370 | 360 | 280 | 300 | 220 | 220 | 3390 CLOSED  |
| MAUTOTARA            | D78722  | 37 43  | 178 14E | 3     |      | 150 | 160 | 170 | 200 | 290 | 260 | 280 | 270 | 210 | 220 | 160 | 160 | 2530 CLOSFED |
| MAKOROKORO           | D78724  | 37 45  | 178 14E | 549   | 2    | 241 | 267 | 274 | 335 | 424 | 417 | 417 | 424 | 307 | 325 | 244 | 241 | 3916         |
| PORO PORO STATION    | D78731  | 37 47  | 178 18E | 119   | 2    | 168 | 180 | 203 | 229 | 272 | 254 | 279 | 290 | 191 | 191 | 152 | 157 | 2566         |
| KATOA, WHAKAANGANGI  | D78733  | 37 43  | 178 18E | 94    | 2    | 160 | 175 | 183 | 216 | 310 | 277 | 297 | 290 | 224 | 241 | 173 | 173 | 2719         |
| HAHAU RANGITUKIA     | D78741  | 37 46  | 178 27E | 6     | 2    | 109 | 117 | 130 | 147 | 175 | 165 | 180 | 185 | 122 | 122 | 99  | 102 | 1653 CLOSED  |
| EAST CAPE LH         | *D78751 | 37 42  | 178 33E | 17    | 1    | 89  | 99  | 99  | 127 | 142 | 152 | 142 | 152 | 102 | 107 | 84  | 81  | 1376         |
| GATE STATION         | D78801  | 37 51  | 178 05E | 195   | 2    | 206 | 193 | 231 | 254 | 300 | 307 | 320 | 343 | 262 | 226 | 211 | 196 | 3049         |
| PAKIHIROA            | D78811  | 37 51  | 178 06E | 226   | 2    | 160 | 175 | 183 | 216 | 310 | 277 | 297 | 290 | 224 | 241 | 173 | 173 | 2719 CLOSED  |
| NAKU                 | D78822  | 37 50  | 178 15E | 143   | 3    | 180 | 190 | 230 | 230 | 290 | 230 | 310 | 310 | 200 | 190 | 160 | 170 | 2690 CLOSED  |
| WAIORONGOMAI         | D78823  | 37 51  | 178 14E | 2     |      | 155 | 152 | 183 | 196 | 236 | 216 | 251 | 262 | 185 | 165 | 147 | 147 | 2295 CLOSED  |
| RUATORIA             | D78831  | 37 53  | 178 20E | 2     |      | 124 | 132 | 147 | 168 | 198 | 188 | 203 | 213 | 140 | 140 | 112 | 114 | 1879 CLOSED  |
| WAIRERE RUATORIA     | D78832  | 37 53  | 178 19E | 107   | 2    | 124 | 135 | 150 | 170 | 203 | 191 | 208 | 216 | 142 | 142 | 114 | 117 | 1912 CLOSED  |
| TAORA STN            | D78921  | 37 57  | 178 12E | 168   | 2    | 127 | 124 | 152 | 163 | 196 | 178 | 208 | 216 | 152 | 137 | 122 | 122 | 1897         |
| RUATORIA             | *D78931 | 37 54  | 178 19E | 61    | 3    | 130 | 140 | 150 | 170 | 210 | 190 | 210 | 220 | 140 | 140 | 110 | 120 | 1930         |
| TE HOE               | D86981  | 38 56  | 176 50E | 552   | 2    | 155 | 145 | 163 | 178 | 211 | 191 | 201 | 229 | 147 | 155 | 145 | 160 | 2080         |
| THE HOOK             | D86982  | 38 56  | 176 52E | 945   | 2    | 150 | 140 | 155 | 170 | 203 | 183 | 193 | 221 | 142 | 147 | 140 | 155 | 1999         |
| MAUNGATANIWA         | D86992  | 38 59  | 176 54E | 427   | 2    | 102 | 94  | 107 | 117 | 140 | 124 | 132 | 150 | 97  | 102 | 97  | 107 | 1369         |
| MOUNT AROWHANA       | D87181  | 38 10  | 177 52E | 732   | 2    | 152 | 142 | 170 | 188 | 221 | 226 | 236 | 251 | 193 | 168 | 155 | 145 | 2247         |
| PUKETAHORE           | D87191  | 38 09  | 177 55E | 610   | 2    | 127 | 124 | 152 | 163 | 196 | 178 | 208 | 216 | 152 | 137 | 122 | 122 | 1897 CLOSED  |
| OKAIHUA STN          | D87271  | 38 16  | 177 43E | 701   | 2    | 145 | 142 | 163 | 178 | 221 | 226 | 229 | 241 | 188 | 183 | 165 | 168 | 2249         |
| WAIPAOA              | D87281  | 38 17  | 177 52E | 244   | 2    | 94  | 84  | 104 | 109 | 130 | 135 | 140 | 147 | 112 | 102 | 94  | 94  | 1345         |
| TARNDALE STN         | D87283  | 38 13  | 177 48E | 792   | 2    | 170 | 160 | 191 | 211 | 246 | 254 | 264 | 284 | 218 | 188 | 175 | 163 | 2524         |
| MANGATU FOREST       | *D87284 | 38 17  | 177 51E | 174   | 2    | 94  | 84  | 104 | 112 | 132 | 137 | 142 | 150 | 114 | 102 | 97  | 94  | 1362         |
| MAUNGAHAMU           | D87371  | 38 20  | 177 42E | 457   | 3    | 110 | 110 | 120 | 140 | 170 | 170 | 180 | 180 | 150 | 140 | 130 | 130 | 1730         |
| MANGATAIKAPUA        | D87382  | 38 23  | 177 50E | 3     |      | 90  | 70  | 100 | 100 | 110 | 110 | 120 | 120 | 90  | 80  | 90  | 90  | 1160 CLOSED  |
| TOTOMIRO             | D87461  | 38 24  | 177 40E | 259   | 3    | 90  | 90  | 110 | 120 | 170 | 150 | 150 | 160 | 110 | 100 | 110 | 100 | 1460 CLOSED  |
| OTOKO                | D87462  | 38 27  | 177 38E | 274   | 1    | 94  | 81  | 107 | 109 | 130 | 137 | 137 | 142 | 107 | 104 | 97  | 102 | 1347         |
| POUTUTU              | D87471  | 38 25  | 177 44E | 107   | 2    | 81  | 69  | 94  | 91  | 109 | 104 | 114 | 117 | 84  | 79  | 76  | 81  | 1099         |
| PUHA                 | D87481  | 38 28  | 177 50E | 46    | 1    | 79  | 69  | 91  | 86  | 104 | 91  | 109 | 107 | 76  | 69  | 66  | 74  | 1021         |
| TE KARAKA            | D87482  | 38 28  | 177 53E | 40    | 2    | 79  | 69  | 91  | 89  | 107 | 104 | 112 | 114 | 84  | 79  | 74  | 79  | 1081 CLOSED  |
| PUHA                 | D87483  | 38 28  | 177 49E | 2     |      | 81  | 71  | 97  | 91  | 114 | 102 | 122 | 117 | 81  | 79  | 71  | 79  | 1105 CLOSED  |
| PUHA                 | D87484  | 38 24  | 177 50E | 2     |      | 81  | 71  | 94  | 91  | 112 | 107 | 117 | 117 | 86  | 81  | 76  | 81  | 1114 CLOSED  |
| WAIKOHU COLLEGE      | D87485  | 38 28  | 177 52E | 41    | 2    | 81  | 71  | 94  | 91  | 109 | 107 | 117 | 117 | 86  | 79  | 76  | 81  | 1109         |
| KANAKANAIA           | D87491  | 38 25  | 177 59E | 61    | 2    | 97  | 84  | 114 | 109 | 135 | 122 | 145 | 140 | 97  | 91  | 84  | 91  | 1309 CLOSED  |
| MAREWA               | D87541  | 38 33  | 177 27E | 488   | 2    | 84  | 76  | 122 | 114 | 140 | 155 | 152 | 157 | 102 | 117 | 97  | 119 | 1435 CLOSFED |
| WAIMAHA TAHORA       | D87542  | 38 33  | 177 26E | 2     |      | 114 | 104 | 135 | 150 | 157 | 147 | 157 | 175 | 112 | 112 | 109 | 104 | 1576 CLOSED  |
| AMIA RERE            | D87561  | 38 33  | 177 40E | 122   | 2    | 76  | 66  | 86  | 86  | 107 | 104 | 117 | 114 | 81  | 81  | 74  | 76  | 1068 CLOSED  |
| EASTWOOD HILL        | D87570  | 38 34  | 177 43E | 137   | 2    | 79  | 69  | 91  | 91  | 117 | 104 | 127 | 119 | 79  | 84  | 74  | 76  | 1110 CLOSED  |
| EASTWOOD HILL        |         |        |         |       |      |     |     |     |     |     |     |     |     |     |     |     |     |              |

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NZ METEOROLOGICAL SERVICE      RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION               | NUMBER  | LAT   | LONG    | HT  |      | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC         | YEAR        |
|-----------------------|---------|-------|---------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-------------|
|                       |         | S.    |         | M.  | TYPE |     |     |     |     |     |     |     |     |     |     |     |             |             |
| HYLANDS NGATAPA       | D87671  | 38 36 | 177 46E | 91  | 2    | 76  | 66  | 91  | 91  | 114 | 109 | 119 | 119 | 76  | 76  | 66  | 71          | 1074 CLOSER |
| WAERENGA O KURT       | *D87681 | 38 41 | 177 48E | 314 | 2    | 94  | 81  | 114 | 114 | 142 | 137 | 150 | 150 | 97  | 97  | 81  | 86          | 1343        |
| MANUTUKE GISBORNE     | *D87683 | 38 41 | 177 53E | 9   | 2    | 71  | 61  | 86  | 86  | 104 | 102 | 112 | 109 | 71  | 71  | 61  | 64          | 998         |
| PATUTAHI              | D87691  | 38 37 | 177 54E | 24  | 2    | 66  | 56  | 79  | 79  | 97  | 94  | 102 | 102 | 66  | 66  | 56  | 61          | 924 CLOSER  |
| GISBORNE AERO         | *D87692 | 38 40 | 177 59E | 6   | 1    | 74  | 61  | 91  | 91  | 109 | 112 | 112 | 117 | 74  | 71  | 58  | 64          | 1034        |
| HOPURUAHINE           | D87701  | 38 42 | 177 05E | 614 | 2    | 185 | 173 | 206 | 221 | 259 | 234 | 244 | 277 | 185 | 185 | 183 | 188         | 2540 CLOSER |
| WAIKAREMOANA          | D87711  | 38 45 | 177 09E | 610 | 2    | 183 | 168 | 201 | 213 | 254 | 226 | 241 | 277 | 178 | 180 | 178 | 185         | 2484 CLOSER |
| EREPETI               | D87731  | 38 44 | 177 18E | 372 | 1    | 132 | 122 | 157 | 173 | 183 | 170 | 183 | 206 | 130 | 130 | 127 | 122         | 1835        |
| WAIAKATEA RUAKITURU   | D87732  | 38 45 | 177 22E | 2   | 2    | 112 | 102 | 124 | 135 | 152 | 137 | 150 | 170 | 107 | 107 | 107 | 107         | 1510 CLOSER |
| MANGATAWHITI          | D87733  | 38 47 | 177 20E | 427 | 2    | 122 | 112 | 137 | 150 | 168 | 152 | 165 | 185 | 117 | 119 | 117 | 117         | 1661        |
| LINWOOD TINIROTO      | D87752  | 38 46 | 177 35E | 274 | 2    | 145 | 132 | 170 | 191 | 201 | 185 | 201 | 224 | 140 | 142 | 140 | 132         | 2003 CLOSER |
| WHAKAPUNAKE           | D87761  | 38 46 | 177 39E | 2   | 2    | 112 | 109 | 160 | 155 | 229 | 218 | 249 | 241 | 145 | 135 | 112 | 117         | 1982 CLOSER |
| FAIRVIEW STATION      | D87762  | 38 46 | 177 39E | 457 | 2    | 119 | 114 | 155 | 160 | 198 | 188 | 208 | 216 | 132 | 130 | 117 | 117         | 1854 CLOSER |
| PARIKANAPA            | D87771  | 38 45 | 177 42E | 594 | 3    | 90  | 90  | 130 | 130 | 190 | 180 | 210 | 200 | 120 | 110 | 90  | 100         | 1640        |
| WAINGAKE              | D87781  | 38 47 | 177 48E | 91  | 1    | 81  | 79  | 117 | 112 | 165 | 160 | 180 | 175 | 104 | 97  | 81  | 86          | 1437        |
| MURIWAI               | D87791  | 38 47 | 177 55E | 15  | 2    | 66  | 64  | 94  | 89  | 132 | 127 | 145 | 140 | 84  | 79  | 66  | 69          | 1155 CLOSER |
| ONEPOTO, WAIKAREMOANA | *D87811 | 38 48 | 177 07E | 643 | 1    | 150 | 140 | 168 | 180 | 211 | 188 | 198 | 226 | 150 | 150 | 147 | 152         | 2060        |
| TUAI                  | D87812  | 38 48 | 177 09E | 293 | 1    | 124 | 112 | 135 | 145 | 173 | 150 | 165 | 191 | 119 | 122 | 119 | 127         | 1682        |
| PIHANGA               | D87841  | 38 48 | 177 26E | 137 | 3    | 90  | 90  | 140 | 140 | 160 | 170 | 170 | 180 | 120 | 120 | 100 | 90          | 1560        |
| WHARERATA BEACH LOOP  | D87880  | 38 50 | 177 52E | 152 | 3    | 110 | 90  | 130 | 140 | 160 | 160 | 160 | 170 | 110 | 100 | 90  | 90          | 1510 CLOSER |
| HILLCREST ARDEEN      | D87921  | 38 56 | 177 17E | 107 | 2    | 99  | 89  | 112 | 122 | 137 | 122 | 132 | 150 | 94  | 97  | 94  | 94          | 1342        |
| CLYDEBANK             | D87941  | 38 58 | 177 28E | 10  | 2    | 112 | 102 | 127 | 137 | 155 | 140 | 150 | 173 | 107 | 109 | 107 | 109         | 1528 CLOSER |
| CLYDEBANK, FRASERTOWN | D87942  | 38 57 | 177 29E | 46  | 3    | 120 | 110 | 140 | 150 | 170 | 150 | 160 | 190 | 120 | 120 | 120 | 120         | 1670        |
| MARUMARU              | D87952  | 38 54 | 177 32E | 91  | 2    | 142 | 130 | 168 | 185 | 196 | 183 | 198 | 221 | 140 | 140 | 137 | 132         | 1972        |
| TANGIWAI STN WAIROA   | D87961  | 38 57 | 177 36E | 207 | 2    | 163 | 150 | 193 | 213 | 226 | 211 | 226 | 254 | 160 | 160 | 157 | 150         | 2263 CLOSER |
| MANGAONE VALLEY       | D87962  | 38 58 | 177 41E | 259 | 3    | 190 | 170 | 220 | 250 | 260 | 240 | 260 | 290 | 180 | 180 | 180 | 170         | 2590 CLOSER |
| MORERE                | D87971  | 38 59 | 177 47E | 91  | 3    | 100 | 100 | 150 | 140 | 210 | 200 | 230 | 220 | 130 | 120 | 100 | 110         | 1810 CLOSER |
| MANGATOTO STN, MORERE | D87972  | 38 57 | 177 47E | 328 | 2    | 142 | 140 | 206 | 196 | 292 | 279 | 318 | 307 | 183 | 170 | 145 | 150         | 2528        |
| SEA VIEW STN          | D87981  | 38 55 | 177 53E | 2   | 2    | 135 | 132 | 193 | 185 | 274 | 264 | 300 | 290 | 173 | 160 | 135 | 142         | 2383 CLOSER |
| TAREWA                | D87982  | 38 56 | 177 48E | 332 | 2    | 150 | 147 | 216 | 208 | 307 | 295 | 335 | 325 | 193 | 180 | 152 | 157         | 2665 CLOSER |
| OWHENEA               | D88001  | 38 04 | 178 00E | 671 | 1    | 142 | 135 | 160 | 178 | 208 | 213 | 224 | 239 | 183 | 157 | 147 | 137         | 2123        |
| HUIARUA STN           | D88002  | 38 05 | 178 03E | 335 | 2    | 112 | 109 | 135 | 142 | 173 | 157 | 183 | 191 | 135 | 122 | 107 | 107         | 1673 CLOSER |
| RUANGAREHU STN        | D88011  | 38 03 | 178 10E | 274 | 1    | 117 | 122 | 150 | 152 | 191 | 155 | 201 | 203 | 130 | 124 | 102 | 112         | 1759        |
| PUKETITI              | D88021  | 38 02 | 178 13E | 335 | 2    | 145 | 150 | 185 | 188 | 234 | 191 | 246 | 249 | 160 | 152 | 127 | 137         | 2164 CLOSER |
| TOTARANUI             | D88022  | 38 01 | 178 16E | 177 | 2    | 127 | 132 | 163 | 165 | 206 | 168 | 218 | 218 | 142 | 135 | 112 | 122         | 1908        |
| TE PUJA SPRINGS       | D88031  | 38 03 | 178 19E | 210 | 2    | 132 | 130 | 160 | 168 | 203 | 188 | 216 | 226 | 160 | 145 | 127 | 127         | 1982        |
| TE PUJA SPRINGS       | D88032  | 38 03 | 178 19E | 229 | 2    | 137 | 135 | 165 | 175 | 211 | 193 | 224 | 234 | 165 | 147 | 130 | 132         | 2048 CLOSER |
| MANGATARATA STN       | D88111  | 38 06 | 178 08E | 536 | 2    | 124 | 124 | 157 | 157 | 196 | 163 | 206 | 201 | 137 | 130 | 109 | 119         | 1823 CLOSER |
| PAUARIKI STN          | D88122  | 38 09 | 178 16E | 207 | 2    | 124 | 124 | 150 | 160 | 193 | 175 | 203 | 213 | 150 | 135 | 119 | 119         | 1865 CLOSER |
| TOKOMARU BAY          | D88131  | 38 06 | 178 21E | 18  | 2    | 107 | 104 | 127 | 135 | 165 | 150 | 175 | 180 | 127 | 114 | 102 | 102         | 1588 CLOSER |
| TOKOMARU BAY          | *D88132 | 38 08 | 178 19E | 25  | 2    | 97  | 94  | 117 | 122 | 150 | 135 | 157 | 165 | 114 | 104 | 91  | 91          | 1437        |
| WAINGAROMIA STN       | D88211  | 38 16 | 178 06E | 543 | 2    | 135 | 132 | 163 | 173 | 208 | 191 | 221 | 229 | 163 | 145 | 130 | 130         | 2020        |
| HUANUI STN            | D88301  | 38 18 | 178 01E | 408 | 3    | 100 | 100 | 130 | 140 | 160 | 150 | 170 | 190 | 140 | 110 | 110 | 100         | 1600        |
| OKIWA STN             | D88302  | 38 23 | 178 04E | 518 | 2    | 127 | 119 | 142 | 157 | 185 | 191 | 198 | 213 | 163 | 140 | 130 | 122         | 1887 CLOSER |
| MANGATUNA TOLAGA BAY  | D88321  | 38 19 | 178 16E | 15  | 2    | 94  | 94  | 127 | 130 | 152 | 142 | 170 | 163 | 104 | 104 | 97  | 81          | 1458        |
| TOLAGA BAY            | D88331  | 38 22 | 178 18E | 6   | 2    | 97  | 91  | 122 | 124 | 152 | 140 | 157 | 160 | 102 | 99  | 81  | 89          | 1414 CLOSER |
| PANIKAU STN GISBORNE  | D88411  | 38 25 | 178 11E | 244 | 2    | 117 | 122 | 150 | 152 | 191 | 155 | 201 | 203 | 132 | 124 | 102 | 112         | 1761 CLOSER |
| MOKAIRAU, PAKAPAE     | D88421  | 38 28 | 178 15E | 46  | 2    | 104 | 97  | 130 | 132 | 160 | 147 | 165 | 170 | 109 | 104 | 86  | 94          | 1498        |
| RAROA TOLAGA BAY      | D88431  | 38 25 | 178 19E | 152 | 2    | 94  | 99  | 122 | 124 | 155 | 124 | 163 | 165 | 107 | 99  | 84  | 91          | 1427        |
| WAITHAU               | D88432  | 38 26 | 178 19E | 2   | 2    | 94  | 104 | 104 | 132 | 150 | 160 | 160 | 107 | 112 | 86  | 86  | 1445 CLOSER |             |
| MANGARARA STATION     | D88501  | 38 31 | 178 02E | 564 | 2    | 145 | 122 | 173 | 168 | 203 | 193 | 208 | 211 | 140 | 132 | 117 | 130         | 1942 CLOSER |
| KAHAROA               | D88502  | 38 32 | 178 02E | 3   | 3    | 90  | 90  | 130 | 120 | 180 | 170 | 200 | 190 | 110 | 100 | 90  | 90          | 1560 CLOSER |
| PUKEAKURA             | D88511  | 38 31 | 178 06E | 299 | 3    | 130 | 110 | 150 | 150 | 180 | 170 | 180 | 190 | 120 | 120 | 100 | 110         | 1710 CLOSER |
| MAUNGAORANGI          | D88512  | 38 33 | 178 08E | 299 | 2    | 137 | 117 | 165 | 160 | 193 | 185 | 198 | 201 | 135 | 127 | 112 | 124         | 1854 CLOSER |
| GISBORNE HARBOUR      | D88601  | 38 41 | 178 01E | 2   | 2    | 66  | 61  | 89  | 86  | 117 | 114 | 122 | 122 | 74  | 71  | 58  | 64          | 1044 CLOSER |
| MAUNGAHARURU          | D96081  | 39 05 | 176 52E | 335 | 1    | 107 | 99  | 107 | 119 | 142 | 130 | 137 | 157 | 99  | 107 | 97  | 114         | 1415        |
| BLACK STUMP STATION   | D96141  | 39 10 | 176 29E | 762 | 2    | 117 | 104 | 127 | 130 | 163 | 150 | 157 | 175 | 112 | 112 | 104 | 127         | 1578        |
| GLENRAE               | D96161  | 39 11 | 176 38E | 442 | 2    | 104 | 91  | 112 | 114 | 142 | 132 | 137 | 155 | 99  | 99  | 94  | 112         | 1391        |
| TARAPONUI             | D96171  | 39 10 | 176 47E | 503 | 3    | 130 | 120 | 140 | 150 | 190 | 170 | 180 | 200 | 120 | 130 | 120 | 140         | 1790        |
| PUTORINO              | D96191  | 39 08 | 176 59E | 122 | 2    | 91  | 84  | 97  | 104 | 132 | 122 | 127 | 140 | 86  | 91  | 81  | 97          | 1252 CLOSER |
| TE WAIERERE           | D96251  | 39 17 | 176 33E | 564 | 1    | 132 | 109 | 152 | 147 | 185 | 178 | 183 | 198 | 130 | 119 | 117 | 140         | 1790        |
| BAIRNSDALE            | D96252  | 39 12 | 176 30E | 442 | 2    | 137 | 66  | 102 | 112 | 150 | 160 | 119 | 142 | 97  | 94  | 94  | 124         | 1402        |
| RUKUMOANA             | D96261  | 39 16 | 176 41E | 335 | 2    | 112 | 102 | 127 | 127 | 170 | 163 | 165 | 175 | 109 | 109 | 97  | 114         | 1570        |
| TITIOKURA             | D96263  | 39 13 | 176 41E | 671 | 2    | 147 | 130 | 170 | 168 | 218 | 208 | 213 | 229 | 147 | 142 | 130 | 157         | 2059        |
| ESK FOREST            | *D96272 | 39 15 | 176 42E | 427 | 2    | 117 | 102 | 135 | 135 | 173 | 165 | 168 |     |     |     |     |             |             |

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| STATION               | NUMBER  | LAT<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR   |
|-----------------------|---------|-----------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|
| KOHURAU               | D96443  | 39 28     | 176 24E | 518      | 3    | 120 | 110 | 140 | 100 | 130 | 140 | 130 | 150 | 90  | 100 | 90  | 130  | 1430   |
| TE HAU                | D96451  | 39 24     | 176 34E | 360      | 2    | 102 | 99  | 124 | 94  | 119 | 135 | 122 | 140 | 81  | 97  | 81  | 117  | 1311   |
| RISSENDEN             | D96471  | 39 27     | 176 43E | 85       | 2    | 84  | 81  | 102 | 76  | 99  | 112 | 102 | 117 | 69  | 79  | 69  | 97   | 1087   |
| APLEY                 | D96472  | 39 28     | 176 45E | 165      | 2    | 79  | 79  | 99  | 79  | 104 | 117 | 99  | 112 | 66  | 76  | 66  | 91   | 1067   |
| AWANUI RISSENDEN      | D96473  | 39 27     | 176 43E | 183      | 2    | 86  | 84  | 109 | 86  | 114 | 124 | 107 | 119 | 71  | 84  | 71  | 99   | 1154   |
| NAPIER AERODROME      | D96481  | 39 28     | 176 52E | 2        | 2    | 56  | 61  | 74  | 64  | 89  | 97  | 81  | 86  | 51  | 58  | 48  | 69   | 834    |
| ESKDALE               | D96483  | 39 24     | 176 50E | 15       | 1    | 74  | 74  | 99  | 81  | 109 | 119 | 97  | 107 | 64  | 76  | 64  | 86   | 1050   |
| NAPIER WAITITERAU     | D96492  | 39 29     | 176 56E | 82       | 2    | 56  | 58  | 71  | 61  | 84  | 91  | 76  | 81  | 51  | 56  | 46  | 66   | 797    |
| POHOKURA OUTSTATION   | D96521  | 39 31     | 176 14E | 488      | 2    | 119 | 97  | 132 | 94  | 109 | 122 | 119 | 135 | 81  | 94  | 84  | 122  | 1308   |
| WHANAHWANA            | D96541  | 39 32     | 176 26E | 293      | 1    | 99  | 81  | 112 | 76  | 91  | 102 | 99  | 112 | 69  | 79  | 71  | 102  | 1093   |
| SHERENDEN             | D96561  | 39 30     | 176 36E | 250      | 1    | 79  | 79  | 97  | 71  | 94  | 104 | 94  | 109 | 64  | 74  | 64  | 89   | 1018   |
| KAUTUKU               | D96571  | 39 35     | 176 44E | 73       | 1    | 61  | 61  | 66  | 53  | 79  | 84  | 74  | 79  | 48  | 53  | 48  | 64   | 770    |
| FERNHILL              | D96572  | 39 35     | 176 46E | 122      | 2    | 61  | 58  | 74  | 64  | 76  | 102 | 84  | 89  | 51  | 56  | 48  | 86   | 849    |
| TARADALE              | *D96581 | 39 32     | 176 51E | 5        | 2    | 53  | 58  | 71  | 61  | 84  | 91  | 76  | 81  | 48  | 56  | 46  | 66   | 791    |
| NAPIER                | *D96591 | 39 30     | 176 55E | 2        | 1    | 51  | 58  | 66  | 61  | 84  | 89  | 79  | 81  | 51  | 53  | 43  | 64   | 780    |
| TE KATATA             | D96631  | 39 37     | 176 23E | 320      | 2    | 94  | 86  | 104 | 79  | 99  | 107 | 104 | 114 | 69  | 76  | 71  | 102  | 1105   |
| BIG HILL STN          | D96641  | 39 36     | 176 24E | 305      | 2    | 119 | 112 | 135 | 102 | 127 | 135 | 135 | 145 | 86  | 99  | 91  | 130  | 1416   |
| TE HOUKA HILL         | D96651  | 39 38     | 176 31E | 274      | 2    | 64  | 69  | 74  | 61  | 79  | 81  | 81  | 86  | 51  | 56  | 53  | 76   | 831    |
| ROSE HILL             | D96653  | 39 39     | 176 33E | 171      | 2    | 66  | 64  | 76  | 58  | 71  | 76  | 76  | 81  | 48  | 56  | 51  | 74   | 797    |
| MARAEKAKAHO           | D96661  | 39 39     | 176 37E | 91       | 2    | 64  | 69  | 69  | 61  | 86  | 86  | 84  | 91  | 51  | 56  | 53  | 74   | 844    |
| HASTINGS              | *D96681 | 39 39     | 176 51E | 14       | 2    | 58  | 58  | 61  | 56  | 79  | 84  | 79  | 86  | 48  | 51  | 46  | 61   | 767    |
| BENDLEY HAVELOCK NTH  | D96682  | 39 40     | 176 53E | 91       | 2    | 61  | 64  | 69  | 61  | 86  | 91  | 84  | 91  | 51  | 56  | 51  | 66   | 831    |
| FRIMLEY HASTINGS      | D96683  | 39 39     | 176 49E | 15       | 2    | 61  | 64  | 61  | 64  | 89  | 91  | 89  | 94  | 51  | 53  | 48  | 66   | 831    |
| HASTINGS              | *D96688 | 39 39     | 176 51E | 12       | 2    | 66  | 53  | 61  | 48  | 81  | 79  | 64  | 86  | 46  | 46  | 41  | 53   | 724    |
| HAVELOCK NORTH        | *D96689 | 39 40     | 176 53E | 9        | 2    | 56  | 58  | 61  | 56  | 79  | 84  | 79  | 84  | 48  | 51  | 46  | 61   | 763    |
| TE MATA HAVELOCK NTH  | D96691  | 39 41     | 176 55E | 140      | 1    | 58  | 58  | 61  | 64  | 86  | 89  | 89  | 97  | 51  | 53  | 46  | 61   | 813    |
| WAKARARA              | D96721  | 39 45     | 176 16E | 488      | 2    | 137 | 132 | 152 | 124 | 160 | 165 | 160 | 178 | 102 | 119 | 112 | 163  | 1704   |
| SMEDLEY               | D96731  | 39 47     | 176 21E | 457      | 2    | 117 | 112 | 130 | 107 | 140 | 140 | 135 | 155 | 89  | 102 | 94  | 140  | 1461   |
| GWAVAS                | D96741  | 39 47     | 176 29E | 244      | 1    | 84  | 89  | 94  | 76  | 102 | 104 | 104 | 112 | 64  | 74  | 69  | 97   | 1069   |
| GWAVAS FOREST         | *D96743 | 39 44     | 176 27E | 335      | 2    | 99  | 99  | 109 | 89  | 109 | 112 | 114 | 132 | 74  | 84  | 76  | 117  | 1214   |
| GLENCOE STN HASTINGS  | D96752  | 39 42     | 176 33E | 213      | 2    | 69  | 74  | 71  | 66  | 91  | 91  | 89  | 97  | 53  | 58  | 56  | 79   | 894    |
| WHAKARUA              | D96753  | 39 42     | 176 35E | 223      | 2    | 69  | 74  | 74  | 66  | 91  | 94  | 91  | 97  | 56  | 61  | 56  | 79   | 908    |
| POUKAWA               | D96771  | 39 45     | 176 43E | 55       | 1    | 58  | 64  | 56  | 58  | 84  | 84  | 79  | 84  | 46  | 51  | 46  | 64   | 774    |
| TAUROA STN            | D96791  | 39 43     | 176 54E | 105      | 2    | 64  | 61  | 66  | 69  | 94  | 99  | 97  | 107 | 53  | 56  | 48  | 61   | 875    |
| MOKOPEKA              | D96792  | 39 46     | 176 56E | 152      | 1    | 74  | 66  | 79  | 84  | 114 | 122 | 117 | 130 | 64  | 66  | 53  | 69   | 1038   |
| TAURAPA               | D96793  | 39 44     | 176 59E | 91       | 2    | 71  | 69  | 79  | 84  | 112 | 114 | 109 | 114 | 61  | 66  | 53  | 69   | 1001   |
| BRENTWOOD             | D96822  | 39 48     | 176 13E | 503      | 2    | 155 | 135 | 168 | 140 | 178 | 180 | 168 | 196 | 112 | 135 | 124 | 185  | 1876   |
| BLACKBURN             | D96831  | 39 53     | 176 20E | 320      | 1    | 89  | 76  | 97  | 79  | 104 | 102 | 94  | 114 | 64  | 76  | 71  | 107  | 1073   |
| RANGI ONGA ONGA       | D96832  | 39 53     | 176 23E | 229      | 2    | 94  | 81  | 102 | 84  | 107 | 109 | 102 | 119 | 69  | 81  | 74  | 114  | 1136   |
| SPRINGHILL            | D96833  | 39 51     | 176 23E | 274      | 2    | 84  | 74  | 84  | 74  | 99  | 97  | 97  | 107 | 61  | 69  | 66  | 99   | 1011   |
| TIKKINO               | D96842  | 39 49     | 176 27E | 351      | 3    | 90  | 90  | 110 | 80  | 110 | 110 | 110 | 120 | 60  | 70  | 70  | 90   | 1110   |
| TAHUNA                | D96851  | 39 53     | 176 32E | 168      | 1    | 74  | 71  | 79  | 69  | 94  | 97  | 99  | 102 | 64  | 64  | 61  | 81   | 955    |
| TE AUTE STN PUKEHOU   | D96861  | 39 49     | 176 38E | 107      | 1    | 69  | 66  | 61  | 64  | 81  | 89  | 91  | 91  | 53  | 51  | 53  | 76   | 845    |
| TE KURA               | D96862  | 39 53     | 176 41E | 76       | 2    | 58  | 58  | 53  | 56  | 76  | 79  | 79  | 81  | 46  | 48  | 46  | 64   | 744    |
| OTUARUMIA             | D96863  | 39 48     | 176 37E | 317      | 2    | 89  | 69  | 71  | 74  | 89  | 102 | 99  | 99  | 64  | 69  | 61  | 91   | 977    |
| PATANGATA             | D96871  | 39 53     | 176 42E | 76       | 2    | 64  | 58  | 64  | 66  | 89  | 94  | 97  | 99  | 51  | 53  | 48  | 64   | 847    |
| HAPUA                 | D96881  | 39 49     | 176 51E | 152      | 1    | 76  | 64  | 84  | 89  | 124 | 130 | 132 | 137 | 61  | 69  | 58  | 71   | 1095   |
| ANAWAI                | D96882  | 39 52     | 176 53E | 442      | 1    | 137 | 127 | 178 | 185 | 254 | 257 | 259 | 287 | 135 | 137 | 114 | 142  | 2212   |
| WAIMARAMA             | D96891  | 39 49     | 176 59E | 3        | 1    | 66  | 69  | 79  | 84  | 109 | 102 | 102 | 102 | 58  | 66  | 53  | 69   | 959    |
| WAIRUNGA HAVELOCK N.  | D96893  | 39 49     | 176 54E | 366      | 3    | 140 | 120 | 150 | 160 | 210 | 230 | 220 | 240 | 120 | 120 | 100 | 130  | 1940   |
| ASHLEY CLINTON        | D96921  | 39 57     | 176 14E | 351      | 3    | 110 | 90  | 130 | 100 | 140 | 130 | 120 | 140 | 90  | 110 | 90  | 140  | 1390   |
| HIGH VIEW             | D96922  | 39 57     | 176 17E | 305      | 1    | 94  | 81  | 102 | 84  | 104 | 109 | 102 | 114 | 66  | 84  | 76  | 114  | 1130   |
| MAKARETU              | D96923  | 39 55     | 176 16E | 509      | 2    | 97  | 94  | 91  | 91  | 127 | 124 | 132 | 130 | 76  | 81  | 76  | 117  | 1236   |
| FARM MILL             | D96924  | 39 54     | 176 12E | 244      | 2    | 180 | 150 | 190 | 160 | 200 | 200 | 190 | 220 | 130 | 150 | 140 | 210  | 2120   |
| MAKARETU NORTH        | D96925  | 39 56     | 176 15E | 396      | 3    | 110 | 100 | 120 | 100 | 120 | 130 | 120 | 140 | 80  | 100 | 90  | 140  | 1350   |
| MT VERNON             | D96951  | 39 59     | 176 33E | 155      | 1    | 71  | 64  | 64  | 64  | 84  | 81  | 89  | 86  | 53  | 56  | 53  | 81   | 846    |
| WAIPAWA               | D96961  | 39 56     | 176 36E | 142      | 2    | 76  | 71  | 71  | 69  | 94  | 94  | 99  | 99  | 58  | 61  | 58  | 89   | 939    |
| ROTOWAI               | D96971  | 39 59     | 176 42E | 158      | 2    | 81  | 76  | 76  | 76  | 104 | 102 | 109 | 107 | 64  | 69  | 64  | 97   | 1025   |
| BROOKLANDS            | D96981  | 39 55     | 176 50E | 244      | 2    | 79  | 71  | 102 | 97  | 127 | 142 | 155 | 150 | 69  | 76  | 76  | 1200 | CLOSED |
| KAKARIKI              | D97001  | 39 04     | 177 02E | 251      | 2    | 107 | 99  | 112 | 119 | 152 | 142 | 147 | 163 | 102 | 107 | 94  | 112  | 1456   |
| GLENFARG STN.         | D97003  | 39 05     | 177 02E | 277      | 3    | 90  | 90  | 100 | 110 | 140 | 130 | 130 | 150 | 90  | 90  | 80  | 100  | 1300   |
| RAUPUNGA              | D97011  | 39 04     | 177 08E | 108      | 2    | 102 | 94  | 109 | 117 | 147 | 137 | 142 | 157 | 97  | 102 | 91  | 109  | 1404   |
| KIA KIA               | D97021  | 39 01     | 177 16E | 273      | 2    | 112 | 104 | 119 | 127 | 160 | 150 | 155 | 170 | 107 | 112 | 99  | 119  | 1534   |
| NGAMAHANGA SN. WAIROA | D97022  | 39 01     | 177 12E | 2        | 130  | 119 | 137 | 147 | 185 | 173 | 178 | 198 | 124 | 130 | 114 | 137 | 1772 |        |
| WAIHUA VALLEY         | D97023  | 39 03     | 177 14E | 67       | 2    | 104 | 97  | 109 | 117 | 147 | 137 | 142 | 157 | 99  | 104 | 91  | 109  | 1413   |
| WAIPUTAPUTA STN       | D97031  | 39 01     | 177 19E | 29       | 2    | 109 | 99  | 117 | 124 | 152 | 132 | 145 | 165 | 104 | 107 | 104 | 112  | 1470   |
| WHAKAMAH              | D97032  | 39 04     | 177 23E | 5        | 2    | 86  | 76  | 94  | 97  | 124 | 112 | 119 | 132 | 81  | 84  | 79  | 86   | 1170   |
| WAIROA                | D97041  | 39 03     | 177 24E | 6        | 2    | 97  | 86  | 104 | 109 | 132 | 114 | 127 | 145 | 91  | 94  | 91  | 97   | 1287   |
| FRASERTOWN, WAIROA    | *D97042 | 39 00     | 177 24E | 8        | 2    | 102 | 91  | 112 | 117 | 147 | 135 | 140 | 155 | 97  | 99  | 91  | 104  | 1390   |
| TUHARA VALLEY         | D97051  | 39 02     |         |          |      |     |     |     |     |     |     |     |     |     |     |     |      |        |

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NZ METEOROLOGICAL SERVICE      RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR        |
|----------------------|---------|-----------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------------|
| PONGAROA STN         | D97191  | 39 06     | 177 57E | 128      | 3    | 70  | 70  | 100 | 110 | 150 | 140 | 160 | 150 | 80  | 80  | 60  | 80   | 1250        |
| PORTLAND IS          | *D97381 | 39 18     | 177 52E | 78       | 1    | 58  | 51  | 74  | 89  | 109 | 109 | 122 | 112 | 58  | 58  | 43  | 58   | 941         |
| KAPITI IS            | *E04891 | 40 51     | 174 56E | 16       | 2    | 71  | 76  | 76  | 104 | 107 | 107 | 94  | 84  | 99  | 84  | 86  | 86   | 1064        |
| PARAPARAUMU AERO     | *E04991 | 40 54     | 174 59E | 7        | 3    | 70  | 70  | 80  | 80  | 100 | 100 | 110 | 90  | 80  | 100 | 80  | 90   | 1050        |
| TURAKINA             | E05021  | 40 03     | 175 12E | 24       | 2    | 74  | 69  | 69  | 74  | 89  | 97  | 86  | 84  | 66  | 86  | 74  | 94   | 962         |
| MARTON               | E05031  | 40 04     | 175 22E | 152      | 2    | 81  | 76  | 76  | 81  | 97  | 107 | 94  | 91  | 74  | 97  | 81  | 104  | 1059 CLOSED |
| THORESBY MARTON      | E05033  | 40 05     | 175 21E | 152      | 2    | 79  | 69  | 71  | 79  | 91  | 99  | 91  | 84  | 69  | 89  | 76  | 99   | 996 CLOSED  |
| BEAVEN ST MARTON     | E05034  | 40 05     | 175 23E | 152      | 2    | 81  | 79  | 76  | 84  | 99  | 109 | 97  | 94  | 74  | 99  | 84  | 107  | 1083        |
| MARTON               | *E05041 | 40 05     | 175 25E | 141      | 2    | 76  | 74  | 74  | 81  | 94  | 107 | 94  | 91  | 74  | 97  | 81  | 99   | 1042 CLOSED |
| UPPER TUTAENUI A     | E05042  | 40 01     | 175 24E | 235      | 2    | 81  | 79  | 79  | 86  | 99  | 114 | 99  | 97  | 79  | 104 | 89  | 107  | 1113        |
| CLIFF ROAD           | E05044  | 40 04     | 175 25E | 175      | 2    | 81  | 74  | 76  | 84  | 97  | 109 | 99  | 91  | 76  | 97  | 86  | 107  | 1077        |
| GREYSTOKE            | E05045  | 40 02     | 175 25E | 183      | 2    | 81  | 76  | 79  | 86  | 99  | 109 | 99  | 94  | 79  | 99  | 89  | 109  | 1099 CLOSED |
| MARTON FILTER STN    | E05047  | 40 00     | 175 24E | 244      | 2    | 86  | 81  | 84  | 91  | 104 | 117 | 107 | 102 | 84  | 107 | 94  | 114  | 1171        |
| MOTUKOWHAI           | E05051  | 40 02     | 175 30E | 165      | 1    | 71  | 74  | 71  | 79  | 91  | 104 | 94  | 89  | 74  | 94  | 84  | 97   | 1022        |
| WAITUNA WEST         | E05061  | 40 02     | 175 38E | 4        |      |     |     |     |     |     |     |     |     |     |     |     |      | 1150 CLOSED |
| WAITUNA WEST 2       | E05062  | 40 02     | 175 39E | 305      | 2    | 89  | 84  | 86  | 94  | 107 | 119 | 109 | 104 | 86  | 109 | 97  | 117  | 1201 CLOSED |
| MARAMA               | F05081  | 40 04     | 175 48E | 244      | 2    | 76  | 76  | 79  | 84  | 109 | 114 | 107 | 102 | 79  | 102 | 91  | 107  | 1126        |
| KOMAKO               | E05092  | 40 05     | 175 55E | 271      | 1    | 86  | 81  | 89  | 91  | 132 | 127 | 124 | 122 | 86  | 109 | 99  | 122  | 1268        |
| DALVEY TURAKINA      | E05111  | 40 06     | 175 10E | 2        |      | 71  | 66  | 69  | 74  | 89  | 97  | 86  | 84  | 69  | 86  | 76  | 94   | 961 CLOSED  |
| BURLEIGH             | E05131  | 40 11     | 175 22E | 91       | 2    | 74  | 64  | 69  | 71  | 84  | 94  | 84  | 81  | 66  | 84  | 71  | 94   | 936         |
| MARTON               | E05132  | 40 07     | 175 19E | 2        |      | 81  | 74  | 76  | 84  | 99  | 109 | 99  | 97  | 76  | 97  | 86  | 107  | 1085 CLOSED |
| RAUMAT BULLS         | E05133  | 40 10     | 175 22E | 2        |      | 84  | 71  | 84  | 84  | 104 | 102 | 99  | 91  | 69  | 86  | 79  | 99   | 1052 CLOSED |
| LAKE ALICE           | E05134  | 40 08     | 175 20E | 110      | 2    | 76  | 69  | 71  | 76  | 89  | 99  | 89  | 86  | 71  | 89  | 76  | 99   | 990         |
| WALCOMBE             | E05151  | 40 09     | 175 30E | 2        |      | 79  | 66  | 74  | 79  | 89  | 97  | 89  | 86  | 71  | 86  | 79  | 102  | 997 CLOSED  |
| TE AWA               | E05171  | 40 08     | 175 47E | 320      | 2    | 84  | 71  | 71  | 91  | 97  | 89  | 89  | 66  | 89  | 86  | 104 | 1008 |             |
| AWAHOU               | E05183  | 40 11     | 175 50E | 271      | 2    | 99  | 74  | 79  | 84  | 112 | 122 | 122 | 114 | 89  | 104 | 102 | 124  | 1225 CLOSED |
| POHANGINA VALLEY     | E05184  | 40 08     | 175 51E | 274      | 2    | 84  | 76  | 81  | 86  | 112 | 114 | 107 | 104 | 79  | 99  | 89  | 114  | 1145        |
| FLOCKHOUSE,BULLS     | *E05221 | 40 16     | 175 17E | 9        | 1    | 64  | 61  | 61  | 66  | 84  | 89  | 79  | 81  | 61  | 79  | 71  | 84   | 880         |
| OHAKEA               | *E05231 | 40 12     | 175 23E | 48       | 1    | 71  | 64  | 66  | 69  | 81  | 91  | 81  | 81  | 66  | 86  | 69  | 89   | 914         |
| WAITATAPIA           | E05232  | 40 14     | 175 19E | 29       | 2    | 69  | 66  | 66  | 71  | 86  | 94  | 84  | 84  | 66  | 86  | 74  | 89   | 935         |
| CAMPBELLTOWN         | E05241  | 40 17     | 175 25E | 4        |      |     |     |     |     |     |     |     |     |     |     |     |      | 950 CLOSED  |
| FEILDING             | E05251  | 40 13     | 175 34E | 72       | 1    | 76  | 64  | 71  | 76  | 86  | 94  | 86  | 81  | 69  | 84  | 74  | 97   | 958         |
| BUNNYTHORPE          | E05261  | 40 17     | 175 37E | 55       | 2    | 76  | 64  | 69  | 71  | 81  | 91  | 84  | 79  | 66  | 81  | 74  | 97   | 933         |
| COLYTON              | E05262  | 40 14     | 175 39E | 244      | 2    | 86  | 71  | 76  | 79  | 91  | 102 | 94  | 89  | 74  | 91  | 84  | 109  | 1046 CLOSED |
| COLYTON              | E05263  | 40 13     | 175 38E | 2        |      | 89  | 74  | 97  | 91  | 97  | 114 | 104 | 86  | 76  | 89  | 84  | 109  | 1110 CLOSED |
| ASHURST              | E05271  | 40 17     | 175 45E | 2        |      | 97  | 81  | 89  | 94  | 109 | 119 | 109 | 104 | 86  | 107 | 94  | 124  | 1213 CLOSED |
| ASHHURST             | E05272  | 40 16     | 175 44E | 128      | 4    |     |     |     |     |     |     |     |     |     |     |     |      | 1200 CLOSED |
| WHARITE TV STN       | *E05282 | 40 15     | 175 51E | 914      | 2    | 157 | 135 | 147 | 150 | 196 | 203 | 193 | 185 | 142 | 180 | 163 | 208  | 2059        |
| TANGIMOANA           | *E05321 | 40 18     | 175 15E | 2        | 2    | 66  | 66  | 61  | 69  | 89  | 94  | 86  | 84  | 69  | 84  | 71  | 89   | 928 CLOSED  |
| GLEN OROUA           | E05341  | 40 20     | 175 24E | 23       | 2    | 66  | 61  | 64  | 69  | 81  | 91  | 79  | 79  | 64  | 81  | 71  | 89   | 895         |
| KAIRANGA             | E05342  | 40 20     | 175 29E | 16       | 1    | 71  | 61  | 69  | 71  | 81  | 94  | 79  | 79  | 64  | 84  | 74  | 94   | 921 CLOSED  |
| PALMERSTON N. AERO   | *E05361 | 40 20     | 175 37E | 45       | 2    | 79  | 61  | 66  | 69  | 79  | 89  | 84  | 79  | 64  | 81  | 74  | 97   | 922         |
| PALMERSTON N. SCHOOL | *E05362 | 40 21     | 175 37E | 30       | 2    | 79  | 64  | 69  | 81  | 91  | 91  | 84  | 79  | 66  | 84  | 74  | 97   | 937 CLOSED  |
| PALMERSTON N. DSIR   | *E05363 | 40 23     | 175 37E | 34       | 1    | 84  | 69  | 74  | 74  | 86  | 99  | 91  | 84  | 69  | 89  | 79  | 104  | 1002        |
| ATAWHAI              | E05364  | 40 22     | 175 38E | 34       | 1    | 89  | 71  | 76  | 76  | 91  | 102 | 94  | 89  | 74  | 94  | 84  | 109  | 1049        |
| MASSEY UNIVERSITY    | *E05365 | 40 23     | 175 37E | 61       | 2    | 86  | 69  | 74  | 74  | 89  | 99  | 91  | 86  | 71  | 91  | 81  | 104  | 1015        |
| PALMERSTON NORTH     | E05366  | 40 21     | 175 38E | 27       | 2    | 84  | 69  | 74  | 74  | 86  | 97  | 91  | 84  | 71  | 89  | 81  | 104  | 1004 CLOSED |
| TERRACE END          | E05367  | 40 20     | 175 39E | 2        |      | 89  | 71  | 79  | 79  | 91  | 99  | 91  | 86  | 71  | 94  | 84  | 114  | 1048 CLOSED |
| PALM NTH HAYDON ST   | E05369  | 40 20     | 175 38E | 41       | 2    | 81  | 64  | 69  | 71  | 84  | 94  | 86  | 81  | 66  | 86  | 76  | 99   | 957         |
| FOXTON               | E05421  | 40 28     | 175 17E | 3        | 1    | 64  | 61  | 56  | 64  | 86  | 91  | 84  | 81  | 66  | 76  | 66  | 81   | 876         |
| HIMATANGI            | E05431  | 40 24     | 175 18E | 12       | 2    | 66  | 66  | 61  | 69  | 89  | 97  | 86  | 86  | 69  | 84  | 74  | 89   | 936         |
| RANGIOTU             | E05441  | 40 24     | 175 25E | 30       | 3    | 70  | 60  | 60  | 70  | 90  | 100 | 80  | 80  | 70  | 80  | 70  | 90   | 920 CLOSED  |
| OPIKI                | E05442  | 40 26     | 175 28E | 11       | 3    | 70  | 70  | 70  | 70  | 90  | 100 | 90  | 90  | 70  | 90  | 80  | 100  | 990         |
| LINTON MILITARY CAMP | E05451  | 40 24     | 175 34E | 46       | 2    | 84  | 66  | 71  | 74  | 86  | 97  | 89  | 84  | 69  | 89  | 79  | 104  | 992         |
| LINTON               | E05452  | 40 27     | 175 34E | 61       | 2    | 99  | 79  | 84  | 86  | 102 | 114 | 104 | 99  | 81  | 104 | 94  | 122  | 1168        |
| TOKOMARU             | E05454  | 40 29     | 175 31E | 27       | 2    | 97  | 76  | 84  | 84  | 99  | 112 | 102 | 97  | 79  | 102 | 91  | 119  | 1142 CLOSED |
| FITZHERBERT WEST     | E05461  | 40 26     | 175 37E | 2        |      | 89  | 76  | 81  | 89  | 99  | 109 | 102 | 97  | 79  | 99  | 86  | 114  | 1120 CLOSED |
| KAHUTERAWA WATERSHED | E05462  | 40 28     | 175 37E | 2        |      | 152 | 127 | 137 | 142 | 163 | 180 | 168 | 157 | 132 | 165 | 147 | 191  | 1861 CLOSED |
| TIRITEA              | E05463  | 40 25     | 175 40E | 83       | 2    | 104 | 84  | 89  | 91  | 107 | 119 | 112 | 104 | 86  | 112 | 99  | 130  | 1237 CLOSED |
| TIRITEA NO 2         | E05464  | 40 26     | 175 40E | 131      | 2    | 114 | 91  | 99  | 99  | 117 | 132 | 122 | 114 | 94  | 119 | 109 | 140  | 1350        |
| WAITARE RE FOREST    | *E05521 | 40 33     | 175 12E | 3        | 2    | 61  | 61  | 61  | 66  | 84  | 86  | 84  | 76  | 66  | 79  | 69  | 79   | 872         |
| MOUTOA               | E05531  | 40 32     | 175 20E | 3        | 2    | 74  | 71  | 64  | 71  | 97  | 102 | 94  | 89  | 76  | 94  | 79  | 94   | 1005        |
| MANGAHAO POWER STN   | E05542  | 40 35     | 175 27E | 110      | 1    | 102 | 94  | 89  | 94  | 127 | 137 | 127 | 117 | 107 | 132 | 109 | 127  | 1362        |
| SHANNON              | E05543  | 40 33     | 175 28E | 2        |      | 79  | 79  | 81  | 109 | 117 | 107 | 102 | 94  | 84  | 99  | 84  | 104  | 1116 CLOSED |
| HOKIO BEACH SCHOOL   | *E05611 | 40 36     | 175 11E | 6        | 2    | 61  | 61  | 66  | 74  | 84  | 89  | 86  | 79  | 66  | 81  | 69  | 81   | 884         |
| LEVIN                | E05621  | 40 37     | 175 17E | 40       | 2    | 79  | 76  | 76  | 84  | 107 | 112 | 107 | 97  | 84  | 102 | 86  | 102  | 1112 CLOSED |
| LEVIN                | *E05622 | 40 39     | 175 16E | 46       | 2    | 76  | 76  | 76  | 84  | 104 | 109 | 107 | 97  | 84  | 99  | 84  | 99   | 1095        |
| OHAU                 | E05623  | 40 39     | 175 15E | 43       | 2    | 76  | 74  | 74  | 81  | 102 | 107 | 104 | 94  | 81  | 99  | 84  | 97   | 1073 CLOSED |
| OHAU LEVIN           | E05624  | 40 39     | 175 12E | 15       | 2    | 69  | 69  | 66  | 74  | 94  | 99  | 97  | 86  | 74  | 89  | 76  | 89   | 982 CLOSED  |
| LEVIN                | E05626  | 40 38     | 175 17E | 37       | 2    | 76  | 84  | 64  | 79  | 97  | 91  | 97  | 89  | 81  | 99  | 79  | 117  | 1053        |
| MUHUNOA EAST         | E05627  | 40 41     | 175 17E | 117      | 2    | 99  | 99  | 97  | 107 | 135 | 142 | 137 | 124 | 107 | 130 | 109 |      |             |

## NZ METEOROLOGICAL SERVICE 22 RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT S.        | LONG E. | HT M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR   |        |
|----------------------|---------|---------------|---------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|--------|
| OTAKI                | E05711  | 40 46 175 09E | 15      | 1     |      | 69  | 69  | 74  | 79  | 91  | 97  | 99  | 84  | 76  | 94  | 79  | 86   | 997    | CLOSED |
| WAITOHIA SUBSTATION  | E05712  | 40 46 175 08E | 2       |       |      | 81  | 94  | 81  | 58  | 97  | 97  | 89  | 99  | 76  | 86  | 86  | 79   | 1023   | CLOSED |
| WATKANAEC            | F05801  | 40 53 175 03E | 2       |       |      | 74  | 76  | 81  | 86  | 102 | 104 | 109 | 91  | 84  | 104 | 86  | 97   | 1094   | CLOSED |
| PARAPARAHU MU PWD    | E05902  | 40 55 175 01E | 2       |       |      | 79  | 84  | 84  | 84  | 117 | 117 | 119 | 104 | 94  | 109 | 94  | 97   | 1182   | CLOSED |
| SMTTHS FARM          | E05904  | 40 58 175 05E | 351     | 3     |      | 150 | 170 | 170 | 160 | 250 | 240 | 240 | 220 | 190 | 220 | 190 | 180  | 2380   |        |
| PLIMMERTON           | F14081  | 41 05 174 52E | 3       | 2     |      | 61  | 66  | 74  | 71  | 117 | 114 | 112 | 107 | 86  | 86  | 76  | 71   | 1041   | CLOSED |
| PAFKAKARIKI HILL     | F14091  | 41 03 174 56E | 107     | 2     |      | 81  | 86  | 97  | 91  | 155 | 152 | 147 | 140 | 112 | 114 | 102 | 94   | 1371   |        |
| PUKERUA BAY          | F14092  | 41 02 174 54E | 3       |       |      | 70  | 70  | 90  | 90  | 120 | 120 | 140 | 120 | 90  | 100 | 80  | 80   | 1170   | CLOSED |
| LINDEN               | F14181  | 41 10 174 50E | 46      | 2     |      | 81  | 97  | 99  | 132 | 137 | 145 | 127 | 104 | 112 | 84  | 86  | 1285 |        |        |
| TITAHIA BAY          | E14182  | 41 06 174 51E | 61      | 2     |      | 66  | 64  | 76  | 79  | 104 | 109 | 114 | 102 | 81  | 89  | 66  | 69   | 1019   |        |
| PORIRUA              | F14183  | 41 07 174 52E | 58      | 3     |      | 70  | 60  | 80  | 80  | 110 | 110 | 110 | 100 | 80  | 90  | 70  | 70   | 1030   |        |
| PAREMATA             | F14184  | 41 07 174 52E | 24      | 2     |      | 71  | 69  | 84  | 84  | 114 | 119 | 124 | 112 | 89  | 97  | 74  | 76   | 1113   |        |
| BELMONT              | F14191  | 41 10 174 54E | 313     | 3     |      | 80  | 80  | 100 | 100 | 150 | 150 | 150 | 140 | 110 | 110 | 90  | 90   | 1350   | CLOSED |
| TAITA, LOWER HUTT    | *E14192 | 41 11 174 58E | 65      | 2     |      | 89  | 94  | 99  | 102 | 147 | 142 | 145 | 132 | 112 | 122 | 104 | 102  | 1390   |        |
| PAUATAHANUI          | E14193  | 41 06 174 55E | 4       |       |      |     |     |     |     |     |     |     |     |     |     |     |      | 1100   | CLOSED |
| PAUATAHANUI          | E14194  | 41 08 174 55E | 40      | 2     |      | 76  | 79  | 84  | 84  | 124 | 119 | 122 | 109 | 94  | 102 | 89  | 86   | 1168   |        |
| AVALON, LOWER HUTT   | *E14195 | 41 11 174 56E | 15      | 2     |      | 74  | 79  | 99  | 97  | 168 | 165 | 157 | 155 | 114 | 104 | 94  | 86   | 1392   |        |
| KARORI RESERVOIR     | E14271  | 41 17 174 45E | 141     | 1     |      | 79  | 76  | 97  | 99  | 130 | 137 | 145 | 130 | 104 | 109 | 84  | 86   | 1276   |        |
| KELURN, WELLINGTON   | *E14272 | 41 17 174 46E | 126     | 1     |      | 81  | 84  | 94  | 97  | 132 | 135 | 140 | 124 | 102 | 112 | 84  | 86   | 1271   |        |
| MAKARA               | *E14273 | 41 15 174 42E | 279     | 2     |      | 71  | 74  | 86  | 94  | 127 | 132 | 140 | 124 | 97  | 104 | 71  | 86   | 1206   |        |
| OPAU                 | E14274  | 41 14 174 42E | 3       |       |      | 80  | 70  | 90  | 90  | 120 | 130 | 140 | 120 | 100 | 100 | 80  | 80   | 1200   | CLOSED |
| KHANDALLAH           | E14275  | 41 14 174 46E | 2       |       |      | 86  | 89  | 94  | 97  | 114 | 119 | 147 | 124 | 114 | 109 | 84  | 79   | 1256   | CLOSED |
| BOLTON ST CEMETERY   | E14277  | 41 17 174 46E | 43      | 4     |      |     |     |     |     |     |     |     |     |     |     |     |      | 1250   | CLOSED |
| THORNDON             | E14278  | 41 17 174 47E | 3       | 3     |      | 70  | 70  | 90  | 80  | 110 | 110 | 120 | 110 | 90  | 100 | 80  | 80   | 1110   | CLOSED |
| KOROKORO             | F14281  | 41 13 174 52E | 98      | 2     |      | 81  | 81  | 97  | 99  | 132 | 137 | 145 | 130 | 104 | 112 | 86  | 89   | 1293   | CLOSED |
| PFTONE               | E14283  | 41 14 174 52E | 21      | 4     |      |     |     |     |     |     |     |     |     |     |     |     |      | 1300   | CLOSED |
| LOWER HUTT           | E14284  | 41 12 174 53E | 2       |       |      | 76  | 79  | 102 | 97  | 168 | 168 | 157 | 155 | 117 | 107 | 94  | 86   | 1406   | CLOSED |
| GLENNSIDE            | F14287  | 41 12 174 49E | 71      | 2     |      | 76  | 74  | 89  | 91  | 122 | 127 | 132 | 117 | 94  | 102 | 79  | 81   | 1184   |        |
| GRACFIELD L HUTT     | *E14290 | 41 14 174 55E | 34      | 2     |      | 81  | 81  | 99  | 102 | 155 | 150 | 147 | 140 | 112 | 109 | 94  | 91   | 1361   |        |
| LOWER HUTT           | E14291  | 41 13 174 54E | 9       | 3     |      | 80  | 80  | 100 | 100 | 160 | 160 | 160 | 150 | 120 | 110 | 100 | 90   | 1410   | CLOSED |
| LOWER HUTT TAMA ST   | F14292  | 41 13 174 54E | 6       | 1     |      | 94  | 89  | 104 | 112 | 152 | 152 | 150 | 137 | 114 | 119 | 102 | 102  | 1420   |        |
| WAIHETIU             | E14293  | 41 14 174 56E | 12      | 3     |      | 80  | 80  | 100 | 100 | 160 | 150 | 150 | 140 | 110 | 110 | 90  | 90   | 1360   | CLOSED |
| WATNU O MATA         | F14294  | 41 16 174 59E | 125     | 1     |      | 109 | 112 | 145 | 140 | 241 | 239 | 229 | 224 | 168 | 152 | 135 | 127  | 2021   |        |
| MAHINA BAY           | E14295  | 41 16 174 54E | 2       |       |      | 84  | 81  | 99  | 102 | 157 | 152 | 152 | 142 | 114 | 109 | 97  | 94   | 1383   |        |
| NAENAE PARK          | F14297  | 41 12 174 57E | 12      | 3     |      | 80  | 80  | 90  | 100 | 150 | 150 | 140 | 140 | 110 | 100 | 90  | 90   | 1320   | CLOSED |
| WATERLOO             | E14298  | 41 13 174 56E | 6       | 2     |      | 86  | 84  | 104 | 107 | 163 | 157 | 157 | 147 | 117 | 114 | 99  | 97   | 1432   |        |
| WATERLOO             | E14299  | 41 12 174 56E | 2       |       |      | 81  | 81  | 99  | 102 | 155 | 150 | 150 | 142 | 112 | 109 | 94  | 91   | 1366   | CLOSED |
| RIDDIFORD PARK       | E1429C  | 41 13 174 54E | 2       |       |      | 84  | 81  | 99  | 104 | 157 | 150 | 150 | 142 | 112 | 109 | 97  | 94   | 1379   | CLOSED |
| BIRCH STREET L HUTT  | E1429D  | 41 13 174 54E | 4       |       |      |     |     |     |     |     |     |     |     |     |     |     |      | 1400   | CLOSED |
| OTERANGA BAY         | E14361  | 41 18 174 38E | 30      | 4     |      |     |     |     |     |     |     |     |     |     |     |     |      | 1200   |        |
| BUCKLE ST WELLINGTON | E14370  | 41 18 174 47E | 34      | 2     |      | 76  | 74  | 89  | 94  | 114 | 130 | 127 | 112 | 86  | 97  | 76  | 76   | 1151   | CLOSED |
| BROOKLYN             | E14371  | 41 19 174 45E | 224     | 4     |      |     |     |     |     |     |     |     |     |     |     |     |      | 1250   | CLOSED |
| RONGOTAI AERODROME   | E14381  | 41 19 174 48E | 3       | 2     |      | 69  | 69  | 79  | 81  | 114 | 112 | 117 | 107 | 86  | 96  | 71  | 79   | 1078   | CLOSED |
| BEACON HILL          | E14382  | 41 20 174 50E | 132     | 1     |      | 66  | 66  | 76  | 76  | 112 | 107 | 109 | 102 | 84  | 89  | 71  | 79   | 1037   |        |
| RONGOTAI             | F14386  | 41 19 174 48E | 5       | 2     |      | 74  | 74  | 84  | 86  | 119 | 119 | 122 | 112 | 91  | 99  | 76  | 81   | 1137   |        |
| WELLINGTON AIRPORT   | *E14387 | 41 20 174 49E | 6       | 2     |      | 66  | 66  | 76  | 76  | 109 | 107 | 109 | 102 | 84  | 89  | 69  | 74   | 1027   |        |
| KAITOKE              | *E15011 | 41 05 175 11F | 226     | 3     |      | 140 | 150 | 150 | 140 | 230 | 220 | 220 | 200 | 170 | 190 | 170 | 160  | 2140   |        |
| HEADWORKS KAITOKE    | E15021  | 41 04 175 12E | 189     | 3     |      | 160 | 170 | 170 | 160 | 250 | 250 | 250 | 220 | 190 | 220 | 190 | 180  | 2410   |        |
| TRENTHAM RACECOURSE  | E15101  | 41 08 175 02E | 52      | 1     |      | 81  | 91  | 89  | 84  | 132 | 132 | 119 | 104 | 117 | 102 | 97  | 1280 |        |        |
| WALLACEVILLE         | *E15102 | 41 08 175 03E | 56      | 1     |      | 86  | 91  | 89  | 86  | 137 | 132 | 135 | 119 | 104 | 117 | 102 | 97   | 1295   |        |
| TRENTHAM             | F15103  | 41 09 175 02E | 49      | 2     |      | 84  | 91  | 89  | 86  | 135 | 132 | 132 | 119 | 104 | 114 | 102 | 97   | 1285   |        |
| UPPER HUTT           | E15104  | 41 08 175 03E | 55      | 2     |      | 89  | 97  | 94  | 91  | 145 | 142 | 142 | 127 | 112 | 124 | 109 | 102  | 1374   |        |
| TIROHANGA            | F15105  | 41 09 175 01E | 2       |       |      | 89  | 97  | 94  | 91  | 142 | 140 | 140 | 127 | 109 | 122 | 107 | 102  | 1360   | CLOSED |
| TE MARUA             | *E15111 | 41 06 175 06E | 84      | 2     |      | 89  | 97  | 94  | 91  | 142 | 140 | 140 | 127 | 109 | 122 | 109 | 102  | 1362   | CLOSED |
| CAPE FGMONT LH       | *E93271 | 39 17 173 45E | 8       | 1     |      | 99  | 91  | 86  | 112 | 135 | 155 | 140 | 117 | 130 | 102 | 107 | 1434 |        |        |
| WAREA                | E93281  | 39 15 173 48E | 24      | 2     |      | 102 | 94  | 91  | 112 | 142 | 157 | 155 | 140 | 112 | 127 | 107 | 114  | 1453   |        |
| OPUA ROAD            | E93391  | 39 22 173 56E | 204     | 2     |      | 122 | 114 | 102 | 140 | 170 | 180 | 163 | 155 | 127 | 119 | 127 | 1674 | CLOSED |        |
| OPUNAKE              | E93481  | 39 27 173 51E | 27      | 3     |      | 90  | 80  | 80  | 100 | 130 | 160 | 140 | 130 | 110 | 120 | 100 | 100  | 1340   | CLOSED |
| PATIKI               | F93491  | 39 28 173 58E | 152     | 3     |      | 90  | 90  | 100 | 110 | 140 | 170 | 140 | 120 | 110 | 120 | 110 | 110  | 1410   |        |
| MIDHIRST             | E94221  | 39 17 174 16E | 341     | 2     |      | 170 | 170 | 160 | 188 | 249 | 262 | 264 | 246 | 213 | 239 | 211 | 198  | 2570   |        |
| DAWSON FALLS         | F94311  | 39 19 174 07E | 945     | 2     |      | 363 | 378 | 373 | 424 | 569 | 605 | 617 | 564 | 485 | 533 | 445 | 439  | 5795   |        |
| STRATFORD MTN HOUSE  | *E94313 | 39 18 174 07E | 846     | 3     |      | 420 | 440 | 430 | 490 | 660 | 700 | 710 | 650 | 560 | 620 | 510 | 510  | 6700   |        |
| STRATFORD AIRFIELD   | E94330  | 39 19 174 19E | 282     | 2     |      | 109 | 112 | 114 | 132 | 175 | 196 | 185 | 168 | 142 | 163 | 135 | 132  | 1763   | CLOSED |
| STRATFORD            | E94331  | 39 20 174 18E | 305     | 3     |      | 130 | 130 | 130 | 160 | 210 | 230 | 220 | 200 | 170 | 190 | 160 | 160  | 2090   | CLOSED |
| STRATFORD            | E94332  | 39 20 174 19E | 262     | 1     |      | 127 | 132 | 130 | 147 | 198 | 211 | 216 | 196 | 170 | 185 | 155 | 152  | 2019   |        |
| STRATFORD DEM FARM   | *E94333 | 39 20 174 18F | 311     | 2     |      | 135 | 147 | 137 | 150 | 206 | 221 | 221 | 213 | 183 | 201 | 165 | 170  | 2149   |        |
| RIVERLEA             | E94401  | 39 26 174 04E | 259     | 1     |      | 102 | 102 | 109 | 132 | 173 | 201 | 173 | 157 | 132 | 155 | 127 | 127  | 1690   |        |
| ELTHAM               | E94421  | 39 26 174 17E | 2       |       |      | 89  | 91  | 94  | 109 | 145 | 16  |     |     |     |     |     |      |        |        |

## NZ METEOROLOGICAL SERVICE

23  
RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT S. | LONG    | HT M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC         | YEAR        |
|----------------------|---------|--------|---------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| TAUMATATAHI          | E94571  | 39 33  | 174 47E | 61    | 2    | 104 | 102 | 104 | 119 | 147 | 165 | 155 | 137 | 112 | 135 | 114 | 135         | 1529        |
| HAWERA               | E94621  | 39 36  | 174 17E | 105   | 1    | 79  | 76  | 76  | 89  | 117 | 132 | 122 | 107 | 89  | 99  | 81  | 97          | 1164 CLOSED |
| HAWERA               | E94631  | 39 36  | 174 18E | 91    | 2    | 74  | 74  | 74  | 84  | 112 | 122 | 119 | 107 | 91  | 99  | 81  | 91          | 1128 CLOSED |
| ALTON                | E94641  | 39 40  | 174 27E | 143   | 2    | 97  | 91  | 94  | 109 | 135 | 150 | 142 | 124 | 102 | 122 | 104 | 122         | 1392 CLOSED |
| KAKARAMEA HYDRO      | E94651  | 39 41  | 174 30E | 23    | 2    | 79  | 76  | 79  | 89  | 112 | 124 | 117 | 102 | 84  | 99  | 84  | 102         | 1147 CLOSED |
| PATEA FREEZING WORKS | F94741  | 39 46  | 174 29E | 8     | 2    | 81  | 76  | 79  | 91  | 114 | 127 | 119 | 104 | 86  | 102 | 86  | 104         | 1169        |
| PATFA                | F94742  | 39 45  | 174 28E | 43    | 2    | 84  | 81  | 84  | 97  | 119 | 132 | 124 | 109 | 89  | 107 | 91  | 109         | 1226        |
| WAVERLEY             | E94761  | 39 46  | 174 36E | 2     | 74   | 71  | 74  | 84  | 104 | 114 | 109 | 97  | 79  | 94  | 79  | 94  | 1073 CLOSED |             |
| MOUMAHAKI            | *F94762 | 39 44  | 174 40E | 2     | 84   | 81  | 84  | 97  | 117 | 130 | 122 | 109 | 89  | 107 | 89  | 107 | 1216 CLOSED |             |
| WAITOTARA VALLEY     | E94781  | 39 47  | 174 48E | 30    | 2    | 91  | 84  | 86  | 99  | 114 | 124 | 117 | 107 | 84  | 109 | 97  | 117         | 1229        |
| WAITAHINGA           | F94791  | 39 45  | 174 57E | 396   | 1    | 112 | 102 | 112 | 124 | 145 | 160 | 152 | 137 | 109 | 140 | 122 | 145         | 1560        |
| BELMONT              | E94891  | 39 52  | 174 58E | 54    | 2    | 76  | 84  | 76  | 91  | 94  | 102 | 104 | 86  | 64  | 99  | 86  | 102         | 1064 CLOSED |
| ORAUTOWA             | F95322  | 39 20  | 175 14E | 305   | 2    | 99  | 109 | 99  | 112 | 140 | 155 | 140 | 127 | 124 | 147 | 147 | 1541        |             |
| HOROPITO             | E95331  | 39 20  | 175 22E | 2     | 119  | 124 | 119 | 137 | 175 | 193 | 170 | 157 | 140 | 175 | 160 | 170 | 1839 CLOSED |             |
| OHAKUNE MOUNTAIN RD. | E95341  | 39 23  | 175 26E | 693   | 2    | 109 | 114 | 112 | 127 | 163 | 178 | 157 | 145 | 127 | 160 | 147 | 155         | 1694        |
| PIPIRIKI             | E95401  | 39 28  | 175 03E | 91    | 2    | 97  | 94  | 97  | 109 | 135 | 145 | 135 | 122 | 104 | 130 | 117 | 130         | 1415 CLOSED |
| RAETIHI              | E95421  | 39 26  | 175 16E | 514   | 1    | 104 | 107 | 102 | 119 | 152 | 163 | 147 | 135 | 119 | 147 | 137 | 145         | 1577        |
| OHAKUNE JUNCTION     | E95441  | 39 24  | 175 25E | 600   | 2    | 99  | 91  | 91  | 107 | 124 | 147 | 130 | 119 | 104 | 132 | 119 | 130         | 1393 CLOSED |
| RANGATAUA            | E95442  | 39 26  | 175 27E | 669   | 2    | 89  | 84  | 84  | 109 | 122 | 132 | 107 | 114 | 117 | 114 | 137 | 94          | 1303 CLOSED |
| OHAKUNE              | *E95444 | 39 24  | 175 25E | 610   | 2    | 86  | 104 | 89  | 104 | 132 | 152 | 130 | 122 | 117 | 130 | 130 | 130         | 1426        |
| KARIOI               | *F95451 | 39 29  | 175 31E | 648   | 1    | 74  | 81  | 79  | 89  | 112 | 127 | 107 | 102 | 89  | 114 | 102 | 109         | 1185        |
| WAIOURU              | E95462  | 39 28  | 175 38E | 2     | 64   | 66  | 76  | 79  | 99  | 119 | 102 | 89  | 79  | 107 | 89  | 99  | 1068 CLOSED |             |
| WAIOURU              | *E95464 | 39 28  | 175 40E | 823   | 2    | 76  | 81  | 76  | 86  | 109 | 122 | 102 | 99  | 86  | 107 | 97  | 107         | 1148        |
| WAIOURU M.C.         | *E95465 | 39 28  | 175 41E | 823   | 2    | 79  | 76  | 71  | 79  | 97  | 122 | 104 | 107 | 86  | 109 | 89  | 122         | 1141        |
| MATAIMOANA           | E95501  | 39 31  | 175 00E | 427   | 2    | 112 | 109 | 112 | 127 | 155 | 168 | 157 | 140 | 119 | 150 | 135 | 150         | 1634 CLOSED |
| JERUSALEM            | E95502  | 39 33  | 175 05E | 52    | 2    | 102 | 99  | 102 | 114 | 142 | 152 | 142 | 127 | 109 | 137 | 124 | 137         | 1487 CLOSED |
| OMEREI               | E95531  | 39 31  | 175 22E | 427   | 2    | 86  | 91  | 86  | 99  | 127 | 140 | 122 | 114 | 102 | 127 | 117 | 122         | 1333 CLOSED |
| OKEORE PARAPARA      | E95532  | 39 31  | 175 20E | 472   | 2    | 86  | 89  | 86  | 99  | 127 | 140 | 122 | 114 | 99  | 127 | 114 | 122         | 1325        |
| HIWIRIA RAKETAPAUMA  | F95551  | 39 34  | 175 35E | 2     | 69   | 71  | 69  | 76  | 97  | 107 | 91  | 89  | 79  | 94  | 84  | 94  | 1020 CLOSED |             |
| WAIOURU              | E95561  | 39 32  | 175 41E | 811   | 2    | 81  | 84  | 81  | 91  | 114 | 127 | 107 | 104 | 91  | 112 | 99  | 112         | 1203 CLOSED |
| HIHTAHI              | E95571  | 39 35  | 175 42E | 738   | 1    | 91  | 94  | 86  | 97  | 122 | 135 | 112 | 109 | 99  | 114 | 102 | 119         | 1280        |
| TE HOROA STN         | E95572  | 39 35  | 175 46E | 2     | 89   | 91  | 86  | 94  | 117 | 127 | 107 | 107 | 94  | 117 | 104 | 124 | 1257 CLOSED |             |
| MAUNGANUI MOAWHANGO  | E95581  | 39 34  | 175 52E | 488   | 2    | 74  | 74  | 69  | 74  | 94  | 99  | 84  | 86  | 76  | 89  | 81  | 99          | 997         |
| AOMARAMA MOAWHANGO   | E95582  | 39 35  | 175 51E | 488   | 2    | 74  | 74  | 69  | 74  | 91  | 99  | 84  | 84  | 76  | 89  | 81  | 97          | 992 CLOSED  |
| EREWHON              | E95591  | 39 31  | 175 58E | 853   | 3    | 70  | 70  | 80  | 70  | 110 | 100 | 90  | 100 | 70  | 90  | 70  | 110         | 1030 CLOSED |
| MARUA                | E95592  | 39 32  | 175 57E | 762   | 2    | 74  | 76  | 71  | 76  | 94  | 102 | 86  | 86  | 76  | 91  | 81  | 99          | 1012        |
| KORINITI             | E95611  | 39 39  | 175 10E | 4     | 2    | 102 | 97  | 99  | 114 | 140 | 150 | 140 | 127 | 107 | 135 | 122 | 135         | 1250 CLOSED |
| MATAHIIWI            | E95612  | 39 36  | 175 08E | 53    | 2    | 76  | 79  | 76  | 86  | 107 | 119 | 102 | 99  | 86  | 107 | 94  | 104         | 1135        |
| NGAMATEA             | E95641  | 39 41  | 175 25F | 366   | 2    | 76  | 79  | 76  | 86  | 107 | 119 | 102 | 99  | 86  | 107 | 94  | 104         | 1135        |
| RUANUI               | E95662  | 39 37  | 175 39E | 2     | 91   | 91  | 84  | 86  | 107 | 109 | 97  | 97  | 86  | 104 | 97  | 122 | 1171 CLOSED |             |
| MATAROA              | F95671  | 39 40  | 175 42F | 564   | 2    | 79  | 86  | 74  | 91  | 112 | 117 | 99  | 102 | 84  | 107 | 99  | 122         | 1172        |
| HIWI,TAIHAF          | *E95681 | 39 40  | 175 50E | 657   | 1    | 74  | 74  | 66  | 69  | 86  | 89  | 79  | 79  | 69  | 86  | 79  | 99          | 969 CLOSED  |
| TIKFERFR MOAWHANGO   | F95682  | 39 36  | 175 52E | 488   | 2    | 71  | 71  | 66  | 71  | 89  | 94  | 81  | 81  | 71  | 86  | 76  | 94          | 951         |
| RAKAUNUI             | E95691  | 39 38  | 175 57E | 561   | 2    | 81  | 81  | 76  | 81  | 102 | 109 | 91  | 91  | 81  | 97  | 89  | 107         | 1086        |
| UPOKOPOTO            | E95712  | 39 45  | 175 09E | 34    | 2    | 79  | 79  | 89  | 84  | 135 | 137 | 104 | 114 | 99  | 102 | 107 | 130         | 1249        |
| PARIHUAHUA           | E95721  | 39 43  | 175 14E | 427   | 2    | 109 | 104 | 102 | 114 | 137 | 145 | 132 | 124 | 97  | 130 | 114 | 145         | 1453        |
| POHONII              | F95751  | 39 45  | 175 34F | 579   | 2    | 94  | 97  | 89  | 97  | 119 | 127 | 109 | 100 | 97  | 114 | 104 | 127         | 1283        |
| CAIRNMUIR MANGAWEKA  | E95781  | 39 47  | 175 48E | 457   | 2    | 94  | 97  | 89  | 97  | 119 | 127 | 109 | 107 | 97  | 114 | 104 | 124         | 1278        |
| HESSETT TAOROA       | E95791  | 39 42  | 175 54E | 427   | 3    | 80  | 80  | 70  | 80  | 100 | 100 | 90  | 90  | 80  | 90  | 80  | 100         | 1040        |
| RANGITANE KAWHATAU   | E95792  | 39 47  | 175 59E | 549   | 2    | 107 | 107 | 99  | 107 | 132 | 142 | 122 | 122 | 109 | 130 | 117 | 140         | 1434        |
| ARRANMORE            | E95811  | 39 52  | 175 06E | 3     | 70   | 70  | 70  | 80  | 90  | 100 | 90  | 90  | 70  | 90  | 80  | 100 | 1000 CLOSED |             |
| PARIKINO             | E95812  | 39 48  | 175 09E | 24    | 2    | 84  | 79  | 76  | 89  | 104 | 112 | 99  | 94  | 74  | 99  | 86  | 109         | 1105 CLOSED |
| OXTON                | E95831  | 39 53  | 175 20E | 70    | 2    | 79  | 74  | 71  | 81  | 97  | 104 | 94  | 86  | 69  | 91  | 81  | 102         | 1029        |
| KAIPAORE             | E95841  | 39 49  | 175 29E | 158   | 2    | 76  | 74  | 74  | 81  | 97  | 104 | 94  | 89  | 71  | 94  | 84  | 102         | 1040        |
| AWAKITEA             | E95861  | 39 50  | 175 40E | 610   | 3    | 60  | 60  | 70  | 70  | 100 | 90  | 90  | 90  | 60  | 80  | 70  | 90          | 930 CLOSED  |
| MANGAONHO            | E95862  | 39 53  | 175 39E | 290   | 2    | 79  | 79  | 76  | 84  | 99  | 109 | 99  | 94  | 74  | 99  | 86  | 104         | 1082        |
| OHINGAITI MANGAMAKO  | E95873  | 39 53  | 175 46F | 311   | 2    | 76  | 79  | 74  | 79  | 94  | 104 | 91  | 89  | 76  | 97  | 86  | 104         | 1049        |
| MANGAWEKA            | E95882  | 39 49  | 175 48E | 327   | 2    | 74  | 71  | 71  | 79  | 99  | 102 | 97  | 97  | 76  | 89  | 84  | 109         | 1045 CLOSED |
| TE PARAPARA          | E95891  | 39 53  | 175 56E | 610   | 2    | 89  | 86  | 91  | 94  | 137 | 132 | 130 | 127 | 89  | 114 | 104 | 127         | 1320        |
| WANGANUI             | *F95902 | 39 56  | 175 03E | 22    | 1    | 69  | 64  | 61  | 74  | 86  | 91  | 81  | 76  | 58  | 81  | 69  | 89          | 899         |
| WANGANUI PLYMOUTH ST | F95904  | 39 54  | 175 04E | 2     | 71   | 66  | 66  | 74  | 89  | 97  | 89  | 76  | 64  | 86  | 69  | 94  | 943 CLOSED  |             |
| OKOIA, MANGAONE      | F95911  | 39 56  | 175 11E | 160   | 1    | 79  | 76  | 74  | 81  | 99  | 104 | 94  | 89  | 69  | 94  | 81  | 104         | 1044        |
| MARYBANK             | E95913  | 39 56  | 175 06E | 4     | 2    | 76  | 79  | 74  | 84  | 97  | 102 | 97  | 97  | 76  | 102 | 89  | 109         | 900 CLOSED  |
| FORDELL              | F95914  | 39 56  | 175 06E | 4     | 2    | 69  | 69  | 71  | 76  | 99  | 104 | 97  | 97  | 76  | 97  | 86  | 104         | 900 CLOSED  |
| NEWTON LEES KAITOKE  | E95915  | 39 56  | 175 06E | 2     | 71   | 64  | 64  | 74  | 89  | 94  | 84  | 79  | 61  | 84  | 71  | 91  | 926 CLOSED  |             |
| NO 2 LINE WANGANUI   | E95916  | 39 56  | 175 06E | 2     | 69   | 64  | 64  | 69  | 86  | 97  | 81  | 74  | 64  | 81  | 71  | 91  | 911 CLOSED  |             |
| HUNTERVILLE          | E95951  | 39 56  | 175 34E | 267   | 2    | 81  | 81  | 79  | 86  | 102 | 112 | 102 | 97  | 76  | 102 | 89  | 109         | 1116 CLOSED |
| NGAHERI ITI          | E95952  | 39 59  | 175 33E | 195   | 2    | 76  | 76  | 74  | 84  | 97  | 107 | 97  | 91  | 74  |     |     |             |             |

## NZ METEOROLOGICAL SERVICE

## 24 RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT.<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR        |
|----------------------|---------|------------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------------|
| COLLINGWOOD          | F02662  | 40 41      | 172 41E | 2        |      | 137 | 145 | 157 | 191 | 264 | 216 | 239 | 218 | 173 | 216 | 155 | 163  | 2274 CLOSED |
| KAHURANGI POINT      | F02721  | 40 47      | 172 13E | 16       | 2    | 147 | 163 | 157 | 193 | 185 | 203 | 160 | 165 | 165 | 198 | 224 | 183  | 2143 CLOSED |
| BAINHAM              | F02751  | 40 46      | 172 33E | 79       | 2    | 267 | 274 | 259 | 302 | 389 | 305 | 404 | 384 | 315 | 323 | 257 | 272  | 3751        |
| PARAPARA             | F02771  | 40 46      | 172 42E | 2        |      | 130 | 140 | 150 | 183 | 251 | 206 | 229 | 208 | 163 | 206 | 147 | 155  | 2168 CLOSED |
| TAKAKA AIRFIELD      | F02871  | 40 49      | 172 46E | 30       | 2    | 150 | 152 | 142 | 168 | 216 | 170 | 224 | 213 | 175 | 180 | 142 | 152  | 2084 CLOSED |
| BU TAKAKA            | F02872  | 40 51      | 172 44E | 2        |      | 226 | 231 | 218 | 257 | 330 | 259 | 340 | 325 | 267 | 274 | 218 | 231  | 3176 CLOSED |
| TARAKOHE             | F02891  | 40 50      | 172 54E | 5        | 1    | 109 | 112 | 107 | 124 | 160 | 124 | 165 | 157 | 130 | 132 | 104 | 112  | 1536        |
| KOTINGA              | F02971  | 40 54      | 172 46E | 49       | 2    | 185 | 191 | 180 | 211 | 272 | 213 | 282 | 267 | 218 | 226 | 180 | 191  | 2616 CLOSED |
| URUWHENUA            | F02981  | 40 59      | 172 49E | 91       | 3    | 140 | 140 | 160 | 180 | 240 | 180 | 230 | 220 | 180 | 190 | 160 | 160  | 2180        |
| FAREWELL SPIT LH     | *F03501 | 40 33      | 173 01E | 3        | 1    | 74  | 79  | 84  | 102 | 142 | 117 | 130 | 117 | 91  | 117 | 84  | 89   | 1226        |
| MILLERTON            | F11681  | 41 38      | 171 52E | 291      | 3    | 210 | 230 | 220 | 260 | 260 | 270 | 230 | 230 | 230 | 260 | 290 | 250  | 2940 CLOSED |
| DOWNERTOWN           | F11682  | 41 41      | 171 53E | 799      | 2    | 457 | 490 | 462 | 559 | 589 | 554 | 536 | 500 | 498 | 538 | 584 | 541  | 6308        |
| WESTPORT MOW         | F11751  | 41 45      | 171 35E | 4        | 2    | 175 | 196 | 175 | 206 | 226 | 203 | 196 | 193 | 180 | 201 | 224 | 206  | 2381 CLOSED |
| WESTPORT AERODROME   | *F11752 | 41 44      | 171 35E | 2        | 1    | 155 | 168 | 157 | 191 | 201 | 188 | 183 | 170 | 170 | 183 | 201 | 185  | 2152        |
| WESTPORT SIG STN     | F11753  | 41 44      | 171 35E | 7        | 4    |     |     |     |     |     |     |     |     |     |     |     |      | 2150 CLOSED |
| WESTPORT             | F11761  | 41 45      | 171 36E | 3        | 2    | 152 | 173 | 157 | 193 | 201 | 185 | 183 | 175 | 170 | 186 | 198 | 183  | 2158        |
| DENNISTON            | F11781  | 41 44      | 171 48E | 2        |      | 163 | 173 | 165 | 198 | 208 | 196 | 191 | 178 | 178 | 191 | 208 | 193  | 2242 CLOSED |
| BULLER GORGE         | F11871  | 41 52      | 171 46E | 61       | 2    | 295 | 318 | 300 | 361 | 381 | 358 | 348 | 325 | 323 | 351 | 378 | 351  | 4089 CLOSED |
| TIRIROA BULLER GORGE | F11872  | 41 51      | 171 45E | 2        |      | 307 | 315 | 300 | 378 | 394 | 371 | 368 | 363 | 363 | 373 | 401 | 356  | 4289 CLOSED |
| BERLINS              | F11881  | 41 51      | 171 50E | 49       | 2    | 239 | 246 | 234 | 295 | 307 | 290 | 284 | 282 | 282 | 290 | 310 | 277  | 3336        |
| INANGAHUA            | F11891  | 41 51      | 171 57E | 61       | 2    | 168 | 173 | 163 | 206 | 213 | 201 | 198 | 198 | 196 | 203 | 216 | 193  | 2328        |
| INANGAHUA LANDING    | F11991  | 41 55      | 171 55E | 61       | 2    | 163 | 168 | 160 | 201 | 208 | 196 | 193 | 191 | 191 | 198 | 211 | 188  | 2268        |
| COBB POWER STATION   | F12071  | 41 05      | 172 44E | 213      | 1    | 107 | 122 | 152 | 180 | 236 | 178 | 211 | 206 | 173 | 185 | 155 | 142  | 2047        |
| TAKAKA HILL          | F12081  | 41 01      | 172 52E | 686      | 2    | 109 | 132 | 160 | 180 | 224 | 183 | 216 | 226 | 188 | 208 | 145 | 145  | 2116 CLOSED |
| KAIRURU              | F12091  | 41 01      | 172 54E | 610      | 2    | 168 | 173 | 163 | 191 | 244 | 193 | 254 | 241 | 198 | 203 | 163 | 173  | 2364        |
| COBB DAM             | *F12162 | 41 06      | 172 41E | 823      | 2    | 117 | 130 | 168 | 188 | 244 | 196 | 208 | 216 | 188 | 198 | 175 | 163  | 2191        |
| ASBESTOS COTTAGE     | F12171  | 41 07      | 172 42E | 823      | 2    | 127 | 142 | 180 | 213 | 279 | 211 | 249 | 244 | 206 | 218 | 183 | 170  | 2422 CLOSED |
| ASBESTOS MINE        | F12172  | 41 08      | 172 42E | 671      | 2    | 122 | 137 | 173 | 203 | 267 | 201 | 236 | 234 | 196 | 208 | 175 | 163  | 2315 CLOSED |
| KARAMEA              | F12211  | 41 15      | 172 07E | 2        | 1    | 127 | 142 | 137 | 168 | 163 | 175 | 137 | 142 | 142 | 170 | 196 | 160  | 1859        |
| CORBYVALE            | F12401  | 41 29      | 172 03E | 247      | 4    |     |     |     |     |     |     |     |     |     |     |     |      | 3800 CLOSED |
| CORBYVALE NO 1       | F12402  | 41 29      | 172 03E | 213      | 2    | 277 | 297 | 279 | 338 | 356 | 335 | 325 | 302 | 302 | 328 | 353 | 328  | 3820        |
| WHANGAPEKA           | F12461  | 41 27      | 172 36E | 3        |      | 120 | 140 | 160 | 190 | 220 | 180 | 200 | 190 | 170 | 170 | 160 | 150  | 2050 CLOSED |
| WANGAPEKA            | F12462  | 41 26      | 172 38E | 259      | 2    | 107 | 119 | 132 | 157 | 180 | 160 | 157 | 157 | 142 | 163 | 160 | 137  | 1771        |
| UPPER SHERRY RTVER   | F12471  | 41 28      | 172 42E | 4        |      |     |     |     |     |     |     |     |     |     |     |     |      | 2550 CLOSED |
| GOWAN                | F12751  | 41 45      | 172 35E | 411      | 2    | 130 | 132 | 135 | 165 | 180 | 145 | 157 | 163 | 157 | 165 | 160 | 155  | 1844 CLOSED |
| HOWARD               | F12761  | 41 46      | 172 40E | 488      | 3    | 140 | 140 | 130 | 170 | 180 | 170 | 170 | 180 | 180 | 170 | 180 | 160  | 1970        |
| TOPHOUSE AIRFIELD    | F12771  | 41 46      | 172 45E | 503      | 2    | 97  | 94  | 91  | 119 | 122 | 114 | 117 | 122 | 122 | 119 | 127 | 107  | 1351 CLOSED |
| TWYNHAM STN CRFEK    | F12772  | 41 43      | 172 42E | 2        |      | 109 | 107 | 102 | 135 | 137 | 130 | 130 | 137 | 137 | 135 | 142 | 122  | 1523 CLOSED |
| THE ROUNDELL         | F12781  | 41 47      | 172 53E | 683      | 2    | 112 | 109 | 104 | 137 | 142 | 135 | 135 | 140 | 140 | 137 | 147 | 124  | 1562 CLOSED |
| TOPHOUSE THREE       | F12793  | 41 46      | 172 54E | 640      | 2    | 97  | 102 | 107 | 132 | 147 | 130 | 137 | 137 | 127 | 127 | 127 | 114  | 1484 CLOSED |
| MURCHISON            | F12831  | 41 48      | 172 20E | 160      | 2    | 112 | 114 | 109 | 137 | 142 | 135 | 135 | 132 | 132 | 135 | 145 | 130  | 1558        |
| MURCHISON            | F12832  | 41 50      | 172 20E | 198      | 2    | 114 | 117 | 112 | 142 | 147 | 140 | 137 | 135 | 135 | 140 | 150 | 132  | 1601 CLOSED |
| CRYSTAL CREEK        | F12833  | 41 49      | 172 23E | 2        |      | 119 | 124 | 117 | 147 | 155 | 145 | 142 | 142 | 142 | 145 | 155 | 140  | 1673 CLOSED |
| SIX MILE CREEK       | F12834  | 41 52      | 172 20E | 198      | 2    | 127 | 130 | 124 | 155 | 163 | 152 | 152 | 150 | 150 | 155 | 165 | 147  | 1770        |
| TUTAKI NORTH         | F12841  | 41 49      | 172 29E | 279      | 2    | 114 | 117 | 112 | 140 | 145 | 137 | 135 | 135 | 135 | 137 | 147 | 130  | 1584 CLOSED |
| MANGLES VALLEY       | F12842  | 41 50      | 172 24E | 232      | 2    | 114 | 119 | 112 | 142 | 147 | 140 | 137 | 137 | 135 | 140 | 150 | 135  | 1608        |
| LAKE ROTOROA         | F12861  | 41 48      | 172 36E | 468      | 3    | 140 | 140 | 130 | 170 | 180 | 170 | 170 | 180 | 180 | 190 | 160 | 1990 |             |
| LAKE ROTOTI          | F12881  | 41 48      | 172 51E | 622      | 2    | 104 | 112 | 124 | 152 | 178 | 135 | 152 | 155 | 135 | 135 | 132 | 124  | 1638 CLOSED |
| LAKE ROTOTI          | *F12882 | 41 48      | 172 51E | 634      | 2    | 97  | 107 | 122 | 142 | 173 | 142 | 157 | 150 | 132 | 132 | 124 | 117  | 1595        |
| MATAKI STATION       | F12941  | 41 59      | 172 29E | 396      | 2    | 117 | 119 | 114 | 142 | 150 | 140 | 140 | 137 | 137 | 140 | 150 | 135  | 1621 CLOSED |
| HOKITIKA SOUTH       | *F20791 | 42 43      | 170 57E | 4        | 2    | 226 | 251 | 221 | 224 | 246 | 201 | 213 | 218 | 229 | 251 | 269 | 226  | 2775 CLOSED |
| RIMU                 | F20792  | 42 46      | 170 59E | 67       | 2    | 249 | 277 | 244 | 246 | 272 | 221 | 234 | 241 | 251 | 279 | 300 | 251  | 3065 CLOSED |
| HOKITIKA AERODROME   | *F20793 | 42 43      | 170 59E | 39       | 1    | 231 | 251 | 239 | 234 | 272 | 229 | 241 | 236 | 239 | 257 | 277 | 234  | 2940        |
| CAMELBACK            | F20891  | 42 53      | 170 58E | 61       | 2    | 284 | 318 | 279 | 282 | 310 | 254 | 267 | 274 | 287 | 318 | 340 | 287  | 3500 CLOSED |
| ROSS                 | F20981  | 42 54      | 170 49E | 30       | 1    | 277 | 318 | 262 | 269 | 284 | 224 | 236 | 254 | 277 | 312 | 335 | 279  | 3327        |
| PUNAKAIKI            | F21131  | 42 10      | 171 20E | 12       | 2    | 201 | 206 | 196 | 221 | 229 | 198 | 198 | 196 | 206 | 229 | 241 | 218  | 2539 CLOSED |
| MAI MAI TWO          | F21172  | 42 08      | 171 46E | 189      | 2    | 132 | 132 | 127 | 150 | 155 | 140 | 142 | 142 | 152 | 157 | 168 | 147  | 1744 CLOSED |
| MAI MAI              | F21173  | 42 06      | 171 46E | 198      | 2    | 201 | 198 | 191 | 226 | 231 | 211 | 211 | 213 | 226 | 236 | 251 | 221  | 2616 CLOSED |
| REEFTON              | F21181  | 42 07      | 171 52E | 204      | 1    | 140 | 137 | 132 | 170 | 175 | 168 | 168 | 175 | 175 | 173 | 183 | 155  | 1951        |
| REEFTON              | *F21182 | 42 07      | 171 51E | 198      | 2    | 150 | 152 | 142 | 175 | 178 | 170 | 165 | 168 | 175 | 180 | 196 | 165  | 2016        |
| WAIMAUNGA            | F21272  | 42 14      | 171 42E | 122      | 2    | 132 | 132 | 124 | 152 | 155 | 147 | 142 | 145 | 152 | 157 | 173 | 145  | 1756        |
| WAIUTA               | F21281  | 42 17      | 171 49E | 427      | 2    | 145 | 145 | 135 | 168 | 170 | 163 | 157 | 160 | 168 | 170 | 188 | 157  | 1926 CLOSED |
| REWANUI STATE MINE   | F21331  | 42 22      | 171 19E | 192      | 1    | 328 | 328 | 312 | 343 | 348 | 307 | 307 | 300 | 338 | 368 | 394 | 358  | 4031        |
| BLACKBALL            | F21341  | 42 22      | 171 25E | 107      | 2    | 274 | 279 | 259 | 295 | 295 | 272 | 262 | 257 | 290 | 312 | 340 | 300  | 3435        |
| ATARAU               | F21351  | 42 20      | 171 30E | 43       | 2    | 216 | 218 | 203 | 229 | 231 | 213 | 206 | 201 | 226 | 244 | 267 | 234  | 2688        |
| TOTARA FLAT          | *F21361 | 42 18      | 171 37E | 77       | 2    | 145 | 145 | 135 | 168 | 170 | 163 | 157 | 160 | 168 | 170 | 188 | 157  | 1926        |
| GRYMOUTH             | F21421  | 42 27      | 171 12E | 3        |      |     |     |     |     |     |     |     |     |     |     |     |      |             |

| STATION              | NUMBER  | NZ METEOROLOGICAL SERVICE |         |          | 25 RAINFALL NORMALS 1941-70. MILLIMETRES |     |     |     |     |     |     |     |     |     |     |     |      |        |        |
|----------------------|---------|---------------------------|---------|----------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|--------|
|                      |         | LAT<br>S.                 | LONG    | HT<br>M. | TYPE                                     | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR   |        |
| INCHBONNIE           | F21641  | 42 41                     | 171 27E | 116      | 2  | 363 | 399 | 338 | 384 | 391 | 348 | 338 | 343 | 384 | 419 | 462 | 384  | 4553   |        |
| ROTOHANU             | F21653  | 42 39                     | 171 34E | 107      | 2  | 274 | 302 | 254 | 290 | 295 | 262 | 254 | 259 | 290 | 315 | 348 | 290  | 3433   |        |
| KANIHERE             | F21701  | 42 45                     | 171 00E | 8        | 2  | 251 | 284 | 246 | 257 | 279 | 231 | 241 | 244 | 262 | 287 | 310 | 257  | 3149   | CLOSED |
| TAIPO                | F21741  | 42 45                     | 171 25E | 122      | 3  | 350 | 370 | 350 | 370 | 370 | 320 | 350 | 350 | 430 | 410 | 460 | 370  | 4500   | CLOSED |
| KOHWHITIRANGI NO 2   | F21801  | 42 53                     | 171 02E | 46       | 2  | 325 | 366 | 318 | 330 | 361 | 300 | 312 | 315 | 338 | 371 | 399 | 333  | 4068   |        |
| UPPER KOKATAHI       | F21811  | 42 52                     | 171 06E |          | 2  | 297 | 328 | 277 | 315 | 320 | 284 | 277 | 279 | 315 | 343 | 378 | 315  | 3728   | CLOSED |
| LAKE KANIHERE        | F21812  | 42 48                     | 171 08E | 133      | 1  | 333 | 389 | 310 | 338 | 351 | 287 | 292 | 307 | 345 | 386 | 419 | 343  | 4100   |        |
| OTIRA SUB STN        | F21851  | 42 50                     | 171 34E | 383      | 1  | 399 | 417 | 343 | 419 | 437 | 371 | 356 | 391 | 472 | 493 | 544 | 432  | 5074   |        |
| KOHWHITIRANGI        | F21901  | 42 55                     | 171 04E |          | 2  | 297 | 335 | 290 | 302 | 330 | 274 | 284 | 290 | 307 | 338 | 366 | 302  | 3715   | CLOSED |
| DUMFREITH            | F22021  | 42 04                     | 172 15E | 347      | 2  | 145 | 147 | 132 | 165 | 173 | 155 | 152 | 163 | 178 | 180 | 196 | 160  | 1946   |        |
| GLENROY              | F22031  | 42 04                     | 172 20E | 457      | 2  | 142 | 145 | 130 | 163 | 168 | 152 | 150 | 160 | 173 | 175 | 191 | 157  | 1906   | CLOSED |
| SPRINGS JUNCTION     | F22311  | 42 20                     | 172 11E | 421      | 2  | 168 | 170 | 150 | 191 | 198 | 178 | 175 | 188 | 206 | 208 | 224 | 185  | 2241   |        |
| LEWIS PASS           | F22341  | 42 23                     | 172 24E | 911      | 2  | 211 | 221 | 183 | 224 | 231 | 198 | 188 | 208 | 251 | 262 | 290 | 229  | 2696   |        |
| GREY ROBINSON RIVERS | F22401  | 42 28                     | 172 01E | 366      | 2  | 221 | 254 | 180 | 251 | 251 | 241 | 208 | 198 | 244 | 279 | 320 | 224  | 2871   |        |
| LOWER HARIHARI       | F30051  | 43 05                     | 170 32E | 30       | 2  | 287 | 320 | 277 | 267 | 277 | 208 | 231 | 251 | 282 | 315 | 335 | 287  | 3337   | CLOSED |
| WAITAHA VALLEY       | F30071  | 43 04                     | 170 44E | 70       | 2  | 373 | 450 | 323 | 368 | 330 | 257 | 272 | 287 | 328 | 422 | 450 | 353  | 4213   | CLOSED |
| HARI HARI            | F30151  | 43 07                     | 170 33E |          | 2  | 323 | 351 | 318 | 284 | 292 | 211 | 241 | 269 | 312 | 345 | 363 | 323  | 3632   | CLOSED |
| HARI HARI            | F30152  | 43 09                     | 170 33E | 49       | 2  | 361 | 389 | 333 | 312 | 328 | 264 | 257 | 284 | 358 | 447 | 445 | 312  | 4090   |        |
| FIVE M BEACH OKARITO | *F30153 | 43 09                     | 170 33E | 45       | 2  | 340 | 384 | 340 | 292 | 325 | 254 | 241 | 269 | 345 | 427 | 419 | 300  | 3936   |        |
| F30211               | 43 16   | 170 07E                   | 3       | 2        | 277                                      | 307 | 267 | 254 | 264 | 201 | 221 | 241 | 269 | 302 | 320 | 277 | 3200 | CLOSED |        |
| LOWER WHATAROA       | F30231  | 43 12                     | 170 22E | 30       | 2  | 302 | 358 | 292 | 284 | 300 | 236 | 262 | 272 | 302 | 345 | 368 | 302  | 3623   |        |
| WHATAROA             | F30232  | 43 17                     | 170 23E | 69       | 2  | 384 | 437 | 361 | 343 | 353 | 257 | 297 | 305 | 386 | 414 | 424 | 386  | 4347   | CLOSED |
| WHATAROA             | F30233  | 43 16                     | 170 22E | 64       | 2  | 401 | 437 | 381 | 345 | 394 | 282 | 295 | 292 | 384 | 467 | 465 | 353  | 4496   |        |
| TE TAHO              | F30241  | 43 13                     | 170 26E |          | 2  | 323 | 409 | 323 | 292 | 318 | 239 | 290 | 297 | 320 | 366 | 389 | 335  | 3901   | CLOSED |
| FRANZ JOSEF          | *F30311 | 43 23                     | 170 11E | 122      | 1  | 457 | 495 | 450 | 401 | 411 | 297 | 343 | 381 | 439 | 488 | 513 | 455  | 5130   |        |
| FOX GLACIER          | F30401  | 43 28                     | 170 01E | 91       | 2  | 417 | 452 | 432 | 376 | 389 | 302 | 323 | 351 | 411 | 429 | 483 | 404  | 4769   |        |
| JACKSONS BAY         | *F38961 | 43 59                     | 168 37E | 8        | 2  | 378 | 409 | 432 | 366 | 356 | 302 | 287 | 312 | 386 | 384 | 455 | 376  | 4443   | CLOSED |
| OKURA                | F38991  | 43 54                     | 168 55E |          | 2  | 249 | 307 | 348 | 302 | 246 | 343 | 251 | 325 | 345 | 264 | 318 | 290  | 3588   | CLOSED |
| GILLESPIES BEACH     | F39481  | 43 25                     | 169 49E | 6        | 2  | 272 | 295 | 279 | 244 | 254 | 196 | 211 | 226 | 267 | 279 | 315 | 326  | 3100   | CLOSED |
| BRUCE BAY MAHITAHU   | F39551  | 43 35                     | 169 30E | 15       | 2  | 363 | 394 | 376 | 328 | 340 | 264 | 282 | 305 | 361 | 373 | 422 | 351  | 4159   | CLOSED |
| KARANGARUA           | F39581  | 43 32                     | 169 50E | 61       | 2  | 335 | 366 | 348 | 305 | 312 | 244 | 262 | 282 | 333 | 345 | 389 | 325  | 3846   | CLOSED |
| MAHITAHU             | F39662  | 43 38                     | 169 36E | 15       | 2  | 381 | 414 | 394 | 345 | 356 | 277 | 295 | 320 | 378 | 394 | 442 | 368  | 4364   |        |
| BRUCE BAY            | F39663  | 43 36                     | 169 36E | 5        | 2  | 345 | 373 | 356 | 312 | 323 | 249 | 267 | 290 | 340 | 356 | 399 | 333  | 3943   | CLOSED |
| PARINGA              | F39741  | 43 43                     | 169 28E | 40       | 2  | 475 | 516 | 493 | 429 | 445 | 345 | 368 | 399 | 470 | 490 | 551 | 460  | 5441   |        |
| HAAST                | *F39801 | 43 52                     | 169 00E | 4        | 1  | 297 | 323 | 323 | 277 | 287 | 239 | 239 | 251 | 302 | 295 | 358 | 279  | 3470   |        |
| ROARING BILLY HAAST  | F39931  | 43 56                     | 169 18E | 122      | 3  | 460 | 500 | 480 | 410 | 430 | 330 | 360 | 390 | 460 | 470 | 530 | 450  | 5270   | CLOSED |
| MILFORD SOUND        | *F47691 | 44 40                     | 167 55E | 3        | 1  | 531 | 569 | 630 | 526 | 483 | 419 | 378 | 424 | 538 | 546 | 638 | 554  | 6236   |        |
| MARIAN CAMP          | F48801  | 44 49                     | 168 05E | 344      | 3  | 360 | 390 | 430 | 360 | 330 | 280 | 260 | 290 | 370 | 370 | 430 | 380  | 4250   | CLOSED |
| HAAST PASS           | F49132  | 44 06                     | 169 22E | 524      | 3  | 310 | 320 | 340 | 300 | 330 | 270 | 290 | 310 | 350 | 350 | 390 | 310  | 3870   |        |
| DEEP COVE            | F57411  | 45 28                     | 167 10E | 9        | 3  | 450 | 480 | 530 | 450 | 410 | 360 | 320 | 360 | 460 | 460 | 540 | 470  | 5290   |        |
| WILMOT PASS          | F57511  | 45 30                     | 167 11E | 671      | 2  | 574 | 615 | 683 | 569 | 521 | 455 | 409 | 460 | 582 | 592 | 688 | 599  | 6747   |        |
| PUYSEGUR PNT LH      | F66161  | 46 09                     | 166 37E | 44       | 1  | 196 | 201 | 216 | 213 | 203 | 211 | 173 | 178 | 191 | 185 | 203 | 185  | 2355   |        |
| PT HARDY DURVILLE IS | G03781  | 40 46                     | 173 51E | 30       | 2  | 79  | 81  | 81  | 91  | 117 | 107 | 122 | 109 | 91  | 104 | 89  | 84   | 1155   |        |
| WAIUA                | G03791  | 40 46                     | 173 54E | 3        | 2  | 76  | 81  | 79  | 86  | 117 | 102 | 119 | 109 | 86  | 91  | 86  | 79   | 1111   | CLOSED |
| PORT HARDY           | G03792  | 40 46                     | 173 54E |          | 2  | 74  | 71  | 76  | 86  | 102 | 99  | 107 | 97  | 84  | 99  | 81  | 79   | 1055   | CLOSED |
| PATUKI               | G03793  | 40 44                     | 173 58E | 183      | 2  | 74  | 74  | 76  | 84  | 107 | 99  | 112 | 102 | 84  | 94  | 81  | 76   | 1063   |        |
| MANUWHAKAPAKAPA      | G03881  | 40 53                     | 173 48E |          | 2  | 76  | 79  | 81  | 89  | 114 | 104 | 119 | 107 | 89  | 102 | 86  | 81   | 1127   | CLOSED |
| GREVILLE HARBOUR     | G03882  | 40 48                     | 173 49E |          | 2  | 84  | 86  | 86  | 97  | 122 | 112 | 127 | 114 | 97  | 109 | 94  | 89   | 1217   |        |
| HAMILTON BAY         | G03981  | 40 59                     | 173 51E |          | 2  | 89  | 97  | 91  | 99  | 137 | 117 | 140 | 127 | 102 | 109 | 99  | 91   | 1298   | CLOSED |
| WAITATA BAY          | G03991  | 40 59                     | 173 54E | 9        | 2  | 91  | 99  | 94  | 102 | 140 | 122 | 142 | 132 | 104 | 112 | 102 | 94   | 1334   | CLOSED |
| STEPHEN'S IS LH      | *G04601 | 40 40                     | 174 00E | 187      | 1  | 56  | 53  | 58  | 66  | 79  | 76  | 84  | 74  | 66  | 76  | 64  | 61   | 813    |        |
| RIWAKA VALLEY        | G12091  | 41 03                     | 172 55E | 61       | 2  | 84  | 117 | 135 | 160 | 188 | 142 | 183 | 188 | 147 | 150 | 127 | 122  | 1743   |        |
| RIWAKA, MOTUEKA      | *G12191 | 41 06                     | 172 58E | 8        | 2  | 74  | 99  | 104 | 127 | 155 | 119 | 145 | 140 | 117 | 112 | 89  | 91   | 1372   |        |
| LOWER MOUTERE        | G12193  | 41 09                     | 172 59E | 5        | 2  | 69  | 79  | 97  | 114 | 145 | 109 | 130 | 127 | 109 | 107 | 89  | 86   | 1261   |        |
| LOWER MOUTERE WEST   | G12194  | 41 10                     | 172 58E | 27       | 2  | 71  | 81  | 97  | 114 | 145 | 109 | 130 | 127 | 112 | 107 | 89  | 86   | 1268   |        |
| GRAHAM V. POKORORO   | G12281  | 41 12                     | 172 50E | 152      | 3  | 90  | 100 | 120 | 140 | 180 | 140 | 160 | 160 | 140 | 140 | 120 | 120  | 1610   |        |
| THORPE               | G12282  | 41 17                     | 172 51E | 91       | 3  | 80  | 90  | 100 | 120 | 150 | 120 | 140 | 130 | 110 | 110 | 100 | 100  | 1350   |        |
| BATON                | G12371  | 41 19                     | 172 43E | 201      | 2  | 94  | 102 | 119 | 140 | 170 | 137 | 155 | 147 | 130 | 127 | 119 | 114  | 1554   |        |
| STANLEY BROOK        | G12381  | 41 19                     | 172 50E | 116      | 1  | 76  | 81  | 94  | 112 | 135 | 109 | 122 | 117 | 104 | 102 | 97  | 91   | 1240   |        |
| DOVEDALE             | G12391  | 41 18                     | 172 55E | 137      | 3  | 70  | 80  | 90  | 110 | 130 | 110 | 120 | 110 | 100 | 100 | 90  | 90   | 1200   |        |
| HOGREN VALLEY        | G12392  | 41 21                     | 172 56E | 229      | 2  | 74  | 79  | 91  | 102 | 127 | 99  | 112 | 112 | 94  | 94  | 86  | 81   | 1151   | CLOSED |
| MOTUPIKO             | G12481  | 41 27                     | 172 49E | 183      | 2  | 74  | 79  | 84  | 102 | 117 | 94  | 104 | 102 | 94  | 97  | 91  | 89   | 1127   |        |
| HIGHFIELD            | G12491  | 41 29                     | 172 59E | 259      | 3  | 90  | 90  | 90  | 110 | 120 | 100 | 100 | 100 | 110 | 110 | 100 | 100  | 1230   |        |
| KAKA                 | G12561  | 41 34                     | 172 41E | 396      | 2  | 109 | 114 | 124 | 147 | 170 | 140 | 152 | 150 | 140 | 142 | 135 | 130  | 1653   |        |
| GOLDEN DOWNS FOREST  | *G12581 | 41 33                     | 172 53E | 274      | 1  | 94  | 97  | 99  | 119 | 132 | 107 | 114 | 119 | 114 | 119 | 117 |      |        |        |

## NZ METEOROLOGICAL SERVICE 26 RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION               | NUMBER  | LAT S. | LONG    | HT M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC         | YEAR        |
|-----------------------|---------|--------|---------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| MAPUA                 | G13203  | 41 15  | 173 05E | 15    | 2    | 66  | 66  | 81  | 91  | 109 | 81  | 91  | 94  | 79  | 81  | 69  | 69          | 977         |
| APPLEBY               | *G13211 | 41 17  | 173 06E | 17    | 1    | 64  | 66  | 81  | 86  | 109 | 81  | 91  | 94  | 79  | 79  | 71  | 66          | 967         |
| CLIFTON TCE NELSON    | G13221  | 41 16  | 173 16E | 3     |      | 60  | 70  | 80  | 90  | 110 | 90  | 100 | 100 | 90  | 80  | 70  | 70          | 1010 CLOSED |
| NELSON AERO           | *G13222 | 41 17  | 173 14E | 2     | 1    | 74  | 74  | 81  | 89  | 112 | 79  | 91  | 94  | 76  | 81  | 74  | 74          | 999         |
| NELSON                | *G13231 | 41 17  | 173 18E | 10    | 2    | 71  | 71  | 84  | 91  | 114 | 84  | 94  | 99  | 79  | 84  | 74  | 74          | 1019 CLOSED |
| MAITAI VALLEY         | G13232  | 41 17  | 173 21E | 116   | 2    | 112 | 114 | 127 | 137 | 173 | 122 | 140 | 145 | 117 | 124 | 112 | 114         | 1537        |
| ATAWHAI NELSON        | G13233  | 41 14  | 173 20E | 2     |      | 64  | 66  | 79  | 84  | 107 | 81  | 91  | 94  | 79  | 79  | 69  | 66          | 959 CLOSED  |
| WHANGAMOA             | G13241  | 41 13  | 173 27E | 259   | 2    | 130 | 130 | 145 | 157 | 201 | 142 | 160 | 168 | 135 | 142 | 130 | 132         | 1772 CLOSED |
| RAI VALLEY            | *G13251 | 41 14  | 173 35E | 79    | 2    | 135 | 127 | 140 | 165 | 218 | 163 | 183 | 198 | 163 | 165 | 168 | 145         | 1970        |
| OPOURI VALLEY         | G13261  | 41 13  | 173 41E | 116   | 2    | 155 | 145 | 157 | 188 | 249 | 185 | 208 | 226 | 185 | 188 | 191 | 165         | 2242 CLOSED |
| CANCASTOWN            | G13262  | 41 17  | 173 40E | 6     | 2    | 122 | 109 | 127 | 147 | 203 | 152 | 191 | 185 | 155 | 147 | 135 | 124         | 1797 CLOSED |
| HAVELOCK              | G13271  | 41 17  | 173 46E | 30    | 1    | 117 | 109 | 119 | 142 | 185 | 140 | 155 | 170 | 137 | 142 | 142 | 124         | 1682        |
| LINKWATER             | G13281  | 41 17  | 173 52E | 18    | 1    | 91  | 84  | 102 | 119 | 163 | 122 | 157 | 155 | 122 | 117 | 112 | 102         | 1446        |
| MOUTERE HILLS         | *G13301 | 41 22  | 173 05E | 137   | 3    | 70  | 80  | 90  | 100 | 120 | 90  | 100 | 100 | 90  | 90  | 80  | 80          | 1090        |
| BRIGHTWATER           | *G13310 | 41 23  | 173 09E | 27    | 3    | 60  | 70  | 80  | 100 | 120 | 90  | 110 | 100 | 90  | 90  | 80  | 80          | 1070 CLOSED |
| RODING RIVER          | G13321  | 41 22  | 173 16E | 183   | 3    | 100 | 100 | 120 | 120 | 160 | 110 | 130 | 140 | 110 | 110 | 100 | 100         | 1400        |
| MAITAI                | G13331  | 41 18  | 173 22E | 152   | 2    | 119 | 119 | 140 | 150 | 191 | 140 | 157 | 163 | 132 | 137 | 122 | 119         | 1689 CLOSED |
| DEEP CREEK            | G13362  | 41 22  | 173 37E | 85    | 2    | 183 | 170 | 188 | 224 | 292 | 218 | 246 | 267 | 218 | 221 | 226 | 193         | 2646 CLOSED |
| CANCASTOWN            | G13363  | 41 18  | 173 40E | 14    | 2    | 112 | 104 | 119 | 140 | 188 | 140 | 170 | 175 | 140 | 140 | 137 | 122         | 1687        |
| HAVELOCK SUBURBAN     | G13371  | 41 20  | 173 46E | 17    | 3    | 100 | 90  | 100 | 120 | 170 | 120 | 150 | 170 | 120 | 120 | 110 | 110         | 1490        |
| WAIAKAKAHO            | G13381  | 41 23  | 173 51E | 67    | 2    | 97  | 89  | 107 | 127 | 173 | 130 | 165 | 163 | 130 | 124 | 119 | 107         | 1531 CLOSED |
| KOROMIKO              | G13391  | 41 21  | 173 58E | 24    | 2    | 112 | 104 | 112 | 114 | 157 | 117 | 142 | 127 | 114 | 117 | 112 | 114         | 1442        |
| WAKEFIELD SCHOOL      | G13401  | 41 25  | 173 03E | 2     |      | 79  | 81  | 97  | 104 | 132 | 99  | 109 | 114 | 94  | 97  | 84  | 79          | 1169 CLOSED |
| WAIROA GORGE          | G13402  | 41 29  | 173 05E | 198   | 2    | 94  | 99  | 119 | 127 | 160 | 122 | 135 | 140 | 114 | 117 | 104 | 97          | 1428 CLOSED |
| WAKEFIELD NO 3        | G13404  | 41 24  | 173 03E | 56    | 3    | 80  | 80  | 90  | 100 | 120 | 90  | 100 | 110 | 90  | 100 | 90  | 90          | 1140        |
| ONAMALUTU             | G13461  | 41 28  | 173 41E | 116   | 2    | 104 | 99  | 109 | 130 | 173 | 122 | 152 | 155 | 130 | 130 | 122 | 117         | 1543        |
| KAITUNA               | G13483  | 41 28  | 173 48E | 2     |      | 64  | 56  | 64  | 71  | 99  | 74  | 91  | 86  | 76  | 74  | 64  | 61          | 880 CLOSED  |
| GROVETOWN             | G13491  | 41 29  | 173 58E | 6     | 2    | 51  | 43  | 51  | 56  | 76  | 58  | 69  | 66  | 56  | 56  | 51  | 48          | 681         |
| SPRING CREEK          | G13492  | 41 26  | 173 59E | 2     |      | 56  | 48  | 56  | 61  | 86  | 66  | 81  | 76  | 66  | 66  | 56  | 53          | 769 CLOSED  |
| TOP VALLEY, LOWER     | G13541  | 41 33  | 173 25E | 227   | 2    | 86  | 84  | 89  | 112 | 137 | 99  | 119 | 127 | 104 | 104 | 102 | 97          | 1260 CLOSED |
| FABIANS VALLEY        | G13551  | 41 31  | 173 35E | 152   | 2    | 94  | 91  | 99  | 119 | 150 | 109 | 132 | 137 | 114 | 114 | 112 | 104         | 1375        |
| WAIARAU VALLEY        | G13552  | 41 33  | 173 34E | 124   | 1    | 69  | 66  | 71  | 84  | 112 | 79  | 99  | 99  | 84  | 84  | 79  | 76          | 1002        |
| BLENHEIM AERO         | *G13581 | 41 31  | 173 52E | 27    | 1    | 53  | 48  | 53  | 61  | 84  | 61  | 71  | 71  | 64  | 61  | 58  | 53          | 738         |
| SEVENOAKS             | G13582  | 41 32  | 173 49E | 55    | 3    | 60  | 50  | 50  | 60  | 80  | 60  | 70  | 70  | 60  | 60  | 60  | 60          | 740         |
| FAIRHALL              | G13583  | 41 33  | 173 51E | 65    | 1    | 56  | 46  | 48  | 56  | 79  | 56  | 69  | 66  | 58  | 58  | 56  | 53          | 701         |
| ST LEONARDS           | G13591  | 41 30  | 173 58E | 9     | 2    | 53  | 46  | 48  | 56  | 76  | 58  | 69  | 64  | 56  | 56  | 53  | 51          | 686 CLOSED  |
| BLENHEIM              | *G13592 | 41 31  | 173 57E | 4     | 1    | 51  | 43  | 51  | 53  | 76  | 58  | 66  | 61  | 53  | 53  | 48  | 51          | 664         |
| WITHER HILLS          | *G13595 | 41 33  | 173 58E | 32    | 2    | 53  | 46  | 53  | 56  | 79  | 61  | 69  | 64  | 56  | 56  | 51  | 51          | 695         |
| BENEAGLE              | G13596  | 41 35  | 173 56E | 183   | 2    | 61  | 53  | 58  | 66  | 91  | 69  | 79  | 74  | 66  | 66  | 61  | 61          | 805         |
| THE BRANCH            | G13612  | 41 41  | 173 11E | 362   | 1    | 89  | 97  | 102 | 130 | 145 | 104 | 119 | 130 | 112 | 112 | 112 | 104         | 1356        |
| WYE HILLS             | G13632  | 41 38  | 173 20E | 244   | 3    | 70  | 70  | 80  | 100 | 110 | 80  | 90  | 100 | 90  | 90  | 90  | 80          | 1050 CLOSED |
| GLEMNAE               | G13641  | 41 37  | 173 24E | 229   | 1    | 74  | 71  | 76  | 97  | 114 | 84  | 99  | 107 | 89  | 89  | 86  | 81          | 1067        |
| WAIHOPAI POWER STN    | *G13651 | 41 40  | 173 34E | 262   | 1    | 69  | 64  | 64  | 76  | 89  | 69  | 79  | 79  | 74  | 76  | 76  | 891         |             |
| AVONDALE              | G13661  | 41 41  | 173 38E | 244   | 2    | 64  | 58  | 58  | 69  | 81  | 61  | 74  | 71  | 69  | 69  | 71  | 71          | 816 CLOSED  |
| TYNTESFIELD           | G13671  | 41 36  | 173 45E | 183   | 2    | 53  | 48  | 53  | 61  | 76  | 56  | 69  | 69  | 61  | 61  | 58  | 726         |             |
| THE BARRACKS          | G13672  | 41 36  | 173 47E | 198   | 2    | 58  | 48  | 53  | 61  | 76  | 58  | 71  | 66  | 58  | 61  | 58  | 61          | 729         |
| THE LEATHAM           | G13721  | 41 45  | 173 12E | 466   | 3    | 80  | 80  | 80  | 110 | 120 | 90  | 100 | 110 | 100 | 100 | 90  | 90          | 1160        |
| SPRAY POINT           | G13741  | 41 44  | 173 26E | 457   | 3    | 80  | 70  | 90  | 110 | 120 | 80  | 90  | 100 | 90  | 90  | 90  | 80          | 1040        |
| BERRIDALE             | G13742  | 41 42  | 173 29E | 305   | 2    | 97  | 86  | 89  | 104 | 124 | 91  | 109 | 107 | 99  | 104 | 107 | 104         | 1221 CLOSED |
| WELDS HILL            | G13781  | 41 46  | 173 51E | 290   | 2    | 74  | 53  | 61  | 91  | 71  | 89  | 81  | 64  | 71  | 66  | 71  | 861 CLOSED  |             |
| AOTEA                 | G13782  | 41 47  | 173 49E | 305   | 2    | 74  | 56  | 66  | 76  | 99  | 71  | 94  | 84  | 71  | 79  | 74  | 74          | 918         |
| THE HALDONS           | G13791  | 41 45  | 173 59E | 262   | 2    | 64  | 48  | 56  | 58  | 84  | 64  | 81  | 71  | 53  | 58  | 56  | 61          | 754         |
| MARAMA                | G13792  | 41 44  | 173 56E | 213   | 1    | 69  | 51  | 58  | 64  | 86  | 66  | 84  | 76  | 58  | 66  | 61  | 66          | 805         |
| DUNTRON               | G13871  | 41 49  | 173 46E | 311   | 1    | 64  | 51  | 58  | 71  | 89  | 64  | 84  | 74  | 66  | 74  | 71  | 66          | 832         |
| THE JORDAN, AWATERE V | *G13872 | 41 49  | 173 46E | 305   | 3    | 70  | 50  | 70  | 80  | 100 | 70  | 90  | 80  | 70  | 80  | 70  | 70          | 910 CLOSED  |
| MIDDLEHURST           | G13941  | 41 59  | 173 27E | 732   | 3    | 60  | 50  | 50  | 60  | 80  | 50  | 70  | 60  | 60  | 60  | 60  | 60          | 720         |
| UPCOT AWATERE VALLEY  | G13951  | 41 54  | 173 34E | 543   | 1    | 61  | 51  | 56  | 66  | 79  | 56  | 69  | 66  | 61  | 66  | 66  | 64          | 761         |
| TITIRANGI BAY         | G14012  | 41 01  | 174 09E | 46    | 3    | 110 | 110 | 110 | 120 | 160 | 140 | 170 | 150 | 120 | 130 | 120 | 110         | 1550        |
| MANAROA               | G14101  | 41 07  | 174 02E | 4     | 1    | 102 | 112 | 107 | 117 | 157 | 137 | 163 | 147 | 119 | 124 | 117 | 107         | 1509        |
| WAITARIA BAY          | G14102  | 41 10  | 174 02E | 12    | 2    | 165 | 165 | 168 | 178 | 241 | 193 | 234 | 211 | 178 | 185 | 175 | 170         | 2263        |
| ENDEAVOUR INLET       | G14111  | 41 06  | 174 10E | 2     |      | 140 | 152 | 145 | 157 | 216 | 185 | 218 | 203 | 160 | 170 | 157 | 147         | 2050 CLOSED |
| THE BROTHERS LH       | G14141  | 41 06  | 174 27E | 66    | 1    | 46  | 46  | 48  | 61  | 71  | 66  | 71  | 66  | 58  | 58  | 48  | 53          | 692         |
| PICTON FREEZING WKS.  | G14201  | 41 17  | 174 00E | 30    | 3    | 100 | 100 | 100 | 110 | 150 | 120 | 140 | 130 | 110 | 110 | 110 | 100         | 1380        |
| PICTON                | G14203  | 41 16  | 174 02E | 2     |      | 102 | 102 | 104 | 109 | 150 | 119 | 145 | 132 | 109 | 114 | 109 | 107         | 1402 CLOSED |
| RUAKAKA BAY           | G14211  | 41 12  | 174 08E | 2     |      | 107 | 107 | 114 | 155 | 124 | 150 | 137 | 114 | 119 | 112 | 109 | 1455 CLOSED |             |
| PICTON                | G14301  | 41 18  | 174 00E | 6     | 3    | 120 | 110 | 110 | 120 | 160 | 120 | 150 | 130 | 120 | 120 | 120 | 120         | 1500 CLOSED |
| ROBIN HOOD BAY        | G14302  | 41 21  | 174 04E | 2     |      | 91  | 79  | 91  | 102 | 140 | 107 | 130 | 122 | 109 | 104 | 91  | 86          | 1252 CLOSED |
| OCEAN BAY             | G14311  | 41 20  | 174 06E | 9     | 1    | 102 | 94  | 102 | 104 | 142 | 107 | 130 | 117 | 104 | 107 | 102 | 104         | 1315        |
| MARSHLANDS            | G14401  | 41 27  | 174 00E | 3     | 1    | 56  | 48  | 56  | 61  | 86  | 66  | 79  | 74  | 66  | 64  | 56  | 53          | 765         |
| SEDDON                | G14601  | 41 40  | 174 05E | 85    | 1    | 53  | 43  | 48  | 51  | 71  | 58  | 69  | 61  | 48  | 51  | 46  | 48          | 647         |

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NZ METEOROLOGICAL SERVICE RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT.<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR        |
|----------------------|---------|------------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------------|
| CAPE CAMPBELL LH     | *G14721 | 41 44      | 174 17E | 3        | 1    | 48  | 43  | 48  | 53  | 81  | 66  | 76  | 64  | 48  | 51  | 46  | 48   | 672         |
| CHANCEY WARD         | G14811  | 41 50      | 174 11E | 20       | 1    | 58  | 48  | 56  | 64  | 89  | 71  | 89  | 79  | 51  | 56  | 53  | 61   | 775         |
| BRACKENDALE          | G14812  | 41 50      | 174 07E | 104      | 2    | 61  | 51  | 58  | 66  | 97  | 76  | 91  | 81  | 56  | 58  | 56  | 61   | 812         |
| BUNNY FLAT           | G22441  | 42 26      | 172 24E | 732      | 2    | 180 | 168 | 188 | 206 | 244 | 208 | 216 | 236 | 185 | 198 | 188 | 206  | 2423        |
| BOYLE RIVER          | G22531  | 42 34      | 172 21E | 518      | 2    | 119 | 112 | 127 | 137 | 163 | 137 | 145 | 157 | 124 | 132 | 124 | 137  | CLOSED 1614 |
| HANMER FOREST        | *G22581 | 42 31      | 172 51E | 387      | 1    | 86  | 81  | 91  | 99  | 117 | 99  | 104 | 114 | 89  | 97  | 89  | 99   | 1165        |
| THE POPLARS          | G22641  | 42 36      | 172 26E | 539      | 2    | 91  | 86  | 97  | 107 | 124 | 107 | 112 | 122 | 94  | 102 | 97  | 104  | 1243        |
| GLYNN WYE STN        | G22651  | 42 36      | 172 31E | 564      | 2    | 81  | 74  | 84  | 91  | 109 | 91  | 97  | 104 | 81  | 89  | 84  | 91   | 1076        |
| MOLESWORTH           | *G23021 | 42 05      | 173 16E | 893      | 3    | 50  | 50  | 50  | 60  | 70  | 50  | 60  | 60  | 50  | 60  | 60  | 60   | 680         |
| ELLERTON             | G23091  | 42 01      | 173 59E | 61       | 1    | 81  | 48  | 69  | 69  | 102 | 64  | 91  | 79  | 51  | 56  | 56  | 56   | 822         |
| BLUFF STATION        | G23151  | 42 09      | 173 31E | 427      | 2    | 56  | 48  | 51  | 61  | 71  | 51  | 64  | 61  | 56  | 61  | 61  | 58   | 699         |
| WOODBANK             | G23181  | 42 08      | 173 53E | 61       | 2    | 81  | 48  | 71  | 69  | 102 | 64  | 94  | 81  | 51  | 58  | 58  | 56   | 833         |
| CLARENCE             | G23191  | 42 09      | 173 56E | 9        | 2    | 79  | 48  | 69  | 66  | 99  | 64  | 89  | 79  | 48  | 56  | 56  | 56   | 809         |
| WAIPAPA CLARENCE     | G23192  | 42 09      | 173 54E | 46       | 2    | 94  | 56  | 79  | 79  | 117 | 74  | 107 | 91  | 58  | 66  | 66  | 64   | 951         |
| SAWYERS DOWNS        | G23341  | 42 23      | 173 29E | 183      | 1    | 76  | 79  | 97  | 89  | 132 | 84  | 122 | 117 | 71  | 84  | 84  | 97   | 1132        |
| GRANGE ROAD, HAPUKU  | G23361  | 42 19      | 173 41E | 137      | 1    | 122 | 114 | 130 | 117 | 152 | 99  | 135 | 127 | 86  | 107 | 112 | 140  | 1441        |
| KAIKOURA WEST        | G23461  | 42 24      | 173 41E | 7        | 1    | 71  | 66  | 81  | 86  | 122 | 81  | 94  | 97  | 58  | 64  | 74  | 71   | 965         |
| KAIKOURA             | G23462  | 42 25      | 173 41E | 2        | 79   | 74  | 86  | 86  | 117 | 76  | 97  | 94  | 61  | 71  | 76  | 86  | 1003 |             |
| HALDON DOWNS         | G23463  | 42 24      | 173 37E | 30       | 2    | 76  | 71  | 84  | 84  | 114 | 74  | 91  | 91  | 58  | 69  | 74  | 81   | 967         |
| KAIKOURA             | *G23471 | 42 25      | 173 42E | 99       | 2    | 69  | 64  | 76  | 74  | 102 | 66  | 81  | 81  | 51  | 61  | 66  | 74   | 865         |
| KEKERENGU            | G24001  | 42 00      | 174 00E | 15       | 3    | 90  | 50  | 80  | 70  | 110 | 70  | 100 | 90  | 60  | 60  | 60  | 60   | CLOSED      |
| ARTHURS PASS         | H21951  | 42 57      | 171 34E | 738      | 3    | 310 | 330 | 270 | 330 | 340 | 290 | 280 | 310 | 370 | 380 | 420 | 340  | 3970        |
| ARTHURS PASS STORE   | H21952  | 42 56      | 171 33E | 671      | 2    | 394 | 411 | 358 | 414 | 442 | 343 | 338 | 366 | 442 | 429 | 493 | 452  | 4882        |
| HANMER SPRINGS       | H22581  | 42 32      | 172 50E | 2        | 81   | 76  | 84  | 91  | 109 | 94  | 97  | 107 | 84  | 89  | 84  | 91  | 1087 |             |
| MORNA CLVERDEN       | H22691  | 42 41      | 172 57E | 2        | 64   | 69  | 79  | 76  | 97  | 66  | 81  | 84  | 61  | 69  | 66  | 76  | 888  |             |
| LAKES STATION        | H22721  | 42 46      | 172 16E | 604      | 3    | 90  | 100 | 100 | 110 | 120 | 90  | 120 | 120 | 90  | 110 | 100 | 120  | 1270        |
| ISLAND HILLS         | H22751  | 42 45      | 172 33E | 380      | 2    | 86  | 94  | 89  | 104 | 104 | 86  | 107 | 102 | 79  | 91  | 91  | 112  | 1145        |
| RIVERSIDE            | H22781  | 42 43      | 172 53E | 229      | 2    | 56  | 61  | 61  | 64  | 74  | 56  | 66  | 66  | 51  | 58  | 58  | 69   | 740         |
| CULVERDEN            | H22782  | 42 46      | 172 51E | 173      | 1    | 51  | 53  | 48  | 56  | 56  | 46  | 56  | 53  | 43  | 48  | 51  | 61   | 622         |
| ESKHEAD              | H22831  | 42 49      | 172 19E | 503      | 2    | 81  | 89  | 86  | 99  | 112 | 79  | 104 | 109 | 84  | 99  | 91  | 112  | 1145        |
| BALMORAL             | *H22862 | 42 50      | 172 41E | 226      | 2    | 48  | 53  | 51  | 58  | 58  | 48  | 61  | 56  | 51  | 51  | 64  | 645  | CLOSED      |
| BALMORAL FOREST      | *H22871 | 42 52      | 172 45E | 198      | 1    | 46  | 51  | 51  | 61  | 61  | 51  | 64  | 58  | 46  | 53  | 51  | 64   | 657         |
| KAIWARA              | H22891  | 42 49      | 172 57E | 213      | 3    | 60  | 70  | 60  | 70  | 70  | 60  | 70  | 70  | 50  | 60  | 60  | 80   | 780         |
| MELROSE STN          | H22941  | 42 56      | 172 26E | 457      | 2    | 74  | 76  | 74  | 86  | 94  | 69  | 86  | 91  | 69  | 79  | 76  | 97   | 971         |
| MASONS FLAT          | H22951  | 42 54      | 172 32E | 335      | 3    | 50  | 60  | 60  | 70  | 70  | 60  | 70  | 70  | 60  | 60  | 70  | 760  |             |
| GLENALLEN            | H22961  | 42 59      | 172 39E | 244      | 1    | 53  | 58  | 56  | 64  | 71  | 51  | 66  | 71  | 53  | 64  | 58  | 71   | 736         |
| FLAX HILLS           | H23431  | 42 28      | 173 21E | 328      | 4    |     |     |     |     |     |     |     |     |     |     |     |      | 1200        |
| WHALESBACK STN       | H23511  | 42 30      | 173 11E | 463      | 1    | 91  | 86  | 112 | 119 | 145 | 112 | 114 | 124 | 89  | 102 | 97  | 104  | 1295        |
| WAIAU                | H23601  | 42 39      | 173 03E | 137      | 1    | 56  | 66  | 71  | 71  | 86  | 64  | 76  | 79  | 56  | 64  | 61  | 71   | 821         |
| HIGHFIELD            | H23602  | 42 39      | 173 04E | 168      | 1    | 64  | 66  | 79  | 74  | 94  | 64  | 79  | 84  | 58  | 66  | 64  | 74   | 866         |
| KEINTON COMBE        | H23611  | 42 36      | 173 06E | 229      | 1    | 71  | 79  | 94  | 91  | 114 | 81  | 94  | 104 | 71  | 79  | 76  | 84   | 1038        |
| WOODCHESTER          | H23621  | 42 36      | 173 14E | 198      | 2    | 71  | 76  | 94  | 86  | 122 | 81  | 102 | 107 | 66  | 76  | 74  | 84   | 1039        |
| FERNIEHURST          | H23631  | 42 36      | 173 19E | 137      | 2    | 76  | 81  | 104 | 97  | 147 | 97  | 119 | 130 | 69  | 79  | 79  | 86   | 1164        |
| HAWKSWOOD            | H23632  | 42 39      | 173 20E | 152      | 1    | 76  | 84  | 107 | 99  | 150 | 99  | 122 | 132 | 69  | 81  | 81  | 89   | 1189        |
| CONWAY FLAT          | H23641  | 42 39      | 173 27E | 43       | 3    | 50  | 60  | 70  | 80  | 100 | 70  | 90  | 90  | 50  | 60  | 60  | 70   | 850         |
| SPOTSWOOD            | H23731  | 42 45      | 173 18E | 27       | 1    | 48  | 58  | 66  | 74  | 89  | 58  | 76  | 79  | 46  | 53  | 56  | 61   | 764         |
| LOWRY HILLS STN      | H23811  | 42 48      | 173 06E | 244      | 2    | 64  | 71  | 81  | 84  | 104 | 71  | 81  | 79  | 58  | 61  | 66  | 76   | 896         |
| GORE BAY             | H23831  | 42 51      | 173 19E | 15       | 1    | 61  | 69  | 79  | 81  | 102 | 71  | 76  | 74  | 53  | 58  | 64  | 69   | 857         |
| PORT ROBINSON        | H23832  | 42 52      | 173 18E | 91       | 2    | 66  | 74  | 84  | 86  | 109 | 74  | 84  | 81  | 58  | 64  | 69  | 79   | 928         |
| KILMARNOCK           | H23911  | 42 56      | 173 09E | 91       | 1    | 64  | 74  | 84  | 89  | 107 | 71  | 84  | 84  | 61  | 64  | 69  | 81   | 932         |
| EREWHON              | H30581  | 43 31      | 170 52E | 610      | 2    | 152 | 137 | 140 | 140 | 130 | 84  | 114 | 124 | 119 | 140 | 152 | 170  | 1602        |
| MOUNT POTTS          | H30591  | 43 34      | 170 56E | 518      | 2    | 114 | 104 | 107 | 99  | 64  | 86  | 97  | 91  | 104 | 117 | 130 | 1217 | CLOSED      |
| MESOPOTAMIA          | H30691  | 43 38      | 170 54E | 552      | 2    | 91  | 86  | 86  | 86  | 86  | 56  | 74  | 81  | 76  | 86  | 97  | 107  | 1012        |
| HERMITAGE MT COOK    | *H30711 | 43 44      | 170 06E | 765      | 1    | 401 | 391 | 353 | 340 | 323 | 251 | 244 | 282 | 330 | 371 | 399 | 386  | 4071        |
| HOOKER FLAT,MT.COOK  | *H30713 | 43 44      | 170 06E | 671      | 3    | 370 | 370 | 340 | 320 | 310 | 230 | 250 | 280 | 330 | 360 | 380 | 360  | 3900        |
| LILYBANK STATION     | H30751  | 43 43      | 170 34E | 686      | 2    | 86  | 79  | 76  | 97  | 102 | 84  | 109 | 104 | 107 | 112 | 109 | 94   | 1159        |
| GODLEY PEAKS, TEKAPO | *H30841 | 43 52      | 170 28E | 762      | 2    | 53  | 46  | 46  | 58  | 58  | 56  | 66  | 61  | 58  | 61  | 71  | 64   | 698         |
| THE REST             | H30912  | 43 57      | 170 08E | 515      | 3    | 110 | 90  | 130 | 130 | 120 | 120 | 120 | 130 | 190 | 170 | 150 | 120  | 1580        |
| BRAEMAR              | H30921  | 43 59      | 170 12E | 533      | 2    | 79  | 61  | 61  | 71  | 79  | 71  | 79  | 81  | 94  | 86  | 89  | 81   | 932         |
| MT JOHN              | *H30941 | 43 59      | 170 28E | 1027     | 3    | 50  | 50  | 50  | 50  | 50  | 40  | 50  | 40  | 50  | 40  | 50  | 40   | 560         |
| DEEPBURN             | H30981  | 43 56      | 170 51E | 518      | 2    | 97  | 89  | 94  | 76  | 71  | 48  | 69  | 71  | 84  | 97  | 104 | 969  |             |
| BROAD STREAM BEALEY  | H31062  | 43 02      | 171 39E | 671      | 2    | 117 | 119 | 117 | 140 | 157 | 130 | 145 | 142 | 155 | 155 | 160 | 137  | 1674        |
| CASS                 | H31072  | 43 02      | 171 45E | 610      | 2    | 94  | 97  | 86  | 107 | 114 | 97  | 99  | 104 | 119 | 122 | 130 | 107  | 1276        |
| MT WHITE STN         | H31091  | 43 03      | 171 56E | 610      | 2    | 71  | 74  | 74  | 86  | 86  | 89  | 91  | 94  | 97  | 89  | 86  | 1026 |             |
| GLENTHORNE           | H31141  | 43 11      | 171 27E | 610      | 1    | 107 | 109 | 107 | 130 | 145 | 119 | 132 | 145 | 142 | 147 | 127 | 1542 |             |
| FLOCKHILL            | H31171  | 43 08      | 171 46E | 655      | 2    | 91  | 91  | 91  | 109 | 124 | 102 | 112 | 122 | 122 | 124 | 107 | 1307 |             |
| CRAIGIEBURN FOREST   | *H31172 | 43 09      | 171 43E | 914      | 3    | 100 | 100 | 100 | 120 | 140 | 110 | 120 | 120 | 140 | 140 | 120 | 1450 |             |
| CRAIGIEBURN STN      | H31181  | 43 06      | 171 52E | 610      | 2    | 79  | 74  | 76  | 84  | 86  | 71  | 79  | 81  | 79  | 89  | 91  | 86   | 975         |
| HARPER RIVER         | H31241  | 43 13      | 171 28E | 533      | 1    | 84  | 86  | 81  | 104 | 114 | 99  | 112 | 109 | 114 | 112 | 117 | 102  | 1234        |
| SIMOIS CREEK         | H31251  | 43 17      | 171 34E | 549      | 1    | 64  | 61  | 66  | 86  | 97  | 76  | 97  | 89  | 89  | 86  | 84  | 984  |             |
| CASTLE HILL          | H31271  | 43 14      | 171 43E | 741      | 2    | 64  | 64  | 64  | 76  | 86  | 71  | 79  | 79  | 86  | 84  | 86  | 74   | 913         |
| DOUBLE HILL</td      |         |            |         |          |      |     |     |     |     |     |     |     |     |     |     |     |      |             |

## NZ METEOROLOGICAL SERVICE

28 RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR        |
|----------------------|---------|-----------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------------|
| DALETHORPE           | H31382  | 43 23     | 171 52E | 396      | 2    | 99  | 91  | 97  | 99  | 94  | 76  | 86  | 89  | 76  | 94  | 99  | 107  | 1107        |
| MT TORLESSE          | H31391  | 43 19     | 171 56E | 378      | 1    | 91  | 81  | 86  | 91  | 86  | 69  | 79  | 84  | 71  | 89  | 91  | 97   | 1015        |
| BAYFIELDS            | H31461  | 43 28     | 171 38E | 497      | 1    | 94  | 86  | 91  | 104 | 99  | 79  | 86  | 97  | 86  | 102 | 104 | 104  | 1132        |
| HIGH PEAK STN        | H31471  | 43 27     | 171 44E | 457      | 2    | 91  | 79  | 102 | 107 | 109 | 94  | 109 | 107 | 79  | 97  | 102 | 104  | 1180        |
| ROCKWOOD             | H31472  | 43 29     | 171 46E | 366      | 2    | 102 | 94  | 99  | 104 | 102 | 79  | 91  | 94  | 84  | 102 | 104 | 112  | 1167        |
| STEVENTON            | H31482  | 43 25     | 171 51E |          | 2    | 97  | 89  | 94  | 94  | 91  | 74  | 84  | 84  | 74  | 91  | 97  | 104  | 1075        |
| GLENDORE             | H31488  | 43 28     | 171 50E | 360      |      | 112 | 104 | 109 | 114 | 112 | 89  | 102 | 104 | 94  | 112 | 114 | 122  | 1288        |
| GLENTUNNEL           | H31491  | 43 29     | 171 56E | 258      | 2    | 94  | 89  | 104 | 94  | 91  | 71  | 84  | 84  | 76  | 91  | 99  | 107  | 1084 CLOSED |
| COALGATE             | H31492  | 43 28     | 171 58E | 236      | 2    | 81  | 76  | 79  | 79  | 76  | 61  | 71  | 71  | 64  | 76  | 81  | 86   | 901 CLOSED  |
| RUDSTONE             | *H31562 | 43 33     | 171 41E | 371      | 2    | 102 | 94  | 99  | 94  | 89  | 66  | 81  | 86  | 74  | 91  | 102 | 109  | 1087 CLOSED |
| WAVERLEY             | H31571  | 43 30     | 171 43E | 381      | 3    | 100 | 90  | 90  | 100 | 90  | 60  | 80  | 80  | 70  | 90  | 100 | 100  | 1050        |
| HIGHBANK POWER STN   | *H31572 | 43 35     | 171 44E | 336      | 2    | 89  | 81  | 86  | 91  | 81  | 61  | 79  | 74  | 66  | 86  | 97  | 94   | 985         |
| HOPORATA WEST        | H31581  | 43 32     | 171 51E | 287      | 2    | 91  | 84  | 89  | 86  | 81  | 61  | 74  | 74  | 66  | 84  | 89  | 97   | 976         |
| HORORATA             | H31591  | 43 33     | 171 54E | 213      | 1    | 79  | 76  | 79  | 76  | 76  | 58  | 71  | 66  | 61  | 74  | 79  | 86   | 881         |
| WOODLANDS            | H31592  | 43 32     | 171 58E | 366      | 4    |     |     |     |     |     |     |     |     |     |     |     |      | 850         |
| HORORATA SUB STN     | *H31593 | 43 33     | 171 59E | 192      | 2    | 71  | 66  | 71  | 69  | 76  | 56  | 66  | 64  | 53  | 66  | 69  | 76   | 803         |
| HAKATERE STN         | H31611  | 43 36     | 171 10E | 616      | 2    | 79  | 74  | 74  | 74  | 69  | 46  | 61  | 66  | 64  | 74  | 81  | 89   | 851         |
| MT POSSESSION        | H31621  | 43 39     | 171 14E | 610      | 2    | 84  | 76  | 76  | 76  | 71  | 48  | 64  | 71  | 66  | 76  | 86  | 94   | 888         |
| STAVELEY             | H31642  | 43 38     | 171 27E | 381      | 1    | 119 | 109 | 109 | 107 | 97  | 64  | 84  | 91  | 86  | 104 | 117 | 135  | 1222        |
| SPRINGBURN           | H31643  | 43 41     | 171 29E | 332      | 1    | 84  | 81  | 79  | 76  | 71  | 48  | 66  | 69  | 64  | 76  | 86  | 99   | 899         |
| ALFORD FOREST        | H31651  | 43 38     | 171 32E | 390      | 1    | 117 | 112 | 109 | 104 | 97  | 71  | 89  | 94  | 86  | 102 | 117 | 122  | 1220        |
| ALASKA               | H31655  | 43 36     | 171 34E | 402      | 1    | 122 | 107 | 112 | 109 | 102 | 71  | 89  | 94  | 84  | 107 | 117 | 122  | 1236        |
| METHVEN              | H31661  | 43 38     | 171 39E | 314      | 1    | 86  | 81  | 86  | 81  | 79  | 61  | 76  | 79  | 64  | 76  | 89  | 97   | 955         |
| GREENFIELDS Highbank | H31671  | 43 36     | 171 44E | 305      | 2    | 89  | 81  | 86  | 81  | 79  | 58  | 71  | 76  | 64  | 79  | 89  | 97   | 950         |
| CREESIDE             | H31681  | 43 39     | 171 49E | 226      | 2    | 69  | 69  | 76  | 69  | 76  | 56  | 66  | 69  | 56  | 66  | 74  | 84   | 830         |
| TE PIRITA RAKAIA     | H31691  | 43 41     | 171 59E | 152      | 2    | 61  | 61  | 69  | 64  | 66  | 51  | 58  | 61  | 48  | 58  | 66  | 74   | 737         |
| RATA PEAKS           | H31702  | 43 43     | 171 03E | 433      | 2    | 74  | 66  | 66  | 66  | 64  | 41  | 56  | 61  | 58  | 66  | 74  | 81   | 773         |
| BEN MCLEOD STN       | H31703  | 43 42     | 171 00E | 457      | 3    | 80  | 70  | 70  | 60  | 50  | 40  | 50  | 50  | 50  | 60  | 70  | 90   | 740 CLOSED  |
| WHITE ROCK           | H31711  | 43 45     | 171 10E | 518      | 4    |     |     |     |     |     |     |     |     |     |     |     |      | 700         |
| EVANDALE             | H31733  | 43 42     | 171 20E | 396      | 1    | 86  | 81  | 81  | 81  | 79  | 51  | 69  | 76  | 71  | 81  | 91  | 99   | 946         |
| BRACKLEY MAYFIELD    | H31734  | 43 46     | 171 19E | 396      | 1    | 91  | 79  | 81  | 81  | 74  | 48  | 66  | 71  | 69  | 81  | 89  | 99   | 929         |
| LAGGAN               | H31735  | 43 47     | 171 22E | 320      | 2    | 97  | 86  | 89  | 86  | 79  | 53  | 71  | 76  | 74  | 86  | 94  | 107  | 998 CLOSED  |
| MT SOMERS            | H31742  | 43 43     | 171 25E | 341      | 1    | 102 | 91  | 94  | 91  | 86  | 56  | 79  | 81  | 76  | 91  | 102 | 112  | 1061        |
| WINCHMORE            | H31760  | 43 47     | 171 40E | 137      | 3    | 70  | 70  | 80  | 70  | 80  | 60  | 70  | 70  | 60  | 70  | 70  | 90   | 860 CLOSED  |
| LYNDHURST            | H31771  | 43 43     | 171 42E | 232      | 2    | 76  | 74  | 76  | 69  | 71  | 51  | 64  | 66  | 58  | 69  | 79  | 86   | 839         |
| HIGHAM CHERTSEY      | H31791  | 43 47     | 171 56E | 128      | 1    | 56  | 61  | 71  | 64  | 74  | 53  | 61  | 61  | 48  | 58  | 61  | 74   | 742         |
| SOMERTON             | H31792  | 43 46     | 171 55E | 137      | 2    | 61  | 64  | 74  | 66  | 74  | 56  | 61  | 61  | 51  | 61  | 66  | 76   | 771         |
| LOCHABER             | H31801  | 43 50     | 171 04E | 488      | 2    | 86  | 74  | 79  | 71  | 64  | 41  | 58  | 61  | 61  | 74  | 81  | 94   | 844         |
| MT PEEL              | H31822  | 43 50     | 171 15E | 351      | 2    | 112 | 97  | 102 | 94  | 84  | 53  | 74  | 79  | 79  | 94  | 107 | 122  | 1097        |
| MAYFIELD             | H31834  | 43 48     | 171 18E |          | 3    | 100 | 90  | 90  | 90  | 80  | 60  | 70  | 80  | 70  | 90  | 100 | 110  | 1030 CLOSED |
| HACKTHORNE           | H31851  | 43 48     | 171 35E | 198      | 1    | 79  | 74  | 74  | 69  | 71  | 51  | 64  | 64  | 58  | 69  | 76  | 86   | 835         |
| VALETTA A            | H31852  | 43 53     | 171 35E | 293      | 3    | 70  | 70  | 70  | 60  | 70  | 50  | 60  | 60  | 50  | 60  | 70  | 80   | 770         |
| LISMORE              | H31854  | 43 53     | 171 31E | 179      | 2    | 76  | 71  | 71  | 66  | 66  | 46  | 58  | 61  | 56  | 69  | 74  | 84   | 798         |
| WINCHMORE MIXED FARM | H31872  | 43 50     | 171 43E | 191      | 3    | 60  | 60  | 70  | 60  | 70  | 50  | 60  | 60  | 50  | 60  | 70  | 80   | 730 CLOSED  |
| WINCHMORE M O W      | H31874  | 43 50     | 171 43E | 142      | 2    | 58  | 64  | 74  | 64  | 74  | 53  | 61  | 51  | 58  | 64  | 74  | 84   | 756 CLOSED  |
| DROMORE ASHBURTON    | H31881  | 43 50     | 171 51E | 116      | 2    | 61  | 64  | 74  | 66  | 74  | 56  | 61  | 61  | 51  | 61  | 66  | 76   | 771 CLOSED  |
| CONISTON ASHBURTON   | H31882  | 43 52     | 171 48E |          | 2    | 64  | 66  | 76  | 66  | 74  | 56  | 61  | 61  | 51  | 61  | 69  | 74   | 779 CLOSED  |
| WINCHMORE            | *H31883 | 43 48     | 171 48E | 160      | 2    | 61  | 64  | 74  | 66  | 74  | 56  | 61  | 61  | 51  | 61  | 66  | 76   | 771         |
| PEEL FOREST          | H31921  | 43 56     | 171 14E | 335      | 2    | 114 | 99  | 104 | 97  | 84  | 56  | 76  | 81  | 81  | 99  | 109 | 124  | 1124        |
| CRAcroft             | H31922  | 43 56     | 171 17E |          | 2    | 109 | 94  | 99  | 91  | 81  | 53  | 74  | 76  | 91  | 104 | 117 | 1065 | CLOSED      |
| MOUNT PEEL RANGITATA | H31924  | 43 54     | 171 14E |          | 2    | 104 | 89  | 94  | 81  | 71  | 46  | 64  | 66  | 69  | 84  | 97  | 112  | 977 CLOSED  |
| HUNTSHAM PEEL FOREST | H31925  | 43 57     | 171 15E |          | 4    |     |     |     |     |     |     |     |     |     |     |     |      | 1100 CLOSED |
| ORARI GORGE          | H31926  | 43 58     | 171 12E | 259      | 1    | 124 | 109 | 114 | 99  | 86  | 56  | 76  | 79  | 81  | 99  | 117 | 135  | 1175        |
| HINDS                | H31941  | 43 59     | 171 26E | 147      | 2    | 74  | 66  | 76  | 61  | 61  | 43  | 53  | 53  | 51  | 61  | 71  | 81   | 751         |
| MIDWAY, LISMORE      | H31943  | 43 54     | 171 25E | 213      | 2    | 84  | 74  | 76  | 69  | 64  | 41  | 56  | 58  | 58  | 71  | 79  | 91   | 821         |
| ASHBURTON            | *H31971 | 43 54     | 171 45E | 101      | 1    | 64  | 66  | 76  | 66  | 71  | 56  | 61  | 51  | 51  | 61  | 69  | 74   | 776         |
| SPRINGDALE WHEATSTON | H31972  | 43 59     | 171 46E | 55       | 1    | 64  | 64  | 71  | 64  | 76  | 53  | 61  | 56  | 51  | 56  | 66  | 74   | 756         |
| ASHBURTON AIRFIELD   | H31981  | 43 54     | 171 48E | 85       | 2    | 61  | 64  | 71  | 64  | 74  | 53  | 58  | 56  | 51  | 56  | 66  | 74   | 748 CLOSED  |
| WAKANUI              | H31982  | 43 58     | 171 52E | 229      | 2    | 94  | 97  | 94  | 109 | 119 | 86  | 112 | 117 | 89  | 102 | 94  | 114  | 1191 CLOSED |
| SEAFIELD             | H31990  | 43 55     | 171 56E |          | 2    | 58  | 61  | 69  | 61  | 69  | 51  | 56  | 53  | 48  | 53  | 64  | 69   | 712 CLOSED  |
| KINKORA              | *H31991 | 43 54     | 171 59E | 37       | 2    | 56  | 56  | 66  | 58  | 66  | 48  | 53  | 51  | 46  | 51  | 61  | 66   | 678 CLOSED  |
| SEAFIELD EXP FARM    | H31992  | 43 57     | 171 54E | 52       | 3    | 60  | 60  | 70  | 60  | 70  | 50  | 60  | 60  | 50  | 60  | 60  | 70   | 730 CLOSED  |
| GLENBURN             | H32031  | 43 04     | 172 18E | 533      | 2    | 86  | 94  | 89  | 104 | 114 | 84  | 107 | 114 | 89  | 102 | 94  | 114  | 1191 CLOSED |
| MACDONALD DOWNS      | H32051  | 43 01     | 172 32E | 229      | 2    | 56  | 58  | 56  | 64  | 71  | 51  | 66  | 69  | 53  | 61  | 56  | 74   | 735         |
| WEKA PASS            | H32071  | 43 01     | 172 42E | 174      | 1    | 56  | 56  | 56  | 64  | 69  | 51  | 64  | 66  | 48  | 56  | 53  | 74   | 713         |
| WAIPARA              | H32072  | 43 03     | 172 45E | 76       | 1    | 51  | 51  | 51  | 56  | 61  | 41  | 58  | 56  | 46  | 46  | 51  | 66   | 634         |
| WHARFEDALE           | H32121  | 43 09     | 172 12E | 396      | 3    | 80  | 80  | 90  | 90  | 100 | 70  | 80  | 80  | 80  | 80  | 100 | 1000 |             |
| BIRCH HILL           | H32131  | 43 11     | 172 19E |          | 2    | 89  | 86  | 94  | 84  | 97  | 69  | 79  | 81  | 69  | 86  | 86  | 107  | 1027 CLOSED |
| OKUKU PASS           | H32141  | 43 07     | 172 27E | 229      | 2    | 94  | 97  | 94  | 109 | 119 | 86  | 112 | 117 | 89  | 102 | 97  | 122  | 1238 CLOSED |
| AMBERLEY             | H32171  | 43 09     | 172 43E | 38       | 1    | 56  | 56  | 56  | 64  | 69  | 46  | 58  | 64  | 46  | 48  | 56  | 74   | 693         |
| GLENTUI              | H32221  | 43 14     | 172 15E | 274      | 2    | 91  | 91  | 102 | 94  | 112 | 74  | 91  | 94  | 71  | 86  | 91  | 114  | 1111        |
| OXFORD               | H32222  | 43 17     | 172 12E | 259      | 1    | 89  | 86  | 94  | 84  |     |     |     |     |     |     |     |      |             |

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NZ METEOROLOGICAL SERVICE RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION               | NUMBER  | LAT   | LONG    | HT  |      | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC        | YEAR        |
|-----------------------|---------|-------|---------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|-------------|
|                       |         | S.    |         | M.  | TYPE |     |     |     |     |     |     |     |     |     |     |     |            |             |
| LOBURN                | H32242  | 43 12 | 172 29E | 168 | 1    | 71  | 74  | 81  | 79  | 97  | 61  | 79  | 79  | 56  | 64  | 74  | 91         | 906         |
| ASHLEY FOREST         | *H32252 | 43 15 | 172 35E | 107 | 2    | 64  | 66  | 71  | 74  | 84  | 53  | 71  | 74  | 53  | 58  | 66  | 86         | 820         |
| VIEW HILL             | H32301  | 43 18 | 172 02E | 335 | 2    | 99  | 91  | 89  | 94  | 102 | 79  | 94  | 86  | 74  | 99  | 94  | 102        | 1103        |
| OXFORD                | H32321  | 43 22 | 172 13E |     | 4    |     |     |     |     |     |     |     |     |     |     |     |            | 800 CLOSED  |
| MIDLANDS OXFORD       | H32322  | 43 20 | 172 14E |     | 2    | 58  | 61  | 61  | 66  | 74  | 58  | 79  | 64  | 56  | 64  | 61  | 79         | 781 CLOSED  |
| HORRELVILLE           | H32331  | 43 23 | 172 19E | 143 | 2    | 61  | 61  | 66  | 64  | 74  | 48  | 61  | 61  | 48  | 56  | 61  | 76         | 737 CLOSED  |
| RANGIORA QUEEN ST     | H32351  | 43 19 | 172 35E | 30  | 2    | 56  | 56  | 61  | 56  | 69  | 46  | 56  | 56  | 43  | 51  | 56  | 69         | 675         |
| RANGIORA              | *H32352 | 43 19 | 172 34E | 46  | 2    | 48  | 51  | 56  | 53  | 66  | 41  | 53  | 53  | 38  | 43  | 48  | 64         | 614         |
| WOODEND               | H32362  | 43 20 | 172 40E | 6   | 2    | 51  | 51  | 56  | 56  | 66  | 43  | 56  | 58  | 41  | 46  | 51  | 66         | 641         |
| WOODEND               | H32371  | 43 20 | 172 42E | 5   | 2    | 48  | 48  | 51  | 53  | 61  | 38  | 51  | 53  | 38  | 41  | 48  | 64         | 594 CLOSED  |
| PUKEURA               | H32401  | 43 24 | 172 01E | 296 | 2    | 89  | 84  | 89  | 86  | 89  | 69  | 76  | 81  | 69  | 86  | 89  | 99         | 1006 CLOSED |
| HOMEBUSH              | H32402  | 43 28 | 172 00E | 244 | 2    | 84  | 79  | 86  | 81  | 89  | 66  | 76  | 74  | 64  | 79  | 81  | 91         | 950         |
| KIMBERLEY             | *H32411 | 43 26 | 172 08E | 3   | 3    | 70  | 70  | 70  | 70  | 70  | 60  | 60  | 60  | 50  | 70  | 70  | 80         | 800 CLOSED  |
| DARFIELD              | *H32412 | 43 29 | 172 08E | 195 | 1    | 69  | 66  | 74  | 69  | 81  | 58  | 66  | 64  | 56  | 66  | 69  | 76         | 814         |
| DARFIELD              | H32413  | 43 29 | 172 06E | 198 | 2    | 79  | 74  | 81  | 76  | 84  | 61  | 74  | 69  | 61  | 74  | 76  | 86         | 895 CLOSED  |
| KIRWEF                | H32422  | 43 29 | 172 14E |     | 2    | 66  | 64  | 71  | 64  | 76  | 53  | 61  | 61  | 51  | 64  | 66  | 76         | 773 CLOSED  |
| EYREWELL FOREST       | *H32424 | 43 24 | 172 17E | 158 | 3    | 80  | 70  | 80  | 70  | 80  | 60  | 70  | 70  | 60  | 70  | 70  | 90         | 870         |
| CHRISTCHURCH AIRPORT  | *H32451 | 43 29 | 172 32E | 30  | 2    | 46  | 43  | 53  | 56  | 81  | 56  | 61  | 53  | 43  | 43  | 48  | 626        |             |
| WAIMAKARITI BRIDGE    | H32461  | 43 25 | 172 39E | 5   | 2    | 46  | 43  | 53  | 53  | 76  | 51  | 53  | 48  | 41  | 41  | 43  | 51         | 599         |
| PAPARUA PRISON FARM   | H32541  | 43 31 | 172 28E | 37  | 2    | 46  | 43  | 51  | 56  | 79  | 56  | 61  | 53  | 41  | 43  | 48  | 620        |             |
| WIGRAM AERODROME      | *H32552 | 43 33 | 172 33E | 22  | 2    | 46  | 43  | 53  | 56  | 79  | 56  | 61  | 53  | 41  | 43  | 48  | 622        |             |
| ISLINGTON             | H32553  | 43 32 | 172 30E |     | 2    | 56  | 53  | 64  | 61  | 84  | 58  | 61  | 56  | 46  | 51  | 58  | 696 CLOSED |             |
| CHRISTCHURCH          | *H32561 | 43 32 | 172 37E | 7   | 1    | 51  | 46  | 58  | 58  | 84  | 56  | 58  | 53  | 46  | 66  | 66  | 658        |             |
| CASHMERE HILLS        | H32562  | 43 34 | 172 38E | 183 | 1    | 51  | 46  | 64  | 66  | 102 | 69  | 71  | 64  | 48  | 51  | 48  | 61         | 741         |
| SHIRLEY               | H32563  | 43 30 | 172 40E | 6   | 2    | 46  | 46  | 53  | 61  | 81  | 56  | 56  | 53  | 41  | 43  | 56  | 635        |             |
| CHRISTCHURCH          | H32564  | 43 31 | 172 40E | 4   | 2    | 46  | 46  | 51  | 61  | 81  | 56  | 61  | 51  | 43  | 43  | 53  | 630 CLOSED |             |
| LINWOOD CHRISTCHURCH  | H32566  | 43 32 | 172 41E |     | 2    | 53  | 51  | 61  | 58  | 79  | 56  | 56  | 53  | 43  | 46  | 48  | 660 CLOSED |             |
| PAGES ROAD            | H32567  | 43 32 | 172 41E |     | 2    | 48  | 46  | 53  | 64  | 84  | 51  | 64  | 53  | 46  | 46  | 46  | 649        |             |
| BROMLEY, CHRISTCHURCH | *H32573 | 43 32 | 172 42E | 9   | 2    | 48  | 46  | 56  | 56  | 81  | 53  | 56  | 51  | 43  | 43  | 46  | 532        |             |
| MT PLEASANT, CHCH.    | *H32574 | 43 34 | 172 43E | 137 | 2    | 48  | 48  | 53  | 58  | 86  | 66  | 74  | 61  | 46  | 51  | 46  | 685        |             |
| HOROTANE              | H32575  | 43 35 | 172 42E | 70  | 2    | 48  | 48  | 56  | 61  | 91  | 69  | 76  | 64  | 48  | 51  | 46  | 51         | 709         |
| GODLEY HEAD LIGHT     | H32581  | 43 35 | 172 48E | 138 | 1    | 38  | 41  | 58  | 53  | 71  | 51  | 58  | 43  | 36  | 30  | 38  | 48         | 545         |
| DUNSDANDEL A          | H32611  | 43 39 | 172 11E |     | 2    | 66  | 64  | 69  | 64  | 71  | 53  | 61  | 58  | 51  | 64  | 66  | 71         | 758 CLOSED  |
| DUNSDANDEL SCHOOL     | H32612  | 43 40 | 172 11E |     | 2    | 58  | 56  | 66  | 61  | 76  | 56  | 58  | 56  | 48  | 53  | 58  | 64         | 710 CLOSED  |
| BURNHAM               | H32621  | 43 37 | 172 17E | 62  | 2    | 58  | 56  | 61  | 58  | 64  | 48  | 56  | 53  | 46  | 56  | 58  | 66         | 680 CLOSED  |
| BURNHAM SEWAGE PLANT  | H32622  | 43 37 | 172 17E | 61  | 2    | 61  | 58  | 64  | 58  | 66  | 48  | 56  | 53  | 48  | 58  | 61  | 66         | 697         |
| LINCOLN               | *H32641 | 43 39 | 172 28E | 11  | 1    | 56  | 56  | 66  | 58  | 76  | 58  | 58  | 56  | 46  | 48  | 53  | 58         | 689         |
| OTAHUNA               | H32651  | 43 40 | 172 35E | 37  | 3    | 60  | 50  | 70  | 70  | 109 | 70  | 80  | 70  | 50  | 50  | 50  | 60         | 780 CLOSED  |
| ALLANDALE             | H32661  | 43 39 | 172 39E | 8   | 1    | 64  | 64  | 74  | 79  | 117 | 89  | 99  | 81  | 61  | 66  | 64  | 64         | 919         |
| LYTTELTON             | H32671  | 43 37 | 172 43E | 5   | 2    | 41  | 46  | 51  | 76  | 78  | 64  | 51  | 38  | 43  | 38  | 41  | 58         | 588         |
| PURAU                 | H32672  | 43 39 | 172 45E | 30  | 2    | 61  | 61  | 69  | 76  | 112 | 84  | 94  | 76  | 58  | 64  | 58  | 61         | 874         |
| FERNHILL              | H32691  | 43 41 | 172 59E | 439 | 2    | 61  | 53  | 79  | 99  | 140 | 109 | 112 | 97  | 64  | 64  | 61  | 71         | 1010 CLOSED |
| PIGEON BAY            | H32693  | 43 41 | 172 54E |     | 3    | 70  | 60  | 80  | 80  | 150 | 110 | 120 | 110 | 70  | 60  | 70  | 70         | 1050 CLOSED |
| RAKAIA                | H32701  | 43 45 | 172 02E | 106 | 2    | 64  | 64  | 71  | 66  | 71  | 53  | 61  | 58  | 51  | 61  | 64  | 76         | 760 CLOSED  |
| DUNSDANDEL B          | H32701  | 43 43 | 172 11E | 64  | 2    | 51  | 51  | 58  | 53  | 64  | 46  | 51  | 51  | 41  | 51  | 53  | 61         | 631 CLOSED  |
| DUNSDANDEL C          | H32721  | 43 42 | 172 12E |     | 2    | 61  | 56  | 61  | 58  | 64  | 48  | 56  | 53  | 46  | 56  | 58  | 66         | 683 CLOSED  |
| KILLINCHY             | H32722  | 43 44 | 172 14E | 46  | 2    | 56  | 58  | 66  | 66  | 86  | 66  | 71  | 64  | 51  | 58  | 56  | 66         | 764         |
| LEESTON               | H32731  | 43 46 | 172 18E | 20  | 2    | 53  | 53  | 61  | 58  | 76  | 58  | 64  | 58  | 46  | 53  | 53  | 58         | 691         |
| LEESTON               | H32732  | 43 46 | 172 18E |     | 2    | 56  | 53  | 64  | 61  | 84  | 58  | 61  | 56  | 46  | 48  | 53  | 58         | 698 CLOSED  |
| MIDDLE RIGG BROOKSIDE | H32733  | 43 42 | 172 18E |     | 2    | 58  | 53  | 66  | 64  | 86  | 61  | 64  | 58  | 48  | 51  | 53  | 61         | 723 CLOSED  |
| GREENPARK             | H32751  | 43 43 | 172 31E | 2   | 2    | 43  | 41  | 51  | 53  | 86  | 64  | 71  | 61  | 43  | 43  | 41  | 43         | 640         |
| LAKE ELESMORE         | H32752  | 43 44 | 172 31E | 2   | 2    | 38  | 36  | 46  | 48  | 76  | 56  | 64  | 53  | 38  | 36  | 38  | 38         | 567 CLOSED  |
| MCQUEENS VALLEY       | H32762  | 43 44 | 172 38E | 17  | 3    | 50  | 50  | 60  | 60  | 100 | 80  | 80  | 70  | 50  | 50  | 50  | 50         | 750         |
| GBBIES PASS           | H32763  | 43 42 | 172 39E | 224 | 2    | 56  | 53  | 66  | 71  | 112 | 84  | 94  | 79  | 56  | 53  | 58  | 58         | 838         |
| KAITUNA VALLEY        | H32771  | 43 43 | 172 45E | 229 | 3    | 90  | 80  | 110 | 120 | 200 | 150 | 170 | 150 | 100 | 90  | 90  | 100        | 1450        |
| OKUTI                 | H32781  | 43 47 | 172 48E | 61  | 1    | 79  | 69  | 97  | 99  | 170 | 124 | 140 | 124 | 84  | 76  | 81  | 81         | 1219        |
| PUAHA                 | H32783  | 43 44 | 172 48E |     | 2    | 69  | 64  | 86  | 89  | 152 | 112 | 127 | 112 | 74  | 69  | 74  | 1097       | CLOSED      |
| ONAWE DUVAUACHE BAY   | H32791  | 43 46 | 172 56E | 46  | 1    | 64  | 58  | 74  | 102 | 124 | 99  | 112 | 89  | 66  | 58  | 66  | 81         | 993         |
| CALEDON OVERDALE      | H32803  | 43 48 | 172 01E | 91  | 2    | 61  | 64  | 74  | 66  | 76  | 56  | 64  | 61  | 51  | 61  | 66  | 76         | 776 CLOSED  |
| SOUTHBRIDGE           | H32821  | 43 49 | 172 15E | 6   | 2    | 53  | 56  | 66  | 58  | 66  | 48  | 53  | 53  | 46  | 53  | 58  | 66         | 676 CLOSED  |
| ELLESMORE SPIT        | H32841  | 43 50 | 172 28E | 3   | 2    | 43  | 41  | 56  | 51  | 81  | 61  | 66  | 58  | 41  | 38  | 41  | 46         | 623         |
| MAGNET BAY            | H32871  | 43 51 | 172 45E | 6   | 1    | 53  | 56  | 71  | 61  | 89  | 66  | 71  | 61  | 46  | 46  | 51  | 56         | 727         |
| TE OKA                | H32872  | 43 49 | 172 47E | 610 | 2    | 71  | 69  | 89  | 84  | 132 | 97  | 107 | 94  | 66  | 64  | 64  | 74         | 1016 CLOSED |
| CAREWS PEAK           | H32881  | 43 49 | 172 52E | 183 | 2    | 89  | 74  | 114 | 132 | 180 | 142 | 163 | 130 | 89  | 89  | 91  | 97         | 1390 CLOSED |
| AKAROA                | H32891  | 43 49 | 172 58E | 34  | 1    | 69  | 58  | 86  | 99  | 137 | 114 | 132 | 122 | 76  | 69  | 69  | 74         | 1105        |
| AKAROA HEAD           | H32892  | 43 53 | 172 59E | 102 | 1    | 51  | 43  | 64  | 58  | 69  | 58  | 64  | 53  | 43  | 41  | 43  | 46         | 633         |
| DORIE                 | H32911  | 43 54 | 172 08E |     | 2    | 51  | 53  | 61  | 53  | 61  | 46  | 51  | 43  | 51  | 53  | 64  | 64         | 638 CLOSED  |
| MOTUNAU               | H33001  | 43 02 | 173 05E | 30  | 2    | 56  | 64  | 74  | 76  | 94  | 64  | 74  | 74  | 53  | 56  | 61  | 71         | 817         |
| HAPPY VALLEY          | H33011  | 43 00 | 173 06E | 61  | 2    | 71  | 79  | 84  | 86  | 107 | 69  | 79  | 76  | 66  | 66  | 71  | 86         | 940 CLOSED  |
| LITTLE AKALOA         | H33601  | 43 40 | 173 00E | 244 | 1    | 51  | 48  | 58  | 81  | 112 | 84  | 89  | 76  | 53  | 51  | 51  | 61         | 815         |
| EASTWOOD LE BONS BAY  | H33711  | 43 45 | 173 06E | 229 | 2    | 58  | 53  | 69  | 94  | 119 | 94  | 102 | 84  | 61  | 56  | 58  | 74         | 922         |
| HICKORY BAY           | H33801  | 43 48 | 173 03E | 381 | 2    | 114 | 99  | 13  |     |     |     |     |     |     |     |     |            |             |

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NZ METEOROLOGICAL SERVICE RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT   | LONG    | HT  |      | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC        | YEAR       |
|----------------------|---------|-------|---------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|
|                      |         | S.    |         | M.  | TYPE |     |     |     |     |     |     |     |     |     |     |     |            |            |
| PUSSEY               | H40091  | 44 03 | 170 56E | 305 | 4    |     |     |     |     |     |     |     |     |     |     |     |            | 950 CLOSED |
| LAKE PUKAKI NO.1     | *H40111 | 44 11 | 170 09E | 506 | 3    | 60  | 60  | 60  | 50  | 50  | 40  | 50  | 40  | 50  | 60  | 60  | 60         | 640 CLOSED |
| LAKE PUYAKI EAST     | H40121  | 44 08 | 170 15E | 634 | 2    | 71  | 61  | 61  | 56  | 53  | 41  | 51  | 46  | 58  | 61  | 64  | 71         | 694 CLOSED |
| MARYBURN             | H40131  | 44 11 | 170 19E |     | 3    | 70  | 60  | 60  | 50  | 40  | 30  | 40  | 40  | 50  | 50  | 60  | 70         | 620 CLOSED |
| BEDESHURST           | H40171  | 44 08 | 170 47E | 442 | 2    | 97  | 89  | 89  | 71  | 66  | 43  | 64  | 61  | 74  | 81  | 89  | 102        | 926 CLOSED |
| LAMPROOK             | H40181  | 44 06 | 170 51E | 284 | 2    | 71  | 66  | 66  | 53  | 48  | 33  | 48  | 46  | 53  | 58  | 66  | 74         | 682 CLOSED |
| FATPLIF              | *H40182 | 44 06 | 170 50E | 306 | 1    | 69  | 66  | 71  | 56  | 53  | 38  | 56  | 53  | 58  | 64  | 71  | 71         | 726        |
| ROCKPOOL             | H40191  | 44 11 | 170 59E | 152 | 2    | 66  | 64  | 66  | 53  | 51  | 36  | 51  | 51  | 53  | 56  | 66  | 71         | 684        |
| TENGAWAI             | H40272  | 44 13 | 170 44E | 427 | 1    | 99  | 89  | 84  | 69  | 58  | 38  | 56  | 54  | 69  | 76  | 84  | 107        | 880        |
| ALBURY PARK          | H40282  | 44 15 | 170 50E |     | 2    | 86  | 79  | 79  | 64  | 58  | 38  | 56  | 53  | 64  | 71  | 79  | 91         | 818 CLOSED |
| ALBURY               | H40283  | 44 14 | 170 52E | 244 | 2    | 64  | 53  | 53  | 48  | 51  | 36  | 61  | 38  | 48  | 48  | 66  | 64         | 630        |
| NIMROD DOWNS         | H40382  | 44 22 | 170 48E | 549 | 3    | 80  | 70  | 60  | 50  | 50  | 40  | 50  | 40  | 50  | 60  | 70  | 80         | 700 CLOSED |
| HEATHERLEIGH CAVE    | H40383  | 44 20 | 170 52E | 274 | 2    | 84  | 74  | 69  | 56  | 48  | 30  | 46  | 43  | 56  | 64  | 69  | 86         | 725        |
| CAVE                 | H40391  | 44 21 | 170 58E | 183 | 1    | 66  | 64  | 66  | 56  | 51  | 41  | 53  | 51  | 53  | 71  | 76  | 91         | 691        |
| TF WHARUA CAVE       | H40392  | 44 20 | 170 57E |     | 2    | 76  | 69  | 64  | 53  | 43  | 28  | 43  | 38  | 51  | 58  | 64  | 79         | 666 CLOSED |
| COAL CREEK MALARO    | H40393  | 44 18 | 170 54E | 250 | 2    | 69  | 66  | 61  | 48  | 51  | 33  | 53  | 38  | 51  | 56  | 69  | 81         | 676        |
| HAKATARAMEA DOWNS    | H40461  | 44 26 | 170 40E | 518 | 1    | 66  | 56  | 56  | 46  | 46  | 36  | 43  | 41  | 46  | 53  | 58  | 66         | 613        |
| MT NIMROD CAVE       | H40475  | 44 25 | 170 47E |     | 2    | 102 | 97  | 91  | 71  | 71  | 53  | 76  | 69  | 69  | 76  | 94  | 104        | 973 CLOSED |
| MT NIMROD            | H40481  | 44 26 | 170 53E | 381 | 2    | 99  | 91  | 89  | 79  | 66  | 51  | 64  | 56  | 64  | 74  | 94  | 112        | 939        |
| FOXDOWN STN          | H40491  | 44 29 | 170 55E | 229 | 1    | 74  | 69  | 66  | 58  | 51  | 38  | 48  | 43  | 48  | 56  | 71  | 84         | 706        |
| ROCKY POINT          | H40562  | 44 33 | 170 40E | 381 | 2    | 61  | 53  | 51  | 41  | 41  | 30  | 38  | 36  | 58  | 46  | 53  | 61         | 549        |
| HAKATARAMEA ESTATES  | H40651  | 44 36 | 170 34E | 457 | 3    | 70  | 60  | 60  | 50  | 40  | 30  | 40  | 40  | 40  | 50  | 60  | 70         | 610        |
| WAIKORA              | H40671  | 44 40 | 170 47E | 396 | 1    | 81  | 79  | 74  | 58  | 58  | 43  | 61  | 56  | 56  | 61  | 76  | 86         | 789        |
| GLEN CARY STN.       | H40750  | 44 42 | 170 30E |     | 3    | 60  | 50  | 50  | 40  | 40  | 30  | 30  | 30  | 40  | 50  | 60  | 60         | 530 CLOSED |
| HAKATARAMEA          | H40751  | 44 46 | 170 35E | 183 | 2    | 56  | 51  | 48  | 38  | 36  | 28  | 38  | 33  | 36  | 38  | 51  | 56         | 509 CLOSED |
| MELFORD HILLS        | H40771  | 44 45 | 170 46E | 442 | 2    | 74  | 66  | 64  | 48  | 46  | 38  | 48  | 43  | 46  | 51  | 64  | 71         | 659        |
| PENTLAND HILLS       | H40781  | 44 42 | 170 49E | 300 | 2    | 69  | 69  | 69  | 53  | 53  | 41  | 51  | 46  | 48  | 53  | 66  | 76         | 692 CLOSED |
| WAIHOU DOWNS         | H40782  | 44 47 | 170 52E | 76  | 2    | 61  | 61  | 61  | 48  | 48  | 36  | 46  | 41  | 43  | 48  | 58  | 66         | 617 CLOSED |
| WAIMATE SADDLE       | H40791  | 44 44 | 170 59E | 264 | 2    | 76  | 79  | 81  | 66  | 66  | 51  | 53  | 51  | 56  | 64  | 79  | 84         | 808        |
| LOCHTEIL KOWHATU     | H40792  | 44 44 | 170 55E | 290 | 2    | 74  | 71  | 71  | 58  | 58  | 43  | 53  | 51  | 53  | 58  | 71  | 81         | 742        |
| WOODBURY             | H41011  | 44 00 | 171 10E | 305 | 2    | 119 | 104 | 112 | 94  | 81  | 53  | 74  | 76  | 79  | 97  | 112 | 130        | 1131       |
| WYNWOOD              | H41022  | 44 04 | 171 13E | 122 | 2    | 81  | 76  | 79  | 69  | 61  | 41  | 56  | 56  | 56  | 66  | 79  | 89         | 809 CLOSED |
| RAUKAPUKA GERALDINE  | H41023  | 44 05 | 171 16E | 122 | 2    | 79  | 74  | 76  | 66  | 58  | 41  | 56  | 56  | 56  | 64  | 76  | 84         | 788 CLOSED |
| COOPERS CREEK        | H41024  | 44 02 | 171 17E | 158 | 2    | 84  | 79  | 79  | 69  | 64  | 43  | 58  | 58  | 58  | 69  | 79  | 91         | 831        |
| STRATHMORP           | H41041  | 44 00 | 171 28E | 137 | 2    | 69  | 69  | 76  | 64  | 66  | 58  | 56  | 53  | 58  | 71  | 79  | 765 CLOSED |            |
| LYNNFORD             | H41061  | 44 01 | 171 36E | 73  | 1    | 66  | 64  | 76  | 61  | 69  | 48  | 58  | 56  | 51  | 56  | 66  | 76         | 747        |
| EIFFELTON            | H41062  | 44 02 | 171 37E | 49  | 2    | 64  | 61  | 71  | 61  | 51  | 58  | 53  | 48  | 56  | 66  | 74  | 734 CLOSED |            |
| ASHTON               | H41071  | 44 02 | 171 46E |     | 2    | 64  | 61  | 71  | 61  | 51  | 58  | 53  | 48  | 56  | 66  | 74  | 734 CLOSED |            |
| BEAUTIFUL VALLEY     | H41101  | 44 07 | 171 01E | 274 | 2    | 84  | 76  | 81  | 69  | 61  | 56  | 56  | 58  | 66  | 81  | 91  | 820 CLOSED |            |
| KAKAHU BUSH          | H41111  | 44 09 | 171 07E | 122 | 1    | 79  | 76  | 79  | 64  | 58  | 41  | 58  | 56  | 58  | 61  | 79  | 84         | 795        |
| GERALDINE            | H41121  | 44 06 | 171 15E | 122 | 2    | 81  | 76  | 79  | 69  | 61  | 41  | 58  | 58  | 58  | 69  | 79  | 89         | 818 CLOSED |
| SPEECHLEYS BRIDGE    | H41122  | 44 07 | 171 12E |     | 2    | 81  | 76  | 76  | 66  | 61  | 41  | 56  | 56  | 56  | 66  | 76  | 86         | 797 CLOSED |
| ORCHARD GERALDINE    | H41123  | 44 06 | 171 14E |     | 2    | 79  | 76  | 79  | 71  | 51  | 36  | 58  | 53  | 51  | 69  | 66  | 91         | 780 CLOSED |
| WINCHESTER           | H41124  | 44 11 | 171 17E |     | 2    | 71  | 69  | 74  | 66  | 58  | 38  | 51  | 48  | 48  | 56  | 64  | 74         | 717 CLOSED |
| GERALDINE            | H41125  | 44 06 | 171 15E | 122 | 2    | 81  | 81  | 71  | 66  | 48  | 41  | 58  | 58  | 58  | 66  | 81  | 94         | 846 CLOSED |
| THE HEIGHTS          | H41126  |       |         |     | 4    |     |     |     |     |     |     |     |     |     |     |     |            | 800 CLOSED |
| ORARI ESTATE         | *H41131 | 44 08 | 171 19E | 81  | 1    | 74  | 74  | 74  | 66  | 61  | 43  | 58  | 56  | 53  | 61  | 71  | 81         | 772        |
| COLDSTREAM           | H41151  | 44 09 | 171 32E | 30  | 2    | 58  | 56  | 66  | 56  | 66  | 46  | 53  | 51  | 46  | 51  | 61  | 66         | 676 CLOSED |
| COLDSTREAM NO. 2     | H41153  | 44 09 | 171 33E | 12  | 2    | 56  | 56  | 56  | 43  | 46  | 46  | 53  | 48  | 43  | 48  | 58  | 66         | 655        |
| PLEASANT POINT       | H41201  | 44 16 | 171 04E | 62  | 3    | 50  | 50  | 50  | 50  | 40  | 30  | 40  | 40  | 40  | 40  | 50  | 60         | 540 CLOSED |
| SUTHERLANDS          | H41202  | 44 16 | 171 02E | 229 | 2    | 58  | 58  | 58  | 51  | 46  | 33  | 43  | 41  | 43  | 48  | 56  | 64         | 599 CLOSED |
| WAITAWA              | H41211  | 44 17 | 171 10E | 49  | 1    | 58  | 58  | 58  | 51  | 46  | 33  | 41  | 41  | 46  | 46  | 58  | 64         | 600        |
| TEMUKA A             | H41221  | 44 15 | 171 17E | 20  | 2    | 61  | 61  | 61  | 51  | 48  | 36  | 43  | 43  | 46  | 51  | 61  | 66         | 628 CLOSED |
| AGHADOE              | H41222  | 44 17 | 171 15E | 23  | 1    | 58  | 58  | 58  | 48  | 48  | 36  | 43  | 41  | 43  | 51  | 58  | 64         | 606        |
| TEMUKA B             | H41223  | 44 15 | 171 17E | 18  | 2    | 66  | 71  | 66  | 56  | 53  | 41  | 51  | 46  | 51  | 56  | 66  | 74         | 697        |
| TEMUKA               | *H41224 | 44 15 | 171 17E | 24  | 2    | 61  | 64  | 64  | 53  | 51  | 38  | 46  | 43  | 46  | 53  | 64  | 69         | 652        |
| KAPUNATIKI PANGITATA | H41241  | 44 12 | 171 27E |     | 2    | 56  | 56  | 53  | 46  | 46  | 33  | 41  | 38  | 38  | 46  | 53  | 66         | 572 CLOSED |
| LIMESTONE VALLEY     | H41305  |       |         |     | 4    |     |     |     |     |     |     |     |     |     |     |     |            | 600 CLOSED |
| CLAREMONT            | H41311  | 44 23 | 171 07E | 213 | 4    | 58  | 58  | 56  | 48  | 48  | 36  | 43  | 41  | 43  | 48  | 58  | 66         | 600 CLOSED |
| SMITHFIELD           | H41322  | 44 22 | 171 15E | 5   | 1    | 58  | 58  | 56  | 46  | 46  | 36  | 43  | 41  | 41  | 46  | 53  | 66         | 590        |
| TIMARU AERODROME     | *H41323 | 44 18 | 171 14E | 30  | 2    | 58  | 58  | 56  | 46  | 46  | 36  | 43  | 41  | 41  | 46  | 53  | 66         | 590        |
| GORDONS VALLEY       | H41402  | 44 27 | 171 03E | 91  | 2    | 61  | 58  | 58  | 48  | 46  | 35  | 41  | 38  | 41  | 48  | 58  | 71         | 601        |
| ADAIR SOIL CON RES   | *H41411 | 44 26 | 171 10E | 85  | 2    | 58  | 58  | 58  | 48  | 48  | 36  | 43  | 41  | 41  | 48  | 56  | 69         | 604        |
| BRASSSELLS BRIDGE    | H41412  | 44 27 | 171 09E | 30  | 2    | 58  | 58  | 58  | 48  | 48  | 36  | 43  | 41  | 41  | 48  | 56  | 69         | 604 CLOSED |
| GLENITT RESERVOIR    | H41414  | 44 24 | 171 11E | 76  | 2    | 61  | 64  | 61  | 51  | 51  | 38  | 43  | 43  | 43  | 51  | 61  | 71         | 638        |
| TIMARU               | *H41421 | 44 25 | 171 15E | 17  | 1    | 58  | 58  | 58  | 48  | 48  | 36  | 41  | 38  | 41  | 48  | 58  | 69         | 601        |
| TIMARU RESERVOIR     | H41423  | 44 25 | 171 13E | 76  | 2    | 61  | 61  | 61  | 51  | 48  | 38  | 43  | 43  | 43  | 51  | 58  | 71         | 629 CLOSED |
| LYALLDALE            | H41501  | 44 30 | 171 05E | 183 | 2    | 66  | 64  | 61  | 53  | 48  | 36  | 43  | 41  | 43  | 51  | 64  | 76         | 646 CLOSED |
| SODWALL HUNTER       | *H41502 | 44 34 | 171 01E | 204 | 2    | 71  | 69  | 66  | 56  | 51  | 38  | 48  | 43  | 48  | 56  | 69  | 81         | 696        |
| HUNTER               | H41601  | 44 37 | 171 02E |     | 2    | 69  | 66  | 66  | 53  | 53  | 41  | 51  | 46  | 48  | 53  | 66  | 74         | 686 CLOSED |
| HUNTER               | H41602  | 44 39 | 171 01E | 137 | 2    | 66  | 64  | 64  | 51  | 51  | 38  | 48  | 43  | 46  | 51  | 64  | 71         | 657        |
| MOANAROA             | H4162   |       |         |     |      |     |     |     |     |     |     |     |     |     |     |     |            |            |

NZ METEOROLOGICAL SERVICE

31 RAINFALL NORMALS 1941-70, MILLIMETRES

| STATION              | NUMBER  | LAT<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC  | YEAR   |          |
|----------------------|---------|-----------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|----------|
| MORVEN               | H41812  | 44 49     | 171 06E | 46       | 2    | 66  | 66  | 71  | 56  | 53  | 43  | 46  | 43  | 46  | 53  | 69  | 74   | 686    | CLOSED   |
| GLENLYON             | H49181  | 44 10     | 169 52E | 533      | 3    | 100 | 90  | 110 | 100 | 120 | 100 | 110 | 120 | 130 | 130 | 130 | 100  | 1340   | CLOSED   |
| LAKE OHAU STN        | H49182  | 44 10     | 169 49E | 533      | 2    | 84  | 81  | 97  | 89  | 104 | 84  | 99  | 107 | 112 | 112 | 112 | 89   | 1170   |          |
| OTAMATAPATO          | I40501  | 44 34     | 170 05E | 411      | 2    | 48  | 43  | 46  | 36  | 36  | 25  | 28  | 28  | 30  | 41  | 43  | 48   | 452    |          |
| GARGUSTON            | I40621  | 44 38     | 170 17E |          | 2    | 48  | 41  | 41  | 33  | 30  | 23  | 30  | 28  | 30  | 38  | 41  | 48   | 431    | CLOSED   |
| OTEMATATA            | *I40623 | 44 36     | 170 12E | 280      | 2    | 51  | 43  | 41  | 33  | 30  | 23  | 28  | 25  | 28  | 36  | 41  | 42   | 427    | CLOSED   |
| AVTEMORE             | I40631  | 44 40     | 170 21E | 271      | 2    | 56  | 48  | 43  | 36  | 33  | 23  | 30  | 30  | 33  | 41  | 46  | 53   | 472    |          |
| LAKE WAITAKI         | I40641  | 44 41     | 170 25E | 229      | 1    | 64  | 53  | 48  | 41  | 38  | 28  | 33  | 33  | 36  | 46  | 51  | 58   | 529    |          |
| OTIAKE               | I40851  | 44 49     | 170 30E | 329      | 2    | 66  | 56  | 53  | 41  | 38  | 30  | 36  | 33  | 38  | 43  | 53  | 61   | 548    |          |
| DUNTRUON             | I40861  | 44 52     | 170 41E | 158      | 1    | 66  | 56  | 56  | 41  | 58  | 33  | 38  | 36  | 38  | 43  | 56  | 61   | 562    |          |
| LOCH LOMOND          | I40941  | 44 57     | 170 29E | 381      | 2    | 84  | 76  | 79  | 58  | 53  | 43  | 33  | 36  | 46  | 64  | 61  | 71   | 704    | CLOSED   |
| STEWARD SETTLEMENT   | I41900  | 44 55     | 171 00E | 15       | 2    | 56  | 51  | 53  | 41  | 38  | 30  | 36  | 33  | 36  | 41  | 51  | 56   | 522    | CLOSED   |
| OAMARU AEPO          | *I41901 | 44 58     | 171 05E | 30       | 2    | 58  | 53  | 53  | 41  | 41  | 33  | 36  | 33  | 38  | 41  | 53  | 58   | 538    |          |
| MT ASPIRING          | I48471  | 44 28     | 168 47E | 335      | 2    | 198 | 188 | 224 | 206 | 239 | 198 | 229 | 249 | 262 | 262 | 262 | 208  | 2725   |          |
| EARNSIAW             | I48741  | 44 45     | 168 24E | 335      | 3    | 120 | 100 | 130 | 120 | 120 | 110 | 100 | 120 | 140 | 130 | 150 | 120  | 1460   |          |
| GLENORCHY            | I48831  | 44 51     | 168 23E | 311      | 3    | 110 | 100 | 110 | 100 | 110 | 100 | 90  | 90  | 110 | 110 | 110 | 90   | 1230   |          |
| GLFNORCHY            | I48841  | 44 52     | 168 24E |          | 2    | 114 | 99  | 117 | 104 | 117 | 99  | 94  | 89  | 114 | 112 | 119 | 97   | 1275   | CLOSED   |
| SKIPPERS             | I48861  | 44 50     | 168 41E | 564      | 2    | 81  | 69  | 81  | 71  | 79  | 69  | 64  | 58  | 79  | 76  | 84  | 69   | 880    | CLOSED   |
| KNOBS FLAT           | I48901  | 44 58     | 168 02E | 360      | 3    | 180 | 160 | 190 | 220 | 200 | 170 | 160 | 170 | 210 | 230 | 210 | 200  | 2300   |          |
| ARTHURS POINT        | I48961  | 44 59     | 168 40E | 482      | 2    | 81  | 71  | 84  | 76  | 86  | 71  | 69  | 66  | 84  | 84  | 84  | 69   | 925    |          |
| APROWNTOWN           | I48981  | 44 57     | 168 50E | 360      | 1    | 71  | 58  | 71  | 61  | 69  | 58  | 56  | 51  | 66  | 66  | 71  | 58   | 756    |          |
| UPPER MAKARORA       | I49221  | 44 14     | 169 14E | 317      | 2    | 193 | 175 | 203 | 183 | 241 | 165 | 173 | 203 | 188 | 262 | 249 | 178  | 2413   | CLOSED   |
| MAKARORA STATION     | I49222  | 44 15     | 169 13E | 320      | 1    | 147 | 140 | 165 | 152 | 178 | 147 | 170 | 185 | 196 | 193 | 196 | 155  | 2024   |          |
| MAKARORA SOUTH       | I49321  | 44 18     | 169 12E | 296      | 3    | 150 | 140 | 170 | 150 | 180 | 150 | 170 | 190 | 200 | 190 | 200 | 160  | 2050   | CLOSED   |
| HUNTER VALLEY        | I49341  | 44 20     | 169 25E | 331      | 3    | 110 | 110 | 120 | 100 | 110 | 90  | 100 | 110 | 120 | 140 | 100 | 1330 | CLOSED |          |
| RIBBONWOOD           | I49381  | 44 22     | 169 51E | 610      | 2    | 58  | 53  | 64  | 58  | 69  | 56  | 66  | 71  | 76  | 76  | 61  | 784  |        |          |
| BENMORE              | I49391  | 44 21     | 169 59E | 488      | 2    | 56  | 48  | 58  | 51  | 61  | 51  | 53  | 59  | 66  | 64  | 51  | 691  | CLOSED |          |
| MINARFT BAY          | I49411  | 44 25     | 169 07E | 313      | 2    | 97  | 91  | 99  | 102 | 130 | 104 | 109 | 114 | 140 | 130 | 130 | 104  | 1350   |          |
| HUNTER VALLEY 2      | I49432  | 44 26     | 169 19E | 354      | 3    | 70  | 70  | 80  | 70  | 90  | 70  | 80  | 90  | 90  | 90  | 90  | 70   | 960    |          |
| TARA HILLS, OMARAMA  | *I49591 | 44 32     | 169 54E | 488      | 2    | 64  | 56  | 53  | 43  | 41  | 30  | 28  | 30  | 36  | 48  | 48  | 56   | 533    |          |
| GLFNNDHU STATION     | I49601  | 44 40     | 169 00E | 290      | 2    | 81  | 76  | 84  | 71  | 84  | 69  | 66  | 66  | 79  | 76  | 81  | 71   | 904    | CLOSED   |
| LAKE HAWEA           | *I49621 | 44 37     | 169 15E | 350      | 2    | 69  | 61  | 71  | 58  | 71  | 58  | 58  | 58  | 71  | 66  | 71  | 58   | 770    |          |
| HAWEA FLAT           | I49631  | 44 39     | 169 18E | 335      | 1    | 61  | 53  | 64  | 53  | 64  | 51  | 51  | 53  | 66  | 58  | 61  | 51   | 686    |          |
| MAUNGAWERA           | I49632  | 44 39     | 169 19E |          | 2    | 66  | 56  | 69  | 56  | 69  | 53  | 56  | 56  | 71  | 64  | 66  | 56   | 738    | CLOSED   |
| MORVEN HILLS         | I49651  | 44 39     | 169 30E | 457      | 2    | 64  | 53  | 64  | 53  | 51  | 53  | 64  | 58  | 61  | 53  | 61  | 53   | 691    |          |
| DUNSTAN PEAKS        | I49681  | 44 36     | 169 52E | 579      | 2    | 56  | 51  | 56  | 43  | 41  | 33  | 25  | 28  | 36  | 46  | 46  | 51   | 512    | CLOSED   |
| WANAKA               | *I49711 | 44 42     | 169 08E | 296      | 1    | 58  | 53  | 61  | 51  | 61  | 51  | 53  | 51  | 61  | 58  | 61  | 51   | 670    |          |
| MT BARKER            | I49712  | 44 43     | 169 11E | 305      | 2    | 58  | 51  | 58  | 48  | 58  | 51  | 48  | 48  | 58  | 53  | 58  | 51   | 640    |          |
| LUGGATE              | I49721  | 44 45     | 169 17E | 335      | 1    | 56  | 46  | 53  | 43  | 51  | 46  | 41  | 42  | 51  | 48  | 51  | 46   | 575    |          |
| LAGOON VALLEY        | I49731  | 44 42     | 169 18E | 335      | 2    | 64  | 53  | 61  | 46  | 53  | 46  | 41  | 43  | 53  | 51  | 53  | 53   | 617    | CLOSED   |
| WILLOWBANK           | I49732  | 44 47     | 169 19E | 305      | 2    | 61  | 51  | 61  | 46  | 53  | 43  | 41  | 43  | 51  | 51  | 53  | 51   | 605    | CLOSED   |
| MERRIVALE            | I49751  | 44 44     | 169 31E | 335      | 3    | 60  | 50  | 60  | 40  | 50  | 40  | 40  | 50  | 40  | 50  | 50  | 50   | 570    | CLOSED   |
| CARDRONA             | I49801  | 44 52     | 169 01E | 518      | 1    | 61  | 56  | 61  | 51  | 61  | 46  | 46  | 43  | 53  | 51  | 58  | 53   | 640    |          |
| LOCHAR               | I49821  | 44 53     | 169 17E |          | 2    | 69  | 58  | 66  | 51  | 58  | 48  | 43  | 48  | 56  | 56  | 58  | 56   | 667    | CLOSED   |
| TARRAS               | I49841  | 44 50     | 169 26E | 435      | 1    | 51  | 43  | 51  | 36  | 41  | 30  | 38  | 41  | 41  | 41  | 43  | 475  |        |          |
| ST BATHANS           | I49881  | 44 52     | 169 48E |          | 3    | 70  | 60  | 70  | 50  | 50  | 40  | 30  | 30  | 40  | 50  | 50  | 60   | 600    | CLOSED   |
| UPPER MEG POWFR STN  | I49901  | 44 58     | 169 03E | 518      | 2    | 69  | 58  | 69  | 56  | 66  | 53  | 51  | 48  | 61  | 61  | 66  | 58   | 716    |          |
| MT PISA STATION      | I49921  | 44 55     | 169 16E |          | 2    | 48  | 38  | 46  | 38  | 43  | 38  | 36  | 38  | 46  | 41  | 43  | 41   | 496    | CLOSED   |
| BENDIGO              | I49931  | 44 54     | 169 19E | 202      | 3    | 50  | 40  | 50  | 40  | 40  | 30  | 30  | 30  | 40  | 40  | 40  | 40   | 470    |          |
| CAMBRIAN             | I49971  | 44 54     | 169 45E | 549      | 1    | 69  | 66  | 76  | 61  | 61  | 46  | 38  | 41  | 51  | 51  | 64  | 69   | 706    | CLOSED   |
| MANUHERIKIA DAM      | I49981  | 44 55     | 169 52E |          | 3    | 70  | 70  | 70  | 50  | 50  | 40  | 30  | 30  | 40  | 60  | 50  | 60   | 620    | CLOSED   |
| BLACKSTONE HILL      | I49991  | 44 56     | 169 55E | 579      | 1    | 69  | 64  | 64  | 48  | 46  | 36  | 25  | 28  | 36  | 53  | 51  | 58   | 578    |          |
| WEDDERBURN           | I50002  | 45 01     | 170 00E | 549      | 2    | 66  | 56  | 64  | 46  | 46  | 41  | 43  | 38  | 43  | 46  | 64  | 66   | 619    |          |
| NASEBY               | I50011  | 45 02     | 170 09E | 600      | 2    | 74  | 61  | 64  | 51  | 46  | 41  | 36  | 36  | 38  | 58  | 58  | 58   | 621    | CLOSED   |
| NASEBY FOREST        | *I50012 | 45 01     | 170 06E | 610      | 1    | 74  | 61  | 66  | 51  | 46  | 38  | 33  | 36  | 38  | 56  | 53  | 58   | 604    |          |
| KYEBOURN DIGGINGS    | I50021  | 45 01     | 170 16E | 518      | 2    | 71  | 58  | 66  | 56  | 51  | 46  | 41  | 33  | 38  | 58  | 64  | 64   | 646    |          |
| ARNMORE WINDSOR      | I50081  | 45 00     | 170 48E |          | 2    | 66  | 71  | 66  | 43  | 41  | 41  | 36  | 43  | 46  | 53  | 64  | 64   | 634    | CLOSED   |
| OAMARU               | I50091  | 45 05     | 170 59E | 46       | 4    | 64  | 53  | 61  | 43  | 43  | 38  | 41  | 38  | 41  | 43  | 61  | 64   | 590    | CLOSED   |
| EWEBURN RANFURLY     | I50101  | 45 07     | 170 05E | 423      | 2    | 64  | 48  | 53  | 36  | 33  | 30  | 23  | 20  | 28  | 41  | 46  | 48   | 470    | CLOSED   |
| RANFURLY             | I50111  | 45 08     | 170 06E | 424      | 2    | 56  | 46  | 48  | 36  | 33  | 28  | 23  | 20  | 25  | 41  | 41  | 43   | 440    |          |
| WAIPATIA             | I50112  | 45 10     | 170 09E | 360      | 1    | 56  | 43  | 48  | 30  | 28  | 25  | 20  | 18  | 23  | 36  | 41  | 43   | 411    |          |
| KAURU, THE DASHER    | I50161  | 45 11     | 170 41E | 549      | 1    | 81  | 66  | 84  | 64  | 61  | 56  | 61  | 51  | 56  | 61  | 84  | 89   | 814    |          |
| MAHENO               | I50171  | 45 08     | 170 46E | 76       | 4    | 64  | 53  | 61  | 43  | 43  | 38  | 41  | 38  | 41  | 43  | 61  | 64   | 650    | CLOSED   |
| KURIHEKA             | I50181  | 45 10     | 170 50E |          | 2    | 61  | 56  | 69  | 51  | 41  | 41  | 48  | 30  | 46  | 48  | 69  | 74   | 634    | CLOSED   |
| PATEAROA             | I50201  | 45 13     | 170 02E | 381      | 1    | 56  | 41  | 43  | 30  | 28  | 25  | 15  | 15  | 20  | 36  | 38  | 41   | 388    |          |
| PUKETOI STN PATEAROA | I50202  | 45 13     | 170 02E |          | 2    | 61  | 46  | 53  | 33  | 33  | 30  | 20  | 18  | 25  | 41  | 43  | 46   | 449    | CLOSED   |
| WAIPATIA             | *I50212 | 45 14     | 170 08E | 472      | 2    | 61  | 46  | 51  | 33  | 30  | 28  | 18  | 18  | 25  | 41  | 43  | 46   | 440    | CLOSED   |
| THE BEECHES WATPIATA | I50214  | 45 15     | 170 07E |          | 2    | 58  | 43  | 48  | 30  | 30  | 28  | 20  | 18  | 25  | 38  | 41  | 43   | 422    | CLOSED</ |

## NZ METEOROLOGICAL SERVICE

30  
RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION                | NUMBER  | LAT<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC        | YEAR        |
|------------------------|---------|-----------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|-------------|
| BUSHEY PARK            | 150472  | 45 29     | 170 47E | 91       | 2    | 61  | 48  | 66  | 56  | 58  | 51  | 43  | 36  | 38  | 51  | 64  | 61         | 633         |
| MOERAKI LIGHTHOUSE     | 150481  | 45 24     | 170 52E | 43       | 1    | 58  | 48  | 66  | 48  | 48  | 43  | 36  | 33  | 38  | 48  | 58  | 61         | 585         |
| MIDDLEMARCH            | 150511  | 45 31     | 170 07E | 202      | 3    | 50  | 40  | 50  | 50  | 40  | 50  | 40  | 30  | 30  | 40  | 50  | 50         | 520 CLOSED  |
| GARTHMYL MIDDLEMARCH   | 150512  | 45 31     | 170 08E | 198      | 2    | 53  | 41  | 53  | 46  | 46  | 46  | 41  | 30  | 33  | 38  | 51  | 48         | 526         |
| MT ROYAL PALMERSTON    | 150561  | 45 30     | 170 41E | 15       | 2    | 61  | 48  | 66  | 56  | 58  | 51  | 43  | 36  | 38  | 51  | 64  | 61         | 633 CLOSED  |
| CENTREWOOD             | 150571  | 45 31     | 170 46E | 85       | 3    | 50  | 40  | 50  | 50  | 50  | 40  | 30  | 30  | 30  | 40  | 50  | 50         | 50          |
| WAIKOUAITI             | 150661  | 45 36     | 170 40E | 8        | 2    | 56  | 43  | 58  | 51  | 53  | 46  | 38  | 33  | 36  | 46  | 56  | 56         | 572 CLOSED  |
| CHERRY FARM HOSPITAL   | *150662 | 45 37     | 170 37E | 6        | 2    | 58  | 43  | 58  | 56  | 58  | 53  | 46  | 36  | 36  | 46  | 58  | 56         | 604         |
| LEE FLAT               | 150701  | 45 47     | 170 02E | 381      | 2    | 76  | 61  | 71  | 64  | 64  | 61  | 48  | 41  | 43  | 56  | 69  | 71         | 725         |
| PINEWOOD               | 150722  | 45 44     | 170 15E | 351      | 2    | 64  | 48  | 66  | 66  | 66  | 66  | 53  | 43  | 43  | 51  | 64  | 61         | 691         |
| HINDON                 | 150731  | 45 43     | 170 21E | 351      | 2    | 61  | 48  | 64  | 64  | 64  | 53  | 43  | 43  | 51  | 61  | 61  | 677 CLOSED |             |
| TAIRAO HEAD            | *150771 | 45 47     | 170 44E | 72       | 1    | 66  | 46  | 66  | 64  | 69  | 58  | 48  | 38  | 38  | 51  | 66  | 66         | 667         |
| BALMORAL OUTRAM        | 150821  | 45 52     | 170 13E | 15       | 2    | 66  | 51  | 66  | 58  | 58  | 51  | 41  | 41  | 48  | 61  | 58  | 657        |             |
| INVERMAY, TAIERI       | *150831 | 45 51     | 170 22E | 24       | 2    | 69  | 53  | 69  | 61  | 61  | 53  | 41  | 43  | 51  | 64  | 61  | 687        |             |
| MOSGIEL                | 150832  | 45 53     | 170 20E | 8        | 2    | 64  | 51  | 64  | 58  | 58  | 51  | 38  | 41  | 48  | 61  | 58  | 650        |             |
| MOSGIEL                | 150833  | 45 53     | 170 21E | 2        | 66   | 51  | 66  | 58  | 58  | 58  | 51  | 41  | 41  | 48  | 61  | 58  | 657 CLOSED |             |
| WARE FLAT              | 150842  | 45 49     | 170 26E | 158      | 3    | 100 | 80  | 100 | 90  | 90  | 80  | 60  | 60  | 70  | 90  | 90  | 1000       |             |
| ROSS CREEK             | 150851  | 45 51     | 170 30E | 165      | 1    | 97  | 79  | 102 | 99  | 102 | 97  | 86  | 69  | 69  | 81  | 102 | 94         | 1077        |
| DUNEDIN BTL GARDENS    | 150852  | 45 52     | 170 31E | 73       | 1    | 86  | 69  | 86  | 81  | 81  | 71  | 53  | 56  | 64  | 81  | 89  | 890        |             |
| SULLIVAN DAM           | 150853  | 45 49     | 170 31E | 299      | 2    | 107 | 84  | 112 | 114 | 112 | 112 | 94  | 76  | 74  | 89  | 109 | 107        | 1190        |
| OPOHO DUNEDIN          | 150854  | 45 52     | 170 31E | 117      | 4    | 81  | 69  | 89  | 81  | 86  | 84  | 69  | 56  | 53  | 61  | 84  | 76         | 900 CLOSED  |
| ROSLYN DUNEDIN         | 150855  | 45 51     | 170 30E | 210      | 2    | 84  | 66  | 86  | 89  | 86  | 86  | 74  | 58  | 58  | 69  | 84  | 81         | 921 CLOSED  |
| BETA ST DUNEDIN        | 150856  | 45 52     | 170 30E | 210      | 1    | 97  | 79  | 102 | 99  | 102 | 97  | 86  | 69  | 69  | 81  | 102 | 94         | 975         |
| SAWYERS BAY            | 150861  | 45 49     | 170 36E | 67       | 1    | 81  | 66  | 89  | 97  | 94  | 94  | 76  | 66  | 61  | 76  | 89  | 86         | 975         |
| PORTOBELLO             | 150862  | 45 50     | 170 39E | 12       | 2    | 64  | 48  | 66  | 69  | 71  | 66  | 53  | 46  | 43  | 56  | 69  | 64         | 715 CLOSED  |
| CAPE SAUNDERS LIGHT    | 150872  | 45 53     | 170 44E | 52       | 1    | 64  | 51  | 61  | 58  | 64  | 56  | 53  | 38  | 36  | 46  | 58  | 61         | 646         |
| BERWICK FOREST         | *150901 | 45 58     | 170 04E | 18       | 2    | 76  | 61  | 71  | 64  | 64  | 61  | 48  | 41  | 43  | 56  | 69  | 71         | 725         |
| WAIPORI FALLS          | 150902  | 45 54     | 170 00E | 213      | 2    | 81  | 66  | 79  | 71  | 74  | 74  | 61  | 48  | 51  | 61  | 79  | 76         | 821 CLOSED  |
| HENLEY                 | 150911  | 45 59     | 170 10E | 5        | 2    | 74  | 58  | 69  | 64  | 61  | 58  | 46  | 38  | 43  | 53  | 69  | 71         | 704         |
| DUNEDIN AIRPORT        | *150921 | 45 56     | 170 12E | 1        | 2    | 61  | 48  | 64  | 56  | 56  | 53  | 46  | 38  | 38  | 46  | 58  | 56         | 620         |
| BURNSIDE               | 150941  | 45 54     | 170 27E | 43       | 1    | 79  | 61  | 79  | 69  | 66  | 66  | 58  | 48  | 48  | 58  | 74  | 71         | 777         |
| SOUTHERN RESERVOIR     | 150942  | 45 54     | 170 27E | 122      | 2    | 84  | 66  | 84  | 74  | 71  | 64  | 51  | 53  | 61  | 79  | 74  | 832        |             |
| MUSSELBURGH, DUNEDIN   | *150951 | 45 54     | 170 31E | 2        | 1    | 74  | 61  | 76  | 74  | 71  | 66  | 56  | 46  | 48  | 58  | 71  | 71         | 772         |
| PUKEURI OAMARU         | 151001  | 45 02     | 171 02E | 2        | 53   | 53  | 56  | 46  | 46  | 36  | 38  | 36  | 38  | 43  | 53  | 61  | 559 CLOSED |             |
| OAMARU, IONA HOSPITAL  | *151002 | 45 04     | 171 00E | 14       | 2    | 58  | 48  | 53  | 41  | 38  | 33  | 33  | 36  | 41  | 53  | 56  | 528        |             |
| TE ANAU 21 MILFS       | 157181  | 45 11     | 167 53E | 229      | 2    | 109 | 94  | 99  | 112 | 104 | 91  | 112 | 99  | 99  | 114 | 137 | 114        | 1284 CLOSED |
| TE ANAU DOWNS          | 157182  | 45 11     | 167 50E | 229      | 2    | 109 | 86  | 122 | 127 | 102 | 109 | 89  | 119 | 152 | 140 | 127 | 112        | 1394        |
| TE ANAU                | 157471  | 45 25     | 167 43E | 213      | 2    | 94  | 86  | 102 | 97  | 102 | 99  | 86  | 84  | 99  | 102 | 99  | 86         | 1136 CLOSED |
| TE ANAU                | *157473 | 45 25     | 167 44E | 215      | 2    | 89  | 84  | 99  | 99  | 99  | 109 | 89  | 86  | 94  | 102 | 97  | 89         | 1136        |
| TE ANAU KAKAPO RD      | 157481  | 45 24     | 167 53E | 305      | 2    | 86  | 81  | 97  | 97  | 107 | 86  | 84  | 91  | 99  | 94  | 86  | 1105       |             |
| WEST ARM, L. MANAPOURI | *157521 | 45 31     | 167 16E | 180      | 2    | 274 | 264 | 312 | 307 | 310 | 338 | 279 | 272 | 295 | 312 | 302 | 274        | 3539 CLOSED |
| MANAPOURI              | 157561  | 45 34     | 167 36E | 192      | 2    | 97  | 97  | 109 | 107 | 104 | 112 | 91  | 91  | 99  | 102 | 104 | 94         | 1207        |
| PLAINS STATION         | 157581  | 45 34     | 167 52E | 305      | 2    | 79  | 76  | 91  | 89  | 89  | 99  | 81  | 79  | 86  | 91  | 79  | 79         | 1025        |
| REDCLIFF               | 157661  | 45 40     | 167 41E | 213      | 2    | 86  | 86  | 97  | 94  | 94  | 99  | 81  | 81  | 89  | 91  | 84  | 84         | 1071 CLOSED |
| MONOWAI                | 157761  | 45 47     | 167 37E | 158      | 1    | 91  | 86  | 104 | 102 | 102 | 112 | 91  | 89  | 97  | 104 | 99  | 91         | 1168        |
| EASTERN BUSH           | 157971  | 45 59     | 167 46E | 183      | 2    | 79  | 71  | 84  | 89  | 86  | 99  | 71  | 71  | 74  | 81  | 84  | 76         | 965         |
| WEATHER HILL           | 157991  | 45 54     | 167 57E | 311      | 2    | 84  | 76  | 91  | 97  | 91  | 104 | 76  | 76  | 79  | 86  | 81  | 81         | 1030        |
| QUEENSTOWN             | *158061 | 45 02     | 168 40E | 329      | 1    | 74  | 66  | 76  | 71  | 79  | 66  | 64  | 61  | 66  | 64  | 653 | 692        |             |
| FRANKTON               | 158071  | 45 01     | 168 43E | 338      | 2    | 69  | 58  | 69  | 61  | 69  | 58  | 56  | 53  | 66  | 69  | 66  | 656        | 750 CLOSED  |
| KAWARAU GATES          | 158073  | 45 02     | 168 44E | 320      | 2    | 64  | 56  | 66  | 58  | 66  | 53  | 51  | 51  | 64  | 66  | 66  | 53         | 717         |
| GIBBSTON               | 158091  | 45 02     | 168 57E | 533      | 3    | 60  | 50  | 60  | 50  | 60  | 50  | 50  | 50  | 60  | 60  | 60  | 50         | 660         |
| CECIL PEAK             | 158161  | 45 06     | 168 36E | 351      | 2    | 81  | 69  | 81  | 74  | 81  | 69  | 66  | 64  | 79  | 81  | 66  | 66         | 890         |
| WYE CREEK              | 158171  | 45 08     | 168 46E | 335      | 2    | 64  | 53  | 64  | 56  | 64  | 53  | 51  | 48  | 61  | 61  | 64  | 64         | 53          |
| KINGSTON               | 158371  | 45 20     | 168 43E | 313      | 2    | 84  | 74  | 86  | 79  | 86  | 74  | 74  | 71  | 69  | 84  | 86  | 71         | 948         |
| GARSTON                | *158461 | 45 28     | 168 41E | 308      | 2    | 86  | 69  | 81  | 66  | 66  | 58  | 41  | 38  | 43  | 64  | 76  | 79         | 767 CLOSED  |
| GARSTON                | 158462  | 45 28     | 168 41E | 320      | 2    | 91  | 74  | 86  | 71  | 71  | 64  | 43  | 41  | 48  | 66  | 81  | 84         | 820 CLOSED  |
| CENTRE HILL MOSSBURN   | 158511  | 45 35     | 169 08E | 274      | 2    | 150 | 122 | 140 | 117 | 114 | 104 | 71  | 66  | 76  | 109 | 135 | 137        | 1341 CLOSED |
| EYRE CREEK             | 158541  | 45 31     | 168 29E | 244      | 2    | 79  | 69  | 81  | 74  | 84  | 71  | 66  | 66  | 81  | 81  | 66  | 66         | 899         |
| ATHOL                  | 158551  | 45 31     | 168 35E | 290      | 2    | 91  | 74  | 86  | 71  | 69  | 64  | 43  | 41  | 46  | 66  | 81  | 81         | 813 CLOSED  |
| MID DOME               | *158552 | 45 34     | 168 30E | 386      | 2    | 107 | 86  | 102 | 86  | 84  | 76  | 51  | 48  | 56  | 79  | 97  | 99         | 971         |
| GLENFALLOCH STN        | 158561  | 45 33     | 168 40E | 2        | 94   | 76  | 86  | 71  | 69  | 64  | 43  | 41  | 48  | 66  | 84  | 84  | 826 CLOSED |             |
| WEST DOME              | 158622  | 45 38     | 168 14E | 274      | 2    | 89  | 81  | 97  | 91  | 97  | 94  | 81  | 79  | 94  | 97  | 94  | 81         | 1075 CLOSED |
| LOWTHER                | 158641  | 45 41     | 168 25E | 219      | 2    | 76  | 66  | 76  | 71  | 69  | 69  | 53  | 51  | 56  | 69  | 74  | 71         | 801 CLOSED  |
| DUNROBIN               | 158711  | 45 44     | 168 07E | 314      | 2    | 79  | 74  | 86  | 84  | 86  | 89  | 64  | 64  | 71  | 79  | 86  | 79         | 943         |
| MURRAY CREEK           | 158721  | 45 42     | 168 17E | 244      | 3    | 70  | 70  | 80  | 80  | 70  | 80  | 60  | 60  | 70  | 80  | 70  | 70         | 850         |
| LUMSDEN                | 158741  | 45 44     | 168 27E | 192      | 2    | 89  | 76  | 84  | 81  | 71  | 74  | 51  | 46  | 56  | 69  | 86  | 81         | 864 CLOSED  |
| LUMSDEN                | 158742  | 45 45     | 168 27E | 192      | 3    | 90  | 70  | 80  | 80  | 70  | 70  | 50  | 50  | 50  | 70  | 80  | 80         | 840 CLOSED  |
| WENDONSIDE             | 158771  | 45 46     | 168 44E | 189      | 2    | 97  | 76  | 84  | 74  | 66  | 66  | 46  | 41  | 51  | 66  | 84  | 81         | 832         |
| WAIKAIKA               | 158781  | 45 44     | 168 51E | 152      | 2    | 89  | 76  | 84  | 81  | 74  | 76  | 58  | 51  | 51  | 69  | 74  | 84         | 867         |
| DIPTON                 | 158831  | 45 53     | 168 21E | 2        | 66   | 61  | 71  | 74  | 69  | 74  | 58  | 53  | 61  | 66  | 71  | 66  | 71         | 790 CLOSED  |
| GLENURE HILL           | 158851  | 45 53     | 168 30E | 229      | 2    | 84  |     |     |     |     |     |     |     |     |     |     |            |             |

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NZ METEOROLOGICAL SERVICE RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT   | LONG    | HT  | JAN  | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC           | YEAR           |
|----------------------|---------|-------|---------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------|
|                      |         | S.    |         | M.  | TYPE |     |     |     |     |     |     |     |     |     |     |               |                |
| OTAMA                | 158981  | 45 55 | 168 50E | 183 | 1    | 74  | 66  | 74  | 71  | 64  | 66  | 48  | 43  | 48  | 61  | 71            | 74 760         |
| WAITIRI STN          | 159001  | 45 03 | 169 02E | 2   | 58   | 51  | 58  | 48  | 56  | 46  | 43  | 41  | 53  | 51  | 56  | 48            | 609 CLOSED     |
| RIPPONVALE           | 159011  | 45 03 | 169 09E | 232 | 2    | 48  | 41  | 46  | 36  | 38  | 30  | 25  | 25  | 30  | 36  | 41            | 38 434 CLOSED  |
| CROMWELL             | *159012 | 45 02 | 169 12E | 213 | 2    | 43  | 36  | 41  | 33  | 36  | 28  | 23  | 23  | 28  | 33  | 36            | 36 396         |
| MATAKANUI            | 159051  | 45 04 | 169 31E | 305 | 3    | 70  | 50  | 60  | 40  | 40  | 30  | 20  | 20  | 30  | 50  | 50            | 60 520         |
| LAUDER               | 159061  | 45 03 | 169 41E | 2   | 69   | 56  | 64  | 41  | 41  | 33  | 25  | 25  | 36  | 51  | 48  | 58            | 547 CLOSED     |
| BECKS                | 159071  | 45 00 | 169 45E | 390 | 1    | 56  | 48  | 56  | 33  | 36  | 28  | 23  | 20  | 28  | 41  | 46            | 456 CLOSED     |
| LAUDER FLAT          | 159072  | 45 00 | 169 42E | 366 | 2    | 58  | 53  | 58  | 41  | 38  | 30  | 23  | 23  | 30  | 46  | 46            | 51 497         |
| CRAIGROY             | 159101  | 45 11 | 169 00E | 671 | 2    | 56  | 46  | 53  | 43  | 38  | 28  | 25  | 28  | 41  | 51  | 51            | 503            |
| GLYDE                | 159131  | 45 11 | 169 19E | 183 | 1    | 51  | 41  | 46  | 36  | 33  | 25  | 20  | 20  | 25  | 33  | 38            | 406            |
| OPHIR                | *159161 | 45 07 | 169 37E | 305 | 1    | 53  | 43  | 48  | 30  | 30  | 25  | 18  | 20  | 28  | 41  | 38            | 46 420         |
| MOA CREEK            | *159162 | 45 11 | 169 39E | 427 | 1    | 53  | 41  | 43  | 28  | 28  | 23  | 15  | 15  | 23  | 36  | 38            | 41 384         |
| OPHIR                | 159163  | 45 07 | 169 36E | 2   | 53   | 41  | 46  | 30  | 28  | 23  | 18  | 18  | 25  | 36  | 38  | 43            | 399 CLOSED     |
| EARNSCLEUGH          | 159231  | 45 13 | 169 19E | 183 | 2    | 48  | 43  | 46  | 38  | 36  | 25  | 20  | 20  | 25  | 33  | 43            | 41 418 CLOSED  |
| EARNSCLEUGH          | *159232 | 45 14 | 169 20E | 152 | 2    | 46  | 38  | 41  | 30  | 28  | 23  | 18  | 18  | 23  | 30  | 33            | 33 361         |
| CONROYS GULLY        | 159233  | 45 16 | 169 18E | 2   | 43   | 36  | 38  | 28  | 28  | 20  | 15  | 15  | 20  | 28  | 33  | 30            | 334 CLOSED     |
| ALEXANDRA            | *159234 | 45 16 | 169 23E | 141 | 1    | 46  | 38  | 38  | 28  | 28  | 20  | 15  | 15  | 20  | 28  | 33            | 30 339         |
| GALLOWAY             | 159241  | 45 15 | 169 28E | 177 | 1    | 48  | 38  | 41  | 28  | 28  | 23  | 15  | 15  | 23  | 30  | 33            | 36 358         |
| GALLOWAY             | 159243  | 45 13 | 169 28E | 2   | 48   | 38  | 41  | 30  | 28  | 23  | 15  | 18  | 23  | 30  | 36  | 38 368 CLOSED |                |
| FRUITLANDS           | 159331  | 45 20 | 169 18E | 335 | 2    | 61  | 46  | 51  | 33  | 33  | 28  | 20  | 18  | 28  | 43  | 46            | 445 CLOSED     |
| MANORBURN DAM        | *159361 | 45 22 | 169 36E | 746 | 3    | 60  | 50  | 50  | 40  | 40  | 30  | 20  | 20  | 30  | 40  | 50            | 50 480         |
| PATEAROA             | 159391  | 45 19 | 169 58E | 2   | 56   | 38  | 46  | 25  | 23  | 20  | 15  | 13  | 20  | 38  | 33  | 38 365 CLOSED |                |
| ROXBURGH POWER STN   | *159431 | 45 29 | 169 19E | 110 | 3    | 50  | 40  | 50  | 40  | 40  | 30  | 30  | 30  | 40  | 50  | 50            | 490            |
| COAL CREEK MT BENDER | 159432  | 45 27 | 169 18E | 244 | 2    | 66  | 51  | 58  | 46  | 46  | 43  | 30  | 30  | 33  | 48  | 56            | 56 563         |
| PAERAU               | 159491  | 45 25 | 169 57E | 594 | 3    | 80  | 70  | 80  | 60  | 60  | 60  | 40  | 40  | 60  | 70  | 70            | 730 CLOSED     |
| BIRCHVALE WAIKAIWA   | 159501  | 45 35 | 169 00E | 207 | 2    | 107 | 86  | 99  | 84  | 81  | 74  | 51  | 46  | 56  | 79  | 97            | 97 957         |
| ROXBURGH EAST        | 159531  | 45 32 | 169 19E | 122 | 1    | 56  | 46  | 53  | 43  | 41  | 38  | 25  | 25  | 28  | 41  | 51            | 51 498         |
| ROXBURGH             | 159532  | 45 33 | 169 19E | 97  | 1    | 61  | 48  | 56  | 48  | 46  | 43  | 28  | 28  | 30  | 46  | 53            | 56 543         |
| HILLTOP ROXBURGH     | 159543  | 45 32 | 169 24E | 518 | 1    | 71  | 56  | 61  | 48  | 51  | 46  | 36  | 36  | 38  | 56  | 61            | 58 618         |
| GREAT MOSS SWAMP     | 159581  | 45 31 | 169 49E | 3   | 60   | 50  | 60  | 50  | 50  | 40  | 30  | 30  | 30  | 50  | 60  | 60            | 570 CLOSED     |
| MILLERS FLAT         | 159641  | 45 40 | 169 24E | 82  | 2    | 66  | 53  | 61  | 48  | 51  | 43  | 33  | 30  | 36  | 51  | 58            | 58 588         |
| DEEP STREAM          | 159691  | 45 40 | 169 58E | 366 | 3    | 70  | 50  | 60  | 50  | 50  | 40  | 30  | 30  | 40  | 60  | 60            | 590 CLOSED     |
| DEEP STREAM NO 2     | 159692  | 45 41 | 169 59E | 366 | 3    | 50  | 40  | 50  | 50  | 50  | 50  | 30  | 30  | 40  | 50  | 50            | 520            |
| WILDEN NO 1          | 159721  | 45 44 | 169 12E | 427 | 2    | 102 | 76  | 76  | 74  | 64  | 66  | 46  | 41  | 53  | 66  | 81            | 86 831         |
| MOA FLAT             | *159722 | 45 46 | 169 17E | 410 | 1    | 86  | 69  | 74  | 66  | 58  | 58  | 41  | 36  | 43  | 58  | 76            | 74 739         |
| LEITHEN GLEN         | 159811  | 45 53 | 169 08E | 183 | 2    | 91  | 74  | 81  | 74  | 74  | 76  | 53  | 46  | 51  | 69  | 81            | 79 849         |
| RAES JUNCTION        | 159841  | 45 48 | 169 27E | 183 | 2    | 84  | 69  | 76  | 74  | 69  | 71  | 48  | 43  | 51  | 66  | 79            | 79 809         |
| BEAUMONT             | 159842  | 45 52 | 169 29E | 46  | 1    | 84  | 71  | 84  | 91  | 86  | 94  | 64  | 56  | 64  | 81  | 91            | 89 955         |
| WAIPORI TOWNSHIP     | 159881  | 45 50 | 169 53E | 2   | 102  | 81  | 89  | 81  | 81  | 76  | 51  | 46  | 56  | 74  | 91  | 99            | 927 CLOSED     |
| MAHINERANGI DAM      | *159891 | 45 53 | 169 58E | 396 | 2    | 97  | 79  | 91  | 81  | 79  | 61  | 51  | 56  | 71  | 89  | 91            | 927            |
| THE MAINS WAIKAKA    | 159901  | 45 57 | 169 01E | 152 | 3    | 80  | 70  | 80  | 70  | 70  | 50  | 40  | 50  | 60  | 80  | 70            | 790            |
| TAPANUI              | *159921 | 45 57 | 169 17E | 226 | 1    | 89  | 71  | 84  | 79  | 84  | 66  | 51  | 56  | 74  | 81  | 79            | 903            |
| RANKLEBURN FOREST    | *159941 | 45 58 | 169 26E | 255 | 3    | 90  | 80  | 90  | 90  | 90  | 100 | 70  | 60  | 60  | 80  | 90            | 90 990         |
| LAWRENCE             | 159961  | 45 55 | 169 41E | 122 | 1    | 81  | 66  | 71  | 66  | 66  | 61  | 41  | 38  | 43  | 58  | 74            | 74 744         |
| WAITAHUNA            | 159971  | 45 59 | 169 45E | 101 | 3    | 70  | 60  | 70  | 60  | 60  | 50  | 40  | 40  | 60  | 70  | 70            | 710            |
| WAIBORI WEIR         | 159991  | 45 55 | 169 59E | 381 | 2    | 94  | 76  | 81  | 76  | 76  | 71  | 48  | 43  | 51  | 66  | 84            | 91 857 CLOSED  |
| MILBURN              | 160001  | 46 05 | 170 01E | 29  | 2    | 56  | 41  | 56  | 53  | 53  | 56  | 41  | 30  | 38  | 48  | 56            | 56 584 CLOSED  |
| WAIHOLA              | 160002  | 46 01 | 170 05E | 30  | 3    | 70  | 60  | 60  | 60  | 60  | 60  | 40  | 40  | 50  | 70  | 60            | 670            |
| TAIERI MOUTH         | *160021 | 46 05 | 170 12E | 15  | 2    | 79  | 66  | 69  | 69  | 74  | 71  | 53  | 38  | 43  | 61  | 79            | 61 763         |
| BULL CREEK           | 160112  | 46 11 | 170 06E | 171 | 2    | 79  | 64  | 71  | 69  | 69  | 51  | 41  | 46  | 61  | 81  | 76            | 777 CLOSED     |
| COOK ROCK            | 160202  | 46 12 | 170 05E | 82  | 2    | 69  | 56  | 61  | 61  | 64  | 48  | 38  | 43  | 53  | 66  | 66            | 689 CLOSED     |
| CHRYSSTALS BEACH     | 160211  | 46 12 | 170 06E | 30  | 2    | 69  | 56  | 61  | 58  | 61  | 61  | 46  | 36  | 41  | 53  | 71            | 66 679         |
| LILLBURN             | 167061  | 46 00 | 167 40E | 76  | 2    | 91  | 81  | 97  | 102 | 99  | 112 | 81  | 81  | 84  | 94  | 97            | 89 1108        |
| CLIFDEN SCHOOL       | 167072  | 46 03 | 167 43E | 52  | 2    | 81  | 74  | 89  | 91  | 89  | 102 | 74  | 76  | 76  | 84  | 86            | 79 999         |
| TUATAPERE            | 167161  | 46 08 | 167 41E | 30  | 2    | 97  | 86  | 102 | 107 | 104 | 117 | 86  | 86  | 89  | 99  | 99            | 91 1163        |
| TE WAE WAE           | 167261  | 46 12 | 167 40E | 24  | 2    | 86  | 76  | 86  | 97  | 91  | 107 | 71  | 71  | 74  | 86  | 86            | 81 1012 CLOSED |
| OREPUKI              | 167272  | 46 17 | 167 44E | 15  | 2    | 112 | 99  | 112 | 124 | 117 | 137 | 91  | 91  | 94  | 112 | 112           | 102 1303       |
| PAHIA                | 167381  | 46 20 | 167 49E | 30  | 2    | 114 | 102 | 117 | 130 | 122 | 142 | 94  | 94  | 97  | 114 | 117           | 107 1350       |
| CENTRE ISLAND LH     | 167481  | 46 28 | 167 51E | 61  | 1    | 102 | 91  | 102 | 112 | 107 | 124 | 86  | 84  | 91  | 107 | 102           | 91 1199        |
| ROSEDALE SOUTH       | 168021  | 46 04 | 168 13E | 85  | 3    | 90  | 80  | 100 | 100 | 100 | 110 | 70  | 70  | 70  | 90  | 100           | 90 1070 CLOSED |
| LORA STN             | 168051  | 46 01 | 168 33E | 256 | 3    | 100 | 100 | 110 | 120 | 110 | 120 | 80  | 80  | 80  | 100 | 110           | 110 1220       |
| REABY DOWNS          | 168071  | 46 02 | 168 46E | 137 | 3    | 90  | 80  | 100 | 100 | 90  | 100 | 70  | 60  | 70  | 80  | 100           | 90 1030        |
| MANDEVILLE           | 168081  | 46 00 | 168 49E | 116 | 2    | 74  | 66  | 74  | 76  | 71  | 74  | 53  | 48  | 53  | 66  | 79            | 76 810         |
| EAST GORE            | *168093 | 46 05 | 168 57E | 75  | 2    | 79  | 71  | 79  | 81  | 76  | 81  | 58  | 51  | 56  | 71  | 84            | 81 868 CLOSED  |
| OTAUTAU              | 168101  | 46 08 | 168 00E | 51  | 2    | 89  | 79  | 89  | 102 | 94  | 109 | 74  | 74  | 76  | 89  | 89            | 81 1045 CLOSED |
| OTAUTAU              | *168102 | 46 10 | 168 00E | 55  | 2    | 91  | 81  | 91  | 102 | 97  | 112 | 76  | 76  | 76  | 91  | 91            | 84 1068        |
| HEDDON BUSH          | 168111  | 46 06 | 168 08E | 73  | 2    | 74  | 69  | 79  | 84  | 76  | 84  | 58  | 56  | 58  | 69  | 79            | 74 860         |
| WINTON               | 168131  | 46 11 | 168 20E | 41  | 2    | 84  | 76  | 86  | 86  | 76  | 79  | 58  | 58  | 58  | 74  | 86            | 84 900 CLOSED  |
| WINTON               | 168132  | 46 11 | 168 22E | 46  | 2    | 74  | 69  | 79  | 84  | 74  | 81  | 56  | 53  | 58  | 69  | 79            | 74 850         |
| WINTON               | *168133 | 46 09 | 168 20E | 44  | 2    | 64  | 61  | 69  | 74  | 66  | 74  | 48  | 48  | 51  | 61  | 71            | 66 753         |
| GLENDHU WAIMUMU      | 168171  | 46 07 | 168 45E | 183 | 2    | 102 | 91  | 102 | 107 | 99  | 104 | 76  | 66  | 74  | 91  | 109           | 104 1125       |
| GORE                 | *168191 | 46 06 | 168 56E | 72  | 2    |     |     |     |     |     |     |     |     |     |     |               |                |

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NZ METEOROLOGICAL SERVICE RAINFALL NORMALS 1941-70. MILLIMETRES

| STATION              | NUMBER  | LAT<br>S. | LONG    | HT<br>M. | TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV  | DEC  | YEAR        |
|----------------------|---------|-----------|---------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-------------|
| HEDGEHOPE            | I68251  | 46 13     | 168 32E | 41       | 2    | 81  | 76  | 86  | 89  | 81  | 86  | 58  | 58  | 61  | 76  | 91   | 84   | 927         |
| HOKONUI FOREST       | *I68252 | 46 13     | 168 35E | 46       | 1    | 86  | 81  | 94  | 97  | 86  | 91  | 66  | 61  | 66  | 81  | 97   | 89   | 995         |
| MATAURA              | I68281  | 46 12     | 168 52E | 76       | 2    | 81  | 74  | 84  | 89  | 79  | 84  | 58  | 56  | 61  | 74  | 89   | 81   | 910         |
| RIVERTON             | I68301  | 46 21     | 168 01E | 6        | 1    | 91  | 81  | 94  | 104 | 99  | 114 | 74  | 76  | 74  | 86  | 94   | 89   | 1076        |
| WAITORU              | I68321  | 46 20     | 168 17E | 12       | 2    | 91  | 84  | 97  | 104 | 94  | 107 | 71  | 69  | 71  | 86  | 99   | 91   | 1064 CLOSED |
| ROSLIN ESTATE        | I68351  | 46 21     | 168 32E | 34       | 2    | 91  | 84  | 97  | 99  | 89  | 94  | 66  | 64  | 69  | 84  | 102  | 94   | 1033 CLOSED |
| DACRE                | I68361  | 46 19     | 168 38E | 46       | 2    | 89  | 81  | 94  | 99  | 89  | 94  | 64  | 64  | 69  | 81  | 102  | 91   | 1017 CLOSED |
| EDENDALE             | I68371  | 46 19     | 168 47E | 40       | 1    | 89  | 79  | 91  | 97  | 86  | 91  | 61  | 64  | 66  | 81  | 102  | 89   | 996         |
| REDAN WYNDHAM        | I68383  | 46 20     | 168 53E | 2        | 2    | 89  | 76  | 86  | 97  | 94  | 102 | 71  | 61  | 64  | 81  | 97   | 89   | 1007 CLOSED |
| REDAN SCHOOL         | I68391  | 46 22     | 168 59E | 91       | 2    | 91  | 81  | 94  | 107 | 99  | 109 | 71  | 66  | 71  | 86  | 104  | 91   | 1070 CLOSED |
| INVERCARGILL         | *I68431 | 46 24     | 168 22E | 10       | 2    | 89  | 81  | 97  | 107 | 94  | 109 | 71  | 69  | 76  | 91  | 97   | 89   | 1070 CLOSED |
| INVERCARGILL         | *I68432 | 46 25     | 168 22E | 2        | 2    | 89  | 81  | 94  | 107 | 94  | 109 | 71  | 69  | 76  | 91  | 97   | 89   | 1067 CLOSED |
| INVERCARGILL AERO    | *I68433 | 46 25     | 168 20E | 0        | 1    | 89  | 79  | 94  | 104 | 91  | 107 | 69  | 66  | 74  | 86  | 94   | 89   | 1042        |
| INVERCARGILL         | I68434  | 46 24     | 168 21E | 5        | 2    | 89  | 79  | 94  | 104 | 91  | 107 | 69  | 69  | 74  | 89  | 94   | 89   | 1048 CLOSED |
| GLENHAM              | I68491  | 46 27     | 168 56E | 107      | 2    | 104 | 91  | 107 | 119 | 112 | 122 | 79  | 76  | 79  | 97  | 117  | 102  | 1205 CLOSED |
| AWARUA               | I68531  | 46 31     | 168 22E | 10       | 1    | 89  | 81  | 94  | 107 | 91  | 109 | 71  | 69  | 76  | 94  | 97   | 89   | 1067        |
| GORGE ROAD           | I68571  | 46 30     | 168 42E | 12       | 2    | 81  | 71  | 91  | 102 | 94  | 109 | 64  | 61  | 66  | 86  | 91   | 84   | 1000 CLOSED |
| WAIMAHAKA            | I68581  | 46 31     | 168 48E | 30       | 2    | 94  | 81  | 97  | 104 | 94  | 107 | 69  | 66  | 81  | 89  | 97   | 89   | 1068        |
| UPPLANDS WAIMAHAKA   | I68582  | 46 32     | 168 49E | 2        | 2    | 86  | 74  | 89  | 94  | 86  | 107 | 56  | 58  | 69  | 81  | 97   | 84   | 981 CLOSED  |
| BLUFF RESERVOIR      | I68631  | 46 36     | 168 20E | 94       | 2    | 79  | 76  | 86  | 97  | 86  | 102 | 66  | 66  | 74  | 89  | 91   | 81   | 993 CLOSED  |
| STIRLING POINT       | I68632  | 46 37     | 168 21E | 7        | 2    | 81  | 76  | 86  | 97  | 86  | 104 | 66  | 66  | 74  | 89  | 91   | 81   | 997         |
| HILL SIGNAL STN      | I68633  | 46 37     | 168 20E | 274      | 2    | 86  | 79  | 91  | 104 | 89  | 107 | 69  | 66  | 74  | 91  | 91   | 86   | 1033 CLOSED |
| DOG ISLAND LIGHT     | I68641  | 46 39     | 168 25E | 15       | 1    | 81  | 81  | 89  | 97  | 89  | 107 | 69  | 69  | 76  | 91  | 97   | 84   | 1030        |
| WAIKAPA POINT LIGHT  | I68681  | 46 40     | 168 51E | 8        | 1    | 79  | 86  | 94  | 99  | 86  | 109 | 74  | 64  | 81  | 86  | 91   | 81   | 1030        |
| OBAN STEWART ISLAND  | I68911  | 46 54     | 168 08E | 24       | 1    | 122 | 114 | 122 | 132 | 124 | 142 | 99  | 104 | 112 | 130 | 142  | 112  | 1455        |
| ULVA ISLAND          | I68912  | 46 56     | 168 08E | 2        | 2    | 119 | 112 | 119 | 137 | 117 | 142 | 91  | 99  | 112 | 132 | 140  | 112  | 1432 CLOSED |
| WAIKAKA VALLEY       | I69001  | 46 03     | 169 04E | 122      | 2    | 79  | 64  | 74  | 71  | 74  | 76  | 56  | 46  | 48  | 66  | 76   | 74   | 804 CLOSED  |
| CONICAL HILL         | I69021  | 46 04     | 169 14E | 104      | 2    | 76  | 61  | 71  | 69  | 74  | 76  | 56  | 46  | 48  | 64  | 74   | 74   | 789         |
| TUAPEKA MOUTH        | I69051  | 46 02     | 169 33E | 116      | 2    | 69  | 56  | 64  | 58  | 61  | 61  | 43  | 36  | 41  | 53  | 64   | 66   | 672         |
| NITHDALE             | I69101  | 46 11     | 169 05E | 213      | 1    | 97  | 79  | 86  | 91  | 91  | 94  | 69  | 56  | 61  | 81  | 97   | 97   | 999         |
| BAVERSTOCK WAIWERA S | I69151  | 46 10     | 169 31E | 91       | 2    | 64  | 53  | 58  | 56  | 58  | 58  | 43  | 36  | 38  | 53  | 69   | 64   | 650         |
| CLYDEVILLE           | I69152  | 46 08     | 169 33E | 24       | 3    | 70  | 50  | 60  | 60  | 60  | 60  | 40  | 40  | 40  | 50  | 70   | 60   | 660         |
| HILLEND              | I69171  | 46 08     | 169 45E | 262      | 2    | 81  | 69  | 74  | 71  | 74  | 76  | 53  | 43  | 48  | 64  | 84   | 79   | 811         |
| PUKEKOMA             | I69172  | 46 06     | 169 44E | 2        | 2    | 76  | 64  | 69  | 66  | 69  | 66  | 51  | 41  | 46  | 58  | 79   | 74   | 759 CLOSED  |
| LOVELLS FLAT         | I69181  | 46 11     | 169 51E | 91       | 2    | 64  | 53  | 56  | 56  | 56  | 56  | 41  | 33  | 38  | 48  | 66   | 61   | 628         |
| MILTON               | *I69191 | 46 07     | 169 58E | 18       | 1    | 69  | 58  | 64  | 64  | 66  | 66  | 51  | 38  | 43  | 53  | 69   | 69   | 710         |
| CRAIGDALE            | I69211  | 46 14     | 169 11E | 221      | 2    | 109 | 89  | 99  | 104 | 104 | 107 | 79  | 64  | 71  | 91  | 109  | 109  | 1135 CLOSED |
| CLINTON              | I69231  | 46 12     | 169 23E | 122      | 2    | 91  | 76  | 86  | 99  | 94  | 104 | 71  | 61  | 64  | 81  | 97   | 89   | 1013 CLOSED |
| CLINTON              | I69232  | 46 12     | 169 22E | 122      | 4    | 69  | 58  | 61  | 61  | 61  | 61  | 46  | 36  | 41  | 53  | 71   | 69   | 1000        |
| BALCLUTHA            | I69271  | 46 14     | 169 44E | 6        | 2    | 69  | 58  | 61  | 61  | 61  | 61  | 46  | 36  | 41  | 53  | 71   | 69   | 687 CLOSED  |
| BALCLUTHA            | I69272  | 46 14     | 169 45E | 12       | 1    | 69  | 56  | 61  | 56  | 56  | 56  | 41  | 33  | 38  | 53  | 74   | 64   | 657         |
| LOCHINDORB           | I69351  | 46 20     | 169 32E | 198      | 2    | 81  | 66  | 74  | 89  | 104 | 94  | 74  | 53  | 66  | 74  | 81   | 79   | 935 CLOSED  |
| INCHCLUTHA           | I69381  | 46 18     | 169 49E | 6        | 2    | 61  | 53  | 56  | 56  | 58  | 43  | 36  | 38  | 51  | 66  | 61   | 61   | 635 CLOSED  |
| INCHCLUTHA NO 3      | I69382  | 46 18     | 169 50E | 8        | 2    | 69  | 58  | 61  | 64  | 61  | 66  | 48  | 41  | 43  | 56  | 74   | 66   | 707         |
| MOKORETA             | I69411  | 46 26     | 169 07E | 117      | 1    | 112 | 97  | 114 | 140 | 132 | 150 | 97  | 84  | 89  | 109 | 127  | 109  | 1360        |
| OWAKA                | I69461  | 46 27     | 169 39E | 12       | 1    | 74  | 64  | 74  | 94  | 89  | 104 | 74  | 64  | 74  | 84  | 79   | 79   | 938         |
| OWAKA VALLEY         | I69462  | 46 25     | 169 36E | 37       | 2    | 81  | 69  | 76  | 91  | 97  | 109 | 74  | 64  | 69  | 81  | 86   | 81   | 978         |
| NUGGET POINT LH      | *I69481 | 46 27     | 169 49E | 129      | 1    | 74  | 66  | 69  | 76  | 76  | 86  | 61  | 51  | 53  | 64  | 79   | 76   | 831         |
| QUARRY HILLS         | I69501  | 46 33     | 169 03E | 76       | 1    | 107 | 97  | 114 | 130 | 127 | 150 | 94  | 89  | 89  | 109 | 122  | 107  | 1335        |
| WAIAKAWA VALLEY      | I69511  | 46 31     | 169 08E | 2        | 2    | 102 | 89  | 102 | 130 | 122 | 145 | 102 | 86  | 89  | 104 | 117  | 107  | 1295 CLOSED |
| TAHAKOPA WHARUARIMU  | I69541  | 46 30     | 169 24E | 2        | 2    | 109 | 94  | 109 | 137 | 132 | 155 | 109 | 94  | 97  | 112 | 124  | 114  | 1386 CLOSED |
| SLOPE POINT          | I69601  | 46 40     | 169 00E | 2        | 2    | 84  | 71  | 84  | 104 | 99  | 117 | 84  | 71  | 74  | 84  | 97   | 89   | 1058 CLOSED |
| WAIAKAWA             | I69611  | 46 38     | 169 08E | 5        | 2    | 102 | 89  | 107 | 124 | 119 | 140 | 89  | 81  | 84  | 102 | 117  | 99   | 1253 CLOSED |
| PENRHYN COOK IS.     | *J00002 | 09 00     | 158 03W | 1        | 2    | 213 | 183 | 201 | 155 | 142 | 170 | 160 | 140 | 119 | 145 | 157  | 160  | 1945        |
| RAKAHANGA COOK IS.   | *J00004 | 10 03     | 161 06W | 3        | 3    | 340 | 234 | 201 | 163 | 152 | 150 | 147 | 201 | 216 | 277 | 2388 |      |             |
| MANIHIKI COOK IS.    | *J00005 | 10 26     | 161 01W | 2        | 2    | 307 | 234 | 178 | 147 | 165 | 152 | 145 | 157 | 142 | 224 | 229  | 277  | 2357        |
| PUKAPUKA COOK IS.    | *J00006 | 10 53     | 165 49W | 2        | 2    | 401 | 310 | 229 | 173 | 198 | 178 | 168 | 185 | 224 | 254 | 333  | 2821 |             |
| APIA WESTERN SAMOA   | *J00007 | 13 48     | 171 47W | 2        | 2    | 353 | 343 | 363 | 234 | 178 | 157 | 119 | 122 | 150 | 234 | 244  | 381  | 2878        |
| AITUTAKI COOK IS.    | *J00010 | 18 50     | 159 49W | 5        | 2    | 208 | 234 | 218 | 185 | 165 | 79  | 91  | 74  | 99  | 127 | 198  | 277  | 1955        |
| ALOFI NIUE ISLAND    | *J00011 | 19 02     | 169 55W | 20       | 2    | 307 | 262 | 287 | 218 | 142 | 86  | 94  | 81  | 130 | 157 | 142  | 173  | 2079        |
| RAROTONGA AIR        | *J00014 | 21 12     | 159 49W | 7        | 2    | 259 | 208 | 246 | 183 | 183 | 97  | 97  | 122 | 109 | 130 | 152  | 226  | 2012        |
| PITCAIRN Island      | *J00018 | 25 04     | 130 06W | 264      | 2    | 160 | 152 | 137 | 160 | 155 | 157 | 168 | 130 | 142 | 152 | 124  | 170  | 1807        |
| RAOUL ISLAND         | *J00019 | 29 15     | 177 55W | 38       | 2    | 91  | 155 | 132 | 124 | 145 | 150 | 163 | 137 | 117 | 86  | 81   | 89   | 1470        |
| WAITANGI CHATHAM IS  | *J00026 | 43 58     | 176 31W | 49       | 2    | 53  | 64  | 84  | 89  | 117 | 94  | 79  | 89  | 61  | 56  | 61   | 66   | 913         |
| CAMPBELL ISLAND      | *J00028 | 52 33     | 169 07E | 15       | 2    | 124 | 114 | 130 | 122 | 140 | 130 | 107 | 109 | 102 | 117 | 107  | 102  | 1404        |

The J section stations are period averages and are unadjusted figures. They are all for 1941 to 1970 except  
Apia 1958 to 1970  
Alofi 1958 to 1970  
Pitcairn 1941 to 1945 and 1954 to 1970  
Waitangi 1951 to 1970  
Campbell Island 1951 to 1970