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METEOROLOGICAL OFFICE

London Road, Bracknell, Berkshire

HYDROLOGICAL MEMORANDUM No.9

**Rainfall over the areas of the Yorkshire Ouse, Hull
and East Yorkshire River Boards, 1916—1950**

by

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Amendments to Hyd. Memo No. 9

| <u>Page</u> | <u>Wrong</u> | <u>Correct</u> |
|-------------|--|--|
| 9. | Mulgrove Castle Mawes Stome & Ears Wham Serutom Cragg Lane Farm Sowerly | Mulgrave Castle Hawes Stone & Ears Wham Scruton Craggs Lane Farm Sowerby |
| 10. | Blubber Houses Swinsey Harwood House Reccall Hulton-le-Hole Malham Tam Cringlis Res Lower Loithe Res. | Blubberhouses Swinsty Harewood House Riccall Hutton-le-Hole Malham Tarn Cringles Res. Lower Laithe Res. |
| 11. | Guisley Moor Leeds, Roundham Park Castle Bar Great Waldem Edge No.2 Blackmoor fort Rpyd Moor | Guiseley Moor Leeds, Roundhay Park Castle Carr Great Wolden Edge No.2 Blackmoorfoot Royd Moor |
| 12. | Heekmondwike Pontfract Greenley Carr Thornsea | Heckmondwike Pontefract Gringley Carr Thornseat |
| 28 | "Scarborough - Other extremes" under col. "Year" delete 1952 17.18 | |
| 22. | Scarborough - All months column - 0.20 - 1487 not 0.20 - 1488 | |



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HYDROLOGICAL MEMORANDA NO. 9

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1. Rainfall, 1916-1950

1.1 Introduction The estimation of standard-period averages for the months or for the year, is carried out in three stages; the selection of sound, homogeneous records complete for the 35 years, 1916-1950, which provide arithmetic means of monthly and annual rainfall, the basic values for all other work; the estimation of standard-period, annual averages for short-period stations; the estimation of standard-period, monthly averages for stations in the second group, where these are needed for special purposes.

A detailed account of the methods developed and used in the Meteorological Office (M.O.3) to estimate standard-period averages from short-period records, is given in Hydrological Memoranda No. 5.

It is possible to process the data in a number of ways but the maps and tables are presented here in the simplest, most precise forms in order to be of use to a wide range of enquirers.

1.2 The Primary Survey, for Great Britain and Northern Ireland, of stations with complete records during 1916-1950, included some cases where the site had been changed to one with a better exposure and observations from both sites had been recorded for a few years. Attempts were made to amend the earlier readings by comparison of the data during a period of overlap, in order to have a set of values from 1916 to the date of the change, which would be representative of the later, and better, record. But since the earlier exposures were usually unsatisfactory (being over-exposed or over-sheltered), the results were mostly erratic and the amended sets of values were not homogeneous. In a few cases, small breaks in a long record were completed by using estimated values, based on a nearby station, with or without the use of a modifying factor.

Of the many records examined, monthly and annual averages were accepted for 78 stations, 72 for the Yorkshire Ouse, 6 for Hull and East Yorkshire areas. Settle, just over the border in the area of the Lancashire River Board has been added to represent the extreme west. The accepted values (in inches), together with the proportions (per cent) of each monthly average to the annual average, are given in Table I together with the altitude and the National Grid reference for each station. Most of these averages were included in H.M.S.O. publication, M.O. 635, "Averages of Rainfall for Great Britain and Northern Ireland, 1916-1950", some were omitted because other stations were so near.

The percentage proportion of monthly averages to the annual averages for the long-period stations were used to draw a series of twelve monthly maps from which it is possible to estimate the percentage of average annual rainfall, for any place, for each month of the year. These maps are shown as Figure 1. Values estimated for a few points between the isopercental lines have been added to give a clearer indication of the variations from place to place. The points chosen are not necessarily the same for each map.

1.3 The Secondary Survey of short-period stations was undertaken next, using records up to the time of the survey, usually into the late 1950's. Long-period stations, whose averages had been rejected from the Primary Survey because the record was not homogeneous, were examined again and averages were estimated for the later (and usually improved) part of the series of observations. Averages based on data for less than 5 years were not usually accepted for publication. A list of the accepted averages, for the

short-period stations, is given in Table II together with the altitude and National Grid reference for each. The stations are listed in an order based on natural drainage areas which will be used for the first time in British Rainfall, 1961.

These averages, together with the long-period averages listed in Table I, were plotted on Ordnance Survey Maps (scale 4 miles to the inch), and used to draw the lines of average annual rainfall, 1916-1950. The map is shown as Figure 2. The Secondary Survey is frequently revised for special areas using the most up-to-date observations for relatively new stations and the map is subject to revision from time to time. The redrawing of the isohyets usually results in greater detail and perhaps a clearer definition of a wet area as more and more observations become available from improved River Board networks of rain-gauges. Drastic changes are not expected. In Tables I, II and III, with a few exceptions, the average quoted are for records still being maintained in 1963.

1.4 Monthly Averages for a further group of stations were next estimated for use in the Monthly Weather Report and for enquiries. For this purpose some stations were chosen from those listed in Table II to supplement those listed in Table I. To find the monthly average, the monthly proportions (per cent of annual average) were chosen from the equipercental maps (see Fig. 1) so that the total for the twelve months was 100. These monthly percentages were then used to apportion the annual average (in inches) amongst the months. The results are given in Table III.

1.5 Daily Rainfall, 1916-1950 Five of the initial 78 records which were accepted for the Primary Survey (1.2.) were analysed further. To this group we added Settle. These records had regular daily entries, for the 24-hour period 0900 to 0900, for each of the 35 years, 1916-1950. Table IVa gives for each of the stations the 35-year totals for each day of the year (in inches). Table IVb gives 1/35 of all possible totals from .17 in. to 24.67 in., thus providing a reduction table for the values in IVa to give average daily falls from "trace" to .70 in. For 29 February the reduction factor is, of course, 1/9.

These daily averages can be re-grouped as 5-day means, 7-day means, consecutive or sliding means or in whatever form suits a specific requirement.

2. Frequencies of Daily Rainfall, 1916-1950 The same set of daily values used for Table IVa were re-grouped to give frequency tables with intervals of .01 inch. These have been re-arranged in Table V, to give accumulated frequencies with intervals of .10 in. up to 2.50 in. and a wider grouping above this.

3. Extremes of Rainfall The records for the 35-year period, 1916-1950, for the stations used in Tables IV and V were also used to find maximum and minimum values for the year and for each month and also maximum daily values for each month. These maxima and minima are given in Table VI and Table VII. Additional extremes are given in these tables to cover the 50-year period, 1911-1960.

Appendix I

Intense Falls Falls of 2 hours or less, which have been recorded in British Rainfall and rank as "noteworthy", "remarkable" or "very rare", are listed in Appendix I.

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TABLE I. Monthly and Annual Averages of Rainfall 1916-1950
over the River Board Areas of the Yorkshire Ouse and
the Hull and East Yorkshire Rivers

| County | Station & N.G.R. | Alt. ft. | Jan | Feb | Mar | Apr | May | June | July | Aug | Sep | Oct | Nov | Dec | Year | Inch % |
|-------------|---|-------------|--------------|--------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|----------------|-----------|
| Yorks. N.R. | Scarborough TA(54)044884 | 118 | 2.53 9.9 | 1.80 7.0 | 1.52 5.9 | 1.77 6.9 | 1.84 7.2 | 1.70 6.7 | 2.48 9.7 | 2.60 10.2 | 2.08 8.1 | 2.24 8.8 | 2.55 10.0 | 2.46 9.6 | 25.57 100.0 | Inch % |
| " | E.R. Lowthorpe TA(54)084608 | 63 | 2.51 9.5 | 1.91 7.21 | 1.57 6.0 | 1.80 6.8 | 1.87 7.1 | 1.65 6.3 | 2.36 9.0 | 2.65 10.1 | 2.34 8.9 | 2.51 9.5 | 2.79 10.6 | 2.36 9.0 | 26.32 100.0 | Inch % |
| " | " Hempholme Lock TA(54)080499 | 11 | 2.36 9.1 | 1.83 7.1 | 1.52 5.9 | 1.78 6.9 | 1.89 7.3 | 1.91 7.4 | 2.51 9.7 | 2.71 10.4 | 2.15 8.3 | 2.37 9.1 | 2.63 10.1 | 2.27 8.7 | 25.93 100.0 | Inch % |
| " | " Dalton Holme TA(44)965453 | 120 | 2.64 9.3 | 2.00 7.0 | 1.69 5.9 | 1.98 7.0 | 2.15 7.6 | 2.05 7.2 | 2.66 9.3 | 2.84 10.9 | 2.31 8.1 | 2.73 9.6 | 2.90 10.2 | 2.50 8.8 | 28.45 100.0 | Inch % |
| " | " S. Bullock P. Sta. TA(54)053426 | 11 | 2.40 9.3 | 1.81 7.0 | 1.50 5.8 | 1.79 6.9 | 1.92 7.5 | 1.82 7.1 | 2.45 9.5 | 2.61 10.1 | 2.09 8.1 | 2.42 9.4 | 2.71 10.5 | 2.27 8.8 | 25.79 100.0 | Inch % |
| " | " Holme-on-Spalding Moor SE(44)813382 | 30 | 2.43 9.3 | 1.82 6.9 | 1.50 5.7 | 1.79 6.8 | 2.00 7.6 | 1.95 7.4 | 2.80 10.7 | 2.69 10.2 | 2.12 8.1 | 2.41 9.2 | 2.53 9.6 | 2.24 8.5 | 26.29 100.0 | Inch % |
| " | " Hull TA(54)084302 | 8 | 2.3 9.3 | 1.83 7.2 | 1.49 5.8 | 1.83 7.2 | 1.94 7.6 | 1.72 6.8 | 2.41 9.5 | 2.58 10.1 | 2.03 8.0 | 2.38 9.4 | 2.57 10.1 | 2.25 8.9 | 25.39 100.0 | Inch % |
| " | N.R. Bolton Hall SE(44)075897 | 420 | 3.96 11.3 | 2.90 8.3 | 2.27 6.5 | 2.43 7.0 | 2.26 6.5 | 1.93 5.5 | 2.78 9.0 | 3.09 8.8 | 2.71 7.8 | 3.60 10.3 | 3.58 10.3 | 3.38 9.7 | 34.89 100.0 | Inch % |
| " | " Breary Bank SE(44)158502 | 600 | 4.37 11.1 | 3.28 8.4 | 2.43 6.2 | 2.66 6.8 | 2.69 6.9 | 2.26 5.3 | 3.12 7.9 | 3.42 8.7 | 3.05 7.8 | 3.96 10.1 | 4.13 10.5 | 3.84 9.8 | 39.21 100.0 | Inch % |
| " | " Towler Hill SE(44)154798 | 820 | 4.28 11.1 | 3.21 8.3 | 2.44 6.3 | 2.64 6.8 | 2.69 6.9 | 2.25 5.8 | 3.05 7.9 | 3.40 8.8 | 3.03 7.8 | 3.89 10.1 | 4.06 10.5 | 3.76 9.7 | 38.70 100.0 | Inch % |
| " | " Leighton Res. SE(44)161790 | 634 | 4.14 11.0 | 3.20 8.5 | 2.38 6.4 | 2.57 6.9 | 2.60 6.9 | 2.14 5.7 | 3.03 8.1 | 3.27 8.7 | 2.97 7.9 | 3.74 10.0 | 3.88 10.3 | 3.59 9.6 | 37.51 100.0 | Inch % |
| " | W.R. Hambleton Hill SE(44)160730 | 1106 | 4.44 10.9 | 3.51 8.6 | 2.73 6.6 | 2.80 6.9 | 2.80 6.9 | 2.34 5.7 | 3.37 8.3 | 3.49 8.5 | 3.40 8.3 | 3.94 9.7 | 4.39 10.8 | 3.60 8.8 | 40.81 100.0 | Inch % |
| " | " Hawsett SE(44)184729 | 820 | 4.14 10.7 | 3.27 8.5 | 2.35 6.1 | 2.57 6.6 | 2.65 6.9 | 2.24 5.8 | 3.07 7.9 | 3.43 8.9 | 3.17 8.2 | 3.91 10.1 | 4.13 10.7 | 3.72 9.6 | 38.65 100.0 | Inch % |

Table I. Monthly and Annual Averages of Rainfall 1916-1950
over the River Board Areas of the Yorkshire Ouse and
the Hull and East Yorkshire Rivers (Contd.)

| County | Station & N.G.R. | Alt. ft. | Jan | Feb | Mar | Apr | May | June | July | Aug | Sep | Oct | Nov | Dec | Year | Inch % |
|-------------|------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|----------------|-----------|
| Yorks. W.R. | Drover's Inn SE(44)213722 | 576 | 4.34 11.1 | 3.43 8.8 | 2.42 6.2 | 2.59 6.6 | 2.64 6.8 | 2.30 5.9 | 3.15 8.1 | 3.30 8.5 | 3.19 8.2 | 3.89 10.0 | 4.08 10.4 | 3.69 9.4 | 39.02 100.0 | Inch % |
| " | N.R. | 900 | 5.74 11.9 | 4.05 8.4 | 3.15 6.5 | 3.04 6.3 | 2.78 5.8 | 2.51 5.2 | 3.42 7.1 | 4.17 8.7 | 3.94 8.2 | 5.4 11.2 | 5.18 10.8 | 4.76 9.9 | 48.14 100.0 | Inch % |
| " | " | 90 | 2.46 9.3 | 1.84 7.0 | 1.61 6.1 | 1.79 6.8 | 2.00 7.6 | 1.92 7.3 | 2.55 9.7 | 2.87 10.9 | 2.24 8.5 | 2.43 9.2 | 2.36 9.0 | 2.26 8.6 | 26.33 100.0 | Inch % |
| " | " | 115 | 2.62 9.8 | 1.81 6.7 | 1.54 5.7 | 1.73 6.5 | 1.90 7.1 | 1.97 7.3 | 2.78 10.4 | 2.94 11.0 | 2.25 8.4 | 2.47 9.2 | 2.46 9.2 | 2.32 8.7 | 26.79 100.0 | Inch % |
| " | " | 459 | 3.05 9.7 | 2.20 7.0 | 1.98 6.3 | 2.05 6.5 | 2.16 6.9 | 2.20 7.0 | 3.07 9.8 | 3.25 10.4 | 2.60 8.3 | 2.84 9.0 | 3.17 10.1 | 2.82 9.0 | 31.39 100.0 | Inch % |
| " | " | 540 | 2.80 9.7 | 2.03 7.1 | 1.74 6.0 | 1.85 6.4 | 2.02 7.0 | 2.11 7.3 | 2.96 10.3 | 3.03 10.5 | 2.39 8.3 | 2.63 9.1 | 2.78 9.6 | 2.52 8.7 | 28.86 100.0 | Inch % |
| " | " | 260 | 2.81 9.7 | 1.99 6.9 | 1.77 6.1 | 1.93 6.7 | 2.12 7.4 | 2.06 7.1 | 2.81 9.7 | 2.98 10.3 | 2.47 8.6 | 2.63 9.1 | 2.84 9.8 | 2.49 8.6 | 28.90 100.0 | Inch % |
| " | W.R. | 1470 | 5.94 11.7 | 3.98 7.8 | 2.90 5.7 | 3.21 6.3 | 3.11 6.1 | 2.82 5.6 | 3.92 7.7 | 4.56 9.0 | 4.26 8.4 | 5.66 11.1 | 5.57 11.0 | 4.87 9.6 | 50.80 100.0 | Inch % |
| " | " | 700 | 3.26 9.8 | 2.58 7.8 | 2.03 6.1 | 2.23 6.7 | 2.37 7.1 | 2.24 6.8 | 2.97 8.9 | 3.16 9.0 | 2.69 8.1 | 3.10 9.3 | 3.52 10.6 | 3.10 9.3 | 33.23 100.0 | Inch % |
| " | " | 646 | 3.51 10.0 | 2.76 7.9 | 2.17 6.2 | 2.36 6.7 | 2.60 7.4 | 2.26 6.4 | 3.29 9.4 | 3.35 9.5 | 2.82 8.0 | 3.35 9.6 | 3.51 10.0 | 3.12 8.9 | 35.10 100.0 | Inch % |
| " | " | 730 | 3.35 9.9 | 2.61 7.7 | 1.95 5.7 | 2.20 6.5 | 2.52 7.4 | 2.30 6.8 | 3.11 9.1 | 3.25 9.6 | 2.75 8.1 | 3.16 9.3 | 3.62 10.7 | 3.13 9.2 | 33.95 100.0 | Inch % |
| " | " | 208 | 3.14 10.1 | 2.43 7.8 | 1.95 6.2 | 2.09 6.7 | 2.46 7.9 | 2.00 6.4 | 2.83 9.1 | 2.92 9.3 | 2.49 8.0 | 2.96 9.5 | 3.12 10.0 | 2.80 9.0 | 31.19 100.0 | Inch % |
| " | " | 181 | 2.79 9.5 | 2.15 7.3 | 1.75 5.9 | 2.05 7.0 | 2.37 8.1 | 1.96 6.7 | 2.92 9.9 | 2.83 9.6 | 2.40 8.2 | 2.69 9.1 | 2.94 10.0 | 2.57 8.7 | 29.42 100.0 | Inch % |

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the Hull and East Yorkshire Rivers (Contd.)

| County | Station & N.G.R. | Alt. ft. | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | Year | Inch % |
|-------------|------------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|----------------|-----------|
| Yorks. N.R. | York, Museum SE(44)598522 | 57 | 2.34 9.5 | 1.68 6.8 | 1.43 5.8 | 1.70 6.9 | 1.97 8.0 | 1.85 7.5 | 2.43 10.0 | 2.57 10.4 | 2.08 8.4 | 2.21 8.9 | 2.36 9.6 | 2.03 8.2 | 24.70 100.0 | Inch % |
| " | Sandbed Beck SE(44)020614 | 676 | 4.89 10.9 | 3.81 8.5 | 2.70 6.0 | 2.76 6.1 | 2.65 5.9 | 2.79 6.2 | 3.76 8.4 | 4.30 9.6 | 3.75 8.4 | 4.78 10.6 | 4.58 10.2 | 4.15 9.2 | 44.92 100.0 | Inch % |
| " | Ilkley SE(44)113476 | 315 | 4.02 10.7 | 3.29 8.7 | 2.35 6.2 | 2.57 6.8 | 2.62 7.0 | 2.26 6.0 | 3.08 8.2 | 3.40 9.0 | 2.93 7.8 | 3.78 10.0 | 3.83 10.2 | 3.56 9.4 | 37.69 100.0 | Inch % |
| " | Broad Dubb SE(44)219530 | 725 | 3.47 10.0 | 2.71 7.8 | 2.10 6.1 | 2.33 6.7 | 2.51 7.3 | 2.30 6.6 | 3.11 9.0 | 3.21 9.3 | 2.83 8.2 | 3.22 9.3 | 3.64 10.5 | 3.83 9.2 | 34.61 100.0 | Inch % |
| " | Osgodby TA(54)055840 | 166 | 2.74 10.2 | 1.80 6.7 | 1.59 5.9 | 1.89 7.0 | 1.56 7.3 | 1.74 6.5 | 2.61 9.7 | 2.60 9.7 | 2.02 7.5 | 2.43 9.9 | 2.82 10.5 | 2.70 10.0 | 26.90 100.0 | Inch % |
| " | Scampton Hall SE(44)864757 | 102 | 2.87 10.1 | 2.06 7.2 | 1.72 6.1 | 1.97 6.9 | 2.05 7.2 | 1.96 6.9 | 2.63 9.3 | 2.82 9.9 | 2.24 7.9 | 2.63 9.3 | 2.91 10.2 | 2.57 9.0 | 28.43 100.0 | Inch % |
| " | Ravenswyke SE(44)706873 | 270 | 2.99 10.2 | 2.13 7.2 | 1.78 6.1 | 1.89 6.4 | 2.11 7.2 | 1.90 6.5 | 2.70 9.2 | 2.99 10.2 | 2.36 8.0 | 2.80 9.5 | 3.03 10.3 | 2.69 9.2 | 29.37 100.0 | Inch % |
| " | Hovingham Hall SE(44)665757 | 119 | 2.94 10.1 | 2.24 7.7 | 1.76 6.0 | 1.86 6.4 | 2.21 7.6 | 2.03 7.2 | 2.76 9.5 | 2.91 10.0 | 2.35 8.1 | 2.63 9.0 | 2.70 9.3 | 2.64 9.1 | 29.08 100.0 | Inch % |
| " | Birdsall House SE(44)815648 | 308 | 3.18 10.5 | 2.27 7.5 | 1.88 6.2 | 2.06 6.8 | 2.13 7.0 | 2.01 6.6 | 2.83 9.3 | 3.04 10.0 | 2.40 7.9 | 2.75 9.0 | 3.06 10.1 | 2.77 9.1 | 30.38 100.0 | Inch % |
| " | Salterforth SD(34)880440 | 832 | 5.28 10.6 | 4.04 8.1 | 2.76 5.6 | 2.86 5.8 | 2.92 5.9 | 3.08 6.2 | 4.24 8.6 | 4.83 9.7 | 4.45 9.0 | 5.53 11.2 | 5.07 10.2 | 4.50 9.1 | 49.56 100.0 | Inch % |
| " | Earby S. Wks. SD(34)909472 | 426 | 4.43 10.8 | 3.32 8.1 | 2.34 5.7 | 2.41 5.9 | 2.51 6.1 | 2.47 6.0 | 3.43 8.4 | 3.99 9.8 | 3.48 8.5 | 4.48 11.0 | 4.27 10.4 | 3.79 9.3 | 40.92 100.0 | Inch % |
| " | Skipton, Town Hall SD(34)991518 | 367 | 3.70 10.5 | 2.88 8.1 | 1.97 5.6 | 2.21 6.2 | 2.36 6.7 | 2.13 6.0 | 3.13 8.9 | 3.46 9.8 | 2.95 8.3 | 3.76 10.6 | 3.58 10.1 | 3.26 9.2 | 35.39 100.0 | Inch % |
| " | Nan Scar SE(44)037334 | 1101 | 5.54 11.2 | 4.20 8.5 | 2.92 5.9 | 3.09 6.2 | 3.12 6.3 | 2.83 5.7 | 3.76 7.6 | 4.49 9.1 | 4.00 8.1 | 5.22 10.6 | 5.54 11.2 | 4.75 9.6 | 45.47 100.0 | Inch % |

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over the River Board Areas of the Yorkshire Ouse and
the Hull and East Yorkshire Rivers. (Contd.)

| County | Station & N.G.R. | Alt. ft. | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | Year | Inch % |
|-------------|---------------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|--------------|--------------|-------------|----------------|-----------|
| Yorks. W.R. | Leeshaw Res. SE(44)011351 | 875 | 5.76 11.3 | 4.49 8.8 | 3.01 5.9 | 3.22 6.3 | 3.15 6.2 | 2.88 5.6 | 3.86 7.5 | 4.56 8.9 | 4.25 8.3 | 5.32 10.4 | 5.61 11.0 | 5.00 9.8 | 51.11 100.0 | Inch % |
| " | Stubden Res. No. SE(44)057332 | 1071 | 5.11 10.8 | 4.00 8.4 | 2.85 6.0 | 3.02 6.4 | 3.18 6.7 | 2.78 5.8 | 3.61 7.6 | 4.33 9.1 | 3.93 8.3 | 5.01 10.5 | 5.18 10.9 | 4.53 9.5 | 47.53 100.0 | Inch % |
| " | Brayshaw Res. SE(44)122306 | 982 | 4.05 10.6 | 3.34 8.7 | 2.32 6.1 | 2.47 6.4 | 2.60 6.8 | 2.35 6.1 | 3.20 8.3 | 3.41 8.9 | 3.14 8.2 | 3.91 10.2 | 4.09 10.7 | 3.45 9.0 | 38.33 100.0 | Inch % |
| " | Chellow Heights Res. SE(44)116352 | 848 | 3.82 10.4 | 3.04 8.3 | 2.31 6.3 | 2.51 6.8 | 2.66 7.2 | 2.20 6.0 | 3.05 8.3 | 3.34 9.1 | 2.96 8.0 | 3.70 10.0 | 3.87 10.5 | 3.36 9.1 | 36.82 100.0 | Inch % |
| " | Henton Res. SE(44)144352 | 531 | 3.62 10.6 | 2.83 8.3 | 2.15 6.3 | 2.36 6.9 | 2.48 7.2 | 2.01 5.9 | 2.94 8.6 | 3.03 8.9 | 2.62 7.7 | 3.34 9.8 | 3.60 10.5 | 3.17 9.3 | 34.15 100.0 | Inch % |
| " | Wortley Res. SE(44)265325 | 307 | 2.70 9.6 | 2.14 7.6 | 1.73 6.1 | 1.95 6.9 | 2.31 8.2 | 1.79 6.3 | 2.62 9.3 | 2.70 9.6 | 2.26 8.0 | 2.66 9.4 | 2.89 10.3 | 2.45 8.7 | 28.20 100.0 | Inch % |
| " | Weetwood Filters SE(44)271373 | 328 | 2.88 9.8 | 2.25 7.6 | 1.82 6.2 | 2.05 7.0 | 2.37 8.1 | 1.89 6.4 | 2.78 9.4 | 2.80 9.5 | 2.35 8.0 | 2.76 9.4 | 3.00 10.3 | 2.48 8.4 | 29.43 100.0 | Inch % |
| " | Woodhouse Moor SE(44)291350 | 307 | 2.64 9.5 | 2.14 7.7 | 1.70 6.1 | 1.95 7.0 | 2.29 8.2 | 1.83 6.5 | 2.6 9.6 | 2.69 9.6 | 2.24 8.0 | 2.57 9.2 | 2.84 10.2 | 2.34 8.4 | 27.91 100.0 | Inch % |
| " | Leeds, Knostrop SE(44)324313 | 72 | 2.32 9.6 | 1.83 7.6 | 1.44 6.0 | 1.76 7.3 | 2.05 8.5 | 1.48 6.2 | 2.33 9.7 | 2.35 9.8 | 1.94 8.1 | 2.17 9.0 | 2.36 9.8 | 2.03 8.4 | 24.06 100.0 | Inch % |
| " | Ramsden Res. SD(34)915214 | 993 | 5.62 10.5 | 4.25 7.9 | 3.08 5.8 | 3.19 6.0 | 3.16 5.9 | 3.27 6.1 | 4.26 8.0 | 5.48 10.2 | 4.65 8.7 | 5.78 10.8 | 5.74 10.7 | 5.01 9.4 | 53.49 100.0 | Inch % |
| " | Greystones SE(44)001178 | 1192 | 5.72 10.7 | 4.48 8.4 | 3.25 6.1 | 3.17 5.9 | 3.41 6.4 | 3.30 6.1 | 4.19 7.8 | 4.96 9.2 | 4.56 8.5 | 5.2 10.7 | 5.72 10.7 | 5.12 9.5 | 53.60 100.0 | Inch % |
| " | Gt. Walden Edge No. 1 SD(34)996156 | 1135 | 5.45 10.5 | 4.31 8.3 | 3.15 6.0 | 3.15 6.0 | 3.39 6.5 | 3.35 6.4 | 4.24 8.1 | 4.97 9.5 | 4.45 8.5 | 5.50 10.5 | 5.49 10.5 | 4.79 9.2 | 52.24 100.0 | Inch % |
| " | Albert Res. SE(44)074256 | 795 | 4.15 10.8 | 3.21 8.3 | 2.29 5.9 | 2.58 6.7 | 2.57 6.7 | 2.41 6.2 | 3.07 8.0 | 3.38 8.8 | 3.20 8.3 | 4.10 10.6 | 4.04 10.5 | 3.56 9.2 | 38.56 100.0 | Inch % |

TABLE I. Monthly and Annual Averages of Rainfall 1916-1950
over the River Board Areas of the Yorkshire Ouse and
the Hull and East Yorkshire Rivers (Contd.)

| County | Station & N.G.R. | Alt. ft. | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | Year | Inch % |
|-------------|-------------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------|--------------|-------------|----------------|-----------|
| Yorks. W.R. | Halifax Library SE(44)085250 | 625 | 3.85 10.8 | 2.96 8.3 | 2.19 6.2 | 2.43 6.8 | 2.49 7.0 | 2.18 6.1 | 2.83 8.0 | 3.12 8.8 | 2.88 8.1 | 3.71 10.4 | 3.69 10.4 | 3.23 9.1 | 35.56 100.0 | Inch % |
| " | Wessenden Head SE(44)068077 | 1200 | 5.06 10.1 | 4.03 8.0 | 3.16 6.3 | 3.28 6.5 | 3.40 6.8 | 3.14 6.3 | 4.10 8.2 | 4.69 9.4 | 4.21 8.4 | 5.05 10.1 | 5.38 10.7 | 4.60 9.2 | 50.10 100.0 | Inch % |
| " | Butterley Moss SE(44)047096 | 1110 | 5.09 10.1 | 4.01 8.0 | 3.15 6.3 | 3.23 6.4 | 3.36 6.7 | 3.17 6.3 | 4.08 8.1 | 4.61 9.2 | 4.24 8.4 | 5.23 10.4 | 5.46 10.9 | 4.62 9.2 | 50.25 100.0 | Inch % |
| " | Huddersfield, Oakes SE(44)113177 | 762 | 4.02 10.7 | 3.32 8.8 | 2.51 6.7 | 2.50 6.6 | 2.67 7.1 | 2.25 6.0 | 3.02 8.0 | 3.24 8.6 | 2.93 7.8 | 3.89 10.3 | 3.90 10.4 | 3.37 9.0 | 37.62 100.0 | Inch % |
| " | Yateholme SE(44)111043 | 1009 | 7.37 11.6 | 5.91 9.1 | 4.19 6.6 | 4.23 6.7 | 3.72 5.8 | 3.53 5.6 | 4.59 7.2 | 5.16 8.1 | 5.14 8.1 | 6.69 10.5 | 7.01 11.0 | 6.19 9.7 | 63.63 100.0 | Inch % |
| " | Trow Grains SE(44)080105 | 900 | 5.29 10.6 | 4.22 8.5 | 3.09 6.2 | 3.29 6.6 | 3.26 6.6 | 2.93 5.9 | 3.80 7.6 | 4.47 9.0 | 4.12 8.3 | 5.24 10.5 | 5.40 10.9 | 4.61 9.3 | 49.72 100.0 | Inch % |
| " | Staincliffe Res. SE(44)229236 | 492 | 2.53 9.3 | 2.07 7.6 | 1.69 6.2 | 1.89 6.9 | 2.28 8.3 | 1.79 6.5 | 2.62 9.6 | 2.62 9.6 | 2.19 8.0 | 2.61 9.6 | 2.77 10.1 | 2.27 8.3 | 27.33 100.0 | Inch % |
| " | Jaw Hill Filters SE(44)293233 | 315 | 2.36 9.2 | 1.96 7.6 | 1.56 6.1 | 1.80 7.0 | 2.21 8.6 | 1.66 6.4 | 2.58 10.0 | 2.55 9.9 | 2.14 8.3 | 2.38 9.2 | 2.49 9.7 | 2.06 8.0 | 25.75 100.0 | Inch % |
| " | Wakefield SE(44)327199 | 115 | 2.53 9.6 | 2.12 8.0 | 1.71 6.5 | 1.81 6.9 | 2.22 8.4 | 1.63 6.2 | 2.54 9.6 | 2.62 9.9 | 2.07 7.9 | 2.44 9.3 | 2.57 9.7 | 2.12 8.0 | 26.38 100.0 | Inch % |
| " | Border Hill SE(44)177011 | 1148 | 5.66 11.3 | 4.49 9.0 | 3.25 6.5 | 3.28 6.6 | 3.05 6.1 | 2.82 5.7 | 3.76 7.5 | 4.03 8.1 | 3.92 7.9 | 5.21 10.4 | 5.57 11.2 | 4.86 9.7 | 49.90 100.0 | Inch % |
| " | Upper Midhope SK(43)215999 | 925 | 4.80 11.4 | 3.59 8.6 | 2.79 6.6 | 2.94 7.0 | 2.84 6.8 | 2.26 5.4 | 3.12 7.4 | 3.32 7.9 | 3.20 7.6 | 4.27 10.2 | 4.77 11.4 | 4.06 9.7 | 41.96 100.0 | Inch % |
| " | Sheep House SE(44)252004 | 945 | 3.83 10.7 | 3.00 8.4 | 2.37 6.6 | 2.55 7.2 | 2.64 7.4 | 2.06 5.8 | 2.79 7.8 | 2.93 8.2 | 2.74 7.7 | 3.54 9.9 | 3.92 11.0 | 3.30 9.3 | 35.67 100.0 | Inch % |
| " | Underbank Res. SK(43)247995 | 604 | 4.13 11.0 | 3.14 8.4 | 2.58 6.9 | 2.64 7.1 | 2.70 7.2 | 2.05 5.5 | 2.87 7.7 | 2.92 7.8 | 2.79 7.5 | 3.69 9.9 | 4.20 11.2 | 3.66 9.8 | 37.37 100.0 | Inch % |

TABLE I. Monthly and Annual Averages of Rainfall 1916-1950
over the River Board Areas of the Yorkshire Ouse and
the Hull and East Yorkshire Rivers (Contd.)

| County | Station & N.G.R. | Alt. ft. | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | Year | Inch % |
|-------------|---------------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|--------------|--------------|-------------|----------------|-----------|
| Yorks. W.R. | Broad Car SK(43)223904 | 1004 | 5.03 11.1 | 4.23 9.0 | 2.99 6.3 | 3.30 7.0 | 3.04 6.5 | 2.75 5.8 | 3.69 7.8 | 3.78 8.0 | 3.67 7.8 | 4.79 10.2 | 5.16 10.9 | 4.51 9.6 | 47.14 100.0 | Inch % |
| " | Loftshaw Strines SK(43)242903 | | 4.90 11.0 | 4.00 8.9 | 2.86 6.4 | 3.06 6.8 | 2.87 6.4 | 2.64 5.9 | 3.46 7.7 | 3.58 8.0 | 3.46 7.7 | 4.63 10.4 | 4.94 11.0 | 4.37 9.8 | 44.77 100.0 | Inch % |
| " | Oakes Farm, Damflask SK(43)272903 | 650 | 4.26 11.0 | 3.49 9.0 | 2.44 6.3 | 2.70 7.0 | 2.62 6.8 | 2.23 5.7 | 3.06 7.9 | 3.00 7.7 | 2.96 7.6 | 3.95 10.2 | 4.25 11.0 | 3.81 9.8 | 38.77 100.0 | Inch % |
| " | Redmires Res. SK(43)262857 | 1110 | 4.57 10.9 | 3.65 8.7 | 2.87 6.8 | 2.97 7.1 | 2.80 6.7 | 2.49 5.9 | 3.38 8.0 | 3.34 7.9 | 3.31 7.9 | 4.11 9.8 | 4.53 10.8 | 3.98 9.5 | 42.00 100.0 | Inch % |
| " | Rivelin SK(43)287869 | 564 | 3.90 10.5 | 3.20 8.6 | 2.49 6.7 | 2.65 7.1 | 2.63 7.1 | 2.15 5.8 | 2.96 7.9 | 3.02 8.1 | 2.87 7.7 | 3.71 9.9 | 4.08 10.9 | 3.62 9.7 | 37.28 100.0 | Inch % |
| " | Crookes SK(43)330872 | 629 | 3.38 10.6 | 2.63 8.3 | 2.06 6.4 | 2.14 6.7 | 2.34 7.4 | 1.88 5.9 | 2.75 8.6 | 2.76 8.7 | 2.40 7.5 | 3.12 9.8 | 3.39 10.6 | 3.03 9.5 | 31.86 100.0 | Inch % |
| " | Crookes NO. 2 SK(43)330872 | 629 | 3.32 10.6 | 2.59 8.3 | 2.00 6.4 | 2.10 6.7 | 2.30 7.4 | 1.85 5.9 | 2.70 8.6 | 2.73 8.7 | 2.36 7.5 | 3.07 9.8 | 3.32 10.6 | 2.98 9.5 | 31.32 100.0 | Inch % |
| Derbys. | Lower Linacre Res. SK(43)338725 | 430 | 3.58 10.8 | 2.72 8.2 | 2.44 6.8 | 2.31 7.0 | 2.41 7.3 | 1.95 5.9 | 2.76 8.3 | 2.93 8.8 | 2.50 7.5 | 3.14 9.5 | 3.42 10.3 | 3.18 9.6 | 33.14 100.0 | Inch % |
| Yorks. W.R. | Firsby Res. SK(43)495958 | 189 | 2.31 8.7 | 1.99 7.5 | 1.76 6.6 | 1.89 7.1 | 2.21 8.3 | 1.85 6.9 | 2.63 9.8 | 2.78 10.4 | 2.16 8.1 | 2.39 8.9 | 2.60 9.7 | 2.13 8.0 | 26.70 100.0 | Inch % |
| " | Thrybergh SK(43)474961 | 184 | 2.27 8.9 | 1.97 7.8 | 1.70 6.7 | 1.80 7.1 | 2.03 8.0 | 1.72 6.8 | 2.45 9.6 | 2.53 10.0 | 2.04 8.0 | 2.27 8.9 | 2.52 9.9 | 2.10 8.3 | 25.40 100.0 | Inch % |
| " | Barnsley, Jordan Hill SE(44)336069 | 460 | 2.64 9.8 | 2.15 8.0 | 1.76 6.6 | 1.85 6.9 | 2.21 8.2 | 1.74 6.5 | 2.51 9.4 | 2.53 9.4 | 2.14 8.0 | 2.44 9.1 | 2.64 9.8 | 2.23 8.3 | 26.84 100.0 | Inch % |
| " | Burntwood Hall SK(44)428092 | 378 | 2.48 9.1 | 2.06 7.5 | 1.76 6.5 | 1.90 7.0 | 2.30 8.4 | 1.81 6.6 | 2.65 9.7 | 2.76 10.0 | 2.23 8.5 | 2.44 8.9 | 2.71 9.9 | 2.15 7.9 | 27.32 100.0 | Inch % |
| " | Wortley Res. SK(44)363035 | 700 | 3.25 10.1 | 2.54 7.9 | 2.06 6.4 | 2.25 7.0 | 2.45 7.6 | 1.97 6.1 | 2.75 8.6 | 2.84 8.8 | 2.46 7.6 | 3.14 9.8 | 3.49 10.9 | 2.96 9.2 | 32.16 100.0 | Inch % |
| " | Settle Sq(34)816633 | 450 | 5.43 11.6 | 3.82 8.2 | 2.66 5.7 | 2.79 5.9 | 2.75 5.9 | 2.59 5.5 | 3.71 7.9 | 4.39 9.4 | 3.93 8.4 | 5.23 11.2 | 4.85 10.4 | 4.65 9.9 | 46.80 100.0 | Inch % |

TABLE II. Estimated Annual Averages of Rainfall, 1916-1950
for short-period stations

| County | Station | Alt. ft. | N.G.R. | Av. |
|----------------------------|----------------------------|-------------|--------------|-------|
| <u>Yorkshire Ouse</u> | | | | |
| Yorks. N.R. | Mulgrave Castle | 410 | NZ(45)845125 | 28.95 |
| " " | Danby Lodge | 399 | NZ(45)717084 | 37.57 |
| " " | Whitby | 135 | NZ(45)895109 | 26.35 |
| " E.R. | Filey P. Sta. | 123 | TA(54)114807 | 24.45 |
| <u>Hull & E. Yorks</u> | | | | |
| Yorks. E.R. | High Mowthorpe | 574 | SE(44)885688 | 30.64 |
| " " | Bridlington | 157 | TA(54)175689 | 27.41 |
| " " | Burton Agnes | 52 | TA(54)110634 | 26.46 |
| " " | Hornsea Town Hall | 12 | TA(54)207482 | 24.26 |
| " " | Burton Pidsea | 23 | TA(54)246314 | 24.78 |
| " " | Withernsea High School | 28 | TA(54)337281 | 23.81 |
| " " | Easington | 29 | TA(54)399195 | 24.19 |
| " " | Brandesburton Hall | 27 | TA(54)112478 | 26.25 |
| " " | Langtoft | 260 | TA(54)009670 | 27.79 |
| " " | Hutton Cranswick | 66 | TA(54)023523 | 26.16 |
| " " | Dunswell P. Sta. | 6 | TA(54)067350 | 24.79 |
| " " | Springhead | 14 | TA(54)040294 | 25.54 |
| " " | Hessle, Sandford | 80 | TA(54)027261 | 26.40 |
| <u>Yorkshire Ouse</u> | | | | |
| Yorks. N.R. | Moorland Cottage | 1125 | SD(34)807923 | 72.07 |
| " " | Mawes S. Wks. | 745 | SD(34)874902 | 57.11 |
| " " | Askrigg | 670 | SD(34)945907 | 42.17 |
| " " | Longridge | 810 | SD(34)960832 | 57.40 |
| " " | Leyburn | 358 | SE(44)137887 | 31.76 |
| " " | Low Houses | 693 | SE(44)137812 | 40.39 |
| " " | Healey Pasture | 620 | SE(44)157808 | 38.19 |
| " W.R. | Agill Head | 1380 | SE(44)114766 | 47.15 |
| " N.R. | Grey Ridge | 1330 | SE(44)120756 | 46.17 |
| " " | Low Ash Head | 845 | SE(44)140763 | 44.04 |
| " " | Arnagill Beck, West | 1210 | SE(44)145746 | 43.26 |
| " " | Arnagill Beck, East | 1150 | SE(44)162756 | 41.93 |
| " " | Somerside | 928 | SE(44)143773 | 41.49 |
| " " | High Sour Mire | 884 | SE(44)143790 | 39.87 |
| " W.R. | Stone and Ears Wham | 1118 | SE(44)168751 | 40.87 |
| " " | Bagwith Brae | 703 | SE(44)195747 | 38.59 |
| " " | Skell Beck | 900 | SE(44)188688 | 42.32 |
| " " | Harper Hill | 819 | SE(44)197702 | 38.61 |
| " " | Burton Leonard | 275 | SE(44)330638 | 27.79 |
| " N.R. | Keld | 1040 | NY(35)893001 | 59.02 |
| " " | Rowleth End | 700 | SD(34)971975 | 45.38 |
| " " | Richmond Green Howard Road | 605 | NZ(45)172016 | 33.38 |
| " " | Barningham Park | 750 | NZ(45)092099 | 36.55 |
| " " | Scruton | 100 | SE(44)300923 | 25.90 |
| " " | Craggs Lane Farm | 550 | SE(44)199945 | 29.60 |
| " " | Oakdale W. Wks. | 600 | SE(44)466966 | 31.78 |
| " " | Sowerby | 110 | SE(44)432812 | 26.80 |
| " " | Thirsk, Ashton House | 112 | SE(44)432809 | 26.56 |
| " " | Thirlby | 315 | SE(44)490840 | 29.27 |
| " " | Mount St. John | 540 | SE(44)474848 | 28.94 |
| " " | Topcliffe | 81 | SE(44)405790 | 25.37 |
| " " | Dishforth | 106 | SE(44)379723 | 24.98 |
| " W.R. | West Houses | 1165 | SE(44)043766 | 57.76 |
| " " | Scar House Res. | 1085 | SE(44)065766 | 48.42 |
| " " | New Houses | 755 | SE(44)094768 | 46.27 |

TABLE II (Contd.)

| County | Station | Alt. ft. | N.G.R. | Av. |
|-----------------------|----------------------------|-------------|--------------|-------|
| <u>Yorkshire Ouse</u> | | | | |
| Yorks. W.R. | East Gill Head | 1730 | SE(44)037738 | 61.22 |
| " " | Raygill House | 930 | SE(44)110704 | 46.27 |
| " " | Ramsgill | 450 | SE(44)120709 | 44.28 |
| " " | Holme House | 464 | SE(44)128699 | 41.30 |
| " " | Birstwith Hall | 325 | SE(44)242583 | 36.98 |
| " " | Long Stoop | 700 | SE(44)212552 | 34.36 |
| " " | Ling Cottage | 763 | SE(44)228521 | 34.01 |
| " " | Ten Acres Res. | 620 | SE(44)248535 | 34.70 |
| " " | Irongatebridge Res. | 455 | SE(44)287548 | 32.26 |
| " " | Knaresborough, Water Tower | 240 | SE(44)348567 | 28.65 |
| " " | Stockeld Park | 200 | SE(44)368492 | 28.97 |
| " " | Tockwith | 77 | SE(44)468524 | 27.42 |
| " " | York, Acomb Landing | 40 | SE(44)582526 | 24.75 |
| " E.R. | York, The Retreat | 60 | SE(44)615508 | 26.56 |
| " W.R. | Thorpe Fell | 1649 | SE(44)007597 | 52.51 |
| " " | Trunla Hill | 1145 | SE(44)069657 | 49.12 |
| " " | Grimwith Res. | 884 | SE(44)062642 | 46.53 |
| " " | Upper Barden | 1164 | SE(44)016576 | 50.00 |
| " " | Barden Res. | 746 | SE(44)035563 | 45.22 |
| " " | Bolton Abbey | 368 | SE(44)072540 | 37.45 |
| " " | Beamsley | 420 | SE(44)077529 | 35.31 |
| " " | High House | 1068 | SE(44)136610 | 46.14 |
| " " | Lane Head | 950 | SE(44)129588 | 41.99 |
| " " | Spittle Ings | 967 | SE(44)135567 | 44.45 |
| " " | Blubberhouses | 575 | SE(44)166554 | 39.50 |
| " " | Timble Ings | 912 | SE(44)156526 | 39.07 |
| " " | Fewston | 525 | SE(44)187543 | 35.73 |
| " " | Swinsty | 460 | SE(44)197525 | 34.72 |
| " " | Lindley Wood | 312 | SE(44)217486 | 31.84 |
| " " | Eccup | 375 | SE(44)309418 | 32.21 |
| " " | Harewood House | 300 | SE(44)308442 | 32.37 |
| " " | Bramham | 177 | SE(44)441412 | 26.47 |
| " " | Cawood | 20 | SE(44)561366 | 24.45 |
| " " | Askham Bryan | 90 | SE(44)552475 | 26.62 |
| " E.R. | Riccall | 18 | SE(44)608373 | 24.36 |
| " W.R. | Brayton Barff | 173 | SE(44)585305 | 25.87 |
| " " | Silpho Moor | 665 | SE(44)957946 | 33.64 |
| " " | Irton P. Sta. | 94 | TA(54)004840 | 27.24 |
| " E.R.G. | Ganton Hall | 250 | SE(44)992770 | 28.80 |
| " " | Ganton Golf Club | 100 | SE(44)982781 | 27.93 |
| " N.R. | Nunnington Hall | 110 | SE(44)671794 | 26.96 |
| " " | Farndale No. 10 | 574 | SE(44)642997 | 43.28 |
| " " | Farndale No. 13 | 1055 | SE(44)673995 | 41.87 |
| " " | Farndale Vicarage | 495 | SE(44)672975 | 38.18 |
| " " | Ampleforth | 313 | SE(44)598789 | 30.03 |
| " " | Leysthorpe Hall | 231 | SE(44)636789 | 28.20 |
| " " | Hutton-le-Mole, Elphield | 340 | SE(44)507900 | 33.17 |
| " E.R. | Warter | 290 | SE(44)861502 | 29.74 |
| " W.R. | Malham Tarn | 1297 | SD(34)894672 | 60.28 |
| " " | Lee Gate House | 1240 | SD(34)926645 | 51.57 |
| " " | Elslack | 675 | SD(34)937484 | 41.73 |
| " " | Cringle's Res. | 715 | SE(44)042491 | 34.35 |
| " " | Silsden Res. | 560 | SE(44)045476 | 35.32 |
| " " | Keighley, Hard Ings Lane | 304 | SE(44)068421 | 36.36 |
| C. Lancs. | Watersheddles Res. | 1115 | SE(44)968379 | 55.25 |
| " W.R. | Oldfield Filters No. 1 | 1008 | SE(44)003379 | 48.89 |
| " " | Oldfield Filters No. 2 | 978 | SE(44)003379 | 48.68 |
| " " | Harbour Lodge | 1165 | SD(34)996353 | 52.93 |

TABLE II. Contd.

| County | Station | Alt. ft. | N.G.R. | Av. |
|-----------------------|----------------------------|-------------|--------------|-------|
| <u>Yorkshire Ouse</u> | | | | |
| Yorks. W.R. | Lower Laithe Res. | 773 | SE(44)015367 | 48.52 |
| " " | Leeming Res. | 850 | SE(44)040340 | 46.37 |
| " " | Stairs Top | 1360 | SE(44)004339 | 54.02 |
| " " | Keighley Moor | 1300 | SD(34)481390 | 52.61 |
| " " | Clough Hey | 1075 | SD(34)998394 | 50.07 |
| " " | Keighley Moor No. 2 | 1025 | SD(34)075061 | 52.14 |
| " " | Newsholme Dean | 675 | SE(44)019404 | 44.03 |
| " " | Thornton Moor Filters | 1190 | SE(44)051337 | 48.25 |
| " " | Doe Park Res. | 754 | SE(44)077341 | 42.58 |
| " " | Hewenden Res. | 707 | SE(44)072355 | 41.82 |
| " " | Gilstead Filters | 572 | SE(44)118393 | 34.66 |
| " " | Thornton Cemetery | 1003 | SE(44)088330 | 38.09 |
| " " | Chellow Dean Res. | 645 | SE(44)124345 | 36.70 |
| " " | Horton Park | 597 | SE(44)146316 | 35.07 |
| " " | Bradford, Shearbridge | 400 | SE(44)152325 | 33.79 |
| " " | Bowling Cemetery | 600 | SE(44)174308 | 35.02 |
| " " | Bradford, Peel Park | 450 | SE(44)168348 | 33.00 |
| " " | Bradford | 439 | SE(44)149352 | 33.57 |
| " " | Weechee Res. | 825 | SE(44)136423 | 34.36 |
| " " | Reva Res. | 735 | SE(44)153426 | 32.11 |
| " " | Guisseley Moor | 750 | SE(44)192435 | 30.30 |
| " " | Rawdon S. Wks. | 150 | SE(44)213380 | 28.17 |
| " " | Farnley Hall | 405 | SE(44)248323 | 28.26 |
| " " | Lawnswood Cemetery | 470 | SE(44)267391 | 30.49 |
| " " | Leeds, Roundhay Park | 425 | SE(44)330383 | 29.76 |
| " " | Lemonroyd S. Wks. | 64 | SE(44)375282 | 24.53 |
| " " | Calf Lee | 945 | SD(34)953201 | 50.22 |
| " " | Warland Res. | 1245 | SD(34)954215 | 52.54 |
| " " | Ramsden Hill | 1326 | SD(34)917208 | 53.27 |
| " " | Gorple Res. | 900 | SD(34)907229 | 57.62 |
| " " | Todmorden | 500 | SD(34)943244 | 51.71 |
| " " | Todmorden Hospital | 650 | SD(34)965244 | 51.63 |
| " " | Eastwood S. Wks. | 368 | SD(34)970260 | 48.14 |
| " " | *Walshaw Dean No. 3 | 1180 | SD(34)962344 | 57.82 |
| " " | Widdop Res. No. 4 | 1060 | SD(34)927327 | 54.51 |
| " " | Widdop Res. No. 2 | 1065 | SD(34)931331 | 54.23 |
| " " | Widdop Res. No. 5 | 1280 | SD(34)942348 | 56.73 |
| " " | Gorple Res. No. 3 | 1160 | SD(34)918311 | 53.51 |
| " " | Gorple Res. No. 2 | 1275 | SD(34)930301 | 57.59 |
| " " | Gorple Res. | 1028 | SD(34)955311 | 55.23 |
| " " | Coppy | 1135 | SD(34)957305 | 53.41 |
| " " | Whiteholme | 1240 | SD(34)975203 | 49.74 |
| " " | Byron Edge | 1251 | SD(34)973192 | 52.21 |
| " " | Turvin No. 1 | 1201 | SD(34)984197 | 50.49 |
| " " | Warland Drain | 1250 | SD(34)971217 | 54.35 |
| " " | Warley Moor | 1325 | SE(44)032312 | 47.75 |
| " " | Midgley Moor | 1350 | SE(44)016306 | 47.01 |
| " " | Castle Carr | 1060 | SE(44)026297 | 44.18 |
| " " | Rishworth Drain | 1301 | SD(34)981177 | 50.47 |
| " " | Baitings | 943 | SE(44)004190 | 52.32 |
| " " | Manshead | 1225 | SE(44)004198 | 52.12 |
| " " | Linsgreave | 1264 | SD(34)986143 | 53.60 |
| " " | Waystone Drain | 1200 | SD(34)998148 | 55.60 |
| " " | Great Wolden Edge No. 2 | 1135 | SD(34)996156 | 52.84 |
| " " | Long Clough | 1010 | SE(44)017156 | 54.78 |
| " " | Rishworth Moor Lodge No. 2 | 950 | SE(44)026165 | 49.80 |
| " " | Stott Hall | 935 | SE(44)032161 | 49.24 |
| " " | Ringstone Res. | 962 | SE(44)048178 | 48.54 |

TABLE II. Contd.

| County | Station | Alt. ft. | N.G.R.. | Av. |
|-----------------------|--------------------------|-------------|----------------|-------|
| <u>Yorkshire Ouse</u> | | | | |
| Yorks. W.R. | Ovenden Moor | 1375 | SE (44) 049316 | 47.93 |
| " " | Ogden Res. | 990 | SE (44) 062306 | 42.34 |
| " " | Ramsden Wood | 815 | SE (44) 059271 | 43.10 |
| " " | Deanhead Res. | 1007 | SE (44) 039151 | 52.19 |
| " " | Redbrook Res. | 1150 | SE (44) 026102 | 52.03 |
| " " | Marsden Res. | 657 | SE (44) 046121 | 54.12 |
| " " | Holly Bank Moss | 1065 | SE (44) 064082 | 54.18 |
| " " | Wessenden, Old Res. | 940 | SE (44) 056087 | 52.36 |
| " " | Bobus | 1200 | SE (44) 035097 | 50.48 |
| " " | Deerhill, No. 1 | 1149 | SE (44) 070113 | 51.25 |
| " " | Blackmoorfoot | 800 | SE (44) 096130 | 43.09 |
| " " | Great Hey | 1200 | SE (44) 104042 | 67.72 |
| " " | Hey Springs | 1100 | SE (44) 117046 | 63.74 |
| " " | *Widdop Res. No. 3 | 1060 | SD (34) 924333 | 53.24 |
| " " | Snape Res. | 1075 | SE (44) 115087 | 47.22 |
| " " | Boshaw Whams Res. | 930 | SE (44) 153057 | 44.79 |
| " " | Harden Moss | 1212 | SE (44) 098086 | 52.94 |
| " " | Heckmondwike | 165 | SE (44) 220224 | 27.37 |
| " " | Dewsbury, Crowsnest Park | 300 | SE (44) 232214 | 27.23 |
| " " | Mitchell Laithe S. Wks. | 115 | SE (44) 252202 | 25.56 |
| " " | Horbury, Town Hall | 250 | SE (44) 297185 | 25.76 |
| " " | Ardsley Res. Lower | 395 | SE (44) 287249 | 25.98 |
| " " | Ardsley Res. Upper | 395 | SE (44) 287248 | 26.02 |
| " " | Wakefield S. Wks. | 80 | SE (44) 346203 | 25.03 |
| " " | Pontefract | 255 | SE (44) 454213 | 23.86 |
| " " | Roall W. Wks. | 42 | SE (44) 568244 | 24.59 |
| " " | Goole S. Wks. | 10 | SE (44) 748250 | 26.20 |
| " " | Swiner Clough Moss | 1503 | SE (44) 126028 | 67.38 |
| " " | End Springs | 1450 | SE (44) 130022 | 67.79 |
| " " | Dearden Moss | 1500 | SE (44) 137015 | 65.05 |
| " " | Dunford Bridge Res. | 1081 | SE (44) 151023 | 56.79 |
| " " | Reaps Slack | 1490 | SE (44) 130037 | 65.29 |
| " " | Harden | 1204 | SE (44) 150035 | 55.46 |
| " " | Brown's Clough No. 10 | 1405 | SE (44) 145004 | 63.25 |
| " " | Stoney Gate | 1087 | SE (44) 157010 | 56.21 |
| " " | Long Grain | 1125 | SE (44) 166019 | 54.27 |
| " " | Cat Clough | 889 | SE (44) 182025 | 49.71 |
| " " | Town Brook Intake | 1035 | SE (44) 177037 | 49.77 |
| " " | Spring Head | 1165 | SE (44) 179068 | 42.44 |
| " " | Pottersgate House | 1165 | SE (44) 190063 | 41.88 |
| " " | Broadstone Res. | 1030 | SE (44) 195062 | 44.26 |
| " " | Gringley Carr | 1090 | SE (44) 201050 | 43.02 |
| " " | Ingbirchworth Res. | 853 | SE (44) 213056 | 38.96 |
| " " | Royd Moor | 835 | SE (44) 222045 | 38.32 |
| " " | Fiddlers Green | 1480 | SK (43) 150993 | 56.65 |
| " " | Fiddlers Green No. 1 | 1493 | SK (43) 152999 | 56.01 |
| " " | Laund Clough | 1515 | SK (43) 157990 | 60.00 |
| " " | Catclough | 1516 | SK (43) 172984 | 57.90 |
| " " | Mickleden Edge No. 37 | 1110 | SK (43) 190985 | 55.62 |
| " " | Mickleden No. 1 | 1217 | SK (43) 192988 | 31.52 |
| " " | Swinden Lodge | 1032 | SE (44) 189009 | 46.53 |
| " " | Flouch Road | 960 | SE (44) 205004 | 44.04 |
| " " | Langsett Res. | 820 | SE (44) 211003 | 41.68 |
| " " | Midhope | 830 | SK (43) 219994 | 46.02 |
| " " | Barnside | 1000 | SK (43) 229984 | 48.47 |
| " " | Brockholes | 902 | SE (44) 227011 | 38.31 |
| " " | Margery Hill | 1784 | SK (43) 189957 | 55.25 |
| " " | Candle Rush | 1400 | SK (43) 203965 | 52.12 |

TABLE II. Contd.

| County | Station | Alt. ft. | N.G.R. | Av. |
|-----------------------|-----------------------|-------------|--------------|-------|
| <u>Yorkshire Ouse</u> | | | | |
| Yorks. W.R. | Middle Moss | 1600 | SK(43)207949 | 52.94 |
| " " | Broomhead Moor | 1370 | SK(43)224956 | 40.09 |
| " " | Brown Edge | 1325 | SK(43)220969 | 49.76 |
| " " | Broomhead Hall | 900 | SK(43)242463 | 40.06 |
| " " | Canyard Brook | 585 | SK(43)261957 | 40.66 |
| " " | Broomhead Res. No. 1 | 585 | SK(43)268961 | 38.00 |
| " " | White Lee Moor | 1170 | SK(43)265946 | 43.43 |
| " " | Morehall Res. | 408 | SK(43)289957 | 33.70 |
| " " | Brogging Moss | 1360 | SK(43)211917 | 52.40 |
| " " | Thornseat | 1326 | SK(43)230923 | 45.72 |
| " " | Dale Dike Res. | 715 | SK(43)242917 | 43.35 |
| " " | Bradfield Filters | 551 | SK(43)261916 | 39.61 |
| " " | Hobson Moss | 1530 | SK(43)217946 | 49.89 |
| " " | Emlin Moor | 998 | SK(43)247934 | 44.94 |
| " " | Rocher Flat | 1106 | SK(43)267935 | 39.89 |
| " " | Crawshaw Wood | 1175 | SK(43)252887 | 42.16 |
| " " | Oaking Clough No.2 | 1185 | SK(43)246862 | 44.27 |
| " " | Black Clough | 1175 | SK(43)235876 | 46.42 |
| " " | Middle Moss | 1168 | SK(43)243871 | 45.56 |
| " " | Redmires Res. No. 3 | 1110 | SK(43)262857 | 42.57 |
| " " | Sheffield | 429 | SK(43)339873 | 30.66 |
| " " | Greenoside | 560 | SK(43)336935 | 28.97 |
| " " | Wincobank S. Wks. | 110 | SK(43)395917 | 24.41 |
| " " | Kimberworth School | 285 | SK(43)407930 | 25.47 |
| Derbys. | Hunger Hill | 643 | SK(43)329679 | 35.30 |
| " " | Whispering Well | 575 | SK(43)332694 | 35.65 |
| " " | Upper Linacre Filters | 521 | SK(43)339727 | 33.36 |
| " " | Chesterfield | 298 | SK(43)384717 | 29.21 |
| " " | Crowhole Res. | 605 | SK(43)321748 | 31.24 |
| " " | Chesterfield S. Wks. | 225 | SK(43)392745 | 29.77 |
| " " | Bolsover | 275 | SK(43)463710 | 29.29 |
| Yorks. W.R. | Woodhouse | 243 | SK(43)414843 | 29.08 |
| " " | Ulley Res. No. 2 | 184 | SK(43)455874 | 24.56 |
| " " | Ulley Res. No. 3 | 132 | SK(43)453876 | 24.84 |
| " " | Rotherham | 282 | SK(43)435923 | 24.74 |
| " " | Aldwarke S. Wks. | 71 | SK(43)444943 | 25.00 |
| " " | Cannon Hall | 350 | SE(44)273084 | 29.05 |
| " " | Barnsley Queens Road | 310 | SE(44)348063 | 26.63 |
| " " | Worsborough Dale | 150 | SE(44)363035 | 26.48 |
| " " | Darfield S. Wks. | 83 | SE(44)421038 | 24.80 |
| " " | Wath Wood Res. | 330 | SK(43)437993 | 24.37 |
| " " | Doncaster P. Sta. | 31 | SE(44)576040 | 24.60 |
| " " | Sandall S. Wks. | 41 | SE(44)601060 | 23.62 |
| " " | Bentley Colliery | 22 | SE(44)571073 | 24.38 |
| " " | Kirk Bramwith | 22 | SE(44)618115 | 23.06 |
| " " | Thorne | 15 | SE(44)675145 | 22.74 |
| " " | Fitzwilliam | 246 | SE(44)417157 | 23.49 |
| " " | Black Drain P. Sta. | 10 | SE(44)690207 | 23.96 |
| " " | Goole, Docks Office | 16 | SE(44)745235 | 24.53 |

TABLE III. Monthly Averages of Rainfall, (in inches) 1916-1950, estimated for Short-period stations

| County | Station | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | Year |
|-------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Yorks. N.R. | Whitby | 2.53 | 1.92 | 1.63 | 1.61 | 1.90 | 1.82 | 2.53 | 2.74 | 2.13 | 2.40 | 2.64 | 2.50 | 26.35 |
| " E.R. | High Mowthorpe | 2.39 | 1.99 | 2.27 | 1.90 | 2.30 | 2.36 | 2.91 | 3.16 | 2.05 | 3.52 | 2.82 | 2.97 | 30.64 |
| " W.R. | Burton Leonard | 2.78 | 2.14 | 1.72 | 1.95 | 2.17 | 1.72 | 2.59 | 2.61 | 2.28 | 2.64 | 2.72 | 2.47 | 27.79 |
| " " | Scruton | 2.41 | 1.94 | 1.61 | 1.76 | 1.99 | 1.84 | 2.54 | 2.59 | 2.28 | 2.41 | 2.38 | 2.15 | 25.90 |
| " N.R. | Dishforth Airfield | 2.42 | 1.75 | 1.50 | 1.65 | 1.92 | 1.77 | 2.47 | 2.50 | 2.10 | 2.35 | 2.35 | 2.20 | 24.98 |
| " " | Raygill House | 5.26 | 3.94 | 2.81 | 3.04 | 2.90 | 2.59 | 3.82 | 3.94 | 3.74 | 4.66 | 5.04 | 4.43 | 46.17 |
| " W.R. | Acomb Landing | 2.40 | 1.76 | 1.43 | 1.68 | 1.81 | 1.76 | 2.45 | 2.47 | 2.01 | 2.30 | 2.47 | 2.21 | 24.75 |
| " " | Bramham | 1.99 | 1.64 | 1.85 | 1.72 | 2.14 | 2.23 | 2.73 | 2.75 | 1.77 | 2.91 | 2.28 | 2.46 | 26.47 |
| " " | Askham Bryan | 2.47 | 1.77 | 1.51 | 1.82 | 2.11 | 1.92 | 2.60 | 2.68 | 2.16 | 2.32 | 2.50 | 2.16 | 26.02 |
| " N.R. | Farndale Vicarage | 3.70 | 2.71 | 2.45 | 2.56 | 2.67 | 2.67 | 3.70 | 3.70 | 3.06 | 3.55 | 3.97 | 3.44 | 38.18 |
| " " | Ampleforth | 2.91 | 2.13 | 1.83 | 1.98 | 2.19 | 2.13 | 2.92 | 3.07 | 2.55 | 2.73 | 2.98 | 2.61 | 30.03 |
| " " | Oswaldkirk | 2.91 | 2.16 | 1.73 | 1.85 | 2.13 | 2.02 | 2.68 | 2.91 | 2.34 | 2.59 | 2.88 | 2.62 | 28.20 |
| " W.R. | Lower Laithes Res. | 5.34 | 4.07 | 2.86 | 3.06 | 3.30 | 2.81 | 3.79 | 4.41 | 3.98 | 5.00 | 5.29 | 4.61 | 48.52 |
| " " | Thornton Moor Filters | 5.31 | 4.05 | 2.84 | 3.04 | 3.14 | 2.80 | 3.67 | 4.39 | 3.96 | 5.11 | 5.31 | 4.63 | 48.25 |
| " " | Bingley | 3.75 | 2.96 | 2.14 | 2.43 | 2.50 | 2.11 | 3.00 | 3.25 | 2.85 | 3.60 | 3.75 | 3.35 | 35.69 |
| " " | Bradford (Lister Park) | 3.52 | 2.79 | 2.12 | 2.32 | 2.45 | 2.01 | 2.92 | 3.02 | 2.59 | 3.29 | 3.52 | 3.02 | 33.57 |
| " " | Ringstone Res. | 5.19 | 4.03 | 3.06 | 3.20 | 3.16 | 2.86 | 3.69 | 4.37 | 4.08 | 5.15 | 5.19 | 4.56 | 48.54 |
| " " | Roall W. Wks. | 2.19 | 1.72 | 1.43 | 1.72 | 2.09 | 1.72 | 2.53 | 2.56 | 2.04 | 2.18 | 2.39 | 2.02 | 24.59 |
| " " | Langsett Res. | 4.63 | 3.50 | 2.75 | 2.96 | 3.08 | 2.13 | 3.37 | 3.46 | 3.25 | 4.17 | 4.59 | 3.79 | 41.68 |
| " " | More Hall Res. | 3.13 | 2.43 | 2.12 | 2.53 | 2.83 | 2.26 | 3.27 | 3.20 | 2.76 | 3.17 | 3.20 | 2.80 | 33.70 |
| " " | Sheffield | 3.04 | 2.39 | 1.99 | 2.09 | 2.30 | 1.87 | 2.76 | 2.79 | 2.33 | 2.97 | 3.22 | 2.91 | 30.66 |
| " " | Coisley Hill S. Wks. | 2.75 | 2.22 | 1.83 | 1.97 | 2.13 | 1.77 | 2.55 | 2.75 | 2.16 | 2.58 | 2.84 | 2.53 | 28.08 |
| " " | Rotherham | 2.35 | 1.93 | 1.63 | 1.73 | 1.90 | 1.61 | 2.33 | 2.45 | 1.98 | 2.23 | 2.45 | 2.15 | 24.74 |
| " " | Wath Wood Res. | 2.19 | 1.88 | 1.58 | 1.71 | 1.97 | 1.66 | 2.36 | 2.44 | 1.95 | 2.22 | 2.36 | 2.05 | 24.37 |

TABLE IVa 35-year Daily Totals of Rainfall (in inches), 1916-1950
Scarborough

| Day | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 3.57 | 2.04 | 2.20 | 2.82 | 1.01 | 2.04 | 1.37 | 1.61 | 6.80 | 1.87 | 3.24 | 2.90 |
| 2 | 2.39 | 2.75 | 1.73 | 3.80 | 2.42 | 3.28 | 2.54 | 3.13 | 2.21 | 2.30 | 3.34 | 2.51 |
| 3 | 3.05 | 3.21 | 2.13 | 2.71 | 1.70 | 2.51 | 1.62 | .76 | 3.23 | 1.99 | 2.54 | 2.67 |
| 4 | 2.88 | 1.99 | 1.27 | 3.69 | 1.57 | 1.43 | 2.90 | 1.95 | 2.30 | 2.95 | 2.11 | 3.61 |
| 5 | 2.18 | 1.90 | 1.63 | 1.73 | 3.15 | 1.21 | 2.85 | 5.82 | 1.05 | 2.26 | 3.23 | 2.97 |
| 6 | 2.64 | 1.30 | 1.15 | 1.48 | 1.84 | 1.95 | 3.82 | 3.98 | 2.15 | 1.67 | 2.92 | 3.29 |
| 7 | 3.36 | 2.23 | 1.90 | 1.10 | 1.48 | 1.46 | 2.96 | 2.61 | 1.35 | 2.10 | 4.90 | 2.61 |
| 8 | 2.54 | 1.71 | 1.17 | 1.86 | 1.98 | 1.52 | 2.24 | 4.09 | 2.59 | 2.68 | 1.44 | 3.05 |
| 9 | 4.00 | 2.35 | 2.96 | 2.91 | 1.56 | 1.54 | 2.32 | 2.82 | 2.00 | 3.26 | 3.63 | 2.61 |
| 10 | 3.70 | 2.62 | 1.34 | 3.13 | 1.20 | 1.53 | 4.78 | 3.08 | 2.29 | 2.02 | 2.75 | 1.85 |
| 11 | 3.30 | 1.80 | 2.79 | 2.54 | 3.31 | 1.92 | 2.36 | 2.28 | .70 | 2.64 | 4.07 | 3.74 |
| 12 | 2.95 | 2.35 | 3.03 | .95 | 2.99 | 2.80 | 1.78 | 3.70 | 2.89 | 2.55 | 3.08 | 1.67 |
| 13 | 1.64 | 1.48 | 1.46 | 1.82 | 1.72 | 2.50 | 3.08 | 2.58 | 3.11 | 1.53 | 2.53 | 2.33 |
| 14 | 3.06 | 1.66 | 1.89 | 1.98 | 1.43 | 4.65 | 1.80 | 1.77 | 2.61 | 1.14 | 2.88 | 4.06 |
| 15 | 3.18 | 2.44 | 1.58 | 1.98 | 1.96 | 1.26 | 4.24 | 3.96 | 1.70 | .84 | 2.58 | 3.06 |
| 16 | 2.61 | 1.47 | 2.09 | 1.72 | 2.65 | 2.76 | 3.72 | 1.92 | 1.84 | 1.66 | 3.06 | 3.00 |
| 17 | 2.40 | 1.51 | 2.63 | 2.52 | 2.49 | 2.15 | 3.65 | .83 | 2.88 | 2.71 | 3.06 | 1.34 |
| 18 | 4.87 | 2.26 | 1.17 | 2.49 | 2.26 | 3.33 | 2.48 | 2.86 | 1.78 | 1.59 | 4.87 | 1.71 |
| 19 | 2.21 | 2.13 | 1.92 | 2.58 | .85 | 2.50 | 1.45 | 2.88 | 4.53 | 2.00 | 3.30 | 1.77 |
| 20 | 2.26 | 2.23 | 1.37 | 1.63 | 2.65 | 1.18 | 3.18 | 6.04 | 3.50 | 2.22 | 2.75 | 2.51 |
| 21 | 2.85 | 1.85 | 2.18 | .62 | 3.08 | 1.91 | 4.14 | 3.92 | 1.90 | 3.02 | 3.07 | 3.15 |
| 22 | 2.36 | 3.29 | 1.25 | 1.07 | 1.82 | 1.79 | 4.09 | .85 | 2.48 | 3.25 | 1.90 | 2.14 |
| 23 | 2.31 | 1.37 | 1.55 | 2.02 | 2.43 | 1.70 | 2.48 | 1.68 | 2.19 | 2.78 | 2.33 | 2.20 |
| 24 | 3.30 | 2.63 | 1.04 | 2.11 | 2.50 | 1.02 | 2.87 | 3.86 | 4.07 | 4.17 | 1.97 | 1.94 |
| 25 | 2.68 | 1.98 | 1.44 | 2.05 | 1.48 | 1.89 | 3.30 | 2.46 | 2.62 | 3.83 | 2.88 | 2.45 |
| 26 | 2.07 | 4.09 | 1.47 | 1.87 | 2.42 | 1.40 | 4.43 | 3.24 | 2.51 | 4.38 | 2.87 | 3.09 |
| 27 | 2.01 | 2.23 | 1.36 | 2.06 | 2.86 | 2.13 | 2.00 | 2.69 | 1.30 | 4.32 | 4.22 | 2.57 |
| 28 | 3.25 | 3.53 | 1.51 | 1.52 | 1.84 | .96 | 3.13 | 4.89 | 1.36 | 2.72 | 3.53 | 2.43 |
| 29 | 4.09 | .52 | 2.61 | 2.34 | 2.29 | 1.56 | 2.58 | 3.98 | 1.20 | 3.04 | 2.55 | 4.04 |
| 30 | 1.70 | - | .75 | .97 | 1.48 | 1.56 | 2.11 | 2.04 | 1.76 | 3.23 | 1.41 | 4.94 |
| 31 | 3.40 | - | 1.09 | - | 2.16 | - | 2.41 | 2.54 | - | 3.03 | - | 3.02 |

TABLE IVa. 35-year Daily Totals of Rainfall (in inches) 1916-1950

Holme-on-Spalding Moor

| Day | Jan | Feb | May | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 3.92 | 2.10 | 2.55 | 3.06 | 1.22 | 2.29 | 1.52 | 1.59 | 3.69 | 1.58 | 3.59 | 2.15 |
| 2 | 1.85 | 3.83 | 2.15 | 3.21 | 1.01 | 3.15 | 1.48 | 2.79 | 3.33 | 1.93 | 3.38 | 2.87 |
| 3 | 2.70 | 2.70 | 1.46 | 1.91 | 1.19 | 2.49 | 3.12 | 1.96 | 3.32 | 2.85 | 2.39 | 1.66 |
| 4 | 1.39 | 1.31 | 2.09 | 2.43 | 2.34 | 1.57 | 2.55 | 2.69 | 1.61 | 2.97 | 2.36 | 3.99 |
| 5 | 1.91 | 2.10 | 1.60 | 1.81 | 4.01 | 2.29 | 3.42 | 4.58 | 1.50 | 1.94 | 3.52 | 1.82 |
| 6 | 2.35 | 2.36 | 1.28 | 1.97 | 2.20 | 1.77 | 2.84 | 3.36 | 2.67 | 2.38 | 2.06 | 2.77 |
| 7 | 2.88 | 1.97 | 1.93 | 1.55 | 2.24 | 2.62 | 4.01 | 3.58 | 2.51 | 2.96 | 2.96 | 2.85 |
| 8 | 2.81 | 2.08 | 1.88 | 1.56 | 1.38 | 1.57 | 2.71 | 4.14 | 1.16 | 2.82 | 1.52 | 3.36 |
| 9 | 3.27 | 3.56 | 1.85 | 2.54 | 1.55 | 1.80 | 3.58 | 3.87 | 1.70 | 4.37 | 3.91 | 2.66 |
| 10 | 3.99 | 1.88 | 1.90 | 2.21 | 1.18 | 1.88 | 4.37 | 4.36 | 2.27 | 4.05 | 3.17 | 1.84 |
| 11 | 3.71 | 2.10 | 2.87 | 1.99 | 2.77 | 1.52 | 1.43 | 2.75 | .69 | 2.56 | 4.50 | 2.80 |
| 12 | 2.90 | 2.42 | 2.52 | 1.28 | 2.24 | 3.00 | 3.57 | 3.00 | 3.01 | 1.57 | 1.90 | 1.08 |
| 13 | 1.21 | 1.38 | .84 | 2.46 | 1.79 | 3.34 | 4.44 | 1.72 | 3.33 | 3.10 | 2.42 | 2.08 |
| 14 | 3.05 | 1.40 | 1.48 | 1.67 | 1.53 | 4.08 | 2.86 | 2.28 | 2.87 | 1.61 | 4.21 | 3.15 |
| 15 | 2.97 | 2.00 | 1.81 | 2.04 | 2.39 | 2.93 | 5.52 | 1.89 | 1.34 | .83 | 2.95 | 2.64 |
| 16 | 1.57 | 2.53 | 2.09 | 2.23 | 3.10 | 3.11 | 5.99 | 2.67 | 2.19 | 1.81 | 3.06 | 2.12 |
| 17 | 2.02 | 1.32 | 1.87 | 3.21 | 2.80 | 1.54 | 4.60 | 1.93 | 3.50 | 2.21 | 3.30 | 1.44 |
| 18 | 3.94 | 1.85 | 1.05 | 2.60 | 2.04 | 4.26 | 3.82 | 3.59 | 2.24 | 1.82 | 6.11 | 1.51 |
| 19 | 2.60 | 2.49 | 1.84 | 2.43 | 1.28 | 3.22 | 3.02 | 4.48 | 4.19 | 1.76 | 3.21 | 2.35 |
| 20 | 1.85 | 1.72 | 1.47 | 2.21 | 1.83 | 1.88 | 3.85 | 4.14 | 4.21 | 2.40 | 3.09 | 2.19 |
| 21 | 3.18 | 1.54 | 1.71 | 1.35 | 5.35 | 2.05 | 2.53 | 2.10 | 1.88 | 3.00 | 3.61 | 3.01 |
| 22 | 2.57 | 2.25 | 1.77 | .80 | 2.10 | 2.79 | 2.32 | 1.61 | 2.86 | 4.52 | 2.05 | 2.57 |
| 23 | 2.20 | .79 | 2.33 | 2.37 | 2.74 | 1.47 | 2.17 | 1.95 | 3.63 | 3.52 | 2.54 | 2.21 |
| 24 | 2.57 | 2.55 | 1.20 | 1.99 | 2.03 | .82 | 2.20 | 3.70 | 4.31 | 2.68 | 1.91 | 1.92 |
| 25 | 3.17 | 3.18 | 1.50 | 2.44 | 1.74 | 1.42 | 2.08 | 3.20 | 1.87 | 4.66 | 1.76 | 1.96 |
| 26 | 2.83 | 3.82 | 1.09 | 2.20 | 3.15 | 1.84 | 3.66 | 3.73 | 1.82 | 3.18 | 2.34 | 3.53 |
| 27 | 2.09 | 3.15 | .88 | 1.87 | 2.67 | 2.25 | 2.64 | 2.79 | 1.36 | 3.09 | 3.60 | 3.02 |
| 28 | 4.08 | 2.69 | 1.49 | 1.53 | 2.64 | 2.03 | 5.21 | 5.50 | 1.27 | 2.92 | 3.23 | 3.24 |
| 29 | 3.52 | .53 | 1.51 | 1.55 | 3.29 | 1.93 | 3.10 | 3.56 | 1.48 | 4.52 | 2.04 | 3.04 |
| 30 | 2.15 | - | 1.53 | 1.71 | 2.01 | 1.22 | 1.61 | 1.95 | 1.81 | 2.24 | 1.91 | 3.80 |
| 31 | 3.31 | - | 1.12 | - | 2.11 | - | 1.73 | 2.13 | - | 3.36 | - | 2.97 |

TABLE IVa. 35-year Daily Totals of Rainfall (in inches) 1916-1950

Bradford

| Day | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 7.96 | 4.32 | 2.94 | 4.78 | 2.30 | 3.85 | 3.14 | 3.29 | 4.07 | 1.91 | 6.31 | 3.89 |
| 2 | 3.13 | 5.04 | 1.85 | 3.81 | 1.78 | 4.44 | 1.79 | 3.11 | 3.69 | 3.49 | 3.63 | 3.67 |
| 3 | 3.61 | 4.02 | 1.66 | 2.55 | 2.05 | 2.22 | 5.35 | 2.05 | 4.47 | 3.20 | 3.25 | 3.20 |
| 4 | 3.60 | 3.27 | 3.35 | 3.86 | 3.02 | 1.35 | 2.89 | 2.38 | 3.14 | 4.63 | 2.91 | 6.08 |
| 5 | 3.74 | 3.93 | 3.28 | 2.33 | 3.02 | 2.61 | 3.26 | 5.05 | .89 | 2.63 | 4.89 | 3.83 |
| 6 | 4.61 | 4.28 | 2.05 | 2.25 | 3.58 | 2.97 | 3.16 | 4.34 | 2.40 | 3.62 | 3.51 | 3.67 |
| 7 | 3.21 | 3.26 | 2.98 | 2.43 | 2.34 | 3.64 | 3.25 | 5.35 | 2.01 | 3.41 | 3.31 | 3.76 |
| 8 | 2.89 | 3.49 | 2.45 | 2.47 | 1.71 | 1.71 | 3.54 | 4.57 | 2.04 | 3.76 | 2.57 | 3.19 |
| 9 | 5.33 | 6.20 | 1.98 | 4.47 | 2.22 | 2.18 | 2.49 | 2.30 | 2.40 | 6.42 | 4.39 | 3.55 |
| 10 | 5.24 | 5.02 | 2.51 | 2.49 | 2.90 | 1.49 | 2.47 | 4.00 | 2.80 | 4.22 | 2.94 | 3.63 |
| 11 | 5.07 | 4.55 | 3.58 | 2.07 | 1.54 | 1.92 | 3.35 | 3.31 | 1.51 | 2.88 | 6.42 | 2.73 |
| 12 | 5.70 | 3.67 | 3.26 | 2.78 | 3.04 | 3.71 | 4.00 | 2.70 | 4.21 | 2.89 | 4.00 | .98 |
| 13 | 1.77 | 1.61 | 1.44 | 3.01 | 2.41 | 4.02 | 4.21 | 2.16 | 3.65 | 3.37 | 4.39 | 2.77 |
| 14 | 4.51 | 2.00 | .96 | 3.11 | 1.24 | 3.55 | 1.92 | 2.43 | 2.57 | 1.49 | 4.83 | 4.21 |
| 15 | 4.69 | 4.32 | 1.75 | 3.01 | 2.42 | 1.17 | 6.13 | 2.22 | 3.47 | 2.19 | 3.94 | 3.82 |
| 16 | 3.12 | 4.33 | 2.47 | 2.17 | 2.15 | 1.74 | 4.31 | 2.36 | 3.22 | 1.54 | 6.13 | 2.69 |
| 17 | 4.31 | 1.71 | 2.46 | 2.79 | 3.98 | 2.27 | 2.61 | 3.01 | 4.23 | 3.63 | 3.03 | 2.06 |
| 18 | 7.32 | 2.84 | 1.81 | 1.48 | 2.49 | 2.38 | 2.83 | 5.15 | 2.24 | 2.94 | 6.11 | 1.81 |
| 19 | 3.09 | 3.08 | 3.94 | 2.56 | 2.86 | 2.02 | 4.11 | 3.86 | 5.94 | 3.07 | 4.62 | 1.98 |
| 20 | 3.35 | 2.53 | 2.71 | 3.09 | 2.98 | .98 | 4.58 | 3.90 | 2.83 | 2.26 | 4.22 | 3.02 |
| 21 | 4.27 | 1.93 | 1.70 | 1.77 | 2.45 | 1.72 | 3.24 | 3.80 | 2.59 | 4.44 | 4.13 | 3.23 |
| 22 | 4.81 | 3.80 | 2.44 | 1.34 | 2.18 | 3.17 | 4.37 | 2.31 | 3.71 | 3.56 | 3.00 | 2.84 |
| 23 | 2.35 | 1.39 | 2.28 | 4.10 | 4.25 | 1.69 | 2.83 | 3.28 | 2.19 | 4.32 | 6.00 | 3.33 |
| 24 | 4.38 | 4.05 | 1.84 | 2.39 | 2.22 | 1.25 | 2.28 | 3.03 | 4.05 | 4.25 | 2.71 | 3.20 |
| 25 | 3.84 | 4.28 | 2.76 | 3.28 | 1.93 | 1.47 | 2.62 | 2.81 | 2.10 | 5.02 | 3.44 | 3.80 |
| 26 | 3.78 | 4.07 | 2.38 | 1.60 | 3.78 | 1.13 | 3.64 | 2.43 | 1.88 | 5.28 | 2.65 | 4.02 |
| 27 | 4.44 | 5.25 | 2.01 | 2.61 | 3.42 | 2.85 | 2.59 | 3.11 | 2.16 | 3.11 | 3.55 | 4.22 |
| 28 | 6.65 | 2.55 | 2.02 | 2.13 | 2.61 | 1.60 | 3.84 | 4.54 | .96 | 3.24 | 2.85 | 5.13 |
| 29 | 4.67 | .72 | 2.98 | 1.93 | 4.26 | 2.40 | 3.33 | 4.45 | 1.50 | 5.92 | 2.86 | 6.41 |
| 30 | 3.33 | - | 2.09 | .83 | 4.13 | 2.10 | 1.40 | 2.13 | 2.03 | 3.92 | 3.49 | 4.96 |
| 31 | 5.12 | - | 3.10 | - | 3.23 | - | 1.95 | 1.75 | - | 3.20 | - | 3.11 |

TABLE IVa.. 35-year Daily Totals of Rainfall (in inches) 1916-1950

Wakefield Clarence Park

| Day | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 3.59 | 2.36 | 2.00 | 3.31 | 2.41 | 2.33 | 2.44 | 1.87 | 3.60 | 1.40 | 4.18 | 2.02 |
| 2 | 1.65 | 3.33 | 2.06 | 3.19 | 1.62 | 3.66 | 1.01 | 2.69 | 2.79 | 1.71 | 2.72 | 2.34 |
| 3 | 3.3 | 3.68 | 1.19 | 2.21 | 1.77 | 1.67 | 3.14 | 1.88 | 3.76 | 3.10 | 2.39 | 1.65 |
| 4 | 1.74 | 1.86 | 2.96 | 3.46 | 2.71 | 1.30 | 2.56 | 2.16 | 2.79 | 3.23 | 1.94 | 4.32 |
| 5 | 2.25 | 1.71 | 1.92 | 1.91 | 3.19 | 2.22 | 2.92 | 5.21 | .68 | 2.79 | 3.53 | 2.16 |
| 6 | 2.65 | 3.26 | 1.36 | 1.88 | 3.32 | 1.49 | 3.64 | 3.99 | 2.82 | 2.65 | 2.40 | 2.49 |
| 7 | 2.58 | 2.19 | 2.26 | 1.83 | 2.36 | 2.98 | 2.81 | 5.12 | 1.54 | 3.23 | 3.03 | 2.94 |
| 8 | 2.67 | 2.99 | 2.11 | 1.91 | 1.80 | 1.84 | 3.09 | 4.32 | 1.33 | 2.75 | 1.83 | 2.20 |
| 9 | 4.06 | 3.82 | 2.36 | 3.26 | 2.10 | 1.72 | 2.92 | 3.33 | 2.41 | 5.87 | 3.74 | 2.13 |
| 10 | 3.61 | 2.78 | 1.69 | 2.11 | 2.43 | 1.23 | 3.55 | 3.58 | 2.01 | 3.22 | 2.61 | 1.76 |
| 11 | 3.64 | 2.89 | 3.54 | 1.69 | 2.27 | 1.36 | 1.15 | 3.54 | 1.55 | 2.26 | 4.36 | 2.22 |
| 12 | 2.85 | 2.57 | 3.49 | 1.96 | 2.70 | 2.85 | 3.08 | 2.80 | 2.71 | 1.85 | 2.64 | .95 |
| 13 | 1.51 | 1.46 | 1.13 | 2.13 | 2.32 | 3.90 | 2.84 | 1.30 | 3.36 | 2.69 | 2.80 | 1.68 |
| 14 | 3.03 | 1.22 | 1.19 | 2.58 | 1.27 | 3.37 | 3.04 | 2.67 | 3.02 | 1.47 | 3.88 | 3.12 |
| 15 | 3.21 | 2.18 | 2.39 | 1.79 | 1.55 | 1.05 | 5.33 | 1.27 | 2.47 | 1.41 | 3.56 | 1.58 |
| 16 | 1.76 | 3.06 | 1.84 | 1.72 | 2.38 | 1.54 | 5.24 | 1.61 | 2.27 | 1.48 | 4.95 | 2.00 |
| 17 | 2.72 | 1.70 | 2.33 | 2.75 | 2.19 | 1.66 | 2.85 | 2.17 | 2.67 | 2.53 | 2.56 | 1.24 |
| 18 | 4.73 | 2.00 | 1.08 | 2.16 | 2.26 | 3.08 | 2.83 | 3.67 | 1.90 | 2.24 | 6.19 | 1.27 |
| 19 | 2.56 | 3.19 | 2.87 | 1.36 | 2.68 | 2.02 | 2.92 | 3.51 | 4.79 | 2.11 | 3.87 | 2.56 |
| 20 | 2.10 | 2.30 | 1.59 | 1.87 | 3.68 | 1.65 | 3.67 | 4.39 | 2.58 | 1.73 | 3.07 | 2.26 |
| 21 | 3.00 | 1.33 | 1.67 | 1.26 | 3.81 | 1.45 | 2.74 | 3.19 | 1.74 | 4.27 | 3.28 | 2.09 |
| 22 | 2.38 | 2.44 | 1.49 | 1.14 | 2.13 | 1.62 | 3.11 | 1.21 | 3.12 | 3.58 | 1.86 | 2.36 |
| 23 | 1.51 | 1.04 | 2.09 | 2.39 | 2.91 | 1.11 | 2.34 | 3.13 | 2.39 | 3.72 | 3.71 | 2.91 |
| 24 | 2.82 | 4.09 | 1.02 | 1.70 | 1.89 | 1.11 | 1.08 | 2.97 | 3.42 | 2.86 | 2.15 | 3.02 |
| 25 | 2.47 | 4.17 | 2.37 | 2.64 | 1.86 | 1.71 | 1.76 | 2.28 | 1.90 | 3.96 | 1.69 | 1.59 |
| 26 | 3.69 | 3.67 | 1.41 | 1.52 | 5.25 | .98 | 4.24 | 2.51 | 1.79 | 2.78 | 2.37 | 2.57 |
| 27 | 3.18 | 3.24 | 1.47 | 1.97 | 2.44 | 2.09 | 1.90 | 3.48 | 1.73 | 2.52 | 2.52 | 3.44 |
| 28 | 4.51 | 2.94 | 1.17 | 2.06 | 2.00 | .85 | 4.35 | 4.39 | 1.09 | 1.45 | 2.61 | 3.23 |
| 29 | 3.20 | .88 | 1.81 | 2.76 | 4.04 | 1.79 | 2.82 | 3.62 | 1.65 | 4.86 | 1.20 | 4.16 |
| 30 | 2.73 | - | 1.71 | .96 | 2.92 | 1.28 | .86 | 1.94 | 2.57 | 2.53 | 2.17 | 3.47 |
| 31 | 3.25 | - | 2.24 | - | 2.27 | - | 1.80 | 1.94 | - | 3.17 | - | 1.91 |

TABLE IVa. 35-year Daily Totals of Rainfall (in inches) 1916-1950

York

| Day | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 3.61 | 1.69 | 2.05 | 2.84 | 1.10 | 2.64 | 2.06 | 1.90 | 5.29 | 1.69 | 4.74 | 1.90 |
| 2 | 1.59 | 3.22 | 1.59 | 3.26 | 1.27 | 3.19 | 1.42 | 2.94 | 3.29 | 2.59 | 3.16 | 2.23 |
| 3 | 2.11 | 2.28 | 1.55 | 2.06 | 1.29 | 2.46 | 2.83 | 1.37 | 3.28 | 2.75 | 2.18 | 1.22 |
| 4 | 1.35 | 1.75 | 2.25 | 3.11 | 2.26 | 1.88 | 2.53 | 1.91 | 3.63 | 3.85 | 2.26 | 3.58 |
| 5 | 1.55 | 1.58 | 1.23 | 1.87 | 2.75 | 1.89 | 3.47 | 3.54 | 1.16 | 2.10 | 2.76 | 2.15 |
| 6 | 2.40 | 1.89 | 1.04 | 1.89 | 2.24 | 2.27 | 3.32 | 3.48 | 3.39 | 2.09 | 2.37 | 1.94 |
| 7 | 3.06 | 1.58 | 1.60 | 1.50 | 2.20 | 3.29 | 2.17 | 4.78 | 1.76 | 2.60 | 2.82 | 2.46 |
| 8 | 2.20 | 1.94 | 1.10 | 1.39 | 1.61 | 1.85 | 2.58 | 4.88 | 1.16 | 2.26 | 1.10 | 2.52 |
| 9 | 3.84 | 3.20 | 2.51 | 2.50 | 1.79 | 1.95 | 2.29 | 2.09 | 1.85 | 4.27 | 4.12 | 2.62 |
| 10 | 2.86 | 1.81 | 1.87 | 2.31 | 1.41 | 2.20 | 3.30 | 3.59 | 2.09 | 2.35 | 2.11 | 1.68 |
| 11 | 3.83 | 2.19 | 2.19 | 1.41 | 3.01 | 1.04 | 1.80 | 4.19 | .54 | 2.20 | 4.02 | 2.73 |
| 12 | 3.18 | 2.52 | 2.41 | 1.15 | 2.63 | 3.28 | 2.95 | 3.49 | 3.09 | 1.88 | 2.02 | .94 |
| 13 | 1.36 | 1.32 | .86 | 2.47 | 2.21 | 3.27 | 3.24 | 1.97 | 2.79 | 2.67 | 2.20 | 1.98 |
| 14 | 2.95 | 1.06 | 1.33 | 1.89 | 1.26 | 3.64 | 2.55 | 2.44 | 2.20 | 1.13 | 4.14 | 3.20 |
| 15 | 3.41 | 2.08 | 1.76 | 1.89 | 1.58 | .68 | 4.73 | 2.56 | 1.77 | .97 | 3.39 | 3.74 |
| 16 | 1.63 | 1.89 | 2.01 | 1.67 | 2.04 | 2.26 | 4.24 | 3.03 | 2.73 | 1.53 | 3.69 | 1.78 |
| 17 | 1.63 | 1.06 | 1.90 | 2.90 | 3.72 | 1.63 | 4.14 | 2.64 | 2.72 | 2.31 | 2.46 | 1.11 |
| 18 | 4.27 | 1.61 | 1.05 | 2.24 | 2.33 | 4.92 | 2.46 | 3.32 | 2.00 | 1.41 | 5.09 | 1.55 |
| 19 | 2.05 | 2.24 | 1.88 | 1.87 | 1.51 | 1.97 | 3.44 | 3.01 | 3.40 | 2.02 | 3.05 | 1.90 |
| 20 | 2.04 | 2.05 | 2.21 | 1.85 | 1.98 | 1.78 | 3.16 | 4.32 | 3.18 | 2.16 | 2.96 | 1.99 |
| 21 | 2.82 | 1.08 | 1.43 | 1.25 | 4.33 | 2.20 | 3.02 | 2.75 | 2.44 | 3.04 | 2.86 | 2.81 |
| 22 | 2.83 | 1.89 | 2.02 | 1.07 | 1.86 | 2.38 | 2.66 | .99 | 2.29 | 3.95 | 1.56 | 1.76 |
| 23 | 2.37 | .56 | 1.10 | 2.25 | 2.72 | 1.41 | 2.21 | 1.68 | 2.91 | 3.53 | 2.82 | 2.85 |
| 24 | 2.21 | 2.45 | 1.23 | 2.30 | 1.88 | 1.13 | 1.45 | 3.15 | 4.27 | 2.54 | 1.60 | 2.27 |
| 25 | 2.61 | 3.44 | 1.55 | 2.27 | 1.13 | 1.14 | 2.21 | 2.21 | 1.54 | 4.15 | 1.71 | 1.38 |
| 26 | 3.14 | 3.32 | 1.20 | 1.59 | 3.30 | 1.36 | 3.93 | 3.71 | 1.90 | 2.85 | 1.95 | 2.37 |
| 27 | 2.34 | 4.50 | 1.32 | 1.89 | 2.58 | 3.06 | 2.70 | 3.50 | 1.58 | 2.34 | 3.04 | 3.09 |
| 28 | 4.21 | 1.97 | 1.09 | 1.61 | 1.82 | .98 | 3.68 | 4.21 | 1.34 | 1.73 | 2.38 | 2.36 |
| 29 | 3.08 | .50 | 1.71 | 1.55 | 4.69 | 2.07 | 2.91 | 2.77 | 1.64 | 4.18 | 2.33 | 3.73 |
| 30 | 2.50 | - | 1.16 | 1.03 | 1.93 | 1.12 | 1.34 | 2.03 | 1.63 | 1.98 | 1.69 | 2.95 |
| 31 | 2.87 | - | 1.72 | - | 2.40 | - | 1.98 | 1.62 | - | 2.31 | - | 2.24 |

TABLE IVa (Contd.)

Settle. *

| Day | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec |
|-----|-------|------|------|------|------|------|------|------|------|-------|------|------|
| 1 | 10.81 | 6.40 | 2.68 | 5.08 | 1.90 | 3.54 | 3.61 | 4.98 | 6.22 | 3.73 | 8.40 | 7.76 |
| 2 | 6.53 | 5.62 | 2.52 | 4.61 | 1.98 | 4.42 | 3.38 | 3.59 | 5.73 | 5.98 | 6.63 | 6.46 |
| 3 | 4.85 | 5.26 | 2.82 | 3.47 | 2.13 | 3.29 | 3.97 | 2.43 | 5.79 | 5.80 | 6.31 | 5.30 |
| 4 | 6.20 | 4.70 | 3.96 | 3.82 | 3.24 | 3.38 | 5.04 | 3.28 | 3.11 | 5.80 | 5.71 | 7.55 |
| 5 | 5.56 | 5.71 | 4.04 | 3.35 | 3.64 | 3.20 | 5.64 | 5.33 | 4.13 | 8.35 | 5.79 | 5.62 |
| 6 | 7.78 | 6.14 | 2.43 | 2.48 | 4.42 | 3.21 | 3.30 | 4.37 | 3.52 | 6.08 | 4.45 | 4.33 |
| 7 | 6.82 | 6.20 | 3.82 | 3.20 | 2.75 | 3.18 | 6.86 | 4.73 | 3.39 | 4.91 | 5.14 | 5.77 |
| 8 | 7.11 | 6.46 | 2.54 | 4.27 | 2.04 | 2.69 | 2.86 | 6.66 | 3.26 | 7.39 | 3.42 | 4.14 |
| 9 | 9.45 | 7.67 | 1.91 | 4.40 | 1.94 | 3.60 | 3.87 | 3.71 | 2.66 | 10.67 | 6.23 | 4.61 |
| 10 | 6.09 | 5.91 | 3.67 | 2.83 | 4.30 | 2.01 | 4.16 | 5.25 | 3.81 | 8.49 | 5.34 | 3.08 |
| 11 | 7.70 | 4.73 | 1.76 | 3.01 | 2.93 | 2.08 | 2.33 | 5.08 | 2.02 | 4.20 | 7.68 | 3.39 |
| 12 | 8.06 | 6.50 | 2.48 | 4.07 | 4.33 | 2.14 | 3.43 | 3.91 | 6.51 | 5.35 | 5.80 | 2.37 |
| 13 | 3.77 | 1.85 | 1.81 | 3.98 | 2.10 | 2.98 | 4.13 | 4.59 | 5.42 | 5.82 | 7.53 | 5.54 |
| 14 | 7.06 | 4.64 | 1.13 | 4.41 | 2.75 | 5.10 | 2.79 | 5.29 | 3.13 | 3.39 | 7.62 | 6.59 |
| 15 | 6.81 | 6.90 | 2.17 | 4.81 | 3.46 | 2.04 | 6.46 | 5.09 | 5.77 | 4.27 | 4.76 | 5.92 |
| 16 | 6.60 | 4.15 | 4.14 | 2.92 | 2.02 | 1.84 | 5.52 | 5.32 | 8.31 | 2.61 | 5.93 | 3.10 |
| 17 | 5.94 | 1.90 | 4.15 | 2.86 | 4.57 | 2.72 | 4.54 | 4.96 | 7.37 | 7.47 | 4.77 | 3.79 |
| 18 | 6.24 | 2.48 | 3.50 | 1.54 | 3.65 | 4.09 | 3.79 | 4.46 | 4.35 | 6.36 | 6.26 | 4.49 |
| 19 | 3.86 | 4.03 | 3.46 | 3.06 | 1.95 | 2.23 | 2.78 | 5.52 | 8.23 | 4.11 | 4.84 | 3.17 |
| 20 | 5.48 | 4.25 | 2.85 | 2.39 | 2.96 | 2.73 | 3.20 | 9.10 | 6.70 | 3.21 | 4.35 | 3.33 |
| 21 | 4.92 | 2.65 | 3.06 | 1.89 | 2.54 | 2.26 | 3.98 | 8.24 | 5.23 | 6.24 | 5.56 | 5.32 |
| 22 | 5.54 | 5.18 | 2.73 | 2.73 | 2.63 | 3.90 | 5.09 | 3.99 | 5.91 | 4.16 | 6.10 | 4.31 |
| 23 | 3.83 | 1.73 | 2.98 | 4.84 | 5.15 | 2.48 | 3.64 | 4.34 | 2.95 | 6.27 | 7.61 | 3.57 |
| 24 | 5.75 | 2.91 | 2.42 | 2.89 | 2.33 | 1.59 | 3.78 | 4.46 | 5.91 | 9.16 | 4.53 | 3.86 |
| 25 | 4.05 | 4.58 | 3.11 | 4.42 | 2.44 | 1.77 | 3.94 | 4.80 | 3.89 | 6.81 | 5.76 | 4.35 |
| 26 | 3.90 | 4.74 | 2.58 | 2.38 | 3.39 | 2.22 | 4.03 | 4.32 | 2.73 | 7.47 | 4.25 | 7.00 |
| 27 | 4.20 | 5.64 | 3.25 | 2.68 | 3.34 | 4.80 | 5.45 | 6.36 | 2.53 | 5.83 | 5.66 | 6.04 |
| 28 | 6.07 | 4.07 | 3.05 | 1.79 | 3.52 | 4.05 | 5.46 | 5.88 | 2.95 | 4.68 | 3.02 | 9.53 |
| 29 | 6.11 | .74 | 5.32 | 1.41 | 4.34 | 3.33 | 5.83 | 7.25 | 1.69 | 7.99 | 3.42 | 9.27 |
| 30 | 4.80 | - | 2.76 | 1.98 | 3.25 | 3.71 | 4.40 | 2.97 | 4.47 | 5.81 | 6.94 | 6.70 |
| 31 | 8.00 | - | 4.08 | - | 4.12 | - | 2.83 | 3.54 | - | 4.66 | - | 6.07 |

* This station, from the Lancashire River Board Area, has been included to represent the extreme west of the Yorkshire River Board area.

Table IVb Rainfall totals in inches, divided by 35, thus giving 35-year means ranging from 'trace' to .70 in., for use with table IVa.

| Totals in inches x | | 35 yr means $\bar{x}/35$ | | Totals in inches x | | 35 yr means $\bar{x}/35$ |
|-----------------------|---------|-----------------------------|--|-----------------------|---------|-----------------------------|
| | - .17 | 'trace' | | 12.43 | - 12.77 | .36 |
| .18 | - .52 | .01 | | 12.78 | - 13.12 | .37 |
| .53 | - .87 | .02 | | 13.13 | - 13.47 | .38 |
| .88 | - 1.22 | .03 | | 13.48 | - 13.82 | .39 |
| 1.23 | - 1.57 | .04 | | 13.83 | - 14.17 | .40 |
| 1.58 | - 1.92 | .05 | | 14.18 | - 14.52 | .41 |
| 1.93 | - 2.27 | .06 | | 14.53 | - 14.87 | .42 |
| 2.28 | - 2.62 | .07 | | 14.88 | - 15.22 | .43 |
| 2.63 | - 2.97 | .08 | | 15.23 | - 15.57 | .44 |
| 2.98 | - 3.32 | .09 | | 15.58 | - 15.92 | .45 |
| 3.33 | - 3.67 | .10 | | 15.93 | - 16.27 | .46 |
| 3.68 | - 4.02 | .11 | | 16.28 | - 16.62 | .47 |
| 4.03 | - 4.37 | .12 | | 16.63 | - 16.97 | .48 |
| 4.38 | - 4.72 | .13 | | 16.98 | - 17.32 | .49 |
| 4.73 | - 5.07 | .14 | | 17.33 | - 17.67 | .50 |
| 5.08 | - 5.42 | .15 | | 17.68 | - 18.02 | .51 |
| 5.43 | - 5.77 | .16 | | 18.03 | - 18.37 | .52 |
| 5.78 | - 6.12 | .17 | | 18.38 | - 18.72 | .53 |
| 6.13 | - 6.47 | .18 | | 18.73 | - 19.07 | .54 |
| 6.48 | - 6.82 | .19 | | 19.08 | - 19.42 | .55 |
| 6.83 | - 7.17 | .20 | | 19.43 | - 19.77 | .56 |
| 7.18 | - 8.52 | .21 | | 19.78 | - 20.12 | .57 |
| 7.53 | - 7.87 | .22 | | 20.13 | - 20.47 | .58 |
| 7.88 | - 8.22 | .23 | | 20.48 | - 20.82 | .59 |
| 8.23 | - 8.57 | .24 | | 20.83 | - 21.17 | .60 |
| 8.58 | - 8.92 | .25 | | 21.18 | - 21.52 | .61 |
| 8.93 | - 9.27 | .26 | | 21.53 | - 21.87 | .62 |
| 9.28 | - 9.62 | .27 | | 21.88 | - 22.22 | .63 |
| 9.63 | - 9.97 | .28 | | 22.23 | - 22.57 | .64 |
| 9.98 | - 10.32 | .29 | | 22.58 | - 22.92 | .65 |
| 10.33 | - 10.67 | .30 | | 22.93 | - 23.27 | .66 |
| 10.68 | - 11.02 | .31 | | 23.28 | - 23.62 | .67 |
| 11.03 | - 11.37 | .32 | | 23.63 | - 23.97 | .68 |
| 11.38 | - 11.72 | .33 | | 23.98 | - 24.32 | .69 |
| 11.73 | - 12.07 | .34 | | 24.33 | - 24.67 | .70 |
| 12.08 | - 12.42 | .35 | | | | |

TABLE V. Accumulated Frequencies of Daily Rainfall Amounts, 1916-1950

Scarborough

| Daily Totals (in inches) | Jan | Feb | Mar | Apr | May | June | July | Aug | Sep | Oct | Nov | Dec | All Months |
|-----------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|---------------|
| 2.90 | | | | | | | 1 | | | | | | 1 |
| 2.50 | | | | | | | 1 | | | | | | 1 |
| 2.40 | | | | | | | 1 | | | | | | 1 |
| 2.30 | | | | | | | 1 | | | | | | 1 |
| 2.20 | | | | | | | 1 | | | | | | 1 |
| 2.10 | | | | | | | 1 | | | | | | 1 |
| 2.00 | | | | | | | 1 | | | | | | 1 |
| 1.90 | | | | | | | 1 | | | | | | 1 |
| 1.80 | | | | | | | 1 | | | | | | 1 |
| 1.70 | | | | | | | 1 | 1 | 1 | | | | 3 |
| 1.60 | | | | | 1 | | 2 | 1 | 1 | | | | 5 |
| 1.50 | | | | | 1 | | 3 | 2 | 1 | | 1 | | 8 |
| 1.40 | | | | | 2 | | 4 | 3 | 1 | | 2 | | 12 |
| 1.30 | | | | | 3 | | 5 | 3 | 2 | | 2 | | 15 |
| 1.20 | | | 1 | | 3 | | 6 | 4 | 3 | 2 | 3 | | 22 |
| 1.10 | | . | 1 | | 5 | 2 | 7 | 5 | 4 | 2 | 4 | | 30 |
| 1.00 | 2 | 1 | 1 | | 5 | 3 | 9 | 7 | 5 | 4 | 5 | 3 | 45 |
| 0.90 | 3 | 1 | 1 | 2 | 5 | 4 | 12 | 9 | 6 | 5 | 6 | 4 | 58 |
| 0.80 | 4 | 2 | 1 | 2 | 5 | 6 | 15 | 16 | 7 | 9 | 10 | 5 | 82 |
| 0.70 | 6 | 3 | 1 | 2 | 8 | 7 | 22 | 27 | 10 | 10 | 13 | 7 | 116 |
| 0.60 | 15 | 6 | 4 | 6 | 15 | 10 | 31 | 32 | 18 | 17 | 20 | 11 | 185 |
| 0.50 | 22 | 11 | 11 | 13 | 18 | 18 | 39 | 45 | 21 | 26 | 28 | 22 | 274 |
| 0.40 | 45 | 21 | 21 | 28 | 35 | 30 | 54 | 67 | 43 | 44 | 39 | 43 | 470 |
| 0.30 | 91 | 48 | 40 | 50 | 58 | 54 | 81 | 98 | 69 | 76 | 77 | 74 | 816 |
| 0.20 | 152 | 112 | 87 | 104 | 99 | 106 | 140 | 152 | 116 | 130 | 145 | 144 | 1487 |
| 0.10 | 297 | 215 | 117 | 217 | 200 | 189 | 237 | 238 | 210 | 255 | 296 | 289 | 2760 |
| 0.005 | 597 | 535 | 491 | 504 | 460 | 415 | 488 | 478 | 487 | 557 | 608 | 628 | 6248 |
| ≧0.004 | 488 | 454 | 594 | 546 | 625 | 635 | 597 | 607 | 563 | 528 | 442 | 457 | 6536 |
| Total No. of days. | 1085 | 989 | 1085 | 1050 | 1085 | 1050 | 1085 | 1085 | 1050 | 1085 | 1050 | 1085 | 12784 |

≧ Including rainless days

TABLE V. Accumulated Frequencies of Daily Rainfall Amounts 1916-1950

Holme-on-Spalding Moor

| Daily Totals (in inches) | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | Year |
|-----------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|-------|
| 3.50 | | | | | 1 | | | | | | | | 1 |
| 2.50 | | | | | 1 | | | | | | | | 1 |
| 2.40 | | | | | 1 | | | | | | | | 1 |
| 2.30 | | | | | 1 | | | | | | | | 1 |
| 2.20 | | | | | 1 | | 1 | | | | | | 2 |
| 2.10 | | | | | 1 | | 1 | | | | | | 2 |
| 2.00 | | | | | 1 | | 1 | | | | | | 2 |
| 1.90 | | | | | 1 | | 1 | | | | | | 2 |
| 1.80 | | | | | 1 | | 1 | | | 1 | | | 3 |
| 1.70 | | | | | 1 | | 2 | | | 1 | | | 4 |
| 1.60 | | | | | 1 | | 2 | 1 | | 1 | | | 5 |
| 1.50 | | | | | 1 | | 3 | 1 | | 1 | | | 6 |
| 1.40 | | | | | 1 | 2 | 5 | 1 | | 1 | | | 10 |
| 1.30 | | | | | 1 | 3 | 5 | 2 | 1 | 1 | | | 13 |
| 1.20 | | | | | 1 | 4 | 7 | 3 | 1 | 1 | 1 | | 18 |
| 1.10 | | | | | 1 | 5 | 11 | 5 | 3 | 1 | 1 | | 27 |
| 1.00 | 1 | | | | 1 | 5 | 12 | 5 | 4 | 2 | 2 | | 32 |
| 0.90 | 1 | | 1 | 1 | 2 | 8 | 14 | 8 | 4 | 4 | 5 | | 48 |
| 0.80 | 3 | 2 | 1 | 1 | 5 | 10 | 19 | 15 | 9 | 9 | 6 | 2 | 82 |
| 0.70 | 10 | 6 | 2 | 4 | 7 | 12 | 26 | 20 | 11 | 16 | 11 | 4 | 129 |
| 0.60 | 18 | 11 | 4 | 8 | 15 | 15 | 36 | 25 | 16 | 21 | 17 | 8 | 184 |
| 0.50 | 27 | 18 | 8 | 12 | 22 | 25 | 55 | 41 | 30 | 29 | 30 | 15 | 312 |
| 0.40 | 48 | 37 | 19 | 23 | 33 | 37 | 71 | 65 | 52 | 60 | 52 | 29 | 526 |
| 0.30 | 78 | 62 | 41 | 51 | 64 | 69 | 104 | 100 | 72 | 90 | 82 | 73 | 886 |
| 0.20 | 139 | 112 | 74 | 100 | 122 | 115 | 162 | 169 | 129 | 132 | 154 | 136 | 1544 |
| 0.10 | 279 | 216 | 168 | 226 | 223 | 210 | 263 | 271 | 227 | 256 | 290 | 285 | 2914 |
| 0.005 | 627 | 491 | 466 | 479 | 461 | 431 | 495 | 511 | 465 | 558 | 616 | 603 | 6203 |
| * 0.004 | 458 | 498 | 619 | 571 | 624 | 619 | 590 | 574 | 585 | 527 | 434 | 482 | 6581 |
| Total No. of days | 1085 | 989 | 1035 | 1050 | 1085 | 1050 | 1085 | 1085 | 1050 | 1085 | 1050 | 1085 | 12784 |

* Including rainless days

TABLE V. Accumulated Frequencies of Daily Rainfall Amounts 1916-1950

Bradford

| Daily Totals (in inches) | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | All Months |
|-----------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|---------------|
| 2.50 | | | | | | | | | | | | | 1 |
| 2.40 | | | | | | | | | | | | | 3 |
| 2.30 | 1 | | | | | | | | | | | | 3 |
| 2.20 | 1 | | | | | | 1 | | 1 | | | | 5 |
| 2.10 | 1 | | | | | | 1 | | 1 | | | | 6 |
| 2.00 | 1 | | | | 1 | | 1 | 1 | 1 | | | | 7 |
| 1.90 | 1 | | | | 1 | | 1 | 1 | 1 | | 1 | | 11 |
| 1.80 | 1 | | 1 | | 1 | | 1 | 1 | 1 | | 1 | | 13 |
| 1.70 | 1 | | 1 | | 1 | | 2 | 3 | 1 | 1 | 1 | | 17 |
| 1.60 | 2 | | 1 | | 1 | | 3 | 3 | 1 | 1 | 1 | | 17 |
| 1.50 | 2 | | 1 | | 1 | 1 | 4 | 3 | 2 | 1 | 2 | | 23 |
| 1.40 | 2 | | 1 | | 1 | 1 | 4 | 3 | 2 | 1 | 2 | | 23 |
| 1.30 | 2 | 1 | 1 | 1 | 1 | 1 | 6 | 3 | 2 | 2 | 3 | | 34 |
| 1.20 | 3 | 2 | 2 | 1 | 2 | 2 | 6 | 3 | 4 | 5 | 3 | 1 | 46 |
| 1.10 | 7 | 2 | 2 | 1 | 2 | 4 | 6 | 4 | 7 | 6 | 4 | 1 | 69 |
| 1.00 | 10 | 3 | 5 | 2 | 4 | 6 | 8 | 7 | 8 | 8 | 7 | 1 | 117 |
| 0.90 | 16 | 3 | 9 | 2 | 7 | 9 | 17 | 13 | 12 | 13 | 13 | 3 | 184 |
| 0.80 | 23 | 14 | 10 | 6 | 11 | 12 | 24 | 19 | 17 | 21 | 19 | 8 | 242 |
| 0.70 | 30 | 20 | 10 | 9 | 14 | 13 | 29 | 29 | 20 | 29 | 25 | 14 | 391 |
| 0.60 | 48 | 40 | 16 | 14 | 21 | 17 | 43 | 38 | 27 | 46 | 48 | 33 | 518 |
| 0.50 | 65 | 53 | 26 | 19 | 29 | 24 | 49 | 49 | 39 | 54 | 61 | 50 | 840 |
| 0.40 | 90 | 88 | 42 | 48 | 55 | 37 | 73 | 77 | 63 | 89 | 96 | 282 | 1193 |
| 0.30 | 144 | 105 | 70 | 74 | 81 | 58 | 96 | 105 | 89 | 118 | 131 | 122 | 1945 |
| 0.20 | 205 | 163 | 106 | 155 | 136 | 115 | 161 | 163 | 143 | 184 | 214 | 200 | 3034 |
| 0.10 | 305 | 303 | 202 | 225 | 223 | 184 | 238 | 254 | 213 | 271 | 308 | 308 | 6949 |
| 0.095 | 697 | 561 | 545 | 549 | 506 | 459 | 525 | 571 | 540 | 641 | 684 | 671 | |
| ≡ 0.004 | 388 | 428 | 540 | 501 | 579 | 591 | 560 | 514 | 510 | 444 | 366 | 414 | 5835 |
| Total No. of days. | 1085 | 989 | 1085 | 1050 | 1085 | 1050 | 1085 | 1085 | 1050 | 1085 | 1050 | 1085 | 12784 |

≡ Including rainless days

TABLE V. Accumulated Frequencies of Daily Rainfall Amounts 1916-1950

Wakefield

| Daily Total (in inches) | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | All Months |
|----------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|---------------|
| 2.50 | | | | | | | | | | | | | |
| 2.40 | | | | | | | | | | | | | |
| 2.30 | | | | | | | | | | | | | |
| 2.20 | | | | | 1 | | | | | | | | 1 |
| 2.10 | | | | | 1 | | | 1 | | | | | 2 |
| 2.00 | | | | | 2 | | | 1 | | | | | 3 |
| 1.90 | | | | | 2 | | | 1 | | | | | 3 |
| 1.80 | | | | | 2 | | | 2 | | | | | 4 |
| 1.70 | | | | | 2 | | | 2 | 1 | | | | 5 |
| 1.60 | | | | | 2 | | | 2 | 1 | | | | 5 |
| 1.50 | | 1 | | | 2 | | 2 | 2 | 1 | | | | 8 |
| 1.40 | 1 | 1 | 1 | | 2 | | 3 | 3 | 1 | | | | 12 |
| 1.30 | 1 | 1 | 1 | | 2 | | 5 | 3 | 3 | | | | 16 |
| 1.20 | 1 | 1 | 2 | | 2 | | 7 | 7 | 3 | 3 | | 1 | 27 |
| 1.10 | 2 | 4 | 5 | | 4 | 2 | 9 | 8 | 4 | 4 | 1 | 1 | 44 |
| 1.00 | 3 | 4 | 7 | | 5 | 3 | 9 | 11 | 5 | 5 | 1 | 2 | 55 |
| 0.90 | 7 | 6 | 8 | 1 | 8 | 4 | 11 | 14 | 7 | 8 | 4 | 2 | 80 |
| 0.80 | 11 | 8 | 8 | 5 | 10 | 6 | 18 | 20 | 9 | 16 | 5 | 3 | 119 |
| 0.70 | 15 | 13 | 8 | 6 | 16 | 8 | 23 | 23 | 14 | 21 | 10 | 5 | 162 |
| 0.60 | 22 | 18 | 13 | 12 | 24 | 12 | 37 | 29 | 20 | 26 | 25 | 10 | 548 |
| 0.50 | 30 | 31 | 19 | 19 | 30 | 16 | 45 | 38 | 34 | 38 | 40 | 13 | 353 |
| 0.40 | 55 | 50 | 29 | 34 | 43 | 34 | 57 | 52 | 51 | 51 | 61 | 34 | 551 |
| 0.30 | 87 | 72 | 55 | 52 | 80 | 51 | 88 | 89 | 72 | 77 | 86 | 65 | 874 |
| 0.20 | 139 | 113 | 94 | 101 | 124 | 91 | 148 | 148 | 114 | 135 | 153 | 117 | 1477 |
| 0.10 | 276 | 217 | 169 | 207 | 217 | 180 | 230 | 247 | 202 | 246 | 278 | 252 | 2721 |
| 0.005 | 661 | 547 | 518 | 524 | 496 | 453 | 527 | 546 | 499 | 593 | 630 | 645 | 6641 |
| * 0.004 | 424 | 442 | 567 | 526 | 587 | 597 | 558 | 539 | 551 | 492 | 420 | 440 | 6143 |
| Total no. Of days. | 1085 | 989 | 1085 | 1050 | 1085 | 1050 | 1085 | 1085 | 1050 | 1085 | 1050 | 1085 | 12784 |

* Including rainless days

TABLE V. Accumulated Frequencies of Daily Rainfall Amounts, 1916-1950

York

| Daily Total (in inches) | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | All Months |
|----------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|---------------|
| 2.70 | | | | | 1 | | | | | | | | 1 |
| 2.50 | | | | | 1 | | | | | | | | 1 |
| 2.40 | | | | | 1 | | | | | | | | 1 |
| 2.30 | | | | | 1 | | | 1 | | | | | 2 |
| 2.20 | | | | | 1 | | | 1 | | | | | 2 |
| 2.10 | | | | | 1 | | 1 | 1 | | | | | 3 |
| 2.00 | | | | | 1 | | 1 | 1 | | | | | 3 |
| 1.90 | | | | | 1 | | 1 | 1 | | | | | 3 |
| 1.80 | | | | | 1 | | 1 | 1 | 1 | | | | 4 |
| 1.70 | | | | | 1 | | 1 | 1 | 2 | | | | 5 |
| 1.60 | | 1 | | | 1 | | 1 | 1 | 2 | | | | 6 |
| 1.50 | | 1 | | | 1 | | 2 | 1 | 2 | | | | 7 |
| 1.40 | | 1 | | | 1 | | 2 | 2 | 3 | | | | 9 |
| 1.30 | | 1 | | | 1 | 2 | 2 | 2 | 4 | | | | 12 |
| 1.20 | | 1 | | | 1 | 3 | 4 | 4 | 4 | 3 | | | 20 |
| 1.10 | | 2 | 1 | | 1 | 5 | 5 | 6 | 5 | 3 | | 1 | 29 |
| 1.00 | 1 | 3 | 1 | | 3 | 5 | 7 | 6 | 6 | 6 | | 1 | 39 |
| 0.90 | 1 | 3 | 1 | | 6 | 6 | 9 | 8 | 8 | 8 | 2 | 1 | 53 |
| 0.80 | 4 | 4 | 2 | 2 | 8 | 6 | 17 | 11 | 11 | 9 | 3 | 3 | 80 |
| 0.70 | 8 | 7 | 2 | 4 | 11 | 10 | 20 | 20 | 14 | 17 | 11 | 5 | 129 |
| 0.60 | 17 | 10 | 3 | 8 | 13 | 15 | 25 | 26 | 18 | 22 | 22 | 10 | 189 |
| 0.50 | 26 | 17 | 11 | 13 | 18 | 24 | 36 | 38 | 27 | 28 | 26 | 16 | 280 |
| 0.40 | 42 | 28 | 17 | 21 | 39 | 34 | 55 | 59 | 42 | 46 | 48 | 29 | 460 |
| 0.30 | 80 | 45 | 36 | 43 | 64 | 65 | 86 | 92 | 70 | 72 | 79 | 52 | 784 |
| 0.20 | 141 | 96 | 77 | 98 | 115 | 109 | 139 | 152 | 115 | 116 | 142 | 120 | 1420 |
| 0.10 | 267 | 180 | 172 | 210 | 214 | 192 | 246 | 266 | 210 | 234 | 267 | 244 | 2702 |
| 0.005 | 628 | 498 | 476 | 494 | 481 | 459 | 509 | 526 | 488 | 567 | 619 | 598 | 6343 |
| * C.004 | 457 | 491 | 609 | 556 | 604 | 591 | 576 | 559 | 562 | 518 | 431 | 487 | 6441 |
| Total No. of days. | 1085 | 989 | 1085 | 1050 | 1085 | 1050 | 1085 | 1085 | 1050 | 1085 | 1050 | 1085 | 12784 |

* Including rainless days

TABLE V. Accumulated Frequencies of Daily Rainfall, 1916-1950

Settle

| Daily Totals (in inches) | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | All Months |
|-----------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|---------------|
| 2.50 | | | | | | | | | | | | | |
| 2.40 | | | | | | | | | | | | | |
| 2.30 | | | | | | | | | | 1 | | | 1 |
| 2.20 | | | | | | | | | | 2 | | | 2 |
| 2.10 | | | | | | | 1 | | 1 | 3 | | | 5 |
| 2.00 | | | | | | | 1 | | 1 | 4 | 2 | | 8 |
| 1.90 | | | | | | | 1 | | 1 | 4 | 3 | 1 | 10 |
| 1.80 | | 2 | | | | | 1 | | 1 | 4 | 3 | 1 | 12 |
| 1.70 | 1 | 2 | | 1 | | | 1 | | 1 | 5 | 3 | 1 | 15 |
| 1.60 | 3 | 2 | 1 | 1 | 1 | | 1 | 1 | 1 | 7 | 4 | 2 | 24 |
| 1.50 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 5 | 3 | 31 |
| 1.40 | 7 | 4 | 1 | 1 | 2 | 1 | 1 | 5 | 4 | 10 | 7 | 5 | 48 |
| 1.30 | 8 | 6 | 3 | 1 | 2 | 3 | 3 | 7 | 7 | 11 | 10 | 5 | 66 |
| 1.20 | 12 | 9 | 4 | 3 | 3 | 3 | 5 | 10 | 8 | 14 | 12 | 7 | 90 |
| 1.10 | 20 | 13 | 4 | 4 | 5 | 4 | 10 | 12 | 10 | 18 | 15 | 11 | 126 |
| 1.00 | 24 | 17 | 4 | 4 | 5 | 5 | 11 | 18 | 13 | 21 | 20 | 14 | 156 |
| 0.90 | 31 | 22 | 6 | 5 | 8 | 7 | 19 | 34 | 17 | 36 | 31 | 16 | 232 |
| 0.80 | 45 | 32 | 9 | 10 | 12 | 14 | 29 | 41 | 29 | 46 | 46 | 29 | 342 |
| 0.70 | 64 | 44 | 17 | 18 | 15 | 20 | 37 | 54 | 46 | 62 | 63 | 46 | 486 |
| 0.60 | 91 | 56 | 23 | 31 | 24 | 30 | 50 | 75 | 64 | 89 | 82 | 62 | 677 |
| 0.50 | 120 | 76 | 35 | 40 | 36 | 40 | 66 | 96 | 87 | 117 | 110 | 89 | 912 |
| 0.40 | 158 | 104 | 55 | 63 | 69 | 63 | 96 | 128 | 119 | 165 | 135 | 137 | 1294 |
| 0.30 | 229 | 151 | 103 | 103 | 112 | 88 | 151 | 183 | 154 | 220 | 195 | 194 | 1883 |
| 0.20 | 330 | 227 | 167 | 165 | 174 | 160 | 224 | 256 | 228 | 297 | 282 | 285 | 2795 |
| 0.10 | 443 | 340 | 278 | 291 | 286 | 266 | 353 | 369 | 348 | 421 | 404 | 420 | 4219 |
| 0.005 | 725 | 565 | 533 | 546 | 499 | 503 | 596 | 625 | 583 | 662 | 649 | 706 | 7192 |
| * 0.004 | 360 | 424 | 552 | 504 | 586 | 547 | 489 | 460 | 467 | 423 | 401 | 379 | 5592 |
| Total No. of days. | 1085 | 989 | 1085 | 1050 | 1085 | 1050 | 1085 | 1085 | 1050 | 1085 | 1050 | 1085 | 12784 |

* Including rainless days

TABLE VI

Maximum and Minimum Monthly and Annual Totals of Rainfall
(in inches) 1916-1950 with supplementary list covering
extremes for the 50-year period 1911-1960

| | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | Year |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Scarborough | 1945 | 1941 | 1937 | 1937 | 1932 | 1931 | 1920 | 1927 | 1918 | 1933 | 1925 | 1918 | 1937 |
| 1916-1950 { (Max | 4.58 | 3.99 | 3.63 | 3.26 | 6.58 | 3.19 | 5.77 | 5.24 | 5.06 | 4.64 | 4.87 | 4.99 | 33.27 |
| (Min | 1916 | 1943 | 1921 | 1938 | 1944 | 1925 | 1935 | 1933 | 1929 | 1947 | 1920 | 1941 | 1921 |
| | 0.67 | 0.45 | 0.13 | 0.26 | 0.68 | 0.18 | 0.51 | 0.41 | 0.26 | 0.58 | 0.49 | 0.56 | 18.74 |
| Other { (Max | 1960 | 1958 | | | | 1911 | 1915 | 1951 | 1952 | 1960 | | | 1960 |
| Extremes (Min | 5.10 | 4.10 | | | | 4.61 | 6.41 | 6.23 | 5.33 | 7.97 | | | 34.05 |
| | | 1959 | | 1912 | 1959 | | | 1959 | | | | | |
| | | 0.41 | | 0.19 | 0.47 | | | 0.31 | | | | | |
| Holme-on-Spalding Moor | 1928 | 1933 | 1947 | 1937 | 1932 | 1931 | 1940 | 1930 | 1944 | 1933 | 1946 | 1938 | 1931 |
| 1916-1950 { (Max | 4.87 | 4.14 | 3.81 | 4.80 | 6.78 | 5.23 | 7.50 | 4.47 | 5.21 | 5.56 | 5.33 | 4.86 | 32.30 |
| (Min | 1949 | 1930 | 1929 | 1938 | 1935 | 1925 | 1935 | 1947 | 1928 | 1946 | 1945 | 1941 | 1921 |
| | 0.64 | 0.45 | 0.15 | 0.14 | 0.45 | 0.09 | 0.40 | 0.31 | 0.24 | 0.59 | 0.66 | 0.47 | 17.02 |
| Other { (Max | | | | | | 1912 | | 1951 | | | | 1915 | 1912 |
| Extremes (Min | | 1959 | | 1912 | | 5.53 | | 5.09 | | | | 5.38 | 33.38 |
| | | 0.25 | | 0.13 | | | 1913 | | 1959 | | | | |
| | | | | | | | 0.26 | | 0.12 | | | | |
| Bradford | 1928 | 1950 | 1947 | 1920 | 1924 | 1928 | 1920 | 1917 | 1918 | 1935 | 1935 | 1929 | 1928 |
| 1916-1950 { (Max | 8.12 | 4.77 | 5.86 | 4.22 | 4.65 | 6.04 | 6.97 | 6.00 | 7.89 | 6.94 | 6.43 | 7.38 | 43.31 |
| (Min | 1949 | 1921 | 1929 | 1938 | 1940 | 1921 | 1935 | 1947 | 1941 | 1946 | 1945 | 1933 | 1933 |
| | 1.44 | 0.13 | 0.28 | 0.22 | 0.56 | 0.05 | 0.60 | 0.25 | 0.24 | 0.81 | 0.31 | 0.56 | 24.88 |
| Other { (Max | | | | 1960 | | 1912 | | 1956 | | | 1951 | 1915 | 1912 |
| Extremes (Min | | | | 4.38 | | 6.18 | | 6.75 | | | 7.44 | 7.73 | 43.65 |
| | 1911 | | | | | | 1911 | | 1910 | | | | 1955 |
| | 1.30 | | | | | | 0.19 | | 1959 | | | | 24.42 |
| | | | | | | | | | 0.14 | | | | |
| Wakefield | 1941 | 1937 | 1947 | 1931 | 1932 | 1931 | 1939 | 1917 | 1918 | 1935 | 1940 | 1918 | 1930 |
| 1916-1950 { (Max | 4.23 | 4.32 | 5.15 | 3.41 | 5.32 | 4.58 | 5.83 | 4.62 | 6.78 | 4.65 | 4.46 | 4.21 | 32.12 |
| (Min | 1949 | 1934 | 1944 | 1938 | 1940 | 1941 | 1935 | 1947 | 1917 | 1947 | 1945 | 1941 | 1921 |
| | 0.82 | 0.34 | 0.25 | 0.08 | 0.48 | 0.09 | 0.82 | 0.33 | 0.48 | 0.77 | 0.38 | 0.45 | 17.57 |
| Other { (Max | 1960 | 1958 | | | | | | 1954 | | 1960 | 1951 | 1915 | 1960 |
| Extremes (Min | 4.84 | 4.34 | | | | | | 5.88 | | 6.00 | 6.37 | 6.23 | 34.15 |
| | 1953 | 1959 | | | | | 1955 | 1955 | 1959 | | | | |
| | 0.46 | 0.07 | | | | | 0.57 | 0.29 | 0.11 | | | | |

TABLE VI (Contd.)

| | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec | Year |
|-------------|-------|--------------|--------------|--------------|------|------|------|------|-------|-------|------|-------|---------------|
| York Museum | 1928 | 1923 | 1947 | 1937 | 1932 | 1928 | 1940 | 1917 | 1918 | 1928 | 1946 | 1929 | 1935 |
| (Max | 4.87 | 3.71 | 4.43 | 3.48 | 5.66 | 4.00 | 5.12 | 5.11 | 5.81 | 3.92 | 5.39 | 5.04 | 29.83 |
| 1916-1950 | 1949 | 1921 | 1929 | 1938 | 1919 | 1925 | 1935 | 1947 | 1928 | 1946 | 1945 | 1941 | 1921 |
| (Min | 0.68 | 0.13 | 0.20 | 0.10 | 0.91 | 0.02 | 0.35 | 0.27 | 0.32 | 0.66 | 0.36 | 0.46 | 16.01 |
| (Max | | | | | | 1912 | | 1954 | | 1960 | | 1915 | 1912 |
| Other | | | | | | 6.08 | | 7.18 | | 5.08 | | 5.23 | 33.01 |
| Extremes | 1953 | | | 1912 | 1956 | | | | 1913 | | | | |
| (Min | 0.47 | | | 0.06 | 0.91 | | | | 0.23 | | | | |
| Settle | 1928 | 1937 | 1947 | 1947 | 1920 | 1928 | 1920 | 1946 | 1918 | 1916 | 1931 | 1929 | 1928 |
| (Max | 12.13 | 8.18 | 6.05 | 5.18 | 6.57 | 7.16 | 7.84 | 8.33 | 11.29 | 12.18 | 9.11 | 10.42 | 59.73 |
| 1916-1950 | 1941 | 1932 | 1931 | 1938 | 1939 | 1925 | 1935 | 1947 | 1941 | 1947 | 1945 | 1933 | 1933 |
| (Min | 1.21 | 1934 0.28 | 0.59 | 0.69 | 0.73 | 0.10 | 1.53 | 0.14 | 0.72 | 0.93 | 0.32 | 0.65 | 32.79 |
| (Max | | | 1913 6.97 | 1913 5.48 | | | | | | | | | 1954 61.08 |
| Other | | | | | | | 1911 | | 1959 | | | | 1955 |
| Extremes | | | | | | | 0.61 | | 0.31 | | | | 30.72 |
| (Min | | | | | | | | | | | | | |

TABLE VII
Maximum Daily Rainfall (in inches) 1916-1950 with additional
maxima for the 50-year period 1911-1960

| | Jan | Feb | Mar | Apr | May | June | Jly | Aug | Sep | Oct | Nov | Dec |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------|--------------|----------------------|
| Scarborough 1916-1950 (Max | 1937 1.08 | 1934 1.03 | 1919 1.27 | 1945 0.96 | 1932 1.63 | 1948 1.16 | 1940 2.91 | 1927 1.78 | 1931 1.71 | 1933 1.27 | 1927 1.58 | 1937 1950 1.08 |
| Other Extremes (Max | 1960 1.11 | | | | | 1911 1.35 | | 1951 2.27 | | 1960 1.35 | | 1955 1.12 |
| Holme-on- Spalding Moor 1916-1950 (Max | 1948 1.04 | 1933 0.83 | 1947 0.92 | 1937 0.92 | 1932 3.58 | 1926 1.45 | 1939 2.21 | 1948 1.60 | 1946 1.33 | 1933 1.85 | 1943 1.27 | 1919 0.85 |
| Other Extremes (Max | | | | | | | | 1957 3.00 | | | 1951 1.75 | 1957 0.96 |
| Bradford 1916-1950 (Max | 1944 2.32 | 1923 1.39 | 1919 1.87 | 1941 1.32 | 1947 2.00 | 1928 1.50 | 1932 2.21 | 1922 2.08 | 1946 2.29 | 1941 1.74 | 1928 1.91 | 1921 1.23 |
| Other Extremes (Max | | | | | 1951 2.15 | 1911 1.67 | | | | 1959 1.77 | | 1957 1.73 |
| Wakefield 1916-1950 (Max | 1920 1.45 | 1933 1.52 | 1947 1.46 | 1946 0.93 | 1945 2.21 | 1936 1.17 | 1919 1.50 | 1922 2.12 | 1946 1.73 | 1941 1.22 | 1916 1.12 | 1922 1.20 |
| 1911-1960 (Max Other Extremes | | | | | | 1911 1.67 | | | | 1952 1.29 | 1954 1.20 | 1957 1.59 |
| York 1916-1950 (Max | 1933 1.04 | 1934 1.60 | 1947 1.11 | 1946 0.83 | 1932 2.77 | 1920 1.35 | 1920 2.13 | 1948 2.35 | 1931 1.87 | 1935 1937 1.25 | 1921 0.98 | 1918 1.12 |
| 1911-1960 (Max Other Extremes | 1913 1.16 | | | | | | | | | | 1951 1.64 | |
| Settle 1916-1950 (Max | 1948 1.70 | 1950 1.40 | 1928 1.62 | 1923 1.72 | 1925 1.65 | 1928 1.54 | 1933 2.15 | 1928 1.65 | 1944 2.17 | 1941 2.30 | 1923 2.07 | 1929 1.95 |
| 1911-1960 (Max Other Extremes | | | | | | | | | | | | |

APPENDIX I

Intense Falls of Rain in 2 hours or less, 1865-1960
 Extracted from British Rainfall

N = Noteworthy
 R = Remarkable
 VR = Very Rare

| Year | Arranged chronologically in county order | | Riv. Div. | Date | Amount in. | Duration min. | Rate in/hr. |
|---------------------|--|--------------------------|--------------|---------|---------------|------------------|----------------|
| | Class | Station | | | | | |
| Yorkshire E. Riding | | | | | | | |
| 1889 | R | Thixendale | 3 | July 24 | 1.40 | 50 | 1.68 |
| 1895 | VR | Middleton-on-the-Wolds | 3 | June 27 | 2.00 | 30 | 4.00 |
| 1899 | N | Hull, Pearson Park | 3 | July 12 | 1.14 | 40 | 1.71 |
| 1911 | R | Malton, The Leat Ho. | 2 | Aug. 20 | 1.61 | 30 | 3.22 |
| 1912 | R | Beverley, E.R. Asylum | 3 | Jul. 24 | 2.00 | 120 | 1.00 |
| 1916 | R | Bridlington | 4 | " 7 | .99 | 15 | 3.96 |
| 1931 | N | Westow Vicarage | 2 | June 14 | 1.16 | 30 | 2.32 |
| " | N | Holm-on-Spalding Moor | 3 | " 19 | 1.18 | 60 | 1.18 |
| 1936 | R | Canton Hall | 2 | June 21 | 2.00 | 75 | 1.60 |
| 1939 | R | Holme-on-Spalding Moor | 3 | " 19 | 1.18 | 60 | 1.18 |
| 1947 | N | Hessle, Westfield Rise | 3 | July 16 | 1.40 | 120 | .70 |
| 1950 | N | Hessle, Sandford | 3 | Aug. 7 | .96 | 20 | 2.88 |
| 1954 | N | Hessle, Sandford | 3 | May 28 | .73 | 17 | 2.58 |
| " | N | Inlaby, Beverley Road | 3 | " " | 1.20 | 45 | 1.60 |
| 1958 | N | Hull, Springhead | 3 | July 2 | 1.01 | 45 | 1.35 |
| " | N | Skirlough | 3 | Aug. 4 | .77 | 30 | 1.54 |
| 1960 | N | Withernsea | 4 | July 5 | 1.10 | 60 | 1.10 |
| Yorkshire N. Riding | | | | | | | |
| 1868 | R | Northallerton | 2 | Aug. 6 | 1.87 | 90 | 1.25 |
| 1893 | R | Northallerton | 2 | June 23 | 1.85 | 60 | 1.85 |
| " | N | Baldersby | 2 | July 8 | 1.33 | 120 | .67 |
| 1895 | N | Scarborough | 5 | " 26 | .76 | 27 | 1.69 |
| " | N | " S. Cliff | 5 | June 30 | .75 | 27 | 1.67 |
| 1896 | VR | Guisborough, Hutton Hall | 5 | July 7 | 3.07 | 75 | 2.46 |
| 1899 | N | Baldersby | 2 | June 29 | .90 | 30 | 1.80 |
| 1910 | N | Malton | 4 | May 20 | .96 | 25 | 2.30 |
| " | R | Thornton-le-Dale | 4 | " 21 | 1.71 | 60 | 1.71 |
| 1911 | N | Pickering | 4 | June 17 | 1.03 | 30 | 2.06 |
| " | R | Malton, Broughton Rise | 4 | Aug. 20 | 1.51 | 31 | 2.92 |

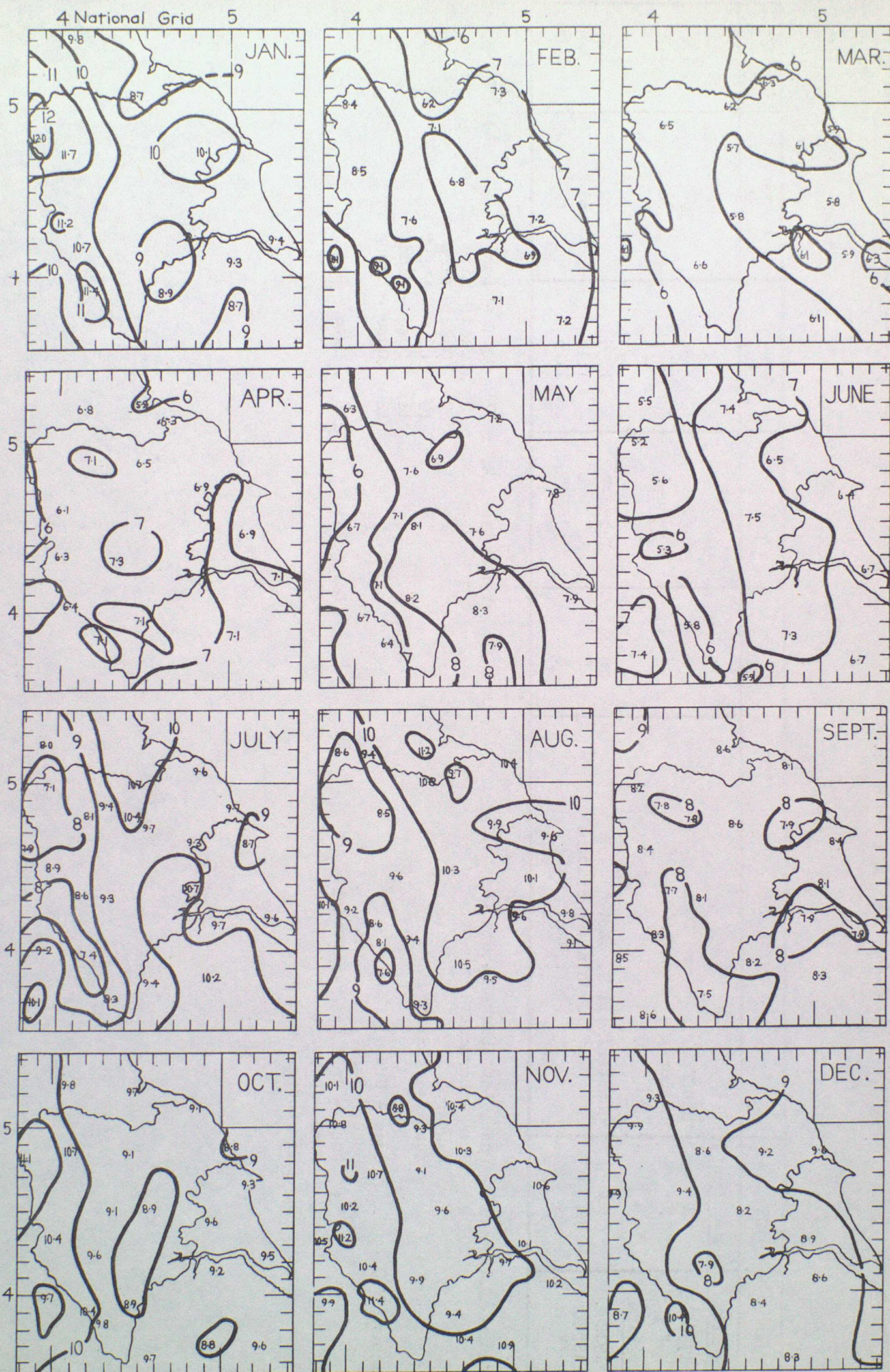
| Year | Class | Station | Riv. Div. | Date | Amount in. | Duration min. | Rate in/hr. |
|-----------------------------------|-------|------------------------------|--------------|---------|---------------|------------------|----------------|
| <u>Yorkshire N. Riding Contd.</u> | | | | | | | |
| 1911 | VR | Haxby, Moorlands | 3 | May 13 | 3.25 | 120 | 1.63 |
| 1927 | N | Ampleforth College | 4 | Aug. 13 | 1.18 | 60 | 1.18 |
| 1928 | N | East Ayton, Derwent Ho. | 4 | Sep. 1 | .88 | 45 | 1.17 |
| 1930 | R | Middleham, Catescu | 1 | Aug. 27 | 1.75 | 45 | 2.33 |
| " | R | Leyburn, Spennithorne | 1 | " 29 | 2.05 | 75 | 1.64 |
| 1932 | R | Felixkirk, Mt. St. John | 2 | July 14 | 1.27 | 48 | 1.59 |
| 1933 | R | Pickering, Hungate Hall | 4 | July 11 | 1.50 | 60 | 1.50 |
| 1934 | N | Bedale, The Hermitage | 2 | " 19 | 1.46 | 90 | .97 |
| " | R | Castleton | 5 | " 18 | 2.15 | 60 | 2.15 |
| " | N | Felixkirk, Mt. St. John | 2 | " 13 | 1.22 | 50 | 1.46 |
| 1936 | N | Pickering, Hungate Hall | 4 | Aug. 15 | .70 | 20 | 2.10 |
| 1939 | N | Leyburn, Spennithorne | 1 | " 21 | .83 | 35 | 1.42 |
| " | R | Thirsh, South Villa | 2 | July 20 | 2.46 | 90 | 1.64 |
| " | N | Catterick Airfield | 2 | " 17 | .98 | 48 | 1.23 |
| 1940 | R | Scarborough | 4 | " 10 | 1.59 | 65 | 1.47 |
| 1944 | N | Scorton | 2 | June 30 | .81 | 30 | 1.62 |
| 1946 | N | E. Harsley, Harsley Hall | 2 | July 13 | 1.10 | 30 | 2.20 |
| " | R | Farnedale Vicarage | 4 | June 23 | 1.23 | 15 | 5.12 |
| 1948 | R | Leeming Airfield | 2 | July 31 | 1.30 | 35 | 2.23 |
| " | N | " " | 2 | " 31 | 1.45 | 65 | 1.34 |
| 1951 | N | Scarborough | 5 | " 8 | .53 | 8 | 3.97 |
| 1953 | N | Leyburn, Spennithorne | 1 | " 12 | .76 | 15 | 3.04 |
| " | N | Tunstall, Craggs Lane | 2 | " 12 | 1.00 | 60 | 1.00 |
| 1956 | N | Pickering, Porters Headland | 4 | July 27 | .99 | 60 | .99 |
| <u>Yorkshire W. Riding</u> | | | | | | | |
| 1871 | N | Otterburn | 9 | July 14 | 1.23 | 120 | .61 |
| 1872 | R | S. Milford Rectory | 9 | " 11 | 1.50 | 45 | 2.00 |
| 1873 | N | Leeds, Chapelton | 9 | " 23 | .94 | 20 | 2.82 |
| 1878 | R | Doncaster, Magdalene | 7 | Aug. 6 | 1.25 | 30 | 2.50 |
| " | R | Otterburn | 9 | June 27 | 2.10 | 90 | 1.40 |
| 1879 | N | Stainborough, Wentworth Cas. | 7 | Aug. 17 | 1.09 | 32 | 2.04 |
| 1880 | VR | Wath-upon-Deane | 7 | Sep. 15 | 3.00 | 120 | 1.50 |
| 1883 | R | S. Milford Rectory | 9 | June 30 | 1.71 | 30 | 3.42 |
| 1886 | VR | Wakefield, Stanley Vic. | 8 | July 25 | 2.50 | 60 | 2.50 |
| 1889 | N | Holmfirth, Yateholme | 8 | Aug. 6 | .85 | 40 | 1.27 |
| 1889 | R | " " | 8 | Sep. 7 | 1.65 | 75 | 1.32 |

| Year | Class | Station | Div. | Date | Amount in. | Duration min. | Rate in/hr. |
|-----------------------------------|-------|--------------------------------|------|---------|---------------|------------------|----------------|
| <u>Yorkshire W. Riding Contd.</u> | | | | | | | |
| 1889 | N | Ilkley | 10 | June 10 | .90 | 45 | 1.20 |
| 1892 | N | Hebden Bridge | 8 | July 3 | .70 | 15 | 2.80 |
| 1892 | R | S. Milford Rectory | 9 | " " | 1.35 | 30 | 2.70 |
| 1894 | N | Wath-upon-Deane, Chapel St. | 7 | " 25 | 1.33 | 120 | .67 |
| 1895 | R | Meltham, Harewood Lodge | 8 | June 26 | 1.13 | 25 | 2.71 |
| " | N | Hebden Bridge | 8 | " 26 | 1.00 | 60 | 1.00 |
| 1896 | N | Leeds, Elmete Hall | 9 | " 8 | 1.36 | 50 | 1.63 |
| 1900 | R | Ardsley Res. | 8 | July 12 | 2.07 | 82 | 1.51 |
| " | VR | Ilkley | 10 | " 12 | 3.75 | 75 | 3.00 |
| " | R | Leeds, Oliver Hill, Horseforth | 9 | " 12 | 2.00 | 90 | 1.33 |
| " | R | Wakefield, Stanley Grange | 8 | " 12 | 2.17 | 115 | 1.13 |
| " | R | Bolton Abbey, Estate Office | 10 | Aug. 3 | 2.00 | 120 | 1.00 |
| 1904 | VR | Slaithwaite, Inglewood | 8 | July 24 | 2.36 | 60 | 2.36 |
| " | N | " | 8 | " " | 1.33 | 80 | 1.00 |
| 1905 | R | Huddersfield Cemetery | 8 | Aug. 28 | 1.54 | 30 | 3.08 |
| 1912 | N | Lawdon | 9 | Aug. 4 | 1.00 | 20 | 3.00 |
| 1914 | N | Haworth, Ir. Laithe Res. | 9 | July 1 | .63 | 15 | 2.52 |
| " | N | " " | 9 | " " | 1.00 | 45 | 1.33 |
| " | R | Halifax, Dean Clough Mills | 8 | " " | 1.81 | 75 | 1.45 |
| 1915 | N | Sheffield, Millhouses | 7 | June 29 | .95 | 30 | 1.90 |
| 1917 | N | " | 7 | " 20 | .72 | 15 | 2.88 |
| " | N | Hebden Bridge, Falling Royd | 2 | May 29 | .97 | 35 | 1.66 |
| " | N | York | 10 | June 17 | .95 | 30 | 1.90 |
| 1918 | R | Haworth, Ir. Laithe Res. | 9 | July 20 | 1.96 | 60 | 1.96 |
| 1920 | N | York, Museum | 10 | June 18 | .55 | 10 | 3.30 |
| " | N | " | 10 | " " | .79 | 20 | 2.37 |
| " | N | Huddersfield, Oakes | 8 | Oct. 15 | .87 | 30 | 1.74 |
| " | N | Doncaster, Avenue Rd. | 7 | May 29 | 1.33 | 45 | 1.77 |
| 1924 | N | Meltham, Harewood Lodge | 8 | Aug. 13 | 1.09 | 30 | 2.18 |
| 1930 | VR | Ilkley, Ben Rhydding | 10 | Apr. 25 | 1.84 | 30 | 3.68 |
| 1931 | N | Tockwith School | 11 | July 12 | .90 | 30 | 1.80 |
| " | N | Rishworth, Ringstone Res. | 8 | June 1 | 1.11 | 60 | 1.11 |
| " | N | Burnsall Rectory | 10 | Aug. 19 | 1.07 | 60 | 1.07 |
| " | N | Tockwith School | 11 | June 14 | 1.03 | 60 | 1.03 |
| " | N | Holmfirth, Thongsbridge | 8 | July 6 | 1.00 | 60 | 1.00 |
| " | N | Barnsley, Jordan Hill | 7 | July 25 | 1.50 | 90 | 1.00 |
| " | N | Holmfirth, Thongsbridge | 8 | Sep. 4 | 1.35 | 90 | .90 |

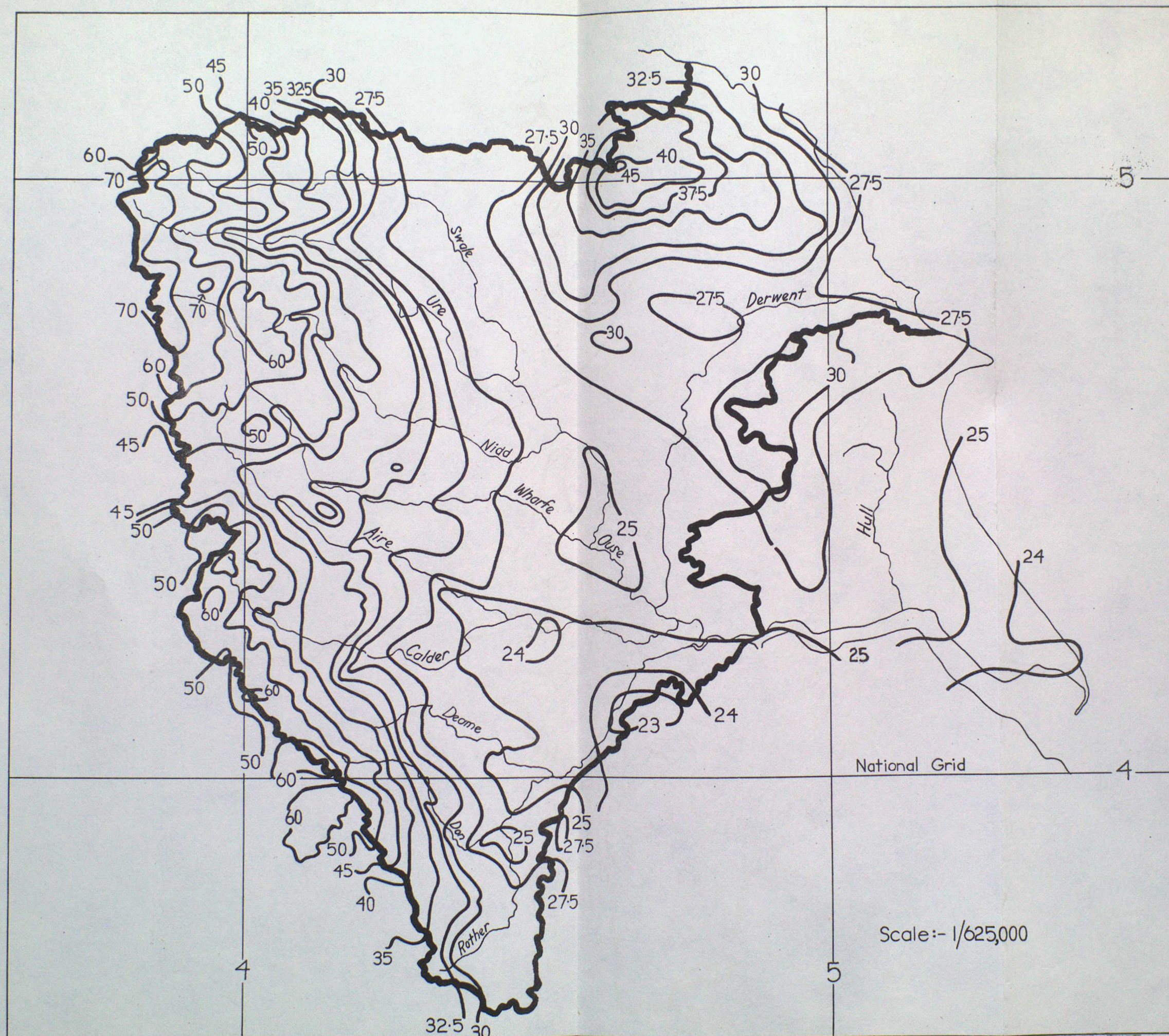
| Year | Class | Station | Riv. Div. | Date | Amount in. | Duration min. | Rate in/hr. |
|----------------------------|-------|----------------------------------|--------------|---------|---------------|------------------|----------------|
| Yorkshire W. Riding Contd. | | | | | | | |
| 1932 | N | Narmanton, Haw Hill Pk. | 8 | July 11 | .89 | 30 | 1.78 |
| 1937 | R | Oughtershaw Hall | 10 | Aug. 12 | 2.21 | 120 | 1.11 |
| 1938 | N | Wakefield, Clarence Pk. | 8 | Aug. 6 | 1.00 | 30 | 2.00 |
| 1939 | N | Rotherham, Broom Lane | 7 | July 16 | 1.44 | 90 | .96 |
| " | N | Heckmondwicks, The Bottoms | 8 | " 20 | 1.33 | 90 | .89 |
| " | R | Dewsbury, Municipal Offices | 8 | " 20 | 1.60 | 55 | 1.75 |
| 1943 | N | Rotherham, Ramsden Road | 7 | Sep. 13 | .96 | 29 | 1.99 |
| " | N | Bolton Abbey Estate Office | 10 | " 14 | .95 | 30 | 1.90 |
| " | N | Adel, Lawnswood Cemetery | 9 | Aug. 5 | 1.01 | 45 | 1.35 |
| " | N | Burton Leonard | 12 | " 5 | 1.21 | 60 | 1.21 |
| 1944 | N | Harrogate, Harlow Moor Ob'sy | 11 | June 30 | .78 | 9 | 5.20 |
| 1947 | N | Leeds, Chapel Allerton | 9 | May 28 | 1.19 | 90 | .79 |
| " | N | " " | 9 | July 16 | 1.22 | 94 | .78 |
| " | N | Bradford, Waverley Terrace | 9 | May 30 | 1.50 | 120 | .75 |
| " | R | Sheffield W.W., Rivelin | 7 | July 16 | .90 | 10 | 5.40 |
| 1950 | R | Leeds, Weetwood Filter Beds | 9 | Aug. 7 | 1.97 | 95 | 1.24 |
| " | N | Leeds, Farnley Hall | 9 | " " | 1.55 | 102 | .91 |
| 1952 | R | Rotherham, Ramsden Road | 7 | July 1 | 1.46 | 46 | 1.90 |
| " | N | Rotherham, Herringthorpe | 7 | " " | 1.42 | 75 | 1.14 |
| " | N | " Broom Lane | 7 | " 1 | 1.14 | 75 | .91 |
| " | N | Skipton, Town Hall | 9 | May 18 | 1.00 | 20 | 3.00 |
| " | N | Langsett Res. | 7 | July 1 | .85 | 36 | 1.42 |
| " | N | Rotherham, Alwarke Res. | 7 | " " | 1.20 | 38 | 1.89 |
| 1953 | R | Halifax W.W., Gorples Res. No. 1 | 8 | June 26 | 2.12 | 120 | 1.06 |
| 1954 | R | Ilkley, Spences Garden | 10 | May 12 | 2.99 | 120 | 1.15 |
| " | N | Rotherham, Aldewarkes S.W. | 7 | Aug. 20 | 1.16 | 48 | 1.45 |
| " | N | Sheffield W.W. Redmires Res. | 7 | " " | .93 | 50 | 1.12 |
| " | R | " " Rivelin | 7 | May 12 | 1.70 | 60 | 1.70 |
| " | N | " " " | 7 | May 12 | 1.00 | 20 | 3.00 |
| " | N | " " " | 7 | May 20 | 1.00 | 60 | 1.00 |
| " | N | " " Redmires Res. | 7 | Aug. 21 | 1.27 | 85 | .90 |
| 1956 | VR | Bradford W.W. Stubden Res. | 9 | June 11 | 2.45 | 75 | 1.96 |
| " | VR | " " Hewenden Res. | 9 | " " | 6.09 | 105 | 3.48 |
| 1957 | N | Langsett Res. | 7 | " 3 | .81 | 30 | 1.62 |
| " | N | Tockwith School | 11 | " 30 | 1.59 | 90 | 1.06 |
| 1958 | R | Litton, Manor Cottage | 10 | " 22 | 2.07 | 120 | 1.03 |
| " | VR | Harrogate, Belton S. Wks. | 11 | Aug. 22 | 2.50 | 70 | 2.14 |
| " | N | Wincobank S. Wks. | 7 | " " | 1.00 | 25 | 2.40 |

| Year | Class | Station | Riv. Div. | Date | Amount in. | Duration min. | Rate in/hr. |
|----------------------------|-------|------------------------|--------------|---------|---------------|------------------|----------------|
| Yorkshire W. Riding Contd. | | | | | | | |
| 1958 | N | Sheffield, Norton Lees | 7 | Aug. 22 | .92 | 47 | 1.17 |
| " | N | Rotherham, Broom Lane | 7 | July 21 | 1.25 | 70 | 1.07 |
| Derbyshire | | | | | | | |
| 1912 | R | Chesterfield S. Wks. | 8 | July 27 | 1.35 | 40 | 2.02 |
| 1952 | N | " Linacre Filters | 8 | " 1 | 1.18 | 30 | 2.36 |
| " | N | " S. Wks. | 8 | " " | 1.25 | 75 | 1.00 |

| | | | | | |
|----------------|---|------------------------------|----------------|----|----------------------|
| Yorkshire J.R. | 1 | Ouse, Left bank Tributaries | Yorkshire W.R. | 7 | Ouse - Don |
| | 2 | Ouse - Derwent | | 8 | Ouse - Aire - Calder |
| | 3 | Humber | | 9 | Ouse - Aire |
| | 4 | East Coast Streams | | 10 | Ouse - Wharf |
| | | | | 11 | Ouse - Nidd |
| | | | | 12 | Ouse - Ure |
| Yorkshire N.R. | 1 | Ouse - Ure | | | |
| | 2 | Ouse - Swale | | | |
| | 3 | Ouse - left bank tributaries | Derbyshire | 8 | Ouse - Don |
| | 4 | Ouse - Derwent | | | |
| | 5 | Esk and c | | | |



Average Monthly Rainfall as percentage of Average Annual Rainfall 1916—1950
Fig 1



AVERAGE ANNUAL RAINFALL 1916—1950 (in inches) over the Hull and East Yorkshire and Yorkshire Ouse River Board areas.