

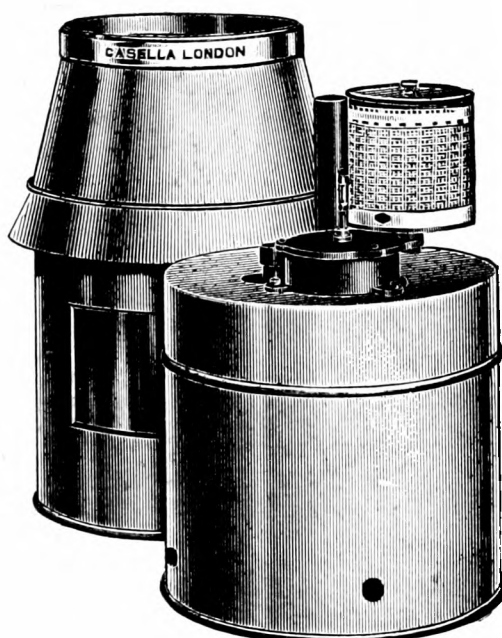
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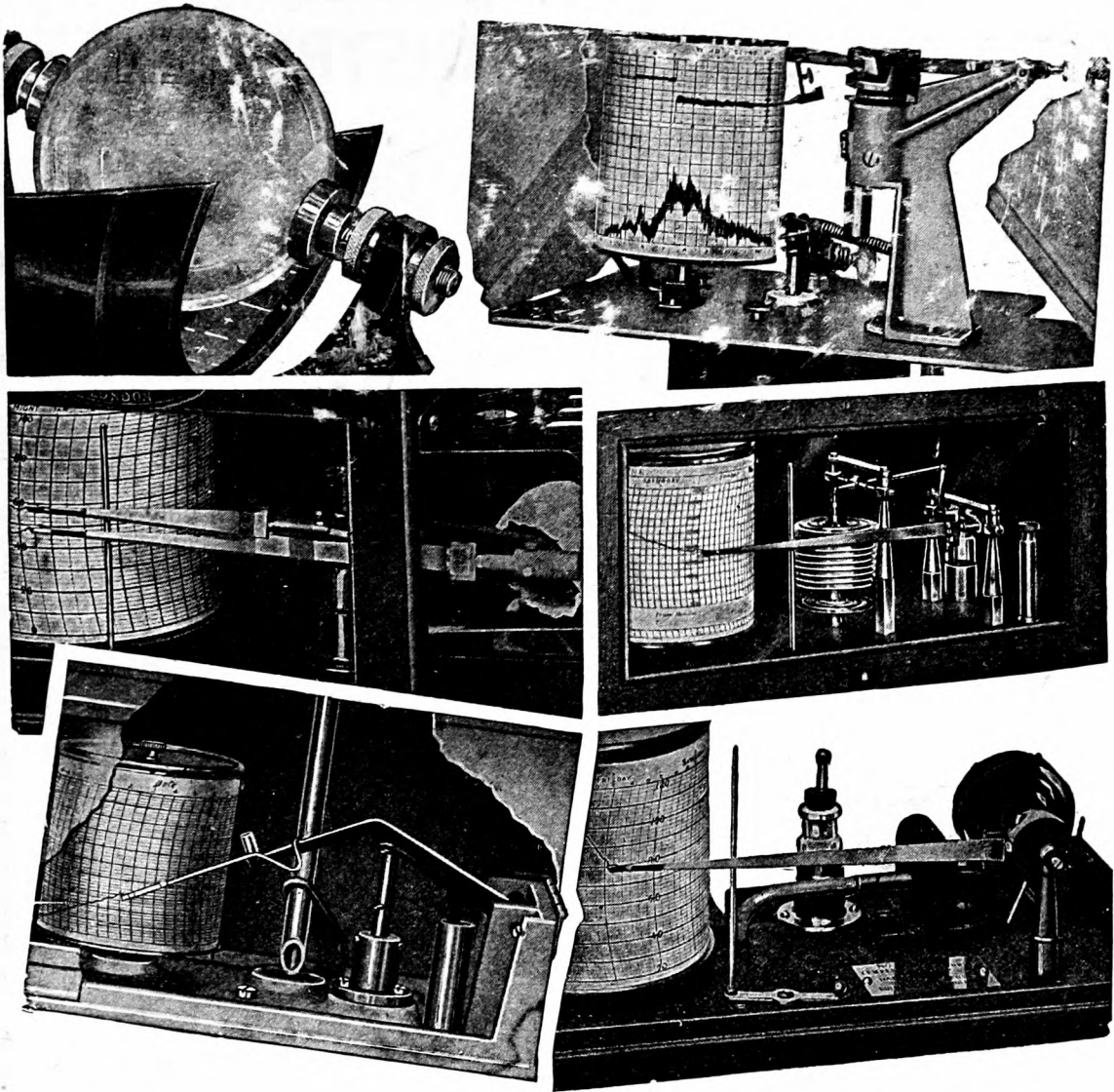
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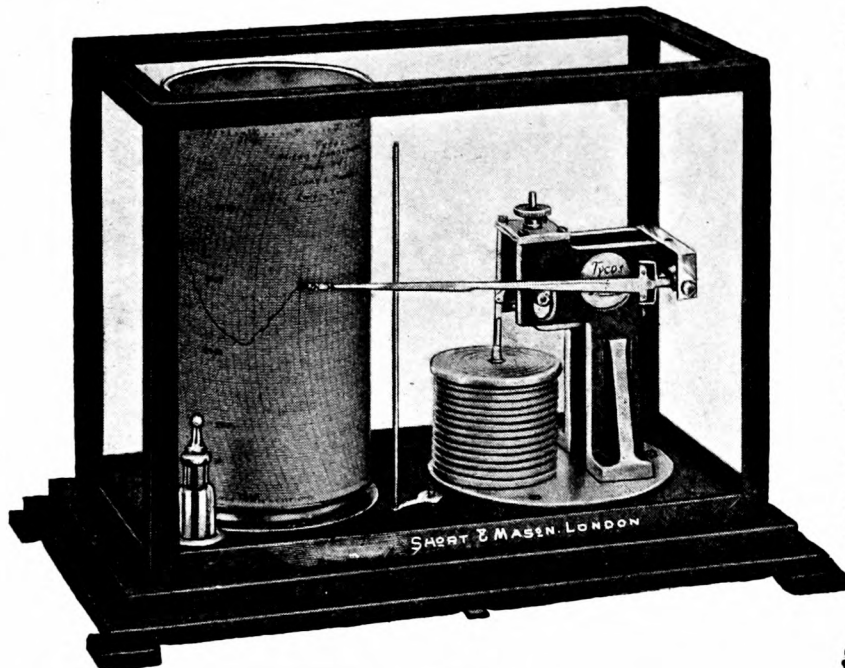
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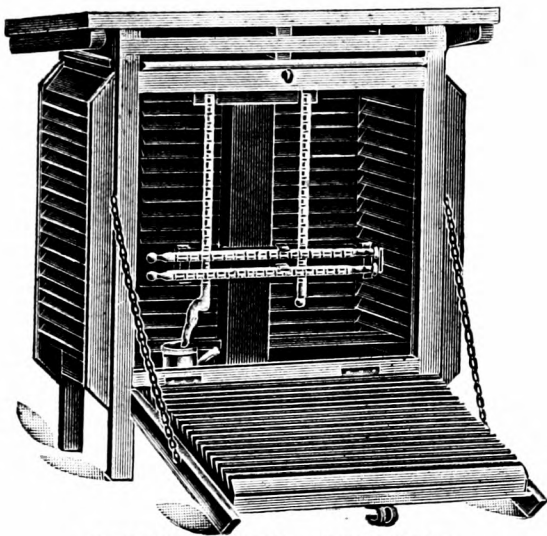
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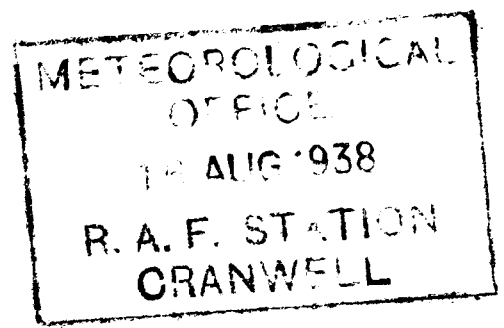
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# BRITISH RAINFALL

## 1937





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# BRITISH RAINFALL

## 1937

THE SEVENTY-SEVENTH ANNUAL VOLUME OF  
THE BRITISH RAINFALL ORGANIZATION

*Report on the*

### DISTRIBUTION OF RAIN

IN SPACE AND TIME OVER THE  
BRITISH ISLES DURING THE YEAR  
1937 AS RECORDED BY OVER 5,500  
OBSERVERS IN GREAT BRITAIN AND  
IRELAND

WITH MAPS AND ILLUSTRATIONS

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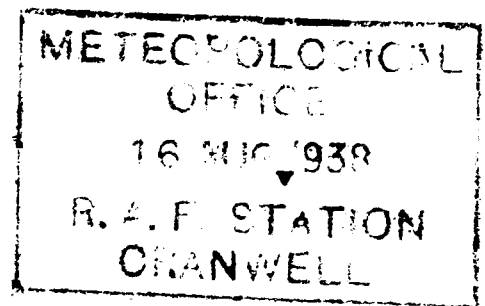
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ERRATA IN " BRITISH RAINFALL," 1935.

- p. 227. Kirkcudbright, 3. Clatteringshaws (Sch. Ho.) *for* 67.55 *read* 67.79.  
p. 268 Section 4 *for* n=9t *read* n=0.9t.

ERRATA IN " BRITISH RAINFALL," 1936.

- p. 55. The entry in Table XIV for Clifton, Oakfield Road should read  
1936 June 29 VI Clifton, Oakfield Road 1.95 0 30 3.90  
and should be inserted seven lines lower in the Table.  
p. 56. The entry in Table XV for Clifton (Oakfield Road) for June 29th should read 3.90in. under  
" Rate per Hour."  
p. 222. Pembroke, 4. Narbeth (Bloomfield) *delete* 50.83 under heading " Average Rainfall."  
p. 223. Cardigan, 2. Ponterwyd (The Mill) *for* 74 feet *read* 740 feet.  
p. 237. Ayr, 3. Kirkland (Dunlop) *for* (52.46) *read* (50.46).  
p. 237. Ayr, 3. Dalry (Knockendon) *for* 54.22 *read* 57.10.  
p. 237. Ayr, 3. Dalry (Bradshaw) *for* 51.27 *read* 54.60.  
p. 238. Ayr, 10. Ballantrae (Lagafater Lodge) *for* 65.12 *read* 63.12.  
p. 249. Inverness, 5. Loch Duntelchaig *for* 45.50 ? *read* 25.58.



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**BRITISH RAINFALL, 1937**

PART I

THE WORK  
OF THE  
BRITISH RAINFALL  
ORGANIZATION

# BRITISH RAINFALL, 1937.

## PART I.

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### THE WORK OF THE BRITISH RAINFALL ORGANIZATION.

RAINFALL IN EIRE.—With the establishment of a Meteorological Service in Eire in April, 1937, the rainfall stations in that country came under the control of the Director of the Meteorological Service, Mr. A. H. Nagle. Rainfall records for Eire are therefore included in this volume by arrangement with Mr. Nagle.

INDEX OF RIVER BASINS IN GENERAL TABLE.—In the General Table (Part III) stations are arranged by counties, and the stations within a given county are arranged by river divisions. This mode of arrangement dates from the early days of *British Rainfall* and has been found, on the whole, to work well. Unfortunately, however, county boundaries do not in general coincide with the boundaries of river basins; consequently it is usually necessary to consult the records for more than one county if it is desired to assemble all the readings available for a given basin. In order to facilitate work of this kind we include in this volume an index of river basins, which will be found on pp. 139-142. The index shows the counties of which some part is included in each river basin, and it should be used in conjunction with the alphabetical index of counties on p. 143.

LOCAL ORGANIZATIONS.—For assistance in the collection of the rainfall returns for the year, and for stimulating local interest in weather records, we are indebted to officials of various local organizations, among whom may be mentioned:—Mr. C. P. Sinclair, of the Hertfordshire Natural History Society and Field Club; Mr. R. H. Primavesi, of the Northamptonshire Natural History Society; Lt.-Col. C. D. Drew, D.S.O., F.S.A., Curator and Secretary of the Dorset Natural History and Archæological Society; Col. H. C. Copeman, of the Norfolk Rainfall Organization; Mr. A. P. Jenkin, of the Cornwall Rainfall Association; Mr. A. J. Jenkins, of Jersey; Miss Cordelia Marshall, of Ambleside; Librarian, North Devon Athenæum; Mr. W. Dunbar, Burgh Surveyor of Kilmarnock; Mr. E. W. M. Murphy, of the Irish Rainfall Association and Mr. F. B.

Goodman (Engineer to the Somerset Rivers Catchment Board), Secretary of the Mid-Wessex Rainfall Association.

Certain changes have been made, however, in the collection of data from local secretaries. Mr. F. B. Goodman, secretary to the Mid-Wessex Rainfall Association, has forwarded monthly the actual returns received from observers and the totals have been used in the preparation of the rainfall map included in the *Monthly Weather Report*. The Editors of the *Hereford Times* and the *Western Morning News* have also been good enough to arrange for the printed summaries of rainfall records to be available in time to be used for the same purpose.

Mr. C. P. Sinclair contributed a Report on the weather in Hertfordshire for the year 1937 to the Hertfordshire Natural History Society and Field Club. The Report for 1936 was published in the *Transactions of that Society* during the year and included details of the monthly totals of rainfall at 59 stations in Hertfordshire together with monthly summaries of the climatological observations made at Rothamsted, St. Albans and Rickmansworth. Mr. Sinclair collects the rainfall data at the end of each year from the observers and compares the values with those furnished to this Office in order that the two reports shall be in agreement. Mr. Sinclair continued the work commenced by the late Mr. J. Hopkinson in the 'eighties.

Mr. R. H. Primavesi contributed a Report on the weather in Northamptonshire for the year 1937 to the *Journal of the Northamptonshire Natural History Society* along lines similar to those for Hertfordshire. The rainfall tables and meteorological summaries are published in the December issue. Monthly totals were given for some 20 stations. Mr. Primavesi continued the work which the late Major C. A. Markham had carried out, as local collector of rainfall records for many years prior to 1924.

The original records are forwarded to this Office for comparison at the end of the year. The observers reporting to the N.N.H.S. are indicated in the General Table Part III by a footnote.

A county report on the weather of 1937 was contributed by Mr. W. A. Stiby to the *Proceedings of Dorset Natural History and Archæological Society*. Monthly totals of rainfall and rain-days recorded during 1936 were published for some 42 stations.

Col. H. C. Copeman, Secretary Norfolk Rainfall Organization, has continued to collect rainfall records from about 35 stations in Norfolk each month and the daily values have been forwarded for publication in the *Eastern Daily Press*. Col. Copeman continued in 1931, the work of collecting rainfall records and maintaining local interest in the weather in Norfolk, which was carried out previously

by the late Mr. A. W. Preston. The monthly totals from these stations have been plotted on the maps as received and the daily values compared with records received direct.

Mr. A. Pearse Jenkin, Secretary, Cornwall Rainfall Association, has continued the collection, monthly, of rainfall reports from about 60 stations and issued summaries on typewritten sheets to this Office and others interested. The totals have been used in preparing the monthly maps and the sheets examined for any new records.

Mr. A. J. Jenkins, formerly Engineer and Manager of The Jersey New Waterworks Co., Ltd., has collected records from the island as in previous years and the daily values have been forwarded to this Office at the end of the year.

Miss Cordelia Marshall has continued to publish monthly a summary of the rainfall experienced at 27 stations in the English Lake District. The records from these stations were plotted on the monthly maps.

The Librarian, North Devon Athenæum, has forwarded each month a list of monthly rainfall totals for some 18 stations.

Mr. W. Dunbar, Borough Surveyor at Kilmarnock, has continued to collect records monthly for 30 stations in Ayrshire and surrounding districts. The monthly totals are typewritten and circulated to those interested, together with a map showing the distribution of the rainfall over the area. These values have been plotted on the monthly maps.

Mr. E. W. M. Murphy, Secretary of the Irish Rainfall Association, has devoted himself during the last 30 years to the task of fostering interest in rainfall observations in Ireland and to the establishment of rain-gauges where new records were desirable. A summary of the records has been received through Mr. Nagle, Director of the Meteorological Service, Eire. The annual report giving totals for 1936 was published at the end of 1937 and circulated to subscribers.

Mr. F. B. Goodman, Engineer to the Somerset Rivers Catchment Board, has forwarded the actual returns to this Office monthly, after the copy giving the monthly totals has been prepared for the local press.

Sincere thanks are due to the numerous observers, including many water engineers, who have agreed, on being asked to do so, to forward returns monthly instead of annually. The Organization cannot, unfortunately, handle 5,000 or more rainfall returns monthly; it was therefore necessary to limit the number of stations to those which were needed for a satisfactory geographical representation. We

*British Rainfall, 1937 compared with 1936.  
Number of Records Published.*

		Gain.		Loss.		Difference.		Per cent. change in year.
England	..	236	..	213	..	+ 23	..	+0·6
Wales, etc.	..	19	..	16	..	+ 3	..	+0·6
Scotland	..	34	..	22	..	+ 12	..	+1·4
Ireland	..	18	..	22	..	— 4	..	—1·6
British Isles	..	307	..	273	..	+ 34	..	+1·0

*Number of Rainfall Records Published in the Volumes of  
"British Rainfall" for the undermentioned Years.*

Years.	England.	Wales, etc.	Scotland.	Ireland.	British Isles.	Change from previous year.	No. of Stations per 100 sq. mi.
1861	333	9	109	20	471	+ 47	0·4
1871	1038	88	311	67	1504	+ 5	1·2
1881	1548	131	313	153	2145	+ 41	1·8
1891	2091	168	359	181	2799	+ 23	2·3
1901	2616	253	442	195	3506	+ 13	2·9
1911	3705	397	701	271	5074	+198	4·2
1914	3962	450	753	288	5453	+ 83	4·5
1919	3419	436	766	277	4898	—101	4·1
1920	3460	453	758	281	4952	+ 54	4·1
1921	3577	446	784	271	5078	+126	4·2
1922	3601	470	785	270	5126	+ 48	4·2
1923	3406	442	754	262	4864	—262	4·0
1924	3438	438	756	248	4880	+ 16	4·0
1925	3437	439	750	259	4885	+ 5	4·0
1926	3418	442	775	238	4873	— 12	4·0
1927	3491	448	786	245	4970	+ 97	4·1
1928	3585	441	791	251	5068	+ 98	4·2
1929	3665	453	797	265	5180	+112	4·3
1930	3765	455	834	262	5316	+136	4·4
1931	3763	454	850	262	5329	+ 13	4·4
1932	3798	474	860	251	5383	+ 54	4·5
1933	3793	474	878	250	5395	+ 12	4·5
1934	3846	491	874	250	5461	+ 66	4·5
1935	3899	497	870	257	5523	+ 62	4·6
1936	3924	491	865	257	5537	+ 14	4·6
1937	3947	494	877	253	5571	+ 34	4·6
Difference from 1936	+23	+3	+12	—4	+34	..	0·0



County.	Records in 1936.	Records Lost.	Records Gained.	Records in 1937.	Records per 100 sq. mi. of area.	County.	Records in 1936.	Records Lost.	Records Gained.	Records in 1937.	Records per 100 sq. mi. of area.
<b>ENGLAND.</b>						<b>SCOTLAND.</b>					
LONDON ..	49	2	0	47	40	WIGTOWN ..	13	0	0	13	3
SURREY ..	227	9	20	238	33	KIRKCUDBRIGHT ..	29	0	3	32	4
KENT ..	181	8	8	181	12	DUMFRIES ..	15	0	1	16	1.5
SUSSEX ..	186	11	8	183	13	ROXBURGH ..	13	0	0	13	2
HAMPSHIRE ..	166	13	14	167	10	SELKIRK ..	3	0	0	3	1.1
BERKSHIRE ..	74	5	1	70	10	PEEBLES ..	14	0	0	14	4
MIDDLESEX ..	62	5	5	62	27	BERWICK ..	10	0	2	12	3
HERTFORDSHIRE ..	89	4	5	90	14	E. LOTHIAN ..	14	0	1	15	6
BUCKINGHAMSHIRE ..	52	4	5	53	7	MIDLOTHIAN ..	37	1	2	38	10
OXFORDSHIRE ..	55	2	2	55	7	W. LOTHIAN ..	15	0	0	15	13
NORTHAMPTON ..	68	1	3	70	7	LANARK ..	52	2	0	50	6
HUNTINGDONSHIRE ..	7	0	0	7	2	AYR ..	97	0	2	99	9
BEDFORDSHIRE ..	31	1	2	32	7	RENFREW ..	38	0	0	38	16
CAMBRIDGESHIRE ..	40	1	3	42	5	DUMBARTON ..	29	0	0	29	11
ESSEX ..	113	3	11	121	8	STIRLING ..	48	1	2	49	11
SUFFOLK ..	62	7	6	61	4	BUTE ..	8	1	0	7	3
NORFOLK ..	90	1	3	92	5	ARGYLL ..	68	2	5	71	2
WILTSHIRE ..	78	7	4	75	5	CLACKMANNAN ..	6	0	0	6	11
DORSETSHIRE ..	97	7	9	99	10	KINROSS ..	6	0	0	6	7
SOUTH DEVON ..	193	7	12	198	12	FIFE ..	31	2	1	30	6
NORTH DEVON ..	41	7	1	35	4	PERTH ..	70	0	1	71	3
CORNWALL ..	89	7	1	83	6	ANGUS ..	43	1	1	43	5
SOMERSETSHIRE ..	184	13	13	184	11	KINCARDINE ..	10	0	0	10	3
GLOUCESTERSHIRE ..	100	12	3	91	7	ABERDEEN ..	36	0	1	37	1.9
HEREFORDSHIRE ..	42	3	5	44	5	BANFF ..	9	0	2	11	1.7
SHROPSHIRE ..	50	3	3	50	4	MORAY ..	15	0	0	15	3
STAFFORDSHIRE ..	65	3	6	68	6	NAIRN ..	9	0	0	9	6
WORCESTERSHIRE ..	64	8	5	61	8	INVERNESS ..	70	5	5	70	1.7
WARWICKSHIRE ..	61	3	1	59	6	ROSS&CROMARTY ..	24	4	5	25	.8
LEICESTERSHIRE ..	44	4	4	44	5	SUTHERLAND ..	7	2	0	5	.2
RUTLANDSHIRE ..	3	0	0	3	2	CAITHNESS ..	10	1	0	9	1.3
LINCOLNSHIRE ..	69	3	12	78	3	ORKNEY ..	11	0	0	11	3
NOTTINGHAMSHIRE ..	57	1	2	58	7	SHETLAND ..	5	0	0	5	.9
DERBYSHIRE ..	104	4	11	111	11	<b>IRELAND.</b>					
CHESHIRE ..	91	8	11	94	9	CORK ..	22	3	1	20	.7
SOUTH LANCS. ..	131	4	0	127	18	KERRY ..	10	1	1	10	.5
CENTRAL LANCS. ..	75	0	6	81	15	WATERFORD ..	6	0	0	6	.8
NORTH LANCS. ..	54	0	2	56	9	TIPPERARY ..	11	0	0	11	.7
YORKSHIRE, W.R. ..	330	5	12	337	12	LIMERICK ..	9	0	0	9	.9
YORKSHIRE, E.R. ..	28	1	1	28	2	CLARE ..	6	2	0	4	.3
YORKSHIRE, N.R. ..	97	3	4	98	5	WEXFORD ..	5	0	0	5	.6
DURHAM ..	55	4	1	52	5	KILKENNY ..	3	0	0	3	.4
NORTHUMBERLAND ..	42	4	3	41	2	WICKLOW ..	9	2	4	11	1.4
CUMBERLAND ..	57	4	2	55	4	CARLOW ..	3	0	0	3	.9
WESTMORLAND ..	71	11	6	66	8	LEIX ..	2	0	1	3	.5
<b>MONMOUTH, WALES, ETC.</b>						OFFALY ..	8	1	1	8	1.0
MONMOUTH ..	34	0	0	34	6	KILDARE ..	7	2	1	6	.9
GLAMORGAN ..	69	8	5	66	8	DUBLIN ..	26	5	1	22	6
CARMARTHEN ..	16	0	1	17	1.9	MEATH ..	7	0	1	8	.9
PEMBROKE ..	9	2	4	11	1.8	WESTMEATH ..	6	0	0	6	.8
CARDIGAN ..	22	0	0	22	3	LOUTH ..	2	1	2	3	1.0
BRECON ..	83	0	2	85	12	LONGFORD ..	5	1	1	5	1.2
RADNOR ..	26	1	1	26	5	GALWAY ..	11	1	0	10	.4
MONTGOMERY ..	26	1	2	27	3	ROSCOMMON ..	3	0	0	3	.3
FLINT ..	22	1	0	21	8	MAYO ..	7	0	2	9	.4
DENBIGH ..	48	0	1	49	7	SLIGO ..	2	0	0	2	.3
MERIONETH ..	37	1	2	38	6	LEITRIM ..	5	0	0	5	.8
CARNARVON ..	53	1	1	53	9	CAVAN ..	2	0	0	2	.3
ANGLESEY ..	14	0	0	14	5	FERMANAGH ..	8	0	0	8	1.1
ISLE OF MAN ..	7	0	0	7	3	MONAGHAN ..	0	0	0	0	.0
CHANNEL ISLANDS ..	25	1	0	24	32	ARMAGH ..	8	1	0	7	1.4
						DOWN ..	16	0	0	16	1.7
						ANTRIM ..	19	1	1	19	1.6
						LONDONDERRY ..	17	1	0	16	2.0
						TYRONE ..	6	0	0	6	.5
						DONEGAL ..	6	0	1	7	.4

shall continue to plot the annual totals from all stations and to use all available returns in the general work of the Organization. The co-operation of the great body of observers who are asked to send returns only at the close of the year is therefore as valuable, and as much appreciated as ever.

**THE STAFF OF OBSERVERS.**—The detailed account of the rainfall of the year 1937 over the British Isles, which is presented in this volume, follows the lines of previous issues. The basis of the discussion is a collection of about 5,500 returns of rainfall measurements for the year received from all parts of the country. The measurements are generally made every day, but in inaccessible districts they may be made only once a week or even once a month. The Meteorological Office relies almost entirely on the returns contributed either by private persons, who measure the rainfall primarily as a matter of private interest, or by public local authorities, and especially the authorities of water undertakings, who find that a knowledge of the rainfall in their locality is indispensable to them in their work. These observers forward copies of their observations voluntarily for preservation by the British Rainfall Organization of the Meteorological Office as national records, and for use not only in the preparation of the annual volumes of *British Rainfall* but also for the purposes of study and research. In this way records which are primarily of local interest acquire a national value which was not always realized by those who initiated them. To the numerous voluntary observers who forward their observations the Organization desires to acknowledge its indebtedness: it would be quite impossible to compile such an account as this without their assistance and goodwill.

In order to ensure, so far as possible, that the various records of rainfall summarized in the volume may be comparable with one another, the Organization issues to each observer and to anyone who is interested, a copy of a pamphlet entitled *Rules for Rainfall Observers*. This pamphlet was originally drawn up by the late Mr. G. J. Symons, F.R.S., founder of the Organization, and although it has been extensively revised since his time, yet the fundamental rules laid down by him remain practically unaltered. A new edition was prepared and issued during 1934.

The total number of records printed in Part III of this volume is 5,571, an increase of 34 records over last year. As many as 307 additional records are included in the volume, while 273 records printed in *British Rainfall*, 1936, are no longer available. Details as to the numbers of records printed in earlier volumes are given in a separate table. The counties with the largest number of net gains are Surrey, Lincoln, Essex and Yorkshire W.R. with 11, 9, 8 and 7

respectively. There is a net loss of 9 in Gloucestershire due mainly to the non-receipt of six records from the Forestry Commission in the Forest of Dean.

Amongst the groups of records included for the first time in *British Rainfall*, reference may be made to the following :—Five records maintained by the Stockport W.W. in the Goyt Valley ; seven stations maintained by the Derwent Valley Water Board ; six stations maintained by the Manchester W.W. near Haweswater and three stations set up by the Surrey County Council. The Engineer to the Surrey County Council has also initiated the establishment of a number of recording gauges, the duration records being included in Section 5.

The following records from areas previously unrepresented by gauges also call for special comment :—Dunmere (West Loch Tarbert) some 8 mi. to the W.N.W. of Skipness in Argyllshire ; Elvington Hall, about 6 mi. to the south-east of York and Lander (Allanbrook) in Berwickshire.

Rainfall records for 1937 and for earlier years have been received in a number of cases, including three records maintained near Catclough Reservoir (Newcastle W.W.) since 1902 ; two records near Formby (one since 1924 and the other since 1894) forwarded by Mr. R. W. Eaton, Land Drainage Engineer to the Lancashire County Council ; at Barnet (Hadley Green) maintained by Mr. F. C. Tidmarsh since 1912 ; at Dunham Massey (Sewage Works) by the Bucklow R.D.C., since 1924 ; at Lincoln (Burton Road) by Mr. G. W. Valley, since 1926 ; at Cardiff (Heathwood Road) by Mr. W. R. Howell, since 1928 ; at Castle Douglas (Corbieton) by Miss A. G. Biggar, since 1928 ; and at Lower Largs, Fifeshire, by Mr. J. Gillies, since 1929. Records have also been received for the years 1890 to 1894 at Lothrie Reservoir and Craigluscar Reservoir, Fifeshire and at Lamington, Lanarkshire for the years 1892 to 1899.

**RECORDING RAIN-GAUGES.**—A large number of recording gauges are maintained by local authorities in connection with the provision of adequate flood prevention schemes. Records from these gauges as to the duration of rainfall and of the intensity of rainfall are received in only a limited number of cases. There are therefore many stations where the instruments and the records do not come under the general scrutiny of this Office. In these circumstances it is desirable to stress the following points :—

(a) The rainfall amounts should not be taken from the recording gauge but from a standard gauge alongside.

(b) The gauge should be set up in an orthodox exposure with the rim as near one foot above the ground as possible.

(c) Recording gauges should be of a satisfactory pattern, the Dines Tilting Syphon, the Natural Syphon, Hyetograph or Beckley.

**AVERAGES PRINTED IN THE GENERAL TABLE OF BRITISH RAINFALL.**—Since 1926 a column in the General Table has been devoted to the average annual rainfall at the various stations, and year by year additional values have been given. This information is supplied mainly by the Rainfall Survey which is being carried out for certain counties year by year. In the present volume additional averages are included for Kirkcudbright, Lanark, Perth and Angus. Mr. Cornish, of Keswick, has computed the averages given in italics for Essex.

**INVESTIGATIONS.**—Three articles are printed in Part IV of this volume. The first deals with the rainfall experienced over the British Isles during the period 1901 to 1930, which has been adopted by international agreement as the standard in computing climatological normals. The rainfall of the period 1901 to 1930 is considered in relation to that experienced during the years 1881 to 1915, which is adopted as the standard in *British Rainfall* since that for 1920. The second article deals with some unusual features of the rainfall of 1937, which cannot be fully discussed under the various sections in Part II, *viz*, the wet period January to May, 1937, the rainfall preceding the flooding in the Great Ouse Catchment Area in March, 1937 and the dry period during August to December, 1937, in Scotland. The third article gives some measurements of wind velocity at the level of the rim of the rain-gauge, a subject previously discussed in *British Rainfall*, 1930.

A paper on "Weather and Water Supply" was contributed by Mr. E. G. Bilham to the winter session of the British Waterworks Association in connection with the Ninth Public Works, Roads and Transport Congress and Exhibition and a note on the "Wettest Places in the British Isles" by Dr. J. Glasspoole for the Meteorological Magazine, 1937, pp. 142-144.

Mr. E. G. Bilham and Dr. J. Glasspoole served on a Joint Committee of the Institution of Water Engineers, British Rainfall Organization and the Royal Meteorological Society, which presented a report on "The Determination of the General Rainfall over any area" at the meeting of the Institution of Water Engineers in December, 1937.

Dr. J. Glasspoole addressed a meeting of the Engineering and Survey Committee of the Catchment Boards' Association on "Catchment Boards and the Collection of Rainfall Data" in May, 1938.

**INSPECTIONS.**—Some progress was made during the year with the inspection of the stations included in the General Table. It was

possible to inspect about 200 stations, exclusive of Climatological stations and other stations reporting general meteorological observations. The stations inspected included those maintained by the water supply undertakings at Barnsley, Burnley, Birmingham (near Rhayader), Halifax, Heywood and Middleton and Newport (Mon.) ; those reporting to the Catchment Boards of the Great Ouse, Nene, Dee and Cheshire Rivers ; and a number of observers in Breconshire and adjacent counties. Sites for additional gauges were selected in the Rhondda Valley.

**SURVEY MAPS.**—The work on the detailed average annual rainfall map of the British Isles on the scale of two miles to the inch, for the period 1881-1915, has been continued. In drawing these maps all the available information is used, averages for stations with short records being weighted to the standard period 1881 to 1915 by comparison with nearby stations with complete records. The averages so computed are included in Part III of *British Rainfall*. Reduced copies of specimen maps and a description of the method used in their preparation are given in articles published in Part IV of *British Rainfall* 1928, 1929 and 1932. In drawing these maps the isohyetal lines are naturally somewhat generalised, and if attention is directed to any small area some amplification of the lines there may prove necessary. Moreover, additional records are always being accumulated so that slight modifications in the lines may subsequently prove necessary. The isohyetal lines have been extended to cover Lanark, Bute and Perth, while parts of Kirkcudbright and Ayr have been re-surveyed.

**INQUIRIES.**—A large number of inquiries regarding the rainfall of various parts of the country was dealt with. These enquiries cover a wide range. They include the supply of records defining the rainfall experienced in some locality for a specified period, the supply of estimates of the average annual or monthly rainfall for specified places or over certain areas, and advice as to the most suitable instruments and the best exposures for the rain-gauges. Amongst the reports supplied reference may be made to those for the Bristol W.W., South Staffordshire W.W., and the Galloway Water Power Co. ; the Ministry of Agriculture in connection with the rainfall in the River Nene Catchment area during January to March, 1937; and for the Witham Fourth District Drainage Board in connection with flooding in May, 1937.

Information has also been supplied for use in *The Surface Water Year-Book of Great Britain*, 1935-36, published by the Ministry of Health and Scottish Office (H.M.S.O.). In the case of each area for which run-off data are available, monthly totals October, 1935, to September, 1936, are given for selected rainfall stations, together

with evaluations of the corresponding general monthly rainfall over the area and the average amounts, where that information is available. The publication of rainfall and run-off data together is likely to prove of particular value to those concerned with the use of water.

Information has been supplied monthly to the Bristol W.W., the Humber Conservancy Board, the Lincolnshire Sugar Co., Ltd., and the Community Council of Kent (Sevenoaks). Reports were supplied monthly to the Metropolitan Water Board and to the Thames Conservancy.

Data have been supplied monthly to the Catchment Boards of the Rivers Mersey and Irwell, River Avon (Bristol), River Severn, Cheshire Rivers and River Nene. Advice has also been given on the distribution of stations in the case of a number of Catchment Boards.

OBITUARY.—During the twelve months 1st July, 1937, to 30th June, 1938, reports have been received of the deaths of 60 observers who have contributed to volumes of *British Rainfall*. Of these, 19 have kept rainfall records, or been associated with relatives who have kept records for 30 years or more. A list of these is given below. In most cases the records have been maintained throughout by the same observer.

Name.	Last place of observation.	No. of Years' records.
Sir J. W. Moore, M.D., D.Sc.	Dublin City (FitzWilliam Square)	73
E. Howarth, Esq., F.R.A.S. ..	Sheffield (Weston Park) .. ..	55
F. E. Harding, Esq. .. ..	Market Drayton (Old Springs), Staffordshire .. ..	51
Mr. G. J. Warren .. ..	Balcombe (The Gables), Sussex	47
J. McDougal Field, Esq. ..	Edinburgh (City Observatory) ..	40
E. Pirie-Gordon, Esq... ..	Crickhowell (Gwernvale), Brecon- shire .. ..	39
R. Matheson, Esq. .. ..	Kinlochewe (Greenhill), Ross and Cromarty .. ..	38
Sir C. G. E. Welby, Bt., C.B... ..	Denton Manor, Lincolnshire ..	38
Jas. McMillan, Esq. .. ..	Lanarkshire County W.W. ..	37
J. A. Gardiner, Esq. .. ..	Campbeltown (South Park) ..	35
Major R. B. Turton .. ..	Kildale Hall, Yorkshire .. ..	35
Rev. Canon A. Wilson .. ..	Dunmanway (The Rectory), Co. Cork .. ..	34
W. Hales, Esq. .. ..	Chelsea (Physic Garden) ..	33
K. H. Power, Esq. .. ..	Chobham (Sandpit), Surrey ..	33
G. Forrester Scott .. ..	Ardingley (Lywood House), Sussex	33
W. Watson, Esq., C.E. .. ..	St. Andrews, Fifeshire .. ..	33
Rev. R. P. Dansey .. ..	Kentchurch Rectory, Herefordshire	32
R. Cross, Esq. .. ..	Edinburgh (Gogar Park) .. ..	30
H. C. Millican, Esq. .. ..	Rothbury (Waterleap), Northum- berland .. ..	30



Sir John William Moore, who died on October 12th, 1937, within a few days of his ninety-second birthday, was author of numerous papers, dealing mainly with the climatology of Dublin, and of "Meteorology, Practical and Applied," first published in 1894, and republished in a revised and enlarged form in 1910. The book contained in particular, a valuable section on "The Influence of season and of weather on disease," much of which was the result of his own research work. He was among the most distinguished of Irish physicians, and received the honour of knighthood in 1900 at the completion of two years as President of the Royal College of Physicians in Ireland. He was an Honorary Physician-in-Ordinary to H.M. the King in Ireland. He was personally associated with the meteorological work of the Dublin City Climatological Station, Fitzwilliam Square, from the date of its commencement, about 1868. Actually his services as a co-operating observer began even earlier, for *British Rainfall*, 1865, contains readings from Dublin, St. Anne's Street, contributed by J. W. Moore, Esq. Sir John Moore was thus a regular meteorological observer for a period of more than 71 years, a truly remarkable record and one that has never been equalled in our annals.

Mr. Elijah Howarth, F.R.A.S., F.Z.S., who died in April, 1938, commenced rainfall records in 1882. He was for some time the Curator of Sheffield Museums and Mappin Art Gallery and maintained a climatological station at Weston Park until the latter half of 1936.

Mr. F. E. Harding, of Market Drayton, Shropshire, commenced rainfall records in 1887 and continued until the end of February, 1938, thus completing over 50 years of continuous records from this station.

**BRITISH RAINFALL, 1937**

PART II .

**RAINFALL AND METEOROLOGY**  
**1937**

## 1. A BRIEF SUMMARY OF THE RAINFALL OF THE YEAR, 1937.

The rainfall of 1937 over the British Isles as a whole was 104 per cent. of the average, so that the remarkable run of wet years, which commenced in 1923, and lapsed only in 1933 and 1934, was continued. A comparison of the rainfall of the eight years 1930 to 1937 is set out below.

### *Annual Rainfall as per cent. of average, 1881-1915.*

			1930	1931	1932	1933	1934	1935	1936	1937
			%	%	%	%	%	%	%	%
England and Wales	...	...	117	109	103	81	95	113	109	110
Scotland	...	...	109	104	108	80	110	108	94	91
Ireland	...	...	116	111	95	77	105	98	105	103
British Isles	...	...	115	109	102	80	100	109	105	104

The comparison shows that the distribution of the rainfall during 1937 was remarkably similar to that of the previous year. During 1937, as in 1936, there was an appreciable excess over England and Wales, while both years gave less than the average over Scotland. Over England and Wales 1937 was not so wet as 1935; over Scotland 1937 was drier than any year since 1902 with the one exception of 1933; over Ireland 1937 was not so wet as either 1936 or 1934.

The main features of the map showing the distribution of the rainfall as a percentage of the average were the large area in the north-west of Scotland with less than 80 per cent., and the areas in the south-east of England with more than 130 per cent. of the average, with over 150 per cent. at Southend, Shoeburyness, Clacton and Boston.

The total rainfall over the British Isles up to the end of May was 6·5 inches in excess of the average, subsequently dry months predominated and by the end of the year the excess was only 1·7 inches. The rainfall of January to February, January to March, January to April and January to May exceeded that recorded in any similar periods back to 1870.

Over England and Wales the rainfall January to May 1937 was nearly equal to that over Scotland and Ireland, although usually both Scotland and Ireland are appreciably wetter. Another unusual feature was that the total over England and Wales during these five months exceeded that of the next six months by as much as 7·1 inches. This abnormal distribution of rainfall during 1937 is the subject of a special article in Part IV, where details are given of the persistent rains which were responsible for the widespread flooding in the Fen District during March.

The largest monthly total was 25·00 inches, recorded at Sty Head in the English Lake District for January, and the smallest ·20 inch at stations in Nottinghamshire in August. A fall of four times the monthly average occurred at Balmoral Castle in January, while in August and November there was less than 10 per cent. at a few isolated stations.

The numbers of absolute droughts and dry spells recorded at the selected stations during the year approximated closely to the average, but the number of partial droughts was fewer than usual. The greater number of these droughts occurred during the three months from the last week of July to the last week of October. At both Worthing and Shoeburyness there were five dry spells, *i.e.* groups of 15 or more consecutive days, none of which gave as much as ·04 inch.

The largest daily entries occurred on St. Swithin's day, July 15th, and intense falls in short periods were most numerous on that day. As much as 5·76 inches, 5·47 inches and 5·46 inches was measured at Waltham-on-the-Wolds, Leicestershire and at Wyberton (Tytton Hall) and Boston (Black Sluice, Skirbeck) both in Lincolnshire. The majority of the entries of intense falls in short periods occurred in July and August. Some of the most outstanding falls are given below :—

July 15th	Asfordby Hill (Iron Works)	3·50 in. in 120 mins.
July 19th	Spalding (Grammar School)	2·14 in. in 25 mins.
July 19th	Spalding (Surveyor's Depot)	2·14 in. in 30 mins.
Aug. 13th	Acton Cemetery	2·25 in. in 60 mins.

## 2. THE DISTRIBUTION OF RAINFALL IN TIME. THE NUMBER OF RAIN-DAYS AND WET-DAYS IN 1937.

The following definitions have been used in *British Rainfall* in order to obtain a homogeneous series of statistics :—

A *rain-day* is a period of 24 hours, commencing normally at 9 a.m., on which  $\cdot 01$  inch, or 0·2 mm. or more of rain is recorded.

A *wet-day* is a period of 24 hours, commencing normally at 9 a.m., on which  $\cdot 04$  inch, or 1·0 mm. or more of rain is recorded.

The former definition dates from the year 1865, the latter was adopted only about 1917. Each of the terms “rain-day” and “wet-day” is open to criticism, the latter particularly so, since it has a different meaning in ordinary use. It must, therefore, be understood that whenever these terms are used in this publication the meanings set out above are always to be attached to them.

For reasons which are set out in detail in the article entitled “The distribution over the British Isles in time and space of the annual number of days with rain,” in *British Rainfall*, 1926, there is frequently a lack of harmony in the annual values at adjacent stations. Statistics of wet-days are found to be much more consistent than those of rain-days. It was this reason, coupled with the fact that similar data are published for certain other countries of Europe, which led to the introduction of statistics of wet-days. The satisfactory mapping of the annual values of rain-days has always presented considerable difficulties, whereas the values of wet-days have proved sufficiently consistent to enable the distribution to be defined. Maps showing the distribution of wet-days have been included in *British Rainfall* since 1919. The experience gained in drawing these maps of wet-days annually has been utilised in interpreting the average values of rain-days as recorded at certain stations during the period 1881 to 1915. Maps showing the distribution of annual and monthly average number of rain-days over the country were published in the *Quarterly Journal of the Royal Meteorological Society*, 1928, pp. 89–101, but similar maps of wet-days have not yet been prepared.

Information as to the number of rain-days and wet-days during the year is set out in this volume in various forms. As usual, the General Table of rainfall in Part III of this volume shows the number of rain-days and wet-days in 1937 as reported from each station at which daily observations were made. The number of wet-days have been plotted on a large map of which the illustration on p. 5 is a reduced copy. The distribution of the numbers is shown on the map in the usual manner.

In order to study the distribution of rain-days and wet-days throughout the year, 100 stations have been selected to represent as uniformly as possible the conditions over the whole of the British Isles. The numbers of rain-days and wet-days recorded at these



Number of "Wet-Days" in 1937.

stations are given in Table V, and the same stations are used in the preparation of Table VIII, Droughts and Dry Spells, and Table XI, Rain Spells and Wet Spells. The monthly totals for these 100 selected stations are included in Tables XX and XXI. The stations are the same as those used last year except that small changes have occurred



in the positions of the stations at Derby, Blackpool, Stornoway and Dublin ; the climatological station at Terrington St. Clement replaces Sandringham, while Mansfield and Roches Point are used instead of Worksop (Hodsock) and Dunmanway, which have now terminated. Monthly general numbers (for England and Wales, Scotland, Ireland and for the British Isles) have been evaluated and they are shown in Table V in heavy type. The annual mean values for 1937 are shown again in Tables I and III and the monthly mean values for 1937 in Tables II and IV, where in each case they can be readily compared with similar values for the intervening years from 1917, and with the averages. In the case of rain-days averages are available for the standard period 1881 to 1915, but for wet-days the averages cover only the period 1917 to 1937.

The distribution of the annual number of wet-days during 1937, as shown on the map on the previous page, is very similar to that for earlier years. As in all the other maps there is a steady increase in the number of wet-days from the south-east to the north-west of the British Isles and from the plains of the east coast to the mountainous regions of the west. In 1937 the number varied from about 120 in the neighbourhood of the Thames Estuary, the Wash, and from Nottingham to York to 200 at a number of stations in the mountainous regions in the north-west of Scotland and west of Ireland with as many as 242 at Delphi Lodge in Connemara. Numerous stations reported less than 125 wet-days, but they were confined mainly to parts of the east of Great Britain.

The total number of rain-days varied from about 160 in the neighbourhood of the Thames Estuary, to about 250 in parts of Connemara and the mountains of Co. Kerry, Donegal and Londonderry.

The general values given in Table III indicate that the frequency of wet-days was less than the average for the period 1917 to 1937. The number for 1937 was 3 less for England and Wales, 21 less for Scotland, 6 less for Ireland and 9 less than the average for the British Isles as a whole.

It should be emphasized that in the case of wet-days comparable statistics are only available back to 1917, and the averages used for comparison are for the period 1917 to 1937, which includes mainly wet years. The averages are therefore greater than they would have been if statistics covering the standard period 1881 to 1915 were available. This fact is brought out by Table I, which shows that the mean annual number of rain-days during the twenty-one years, 1917 to 1937, was 210 or 6 more than the average for the standard period 1881 to 1915.

The number of wet-days over the British Isles in each month is given in Table IV. The numbers vary from 9 in August and November to 19 in January and February. The general number in February

of 19 was 7 more than the average and greater than that for any other February since 1923. November with 9 and October with 10 wet-days each gave 5 less than the average numbers. The number for October and November together was less than for any year since 1922. For the three months January to March the total of 52 wet-days was 11 more than the average. On the other hand no one of the nine months April to December gave more than the average, the total of 100 wet-days being 20 less than the average. August stands out again as a month of relatively few wet-days. In fact the mean for the six years 1932 to 1937 is 10 for August, compared with 14 and 13 for July and September respectively, a state of affairs markedly different from the normal.

In dealing with the general numbers of rain-days given in Tables I and II, it is possible to compare the values for 1937 with computed averages for the 35 years, 1881 to 1915. It is shown in Table I that over the British Isles as a whole there were 199 rain-days or 5 less than the average number. The number of rain-days was 5 less than the average over England and Wales, 11 less over Scotland and 4 more over Ireland.

The number of rain-days over the British Isles in each month is given in Table II. The range is from 11 in August (6 less than the average) to 23 in January (4 more than the average) and in February (6 more than the average). The total number for January and February together (46 or 10 more than the average) was more than in any year since before 1917. The numbers for August (11) and November (13) were less than in the corresponding months for any other year in the series and that for October (14) since 1920. The total August to November was 55 or 15 less than the average and less than that for any similar period in the series. Even in the dry year 1933 the total August to November was 57.

During the year the total number of rain-days over the British Isles was 199; of these, 152 received sufficient rain to rank as wet-days. There were only 2 more rain-days than wet-days in August, 3 more in May and 4 or 5 in the remaining months.

None of the 100 selected stations failed to record a rain-day during any calendar month of 1937. The smallest number of rain-days was 3, recorded at Worthing, Oxford and Shoeburyness in August. Entries of less than 10 rain-days occurred in every month except January and February. As many as 31 rain-days were recorded in January at Mallow, in Co. Cork and at Valentia in Co. Kerry. Only 2 wet-days were recorded at Derby in August and Maybole, Ayrshire, in November. The largest number of wet-days reported for any month was 30 for January at Delphi Lodge in Connemara.

Table I.—*Annual General Number of Rain-days (Days with .01 in. or more) in 1917-1937, compared with Average, 1881-1915†.*

Year.	England and Wales. Average 188.			Scotland. Average 217.			Ireland. Average 220.			British Isles. Average 204.		
	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.
1917	185	— 3	98	217	0	100	224	+ 4	102	203	— 1	100
1918	200	+ 12	106	226	+ 9	104	227	+ 7	103	214	+ 10	105
1919	191	+ 3	102	214	— 3	99	213	— 7	97	203	— 1	100
1920	203	+ 15	108	232	+ 15	107	243	+ 23	110	220	+ 16	108
1921	158	— 30	84	224	+ 7	103	217	— 3	99	190	— 14	93
1922	196	+ 8	104	234	+ 17	108	226	+ 6	103	214	+ 10	105
1923	216	+ 28	115	257	+ 40	118	253	+ 33	115	236	+ 32	116
1924	202	+ 14	107	237	+ 20	109	248	+ 28	113	223	+ 19	109
1925	192	+ 4	102	231	+ 14	106	230	+ 10	105	212	+ 8	104
1926	192	+ 4	102	234	+ 17	108	226	+ 6	103	211	+ 7	103
1927	208	+ 20	111	233	+ 16	107	238	+ 18	108	223	+ 19	109
1928	204	+ 16	109	240	+ 23	111	247	+ 27	112	225	+ 21	110
1929	165	— 23	88	217	0	100	218	— 2	99	192	— 12	94
1930	207	+ 19	110	223	+ 6	103	232	+ 12	105	217	+ 13	107
1931	199	+ 11	106	233	+ 16	107	235	+ 15	107	217	+ 13	106
1932	190	+ 2	101	219	+ 2	101	214	— 6	97	204	0	100
1933	162	— 26	86	193	— 24	89	191	— 29	87	177	— 27	87
1934	187	— 1	99	229	+ 12	106	232	+ 12	106	209	+ 5	103
1935	195	+ 7	104	218	+ 1	100	223	+ 3	101	208	+ 4	102
1936	195	+ 7	104	209	— 8	96	223	+ 3	101	204	0	100
1937	183	— 5	97	206	— 11	95	224	+ 4	102	199	— 5	97

† The averages for the period 1881-1915 are based on the records from about 100 stations distributed as evenly as possible over the country. The selection of stations is described in an article in *British Rainfall*, 1926, p. 267, and the general number of rain-days in each year from 1881 will be found in Table I of that article.

Table II.—*Monthly General Number of Rain-days (Days with .01 in. or more) in 1917 to 1937, British Isles, with Average, 1881-1915.‡*

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1917 ...	15	12	19	16	13	14	12	23	17	25	20	17	203
1918 ...	20	20	12	12	13	13	19	17	25	22	16	25	214
1919 ...	23	12	20	18	11	16	11	16	16	14	20	26	203
1920 ...	24	17	21	23	19	13	24	13	17	13	16	20	220
1921 ...	25	9	23	11	17	7	12	20	11	16	16	23	190
1922 ...	24	20	17	18	13	15	21	19	17	12	16	22	214
1923 ...	22	24	15	17	19	13	18	21	20	25	19	23	236
1924 ...	22	15	10	16	23	17	20	23	20	19	16	22	223
1925 ...	18	23	16	19	23	5	16	17	21	19	15	20	212
1926 ...	24	20	14	17	19	14	14	17	16	17	24	15	211
1927 ...	23	16	21	18	12	20	18	21	22	17	21	14	223
1928 ...	27	17	21	16	11	20	14	19	12	23	23	22	225
1929 ...	14	14	5	13	14	15	14	21	11	22	23	26	192
1930 ...	23	9	19	16	15	12	18	23	18	24	19	21	217
1931 ...	22	22	11	19	19	18	22	15	14	15	22	18	217
1932 ...	19	7	15	22	21	7	20	13	20	25	17	18	204
1933 ...	16	18	16	12	17	12	16	14	9	19	15	13	177
1934 ...	21	8	20	19	14	12	13	19	18	23	15	27	209
1935 ...	16	20	12	19	8	21	11	13	22	24	23	19	208
1936 ...	22	17	17	13	10	15	24	13	16	17	19	21	204
1937 ...	23	23	19	16	14	14	16	11	17	14	13	19	199
Average 19	17	18	15	15	14	14	16	17	15	19	19	20	204

‡ The average general values for England and Wales, Scotland and Ireland separately are given in *British Rainfall*, 1927, p. 7, and are discussed in an article on *The Distribution over the British Isles of the average number of days with rain during each month of the year*.—Q.J.R. Meteor. Soc. Vol. 54, 1928.

Table III.—*Annual General Number of Wet-days (Days with .04 in. or more) in 1917 to 1937, with Average.*

	England and Wales.	Scotland.	Ireland.	British Isles.
1917 ... ..	134	174	176	155
1918 ... ..	150	182	188	168
1919 ... ..	143	172	171	158
1920 ... ..	151	185	197	171
1921 ... ..	110	177	166	142
1922 ... ..	146	181	178	163
1923 ... ..	159	206	198	182
1924 ... ..	154	184	199	173
1925 ... ..	143	179	180	162
1926 ... ..	141	184	173	161
1927 ... ..	156	184	185	171
1928 ... ..	151	193	200	175
1929 ... ..	121	170	170	147
1930 ... ..	155	174	186	168
1931 ... ..	145	180	182	163
1932 ... ..	136	168	165	152
1933 ... ..	115	145	142	130
1934 ... ..	137	183	182	160
1935 ... ..	149	174	177	163
1936 ... ..	149	162	172	158
1937 ... ..	139	156	173	152
Average 1917-37	142	177	179	161

Table IV.—*Monthly General Number of Wet-days (Days with .04 in. or more) in 1917 to 1937, British Isles, with Average.*

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1917 ...	11	8	14	13	10	10	9	20	12	21	15	12	155
1918 ...	15	17	9	9	10	9	15	12	22	16	13	21	168
1919 ...	19	9	15	14	8	12	8	12	13	11	15	22	158
1920 ...	20	13	17	19	15	10	19	9	13	9	12	15	171
1921 ...	20	5	17	8	13	5	10	15	7	12	12	18	142
1922 ...	20	16	13	14	9	11	16	15	13	8	11	17	163
1923 ...	15	20	11	13	14	8	13	17	16	21	16	18	182
1924 ...	17	9	7	12	19	13	17	18	16	15	12	18	173
1925 ...	14	19	11	15	18	3	12	13	15	14	12	16	162
1926 ...	20	15	9	12	15	11	11	13	12	14	19	10	161
1927 ...	19	13	17	13	8	16	13	17	17	13	15	10	171
1928 ...	23	13	16	11	8	16	10	15	9	19	18	17	175
1929 ...	9	10	3	8	11	11	11	16	8	17	20	23	147
1930 ...	19	5	14	12	11	9	14	18	14	20	16	16	168
1931 ...	17	18	7	14	15	14	17	11	9	11	18	12	163
1932 ...	15	3	11	18	15	5	16	9	15	20	12	13	152
1933 ...	12	14	13	9	12	10	12	10	6	14	10	8	130
1934 ...	16	4	16	14	11	9	10	15	15	18	10	22	160
1935 ...	11	16	9	15	6	17	7	10	18	20	19	15	163
1936 ...	19	13	12	9	7	12	19	9	13	13	15	17	158
1937 ...	19	19	14	12	11	10	12	9	13	10	9	14	152
Average 1917-37	17	12	12	13	12	11	13	13	13	15	14	16	161

Table V.—Number of "Rain-days" (.01 in. or more) and of "Wet-days" (.04 in. or more) in 1937.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.
<b>ENGLAND AND WALES.</b>															
London . . . . .	St. Pancras (Camden Square)	23 18	23 20	20 15	14 12	13 11	12 9	8 5	4 4	14 12	9 8	7 6	18 12	165 132	28.58
Kent . . . . .	Tenterden (Ashenden) . . . . .	23 21	21 21	20 17	15 13	15 12	12 9	9 6	6 6	11 8	12 10	9 6	18 15	171 144	36.33
Sussex . . . . .	Worthing (Beach House Pk.) . . . . .	23 20	23 19	16 14	16 14	14 10	8 5	7 7	3 3	12 8	12 11	9 7	19 15	162 133	31.59
Hampshire . . . . .	Ventnor (Royal National Hos.) . . . . .	24 21	22 20	16 13	16 13	13 8	10 6	10 7	6 5	13 10	13 9	11 8	21 18	175 138	37.13
Hampshire . . . . .	Selborne (The Wakes) . . . . .	26 22	24 21	20 14	21 14	12 12	12 9	11 5	6 5	15 12	16 12	14 7	22 13	199 146	46.78
Herts . . . . .	Royston (Therfield Rectory) . . . . .	22 20	21 16	18 25	15 12	15 13	12 9	11 9	7 5	15 12	10 9	13 9	20 17	179 146	33.90
Oxford . . . . .	Oxford (Radcliffe Met. Stn.) . . . . .	22 18	24 16	16 13	17 12	13 12	11 6	11 6	3 3	13 9	12 10	10 6	21 11	173 122	27.55
Northants . . . . .	Wellingborough (Swanspool) . . . . .	25 19	23 16	20 17	18 11	14 10	9 6	9 8	7 6	13 10	14 10	11 6	22 12	185 131	30.41
Cambridge . . . . .	March . . . . .	16 14	15 13	19 18	13 12	11 11	8 6	9 7	7 5	9 8	9 8	9 9	19 16	144 127	28.07
Essex . . . . .	Shoeburyness . . . . .	20 18	21 17	20 14	14 10	12 11	14 10	11 5	3 3	16 12	10 6	9 7	16 10	166 123	29.98
Suffolk . . . . .	Lowestoft (Secondary School) . . . . .	21 15	21 15	18 10	20 11	10 8	10 3	12 9	5 4	15 11	10 7	17 12	23 15	182 120	25.03
Suffolk . . . . .	Bury St. Edmunds (Westley H.) . . . . .	18 17	19 17	18 16	14 14	11 10	7 7	9 8	9 9	18 14	9 9	11 11	15 14	158 146	31.88
Norfolk . . . . .	Terrington St. Clement (C. Sch.) . . . . .	22 17	21 15	24 17	13 11	11 9	5 5	10 9	6 4	11 6	8 6	13 9	18 11	162 119	30.30
Wiltshire . . . . .	Larkhill (Sch. of Artillery) . . . . .	21 18	23 19	16 12	15 12	12 12	10 7	7 7	5 4	12 9	14 11	13 7	22 10	170 128	33.53
Dorsetshire . . . . .	Poole . . . . .	25 19	26 17	20 13	17 14	12 10	5 4	12 5	5 3	11 7	12 10	11 9	21 15	177 126	39.60
South Devon . . . . .	Holne (Church Park Cottage) . . . . .	26 24	26 20	21 19	18 16	16 12	10 7	14 8	6 3	18 14	14 11	11 9	21 18	201 161	72.51
North Devon . . . . .	Barnstaple (N. Dev. Atheneum) . . . . .	28 19	24 20	21 16	15 12	17 12	12 8	16 10	9 6	17 15	12 11	9 6	17 14	197 149	38.45
North Devon . . . . .	Okehampton (Uplands) . . . . .	27 23	28 25	22 18	17 17	13 11	10 9	14 7	7 4	19 16	14 12	16 11	18 12	205 165	57.85
Cornwall . . . . .	St. Austell (Trevarna) . . . . .	28 25	26 22	20 17	17 14	13 10	9 9	13 10	7 5	19 16	9 7	11 10	19 17	191 162	52.73
Somerset . . . . .	Bath (Henrietta Park) . . . . .	22 17	23 19	18 15	16 13	13 10	7 5	11 7	10 6	14 11	11 9	10 9	21 11	176 132	32.64
Somerset . . . . .	Angersleigh (Leigh Court) . . . . .	22 20	23 19	23 18	18 15	14 12	10 5	14 8	8 6	17 11	14 10	16 10	21 14	200 148	46.01
Hereford . . . . .	Ross-on-Wye . . . . .	18 16	25 18	16 14	15 11	13 10	11 5	11 8	4 4	12 9	10 8	9 7	21 12	165 122	30.32
Shropshire . . . . .	Bishops Castle (The Vicarage) . . . . .	21 19	25 21	15 10	15 9	9 8	11 7	13 9	6 4	11 9	11 8	11 7	16 13	164 124	28.49
Shropshire . . . . .	Shifnal (Hatton Grange) . . . . .	24 16	27 23	21 15	19 13	17 12	13 8	13 9	8 6	15 9	14 10	18 6	22 14	211 141	29.33
Warwick . . . . .	Warwick Castle Gardens . . . . .	22 19	23 16	19 13	17 12	17 11	9 5	13 9	6 4	11 10	12 7	11 7	19 11	179 124	27.85

Table V.—*Number of "Rain-days" (.01 in. or more) and of "Wet-days" (.04 in. or more) in 1937.—(con.).*

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.
ENGLAND AND WALES—(con.)															
Leicester . . . . .4	Leicester (Town Hall Sq.) . . . .	20 18	20 16	22 18	15 11	14 12	7 4	10 6	8 6	12 8	11 6	8 8	14 10	161 123	27·16
Lincoln . . . . .3	Horncastle . . . . .	22 16	19 14	26 17	20 14	17 9	11 6	9 6	8 4	14 7	15 6	13 11	23 18	197 128	28·88
Nottingham . . . . .5	Mansfield (Carr Bank) . . . . .	21 16	20 18	17 13	12 10	12 11	5 4	8 6	6 6	9 8	7 7	9 7	20 16	146 122	28·73
Derbyshire . . . . .6	Derby (The Arboretum) . . . . .	22 13	24 20	17 10	13 9	15 11	6 5	10 5	6 2	10 8	10 6	8 7	17 8	158 104	24·22
Cheshire . . . . .2	Northwich (Hunt's Lock) . . . .	19 14	24 20	14 13	16 12	10 9	12 8	14 9	11 7	13 6	12 9	9 8	17 11	171 126	29·74
North Lancs. . . . .5	Blackpool (Stanley Park) . . . .	21 12	20 17	17 8	17 13	13 9	14 10	13 8	11 7	15 10	12 11	8 6	16 11	177 122	28·62
Yorks. W.R. . . . .8	Meltham (Harewood Lodge) . . .	24 20	23 20	21 17	18 14	14 11	13 8	17 9	13 10	15 10	12 8	15 8	24 16	209 151	39·35
Yorks. E.R. . . . .3	Hull (Pearson Park) . . . . .	19 13	20 13	20 12	18 15	12 8	10 8	15 10	10 3	10 6	11 6	14 8	25 21	184 123	29·57
Yorks. N.R. . . . .1	West Witton (Ivy House) . . . .	25 19	24 20	23 19	18 16	18 13	14 11	11 7	11 5	14 10	11 10	10 7	22 15	201 152	36·12
Yorks. N.R. . . . .2	Felixkirk (Mount St. John) . . .	17 14	17 12	24 16	18 14	16 13	15 8	12 10	13 7	12 7	11 7	12 9	25 20	192 137	29·65
Yorks. N.R. . . . .5	Scarborough . . . . .	18 14	15 11	23 16	19 14	12 6	10 9	14 11	10 5	13 7	12 8	16 14	23 18	185 133	33·27
North'land . . . . .3	Newcastle (Leazes Pk.) . . . . .	14 12	16 14	19 18	18 15	11 10	17 14	15 13	12 10	10 8	11 7	17 11	21 21	181 153	34·55
North'land . . . . .6	Ilderton (Lilburn Tower Gdns.) . .	21 14	19 11	22 14	19 11	16 13	15 9	17 12	12 10	15 9	15 12	12 7	27 19	210 141	34·54
Cumberland . . . . .1	Geltsdale . . . . .	25 19	19 17	19 11	19 15	16 12	20 13	19 17	11 7	20 15	20 11	12 6	22 16	222 159	33·41
Cumberland . . . . .2	Keswick (High Hill) . . . . .	21 20	21 15	16 13	16 15	14 10	14 12	16 11	11 8	15 12	13 12	5 4	18 13	180 145	42·95
Glamorgan . . . . .6	Treherbert (Tyn-y-waun) . . . .	26 23	27 14	20 18	20 17	15 13	17 15	21 17	7 4	20 16	13 9	14 8	20 15	220 169	74·97
Carmarthen . . . . .2	Carmarthen (Model & Prac. Sch.) .	27 23	26 22	20 15	16 11	11 11	16 13	15 11	8 7	20 15	12 11	12 10	20 16	203 165	50·01
Cardigan . . . . .3	Lampeter (Falcondale) . . . . .	21 20	23 23	13 13	11 11	11 10	11 9	15 14	6 6	17 15	11 10	7 6	13 12	159 149	43·71
Radnor . . . . .1	Birmingham WW (Tymynydd) . .	24 21	27 26	20 17	20 16	15 9	16 12	17 12	11 5	21 13	13 12	12 8	21 16	217 167	54·00
Denbigh . . . . .2	Denbigh (Garn) . . . . .	20 14	24 19	19 14	16 12	9 7	11 8	18 12	9 4	18 11	14 11	14 10	21 13	193 135	29·63
Méioneth . . . . .4	Dolgelley (Bontddu) . . . . .	21 20	25 24	18 14	18 16	13 11	17 10	15 13	9 7	15 13	11 10	11 8	17 15	190 161	47·74
Anglesey . . . . .	Llanerchymedd (Ll'diarth Es.) . .	25 24	24 22	19 16	18 16	8 6	9 8	18 11	7 7	16 13	12 11	12 10	27 17	195 161	40·83
England and Wales	(Mean of 47 Stations) . . . . .	22 18	22 18	19 15	17 13	13 10	11 8	13 9	8 5	14 11	12 9	11 8	20 14	183 139	36·78

Table V.—Number of "Rain-days" (.01 in. or more) and of "Wet-days" (.04 in. or more) in 1937.—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.
ISLE OF MAN.															
Isle of Man..	Douglas (Borough Cemetery) ..	20 18	22 16	20 14	17 15	10 10	15 10	16 12	10 8	16 11	12 10	13 10	21 17	192 151	44.55
CHANNEL ISLANDS.															
Guernsey ...	St. Peter Port (Grange Road) .	26 19	26 24	22 18	19 16	14 9	10 7	12 9	5 5	16 12	14 13	14 11	24 20	202 163	43.33
SCOTLAND.															
Wigtown ... 3	Port William (Monreith) .....	18 15	20 17	7 6	17 14	10 10	12 10	15 14	11 10	14 11	11 9	6 6	13 13	154 135	38.73
Dumfries... 3	Dumfries (Crichton R. Inst.) ..	23 18	23 19	12 7	19 17	13 9	18 14	17 14	12 11	18 13	15 12	6 5	15 11	191 150	34.50
Peebles ... 2	Stobo Castle .....	19 19	24 20	12 7	16 13	13 10	17 12	18 13	14 12	18 15	20 15	8 5	20 14	199 155	35.82
Berwick ... 4	Marchmont House .....	20 15	20 13	25 14	17 10	13 9	17 10	15 12	15 10	16 8	17 11	11 7	25 17	211 136	34.39
Lanarkshire 5	Strathaven (Dungavel) .....	23 17	22 20	15 10	19 13	11 6	18 13	19 17	16 13	18 18	17 16	12 8	19 12	209 163	43.88
Ayrshire ... 6	Maybole (Culzean Castle Gdns.)	20 18	22 21	7 6	16 11	8 7	14 12	17 15	9 7	11 9	15 13	4 2	12 10	155 131	29.88
Renfrew ... 3	Greenock (Prospect Hill) .....	25 21	24 23	11 7	17 12	13 9	14 12	18 14	16 12	17 16	16 14	11 6	14 11	196 157	45.48
Stirling ... 1	Falkirk (Westbank) Gdn. ....	26 20	20 17	15 12	16 12	12 7	17 13	19 17	14 12	16 14	15 14	9 3	13 11	192 152	34.00
Bute ... 3	Dougarie Lodge .....	24 21	24 22	14 9	20 14	14 11	17 15	18 16	15 10	20 17	17 12	13 8	14 10	210 165	44.26
Argyllshire 8	Lochgilphhead (Poltalloch) .....	23 23	25 25	11 9	17 15	16 14	15 14	19 14	17 14	20 18	14 14	16 12	9 8	202 180	53.41
Argyllshire 14	Islay (Eallabus) .....	22 20	24 24	14 8	19 13	17 13	19 14	20 15	17 14	23 15	17 14	20 16	15 14	227 180	47.77
Argyllshire 14	Mull (Gruline) .....	27 26	27 24	19 10	22 14	19 16	19 15	22 17	17 13	26 18	20 14	21 15	19 14	258 196	65.17
Argyllshire 14	Tiree .....	22 20	25 20	13 7	15 11	15 11	17 10	19 13	17 11	21 15	17 12	14 9	18 13	213 152	34.52
Fifehire ... 3	Leuchars (Aerodrome) .....	20 16	16 11	15 13	19 11	14 9	13 11	16 11	13 12	10 7	16 13	8 4	17 11	177 129	29.99
Perthshire 11	Aberfeldy (Dall Avon) .....	25 23	20 15	13 7	16 9	15 12	14 11	17 15	15 11	18 13	18 9	10 4	14 9	195 138	34.88
Aberdeen ... 1	Balmoral Castle Gardens .....	27 25	23 16	23 19	18 6	13 6	15 7	16 15	13 8	16 7	18 14	16 9	23 13	221 145	37.07
Aberdeen ... 2	Aberdeen Observatory .....	23 18	21 11	24 18	16 8	10 5	13 7	17 14	12 6	11 6	14 10	20 14	22 16	203 133	31.31
Aberdeen ... 4	Peterhead (Foleshill Works) ...	25 22	20 19	23 17	15 11	7 5	17 12	17 14	11 9	16 9	16 11	18 17	27 19	212 165	31.67
Morayshire 2	Fochabers (Gordon Castle) ....	23 19	17 13	22 18	11 4	9 7	16 10	20 14	15 10	14 9	13 9	20 12	20 13	200 138	27.92

Table V.—Number of "Rain-days" (.01 in. or more) and of "Wet-days" (.04 in. or more) in 1937.—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.
<b>SCOTLAND</b>															
—(con.)															
Inverness ... <b>3</b>	Cluny Castle .....	25 22	24 19	15 10	16 10	13 11	15 11	16 14	15 13	21 15	13 11	13 5	11 8	197 149	32.97
Inverness .. <b>16</b>	Fort William (The Factory) ...	25 25	24 20	17 10	17 13	17 14	17 13	17 17	15 11	24 18	16 13	20 8	13 8	222 170	56.46
Inverness .. <b>18</b>	Skye (Portree) .....	26 24	25 22	18 14	18 12	19 16	22 14	19 16	20 13	25 21	21 16	20 16	20 17	253 201	51.50
R & Cromarty <b>3</b>	Fortrose .....	17 12	19 13	19 12	7 3	13 9	15 10	16 12	14 11	14 9	12 8	11 4	14 8	171 111	21.74
R & Cromarty <b>7</b>	Ullapool .....	22 16	22 18	17 12	9 6	9 6	19 9	19 10	10 8	21 17	20 13	20 14	17 12	205 141	28.83
R & Cr'm'rtly <b>10</b>	Stornoway (C. Guard Station) .	25 19	24 19	19 14	15 10	16 13	20 12	18 10	15 14	24 18	23 15	23 18	25 15	247 177	35.78
Sutherland .. <b>1</b>	Lairg .....	22 20	20 16	23 21	7 5	6 6	13 11	15 14	10 10	16 13	12 9	12 6	12 10	168 141	30.64
Sutherland .. <b>5</b>	Loch More (Achiary) .....	26 21	23 21	22 18	14 9	12 11	23 20	19 17	15 13	25 23	23 20	22 19	22 16	246 208	54.08
Cathness ... <b>3</b>	Thurso (Buckies) .....	28 24	23 19	25 19	18 10	9 6	24 15	17 14	14 9	22 16	20 16	18 15	18 12	236 175	33.65
<b>Scotland</b> .....	<b>(Mean of 28 Stations)</b> .....	<b>23 20</b>	<b>22 18</b>	<b>17 12</b>	<b>16 11</b>	<b>13 10</b>	<b>17 12</b>	<b>18 14</b>	<b>14 11</b>	<b>18 14</b>	<b>17 13</b>	<b>14 10</b>	<b>17 12</b>	<b>206 156</b>	<b>38.58</b>
<b>IRELAND.</b>															
Co. Cork ... <b>7</b>	Cork (University College) .....	27 25	17 16	18 16	15 14	13 9	12 6	18 12	15 11	19 12	11 8	13 12	18 13	196 154	41.97
Co. Cork ... <b>8</b>	Roches Point (C. Guard Stn.) ..	29 25	24 17	19 15	19 15	15 11	18 10	18 12	14 12	21 15	13 10	15 12	20 12	225 166	44.99
Co. Cork ... <b>9</b>	Mallow (Longueville) .....	31 28	26 18	21 16	19 14	17 10	17 8	21 13	15 10	20 15	15 8	17 13	20 14	239 167	48.70
Co. Kerry ... <b>3</b>	Valentia Observatory .....	31 27	24 22	20 15	21 17	20 15	16 9	23 17	20 15	23 21	12 10	15 13	23 19	248 200	63.94
Co. Waterford <b>3</b>	Waterford (Gortmore) .....	28 21	20 15	19 14	15 10	15 10	12 8	16 13	11 10	20 14	10 7	16 13	18 12	200 147	42.08
Co. Tipperary <b>1</b>	Nenagh (Castle Lough) .....	27 23	27 25	22 17	18 16	21 15	21 16	22 20	18 15	21 16	12 8	14 11	23 18	246 200	42.61
Co. Tipperary <b>3</b>	Cashel (Ballinamona) .....	29 23	26 21	17 15	19 14	15 14	15 8	19 15	19 13	19 14	13 7	16 12	21 12	228 168	40.31
Co. Limerick <b>2</b>	Foynes (Coolnanes) .....	25 23	25 23	14 10	16 12	14 12	16 9	21 18	16 13	22 16	11 9	12 10	15 13	207 168	36.43
Co. Wexford <b>4</b>	Gorey (Courtown House) .....	29 21	25 18	23 15	16 12	16 8	16 12	19 14	12 8	22 18	16 12	15 10	20 15	229 163	40.57
Co. Leix ... <b>2</b>	Abbey Leix (Blandsfort) .....	28 21	24 17	17 13	21 13	13 12	19 14	19 16	16 12	22 17	13 8	14 10	17 11	223 164	38.63
Co. Dublin .. <b>2</b>	Dublin City (Phoenix Park) ...	23 15	24 14	25 17	16 10	14 8	15 9	19 14	12 9	19 13	13 8	13 8	18 9	211 134	28.67
Co. Meath ... <b>4</b>	Kells (Headfort) .....	21 16	19 16	17 10	9 8	14 9	13 11	18 13	14 9	17 15	12 10	10 9	15 13	179 139	37.25
Co. W'm'eath <b>1</b>	Mullingar (Belvedere Ho.) .....	21 16	21 17	18 13	16 10	11 9	18 14	21 16	16 13	27 21	12 7	14 9	16 11	211 156	35.91



Table V.—Number of “Rain-days” (.01 in. or more) and of “Wet-days” (.04 in. or more) in 1937.—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.
<b>IRELAND</b>															
—(con.)															
Co. Longford .2	Newtownforbes (Cas. Forbes G.)	17 17	21 21	8 8	12 11	17 17	13 13	17 16	13 13	23 22	9 8	7 6	14 14	171 166	35.94
Co. Mayo . . .4	Mallaranny . . . . .	27 24	28 28	20 19	16 12	17 14	18 14	22 16	19 16	24 22	12 10	14 13	20 18	237 206	59.30
Co. Mayo . . .5	Delphi Lodge . . . . .	30 30	26 25	22 21	19 16	20 20	18 15	25 23	23 19	26 23	17 15	16 13	24 22	266 242	97.51
Co. Sligo . . . .2	Collooney (Markree Castle) . . . .	23 21	28 27	18 13	18 13	16 12	21 17	26 21	20 18	25 19	11 9	15 10	21 17	242 197	40.61
Co. Ferm'gh .1	Newtownbutler (Crom Castle) . . .	27 17	27 22	20 9	13 11	16 10	18 12	23 18	19 13	26 16	15 7	16 8	24 17	244 160	33.93
Co. Armagh .5	Armagh Observatory . . . . .	19 15	24 20	18 13	14 12	14 9	16 13	19 13	14 10	21 16	16 12	10 5	19 13	204 151	30.66
Co. Down . . .2	Seaforde . . . . .	24 19	22 19	23 17	15 12	10 9	14 13	26 23	14 11	21 16	14 11	11 9	24 20	218 179	42.65
Co. Antrim .5	Ballymena (Harryville) . . . . .	22 19	26 24	21 19	17 13	17 14	16 14	25 21	17 15	21 17	17 12	15 10	18 18	232 196	42.33
Co. Tyrone . .3	Omagh (Edenfel) . . . . .	26 20	28 27	23 11	17 11	18 12	19 12	22 17	19 12	25 19	15 9	18 9	22 18	252 177	39.82
Co. Donegal .2	Buncrana (Rectory) . . . . .	24 19	27 26	23 17	17 12	15 10	21 15	21 17	19 17	23 15	15 9	18 8	22 14	245 179	37.04
<b>Ireland . . . .</b>	<b>(Mean of 23 Stations) . . . . .</b>	<b>26 21</b>	<b>24 21</b>	<b>19 14</b>	<b>16 13</b>	<b>16 12</b>	<b>17 12</b>	<b>21 16</b>	<b>16 13</b>	<b>22 17</b>	<b>13 9</b>	<b>14 10</b>	<b>20 15</b>	<b>224 173</b>	<b>43.56</b>
<b>British Isles .</b>	<b>(Mean of 100 Stations) . . . . .</b>	<b>23 19</b>	<b>23 19</b>	<b>19 14</b>	<b>16 12</b>	<b>14 10</b>	<b>14 10</b>	<b>16 12</b>	<b>11 9</b>	<b>17 13</b>	<b>14 10</b>	<b>13 9</b>	<b>19 14</b>	<b>199 152</b>	<b>38.99</b>

### 3. ABSOLUTE DROUGHTS, PARTIAL DROUGHTS AND DRY SPELLS IN 1937.

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As in the analogous case of rain-days and wet-days (Section 4), certain definitions have to be adopted in order to obtain a reliable body of statistical information on the subject of droughts. The definitions used are :—

An **absolute drought** is a period of at least 15 consecutive days, to none of which is credited  $\cdot 01$  inch of rain or more ;

A **partial drought** is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed  $\cdot 01$  inch ;

A **dry spell** is a period of at least 15 consecutive days to none of which is credited  $\cdot 04$  inch of rain or more.

These terms are used in *British Rainfall* only in the senses stated. More concise definitions of two of these terms would be :—An *absolute drought* is a period of at least 15 days, none of which is a rain-day ; a *dry spell* is a period of at least 15 days, none of which is a wet day. The definitions of absolute drought and partial drought were introduced in *British Rainfall*, 1887, page 21, while that of dry spell was first used in *British Rainfall*, 1919, page 15.

Details are given in Table VIII of the absolute droughts, partial droughts and dry spells, which occurred at the 100 selected stations of Table V. Stations from which no droughts were reported are omitted from this table.

During 1937 the number of stations out of the 100 which failed to record either a drought or a dry spell was thirty-three. This was seven more than in 1936, and more than recorded in most recent years. Of the thirty-three stations without either a drought or dry spell during the year one was in England, Wales and the Isle of Man, 16 in Scotland and 16 in Ireland.

In Tables VI and VII the numbers of droughts and dry spells recorded in 1937 are compared with those of each year from 1917 to 1936. In the case of absolute and partial droughts similar information is available as far back as the famous dry year 1887 and averages are therefore available for the 51 years 1887 to 1937. Statistics, comparable with those given in Table VI, are given for the years 1887 to 1916 in *British Rainfall*, 1929, page 20.

The total number of absolute droughts recorded in 1937 was 61 or one more than the average 1887 to 1937. The number of partial droughts was 38 or 15 less than the average. The number of dry spells was 136 or 1 less than the average. There were more droughts or dry spells in 1937 than in the preceding year. Of the 100 stations, 61 had no absolute drought, 64 no partial drought, and 33 no dry spell during 1937 ; in each case the value was in excess of the normal.

The longest absolute drought lasted 30 days from September 21st to October 20th at Mansfield. The longest partial drought persisted from July 23rd to September 11th, a period of 51 days, at Derby. The longest dry spell lasted for 35 days from September 17th to October 21st, at Poole, in Dorsetshire.

Absolute droughts were confined to the period May 22nd to October 21st, apart from those at Keswick, in the English Lake District, and Maybole, in Ayrshire, during the first three weeks of November. Only one absolute drought was recorded for stations in Ireland and only three for Scotland. Four absolute droughts were recorded at Shoeburyness.

Of the 38 partial droughts recorded during the year 32 occurred from September 17th to October 22nd. There were no partial droughts in Ireland and only four in Scotland. As many as two partial droughts were recorded at only two stations, *viz.* Derby and Mansfield.

Of the 136 dry spells 118 occurred at some time during the period June 8th to October 22nd. There were 54 dry spells during the period September 13th to October 22nd, including all those recorded at stations in Ireland. There were 29 dry spells at some time during the period July 20th to August 13th, 23 during the period August 14th to September 8th and 12 during the period June 8th to July 8th. Both Shoeburyness and Worthing recorded five dry spells during the year.

Table VI.—*Droughts at 100 Stations, 1917–1937.*

ABSOLUTE DROUGHTS.*					PARTIAL DROUGHTS.†			
Year.	No. of Droughts at 100 Stations.	Mean Duration.	Longest.	Stations without one.	No. of Droughts at 100 Stations.	Mean Duration.	Longest.	Stations without one.
		Days.	Days.			Days.	Days.	
1917	109	19	28	23	64	33	61	46
1918	20	16	18	83	14	34	47	87
1919	33	18	31	68	44	38	50	63
1920	18	17	22	84	22	37	54	79
1921	86	19	38	47	109	42	89	30
1922	63	17	23	46	44	36	51	66
1923	11	17	24	89	20	38	54	80
1924	50	16	22	55	25	36	57	81
1925	74	23	33	37	76	38	60	29
1926	20	17	24	83	43	36	57	64
1927	11	17	19	90	19	32	43	83
1928	50	17	22	57	41	33	43	70
1929	110	20	37	14	99	47	85	35
1930	16	17	20	86	29	31	42	72
1931	16	18	21	85	28	34	46	82
1932	87	19	32	36	156	40	71	7
1933	56	18	25	52	92	37	69	52
1934	82	18	30	38	101	37	54	33
1935	70	19	32	49	44	42	66	64
1936	42	17	25	65	24	33	38	81
1937	61	17	30	61	38	33	51	64
Average 1887–1937	.60	18	26	54	53	36	56	59

\* 15 days without a "rain day."

† 29 days averaging not more than .01 in.

Table VII.—*Dry Spells\* at 100 Stations, 1917–1937.*

Year.	Number at 100 Stations.	Mean Duration.	Longest Spell.	Number of Stations with			
				None.	1 or 2.	3 or 4.	5 or more.
		Days.	Days.				
1917	193	20	31	5	70	25	0
1918	118	17	26	36	47	17	0
1919	98	19	38	35	62	3	0
1920	56	18	31	55	44	1	0
1921	201	21	58	21	43	29	7
1922	162	18	30	13	65	22	0
1923	65	18	29	54	43	3	0
1924	120	17	29	32	56	12	0
1925	164	22	43	14	65	21	0
1926	98	19	40	30	65	5	0
1927	91	17	31	43	49	8	0
1928	115	19	31	25	68	7	0
1929	215	22	53	1	65	31	3
1930	76	18	22	45	51	4	0
1931	84	19	26	53	35	12	0
1932	229	23	51	5	53	38	4
1933	191	19	40	14	54	31	1
1934	193	20	44	10	60	29	1
1935	142	19	33	26	52	22	0
1936	128	17	27	26	62	12	0
1937	136	19	35	33	46	19	2
Average 1917–1937	137	19	36	27	55	17	1

\* 15 days without a "wet day."



Table VIII.—*Droughts and Dry Spells in 1937—(con.)*.

County and River Division.	Station.	Absolute Droughts.				Partial Droughts.				Dry Spells.			
		Began.	Ended.	Lasted. days	Rain. in.	Began.	Ended.	Lasted. days	Rain. in.	Began.	Ended.	Lasted. days	Rain. in.
Suffolk . . . . . <b>5</b>	Bury St. Edmunds (Westley Ho.)	June 20	July 4	15	..	..	..	..	..	June 20	July 4	15	..
Norfolk . . . . . <b>3</b>	Terington St. Clement (C. Sch.)	July 25	Aug. 10	17	..	..	..	..	..	July 24	Aug. 10	18	..03
		June 20	July 5	16	..	..	..	..	..	June 20	July 5	16	..00
		July 26	Aug. 11	17	..	..	..	..	..	July 26	Aug. 11	17	..00
Wiltshire . . . . . <b>3</b>	Larkhill (School of Artillery)	Sept. 25	Oct. 10	16	..13	Sept. 18	Oct. 21	34	..13	Sept. 25	Oct. 10	16	..00
		.. 17	.. 1	.. 16	..	..	..	..	..	July 23	Aug. 9	18	..06
		Aug. 17	Sept. 1	.. 16	..27	Sept. 20	Oct. 21	32	..27	Aug. 17	Sept. 1	16	..01*
Dorsetshire . <b>3</b>	Poole . . . . .	June 20	July 4	15	..	Sept. 20	Oct. 21	..	..	Oct. 7	Oct. 21	15	..05
		.. 17	.. 1	.. 16	..	..	..	..	..	June 17	July 4	18	..02
S. Devon . . . . . <b>4</b>	Holne (Church Park Cottage)	July 25	Aug. 9	16	..	Sept. 17	Oct. 21	35	..13	July 23	Aug. 11	20	..02
		..	..	..	..	..	..	..	..	Aug. 17	Sept. 1	16	..00
N. Devon . . . . . <b>2</b>	Barnstaple (N. Dev. Atheneum)	Oct. 3	Oct. 20	18	..	..	..	..	..	Sept. 17	Oct. 21	35	..13
„ . . . . . <b>3</b>	Okehampton (Uplands)	.. 17	.. 31	15	..	..	..	..	..	July 23	Aug. 11	20	..02
		Aug. 25	Aug. 9	16	..	..	..	..	..	Aug. 17	Aug. 31	15	..01
Cornwall . . . . . <b>2</b>	St. Austell (Trevarna)	Oct. 1	Oct. 20	20	..16	Sept. 22	Oct. 20	29	..16	Oct. 3	Oct. 20	18	..02
		..	..	..	..	..	..	..	..	Oct. 2	Oct. 20	19	..01
Somerset . . . . . <b>1</b>	Bath (Henrietta Park)	.. 7	.. 21	15	..09	Sept. 20	Oct. 21	32	..09	Nov. 1	Nov. 17	17	..04
		Oct. 7	Oct. 21	.. 15	..	..	..	..	..	July 23	Aug. 8	17	..05
„ . . . . . <b>3</b>	Angersleigh (Leigh Court)	.. 24	Aug. 11	19	..28	Sept. 20	Oct. 21	32	..28	Aug. 17	Aug. 31	15	..00
		Aug. 17	Aug. 31	15	..	..	..	..	..	July 25	Aug. 9	16	..00
Hereford . . . . . <b>1</b>	Ross-on-Wye	Oct. 7	Oct. 21	15	..	Sept. 20	Oct. 21	32	..21	Aug. 17	Sept. 1	16	..06
		Aug. 15	Aug. 29	15	..	..	..	..	..	Oct. 1	Oct. 20	20	..00
Shropshire . . . . . <b>3</b>	Bishops Castle (The Vicarage)	Oct. 3	Oct. 18	16	..24	Sept. 19	Oct. 21	33	..24	June 20	July 4	15	..01
		.. 3	.. 18	.. 16	..	..	..	..	..	July 23	Aug. 9	18	..04
„ . . . . . <b>4</b>	Shifnal (Hatton Grange)	Oct. 3	Oct. 18	16	..	Sept. 19	Oct. 21	33	..	Sept. 25	Oct. 20	26	..12
		.. 3	.. 18	.. 16	..	..	..	..	..	May 27	June 10	15	..06
		.. 3	.. 18	.. 16	..	..	..	..	..	June 24	Aug. 11	19	..00
		.. 3	.. 18	.. 16	..	..	..	..	..	Aug. 17	Aug. 31	15	..00
		.. 3	.. 18	.. 16	..	..	..	..	..	Sept. 25	Oct. 21	27	..09
		.. 3	.. 18	.. 16	..	..	..	..	..	Aug. 14	Aug. 31	18	..03
		.. 3	.. 18	.. 16	..	..	..	..	..	Oct. 2	Oct. 21	20	..04
		.. 3	.. 18	.. 16	..	..	..	..	..	Sept. 25	Oct. 18	24	..07

\* 0.1 mm. was recorded on August 30th and September 1st.



Table VIII.—*Droughts and Dry Spells in 1937—(con.)*.

County and River Division.	Station.	Absolute Droughts.			Partial Droughts.			Dry Spells.		
		Began.	Ended.	Lasted, days	Began.	Ended.	Lasted, days	Began.	Ended.	Lasted, days
Denbigh . . . . .2	Denbigh (Garn) . . . . .	..	..	..	..	..	..	July 25	Aug. 12	19
Merioneth . . . . .4	Dolgelley (Bontddu) . . . . .	Oct. 2	Oct. 20	19	..	..	..	Oct. 2	Oct. 20	19
Anglesey . . . . .	Llanerchymedd (Ll'wydiarth Esgob).	June 14	June 29	16	Sept. 24	Oct. 21	28	Oct. 2	Oct. 20	19
Isle of Man . . . . .	Douglas (Borough Cemetery) . .	Oct. 2	Oct. 20	19	..	..	..	June 14	June 29	16
Guernsey . . . . .	St. Peter Port (Grange Road) .	Oct. 2	Oct. 19	18	..	..	..	Oct. 2	Oct. 20	19
		..	..	..	..	..	..	Oct. 2	Oct. 21	20
		..	..	..	..	..	..	Apr. 21	May 7	17
		..	..	..	..	..	..	July 24	Aug. 11	19
		..	..	..	..	..	..	Aug. 19	Sept. 6	19
	SCOTLAND.									
Wigtown . . . . .3	Port William (Monreith) . . . . .	Oct. 2	Oct. 17	16	..	..	..	Oct. 2	Oct. 19	18
Dumfries . . . . .3	Dumfries (Chrichton R. Institute)	..	..	..	..	..	..	Oct. 3	Oct. 19	17
Berwick . . . . .4	Marchmont House . . . . .	..	..	..	..	..	..	Oct. 4	Oct. 19	16
Ayrshire . . . . .6	Maybole (Culzean Castle Gdns.)	July 25	Aug. 12	19	..	..	..	July 25	Aug. 12	19
		Nov. 3	Nov. 19	17	Nov. 1	Nov. 29	29	Nov. 1	Nov. 19	19
Stirling . . . . .1	Falkirk (Westbank) . . . . .	..	..	..	Oct. 31	Nov. 28	29	Nov. 2	Nov. 28	27
Argyllshire .14	Mull (Gruline) . . . . .	..	..	..	..	..	..	Mar. 1	Mar. 15	15
" . . . . .14	Tiree . . . . .	..	..	..	..	..	..	Feb. 26	Mar. 15	18
Aberdeen . . . . .1	Balmoral Castle Gardens . . . .	..	..	..	..	..	..	June 8	June 26	19
" . . . . .2	Aberdeen Observatory . . . . .	..	..	..	Apr. 11	May 19	39	Apr. 11	May 4	24
Morayshire . . . . .2	Fochabers (Gordon Castle) . . .	..	..	..	..	..	..	June 17	July 1	15
Inverness . . . . .16	Fort William (The Factory) . . .	..	..	..	..	..	..	July 28	Aug. 13	17
Rose and Cromarty.	Fortrose . . . . .	..	..	..	..	..	..	Sept. 13	Sept. 29	17
		..	..	..	..	..	..	Oct. 3	Oct. 20	18
		..	..	..	Mar. 25	May 2	39	Dec. 5	Dec. 19	15
		..	..	..	..	..	..	Mar. 25	Apr. 17	24
	IRELAND.									
Co. Waterford .3	Waterford (Gortmore) . . . . .	..	..	..	..	..	..	Oct. 2	Oct. 20	19
Co. Tipperary .3	Cashel (Ballinamona) . . . . .	..	..	..	..	..	..	Oct. 2	Oct. 19	18
Co. Dublin . . . . .2	Dublin City (Phoenix Park) . . .	..	..	..	..	..	..	Oct. 2	Oct. 19	18
Co. W. Meath . . . . .1	Mullingar (Belvedere Ho.) . . . .	..	..	..	..	..	..	Oct. 3	Oct. 19	17
Co. Longford . . . . .2	Newtownforbes (Cas. Forbes Gd.)	Oct. 3	Oct. 18	16	..	..	..	Oct. 3	Oct. 18	16
Co. Down . . . . .2	Seaford . . . . .	..	..	..	..	..	..	Oct. 4	Oct. 19	16
Co. Donegal . . . . .2	Buncrana Rectory . . . . .	..	..	..	..	..	..	Oct. 2	Oct. 18	17



#### 4. RAIN SPELLS AND WET SPELLS IN 1937.

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The definitions of the terms "rain spell" and "wet spell," as used in this section, are analogous to those of the terms "absolute drought" and "dry spell," which are used in the previous section. Thus :—

A **rain spell** is a period of at least 15 consecutive days to each of which is credited .01 inch of rain or more.

A **wet spell** is a period of at least 15 consecutive days to each of which is credited .04 inch of rain or more.

In other words, a *rain spell* contains at least 15 consecutive rain days, and a *wet spell* contains at least 15 consecutive wet days.

Table XI contains particulars of all rain spells\* and wet spells\* during 1937 which were reported from the 100 selected stations of Table V. Stations from which no rain or wet spells were reported are omitted from this table. The number of stations so omitted is 39, 22 in England and Wales including the Isle of Man, 10 in Scotland and 7 in Ireland. Tables IX and X give comparative statistics concerning the rain spells and wet spells since 1917. Similar details of rain spells are available back to 1903, and are given in *British Rainfall*, 1929, p. 30, and averages are therefore available for the 35 years, 1903 to 1937.

In 1937, the total number of rain spells at the 100 stations was 93 or 73 less than the average. The total number in 1937 was smaller than in any other year since the commencement of these statistics in

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\* There is a difficulty connected with the identification and enumeration of rain spells which arises from the fact that spells may be proceeding both at the beginning and end of the year under review. In regard to the latter, it has to be provisionally assumed (in the absence of definite information) that all spells terminate at the end of the year. If a spell which was in progress at the end of 1936 is now found to be continued into 1937, full details of the whole spell appear in Table XI. These entries are printed in italics, and they can be regarded as corrections to the provisional entries made in *British Rainfall*, 1936. In Tables IX and X the columns headed "number of spells" do not include, in the entry for 1937, spells which commenced in 1936, and were counted as spells in *British Rainfall*, 1936, although they include spells, which commenced near the end of 1936, but were not of sufficient duration in that year to qualify for admission to the 1936 table. Those columns dealing with the mean duration take account however, of that part which occurred in 1937 of those spells which commenced in 1936, and were counted in that year. If a spell commenced in 1936, of which the duration in that year was insufficient to count as a spell for that year, the mean duration in Tables IX and X refers to the whole spell, including the portion which actually occurred in 1936. On the other hand, a spell which commenced in 1936 is considered to be eligible for notice under "greatest duration," if it terminated in 1937, even if it has already been counted as a spell in 1936. This actually occurred for 1937, for the spell of greatest duration was one of 62 days which commenced in November, 1936. (These conventions were first printed in *British Rainfall*, 1926, p. 25.)

1903, with the one exception of 1933, which gave 57 rain spells. In many other years there were twice as many rain spells as occurred in 1937. The mean duration of the rain spells was 21 days, exactly the average. The mean rain per day during the rain spells was  $\cdot 25$  inch, slightly less than the average. A rain spell continued for 46 days from January 15th to March 1st at Okehampton, to the north of Dartmoor, when the total rainfall was 19.31 inches. The rain spell which commenced on November 26th, 1936, at Delphi, Co. Mayo, as given in *British Rainfall*, 1936, p. 31, was completed on January 26th, 1937, giving in all 62 days. In accordance with the adopted convention this is credited as the longest of the year. Rain spells occurred during 1937 at 61 stations, nine less than the average.

No station recorded as many as five rain spells during the year, for the first time since 1909. Four rains spells were recorded at West Witton in the north of Yorkshire and eight other stations had three rain spells.

The total number of wet spells at the 100 stations was 20, or 28 less than the average. The number was greater in every other year in the series except 1931 with 20 and 1933 with 9. The mean duration of the wet spells was 21 days and the mean rain per wet day  $\cdot 32$  inch, both values approximating closely to the average. Wet spells occurred at 18 stations or 10 less than the average. No station recorded three or more wet spells. Only two stations recorded two wet spells, *viz.* Delphi Lodge, in Co. Mayo and Llanerchymedd in Anglesey, and this has not occurred previously since comparable statistics became available in 1917. A wet spell lasted for 31 days, from January 31st to March 2nd at Mallaranny, Co. Mayo, and gave 7.84 inches.

The longest wet spell counted in Table X occurred at Delphi Lodge, Co. Mayo, and lasted from December 9th, 1936, to January 26th, 1937. This gave 49 days with 26.61 inches.

Of the 20 wet spells 4 occurred in England, 5 in Wales, 4 in Scotland and 7 in Ireland. The wet spells were all confined to the periods up to March 26th or after November 30th.

The rain spells were also mainly confined to the first three months of the year and December. For stations in England and Wales the only rain spells outside these periods occurred during the later half of October at stations in Wiltshire and Hampshire. In the west of Scotland a few stations recorded rain spells at the end of May or beginning of July. A few stations in Ireland also recorded the rain spell in July, while the only rain spell in August was recorded at Delphi in Co. Mayo, and the only rain spell in September at Gorey in Co. Wexford.

Table IX.—*Rain Spells\** at 100 Stations, 1917—1937.

Year.	No. of Rain Spells.	DURATION OF SPELLS				STATIONS WITH			
		Mean		Longest		None.	1 or 2.	3 or 4.	5 or more
		Days.	Mean rain per day.	Days.	Mean rain per day.				
1917.....	152	22	<sup>in.</sup> ·28	52	<sup>in.</sup> ·19	30	48	17	5
1918.....	186	23	·30	56	·21	21	51	19	9
1919.....	143	20	·26	46	·31	29	53	14	4
1920.....	165	20	·25	45	·24	32	45	12	11
1921.....	184	22	·29	45	·25	31	36	25	8
1922.....	170	21	·26	49	·35	30	42	23	5
1923.....	222	23	·26	89	·31	17	47	21	15
1924.....	168	19	·25	54	·23	33	41	18	8
1925.....	176	19	·29	60	·34	27	43	23	7
1926.....	194	20	·28	45	·14	21	37	38	4
1927.....	206	19	·26	42	·19	21	43	26	10
1928.....	202	24	·27	52	·27	28	43	21	8
1929.....	157	21	·32	57	·27	19	58	15	8
1930.....	174	23	·30	72	·42	32	36	29	3
1931.....	121	20	·25	56	·25	49	33	12	6
1932.....	150	20	·29	36	·29	37	37	20	6
1933.....	57	18	·25	31	·25	65	31	2	2
1934.....	206	21	·27	58	·21	22	45	20	13
1935.....	155	21	·26	57	·45	30	41	28	1
1936.....	140	21	·26	39	·40	38	40	18	4
1937.....	93	21	·25	62	·42	39	52	9	0
Average 1903-37	166	21	·27	51	·28	31	43	20	7

\* At least .01 inch each day, 15 days or more.

Table X.—*Wet Spells†* at 100 Stations, 1917—1937.

Year.	Number of Wet Spells.	Mean Duration.		Longest Spell.		STATIONS WITH			
		Days.	Mean rain per day.	Days.	Mean rain per day.	None.	1 or 2.	3 or 4.	5 or more
1917.....	55	19	<sup>in.</sup> ·35	31	<sup>in.</sup> ·46	67	28	3	2
1918.....	49	21	·40	36	·44	70	26	4	0
1919.....	49	17	·29	33	·34	66	29	5	0
1920.....	47	18	·37	31	·61	75	17	8	0
1921.....	59	20	·41	29	·32	69	22	9	0
1922.....	65	20	·36	42	·28	64	29	7	0
1923.....	62	20	·36	42	·39	73	17	8	2
1924.....	30	18	·34	24	·37	79	19	2	0
1925.....	55	17	·42	31	·18	67	27	6	0
1926.....	60	19	·37	30	·48	62	32	6	0
1927.....	39	18	·35	24	·29	74	22	4	0
1928.....	87	20	·40	39	·29	62	21	17	0
1929.....	59	19	·41	33	·40	59	36	4	1
1930.....	71	21	·40	35	·51	61	30	9	0
1931.....	20	19	·31	32	·44	87	10	3	0
1932.....	44	19	·41	30	·50	77	16	7	0
1933.....	9	16	·34	20	·49	94	5	1	0
1934.....	66	19	·37	31	·47	64	29	5	2
1935.....	33	18	·38	29	·41	76	22	2	0
1936.....	31	20	·35	30	·44	81	18	1	0
1937.....	20	21	·32	49	·25	82	18	0	0
Average 1917-37	48	19	·37	32	·40	72	23	5	0

† At least .04 inch each day, 15 days or more.

Table XI.—*Rain Spells and Wet Spells in 1937.*

County and River Division.	Station.	Rain Spells.*				Wet Spells.†			Max. in a Day during Rain Spells.
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	
									Date.
ENGLAND AND WALES				days	in.			days	in.
Kent . . . . .1	Tenterden (Ashenden) . . . . .	Jan. 12	Jan. 26	15	3.65	..	..	..	Jan. 24
Sussex . . . . .3	Worthing (Beach House Park) . . . . .	Jan. 17	Feb. 8	23	5.25	..	..	..	Feb. 4
Hampshire . . .7	Selborne (The Wakes) . . . . .	Jan. 12	Feb. 8	28	11.15	..	..	..	Jan. 21
		Oct. 19	Nov. 4	17	5.53	..	..	..	Oct. 22
Wiltshire . . . .3	Larkhill (School of Artillery) . . . . .	Feb. 12	Feb. 28	17	2.61	..	..	..	Feb. 24
		Oct. 20	Nov. 3	15	5.43	..	..	..	Oct. 22
Dorsetshire . . .3	Poole . . . . .	Jan. 10	Jan. 25	16	4.11	..	..	..	Jan. 17
		Feb. 12	Feb. 28	17	2.80	..	..	..	Feb. 24
		Mar. 9	Mar. 26	18	3.35	..	..	..	Mar. 10
S. Devon . . . .4	Holne (Church Park Cottage) . . . . .	Feb. 12	Mar. 3	20	7.44	..	..	..	Feb. 25
N. Devon . . . .3	Barnstaple (N. Dev. Atheneum) . . . . .	Jan. 10	Jan. 26	17	2.79	..	..	..	Jan. 17
" . . . . .3	Okehampton (Uplands) . . . . .	Jan. 15	Mar. 1	46	19.31	..	..	..	Feb. 25
		Mar. 9	Mar. 26	18	6.90	..	..	..	Mar. 10
Cornwall . . . .2	St. Austell (Trevarna) . . . . .	Jan. 12	Feb. 4	21	6.96	..	..	..	Feb. 2
		Feb. 12	Mar. 1	18	5.63	..	..	..	Feb. 21
Somerset . . . .3	Angersleigh (Leigh Court) . . . . .	Mar. 15	Mar. 1	15	3.56	..	..	..	Feb. 26
		Mar. 9	Mar. 26	18	5.35	..	..	..	Mar. 10
Hereford . . . .1	Ross-on-Wye . . . . .	Feb. 12	Feb. 28	17	2.10	..	..	..	Feb. 26
Shropshire . . .4	Shifnal (Hatton Grange) . . . . .	Feb. 6	Mar. 3	26	4.18	..	Mar. 2	16	Feb. 7
Leicester . . . .4	Leicester (Town Hall Square) . . . . .	Mar. 10	Mar. 27	18	2.36	..	..	..	Mar. 11
Yorks E.R. . .3	Hull (Pearson Park) . . . . .	Nov. 29	Dec. 17	19	4.59	Nov. 30	Dec. 17	18	Dec. 2
" N.R. . .1	West Witton (Ivy House) . . . . .	Jan. 15	Feb. 4	21	3.71	..	..	..	Jan. 31
		Feb. 7	Feb. 21	15	3.26	..	..	..	Feb. 15
		Feb. 24	Mar. 14	19	4.26	..	..	..	Feb. 25
		Nov. 30	Dec. 17	18	3.37	..	..	..	Dec. 10
		Nov. 29	Dec. 17	19	5.02	..	..	..	Dec. 1
		Dec. 4	Dec. 19	16	3.38	..	..	..	Dec. 11
" . . .2	Felixkirk (Mount St. John) . . . . .								
" . . .5	Scarborough . . . . .								
Northumber-									
land . . . . .3	Newcastle (Leazes Park) . . . . .	Nov. 30	Dec. 17	18	5.93	Nov. 30	Dec. 17	18	Dec. 14
" . . . .6	Ilderton (Lilburn Tower Gdns.) . . . . .	Jan. 20	Feb. 4	16	2.63	..	..	..	Jan. 30
		Feb. 24	Mar. 14	19	5.92	..	..	..	Feb. 27
		Nov. 30	Dec. 17	18	4.88	Nov. 30	Dec. 16	17	Dec. 11
Cumberland . .1	Geltsdale . . . . .	Jan. 19	Feb. 3	16	2.25	..	..	..	Feb. 2
Glamorgan . .6	Treherbert (Tyn-y-waun) . . . . .	Feb. 6	Mar. 1	24	9.68	Feb. 12	Mar. 1	18	Feb. 25

\* At least 15 days, each credited with .01 inch or more.

† At least 15 days, each credited with .04 inch or more.

Table XI.—Rain Spells and Wet Spells in 1937—(con.).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
ENGLAND AND WALES—(cont.).											
Carmarthen . . . 2	Carmarthen (Model & Prac. Sch.)	Feb. 12	Mar. 3	days 20	in. 4.77	Feb. 12	Feb. 28	days 17	in. 6.55	Feb. 21	in. .60
Radnor . . . . 1	Birmingham W. W. (Tyrmynydd)	Feb. 6	Feb. 28	23	8.04	Feb. 6	Feb. 28	23	8.04	Feb. 27	.84
		Mar. 10	Mar. 24	15	4.14	Mar. 10	Mar. 24	15	4.14	Mar. 16	.83
Denbigh . . . . 2	Denbigh (Garn)	Feb. 12	Mar. 2	19	4.19	Feb. 12	Mar. 2	19	4.19	Feb. 27	.73
Merioneth . . . 4	Dolgellau (Bontddu)	Feb. 10	Mar. 2	21	7.02	Feb. 10	Mar. 2	21	7.02	Feb. 28	1.28
Anglesey . . . .	Llanerchymedd (Ll'diarth Es.)	27.xii.'36	Jan. 23	28	4.56	Jan. 2	Jan. 23	22	4.02	Feb. 12	.52
		Feb. 11	Mar. 4	22	4.49	Feb. 11	Mar. 4	21	4.47	Feb. 15	.65
		Nov. 29	Dec. 27	29	4.62	Nov. 29	Dec. 27	29	4.62	Dec. 10	.60
CHANNEL ISLANDS											
Guernsey . . . .	St. Peter Port (Grange Road)	Feb. 12	Mar. 1	18	3.44	Feb. 12	Mar. 1	18	3.44	Feb. 26	.40
SCOTLAND											
Berwick . . . . 4	Marchmont House	Jan. 20	Feb. 4	16	2.38	Jan. 20	Feb. 4	16	2.38	Jan. 31	.31
		Feb. 24	Mar. 14	19	4.01	Feb. 24	Mar. 14	19	4.01	Mar. 1	.64
		Nov. 30	Dec. 16	17	5.52	Nov. 30	Dec. 16	17	5.52	Dec. 13	1.32
Renfrew . . . . 3	Greenock (Prospect Hill)	28.xii.'36	Jan. 12	16	6.63	28.xii.'36	Jan. 12	16	6.63	Jan. 12	.85
Stirling . . . . 1	Falkirk (Westbank)	Jan. 15	Feb. 9	26	3.87	Jan. 15	Feb. 9	26	3.87	Feb. 8	.71
Argyllshire . . . 8	Lochgilphead (Pottaloch)	June 24	July 9	16	4.82	June 24	July 9	16	4.82	July 2	1.65
" . . . . 14	Islay (Eallabus)	May 18	June 8	22	3.68	May 18	June 8	22	3.68	June 2	.72
" . . . . 14	Mull (Gruline)	28.xii.'36	Jan. 13	17	7.97	28.xii.'36	Jan. 13	17	7.97	Jan. 11	1.15
		Jan. 30	Feb. 22	24	6.14	Jan. 30	Feb. 22	24	6.14	Feb. 4	.74
		May 18	June 28	22	5.56	May 18	June 28	22	5.56	May 21	.83
" . . . . 14	Tiree	Feb. 8	Feb. 22	15	2.29	Feb. 8	Feb. 22	15	2.29	Feb. 12	.38
Perthshire . . . 11	Aberfeldy (Dall Avon)	Jan. 20	Feb. 5	17	6.51	Jan. 20	Feb. 5	17	6.51	Jan. 20	1.11
Aberdeen . . . 1	Balmoral Castle Gardens	Jan. 20	Feb. 5	17	8.34	Jan. 20	Feb. 5	17	8.34	Jan. 24	2.65
		Nov. 30	Dec. 16	17	3.51	Nov. 30	Dec. 16	17	3.51	Dec. 16	.71
" . . . . 2	Aberdeen Observatory	Jan. 16	Feb. 4	20	4.14	Jan. 16	Feb. 4	20	4.14	Jan. 24	.70
" . . . . 4	Peterhead (Forehill Works)	Jan. 16	Feb. 3	19	3.76	Jan. 16	Feb. 3	19	3.76	Jan. 24	.79
Morayshire . . 2	Fochabers (Gordon Castle)	Jan. 20	Feb. 3	15	2.19	Jan. 20	Feb. 3	15	2.19	Jan. 24	.78
Inverness . . . 3	Cluny Castle	Feb. 2	Feb. 22	21	3.80	Feb. 2	Feb. 22	21	3.80	Feb. 19	.59
" . . . . 16	Fort William (The Factory)	28.xii.'36	Jan. 13	17	10.16	28.xii.'36	Jan. 13	17	10.16	Jan. 3	1.45
" . . . . 18	Skye (Portree)	29.xii.'36	Jan. 13	16	5.42	29.xii.'36	Jan. 13	16	5.42	Jan. 3	.90
Ross and Cromarty 10	Stornoway (C. G. Station)	29.xii.'36	Jan. 23	25	5.55	29.xii.'36	Jan. 23	25	5.55	Jan. 21	.89
		Feb. 9	Feb. 23	15	2.78	Feb. 9	Feb. 23	15	2.78	Feb. 20	.59
		Oct. 13	Oct. 27	15	1.39	Oct. 13	Oct. 27	15	1.39	Oct. 23	.46

\* At least 15 days, each credited with .01 inch or more.

† At least 15 days, each credited with .04 inch or more.

Table XI.—Rain Spells and Wet Spells in 1937—(con.).

County and River Division.		Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
			Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
SCOTLAND—(cont.).												
Sutherland . . . 1	Laig . . . . .	Mar. 15	Apr. 2	days 19	in. 2.09	..	..	days ..	in. ..	Mar. 16	in. .54	
Caithness . . . 3	Thurso (Buckies) . . . . .	Jan. 18	Feb. 2	16	3.57	..	..	..	..	Jan. 24	.65	
IRELAND												
Co. Cork . . . . 8	Roches Point (C.G. Station) ..	Jan. 15	Feb. 3	20	6.74	Jan. 15	Jan. 31	17	6.01	Jan. 26	.77	
" . . . . . 9	Mallow (Longueville) . . . . .	28.xii.'36	Feb. 3	38	12.27	..	..	..	..	Jan. 21	1.75	
Co. Kerry . . . 3	Valentia Observatory . . . . .	Feb. 6	Feb. 28	23	4.48	..	..	..	..	Feb. 21	.68	
Co. Tipperary 1	Nenagh (Castle Lough) . . . . .	28.xii.'36	Feb. 3	38	13.63	..	..	..	..	Jan. 23	1.57	
" . . . . . 3	Cashel (Ballinamona) . . . . .	July 8	July 24	17	5.04	..	..	..	..	Jan. 22	.92	
Co. Wexford . 4	Gorey (Courtown House) . . . . .	Feb. 5	Mar. 1	25	4.65	..	..	..	..	Feb. 26	.49	
		Feb. 10	Feb. 28	19	3.76	..	..	..	..	Feb. 21	.58	
		29.xii.'36	Jan. 13	16	2.98	..	..	..	..	Jan. 11	.85	
		Sept. 11	Sept. 26	16	1.93	..	..	..	..	Sept. 17	.24	
										Sept. 21		
Co. Dublin . . . 2	Dublin City (Phoenix Park) . . .	Mar. 4	Mar. 25	22	4.51	..	..	..	..	Mar. 11	1.37	
Co. W' Meath 1	Mullingar (Belvedere Ho.) . . .	Feb. 12	Feb. 27	16	3.77	..	..	..	..	Feb. 26	.85	
Co. Mayo . . . 4	Mallaranny . . . . .	Jan. 10	Jan. 26	17	3.96	..	..	..	..	Jan. 12	.77	
		Jan. 29	Mar. 2	33	7.91	Jan. 31	Mar. 2	31	7.84	Feb. 17	.71	
		Mar. 11	Mar. 26	16	1.76	..	..	..	..	Mar. 15	.38	
" . . . . . 5	Delphi Lodge . . . . .	26.xi.'36	Jan. 26	62	31.53	9.xii.'36	Jan. 26	49	26.61	13.xii.'36	2.25	
		Feb. 6	Feb. 21	16	6.03	Feb. 6	Feb. 21	16	6.03	Feb. 15	1.30	
		Mar. 10	Mar. 26	17	3.03	Mar. 10	Mar. 26	17	3.03	Mar. 16	.72	
		Aug. 3	Aug. 19	17	4.89	..	..	..	..	Aug. 5	1.85	
Co. Sligo . . . . 2	Collooney (Markree Castle) . . .	Jan. 30	Mar. 2	32	5.64	Feb. 7	Feb. 28	22	4.72	Feb. 25	.55	
Co. Ferm'gh 1	Newtownbutler (Crom Castle)	July 4	July 27	24	4.50	..	..	..	..	July 5	.93	
Co. Down . . . 2	Seaford (Markree Castle)	Feb. 7	Mar. 7	29	3.87	..	..	..	..	Feb. 12	.45	
Co. Antrim . . 5	Ballymena (Harryville) . . . . .	July 11	July 27	17	1.90	..	..	..	..	July 14	.61	
		Feb. 6	Feb. 28	23	5.27	..	..	..	..	Feb. 25	.74	
		June 27	July 15	19	3.74	..	..	..	..	July 2	1.05	
Co. Tyrone . . 3	Omagh (Edenfel) . . . . .	Jan. 28	Mar. 7	39	4.86	Feb. 2	Feb. 28	27	4.43	Feb. 12	.51	
Co. Donegal . 2	Buncrana (Rectory) . . . . .	Feb. 2	Mar. 7	34	4.99	Feb. 3	Feb. 28	26	4.58	Feb. 24	.52	
		Dec. 1	Dec. 15	15	2.56	..	..	..	..	Dec. 10	.58	

\* At least 15 days, each credited with .01 inch or more.

† At least 15 days, each credited with .04 inch or more.

## 5. DURATION OF RAINFALL IN 1937.

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The duration of rainfall is obtained from measurements of the records of autographic gauges. On these records the amount of rain is measured vertically and the duration of the rainfall is measured horizontally, in accordance with scales which are printed upon the charts before they are placed in position in the gauges. The pen of an autographic gauge writes a horizontal line on the record during such time as no rain is falling, and it writes a more or less sloping line whenever rain is passing into the receiver of the gauge.

The duration of rainfall discussed in this section is defined as the length of time during which rain is falling at a rate not less than 0.1 mm. per hour, *i.e.*, .004 in. per hour. The tabulations at all the official stations are made according to this convention, which was first brought into general use in *British Rainfall*, 1920. It was adopted because during very light rainfall it was found to be almost impossible to decide upon the exact point on the record where the change from "no rain" to "rain" occurred. By taking a definite limiting slope of the trace as the criterion this difficulty is, to a great extent, avoided and it is found possible to obtain comparable measurements from different gauges and from different observers. The limit of 0.1 mm. (.004 in.) per hour is low enough to ensure that no fall of practical importance is excluded.

The list of stations reporting duration of rainfall for 1937 is given in Tables XII and XIII. These tables have been arranged in this volume so as to give information of the total duration of rainfall and of the mean rate of rainfall for the same stations at one opening. The distribution of the stations for 1934 was shown on a map on p. 42 of *British Rainfall*, 1934. The list is the same as that for 1936 apart from the following deletions and additions:—Complete records are no longer available for Leatherhead, Kingston (Sewage Works), Ramsgate, Greenford, Harpsden (Cray), Chagford (Metherall), and Bristol (Victoria Park); while additional records have been received from the Surrey County Council for Caterham, Woodcote Park and Beddington Park, and through the initiative of the Surrey County Council from the local authorities at Wimbledon, Sutton, Epsom, Worcester Park, Old Malden, and Morden. Mr. E. L. Kelting (Engineer to the Cheshire Rivers Catchment Board), has been responsible for two complete returns for 1937, and four additional returns from gauges set up during the year. The important series of records from recording gauges both in Surrey and Cheshire add materially to our knowledge both as to the duration and the intensity of rains in these areas. The Water Engineers at Taf Fechan and Bristol, and of the Barnet District Gas and Water Co. have contributed

returns for their localities. Local authorities at Nelson, Cheltenham and Bexley Heath have also forwarded returns. The Middlesex County Council have supplied additional returns for Stanmore and the Mogden Works at Isleworth. For 1937 the net gain is fifteen, of which all are in England, apart from one in Wales.

Complete records from several stations were obtained from the Dines Tilting Syphon, which is now being adopted as the standard Meteorological Office pattern recording rain-gauge. A diagram showing the principle of the gauge is given in *British Rainfall*, 1936, p. 35. A description of the gauge also appears in the 1934 edition of the *Meteorological Observer's Handbook*, p. 126, and in the *Meteorological Magazine*, 1935, pp. 237-8.

Hourly total values of the duration of rainfall, and totals for the days and months commencing at midnight, for the four Observatories Kew, Eskdalemuir, Aberdeen and Valentia, are to be found in the *Observatories' Year Book*.

Table XII sets out the duration of rainfall expressed in hours at 116 stations in the British Isles, for each month and for the whole year of 1937. For the purposes of this table the month commences either at 7 a.m. or 9 a.m. G.M.T. on the first day of the month and ends at the same hour on the first day of the following month. The station with the highest aggregate duration for the year is Snowdon (Cwm Dyli) with a duration of 1,156 hours. This period is equivalent to a total of about 48 days, or just over 3 hours per day throughout the year. The only other stations with aggregates reaching or exceeding 1,000 hours were Glenleven, Pontsticill, Kirriemuir, Valentia and Eskdalemuir with 1,103, 1,101, 1,092, 1,086 and 1,068 hours respectively. The smallest aggregates for the year occurred at stations in the Midlands, *viz.*, West Bromwich, Sutton Bonington, and Rotherham, where about 440 hours, or rather more than one hour per day, were recorded.

The month of least duration was July or August over most of England and Wales, but in Scotland and parts of Ireland June gave the least amount. September gave least at several stations in the north of England, and May least in the northern half of Ireland. Eight stations recorded totals of less than 10 hours for August, Rotherham with two hours recording the smallest total for the year. Rotherham and Birmingham (Erdington) also had less than 10 hours rain in June.

The month of longest duration was February over most of England and Wales, southern Scotland and the north of Ireland. January gave the longest duration in the south-east of England, over the south of Ireland and the north of Scotland. The only months during which no station reported as many as 100 hours of rainfall were May, August and November. For June and July there were only a few stations

(Continued on p. 38.)



Table XII.—Duration of Rainfall at 116 Stations during 1937. (Monthly and Annual values.)

County and River Division.	Station.	Pattern of Gauge.	H't above Sea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
			ft.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
London	2 Kensington Palace.....	Hyeto	80	86	102	63	68	55	19	16	10	32	41	32	77	601
"	2 Fulham (Bishops Park) .....	Casella	15	75	83	59	49	41	18	14	11	23	36	22	57	488
"	2 Hampstead Observatory .....	Hyeto	451	91	104	68	67	59	26	14	18	38	50	32	88	655
"	2 St. Pancras (Camden Square) ..	Hyeto	111	73	90	62	60	53	20	13	14	27	36	22	64	534
Surrey	4 Caterham (Alderstead Heath)	Dines, T. S.	577	111	123	82	80	58	27	22	20	48	57	35	105	768
"	4 Woodcote Park Golf Club ...	Dines, T. S.	450	113	108	88	68	61	29	24	23	49	54	30	87	734
"	4 Croydon (Airport) .....	Nat. Syphon	217	133	115	84	74	78	29	14	18	49	57	31	91	773
"	4 Beddington Park .....	Dines, T. S.	108	102	92	82	64	60	30	15	17	42	49	25	76	654
"	4 Wimbledon (Durnsford Road)	Hyeto	58	78	74	60	42	47	23	15	12	28	33	17	62	491
"	5 Sutton (Sewage Works) .....	Dines, T. S.	99	94	90	81	59	56	29	14	21	34	49	19	63	609
"	5 Epsom (Ruxley Lane Sew. W.)	Hyeto	76	90	78	56	46	47	23	17	11	35	36	15	59	513
"	5 Worcester Park (Sew. Works)	Dines, T. S.	68	93	97	83	54	53	20	15	20	36	44	23	68	606
"	5 Old Malden (Sports Ground) ..	Hyeto	64	112	96	73	58	47	21	17	16	38	43	22	63	606
"	5 Morden (Recreation Ground)	Dines, T. S.	117	62	84	65	66	51	29	14	16	34	37	18	74	550
"	5 Kew Observatory .....	Beckley	20	84	90	64	54	45	23	17	14	28	34	26	64	543
Kent	1 Dover (Waterloo Crescent) ..	Hyeto	22	84	79	108	58	46	16	19	10	40	34	39	109	642
"	2 Lympne (Airport) .....	Dines, T. S.	346	117	97	94	57	46	16	25	12	46	32	36	103	681
"	2 Manston (Aerodrome) .....	Nat. Syphon	142	114	87	87	51	48	17	21	13	44	42	30	86	640
"	4 Strood Waterworks .....	Nat. Syphon	112	96	96	80	53	66	22	15	11	41	42	41	75	638
"	5 Bexley Heath (Danson Park)	Hyeto	161	81	65	59	54	55	18	13	8	19	27	36	64	499
Hampshire	4 Calshot (Aerodrome) .....	Nat. Syphon	9	129	120	65	55	47	12	30	17	35	52	52	100	714
"	7 Petersfield (Stoner Hill) .....	Hyeto	750	168	129	85	87	52	18	27	16	45	53	47	84	811
"	8 South Farnborough (R.A.E.) ..	Hyeto	237	124	132	74	63	44	20	16	16	45	46	32	72	684
Middlesex	1 Twickenham Refuse D. Wks..	Hyeto	38	79	86	60	47	46	25	14	11	26	34	29	57	514
"	1 Isleworth (Mogden Works) ..	Dines, T. S.	33	83	102	66	64	48	22	17	11	27	34	26	62	562
"	1 Hanwell .....	Hyeto	36	81	99	69	62	49	32	17	17	32	39	24	74	595
"	1 Acton Cemetery .....	Nat. Syphon	100	73	89	58	58	42	19	11	17	26	32	23	61	509
"	1 Hayes Sewage Works .....	Hyeto	124	77	99	55	(60)	53	23	17	18	34	31	21	42	530
"	1 Edgware M.C.C. Depot .....	Hyeto	179	90	113	68	61	57	20	22	14	40	34	23	63	605

Table XIII.—Mean Rate of Rainfall at 116 Stations during 1937. (Monthly and Annual values.)

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
London	Kensington Palace	.038	.040	.046	.034	.045	.095	.042	.191	.045	.062	.042	.054	.048
"	Fulham (Bishops Park)	.045	.046	.053	.045	.061	.110	.040	.083	.073	.070	.059	.060	.056
"	Hampstead Observatory	.043	.042	.043	.041	.049	.097	.047	.151	.047	.053	.048	.042	.049
"	St. Pancras (Camden Square)	.048	.048	.048	.044	.055	.071	.041	.096	.057	.061	.058	.061	.054
Surrey	Caterham (Alderstead Heath)	.053	.041	.047	.043	.040	.069	.048	.113	.075	.059	.066	.044	.052
"	Woodcote Park Golf Club	.046	.044	.042	.041	.044	.059	.043	.061	.054	.066	.070	.051	.049
"	Croydon (Airport)	.040	.041	.039	.034	.032	.060	.051	.136	.049	.058	.061	.049	.046
"	Beddington Park	.044	.044	.043	.038	.046	.070	.054	.177	.063	.066	.064	.057	.053
"	Wimbledon (Durnsford Road)	.047	.052	.045	.046	.050	.086	.036	.093	.084	.075	.073	.058	.057
"	Sutton (Sewage Works)	.048	.044	.041	.039	.048	.065	.056	.176	.056	.061	.077	.073	.056
"	Epsom (Ruxley Lane Sew. Works)	.048	.049	.049	.048	.052	.086	.060	.162	.049	.070	.089	.071	.059
"	Worcester Park (Sew. Works)	.045	.043	.036	.039	.044	.091	.042	.134	.046	.060	.064	.062	.051
"	Old Malden (Sports Ground)	.037	.044	.036	.035	.052	.086	.043	.121	.044	.060	.067	.069	.050
"	Morden (Recreation Ground)	.076	.049	.043	.036	.050	.068	.053	.199	.049	.078	.077	.056	.059
"	Kew Observatory	.045	.045	.043	.036	.048	.078	.056	.213	.073	.070	.054	.054	.055
"	Dover (Waterloo Crescent)	.060	.063	.048	.043	.087	.099	.113	.118	.087	.092	.044	.058	.064
Kent	Lympne (Airport)	.041	.049	.038	.050	.062	.085	.052	.105	.049	.066	.036	.055	.050
"	Manston (Aerodrome)	.035	.040	.040	.041	.068	.132	.042	.119	.061	.066	.039	.061	.051
"	Strood Waterworks	.047	.044	.040	.045	.044	.129	.088	.124	.040	.056	.033	.053	.050
"	Bexley Heath (Danson Park)	.040	.055	.049	.039	.058	.114	.054	.060	.063	.074	.050	.054	.054
Hampshire	Calshot (Aerodrome)	.047	.041	.049	.042	.056	.077	.043	.052	.044	.053	.042	.061	.049
"	Petersfield (Stoner Hill)	.059	.054	.058	.047	.074	.079	.050	.076	.057	.084	.066	.056	.060
"	South Farnborough (R.A.E.)	.049	.033	.055	.031	.057	.098	.048	.105	.049	.055	.054	.057	.049
Middlesex	Twickenham Refuse D. Works	.045	.043	.041	.036	.044	.085	.040	.337	.064	.068	.047	.061	.056
"	Isleworth (Mogden Works)	.040	.039	.040	.030	.042	.093	.052	.238	.075	.065	.057	.056	.051
"	Hanwell	.046	.043	.041	.035	.050	.049	.062	.103	.059	.058	.061	.049	.049
"	Acton Cemetery	.052	.045	.048	.039	.060	.098	.062	.188	.062	.079	.060	.052	.058
"	Hayes Sewage Works	.047	.040	.049	.037	.051	.077	.057	.063	.062	.083	.062	.072	.053
"	Edgware M.C.C. Depot	.041	.039	.044	.047	.055	.098	.030	.108	.043	.075	.063	.057	.050

Table XII.—Duration of Rainfall at 116 Stations during 1937—(con.).

County and River Division.	Station.	Pattern of Gauge.	H't. above Sea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
			ft.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
Middlesex	1 Stanmore.....	Hyeto	281	74	98	76	70	61	22	20	13	34	29	28	79	604
"	2 Palmers Gn. (Broomfield Park)	Casella	138	70	(95)	60	76	56	20	11	10	21	32	20	60	531
Herts.	2 Barnet (Sewage Works) .....	Hyeto	295	77	115	84	73	61	25	19	19	37	42	39	77	668
"	2 North Mimms P.S. ....	Dines, T. S.	254	82	96	60	71	59	24	25	18	41	47	40	74	637
"	2 Harpenden (Rothamsted) ..	Nat. Syphon	420	93	102	57	64	48	18	24	17	36	31	37	54	581
Bucks.	3 Eton (Tangier Island) .....	Nat. Syphon	78	69	79	61	46	38	22	15	12	35	36	19	42	474
Oxon.	3 Upper Heyford (Aerodrome) .	Nat. Syphon	408	97	140	80	96	54	21	24	11	48	51	41	67	730
Beds.	3 Bedford (Bedford Park) .....	Nat. Syphon	117	67	106	78	52	59	20	21	26	31	37	37	48	582
Essex.	1 Leyton Sewage Works.....	Hyeto	22	88	94	77	71	75	22	22	19	27	34	30	77	636
"	2 Ilford (Valentines Park) .....	N. & Z. Float	43	94	103	68	61	59	20	18	8	18	23	24	64	560
"	5 Colchester (Waterworks) .....	Nat. Syphon	38	90	83	56	58	39	19	22	13	35	22	26	55	518
Suffolk	2 Copdock .....	Casella	164	81	82	61	68	41	10	20	20	41	30	29	61	544
"	3 Felixstowe (Aerodrome) .....	Nat. Syphon	15	(79)	93	64	66	51	16	22	18	37	33	33	69	581
"	5 Mildenhall (Aerodrome) .....	Nat. Syphon	19	69	79	80	75	44	21	29	31	36	29	35	81	609
Wilts.	3 Salisbury (Sewage Works) .....	Nat. Syphon	147	123	121	63	58	45	16	27	16	43	67	42	74	695
"	3 Porton (W.D. Ex. Station) ..	Hyeto	363	109	104	59	36	28	11	19	13	27	53	25	48	532
"	3 Amesbury (Boscombe D. Aero.)	Nat. Syphon	419	115	122	69	58	45	16	28	15	39	63	43	67	680
Dorset	3 Poole .....	Hyeto	18	99	94	58	47	26	5	30	14	30	61	37	93	594
S. Devon	2 Plymouth (Mt. Batten Aero.) .	Nat. Syphon	82	100	117	75	65	51	20	37	15	39	47	49	82	697
"	4 Princetown (H.M. Prison) .....	Nat. Syphon	1430	162	213	83	93	53	35	74	17	..	..	..	..	..
"	5 Moretonhampstead .....	Nat. Syphon	798	176	141	105	97	50	21	24	18	45	53	50	71	851
Cornwall	2 Falmouth Observatory .....	Beckley	167	143	156	83	68	38	24	41	9	42	41	45	104	794
Somerset	1 Litton (Sherborne Res.) .....	Dines, T. S.	340	127	130	95	72	46	18	34	24	32	65	58	73	774
Gloucester	3 Cheltenham (Montpellier G.) .	N. & Z. Float	216	68	87	75	43	34	12	19	11	28	54	27	52	510
"	5 Horfield .....	Hyeto	206	67	107	60	44	42	15	36	12	33	61	42	46	565
Hereford	1 Ross-on-Wye .....	Hyeto	224	75	85	71	35	35	14	23	12	34	59	31	47	521
Stafford	3 West Bromwich .....	Hyeto	543	54	64	43	46	34	11	20	15	35	38	29	45	434
"	3 Cannock (Longford Lane S.F.)	Hyeto	400	61	84	52	55	50	14	25	14	40	46	35	58	534
"	5 Mayfield .....	Casella	374	80	133	55	67	43	28	30	14	33	50	44	64	641

Table XIII.—Mean Rate of Rainfall at 116 Stations during 1937—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
Middlesex .....	Stanmore .....	.051	.044	.036	.040	.052	.096	.036	.107	.068	.089	.049	.041	.050
" .....	Palmers Green (Broomfield Park) ..	.054	(.046)	.041	.040	.049	.092	.052	.120	.075	.071	.070	.059	.054
Herts. ....	Barnet (Sewage Works) .....	.051	.038	.034	.041	.043	.081	.036	.092	.039	.059	.036	.052	.046
" .....	North Mimms P.S. ....	.053	.044	.048	.045	.049	.088	.059	.125	.044	.059	.032	.050	.052
" .....	Harpenden (Rothamsted) .....	.046	.037	.055	.042	.073	.096	.069	.107	.071	.079	.044	.054	.055
Bucks. ....	Eton (Tangier Island) .....	.067	.059	.052	.047	.071	.105	.077	.118	.065	.085	.062	.080	.068
Oxon. ....	Upper Heyford (Aerodrome) .....	.038	.029	.033	.031	.048	.051	.077	.053	.050	.055	.038	.024	.038
Beds. ....	Bedford (Bedford Park) .....	.039	.031	.039	.045	.067	.090	.056	.066	.068	.073	.045	.043	.049
Essex. ....	Leyton Sewage Works .....	.036	.043	.036	.038	.042	.080	.070	.070	.059	.061	.043	.048	.046
" .....	Ilford (Valentines Park) .....	.031	.037	.036	.044	.054	.098	.092	.122	.053	.090	.053	.055	.049
" .....	Colchester (Waterworks) .....	.040	.040	.050	.048	.056	.111	.060	.069	.067	.067	.061	.068	.054
Suffolk ....	Copdock .....	.053	.041	.045	.043	.066	.143	.058	.096	.038	.061	.040	.055	.053
" .....	Felixstowe (Aerodrome) .....	(.044)	.031	.032	.036	.057	.108	.063	.051	.048	.057	.037	.057	.045
Wilts. ....	Mildenhall (Aerodrome) .....	.036	.032	.036	.038	.050	.070	.089	.060	.069	.052	.042	.034	.045
" .....	Salisbury (Sewage Works) .....	.040	.038	.053	.030	.056	.085	.046	.063	.051	.067	.029	.052	.047
" .....	Porton (W.D. Ex. Station) .....	.055	.046	.071	.056	.088	.132	.057	.084	.078	.084	.050	.074	.065
" .....	Amesbury (Boscombe Down Aero.) ..	.049	.041	.060	.038	.050	.099	.054	.062	.056	.078	.031	.044	.051
Dorset ....	Poole .....	.059	.064	.065	.047	.114	.090	.057	.186	.078	.098	.040	.046	.067
S. Devon. ....	Plymouth (Mt. Batten Aero.) .....	.045	.062	.066	.056	.055	.078	.045	.069	.056	.073	.060	.055	.058
" .....	Princetown (H.M. Prison) .....	.088	.071	.093	.066	.085	.071	.078	.089	..	..	..	..	..
" .....	Moretonhampstead .....	.062	.056	.072	.058	.066	.070	.038	.055	.045	.079	.067	.067	.062
Cornwall ....	Falmouth Observatory .....	.047	.055	.059	.054	.042	.045	.036	.053	.076	.091	.055	.052	.055
Somerset ....	Litton (Sherborne Res.) .....	.046	.055	.053	.052	.054	.087	.101	.039	.069	.059	.043	.034	.053
Gloucester ....	Cheltenham (Montpellier Gdns.) ..	.049	.039	.050	.053	.054	.101	.124	.058	.057	.053	.053	.035	.052
" .....	Horfield .....	.058	.044	.055	.062	.061	.101	.123	.100	.061	.053	.044	.045	.059
Hereford ....	Ross-on-Wye .....	.054	.041	.058	.053	.069	.074	.150	.076	.068	.059	.038	.046	.058
Stafford. ....	West Bromwich .....	.059	.051	.064	.058	.064	.060	.193	.067	.083	.058	.054	.053	.066
" .....	Cannock (Longford Lane Sew. Fm.) ..	.044	.038	.041	.038	.049	.057	.098	.045	.069	.047	.038	.042	.047
" .....	Mayfield .....	.056	.047	.049	.032	.053	.048	.078	.036	.037	.051	.039	.057	.048

Table XII.—Duration of Rainfall at 116 Stations during 1937—(con.).

County and River Division.	Station.	H't above Sea.	Pattern of Gauge.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ft.		hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
Warwick ... 4	Birmingham (Handsworth Pk.)	424	Hyeto	69	60	40	43	34	10	20	13	31	40	36	45	441
" ... 4	" (Erdington Spring Lane)	386	Hyeto	61	62	35	42	33	9	20	8	24	35	29	35	393
Leicester ... 4	Loughborough (Nanpantan R.)	269	Hyeto	55	73	40	70	34	12	25	10	19	40	29	36	443
Lincoln ... 3	Cranwell (Aerodrome) .....	205	Nat. Syphon	98	103	91	91	79	30	39	14	30	45	57	84	761
Nottingham 2	Sutton Bonington (Agric. Coll.)	159	Hyeto	62	64	38	53	38	15	23	8	18	42	36	45	442
" 5	Nottingham (Sneinton P.S.)	83	Fernley	69	88	61	73	37	10	22	6	29	42	29	40	506
" 5	Worksop (Hodsock) .....	56	Halliwell	62	63	35	59	47	13	23	4	23	..	..	..	..
Derby ... 6	Burbage (Lower Burbage) ...	925	Hyeto	92	104	62	48	48	26	31	16	21	41	63	64	616
Cheshire ... 1	Prestbury (Sew. Works) .....	340	Dines, T. S.	49	112	42	86	39	27	25	14	23	24	32	60	533
" ... 1	Dunham Massey (Sew. Works)	55	Dines, T. S.	40	99	35	84	42	32	23	22	14	21	27	34	473
" ... 2	Cholmondeley (Estate Office)	..	Dines, T. S.	..	..	36	95	37	28	20	14	24	29	23	59	..
" ... 3	Birkenhead (Bidston Obs.) ..	300	Nat. Syphon	..	..	43	93	39	34	25	24	34	56	47	81	643
S. Lancs. ... 2	Liverpool (Monument Place) ..	198	Casella	50	111	53	89	50	37	31	33	42	49	49	75	683
" ... 3	Manchester (Barton Airport) ..	70	Nat. Syphon	50	111	37	102	48	35	34	29	23	40	57	57	623
" ... 3	Bolton (Queen's Park) .....	342	Fernley	61	152	47	98	47	34	39	39	34	48	52	53	704
C. Lancs. ... 1	Accrington .....	646	Nat. Syphon	65	130	59	83	30	33	32	38	31	33	45	56	635
" ... 1	Nelson (Walton Lane) .....	540	Hyeto	75	123	44	75	32	40	38	32	41	55	55	59	669
" ... 2	Leyland (Warden Hall) .....	125	Fernley	43	115	44	88	36	40	32	35	36	38	38	54	599
" ... 3	Southport (Hesketh Park) .....	39	Fernley	31	93	30	75	37	30	21	18	25	36	34	39	469
N. Lancs. ... 4	Lancaster (Greg Observatory)	312	Beckley	51	108	37	82	36	51	45	33	45	31	37	43	599
W.R. Yorks. 7	Sheffield W.W. (Rivelin) .....	564	Hyeto	83	101	61	47	46	21	27	13	23	46	75	58	601
" 7	Rotherham (Aldwarke Sew. W.)	71	Hyeto	54	70	50	47	42	8	21	2	22	37	44	48	445
" 7	Langsett Moor (Swinden Lodge)	1038	Nat. Syphon	93	111	71	67	48	30	35	19	35	54	75	75	713
" 8	Dewsbury (Municipal Offices) ..	225	Hyeto	75	84	51	43	44	17	26	12	22	50	52	77	553
" 9	Haworth (Lower Laithe Res.) ..	771	Hyeto	120	183	66	78	49	41	43	35	44	50	67	83	859
" 9	Earby (Sewage Works) .....	426	Hyeto	74	129	95	79	40	61	59	36	44	36	47	107	807
" 9	Skipton (Town Hall) .....	368	Hyeto	91	127	53	76	35	27	52	41	40	36	38	73	689
N.R. Yorks. 2	Felixkirk (Mt. St. John) .....	542	Halliwell	71	90	73	91	47	26	23	22	21	31	43	72	610
" 2	Catterick (Aerodrome) .....	175	Nat. Syphon	94	92	55	102	49	21	26	28	27	38	45	93	670

Table XIII.—Mean Rate of Rainfall at 116 Stations during 1937—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
Warwick . . . . .	Birmingham (Handsworth Park) . . .	.052	.065	.055	.062	.069	.064	.133	.082	.074	.063	.043	.056	.063
" . . . . .	" (Erdington, Spring Lane) . . .	.058	.057	.070	.059	.067	.122	.124	.115	.075	.073	.066	.069	.070
Leicester . . . . .	Loughborough (Nanpantan Res.) . . .	.069	.049	.064	.039	.078	.084	.126	.064	.082	.072	.053	.063	.064
Lincoln . . . . .	Cranwell (Aerodrome) . . . . .	.031	.025	.024	.030	.046	.039	.074	.030	.025	.049	.021	.020	.032
Nottingham . . . . .	Sutton Bonington (Agric. College) . .	.050	.053	.052	.042	.065	.066	.163	.059	.107	.057	.041	.046	.059
" . . . . .	Nottingham (Sneinton P.S.) . . . . .	.044	.044	.031	.034	.066	.045	.130	.035	.032	.087	.040	.062	.050
" . . . . .	Workop (Hodsock) . . . . .	.056	.042	.044	.022	.014	.336	.163	.029	.079	. . .	. . .	. . .	. . .
" . . . . .	Burbage (Lower Burbage) . . . . .	.062	.061	.059	.048	.076	.056	.101	.067	.068	.094	.037	.072	.064
Derby . . . . .	Prestbury (Sew. Works) . . . . .	.061	.045	.050	.037	.047	.053	.148	.068	.059	.070	.043	.039	.052
Cheshire . . . . .	Dunham Massey (Sew. Works) . . . .	.073	.046	.038	.033	.057	.033	.084	.124	.071	.083	.071	.063	.056
" . . . . .	Cholmondeley (Estate Office) . . . . .	. . .	. . .	.054	.033	.070	.056	.104	.142	.077	.091	.062	.067	. . .
" . . . . .	Birkenhead (Bidston Observatory) . .	.037	.038	.031	.030	.088	.053	.063	.068	.061	.041	.031	.036	.043
" . . . . .	Liverpool (Monument Place) . . . . .	.043	.038	.025	.035	.051	.034	.057	.075	.054	.054	.037	.035	.042
S. Lancs. . . . .	Manchester (Barton Airport) . . . . .	.061	.042	.034	.025	.051	.038	.057	.091	.046	.044	.032	.038	.043
" . . . . .	Bolton (Queen's Park) . . . . .	.059	.046	.042	.038	.053	.060	.070	.080	.057	.049	.044	.051	.051
" . . . . .	Accrington . . . . .	.073	.045	.036	.038	.061	.115	.054	.082	.055	.069	.047	.052	.056
C. Lancs. . . . .	Nelson (Walton Lane) . . . . .	.064	.058	.047	.039	.070	.059	.061	.065	.052	.038	.031	.035	.051
" . . . . .	Leyland (Worden Hall) . . . . .	.049	.039	.031	.031	.053	.043	.052	.067	.061	.050	.032	.037	.043
" . . . . .	Southport (Hesketh Park) . . . . .	.053	.045	.046	.038	.051	.063	.077	.085	.075	.066	.043	.056	.053
N. Lancs. . . . .	Lancaster (Greg Observatory) . . . . .	.054	.053	.042	.040	.058	.053	.051	.079	.060	.057	.042	.056	.052
W.R. Yorks. . . . .	Sheffield W.W. (Rivelin) . . . . .	.077	.066	.065	.047	.075	.046	.103	.060	.063	.075	.037	.071	.065
" . . . . .	Rotherham (Aldwarke Sew. Works) . .	.065	.047	.054	.052	.068	.159	.155	.074	.077	.083	.038	.065	.063
" . . . . .	Langsett Moor (Swinden Lodge) . . .	.070	.058	.057	.042	.065	.049	.086	.047	.056	.073	.035	.053	.057
" . . . . .	Dewsbury (Municipal Offices) . . . .	.042	.044	.051	.054	.054	.058	.085	.090	.048	.046	.033	.024	.046
" . . . . .	Haworth (Lower Laithe Res.) . . . .	.049	.046	.043	.037	.060	.057	.061	.077	.036	.053	.030	.029	.046
" . . . . .	Earby (Sewage Works) . . . . .	.050	.047	.022	.034	.052	.031	.035	.049	.028	.051	.033	.013	.035
" . . . . .	Skipton (Town Hall) . . . . .	.044	.045	.054	.039	.071	.055	.050	.049	.044	.051	.035	.035	.046
" . . . . .	Felixkirk (Mt. St. John) . . . . .	.045	.043	.036	.028	.058	.056	.056	.064	.057	.063	.053	.070	.049
N.R. Yorks . . . . .	Catterick (Aerodrome) . . . . .	.029	.034	.051	.030	.053	.054	.053	.035	.030	.045	.043	.035	.038

Table XII.—Duration of Rainfall at 116 Stations during 1937—(con.).

County and River Division.	Station.	Pattern of Gauge.	H't above Sea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
			ft.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
Durham . . . . . 1	Billingham-on-Tees . . . . .	Nat. Syphon	58	35	53	48	66	39	21	24	18	17	23	44	70	458
Glamorgan . . . . . 1	Felindre (Upper Lliw Res.) . . . . .	Hyeto	599	103	117	34	52	41	44	55	18	63	48	53	74	702
" . . . . . 3	Swansea (Victoria Park) . . . . .	Hyeto	28	61	88	31	38	27	24	44	16	47	43	43	55	517
" . . . . . 7	Cardiff (Penylan) . . . . .	Nat. Syphon	205	104	143	69	69	39	17	43	15	35	58	43	49	684
Brecon . . . . . 4	Taf Fechan (Pontsticill) . . . . .	Dines, T. S.	1031	188	216	100	104	44	72	66	27	61	72	63	88	1101
" . . . . . 7	Cray Reservoir . . . . .	Halliwell	1044	131	133	86	74	41	41	46	20	48	58	59	110	847
Flint . . . . . 1	Sealand (Aerodrome) . . . . .	Dines, T. S.	17	63	131	69	99	51	31	33	26	42	57	68	72	742
Merioneth . . . . . 1	Bala (Tegid Street) . . . . .	Nat. Syphon	537	116	188	59	80	29	36	24	14	29	52	35	75	737
Carnarvon . . . . . 5	Snowdon (Cwm Dyli) . . . . .	Beckley	310	146	220	102	152	34	77	74	39	66	60	67	119	1156
Anglesey . . . . . 7	Holyhead (Salt Island) . . . . .	Dines, T. S.	26	72	137	39	60	28	56	44	27	48	83	41	68	703
Dumfries . . . . . 5	Eskdalemuir Observatory . . . . .	Beckley	794	172	145	78	82	44	103	99	50	69	70	33	123	1068
Berwick . . . . . 3	Swinton House . . . . .	Hyeto	200	44	77	80	28	36	36	44	51	23	41	16	80	556
Midlothian . . . . . 5	Boghall (Coll. of Agriculture) . . . . .	Hyeto	646	68	95	61	43	31	33	56	50	33	68	9	66	613
Lanark . . . . . 4	Crawford (Camps Res.) . . . . .	Nat. Syphon	970	150	77	27	53	27	51	66	52	56	72	13	79	723
Ayr . . . . . 3	Kilmarnock (Kay Park) . . . . .	" *	132	75	82	17	35	19	55	56	42	41	43	10	36	511
Renfrew . . . . . 2	Renfrew (Abbotsinch) . . . . .	Dines, T. S.	21	99	108	29	49	26	54	69	58	57	69	15	60	693
" . . . . . 3	Greenock (Prospect Hill) . . . . .	Hyeto	200	116	93	31	47	23	82	104	78	105	98	23	67	867
Argyll . . . . . 4	Glenleven (Blackwater Dam) . . . . .	Hyeto	1072	252	135	34	69	57	102	107	73	107	77	41	49	1103
" . . . . . 14	Tiree . . . . .	Hyeto	22	84	60	31	50	37	48	67	55	66	49	36	58	641
Fife . . . . . 3	Leuchars (Aerodrome) . . . . .	Nat. Syphon	30	71	83	52	66	36	40	66	57	31	78	14	58	652
Angus . . . . . 1	Kirriemuir (Lintrathen) . . . . .	Nat. Syphon	700	177	99	90	78	42	54	118	83	91	130	36	94	1092
Aberdeen . . . . . 1	Balmoral Castle Gardens . . . . .	Nat. Syphon	927	175	78	126	31	25	20	59	49	25	77	22	86	773
" . . . . . 2	Aberdeen Observatory . . . . .	Beckley	79	143	85	94	52	33	35	72	42	32	69	44	77	778
" . . . . . 2	Dyce (Crabstone) . . . . .	Hyeto	300	121	67	76	45	24	31	62	29	26	55	36	68	640
Shetland . . . . .	Lerwick Observatory . . . . .	Hyeto	269	130	100	69	46	36	92	43	39	52	67	60	76	810
Cork . . . . . 7	Cork (University College) . . . . .	Hyeto	64	165	111	105	93	35	23	48	26	46	47	80	52	831
Kerry . . . . . 3	Valentia Observatory . . . . .	Beckley	30	150	145	75	82	49	41	133	65	111	42	98	95	1086
Armagh . . . . . 5	Armagh (Observatory) . . . . .	Beckley	209	126	130	93	80	39	66	86	50	64	71	37	98	940
Antrim . . . . . 5	Aldergrove (Aerodrome) . . . . .	Nat. Syphon	238	97	95	78	61	21	42	62	48	33	49	23	75	684

\* Private construction.

Table XIII.—*Mean Rate of Rainfall at 116 Stations during 1937—(con.).*

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
Durham . . . . .	Billingham-on-Tees . . . . .	.039	.042	.049	.032	.062	.070	.049	.063	.088	.054	.047	.054	.050
Glamorgan . . . . .	Felindre (Upper Lliw Res.) . . . . .	.085	.070	.086	.072	.074	.106	.079	.085	.074	.084	.079	.056	.078
" . . . . .	Swansea (Victoria Park) . . . . .	.098	.082	.085	.089	.083	.063	.063	.090	.075	.084	.066	.053	.078
" . . . . .	Cardiff (Penylan) . . . . .	.047	.045	.054	.056	.060	.064	.072	.025	.056	.070	.056	.046	.053
Brecon . . . . .	Taf Fechan (Pontsticill) . . . . .	.058	.044	.040	.043	.050	.031	.072	.057	.050	.061	.054	.049	.050
" . . . . .	Cray Reservoir . . . . .	.096	.079	.073	.059	.067	.066	.064	.042	.057	.061	.054	.047	.068
Flint . . . . .	Sealand (Aerodrome) . . . . .	.041	.037	.028	.032	.052	.039	.043	.057	.038	.043	.026	.036	.037
Merioneth . . . . .	Bala (Tegid Street) . . . . .	.065	.041	.087	.041	.085	.067	.077	.086	.072	.064	.046	.054	.058
Carnarvon . . . . .	Snowdon (Cwm Dyli) . . . . .	.085	.079	.050	.071	.055	.086	.082	.153	.107	.112	.079	.093	.083
Anglesey . . . . .	Holyhead (Salt Island) . . . . .	.045	.033	.040	.032	.027	.042	.049	.059	.062	.077	.046	.059	.048
Dumfries . . . . .	Fskdalemuir Observatory . . . . .	.054	.044	.041	.035	.059	.040	.043	.087	.065	.053	.036	.039	.048
Berwick . . . . .	Swinton House . . . . .	.047	.043	.042	.037	.096	.042	.066	.058	.049	.068	.039	.060	.054
Midlothian . . . . .	Boghall (Coll. of Agriculture) . . . . .	.045	.050	.039	.033	.100	.035	.084	.082	.073	.063	.035	.046	.057
Lanark . . . . .	Crawford (Camps Res.) . . . . .	.062	.049	.048	.034	.068	.044	.065	.067	.041	.076	.045	.040	.055
Ayr . . . . .	Kilmarnock (Kay Park) . . . . .	.061	.058	.051	.049	.082	.059	.089	.079	.063	.066	.059	.073	.066
Renfrew . . . . .	Renfrew (Abbotsinch Aero.) . . . . .	.043	.044	.051	.037	.055	.033	.048	.058	.046	.048	.037	.043	.045
" . . . . .	Greenock (Prospect Hill) . . . . .	.081	.063	.053	.060	.077	.036	.040	.047	.042	.029	.077	.062	.052
Argyll . . . . .	Glenleven (Blackwater Dam) . . . . .	.064	.058	.051	.041	.065	.049	.070	.065	.085	.037	.033	.077	.060
" . . . . .	Tiree . . . . .	.057	.049	.038	.049	.068	.052	.050	.064	.069	.046	.051	.045	.054
Fife . . . . .	Leuchars (Aerodrome) . . . . .	.041	.035	.050	.028	.066	.048	.055	.060	.036	.045	.038	.055	.046
Angus . . . . .	Kirriemuir (Lintrathen) . . . . .	.034	.034	.028	.020	.045	.045	.038	.048	.018	.026	.020	.026	.031
Aberdeen . . . . .	Balmoral Castle Gardens . . . . .	.068	.039	.042	.031	.068	.037	.056	.036	.039	.039	.036	.043	.048
" . . . . .	Aberdeen Observatory . . . . .	.035	.027	.029	.020	.046	.036	.055	.065	.047	.049	.037	.056	.040
" . . . . .	Dyce (Craibstone) . . . . .	.058	.035	.044	.037	.069	.039	.069	.071	.049	.071	.042	.057	.053
Shetland . . . . .	Lerwick Observatory . . . . .	.045	.040	.040	.036	.061	.050	.044	.049	.051	.054	.041	.049	.046
Cork . . . . .	Cork (University College) . . . . .	.055	.042	.057	.037	.055	.030	.035	.123	.066	.053	.045	.047	.051
Kerry . . . . .	Valentia Observatory . . . . .	.079	.050	.066	.041	.068	.049	.066	.046	.060	.060	.057	.053	.059
Armagh . . . . .	Armagh (Observatory) . . . . .	.036	.027	.025	.028	.028	.033	.038	.059	.037	.039	.034	.023	.033
Antrim . . . . .	Aldergrove (Aerodrome) . . . . .	.046	.044	.035	.043	.046	.070	.070	.070	.060	.060	.031	.042	.050



reporting totals exceeding this amount. Values exceeding 200 hours were confined to the months of January and February. Glenleven reported a total of 252 hours in January and Snowdon (Cwm Dyli), Pontsticill and Princetown gave totals of 220, 216 and 213 hours respectively in February. Eighteen monthly totals of between 150 hours and 200 hours were reported for either January or February.

Details of the duration of rainfall are available at Camden Square (London), back to 1881. The large totals recorded during the first five months call for special comment. The duration in January, 1937, of 73 hours was less than that of January, 1936, with 89 hours, but together January and February, 1937, gave the longest duration of rain in the series. The total duration was 163 hours compared with the next longest duration of 161 hours for January and February, 1919. The total January to March, 1937, of 225 hours, and the total January to April, 1937, of 284 hours, were exceeded by the corresponding totals in 1919 of 264 and 322 hours respectively. The total January to May, 1937, of 337 hours was, however, greater than that for the similar period in any other year, the next longest duration being 327 hours in 1919.

Table XIII sets out the mean monthly and annual values of rate of rainfall at each of the stations of Table XII. The rainfall amounts are taken from the ordinary gauge for making daily observations which is set up alongside the recording gauge. The values are obtained by dividing the total fall for the month or year by the duration as given in the preceding table. The mean rates for the year vary from .083 in. at Snowdon (Cwm Dyli), and .078 in. at Upper Lliw Reservoir, in Glamorgan, to .031 in. per hour at Kirriemuir. The highest mean rate was recorded in August at Twickenham, *viz.*, .337 in. per hour. The mean rates in August for Isleworth and Kew were .238 and .213 inch per hour. These high rates were due to the severe thunderstorms to the west of London on August 13th from about 7 h. to 18 h. (*see* Section 6).

*Addendum.*—A duration record has been received from the City Engineer at Peterborough using a Casella self-recording gauge. The monthly totals of duration in hours and of mean rate in inches per hour are given below :—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
64	64	80	54	59	20	23	18	20	36	35	58	531
.039	.039	.038	.042	.058	.069	.086	.043	.048	.062	.041	.038	.046

## 6. HEAVY FALLS IN SHORT PERIODS IN 1937.

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Heavy falls of rain in short periods are of considerable economic importance, for they are frequently of such intensity as to cause extensive flooding, often accompanied by much surface erosion and structural damage to property. Considerable damage may occur as a result of the accumulation of flood water below the area of heaviest rainfall. The amount of the damage depends on a number of other factors, such as the shape of the catchment area, the nature of the ground and vegetation, whether the water finally flows into the river or sea at high or low tide and the relative positions of the towns. In towns the floods may be aggravated by the failure of the drainage system to cope with the demands made upon it. The information given in this section supplements that in Section 7, Heavy Falls on Rainfall Days, which deals with falls of longer duration causing often more widespread flooding.

Since 1908, this section of *British Rainfall* has contained a classification of intense falls into three categories designated "worthy of notice," "remarkable," and "very rare." The classification has been effected by reference to a diagram of which a copy was reproduced on p. 44 of *British Rainfall*, 1935. This diagram indicates by continuous curved lines the lower limits of rainfall which must fall in stated times in order that the fall may be admitted into one of the three categories. The diagram was prepared almost exclusively from eye observations of rainfall duration and from corresponding measurements of rainfall in ordinary rain-gauges.

On pp. 45-46 of *British Rainfall*, 1926, it was pointed out that the frequency of intense falls above the curve denoting the limit of noteworthy falls is in actual fact much greater for small intervals of time (*i.e.*, the left-hand side of the diagram) than for larger intervals (the right-hand side of the diagram). Consideration was therefore given to the question of modifying the curves so that they might represent, as nearly as possible, rainfalls having a uniform frequency of incidence. A new classification-diagram was prepared, full particulars being given in an article in Part IV of *British Rainfall*, 1935.

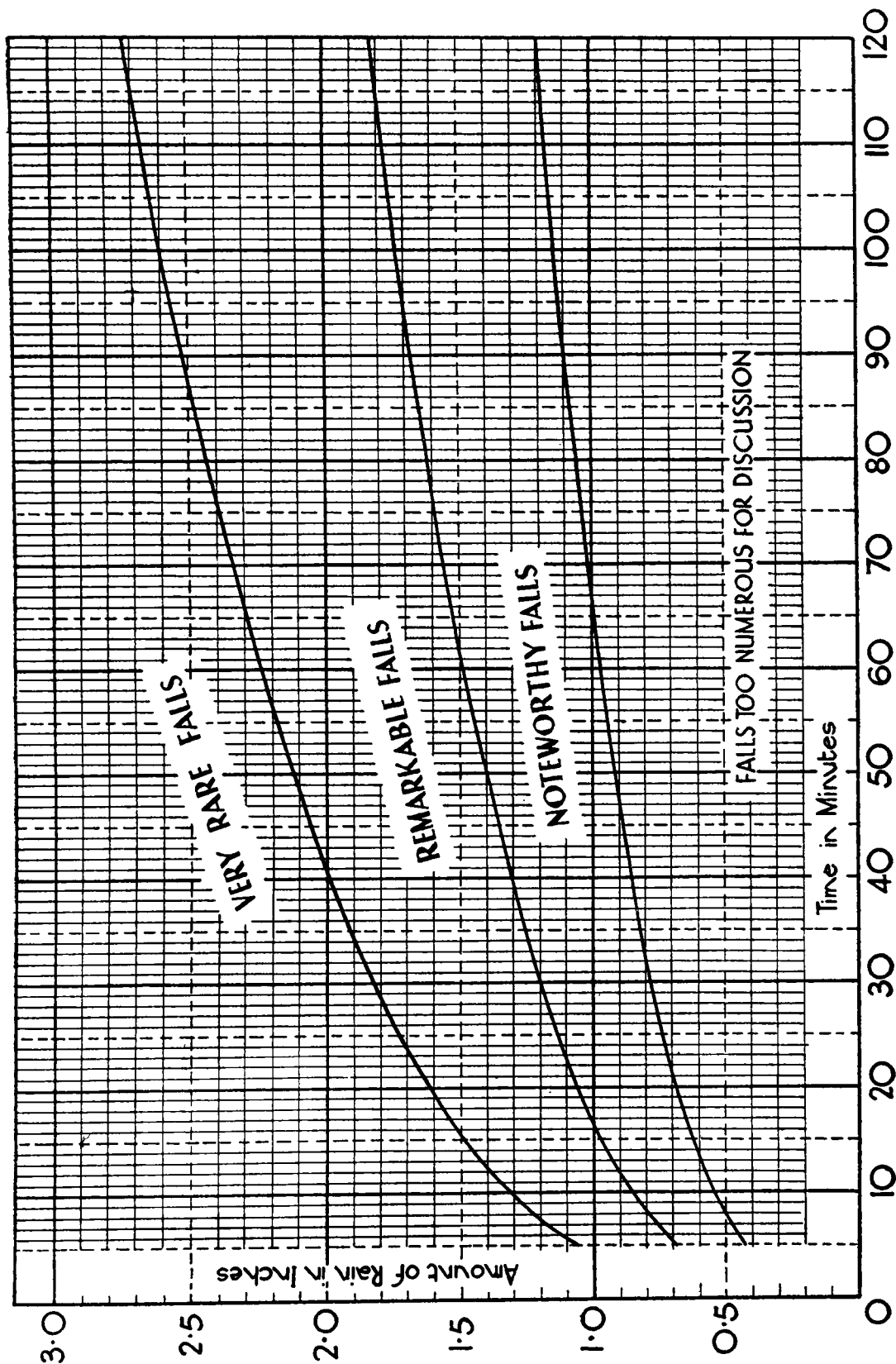
The diagram is reproduced on p. 41 and the lower limits are set out in the table on p. 40. These limits were brought into operation on January 1st, 1936.

*Lower limits of intense Rainfalls for purposes of classification brought into use initially in "British Rainfall," 1936.*

Time	Noteworthy			Remarkable			Very Rare		
	Amount		Rate	Amount		Rate	Amount		Rate
mins.	in.	mm.	in./hr.	in.	mm.	in./hr.	in.	mm.	in./hr.
5 or less ..	.43	10.9	5.16	.68	17.3	8.16	1.06	26.8	12.72
10 " ..	.54	13.8	3.24	.85	21.6	5.10	1.31	33.2	7.86
20 " ..	.68	17.3	2.04	1.06	26.8	3.18	1.61	40.9	4.83
30 " ..	.77	19.7	1.54	1.19	30.3	2.38	1.82	46.2	3.64
40 " ..	.85	21.6	1.27	1.30	33.2	1.95	1.98	50.3	2.97
50 " ..	.91	23.2	1.09	1.40	35.6	1.68	2.12	53.8	2.55
60 " ..	.97	24.5	.97	1.48	37.6	1.48	2.24	56.8	2.24
70 " ..	1.01	25.7	.87	1.55	39.4	1.33	2.34	59.5	2.01
80 " ..	1.05	26.8	.79	1.61	40.9	1.21	2.44	61.9	1.83
90 " ..	1.09	27.8	.73	1.67	42.4	1.11	2.52	64.0	1.68
100 " ..	1.13	28.8	.68	1.72	43.8	1.03	2.60	66.0	1.56
110 " ..	1.16	29.6	.63	1.77	45.0	.97	2.67	67.8	1.46
120 " ..	1.19	30.4	.59	1.82	46.2	.91	2.73	69.4	1.37

A list of the recorded falls of "very rare" intensity of one hour or less, qualifying for inclusion under the new classification, is given in Table XIV. There are three additional entries for 1937, *viz.*, at Spalding on July 19th of 2.14 in. in 25 mins., and 2.14 in. in 30 mins. and at Acton Cemetery on August 13th of 2.25 in. in 60 mins. In Table XV particulars are given of falls recorded in 1937 which reached at least the intensity "worthy of notice." Unlike Table XIV, falls of longer duration than one hour are included, the upper limit being two hours. In general not more than one entry is made for the same shower for any station. The main entry gives the largest amount recorded with a mean intensity "worthy of notice," "remarkable," or "very rare," as the case may be, an entry at the higher rate being in general preferred. In the case of entries ranking as "very rare" additional entries are occasionally included in italics under "worthy of notice" and "remarkable," and in the case of "remarkable" entries under "worthy of notice" also where such information is available. In Table XV additional information was available in only one case. Unless the amount was .43 inch or more, intense falls of less duration than five minutes are not included in the table, since in such cases the error is likely to be relatively large and such falls are not usually of practical importance.

In accordance with practice the geographical distribution of the heavy falls of Table XV is given in the following summary. The analysis probably separates the areas of more frequent and intense



falls from those relatively immune, although it cannot be expected to indicate the actual relative frequency of intense falls in each area.

*Number of Noteworthy Rains of Two Hours' Duration or less.*

		England and Wales.					Scotland.	Ireland.	British Isles.	Per cent of all records.
		S.E.	S.W.	N.E.	N.W.	Total.				
1937	(a) ..	25	21	9	2	57	2	1	60	1.1
	(b) ..	19	4	2	1	27	0	0	26	0.5
	Sums ..	44	25	11	3	84	2	1	86	1.6

(a) Observations made without autographic rain-gauges.

(b) Readings of autographic gauges.

Most of the entries occur in south-east and south-west England. There are only two entries for Scotland and only one for Ireland.

The total number 86 compares with 65 in 1936, which was also appreciably in excess of the mean for the preceding years.

Usually about two-thirds of the total number of intense falls on record have occurred in the three months, June, July and August. In 1937 as many as 80 of the 84 entries occurred in July or August. As many as 33 are for July 15th and 20 for August 13th.

There were no entries in Table XV for the first four months of the year.

The only intense fall for *May* occurred on the morning of the 9th at Newton Poppleford, near Sidmouth, in Devon, when 1.29 inch fell between 6h. and 7h. 30m.

A storm which caused widespread havoc to trees and the windows of houses and churches occurred on May 26th in the Wisbech area. The notes set out below are taken from the *Isle of Ely and Wisbech Advertiser* of May 26th:—"Storm clouds gathered soon after 15h. and following a fusillade of thunder, there came one of the heaviest hail storms in living memory in this part of the country. Water rushed down the sides of the streets at Wisbech. In the Market Place it accumulated across the roadways and eventually left layers of hail-stones three inches in thickness. The full force of the storm struck the southern part of the town first and it did extensive damage in this area. Thousands of panes of glass were broken and the west side of St. Peter's Church suffered severely where glass was forced 10-ft. to 15-ft. inside the church. The walls were damaged, being badly pitted by the wind-driven hail. As the glass had survived hitherto, it may be assumed that a storm of this ferocity, from the same direction, had not been experienced for some hundreds of years." Mr. C. Dann of Wisbech reports that at Hunstanton 2.00 inches of rain fell in about an hour.

The month of *June* also resulted in only one heavy fall, and this was recorded at Torquay (Abbey Park) on the 19th, when Mr. C. Bellingier, the Borough Meteorologist, reports "a storm of great

severity occurred at 11h. 10m. with a cloud burst giving .66 inch in 12 minutes."

On the afternoon of June 12th there was a thunderstorm in the neighbourhood of Hampstead, which resulted in .71 inch in 27 minutes from 14h. 15m. to 14h. 42m. This fall does not qualify for inclusion in Table XV. The storm was accompanied by heavy hail. There was a thunderstorm accompanied by torrential rain, beginning at Berkhamsted at 16h. 15m. and ending at Mill Hill at 16h. 45m. on the same day.

Of the forty-five entries for *July*, 33 are for the 15th, 10 for the 19th, and one each for the 3rd and 18th. St. Swithin's day, July 15th, gave more entries than any other day of the year.

The following account of the storm of the 3rd is taken from the *Sunderland Daily Echo* of July 5th :—"Sunderland and district felt the full force of the severe thunderstorm which approached from the north-west on Saturday afternoon. Road surfaces were torn up in several places and a large part of a 15 ft. high wall collapsed. Hundreds of houses, especially in the low-lying parts of the town, were flooded to a depth of two and three feet."

The entries for July 15th are so numerous and from places situated so far apart that the 15th must rank as the worst day for many years with rain of such intensity and causing such widespread damage. Heavy falls were recorded in fifteen counties consisting of the midland and western counties of England. Most of these counties reported one or two entries of heavy falls, but Somersetshire and Lincolnshire reported 9 and 5 entries respectively. The storms approached from the south-west reaching the south-western counties about 7h. on the morning of the 15th and Lincolnshire and neighbouring counties in the late afternoon. Mr. J. Edmund Clark sends the following details of his experiences at Street in Somerset :—"At 6h. the sky was obscured by low-lying cloud and at 7h. a partial break in the clouds gave ten minutes sunshine. The clouds re-formed and the sky became darker. Thunder was heard about 8h. and rain began at 8h. 20m., increasing in violence at 8h. 25m. and continuing heavy until 8h. 48m. Then the sky quickly began to clear from the south-west and only a normal amount of cloud remained. The total fall during this storm was 1.21 inches. Thunder was again heard at 10h. 20m. and heavy rain was again experienced a little time afterwards. The thunder ceased at 11h. 30m. but the rain continued to fall, increasing slightly in intensity at first. About 19h. the sky began to clear and was entirely clear at 20h." Mr. N. A. Field, of High Street, Evesham in Worcestershire, writes :—"At 8h. 50m. a dense bank of cloud rapidly approached from the south-west and the sky became dark, lights being required in the houses and on the cars in the streets. At 9h. 2m. there was a heavy squall of wind from the west, accompanied by very heavy rain. The amount at 9h. 20m.

was .61 inch. A second storm approached from the south-south-west at 9h. 45m. with a surface wind which was light and from a north-easterly direction. Rain commenced with much thunder at 9h. 50m. and when the gauge was emptied at 10h. 50m. another .82 inch had fallen. This made a total of 1.43 inch in 108 minutes. Continuous moderate rain fell throughout the afternoon and evening until 22h."

The *Birmingham Daily Mail* in the issue of July 15th reports :—" This morning soon after 10h. a violent thunderstorm broke over Birmingham accompanied by heavy rain which caused the gutters to become miniature torrents. The rain continued to fall far into the afternoon but was not so intense as that experienced in other districts. At Stratford-on-Avon at noon after heavy thunder and lightning there was a deluge of rain which temporarily flooded streets and pavements. The storm reached central London at 15h."

The *Bristol Evening Post* of July 15th has the following report :—" Three storms struck Bristol: the first broke just before 9h. and lasted about an hour, during which time many districts were flooded; the second storm broke about an hour later flooding districts where the water had begun to subside; the third and least severe storm came shortly after 14h. After the first storm had ceased, the water, which had flooded many houses, began to subside rapidly after an interval of about half an hour. The traffic began to flow again and it seemed that the roads would be clear in a very short time, apart from the mud which covered everything. Then came the second storm and the water was once more rising rapidly to the despair of the inhabitants. A subsidence of about 50 ft. of the banking of the railway line near Clifton Down Station caused several tons of masonry and earth to fall across the line. Lawrence Hill G.W.R. station was flooded up to platform level for some time and several trains were held up. The River Avon rose four inches in half an hour at Netham Lock and the Floating Harbour level went up by four inches in an hour."

The final edition of the *Dorset Daily Echo and Weymouth Dispatch* of July 15th describes the storm havoc at Weymouth as follows :—" The rain which fell continuously from 11h. to 12h. flooded the Park district of Weymouth to a depth of two feet in places. Water poured into the houses and Weymouth Fire Brigade was called out to help in coping with the rush of storm water. For the first time since 1910 rowing boats had to be used in this part of the town and holiday visitors had to be rowed to their lodgings for lunch. Practically the whole of the low-lying streets in Weymouth were flooded. The Weymouth Weather Bureau reported that in the two and a half hours from the commencement of the storm, 3 inches of rain had fallen."

The *Yorkshire Post* in its issue of the 16th July, when describing the storm damage in Lincolnshire and elsewhere reports :—" Electricity supplies in the north of Lincolnshire have been cut off, road and rail traffic held up, streets flooded and people trapped in their houses

following the worst thunderstorm Lincolnshire has experienced for many years. Damage, to the extent of thousands of pounds, was done by this storm, the main streets being under water in some places to a depth of over two feet. About 17h. the sky darkened and there was violent thunder and lightning followed by torrential rain and a gale. Visibility was reduced to a few yards, the headlights of cars failing to penetrate the falling rain to any appreciable distance. A landslide occurred on the South Park embankment of the main line from Lincoln to Grantham and the line was impassable. The River Witham overflowed in several places, one place nearby being flooded to a depth of four feet. The Foss Dyke near Lincoln rose five feet in an hour. Trees fell in two roads, holding up traffic and breaking down telephone lines. Over 500 lines were dislocated by the storm. In Gloucestershire storms were so severe that at one place schools were closed for the day. During the height of a storm, an R.A.F. bomber crashed in Somerset, blocking the main road, but, fortunately, the occupants escaped uninjured. Another bomber on its way to Yorkshire came down on a farm in Leicestershire and the pilot and observer were injured. A heavy thunderstorm broke over Leeds about 17h. and lasted until 18h. 30m. Vivid lightning occurred and for more than an hour the rain was intense. Moderately heavy rain continued throughout the evening. A large part of Selby in Yorkshire, where violent storms also occurred, had its electricity supplies cut off."

At Boston in Lincolnshire, 5.46 inches of rain fell in 12 hours on this day (see Section 7). There were fifteen cases of remarkable falls on the 15th and one very rare fall, the latter occurring at the Stanton Ironworks Company, Asfordby Hill in Leicestershire.

The only entry for the 18th is for Lingfield in Surrey. Mr. R. G. W. Bush reports:—"In a thunderstorm at 19h. 45m. lasting 12½ minutes we had 1.03 inch of rain. As I left the house to take the measurement a flash of lightning struck and scored a tall Wellingtonia from top to bottom less than 30 feet from me. Altogether a very exciting quarter of an hour on the evening of July 18th." This fall qualifies for inclusion as "remarkable."

Of the entries for July 19th three are reported from Edenbridge in Kent, three from Dorking in Surrey, two from Spalding in Lincolnshire and the other from Essendon Place Gardens in Hertfordshire. Further details of the fall at Spalding are given in Section 7. Mr. J. B. Healing the observer at Essendon reports that there was a thunderstorm between 17h. 50m. and 18h. 30m. during which time 1.25 inch of rain occurred. Mr. J. Mavrogordato writing from Edenbridge, Kent, sends in the following notes:—"1.39 inch fell on July 19th during a thunderstorm between 20h. and 20h. 45m. There had been a very light shower between 16h. and 16h. 30m., but this only gave a trace." The description of the storm in Surrey is given in the *Surrey Advertiser* of the 24th July, as follows:—"Considerable flooding was caused in the Dorking district by a severe thunderstorm



on Monday evening. Rain which was unusually heavy fell for about an hour and was accompanied by thunder and lightning. The fire brigade was called out to deal with the flooding which in the lowest parts of the town was one foot deep. A large amount of debris was floating down the streets as if on a river, and it was not until Tuesday that the streets were cleared of water and debris. Although rain fell heavily for a time Leatherhead missed the full force of the storm." The *Peterborough Standard* of the 23rd July contains the following remarks:—"Peterborough experienced an abnormally heavy rain storm accompanied by thunder and lightning on Monday night, July 19th. The storm was at its height between 19h. and 20h. Mr. J. Shipley Ellis, J.P., F.R.Met.S., recorded .74 inch of rain at Abbeyfields, The Park, but Mr. H. S. Colman of London Road, Felton, only measured .45 inch. This was the second heavy rain during the month since .90 inch had occurred on the 15th. When the storm on the 19th was at its height, the water rose very rapidly in Midgate, the drains being unable to carry away the water, but this was not the only place to suffer. 'Like a river' was the description given to Fitzwilliam Street by eye-witnesses." Mr. J. Rhodes of Horndon-on-the-Hill, Essex, sends the following account:—"On the evening of July 19th two thunderstorms broke over Horndon-on-the-Hill: I was watching the first from my front window when a ball of fire appeared over the garden bed not more than ten or twelve feet from the window accompanied by a deafening crash of thunder that seemed to convulse the whole neighbourhood. It was about eighteen inches in diameter, and a streak of lightning led down from above on the left, while another came from the ground on the right. The ball was as round as the sun and of the same colour. Although it is difficult to judge distance under such exciting conditions, it could not have been so very far away because there were bushes and trees on the other side of the road, higher than the luminous ball, which would have hidden it from me had it been farther off. Two horses were struck and killed during one of the storms of the same evening so perhaps we had a narrow escape. A similar ball struck a house at Laindon about 3 miles from Billericay." Six of the entries on the 19th rank as "remarkable falls" and two as "very rare" falls. The latter occurred at the Grammar School and The Surveyor's Depot of the Urban District Council at Spalding in Lincolnshire.

The number of entries of heavy falls in *August* is 35 on the seven days 4th, 11th, 12th, 13th, 14th, 18th and 30th. There are 20 entries on the 13th, 8 on the 30th, 2 each on the 11th and 12th, and one each on the 4th, 14th, and 18th. The only entry for the 4th is from Mr. W. H. Adams who writes:—"Heavy storms occurred on August 4th, 1.18 inch falling between 14h. 40m. and 15h. 20m. at Crouch End."

The entries on the 11th are from Ely in Cambridgeshire and from Plas Llangoedmore in Cardiganshire. The *Cambridgeshire Times* in

the issue of the 13th reports:—"Ely was the centre of a terrific storm on Wednesday afternoon between 15h. 15m. and 16h. 45m. 1·12 inch was recorded in an hour. The drains were unable to cope with the abnormal rush of water and almost every street in Ely was flooded." Mr. D. Berrington Davies of Plas Llangoedmore, writes:—"1·30 inch of rain fell in under 90 minutes on the afternoon of the 11th. The two entries on the 12th are from Oughtershaw Hall in the West Riding of Yorkshire and Newport in Monmouthshire. Miss G. J. Woodd reports from Oughtershaw Hall:—"At 14h. 50m. there was a sudden downpour of rain with thunder and lightning and hail like pieces of ice. The Wharfe became a torrent, trees and wooden bridges being swept away. In rather less than 2 hours 2·21 inches of rain had fallen." The *South Wales Argus* in the issue of the 13th August reports:—"Heralded by oppressive heat—it was 83° F. in the shade—and a few rumbles from the Somerset coast, a fierce thunderstorm, accompanied by an intense downpour of rain and, later, huge hailstones lashed Monmouthshire on Thursday night. The storm was the worst Newport has experienced since the deluge of 1931. It started shortly before 17h. 30m. and although the full force lasted only half an hour, lightning and thunder continued to flash and rumble intermittently until after midnight. Although rain fell for little more than an hour, the rainfall at Newport on Thursday night amounted to 1·71 inches as measured by the gauge at Friars Street, Newport."

Of the 20 entries for the 13th, 9 are from Surrey, 6 from Middlesex, and 1 each from London, Kent, Suffolk, Lancashire and Londonderry. The *Surrey Comet* in its issue of the 14th reports:—"The storm of yesterday afternoon broke almost without warning. Tremendous black clouds blotted out the brightness which had followed the steady morning rain. The first thunder crashes were astonishingly near at hand and then came rain in torrents. Rapidly the crash of thunder increased in volume, lightning flashed incessantly and in a few minutes the storm was raging furiously overhead. The rain was so heavy that visibility was reduced to a few yards even with car lights. The accumulated water under the railway arches at Kingston station and at Norbiton stopped many cars." The Headmaster of Kingston Grammar School writes:—"We had no rain at Kingston until the storm burst on us at approximately 15h. 15m. Unlike most Thames Valley thunderstorms which have a liking for 'swinging back' towards the Kingston district this storm was intense and apparently almost stationary, with particularly heavy rainfall until about 16h. 45m. From 15h. 15m. to 17h. 15m. 2·15 inches of rain were recorded."

The *Daily Herald* in its issue of the 14th contains the following:—"There was a mile and a half traffic jam on the Great West Road near Brentford; Brentford War Memorial was flooded to a depth of seven feet."

Mr. W. G. Cross, the Borough Engineer at Acton, reports that during the heavy storm on the 13th the following readings were recorded on his automatic rain-gauge :—·5 inch in 5 mins., 1 inch in 10 mins., 1·4 inch in 15 mins., 1·8 inch in 20 mins., 2·05 inches in 30 mins., 2·20 inches in 45 mins., and 2·25 inches in an hour. Only two of these entries are contained in the table although each qualifies for inclusion, the last four ranking as very rare falls.

Mr. C. B. Townend, the engineer to Middlesex County Council, writes :—" On August 13th between 14h. 50m. and 16h. 50m. 1·82 inch of rain was recorded at the Mogden Purification Works at Isleworth."

Lt.-Col. J. M. Rogers writing from Riverhill at Sevenoaks in Kent, reports :—" The heavy falls in August were due to thunderstorms. The 2·09 inches of rain on the 13th fell in less than 2 hours and washed away old gravel paths which have stood for many years."

The *Glasgow Herald* on the 14th reports :—"Almost the whole of Scotland yesterday experienced one of the worst thunderstorms for many years. Much damage and flooding resulted ; Montrose had three fires, two landslides and much flooding ; Arbroath had a church damaged by lightning and at Inverness a house was set on fire and destroyed. Glasgow experienced serious flooding through a heavy cloudburst in the afternoon. The thunderstorm was very fierce over Nairn between 12h. and 13h. Rain, accompanied by hailstones, fell in torrents, and gullies were unable to cope with the large volume of water. In some parts of the town houses and shops were under water to a depth of three and four feet, and considerable damage was done."

The only entry for the 14th\* is from Liverpool and occurred in the early hours ; the autographic gauge kept at Monument Place, Liverpool, by Liverpool Corporation recorded ·85 inch of rain between 2h. 30m. and 2h. 45m. on that day. The *Liverpool Evening Express* of the 14th reports :—" The rainfall in Liverpool was the most abnormal for more than 20 years, according to Corporation official records. Between 22h. last night and 9h. this morning, 1·39 inch of rain fell. After slight flooding in the Bootle, Litherland and Seaforth area yesterday afternoon, further serious flooding occurred shortly before midnight, and barely had the residents left their homes when a cloudburst at 2h. to-day caused the worst flooding yet experienced. There was 8 feet of water in Akenside Street, Bootle, and several houses were flooded. There were reports that several houses were struck during the storm, but no serious damage occurred. Lightning struck the chimney-stack at the home of Mrs. Mary Lynch, in Marsh Lane, and a number of bricks were dislodged. Passengers were unable to enter Seaforth railway station until the railway company placed seats in the flood water to enable them to reach the entrance."

There is only one entry for the 18th and that is from the observer at Esslemont House, Ellon, in Aberdeenshire, who reports that ·96 inch of rain fell in 55 minutes.

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\* *Addendum* :—At Eskdalemuir 1·38 inch fell in 128 minutes on August 14th.

There are 8 entries on the 30th, 3 of which are from Kent, 2 from Surrey and 1 each from Hampshire, Sussex and Lancashire.

Mr. H. Cliffe, B.Sc., sent in details of the heavy storm over Bromley in Kent on this day, and reports that 1·65 inch fell in 82 minutes and 1·36 inch in 30 minutes during the afternoon.

*The Times* on the 31st reports :—" In some parts of London heavy rain, accompanied by hail and violent thunder, lasted an hour. The Wallington and Carshalton fire brigade was called to Croydon Aerodrome to pump away flood water which had gathered near the main building. A pilot arriving from France said that on the whole of the route from the south coast the ground appeared to be covered with hailstones. At Wallington, Surrey, hailstones, some of them measuring ·75 inch in diameter, fell for half an hour. During a thunder-storm at Alton hailstones as large as marbles fell and water flowed through the High Street 12 inches deep, flooding shops, banks, and business premises."

The Steward of the Lord Mayor Treloar Cripples' Hospital and College of Alton, Hampshire, reports that 1·51 inch of rain fell between 15h. and 17h. on this day.

The *Daily Dispatch* in the issue of the 31st contains the following account :—" Roads heaved under the pressure of water, floods swept into houses and put out fires, and buildings were struck by lightning in a fierce storm which swept parts of Lancashire and the south of England last night. The storm swept across Manchester and Salford bringing seven-eighths of an inch of rain in half an hour, the heaviest fall recorded at the Corporation's Oldham Road depot. At the junction of Moston Lane and Upper Conran Street the roadway rose and fell under the pressure of the water from beneath. Manhole covers were blown off by fountains of water, and scores of police were called out to divert traffic from undulating and undermined road surfaces."

There are only two entries for *September*, one from Wigtownshire for the 16th which ranks as a remarkable fall and the other from Derbyshire for the 17th.

K. McDonall reports from Port Logan, Wigtownshire :—" At 12h. 30m. a severe thunderstorm accompanied by hail and heavy rain commenced. It lasted one hour and during this time 1·79 inch of rain was recorded. Practically all of this fell during three-quarters of an hour. Lightning struck a water supply tank one quarter of a mile away from this house about 1h. 10m. when there was a very vivid flash accompanied by a loud hissing sound which was heard over a considerable area. The lightning, after breaking off some of the roofing, passed down a wire fence for some distance, splintering and scorching six wooden posts ; it entered the earth at three places making large circular holes."

Mr. A. Taylor, the Secretary at Derbyshire Royal Infirmary, reports that on September 17th between 13h. 10m. and 13h. 25m.

there was a thunderstorm with hail and rain during which .92 inch of rain was recorded.

In the issue of the 20th of the *Western Morning News* the following account concerning a storm in Devon on the 18th is found :—" North Devon and parts of north and mid-Cornwall were visited by a thunderstorm of considerable violence on Saturday night. The storm was at its height about 21h. when hundreds of persons leaving a fete at Barnstaple Market had to drive through several inches of water on parts of the road."

The two entries for *October* were both from Dorset on the 31st. Mr. S. Hyla Greves of Frankland Crescent, Parkstone, reports :—" Very light rain was falling as early as 14h. and again at 17h. but was barely measurable. There was light rain again about 17h. 30m. but it increased in intensity and developed into a cloudburst between 17h. 50m. and 18h. Rain continued until about 19h. I am certain that 1.25 inch of the 1.40 inch fell between 17h. 50m. and 19h."

Mr. E. J. Goodacre, Borough Engineer and Surveyor, sends in the following letter from Poole, Dorset :—" On Sunday evening, the 31st, we had a very intense rainstorm and as a result some flooding occurred. For the 24 hours ending 9h. on November 1st 1.34 inch of rain fell and 1.25 inch of this fell between 17h. 50m. and 19h. 30m. At 18h. 40m. the intensity of the downpour was 2.20 inches per hour for 3 minutes."

There were no heavy falls in short periods for the last two months of the year.

In the preceding part of this section the material has been provided both from autographic records and from eye observations at any of the 5,500 rainfall stations. Another method of dealing with the frequency of heavy falls of rain is to confine attention to the stations with autographic records and to examine the traces for all the rain which occurs at these stations. This procedure was adopted initially in *British Rainfall*, 1925, and the number of days on which specified amounts of rain fell in specified times were published in Table XVI. In the tabulations on which the classification was based, the shortest interval in which .2 inch (5 mm.) fell was entered for each day on which rain occurred ; similarly with falls of .4 inch and 1 inch. Cases in which a fall of the given amount occupied parts of two days were included, but attention was confined to falls not exceeding 24 hours duration and only one fall of the given amount was credited to any calendar day.

Statistics accumulated along these lines were published in each volume from 1925 to 1936. Experience has shown that the range of the data is too small, and that statistics of .2 inch might be dispensed with. In general such small amounts are not of great practical importance and moreover, in the case of intense falls of this amount which may occupy less than 5 minutes, the duration cannot always

Table XIV.—*Rainfalls of Very Rare Intensity lasting for One Hour or less.*

Year.	Date.	Div.	Station.	Amount	Duration	Rate per Hour
				in.	H. M.	in.
1893	Aug. 10	VIII	Preston, Corporation Offices....	1.25?	0 5?	15.00?
1914	Aug. 14	XI	Guernsey, St. Martin's Road ..	1.50	0 15	6.00
1875	Aug. 7	II	Canterbury, Harbledown .....	2.12	0 20	6.36
1932	Aug. 20	VI	Malvern, Free Library.....	1.86	0 20	5.58
1878	June 23	I	St. Pancras, Camden Square ...	1.82	0 20	5.46
1897	June 24	III	Luton Pumping Station .....	1.65	0 20	4.95
1920	May 29	VIII	Leyland, Worden Hall .....	1.65	0 20	4.95
1933	June 24	II	Silchester House.....	2.50	0 25	6.00
1934	July 18	VI	Stratford-on-Avon, Milcote ...	2.25	0 25	5.40
1937	July 19	VII	Spalding, Grammar School ....	2.14	0 25	5.14
1878	June 23	I	St. Pancras, Camden Square ...	2.30	0 28	4.93
1880	July 22	XI	Cowbridge, Ash Hall .....	2.90	0 30	5.80
1915	July 4	XI	Abergavenny, The Chain .....	2.20	0 30	4.40
1937	July 19	VII	Spalding, Surveyor's Depot ....	2.14	0 30	4.28
1933	July 21	II	Chatham, Woolman's Wood....	2.13	0 30	4.26
1918	July 17	I	Shad Thames Pumping Station..	2.07	0 30	4.14
1895	June 27	IX	Middleton-in-the-Wolds .....	2.00	0 30	4.00
1902	Sept. 10	II	Surbiton, Vronvelin .....	2.00	0 30	4.00
1936	June 29	VI	Clifton, Oakfield Road .....	1.95	0 30	3.90
1931	June 14	VI	Cannock Sewage Works .....	2.35	0 38	3.71
1936	June 29	VI	Bristol (Tyndalls Park) .....	2.00	0 40	3.00
1920	May 25	IV	Hatfield, Broad Oak, Barrington	2.79	0 45	3.72
1933	June 21	V	Temple Combe Rectory .....	2.75	0 45	3.67
1904	July 27	II	Cooling, Broomy Farm .....	2.66	0 45	3.55
1909	Sept. 29	V	Ilfracombe Reservoir.....	2.50?	0 45	3.33?
1936	May 6	III	Dunstable (Cement Works) ....	2.08	0 45	2.77
1895	June 26	V	Marlborough .....	2.71	0 50	3.25
1915	June 30	IV	Mildenhall .....	2.63	0 50	3.16
1903	July 18	VI	Crewe, Betley Hall.....	2.53	0 50	3.04
1905	July 9	III	Enfield, Carisbrooke .....	2.44	0 50	2.93
1911	May 31	II	Epsom, Ashley Road.....	2.44	0 50	2.93
1901	July 29	II	Wadhurst, Lower Cousley Wood	3.25?	0 55	3.55?
1913	June 17	IV	Elvedon Hall .....	2.85	0 58	2.95
1901	July 12	II	Maidenhead, Lowood .....	3.63	1 0?	3.63?
1903	May 30	II	Beddington Corner .....	3.50	1 0	3.50
1911	May 26	II	Fareham, The Mount .....	3.00	1 0	3.00
1936	Aug. 10	II	Leatherhead, Windfield .....	2.68	1 0	2.68
1897	July 21	IV	Ipswich, Bishops Hill .....	2.95	1 0	2.95
1932	July 11	VII	Cranwell Aerodrome .....	2.93	1 0	2.93
1895	June 26	VI	Worcester, Diglis Lock .....	2.75	1 0	2.75
1934	July 13	XI	Wrexham, W.W. Office .....	2.75	1 0	2.75
1909	June 1	XII	Carsphairn, Shiel .....	2.71	1 0?	2.71?
1936	June 29	V	Bodmin, Castle Hill House ....	2.98	1 0	2.98
1873	July 28	XVII	Fettercairn .....	2.60	1 0	2.60
1889	June 7	II	Tonbridge, Ferndale .....	2.60?	1 0?	2.60?
1886	July 25	VIII	Sale, Brooklands .....	2.58	1 0	2.58
1899	July 22	V	Dorchester Water Works .....	2.56	1 0?	2.56?
1875	July 22	V	Trowbridge, Sunnyside .....	2.53	1 0	2.53
1875	June 29	III	Cardington .....	2.50	1 0	2.50
1886	July 25	IX	Wakefield, Stanley Vicarage ...	2.50	1 0	2.50
1935	June 25	V	Melksham, Beechfield .....	2.50	1 0	2.50
1937	Aug. 13	III	Acton Cemetery .....	2.25	1 0	2.25

Table XV.—*Heavy Falls in Short Periods in 1937.*

County and River Division.	Station.	Date.	Amount.	Dura- tion.	Rate per Hour.
<b>(a) EYE OBSERVATIONS</b>			in.	min.	in.
Somerset ...3	West Lambrook (Rodwell) ..	July 15	.55	10	3.30
S. Devon ...5	Torquay (Abbey Park) .....	June 19	.66	12	3.30
Surrey .....2	Lingfield (Lingfield House) ..	July 18	1.03	12.5	4.94*
Derby .....6	Derby (Royal Infirmary) ....	Sept. 17	.92	15	3.68
Lincoln .....3	Leasingham Rectory .....	July 15	1.07	20	3.21
Lincoln .....2	Spalding (Grammar School) ..	July 19	2.14	25	5.14‡
Kent .....4	Edenbridge (Falconhurst)....	July 19	1.40	25	3.36*
Somerset ...2	Street (Portway) .....	July 15	1.21	25	2.90*
Lincoln .....2	Spalding (Surveyor's Depot) ..	July 19	2.14	30	4.28‡
Kent .....4	Edenbridge (Stonewall Park)..	July 19	1.73	30	3.46*
Lincoln .....3	Lincoln (Swallowbeck) .....	July 15	1.70	30	3.40*
Northants. ...4	Blisworth (Crieff House) ....	July 15	1.10	30	2.20
Sussex .....2	Horsham (Wimblehurst) ....	Aug. 30	.93	30	1.86
S. Lancs. ...3	Manchester (Oldham Road) ..	Aug. 30	.87	30	1.74
C. Lancs. ....1	Stonyhurst College .....	Aug. 13	.80	30	1.60
Kent .....4	Hildenborough (Old Sch. Cot.)	Aug. 30	1.09	35	1.87
Somerset ...3	Cannington (Ashford) .....	July 15	.90	36	1.50
Somerset ...2	Street (Hill Close) .....	July 15	1.50	40	2.25*
Herts. ....3	Essendon Place Gardens ....	July 19	1.25	40	1.87
Middlesex ..2	Crouch End (Priory Park) ...	Aug. 4	1.18	40	1.77
Essex .....2	Forest Gate (Monega Rd.) ...	July 15	1.04	40	1.56
Gloucester ..2	Tewkesbury (Forthampton Ct.)	July 15	1.64	45	2.19*
Herts. ....3	Hitchin (Preston) .....	July 15	1.49	45	1.99*
Kent .....4	Edenbridge (Gilridge) .....	July 19	1.39	45	1.85*
Aberdeen ...3	Ellon (Esslemont House) ....	Aug. 18	.96	55	1.05
Wigtown ...2	Lógan House .....	Sept. 16	1.79	60	1.79*
Lincoln .....3	Grantham (Central School) ..	July 15	1.44	60	1.44
Notts. ....5	Southwell (The Residence) ..	July 15	1.44	60	1.44
Kent .....5	Bromley (Sundridge Avenue).	Aug. 30	1.27	60	1.27
Cambridge ..2	Ely .....	Aug. 11	1.12	60	1.12
Worcester ..3	Evesham (Bengeworth) .....	July 15	1.10	60	1.10
Worcester ..3	Broadway (Farncombe) .....	July 15	1.00	60	1.00
Surrey .....5	Dorking (Bramerton) .....	July 19	1.72	65	1.59*
Dorset .....3	Parkstone (Rosemead) .....	Oct. 31	1.25	70	1.07
Somerset ...3	Angersleigh (Leigh Court) ...	July 15	2.26	75	1.81*
Surrey .....5	Dorking (Reigate Road) ....	July 19	1.87	75	1.50*
Monmouth ...3	Newport W.W. (Friar St. Yard)	Aug. 12	1.71	75	1.37*
Gloucester ..2	Bromsberrow Heath P.S. ....	July 15	1.90	90	1.27*
Middlesex ..1	Hampton (Gloucester Road) ..	Aug. 13	1.46	90	.97
Cardigan ...3	Cardigan (Plas Llangoedmore)	Aug. 11	1.30	90	.87
S. Devon ...7	Newton Poppleford (Haymans)	May 9	1.29	90	.86
Essex .....1	Leytonstone (High Road) ....	July 15	1.16	90	.77
Somerset ...3	Cannington (Farm Inst.) ....	July 15	1.15	95	.73
Lincoln .....3	Horncastle .....	July 15	1.61	105	.92
Worcester ..3	Evesham (High Street) .....	July 15	1.43	108	.79
Leicester ...4	Asfordby Hill (Ironworks) ...	July 15	3.50	120	1.75‡
Middlesex ..2	Harringay (Wightm'n Rd. Dep.)	Aug. 13	2.53	120	1.27*
Dorset .....3	Easton (Tophill School) .....	July 15	2.52	120	1.26*
Middlesex ..2	Crouch End (Priory Park) ...	Aug. 13	2.50	120	1.25*
Somerset ...1	Radstock .....	July 15	2.39	120	1.19*
Yorks, W.R.10	Oughtershaw Hall .....	Aug. 12	2.21	120	1.10*
Surrey .....5	Kingston (Grammar School) ..	Aug. 13	2.15	120	1.07*
Leicester ...4	Melton Mowbray (White Lodge)	July 15	2.11	120	1.05*
Londonderry 3	Garvagh (Moneydig) .....	Aug. 13	2.10	120	1.05*

\* "Remarkable" fall. ‡ "Very Rare" fall.

Table XV.—*Heavy Falls in Short Periods in 1937—(con.).*

County and River Division.	Station.	Date.	Amount.	Duration.	Rate per Hour.
<b>(a) EYE OBSERVATIONS—</b>					
Kent .....4	Sevenoaks (Riverhill) .....	(con.) Aug. 13	in. 2.09	min. 120	in. 1.04*
Somerset ...3	Bridgwater (Blake Gardens) .	July 15	2.09	120	1.04*
Monmouth ..3	Abersychan (Glansychan) ...	July 15	1.93	120	.96*
Somerset ...3	Bridgwater (Wembdon Rd.)..	July 15	1.67	120	.83
Suffolk .....5	Bury St. Edmunds (Westley H.)	Aug. 13	1.54	120	.77
Hants. ....7	Alton (Treloar Cripples Hosp.)	Aug. 30	1.51	120	.75
<b>(b) AUTOGRAPHIC RECORDS</b>					
Lincoln .....3	Cranwell (Aerodrome) .....	July 15	.81	12	4.05
Surrey .....4	Croydon (Airport) .....	Aug. 30	.65	13	3.00
S. Lancs. ...2	Liverpool (Monument Place) .	Aug. 14	.85	15	3.40
Surrey .....4	Caterham (Alderstead Heath) .	Aug. 30	.69	15	2.76
Surrey .....4	Beddington Park .....	Aug. 13	1.00	17	3.53
Surrey .....5	Kingston Sewage Works.....	Aug. 13	.98	22	2.67
Surrey .....5	New Malden (Sewage Works)..	Aug. 13	1.00	23	2.61
Surrey .....5	Worcester Pk. (Sewage Works)	Aug. 13	1.00	25	2.40
Middlesex ..1	Willesden (Stonebridge Farm)	Aug. 13	1.02	28	2.19
Hereford ...1	Ross-on-Wye .....	July 15	.83	30	1.66
Surrey .....5	Sutton (Sewage Works) .....	Aug. 13	1.00	40	1.50
Surrey .....5	Morden (Recreation Ground) .	Aug. 13	1.00	40	1.50
Middlesex ..2	Enfield Lock .....	July 15	1.37	45	1.83*
Oxford .....3	Upper Heyford (Aerodrome) .	July 15	.98	45	1.31
Middlesex ..1	Acton Cemetery .....	Aug. 13	2.25	60	2.25†
Kent .....5	Bromley .....	Aug. 30	1.63	60	1.63*
Surrey .....5	Kew Observatory .....	Aug. 13	1.54	60	1.54*
Surrey .....5	Dorking (Pixham L. Sew. Wks.)	July 19	1.50	60	1.50*
London ....2	Hampstead Observatory ....	Aug. 13	1.18	60	1.18
Durham ....2	Sunderland (Mowbray Park) .	July 3	1.18	60	1.18
Surrey .....5	Old Malden (Sports Ground) .	Aug. 13	1.00	60	1.00
Warwick ...1	Bidford (Moor Hall).....	July 15	2.00	75	1.60*
Dorset .....3	Poole .....	Oct. 31	1.25	100	.75
Essex.....1	Spelbrook .....	July 19	2.11	115	1.10
Middlesex ...1	Isleworth (Mogden Works) ..	Aug. 13	1.82	120	.91*
Gloucester ..5	Horfield .....	July 15	1.42	120	.71
Middlesex ..1	Acton Cemetery .....	Aug. 13	1.40	15	5.60*

\* "Remarkable" fall. † "Very Rare" fall.

be read off the chart correctly to the nearest minute. The headings of Table XVI have therefore been revised in this volume. Attention has been directed to the preparation of statistics of the frequency of falls of .6 inch and .8 inch in stated periods, in addition to those of .4 inch and 1 inch, which are available for the twelve years 1925 to 1936. Table XVI shows the revised classification. The sub-headings under .4 inch and 1.0 inch are the same as in the previous volume except that an additional column has been added covering falls of .4 inch in 5 minutes. This column has been added because then the first column under each of the main headings .4 inch, .6 inch, .8 inch and 1.0 inch gives limits corresponding roughly with those of noteworthy falls shown on the diagram earlier in this article.



Table XVI.—*Number of Days on which specified amounts of Rain fell in specified times during 1937.*

COUNTY	STATION	10 mm. (0.4 inch) within					15 mm. (0.6 inch) within					20 mm. (0.8 inch) within				25 mm. (1.0 inch) within			
		5 mins.	15 mins.	30 mins.	1 hr.	2 hrs.	15 mins.	30 mins.	1 hr.	2 hrs.	5 hrs.	30 mins.	1 hr.	2 hrs.	5 hrs.	1 hr.	2 hrs.	5 hrs.	24 hrs.
London . . . .	Camden Square . . . .	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	1
Surrey . . . .	Croydon . . . . .	0	1	1	4	6	1	1	2	3	0	0	0	1	0	0	0	0	3
" . . . .	Kew Obsy. . . . .	1	1	1	2	4	1	1	1	1	1	1	1	1	1	1	1	1	2
Kent . . . . .	Lympne . . . . .	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	4
" . . . .	Manston . . . . .	0	0	0	4	7	0	0	0	4	0	0	0	0	0	0	0	0	1
Ilants. . . . .	Calshot . . . . .	0	0	0	1	2	0	0	0	3	0	0	0	1	0	0	0	0	4
" . . . .	S. Farnborough . . . .	0	0	1	1	5	0	0	1	4	0	0	0	1	0	0	0	0	1
Oxford . . . .	Upper Heyford . . . .	0	1	1	1	2	1	1	1	3	1	1	1	1	1	1	1	1	1
Suffolk . . . .	Mildenhall . . . . .	0	1	1	4	6	0	0	1	5	0	0	0	2	0	0	0	0	2
Wilts. . . . .	Boscombe Down . . . .	0	0	0	1	3	0	0	2	6	0	0	0	0	0	0	0	0	1
Devon . . . .	Mount Batten . . . . .	0	0	0	4	4	0	0	0	2	0	0	0	0	0	0	0	0	2
Lincoln . . . .	Cranwell . . . . .	0	2	2	2	3	1	1	1	3	1	1	1	1	1	1	1	1	2
Lancashire . .	Barton . . . . .	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	2
" . . . .	Southport . . . . .	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1
N.R. Yorks. .	Catterick . . . . .	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
Flint . . . . .	Sealand . . . . .	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Anglesey . . .	Holyhead . . . . .	0	1	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	4
Dumfries. . . .	Eskdalemuir Obsy. . . .	0	0	1	2	10	0	0	1	9	0	1	1	1	1	1	1	1	6
Ayr . . . . .	Kilmarnock . . . . .	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	1
Renfrew . . . .	Abbotsinch . . . . .	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife . . . . .	Leuchars . . . . .	0	0	0	1	4	0	0	0	2	0	0	0	0	0	0	0	0	1
Aberdeen . . .	Aberdeen Obsy. . . . .	0	0	0	1	2	0	0	0	1	6	0	0	0	0	0	0	0	3
" . . . .	Balmoral Castle . . . .	0	0	0	1	4	0	0	0	2	0	0	0	0	0	0	0	0	5
Shetland . . .	Lerwick . . . . .	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3
Co. Kerry . . .	Valentia Obsy. . . . .	0	0	0	3	10	0	0	0	12	0	0	0	0	0	0	0	0	12
Co. Armagh . .	Armagh . . . . .	0	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	1
Co. Antrim . .	Aldergrove . . . . .	0	0	0	1	3	0	0	0	0	1	0	0	0	0	0	0	0	1

The falls are not necessarily continuous nor are they always confined to one calendar day. Not more than one fall of each specified amount is credited to any day; if more than the specified amount fell on any day, that part of it which fell in the shortest time is used for the table. An entry in any of the first four columns under the heading 10 mm. (0.4 inch) naturally recurs in the column or columns to the right, and similarly with the entries under headings 15 mm. (0.6 inch), 20 mm. (0.8 inch) and 25 mm. (1.0 inch).

## 7. HEAVY FALLS ON RAINFALL DAYS IN 1937.

The daily measurements of rain which are set out in this Section are (a) those of falls of 2·5 inches or more in the rainfall day, and (b) those of falls which amount to at least 7·5 per cent. of the total recorded for the year 1937. A fall of  $2\frac{1}{2}$  inches in a day at any station is sufficiently remarkable to be noticed, but as such heavy falls are more frequent in the normally wet areas of mountain districts than elsewhere, the criterion of  $7\frac{1}{2}$  per cent. was introduced to admit certain falls of less than  $2\frac{1}{2}$  inches in areas where the total rainfall for the year is less than 33·3 inches. In this way daily falls which are heavy in relation to the local standard are not neglected.

A summary of the information given in this section in each of the seventy volumes of *British Rainfall* from 1865 to 1934 was set out in an article in Part IV of *British Rainfall*, 1934. A complete list of the absolute maximum daily rainfall and the absolute maximum daily percentage reported for each year from 1865 to 1934 was also given in this special article.

The corresponding values for 1935 to 1937 are given below.

Table XVII.—*Maximum Daily Fall and Maximum Percentage.*

Year.	ABSOLUTE HIGHEST RAINFALL.				ABSOLUTE HIGHEST PERCENTAGE.				Year.
	Depth.	Per cent.	Station.	Div.	Per cent.	Depth.	Station.	Div.	
	in.					in.			
1935..	6·16	5·7	New Dungeon Ghyll	x	12·2	4·83	Batheaston Reservoir	v	1935
1936..	5·80	..	Glen Shiel	xviii	12·8	3·97	St. Albans (Oaklands)	iii	1936
1937..	5·76	18·2	Waltham-on-the-Wolds.	vii	18·2	5·76	Waltham-on-the-Wolds.	vii	1937

The maximum daily amount for 1937 of 5·76 inches and the maximum percentage for 1937, *viz.*, 18·2 are not remarkable, since larger entries have occurred in many recent years.

Particulars of the seven largest falls of the year 1937 are given in Table XVIII. The table shows also the year's total at each of the stations (where this is available) and the percentage of that total which is accounted for by the highest daily fall. There were ten falls exceeding 4·00 inches and four falls reaching or exceeding 4·50 inches. The total number of falls exceeding 2·50 inches was 245 and exceeding 3·00 inches 91.

Table XVIII.—*The largest Daily Rainfalls in 1937.*

Date.	Div.	Station.	Depth.	Per cent. of Year.	Total for Year.
			in.	%	in.
July 15	VII	Waltham-on-the-Wolds School ...	5·76	18·2	31·64
July 15	VII	Wyberton (Tytton Hall).....	5·47	16·1	33·98
July 15	VII	Boston (Black Sluice) .....	5·46	15·6	34·92
July 15	VII	Grantham (Belvoir Cas.).....	4·56	16·2	28·08
Jan. 24	XVII	Aitnach .....	4·49	7·7	58·19
July 15	VII	Woolsthorpe .....	4·35	15·9	27·33
July 15	VII	Denton Manor .....	4·25	14·2	29·99

In the tables included in the following account of the heavy falls of the year, a daily fall which is the maximum fall for the year at the station is indicated by ordinary roman type; other falls are in *italics*.

### CHRONICLE.

There were more entries for *January*, 1937, than either January, 1936, or January, 1935, but in general they were not remarkable. The first three days gave a few entries for stations in Scotland.

#### January 1st

*Inverness.*—Loch Quoich (Kinlochquoich).....2·52 in. or 3·1 per cent.

#### January 2nd

*Ross and Cromarty.*—Glenshiel (Kyle).....2·50 in. or 3·0 per cent.

#### January 3rd

<i>Inverness.</i>	<i>in. or %</i>	<i>Ross and Cromarty.</i>	<i>in. or %</i>
Loch Q. (Kinlochquoich) ..	3·30 4·1	Kinlochewe (Greenhill)....	2·64 5·8
Loch Quoich (Glenquoich) ·	2·74 3·8		

#### January 5th

<i>Westmoreland.</i>	<i>in. or %</i>	<i>Merioneth.</i>	<i>in. or %</i>
Rydal (High Close) .....	2·60 3·9	Blaenau (Oakeley Q.) .....	2·90 3·8
Grasmere (Huntingstile) ..	2·69 3·7	Blaenau (Llechwedd Q.)..	2·70 3·3
New Dungeon Ghyll Hotel.	4·00 4·5	Blaenau (Slate Quarries)..	2·84 3·8
Kentmere Head Reservoir	2·67 3·4		
<i>Montgomery.</i>		<i>Carnarvon.</i>	
Machynlleth (Plas Llwyn		Snowdon (Cwm Dyli) No. 11	2·87 2·9
Gwern) .....	2·68 4·4	Snowdon (Llydaw Intake).	3·20 2·6

On the 5th widespread heavy rain caused flooding in the north of England and many rivers including the Mersey, Irk and Irwell overflowed their banks in places. There were severe gales in the Irish Sea and the northern half of Wales suffered from flooding

following heavy rain on the evening of the 5th. Hundreds of acres of low-lying land were covered by the flood waters of the River Conway between Bettws-y-Coed and Dolgarrog.

### January 11th

*Ross and Cromarty.*—Glenmoriston (Cluanie Lo.) . . . . . 3·23 in. or 5·5 per cent.

### January 12th

<i>Devonshire.</i>	<i>in. or %</i>	<i>Glamorgan (contd.)</i>	<i>in. or %</i>
Holne (Church Park Cott.)..	2·50 3·4	Treherbert (Tyn-y-Waun)..	3·41 4·5
Princetown (H.M. Prison) ..	2·73 3·5	Rhondda (Castell Nos R.)..	3·13 4·4
<i>Cumberland.</i>		Rhondda (Lluest Wen F.)..	3·08 4·6
Buttermere (Hassness)....	2·98 3·6	Rhondda (Lluest Wen R.)..	3·12 4·8
<i>Westmorland.</i>		<i>Carmarthen.</i>	
Patterdale Hall .....	2·64 3·9	Llyn-y-Fan F. (Nant C.)..	3·05 4·1
Grasmere (Huntingstile)...	2·55 3·5	Llyn-y-Fan F. (T.-y-Foel)..	2·97 4·1
New Dungeon Ghyll Hotel.	2·62 2·9	<i>Brecon.</i>	
Grasmere (The Wray)....	2·94 4·0	Cardiff W.W. (Storey A.)..	2·76 3·5
<i>Glamorgan.</i>		<i>Carnarvon.</i>	
Rhondda W.W. (Llyn Fawr)	3·40 4·5	Snowdon (Llydaw Intake)..	3·85 3·1

The rain in the north of Scotland on the 11th and along the west coast of England and Wales on the 12th was occasioned by an intense complex depression over the Atlantic moving eastwards. On the morning of the 12th an intense anti-cyclone was centred over the Gulf of Finland and a trough of low pressure, extending from the Hebrides to south-east Ireland was moving slowly eastwards. There were rainy periods in the west and north during the day. This depression was followed by other depressions and a very wet period over the country generally commenced on the 11th and continued until the 25th.

### January 17th

<i>Cumberland.</i>	<i>in. or %</i>	<i>Aberdeen.</i>	<i>in. or %</i>
Watendlath Farm .....	2·80 3·8	Aitnach .....	3·05 5·2

### January 20th

*Cumberland.*—Watendlath Farm .....

### January 24th

<i>Aberdeen.</i>	<i>in. or %</i>	<i>Aberdeen (contd.).</i>	<i>in. or %</i>
Glen Muick (Inchnabobart)	3·14 5·7	Glen Tanar (Mansion Ho.)	3·25 7·2
Aitnach .....	4·49 7·7	Balmoral Castle Gdns.....	2·65 7·1
Braemar (Bank).....	3·28 8·2	Ballater (Irrigation Fm.)..	2·85 7·6
Braemar (Derry Lodge)...	2·77 7·8		

On the 24th a deep depression west of Ireland moved slowly north-north-west and troughs of low pressure moved quickly north-eastwards across the British Isles, causing heavy rain and gales generally. In the Shetlands the gales were so strong that in many places walls were breached and the fields littered with stones and debris from the coasts.

The total rainfall for the period January 12th to 25th is worthy of special comment, since large totals were recorded at stations widely

apart. Over the Thames Valley the total for these 14 days was 3·5 inches, out of a total for the month of 4·5 inches; at Princetown Prison it was 9·7 inches, out of 14·3 inches; at Watendlath Farm, in the English Lake District, 12·3 inches out of 17·8 inches, on Snowdon 8·0 inches out of 17·6 inches (7·3 inches occurring from the 3rd to 5th); and at Balmoral Castle 9·4 inches out of 11·8 inches. The heavy rain of this period was responsible mainly for the large totals recorded for January, *see* Section 8.

The only entries for *February* are for the 2nd from stations in Wales and Devonshire. There was heavy rain during the first eight days of February and extensive flooding occurred, the Thames in places rising higher than during the January floods. Flooding also occurred in many parts of the eastern, midland and southern counties. The abnormal totals recorded during January and February, and dealt with in a separate article in Part IV, were due, therefore, more especially to the frequency of persistent rains rather than to unusually large totals on any individual days.

#### February 2nd

<i>Devonshire.</i>	<i>in. or</i>	<i>%</i>	<i>Glamorgan (contd.).</i>	<i>in. or</i>	<i>%</i>
South Brent (Brent M.)....	3·00	3·6	Rhondda (Lluest Wen R.)	3·02	4·7
S. Brent (Brentmoor Ho.)..	3·00	3·8	<i>Carmathen.</i>		
Holne (Church Park Cott.)	3·25	4·5	Llyn-y-Fan F. (Nant C.) ..	2·57	3·5
Dartmoor (Fox Tor).....	2·82	3·4	<i>Brecon.</i>		
Princetown (H.M. Prison)..	2·75	3·5	Cardiff W.W. (Storey A.)..	2·88	3·7
<i>Glamorgan.</i>			<i>Merioneth.</i>		
Rhondda W.W. (Llyn Fawr)	3·22	4·2	Blaenau (Oakeley Q.)....	2·52	3·3
Pontycymmer (Garw Sch.)	3·17	4·6	<i>Carnarvon.</i>		
Treherbert (Tyn-y-waun)..	3·27	4·4	Snowdon (Cwm Dyli) ....	2·59	2·6
Rhondda (Castell Nos R.)..	3·11	4·4	Snowdon (Llydaw Intake)	3·20	2·6
Rhondda (Lluest Wen F.)..	2·96	4·4			

In *March* there is only one entry, *viz.*, that on the 20th. There was snow over the south-eastern half of England on the 6th. Falls of over 1 inch as rain occurred in several isolated areas Woking, Basingstoke, Petersfield and Bedford. In the north-west of England and Wales and along the north-east coast there was no measurable precipitation for this day.

During the three days 11th to 13th snow fell in most parts of the British Isles. The total precipitation exceeded 1 inch (as rain) in the south-east of England from Petersfield to Dover, in the Devon Cornwall peninsula as far east as Dorchester, in the Mendips, Cotswolds and part of the mountains of South Wales, to the east of the Pennines and in the Cheviots. In the neighbourhood of Barnard Castle the totals exceeded two inches.

Reference is made to the flooding in the Great Ouse which reached peak conditions about March 17th in Part IV.

#### March 20th

*Devonshire.*—Ipplepen Vicarage.....2·81 in. or 6·0 per cent.

Entries for *April* are confined to the two days the 10th and 16th.

#### April 10th

<i>Gloucester.</i>	<i>in. or</i>	<i>%</i>	<i>Gloucester (contd.).</i>	<i>in. or</i>	<i>%</i>
Minchinhampton (Box Ho.)	2.50	6.7	Minchinhampton (Shard)	2.64	7.9

The *Stroud News* refers to the heavy thunderstorm rain of the 10th as resembling a cloudburst in the Brimscombe, Minchinhampton, Box and Nailsworth area, and reports that tons of material were swept down the hillside and that traffic on road and rail was held up.

#### April 16th

<i>Carnarvon.</i>	<i>in. or</i>	<i>%</i>	<i>Carnarvon (contd.).</i>	<i>in. or</i>	<i>%</i>
Lake Eigiau (Dam Site) . . .	2.81	4.3	Snowdon (Llydaw Intake).	2.85	2.3
Snowdon (Cwm Dyli) No. 11	2.72	2.7			

Entries for *May* are confined to the 20th in East Anglia. There was more than 1 inch at most stations to the east of a line drawn roughly from Sandringham to Ipswich with more than 2 inches at isolated stations to the north of both Norwich and Woodbridge.

#### May 20th

<i>Suffolk.</i>	<i>in. or</i>	<i>%</i>	<i>Suffolk (contd.).</i>	<i>in. or</i>	<i>%</i>
Orford (The Gables) . . . . .	2.45	8.0	Blaxhall . . . . .	2.56	8.0
Rendlesham Hall . . . . .	2.33	7.6			

On that day a depression moved quickly north-north-west from the Mediterranean to Scotland. Thunderstorms occurred in eastern England and Scotland and heavy rainfall over a wider area, although the rainfall over the Irish Sea was probably due to a separate front. The depression moved in a frontal zone with a fairly strong south-south-east upper current, but the development of a definite front was due to convergence just ahead of the centre. There was pronounced subsidence behind the cold front shown by low relative humidity in the upper air over Utrecht at 7h. on the 21st. Temperature there was much higher than at Mildenhall up to 6,000 feet, but was lower than in Germany. Red rain fell at Milan on 20th and dust deposits were reported from the Alps. This was by far the most notable depression moving from the Mediterranean to the British Isles since April 24th to 26th in 1926, when red precipitation also occurred in the Alps.

There are only three entries for *June*, one each for the 6th, 13th and 27th.

#### June 6th

*Carnarvon.*—Snowdon (Llydaw Intake) No. 10 . . . . . 2.80 in. or 2.2 per cent.

#### June 13th

*Yorkshire.*—Ilkeley (Silverwell Cottage) . . . . . 2.53 in. or 6.6 per cent.

#### June 27th

*Inverness.*—Loch Quoich (Kinlochquoich) . . . . . 2.76 in. or 3.4 per cent.

A severe storm was also recorded at Driffield, in Yorkshire, *viz.*, 2 inches from 13h. to 15h. 30m. at Driffield Council School, and local flooding occurred.

Of the entries for *July* only those for the 15th call for special comment.

			July 2nd		
<i>Argyll.</i>	<i>in. or</i>	<i>%</i>	<i>Cork.</i>	<i>in. or</i>	<i>%</i>
Glencoe Gardens.....	2.80	4.3	Garinish Island .....	3.20	4.7
Glenleven (Kinlochleven)..	3.00	4.4	<i>Mayo.</i>		
Inveraray Castle Gardens.	2.50	3.2	Delphi Lodge .....	2.55	2.6
Glencroe (Guithas Cott.) ..	2.78	3.4	<i>Londonderry.</i>		
			Dungiven (Banagher F.)..	2.56	5.0

July 4th	
<i>Kirkcudbright.</i> —Carsphairn (Lorg) .....	2.51 <i>in.</i> or 3.5 per cent.

July 15th					
<i>Hertfordshire.</i>			<i>Somersetshire (contd.).</i>		
	<i>in. or</i>	<i>%</i>		<i>in. or</i>	<i>%</i>
Letchworth			Draycott .....	3.27	8.7
(Sollershott West) ..	2.44	7.5	Cheddar (Pumping Stn.)...	3.28	8.9
Letchworth (Fire Stn.)....	2.46	7.8	Blagdon (Pumping Stn.)...	3.86	9.9
<i>Essex.</i>			Churchill (Langford Ho.)..	2.85	6.8
Stansted (Bentfield Pl.)....	2.64	8.5	Yatton (Chelvey).....	2.97	9.0
Ilford (Sewage Works)....	2.20	7.6	Backwell Hill.....	3.32	11.5
<i>Wiltshire.</i>			West Town .....	3.29	10.1
Sherston School .....	2.47	7.5	Cleveland W.W.		
<i>Dorsetshire.</i>			(Tickenham Road)....	2.27	7.5
Portland Bill (Lighthouse)	3.07	8.3	Wraxall Court.....	3.68	10.7
Easton (Tophill Sch.)....	2.91	7.4	Chaffcombe House .....	2.50	5.2
Portland (H.M. Depot)....	2.99	7.5	Langport (Council Sch.)...	2.68	7.0
Weymouth (Lansdowne V.)	3.06	7.8	Bridgewater (Blake Gdns.)..	2.87	6.9
Weymouth (Westham)....	3.25	8.2	Cannington (Ashford)....	2.62	7.2
Weymouth (Springfield)...	3.12	8.1			
Dorchester (Littlemayne)..	2.58	6.2	<i>Gloucestershire.</i>		
Dorchester (Kingscote)....	2.82	6.4	Chepstow (Castleford).....	2.63	7.2
Dorchester Waterworks...	2.76	6.2	St. Briavels Ho.....	3.50	7.9
Dorchester (Stinsford)....	2.93	6.5	Newnham-on-Severn Sch..	2.57	7.3
Dorchester (Birkin Ho.)...	2.93	6.2	Westbury (Ninnage Lodge)	2.71	9.0
Puddletown Vicarage.....	2.95	6.1	Bromsberrow Heath P.S...	2.35	7.5
Sturminster Newton.....	2.71	6.3	Tewkesbury		
Marnhull .....	2.72	6.9	(Forthampton Court)..	3.21	11.8
Fifehead Magdalen.....	2.65	6.4	Tewkesbury (Upper Lode)..	2.91	11.2
<i>Somersetshire.</i>			Thornbury (Thornbury Pk.)	3.05	9.8
Hinton Blewett Manor....	2.53	6.2	Berkeley Castle Gdns. ....	2.69	8.6
Pensford (Sutton Ct.)....	4.19	10.4	Cam (Drake Lane).....	2.60	7.7
Pensford (Publow Sch.)...	2.78	8.4	Sharpness Docks.....	2.73	8.0
Bath (Lambridge Ho.)....	2.35	7.6	Whitminster (Parklands)..	2.87	9.3
Keynsham (Wellsway)....	2.70	10.1	Miserden Park.....	2.52	6.8
Keynsham (Somerdale)....	2.72	..	Whitminster (Junction)...	2.40	8.4
Barrow Gurney Res.....	2.73	8.0	Haresfield Court.....	2.68	8.5
Portishead (Bristol Rd.)...	2.72	8.8	Harescombe Grange.....	2.38	7.7
Portishead (Redcliffe B.)..	3.85	12.0	Quedgeley House.....	2.61	9.5
Street (Hill Close).....	3.32	9.1	Glo'ster (The Lannett)....	2.62	10.5
Street (Hindhayes).....	3.14	8.7	Glo'ster (Llanthony Lock) .	2.80	11.6
Street (Portway).....	3.23	8.3	Glo'ster (Maisemore Lock)..	2.72	10.9
Street (Millfield).....	3.27	9.0	Cheltenham (Hewletts Rd.)	2.28	7.7
Glastonbury (Bere Lane)...	2.96	8.1	Bishop's Cleeve.....	2.56	8.8

## July 15th (cont.).

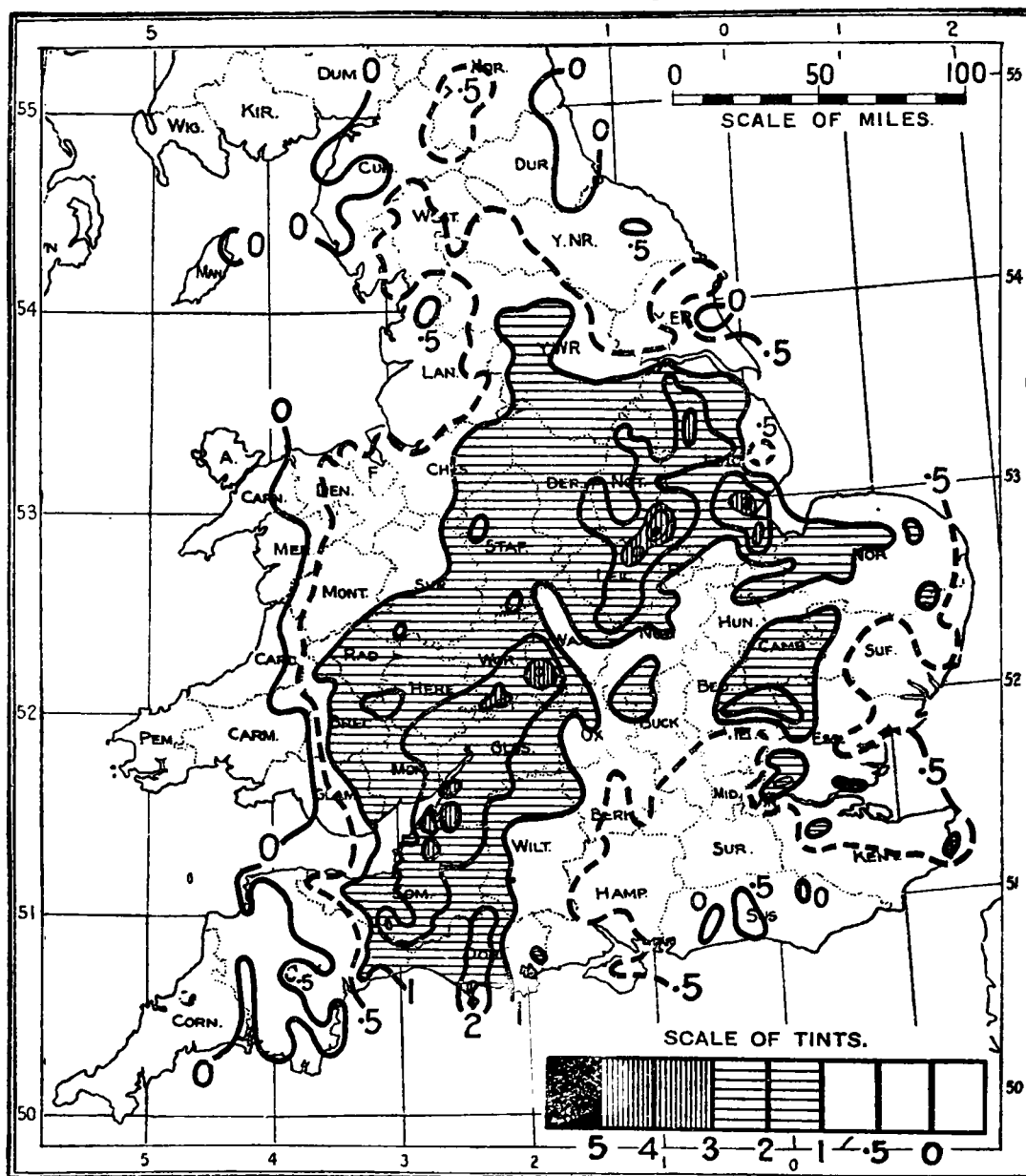
<i>Gloucestershire (contd.).</i>			<i>Leicestershire (contd.)</i>		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Tewkesbury Pump Stn....	2.73	10.7	Leicester (Town Hall Sq.)..	2.75	10.1
Winchcombe (Sudeley Ca.)..	2.56	7.7	Barkby Hall.....	3.25	10.9
Broadway (Buckland Ma.)..	2.58	8.1	Rothley (West Lawn).....	2.07	7.6
Bristol (Whitchurch).....	3.30	..	Asfordby Hill (Iron Wks.)..	4.00	13.9
Bath (Monkswood Res.)..	2.69	7.5	Melton Mowbray (White L.)	2.49	8.9
Bristol (Victoria Park)....	3.00	..	Burton-on-Wolds		
Bristol (Tyndalls Park)....	3.19	9.1	(Burton Hall) .....	2.88	10.4
Bristol (Hopewell Hill)....	3.03	9.3	Prestwold Hall Gdns.....	2.25	8.5
Bristol (Sneyd Park).....	3.62	11.1	Waltham-on-the-Wolds Sch	5.76	18.2
Clifton (Oakfield Road)....	3.36	10.2	Grantham (Belvoir Castle)..	4.56	16.2
Clifton (All Saints Road) ..	3.32	9.5			
Bristol (St. Andrews Pk.) .	3.25	9.8	<i>Lincolnshire.</i>		
Horfield .....	3.44	10.2	Holbeach (Manor Farm)...	3.61	12.6
Frampton Cotterell (Pk.Ho.)	2.46	7.7	Surfleet (Iceni Nurs.) .....	2.38	7.9
Almondsbury (Ridgewood)	3.60	12.4	Holbeach (Bingham Lo.)..	3.17	9.6
Winchcombe			Stainby Rectory.....	2.06	7.6
(Temple Guiting Ho.)..	2.53	7.0	Denton Manor.....	4.25	14.2
<i>Herefordshire.</i>			Grantham (Saltersford)...	2.38	8.5
Goodrich Court Gdns.....	3.27	8.9	Grantham (Central Sch.)...	2.79	10.8
Ross-on-Wye .....	2.40	7.9	Wyberton (Tytton Hall)...	5.47	16.1
Dorstone (Oaklands).....	2.67	6.5	Fishtoft School .....	2.34	7.9
<i>Staffordshire.</i>			Boston (Black Sluice).....	5.46	15.6
West Bromwich.....	2.40	8.4	Boston (Grand Sluice).....	3.95	12.6
<i>Worcestershire.</i>			Boston (Bargate End) .....	3.30	11.1
Upton (The Eades).....	2.58	8.8	Wildmore .....	2.63	9.4
Upton (Berryfield Ho.)....	2.33	8.2	Carrington Grange.....	2.55	8.2
Earls Croome Court.....	2.14	8.0	Carlton-le-Moorland .....	2.26	9.1
Bredon (Bredon House)...	3.41	11.2	Horncastle .....	2.24	7.8
Broadway (Farncombe)...	2.73	8.1	Lincoln (Swallowbeck)....	2.65	10.9
Eckington (The Orchard)...	2.95	10.8	Bardney (Sugar Fac.).....	2.35	9.2
Defford (The Vicarage)....	3.10	10.8	Lincoln		
Evesham (Bengeworth)...	2.52	9.5	(Skellingthorpe Hall) .	1.92	7.6
Evesham (Sewage Works)...	2.54	9.7	Lincoln (Burton Road)....	2.61	10.7
Evesham (High Street)....	2.41	8.9	Sudbrooke (The Manor Ho.)	3.57	13.3
Pershore (Three Springs)...	2.51	9.1	Hackthorn Hall.....	3.00	11.4
Evesham (Sheriff's Lench)...	2.53	9.1	Glentham (Bishops Bdge.)..	3.70	12.6
Alcester (Cookhill).....	2.68	9.6	Kirkby (Council School)...	2.69	10.1
<i>Warwickshire.</i>			Woolsthorpe.....	4.35	15.9
Stratford (Milcote).....	3.24	11.6	<i>Nottinghamshire.</i>		
Stratford (Thurlaston) ....	3.80	14.0	Sutton Bonington (Agri. C.)	2.18	8.3
Bidford (Moor Hall).....	4.14	14.6	Ruddington (Westlands)...	2.02	8.2
Temple Grafton Ct. ....	3.15	11.8	Newark .....	1.84	8.3
Alcester (Ragley Hall)....	2.52	8.6	Newark (Sew. Wks.).....	2.02	9.5
Stratford (Clopton Ho.)...	2.87	11.1	Kelham (Sugar Factory) ..	2.19	9.2
Studley College.....	2.12	8.0	Eastwood W.W.....	2.14	7.8
Rugby (Frankton Manor) ..	2.20	8.0	Eastwood Hall.....	2.03	7.6
Ullesthorne (High Cross)...	2.35	8.3	Eastwood (Moorgreen R.)..	2.28	8.2
Nuneaton (Hartshill S.W.)..	2.67	10.2	Attenborough.....	2.51	9.6
<i>Leicestershire.</i>			Beeston (Council Depot)...	2.10	8.0
North Kilworth W.W.....	3.23	10.4	Bramcote Reservoir.....	2.74	10.4
Lutterworth W.W.....	2.08	7.6	Southwell (Residence)....	2.35	9.4
Countesthorpe (Wigston S.F.)	2.40	9.2	Southwell (Nurseries)....	1.97	7.6
Leicester (London Rd.)....	3.15	10.8	Elkesley Pump. Stn. ....	2.47	8.5
Leicester (Stoughton Dr.)..	2.38	8.3	Worksop (Osberton Gdns.)..	1.99	7.7
			Retford (Morton Hall)....	2.73	9.1



**July 15th (contd.).**

<i>Derbyshire.</i>	<i>in. or</i>	<i>%</i>	<i>Derbyshire (contd.).</i>	<i>in. or</i>	<i>%</i>
Spondon (Derby Sew. Wks.)	2.18	9.4	Ilkeston (Sew. Wks.)	2.22	9.2
Derby (The Arboretum)	1.82	7.5	<i>Monmouth.</i>		
Long Eaton (Town Hall)	2.31	9.5	Portskewett (Sudbrook)	2.42	7.7

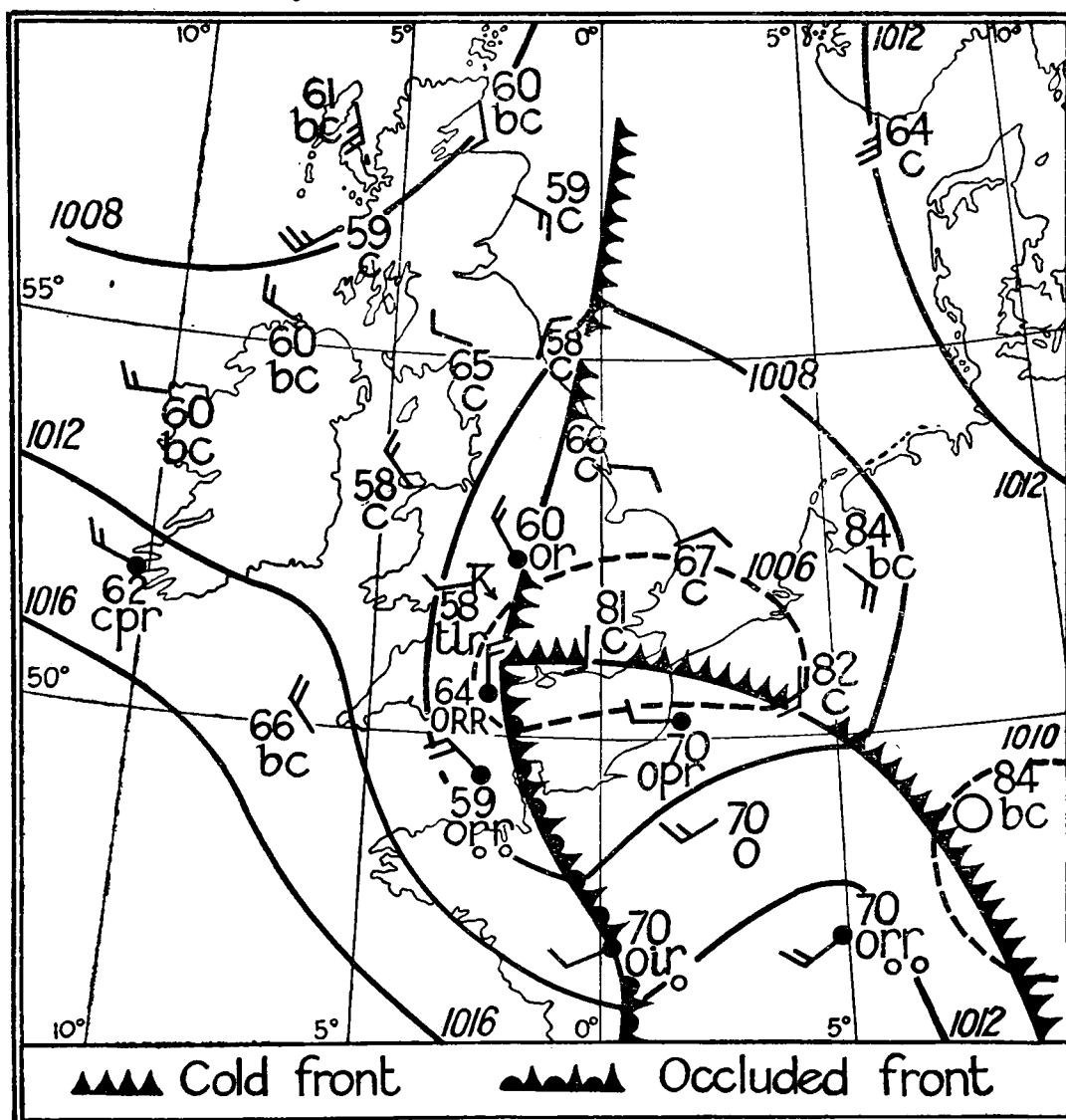
The intense falls of July 15th, St. Swithin's Day, have been dealt with in Section 6. A map showing the distribution of the



**Rainfall, 15th July, 1937.**

rainfall over England and Wales for this day is reproduced together with a synoptic chart showing the general meteorological situation at 13h. on the 15th. The main feature of the rainfall map is that

while there was no rain at stations in the west of England and Wales, there was a belt of heavy rain, exceeding two inches stretching almost continuously from Somersetshire to Lincolnshire. There was more than five inches at one station in Leicestershire and two in Lincolnshire, viz., Waltham-on-the-Wolds, Wyberton (Tyton Hall) and Boston (Black Sluice) with 5·76, 5·47 and 5·46 inches, respectively. In the *Transactions of the Institution of Water Engineers*, 1937, mention is made of the heavy fall at Boston and the 5·46 inches described as



### SYNOPTIC CHART, 15TH. JULY, 13h.

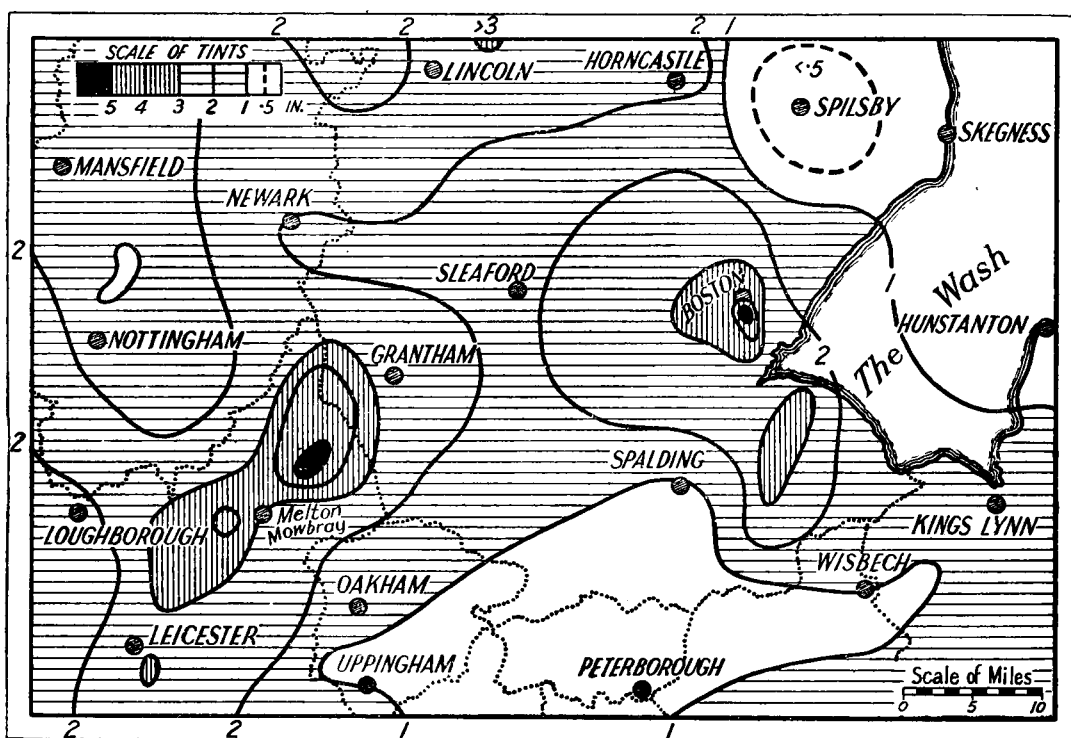
Barometer.—Isobars are drawn for intervals of 4 millibars, 1,000 millibars=29·53 mercury-inches.

Wind.—Direction is shown by arrows flying with the wind. Force on the scale 0 to 12, is indicated by the feathers:—one long feather indicates *two* steps in the Beaufort Scale, one short feather, *one* step.

Temperature is given in figures in degrees Fahrenheit.

Weather at the time of observation is indicated by letters which have the following meaning:—b, blue sky; bc, sky partly clouded; c, cloudy; d, drizzle; i, intermittent; o, overcast sky; p, showers; q, squalls; r, rain; r<sub>s</sub>, slight rain; rr, continuous rain; r<sub>o</sub>r<sub>c</sub>, continuous slight rain.

falling in 12 hours, when the drains became over-charged and the whole neighbourhood flooded and crops destroyed. A more detailed map showing the distribution of the rainfall over the area between Leicester and Boston is also reproduced. In the Boston area it is considered that 5 inches or more fell over  $1\frac{1}{4}$  sq. mi.; 4 inches or more over  $2\frac{1}{2}$  sq. mi., and 3 inches or more over 32 sq. mi. The area in Leicestershire with over 5 inches was about  $4\frac{1}{2}$  sq. mi. and with over 4 inches about 37 sq. mi., while there was another small area near Stratford-on-Avon also with just over 4 inches. The whole area to the north of Leicester with over 3 inches was about 143 sq. mi.



**Rainfall, 15th July, 1937.**

It is interesting to compare the distribution in the neighbourhood of Boston on July 15th, 1937, with that of July 11th, 1932. In both cases the distribution is typical of thunderstorm rains. In July 11th, 1932, the area of heaviest rain was more local and occurred between the two areas of heaviest rain on July 15th, 1937. On July 11th, 1932, 5.41 inches was measured at Cranwell Aerodrome where 2.93 inches fell in one hour. For July 15th, 1937, the total at Cranwell Aerodrome was only 1.82 inch, the heaviest rains occurring a few miles to the south-west and east-south-east of that station. This illustrates the capricious distribution of intense rains during thunderstorms.

## July 19th

<i>Lincolnshire.</i>	<i>in. or %</i>	<i>Lincolnshire (contd.).</i>	<i>in. or %</i>
Spalding (Grammar Sch.)..	2.45 9.3	Spalding (Surveyor's D.)...	2.36 8.6

The repetition of intense rain in Lincolnshire on the 19th is of interest, although it occurred further to the south than on the 15th.

## July 20th

*Argyll.*—Morvern (Kingairloch) .....2.63 in. or 3.3 per cent.

*August 12th, 13th and 14th* were the only days in this month which resulted in heavy falls eligible for inclusion in this section and the meteorological report for that period is worth noting :—" There were thunderstorms over most of the British Isles, with heavy rainfall locally, notably at Portland Bill on the night of the 12th, near Wellingborough and the Goyt Valley in Derbyshire on the 12th, and in West London, Montrose and Nairn on the 13th. The thunder and lightning were severe locally. Conditions were typically thundery in the south, with a previous outbreak of storms in France. In northern districts the reasons for such a severe outbreak are less evident, as there was little thunder in the British Isles on the 12th. The air over Duxford on this day was verging on instability, only requiring convergence to produce actual instability. This air moved slowly north-west and part of the same mass probably reached Scotland. The trigger action may have been provided either by sea-breeze and orographic effects, or by the remains of an old front which seemed to have died out but might still have acted as a trigger. Further thunderstorms occurred on 14th in part of eastern England."

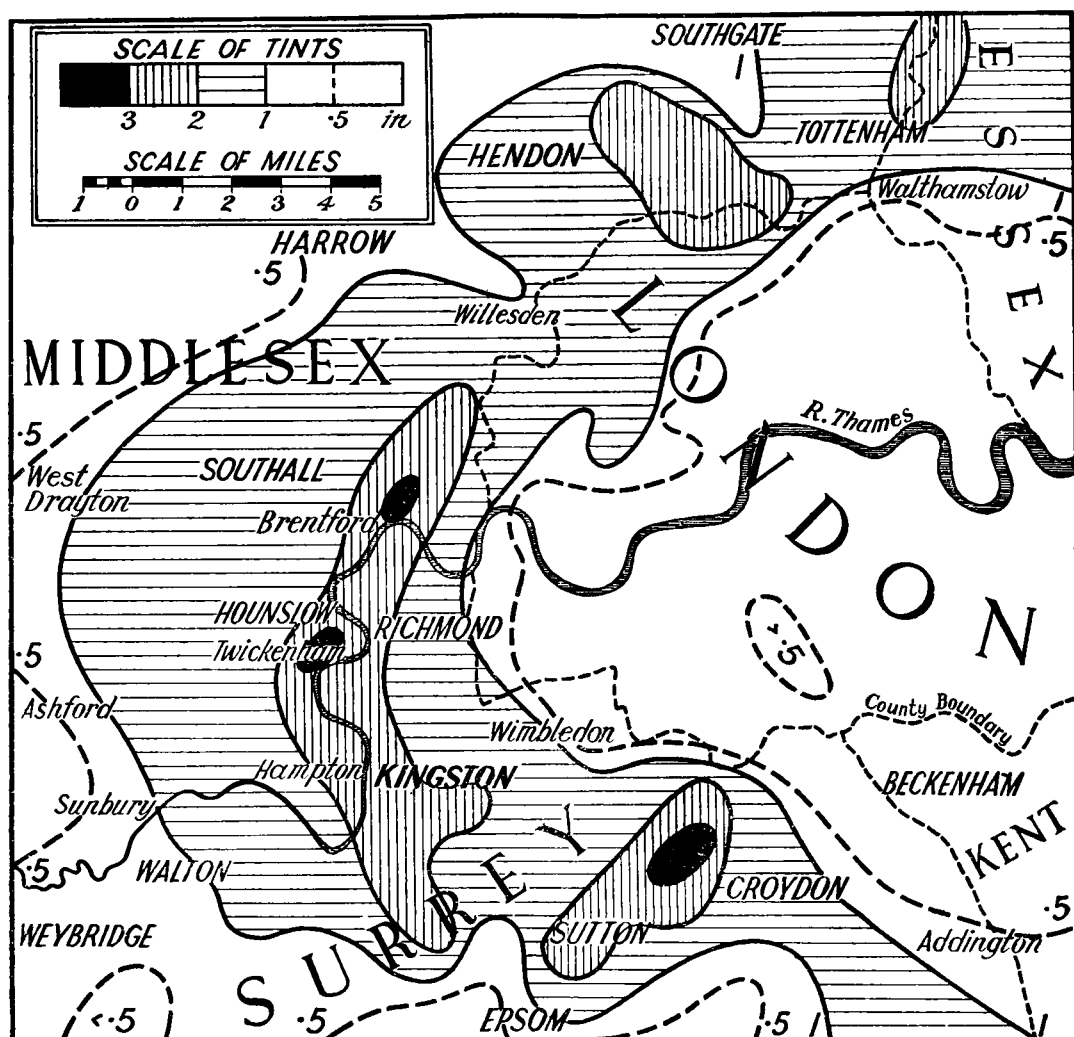
## August 12th

<i>Dorset.</i>	<i>in. or %</i>	<i>Derbyshire.</i>	<i>in. or %</i>
Portland Bill (Lighthouse) ..	2.56 7.0	Fernilee (Wythen) .....	2.78 6.5
		<i>Angus.</i>	
		Montrose .....	3.39 10.2

## August 13th

<i>Surrey.</i>	<i>in. or %</i>	<i>Worcestershire.</i>	<i>in. or %</i>
Beddington Corner		Stourbridge (Pump. Stn.) ..	3.23 10.0
(Millgreen Road) .....	3.58 9.0	<i>Cheshire.</i>	
Sutton (Sewage Works) .....	2.57 7.6	Appleton Reservoir .....	2.94 10.2
New Malden (Dunbar Rd.) ..	2.21 7.8	<i>Lancashire.</i>	
Kingston (County Hall) .....	2.40 8.0	Warrington (Howley Yd.) ..	3.16 11.3
Kingston (Grammar Sch.) .....	2.15 7.5	<i>Cumberland.</i>	
Kingston Sewage Works .....	2.56 8.9	Ulpha .....	2.54 3.7
Kew (Roy. Bot. Gdns.) .....	2.28 7.7	<i>Nairn.</i>	
<i>Kent.</i>		Nairn (Balblair) .....	2.03 8.3
Hildenborough (Gailes) .....	2.76 7.0	Nairn (Achareidh) .....	2.72 11.2
<i>Middlesex.</i>		Nairn (Golf Course) .....	3.13 13.2
Twickenham (Refuse D.W.) ..	3.12 10.9	<i>Inverness.</i>	
Kew Bridge (Waterworks) ..	3.02 9.9	Inverness (Culduthel R.) ..	3.31 13.7
Acton Cemetery .....	2.45 8.3	<i>Ross and Cromarty.</i>	
Highgate (N. Hill Depot) ..	2.66 7.7	Fortrose .....	1.93 8.9
Harringay (Whiteman Rd.) ..	2.53 7.6	Dingwall (Academy) .....	1.81 8.3

The map shows the distribution of the heavy rain to the west and south-west of London for the 13th, details of the intensity being given in Section 6. More than 3 inches occurred near Croydon, Twickenham and Kew, although there was no measurable rain at all



Rainfall, 13th August, 1937.

at Woolwich. Falls exceeding three inches were also recorded at Stourbridge, in Worcestershire, and at Warrington, Nairn and Inverness.

#### August 14th

<i>Berkshire.</i>			<i>Suffolk.</i>		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Bray (Braimel).....	2.78	8.2	Horham Rectory.....	2.67	8.3
<i>Cambridgeshire.</i>			<i>Norfolk.</i>		
Upwell (Marmont Priory L)	2.50	7.5	Diss (The Cedars).....	2.04	8.0

For the 14th some rain was recorded at most stations in the eastern half of the United Kingdom, although there was little rain in Ireland, Wales, the south-west of England and the west of Scotland. The amount appears to have exceeded 1 inch only near Windsor and in East Anglia, over a broad belt from King's Lynn to Southwold and to the west of Downham. There was more than 2 inches at Bray (near Windsor), at Upwell (in Cambridgeshire), at Diss and over an appreciable area to the south-west of Halesworth.

Entries for *September* are confined to 5th, 16th and 18th.

#### September 5th

<i>Yorkshire.</i>	<i>in. or %</i>	<i>Cumberland.</i>	<i>in. or %</i>
Sedbergh (The Leyes).....	2·53 5·7	Borrowdale (The Moraine).	2·72 (3·6)

#### September 16th

*Dorsetshire.*—Wareham (King's Barrow) .....2·85 *in.* or 6·1 per cent.

#### September 18th

*Leicestershire.*—Netherseal (Chilcote) .....1·86 *in.* or 7·7 per cent.

The period 16th to 18th was remarkable for local thunderstorms. It is shown in Section 3 that most of the partial droughts recorded during the year occurred from September 17th to October 22nd. There are no entries in this section from September 19th until October 23rd.

#### October 23rd

<i>Carnarvon.</i>	<i>in. or %</i>	<i>Anglesey (contd.).</i>	<i>in. or %</i>
Snowdon (Cwm Dyli) No. 11	2·82 2·8	Bodedern (Presaddfed)....	2·79 7·7
<i>Anglesey.</i>		Llanerchymedd	
Llangefni (Glanabar).....	2·82 7·1	(Llwydiarth Esgob)...	3·80 9·3
Llangefni (Fronheulog)....	2·91 6·7	Lligwy.....	2·62 7·2
Llangwilog (Trescawen)...	3·02 7·8	Amlwch (Dyffryn Adda) ..	2·74 7·8

#### October 25th

*Dublin.*—Dublin (Phoenix Park) .....2·18 *in.* or 7·6 per cent.

Thunderstorms occurred mainly in western districts of England on the 23rd, and more widely on the 25th. As much as 3·80 inches was recorded at Llwydiarth Esgob, where the amount was easily the largest for any day of the year at that station.

*November, 1937*, was the driest November since 1909 (see Section 8) and this was due to the unusually small number of days with heavy falls of rain.

#### November 3rd

*Kerry.*—Kenmare (Dereen) .....3·00 *in.* or 3·8 per cent.

#### November 17th

*Devonshire.*—Holne (Church Park Cottage) ; .....2·58 *in.* or 3·6 per cent.

**December 2nd**

<i>Lincolnshire.</i>			<i>Yorkshire.</i>		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Normanby .....	2.55	8.9	Austerfield P.S.....	2.13	7.7
Scunthorpe (Brumby S.Sc.)	2.45	7.9	Mexborough .....	2.11	7.5
Scunthorpe			Balby (Sewage Works)....	2.15	7.8
(Henderson Ave. Sch.)..	2.41	8.3	Low Pasture P.S.....	2.17	7.9
Wroot (S. Level P.S.).....	2.83	9.0	Kirk Bramwith.....	2.14	7.9
Crowle (Snowdrop V.).....	2.13	7.9	Beverley (Gas Works).....	2.48	7.6
<i>Nottinghamshire.</i>			Rise Park.....	2.60	7.8
Scrooby .....	2.26	8.2			

The heavy rain of the 2nd was associated with the passage of a depression which moved south-east to the English Channel and then east-north-east to Germany. This occurred before the general wintry spell which set in on the 4th.,

**December 7th**

<i>Hampshire.</i>			<i>Hampshire (contd.)</i>		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Newport (The Mall).....	4.14	9.0	Cowes W.W. (Broadfields).	3.21	8.6
Wootton (Bridge Ho.).....	2.56	6.3	Osborne .....	2.95	6.5
Wootton (Oak Lawn).....	2.50	5.8	Calshot (Aerodrome).....	2.52	7.3

Capt. J. E. Cowper gives an account of the storm at Newport, Isle of Wight, on the 7th, as follows :—" From 15h. till 20h. prolonged and very heavy rain, hail, sleet, and wet snow fell accompanied by severe thunder and lightning. The roads were covered to a depth of about 2 inches by this mixture and the severest flooding for years occurred. The total of 4.14 inches measured next day at 9 h. was the largest ever measured in the Isle of Wight.

**December 10th**

*Perthshire.*—Glendevon (Frandy) .....2.59 *in.* or 4.7 percent.

**December 13th**

*Peebles.*—West Linton (Baddingsgill Res.).....2.85 *in.* or 6.3 percent.

**December 14th**

*Peebles.*—West Linton (Baddingsgill Res.).....2.55 *in.* or 5.6 percent.

**December 23rd**

<i>Mayo.</i>			<i>Mayo (contd.).</i>		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Aasleagh House .....	2.90	3.0	Delphi Lodge .....	2.76	2.8

## 8. MONTHLY RAINFALL IN 1937.

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Information as to the rainfall of the months of 1937 is set out in this section in various forms :—

(1) Table XIX (a) gives general values of the monthly and annual rainfall over the British Isles as a whole and also over the constituent countries separately.

(2) On page 73 details are given of some of the largest and smallest monthly totals of rainfall reported during 1937.

(3) In Table XX the monthly and annual totals of rainfall are set out for 400 stations, distributed as evenly as possible over the British Isles.

(4) Table XXI gives the monthly and annual falls expressed as percentages of the averages for 1881 to 1915. It is confined to 150 stations, uniformly distributed over the British Isles, for which averages are available. At the end of this table, general monthly and annual percentage values are given for the British Isles and for each of the constituent countries.

(5) A set of twelve maps showing the distribution of the actual rainfall in each month, is reproduced in this article. A thirteenth map on a larger scale depicting the distribution of rainfall for the whole year appears in Section 10. These maps were originally drawn on the much larger scale of 19 miles to the inch, and values from the 2,000 stations reporting monthly were plotted on each map before the isohyetal lines were drawn.

(6) A second set of twelve maps showing cartographically the distribution of the percentage monthly values given in Table XXI, as well as in the rainfall tables published month by month in the *Meteorological Magazine* and in the *Monthly Weather Report* is also reproduced in this article. The corresponding percentage map for the whole year appears later in Section 10.



In Table XIX (b) the average values, taken from the Book of Normals, Table 21A (M.O. 236, Section V), are given for comparison with the values for 1937 given in Table XIX (a).

Changes have been made both in connection with the preparation of the maps and the stations selected for inclusion in Tables XX and XXI. In earlier volumes as many as possible of the stations received both monthly and annually were plotted on the monthly maps before the isohyetal lines were drawn, but the rainfall maps for 1937 have been based only on the 2,000 stations for which data are received monthly. The stations in Table XXI have been adjusted to include stations for which records are received monthly, while those in Table XX have been modified to include those given in Table V and Table XXI.

#### *Monthly Percentage Maps, 1870 to 1937.*

The monthly percentage maps, mentioned under (6), continue the series, which was commenced in *British Rainfall*, 1921. Similar maps were published in earlier volumes back to that for 1903, but were not strictly comparable with those for more recent years owing to various changes in the period used as the standard for comparison. The series of monthly percentage maps on a comparable basis has been continued by Dr. J. Glasspoole to cover the period 1870 to 1920. The article on the Fluctuations of Monthly Rainfall\* gave the material to prepare monthly maps for the Januarys and Julys in the period 1881 to 1915. Since then maps for other months in this period were prepared, and recently the series has been extended to cover the years 1870 to 1920.

These percentage maps are available in manuscript in the British Rainfall Organization for reference and could be consulted by any person engaged on investigations where a knowledge as to the fluctuations of monthly rainfall over the period 1870 to date, in various parts of the British Isles would be of service.

These maps form a natural complement to the series of annual percentage maps which appear in the Rainfall Atlas published by the Royal Meteorological Society.

#### *General Monthly Rainfall.*

The general monthly values shown in Table XIX (a) have been computed by applying the percentage values given at the end of Table XXI to the average general values for the period 1881 to 1915. These computed values have been subsequently slightly adjusted in order that the totals for the year should agree with the totals given in Table XXIII which are based on a more exact determination as explained in the text accompanying that table.

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\* See *British Rainfall*, 1922, pp. 234-259, by J. Glasspoole.

Table XIX (a).—*General Rainfall for 1937, computed from the average, 1881–1915, by applying the general percentage values given in Tables XXI and XXIII to the General Average Values.*

	England.	Wales.	Isle of Man.	England and Wales.	Scotland.	Ireland.	British Isles.
	in.	in.	in.	in.	in.	in.	in.
January .. ..	5.0	7.2	4.3	5.4	7.7	7.0	6.5
February .. ..	5.1	8.5	7.8	5.6	5.6	5.6	5.9
March .. ..	3.6	3.6	3.7	3.7	3.0	3.8	3.7
April .. ..	3.0	3.8	4.1	3.1	2.1	3.1	3.0
May .. ..	3.1	2.2	1.9	3.0	2.5	2.3	2.8
June .. ..	1.5	2.4	3.2	1.7	3.0	2.1	2.1
July .. ..	2.5	3.2	4.4	2.6	4.7	4.9	3.7
August .. ..	1.5	1.6	2.3	1.5	4.1	3.1	2.5
September .. ..	2.3	3.2	2.5	2.5	3.5	4.1	3.2
October .. ..	3.0	4.9	4.6	3.3	3.9	2.7	3.3
November .. ..	2.0	2.7	2.4	2.1	1.6	2.5	2.2
December .. ..	4.0	4.3	4.5	4.3	4.1	3.4	4.2
Year .. ..	36.6	47.6	45.7	38.8	45.8	44.6	43.1

The total rainfall over the British Isles up to the end of May was 6.5 inches in excess of the average. Subsequently dry months predominated and by the end of the year the excess was only 1.7 inch.

Table XIX (b).—*General Monthly and Annual Averages of Rainfall, 1881–1915.*

	England	Wales	Isle of Man.	England and Wales	Scotland	Ireland	British Isles
	in.	in.	in.	in.	in.	in.	in.
January .. ..	2.69	4.72	3.40	2.99	4.90	4.07	3.78
February .. ..	2.34	3.94	3.25	2.57	4.18	3.53	3.26
March .. ..	2.47	3.82	3.03	2.67	4.05	3.36	3.22
April .. ..	1.98	2.96	2.47	2.12	2.99	2.75	2.52
May .. ..	2.19	2.95	2.82	2.30	3.01	2.75	2.61
June .. ..	2.33	3.05	2.54	2.44	2.83	2.82	2.64
July .. ..	2.75	3.60	3.22	2.87	3.78	3.37	3.25
August .. ..	3.11	4.71	4.01	3.35	4.51	4.20	3.88
September .. ..	2.37	3.51	3.22	2.54	4.00	3.13	3.09
October .. ..	3.69	5.63	4.64	3.97	4.90	4.08	4.25
November .. ..	3.19	5.25	4.73	3.49	5.29	4.28	4.19
December .. ..	3.56	6.00	4.97	3.92	5.88	4.96	4.72
Year .. ..	32.67	50.14	42.30	35.23	50.32	43.30	41.41

A striking feature of the distribution of the rainfall shown in the summary at the foot of Table XXI is the sequence of five wet months, from January to May, and the dry period, August to December. Further details are given in Part IV.

The wettest months over the country generally were January and February with 6·5 and 5·9 inches respectively. February was the wettest month over England and Wales, while January was wettest over Scotland and Ireland; June was the driest month over the country generally and over Ireland. November ranked as the driest month over Scotland, and August over England and Wales.

At the end of Table XXI the general values are given as percentages of the average. The rainfall exceeded the average over the British Isles as a whole in seven months, *viz.*, January, February, March, April, May, July and September. November was the driest November since that of 1909. It is also interesting to note that in five out of the last six years August has given less than the average amount. During the years 1932 to 1937 the mean of July, August and September has been 3·4, 2·6 and 4·0 inches respectively. In Table XIX (b) August is the wettest of these months, and the recent run of dry Augusts is therefore most remarkable.

January, with 171 per cent., was the wettest January since that of 1877, with 192 per cent., apart from January, 1928, with 203 per cent. February, with 181 per cent., was the wettest February since 1870 apart from those of 1915 and 1923 with 181 and 204 per cent., respectively. Together January and February, 1937, gave more rain than any similar period since before 1870. In fact that is the case also with the three months January to March, the four months January to April, and also the five months January to May of 1937. A comparison is given below with the rainfall of earlier wet years :—

*General Rainfall, British Isles.*

		2 Months. Jan.—Feb.	3 Months. Jan.—March.	4 Months. Jan.—April.	5 Months. Jan.—May.
1872 ..	..	11·2	14·9	17·7	20·5
1877 ..	..	11·1	14·4	18·2	21·3
1920 ..	..	9·0	13·2	17·3	21·1
1928 ..	..	11·5	15·5	17·5	19·2
1937 ..	..	12·4	16·1	19·1	21·9

Both 1872 and 1877 gave more rain in the corresponding period than occurred in the six months January to June, 1937.

The rainfall of the five months January to May, 1937, did not, however, reach the large totals recorded in the wettest consecutive months on record. Thus the general rainfall of the four consecutive months November, 1914, to February, 1915, was as much as 24·6 inches and appreciably more than fell during the first five months of 1937.

The incidence of rainfall during 1937 was even more remarkable over England and Wales. The rainfall of each of the five months January to May exceeded the average, while the following six months June to November were all relatively dry. Estimates of the general rainfall over England and Wales since 1727 were published in *British Rainfall*, 1931, pp. 300–305. These values give no other year with such a definite contrast as occurred during 1937. A comparison of the rainfall of these two periods is set out below :—

		England and Wales.			Scotland.	Ireland.
		in.			in.	in.
January to May, 1937	...	20·8	20·9	21·8		
January to May (average)	...	12·6	19·1	16·5		
<hr/>						
June to November, 1937	...	13·7	20·8	19·4		
June to November (average)		18·7	25·3	21·9		

It will be noted that the rainfall experienced during January to May, 1937, over England and Wales was nearly equal to that over Scotland and Ireland, although usually both Scotland and Ireland are appreciably wetter.

*Extremes of Monthly Rainfall at Individual Stations.*

(a) *Monthly Totals.*—As much as 25 inches was recorded at only one station, *viz.*, at Sty Head, in Cumberland, for January.

On the other hand the smallest totals were recorded in August at stations in Nottinghamshire :—

Station.	Amount. in.
Nottingham (Colwick Sugar Factory) ...	·17
Southwell (The Residence) ...	·17
East Bridgford ...	·19
Worksop (Hodsock) ...	·20
Bulwell (Bestwood W.W.) ...	·20

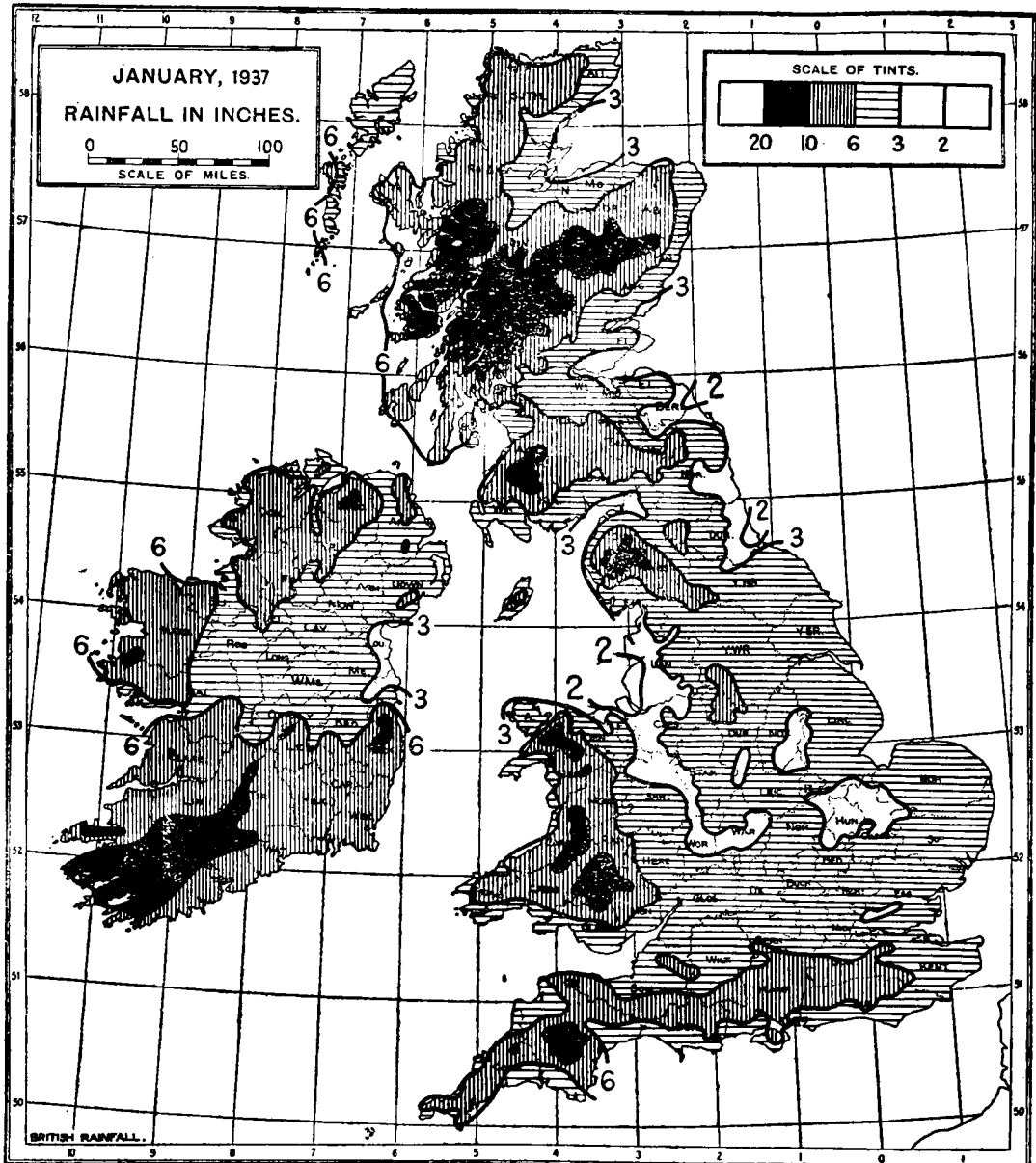
(b) *Monthly Percentage Totals.*—A monthly total of more than four times the average was recorded at Balmoral Castle for January, *viz.*, 428 per cent. Boston, in Lincolnshire, recorded 300 per cent. in May and 335 per cent. in July.

*The Rainfall and Weather of the Individual Months.*

\* \* Maps showing the distribution of mean pressure and the movements of the centres of depressions for each month are published in the *Monthly Weather Report*.

In the following pages maps are given showing the distribution of the actual rainfall in each month, and of the percentage monthly values, together with a short description of the weather of each month. Further details are given in the *Monthly Weather Report* and in the *Meteorological Magazine*.

**January.**—During the month gales were frequent and severe in the west and north. Snow was widespread in Scotland from the 26th to 31st and was reported at many stations in England and Ireland from the 28th to 30th. Undrifted snow was 15 inches deep in Aberdeenshire, 10 inches in Fife and 4 to 6 inches locally in the north of

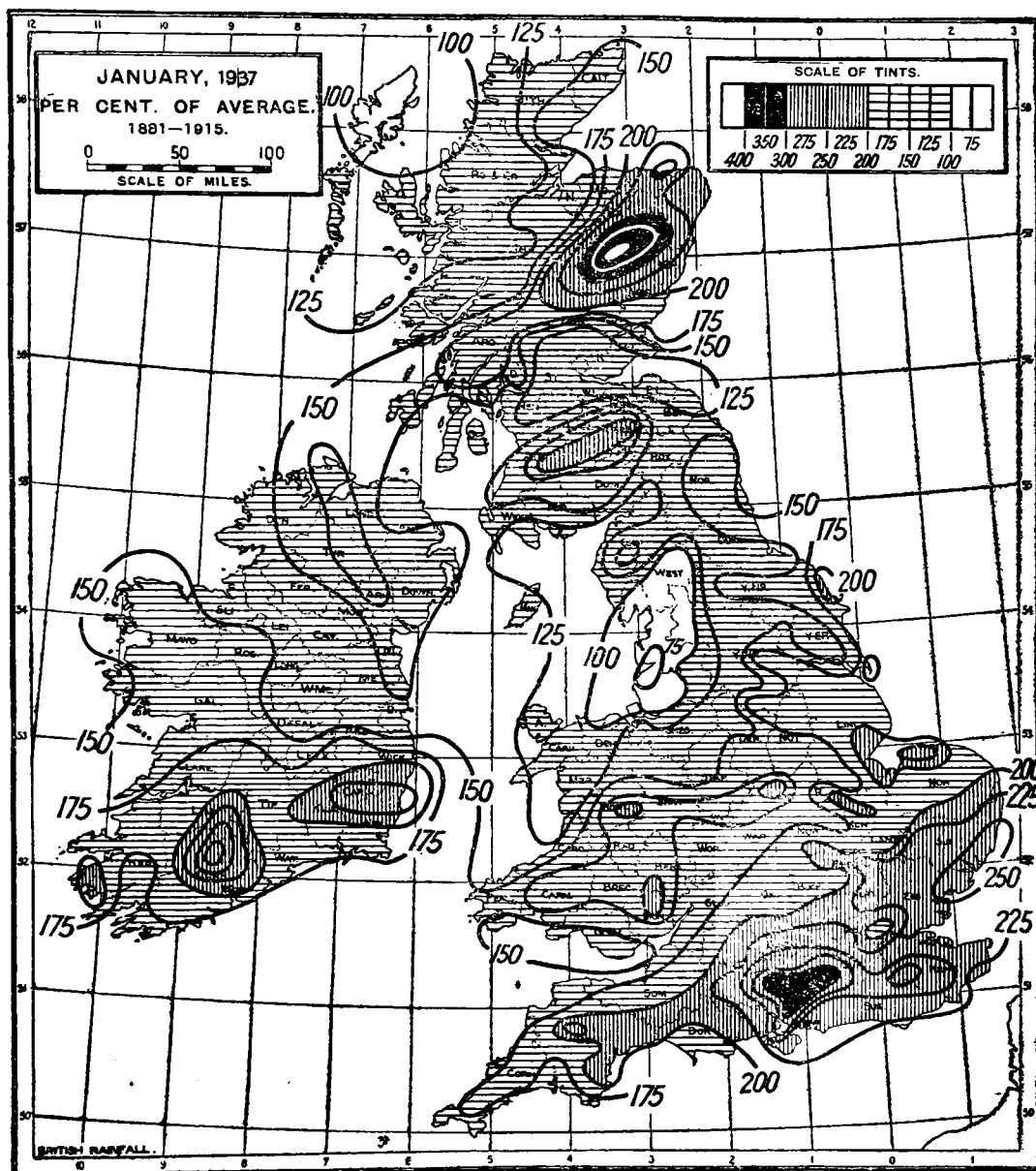


Rainfall, January, 1937.

England. Frequent cyclonic rains occurred during the 14 days, 12th to 25th (see Section 7). Mean pressure was below the average everywhere, the deficiency at 7h. varying from 14·3 mb. at Valentia to 3·6 mb. at Lerwick.

Excessive rainfall was general, though less than the average

occurred over parts of Lancashire and Westmorland and in the island of Lewis. More than twice the average occurred to the south-east of a line drawn roughly from Okehampton to Norwich, over the Grampians and adjacent districts, the Southern Uplands of Scotland and the south of Ireland ; at Balmoral Castle and Braemar the totals

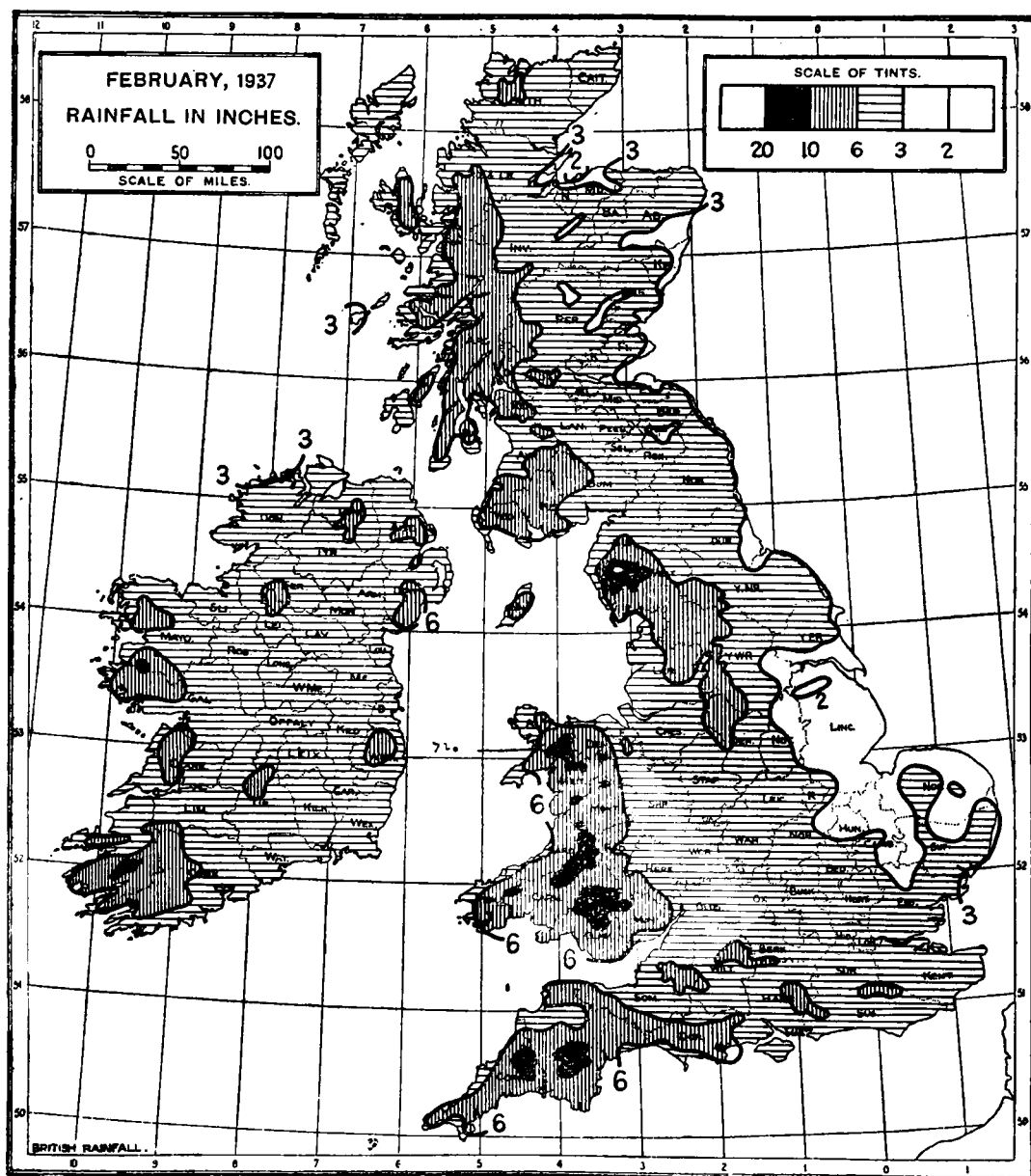


Rainfall, January, 1937, as per cent. of average.

exceeded four times the average. At Braemar it was the wettest month of any name since records commenced there in 1866.

Large areas in the west of Great Britain and in Ireland received more than ten inches during the month, with over 20 inches in part of Inverness-shire.

**February** brought further gales and heavy rains. On the 28th a gust of 107 m.p.h. was registered at Holyhead, this being the highest recorded anywhere during the year. A notable snowstorm occurred on the 27th-28th, accompanied by a northerly gale which caused deep

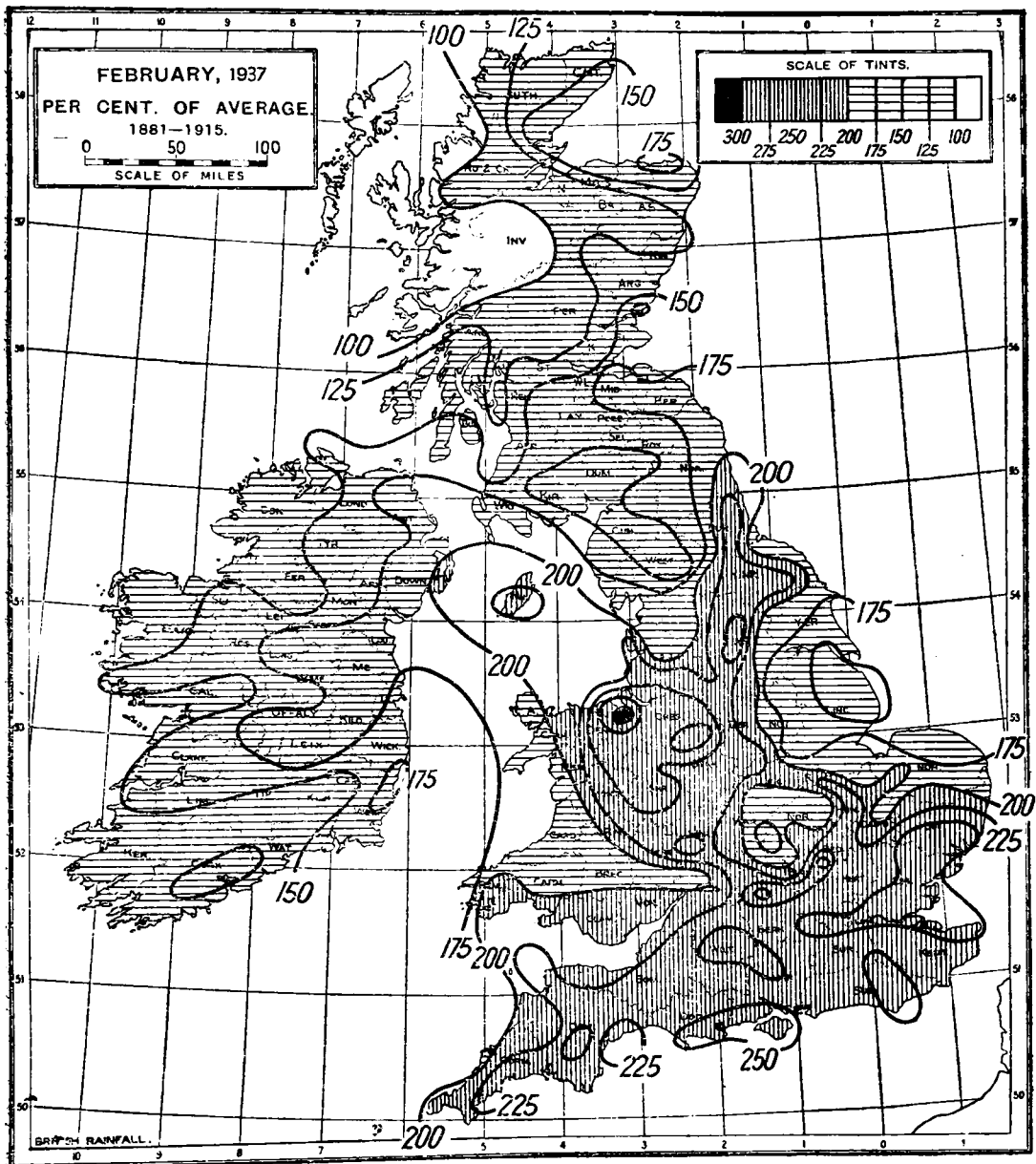


Rainfall, February, 1937.

drifts, especially in Scotland. On the 28th undrifted snow was 24 inches deep at Buxton, while drifts 7 to 12 feet occurred in Nairnshire.

Unusually low mean pressure was registered over the country generally, the deficiency at 7h. varying from 14.4 mb. at Tynemouth to 9.4 mb. at St. Ann's Head.

The rainfall reached the average in all parts of the British Isles, except the north-west of Scotland, and exceeded twice the average over most of southern and central districts of England, with three times the average in Flintshire.



**Rainfall, February, 1937, as per cent. of average.**

A feature of the rainfall map in inches is the large area with from 3 to 6 inches.

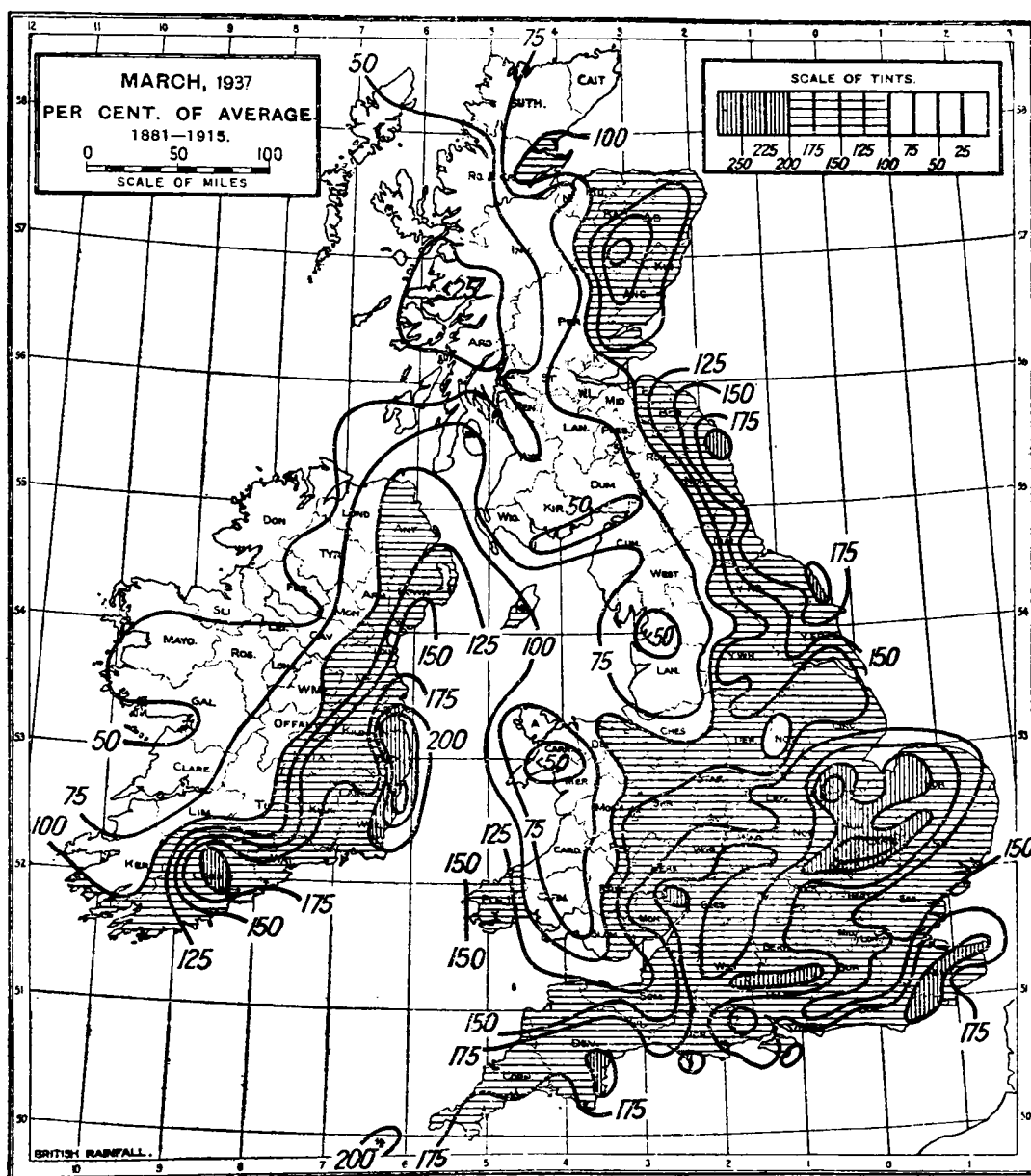
It was the wettest February since 1870 at many stations in England and Wales, *e.g.*, Camden Square (London), Slough, Oxford, Salisbury and Liverpool (Bidston). Over the British Isles it was the wettest February since 1870 apart from those of 1923 and 1915.





reversed. The mean pressure at 7h. varied from 1003 mb. in the south-west to 1007 mb. in the north.

There was more than twice the average rainfall to the south of the Wash, in Kent, Hampshire, Northumberland, Co. Cork and Co. Wexford.

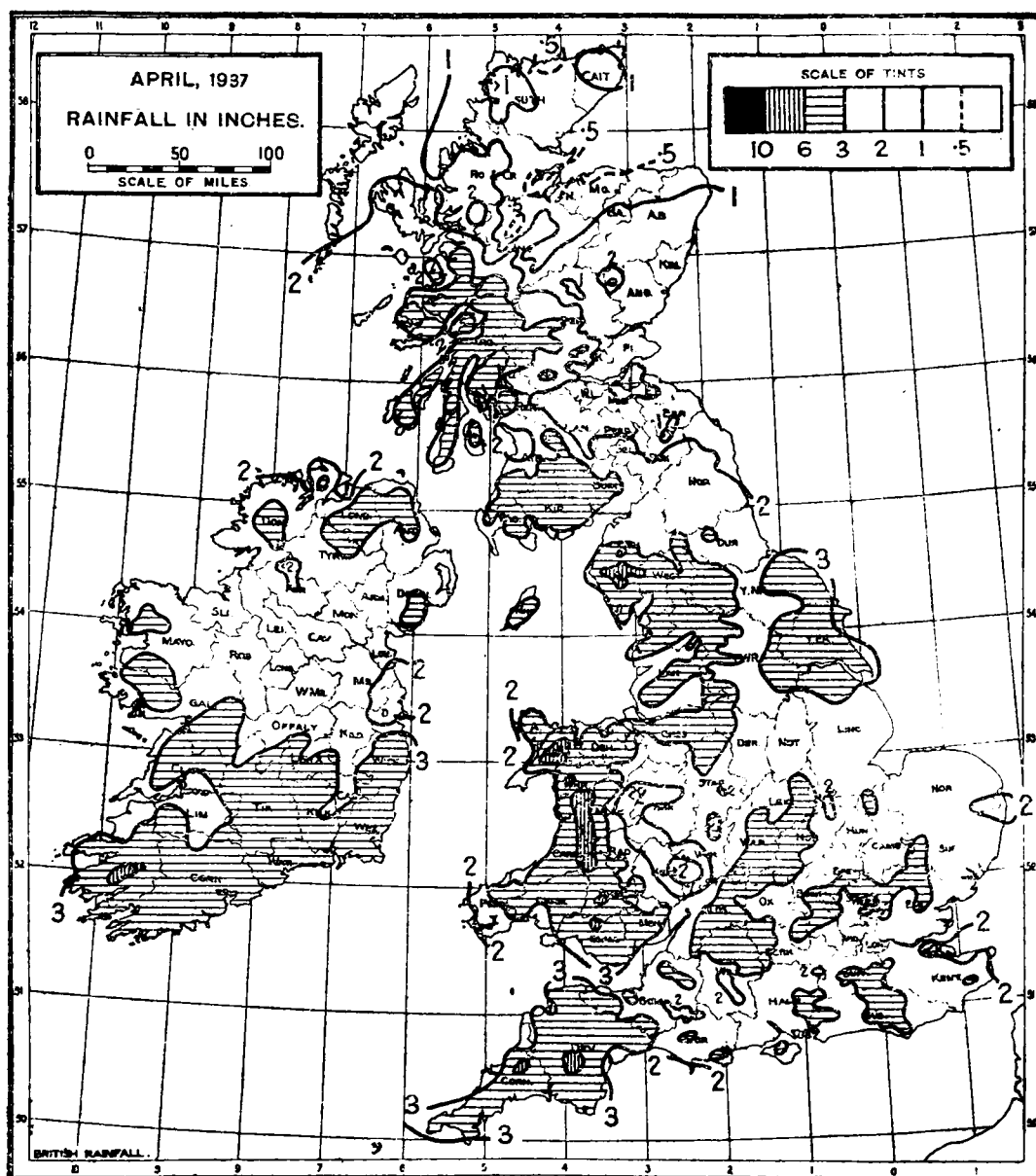


Rainfall, March, 1937, as per cent. of average.

On the other hand there was less than half the average in the north-west of Ireland and over the Western Highlands of Scotland.

Further details of the persistent rains of January to March and the serious flooding in the Fenlands are dealt with separately.

**April** showed a general and exceptional deficiency of sunshine. At numerous stations it was the dullest April for 56 years. An unusual feature was the occurrence of the highest temperature readings in Scotland, where on the 30th 70° F. or 71° F. was reached at several stations.

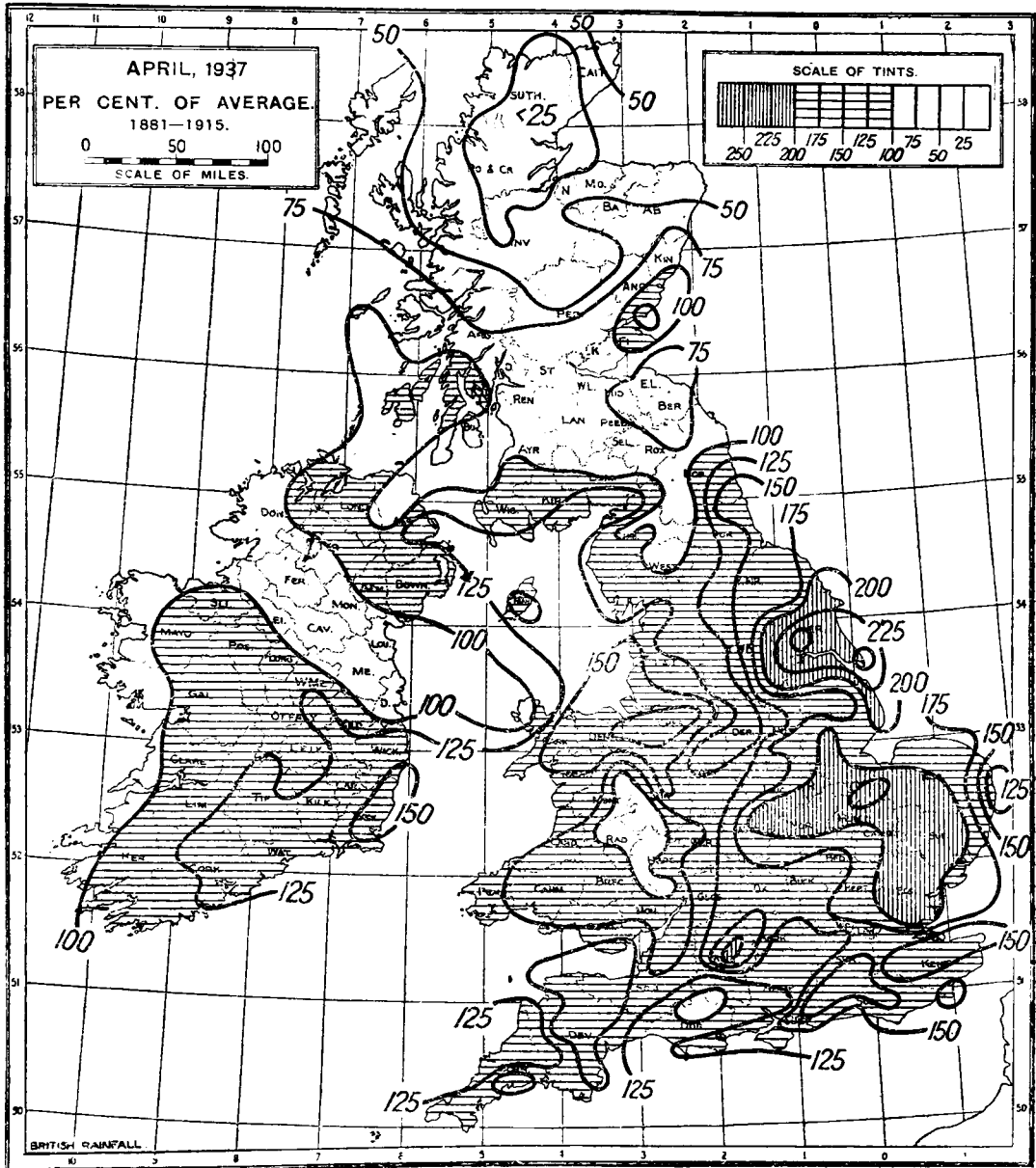


**Rainfall, April, 1937.**

Mean pressure was generally below the average by amounts ranging up to 4 mb. except in the Shetlands where the mean value was slightly above the average.

Rainfall exceeded the average in most parts of England, Wales and southern Ireland, but there was a deficiency in most of Scotland.

Over large areas between Scarborough and Shoburyness there was more than twice the average, while over the northern half of Scotland less than half the average occurred, with only 20 per cent. in parts of Cromarty and Sutherland. This was the fourth successive month in which the rainfall exceeded the average over England and Wales,



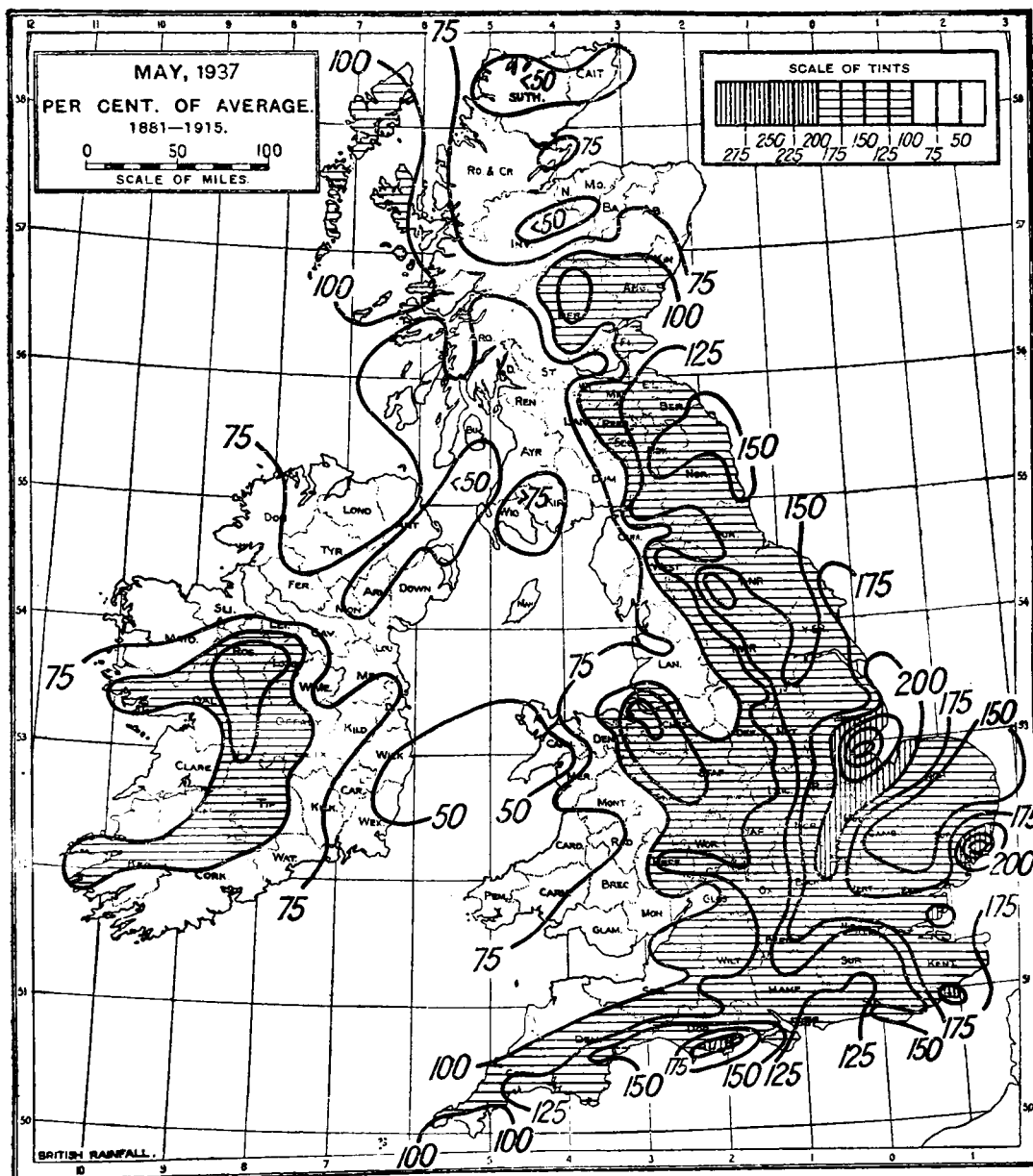
Rainfall, April, 1937, as per cent. of average.

over Ireland and the British Isles as a whole.

The map of the rainfall in inches shows areas in the neighbourhood of the Caledonian Canal with less than half-an-inch and more than 10 inches locally in the English Lake District.



The total rainfall exceeded twice the average over an area extending from Spurn Head to Bedford, and at other stations in the south-east of England. The large total recorded at Boston, 5.92 inches, or three times the average, was due mainly to heavy rains of the 11th and 12th, amounting to 2.05 inches, and the 20th to 26th, giving

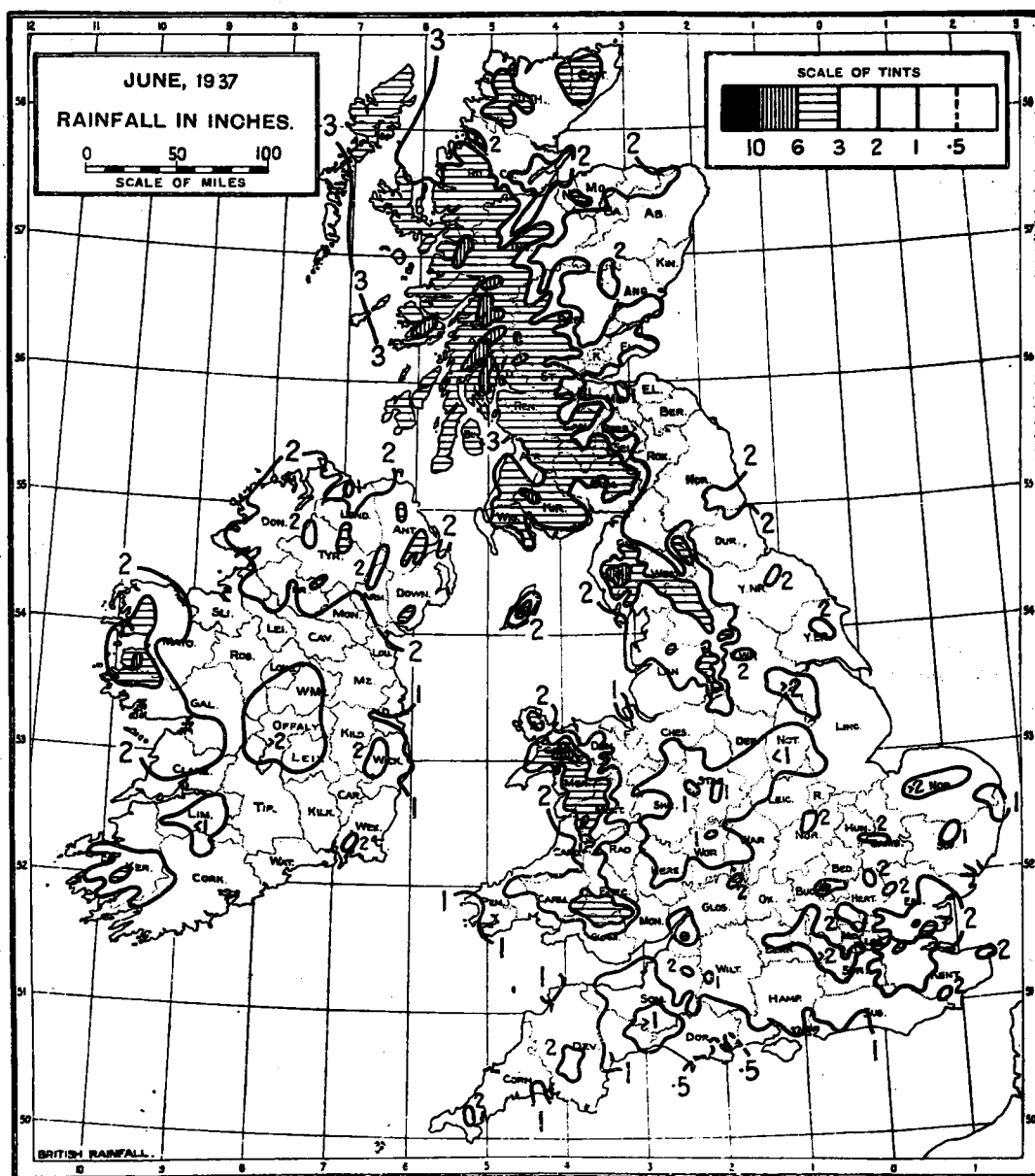


Rainfall, May, 1937, as per cent. of average.

2.36 inches. Over parts of the north of Scotland, in north Wales and parts of the east of Ireland, there was less than half the average.

The map of the rainfall in inches shows the unusual distribution of more rain over the eastern half than over the western half of England and Wales.

**June** was mainly dry over England, Wales, Ireland and the east of Scotland. There was a general deficiency of sunshine, especially in Ireland. Frequent thunderstorms were experienced in England between the 10th and 22nd. In the north of Scotland heavy rain, accompanied by gales, occurred on the 27th and 28th.



**Rainfall, June, 1937.**

The deviation of mean pressure at 7h. varied from  $-2.6$  mb. at Lerwick to  $+3.1$  mb. at Valentia, and the pressure gradient was therefore appreciably greater than usual.

The total rainfall was less than the average over large areas to the east of Wales, extending to Nottingham and Leicester, along the

south coast of Wales and south coast of England as far as Worthing, over part of the Pennines, Aberdeenshire and Co. Kerry. On the other hand as much as 175 per cent. occurred in Argyllshire. June, 1937, was the first month since October, 1936, to receive less than the average over the British Isles as a whole.



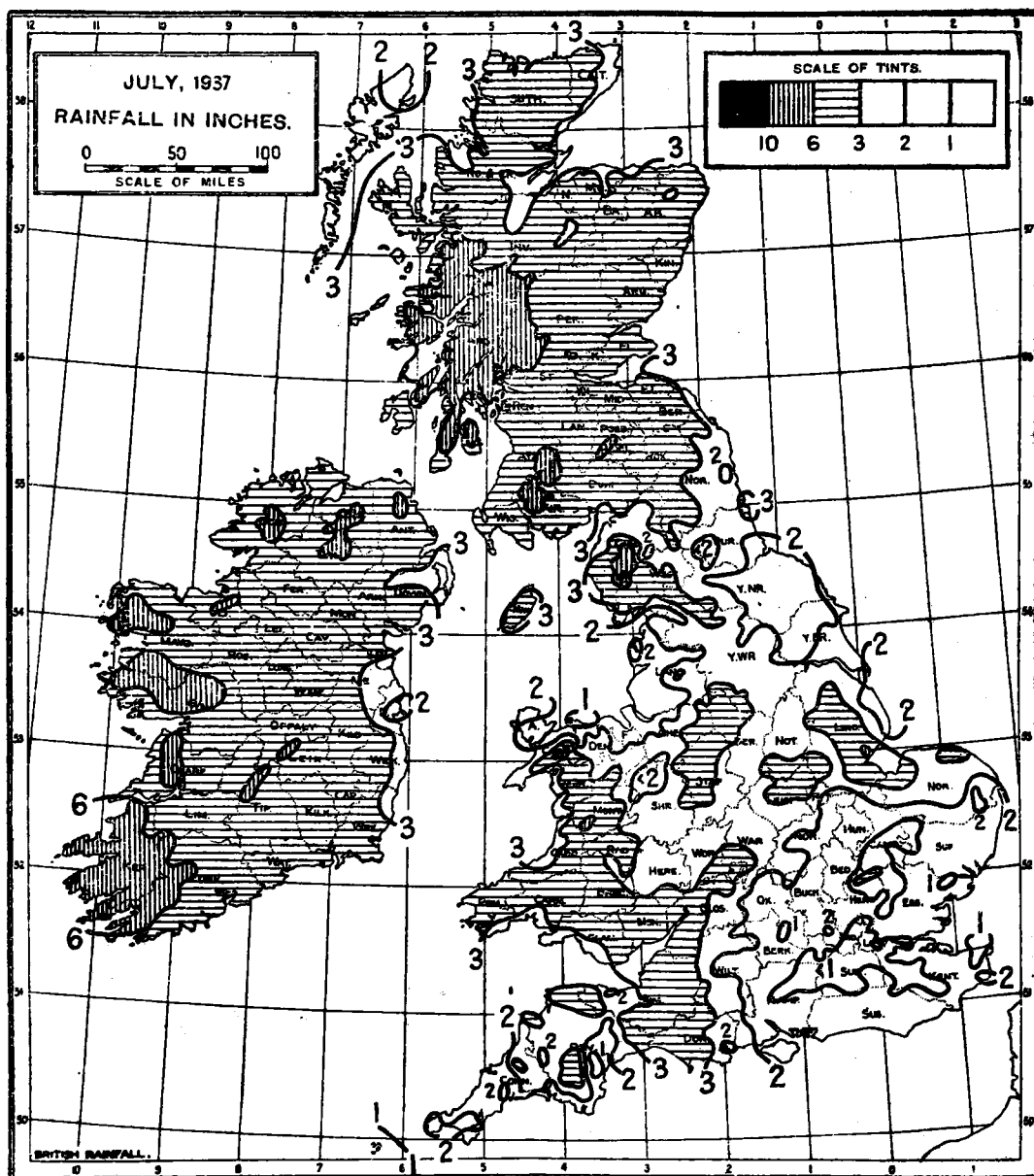
**Rainfall, June, 1937, as per cent. of average.**

The most interesting features of the map in inches are the numerous areas in the Midlands and south of England with less than 1 inch, and the area with .5 inch near Swanage. Falls exceeding 3 inches occurred mainly in the western half of Scotland.



**July** was a dull month with frequent thunderstorms during the first three weeks.

The mean pressure at 7h. approximated closely to the average at most stations, the deviation ranging from  $-1.1$  mb. at Wick to  $+1.3$  mb. in the Scilly Isles.

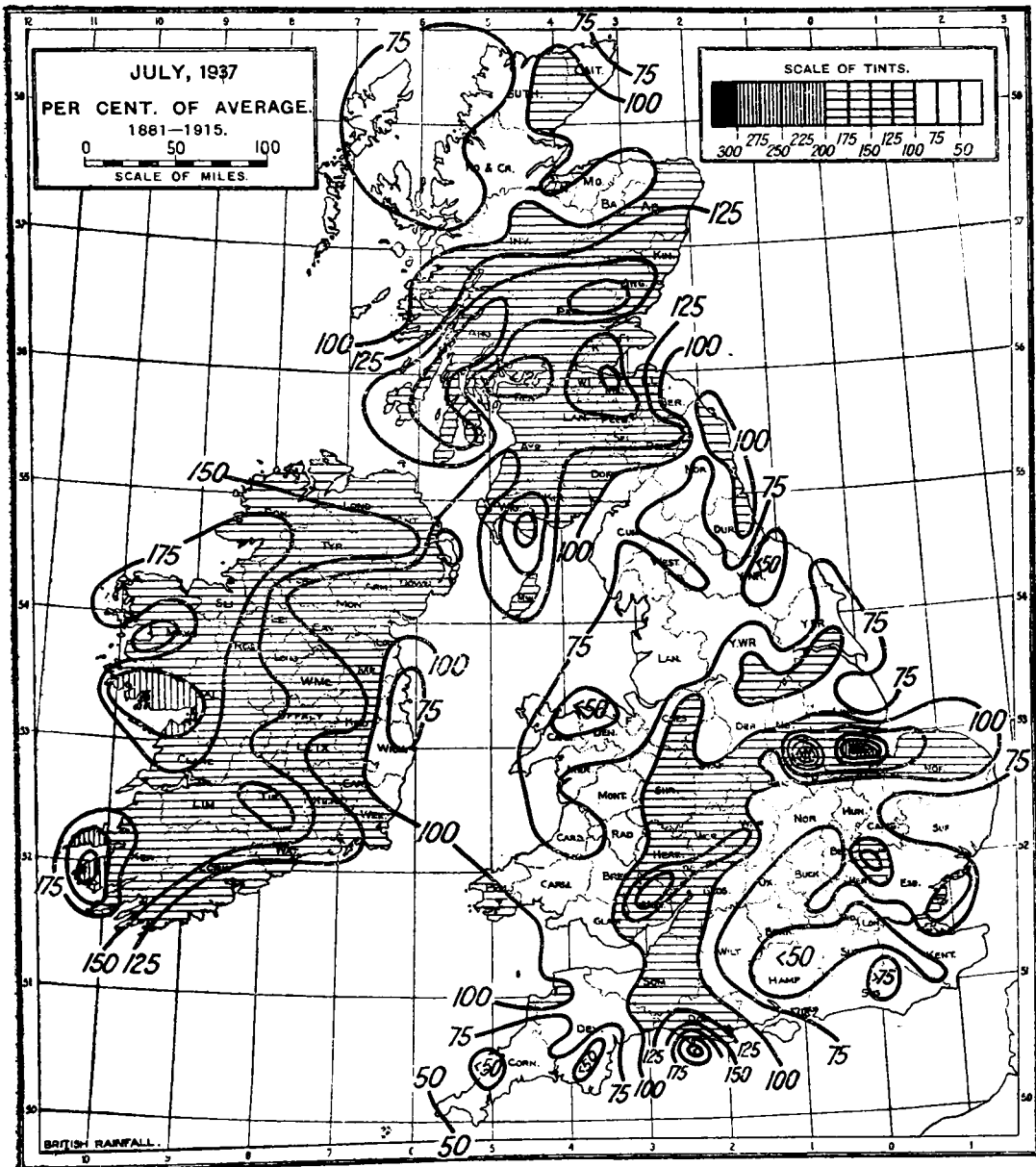


**Rainfall, July, 1937.**

Owing to heavy falls during thunderstorms the totals for the month were very variable. There was less than half the average in North Wales, over a large area to the south of London, and in parts of the Devon and Cornwall peninsula. More than twice the average

occurred in Connemara, in Co. Kerry, near Weymouth and in the south of Lincolnshire. At Boston the large total of 7·37 inches or 335 per cent. was due mainly to the fall of 5·46 inches on the 15th (see Section 7).

By far the greater part of Wales, Scotland and Ireland recorded

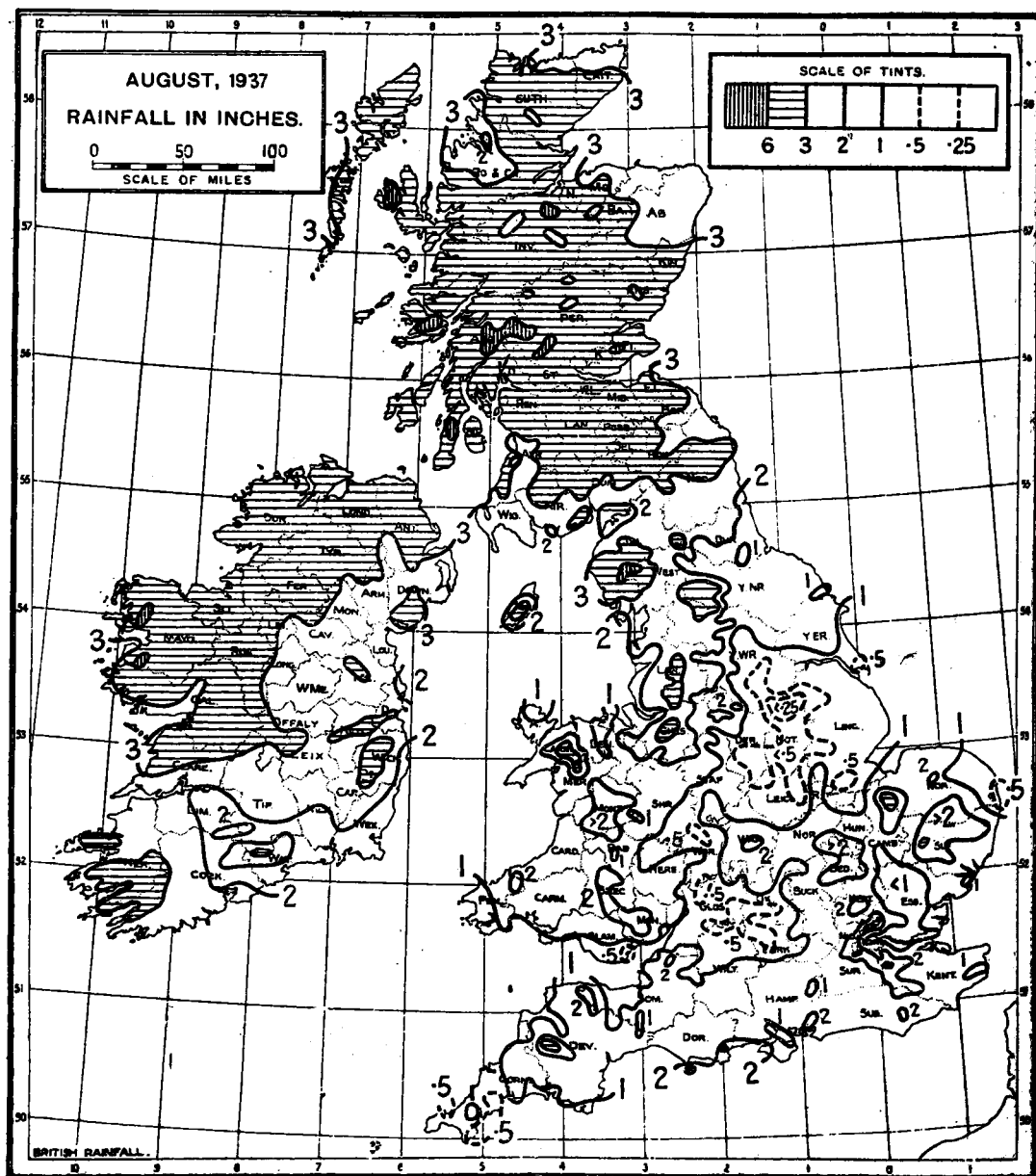


Rainfall, July, 1937, as per cent. of average.

between 3 and 6 inches for the month. A number of stations in the south of England recorded less than 1 inch.

At Valentia Observatory, in Co. Kerry, it was the wettest July in records back to 1866.

**August** gave a return to more seasonable conditions, being on the whole warm and dry. The highest temperatures of the year were recorded in the early part of August, *viz.*, 92° F. at Canterbury and Tunbridge Wells on August 7th. Absolute droughts were recorded during the month (see Section 3).



**Rainfall, August, 1937.**

Mean pressure exceeded the average everywhere, the excess at 7h. varying from 6.9 mb. at Lerwick to 3.2 mb. at Kew.

The totals were generally less than 50 per cent. of the average in the southern half of England and Wales. Falls of less than 25 per cent. were widespread in this area and there was less than 10 per cent.

in parts of Nottinghamshire and Glamorgan. The largest percentage values occurred in the neighbourhood of the Moray Firth. The large total at Nairn of 5·43 inches, or 225 per cent. was due mainly to the thunderstorm rains which gave 3·13 inches for the 13th (see Section 7). At Oxford it was the driest August since 1822, *i.e.* for 115 years.



Rainfall, August, 1937, as per cent. of average.

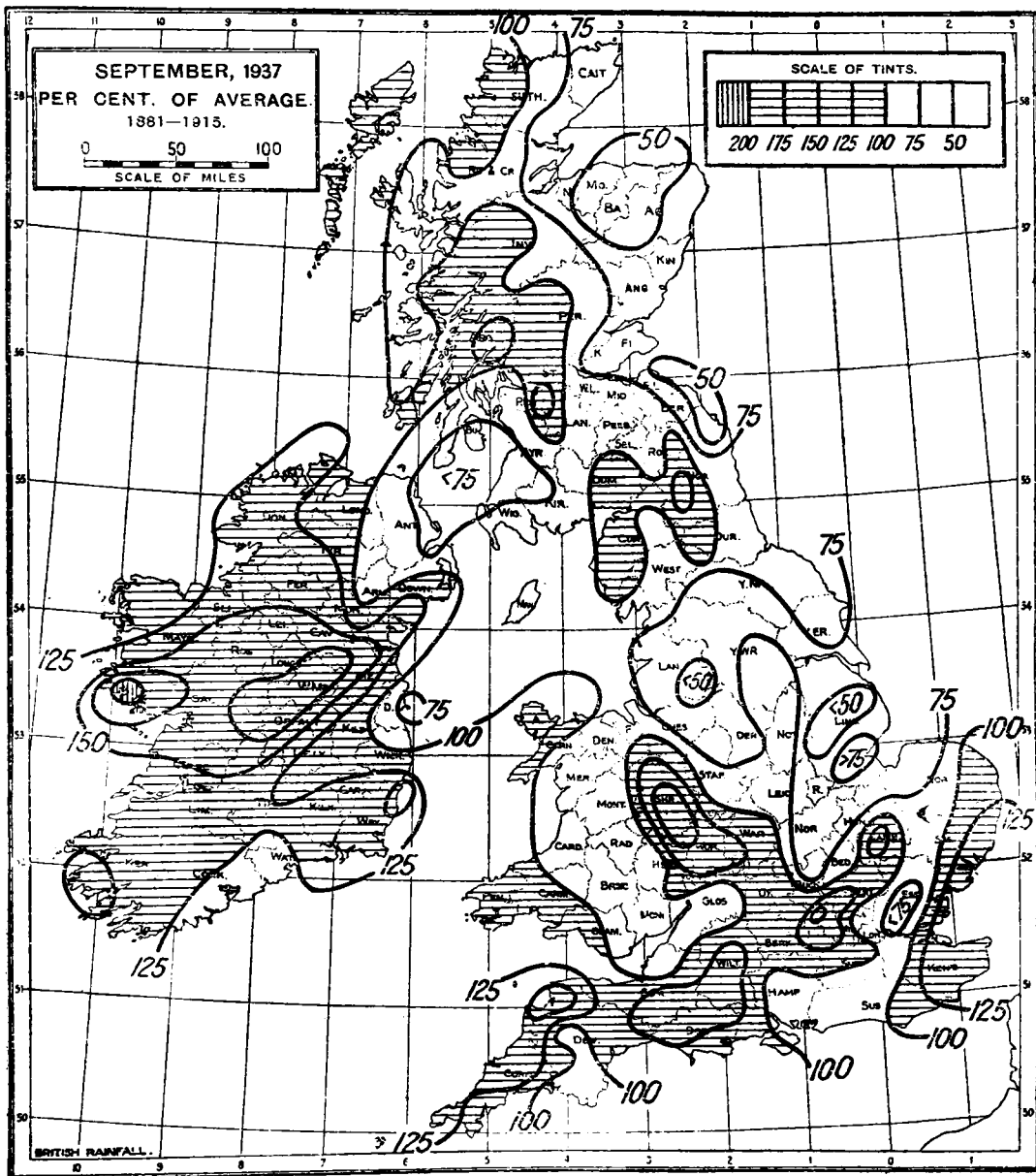
The map of the rainfall in inches shows many areas with less than .5 inch. There was less than .25 inch in Nottinghamshire.

The dry period, especially in parts of Scotland, which commenced in August, is dealt with in Part IV.



in Co. Galway of 9.60 inches, or 202 per cent., was due to frequent heavy rains, more than 1 inch being recorded on the 1st, 5th, 22nd and 30th.

Over England and Wales September was the fourth consecutive month with a rainfall less than the average.

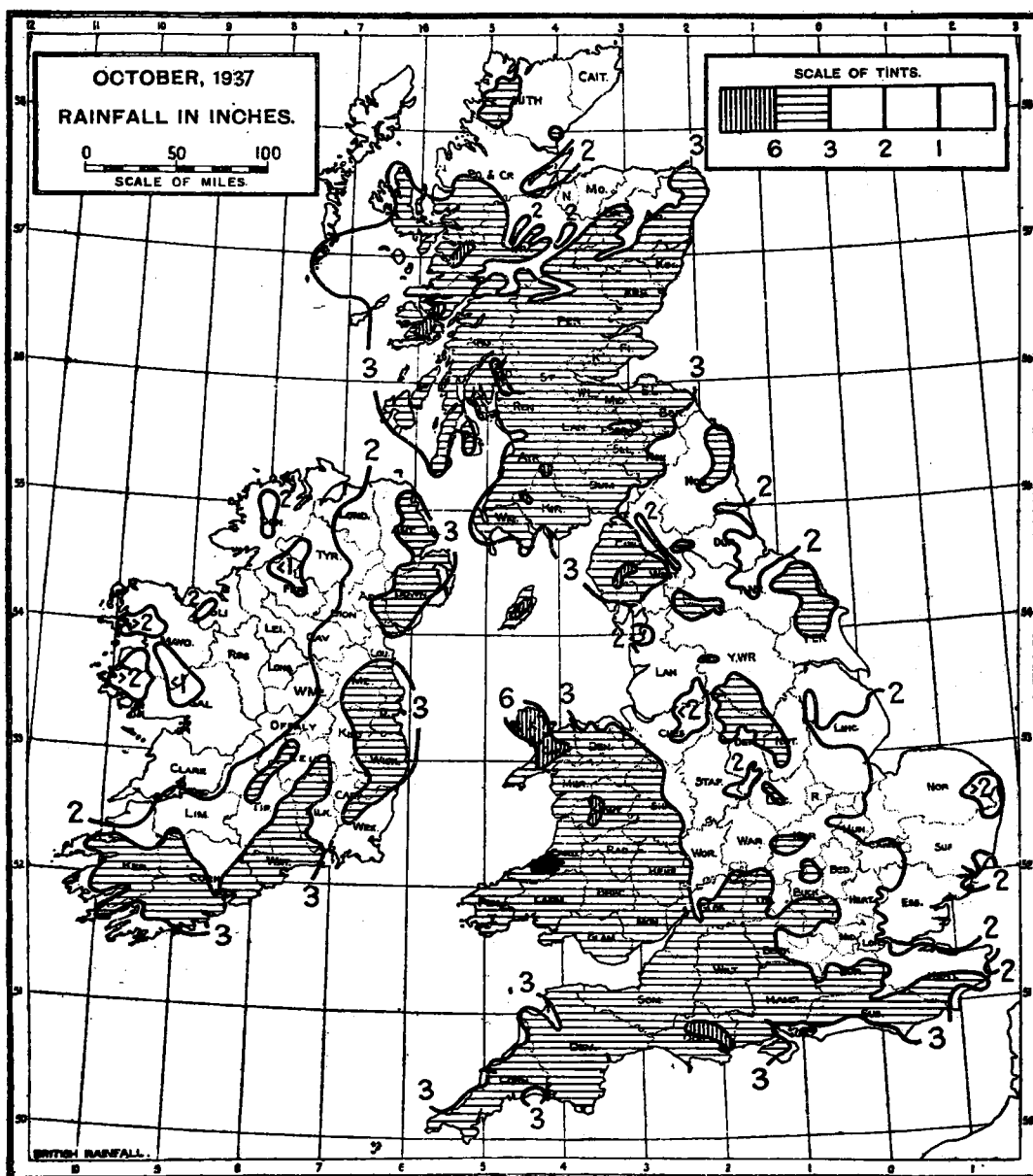


Rainfall, September, 1937, as per cent. of average.

The map of rainfall in inches shows that practically the whole of Ireland received more than 3 inches. Falls of more than 10 inches were recorded in Co. Galway as well as in Inverness-shire and the English Lake District.

**October** was on the whole dry and dull. At many stations little rain fell during the period 2nd to 20th. At Horncastle, in Lincolnshire, there was a dry spell from September 25th to October 21st (see Section 3).

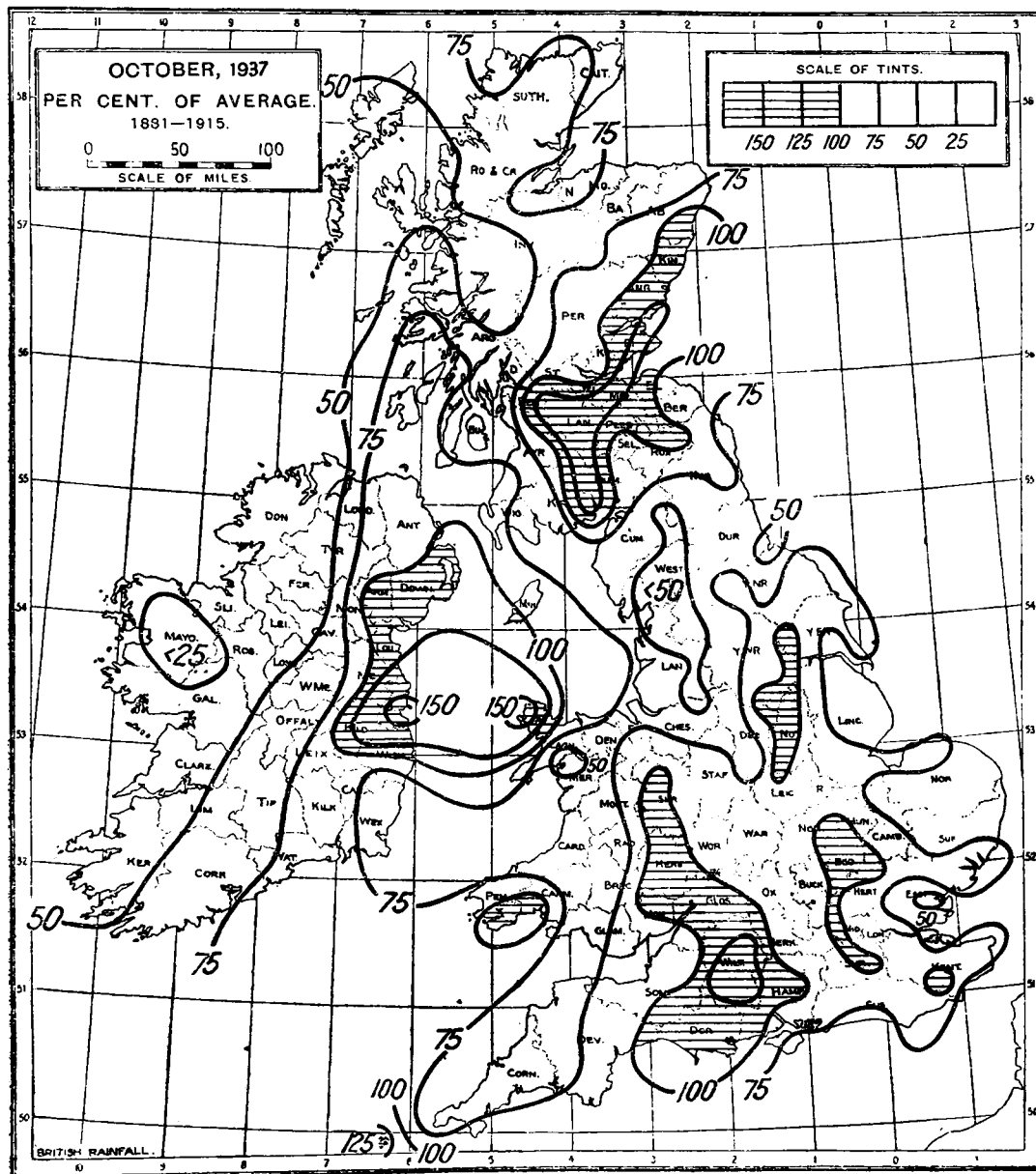
Mean pressure at 7h. exceeded the average generally, the deviation



**Rainfall, October, 1937.**

ranging from  $+1.1$  mb. at Kew to  $+4.1$  mb. at Stornoway. An interesting occurrence was the great change in pressure at Kew from  $1035.3$  mb. on the 17th to  $970.8$  mb. on the 23rd. Such a wide range of pressure has not been experienced there in any October since before 1869.

There was less than half the average in a number of areas, especially in the west of Ireland and of Scotland, but also near Chelmsford, Middlesbrough, and Cricketh, and in the north-west of England. Thunderstorms occurred mainly in western districts of England on the 23rd and more widely over England on the 25th.



Rainfall, October, 1937, as per cent. of average.

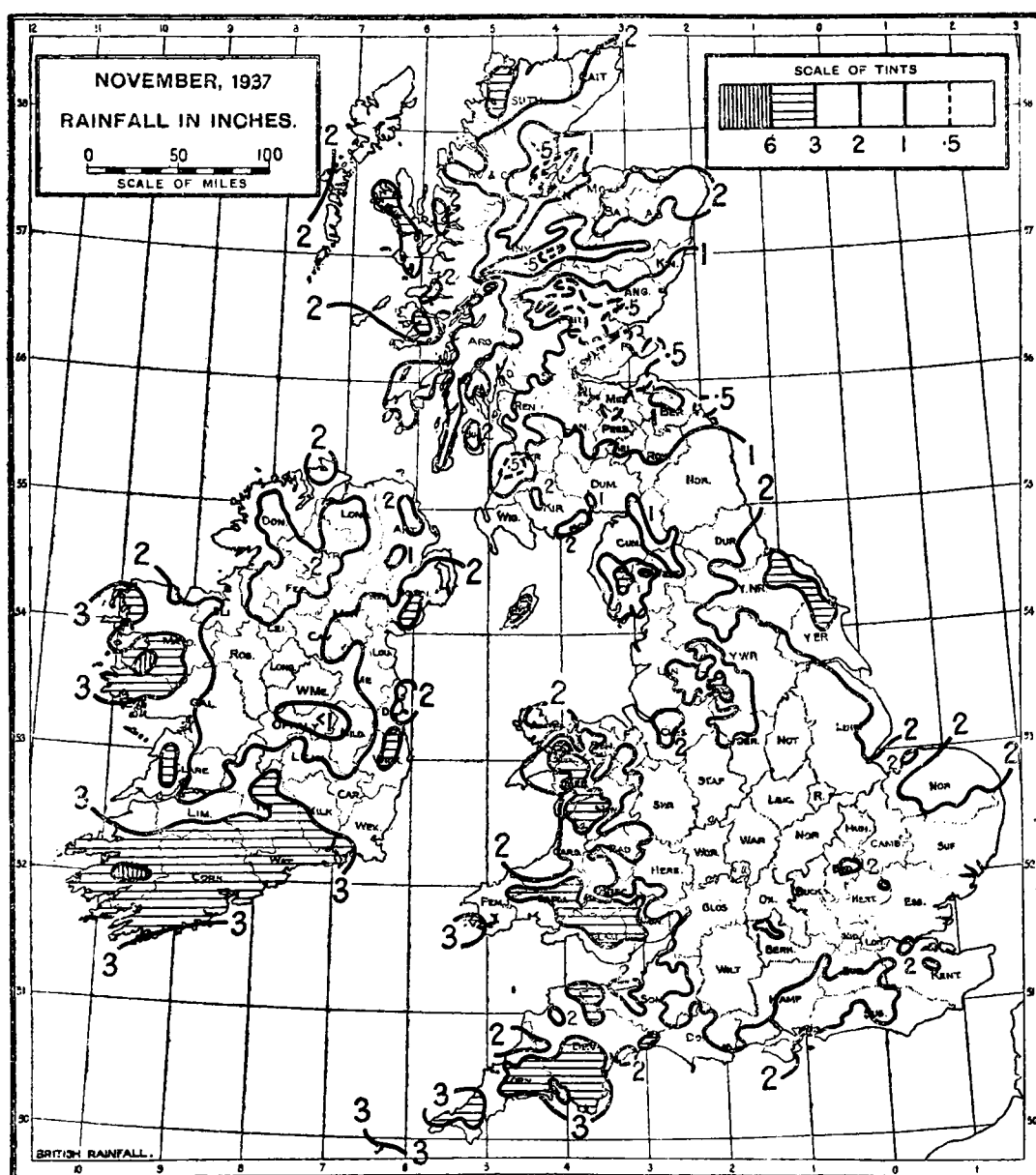
At Llanerchymedd, Anglesey, as much as 3·80 inches was recorded for the 23rd (see Section 7) and the total for the month in this area exceeded 150 per cent.

The map of the rainfall in actual inches is remarkable for the large areas with less than 3 inches and the small areas with over 6 inches.



**November** was generally dry, more especially in Scotland, with calm weather and considerable fog, especially in England.

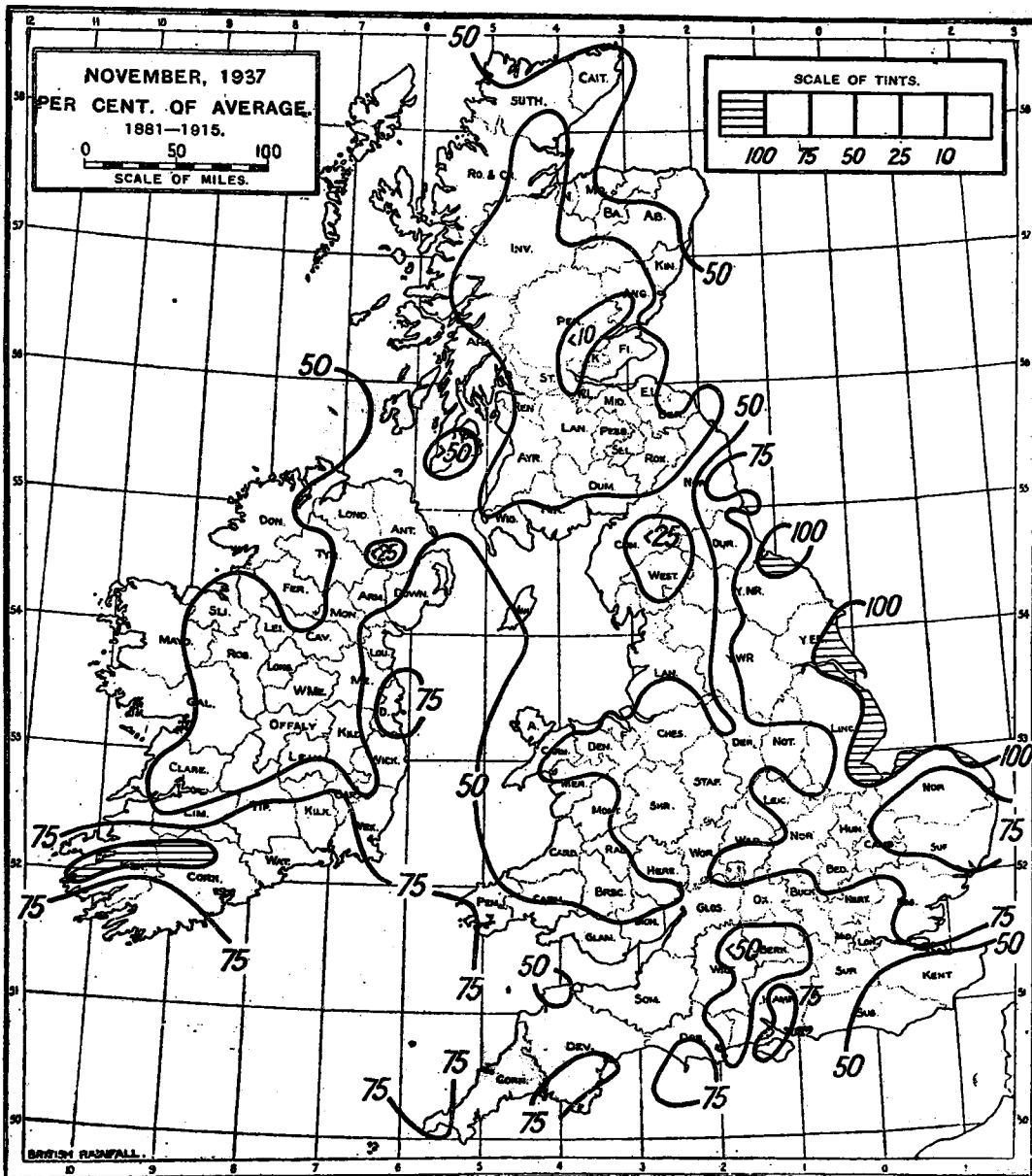
The mean pressure at 7h. exceeded the average everywhere, the excess varying from .9 mb. in the Scilly Isles to 8.4 mb. at Stornoway.



**Rainfall, November, 1937.**

The total for the month exceeded the average at a few stations between Yarmouth and Middlesbrough, and in the south of Ireland. There was less than 50 per cent. over rather more than half the British Isles, including most of Scotland, where in the neighbourhood of Perth there was less than 10 per cent.

Numerous droughts and dry spells were recorded during this month (see Section 3). It was the driest November on record at a number of widely separated stations in Scotland and at Edinburgh over a period of 160 years.



Rainfall, November, 1937, as per cent. of average.

No station in the British Isles recorded as much as 9 inches during the month, and only a few stations in the mountainous districts of the west of Ireland and on Snowdon recorded over 6 inches. Many stations in Scotland recorded less than .5 inch.

DECEMBER, 1937  
RAINFALL IN INCHES.

0 50 100  
SCALE OF MILES.

SCALE OF TINTS.  
10 6 3 2 1

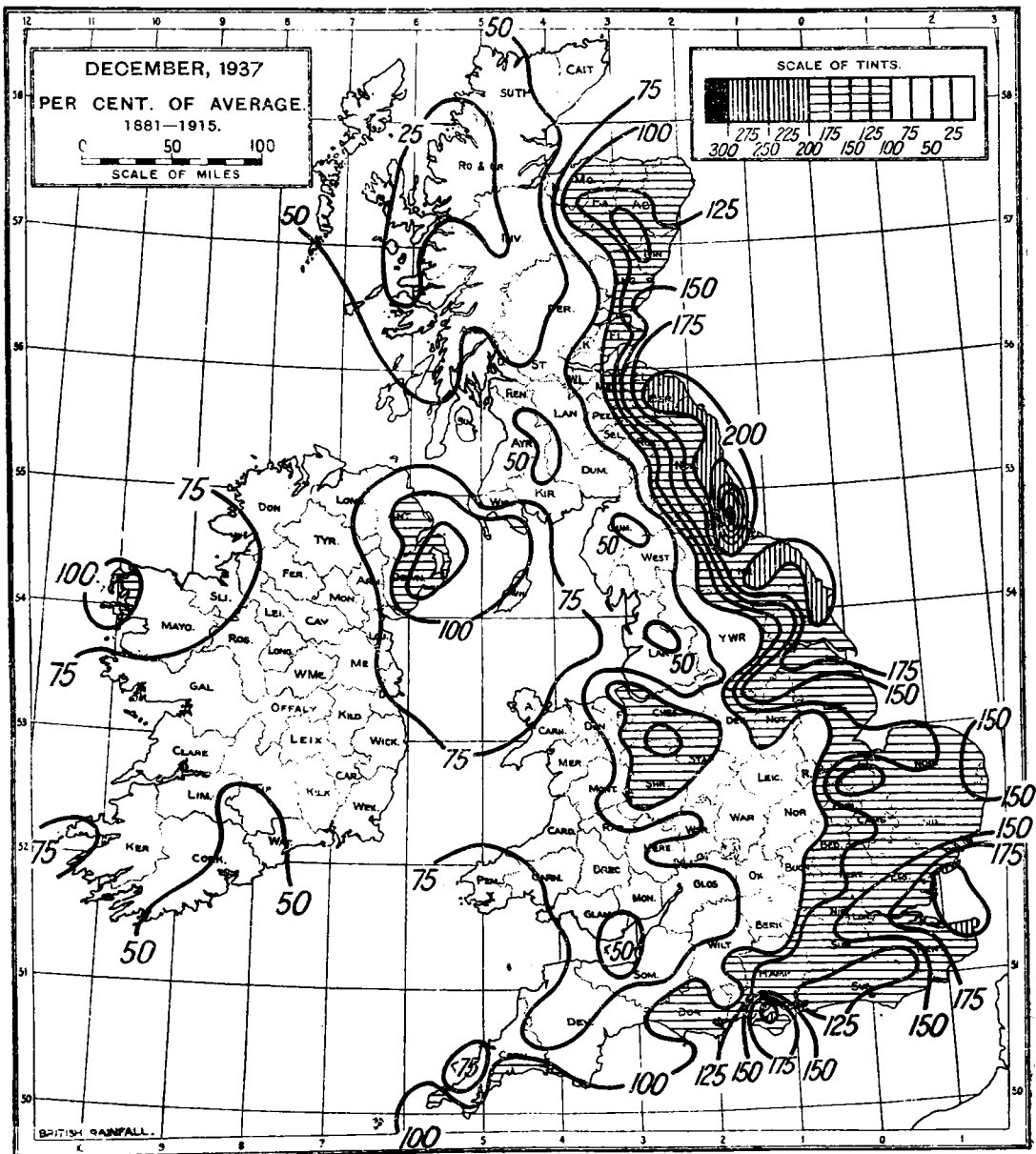
BRITISH RAINFALL.

### Rainfall, December, 1937.

The mean pressure at 7h. over the British Isles was more uniform than usual. Winds with a southerly component were less frequent than usual, while east and north winds were more frequent.

The totals exceeded the average mainly in the east of Great

Britain from the Moray Firth to the south coast as far west as Dorsetshire, while deficiencies occurred mainly in the western half. As in November the deficiencies were most marked in Scotland, when there was less than 25 per cent. over much of the Western Highlands. The large percentage value in the Isle of Wight was due mainly to



Rainfall, December, 1937, as per cent. of average.

the heavy fall for the 7th (see Section 7).

The distribution on the map in inches is unusual for December, since generally the western half of the country is much wetter than the east.

Table XX.—*Monthly Rainfall at 400 Stations in the British Isles during 1937.*

## ENGLAND, WALES AND THE ISLANDS

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
London	2 St. Pancras (Camden Square)	3.47	4.33	2.96	2.64	2.89	1.49	.53	1.34	1.54	2.21	1.26	3.92	28.58
Surrey	6 Byfleet (Wisley R.H.S. Gdns.)	4.86	3.90	3.49	2.34	2.35	2.02	.74	1.16	2.04	3.27	1.63	4.11	31.91
Kent	1 Tenterden (Ashenden)	5.56	4.79	4.70	2.50	2.86	1.84	.84	1.63	2.72	3.76	1.18	3.95	36.33
"	1 Folkestone (Isolation Hospital)	4.88	5.10	4.92	2.62	3.09	1.71	1.77	1.01	3.11	2.65	1.35	7.45	39.66
"	2 Margate (Cliftonville)	3.87	3.68	3.22	1.93	2.43	1.83	.77	1.42	2.50	2.78	1.10	4.64	30.17
"	2 Canterbury (St. Keyne)	4.70	3.89	4.70	2.03	3.11	1.36	.76	.80	3.27	2.93	1.26	5.19	34.00
"	4 Edenbridge (Falconhurst)	6.94	5.55	3.67	2.72	2.62	2.57	2.20	2.53	2.16	2.89	1.51	3.77	39.13
"	4 Stroud Waterworks	4.58	4.20	3.18	2.40	2.91	2.82	1.31	1.42	1.63	2.36	1.33	3.97	32.11
"	5 Biggin Hill (Aerodrome)	6.13	4.97	3.80	2.92	2.50	2.63	.89	1.52	2.15	3.30	2.13	5.31	38.25
Sussex	1 Bognor Regis (Waterloo Square)	5.33	4.93	3.50	2.19	2.53	.83	1.55	1.96	1.96	2.22	1.78	4.18	32.96
"	1 Compton (Compton House)	7.56	6.43	4.04	3.63	2.54	1.01	1.73	1.77	2.19	4.02	2.61	4.78	42.31
"	2 Horsham (Wimblehurst)	6.23	4.80	4.02	3.02	2.77	1.05	1.03	2.03	1.91	3.23	2.03	3.65	35.77
"	3 Worthing (Beach House Park)	5.13	4.77	3.61	2.10	2.12	.83	1.39	1.32	2.02	3.03	1.59	3.68	31.59
"	5 Eastbourne (Wilmington Square)	5.73	5.73	4.36	3.05	2.57	1.35	1.42	1.80	2.62	3.27	1.31	4.95	38.16
Hampshire	1 Ventnor (Royal National Hospital)	6.05	5.37	4.34	2.13	1.70	.85	1.57	1.64	2.72	2.37	2.07	6.32	37.13
"	3 Fordingbridge (Oaklands)	6.69	6.13	3.36	2.17	2.85	.81	1.86	1.20	2.70	4.33	1.55	3.86	37.51
"	4 Calshot (Aerodrome)	6.06	4.85	3.17	2.31	2.64	.93	1.30	.88	1.55	2.74	2.19	6.05	34.67
"	4 Stockbridge (Leckford Estate)	6.26	5.19	3.56	2.18	3.01	1.51	1.10	1.45	2.79	4.77	1.47	3.36	36.65
"	7 Selborne (The Wakes)	9.68	6.51	5.20	3.28	4.19	1.62	1.03	.93	2.52	4.62	2.78	4.42	46.78
"	8 Sherborne St. John	6.18	5.24	4.10	2.29	3.10	1.62	.98	1.29	2.15	3.11	1.33	3.06	34.45
Berkshire	4 Newbury (Wash Hill)	6.05	5.11	4.25	2.81	3.15	1.45	1.29	.57	2.29	3.45	1.19	2.27	33.88
"	5 Upton (Manor House)	3.92	3.76	3.34	2.32	2.69	1.39	.84	.62	1.71	2.32	.91	1.84	25.66
Hertfordshire	2 Harpenden (Rothamsted)	4.27	3.76	3.13	2.72	3.48	1.73	1.67	1.82	2.55	2.43	1.66	2.87	32.09
"	3 Royston (Therfield Rectory)	4.06	3.05	3.61	2.91	3.12	2.89	3.62	1.10	1.91	2.79	1.76	3.08	33.90
Buckinghamshire	3 Slough (Upton)	4.23	4.64	2.93	2.23	2.73	1.99	1.22	1.28	2.44	2.92	1.20	3.40	31.21
"	3 Penn (Rayners)	5.26	5.06	3.38	3.25	3.77	1.74	1.20	1.22	3.26	2.74	1.74	3.36	35.98
"	5 Wolverton (Gables Lodge)	3.60	3.58	3.44	2.90	3.87	1.41	1.04	.85	1.31	3.24	1.87	2.05	29.16
Oxfordshire	3 Oxford (Radcliffe Met. Station)	3.34	4.73	3.05	2.63	2.62	1.56	1.38	.44	1.98	2.70	1.22	1.90	27.55
Northamptonshire	4 Daventry (Tunnel End)	3.42	2.90	3.27	3.08	2.92	.96	1.50	1.78	1.16	3.27	1.54	1.90	27.90
"	4 Wellingborough (Swanspool)	3.46	3.18	3.30	3.02	3.93	1.44	1.71	2.28	1.27	2.87	1.74	2.21	30.41
Huntingdonshire	1 St. Ives (Slope House)	2.82	2.89	3.12	2.65	3.69	2.16	1.55	1.09	1.32	1.88	1.52	2.20	26.89
Bedfordshire	3 Sandy (Mogerhanger Park)	2.94	3.29	3.31	2.51	4.49	1.17	1.76	2.51	2.79	2.37	2.23	2.52	31.89

Table XX.—(con.) *Monthly Rainfall—ENGLAND, WALES AND THE ISLANDS—(con.)*.

County and River Division.	Station.	MONTHLY RAINFALL.												Total
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Cambridgeshire	2 Littleport (Highfield House)	2.69	2.61	2.71	3.09	2.41	1.39	1.58	2.19	1.87	1.94	1.22	2.74	26.44
"	2 March	2.72	2.30	3.10	3.13	3.78	1.34	1.98	1.60	1.22	1.84	1.60	3.46	28.07
Essex	1 Elsenham (Gaunt's End)	3.64	3.66	3.43	3.82	2.72	2.08	2.31	.89	1.71	2.10	1.57	3.17	31.10
"	2 North Weald (Canes)	4.18	3.79	2.52	3.13	2.81	1.77	2.02	.58	1.60	1.89	1.63	3.80	29.72
"	3 Shoeburyness	3.65	3.28	2.34	3.00	2.92	2.77	1.92	.78	2.15	1.65	1.83	3.69	29.98
"	3 Bradwell-on-Sea (Bradwell Hall)	3.73	3.32	2.22	2.45	2.64	2.21	1.29	1.37	2.18	1.69	1.72	3.80	28.62
"	4 Chelmsford (County Gardens)	3.77	3.83	2.48	2.77	2.54	2.31	1.73	.71	1.28	1.21	1.93	3.68	28.24
"	4 Gt. Bardfield (South Lodge)	3.78	2.67	2.78	3.06	2.25	1.83	1.57	.62	.98	1.38	1.54	3.06	25.52
Suffolk	2 Copdock	4.28	3.40	2.77	2.92	2.73	1.46	1.15	1.89	1.57	1.85	1.17	3.35	28.54
"	3 Rendlesham Hall	4.68	3.78	2.50	2.72	3.87	1.32	1.30	1.41	2.54	2.00	1.21	3.37	30.70
"	3 Halesworth Rectory	4.32	3.38	3.20	2.31	2.71	1.05	1.34	2.36	2.97	1.95	1.67	4.09	31.35
"	4 Lowestoft (Secondary School)	4.13	2.67	2.01	1.71	2.35	.66	1.67	.44	2.17	1.75	1.46	4.01	25.03
"	5 Bury St. Edmunds (Westley House)	4.20	3.17	3.66	3.33	2.48	1.79	1.81	3.06	1.70	1.94	1.60	3.14	31.88
Norfolk	1 Diss (The Cedars)	3.55	2.57	3.10	2.13	2.81	.88	1.10	2.53	1.42	1.16	1.67	2.47	25.39
"	1 Wymondham	4.17	2.74	3.18	2.36	2.63	1.35	2.38	2.08	1.97	1.40	2.01	3.28	29.55
"	1 Cawston (The Poplars)	3.98	2.77	3.13	2.56	3.11	1.87	2.39	.87	2.25	1.39	2.32	3.81	30.45
"	3 Cromer (Howards Hill)	3.12	2.14	2.65	2.64	1.97	1.39	2.72	.96	2.19	1.58	2.69	3.74	27.79
"	3 Wells (Holkham Hall)	3.74	2.26	3.22	2.27	3.19	1.34	2.80	1.21	1.19	2.24	1.63	2.53	27.62
"	4 Thetford W. W.	3.52	3.09	3.47	2.62	2.11	1.38	1.43	2.14	2.05	1.80	1.97	2.77	28.35
"	4 Swaffham (The Villa)	3.53	3.33	4.00	2.73	2.51	1.79	2.35	1.41	4.24	1.94	2.10	3.38	33.31
"	4 Terrington St. Clement (C. Sch.)	3.42	2.91	2.69	2.74	4.72	1.33	4.06	1.57	1.01	1.69	1.43	2.73	30.30
Wiltshire	2 Mere (Charnage)	5.02	4.72	3.86	2.19	2.70	.68	2.79	1.30	3.22	4.17	1.80	3.27	35.72
"	3 Larkhill (School of Artillery)	5.12	4.66	3.84	1.96	2.19	1.16	1.81	1.03	2.15	5.25	1.66	2.70	33.53
"	3 Bishops Cannings	4.96	6.33	3.63	4.16	2.25	1.50	1.78	.93	3.14	4.48	1.80	2.54	37.50
Dorsetshire	3 Weymouth (Westham)	4.66	5.59	4.21	2.13	3.28	.57	4.47	1.63	2.13	4.49	2.59	3.81	39.56
"	3 Poole	5.88	6.01	3.77	2.20	2.98	.45	1.70	2.58	2.36	5.98	1.46	4.23	39.60
"	3 Beaminster (East Street)	6.71	6.87	4.68	2.46	3.28	1.36	3.39	1.07	3.30	4.80	2.39	5.29	45.60
"	4 Blandford (Bryanston Gardens)	7.84	6.76	4.65	2.38	3.32	1.00	1.97	1.53	3.54	6.19	1.54	4.90	45.62
Sth. Devonshire	2 Plymouth (The Hoe)	4.90	7.26	4.84	3.39	2.70	1.33	1.78	.86	2.32	3.75	2.99	5.24	41.36
"	4 Holne (Church Park Cottage)	14.35	14.98	7.81	5.87	4.68	1.78	1.54	.90	3.02	4.64	5.52	7.42	72.51
"	5 Teignmouth (Den Gardens)	7.00	5.88	5.70	2.67	2.56	.93	1.32	1.38	2.23	3.81	2.72	3.85	40.05
"	6 Cullompton	7.41	6.69	4.96	3.43	2.41	.75	2.53	.99	2.71	3.65	2.31	3.40	41.24

Table XX.—(con.) *Monthly Rainfall—ENGLAND, WALES AND THE ISLANDS—(con.)*.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Sth. Devonshire .. 7	Sidmouth (U.D.C.) .....	4.23	5.73	4.62	2.63	2.62	.70	2.64	1.59	2.34	3.35	1.65	3.21	35.31
Nth. Devonshire .. 2	Barnstaple (N. Devon Athenæum) ..	5.31	6.44	3.31	2.64	1.92	1.03	3.07	1.33	4.44	2.95	2.09	3.92	38.45
" .. 3	Okehampton (Uplands) .....	13.64	9.76	7.71	5.25	2.73	1.30	2.19	.99	3.12	4.39	3.03	3.74	57.85
" .. 3	Torrington (Enfield) .....	4.38	5.53	3.78	3.46	2.27	1.15	1.43	.81	3.66	2.73	1.97	4.14	35.31
Cornwall .....	Redruth (Trewirgie) .....	8.52	7.67	6.17	3.94	2.37	2.09	1.87	1.19	3.71	3.69	3.53	4.58	49.33
" .. 1	Newquay (Mount Wise) .....	5.28	5.01	4.61	2.26	1.73	1.27	1.01	.56	3.48	2.88	2.44	2.70	33.23
" .. 1	Bodmin (Castle Hill House) .....	6.66	7.36	6.16	3.69	3.42	1.64	1.98	1.54	4.57	3.44	3.44	4.76	48.66
" .. 1	Bude (School House) .....	3.87	6.37	4.47	2.75	1.60	1.18	2.24	.36	3.05	2.59	1.96	3.34	33.78
" .. 2	Penzance (Morrab Gardens) .....	5.76	7.39	6.06	3.17	1.85	1.21	1.61	.63	4.05	3.21	3.48	5.85	44.27
" .. 2	St. Austell (Trevarna) .....	7.72	9.25	6.43	4.57	3.22	1.77	2.15	.55	3.99	3.15	3.34	6.59	52.73
" .. 3	St. Mary's (Coastguard Station) ..	5.32	4.56	5.08	2.55	2.16	1.26	.54	.59	3.65	5.23	2.17	4.17	37.28
Somersetshire .. 1	Chewton Mendip (The Priory) .....	6.90	7.60	4.45	3.72	2.58	1.66	3.89	.97	2.48	4.46	3.11	2.90	45.12
" .. 1	Bath (Henrietta Park) .....	4.23	5.00	4.89	2.58	2.28	1.19	2.76	.94	2.13	3.18	1.69	2.17	32.64
" .. 2	Street (Millfield) .....	4.19	4.73	3.76	1.99	2.21	.74	5.27	1.58	4.00	3.80	1.68	2.37	36.32
" .. 2	Burnham (Chalbury) .....	4.87	4.08	3.52	2.85	2.35	.74	4.81	.59	1.94	3.56	2.86	1.39	33.56
" .. 3	Angersleigh (Leigh Court) .....	7.34	6.27	6.07	2.82	2.50	.99	5.49	1.56	2.97	4.47	2.18	3.35	46.01
" .. 5	Brushford Rectory .....	8.50	7.90	5.13	3.57	2.03	1.18	2.00	1.15	3.00	3.95	2.78	3.63	44.82
Gloucestershire .. 3	Cheltenham (Montpellier Gdns.) ..	3.33	3.36	3.78	2.26	1.82	1.23	2.40	.65	1.59	2.83	1.41	1.80	26.46
" .. 4	Blockley .....	4.07	4.59	3.71	3.64	2.70	2.08	2.67	.81	2.65	3.48	1.46	2.50	34.36
" .. 7	Lechlade (Claydon Ho.) .....	3.50	4.29	2.72	3.20	2.32	1.49	1.98	.51	1.43	3.40	1.39	1.99	28.22
" .. 7	Cirencester (Gwynfa) .....	4.76	5.01	3.70	2.98	2.12	1.30	2.39	.59	1.82	3.49	1.71	2.24	32.11
Herefordshire .. 1	Ross-on-Wye .....	4.03	3.51	4.11	1.87	2.38	1.06	3.41	.87	2.30	3.44	1.19	2.15	30.32
" .. 1	Hereford (Belmont Abbey) .....	4.20	4.68	3.41	1.89	3.37	.78	2.69	1.99	1.79	4.32	1.47	2.42	33.01
Shropshire .....	Bromfield (Warwick House) .....	4.52	4.65	2.73	1.77	1.75	.49	2.41	.93	2.71	3.57	1.67	2.68	29.88
" .. 3	Bishops Castle (The Vicarage) .....	4.43	5.03	2.79	1.56	1.28	.75	2.34	.64	1.87	3.36	1.41	3.03	28.49
" .. 3	Church Stretton (Woolstaston) .....	4.73	5.56	3.28	2.09	2.14	1.48	2.63	1.39	3.25	4.48	1.94	3.42	36.39
" .. 4	Shifnal (Hatton Grange) .....	2.97	4.44	2.43	2.29	2.67	.88	3.45	.73	2.92	2.20	1.56	2.79	29.33
" .. 4	Cheswardine Hall .....	3.24	4.92	2.21	2.64	3.02	.94	3.44	.96	2.20	2.67	1.45	4.12	31.81
Staffordshire .. 3	Lichfield (Hanch Res.) .....	3.63	3.89	2.25	2.00	2.59	.46	2.50	.62	2.52	1.94	1.58	2.77	26.75
" .. 3	Stafford (Victoria Pleasure Gdns.) ..	3.39	4.53	2.54	2.21	2.17	.55	3.07	.91	3.39	2.06	1.41	3.70	29.93
" .. 5	Mayfield .....	4.48	6.23	2.68	2.15	2.26	1.33	2.36	.49	1.25	2.52	1.70	3.62	31.07
Worcestershire .. 1	Malvern (Free Library) .....	3.67	4.52	2.94	2.31	2.96	1.22	2.78	.43	2.46	2.95	1.42	2.29	29.95

Table XX.—(con.) *Monthly Rainfall—ENGLAND, WALES AND THE ISLANDS—(con.)*.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Worcestershire . . . 2	Stourport (Lincombe Lock) . . . . .	3.16	4.20	2.73	1.72	2.12	.57	2.49	.61	2.06	2.46	1.41	1.81	25.34
Warwickshire . . . 1	Alcester (Ragley Hall) . . . . .	2.93	3.57	3.16	2.72	2.35	.79	3.55	1.26	2.49	2.58	1.83	2.09	29.32
" . . . 1	Warwick Castle Gardens . . . . .	3.11	3.41	2.87	2.95	2.24	.74	2.30	2.49	2.29	2.30	1.62	1.53	27.85
" . . . 1	Coventry City Hospital . . . . .	2.98	3.31	2.65	3.50	2.75	1.47	2.10	1.52	1.95	2.19	1.38	2.07	27.87
" . . . 4	Birmingham (Edgbaston) . . . . .	3.69	3.89	2.64	2.86	2.50	.82	2.74	.97	1.99	2.67	1.57	2.54	28.88
Leicestershire . . . 4	Leicester (Town Hall Square) . . . . .	3.06	2.87	2.85	2.62	2.87	.97	4.01	.84	.99	3.08	1.34	1.66	27.16
" . . . 4	Grantham (Belvoir Castle Gdns.) . . . . .	2.79	2.85	2.80	2.79	3.48	.56	5.59	.76	.97	2.30	1.23	1.96	28.08
Rutlandshire . . . 1	Uppingham (Ridlington) . . . . .	3.37	3.39	3.05	3.25	3.78	1.12	1.98	1.40	1.35	2.40	1.77	2.42	29.28
Lincolnshire . . . 2	Spalding (Pode Hole) . . . . .	3.20	2.91	3.15	2.60	4.75	1.54	3.30	.41	1.59	2.17	1.57	2.67	29.86
" . . . 3	Boston (Black Sluice, Skirbeck) . . . . .	3.56	2.60	3.03	2.50	5.29	1.92	7.37	.59	1.41	2.13	2.02	2.50	34.92
" . . . 3	Cranwell (Aerodrome) . . . . .	3.02	2.59	2.14	2.70	3.64	1.19	2.89	.43	.75	2.21	1.20	1.66	24.42
" . . . 3	Horncastle . . . . .	3.87	2.28	3.02	2.88	3.51	1.50	3.56	.91	1.27	1.94	1.66	2.48	28.88
" . . . 3	Lincoln (Skellingthorpe Hall) . . . . .	2.86	2.21	1.69	2.69	3.15	1.64	3.13	.70	.83	2.18	1.50	2.83	25.41
" . . . 4	Skegness (Marine Gardens) . . . . .	3.28	2.28	2.53	2.81	3.94	1.58	1.71	.73	1.17	1.38	2.41	2.87	26.69
" . . . 4	Louth (Westgate) . . . . .	4.10	2.28	2.52	2.80	3.28	1.26	1.72	.53	.96	2.10	2.22	3.69	27.46
" . . . 5	Brigg (Wrawby Road) . . . . .	3.09	1.83	1.90	3.39	2.90	1.57	2.88	1.49	.97	2.45	1.72	4.13	28.32
Nottinghamshire 5	Mansfield (Carr Bank) . . . . .	4.11	3.62	2.02	2.44	3.00	.57	2.30	.59	1.63	3.63	1.53	3.29	28.73
Derbyshire . . . . 6	Derby (The Arboretum) . . . . .	3.14	3.76	1.96	1.98	2.26	.89	2.83	.30	1.58	1.81	1.53	2.18	24.22
" . . . 6	Matlock Bath (Lower Tower) . . . . .	5.75	5.48	2.89	2.25	3.04	1.18	2.69	.82	1.43	2.58	1.73	4.64	34.48
" . . . 6	Buxton (Terrace Slopes) . . . . .	6.52	8.94	4.36	4.66	2.42	1.74	3.66	1.35	1.50	2.86	1.99	4.64	44.61
Cheshire . . . . . 2	Northwich (Hunt's Lock) . . . . .	3.10	5.14	1.35	3.30	2.35	1.19	1.99	3.28	1.37	2.07	2.11	2.49	29.74
" . . . . . 3	Birkenhead (Bidston Observatory) . . . . .	1.86	4.46	1.31	2.82	3.44	1.81	1.56	1.63	2.09	2.30	1.48	2.89	27.65
" . . . . . 4	Eccleston . . . . .	2.11	4.66	1.48	2.97	2.33	1.17	1.89	2.57	1.71	2.90	1.85	3.08	28.72
South Lancashire 3	Manchester (Whitworth Park) . . . . .	3.06	4.72	1.35	2.64	1.86	1.19	2.19	1.23	1.02	1.55	1.94	2.33	25.08
" . . . . . 3	Bolton (Queen's Park) . . . . .	3.61	6.95	1.94	3.75	2.48	2.06	2.72	3.14	1.94	2.37	2.26	2.73	35.95
Central . . . . . 1	Burnley (Swinden) . . . . .	3.69	5.56	2.02	3.19	2.29	1.95	1.84	2.03	2.19	2.36	2.33	2.43	31.88
" . . . . . 1	Stonyhurst College . . . . .	3.51	6.16	1.79	2.78	2.05	3.74	2.15	2.89	2.64	2.07	1.56	1.89	33.23
" . . . . . 3	Southport (Bedford Park) . . . . .	1.62	4.53	1.24	2.78	1.89	1.87	1.89	1.37	2.02	2.25	1.37	2.02	24.85
North . . . . . 1	Ulverston (Poaka Beck) . . . . .	4.11	6.79	2.53	3.43	2.04	3.04	3.32	2.52	4.25	2.91	2.34	4.05	41.33
" . . . . . 4	Lancaster (Greg Observatory) . . . . .	2.77	5.73	1.56	3.26	2.06	2.68	2.30	2.64	2.68	1.77	1.53	2.39	31.37
" . . . . . 5	Blackpool (Stanley Park) . . . . .	2.38	5.02	1.36	3.07	1.80	2.25	1.97	2.02	2.02	2.78	1.52	2.43	28.62
Yorkshire, W.R. 2	Settle (Giggleswick School) . . . . .	3.98	6.80	1.83	3.06	2.65	1.59	1.92	2.03	2.47	2.22	1.60	2.21	32.36





Table XX.—(con.) *Monthly Rainfall—ENGLAND, WALES AND THE ISLANDS—(con.)*.

County and River Division.	Station.	MONTHLY RAINFALL.												103	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
Cumberland	Borrowdale (Stockley Bridge)	22.75	20.25	4.25	8.75	3.00	10.75	8.50	6.75	12.00	6.75	4.25	8.25	116.25	
"	Keswick (High Hill)	8.59	6.49	3.05	2.12	1.92	2.12	2.95	3.15	5.08	3.35	1.25	2.88	42.95	
"	Ravenglass (The Grove)	4.82	5.32	3.18	2.90	1.80	2.34	3.18	3.03	3.28	2.96	1.49	2.67	36.97	
"	Wast Water (Walsdale Head)	13.00	12.50	3.50	6.00	2.50	7.00	7.11	4.50	9.00	4.25	2.50	4.45	76.31	
Westmorland	Kirkby Stephen (Eden Place)	4.73	5.55	3.01	3.01	2.88	1.75	2.03	1.77	3.39	2.04	.87	2.02	33.05	
"	Appleby (Castle Bank)	2.61	4.03	1.85	1.79	3.03	1.30	2.89	1.57	2.38	1.35	.34	2.10	25.24	
"	Kendal Gasworks	4.14	6.93	1.67	3.00	2.71	2.73	2.97	2.10	4.99	2.22	1.47	3.98	38.91	
Monmouth	Newport W.W. (Nantypridd)	4.77	6.22	4.04	3.62	2.68	1.37	4.38	1.42	2.08	3.87	2.55	3.25	40.25	
"	Abergavenny (Larchfield)	7.12	6.43	4.96	2.61	2.23	1.27	3.93	1.09	1.26	4.61	1.91	3.26	40.73	
Glamorgan	Swansea (Victoria Park)	5.96	7.20	2.66	3.40	2.27	1.50	2.74	1.43	3.52	3.66	2.54	2.94	39.82	
"	Ystalyfera (Wern House)	9.87	10.76	3.77	4.18	2.99	4.02	3.69	1.26	4.48	3.54	4.53	5.23	58.32	
"	Treherbert (Tyn-y-Waun)	15.96	14.76	5.35	6.26	3.24	3.87	4.05	1.04	4.58	4.30	4.50	7.06	74.97	
"	Cardiff (Penylan)	4.90	6.39	3.72	3.84	2.35	1.10	3.12	.38	1.94	4.09	2.40	2.24	36.47	
Carmarthen	Carmarthen (Model and Prac. Sch.)	8.29	7.40	3.22	3.11	2.12	2.43	3.15	1.80	4.28	5.88	2.81	5.52	50.01	
"	Abergorlech	10.40	10.33	3.56	3.57	1.84	1.57	3.15	1.20	3.23	4.49	2.01	5.20	50.55	
Pembroke	Pembroke (Stackpole Court)	5.24	8.18	4.19	3.01	1.42	1.08	3.14	.83	3.45	4.85	2.59	4.77	42.75	
"	Haverfordwest (Hospital Grounds)	6.39	6.75	3.98	2.71	2.08	1.32	4.06	.96	4.98	3.94	2.46	4.76	44.39	
Cardigan	Aberystwyth (Plant Breeding Stn.)	4.56	6.14	1.76	2.70	1.54	1.88	3.13	1.35	3.36	3.92	2.01	2.97	35.32	
"	Cardigan (Plas Llangoedmore)	7.96	5.74	3.48	2.51	1.34	1.55	3.52	2.75	3.37	5.01	1.35	3.48	42.06	
"	Lampeter (Falcondale)	9.17	7.25	3.32	2.95	1.39	1.73	3.01	.62	4.51	5.25	1.29	3.22	43.71	
"	Plynlimon	11.00	14.10	6.50	10.00	2.50	6.70	6.50	2.00	6.00	4.50	3.70	7.50	81.00	
Brecon	Swansea W.W. (Cray Res.) No. 1	12.70	10.44	6.26	4.41	2.77	2.69	2.94	.84	2.69	3.57	3.18	5.21	57.70	
Radnor	Llandrindod Wells (The Common)	5.86	5.99	2.89	2.80	.88	1.50	2.88	.58	3.11	2.95	1.22	3.18	33.84	
"	Birmingham W.W. (Tyrryrydd)	10.97	10.10	4.72	5.14	2.39	1.59	2.86	1.04	3.22	4.65	1.92	5.40	54.00	
Montgomery	Newtown (Penarth Weir)	6.06	6.26	3.42	2.14	1.70	1.19	2.32	1.06	1.94	3.66	1.82	3.55	35.12	
"	Welshpool (County School)	4.32	5.83	1.83	1.63	2.02	.97	1.94	2.79	1.39	3.27	1.77	2.50	30.26	
"	Lake Vyrnwy	8.61	10.53	3.80	4.25	2.90	3.92	3.37	2.13	2.19	4.26	2.40	4.80	53.16	
Denbigh	Wrexham (Pack Saddle Res.)	3.92	5.82	2.26	3.04	2.35	1.39	2.08	2.16	1.18	3.19	1.92	2.95	32.26	
"	Llyn Aled (Rhyd-y-Bedd)	5.50	7.06	3.38	5.42	2.34	2.13	2.10	1.09	2.52	3.67	2.19	3.78	41.18	
"	Llangynhafal (Plas Draw)	2.35	4.46	2.76	3.59	2.52	1.68	1.88	2.85	1.62	3.56	1.56	2.93	31.76	
"	Denbigh (Garn)	2.21	4.89	2.56	3.92	1.69	1.38	2.36	.76	2.09	3.14	1.66	2.97	29.63	
Merioneth	Blaenau Festiniog (Oakeley Q.)	10.20	13.93	3.61	8.43	1.75	6.84	5.16	4.60	5.86	3.95	5.20	6.52	76.05	

Table XX.—(con.) *Monthly Rainfall—ENGLAND, WALES AND THE ISLANDS—(con.)*

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Merioneth . . . . .	4 Dolgelley (Bontddu) . . . . .	6.88	8.83	3.08	5.28	2.66	3.20	3.25	1.10	4.17	3.45	2.11	3.73	47.74
Carnarvon . . . . .	2 Llandudno (Cricket Ground) . . . . .	3.03	4.22	1.61	2.56	1.64	1.09	.94	1.67	2.60	3.24	1.36	1.89	25.85
" . . . . .	3 Bethesda (Penrhyn Quarries) . . . . .	5.07	7.64	1.88	4.32	1.27	2.03	2.21	1.82	4.86	5.66	1.80	4.68	43.24
" . . . . .	4 Pwllheli (West End) . . . . .	3.96	6.79	2.02	3.59	3.10	2.03	3.01	1.70	2.72	5.42	2.52	3.56	40.42
" . . . . .	5 Snowdon (Cwm Dyli) . . . . .	13.08	17.58	5.20	11.24	1.94	6.66	6.13	6.13	7.15	7.06	5.38	11.57	99.12
Anglesey . . . . .	Holyhead (Salt Island) . . . . .	3.26	4.57	1.54	1.93	.75	2.35	2.18	1.61	2.99	6.40	1.85	4.01	33.44
" . . . . .	Llanerchymedd (Llwydiarth Esgob) . . . . .	4.31	5.35	2.05	3.94	1.21	3.65	2.18	.84	3.25	7.73	2.57	3.75	40.83
<b>ISLE OF MAN.</b>														
Isle of Man . . . . .	Douglas (Borough Cemetery) . . . . .	4.30	7.61	3.59	4.09	1.70	3.04	4.20	2.20	2.50	4.47	2.37	4.48	44.55
" . . . . .	Point of Ayre . . . . .	5.20	4.40	1.99	2.56	1.53	1.82	2.10	1.20	2.59	4.08	2.01	3.67	33.15
<b>CHANNEL ISLANDS.</b>														
Jersey . . . . .	St. Heliers (Harbour Office) . . . . .	4.82	6.29	4.20	2.22	2.26	.92	1.28	1.10	3.54	2.93	2.75	5.37	37.68
Guernsey . . . . .	St. Martin's (Les Blanchés) . . . . .	5.08	6.06	4.69	2.40	3.98	.73	1.35	.38	3.06	3.54	3.34	6.12	40.73
" . . . . .	St. Peter Port (Grange Road) . . . . .	5.25	6.47	5.10	2.84	4.04	.62	1.78	.43	3.33	4.20	2.82	6.45	43.33
Sark . . . . .	Pointe Robert . . . . .	4.52	5.70	2.64	2.41	3.79	.66	1.79	.44	1.87	3.30	2.75	4.45	34.32
Alderney . . . . .	St. Anne's . . . . .	4.87	5.40	3.92	2.28	2.52	.54	1.19	.45	2.77	4.01	3.23	6.58	37.76
<b>SCOTLAND.</b>														
Wigtownshire . . . . .	3 Port William (Monreith) . . . . .	3.35	6.04	1.43	2.76	2.14	2.93	5.56	2.23	2.36	2.89	1.68	5.36	38.73
" . . . . .	4 Kirkcowan (Craighlaw) . . . . .	5.78	6.80	1.80	3.37	2.09	3.42	5.02	2.26	3.35	2.85	1.90	3.18	41.82
Kirkcudbright . . . . .	3 Dalry (Glendaroch) . . . . .	9.09	6.63	3.07	3.30	2.59	3.00	5.26	3.60	2.56	3.74	1.44	3.55	47.83
Dumfriesshire . . . . .	3 Dumfries (Crichton R. Institute) . . . . .	4.59	4.45	1.68	3.28	1.63	2.56	3.18	2.25	2.69	4.75	.98	2.55	34.50
" . . . . .	3 Moniaive (Glencrosh) . . . . .	9.22	7.36	2.46	3.69	2.33	3.31	4.90	2.89	2.60	5.02	1.37	3.95	49.19
" . . . . .	5 Langholm (Ewes) . . . . .	7.13	5.79	2.90	2.71	3.12	3.36	4.80	2.49	4.76	2.57	1.30	4.30	45.23
" . . . . .	5 Eskdalemuir Observatory . . . . .	9.26	6.34	3.21	2.90	2.59	4.10	4.32	4.33	4.46	3.72	1.19	4.79	51.21
Roxburghshire . . . . .	3 Hawick (Wolflee) . . . . .	4.61	4.90	2.72	1.79	3.60	1.24	3.80	2.91	2.38	3.12	.76	4.12	35.95
Selkirkshire . . . . .	1 Selkirk (Whitmuir Hall) . . . . .	3.64	3.37	2.86	1.67	4.29	1.71	3.65	3.80	2.34	3.52	.69	4.79	36.33
Peeblesshire . . . . .	1 Edinburgh W.W. (Victoria Lodge) . . . . .	9.14	5.07	2.57	2.27	1.99	2.30	4.28	3.58	2.78	5.06	.84	4.13	44.01
" . . . . .	2 Stobo Castle . . . . .	6.66	4.69	2.02	1.69	2.50	1.49	4.25	3.44	1.89	3.44	.65	3.10	35.82
Berwickshire . . . . .	4 Marchmont House . . . . .	3.11	3.73	3.76	1.42	3.68	1.45	2.65	2.87	1.52	3.55	.70	5.95	34.39

Table XX.—(con). Monthly Rainfall—SCOTLAND—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
East Lothian . . . . .	North Berwick Reservoir. . . . .	2.13	2.61	2.17	.93	2.83	1.70	3.19	2.99	1.03	3.29	.51	4.20	27.58
Midlothianshire . . . . .	Moorfoot Hills (Gladhouse Res.) . . . . .	4.88	4.68	5.69	1.27	3.25	1.22	5.57	3.34	1.88	3.91	.82	4.41	40.92
"	Pentland Hills (Harperigg) . . . . .	4.29	4.80	2.00	1.57	2.32	2.25	4.65	5.07	2.99	4.33	.40	3.83	38.50
"	Edinburgh (Blackford Hill) . . . . .	2.04	3.02	1.70	1.10	2.52	1.00	5.37	4.13	1.64	3.87	.24	2.34	28.97
Lanarkshire . . . . .	Gartcosh (Gartloch Hospital) . . . . .	3.40	4.86	1.24	1.79	1.77	3.32	2.89	3.83	1.87	3.52	.56	2.28	31.33
"	Strathhaven (Dungavel) . . . . .	6.54	6.08	1.28	2.57	1.70	3.98	4.80	4.56	3.57	4.62	1.05	3.13	43.88
Ayrshire . . . . .	Kilmarnock (Kay Park) . . . . .	4.55	4.76	.86	1.71	1.53	3.25	5.03	3.34	2.55	2.81	.61	2.67	33.67
"	Maybole (Culzean Castle Gardens) . . . . .	5.20	4.79	.85	2.03	.95	3.27	3.99	2.48	1.12	3.00	.38	1.82	29.88
"	Girvan (Pinmore) . . . . .	7.79	6.10	2.27	3.35	1.61	3.16	3.74	3.80	2.88	3.99	.73	3.35	42.77
"	Glen Afton (Ayr Sanatorium) . . . . .	11.24	7.03	2.09	2.93	2.11	3.00	6.01	2.44	3.31	4.91	1.14	3.19	49.40
Renfrewshire . . . . .	Glasgow (Queen's Park) . . . . .	3.64	4.57	1.33	1.92	1.58	2.17	3.60	3.57	3.53	4.14	.53	2.36	32.94
"	Greenock (Prospect Hill) . . . . .	9.39	5.86	1.65	2.81	1.74	2.96	4.15	3.69	4.48	2.84	1.76	4.15	45.48
Stirlingshire . . . . .	Falkirk (Westbank Garden) . . . . .	3.54	4.55	2.28	1.68	2.05	2.18	3.92	4.31	2.36	4.24	.53	2.36	34.00
Buteshire . . . . .	Rothsay (Ardencraig) . . . . .	6.73	5.56	2.16	3.16	1.75	4.53	4.94	4.24	3.34	3.12	1.53	3.33	44.39
"	Dougarie Lodge . . . . .	6.35	6.04	2.82	2.54	1.45	3.38	5.85	4.67	2.54	2.73	2.93	2.96	44.26
Argyllshire . . . . .	Loch Sunart (Glenborrodale) . . . . .	10.33	4.74	1.19	3.31	3.64	4.10	5.06	5.64	6.67	4.44	1.95	1.40	52.47
"	Morvern (Kingairlock) . . . . .	12.65	9.77	1.74	4.20	4.56	5.55	9.85	5.25	13.18	4.16	3.20	5.86	79.97
"	Oban . . . . .	8.65	4.47	.39	1.72	2.36	4.12	7.15	3.69	6.25	3.79	1.97	2.20	46.76
"	Lochgilphhead (Portalloch) . . . . .	9.99	5.70	1.58	3.36	2.54	4.80	7.38	4.29	5.22	4.52	2.15	1.88	53.41
"	Campbeltown (South Park) . . . . .	7.24	6.08	3.67	3.83	1.74	2.98	5.48	4.56	3.29	4.57	2.01	3.87	49.32
"	Monybacach (Skipness) . . . . .	8.14	7.61	2.05	2.55	2.13	4.38	4.85	5.82	2.61	4.12	1.59	3.50	49.35
"	Ardishaig (Canal Office) . . . . .	9.64	7.92	2.27	3.23	2.98	5.01	6.99	4.60	4.64	4.13	1.98	2.66	56.05
"	Inveraray Castle Gardens. . . . .	15.74	8.60	1.40	3.84	2.85	7.01	9.50	7.19	9.45	3.94	2.50	5.36	77.38
"	Loch Eck (Ben More) . . . . .	13.25	9.89	3.58	5.16	3.56	5.84	7.10	4.72	6.29	4.29	2.00	5.63	71.31
"	Islay (Eallabus) . . . . .	7.29	5.63	2.13	3.06	1.89	3.72	5.86	3.68	4.19	4.43	2.63	3.26	47.77
"	Jura (Ardfin) . . . . .	7.36	6.22	1.55	2.73	2.15	3.59	5.98	4.48	3.59	4.09	1.70	3.50	46.94
"	Colonsay . . . . .	6.67	4.37	1.15	2.88	2.56	3.03	6.12	3.88	5.01	4.09	2.30	2.62	44.68
"	Seil (An Cala) . . . . .	13.66	4.50	1.46	2.88	2.20	5.32	7.22	4.66	4.77	4.22	1.81	2.60	55.30
"	Mull (Bunessan) . . . . .	6.25	5.46	1.32	3.11	2.78	3.53	5.61	3.93	4.72	4.50	1.46	2.56	45.23
"	Mull (Gruline) . . . . .	11.90	6.54	2.60	4.21	3.70	4.13	6.22	5.09	8.12	4.98	2.81	4.87	65.17
"	Tiree . . . . .	4.82	2.94	1.18	2.46	2.53	2.49	3.38	3.54	4.53	2.23	1.81	2.61	34.52
Kinross . . . . .	Loch Leven Sluice . . . . .	3.77	3.95	2.66	1.73	1.81	2.42	4.72	5.50	1.56	3.37	.48	3.12	35.09

Table XX.—(con.) Monthly Rainfall—SCOTLAND—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Fifeshire . . . . . 3	Leuchars (Aerodrome) . . . . .	2.92	2.89	2.61	1.86	2.37	1.93	3.64	3.42	1.10	3.54	.52	3.19	29.99
Perthshire . . . . . 1	Loch Dhu . . . . .	12.40	8.50	2.70	4.00	2.50	4.60	6.65	5.20	6.60	3.80	1.10	4.60	62.65
" . . . . . 3	Glengyle . . . . .	16.45	9.30	3.60	4.40	4.00	5.60	6.60	5.60	7.80	3.50	1.90	5.30	74.05
" . . . . . 4	Glendevon (Glenquay Reservoir) . . . . .	5.31	4.62	3.00	2.81	2.94	4.31	5.59	5.27	4.06	4.20	1.27	3.25	46.63
" . . . . . 7	Lochearnhead (Edinchip) . . . . .	14.29	8.02	3.64	4.20	3.55	3.40	4.38	5.04	4.41	4.06	.83	2.75	58.57
" . . . . . 7	Crieff (Strathearn Hydro.) . . . . .	4.63	3.52	2.68	2.15	2.96	2.00	4.39	4.05	2.66	3.62	.39	2.65	35.70
" . . . . . 11	Aberfeldy (Dall Avon) . . . . .	10.98	3.39	1.86	1.29	2.96	1.19	3.37	2.88	1.74	3.15	.41	1.66	34.88
" . . . . . 12	Tyndrum Manse . . . . .	18.12	8.11	2.00	4.13	3.95	5.48	7.26	6.22	9.18	3.17	1.66	4.10	73.38
" . . . . . 14	Loch Rannoch (Dall) . . . . .	12.98	4.42	1.78	1.22	3.35	1.67	3.43	2.82	3.05	2.26	.54	1.52	39.04
" . . . . . 14	Blair Atholl (Blair Castle Gdns.) . . . . .	8.72	3.05	1.72	.67	2.68	1.41	4.24	2.76	2.36	2.62	.61	1.66	32.50
" . . . . . 15	Kirkmichael (Ballintuin House) . . . . .	8.45	4.03	2.18	1.63	2.70	1.53	4.45	4.30	2.01	4.22	.55	3.19	39.24
Angus . . . . . 1	Kettins School . . . . .	5.02	3.35	2.92	1.44	1.74	1.49	4.68	4.28	1.02	3.28	.25	2.50	31.97
" . . . . . 3	Arbroath (W. Cemetery) . . . . .	3.32	3.16	2.56	2.02	2.12	2.24	3.35	3.92	1.23	3.74	.71	4.12	32.49
" . . . . . 3	Glen Prosen (Pearsie House) . . . . .	7.97	3.40	3.50	1.70	2.39	1.75	4.70	2.88	1.80	3.18	.45	2.74	36.46
" . . . . . 4	Montrose (Sunnyside Asylum) . . . . .	4.15	2.57	2.58	1.93	2.11	1.95	3.90	5.44	1.31	3.19	.67	4.12	33.92
Kincardineshire . 3	Strachan (Bridge of Dye) . . . . .	10.68	3.44	4.38	1.75	2.16	1.39	4.80	4.51	1.16	4.36	1.15	4.09	43.87
Aberdeenshire . . 1	Braemar (Bank) . . . . .	13.41	3.85	4.13	1.11	2.28	1.11	3.14	3.22	1.49	2.70	.65	2.73	39.82
" . . . . . 1	Balmoral Castle Gardens . . . . .	11.80	3.01	5.31	.96	1.73	.73	3.32	1.74	.99	3.05	.79	3.64	37.07
" . . . . . 1	Logie Coldstone School . . . . .	(8.60)	2.34	4.49	1.41	2.00	1.07	(2.70)	1.96	.50	2.75	1.07	4.70	(33.56)
" . . . . . 2	Aberdeen Observatory . . . . .	4.96	2.32	2.70	1.05	1.52	1.26	3.93	2.71	1.53	3.37	1.65	4.31	31.31
" . . . . . 4	New Deer Schoolhouse . . . . .	5.04	3.67	3.34	.80	1.49	1.72	3.08	1.79	1.79	2.50	2.15	3.85	31.22
" . . . . . 4	Peterhead (Forehill Works) . . . . .	4.48	3.82	2.89	1.03	1.22	1.62	3.02	2.01	1.53	3.29	2.02	4.74	31.67
" . . . . . 5	Huntley (Cruchie) . . . . .	6.21	3.05	4.02	.60	1.58	1.68	3.76	1.84	.89	2.62	2.68	4.54	33.47
Banffshire . . . . . 2	Turriff (Forglen Gardens) . . . . .	6.16	3.36	3.25	.77	1.56	2.10	3.77	2.13	1.41	2.43	2.00	4.39	33.33
Morayshire . . . . . 2	Fochabers (Gordon Castle) . . . . .	3.78	3.28	2.72	.45	1.81	2.26	3.07	2.60	1.09	2.32	1.73	2.81	27.92
" . . . . . 3	Grantown-on-Spey . . . . .	3.82	2.45	2.61	1.21	1.15	1.55	2.48	2.20	1.11	2.08	1.11	3.40	25.17
" . . . . . 3	Aberlour (Wester Elchies) . . . . .	3.31	2.54	3.31	.90	1.29	1.36	2.66	1.45	1.03	2.18	2.03	4.49	26.55
Nairnshire . . . . . 2	Nairn Golf Course . . . . .	2.61	1.83	1.39	.60	1.19	1.83	3.15	5.43	1.13	2.32	.62	1.56	23.66
Inverness-shire . . 3	Cluny Castle . . . . .	8.06	3.97	1.71	.85	1.80	1.52	4.69	3.15	3.05	2.30	.50	1.37	32.97
" . . . . . 3	Kingussie (The Birches) . . . . .	6.92	2.84	2.39	.58	1.27	1.32	2.68	2.57	2.13	1.77	.42	1.31	26.20
" . . . . . 6	Loch Ness (Foyers) . . . . .	5.49	3.39	1.97	.86	1.25	1.31	3.15	3.65	4.02	1.99	.56	1.17	28.81
" . . . . . 6	Inverness (Culduthel Reservoir) . . . . .	3.59	2.34	1.61	.32	1.25	1.52	2.58	5.67	1.62	2.17	.57	.97	24.21

Table XX.—(con.) Monthly Rainfall—SCOTLAND—(con.)

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Inverness-shire ..7	Loch Quoich (Glenquoich) .....	in. 15.52	in. 9.49	in. 2.80	in. 2.94	in. 3.73	in. 6.25	in. 6.31	in. 4.25	in. 9.63	in. 4.26	in. 2.71	in. 4.07	in. 71.96
" ..12	Loch Nevis (Inverie Gardens) .....	10.20	6.73	1.92	2.85	3.64	5.42	6.54	4.93	7.84	4.56	2.79	2.72	60.14
" ..13	Arisaig House .....	7.74	4.01	1.05	1.86	2.81	4.25	5.38	4.51	5.83	3.99	2.42	1.87	45.72
" ..17	Fort William (The Factory) .....	11.92	5.49	1.64	2.17	3.14	4.78	7.15	4.04	9.20	2.58	1.06	3.29	56.46
" ..17	Glenleven (Corrour) .....	11.49	6.48	2.26	2.06	3.36	4.13	6.40	3.20	4.30	2.38	1.10	2.70	49.86
" ..18	Isle of Eigg .....	6.62	4.40	1.34	2.25	3.33	4.81	5.56	4.54	6.57	3.92	3.36	2.57	49.27
" ..18	Skye (Kyleakin, Dunringell) .....	8.48	5.31	1.35	1.94	3.06	2.98	5.26	4.35	6.32	2.92	1.38	1.90	45.25
" ..18	Skye (Portree) .....	8.31	5.96	2.94	2.19	3.15	4.00	3.97	4.26	6.76	4.08	2.45	3.43	51.50
" ..18	Skye (Dunvegan) .....	6.28	4.35	1.81	2.74	2.69	3.79	4.61	6.84	7.13	2.79	3.25	4.75	51.03
" ..19	Barra (Skallary) .....	5.13	4.62	1.28	1.86	2.99	2.00	2.04	2.68	4.05	3.04	2.41	3.47	35.57
" ..19	N. Harris (Amhuinnsuidh Castle) .....	5.49	4.11	3.90	2.14	2.50	4.14	3.23	5.68	6.93	4.07	3.25	3.23	48.67
Ross & Cromarty ..1	Glenmoriston (Claunie Lodge) .....	13.82	7.76	1.83	2.16	4.82	3.49	4.50	4.11	8.48	3.26	1.10	3.35	58.68
" ..3	Fortrose .....	2.71	2.96	1.50	.35	1.49	1.81	2.67	3.99	1.20	1.75	.35	.96	21.74
" ..4	Dingwall (The Academy) .....	3.50	3.03	1.81	.41	1.32	1.67	2.16	3.72	1.41	1.53	.49	.71	21.76
" ..5	Tain (Ardlarach) .....	2.41	3.69	2.23	.55	1.77	2.14	2.60	3.18	1.37	2.24	.64	1.01	23.83
" ..7	Inverbroom (Glaskour) .....	7.00	6.01	4.35	.85	1.74	2.16	3.20	2.07	3.30	3.10	1.80	1.52	37.10
" ..7	Ullapool .....	4.80	4.23	1.89	.61	1.47	1.77	2.69	1.68	3.90	2.59	1.83	1.37	28.83
" ..8	Poolewe (Inverewe Gardens) .....	4.47	4.85	1.26	.77	1.79	2.98	3.32	2.14	5.11	4.10	2.28	2.73	35.80
" ..9	Loch Carron (Dunhulladale) .....	7.97	6.51	2.08	1.80	2.52	4.44	4.72	3.58	6.65	3.94	2.71	1.60	48.52
" ..9	Achnashellach .....	11.75	8.07	2.01	1.87	2.96	4.10	3.81	3.38	6.62	4.32	2.67	2.17	53.73
" ..10	Stornoway (Coastguard Station) .....	4.79	4.16	1.96	1.78	2.65	3.43	1.60	4.05	4.41	2.32	2.23	2.40	35.78
Sutherlandshire ..1	Lairg .....	5.51	5.35	2.82	.33	1.64	2.27	3.37	2.25	2.06	2.19	.91	1.94	30.64
" ..4	Skerry (Borgie) .....	4.21	5.25	2.55	.53	1.16	2.45	3.49	1.88	2.78	2.45	2.61	2.63	31.99
" ..4	Melvich .....	4.82	4.35	2.31	.44	1.07	2.96	3.36	2.14	2.12	2.03	2.01	1.81	29.42
" ..5	Loch More (Achfary) .....	8.18	7.34	4.37	1.60	1.93	4.50	3.83	3.44	5.93	5.93	4.27	2.76	54.08
Caithness-shire ..2	Wick (Coastguard Station) .....	3.90	3.47	1.96	1.15	.69	2.77	1.96	3.09	1.75	2.51	1.46	2.20	26.91
" ..3	Thurso (Buckies) .....	5.71	4.44	3.29	1.00	.97	3.23	3.26	2.44	2.64	2.35	2.33	1.99	33.65
Orkney .....	Deerness .....	5.88	4.78	2.55	.92	.36	2.70	1.65	2.35	3.12	2.54	1.83	2.22	30.90
Shetland .....	Lerwick Observatory .....	5.87	4.00	2.73	1.68	2.17	4.63	1.91	1.87	2.65	3.61	2.43	3.76	37.31

Table XX.—(con.) Monthly Rainfall—Ireland.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Cork	Garinish Island	11.86	8.72	4.25	5.02	3.36	2.02	10.54	3.82	5.84	2.22	4.61	5.34	67.60
"	Castletownshend (Seafeld)	9.73	6.26	4.33	4.10	2.09	1.03	5.94	2.88	3.60	2.47	2.75	3.27	48.45
"	Cork (University College)	9.04	4.30	5.99	3.50	1.94	.68	3.21	1.78	3.01	2.48	3.57	2.47	41.97
"	Roches Point (Coastguard Stn.)	7.26	5.33	4.56	3.69	2.01	1.67	4.73	2.56	3.40	3.48	3.87	2.43	44.99
"	Malow (Longueville)	11.32	4.99	6.24	3.18	2.36	.96	4.19	1.72	3.58	2.62	4.59	2.95	48.70
"	Kanturk (Castlecarr)	7.42	4.66	3.98	3.45	2.29	1.04	4.01	2.35	4.04	2.80	3.50	2.74	42.28
Co. Kerry	Valentia Observatory	11.71	7.19	4.94	3.33	3.33	2.00	8.77	2.96	6.55	2.50	5.61	5.05	63.94
"	Gap of Dunloe (Gearhameen)	15.30	12.50	6.80	6.30	4.60	3.00	9.80	3.60	8.70	3.80	6.80	7.10	88.30
"	Killarney (Flesk Mills)	14.12	6.21	5.05	3.38	2.44	1.68	6.60	2.37	5.26	3.18	4.30	4.32	58.91
"	Killorglin (Callinafercy)	10.61	7.27	3.78	2.84	1.50	1.75	7.21	2.55	5.50	2.87	4.79	2.95	53.62
"	Bally McElligott Rectory	8.23	5.84	2.79	2.46	2.35	1.06	6.48	2.45	5.05	2.44	2.84	3.05	45.04
"	Darrynane Abbey	10.72	6.75	4.34	3.45	2.53	1.06	8.11	3.21	6.12	2.33	3.44	3.97	56.03
"	Kenmare (Dromore Castle)	14.09	8.32	5.62	4.72	2.98	2.02	9.93	4.50	6.40	2.85	4.62	4.84	71.79
Co. Waterford	Lismore Castle	8.57	5.48	4.44	3.71	2.65	1.48	3.30	2.26	2.54	3.38	3.43	3.20	44.44
"	Waterford (Gortmore)	6.43	4.96	5.04	3.45	1.71	1.65	4.34	1.85	3.89	3.11	3.14	2.51	42.08
"	Carrick-on-Suir (Seskin)	9.06	5.38	5.33	4.17	2.28	1.00	3.95	1.61	3.94	4.21	4.52	2.51	47.96
Co. Tipperary	Nenagh (Traverston)	9.74	5.77	3.22	3.84	3.53	1.50	5.79	2.41	3.91	2.52	2.49	2.93	47.65
"	Nenagh (Castle Lough)	7.51	5.33	2.36	2.94	3.96	1.44	5.24	2.63	4.81	1.79	1.80	2.80	42.61
"	Terryglass (Slevyire)	4.45	3.77	1.35	2.86	3.01	1.23	3.73	3.06	4.05	1.64	1.71	1.52	32.38
"	Cashel (Ballinamona)	7.01	4.69	2.72	3.51	2.92	1.04	5.14	2.44	3.07	2.64	2.98	2.15	40.31
Co. Limerick	Abbeylea (Springmount School)	8.16	5.42	2.77	3.58	1.00	.63	3.47	2.47	2.81	1.91	2.28	3.13	37.63
"	Foynes (Coolnanes)	6.76	5.16	1.99	2.80	1.85	.85	5.30	2.02	3.78	1.49	1.93	2.50	36.43
"	Limerick (Mulgrave Street)	6.78	4.97	1.39	2.77	1.87	1.00	5.49	1.95	4.52	1.93	2.14	2.71	37.52
Co. Clare	Inagh (Mount Callan)	10.87	9.87	3.16	4.33	2.52	2.74	10.85	4.76	10.49	1.91	4.11	4.54	70.15
"	Dromoland Castle	7.14	6.41	1.90	2.87	1.42	.75	4.46	2.80	4.16	1.97	2.37	2.53	38.78
Co. Wexford	Foulks Mills (Longraigue)	6.90	5.42	4.58	3.47	1.54	2.16	3.78	1.42	4.18	2.79	3.65	2.37	42.26
"	Enniscorthy (Woodbrook)	9.53	6.23	8.11	5.37	2.39	2.01	3.68	1.76	4.41	2.76	3.40	4.16	53.81
"	Gorey (Courtown House)	7.65	5.17	6.12	3.64	1.08	1.44	2.52	1.47	3.79	2.49	2.39	2.81	40.57
Co. Kilkenny	Thomastown (Mall House)	7.45	3.65	3.91	2.69	1.60	1.36	3.04	1.63	3.66	2.81	2.61	1.90	36.31
"	Castlecromer House	7.02	5.04	4.62	3.14	2.25	2.01	3.50	1.59	3.42	3.66	1.85	1.73	39.83
Co. Wicklow	Newcastle (Killadreenan)	7.14	5.40	5.29	3.44	2.16	.82	2.08	1.30	3.46	3.92	2.47	3.84	41.32
"	Blessington Rectory	4.36	4.02	4.46	2.42	1.46	1.90	3.71	2.90	3.04	3.08	1.31	2.34	35.00

Table XX.—(con.) *Monthly Rainfall—IRELAND—(con.)*.

County and River Division.	Station.	MONTHLY RAINFALL.												Total.
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Carlow . . . . .	2 Bagnalstown (Fenagh House) . . . . .	7.31	3.76	4.62	3.00	1.40	1.58	3.65	2.48	3.17	2.78	2.57	2.15	38.47
" . . . . .	3 Hacketstown Rectory . . . . .	7.35	4.64	4.61	3.37	1.34	1.72	3.19	4.21	3.48	2.61	2.14	2.82	41.48
Co. Leix . . . . .	2 Abbey Leix (Blandsfort) . . . . .	5.76	5.04	4.45	3.06	2.03	2.20	3.71	2.13	2.96	3.33	1.84	2.12	38.63
" . . . . .	3 Mountrath (Baunreagh) . . . . .	6.90	7.71	4.75	4.81	3.66	2.58	7.24	3.95	4.45	5.05	2.33	3.16	56.59
Co. Offaly . . . . .	1 Birr Castle . . . . .	4.48	4.15	2.06	2.66	2.74	2.05	3.85	3.33	4.00	1.93	1.47	1.94	34.66
" . . . . .	1 Ferbane (Turraun Peat Works) . . . . .	3.43	4.08	1.91	2.76	1.89	2.09	4.21	3.20	4.06	1.25	1.07	1.70	31.65
" . . . . .	1 Ballycumber (Bellair House) . . . . .	3.40	4.41	2.15	3.22	2.43	2.70	3.65	2.69	4.86	1.75	.95	2.06	34.27
Co. Kildare . . . . .	2 Straffan House . . . . .	3.07	4.22	3.74	2.11	1.66	1.60	3.59	3.86	2.26	3.96	1.56	1.77	33.40
Co. Dublin . . . . .	2 Dublin (Phoenix Park) . . . . .	2.80	3.27	4.72	1.52	1.16	1.31	1.74	2.34	1.45	4.45	2.17	1.74	28.67
" . . . . .	2 Howth Castle . . . . .	3.94	3.88	4.13	2.50	1.39	1.01	2.62	1.44	1.87	3.59	1.73	2.05	30.15
" . . . . .	3 Balbriggan (Ardgillan) . . . . .	2.95	4.69	3.27	1.84	1.07	1.28	2.19	1.92	1.98	(3.75)	2.36	2.50	29.80
Co. Meath . . . . .	2 Dunboyne (Stirling, Clonee) . . . . .	2.55	4.14	4.91	1.79	1.04	1.33	2.07	2.60	2.04	4.17	2.32	2.09	31.05
" . . . . .	4 Summerhill House . . . . .	3.56	4.61	3.95	2.08	1.50	1.59	3.72	2.35	3.35	3.48	1.58	1.91	33.68
" . . . . .	4 Kells (Headfort) . . . . .	4.63	5.16	3.12	2.21	1.81	1.95	3.90	3.51	4.89	2.33	1.60	2.14	37.25
Co. Westmeath . . . . .	1 Mullingar (Belvedere House) . . . . .	4.57	4.76	2.66	3.01	1.85	2.57	4.08	2.27	4.76	1.93	1.39	2.06	35.91
" . . . . .	1 Castlepollard (Pakenham Hall) . . . . .	3.68	3.64	3.20	2.88	1.36	2.02	4.63	2.64	3.81	2.14	1.22	1.92	33.14
Co. Longford . . . . .	2 Ballymahon (New Castle) . . . . .	4.58	4.50	2.80	2.86	2.96	1.99	5.30	2.59	5.97	2.03	1.25	2.41	39.24
" . . . . .	2 Newtownforbes (Cas. Forbes Gdns.) . . . . .	4.37	5.15	2.12	2.43	3.28	1.89	4.21	2.67	4.85	1.56	1.04	2.37	35.94
Co. Galway . . . . .	3 Galway (Grammar School) . . . . .	6.09	4.46	1.45	2.58	2.35	2.09	6.79	2.86	5.43	1.06	2.13	2.89	40.18
" . . . . .	3 Ballynahinch Castle . . . . .	8.67	8.28	2.62	2.93	4.40	3.30	9.27	3.91	9.60	2.55	3.40	5.00	63.93
" . . . . .	3 Tuam Palace Gardens . . . . .	5.49	5.12	2.03	2.59	2.28	2.09	6.66	3.03	5.70	.88	2.73	3.55	42.15
" . . . . .	5 Abascragh (Clonbrock) . . . . .	5.91	4.49	1.80	3.06	3.55	1.97	5.74	3.51	5.42	1.03	1.44	2.50	40.42
Co. Roscommon . . . . .	4 Strokestown (Castlenode) . . . . .	4.87	4.26	1.93	2.61	3.39	1.64	4.25	2.77	4.08	1.50	1.02	2.27	34.59
Co. Mayo . . . . .	2 Castlebar Rectory . . . . .	8.10	6.49	2.25	3.10	2.75	2.86	4.68	3.88	5.07	1.17	3.44	5.35	49.14
" . . . . .	3 Ballina (The Rectory) . . . . .	7.63	4.56	1.65	2.23	1.82	2.26	5.43	3.08	7.18	1.74	2.16	4.61	44.35
" . . . . .	3 Blacksod Point . . . . .	8.88	4.61	1.69	2.67	1.70	2.79	6.00	4.85	4.20	2.02	3.79	6.43	49.63
" . . . . .	4 Westport House . . . . .	7.86	4.76	2.52	2.71	2.12	1.82	3.95	3.55	4.57	.89	3.11	4.62	42.48
" . . . . .	4 Mallaranny . . . . .	7.11	7.64	2.05	3.70	2.38	4.92	7.45	6.32	7.08	2.05	2.73	5.87	59.30
" . . . . .	5 Delphi Lodge . . . . .	15.74	10.31	4.59	5.04	4.72	6.72	11.59	7.65	11.10	2.80	6.76	10.49	97.51
Co. Sligo . . . . .	2 Collooney (Markree Castle) . . . . .	5.39	5.47	1.60	2.73	1.66	1.83	6.39	3.97	4.68	1.37	1.61	3.91	40.61
" . . . . .	2 Sligo (Ard-na-veagh) . . . . .	5.22	5.08	1.44	2.46	2.00	2.66	5.88	3.56	4.78	1.44	1.04	3.95	39.51
Co. Cavan . . . . .	1 Crossdoney (Kevit Castle) . . . . .	4.48	4.88	1.63	2.37	1.56	1.87	4.14	3.14	4.30	1.96	1.79	2.60	34.72



Table XX.—(con.) Monthly Rainfall—Ireland—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Fermanagh	Newtownbutler (Crom Castle) . . . . .	4.83	4.13	1.44	2.16	1.45	2.23	4.13	4.11	3.65	1.12	1.97	2.71	33.93
"	Enniskillen (Portora School) . . . . .	5.13	3.96	1.31	1.67	2.26	(1.30)	4.51	3.09	3.01	.64	1.28	1.70	29.86
"	Belleek (Heronshaw) . . . . .	6.36	4.78	1.48	2.28	3.28	2.89	5.71	3.78	5.40	.94	1.44	3.37	41.71
Co. Armagh	Markethill (Whitecross) . . . . .	4.61	4.47	2.64	2.80	1.16	2.20	3.28	1.97	3.48	3.39	2.67	3.38	36.05
"	Armagh Observatory . . . . .	4.62	3.44	2.29	2.27	1.08	2.15	3.28	2.93	2.35	2.75	1.26	2.24	30.66
Co. Down	Newry (Bridge Street House) . . . . .	5.49	4.56	3.86	2.25	1.10	2.07	2.74	2.27	3.07	3.45	1.80	3.15	35.81
"	Silent Valley (Belfast W.W.) . . . . .	5.59	8.12	7.41	3.81	1.96	3.13	4.88	3.61	3.86	3.15	3.30	6.62	55.44
"	Seaforde . . . . .	4.86	6.04	4.38	3.09	.93	2.54	3.90	2.41	3.44	3.62	2.11	5.33	42.65
"	Donaghadee (Coastguard Station) . . . . .	4.29	4.59	2.92	2.57	.88	2.44	2.59	2.76	1.85	3.49	1.69	4.52	34.59
"	Waringstown (The Forge) . . . . .	4.42	3.71	3.07	2.05	.99	2.95	3.00	2.42	2.43	3.10	1.04	2.77	31.95
Co. Antrim	Belfast (Queen's University) . . . . .	5.99	6.37	3.43	2.49	1.23	3.20	3.31	3.26	1.92	3.14	1.69	4.20	40.23
"	Larne (Sallagh Springs) . . . . .	7.70	7.18	4.67	3.18	2.23	2.99	4.35	3.09	2.87	3.69	2.53	4.75	49.23
"	Ballycastle (Magherintemple) . . . . .	6.58	6.00	2.27	2.49	1.44	2.69	4.49	3.31	2.76	4.06	2.50	3.46	42.05
"	Aldergrove Aerodrome . . . . .	4.48	4.15	2.71	2.64	.95	2.99	4.36	3.36	2.00	2.95	.69	3.20	34.48
"	Ballymena (Harryville) . . . . .	5.08	5.72	3.65	2.49	2.19	2.80	4.99	4.14	2.38	2.99	1.45	4.45	42.33
Co. Londonderry	Garvagh (Moneydig) . . . . .	6.50	4.72	2.37	3.09	1.59	2.20	5.38	4.80	3.23	2.34	1.44	3.51	41.17
"	Coleraine (Ingledene) . . . . .	5.85	4.42	1.56	3.07	1.46	1.93	5.50	4.41	3.17	2.28	1.56	2.70	37.91
"	Glendora Lodge . . . . .	9.90	6.97	3.23	4.34	2.51	2.51	7.06	5.16	4.09	2.25	2.52	3.58	54.12
"	Londonderry (Creggan Reservoir) . . . . .	6.29	4.59	1.54	2.80	2.15	2.51	5.17	4.08	3.98	1.68	1.59	3.15	39.53
Co. Tyrone	Omagh (Edenfel) . . . . .	6.15	4.46	1.98	2.49	2.10	2.83	5.84	3.99	3.84	1.10	2.22	2.82	39.82
"	Sion Mills (Sion House) . . . . .	7.23	4.59	1.48	2.38	1.84	1.68	4.81	2.83	4.12	1.31	1.47	2.68	36.42
Co. Donegal	Malin Head (Coastguard Station) . . . . .	5.56	3.85	.96	1.94	2.17	2.06	4.80	3.13	4.41	1.57	2.59	2.54	35.58
"	Buncrana Rectory . . . . .	5.54	4.61	1.55	1.92	1.76	2.11	4.71	4.33	3.76	1.67	1.96	3.12	37.04
"	Dunfanaghy (St. Patrick's) . . . . .	5.64	2.87	1.05	1.91	2.45	2.22	4.04	4.04	2.84	1.47	2.69	3.35	34.57
"	Dunkeelney (Killaghtee House) . . . . .	6.09	5.70	1.09	2.84	2.09	2.21	5.20	3.55	5.31	1.31	1.53	3.15	40.07

Table XXI.—*Monthly Rainfall in 1937; the Average, 1881–1915, being taken as 100.*

County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
London	St. Pancras (Camden Square)	187	260	162	171	164	74	22	61	85	84	53	164	117
Kent	Tenterden (Ashenden)	259	243	219	154	182	97	40	71	127	108	39	127	132
"	Margate (Cliftonville)	234	266	202	143	154	104	39	74	127	95	46	203	132
"	Edenbridge (Falconhurst)	283	251	148	146	141	117	96	97	95	80	43	114	127
Sussex	Compton (Compton House)	238	244	146	182	114	41	61	57	79	88	69	114	116
"	Eastbourne (Wilmington Square)	217	258	193	167	155	73	65	73	105	79	37	142	124
Hampshire	Ventnor (Royal National Hosp.)	235	255	212	127	100	46	78	82	110	60	65	192	129
"	Fordingbridge (Oaklands)	242	246	144	119	137	43	93	46	126	104	45	97	119
"	Sherborne St. John	265	239	183	129	160	76	44	53	105	88	47	93	119
Hertfordshire	Royston (Therfield Rectory)	235	198	197	185	161	129	144	43	102	103	76	133	135
Buckinghamshire	Slough (Upton)	227	273	166	156	162	97	64	59	139	104	54	135	131
Oxfordshire	Oxford (Radcliffe Met. Stn.)	185	289	185	165	140	70	58	19	116	93	53	77	111
Northamptonshire	Wellingborough (Swanspool)	187	198	184	203	203	69	75	96	71	114	81	94	125
Cambridgeshire	March	170	178	196	237	218	68	83	67	68	71	78	164	123
Essex	Chelmsford (County Gardens)	246	259	143	216	176	120	81	33	74	49	86	166	127
Suffolk	Rendlesham Hall	257	270	149	191	253	70	56	71	132	77	55	143	133
"	Lowestoft (Secondary School)	247	190	125	116	146	36	74	20	111	63	62	172	107
"	Bury St. Edmunds (Westley H.)	235	211	194	217	136	85	72	118	85	72	70	130	127
Norfolk	Wells (Holkham Hall)	258	153	198	177	196	68	121	50	63	80	76	123	120
Wiltshire	Bishops Cannings	214	298	161	206	115	62	71	30	143	135	63	77	124
Dorsetshire	Weymouth (Westham)	192	258	204	128	201	32	248	76	101	123	84	109	141
"	Beaminstor (East St.)	193	227	160	104	159	60	130	34	129	108	60	111	121
South Devonshire	Taigntonmouth (Den Gardens)	240	221	219	133	139	48	57	61	114	98	85	91	126
"	Cullompton	229	240	180	151	111	35	94	33	120	88	67	78	117
North Devonshire	Barnstaple (N. Dev. Athenæum)	163	237	126	124	95	58	114	39	164	65	53	88	105
"	Okehampton (Uplands)	268	224	186	165	101	47	68	23	96	73	57	53	113
Cornwall	Penzance (Morrah Gardens)	152	221	189	130	84	55	59	20	138	69	76	103	108
"	St. Austell (Trevarna)	180	241	187	162	133	68	64	15	125	60	68	108	115
Somersetshire	Chewton Mendip (The Priory)	180	226	136	125	97	56	111	22	81	93	73	54	100
Gloucestershire	Cirencester (Gwynfa)	190	222	160	159	103	54	93	20	83	105	57	67	104
Shropshire	Church Stretton (Woolstaston)	187	253	139	97	86	61	107	43	160	124	66	102	114
"	Cheswardine Hall	147	276	104	151	136	38	127	29	108	86	56	146	109

Table XXI.—*Monthly Rainfall in 1937; the Average, 1881–1915, being taken as 100—(con.).*

County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Worcestershire . . . 1	Malvern (Free Library) . . . . .	% 166	% 251	% 152	% 128	% 137	% 53	% 122	% 15	% 127	% 99	% 56	% 83	% 109
Warwickshire . . . 1	Alcester (Ragley Hall) . . . . .	152	216	184	161	114	35	149	45	140	94	79	85	114
" . . . 4	Birmingham (Edgbaston) . . . . .	183	230	138	164	116	35	118	36	111	96	66	94	109
Leicestershire . . . 4	Grantham (Belvoir Castle Gdns.) . . .	157	171	155	182	165	29	230	29	52	85	55	80	112
Lincolnshire . . . 3	Boston (Black Sluice, Skirbeck) . . .	220	178	194	185	300	105	335	25	80	78	101	116	153
" . . . 4	Louth (Westgate) . . . . .	189	119	119	168	159	58	69	19	48	65	86	132	98
Nottinghamshire . . 5	Mansfield (Carr Bank) . . . . .	191	188	97	141	142	25	88	21	89	119	63	113	103
Derbyshire . . . . . 6	Derby (The Arboretum) . . . . .	150	224	109	116	114	38	115	11	92	67	68	80	92
Cheshire . . . . . 3	Birkenhead (Bidston Obs'y.) . . . .	88	266	69	173	181	82	60	53	87	70	59	109	99
S. Lancashire . . . 3	Manchester (Whitworth Park) . . . .	122	246	60	138	88	45	66	36	43	47	73	72	79
C. " . . . 1	Stonyhurst (College) . . . . .	82	184	49	103	72	122	56	57	69	46	35	39	71
N. " . . . 1	Ulverston (Poaka Beck) . . . . .	95	184	65	114	64	94	73	47	99	53	42	73	79
N. " . . . 5	Blackpool (Stanley Park) . . . . .	87	224	57	164	83	103	67	56	71	75	44	74	86
Yorkshire, W.R. . . 8	Wakefield (Clarence Park) . . . . .	180	252	134	163	150	65	102	22	85	93	93	83	112
" E.R. . . 3	Hull (Pearson Park) . . . . .	161	150	114	233	176	64	113	26	75	57	117	198	117
" N.R. . . 1	West Witton (Ivy House) . . . . .	153	214	103	148	181	65	73	48	71	78	50	107	106
" " . . . 2	Felixkirk (Mount St. John) . . . . .	161	232	133	153	145	66	46	49	66	68	93	210	112
" " . . . 3	York (Museum Gardens) . . . . .	159	197	134	217	173	84	69	71	65	104	92	108	117
" " . . . 5	Scarborough . . . . .	203	194	202	209	182	66	85	27	83	94	93	203	129
" " . . . 6	Middlesbrough (Albert Park) . . . .	121	174	187	157	131	90	41	41	92	41	103	191	103
Northumberland . . 3	Newcastle (Leazes Park) . . . . .	150	240	125	168	135	135	103	90	84	68	81	266	131
" . . . 4	Bellingham (Highgreen) . . . . .	155	171	95	93	129	48	80	85	141	68	31	147	101
" . . . 6	Ilderton (Lilburn Tower Gdns.) . . .	162	180	203	78	153	72	103	104	43	75	37	196	114
Cumberland . . . . 1	Carlisle (Scaleby Hall) . . . . .	111	173	47	138	145	68	80	51	100	50	25	60	81
" . . . . 2	Keswick (High Hill) . . . . .	170	131	68	69	60	73	77	60	120	60	22	43	78
Westmorland . . . 1	Appleby (Castle Bank) . . . . .	82	136	69	92	138	57	91	48	94	39	10	53	72
Monmouthshire . . 3	Abergavenny (Larchfield) . . . . .	211	202	163	103	85	52	158	37	54	110	50	73	109
Glamorganshire . . 3	Ystalyfera (Wern House) . . . . .	156	210	70	110	86	107	80	20	103	51	69	63	90
" . . . 5	Cardiff (Penylan) . . . . .	133	217	118	153	96	44	101	9	64	86	59	45	88
Carmarthenshire . . 2	Carmarthen (Model & Prac. Sch.) . .	189	193	81	109	74	82	86	38	119	100	55	93	100
Pembrokeshire . . . 4	Pembroke (Stackpole Court) . . . . .	145	293	150	137	64	49	115	23	111	103	59	98	109
Radnorshire . . . . 1	Birmingham W.W. (Tyrynndd) . . .	174	192	88	139	69	49	70	19	83	70	29	66	87

Table XXI.—*Monthly Rainfall in 1937 ; the Average, 1881–1915, being taken as 100—(con.).*

County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Montgomeryshire 4	Newtown (Penarth Weir) . . . . .	201	247	125	100	77	48	88	33	82	90	53	87	100
" 5	Lake Vyrnwy . . . . .	152	232	89	141	92	124	98	41	62	75	43	70	98
Merionethshire . . 3	Blaenau Festiniog (Oakeley Q.) . . .	109	187	46	151	34	114	66	45	82	42	54	57	78
" . . 4	Dolgelley (Bontddu) . . . . .	121	199	62	145	80	92	76	20	98	57	34	54	81
Carnarvonshire . . 2	Llandudno (Cricket Ground) . . . . .	126	216	79	151	92	57	42	59	122	97	47	65	92
Anglesey . . . . .	Holyhead (Salt Island) . . . . .	112	187	59	93	38	109	84	51	112	160	45	96	96
Isle of Man . . . . .	Douglas (Borough Cemetery) . . . . .	128	239	121	167	68	126	137	58	77	99	50	91	108
Channel Islands . .	Guernsey, St. Peter Port (Grange Rd.)	179	263	207	141	237	33	88	18	128	93	67	158	131
Wigtownshire . . . 3	Port William (Monreith) . . . . .	103	196	50	125	91	125	198	58	81	73	39	118	101
Kirkcudbrightshire 3	Dalry (Glendarroch) . . . . .	163	131	68	108	83	108	147	75	70	71	24	50	88
Dumfriesshire . . . 3	Dumfries (Crichton Roy. Inst.) . . .	151	144	60	148	63	107	103	59	102	128	28	63	94
Roxburghshire . . . 3	Hawick (Wolfelee) . . . . .	144	150	81	79	154	53	123	87	93	81	20	99	96
Peeblesshire . . . . 2	Stobo Castle . . . . .	222	170	70	81	110	64	147	97	75	100	20	82	103
Berwickshire . . . . 4	Marchmont House . . . . .	138	179	142	70	149	63	87	87	63	93	23	212	107
East Lothian . . . . 5	North Berwick Reservoir . . . . .	124	167	115	67	142	102	124	95	49	111	23	195	109
Midlothianshire . . 5	Edinburgh (Blackford Hill) . . . . .	116	182	86	75	123	50	190	129	80	141	11	100	110
Ayrshire . . . . . 8	Girvan (Pinmore) . . . . .	165	143	60	113	54	109	102	85	75	80	14	56	86
" . . . . . 13	Glen Afton (Ayr Sanatorium) . . . .	220	160	50	98	70	100	143	45	85	96	21	50	93
Renfrewshire . . . . 2	Glasgow (Queen's Park) . . . . .	109	155	51	97	65	94	123	101	127	127	14	56	91
" . . . . . 3	Greenock (Prospect Hill) . . . . .	145	110	35	82	53	95	112	72	100	57	29	56	78
Bute . . . . . 3	Dougarie Lodge . . . . .	147	160	81	89	53	124	185	110	66	66	56	54	96
Argyllshire . . . . . 2	Loch Sunart (Glenborrodale) . . . .	146	79	21	79	102	127	109	99	107	67	26	16	76
" . . . . . 8	Lochgilphead (Polkalloch) . . . . .	197	132	41	111	88	157	179	88	114	92	38	29	101
" . . . . . 11	Inveraray Castle Gardens . . . . .	192	127	22	83	73	177	191	109	147	56	30	54	100
" . . . . . 14	Islay (Eallabus) . . . . .	156	134	56	105	71	142	172	84	100	93	49	55	98
" . . . . . 14	Tiree . . . . .	113	85	35	100	101	98	93	84	122	49	37	50	77
Kinross-shire . . . . 2	Loch Leven Sluice . . . . .	120	140	89	90	74	111	164	144	61	98	13	79	98
Fifeshire . . . . . 3	Leuchars (Aerodrome) . . . . .	160	165	134	117	122	116	140	111	57	136	23	129	117
Perthshire . . . . . 1	Loch Dhu . . . . .	136	114	41	84	55	110	138	77	115	53	13	46	79
" . . . . . 7	Crieff (Strathearn Hydro) . . . . .	115	100	84	98	119	76	148	96	93	92	9	59	87
" . . . . . 14	Blair Atholl (Blair Castle Gdns.) . .	262	109	66	32	132	71	166	82	100	85	17	43	97
Angus . . . . . 4	Montrose (Sunnyside Asylum) . . . .	209	140	124	106	103	118	148	195	66	116	25	148	125

Table XXI.—*Monthly Rainfall in 1937; the Average, 1881–1915, being taken as 100—(con.)*.

County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Aberdeenshire . . . . .1	Balmoral Castle Gdns. . . . .	428	116	186	45	75	43	130	57	41	85	21	108	112
" . . . . .2	Aberdeen Observatory . . . . .	228	113	112	56	65	74	140	99	69	112	56	134	106
Aberdeenshire . . . . .4	New Deer Schoolhouse . . . . .	216	172	129	40	68	86	101	60	71	66	64	113	97
Morayshire . . . . .2	Fochabers (Gordon Castle) . . . . .	187	171	117	26	85	111	96	82	44	73	60	104	94
" . . . . .3	Grantown-on-Spey . . . . .	158	116	99	61	49	69	81	69	45	70	37	125	81
Nairnshire . . . . .2	Nairn (Golf Course) . . . . .	131	102	74	40	66	104	118	225	51	99	26	70	95
Inverness-shire . . . . .6	Loch Ness (Foyers) . . . . .	131	104	61	40	51	59	104	119	137	59	14	26	75
" . . . . .7	Loch Quoich (Glenquoich) . . . . .	113	92	29	45	68	127	98	52	111	43	23	28	65
" . . . . .13	Arisaig House . . . . .	125	81	22	52	81	130	108	78	96	68	36	26	73
" . . . . .17	Glenleven (Corrour) . . . . .	134	98	39	51	87	123	155	59	80	39	15	29	71
Ross and Cromarty . . . . .5	Tain (Ardlarach) . . . . .	85	149	90	28	78	105	88	110	55	74	20	32	75
" . . . . .7	Ullapool . . . . .	104	99	45	20	58	75	85	47	104	53	34	22	60
" . . . . .9	Achnashellach . . . . .	122	111	28	33	66	103	74	51	91	54	29	22	64
" . . . . .10	Stornoway (Coastguard Stn.) . . . . .	98	98	50	62	109	156	56	107	118	47	38	40	76
Sutherlandshire . . . . .1	Lairg . . . . .	168	173	91	14	65	109	108	71	73	59	23	48	82
" . . . . .4	Melvich . . . . .	146	145	81	19	52	153	120	72	76	55	50	42	82
" . . . . .5	Loch More (Achfary) . . . . .	112	111	68	33	44	122	72	59	103	76	50	30	71
Caithness-shire . . . . .2	Wick (Coastguard Station) . . . . .	159	153	86	58	33	154	75	112	70	85	46	71	90
Orkney . . . . .7	Deerness . . . . .	170	159	91	44	18	147	64	82	108	67	47	53	87
Co. Cork . . . . .8	Cork (University College) . . . . .	224	115	200	134	86	27	118	53	112	64	89	48	105
" . . . . .9	Roches Point (Coastguard Stn.) . . . . .	175	144	151	138	83	63	164	68	114	85	92	46	107
" . . . . .3	Mallow (Longueville) . . . . .	290	147	215	130	106	44	167	55	149	73	123	60	131
Co. Kerry . . . . .3	Valentia Observatory . . . . .	213	138	109	91	105	63	232	62	158	45	103	76	115
" . . . . .3	Gap of Dunloe (Gearhameen) . . . . .	151	140	84	110	88	60	171	47	143	41	70	57	94
Co. Waterford . . . . .3	Waterford (Gortmore) . . . . .	177	154	185	138	75	63	136	49	143	79	85	55	108
Co. Tipperary . . . . .1	Nenagh (Castle Lough) . . . . .	190	171	76	117	160	59	167	67	171	53	45	61	108
" . . . . .3	Cashel (Ballinamona) . . . . .	187	148	100	143	124	46	180	70	127	74	86	50	110
Co. Limerick . . . . .2	Foynes (Coolnanes) . . . . .	179	162	68	115	79	33	171	52	131	39	47	53	92
Co. Wexford . . . . .4	Gorey (Courtown House) . . . . .	245	184	265	166	49	59	86	44	153	70	68	74	117
Co. Carlow . . . . .2	Bagnalstown (Fenagh House) . . . . .	233	148	191	131	57	64	116	71	128	83	77	57	110
" . . . . .3	Hacketstown Rectory . . . . .	207	155	165	127	51	61	92	104	124	69	45	69	105
Co. Leix . . . . .2	Abbey Leix (Blandsfort) . . . . .	176	188	170	117	83	85	118	54	109	95	55	58	106

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County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Co. Offaly . . . . . 1	Birr Castle . . . . .	158	181	86	124	123	89	130	87	175	66	47	59	106
Co. Kildare . . . . . 2	Straffan House . . . . .	119	194	161	107	75	70	127	102	101	139	50	58	107
Co. Dublin . . . . . 2	Dublin (Phoenix Park) . . . . .	123	183	242	84	56	66	65	74	76	169	77	69	104
Co. Meath . . . . . 4	Kells (Headfort) . . . . .	147	190	113	88	67	73	123	85	184	70	47	56	101
Co. Westmeath . . . . . 1	Mullingar (Belvedere) . . . . .	142	171	99	127	75	99	128	54	178	62	38	56	99
Co. Longford . . . . . 2	Newtownforbes (Cas. Forbes Gdns.) . . . . .	131	181	72	102	127	73	135	65	169	48	29	59	96
Co. Galway . . . . . 3	Galway (Grammar School) . . . . .	164	147	48	109	95	82	212	69	172	29	52	63	100
„ . . . . . 3	Ballynahinch Castle . . . . .	139	162	51	83	122	93	224	71	202	43	57	67	105
„ . . . . . 5	Ahascragh (Clonbrock) . . . . .	152	145	54	120	128	70	165	84	175	28	36	53	97
Co. Roscommon . . . . . 4	Strokestown (Castlenode) . . . . .	156	161	70	119	141	70	152	73	151	49	30	61	99
Co. Mayo . . . . . 3	Blacksod Point . . . . .	175	114	41	92	60	100	190	106	108	41	73	105	100
„ . . . . . 4	Westport House . . . . .	169	121	65	100	75	67	127	88	129	20	63	80	91
„ . . . . . 5	Delphi Lodge . . . . .	159	122	55	88	78	117	175	89	147	29	65	86	99
Co. Sligo . . . . . 2	Collooney (Markree Castle) . . . . .	138	159	47	103	61	62	186	92	138	34	38	82	94
Co. Fermanagh . . . . . 1	Newtownbutler (Crom Castle) . . . . .	145	141	47	84	52	82	119	99	131	35	57	65	88
Co. Armagh . . . . . 5	Armagh Observatory . . . . .	183	155	97	108	45	85	113	81	96	101	44	72	97
Co. Down . . . . . 2	Seaford . . . . .	154	198	150	118	73	92	122	64	125	102	56	129	111
„ . . . . . 4	Donaghadee (Coastguard Station) . . . . .	169	199	133	128	39	105	93	83	77	121	55	142	111
Co. Antrim . . . . . 5	Aldergrove (Aerodrome) . . . . .	164	172	108	125	42	124	156	93	81	98	21	93	104
„ . . . . . 5	Ballymena (Harryville) . . . . .	137	176	116	94	77	96	145	97	77	81	36	100	102
Co. Londonderry . . . . . 5	Londonderry (Creggan Reservoir) . . . . .	175	144	48	109	82	86	141	88	121	46	39	72	95
Co. Tyrone . . . . . 3	Omagh (Edenfel) . . . . .	174	150	63	95	81	100	172	93	126	30	58	67	99
England . . . . .	(general mean*, 58 stations) . . . . .	186	220	148	153	143	68	92	48	98	82	63	117	†
Wales . . . . .	( „ „ 12 „ ) . . . . .	152	215	94	128	74	77	89	33	91	87	50	72	..
England and Wales . . . . .	( „ „ 70 „ ) . . . . .	180	219	138	149	131	69	91	46	97	82	61	109	..
Scotland . . . . .	( „ „ 43 „ ) . . . . .	157	133	73	70	81	106	123	90	86	80	30	70	..
Ireland . . . . .	( „ „ 35 „ ) . . . . .	172	159	113	113	83	75	146	75	134	66	59	70	..
British Isles† . . . . .	( „ „ 150 „ ) . . . . .	171	181	114	118	106	81	114	65	103	78	52	89	..

\* The “general” values given in the last six rows are obtained by taking the means of the percentage values for the stations.

† Including Isle of Man and St. Peter Port, Guernsey. ‡ See Table XXIII.

### 9. SEASONAL RAINFALL, 1936-37.

There are definite advantages in considering the rainfall of the winter and summer separately. One defect of the calendar year



Rainfall Winter Half-year, as per cent. of average.

as a unit of time for rainfall purposes is that part of a winter is included in one calendar year and the other part in another year.

Winter rainfall has a special economic importance, for, except in the wettest areas, the summer rainfall is, for the most part, lost by evaporation or absorbed by vegetation.

In this section the rainfall of the winter season, 1st October, 1936, to 31st March, 1937, and of the summer season, 1st April, 1937, to 30th September, 1937, is dealt with, as well as the rainfall of the whole seasonal year, 1st October, 1936, to 30th September, 1937. It is natural to associate a summer season with the preceding rather than with the following winter season, since the water required

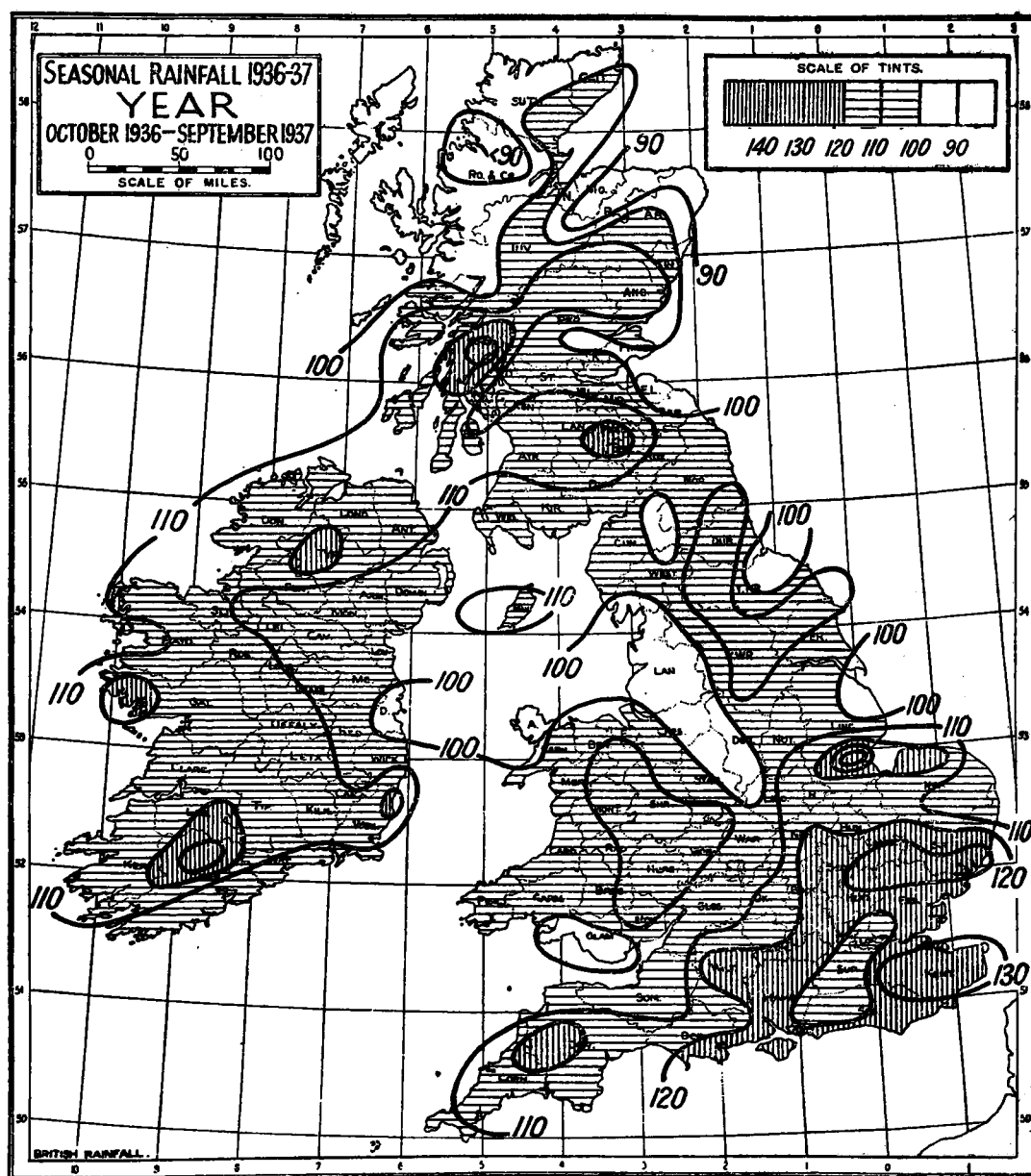


Rainfall, Summer Half-year, as per cent. of average.

1937, to 30th September, 1937, is dealt with, as well as the rainfall of the whole seasonal year, 1st October, 1936, to 30th September, 1937. It is natural to associate a summer season with the preceding rather than with the following winter season, since the water required



in summer for replenishing streams and for the needs of animal and vegetable life is derived, in part, from that which has been naturally stored during the previous winter season. One section of *British Rainfall* has been devoted to this subject since the volume for 1908, and three maps and Table XXII similar to those introduced in that volume, are now reproduced.



Rainfall, Seasonal Year, as per cent. of average.

Table XXII contains rainfall values for each of these two seasons for the stations shown in Section 8 on Monthly Rainfall. The values are expressed as percentages of the average fall for the season and

the station. The table gives in the fourth column the corresponding percentages for each station for the whole of the seasonal year. These last figures are not always the mean of the percentages for the two seasons, but often show a bias towards the winter value rather than that of the summer. This is due to the fact that the average rainfall for the winter is, in general, greater than that for the summer.

The *winter* half-year included five wet months. The general values for the British Isles were:—October, 1936, 78 per cent.; November, 1936, 106 per cent.; December, 1936, 101 per cent.; January, 1937, 171 per cent.; February, 1937, 181 per cent.; and, March, 1937, 114 per cent.

The general rainfall for the whole country for the *winter* half-year was 21 per cent. in excess of the average, the excesses over England and Wales, Scotland and Ireland being 28, 10 and 19 respectively. Over England and Wales the rainfall of the winter half-year 1936-37 was equalled or exceeded back to 1906-07 on only four occasions, *viz.*, 1911-12, 1914-15, 1929-30, and 1935-36, with excesses of 36, 31, 46 and 31 per cent. respectively. Over Scotland the winter half-year 1936-37 was wetter than the three previous winters and over Ireland than the six previous winters. Over Scotland the summers of both 1936 and 1937 were appreciably drier than the average.

The rainfall of the winter half-year was less than the average over four areas and these were all in Scotland, *viz.*, from Edinburgh to Peterhead, the neighbourhood of the Moray Firth, in the north-west and extreme south. There were three areas in Scotland with more than 120 per cent., *viz.*, in Sutherlandshire, over a narrow belt stretching from Argyllshire to Aberdeenshire, and in the Southern Uplands. The largest values in these areas were 154 per cent. at Balmoral (where March, 1937, and more especially January, 1937, gave large excesses), and 142 per cent. at Stobo Castle (where all the five months October, 1936, to February, 1937, gave excesses).

Most stations in the southern half of England and Wales and in Yorkshire recorded more than 120 per cent. More than 150 per cent. occurred to the north of Dartmoor, over the Isle of Wight, Kent, and part of Suffolk. The largest values for the winter half-year were 154 per cent. at Margate and Edenbridge, in Kent, and at Rendlesham Hall, in Suffolk, and 153 per cent. at Okehampton. At each of these stations the large values were due mainly to the persistent rains of January, February and March, 1937. At Ventnor and Margate the rainfall of each of these months exceeded twice the average. At Ventnor persistent rains occurred, the totals for the six days January 17th to 22nd, February 2nd to 7th and 21st to 26th, being 1.76, 2.37 and 1.74 inches respectively.

Over Ireland the variation was from 105 per cent. at Clonbrock, in Galway, to 148 per cent. at Courtown House, in Co. Wexford, and

153 per cent. at Mallow in Co. Cork. The average annual rainfall at Mallow is 37 inches and 4 inches less than that at Clonbrock. For January, 1937, the total at Mallow, however, was 11·3 inches compared with 5·9 at Clonbrock, and for March, 1937, as much as 6·2 compared with 1·8 inch. At Mallow there was measurable rain on each day except two during January and February, and the 21 days January 11th to 31st gave 10·10 inches.

The largest totals for the winter half-year among the stations in Table XXII were 72·08 inches at Glenquoich (Inverness-shire), 65·63 inches at Inveraray Castle Gardens (Argyllshire), 65·14 inches at Blaenau Festiniog (Merioneth) and 63·83 inches at Delphi Lodge (Co. Mayo).

The *summer* half-year included four wet months, April, May, July and September, with 118, 106, 114 and 103 per cent. respectively, and two dry months, June and August, with 81 and 65 per cent. respectively. The general rainfall for the British Isles as a whole was 96 per cent.; England and Wales, and Scotland had each a deficiency of 7 per cent., and Ireland an excess of 4 per cent. The map showing the distribution of the rainfall as a percentage of the average is noteworthy for the areas with less than 70 per cent. in the north of Scotland, including parts of Ross-shire and Aberdeenshire, as well as near Manchester and in central Wales. In each of the six months deficiencies were widespread in the northern half of Scotland. Grantown-on-Spey recorded less than the average in every month. At Manchester the deficiency was due mainly to June, August and September, each of these months giving less than half the usual amount. (The total for the 147 days May 27th to October 20th there was only 5·64 inches). At Rhayader there was a deficiency in each month May to September, which amounted to 50 per cent. in June and August. August was remarkably dry in the southern half of England and Wales (see Section 8). Over Wales the total rainfall for the summer half year was only 78 per cent. of the average (see Table XXII).

The relatively dry weather in the northern half of Scotland during the summer of 1937 is of particular interest in view of the similar type of distribution which prevailed during the period November, 1935, to June, 1936 (see *British Rainfall*, 1936, pp. 266–271).

The largest percentage value for the summer was 167 at Boston, due mainly to the intense local rains of May and July, as much as 5·46 inches being recorded for July 15th (see Section 7).

For the *seasonal year* the percentage values were more uniform, most stations recording from 90 to 120 per cent. of the respective averages. Excesses predominated, however, the general percentage excess over the British Isles being 10, over England and Wales 12, over Scotland 3, and over Ireland 12. Values of less than 90 per cent.

were confined to parts of the northern half of Scotland, and included areas where both the summer and winter had given less than the average amounts. Values exceeding 120 per cent. were most widespread in the south-eastern half of England, the largest values being 147 per cent. at Boston and 136 per cent. at Edenbridge. At Ventnor the large total was due mainly to the wet winter, when the amount was more than twice that of the whole summer half year. At Boston the large total was due more especially to the wet summer, but the fall of the winter also exceeded the average. The total of the summer exceeded that of the winter there by 4·7 inches. All stations in Ireland, except those near Dublin, recorded more than the average amount for the seasonal year. The largest percentage value was 135 at Mallow, where the winter half-year had been exceptionally wet.

A striking feature of the seasonal rainfall 1936-37 was the similarity in the general values with those for 1935-36. For 1936-37 the general values for the British Isles for the winter, summer and seasonal year were 121, 96 and 110, respectively, compared with 119, 104 and 112 for 1935-36.

In *British Rainfall*, 1926, p. 125, values are given for the general rainfall over England and Wales, Scotland and Ireland separately back to 1906-7. In *British Rainfall*, 1936, pp. 131-2, similar values are given for the British Isles from 1870 to 1936. The changes in the seasonal distribution of rainfall become more apparent by taking the means of these values for the British Isles for successive groups of 10 years. From 1870 the excesses were contributed more especially by wet summers; from 1884 to 1892 dry winters predominated; from 1893 to 1910 the rainfall of both the summers and winters approximated closely to the average; from 1907 to 1919 the winters were mainly wet with moderately dry summers, and more recently the excesses were contributed mainly by wet summers, although the rainfall of the winters also slightly exceeded the average. This state of affairs was reversed, however, during the last seasonal years, October, 1935, to September, 1936, and October, 1936, to September 1937, for the rainfall was markedly more excessive during the winter half-years than during the summer half-years.

Table XXII.—*Seasonal Rainfall, 1936-37, in relation to the Average, 1881-1915.*

Station.†	Winter, 6 Months, Oct. 1936- Mar. 1937.		Summer, 6 Months, Apr. 1937- Sept. 1937.		Station.†	Winter, 6 Months, Oct. 1936- Mar. 1937.		Summer, 6 Months, Apr. 1937- Sept. 1937.		Twelve Months, Oct. 1936- Sept. 1937.	
	Per cent. of Average.		Per cent. of Average.			Per cent. of Average.		Per cent. of Average.		Per cent. of Average.	
St. Pancras (Camden Square) . . . . .	139		89	115	St. Austell (Trevarna) . . . . .	131		90	115		
Tenterden (Ashenden) . . . . .	152		107	133	Chewton Mendip (The Priory) . . . . .	129		78	107		
Margate (Cliftonville) . . . . .	154		103	131	Cirencester (Gwynfa) . . . . .	129		79	107		
Edenbridge (Falconhurst) . . . . .	154		113	136	Church Stretton (Woolstaston) . . . . .	147		87	119		
Compton (Compton House) . . . . .	133		83	112	Cheswardine Hall . . . . .	121		91	106		
Eastbourne (Wilmington Square) . . . . .	134		103	121	Malvern (Free Library) . . . . .	130		91	111		
Ventnor (Royal National Hospital) . . . . .	146		91	124	Alcester (Ragley Hall) . . . . .	116		102	109		
Fordingbridge (Oaklands) . . . . .	136		92	119	Birmingham (Edgbaston) . . . . .	129		91	111		
Sherborne St. John . . . . .	146		91	122	Grantham (Belvoir Castle Gdns.) . . . . .	118		113	116		
Royston (Therfield Rectory) . . . . .	140		122	131	Boston (Black Sluice, Skirbeck) . . . . .	125		169	147		
Slough (Upton) . . . . .	145		108	128	Louth (Westgate) . . . . .	106		80	94		
Oxford (Radcliffe Met. Stn.) . . . . .	134		88	112	Mansfield (Carr Bank) . . . . .	121		79	101		
Wellingborough (Swanspool) . . . . .	128		114	121	Derby (The Arboretum) . . . . .	109		76	93		
March . . . . .	111		113	112							
Chelmsford (County Gardens) . . . . .	137		107	123	Birkenhead (Bidston Observatory) . . . . .	109		97	103		
					Manchester (Whitworth Park) . . . . .	119		64	92		
Rendlesham Hall . . . . .	154		119	137	Stonyhurst (College) . . . . .	113		76	96		
Lowestoft (Secondary School) . . . . .	125		79	103	Ulverston (Poaka Beck) . . . . .	103		79	92		
Bury St. Edmunds (Westley H.) . . . . .	144		113	129	Blackpool (Stanley Park) . . . . .	112		84	99		
Wells (Holkham Hall) . . . . .	140		105	122	Wakefield (Clarence Park) . . . . .	130		93	111		
Bishops Cannings . . . . .	146		97	123	Hull (Pearson Park) . . . . .	104		104	104		
Weymouth (Westham) . . . . .	130		128	129	West Writton (Ivy House) . . . . .	126		95	113		
Beaminstor (East Street) . . . . .	126		99	115	Felixkirk (Mount St. John) . . . . .	121		81	101		
Teignmouth (Den Gardens) . . . . .	134		90	117	York Museum Gardens) . . . . .	114		108	111		
Cullompton . . . . .	136		88	116	Scarborough . . . . .	130		99	116		
Barnstaple (N. Dev. Athenæum) . . . . .	118		95	108	Middlesbrough (Albert Park) . . . . .	104		83	93		
Okehampton (Uplands) . . . . .	153		81	126	Newcastle (Leazes Park) . . . . .	117		116	116		
Penzance (Morrab Gardens) . . . . .	119		80	104	Bellingham (Highgreen Manor) . . . . .	106		95	101		

† For Counties see Table XXI, pp. 111-115.

Table XXII.—*Seasonal Rainfall, 1936-37, in relation to the Average, 1881-1915.*

Station.†.	Winter 6 Months, Oct. 1936- Mar. 1937.		Summer 6 Months, Apr. 1937- Sept. 1937.		Twelve Months, Oct. 1936- Sept. 1937.		Station.†.	Winter 6 Months, Oct. 1936- Mar. 1937.		Summer 6 Months, Apr. 1937- Sept. 1937.		Twelve Months, Oct. 1936- Sept. 1937.	
	Per cent. of Average.		Per cent. of Average.		Per cent. of Average.			Per cent. of Average.		Per cent. of Average.		Per cent. of Average.	
Ilderton (Lilburn Tower Gardens) .	116		93		106		Girvan (Pinmore) . . . . .	115		89		104	
Carlisle (Scaleby Hall) . . . . .	109		90		100		Glen Afton (Ayr Sanatorium) . . . . .	134		88		115	
Keswick (High Hill) . . . . .	127		77		107		Glasgow (Queen's Park) . . . . .	118		103		111	
Appleby (Castle Bank) . . . . .	112		84		100		Greenock (Prospect Hill) . . . . .	113		86		102	
Abergavenny (Larchfield) . . . . .	141		81		116		Dougarie Lodge . . . . .	114		105		110	
Ystalyfera (Wern House) . . . . .	111		79		98		Loch Sunart (Glenborrodale) . . . . .	111		103		108	
Cardiff (Penylan) . . . . .	109		71		93		Lochgilphhead (Poltalloch) . . . . .	133		122		128	
Carmarthen (Model & Prac. Sch.) .	121		82		105		Inveraray Castle Gardens . . . . .	140		131		137	
Pembroke (Stackpole Court) . . . . .	128		80		108		Islay (Fallabus) . . . . .	113		111		112	
Birmingham W.W. (Tyrmynydd) .	126		68		104		Tiree . . . . .	85		99		91	
Newtown (Penarth Weir) . . . . .	149		68		114		Loch Leven Sluice . . . . .	97		112		104	
Lake Vyrnwy . . . . .	139		87		119		Leuchars (Aerodrome) . . . . .	100		112		106	
Blaenau Festiniog (Oakeley Q.) . .	118		78		101		Loch Dhu . . . . .	107		96		103	
Dolgelley (Bontddu) . . . . .	123		80		105		Crieff (Strathearn Hydro) . . . . .	90		105		97	
Llandudno (Cricket Ground) . . . . .	118		84		103		Blair Atholl (Blair Castle Gdns.) . .	132		98		117	
Holyhead (Salt Island) . . . . .	101		81		92		Montrose (Sunnyside Asylum) . . . .	95		129		111	
Douglas (Borough Cemetery) . . . .	129		101		117		Balmoral Castle Gardens . . . . .	154		67		116	
Guernsey, St. Peter Port (Grange Rd.)	133		104		122		Aberdeen Observatory . . . . .	92		88		90	
Port William (Monreith) . . . . .	96		109		102		New Deer Schoolhouse . . . . .	104		73		90	
Dalry (Glendarroch) . . . . .	111		97		106		Fochabers (Gordon Castle) . . . . .	102		76		89	
Dumfries (Crichton Roy. Inst.) . . .	114		93		105		Grantown-on-Spey . . . . .	104		63		84	
Hawick (Wolfelee) . . . . .	107		99		104		Nairn (Golf Course) . . . . .	97		108		102	
Stobo Castle . . . . .	142		97		122		Loch Ness (Foyers) . . . . .	118		90		106	
Marchmont House . . . . .	112		87		100		Loch Quoich (Glenquoich) . . . . .	102		83		95	
North Berwick Reservoir . . . . .	95		98		97		Arisaig House . . . . .	100		91		96	
Edinburgh (Blackford Hill) . . . . .	96		116		106		Glenleven (Corrour) . . . . .	107		89		101	
							Tain (Ardlarach) . . . . .	99		79		90	

† For Counties see Table XXI, pp. 111-115.

Table XXII.—Seasonal Rainfall, 1936-37, in relation to the Average, 1881-1915.

Station.†.	Winter 6 Months, Oct. 1936- Mar. 1937.		Summer 6 Months, Apr. 1937- Sept. 1937.		Twelve Months, Oct. 1936- Sept. 1937.		Station.‡.	Winter 6 Months, Oct. 1936- Mar. 1937.		Summer 6 Months, Apr. 1937- Sept. 1937.		Twelve Months, Oct. 1936- Sept. 1937.	
	Per cent. of Average.	Average.	Per cent. of Average.	Average.	Per cent. of Average.	Average.		Per cent. of Average.	Average.	Per cent. of Average.	Average.	Per cent. of Average.	Average.
Ullapool .....	97		66		85		Newtownforbes (Cas. Forbes Gdns.)	110		110		110	
Achnashellach .....	107		69		92		Galway (Grammar School) .....	109		124		115	
Stornoway (Coastguard Station) ..							Ballynahinch Castle .....	112		133		121	
Lairg .....	95		100		97		Ahascragh (Clonbrock) .....	105		123		113	
Melvich .....	131		74		106		Stokestown (Castlenode) .....	111		115		113	
Loch More (Achfary) .....	405		81		95		Blacksod Point .....	109		110		110	
Wick (Coastguard Station) .....	114		71		97		Westport House .....	113		99		107	
Deerness .....	116		83		101		Delphi Lodge .....	109		116		112	
Cork (University College) .....	112		78		98		Collooney (Markree Castle) .....	110		109		110	
Roches Point (Coastguard Stn.) ..	123		87		108		Newtownbutler (Crom Castle) .....	106		96		101	
Mallow (Longueville) .....	106		104		105		Armagh Observatory .....	127		88		108	
Valentia Observatory .....	153		108		135		Seaford .....	124		92		109	
Gap of Dunloe (Gearhameen) .....	120		118		119		Donaghadee (Coastguard Station) .	126		87		107	
Waterford (Gortmore) .....	119		102		112		Aldergrove (Aerodrome) .....	120		104		112	
Nenagh (Castle Lough) .....	115		99		108		Ballymena (Harryville) .....	126		99		113	
Cashel (Ballinamona) .....	121		121		121		Londonderry (Creggan Reservoir) .	124		105		115	
Foynes (Coolnanes) .....	113		114		113		Omagh (Edenfel) .....	130		112		122	
Gorey (Courtown House) .....	121		97		111								
	148		89		122								
Bagnalstown (Fenagh House) ....	127		93		111		General Values*	127		96		113	
Hacketstown Rectory .....	118		94		107			124		78		105	
Abbey Leix (Blandsfort) .....	129		92		111			128		93		112	
Birr Castle .....	112		118		115			110		93		103	
Straffan House .....	116		99		107			119		104		112	
Dublin (Phoenix Park) .....	123		70		97			121		96		110	
Kells (Headfort) .....	110		102		106		England .....						
Mullingar (Belvedere) .....	116		106		111		Wales .....						
							England and Wales ..						
							Scotland .....						
							Ireland .....						
							British Isles† .....						

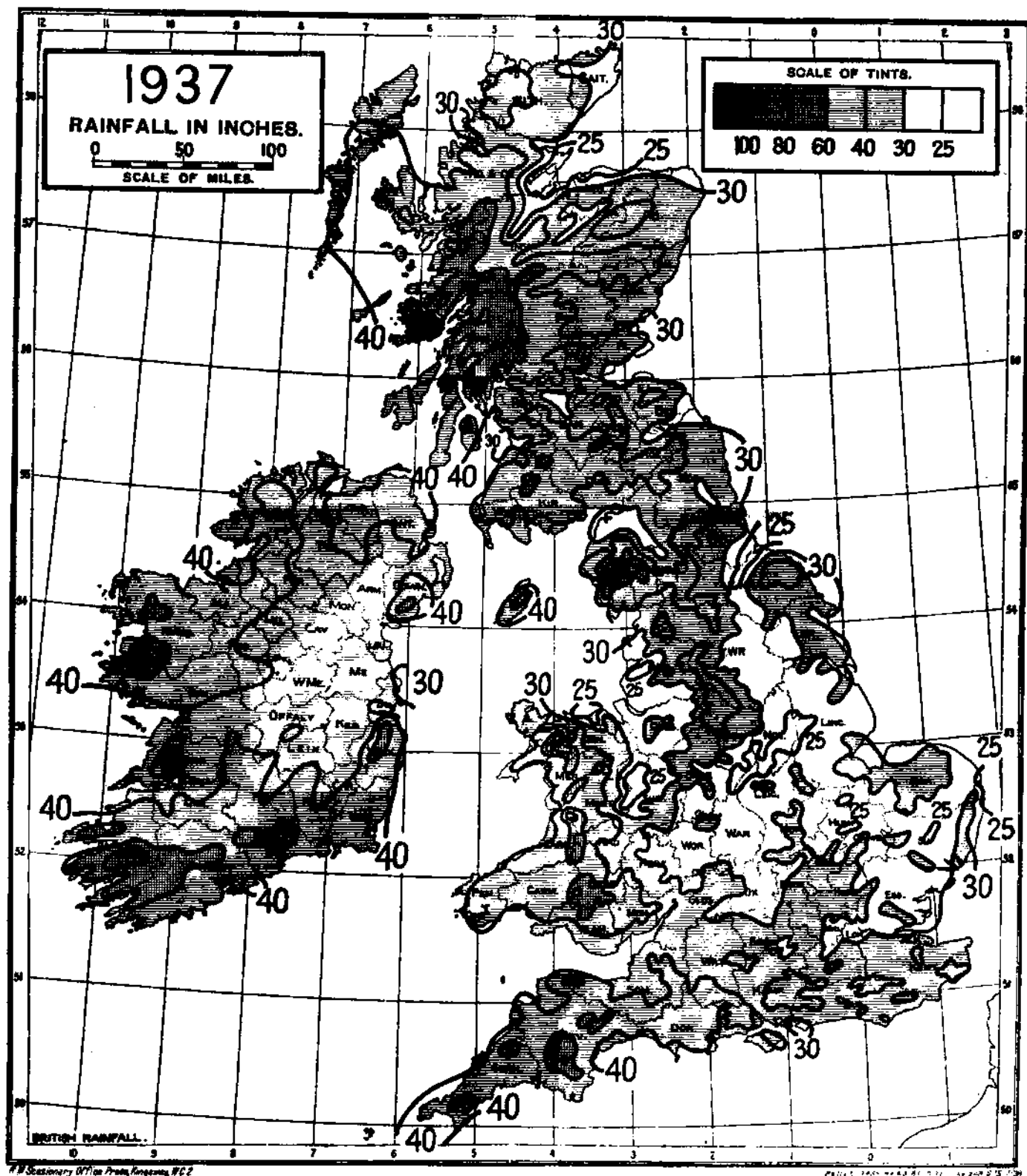
\* Obtained by taking the means of the percentage values for the stations.

† Including Isle of Man and St. Peter Port, Guernsey.

‡ For Counties see Table XXI, pp. 111-115.







## 10. THE TOTAL FALL OF RAIN IN 1937 AND ITS RELATION TO THE AVERAGE.

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The total rainfall for the year is given for over 5,500 stations in the British Isles in the General Table, Part III of this volume. As many of these totals as practicable have been plotted on a map on the scale of 19 miles to the inch. In the districts of relatively few rainfall stations, each record has been plotted, while in the more thickly represented areas some have had to be omitted. Isohyetal lines, or lines of equal rainfall amount, have been drawn giving a cartographical presentation of the distribution of the rainfall of the year over the land. The map is reproduced on a smaller scale as the folding plate opposite this page. Such a map is dominated by the orography of the country to such an extent that not only is it complicated in itself, but it also closely resembles its predecessors, the differences being noticeable only after detailed examination and comparison. The characteristics of a particular year are brought out better by a map such as that opposite p. 128, in which the percentage ratio of the rainfall for the year to the local average is shown. It has been coloured so that blue areas represent regions where the fall in 1937 was more than the average, and red areas represent regions where the fall in 1937 was less than the average for the standard period 1881–1915. The statistics on which the latter map is based are set out in Tables XXI and XXIV.

The percentage map for 1937 shows by means of continuous lines the places where the values of the rainfall were, respectively, 70, 80, 90, 100, 110, 120, 130, 140 and 150 per cent. of the average values. The 150 line has not been included since the map for 1923. Over England and Wales the largest values occurred generally in the south and east, and the smallest values in the north-west. This type of distribution prevailed also in both Scotland and Ireland.

The rainfall over England was less than the average near Louth (in Lincolnshire), Falmouth, Gloucester to the south of Bristol, near Bideford (in Devon), and over a large area covering most of the Pennines and area to the west, and extending as far south as Wolverhampton. There was less than 80 per cent. over a large area stretching from Carlisle to Manchester. Falls exceeding 120 per cent. occurred at most stations in the south-east from Torquay to Margate, extending northwards over Salisbury Plain and to the Wash. More than 150 per cent. was recorded at Boston, Clacton, Shoeburyness and Southend, where the values were 153, 152, 151 and 151 per cent. respectively.

Over most of Wales the rainfall was less than the average, the deficiency being most marked in the north, where there was less than 80 per cent. around Bettws-y-coed.

In Scotland there was less than 80 per cent. in the neighbourhood of the Caledonian Canal, and over much of the area to the north. In parts of Inverness-shire and Ross-shire the totals failed to reach 70 per cent. The smallest percentage values occurred in this area, *viz.*, 60 per cent. at Ullapool and 64 per cent. at Achnashellach. On the other hand as much as 120 per cent. occurred at Dundee and Montrose.

There was less than the average over much of the north-western half of Ireland, with less than 90 per cent. in Co. Fermanagh and near Dumfanaghy. The largest values occurred in the south and east, with more than 120 per cent. between Mallow and Clonmel.

The small percentage values in the Western Highlands of Scotland were due more especially to the dry period which occurred there during the last five months of the year. The large values in the south-east of the British Isles were due mainly to the persistent rains of January to May. Further details are given in a separate note in Part IV.

Use is made of the percentage values at the 251 stations of both Tables XXI and XXIV to derive general values of the total rainfall for the year over the British Isles and over the larger divisions separately. These values are set out in the following table :—

Table XXIII.—*General Rainfall, 1937, compared with average.*

Countries.	No. of Stations.	Average 35 years 1881–1915.	1937	
			Per cent.	Rainfall.
		in.		in.
England .....	120	32·67	112	36·6
Wales .....	19	50·14	95	47·6
England and Wales ..	139	35·23	110	38·8
Scotland .....	63	50·32	91	45·8
Ireland .....	47	43·30	103	44·6
British Isles† .....	251	41·41	104	43·1

† Including Isle of Man and Guernsey, St. Peter Port.

For the British Isles as a whole, the rainfall of 1937 was 4 per cent. in excess of the average, compared with an excess of 5 per cent..

in 1936. The general distribution in 1937 was also similar to that of 1936. Over England and Wales there was an excess of 10 per cent. in 1937 compared with 9 per cent. in 1936; over Scotland a deficiency of 9 per cent. compared with 6 per cent., and over Ireland an excess of 3 per cent. compared with 5 per cent. Wales was, however, appreciably drier in 1937 than in 1936, the percentage values being 95 and 109 respectively.

The general distribution of the actual rainfall, as shown on the folding plate, is similar to that for other years. The smallest totals for the year usually occur in the neighbourhood of the Thames Estuary and the Moray Firth, but in 1937 they were in Nottinghamshire and near the Moray Firth.

Among the largest totals reported for the year and set out in the General Table, Part III, the following may be mentioned :—

					Inches.
England ...	Cumberland, Borrowdale	(Sprinkling Tarn)			129·80
	„	„	(Stye Head B)		124·75
Wales ...	Snowdon (Delta)	...	...	...	140·15
	„	(Grib Goch)	...	...	131·25
Scotland ...	Argyll, Mull (Ben More)	...	...	...	109·90
	Inverness, Loch Quoich	(Loan)	...	...	80·93
	„	„	(Kinlochquoich)	...	80·67
Ireland ...	Mayo, Delphi Lodge	...	...	...	97·51
	„	Aasleagh House	...	...	96·20

The stations with the largest annual totals during 1937 occurred therefore on Snowdon, but Borrowdale, in Cumberland, was nearly as wet.

Some of the smallest totals for the year are set out below :—

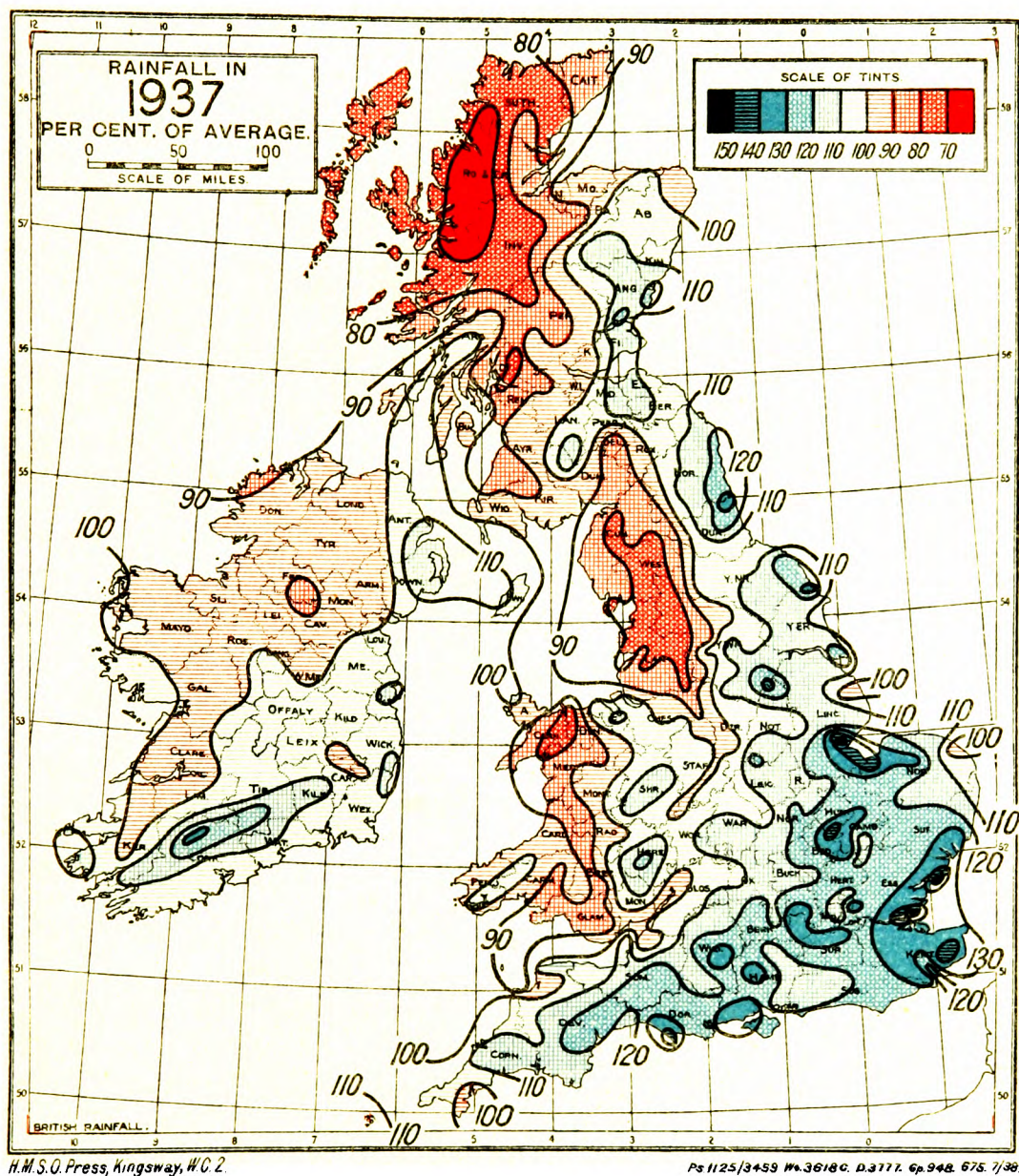
					Inches.
England ...	Nottingham, Newark	(Sewage Works)	...		21·37
	„	Newark	...	...	22·22
	Suffolk, Haughley	(Haughley House)	...		22·74
	Nottingham, East Bridgford		...	...	23·16
Scotland ...	Ross and Cromarty, Fortrose	...	...		21·74
	Moray, Forres	(Hydro.)	...	...	22·73
Ireland ...	Dublin	(Trinity College)	...	...	29·22
	„	Lambay Island	...	...	29·55

Table XXIV.—*Rainfall of 1937 as Percentage of Average, 1881-1915.\**

County.	Station.	Per cent. of Average.	County.	Station.	Per cent. of Average.
ENGLAND					
Surrey	Reigate (Wray Park Rd.)	126	North'd	Hallington (Fawcett)	115
Kent	Lympne (Airport)	119	"	Morpeth (Cockle Park)	120
"	Biggin Hill (Aerodrome)	122	"	Howick Hall	124
Sussex	Patching Farm	112	Cumberland	Penrith (Newton Rigg)	81
"	Horsham (Wimblehurst)	119	"	Borrowdale (Seathwaite)	89
Hampshire	Totland Bay (Aston House)	135	"	Ravenglass (The Grove)	87
"	Portsmouth (Victoria Park)	119	Westmorl'd	Grasmere (The Wray)	84
Berkshire	Wellington College	130			
Hertford	Harpenden (Rothamsted)	120			
Bucks	Mursley Hall	111			
Bedford	Woburn (Experimental Farm)	128			
Cambridge	Cambridge (Botanic Gardens)	124			
Essex	Elsenham (Gaunts End)	126			
"	Bradwell-on-Sea	138			
Suffolk	Campea Ashe (High House)	133			
Norfolk	Cromer (Howards Hill)	117			
"	Swaffham (The Villa)	127			
Wiltshire	Larkhill (School of Artillery)	131			
"	Marlborough (College)	119			
Dorset	Creech Grange	127			
Devon, S.	Wymouth (The Hoe)	113			
"	Tavistock	105			
" N.	Torrington (Enfield)	90			
Cornwall	Newquay (Mount Wise)	100			
"	Falmouth (Observatory)	99			
"	St. Marys (Coastguard Stn.)	117			
Somerset	Bath (Henrietta Park)	108			
"	Street (Millfield)	126			
Gloucester	Cheltenham (Montpellier Gns.)	100			
Hereford	Ross (Birchlea)	110			
"	Hereford (Belmont Abbey)	120			
Shropshire	Shifnal (Hatton Grange)	112			
Stafford	Mayfield	96			
"	Leek (Wall Grange)	92			
Worcester	Stourport (Lincombe Lock)	99			
Warwick	Coventry (City Hospital)	107			
Leicester	Thornton Reservoir	111			
Rutland	Uppingham (Ridlington)	116			
Lincoln	Spalding (Pode Hole)	127			
"	Lincoln (Skellingthorpe Hall)	110			
"	Skegness (Marine Gardens)	115			
Nottingham	Nottingham (Sneinton P.S.)	113			
Derby	Buxton (Terrace Slopes)	92			
Lancs. S.	Garston (Grassendale Pk.)	100			
" C.	Wigan W.W. (Worthington)	82			
" N.	Lancaster (Greg Observatory)	77			
Yorks W.R.	Huddersfield (Oakes)	103			
"	Harrogate (Harlow Moor)	94			
" E.R.	Patrington (Rose Cottage)	124			
"	Holme-on-Spalding Moor	111			
"	Lowthorpe (The Elms)	109			
" N.R.	Pickering (Houndgate)	116			
"	Guisborough (Lockwood Res.)	114			
Durham	Barnard Castle (Bowes Museum)	106			
"	Ushaw (College)	123			
		</			

\*See also Table XXI, pp. 111-115

# RELATION OF RAINFALL IN 1937 TO THE AVERAGE OF 1881-1915.



The area coloured Red had rainfall below the average, that coloured Blue had rainfall above the average.





## 11.—EVAPORATION AND PERCOLATION IN 1937.

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The *evaporation gauges* in use are square tanks sunk in the ground, and the evaporation which is measured is that from a free water surface. The standard gauge at Camden Square is 6 ft. square and 2 ft. deep, and is sunk so that the lip projects about 3 inches. A photograph showing the Meteorological station, including the tank, at Camden Square, was reproduced as the *frontispiece* of *British Rainfall*, 1921. The routine consists of the daily measurement of the level of the water below a mark fixed in the tank. From the difference between consecutive daily measurements, is deducted the rainfall for the same period, as measured in an adjacent rain-gauge. The net depression of the water-level in the tank during the interval of 24 hours is taken to be a measure of the evaporation. Sometimes in winter the "evaporation" comes out as a small negative quantity; this is regarded as due to the condensation of water from the superincumbent air, and the corresponding measurements are marked "c" in the tables. So far as is practicable, the level of the water is kept about 2 to 3 inches below the top of the lip. This necessitates water being added in summer and syphoned off in winter. During the winter months there is some difficulty in getting a reading when the water freezes. In such cases the ice is broken away from the side of the tank and the measurement of the water-level is made while the ice is floating. If this cannot be done any morning, owing to the thickness of the ice, a measurement is made as soon as possible (on a subsequent morning), and the amount of evaporation calculated over the whole period. The evaporation is small in winter, so that little information is lost by adopting this procedure.

The accuracy of the measurements of evaporation depends on the depth of water caught as rain in the evaporation tank being identical with that measured directly in the rain-gauge alongside. Some of the factors which are likely to vitiate the measurements of evaporation were discussed in *British Rainfall*, 1925, pp. 127–128 and in *British Rainfall*, 1931, pp. 268–274.



The list of stations given in Table XXV, for which details of the evaporation are available for 1937, is the same as last year.

The monthly and annual means for the fourteen stations are set out in the last column of the table. For the year the mean evaporation is 15·8 inches. The evaporation is very similar to that for 1936 when the total was 15·5 inches, and in both 1936 and 1937 there was a general deficiency of sunshine. The evaporation at individual stations during 1937 was less than the average in each case, with the exception of Otterbourne, where the evaporation for the year was ·8 inch above the average 1908–1937. In January, April and July the sunshine was considerably below the average, and above in May and August. At eleven stations the greatest amount of evaporation occurred in June, at Revesby and Ardsley in July, at Bartley in August, and at Talla, May and June gave similar amounts. The four months May to August accounted for 67 per cent. of the total evaporation for the year.

*Evaporation at Camden Square (London).* The monthly evaporation values for the 53 years, 1885 to 1937, are set out in Table XXVII. The record is the longest available in this country. For 1937 the evaporation of 15·12 inches was ·38 inch less than the average for the 35 years (1885–1919). The total evaporation was largest in June with 3·21 ins. May, July and August also had totals of more than 2 inches. June, August, September and October all had totals greater than the average. The differences from the monthly averages ranged from ·45 inch below the average in April to ·30 inch above the average in June.

*Percolation gauges.* In Table XXVI the amount of water which percolates through a definite depth of soil is given. The list of stations is the same as for 1936, apart from the addition of Fleam Dyke Pumping Station, near Cambridge, maintained by Mr. Philip Porteous, Engineer to the Cambridge University and Town Waterworks. Details of the percolation gauges and the type of soil are set out in the footnotes, in *British Rainfall*, 1924, p. 128, in *British Rainfall*, 1932, p. 143, and in *British Rainfall*, 1934, p. 137. The difference between percolation and rainfall is largely to be accounted for by evaporation, but evaporation as determined in this way (known as “calculated evaporation”) is not strictly comparable with that given in the earlier table. There is no free water surface present in the percolation gauge, but during dry periods the surface soil is nearly dry, so that practically no evaporation can take place. In dry years the calculated evaporation, as obtained from the percolation gauges, will be less than similar values for wet years, and less than the values obtained from the water surface in a tank. In 1937 the mean value from the 15 percolation gauges was 15·34 inches, compared with 16·49 inches in 1936.

At Fleam Dyke, the two percolation gauges are each 36 inches deep composed of 9 inches of soil over well-rammed chalk, and both have surface areas of one-thousandth of an acre as at Rothamsted. The surface of one gauge is covered with short turf and the other with soil which is kept free from all vegetation. There is considerable difference in the amount of percolation from the two gauges. For the six months June to November the total was .02 inch with the turfed gauge, while the gauge with bare soil gave 3.03 inches. Taking the mean of the two gauges, during the six winter months January to March and October to December 62 per cent. of the rain percolates, while during the six summer months April to September only 18 per cent. percolates.

At Compton the total percolation through the gauge (which consists of 10 inches of soil, on which grass is grown, over 2 feet of well-rammed chalk) was nil for the six months May to October. Percolation for the two months January and February was 15.03 inches while the rainfall was only 13.99 inches. At Farlington also there was practically no percolation through any gauge for the period May to October, only one gauge recording as much as .1 inch. At Rothamsted there was no percolation from June 22nd until September 15th, apart from the short spell from August 13th—to 19th. At Harrogate there was no month without percolation. At Craibstone, where the gauges were under hay, there was no percolation during the four months, June to September.

The records from the Farlington gauges continue to show a consistent diminution in the amount of percolation as the depth of the gauge increases. This suggests that in order to form a reliable estimation of the amount of the rain which actually reaches the underground water table, a gauge not less than 6 feet deep should be employed. On the other hand the 20 inch and 60 inch gauges at Rothamsted continue to record approximately the same percolation, while that through the 40 inch gauge is somewhat greater. The differences are accounted for by variations in the composition and structure of the soil of the gauges, and in this case it seems reasonable to conclude that the 20-inch gauge is of sufficient depth to give a good indication of the water likely to penetrate the sub-soil there.

The three gauges at Craibstone, each 40 inches deep, were under hay in 1937, whereas they were under barley in 1936, turnips in 1935, oats in 1934, potatoes in 1933 and pasture in 1932. The amount of percolation was least when the soil was manured and limed.

BRITISH RAINFALL, 1937.  
Table XXV.—*Evaporation in 1937.*

List of Stations.	County.	Observer.	Particulars of Tank.			
			Height above		Side.	Capacity.
			Ground.	Sea Level.		
			ft. in.	ft.	ft. in.	Gals.
Camden Square.	London . . . . .	2	Royal Meteor. Soc. . .	0 3 111	6 0	450
Otterbourne . .	Hampshire . . . . .	5	J. Hawksley, Esq. . .	0 3 112	6 0	450
Petersfield . . .	" . . . . .	7	C. J. P. Cave, Esq.* . .	0 3 747	4 0	250
Ormesby St. M.	Norfolk . . . . .	2	Gt. Yarmouth W.W..	0 3 21	6 0	450
Kennick . . . . .	South Devon . . . .	5	N.G. Elliot, Esq., C.E.	0 3 835	6 0	450
Bartley . . . . .	Warwickshire . . . .	4	J. W. Wilkinson, Esq.	0 3 611	6 0	450
Revesby . . . . .	Lincoln . . . . .	3	T. Henry Tyson, Esq.	0 6 124	6 0	450
Southport . . . .	Gen. Lancashire . .	3	The Corporation . . .	0 3 37	3 0	112
Ardley, No. 1 .	Yorkshire, W.R. . .	8	Wakefield Corp. W.W.	0 3 395	6 0	450
Lower Laithe .	" . . . . .	9	J. N. Wood, Esq., M.C., C.E. . . . .	0 6 772	6 0	450
Harrogate . . . .	" . . . . .	11	A. S. West, Esq. . . .	0 3 589	6 0	450
Talla Water . . .	Peebles . . . . .	1	Messrs. Leslie & Reid	0 3 904	6 0	450
Glencorse Filters	Midlothian . . . . .	4	" . . . . .	0 3 639	6 0	450
Amlaird Filters	Ayr . . . . .	3	W. Dunbar, Esq. . . .	0 4 590	†	650

1937.	Camden Square.	Otterbourne.	Petersfield.	Ormesby St. Michael.	Kennick.	Bartley.	Revesby.	Southport.
	in.	in.	in.	in.	in.	in.	in.	in.
January . . . . .	·09	·15	·37	·19	·20	·25	·07	·07
February . . . . .	·23	·28	·42	·04	·17	·21	·13	·19
March . . . . .	·58	1·20	·65	·66	·54	·71	·22	·56
April . . . . .	1·06	1·90	1·68	·94	1·44	1·21	·81	1·26
May . . . . .	2·18	2·98	2·83	2·23	2·61	2·09	1·86	2·39
June . . . . .	3·21	4·02	3·28	3·22	3·53	2·91	2·24	2·86
July . . . . .	2·82	3·14	2·81	2·57	2·67	2·70	2·70	2·50
August . . . . .	2·48	3·41	2·59	2·42	3·03	2·97	1·92	2·24
September . . . .	1·46	2·03	1·56	1·51	1·68	1·92	1·29	1·38
October . . . . .	·70	·89	·87	·83	·96	·81	·69	·64
November . . . . .	·25	·35	·30	·33	·57	·29	·58	·28
December . . . . .	·06	·12	·04	·11	·18	·09	·12	c. ·06
Year . . . . .	15·12	20·47	17·40	15·05	17·58	16·16	12·63	14·31
1908–1937 . . . .	15·26	19·68	..	..	18·49	..	..	..
Difference . . . . .	—·14	+·79	..	..	—·91	..	..	..

1937.	Ardley No. 1.	Lower Laithe.	Harrogate.	Talla Water.	Glencorse.	Amlaird Filters.	Mean of 14 Records.
	in.	in.	in.	in.	in.	in.	in.
January . . . . .	·09	·26	·36	·11	·08	·48	·20
February . . . . .	·31	c. ·06	·53	·15	·18	·24	·22
March . . . . .	·46	c. ·24	·60	·07	·00	·56	·47
April . . . . .	1·30	·88	1·50	·88	1·15	·90	1·21
May . . . . .	2·46	2·27	2·57	2·34	2·49	2·81	2·44
June . . . . .	2·70	2·54	3·14	2·34	3·07	2·98	3·00
July . . . . .	2·97	2·36	3·07	2·16	2·35	2·33	2·65
August . . . . .	2·49	2·29	2·78	2·23	1·99	2·44	2·52
September . . . . .	1·91	1·53	2·11	1·24	1·65	1·70	1·64
October . . . . .	·92	·85	1·20	·40	·78	·80	·81
November . . . . .	·25	·42	·58	·18	·32	·05	·34
December . . . . .	c. ·09	·24	·25	1·58	·12	·97	·27
Year . . . . .	15·77	13·34	18·69	13·68	14·18	16·26	15·77
Average, 1908–1937 . .	17·49	..	19·41	15·15	..	..	..
Difference . . . . .	—1·72	..	—·72	—1·47	..	..	..

NOTE.—In the Table, "c" indicates an excess of condensation over evaporation.

\* Per Royal Meteorological Society.

† 6 ft. x 4 ft.

Table XXVI.—*Rainfall, Percolation and Calculated Evaporation, in 1937.*

(Unless otherwise stated the size of the percolation gauges is 3 ft. x 3 ft. x 3 ft.)

1937.	Compton, Sussex.	Farlington, Hants. Gauges 36-inch diameter.				Rothamsted, Herts. 1000 acre gauges.				Fleam Dyke, Cambs. 1000 acre gauges.				Harrogate, Yorks.		Craibstone, Aberdeen. 1000 acre gauges.			
		Percolation.				Percolation *				Percolation.				Percolation.		Percolation §			
		Rain- fall.	24" Chalky Marl	36" Marl	48" **	36" Sand	36" Chalk	Rain- fall.†	20" Soil.	40" Soil.	60" Soil.	Rain- fall.	36" Chalk.	36" Chalk.*	Rain- fall.	Rain- fall.	1†† 40" Soil.	2†† 40" Soil.	3    40" Soil.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Jan. ....	7.56	8.33	5.57	5.36	5.00	4.95	5.06	4.27	4.35	4.66	4.48	2.83	1.87	2.19	3.48	2.99	7.43	6.21	5.96
Feb. ....	6.43	6.70	4.54	4.51	4.53	4.48	4.53	3.76	3.44	3.74	3.60	2.74	1.88	1.96	4.50	4.29	2.65	1.83	1.98
March .....	4.04	4.11	2.75	2.77	2.80	2.79	2.90	3.13	3.11	3.42	3.25	3.06	2.45	2.39	2.63	3.56	3.57	3.39	4.11
April .....	3.63	2.58	1.02	.94	.94	.94	1.00	2.72	1.54	1.71	1.60	2.55	.84	1.03	3.38	2.48	1.82	.85	.87
May .....	2.54	.00	.04	.03	.03	.04	.02	3.48	1.80	2.02	1.92	2.01	.11	.85	3.11	1.16	1.68	.04	.03
June .....	1.02	.00	.00	.03	.02	.01	.01	1.73	.33	.35	.34	1.57	.01	.25	1.65	.24	1.15	.00	.00
July .....	1.73	.00	.00	.00	.00	.00	.00	1.67	.00	.00	.00	1.88	.01	.48	2.14	.28	4.22	.00	.00
August .....	1.77	.00	.00	.00	.00	.00	.00	1.82	.85	.85	.78	.86	.00	.07	.89	.05	2.48	.00	.00
Sept. ....	2.19	.00	.00	.00	.00	.00	.00	2.55	1.04	1.04	.92	2.03	.00	.36	1.28	.18	1.23	.00	.00
Oct. ....	4.02	.00	.06	.00	.00	.00	.00	2.43	1.61	1.57	1.50	1.71	.00	.62	2.25	.60	3.83	1.22	.51
Nov. ....	2.61	1.60	1.39	.00	.00	.00	.00	1.66	1.30	1.31	1.24	1.65	.00	1.25	1.80	.73	1.53	.71	.85
Dec. ....	4.78	5.57	4.18	3.46	2.53	2.83	2.50	2.87	3.04	3.23	3.10	2.73	.86	2.67	2.75	2.49	4.04	3.56	3.45
Year .....	42.32	28.80	19.55	17.10	15.85	16.04	16.02	32.09	22.41	23.90	22.73	25.62	8.03	14.12	29.86	19.05	35.63	17.81	17.93
Calculated Evaporation	..	13.43	15.82	18.27	19.52	19.33	19.35	..	9.68	9.19	9.36	..	17.59	11.50	..	10.81	..	17.82	17.70

† Values obtained from the 8-inch gauge.

\* Through bare unworked soil.

\*\* Depths include 12 in. of top soil and turf.

At Fleam Dyke depths include 9 in. of top soil, the first with short turf and the other kept free of vegetation.

|| Depths include 6 in. of top soil and turf.

§ The gauges were under hay.

†† Unmanured. ‡‡ Manured.

||| Manured and Limed.

Table XXVII.—*Evaporation at Camden Square, London, 1885–1937.*

	Jan. in.	Feb. in.	Mar. in.	April in.	May in.	June in.	July in.	Aug. in.	Sept. in.	Oct. in.	Nov. in.	Dec. in.	Total in.
1885.....	·20	·38	·86	1·71	1·98	2·77	3·29	2·25	1·13	·77	·17	·11	15·62
1886.....	·23	·13	·53	1·59	1·78	2·93	3·12	1·86	1·46	·63	·27	·12	14·65
1887.....	c·07	·29	·76	1·72	1·79	3·68	3·76	2·54	1·25	·78	·21	·07	16·78
1888.....	·07	·37	·48	1·16	2·71	2·24	1·44	1·90	1·17	·60	·43	·03	12·60
1889.....	·03	·18	·62	1·07	1·76	2·97	2·34	1·96	1·52	·42	·29	c·13	13·03
1890.....	·08	·19	·50	1·44	2·63	2·14	2·33	2·02	1·27	·79	·31	·04	13·74
1891.....	·03	·16	·73	1·35	1·66	2·83	2·34	1·67	1·00	·62	·20	·22	12·81
1892.....	·05	·09	·60	1·88	2·65	3·05	2·84	2·20	1·01	·36	·02	·20	14·95
1893.....	c·03	·01	·92	2·33	3·06	3·62	3·12	2·85	1·48	·70	·11	·01	18·18
1894.....	c·04	·28	·83	1·17	2·10	2·48	2·49	1·91	·97	·37	·20	·11	12·87
1895.....	·14	·64	·36	1·26	3·06	3·31	3·07	2·12	1·27	·54	·19	·07	16·03
1896.....	·16	·24	·64	1·57	3·06	3·21	3·63	1·96	·68	·47	·18	·00	15·80
1897.....	·23	·21	·76	1·23	2·99	2·48	3·60	2·49	·99	·63	·26	c·14	15·73
1898.....	·19	·37	·51	1·28	1·56	2·10	2·96	2·53	1·73	·45	·11	·16	13·95
1899.....	·04	·28	·52	1·24	2·34	3·67	4·03	3·78	2·01	·45	·41	·11	18·88
1900.....	·03	·16	·80	1·46	2·35	2·85	4·25	2·61	1·61	·89	·24	·15	17·40
1901.....	·13	·24	·60	1·98	3·25	3·85	3·37	3·19	1·42	·64	·31	c·05	18·93
1902.....	·16	·15	·71	1·75	1·78	2·33	3·30	1·71	1·47	·69	·28	·27	14·60
1903.....	·26	·39	·97	1·57	2·24	2·79	3·35	2·53	1·51	·86	·29	·12	16·88
1904.....	c·09	·26	·54	1·68	1·81	3·32	4·06	2·86	1·20	·50	·26	·02	16·42
1905.....	·17	·35	·65	1·14	3·19	2·49	3·65	2·23	1·24	·78	·09	·16	16·14
1906.....	·06	·21	·73	1·90	1·90	3·53	3·65	3·46	2·38	·78	·27	·16	19·03
1907.....	·21	·38	1·02	1·27	1·93	2·47	2·65	2·24	1·72	·49	·27	·19	14·84
1908.....	·05	·27	·56	1·32	2·23	3·77	2·75	2·47	1·25	·48	·29	·14	15·58
1909.....	·14	·30	·30	1·85	2·93	1·70	2·60	2·23	·84	·76	·17	·16	13·98
1910.....	·22	·17	·80	1·43	2·52	2·57	2·00	2·12	1·42	·76	·19	·10	14·30
1911.....	·15	·32	·59	1·77	2·58	3·34	4·60	3·19	1·96	·64	·37	·02	19·53
1912.....	·24	·16	·79	2·34	2·44	2·49	2·55	1·69	1·41	·39	·33	·12	14·95
1913.....	·10	·32	·77	1·25	2·49	3·13	2·15	2·09	1·07	·61	·36	·32	14·66
1914.....	·09	·24	·52	1·84	2·56	2·93	2·72	1·99	1·68	·70	·28	·05	15·60
1915.....	·11	·13	·66	1·65	2·90	3·15	2·50	1·76	1·61	·56	·25	c·03	15·25
1916.....	·19	·34	·30	1·61	2·32	2·20	2·23	2·34	1·20	·76	·34	c·04	13·79
1917.....	·11	·17	·53	1·18	3·06	3·01	2·81	1·95	1·16	·75	·34	·12	15·19
1918.....	·14	·27	·85	·89	2·38	3·01	2·59	2·04	1·69	·40	·24	·16	14·66
1919.....	c·12	·13	·66	1·06	2·94	3·39	1·90	2·78	1·53	·61	·08	·06	15·02
1920.....	·20	·24	·78	·85	2·71	2·85	2·09	2·00	1·04	·66	·04	·00	13·46
1921.....	·20	·28	·96	1·91	3·04	3·66	4·17	2·56	1·72	·72	·19	·28	19·69
1922.....	·16	·31	·96	1·20	2·93	3·36	2·09	1·74	1·11	·66	·27	·14	14·93
1923.....	c·01	·16	·65	1·26	2·16	2·16	3·59	2·79	1·24	·73	·24	·02	14·99
1924.....	c·17	·28	·73	1·28	2·27	2·91	3·21	1·82	1·11	·59	·33	·11	14·47
1925.....	·12	·30	·83	1·30	2·34	3·48	2·61	1·58	1·01	·56	·37	·00	14·50
1926.....	c·03	·12	1·03	1·06	2·07	2·50	2·51	2·12	1·34	·74	·20	·05	13·71
1927.....	·05	·19	·65	1·45	2·91	2·64	2·01	1·75	1·08	·37	·29	·13	13·52
1928.....	c·04	·23	·70	1·33	2·15	3·04	4·08	2·17	1·67	·57	·36	·03	16·29
1929.....	·20	·29	·64	1·53	2·66	2·93	3·42	2·22	1·81	·80	·27	·14	16·91
1930.....	·13	·26	·90	1·07	1·82	3·07	2·85	1·98	1·16	·71	·28	·08	14·31
1931.....	·03	·22	·88	1·03	1·92	2·69	2·60	1·75	·97	·68	·12	·24	13·13
1932.....	·14	·33	·64	1·08	1·65	3·05	2·33	2·33	1·05	·63	·23	·10	13·56
1933.....	·08	·20	·80	1·70	2·36	3·48	3·44	3·13	1·86	·83	·33	·26	18·47
1934.....	·01	·19	·53	1·32	2·90	3·31	4·07	2·42	1·79	·93	·23	c·03	17·67
1935.....	·14	·32	·99	1·25	2·66	2·65	4·04	2·69	1·45	·74	·16	·02	17·11
1936.....	·02	·23	·60	1·35	2·68	2·57	2·23	1·99	1·13	·73	·17	·01	13·71
1937.....	·09	·23	·58	1·06	2·18	3·21	2·97	2·48	1·46	·70	·25	·06	15·12
Average													
1885–1919..	·10	·25	·66	1·51	2·43	2·91	2·97	2·33	1·38	·62	·25	·09	15·50
Difference 1937—	·01	—·02	—·08	—·45	—·25	+·30	—·15	+·15	+·08	+·08	—·00	—·03	—·38

## MONTHLY EXTREMES OF EVAPORATION, 1885–1937.

Largest—													
Amt. (in.)	·26	·64	1·03	2·34	3·25	3·85	4·60	3·78	2·38	·93	·43	·32	19·69
Year .....	1903	1895	1926	1912	1901	1901	1911	1899	1906	1934	1888	1913	1921
Smallest—													
Amt. (in.)	c 17	·01	·30	·85	1·56	1·70	1·44	1·58	·68	·36	·02	c·14	12·60
Year .....	1924	1893	{1909 1916}	1920	1898	1909	1888	1925	1896	1892	1892	1897	1888

NOTE.—c indicates condensation.

METEOROLOGICAL OFFICE, AIR MINISTRY

BRITISH RAINFALL ORGANIZATION

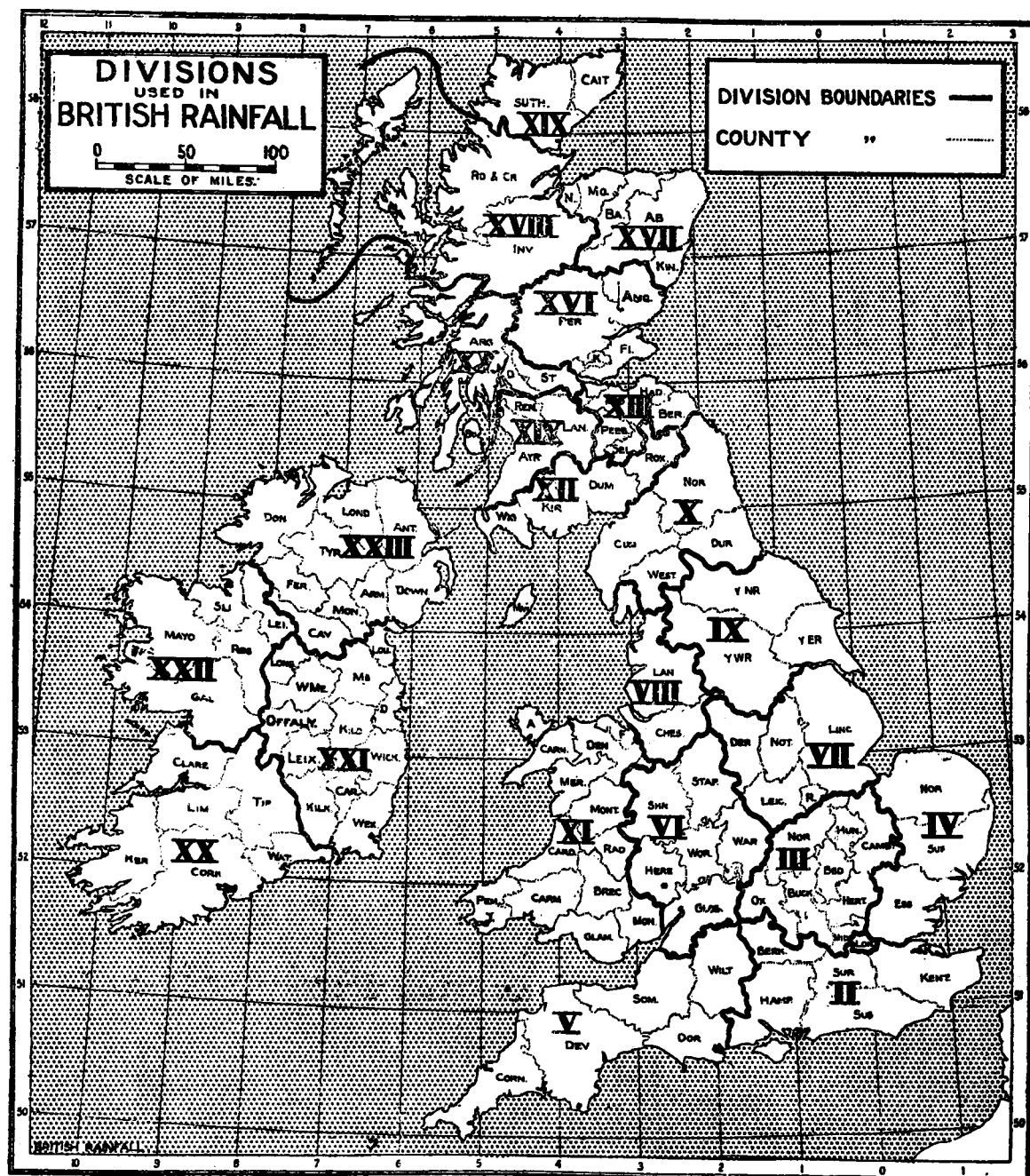
# BRITISH RAINFALL, 1937

PART III

*General Table of*  
**TOTAL RAINFALL IN 1937**

AT STATIONS IN GREAT BRITAIN AND  
IRELAND WITH THE NAMES OF THE  
OBSERVERS OR OTHER AUTHORITIES  
FOR THE OBSERVATIONS

*Issued by the Authority of  
the Meteorological  
Committee*



AIR MINISTRY, METEOROLOGICAL OFFICE

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**EXPLANATORY NOTE.**

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The Divisions of Great Britain in the General Table are the same as those adopted by the Registrars-General of England and Scotland. They are shown on the map facing this page.

The counties are divided up into numbered areas, corresponding to the river-basins. An account of these river-divisions for England and Wales was given in a special article in Part I of *British Rainfall*, 1910 (pp. 37-66), and a similar article on the river-divisions of Scotland and Ireland appeared in Part I of *British Rainfall*, 1911 (pp. 40-72), with detailed maps showing all the river-divisions in each Division. Lists were also included showing the various river-divisions in each of the main catchment areas over the British Isles. The areas of the river basins of the Great Ouse and tributaries in Norfolk and Cambridge were redetermined in 1928; the values printed in this volume and in the volume for 1927 differ slightly from those published in *British Rainfall* from 1910 to 1926. The sequence of river divisions in Great Britain proceeds anti-clockwise from the Solway Firth. For example, in the West Riding of Yorkshire we have four divisions for rivers flowing to the Irish Sea, followed by eight divisions for rivers tributary to the Humber.

The stations in each river-division are arranged nearly in the order of their latitude from South to North. For convenience, the first name defining a station is that of a place which can be found on any large scale map; occasionally it is in an adjoining county. The second name is added to fix the site of observation more closely, *e.g.*, "Haslemere (Clammer Hill)" means Clammer Hill, near Haslemere.

Stations the names of which are printed in small capitals, *e.g.*, KENSINGTON PALACE, are climatological stations in association with the Meteorological Office.\* For the majority of these a summary of the climatological observations is printed in the *Monthly Weather Report*.

In some cases the records have been received from a local rainfall organization. This has been indicated by a footnote.

In the column headed "Diameter," figures in old style type indicate the length of the sides of rectangular gauges.

The letter D signifies that daily observations have been received and are complete for the year; d, that less complete daily records have been received; w indicates that weekly readings have been received, and M that the gauge is read only once a month, usually on the 1st.

(R) denotes that the gauge is a mechanical one the correct reading of which depends on the mechanism being in working order.

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\* In the case of Division I small capitals are also used to indicate the names of London Boroughs.



The use of mechanical gauges for measuring the total rainfall is not recommended by the Meteorological Office and the number of records marked (R) is therefore small.

(+A) denotes that the amount of rainfall is taken from an ordinary gauge, that an autographic instrument is also in use and that duration of rainfall records are normally available.

Where two or more gauges are maintained at the same station the comparison of the records is seldom of general interest. The rule has now been adopted that in such cases only one record will normally be published in *British Rainfall*.

Gauges which have been inspected and found to be over-exposed on moorland have been so marked. It is likely that there are other gauges (notably some of those at lighthouses) which are also over-exposed.

The column for the total rainfall in millimetres, which was a feature of the corresponding table in the volumes for the years 1914 to 1925, has been omitted since 1926, and the space thus set free is devoted to a column for average annual totals, expressed in inches, to the nearest tenth of an inch. The averages are printed in ordinary type if they are either the mean of the annual values for the standard period 1881 to 1915, or, in the case of shorter records, if they have been reduced by the accepted method to the standard period. In such cases all the available information has been used in the computation of the averages, means for stations with short records being weighted to the standard period 1881 to 1915 by comparison with nearby stations with records complete from 1881 to date. If the computation has been made outside the office the average is printed in italics, since it may subsequently be revised slightly. The average is also given in italics if it is the mean for twenty or more years other than the standard period or if the mean has been weighted to some other period. Averages for the standard period of 35 years 1881 to 1915, are always preferred for entry in the table. Many of the averages printed in italics have been kindly computed by Mr. H. P. Cornish of Keswick and these are weighted to the standard period 1881 to 1915.

A few entries of total rain will be found in brackets—indicating that the values have been corrected, *e.g.*, when snow has been lost, when the amount for a short period has been computed from other records, or when the gauge has been moved a short distance during the year. A record is not as a rule printed if the gauge has been moved more than a mile, or if there is a greater difference than 50 ft. of altitude between the two positions.

A note of interrogation (?) implies doubt, not necessarily error. The absence of information is indicated by . .

# INDEX OF RIVER BASINS.

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To be used in conjunction with County Index, p. 143.

## ENGLAND AND WALES.

ADUR.....	Sussex 3.
ALT .....	S. Lancashire 1.
ARUN .....	Surrey 1, Sussex 2, Hampshire 6.
AXE.....	Dorset 2, S. Devon 7, Somersetshire 6.
BLACKWATER.....	Essex 4.
CAMEL .....	Cornwall 1
CLEDDAU.....	Pembroke 4.
CLWYD .....	Flint 2, Denbigh 2, Merioneth 2.
COLNE .....	Essex 5.
CONWAY .....	Denbigh 3, Carnarvon 2.
COQUET .....	Northumberland 5.
CROUCH .....	Essex 3.
CUCKMERE .....	Sussex 5.
DART .....	S. Devon 4.
DEBEN .....	Suffolk 3.
DEE .....	Shropshire 2, Cheshire 4, Flint 1, Denbigh 1, Merioneth 1
DERWENT .....	Cumberland 2.
DOVEY.....	Cardigan 1, Montgomery 1, Merioneth 5.
DUDDON.....	N. Lancashire 1, Cumberland 4.
EAST AVON.....	Hampshire 3, Wiltshire 3, Dorset 5.
EBBW .....	Monmouth 2, Brecon 6.
EDEN AND SOLWAY.....	Northumberland 1, Cumberland 1, Westmorland 1.
ERCH.....	Carnarvon 4.
ERM .....	S. Devon 3.
ESK .....	Yorkshire, N.R. 5.
EKE .....	S. Devon 6, N. Devon 5, Somersetshire 5.
FOWEY .....	Cornwall 2.
FROME.....	Dorset 3.
GLASLYN .....	Merioneth 3, Carnarvon 5.
GOWER PENINSULA.....	Glamorgan 2.
GREAT EAU .....	Lincolnshire 4.
HUMBER—LEFT BANK TRIBS....	Yorkshire, E.R. 3.
HUMBER—RIGHT BANK TRIBS....	Lincolnshire 5.
ITCHEN & SPITHEAD.....	Hampshire 5.
KENT.....	N. Lancashire 3, Westmorland 3.
LAVANT.....	Sussex 1.
LEVEN.....	N. Lancashire 2, Westmorland 2.
LOUGHOR .....	Glamorgan 1, Carmarthen 3.
LUNE .....	N. Lancashire 4, Yorkshire, W.R. 1, Westmorland 4.
MAWDDACH.....	Merioneth 4.
MEDWAY.....	Surrey 2, Kent 4, Sussex 7.
MERSEY—IRWELL.....	S. Lancashire 3, Yorkshire, W.R. 3.
MERSEY, LOWER.....	Cheshire 3, S. Lancashire 2.
MERSEY, UPPER.....	Derbyshire 1, Cheshire 1, S. Lancashire 4, Yorkshire, W.R. 4.
MERSEY—WEAVER.....	Shropshire 1, Staffordshire 1, Derbyshire 2, Cheshire 2.
NEATH.....	Glamorgan 4, Brecon 3.
NENE.....	Northamptonshire 4, Huntingdonshire 2, Bedfordshire 4, Cambridgeshire 3.
NEVERN .....	Pembroke 2. [Norfolk 5, Lincolnshire 1.
OGMORE .....	Glamorgan 5.
ORWELL .....	Suffolk 2.
OUSE .....	Sussex 4.
OUSE .....	Hertfordshire 4, Buckinghamshire 5, Oxfordshire 5, Northamptonshire 3, Huntingdonshire 1, Bedfordshire 3, Cambridgeshire 2, Essex 7, Suffolk 5, [Norfolk 4.
OUSE-AIRE .....	C. Lancashire 4, Yorkshire W.R. 9.
OUSF-AIRE-CALDER.....	Yorkshire, W.R. 8.
OUSE—DERWENT .....	Yorkshire, E.R. 2, Yorkshire, N.R. 4.
OUSE—DON.....	Nottinghamshire 6, Derbyshire 8, Yorkshire, W.R. 7.
OUSE—LEFT BANK TRIBS....	Yorkshire, E.R. 1, Yorkshire, N.R. 3.
OUSE—NIDD .....	Yorkshire, W.R. 11.
OUSE—SWALE .....	Yorkshire, N.R. 2.
OUSE—URE.....	Yorkshire, W.R. 12, Yorkshire, N.R. 1.
OUSE—WHARFE .....	Yorkshire, W.R. 10.
PARRETT .....	Dorset 1, S. Devon 1, Somersetshire 3.
RHYMNEY .....	Monmouth 1, Glamorgan 7, Brecon 5.
RIBBLE .....	C. Lancashire 1, Yorkshire, W.R. 2.
RIBBLE—DOUGLAS .....	C. Lancashire 2.
ROTHER.....	Kent 1, Sussex 6.
SEVERN—LEFT BANK TRIBS....	Gloucestershire 3, Shropshire 4, Staffordshire 2, Worcestershire 2 [Montgomery 5, Flint 3, Denbigh 4, Merioneth 6.
SEVERN—LOWER AVON.....	Wiltshire 1, Somersetshire 1, Gloucestershire 5.
SEVERN—RIGHT BANK TRIBS....	Gloucestershire 2, Herefordshire 2, Shropshire 3, Worcestershire 1, [Radnor 2, Montgomery 4.
SEVERN—UPPER AVON.....	Oxfordshire 1, Northamptonshire 1, Gloucestershire 4, Worcestershire 3, [Warwickshire 1, Leicestershire 1.
STIFFKEYS .....	Norfolk 3.

## ENGLAND AND WALES—(con.).

STOUR.....	Hampshire 2, Wiltshire 2, Dorset 4, Somersetshire 7.
STOUR.....	Kent 2.
STOUR.....	Cambridgeshire 1, Essex 6, Suffolk 1.
SWALE.....	Kent 3.
TAFF.....	Glamorgan 6, Brecon 4.
TAMAR.....	S. Devon 2, Cornwall 3.
TAW.....	N. Devon 2.
Tawe.....	Glamorgan 3, Carmarthen 4, Brecon 2.
TEES.....	Yorkshire, N.R. 6, Durham 1, Westmorland 5.
TEIFI.....	Carmarthen 1, Pembroke 1, Cardigan 3.
TEIGN.....	S. Devon 5.
TEST & SOLENT .....	Hampshire 4, Berkshire 1, Wiltshire 4.
THAMES—LEFT BANK TRIBS.....	London 2.
CHERWELL.....	Buckinghamshire 1, Oxfordshire 3, Northamptonshire 2, Warwickshire 3.
COLNE & BRENT.....	Middlesex 1, Hertfordshire 2, Buckinghamshire 4, Bedfordshire 1.
LEA.....	Middlesex 2, Hertfordshire 3, Bedfordshire 2, Essex 1.
RODING.....	Essex 2.
THAME.....	Hertfordshire 1, Buckinghamshire 2, Oxfordshire 4.
WINDRUSH.....	Oxfordshire 2, Gloucestershire 7, Worcestershire 4, Warwickshire 2.
WYE.....	Buckinghamshire 3.
THAMES—RIGHT BANK TRIBS.....	London 1, Gloucestershire 6.
BOURNE .....	Surrey 7, Berkshire 2.
COLE .....	Wiltshire 6.
DARENT.....	Surrey 3, Kent 5.
KENNET .....	Hampshire 9, Berkshire 4, Wiltshire 5.
LODDON .....	Surrey 8, Hampshire 8, Berkshire 3.
MOLE.....	Surrey 5, Sussex 8.
OCK .....	Berkshire 5.
WANDLE .....	Surrey 4.
WEY.....	Surrey 6, Sussex 9, Hampshire 7.
TORRIDGE .....	N. Devon 3.
TOWY .....	Carmarthen 2, Cardigan 4, Brecon 1.
TRENT—DERWENT.....	Nottinghamshire 3, Derbyshire 6, Yorkshire, W.R. 5.
TRENT—DOVE .....	Staffordshire 5, Derbyshire 4.
TRENT—EREWASH .....	Nottinghamshire 4, Derbyshire 7.
TRENT—LEFT BANK TRIBS.....	Staffordshire 4, Lincolnshire 7, Nottinghamshire 5, Derbyshire 5, [Yorkshire, W.R. 6.]
TRENT—RIGHT BANK TRIBS.....	Staffordshire 3, Worcestershire 5, Warwickshire 4, Leicestershire 4, [Rutland 3, Lincolnshire 6, Nottinghamshire 2, Derbyshire 3.]
TWEED .....	Northumberland 6.
TYNE .....	Durham 3, Northumberland 2, 3 and 4, Cumberland 5.
USK .....	Monmouth 3, Carmarthen 5, Brecon 7.
WEAR .....	Durham 2.
WELLAND .....	Northamptonshire 5, Leicestershire 2, Rutland 1, Lincolnshire 2.
WITHAM .....	Leicestershire 3, Rutland 2, Lincolnshire 3, Nottinghamshire 1.
WYE.....	Gloucestershire 1, Hereford 1, Monmouth 4, Carmarthen 6, Cardigan 5, Brecon 8, [Radnor 1, Montgomery 3.]
WYRE.....	N. Lancashire 5.
YARE.....	Suffolk 4, Norfolk 1.
YARE—BURE .....	Norfolk 2.
YEO, AXE & BRUE .....	Somersetshire 2.
YSTWYTH .....	Cardigan 2, Montgomery 2.

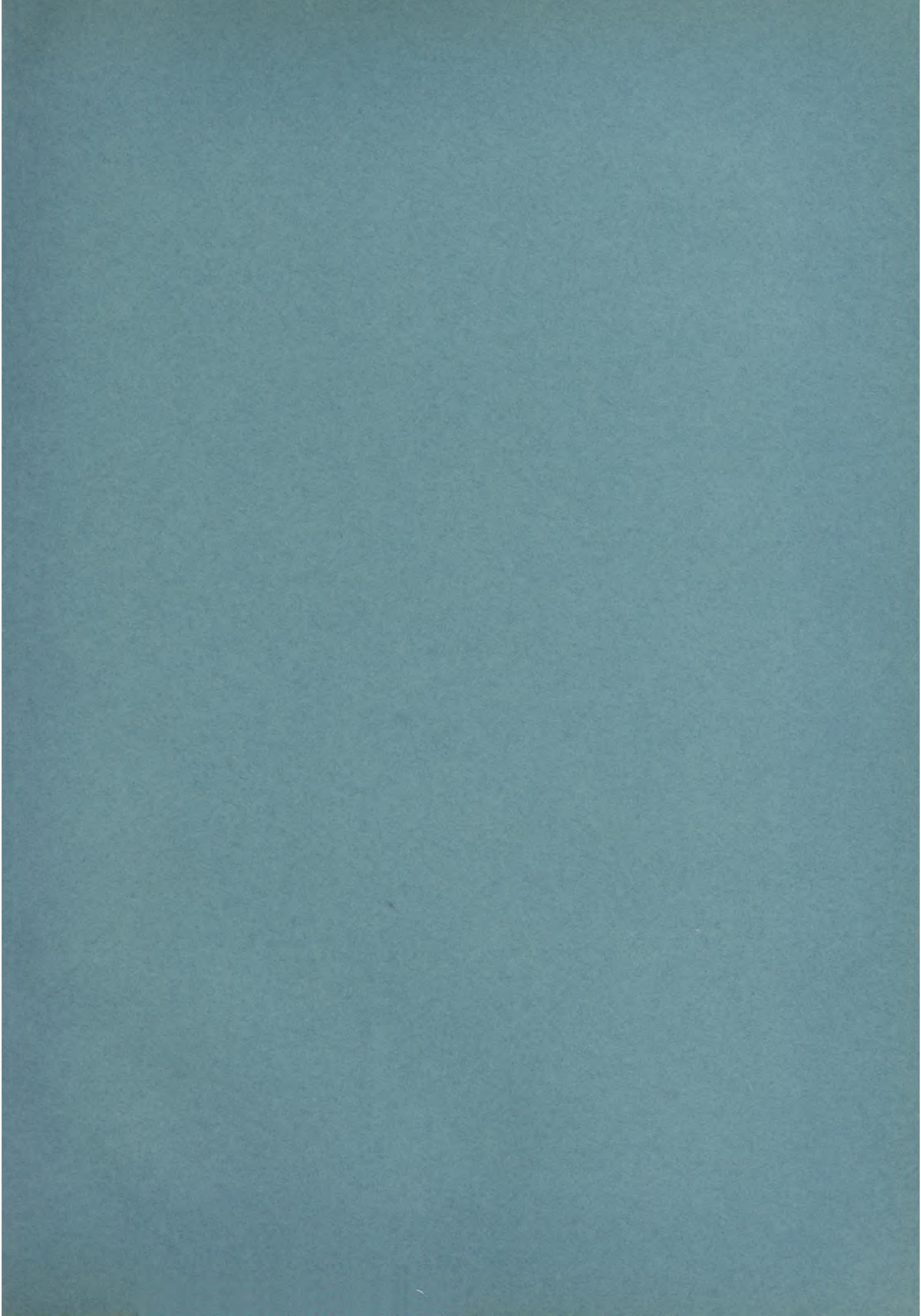
## SCOTLAND.

ALMOND .....	Midlothian 5, W. Lothian 1, Lanark 2.
ANNAN .....	Dumfries 4, Lanark 9.
AYR .....	Lanark 7, Ayr 4.
BEAULY.....	Inverness 10, Ross and Cromarty 2.
BERRIEDALE, DUNBEATH.....	Caithness 1.
BERVIE COWIE .....	Kincardine 2.
CLYDE—LEFT BANK TRIBS.....	Lanark 5, Ayr 1, Renfrew 2.
CLYDE—LEVEN .....	Dumbarton 3, Stirling 4, Argyll 13, Perth 20.
CLYDE—RIGHT BANK TRIBS.....	Dumfries 1, Peebles 4, Midlothian 6, W. Lothian 3, Lanark 4, Renfrew 1, [Dumbarton 4, Stirling 5.]
CREE & WIGTOWN BAY.....	Wigtown 4, Kirkcudbright 2, Ayr 11.
CROMARTY FIRTH .....	Inverness 11, Ross and Cromarty 4.
CULZEAN BAY .....	Ayr 6.
DEE .....	Kincardine 3, Aberdeen 1.
DEE .....	Kirkcudbright 3, Ayr 12.
DEVERON .....	Aberdeen 5, Banff 2, Moray 1.
DON .....	Aberdeen 2.
DOON.....	Kirkcudbright 1, Ayr 5.
DORNOCK FIRTH .....	Ross and Cromarty 5, Sutherland 1.

SCOTLAND—(con.).

EDEN..... Kinross 3, Fife 3, Perth 6.  
 ENARD BAY ..... Ross and Cromarty 6, Sutherland 6.  
 ESK ..... Dumfries 5, Roxburgh 8.  
 ESK ..... Peebles 3, Midlothian 4.  
 FINDHORN..... Moray 5, Nairn 1, Inverness 4.  
 FIRTH OF CLYDE .... Ayr 2, Renfrew 3.  
 FIRTH OF CLYDE & COWAL... Dumbarton 2, Argyll 12.  
 FIRTH OF FORTH—RIGHT BANK TRIBS... E. Lothian 5, Midlothian 3.  
 FIRTH OF LORNE .... Argyll 7.  
 FIRTH OF TAY ..... Fife 4.  
 FIRTH OF TAY—LEFT BANK TRIBS... Perth 17, Angus 2.  
 FLEET, BRORA ..... Sutherland 2.  
 FORSS ..... Caithness 4.  
 FORTH, LOWER—LEFT BANK TRIBS... Stirling 3, Clackmannan 1, Kinross 1, Fife 1, Perth 4.  
 FORTH—RIGHT BANK TRIBS... W. Lothian 2, Lanark 3, Dumbarton 1, Stirling 1, Perth 1.  
 FORTH—TEITH..... Stirling 2, Perth 3.  
 FORTH, UPPER—LEFT BANK TRIBS... Perth 2.  
 GIRVAN ..... Ayr 7.  
 HELMSDALE ..... Sutherland 3.  
 IRVINE..... Lanark 6, Ayr 3, Renfrew 4.  
 KINTYRE EAST..... Argyll 10.  
 KINTYRE WEST .... Argyll 9.  
 LEVEN ..... Kinross 2, Fife 2, Perth 5.  
 LOCH BROOM ..... Ross and Cromarty 7.  
 LOCH CARRON, LOCH ALSH... Ross and Cromarty 9.  
 LOCH ETIVE ..... Argyll 5.  
 LOCH ETIVE, LOCH AWE... Argyll 6.  
 LOCH EWE, LOCH TORRIDON... Ross and Cromarty 8.  
 LOCH FYNE ..... Argyll 11.  
 LOCH LAXFORD ..... Sutherland 5.  
 LOCH LINNHE—LEFT BANK TRIBS... Argyll 4, Perth 19, Inverness 17.  
 LOCH LINNHE—RIGHT BANK TRIBS... Argyll 3, Inverness 14.  
 LOCH RYAN ..... Wigtown 1, Ayr 9.  
 LOCHY—LEFT BANK TRIBS... Inverness 16.  
 LOCHY—RIGHT BANK TRIBS... Inverness 15.  
 LOSSIE..... Moray 4.  
 LUCE BAY..... Wigtown 3, Ayr 10.  
 MORAY FIRTH ..... Ross and Cromarty 3.  
 NAIRN ..... Nairn 2, Inverness 5.  
 NESS—ENRICK..... Inverness 9.  
 NESS—GARRY ..... Inverness 7.  
 NESS—MORISTON ... Inverness 8, Ross and Cromarty 1.  
 NESS—RIGHT BANK TRIBS... Inverness 6.  
 NITH ..... Kirkcudbright 5, Dumfries 3, Lanark 8, Ayr 13.  
 NORTH ESK..... Angus 4, Kincardine 1.  
 NORTH TYNE ..... Roxburgh 1.  
 SOUND OF ARISAIG, SOUND OF MULL... Argyll 2, Inverness 13.  
 SOUND OF JURA..... Argyll 8.  
 SOUND OF SLEAT ... Inverness 12.  
 SOUTH ESK..... Angus 3.  
 SPEY—LEFT BANK TRIBS... Moray 3, Inverness 3.  
 SPEY—RIGHT BANK TRIBS... Perth 18, Banff 3, Moray 2, Inverness 2.  
 STINCHAR ..... Ayr 8.  
 TAY—ALMOND..... Perth 8.  
 TAY—BRAN ..... Perth 10.  
 TAY—EARN ..... Kinross 4, Fife 5, Perth 7.  
 TAY—ISLA ..... Perth 15, Angus 1.  
 TAY—LEFT BANK TRIBS... Perth 16.  
 TAY—LOCH TAY .... Perth 12.  
 TAY—LYON ..... Perth 13.  
 TAY—STRATH TAY ABOVE DUNKELD... Perth 11.  
 TAY—STRATH TAY BELOW DUNKELD... Perth 9.  
 TAY—TUMMEL..... Argyll 1, Perth 14, Inverness 1.  
 THURSO..... Caithness 3.  
 TWEED—GALA..... Roxburgh 5, Selkirk 5, Berwick 1, Midlothian 1.  
 TWEED—LEADER ... Roxburgh 6, Berwick 2, E. Lothian 1.  
 TWEED, LOWER—ETTRICK... Roxburgh 4, Selkirk 2.  
 TWEED, LOWER—LEFT BANK TRIBS... Berwick 3, Roxburgh 7.  
 TWEED, LOWER—RIGHT BANK TRIBS... Roxburgh 2.  
 TWEED, LOWER—TEVIOT... Roxburgh 3, Selkirk 1.  
 TWEED, UPPER—LEFT BANK TRIBS... Selkirk 4, Peebles 2, Lanark 1.  
 TWEED UPPER—RIGHT BANK TRIBS... Selkirk 3, Peebles 1.  
 TWEED WHITEADDER... Berwick 4, E. Lothian 2.  
 TYNE..... E. Lothian 4, Midlothian 2.









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## ENGLAND AND WALES.

## DIVISION I—LONDON. (Area, 117 sq. mi.)

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			Average Rain-fall.	1937.		
			Height of Rim above Ground.	Ground above Sea Level.			Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
1. THAMES.—Right Bank Tributaries. 67 sq. mi.									
BERMONDSEY.									
D Southwark Park .....	London County Council....	5	in.	ft.	in.	ft.	in.	in.	
			1	0		9	24·4	29·88	162 139
LAMBETH.									
D Dulwich (Thurlow Pk. Rd.) .....	B. T. Yonge, Esq. ....	5	0	11		147	..	31·75	178 132
D Brockwell Park .....	(+A)..London County Council....	5	1	0		144	23·8	29·43	162 127
D Brixton Hill Reservoir .....	Met. Water Board .....	5	1	0		121	23·9	30·46	170 126
BATTERSEA.									
D Battersea Park .....	London County Council....	5	1	0		13	23·2	26·96	143 116
WANDSWORTH.									
D Streatham (Conyers Road) .....	Met. Water Board .....	5	1	0		119	23·3	29·26	166 129
D Streatham Hill Reservoir .....	Met. Water Board .....	5	1	0		205	23·3	29·52	166 128
D Putney Heath Reservoir ..	(+A)..Met. Water Board .....	5	1	0		179	..	27·78	166 120
D Balham High Road.....	(+A)..E. J. Elford, Esq., C.E. ....	5	1	6		89	24·7	29·48	165 126
D Southfields (Coronation Gds)(+A)	E. J. Elford, Esq., C.E. ....	5	1	6		37	23·6	28·62	166 122
CAMBERWELL.									
D Nunhead (Nunhead Reservoir) ..	Met. Water Board .....	5	1	0		175	..	28·95	167 123
DEPTFORD.									
D Telegraph Hill .....	London County Council ...	5	1	0		135	..	30·53	161 122
D Waterworks .....	Met. Water Board .....	5	1	0		20	23·0	28·63	160 119
GREENWICH.									
D Deptford Pumping Station(+A) ..	London County Council ....	8	1	0		18	22·4	27·97	150 116
D ROYAL OBSERVATORY .....	The Astronomer Royal ....	8	0	5		149	23·5	28·76	176 123
CATFORD.									
D Catford Hill (Exbury Rd.) .....	Rev. T. R. Price, M.A. ....	8	1	3		67	..	26·93	154 119
LEWISHAM.									
D Forest Hill Reservoir .....	(+A) .Met. Water Board .....	5	1	0		339	..	30·53	173 134
WOOLWICH.									
D Eltham (High Street) .....	(+A)..Met. Water Board .....	5	1	0		245	23·2	29·55	151 124
2.—THAMES.—Left Bank Tributaries. 50 sq. mi.									
KENSINGTON.									
D Holland House .....	Mr. P. B. Rintoul .....	5	1	0		68	23·9	29·01	161 126
D Campden Hill Reservoir ..	(+A) ..Met. Water Board .....	5	1	2		142	24·5	28·07	167 131
D KENSINGTON PALACE ....	(+A) ..H.M.O.W. (M.O.) .....	8	1	0		80	24·2	29·08	172 127
HAMMERSMITH.									
D The Creek.....	London County Council ...	5	3	0		19	23·2	25·75	151 119
FULHAM.									
D Hammersmith Cemetery .....	R. J. Brown, Esq. ....	5	1	0		17	23·4	28·48	166 136
D Bishops Park .....	(+A) ..A. F. Holden, Esq., C.E. ....	5	0	11		15	22·6	27·42	150 125
CHELSEA.									
D Physic Garden .....	G. W. Robinson, Esq.....	5	1	0		20	23·4	26·76	151 126
D ST. LUKE'S GARDENS .....	J. A. Gough, Esq.....	5	1	0		26	23·3	27·34	173 128

## DIVISION I—LONDON—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.				
			Height of Rim above Ground.	Ground above Sea Level.	Average Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.		
2.—THAMES.—Left Bank Tributaries—(con.).			in.	ft. in.	ft.	in.	in.			
WESTMINSTER.										
D Western Pumping Station (+A) ..	London County Council .....	8	1 0	19	..	25·67	149	118		
D Buckingham Palace .....	Mr. A. J. Cole .....	5	8 0	35	23·5	27·26	172	123		
D St. JAMES'S PARK .....	(+A) .. H.M.O.W. (M.O.) .....	8	1 0	27	23·2	25·91	158	119		
ST. MARYLEBONE.										
D OXFORD STREET (Roof Gdns.)(+A)	Messrs. Selfridge & Co., Ltd.	5	1 0	159	..	27·09	162	123		
D REGENT'S PARK .....	H.M.O.W. (M.O.) .....	5	1 0	129	..	28·57	161	128		
HAMPSTEAD.										
d Barrow Hill Reservoir ...(+A) ..	Met. Water Board .....	5	1 0	175	..	29·64	..	..		
D Kidderpore Reservoir .....	Met. Water Board .....	5	1 0	328	..	30·61	162	128		
D OBSERVATORY .....	(+A) .. The Hampstead Scientific Soc. (E. L. Hawke, M.A.) .....	8	1 0	450	..	32·40	186	135		
D Golders Hill Park .....	London County Council .....	5	1 0	350	26·2	32·33	177	137		
ST. PANCRAS.										
D Camden Square .....	(+A) .. Royal Meteorological Soc. ...	8	1 0	110	24·5	28·57	165	132		
D CAMDEN SQUARE .....	Snowdon .. Royal Meteorological Soc. ...	5	1 0	110	24·5	28·58	165	132		
STOKE NEWINGTON.										
D New River Filter Beds .....	Met. Water Board .....	5	1 0	101	23·1	28·73	162	124		
D New River Reservoirs ...(+A) ..	Met. Water Board .....	5	1 0	105	23·5	28·49	153	123		
HACKNEY.										
D Clapton Pond .....	(+A) .. P. Holt, Esq., C.E. ....	5	1 0	68	22·8	29·47	167	120		
FINSBURY										
D New River Head .....	(+A) .. Met. Water Board .....	5	1 0	95	..	26·90	151	122		
BETHNAL GREEN.										
D Victoria Park .....	London County Council .....	5	1 0	43	23·1	29·27	153	113		
POPLAR.										
D Isle of Dogs (Island Gardens) ....	London County Council .....	5	1 0	18	21·9	29·48	166	129		
D Old Ford Pumping Station .....	Met. Water Board .....	8	0 9	19	22·9	28·92	163	128		
D Old Ford (Penstock House) (+A) ..	London County Council .....	8	1 0	43	22·4	29·68	167	120		
WOOLWICH.										
D N. Woolwich Pumping Stn. (+A) ..	London County Council .....	8	0 9	12	21·6	26·06	155	122		
d Barking Outfall .....	London County Council .....	8	0 9	9	20·8	(26·85)	(157)	(125)		

## DIVISION II—SOUTH-EASTERN COUNTIES.

SURREY. (Area, 725 sq. mi.)

## 1.—ARUN. 45 sq. mi.

D Haslemere (Clammer Hill) .....	Mrs. Glennie .....	5	1 6	400	35·8	42·88	181	143
D Haslemere (Furnace Place) .....	F. J. Barlow, Esq. ....	5	1 0	300	..	40·12	168	137
D Haslemere (Grayshurst) .....	C. W. Dixon, Esq. ....	5	1 0	621	..	40·73	171	136
D Chiddingfold (Chiddingfold Ho.) ..	L. J. E. Hooper, Esq. ....	5	0 10	210	..	38·80	165	131
D Hambledon (Rossall) .....	Mrs. M. B. Furneaux .....	5	1 0	250	..	36·94	179	135

## 2.—MEDWAY. 50 sq. mi.

D East Grinstead (Lockeridge) .....	Lt.-Col. J. F. Forbes, D.S.O.	5	1 0	320	..	38·61	186	137
D Dormans Park (Chartham Park) .....	I. D. Margary, Esq. ....	5	1 0	270	..	39·00	198	137
D Dormans Park (Hill Crest) .....	Dr. H. R. Mill .....	5	1 0	320	..	39·56	214	141
D Dormans Park (Yew Lodge) .....	Mrs. I. D. Margary .....	5	1 0	260	..	38·07	190	132
D Lingfield (Felcourt) .....	Sir Alfred R. McAlpine, Esq.	5	1 6	320	..	39·42	195	146
D S. Godstone (Hartsridge) .....	F. E. Goad, Esq. ....	5	0 10	450	..	35·55	188	139
D Bletchingley (North Park Farm) ..	H. C. Millen, Esq. ....	5	1 0	300	..	35·63	191	143
D Limsfield (Kent Hatch Res.) .....	A. E. Cornwall-Walker, Esq.	5	1 0	664	..	34·73	..	..

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain- fall.	1937.		
			Height of Rim above Ground.	Ground above Sea Level.		Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
SURREY—(con.).		in.	ft. in.	ft.	in.	in.		
2.—MEDWAY—(con.).								
d Godstone .....	C. J. Salter, Esq. ....	5	1 0	400	..	37·39	205	148
d Oxted (The Croft) .....	Mrs. W. P. Metcalfe .....	5	1 3	380	..	35·92	..	149
d Oxted (North End) .....	S. F. Lunniss, Esq. ....	5	1 0	350	..	37·38	194	146
3.—THAMES—Darent. 22 sq. mi.								
d Limpsfield (The Chart) .....	E. G. Ingold, Esq. ....	5	1 0	570	..	34·99	186	137
d Westwood (Pumping Station) .....	A. E. Cornwall-Walker, Esq. 5	1 0	418	..	37·24	168	140	
d Chelsham (Ivydene) .....	H. S. Weston, Esq. ....	5	1 0	610	..	42·54	179	151
d Farleigh (Croydon Ment. Hosp.) .....	Croydon Corporation .....	8	1 0	100	..	40·06	170	149
d Chelsham (Fairchildes) .....	A. S. Daniell, Esq. ....	5	0 8	600	33·7	37·54	..	..
d Addington (Hares Bk. Pump. Sta.) .....	Croydon Corporation .....	8	1 0	331	..	36·10	192	143
d ADDINGTON Hills Reservoir .....	Croydon Corporation .....	8	1 0	472	29·4	36·65	179	142
d Addington (Golf Club) .....	The Secretary .....	5	1 2	380	..	34·46	186	135
d Shirley (Residential Sch.) .....	W. H. Westacott, Esq. ....	5	1 0	197	..	33·90	162	132
4.—THAMES—Wandle. 71 sq. mi.								
d Kingswood (Margery Hall Res.) .....	W. Vaux Graham, Esq., C.E. 5	1 0	691	..	37·10	164	132	
d Woldingham Reservoir .....	A. E. Cornwall-Walker, Esq. 5	1 0	841	..	39·23	..	..	
d Woldingham .....	Miss V. K. Isaac .....	5	1 0	797	..	43·77	188	155
d Caterham Reservoir .....	A. E. Cornwall-Walker, Esq. 5	1 0	704	34·6	38·12	203	148	
d Caterham (Alderstead Hth.) (+A). Surrey County Council .....	5	1 0	577	..	39·55	190	147	
d Chelsham & Woldingham W.W. ....	A. E. Cornwall-Walker, Esq. 5	1 0	478	..	39·59	178	145	
d Woldingham (Marden Park) .....	Sir Bernard Greenwell, Bt. ... 5	1 2	550	..	38·09	176	137	
d Caterham Valley Depot .....	A. E. Cornwall-Walker, Esq. 5	1 0	431	..	40·06	197	151	
d Chipstead (South Lodge) .....	G. R. Rudolf, Esq. ....	8	1 1	550	..	37·07	195	144
d Coulsdon (Netherne Ment. Hosp.) .....	The Clerk and Steward .....	8	0 10	540	..	38·39	191	144
d Banstead (Burgh Heath Res.) .....	W. Vaux Graham, Esq., C.E. 5	1 0	600	32·7	37·28	168	143	
d Chipstead (How Green Res.) .....	W. Vaux Graham, Esq., C.E. 5	1 0	528	..	38·46	175	148	
d Kenley (Refuse Disposal Wks.) .....	The Surveyor .....	5	1 0	290	..	38·42	161	141
d Kenley Pumping Station .....	A. E. Cornwall-Walker, Esq. 5	1 0	275	..	34·02	172	139	
d Coulsdon (Howard Road) .....	J. H. Lowe, Esq. ....	5	0 6	425	28·6	37·76	202	152
d Coulsdon (Coulsdon Rise) .....	Charles Knight, Esq. ....	5	0 6	350	..	35·86	188	143
d Woodcote Park Golf Club. (+A). Surrey County Council .....	5	1 0	450	..	35·95	183	142	
d Banstead Mental Hospital .....	S. J. Wray, Esq. ....	5	4 8	410	..	34·66	186	138
d Purley (Selcroft Road) .....	E. W. Finch, Esq. ....	5	0 10	400	..	36·43	186	139
d Purley (Woodcote Valley Rd.) .....	C. Stuart Bailey, Esq. ....	5	1 0	310	..	36·51	180	140
d Purley (Pumping Station) .....	A. E. Cornwall-Walker, Esq. 5	1 0	214	30·1	38·84	189	147	
d Purley (Green Lane) .....	E. E. Bluett, Esq. ....	5	1 0	341	..	(37·42)	(178)	(137)
d Purley (Hillcrest Rd.)† .....	E. A. W. Madge, Esq. ....	5	1 0	330	..	36·26	181	129
d Purley (St. Mark's Vicarage) .....	Mrs. D. L. P. Shattock .....	5	1 0	336	..	37·83	171	131
d Sanderstead (Beechwood Rd.) .....	G. M. Davies, Esq. ....	5	1 0	320	..	39·23	193	143
d Sutton (The Ridgway) .....	W. H. Boucher-James, Esq. 5	2 7	250	..	33·92	168	136	
d CROYDON (Airport) .....	(+A) Officer-in-Charge .....	8	1 0	217	26·7	35·20	180	129
d S. Croydon (Croham Valley Rd.) .....	F. A. Reynolds, Esq. ....	5	1 0	350	..	36·40	180	137
d Carshalton (Pumping Stn.) .....	Surveyor, U.D.C. ....	5	1 0	83	..	34·55	174	128
d Carshalton (Park Road) .....	A. C. Challands, Esq. ....	5	1 0	200	..	35·86	172	137
d Carshalton (The Grove) .....	H. J. Spicer, Esq. ....	5	1 0	120	..	35·91	..	138
d Beddington (Sewage Farm) .....	Croydon Corporation .....	5	1 0	129	..	33·28	164	130
d Beddington Park .....	(+A) Surrey County Council .....	5	1 0	108	..	34·83	173	131
d Croydon (Northampton Road) .....	Mrs. Higgins .....	5	1 0	210	..	34·10	167	136
d Beddington Corner (Millgreen Rd.) .....	Messrs. G. Miller & Son .....	5	5 0	77	..	39·62	..	130
d Upper Norwood (Beulah Hill) .....	Rev. A. H. Shaw .....	5	1 0	400	..	33·55	176	137
d Wimbledon (Durnsford Rd.)‡(+A) T. Webster, Esq., C.E. ....	5	2 11	58	23·4	27·85	175	115	
5.—THAMES—Mole & c. 229 sq. mi.								
d Beare Green (Wigmore) <i>new g</i> .....	Leonard Mortimer, Esq. ....	5	1 0	250	..	39·08	181	147
d Horley (Smallfield) .....	W. W. Hughes-D'Aeth, Esq. 5	1 0	215	..	38·17	174	140	
d Dorking (Woodlands Pk.) .....	O. Langer, Esq. ....	5	1 0	200	..	37·69	175	140
d Dorking (Bramerton) .....	Rev. Jas. F. Twist .....	5	1 0	300	..	41·59	186	149

† Station formerly known as Purley (Harbledon).    ‡ Station formerly known as Wimbledon (Sewage Pmp. Sta.).

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
SURREY—(con.).			in.	ft. in.	ft.	in.		
<b>5.—THAMES—Mole &amp; c.—(con.).</b>								
d Dorking (Denbies).....	S. C. Westbrook, Esq.....	5	1 0	620	32·2	41·18	188	149
d Dorking (Pixham La Sew. Wks.) (+A).....	Dorking U.D.C. ....	5	1 0	137	..	38·51	175	143
d Betchworth (Snower Hill).....	T. DuBuisson, Esq. ....	8	0 11	200	..	36·87	183	144
d South Nutfield (Hale Edge).....	Mrs. B. Grant.....	5	1 0	250	28·7	33·94	..	153
d Earlswood (Sewage Farm).....	G. G. Sanderson, Esq., C.E. ....	5	1 6	196	..	34·26	170	135
d Reigate (Hill Top Road).....	H. E. Irving Taylor, Esq. ....	5	0 10	375	..	36·03	186	139
d Redhill (London Road).....	A. E. Cornwall-Walker, Esq. ....	5	1 0	270	..	34·16	179	137
d Reigate (Woodcote).....	Herbert Crosfield, Esq., J.P. ....	5	0 10	310	..	38·30	202	157
d Reigate (Wray Park Road).....	W. J. MacAndrew, Esq. ....	5	1 0	330	28·9	36·54	184	139
d Reigate (Castle Grounds).....	G. G. Sanderson, Esq., C.E. ....	5	1 0	350	30·4	36·44	187	140
d Reigate (Thurso).....	F. S. Smith, Esq. ....	8	1 0	270	..	34·60	..	130
d Reigate (Raglan Rd.).....	G. E. Collip, Esq. ....	5	1 1	450	..	38·07	183	144
d Bletchingley (South Park Farm).....	Uvedale H. Lambert, Esq. ....	5	1 0	340	31·4	32·47	..	116
d Mersham (Gatton Point).....	C. F. Bull, Esq. ....	5	1 0	300	..	34·79	188	134
d Effingham.....	A. E. Cornwall-Walker, Esq. ....	5	1 0	363	..	36·30	..	..
d Headley Reservoir.....	A. E. Cornwall-Walker, Esq. ....	5	1 0	629	..	38·93	198	146
d Gatton (The Cottage).....	J. F. E. Goad, Esq. ....	5	0 11	434	..	33·41	203	139
d Headley Rectory.....	Rev. T. E. R. Phillips.....	5	1 0	570	..	37·96	205	141
d Headley (The Hurst).....	Mrs. Lyall.....	5	1 3	420	32·2	36·61	187	142
d Walton-on-the-Hill.....	Mr. J. Millichamp.....	5	1 0	600	29·6	38·07	201	147
d Fetcham W.W.....	A. E. Cornwall-Walker, Esq. ....	5	1 0	102	..	36·16	187	141
d Leatherhead (The Mansion).....	The Head Gardener.....	5	1 0	150	..	35·03	181	134
d Leatherhead (Windfield).....	Mrs. Still.....	5	1 6	250	..	35·95	..	142
d Tadworth.....	C. H. L. Blaxland, Esq. ....	5	1 4	600	..	38·66	213	148
d Tadworth (Pumping Station).....	Banstead U.D.C. ....	5	1 0	405	..	37·27	187	143
d Epsom College.....	S. A. Weare, Esq. ....	8	1 6	300	..	34·40	168	132
d Banstead Grange.....	R. L. Powell, Esq. ....	5	0 10	390	..	38·72	202	151
d Epsom (Water Works).....	T. N. Young, Esq. ....	5	0 6	150	..	34·33	184	129
d Whiteley Village.....	The Whiteley Homes Trust.....	8	3 4	195	..	36·15	186	137
d Cobham (Uplands).....	R. S. Morrish, Esq. ....	5	0 9	180	..	34·67	179	139
d Epsom (Long Grove Ho.).....	Dr. F. G. L. Barnes.....	5	1 0	130	..	31·13	179	130
d Weybridge (St. George's Hill).....	Mrs. Buckley.....	5	0 10	200	..	29·74	..	126
d Claygate (Claygate House).....	S. W. Parkhurst, Esq. ....	5	..	100	..	31·78	..	..
d Claygate (Hertslets).....	N. C. Armitage, Esq. ....	5	1 0	106	..	30·62	198	134
d Esher (Halidon).....	D. H. Baird, Esq., C.B.E. ....	5	1 3	100	..	31·97	180	136
d Ewell (Stoneleigh).....	L. W. Carpenter, Esq. ....	5	1 0	150	..	33·04	178	136
d Sutton (Mulgrave Rd.).....	Mrs. A. Carter.....	5	1 0	214	..	35·38	181	137
d Sutton (Waterworks).....	W. Vaux Graham, Esq., C.E. ....	5	1 6	166	26·0	35·36	168	128
d Sutton (Sewage Works).....	(+A) N. H. Michell, Esq., C.E. ....	5	1 6	99	28·8	33·99	184	126
d Worcester Park (Sewage Wks.) (+A).....	N. L. Michell, Esq., C.E. ....	5	1 0	68	..	31·05	176	120
d Old Malden (Sports Ground) (+A).....	A. R. Goldthorp, Esq.*.....	5	1 6	64	..	30·81	163	123
d Morden (Recreation Ground) (+A).....	R. W. North, Esq.*.....	5	1 0	117	..	32·50	177	132
d Surbiton (Seething Wells).....	Met. Water Board.....	5	0 10	34	24·1	31·78	152	125
d West Molesey (Walton Works).....	Met. Water Board.....	5	1 0	35	23·5	30·76	169	130
d New Malden (Dunbar Road).....	J. W. Harris, Esq. ....	5	1 0	50	24·8	28·18	173	137
d New Malden (Sewage Wks.) (+A).....	A. R. Goldthorp, Esq., C.E.*.....	5	1 11	51	..	28·26	160	114
d New Malden (High Drive).....	Mrs. Ben. G. Brame.....	5	1 0	60	..	31·27	194	124
d Kingston (County Hall).....	W. E. Robinson, Esq. ....	5	0 9	31	..	30·10	159	119
d Kingston (Grammar School).....	The Headmaster.....	5	1 0	34	..	(28·57)	..	..
d Kingston Sewage Works .. (+A).....	P. G. Lloyd, Esq. ....	5	1 0	25	..	28·89	143	112
d Merton Park (Mostyn Rd.).....	A. T. Bench, Esq. ....	5	1 0	55	25·0	31·70	166	123
d Merton Park (Innes Hort. Inst.).....	Garden Superintendent.....	5	1 0	55	..	29·47	148	123
d Merton (Joseph Hood Rec. Gd.).....	R. W. North, Esq., C.E. ....	5	1 0	48	..	29·35	159	118
d Raynes Park (Cottenham Pk. P.S.).....	T. Webster, Esq., C.E. ....	5	1 2	50	23·6	30·79	174	128
d Raynes Park (Richmond Road).....	W. B. de Winton, Esq. ....	5	1 0	70	..	31·53	189	135
d Wimbledon (West Side).....	E. K. Wilson, Esq. ....	5	1 0	160	..	30·14	174	131
d Richmond (Terrace Gardens).....	G. Humphreys, Esq. ....	5	1 3	29	..	29·86	166	128
d Kew OBSERVATORY.....	(+A) The Superintendent.....	8	1 0	18	23·8	29·67	164	107
d Mortlake (Hammersmith Cem.).....	R. J. Brown, Esq. ....	5	1 0	23	..	27·71	152	114

\* Per Surrey County Council.

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.		AUTHORITIES.	Diam.	Rain-gauge		Average Rain-fall.	1937.		
				Height of Rim above Ground.	Height of Ground above Sea Level.		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
SURREY—(con.).							in.		
5.—THAMES—Mole & c.—(con.).									
d Kew (Royal Botanic Gardens) . . . . .	The Director . . . . .	8	0	9	20	23.4	29.68	152	124
d Barnes (Barn Elms) . . . . .	Met. Water Board . . . . .	5	1	0	16	22.9	27.80	158	127
6.—THAMES—Wey. 236 sq. mi.									
d Haslemere (U.D.C. Depot) . . . . .	A. G. Whitcher, Esq. . . . .	5	1	0	475	36.2	45.38	181	144
d Shottermill (Sewage Works) . . . . .	A. G. Whitcher, Esq. . . . .	5	1	0	414	..	42.84	178	142
d Haslemere (Frensham Hall Gdns.) . . . . .	H. Windibank, Esq. . . . .	5	1	0	750	..	44.73	178	149
d Haslemere (Frensham Hall Farm) . . . . .	H. Windibank, Esq. . . . .	5	1	0	600	37.4	41.55	173	142
d Hindhead Waterworks . . . . .	Wey Valley Water Co. . . . .	5	1	0	849	..	41.35	181	151
d Oakwood Hill (Honeywood Ho.) . . . . .	The Lady Tredegar . . . . .	5	0	10	270	..	34.78	194	140
d Witley (King Edward's School) . . . . .	E. Townsend, Esq. . . . .	5	1	0	300	..	37.37	170	131
d Churt (Furze Hills) . . . . .	Rev. C. G. O. Bond, M.A. . . . .	5	1	6	390	..	40.41	176	147
d Churt (Bron-y-dé) . . . . .	Rt. Hon. D. Lloyd George . . . . .	8	2	0	350	..	40.26	181	137
d Thursley (Bowlhead Green) . . . . .	F. K. Borrow, Esq. . . . .	5	1	6	415	..	41.49	..	..
d Hascombe Place . . . . .	C. T. Musgrave, Esq. . . . .	5	1	0	361	31.7	38.38	179	134
d Hascombe Court . . . . .	Sir John Jarvis, Bt. . . . .	5	1	0	400	..	39.37	188	142
d Witley (King George V. Sanatm.) . . . . .	Dr. J. Watt . . . . .	5	1	0	305	..	38.52	180	143
d Witley (Lashams) . . . . .	J. H. Wenham, Esq. . . . .	5	1	3	250	..	38.96	161	136
d Cranleigh (Ruffold Lodge) . . . . .	Dr. C. J. Blakeman . . . . .	5	1	3	180	..	33.82	191	138
d Cranleigh (Smithwood Common) . . . . .	W. C. Foote, Esq. . . . .	5	1	0	340	..	36.47	179	138
d Godalming (Enton Green) . . . . .	Gen. Sir J. du Cane . . . . .	5	1	0	200	..	38.03	153	138
d Ewhurst (Downhurst Lo.) . . . . .	W. H. Boniface, Esq. . . . .	5	1	0	310	..	36.30	185	141
d Ewhurst (Coneyhurst) . . . . .	Col. R. J. Few, D.S.O. . . . .	8	1	0	561	33.7	35.15	187	155
d Ewhurst (The Four Winds) . . . . .	Miss E. Brooke . . . . .	5	1	0	809	..	39.50	190	155
d Ewhurst (Woolpit) . . . . .	L. T. E. Hooper, Esq. . . . .	5	1	0	600	..	40.69	197	151
d Cranleigh (Winterfold House) . . . . .	The Head Gardener . . . . .	8	1	0	600	..	41.98	195	151
d Frensham (Spreakley Hollow) . . . . .	A. R. Crossley, Esq. . . . .	5	1	0	200	..	40.37	165	137
d Milford (Manor Wood) . . . . .	G. S. Unwin, Esq. . . . .	5	1	0	200	..	36.58	189	140
d Godalming (Munstead Heath) . . . . .	A. M. P. Hodsoll, Esq. . . . .	5	1	0	450	..	38.51	..	137
d Godalming (Ockford P.S.) . . . . .	The Engineer and Manager . . . . .	8	1	0	152	..	36.06	168	131
d Godalming (Borough Rd. P.S.) . . . . .	The Engineer and Manager . . . . .	8	1	0	120	..	35.96	176	132
d Elstead (Sunny Mount) . . . . .	W. Nash, Esq. . . . .	5	1	3	175	..	38.41	..	130
d Godalming (Filmer Grove) . . . . .	Miss Sanderson . . . . .	5	1	0	..	..	34.99	174	140
d Godalming (Chalk Road) . . . . .	Rev. W. Havard-Jones . . . . .	5	0	9	150	..	36.72	185	142
d Godalming (Charterhouse) . . . . .	O. H. Latter, Esq. . . . .	5	1	0	130	29.2	35.19	185	132
d Tilford (Woodlands) . . . . .	T. A. B. Pares, Esq. . . . .	8	1	0	220	..	37.04	..	..
d Farnham (Boundstone) . . . . .	A. Hampton Brown, Esq. . . . .	5	1	0	370	..	38.09	191	131
d Tilford (Openwood) . . . . .	Capt. G. A. Moxon . . . . .	5	0	8	240	..	34.69	187	139
d Tilford (Brownholm) . . . . .	J. King, Esq. . . . .	5	1	3	275	..	36.47	201	139
d Holmbury St. Mary (Feldemore) . . . . .	Mr. W. E. Hobday . . . . .	5	1	0	500	..	41.09	..	150
d Farnham (Short Heath Lodge) . . . . .	Col. G. Chrystie . . . . .	5	1	0	365	29.8	39.16	170	145
d Shackleford (Hall Place) . . . . .	Sir Edgar Horne, Bart. . . . .	8	1	2	200	..	39.69	210	144
d Peaslake (Dewdney) . . . . .	Mr. F. Newman . . . . .	5	1	0	532	..	39.70	..	140
d Peaslake (Southcote) . . . . .	H. M. Gregory, Esq. . . . .	5	1	0	420	..	41.43	194	152
d Bramley (Wood View) . . . . .	The late Rev. C. J. Etty . . . . .	5	0	9	133	..	38.90	176	135
d Abinger Hill School . . . . .	The Headmaster . . . . .	5	1	2	670	..	40.03	198	155
d Abinger Common (Goddards) . . . . .	J. A. Gibbs, Esq. . . . .	5	1	0	586	..	40.77	184	149
d Abinger Common (Furzen Wood) . . . . .	Major E. J. Lugard . . . . .	5	1	0	555	..	39.50	195	146
d Compton (Sandyknove Gdns.) (A) . . . . .	Mrs. F. Houghton . . . . .	8	1	3	250	..	34.58	..	..
d Abinger Hall . . . . .	Lord Farrer . . . . .	8	1	5	300	36.5	42.94	208	162
d Shere (Manor House) . . . . .	R. A. Bray, Esq. . . . .	5	1	0	330	..	37.82	183	139
d Shere (The Rectory) . . . . .	Rev. Sir P. M. Bowman, Bt. . . . .	5	1	3	200	..	37.35	183	143
d Albury (Dalton Hill Gardens) . . . . .	Mr. J. Tidy . . . . .	5	1	0	250	..	37.74	..	142
d Shalford (The Hutch) . . . . .	Capt. G. C. Pentland . . . . .	5	1	4	170	..	33.10	181	136
d Farnham (Longley Rd.) . . . . .	C. Edwards, Esq. . . . .	5	0	10	280	..	39.24	166	139
d Farnham (Littleworth Rd.) . . . . .	F. R. Walters, Esq., M.D. . . . .	5	1	4	440	31.0	37.29	206	144
d Chilworth (Braunston) . . . . .	E. Ramsay, Esq. . . . .	5	0	11	170	..	36.90	213	142
d Puttenham (Berthorpe) . . . . .	Capt. E. H. Tuckwell, M.C. . . . .	5	1	0	350	..	36.84	182	141
d Wanborough (Greyfriars) . . . . .	The Head Gardener . . . . .	5	1	0	400	..	32.78	..	131
d Guildford (Pilgrim Wood) . . . . .	H. A. Powell, Esq., M.D. . . . .	5	1	0	300	..	34.47	178	134
d Guildford (Warren Road) . . . . .	Colin Docwra, Esq. . . . .	8	1	0	375	..	33.74	165	136

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			Average Rain-fall.	1937.		
			Height of Rim above Ground.	Ground above Sea Level.	ft.		in.	Days with .01 in. or more.	Days with .04 in. or more.
SURREY—(con.).			in.	ft. in.	ft.	in.	in.		
6.—THAMES—Wey—(con.).									
d Guildford (Pewley Hill Res.)	Borough Surveyor	5	1 0	365	..	34.32	179	134	
d Guildford (Pewley Hill)	Miss H. S. Pitman	5	1 0	365	..	37.31	213	145	
d Guildford (West Mount)	Miss M. E. Powell	5	1 0	220	..	35.76	186	142	
d Guildford (Epsom Road)	Frank E. Box, Esq.	8	1 0	208	..	35.57	188	135	
d Guildford (Kilvington)	Miss Meynell	5	1 0	300	..	35.27	187	141	
d Guildford (St. Joseph's Rd.)	Borough Surveyor	5	1 0	98	..	33.96	175	126	
d Guildford (Wood Street)	J. Taylor, Esq.	5	1 6	150	..	33.83	173	133	
d Normandy (The Manor House)	E. S. Hose, Esq., C.M.G.	5	1 4	149	..	32.66	184	134	
d Merrow (Stoodwell)	S. Eustace, Esq.	5	0 10	250	..	35.35	168	149	
Clandon Regis Gardens	The Head Gardener*	..	..	240	..	35.73	..	..	
East Clandon (Hatchlands)	F. A. Akers, Esq.*	5	1 0	340	..	35.31	..	..	
d West Clandon	J. Dalrymple, Esq., C.E.	8	1 0	319	..	35.23	168	137	
d West Clandon (Newlands)	R. C. Patrick, Esq.	5	1 0	200	..	35.54	180	130	
d Worplesdon (Tangley Place)	E. J. W. Jeudwine, Esq.	5	1 10	150	..	33.99	170	142	
d Worplesdon (Golf Club)	The Secretary	5	1 6	168	..	30.97	176	133	
d Send (Woodside)	G. M. Osborne, Esq.	8	0 10	146	..	33.33	178	133	
d Send (Send Hill House)	L. A. T. Broadwood, Esq.	5	1 1	150	..	32.59	175	134	
d East Horsley (Forest Lane)	H. Blanchard, Esq.	5	1 0	176	..	33.19	182	138	
d Woking (The Grange)	Miss M. E. Wilson	5	1 0	78	26.1	34.35	211	139	
d Woking (Westfield)	Vernon B. Longhurst, Esq.	5	1 0	100	..	33.84	188	142	
d Woking (Hook Heath)	W. S. Patterson, Esq.	5	1 3	160	..	31.94	169	132	
d Woking (York Road)	L. C. Norris, Esq.	5	1 0	120	..	31.41	187	127	
d Woking (The Green)	Mrs. G. E. Howlett	5	0 9	100	..	30.04	163	128	
d Brookwood (Sheets Heath)	Captain H. J. Cann	5	1 0	200	..	32.70	..	..	
d Old Woking (Sewage Works)	Woking U.D.C.	5	0 6	76	..	30.87	162	135	
d Woking (Percy Street)	J. Dalrymple, Esq., C.E.	8	1 0	100	..	31.13	164	128	
Woking (Goldsworth)	Mrs. S. Slocock	5	1 4	110	..	31.34	..	..	
d Woking (Goldsworth Rd. Depot)	Woking U.D.C.	5	2 6	96	..	32.26	163	133	
d Byfleet (WISLEY R.H.S. Gdns.)	The Director	8	1 0	150	24.1	31.91	180	130	
d Wisley (Outfall Works)	Woking U.D.C.	5	1 0	55	..	31.59	151	129	
d West Byfleet (Starcross)	Walter W. Way, Esq.	5	1 0	110	..	32.23	161	133	
d West Byfleet (Scotland Bridge)	Woking U.D.C.	5	1 0	86	..	30.51	..	127	
d Weybridge (Harwood)	Lt.-Com. J. K. Elliott, R.N.	5	0 11	150	..	29.68	177	125	
d Weybridge (St. Michael's)	H. I. Bond, Esq.	5	1 0	115	..	29.50	186	132	
d Weybridge (Heath Field)	Miss A. T. Gardiner	5	1 0	100	..	30.49	..	120	
d Addlestone	W. V. Davies, Esq., C.E.	8	1 0	42	..	30.24	187	127	
d Weybridge (Oil Mills)	A. Whittet, Esq.	5	1 0	36	24.1	29.84	182	124	
7.—THAMES—Bourne. 55 sq. mi.									
d Knap Hill (Ulundi)	G. C. H. Simmonds, Esq.	5	1 0	180	..	34.10	165	138	
d Knap Hill Nurseries	Donald Waterer, Esq.	5	1 0	118	..	30.51	179	127	
d Chobham (West End)	F. A. Walter, Esq.	5	1 0	150	..	32.43	195	136	
d Bagshot (Charlton)	W. Perry, Esq.	5	0 10	215	..	32.17	..	127	
d Bagshot	J. Waterer Sons & Crisp, Ltd.	5	1 0	265	..	32.59	..	..	
d Windlesham (Windlesham Ho.)	R. Adml. A. Cochrane, C.M.G.	5	1 0	200	..	32.22	189	136	
d Upper Childown (Long Cross H.)	Miss C. M. Leycester-Penrhyn	5	1 0	220	..	32.96	215	139	
d Sunningdale (Hilltop)	E. F. Cecil, Esq.	5	1 0	280	..	31.70	161	127	
d Chertsey	W. V. Davies, Esq., C.E.	8	1 0	39	..	29.41	169	124	
d Chertsey (Abbey Meads)	J. Dalrymple, Esq., C.E.	8	1 0	53	..	29.24	168	124	
d Virginia Water (S. Ann's Heath)	H. Y. Summons, Esq.	8	1 1	80	25.4	34.00	177	134	
d Englefield Green (Harvest Rd.)	H. Fermor, Esq.	5	1 3	205	..	31.61	185	130	
d Egham (Water Works)	S. W. Suburban Water Co.	8	0 3	55	..	30.11	171	122	
8.—THAMES—Loddon. 17 sq. mi.									
d Frimley Green (Ridgemount)	C. C. Haviland, Esq.	5	0 9	350	29.1	34.56	200	131	
d Camberley (Way's End)	E. Ernest Green, Esq.	5	0 11	295	..	34.22	173	136	
d Camberley (The Holt)	Sir Henry Scott-Smith	5	0 6	350	..	32.84	180	143	
d Camberley (Cordwalles)	C. H. Ledward, Esq.	5	1 0	400	..	30.52	179	127	

\* Per Surrey Advertiser.

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STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			Average Rain-fall.	1937.		
			Height of Rim above Ground.	Ground above Sea Level.			Rain-fall.	Days with or more.	Days with or more.
KENT. (Area, 1,532 sq. mi.)			in.	ft. in.	ft.	in.	in.		
1.—ROTHER & C. 217 sq. mi.									
D DUNGENESS (Lighthouse).....	Chief Officer R.N. Sig. Stn.(M.O.).	8	0 11		20	24.4	31.88	165 138	
D Lydd (Westbroke House).....	A. G. Finn, Esq., J.P.	5	1 0		10	..	32.30	157 122	
D Dymchurch (Hoores).....	Mrs. Paddock	5	1 0		9	..	31.03	150 117	
D Appledore (The Well House).....	Dr. F. W. Cock	5	1 5		23	..	38.22	165 133	
d Hawkhurst (Moor House).....	F. S. Springett, Esq.	5	1 0		208	..	35.99	.. 124	
D Hawkhurst (Hensill).....	Mrs. F. Ross Thomson	5	1 0		280	30.5	36.09	173 121	
D Kenardington (The Firs).....	Cmdr. F. H. Lyon, D.S.O.	5	1 2		65	..	34.33	182 141	
D Tenterden (Ashenden).....	T. C. Norris, Esq.	5	1 0		190	27.5	36.33	171 144	
D Hythe.....	M. J. Harvey, Esq., C.E.	5	0 9		12	28.0	36.43	175 142	
D Hythe (Douglas Avenue).....	W. H. Elder, Esq.	5	1 9		33	..	34.30	176 136	
d Hythe (Sandling Park).....	Capt. A. E. Hardy	8	1 0		260	30.4	38.38	.. 147	
D Saltwood (Cylinder).....	Miss M. Lethbridge	5	1 0		230	..	37.26	186 150	
D Tenterden (St. Michael's).....	E. F. Amos, Esq.	5	1 0		192	..	35.57	215 140	
D FOLKESTONE (Isolation Hospital)†	Borough Engineer	5	1 0		101	28.6	39.66	179 137	
D Folkestone (Cherry Gardens).....	Folkestone W. W. Co.	5	1 6		230	29.1	40.77	184 156	
D Alkham (Lower Standen).....	Folkestone W. W. Co.	5	2 11		250	..	39.56	171 142	
D DOVER (Waterloo Crescent) (+A).	W. B. Smith, Esq., C.E.	8	1 0		19	..	41.36	178 136	
D Dover (Waterworks).....	W. B. Smith, Esq., C.E.	5	1 6		200	30.0	43.17	158 135	
d Dover (Buckland).....	Guy Mannering, Esq.	8	1 6		50	..	44.29	.. 129	
D Kearsney (Chilton Farm).....	W. B. Smith, Esq., C.E.	5	1 6		127	33.5	45.68	174 152	
2.—STOUR & C. 386 sq. mi.									
D LYMPNE (Airport).....(+ A)	Meteorologist-in-Charge	8	1 0		346	28.5	34.00	189 140	
D Sellindge (Council School).....	S. H. Serpell, Esq.	5	1 0		200	..	36.73	174 145	
D Lyminge (Elham Valley W.W.) ..	Phillip Harris, Esq.	5	1 6		445	..	40.85	184 152	
D Ashford (Gas Works).....	L. G. Kimmins, Esq.	5	0 11		125	..	36.87	181 140	
D Ashford.....	B. H. Headley, Esq.	5	1 0		190	..	39.20	193 145	
D Ashford (Albert Road).....	A. E. Brounger, Esq.	5	1 0		185	..	38.12	187 141	
D Ashford (Belmore).....	J. W. Kennard, Esq.	5	1 0		200	..	37.75	168 137	
D Elham (Bladbean Farm).....	Capt. T. L. Wall	5	0 9		459	..	44.33	167 145	
D Dover (Martin Mill Pump. Stat.)..	F. L. Ball, Esq.	5	1 0		287	..	41.65	171 138	
d Elham (Domel).....	J. Hill, Esq.	5	1 3		450	..	43.62	.. ..	
D WYE (Agricultural College).....	S.E. Agric. College	5	1 0		164	..	38.29	179 136	
D Waldershare Rectory.....	Rev. H. Saumarez Smith	5	1 0		275	..	43.59	189 142	
D Waldershare Park Gardens.....	J. Haggett, Esq.	8	1 0		250	33.2	43.24	179 152	
D Shepherdswell (Upton Lodge).....	Rutley Mowll, Esq.	5	1 0		300	..	43.73	205 145	
D Boughton Aluph(TheGlebeHouse)‡	E. Simmons, Esq.	5	1 3		220	..	37.80	186 142	
D Charing Pumping Station.....	F. L. Ball, Esq.	5	1 0		295	..	34.44	170 138	
D Charing (Pett Place).....	Brig.-Gen. T. M. S. Pitt	5	1 0		300	..	39.07	174 142	
D Deal and Walmer W.W.....	W. Mantle, Esq.	5	1 0		110	28.0	38.61	168 136	
D Barham (Old House).....	L. S. Osmaston, Esq.	5	0 9		175	..	40.53	182 148	
D Barham House.....	Col. R. G. Clarke	5	0 9		194	..	40.71	179 146	
D Barham Pumping Station.....	F. L. Ball, Esq.	5	..		173	..	40.20	175 138	
D DEAL (Wellington Road).....	The Town Clerk	5	1 0		25	..	30.25	150 119	
D Worth (Upton House).....	Capt. W. Elwin Napier	5	1 0		32	27.7	39.35	166 139	
D Worth (Felder Lodge).....	J. S. Campbell, Esq.	5	0 10		26	..	37.19	184 144	
D Wingham (Margate W.W.).....	Mr. J. H. Parker	5	1 0		138	28.7	37.34	178 134	
D Chilham (Lower Ensdon).....	F. Ivo Neame, Esq.	5	3 0		305	..	38.59	171 140	
D Wingham Boys' School.....	The Headmaster	5	1 0		55	..	34.19	149 126	
D Canterbury (Old Dover Ho.).....	Legh S. Powell, Esq.	5	1 1		70	..	33.75	147 125	
D CANTEBURY (St. Keyne).....	A. Lander, Esq.	5	1 0		135	..	34.00	162 130	
D Canterbury (London Road).....	Miss B. Spillett	5	1 0		66	28.7	35.81	168 135	
D Canterbury (Irrigation Works).....	The Manager	5	2 6		15	27.5	35.59	177 133	
d Canterbury (Rough Common).....	R. W. Wood, Esq.	5	1 0		285	..	36.56	.. 133	
D RAMSGATE (East Cliff).....(+ A)	Borough Engineer	8	1 0		80	24.0	32.53	168 127	
D Ramsgate (Archer House).....	Miss M. A. G. Saunders	5	1 0		75	..	34.70	171 134	
D MANSTON (Aerodrome).....(+ A)	Meteorological Officer	8	1 0		142	..	32.92	177 124	
D Reculver.....	Allington Collard, Esq.	5	5 2		27	21.8	30.08	147 122	
D Broadstairs (Domus).....	Capt. W. B. Marling	8	1 0		60	..	33.68	154 135	
D Broadstairs (Collis Court Road) ..	The late A. Watkins, Esq.	5	1 0		120	..	33.42	166 132	

† Station formerly called FOLKESTONE (Borough Sanatorium). ‡ Station formerly called Boughton Aluph (Fairlawn).

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Rain-fall.	Days with or more.	Days with or more.
			Rim	Ground					
			above	above					
			Ground.	Sea Level.					
KENT—(con.).									
		<i>in.</i>	<i>ft.</i>	<i>in.</i>	<i>ft.</i>	<i>in.</i>	<i>in.</i>		
2.—STOUR & C.—(con.)									
d St. Peter's (Hildersham House) . . .	The Surveyor . . . . .	5	0	9	145	23·7	32·75	147	123
d Birchington (Hollydene) . . . . .	W. Tomlin, Esq., Junr. . . . .	5	6	0	75	..	31·57	137	114
d MARGATE (Cliftonville) . . . . .	The Town Clerk . . . . .	5	1	0	51	22·8	30·17	161	118
3.—SWALE & C. 167 sq. mi.									
d Selling (Grove House) . . . . .	F. Ivo Neame, Esq. . . . .	5	1	5	330	..	37·28	163	123
d Selling (Luton) . . . . .	F. Ivo Neame, Esq. . . . .	5	4	9	300	30·4	38·43	164	137
d Sittingbourne (Torry Hill) . . . . .	D. Leigh Pemberton, Esq. . . . .	5	1	0	497	..	40·08	176	136
d Faversham (Water Wks.) . . . . .	The Engineer & Manager . . . . .	8	1	6	130	..	35·14	182	134
d Ospringe (Queen Court) . . . . .	L. H. Finn, Esq. . . . .	8	1	3	50	..	35·40	152	114
d Ospringe (Lorenden) . . . . .	L. H. Finn, Esq. . . . .	5	1	6	175	..	35·60	168	135
d Faversham (Portway) . . . . .	C. Gordon Neame, Esq. . . . .	5	3	6	180	..	35·73	174	134
d Teynham (Norton Court) . . . . .	A. L. Mercer, Esq. . . . .	5	1	6	90	..	36·63	174	130
d Teynham (New Gardens) . . . . .	Mrs. Honeyball . . . . .	5	1	5	30	24·5	33·47	173	129
d Graveney Marshes . . . . .	L. H. Finn, Esq. . . . .	8	2	3	6	..	31·85	..	125
d Milton Regis (Sewage Works) . . . . .	Sittingbourne U.D.C. . . . .	5	1	1	19	..	30·52	152	119
d Herne Bay (Waterworks) . . . . .	J. Roberts, Esq. . . . .	5	1	6	130	22·8	32·59	..	..
d HERNE BAY (St. Anne's Home) . . . . .	The Surveyor . . . . .	5	1	0	21	..	31·59	165	126
d Eastchurch (Barnland) . . . . .	A. Beal, Esq. . . . .	5	1	0	180	..	31·54	..	113
d Sheerness . . . . .	Dr. W. C. D. Hills . . . . .	5	1	0	9	..	30·09	..	117
4.—MEDWAY, 506 sq. mi.									
d GOUDHURST (Bedgebury Forest) . . . . .	Forestry Commission . . . . .	5	1	0	290	..	40·47	192	141
d Goudhurst (Bedgebury Pk. Gdns.) . . . . .	Mr. H. Arnold . . . . .	5	1	0	280	..	40·75	..	141
d Kildown School . . . . .	The late J. A. Ager, Esq. . . . .	5	1	6	365	..	37·65	186	134
d Scotney Castle . . . . .	E. W. Hussey, Esq. . . . .	5	3	9	203	26·8	34·35	177	133
d Cranbrook (Little Glassenbury) . . . . .	J. I. Stirling, Esq. . . . .	5	0	10	360	..	39·63	182	138
d Lanherthurst (Bayham Abbey) . . . . .	Mr. G. J. Miller . . . . .	5	1	0	250	..	42·06	177	154
d High Halden (Middle Quarter) . . . . .	Mrs. J. E. Budding . . . . .	5	0	11	114	..	34·30	..	..
d Goudhurst (Gore Court) . . . . .	J. A. Druce, Esq. . . . .	5	1	0	197	30·3	35·63	179	135
d Tunbridge Wells (Hawkenbury) . . . . .	D. W. Horner, Esq. . . . .	5	1	6	435	..	39·05	175	145
d Tunbridge Wells (Rustall Grange) . . . . .	Mrs. Robins . . . . .	5	1	0	440	..	39·09	166	139
d Tunbridge Wells (Langton Green) . . . . .	Miss E. M. Pott . . . . .	5	1	0	400	..	39·92	212	145
d TUNBRIDGE WELLS (Calverley Pk.) . . . . .	Medical Officer of Health . . . . .	5	1	0	351	..	36·52	173	138
d Tun. Wells (The White House) . . . . .	Miss Monica G. Robins . . . . .	5	1	6	300	..	40·29	175	153
d Matfield (Kings Mead) . . . . .	Henry Hills, Esq. . . . .	5	1	4	390	..	38·18	161	134
d Brenchley (The Warren) . . . . .	Capt. Carl Langer . . . . .	5	0	6	275	..	37·30	181	139
d Speldhurst Rectory . . . . .	Rev. Canon H. Masters . . . . .	5	0	10	334	..	39·41	173	140
d Pembury (The Spring) . . . . .	Miss A. P. Fowler . . . . .	5	1	0	416	..	38·45	178	152
d Pembury Waterworks . . . . .	H. P. Bishop, Esq., C.E. . . . .	8	0	5	197	..	36·65	175	138
d Markbeece (Edells) . . . . .	Miss M. F. Pearse . . . . .	5	1	0	320	..	38·55	193	144
d Edenbridge (Falconhurst) . . . . .	Hon. Mr. Justice Talbot . . . . .	5	1	6	375	30·7	39·13	185	153
d Edenbridge (Stonewall Pk.) . . . . .	Lt.-Col. E. R. Meade-Waldo, D.S.O. . . . .	5	1	1	344	..	39·89	167	144
d Edenbridge (Gilridge) . . . . .	J. Mavrogordato, Esq. . . . .	5	1	0	400	..	38·79	181	143
d Edenbridge (Hever Castle) . . . . .	Mr. A. McCutcheon . . . . .	5	1	0	200	..	38·14	183	139
d Headcorn (Upalong) . . . . .	R. S. Hartree, Esq. . . . .	5	1	0	100	..	34·06	183	136
d Pluckley (Brick Works) . . . . .	Guy G. Davies, Esq. . . . .	5	1	6	112	..	33·13	(202)	(138)
d Penshurst Place . . . . .	Lord De Lisle & Dudley . . . . .	5	1	6	120	..	37·78	184	137
d Edenbridge (Skeynes) . . . . .	B. Walmsley, Esq. . . . .	5	1	3	200	..	38·53	165	140
d Tonbridge (Mabledon Park) . . . . .	J. F. W. Deacon, Esq. . . . .	5	1	0	190	..	37·31	182	136
d Hildenborough (Gales) . . . . .	E. E. Roper, Esq. . . . .	5	1	0	159	..	39·69	168	148
d Hildenborough (Hollenden Ho.) . . . . .	C. H. Scott, Esq. . . . .	8	1	0	99	..	38·56	197	139
d Hildenborough (Old School Cot.) . . . . .	J. S. Roper, Esq. . . . .	5	1	0	275	..	37·62	184	148
d East Peckham (Woodbine) . . . . .	W. H. Pearson, Esq. . . . .	8	1	0	48	..	33·90	177	136
d Langley (Rumwood Court) . . . . .	Mr. W. J. Gould . . . . .	5	1	9	354	..	37·26	197	149
d Lenham . . . . .	D. F. Tysoe, Esq. . . . .	5	1	6	400	..	38·91	174	142
d Nettlestead (Old Quarry) . . . . .	W. Pye-English, Esq. . . . .	5	1	0	286	..	36·51	205	149
d Otham (Synyards) . . . . .	Ambrose Boyson, Esq. . . . .	5	1	0	315	..	37·90	219	142
d Sevenoaks (River Hill) . . . . .	Lt.-Col. J. M. Rogers, D.S.O. . . . .	5	2	0	500	30·0	39·11	..	150
d Sittingbourne (Penn Court) . . . . .	S. Lucy, Esq. . . . .	5	1	1	261	..	39·91	185	151
d Maidstone W.W. (Barming) . . . . .	C. H. Harden, Esq., C.E. . . . .	5	1	4	245	..	32·95	179	137



## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain-fall.	1937.		
			Height of Rim above Ground.	Ground above Sea Level.		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
						in.		
KENT—(con.).						tn.	ft.	in.
4.—MEDWAY—(con.).								
d Maidstone (Mill Street).....	T. F. Bunting, Esq.....	8	6	0	37	..	33·53	199 141
d Maidstone (Brenchley Gardens) ..	T. F. Bunting, Esq.....	5	0	9	49	..	33·93	182 143
d East Malling (Belvidere) .....	O.I.L. Bird, Esq.....	5	1	9	250	..	36·27	177 138
d EAST MALLING (Research Station) ..	The Principal .....	8	1	0	132	..	33·60	176 133
d Maidstone (Allington Lock) .....	Mr. A. H. Reed .....	5	1	0	20	..	31·56	157 131
d Aylesford (Forstal House) .....	G. L. Garratt, Esq.....	5	1	4	18	..	33·23	180 135
d Aylesford (Forstal P. Stn.) .....	C. H. Harden, Esq., C.E. ....	5	1	4	20	..	33·14	176 134
d Detling (The Croft) .....	R. Cooke, Esq.....	5	1	0	330	27·8	38·15	203 146
d Trottscliffe Pumping Station† .....	F. L. Ball, Esq.....	5	1	8	250	..	36·44	161 137
d Maidstone W.W. (Boxley) .....	C. H. Harden, Esq., C.E. ....	5	1	0	286	..	35·80	174 135
d Chatham (Woolmans Wood) .....	W. Coles Finch, Esq., C.E. ....	5	3	0	470	..	35·30	162 136
d Halling Pumping Station .....	F. L. Ball, Esq.....	5	1	0	75	..	32·83	.. 137
d Chatham (Nashenden P.S.) .....	W. Coles Finch, Esq., C.E. ....	5	0	9	125	..	34·08	167 131
d Chatham (Luton W.W.) .....	W. Coles Finch, Esq., C.E. ....	5	3	0	88	..	34·57	168 133
d Rainham (Motney Hill) .....	J. B. Harvey, Esq.....	5	1	0	28	..	32·17	162 127
d Rochester (Deanery Gate) .....	Warwick Stunt, Esq.....	5	1	6	50	..	31·80	157 125
d Strood Waterworks .....	(+A) W. Law, Esq., C.E. ....	5	1	0	112	..	32·11	157 127
d Stoke Vicarage .....	Rev. A. E. Ottaway .....	5	0	10	80	..	29·58	163 122
5.—THAMES—Darent & c. 256 sq. mi.								
d Westerham Town .....	Met. Water Board .....	5	1	0	380	..	38·73	(188) (144)
d Westerham Hill Pumping Stat.....	Met. Water Board .....	5	1	0	539	..	40·46	191 149
d Sundridge Pumping Stn. ....	Met. Water Board .....	5	1	0	270	..	36·31	161 141
d Sevenoaks (Knole Park) .....	The Head Gardener .....	5	1	0	500	..	38·46	175 145
d Sevenoaks (Oak Lane) .....	E. H. Evans, Esq.....	8	1	6	428	..	39·42	.. 142
d Tatsfield (Betsoms Hill) .....	Met. Water Board .....	5	1	0	820	..	42·34	(191) (152)
w Seal (Oak Bank Reservoir) .....	E. H. Evans, Esq.....	8	1	3	548	..	39·69	.. ..
w Seal (St. Lawrence Reservoir) .....	E. H. Evans, Esq.....	8	1	3	665	..	38·19	.. ..
w Seal (Kemsing Pumping Stn.) .....	E. H. Evans, Esq.....	5	1	3	292	..	38·63	.. ..
d Sevenoaks (Chevening Gardens) ..	The Head Gardener .....	5	1	0	360	..	41·86	189 148
d Knockholt (Kent Waterworks) .....	Met. Water Board .....	5	1	0	785	29·9	42·59	(194) (154)
w Sevenoaks (Polhill Res.) .....	E. H. Evans, Esq.....	5	1	0	369	..	35·21	.. ..
d BIGGIN HILL (Aerodrome) .....	Assistant-in-Charge .....	8	1	0	567	31·4	38·25	189 142
d Chelsfield (Hewitts) .....	W. A. Waring, Esq.....	5	4	0	476	..	36·32	178 133
d Shoreham (Highfield) .....	Sir Herbert B. Cohen, Bart., O.B.E. ....	5	0	9	650	..	39·73	161 135
d West Wickham (Pumping Stn.) .....	Met. Water Board .....	5	1	0	240	..	32·27	164 131
d Eynsford Pumping Station .....	Met. Water Board .....	5	1	0	100	..	35·77	173 134
d Eynsford Hill .....	Arthur Mee, Esq.....	5	1	0	358	..	34·57	194 140
d Orpington (Kent Waterworks) .....	Met. Water Board .....	5	1	0	220	..	36·25	176 141
d W. Wickham (Woodland Way) .....	D. A. Worthington, Esq. ....	5	0	9	325	..	34·31	(204) (135)
d Crockenhill (Wested Farm) .....	A. T. Miller, Esq.....	5	1	6	331	..	34·95	.. ..
d Cobham (Crossways) .....	Miss F. H. Pye .....	5	3	0	320	..	34·80	179 134
d Horton Kirby (Court Lodge) .....	W. Rogers, Esq.....	5	1	0	30	..	31·23	.. ..
d Nurstead (Downs Road W.W.) .....	Gravesend & Milton W.W.Co. ....	8	1	0	164	..	33·32	183 133
d Bickley (Farrants) .....	Miss Chalmers .....	5	1	0	250	25·9	34·72	167 133
d Swanley (Glasshouse Dem. Stn.) ..	W. Corbett, Esq.....	5	1	3	265	..	32·92	190 124
d Beckenham (Park Langley) .....	G. H. Preston, Esq.....	5	1	0	210	..	31·55	164 128
d Bromley (Sundridge Avenue) .....	Dr. H. Wynne Thomas .....	5	1	0	270	24·7	31·64	.. ..
d BROMLEY .....	(+A) Borough Engineer .....	5	1	0	213	24·2	30·80	168 126
d Beckenham (Croydon Rd.) .....	(+A) Borough Engineer .....	8	1	0	110	..	30·82	179 133
d Penge (Recreation Ground) .....	H. W. Longdin, Esq., C.E. ....	5	1	1	122	24·6	28·45	.. 130
d Anerley (Oakfield Road) .....	Miss S. Stannard .....	5	1	5	180	..	28·78	157 131
d Chislehurst (Hawkwood) .....	Miss M. C. Edlmann .....	5	0	10	300	..	33·50	154 135
d Chislehurst (Holbrook Lane) .....	W. P. Jones, Esq.....	5	1	0	325	25·1	31·83	.. ..
d Chislehurst (Scadbury Park) .....	Mr. B. Orchard .....	5	1	0	250	24·6	31·12	176 128
d Swanley (Horticultural College) ..	The Principal .....	5	1	0	155	..	31·18	171 125
d Southfleet (Hook Place Farm) .....	J. Barker, Esq.....	5	1	0	100	..	32·20	.. 124
d Southfleet (Kent Waterworks) .....	Met. Water Board .....	5	1	0	82	..	31·08	168 127
d Wilmington (Kent Waterworks) .....	Met. Water Board .....	5	1	0	25	..	31·04	166 124
d New Eltham .....	G. E. Dacey, Esq.....	5	1	0	157	..	31·18	184 127

† Station formerly called Trosley Pumping Station.

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Aver-		Rain-	Days	Days
			Rim	Ground	age		fall.	with	with
			above	above	Rain-			·01 in.	·04 in.
			Ground.	Sea Level.	fall.			or	or
								more.	more.
KENT—(con.).			in.	ft. in.	ft.	in.	in.		
<b>5.—THAMES—Darent &amp; c.—(con.).</b>									
d Stone (City of Lond. Ment. Hosp) . . . . .	A. W. Fletcher, Esq. . . . .	5	1	2	115	..	29·52	170	124
d Bexley Heath (Danson Park) . . . . .	(+A) The Surveyor . . . . .	5	1	6	161	..	26·75	165	119
d Dartford (Sewage Works) . . . . .	The Resident Engineer . . . . .	5	1	0	14	..	29·36	169	122
d Erith Sanatorium . . . . .	Erith U.D.C. . . . .	5	1	0	182	..	28·71	170	131
d Erith (Sewage Works) . . . . .	Erith U.D.C. . . . .	5	1	0	13	..	27·65	158	117
d Erith (St. Joseph's Convent) . . . . .	Erith U.D.C. . . . .	5	1	0	213	..	26·52	140	110
d Higham Waterworks . . . . .	C. H. Clark, Esq. . . . .	8	1	0	141	..	29·75	179	128
d Erith (Crossness) . . . . .	London County Council . . . . .	14	0	6	16	20·8	25·92	160	115
SUSSEX. (Area, 1,458 sq. mi.)									
<b>1.—LAVANT &amp; C. 175 sq. mi.</b>									
d Bognor Regis (Greenways Sch.) . . . . .	D. S. Hancock, Esq., F.R.Met.S. . . . .	5	1	0	25	..	32·27	162	126
d Bognor Regis (Waterloo Square) . . . . .	The Town Clerk . . . . .	8	1	0	24	25·9	32·96	161	129
d Bognor Regis (Albert Road) . . . . .	W. L. Guernonprez, Esq. . . . .	8	1	0	17	..	32·16	179	130
d North Mundham Vicarage . . . . .	Rev. A. F. H. Outram . . . . .	5	0	9	0	..	38·08	174	133
d Merston (Abelands) . . . . .	Miss V. Kennard . . . . .	5	1	0	24	..	36·40	157	126
d Bosham (Cobnor) . . . . .	Major S. W. P. Beale . . . . .	5	1	6	12	..	35·39	167	128
d Chidham (Chidmere) . . . . .	H. Ll. Baxendale, Esq. . . . .	5	1	0	14	..	33·22	158	124
d Chidham P. School . . . . .	The Headmaster . . . . .	5	1	0	10	..	34·13	162	127
d Bosham (Council School) . . . . .	The Headmaster . . . . .	5	1	2	20	..	34·09	162	138
d Chichester (Apuldram) . . . . .	S. J. K. Eames, Esq. . . . .	5	0	10	14	..	32·01?	154	127
d Chichester (Kingsham Farm) (R) . . . . .	W. Lawson, Esq. . . . .	8	0	10	35	..	35·00	190	131
d Chichester (West Street) . . . . .	Dr. W. Dick . . . . .	5	1	0	40	..	35·03	151	126
d Chichester (County Hall) . . . . .	D. Farr, Esq. . . . .	5	1	0	45	..	35·07	..	..
d Chichester (Oakwood House) . . . . .	Mrs. Baring Du Pre . . . . .	5	1	0	101	..	36·73	..	129
d Emsworth (Westbourne)† . . . . .	W. M. Christy, Esq. . . . .	5	1	0	40	..	34·90	163	132
d Boxgrove (Strettington Ho.) . . . . .	Mrs. W. J. R. Wingfield . . . . .	5	1	0	95	..	33·35	188	125
d Funtington House . . . . .	J. A. Greenwood, Esq. . . . .	5	1	0	95	..	36·25	188	143
d Chichester (Goodwood Gardens) . . . . .	Duke of Richmond & Gordon . . . . .	5	1	1	133	..	37·83	171	134
d Emsworth (Stansted Park) . . . . .	Earl of Bessborough . . . . .	5	2	6	140	..	40·77	210	147
d Emsworth (Watergate House) . . . . .	W. M. Christy, Esq. . . . .	5	1	0	222	..	40·78	167	138
d West Dean Park . . . . .	W. A. Mackenzie, Esq. . . . .	5	1	0	190	..	42·69	..	148
d Chilgrove House . . . . .	E. L. Woods, Esq. . . . .	5	1	0	266	35·0	40·72	161	133
d Compton (Compton House) . . . . .	Miss K. B. Langdale . . . . .	5	1	0	263	36·6	42·31	182	140
<b>2.—ARUN. 285 sq. mi.</b>									
d LITTLEHAMPTON (Met. Station) . . . . .	Clerk to the U.D.C. . . . .	5	1	0	15	..	33·51	168	133
d Rustington (Bracondale Nurs.) . . . . .	J. Muir, Esq. . . . .	5	0	10	30	..	33·48	..	121
d Lyminster Vicarage . . . . .	Rev. Dr. S. P. Duval . . . . .	5	1	6	20	..	31·91	171	136
d Arundel (Cross Bush) . . . . .	Miss M. Orme . . . . .	5	1	3	125	..	33·80	186	136
d Patching Farm . . . . .	Michael Drewitt, Esq. . . . .	5	1	0	180	30·8	34·35	163	133
d Arundel Castle . . . . .	The Duke of Norfolk . . . . .	5	1	0	106	..	35·58	171	137
d Bury (Rover's Cottages) . . . . .	C. P. Gates, Esq. . . . .	5	1	0	70	..	40·25	225	137
d Harting (Down Place) . . . . .	R. G. Blackwell, Esq. . . . .	5	1	2	401	..	43·56	..	135
d Storrington (Greyfriars) . . . . .	Capt. J. R. Abbey . . . . .	5	1	0	250	..	37·87	174	134
d Storrington (Badgercroft) . . . . .	P. Herington, Esq. . . . .	5	0	6	250	..	41·76	182	146
d Storrington Rectory . . . . .	Mrs. Faithfull . . . . .	5	1	1	150	..	37·63	176	137
d Bignor . . . . .	Major G. B. Hill . . . . .	5	1	0	175	..	42·06	..	..
d Pulborough (Parham) . . . . .	Hon. Clive Pearson . . . . .	5	1	6	98	..	38·10	164	134
d Pulborough (Nutbourne) . . . . .	Mrs. Burney Young . . . . .	5	1	3	100	..	35·34	..	127
d Pulborough (Codmore Hill) . . . . .	Rev. C. Ash . . . . .	5	2	0	165	..	37·21	195	151
d Petworth (Byworth) . . . . .	Major B. J. M. Bebb . . . . .	5	0	9	130	..	42·11	162	143
d Midhurst (June Lane)† . . . . .	H. R. Amooore, Esq. . . . .	5	1	0	135	..	39·86	172	129
d Petworth Park Gardens . . . . .	Lord Leconfield . . . . .	5	1	0	182	..	41·30	..	129
d Tillington (Westmoor) . . . . .	Mrs. Randall . . . . .	5	1	0	200	..	41·08	187	148
d Midhurst (Fairview) . . . . .	Miss P. Eames . . . . .	5	1	0	200	..	40·97	185	139
d Tillington (River House) . . . . .	Hon. Lady Cunliffe, C.B.E. . . . .	5	1	0	230	..	39·31	..	..
d Rogate (Durford Wood) . . . . .	Mrs. A. M. Kennion . . . . .	5	0	9	400	..	45·43	..	..

† Gauge moved 1 mile W. from Woodmancote in January 1937. † Station formerly called Midhurst (Peachey House).

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
				Height of	Average	Rain-	Days	Days
				Rim Ground	age	fall.	with	with
				above above	Rain-		·01 in.	·04 in.
				Ground. Sea Level.	fall.		or	or
							more.	more.
SUSSEX—(con.).			in.	ft.	in.	ft.	in.	
2.—ARUN—(con.).								
d Rogate (Old Copse).....	Miss E. Barton.....	5	1	0	500	..	41·79	(176) (137)
d Kirdford (Brownings).....	B. de F. Osmaston, Esq.....	5	2	0	100	..	36·28	171 136
d Kirdford (Hills Green).....	L. Baker, Esq.....	5	1	0	130	..	34·87	162 133
d Petersfield (Durford Heath).....	Miss H. E. Cohen, O.B.E.....	5	1	0	450	..	42·38	.. 128
d Liss (Hill Brow).....	F. W. Beckford, Esq.....	5	1	0	488	..	43·32	192 143
d Horsham (Whites Bridge).....	C. G. Atkinson, Esq.....	5	1	0	139	..	37·05	180 133
d Lower Beeding (The Warren).....	Leicester M. Reed, Esq.....	5	0	10	430	..	36·75	170 140
d Horsham (Christ's Hospital).....	Major Gabriel Green, M.C.....	5	1	0	160	..	31·83	155 127
d Horsham (Tower Hill).....	Mrs. C. Marsh.....	5	1	0	220	..	34·29	189 132
d Horsham (Sewage P.S.).....	C. G. Atkinson, Esq.....	5	1	0	118	..	35·43	189 135
d Horsham (Wimblehurst).....	Miss E. M. Allcard.....	5	1	0	195	30·0	35·77	179 136
d Rusper (The Nunnery).....	Sir Cecil J. B. Hurst, G.C.M.G.	5	1	6	260	..	37·03	180 139
3.—ADUR & C. 237 sq. mi.								
d Peacehaven.....	Commander W. S. Davenport	5	1	0	119	..	35·35	153 130
d Rottingdean School.....	Mr. T. A. Sandalls.....	8	1	0	120	..	35·61	167 136
d Rottingdean (Hillside).....	Admiral H. J. L. Clarke, C.B.E.	5	1	0	60	..	36·21	157 134
d WORTHING (Beach House Pk.) (+A)	Medical Officer of Health.....	8	1	0	25	27·5	31·59	162 133
d Shoreham (Parkside).....	E. C. Smith, Esq.....	5	1	0	80	..	34·00	160 137
d BRIGHTON (Old Steyne).....	Medical Officer of Health.....	5	1	0	32	28·1	32·87	158 132
d High Salvington (Hayling Rise).....	H. R. McCarthy, Esq.....	5	1	0	250	..	35·26	170 133
d Hove.....	Medical Officer of Health.....	5	1	6	27	..	31·22	159 133
d Hove (Park House).....	Guy Michell, Esq.....	5	1	0	120	..	35·47	167 147
d Hove (Old Shoreham Rd.).....	Chas. Modlen, Esq.....	5	0	11	145	..	37·41	173 142
d Lancing College.....	The Headmaster.....	5	1	0	120	..	33·06	172 135
d Brighton W.W. (Goldstone Bot.).....	A. B. Cathcart, Esq., C.E.....	8	1	0	142	..	34·86	171 138
d Brighton W.W. (Lewes Road).....	A. B. Cathcart, Esq., C.E.....	8	1	0	135	29·9	37·36	173 143
d Brighton W.W. (Shoreham).....	A. B. Cathcart, Esq., C.E.....	8	1	8	9	..	34·13	176 139
d Brighton W.W. (Mile Oak).....	A. B. Cathcart, Esq., C.E.....	8	1	3	166	..	35·38	171 136
d Brighton W.W. (Race Hill Res.).....	A. B. Cathcart, Esq., C.E.....	8	1	0	467	..	38·57	174 147
d Brighton W.W. (Balsdean P.S.).....	A. B. Cathcart, Esq., C.E.....	5	1	0	188	..	37·80	157 131
d Falmer (Brighton W.W.).....	A. B. Cathcart, Esq., C.E.....	8	1	3	200	..	39·75	179 140
d Patcham (Vale Avenue).....	G. Berry Hamlin, Esq.....	5	1	0	205	..	38·02	170 140
d Patcham (30, Vale Avenue).....	F. R. Hickley, Esq.....	5	1	0	201	..	39·36	166 141
d Patcham (Brighton W.W.).....	A. B. Cathcart, Esq., C.E.....	5	1	0	205	..	36·18	165 137
d Hassocks (Wilmington Lodge).....	C. T. Agar, Esq.....	5	1	0	200	..	37·94	163 138
d Hassocks (The Croft).....	Harold Taylor, Esq., M.A.....	5	1	0	200	..	40·02	160 137
d Keymer.....	J. Francis Jupp, Esq., C.E.....	5	2	0	150	..	37·93	160 140
d Henfield (Townmead).....	Miss H. Dixon Brown.....	5	1	0	100	..	35·50	189 136
d Hurstpierpoint (Brundall).....	R. E. Toombs, Esq.....	5	1	0	140	..	(35·72)	(171) (129)
d West Grinstead (Danefold).....	Miss T. Gaisford.....	5	1	0	130	..	34·82	177 134
d Coolham.....	C. E. Cleaves, Esq.....	5	1	0	80	..	35·75	167 128
d Billingshurst (Duncan's Farm).....	Miss Edith Beck.....	5	1	2	130	..	36·58	201 143
d Slinfold (Elmhurst Farm).....	Elmhurst Fmg. & Trdg. Co.....	5	0	10	200	..	37·96	175 153
4.—OUSE. 224 sq. mi.								
d Seaford (Bowden Ho. School).....	J. F. Thomas, Esq.....	5	1	0	190	..	32·84	163 130
d Seaford (Newlands).....	T. D. Manning, Esq., F.R.Met. S.	5	1	0	150	..	34·13	160 130
d SEAFORD.....	The Surveyor.....	5	1	0	45	..	32·36	166 130
d Newhaven (Poverty Bottom W.W.).....	F. B. Lumsden, Esq.....	8	1	0	51	..	37·38	176 140
d Lewes (Littledene).....	Mr. C. E. Gravett.....	8	1	6	58	..	37·70	.. ..
d Lewes W.W. (Kingston).....	J. T. P. Johnston, Esq.....	8	1	3	13	..	41·50	194 142
d Framfield (High Cross).....	Maj. R. L. Thornton, C.B.E.....	5	1	0	195	30·5	34·72	.. ..
d Newick (Piltown).....	A. C. Jeffery, Esq.....	5	2	4	150	..	38·50	.. ..
d Newick (Holly Grove).....	Mrs. A. K. Slessor.....	5	1	0	150	..	38·23	.. 141
d Uckfield (Lawrence Ho.).....	C. G. D. Hoare, Esq., M.A.....	5	1	6	125	..	38·19	184 144
d Uckfield House.....	Major G. Larnach-Nevill.....	5	0	10	200	..	34·73	.. 127
d Haywards H. (Abbots Leigh).....	C. Hales, Esq., J.P.....	5	1	0	250	..	36·44	171 137
d Haywards H. (Paddockhall Rd.).....	L. E. Hervey, Esq.....	5	1	0	260	..	38·41	181 139

§ Gauge possibly over exposed.

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
SUSSEX—(con.).		in.	ft. in.	ft.	in.	in.		
<b>4.—OUSE—(con.).</b>								
D Maresfield (Budletts) . . . . .	T. Hobden, Esq. . . . .	5	1 0	150	..	37·90	171	140
Buxted (Strawberry Hall) . . . . .	C. Rintoul, Esq. . . . .	5	1 0	180	30·5	36·81	166	..
D Lindfield (Sunte Avenue) . . . . .	E. A. W. Madge, Esq. . . . .	5	1 0	153	..	37·45	192	137
D Lindfield (The Common) . . . . .	R. H. Robertson, Esq. . . . .	5	1 6	180	..	41·43	188	143
D Uckfield (Fairwarp) . . . . .	Col. A. E. Barchard. . . . .	5	0 10	475	33·0	42·00	173	140
D Oldlands Hall. . . . .	(R) Sir B. Eckstein, Bart. . . . .	8	3 0	400	35·7	40·45	166	141
D Horsted Keynes (Holy Well P.S.) . . . . .	F. Martin, Esq. . . . .	8	1 9	124	..	37·66	168	141
Ardingly (Lywood House) . . . . .	Rev. H. J. Scott. . . . .	5	0 9	240	..	38·67	..	..
D ARDINGLY (Wakehurst Place) . . . . .	Sir Henry P. Price . . . . .	8	1 3	437	..	40·24	185	139
D Horsted Keynes (Birchgrove) . . . . .	Miss G. C. Price-Davies . . . . .	5	1 0	400	..	39·38	204	142
D Balcombe (Lullings) . . . . .	Mrs. M. Holland . . . . .	5	1 0	348	..	40·66	197	143
D Balcombe (Stockcroft) . . . . .	Dr. R. Newton . . . . .	5	1 1	341	..	40·63	190	132
D Balcombe (Waterworks) . . . . .	F. Martin, Esq. . . . .	8	1 0	467	..	41·18	184	140
D Balcombe (Highley Manor) . . . . .	Mr. B. T. Brooks . . . . .	8	1 6	420	..	42·68	187	143
D West Hoathly (Stonelands) . . . . .	J. Godwin King, Esq. . . . .	5	1 0	450	..	40·35	168	133
D Worth Priory† . . . . .	Rev. R. J. Stonor . . . . .	5	1 0	500	..	39·03	181	140
<b>5.—CUCKMERE &amp; C. 189 sq. mi.</b>								
D BEACHY HEAD (C. Guard Stn.) . . . . .	The Chief Officer (M.O.) . . . . .	8	1 0	502	..	37·30	176	136
D EASTBOURNE (Wilmington Sq.) (+A) . . . . .	Medical Officer of Health. . . . .	5	1 0	35	30·7	38·16	174	133
D Eastbourne (Arundel Road) . . . . .	Miss G. J. Woodd . . . . .	8	1 6	86	..	37·93	180	140
D Eastbourne (King's Avenue) . . . . .	Rev. G. G. Wilkinson . . . . .	5	1 0	120	..	40·81	184	142
D Friston (Water Tower) . . . . .	Eastbourne W.W. . . . .	5	1 0	389	..	40·50	179	147
D Friston . . . . .	Eastbourne W.W. . . . .	8	1 0	104	..	37·81	176	136
D Jevington . . . . .	Eastbourne W.W. . . . .	8	1 0	274	..	38·46	..	140
D Litlington . . . . .	Eastbourne W.W. . . . .	8	1 0	19	..	37·18	160	138
D Willington Sewage Farm . . . . .	Hailsham R.D.C. . . . .	5	1 0	24	..	39·45	165	140
D Alfriston (White Lodge) . . . . .	D. Morphew, Esq. . . . .	5	1 0	70	..	38·87	180	143
D Pevensey Pumping Station . . . . .	Hailsham R.D.C. . . . .	5	1 0	12	..	34·96	163	132
D Pevensey Bay Pumping Station . . . . .	Hailsham R.D.C. . . . .	5	1 0	7	..	36·80	165	136
D BEXHILL (EGERTON PARK) . . . . .	The Boro' Council (H. J. Sargent) . . . . .	8	1 0	12	26·3	35·52	166	130
D HASTINGS (White Rock) . . . . .	The Town Clerk . . . . .	5	1 0	149	..	37·20	168	136
D St. Leonards (Filsham W.W.) . . . . .	S. Little, Esq., C.E. . . . .	5	1 0	37	27·3	34·81	171	130
D Hailsham (North Street) . . . . .	R. Matthews, Esq. . . . .	5	1 3	105	30·0	37·90	199	145
D Hailsham (Magham Down) . . . . .	E. M. Bear, Esq. . . . .	5	1 0	90	28·4	36·40	166	137
D Hellingly (East Sx. Ment. Hos.) . . . . .	The Medical Superintendent . . . . .	5	0 7	140	..	38·28	180	137
D Hazards Green (Pumping Station) . . . . .	Bexhill W.W. . . . .	5	1 7	74	26·0	33·26	176	129
D Hastings (Beechwood) . . . . .	N. Lang Smith, Esq. . . . .	8	1 0	128	..	38·14	172	143
D Hastings (Newgate) . . . . .	S. Little, Esq., C.E. . . . .	8	1 0	243	27·5	38·66	168	135
D Hastings (Clive Vale) . . . . .	A. E. Moon, Esq., F.R.Met.S. . . . .	5	1 0	328	28·4	38·22	198	144
D Hastings (Halton Reservoir) . . . . .	S. Little, Esq., C.E. . . . .	5	1 0	294	28·6	37·46	175	140
D Hastings (Fairlight Reservoir) . . . . .	S. Little, Esq., C.E. . . . .	5	1 0	515	28·2	40·48	177	148
D Battle (Forewood W.W.) . . . . .	S. Little, Esq., C.E. . . . .	5	1 0	50	28·0	36·22	172	130
D Cowbeech (Pumping Station) . . . . .	Bexhill W.W. . . . .	5	1 7	100	..	34·74	152	127
D Bodle Street (Bucksteep Manor) . . . . .	Major G. P. Richardson . . . . .	5	1 0	235	..	36·86	173	134
D Horam (Coxlow) . . . . .	Miss P. C. Harrison . . . . .	5	1 0	260	29·7	37·19	178	136
D Warbleton (Church Farm) . . . . .	Mrs. D. Hook . . . . .	5	1 0	300	..	(37·43)	..	132
D Heathfield (Hailsham Road) . . . . .	Heathfield Growers . . . . .	5	1 0	350	..	39·47	168	129
D Heathfield (The White Cottage) . . . . .	J. F. Leigh Clare, Esq. . . . .	5	1 0	500	..	37·01	190	139
<b>6.—ROTHER. 194 sq. mi.</b>								
D Hastings (Fairlight, Machico) . . . . .	P.G. Lock, Esq., M.A., M.R.C.S. . . . .	5	0 8	100	..	36·68	170	137
D Battle (The White Cottage) . . . . .	Rev. E. J. Morgan . . . . .	5	1 0	320	32·3	39·19	191	140
D Brede Pumping Station . . . . .	S. Little, Esq., C.E. . . . .	8	1 0	26	28·3	37·09	157	130
D Battle (Netherfield) . . . . .	Thos. W. C. Terry, Esq. . . . .	5	1 0	420	32·2	40·90	195	152
D Udimore (The Wick) . . . . .	Major R. P. Mair . . . . .	8	1 0	92	27·1	40·22	157	129
D Camber (Home Farm) . . . . .	Mr. J. N. Baker . . . . .	5	0 8	15	..	37·00	173	141
D Rye (The Point) . . . . .	W. Gay, Esq. . . . .	5	1 0	120	..	39·05	177	141
D Brightling Park . . . . .	T. P. Tew, Esq. . . . .	5	1 0	545	34·1	40·73	196	139

† Station previously in Sussex—8.

§ Gauge possibly over exposed.

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain- fall.	1937.		
			Height of Rim above Ground.	Ground above Sea Level.		Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
in.	ft. in.	ft.	in.	in.				
SUSSEX—(con.).								
6.—ROTHER—(con.).								
d Robertsbridge (Davell Hall San.)	Medical Superintendent	5	3 0	100	29·1	34·96	121	
d Peasmarsh (Woodside)	A. W. Rickards, Esq.	5	0 8	100	30·1	42·19	165 144	
d Rye (Iden)	Admiral Sir Aubrey Smith	5	1 0	150	..	35·99	..	
d Northiam (Great Dixter)	Mrs. Lloyd	5	1 0	209	29·5	36·16	167 137	
d Burwash (Crowhurst Bridge)	Heathfield Dist. Water Co.	5	0 11	97	..	36·60	168 127	
d Mayfield (Berkeley Cottage)	Lt.-Col. A. H. Wolley-Dodd	5	1 0	450	..	37·34	158 130	
d Ticehurst (Stonegate)	W. J. Wheeler, Esq.	5	1 0	230	32·6	39·27	208 139	
d Tidebrook (Downgate)	The late Rev. E. P. Gatty	5	1 6	300	31·9	36·54	162 135	
7.—MEDWAY. 117 sq. mi.								
d Rotherfield (Horsegrove Fm.)	F. W. Shaw, Esq.	5	1 0	528	..	41·90	179 142	
d Crowborough (Harecombe)	W. Morrison, Esq.	5	1 0	680	..	41·44	194 146	
d Crowborough (Monkstown)†	R. W. Hunt, Esq.	5	1 3	700	..	(44·60)	(195) (146)	
d Crowborough (The Beacon)	A. R. Allcroft, Esq.	5	1 0	796	..	44·84	.. 157	
d Tunbridge Wells (Cousley Wd.)	A. Wilkin, Esq.	5	1 0	416	..	36·90	181 140	
d Hartfield (Beechcroft)	Miss E. A. Foyster	5	1 0	370	..	44·52	204 145	
d Forest Row (Wirksworth)	L. Gibbs, Esq.	5	1 0	217	..	40·77	198 137	
d Turners Hill (The Old Manse)	Miss R. M. Ravenshaw	8	1 6	500	..	42·32	182 135	
d Frant (Hazelhurst)	I. W. Bennett, Esq.	5	1 0	450	..	41·61	182 137	
d Frant (Henley Lodge)	Rev. E. Malden	5	1 0	440	32·3	41·63	189 139	
d Frant (Eridge Castle)	Mr. A. Wilson	5	1 0	400	..	41·76	170 152	
d Frant (Highfield)	H. S. Eeles, Esq.	5	1 0	413	..	38·02	..	
d Groombridge (Crossways)	Capt. Darcy Gray	5	1 0	260	..	38·71	183 138	
d Hartfield (Bolebroke)	P. R. Mann, Esq.	5	1 0	175	..	40·68	173 141	
d Crawley Down (Grange Hill)	Miss L. T. A. Buckley	5	0 10	450	..	43·59	192 143	
d E. Grinstead (Brockhurst Obsy.)	The late F. J. Hanbury, Esq.	8	1 0	435	32·9	40·42	227 143	
8.—THAMES—Mole. 27 sq. mi.								
d Worth (Worth Lodge)	Miss M. C. Nix	5	1 0	340	31·9	39·54	200 138	
d Crawley (Orleton Lodge)	B. Longley, Esq.	8	1 0	260	..	36·61	.. 134	
9.—THAMES—Wey. 10 sq. mi.								
d Milland House	S. Thompson, Esq.	5	1 0	425	..	39·40	182 138	
d Liphook (Ripsley)	W. D. Bosanquet, Esq.	5	1 0	400	..	40·00	184 143	
HAMPSHIRE. (Area, 1,627 sq. mi.)								
1.—ISLE OF WIGHT. 150 sq. mi.								
d St. CATHERINE'S POINT (C.G. STN.)	Station Officer (M.O.)	8	0 8	150	27·8	35·82	169 144	
d Blackgang (H.M. Coastguard)	Mr. H. W. Hawkes	5	1 0	420	27·9	37·16	154 133	
d VENTNOR (ROYAL NATIONAL Hos.)	The Matron	5	1 0	59	28·9	37·13	175 138	
d VENTNOR (Cemetery)	The Surveyor	5	1 0	445	29·5	37·65	171 142	
d Shanklin (Pomona Road)	The Town Surveyor	5	1 0	199	32·7	40·94	160 140	
d Brighstone (Pitt Place)	A. A. H. Wykeham, Esq.	5	1 7	200	..	36·16	167 136	
d SANDOWN (Sandham Gds.)	The Town Clerk	8	1 0	13	30·9	35·92	170 134	
d The Needles (Golf Club)	Mrs. Newnham	5	1 0	350	27·5	37·07	171 131	
d TOTLAND BAY (Aston House)	Hotel & Pier Co. (J. Dover)	8	1 0	144	28·5	38·58	177 137	
d Freshwater (Pumping Station)	J. Dover, Esq.	8	1 0	5	28·8	38·46	174 141	
d NEWPORT (The Mall)	Miss Morey	5	1 0	48	32·9	45·78	171 138	
d Ryde (West Street)	W. H. Salter, Esq.	5	1 0	170	30·7	38·45	175 140	
d Ryde (Buckland Grange)	Lt.-Col. Sir Hugh Daly	5	1 0	90	30·5	37·99	200 138	
d RYDE (Esplanade Gardens)	Borough Engineer	5	1 0	13	29·0	35·29	165 126	
d Wootton (Bridge House)	Miss A. Brodie	8	1 0	12	..	40·50	167 129	
d Wootton (Oak Lawn)	R. W. Hutton, Esq.	5	0 9	80	31·8	43·09	168 136	
d Osborne	The House Governor	5	1 0	127	..	45·36	185 140	
2.—STOUR. 37 sq. mi.								
d Bournemouth (East Cliff)	Miss M. Penrose, B.Sc.	8	1 0	120	..	36·93	180 131	
d BOURNEMOUTH (Vale View)	The Corp. A.C. Marsh, Esq. F.R.Met.S.	5	1 0	139	31·5	40·98	179 135	

† Station formerly called Crowborough (Beacon School). Gauge moved 1ml. S.E., November, 1937.

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
HAMPSHIRE—(con.).								
2.—STOUR—(con.).								
d Bournemouth (East Avenue) . . . . .	J. E. Hewitt, Esq. . . . .	5	1 0	142	28·6	40·42	172	134
d Bournemouth Talbot Woods) . . . . .	H. Constantine, Esq. . . . .	5	1 0	110	29·1	40·97	174	138
d Christchurch (Air Compressing Stn.) . . . . .	Borough Surveyor . . . . .	5	1 6	4	26·7	37·68	..	130
d Christchurch (Hurn Court) . . . . .	The Earl of Malmesbury . . . . .	8	1 3	19	32·2	39·78	183	145
d Kinson (Elmbrook) . . . . .	C. E. M. Pinney, Esq. . . . .	5	1 0	40	..	39·82	165	133
d Ringwood (Athol Lodge) . . . . .	S. O. Ferry, Esq. . . . .	5	1 0	60	..	40·02	184	147
3.—EAST AVON & C. 114 sq. mi.								
d Christchurch (Harrow Lodge) . . . . .	R. C. Bacon, Esq. . . . .	8	1 0	135	31·3	41·97	180	140
d Ringwood (Bisterne) . . . . .	Major J. D. Mills . . . . .	8	1 2	45	30·9	41·73	179	138
d Ringwood (Crow Hill) . . . . .	Mrs. H. F. Rawstorne . . . . .	5	1 0	250	30·2	37·58	182	134
d Ringwood (Hangersley) . . . . .	Col. E. G. St. Aubyn, D.S.O. . . . .	5	0 9	200	..	39·09	186	142
d Ringwood (Grey Friars) . . . . .	R. W. Christy, Esq. . . . .	5	1 0	50	28·4	38·45	..	129
d Ringwood (Linwood) . . . . .	Dr. F. H. Haines . . . . .	5	0 9	138	32·0	39·38	205	144
d Fordingbridge (Cuckoo Hill) . . . . .	Heywood Sumner, Esq. . . . .	5	1 0	150	32·5	39·85	203	149
d Fordingbridge (Dockens) . . . . .	E. W. Poore, Esq. . . . .	8	1 0	140	31·1	36·91	166	131
d Fordingbridge (Furze Hill) . . . . .	G. G. Smith, Esq. . . . .	5	0 5	150	..	40·50	179	145
d Fordingbridge (Oaklands) . . . . .	S. B. Rake, Esq. . . . .	8	1 0	135	31·7	37·51	180	141
4.—TEST & SOLENT. 551 sq. mi.								
d Milford-on-Sea (Farlights) . . . . .	Mrs. F. W. Brown . . . . .	5	1 0	50	..	38·25	168	137
d Lymington (The Salterns) . . . . .	P. A. Ouvry, Esq. . . . .	5	1 0	4	28·9	37·43	171	138
d Pennington Cross (Greenodd) . . . . .	Mrs. J. M. Reeves . . . . .	5	1 0	50	..	39·02	162	138
d Lymington (Wistaria) . . . . .	Major G. M. Harding . . . . .	5	1 0	70	29·4	39·36	173	135
d New Milton (Manor Rd.) . . . . .	A. J. Sturme, Esq. . . . .	5	0 9	140	30·7	42·43	174	141
d Sway (Gordleton) . . . . .	W. F. Wright, Esq. . . . .	5	1 6	102	29·7	41·30	180	142
d Lymington (Buckland Rd.) . . . . .	H. H. Wyatt, Esq. . . . .	5	2 0	90	..	40·28	..	..
d Boldre (Battramsley Close) . . . . .	Dr. H. A. Des Voeux . . . . .	5	1 1	119	31·8	42·71	166	147
d Exbury . . . . .	L. N. de Rothschild, Esq. . . . .	5	1 0	40	29·2	40·46	154	136
d Brockenhurst (Weirs End) . . . . .	Col. C. Mansel-Jones, V.C. . . . .	5	1 0	45	32·0	41·23	174	145
d CALSHOT (Aerodrome) . . . . .	(+A) Officer-in-Charge . . . . .	8	1 0	8	25·5	34·67	168	132
d Burley (Sandys) . . . . .	G. Mason, Esq. . . . .	5	1 0	150	31·8	40·98	178	137
d Hythe (Butts Lane) . . . . .	G. H. Baker, Esq. . . . .	5	1 0	130	30·6	39·07	171	140
d Fawley (Cadland Cottage) . . . . .	Major Drummond . . . . .	5	1 0	100	..	39·10	162	132
d Minstead (Furzey) . . . . .	B. H. Dalrymple, Esq. . . . .	5	1 3	280	..	41·90	171	146
d Cadnam (Canterton Manor) . . . . .	Miss Jeffreys . . . . .	5	1 0	190	31·8	40·63	168	137
d Bartley (The Nurseries) . . . . .	G. H. Dalrymple, Esq. . . . .	5	0 8	100	32·0	42·48	162	141
d SOUTHAMPTON (East Park) . . . . .	Director Ordnance Survey . . . . .	8	1 0	64	30·9	38·72	176	145
d Southampton Common Res. . . . .	J. Hawksley, Esq. . . . .	5	1 0	193	..	35·65	..	..
d Romsey (Embley Gardens) . . . . .	J. J. Crosfield, Esq. . . . .	5	1 0	130	30·3	37·70	175	140
d Romsey (Harefield) . . . . .	Lt.-Col. W. J. Langford . . . . .	5	1 0	120	30·1	37·66	166	142
d Romsey (Timsbury P.S.) . . . . .	J. Hawksley, Esq. . . . .	5	1 0	92	29·6	37·20	164	145
d KingsSomborne (Rookley Manor) Adml. The Hon. Sir Herbert Brand	.. . . .	5	1 0	190	..	36·72	168	132
d Sparsholt (Garstons) . . . . .	R. Simpson, Esq. . . . .	5	1 3	350	..	38·93	163	145
d Upper Somborne . . . . .	Charles Alleyway, Esq. . . . .	8	1 0	250	30·7	37·43	169	134
d Stockbridge (Houghton Lodge) . . . . .	Mr. G. Morris . . . . .	5	1 0	112	30·5	38·46	166	139
d Crawley (Chilbolton Down) . . . . .	G. W. S. Beale, Esq. . . . .	8	1 2	350	31·0	37·13	169	139
d Stockbridge (LECKFORD Estate) . . . . .	The Managing Director . . . . .	5	1 0	385	..	36·65	163	135
d Micheldever (School House) . . . . .	W. G. Gould, Esq. . . . .	5	1 0	280	..	35·85	180	130
d Wonston (Upton House) . . . . .	H. J. Gardiner, Esq. . . . .	5	1 0	229	30·0	36·12	176	137
d Abbots Ann (The Old Manor) . . . . .	Miss E. E. de Paravicini . . . . .	5	0 9	225	..	34·95	164	136
d Andover (Sewage Works) . . . . .	W. C. Jerome, Esq. . . . .	8	1 0	182	28·9	34·48	163	136
d Whitchurch (Laverstoke Mills) . . . . .	Dr. J. Knaggs, A.R.C.S., F.I.C. . . . .	8	1 6	250	..	36·71	(169)	(135)
d Overton (Berrydown Court) . . . . .	T. C. Mann, Esq. . . . .	5	1 0	380	..	36·44	182	136
d St. Mary Bourne (Bournside) . . . . .	Sir Charles V. Boys, F.R.S. . . . .	5	1 0	300	29·4	35·65	157	134
d St. Mary Bourne (Spring Hill) . . . . .	Mrs. H. A. Boys . . . . .	5	1 4	300	28·7	36·36	162	133
d Worting (Manydown Park) . . . . .	Col. A. S. Bates, D.S.O. . . . .	5	1 0	415	..	36·61	169	139
d Hurstbourne Tarrant (Rookery) . . . . .	R. E. C. Burder, Esq. . . . .	5	1 0	331	31·8	40·36	177	145
d Whitchurch (Dunley Manor) . . . . .	Sir Alfred Herbert . . . . .	5	1 0	500	30·8	37·10	163	140
5.—ITCHEN & SPITHEAD. 422 sq.mi.								
d Alverstoke (Monckton House) . . . . .	Major J. Blake . . . . .	5	1 3	15	28·6	35·13	172	131
d Alverstoke (Glencoe) . . . . .	J. G. Thomas, Esq. . . . .	5	1 3	20	28·0	32·96	167	136

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of	Average	Rain-	Rain-	Days	Days
			Rim	Ground	fall.	fall.	with	with
			above	above			·01 in.	·04 in.
			Ground.	Sea Level.			or	or
							more.	more.
HAMPSHIRE—(con.).			in.	ft. in.	ft.	in.	in.	
5.—ITCHEN & SPITHEAD—(con.).								
D Southsea (St. Edward's Road) . . . . .	Mrs. B. H. Key . . . . .	5	1 0	10	..	33·70	150	132
D Gosport . . . . .	Borough Surveyor . . . . .	8	0 9	30	28·8	35·17	158	125
D PORTSMOUTH (VICTORIA PARK) . . . . .	Medical Officer of Health . . . . .	5	1 0	15	27·7	33·04	160	125
D Portsmouth (Eastney) . . . . . (+A)	The City Engineer . . . . .	8	1 0	12	..	29·17	155	125
D South Hayling (C. of E. School) . . . . .	H. J. Earney, Esq. . . . .	5	1 6	10	26·1	28·16	147	120
D Lee-on-Solent (Edinburgh Ho. Sch.)	Trevor J. Tatham, Esq. . . . .	5	1 0	15	27·5	36·72	155	131
d Hook-cum-Warsash . . . . .	E. M. Biggs, Esq. . . . .	5	1 0	50	28·6	38·04	..	141
D Farlington (Pump. Stn.) . . . . .	Portsmouth Water Co. . . . .	5	1 0	78	28·5	34·61	167	130
D Farlington (Filter Works) . . . . .	Portsmouth Water Co. . . . .	5	1 0	157	27·9	33·69	165	129
D Havant (Portsmouth W.W.) . . . . .	Portsmouth Water Co. . . . .	5	1 0	25	27·2	33·88	162	129
d Fareham (Fareham House) . . . . .	W. S. Stevenson, Esq., M.D. . . . .	5	1 6	30	29·2	35·98	..	123
D Fareham (West Street) . . . . .	N. E. Neville, Esq. . . . .	5	1 0	41	..	39·01	172	133
D Southwick (Pinsley Lodge) . . . . .	Portsmouth Water Co. . . . .	5	1 0	150	29·6	36·41	158	134
D Fareham (Roche Court) . . . . .	Admiral Sir W. De Salis . . . . .	5	1 0	103	31·3	39·55	170	139
D Itchen Sewage Works . . . . .	S. G. Stanton, Esq., C.E. . . . .	5	5 8	13	..	38·35	161	139
D Idsworth (Water Tower) . . . . .	Portsmouth Water Co. . . . .	5	1 0	202	31·0	39·90	..	..
D Southwick (Upper Beckford Fm.) . . . . .	Portsmouth Water Co. . . . .	5	1 0	112	30·8	39·11	..	..
D Wickham (The Croft) . . . . .	Miss Joy Stansfeld . . . . .	5	0 8	85	..	41·32	156	141
D Botley (Botley Hill) . . . . .	H. H. Jenkyns, Esq. . . . .	5	1 6	36	31·1	39·96	159	145
D Curdridge (Kitnocks House) . . . . .	Major C. F. Randolph . . . . .	5	1 0	185	30·7	40·42	177	150
D Catherington Reservoir . . . . .	Portsmouth Water Co. . . . .	5	1 0	428	34·2	42·15	..	..
D Swanmore (Holywell House) . . . . .	Mrs. M. Portal . . . . .	5	1 0	175	32·2	40·34	189	155
D Hambledon (Whitedale) . . . . .	Portsmouth Water Co. . . . .	5	1 0	223	34·0	43·86	178	141
D Soberton (Mislingford) . . . . .	E. T. Hildred, Esq., C.E. . . . .	5	1 0	136	31·7	39·92	159	142
D West End (Oaklands) . . . . .	Mrs. Pearson . . . . .	5	1 0	45	30·9	40·37	168	145
D Bishops Waltham (Park Ho.) . . . . .	A. F. Hardy, Esq. . . . .	5	1 3	170	30·2	39·62	203	146
D Droxford (Uplands) . . . . .	Miss C. E. King . . . . .	5	1 0	279	34·2	43·37	186	149
D Droxford (Fairfield Ho.) . . . . .	E. S. McEuen, Esq. . . . .	5	1 0	254	..	42·02	179	148
D Petersfield (Ditcham Pk.) . . . . .	Portsmouth Water Co. . . . .	8	1 0	555	..	40·78	174	132
D Otterbourne (Kingfisher Lo.) . . . . .	Major T. T. Phelps . . . . .	5	0 10	80	..	38·91	..	143
D Otterbourne W.W. . . . .	J. Hawksley, Esq. . . . .	5	1 0	113	30·5	38·06	178	151
D Twyford (Pumping Station) . . . . .	H. Hawksley, Esq. . . . .	5	1 0	139	31·3	38·86	165	144
D East Meon (Burnside) . . . . .	H. A. Gilmour, Esq. . . . .	5	1 5	350	34·5	45·54	..	..
D Winchester (Shawford) . . . . .	J. A. Rooke, Esq. . . . .	5	1 0	250	31·3	38·11	179	137
D Hursley (Merton Manor) . . . . .	Capt. G. J. R. Cooper . . . . .	5	1 0	360	..	39·92	179	147
D Hursley Park . . . . .	Sir G. A. Cooper, Bart. . . . .	8	1 0	210	..	41·19	184	150
D Compton (Cross Ash) . . . . .	J. Durst, Esq. . . . .	5	1 1	150	30·4	40·15	180	143
D Privett (The Vicarage) . . . . .	Rev. F. P. Syngé . . . . .	5	2 8	650	36·0	49·50	201	145
D Winchester (St. Cross) . . . . .	G. M. Mathews, Esq. . . . .	5	1 0	135	30·7	38·33	171	139
D Winchester (High Street) . . . . .	Kenneth E. N. Williams, Esq. . . . .	5	1 0	200	31·6	37·89	179	135
D Winchester (East Hill) . . . . .	Mrs. E. Wilde . . . . .	5	1 0	256	28·3	34·41	193	137
D Ovington Rectory . . . . .	Rev. H. L. Atkins . . . . .	5	1 0	221	33·2	43·62	173	144
D Bishop's Sutton . . . . .	H. C. Mills, Esq. . . . .	5	1 0	260	..	39·71	173	139
D Winchester (Kings Worthy) . . . . .	Miss R. P. Woodard . . . . .	5	1 0	304	..	39·62	180	133
D Itchen Abbas (Chilland) . . . . .	W. J. Arnold, Esq. . . . .	5	1 3	200	30·5	36·83	175	132
D Itchen Abbas (Itchen Lodge) . . . . .	Lt.-Col. R. V. Savile . . . . .	8	1 0	200	..	37·26	184	135
D Alresford Place . . . . .	Percy Laming, Esq.* . . . .	5	1 0	300	30·8	40·31	167	145
6.—ARUN. 82 sq. mi.								
D Petersfield (Weston) . . . . .	Capt. P. W. Seward . . . . .	5	1 0	330	37·6	50·10	168	148
D Petersfield (Monks Barn) . . . . .	F. G. Padwick, Esq. . . . .	5	1 0	300	35·8	45·84	182	133
D Petersfield (Collyers) . . . . .	Fraser Parkes, Esq. . . . .	5	0 9	350	..	45·52	184	146
D Liss (Kippences) . . . . .	Rev. W. L. de B. Thorold . . . . .	5	0 9	250	33·3	45·01	170	138
D Liss (Hawkley Hurst) . . . . .	T. Clive Davies, Esq. . . . .	5	0 11	422	37·7	45·80	193	151
D Greatham (Manor House) . . . . .	Miss I. L. Coryton . . . . .	5	1 0	260	32·5	42·11	168	141
D Greatham (Le Court) . . . . .	The late Lady Mary A. Harrison . . . . .	5	0 9	300	34·5	45·59	196	142

\* Per A. E. Broad, Esq. §Exposure unorthodox.

## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Aver- age Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
			Rim	Ground					
			above	above					
			Ground.	Sea Level.					
<b>HAMPSHIRE—(con.).</b>									
		<i>in.</i>	<i>ft.</i>	<i>in.</i>	<i>ft.</i>	<i>in.</i>			
<b>7.—THAMES—Wey. 92 sq. mi.</b>									
D Petersfield (Stoner Hill) . . . . .	(+A) C. J. P. Cave, Esq., J.P. . . . .	5	0	9	748	38·1	48·49	191	142
D East Tisted (Rotherfield Park) . . . . .	Capt. J. B. Scott . . . . .	5	1	3	590	37·1	44·15	188	147
D Newton Valence Vicarage . . . . .	Rev. A. C. Maclachlan . . . . .	5	1	0	586	33·1	43·24	180	143
D Newton Valence (Shotters) . . . . .	Major W. H. Chawner . . . . .	5	1	2	600	33·2	41·85	174	135
D Newton Valence Place . . . . .	Rear-Adm. E. Jervoise, C.B.E. . . . .	8	1	3	615	33·3	48·27	185	149
D Selborne (The Wakes) . . . . .	Mrs. Bibby . . . . .	5	1	0	400	35·3	46·78	199	146
D Alton (Treloar Cripples' Hosp.) . . . . .	The Secretary . . . . .	5	1	0	350	..	42·83	175	142
D Kingsley (Fruit Farm) . . . . .	A. E. Jones, Esq. . . . .	5	1	0	300	..	39·03	170	137
D Alton (Shalden Cottage) . . . . .	Miss G. M. Wood . . . . .	5	1	0	630	..	41·55	194	142
D Alice Holt Forest . . . . .	Forestry Commission . . . . .	8	1	0	264	30·0	40·18	..	126
D Alton (Froyle Place) . . . . .	Rt. Hon. the Earl of Bective . . . . .	5	1	3	410	..	40·34	163	136
Bentley (The Welches) . . . . .	J. Howarth Massey . . . . .	5	1	0	300	..	38·16	..	..
<b>8.—THAMES—Loddon. 164 sq. mi.</b>									
w Swainshill . . . . .	Mid-Wessex Water Co. . . . .	5	1	0	616	..	42·46	..	..
D LONG SURTON (Agric. Coll.) . . . . .	The Lord Wandsworth Ag. Coll. . . . .	5	1	0	479	28·2	40·02	174	133
D South Warnborough (Vine Cot.) . . . . .	Mrs. Gawne . . . . .	5	1	0	416	27·8	(36·40)	..	..
D Upton Grey (Hoddingdon Ho.) . . . . .	Col. The Lord Basing . . . . .	5	1	0	378	27·7	37·81	163	138
D Basingstoke (Upton Grey Ho.) . . . . .	G. W. Hayes, Esq. . . . .	5	1	0	400	27·7	37·52	177	138
D Aldershot Waterworks . . . . .	Mid-S. Dist. Utility Co. . . . .	5	1	0	251	27·0	35·74	173	138
D Aldershot Reservoirs . . . . .	Mid-S. Dist. Utility Co. . . . .	5	0	7	393	27·2	35·25	184	143
D Odiham (Mill House) . . . . .	W. M. Dean, Esq. . . . .	5	1	0	241	26·0	35·17	153	127
D Odiham (Sewage Works) . . . . .	Hartley Wintney R.D.C. . . . .	5	1	0	245	26·5	34·44	157	128
D Greywell (Pumping Station) . . . . .	Mid Wessex Water Co. . . . .	5	1	0	258	26·3	32·80	180	132
D Hook (Nately Hatch) . . . . .	R. C. Mallock, Esq. . . . .	5	1	0	328	26·7	36·01	196	136
D Fleet (Home Wood) . . . . .	Mrs. L. M. Kent . . . . .	5	1	0	300	25·4	32·36	163	134
D Sherborne St. John . . . . .	A. G. Willis, Esq. . . . .	5	2	2	260	29·0	34·45	177	133
D Rotherwick (Tydney Hall) . . . . .	Major Sir H. R. Cayzer, Bt. . . . .	5	1	0	250	25·8	32·53	163	128
D Hartley Wintney (Warren Heath) . . . . .	Sanitary Inspector, R.D.C. . . . .	5	1	0	227	25·8	34·70	..	120
D Hartley Wintney (S.D. Works) . . . . .	Sanitary Inspector R.D.C. . . . .	5	1	0	180	..	(35·02)	..	..
D SOUTH FARNBOROUGH (R.A.E.) (+A) . . . . .	Meteorological Officer . . . . .	8	1	0	226	26·1	33·78	178	129
D Winchfield (Elvetham Park) . . . . .	Mr. T. J. Brownjohn . . . . .	8	0	6	217	26·8	34·21	179	143
D Stratfield Turgis (Byland's Cottage) . . . . .	Miss D. Page-Roberts . . . . .	5	1	0	218	26·1	28·17	168	120
D Heckfield (Park Corner) . . . . .	Miss V. Martineau . . . . .	5	1	2	257	24·6	32·07	191	136
<b>9.—THAMES—Kennet. 65 sq. mi.</b>									
D Kingsclere (Isle Hill) . . . . .	C. E. Harvard, Esq. . . . .	5	1	6	500	..	38·12	193	147
D Highclere (Castle Gardens) . . . . .	Mr. A. W. Blake . . . . .	5	1	6	500	32·5	37·23	178	138
D Highclere (Black Ford) . . . . .	W. A. Turner, Esq. . . . .	5	1	0	439	31·9	38·91	183	140
D Highclere (Adbury Pk. Gdns.) . . . . .	The Head Gardener . . . . .	5	1	0	350	30·0	36·82	172	144
D Silchester House . . . . .	T. M. Hartley, Esq. . . . .	5	1	0	325	25·0	29·54	170	122
<b>BERKSHIRE. (Area, 722 sq. mi.).</b>									
<b>1.—TEST. 2 sq. mi.</b>									
<b>2.—THAMES—Bourne. 15 sq. mi.</b>									
D Sunninghill (Frogna) . . . . .	Mr. D. Chaplin . . . . .	5	1	0	200	..	32·19	175	134
D ASCOT (HEATHERWOOD Hospital) . . . . .	The Medical Superintendent . . . . .	5	1	0	300	..	30·91	191	131
D Sunninghill (Blacknest P.S.) . . . . .	E. J. Toy, Esq. . . . .	8	1	0	130	26·0	31·76	186	132
D Sunninghill (Little Paddocks) . . . . .	Col. J. N. Horlick, M.C. . . . .	5	1	0	200	27·0	32·50	172	137
<b>3.—THAMES—Loddon &amp; c. 162 sq. mi.</b>									
D Sandhurst (Eagle House) . . . . .	G. E. Straker, Esq. . . . .	5	1	0	280	..	34·32	173	131
D Wellington College . . . . .	D. B. Briggs, Esq. . . . .	5	1	0	290	26·4	34·28	184	134
D Broadmoor Asylum . . . . .	The Medical Superintendent . . . . .	5	1	0	300	27·6	33·42	156	134
D Wokingham (Bucks Copse) . . . . .	C. W. Marks, Esq. . . . .	5	1	0	174	24·7	29·42	162	125
D Wokingham (Frog Hall) . . . . .	J. Rolt, Esq., K.C. . . . .	5	1	0	200	..	32·12	181	137
D Wokingham (Bear Wood Gdns.) . . . . .	M. Goddard, Esq. . . . .	8	1	0	200	..	31·61	166	133
D Wokingham (Sindleshaw Ho.) . . . . .	Mr. W. Balcombe . . . . .	5	4	6	200	25·4	31·29	163	132
D Wokingham (Winnersh Nursery) . . . . .	W. Bates, Esq. . . . .	5	1	0	180	..	30·86	184	126
D Winkfield (Ryemead) . . . . .	Mrs. Aubrey Elliott . . . . .	5	0	10	220	25·8	30·47	184	136
D Winkfield (Maidens Green) . . . . .	R. Crosbie-Hill, Esq. . . . .	5	1	0	210	26·0	30·49	178	134
D Windsor (Forest Park Gdns.) . . . . .	G. W. Briars, Esq. . . . .	5	0	10	150	..	31·89	173	144



## DIVISION II—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain-fall.	1937.				
			Height of Rim above Ground.	Ground above Sea Level.		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.		
			in.	ft. in.	ft.	in.	in.			
BERKSHIRE—(con.).										
3.—THAMES—Loddon & c.—(con.).										
d Shurlock Row (Crossways) . . . . .	John P. Lee, Esq. . . . .	5	0	9	149	..	31·73	176	125	
d Sonning on Thames (The Deanery) . . . . .	Capt. N. J. Bengough . . . . .	5	0	9	120	24·6	28·95	174	127	
d Windsor (Royal Gardens) . . . . .	Mr. G. Simpson . . . . .	5	1	0	88	24·9	32·30	189	133	
d Twyford (Hare Hatch) . . . . .	Messrs. J. Waterer, Sons & Crisp, Ltd . . . . .	5	1	0	180	..	31·07	153	119	
d Bray (Bramel) . . . . .	N. Vaslet, Esq. . . . .	5	1	0	75	..	33·73	..	123	
d Maidenhead (The New Hall) . . . . .	Mrs. Torkington . . . . .	5	1	0	130	27·2	31·73	..	124	
d Pinkney's Green . . . . .	R. P. Lord, Esq. . . . .	5	0	10	240	26·7	33·56	..	..	
d Maidenhead (Boulter's Lock) . . . . .	The Thames Conservancy . . . . .	5	1	6	82	..	32·92	174	132	
d Remenham Hill (Wedmore) . . . . .	Lt.-Col. C. D. Burnell, D.S.O. . . . .	5	1	0	300	27·5	33·04	..	141	
d Hambleden Lock . . . . .	Mr. T. E. Wise . . . . .	5	2	0	107	27·0	35·19	200	146	
d Hurley House . . . . .	H. M. Farrer, Esq. . . . .	5	1	0	105	..	29·43?	..	110	
4.—THAMES—Kennet & c. 224 sq. mi.										
d Inkpen (Manor Farm) . . . . .	A. A. Lawrence, Esq. . . . .	5	1	5	500	31·6	38·51	176	151	
d Inkpen (New Mill) . . . . .	G. C. Goodhart, Esq. . . . .	5	1	0	475	32·5	38·40	163	137	
d Mortimer (Wokefield Park) . . . . .	The Head Gardener . . . . .	5	1	0	220	25·2	31·48	168	129	
d Mortimer (Oakfield) . . . . .	Rev. G. G. Skipwith . . . . .	6	1	0	200	26·1	31·47	184	126	
d Brimpton (Little Park) . . . . .	Lady Delia Peel . . . . .	5	0	8	340	..	33·36	179	138	
d Kintbury (Wallingtons) . . . . .	A. S. Gladstone, Esq. . . . .	5	1	0	360	..	35·17	..	..	
d Newbury (Wash Hill) . . . . .	C. F. B. Marshall, Esq. . . . .	5	1	0	385	31·4	33·88	174	130	
d Newbury (Wash Hill Ho.) . . . . .	E. P. Plenty, Esq. . . . .	5	1	6	400	29·1	36·10	172	133	
d Beenham (Beenham Lodge) . . . . .	Sir Edward Freeling . . . . .	5	1	0	320	..	34·56	186	142	
d SHINFIELD (University Col. Farm) . . . . .	Prof. J. A. Crowther . . . . .	5	1	0	200	..	30·87	165	126	
d Woolhampton (Douai School) . . . . .	Rev. J. O. Dorman, B.A. . . . .	5	1	1	370	..	32·57	165	128	
d Bucklebury Place . . . . .	Mr. J. E. Henshall . . . . .	5	1	0	409	..	30·02	171	138	
d Newbury (Arlington Manor Gdns.) . . . . .	Col. J. A. Fairhurst . . . . .	5	1	0	350	..	32·23	155	126	
d Reading W.W. (Bath Road) . . . . .	L. C. Walker, Esq., C.E. . . . .	5	1	0	218	24·4	30·01	190	137	
d Reading (Tilehurst) . . . . .	Miss M. W. Latham . . . . .	5	1	0	200	25·6	34·97	184	142	
d Reading (Forbury Gardens) . . . . .	A. S. Parsons, Esq., C.E. . . . .	5	1	5	143	24·9	29·23	167	128	
d READING (University College) . . . . .	Prof. J. A. Crowther . . . . .	5	1	0	152	..	29·86	183	128	
d Reading (Caversham Lock) . . . . .	The Thames Conservancy . . . . .	5	1	6	123	..	29·05	165	127	
d Chieveley (Priors Court) . . . . .	G. E. H. Palmer, Esq. . . . .	5	1	0	403	..	32·28	161	132	
d Peasemore House . . . . .	Mrs. E. Brown . . . . .	5	1	0	490	..	29·44	..	..	
5.—THAMES—Ock & c. 319 sq. mi.										
d Stanford Dingley (Dingley Hill) . . . . .	C. O. Lowsley, Esq. . . . .	5	1	2	400	..	31·94	164	131	
d Reading (Englefield) . . . . .	J. H. Benyon, Esq. . . . .	5	1	0	175	27·4	33·80	152	133	
d Bradfield Pumping Station . . . . .	Mid-Wessex Water Co. . . . .	5	1	0	177	..	30·82	158	129	
d Pangbourne (Jesmond Hill) . . . . .	The Earl of Lucan . . . . .	5	1	0	290	..	34·84	160	142	
d Pangbourne (Woodberry) . . . . .	W. H. Keep, Esq. . . . .	5	1	0	220	..	33·21	172	140	
d Moulsoford (The Old Vicarage) . . . . .	E. R. Abbott, Esq. . . . .	8	1	4	170	..	33·53	155	120	
d Upton (Manor House) . . . . .	Miss C. S. Fry . . . . .	5	1	0	240	..	25·66	180	119	
d Wantage (Lockinge Estate Office) . . . . .	E. Lousley, Esq. . . . .	5	1	1	400	27·8	33·46	159	142	
d Uffington (Woolstone Lodge) . . . . .	Miss A. E. Butler . . . . .	5	1	0	350	27·6	31·17	156	126	
d Wallingford (Winterbrook) . . . . .	Frank K. Weedon, Esq. . . . .	5	1	0	151	24·9	31·57	164	125	
d Wallingford (St. Leonard's Rec.) . . . . .	Rev. A. Simmons . . . . .	5	0	10	142	24·7	30·09	155	123	
d Wallingford Castle . . . . .	Major Hedges . . . . .	5	1	3	175	23·8	29·20	156	123	
d Wallingford (Style Acre) . . . . .	A. L. Morphew, Esq. . . . .	5	1	4	200	25·2	29·89	171	127	
d Didcot (Sewage Works) . . . . .	Wallingford R.D.C. . . . .	5	0	9	170	..	27·14	153	119	
d Appleford (Wigbalds) . . . . .	A. Tame, Esq. . . . .	5	1	0	180	..	27·03	145	119	
d Faringdon (Shellingford Ho.) . . . . .	Mrs. K. Marshall . . . . .	5	..	..	275	..	29·38	155	126	
d Long Wittenham (The Manor Ho.) . . . . .	R. P. Sing, Esq. . . . .	12	1	0	170	25·3	29·50	154	130	
d Long Wittenham (Willington) . . . . .	H. J. Hewett, Esq. . . . .	5	1	0	167	25·2	28·75	168	127	
d Abingdon (Sewage Works) . . . . .	The Borough Surveyor . . . . .	8	1	0	169	22·8	27·39	187	127	
d Abingdon (The Firs) . . . . .	Miss G. G. Challenor . . . . .	5	1	3	200	23·7	28·43	164	129	
d Abingdon (Frilford Heath) . . . . .	R. W. Langford, Esq. . . . .	5	1	0	240	..	29·26	169	123	
d Boars Hill (Blackthorn) . . . . .	A. C. Pilkington, Esq. . . . .	5	1	0	410	25·6	28·08	161	133	
d Oxford (Kennington Nursery) . . . . .	Forestry Commission . . . . .	5	0	10	350	24·7	29·34	166	133	
d Eynsham (Swinford P.S.) . . . . .	A. Carstairs, Esq., C.E. . . . .	5	1	0	203	..	27·37	..	119	

## DIVISION III—SOUTH MIDLAND COUNTIES.

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-	Days	Days
			Rim	Ground	Rain-	fall.	with	with
			above	above	fall.		·01 in.	·04 in.
			Ground.	Sea Level.			or	or
MIDDLESEX. (Area, 232 sq. mi.)			in.	ft. in.	ft.	in.	in.	
1.—THAMES—Colne & Brent. 185 sq. mi.								
d Weybridge (Shepperton Lock) . . . . .	Thames Conservancy . . . . .	5	1 0	41	23·1	29·22	172	126
d Littleton (Queen Mary Res.) . . . . .	Met. Water Board . . . . .	5	1 0	44	23·0	30·37	169	127
d Hampton Waterworks . . . . .	Met. Water Board . . . . .	5	1 0	27	22·7	28·90	164	129
d Kempton Works . . . . .	Met. Water Board . . . . .	5	1 0	40	22·6	28·24	149	114
d Hampton (Gloucester Rd.) . . . . .	C. J. Palmer, Esq. . . . .	5	1 0	50	..	29·76	148	120
d Staines (Pumping Stn.) . . . . .	Met. Water Board . . . . .	5	1 0	55	..	29·71	174	129
d Staines Reservoir (West Side) . . . . .	Met. Water Board . . . . .	5	1 6	53	23·8	30·52	172	130
d Staines Reservoir (East Side) . . . . .	Met. Water Board . . . . .	5	1 6	53	23·9	30·45	174	127
d Twickenham Refuse D.Wks. (+A) . . . . .	The Borough Surveyor . . . . .	5	1 0	37	..	28·75	157	116
d Isleworth (Mogden Wks.) . . . . .	C. B. Townend, Esq., C.E. . . . .	5	1 1	33	..	28·61	164	118
d Sipson . . . . .	Middlesex County Council . . . . .	5	1 2	95	..	31·65	176	130
d Sipson (Hollycroft) . . . . .	Mr. W. J. Mitchell . . . . .	5	1 0	94	22·5	31·30	180	129
d Kew Bridge (Waterworks) . . . . .	Met. Water Board . . . . .	5	1 3	36	24·1	30·45	163	122
d Chiswick (Turnham Green) . . . . .	The Borough Engineer . . . . .	8	1 0	27	23·3	27·45	..	..
d Hanwell . . . . .	(+A) Middlesex County Council . . . . .	5	1 9	36	24·5	29·05	167	130
d Ealing (St. Paul's Vicarage) . . . . .	Rev. A. H. Cooper . . . . .	5	1 6	100	24·7	28·61	202	142
d Ealing (Carlton Road) . . . . .	H. W. Peal, Esq. . . . .	5	1 0	120	..	28·46	154	122
d Acton Pumping Station . . . . .	(+A) W. G. Cross, Esq., C.E. . . . .	5	1 0	22	..	26·86	162	119
d Acton Cemetery . . . . .	(+A) W. G. Cross, Esq., C.E. . . . .	5	1 6	100	..	29·70	158	124
d Hayes Sewage Works . . . . .	(+A) Middlesex County Council . . . . .	5	2 3	98	..	28·13	178	128
d Ealing (Hanger Hill Reservoir) . . . . .	Met. Water Board . . . . .	5	1 0	206	24·7	29·82	176	133
d Greenford . . . . .	(+A) Middlesex County Council . . . . .	5	1 0	61	..	31·24	201	138
d Willesden Reservoir . . . . .	Met. Water Board . . . . .	5	1 0	167	25·6	31·79	169	130
d Willesden (Stonebridge Fm.) . . . . .	F. Wilkinson, Esq., C.E. . . . .	5	5 9	100	..	28·94	169	131
d Northolt (Wood End Gdns.) . . . . .	E. R. Sinfeld, Esq. . . . .	5	1 0	260	..	29·22	183	136
d Sudbury (Station Approach) . . . . .	L. H. Powers, Esq. . . . .	8	1 0	153	24·3	28·44	184	135
d Sudbury (36, Station Approach) . . . . .	R. M. Eadie, Esq. . . . .	5	0 11	152	..	30·43	162	136
d Wembley (Kewick Gardens) . . . . .	A. R. Bill, Esq. . . . .	5	1 0	150	..	28·62	172	130
d Wembley (Wembley Park Drive) . . . . .	L. J. Petre, Esq. . . . .	5	1 0	120	..	27·80	(170)	(128)
d Highgate (North Hill Depot) . . . . .	W. H. Adams, Esq., C.E. . . . .	5	1 0	303	25·4	34·47	183	130
d Harrow (Oakhurst) . . . . .	Hugh Gardner, Esq. . . . .	5	1 6	295	24·2	28·85	190	132
d Brent Reservoir . . . . .	Grand Union Canal Co. . . . .	5	1 0	138	..	28·36	189	127
d Hendon (Council Depot) . . . . .	A. O. Knight, Esq., C.E. . . . .	8	1 0	153	..	33·19	193	141
d Kenton (Kingshill Drive) . . . . .	T. Bedford Franklin, Esq. . . . .	5	1 0	250	..	30·26	..	..
d Hendon (Central School) . . . . .	J. Burgess, Esq. . . . .	5	0 9	200	26·0	28·93	169	122
d Finchley (Church End) . . . . .	Sister Marie Jacques . . . . .	5	0 8	296	..	31·07	193	131
d Ruislip Reservoir . . . . .	Grand Union Canal Co. . . . .	5	1 0	170	..	31·53	198	135
d Wealdstone (Kodak Works) . . . . .	Messrs. Kodak, Ltd. . . . .	5	1 0	195	..	30·63	169	135
d Harrow (Wealdstone House) . . . . .	Miss H. O. E. Cobb . . . . .	5	1 0	236	25·1	29·92	(176)	(134)
d Northwood (Tandridge) . . . . .	Chas. Price, Esq. . . . .	5	1 0	..	25·5	29·18	162	137
d Northwood (Ravenswood) . . . . .	M. T. Allen, Esq. . . . .	5	6 0	365	..	33·41	167	140
d Edgware M.C.C. Depot . . . . .	(+A) Middlesex County Council . . . . .	5	0 9	179	25·8	30·51	152	131
d Elstree (Barnet Lane) . . . . .	G. V. Macted, Esq., C.E. . . . .	8	1 0	470	..	31·42	163	133
d Elstree (Ridgeway) . . . . .	Major N. G. Brett-James . . . . .	5	1 0	440	..	31·33	163	142
d Potters Bar (Mount Grace) . . . . .	J. Forbes, Esq. . . . .	5	1 3	375	26·1	34·63	179	147
2.—THAMES—Lea. 47 sq. mi.								
d Highgate Village (Northgrove) . . . . .	F. J. Varley, Esq. . . . .	5	1 0	400	..	33·52	(162)	135
d Crouch End (Priory Park)† . . . . .	W. H. Adams, Esq., C.E. . . . .	5	1 0	118	25·8	32·97	167	129
d TOTTENHAM (Drayton Road) . . . . .	Medical Officer of Health . . . . .	5	0 11	54	23·3	30·60	163	122
d Hornsey (High Street) . . . . .	Met. Water Board . . . . .	5	1 0	107	24·9	30·69	161	127
d Harringay (Wightman Rd.)‡ . . . . .	W. H. Adams, Esq., C.E. . . . .	5	1 0	90	..	33·48	179	136
d Muswell Hill (Cl.Nurs.)* (new g) (+A) . . . . .	W. H. Adams, Esq., C.E. . . . .	5	1 0	209	26·1	31·84	193	136
d Wood Green (Maryland Road) . . . . .	F. C. Hornsey, Esq. . . . .	5	1 0	110	..	28·20	179	129
d Finchley (Victoria Park) . . . . .	P. T. Harrison, Esq., C.E. . . . .	5	0 11	272	26·3	31·51	194	133
d PalmersGr. (Broomfield Pk.) (+A) . . . . .	D.M. Mactavish, Esq., B.Sc. C.E. . . . .	8	1 6	136	24·7	28·84	181	130
d Whetstone (Friern Barnet La.) . . . . .	Dr. R. Telford Martin . . . . .	5	1 0	400	..	30·55	187	130
d Winchmore Hill (Elsiedene Road) . . . . .	V. E. Steers, Esq. . . . .	5	1 0	107	26·7	29·65	176	130

† Station formerly called Crouch End (Barrington Road). ‡ Station formerly called Muswell Hill (Wightman Road).  
 \* Station formerly called Muswell Hill (Sewage Farm).

## DIVISION III—SOUTH MIDLAND COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Sea Level.				
		in.	ft.	in.	ft.	in.		
MIDDLESEX—(con.).								
2.—THAMES—Lea—(con.).								
d Ponders End Pumping Station	Met. Water Board	5	1	0	45	23·3	28·08	159 125
d ENFIELD (Southbury Road)	Met. Water Board	5	1	0	148	24·7	29·31	165 132
d Cockfosters (Trent Park)	Lee Conservancy Catchm. Bd.	5	1	0	250	..	29·61	180 137
d Enfield (Forty Hill)	Dr. E. C. Carter	5	0	11	125	..	30·81	169 131
d Enfield (Roselands, Turkey St.)	E. S. Rashleigh, Esq.	5	1	0	80	23·2	29·99	173 130
d Waltham Cross (Sewage Works)	Cheshunt U.D.C.	5	1	0	61	22·6	28·56	150 120
HERTFORDSHIRE. (Area, 635 sq. mi.).								
1.—THAMES—Thame. 10 sq. mi.								
d Tring (Akeman St.)	T. Grace, Esq.	8	1	0	450	29·4	34·43	184 126
d Tring (Pendley Manor)	Mrs. J. G. Williams	5	1	0	420	28·4	36·00	177 142
2.—THAMES—Colne and Brent. 199 sq. mi.								
d Northwood (St. Mary's Ave.)	R. H. Daw, Esq.	5	1	0	231	..	30·38	178 131
d Northwood (Woodhouse Eaves)	Miss S. F. Fox, M.D.	5	1	0	400	27·6	34·41	209 153
d Northwood (Moor Park)†	H. L. Lewis, Esq.	5	1	0	220	..	32·57	193 138
d Moor Park (Main Ave.)	S. R. Wright, Esq., F.R. Met. S.	5	1	0	272	..	31·81	.. 137
d Bushey Heath (California La.)	Miss C. C. Cooper	5	1	0	500	26·0	33·17	164 133
w Totteridge (West Lodge)	P. D. Walker, Esq.	5	1	4	410	26·9	30·22	.. ..
d Batchworth (Pumping Stn.)	L. F. Hobbs, Esq., C.E.	5	1	2	156	..	32·52	.. 132
d Rickmansworth (Croxley Green)	S. Ingleby Oddie, Esq.	5	1	0	262	27·2	34·27	189 149
d Barnet (Bedford Avenue)	Miss M. Haines	5	1	4	350	27·9	31·65	174 145
d Barnet (Jesus Hospital)	P. J. Neville, Esq.	5	1	0	335	..	30·43	167 131
d Barnet (Sewage Works)	(+A) E. Scott, Esq., C.E.	5	1	0	295	..	30·43	186 139
d Barnet (Hadley Green)	F. C. Tidmarsh, Esq.	5	1	0	425	..	31·37	176 137
d Watford (Colne Valley W.W.)	C. P. Sinclair, Esq.	5	3	2	200	25·6	33·83	174 134
d Watford (Waterworks)	W. W. Newman, Esq., C.E.	6	1	9	175	25·9	33·10	.. 122
d Watford (Cassiobury Pk. Av.)	E. A. Robins, Esq.	5	1	0	240	26·2	35·64	.. ..
d Watford (Stratford Road)	Miss L. M. Slinn	5	1	6	257	26·0	34·61	178 126
d Herongate (Waterfield Ho.)	A. J. Richardson, Esq.	5	1	0	390	..	34·59	180 141
d Sarratt (Micklefield Green)	J. O. Hickman, Esq.	5	0	6	380	29·0	36·19	163 140
d Shenley Grange	J. Charrington, Esq.	5	0	9	430	27·9	34·55	175 143
d Shenley (Kitwells)	T. H. Riches, Esq.	5	1	0	420	27·5	32·93	181 138
d Sarratt (Goldingtons)	P. Clutterbuck, Esq.	5	1	0	384	29·0	37·18	164 138
d Kings Langley (Langleybury Gdns.)	E. Henry Loyd, Esq.*	5	..	..	300	..	34·68	205 141
d Chipperfield (Little Callipers)	Miss M. M. Rivington	5	1	0	407	27·6	35·93	.. ..
d Kings Langley (Fir Tree Cottage)	Edward Toms, Esq.	5	1	0	278	28·1	36·26	184 141
d Kings Langley (Langley Rise)	F. W. Rowson, Esq.	5	0	9	360	27·4	32·66	159 128
d North Mimms P.S.	(+A) J. F. Haseldine, Esq.	5	1	0	254	..	32·86	187 133
d Hemel Hempstead (Felden)‡	A. T. Collier, Esq.	5	0	9	500	..	35·80	189 129
d Hemel Hempstead (Apsley Mills)	Messrs. J. Dickinson & Co.	24	1	4	268	27·9	33·98	177 128
d Colney Heath (Tyttenhanger P.S.)	J. F. Haseldine, Esq.	5	1	0	241	25·7	31·49	179 125
d Berkhamsted (Haresfoot)	T. G. Blackwell, Esq.*	5	..	..	500	..	37·38	.. ..
d St. Albans (Co. Mental Hosp.)	The Controller	5	1	0	295	25·1	34·15	.. 130
d St. Albans (County Museum)	The Curator	5	1	0	389	27·4	29·89	168 138
d St. ALBANS (Oaklands Inst.)	The Principal	5	1	0	272	24·9	31·72	189 131
d St. Albans (Gorhambury)	The Head Gardener	5	1	0	423	27·9	35·63	188 135
d Hatfield (Hatfield P. Stn.)	J. F. Haseldine, Esq.	5	1	0	334	24·7	33·17	187 138
d Berkhamsted (Rossway)	The Lady Hadden	5	1	1	590	..	41·11	.. 129
d Berkhamsted (Anglefield)	The late E. T. Browne, Esq.	5	1	0	450	29·8	36·53	176 135
d Berkhamsted (Dudswell)	Rev. A. du B. Hill	5	1	3	390	..	39·82	193 144
d Tring (Cowroast Lock)	Grand Union Canal Co.	5	1	0	390	29·7	36·42	161 136
d Harpenden (ROTHAMSTED)	(+A) Lawes Agricultural Trust	8	0	9	420	26·7	32·09	177 130
d Harpenden (Rothamsted)	Lawes Agricultural Trust	5	0	9	420	27·3	33·25	183 135
d Harpenden (Rothamsted)	Lawes Agricultural Trust.	72 × 87	0	9	420	28·6	35·39	194 135
d Little Gaddesden (Ringshall End)	H. C. Bradby, Esq.	5	1	0	700	28·9	35·51	172 137
d Markyate Waterworks	B. I. Stephenson, Esq.	5	1	0	538	..	35·49	195 144

\* Per Hertfordshire Natural History Society.

† Station previously known as Northwood (Sandy Lodge). Gauge moved  $\frac{1}{8}$  ml. W. on 4.8.37

‡ Previously known as Bovington (Felden).

## DIVISION III—SOUTH MIDLAND COUNTIES—(con.).

		Rain-gauge			1937.			
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-	Days	Days
			Rim	Ground	age	fall.	with	with
			above	above	Rain-		·01 in.	·04 in.
			Ground.	Sea Level.	fall.		or	or
							more.	more.
HERTFORDSHIRE—(con.).		in.	ft.	in.	ft.	in.	in.	
3.—THAMES—Lea. 340 sq. mi.								
d Cheshunt (Manor House)	Cheshunt U.D.C.	5	1	0	83	24·2	30·32	..
d Northaw School	C. Steventon, Esq.	5	5	0	350	26·8	28·99	166
d Goff's Oak	D. L. Champion, Esq.	5	1	0	330	..	30·54	187
d Cheshunt Yard	Met. Water Board	5	1	0	100	24·1	30·87	186
d Cheshunt (Cheshunt Park)	Mr. W. Standerwick	5	0	9	209	25·4	31·37	192
d Cheshunt (Darnicle Hill P. Stn.)	Met. Water Board	5	1	0	250	26·2	31·80	176
d Essendon Place Gardens	J. B. Healing, Esq.	5	1	0	365	26·6	32·67	161
d Little Berkhamstead	A. Noble, Esq., L.C.P.	5	1	0	380	25·0	30·44	..
d Broxbourne (Broxbournebury)	Mr. D. Cake	5	1	0	140	..	29·74	196
d Hoddesdon	H. F. Hayllar, Esq.	5	5	0	120	23·7	27·24	173
d Hoddesdon (Feilde's Weir)	Met. Water Board	5	3	8	95	23·7	27·86	179
d Haileybury College	The Headmaster	8	1	0	270	24·8	31·23	196
d Hertford (Cole Green)	Lee Conservancy Catchm. Bd.	5	1	0	240	..	31·17	..
d Gilston Park	The Head Gardener	8	1	0	175	25·7	32·05	186
d Welwyn Garden City (Sewage Wks.)	K. S. Henderson, Esq.	5	1	0	246	24·7	30·24	172
d Hertford (Sewage Works)	Met. Water Board	5	1	0	123	23·3	29·23	185
d Ware (Red House)	Met. Water Board	5	1	0	105	23·5	29·06	170
d Ware Grammar School	The Headmistress	5	1	0	118	23·0	30·49	173
d Ware (Chadwell Spring)	Met. Water Board	5	1	0	140	24·2	29·54	170
d Wareside (Morley House)	Lee Conservancy Catchm. Bd.	5	1	0	220	..	28·58	205
d Welwyn (Harmer Green)	Mrs. E. Weber	5	1	0	403	25·5	34·43	191
d Welwyn (The Manor House)	Lt.-Col. J. B. Gilliat*	5	0	9	245	..	32·00	..
d Welwyn (Sewage Works)	C. B. Borthwick, Esq., C.E.	8	0	11	260	..	31·35	192
d Welwyn (Codicote Lodge)	Mr. E. A. Roberts	5	1	0	340	25·8	32·02	183
d Much Hadham (Wynches)	Lady Wilson	5	1	3	278	..	28·60	158
d Much Hadham	Miss J. Mott	5	1	0	212	25·1	31·45	151
d Bishop Stortford (Twyford Ho.)	Laurie Frere, Esq.	5	1	0	181	23·7	29·39	177
d Bishop Stortford (Little Canes)	Hugh W. Hart, Esq.	5	1	0	250	..	30·11	185
d Breachwood Green	S. J. Simpson, Esq.	5	2	0	484	..	35·43	..
d Bishop Stortford (Dunmow Road)	H. J. Holmes	5	1	1	290	..	31·34	183
d Little Hadham (Hadham Hall)	Miss S. Minet	5	1	0	338	24·5	30·68	175
d Stevenage (Six Hills)	J. Barker, Esq.	5	1	0	296	..	35·21	201
d Hitchin (Preston)	R. de V. Pryor, Esq.	8	1	0	484	25·2	33·83	170
d Braughing (Upp. Hall)†	Lady Brodie Henderson	5	1	6	370	..	30·92	214
d Furneaux Pelham (The Brewery)	G. Warren Bindloss, Esq.	5	1	0	300	24·8	29·75	188
d Buntingford (Wyddial)	Lee Conservancy Catchm. Bd.	5	1	0	410	..	29·94	171
d Royston (Therfield Rectory)	Rev. H. R. Humphreys	5	1	0	512	25·2	33·90	179
4.—OUSE. 86 sq. mi.								
d Offley (School House)	The Headmaster	5	1	0	526	25·4	31·39	..
d Hitchin (High Down)	Miss E. Pollard	5	1	1	421	24·6	32·92	202
d Letchworth (Gernon Road)	A. W. Brunt, Esq.	5	1	0	280	22·8	32·12	176
d Letchworth (Sollershott West)	Edward Grubb, Esq.	8	0	11	310	23·1	32·31	175
d Letchworth (Fire Station)	The Surveyor, U.D.C.	5	1	0	281	22·3	31·60	147
d Barley (Dalnyveed)	W. F. Sermons, Esq.	5	1	0	300	24·0	29·28	172
d Royston (Earls Hill House)	Col. E. C. M. Phillips, D.S.O.	8	1	3	225	23·6	32·60	183
BUCKINGHAMSHIRE. (Area, 743 sq. mi.).								
1.—THAMES—Cherwell. 30 sq. mi.								
d Dagnall (Ivinglea)	E. L. Hawke, Esq., M.A.	5	1	0	550	..	39·78	217
2.—THAMES—Thame. 158 sq. mi.								
d Parslow's Hillocks	Col. C. S. Prichard	5	1	0	770	31·1	37·61	199
d Princes Risborough (Research Lab.)	The Director	5	1	0	333	..	34·99	176
d Little Kimble	Dr. L. T. Burra	5	0	10	370	25·0	31·71	169
d HALTON Camp	R.A.F. Inst. of Pathology	5	1	0	544	..	35·14	167
d Weston Turville	G. Eland, Esq.	5	1	0	320	25·5	33·76	..

\* Per Hertfordshire Natural History Society.

† Gauge moved 100 yds. N. in June, 1937.

## DIVISION III—SOUTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-	Days	Days
			Rim	Ground	age	fall.	with	with
			above	above	Rain-		·01 in.	·04 in.
			Ground.	Sea Level.	fall.		or	or
							more,	more.
BUCKINGHAMSHIRE—(con.).			in.	ft. in.	ft.	in.		
2.—THAMES—Thame—(con.).								
d Tring (Bulbourne) . . . . .	Grand Union Canal Co. . . . .	5	1 0	401	26·2	35·86	184	133
d Aylesbury (Sewage Works) . . . . .	W. H. Taylor, Esq. . . . .	5	1 0	251	25·9	31·98	169	126
d Mentmore Gardens . . . . .	Mr. T. Lindores . . . . .	5	1 3	400	25·0	32·01	177	134
d Quainton (Quainton Cottage) . . . . .	Sir L. H. West, O.B.E. . . . .	5	1 2	350	..	29·95	153	125
3.—THAMES—Wye & c. 129 sq. mi.								
d Eton (Tangier Island) . . . . . (+A)	F. N. McRae, Esq. . . . .	5	0 8	68	24·6	32·14	181	134
d Slough (Upton) . . . . .	Mrs. L. R. Bentley . . . . .	5	1 0	78	23·9	31·21	178	127
d Slough (Windsor Road) . . . . .	F. K. Hare, Esq. . . . .	5	0 11	69	..	30·60	158	128
d Taplow (Beechwood) . . . . .	Messrs. Wm. Wood & Son, Ltd. . . . .	5	0 10	..	..	31·02	153	124
d Taplow Court Gardens . . . . .	G. H. Emmett, Esq. . . . .	5	1 0	211	23·9	34·27	171	138
d Henley-on-Thames (Greenlands) . . . . .	Lord Hambleton . . . . .	5	1 0	125	27·1	31·71	..	129
d Burnham Waterworks P.S. . . . .	J. W. Madeley, Esq. . . . .	5	1 0	180	..	30·50	169	128
d Stoke Poges (Tithe Farm) . . . . .	G. J. Mortlock, Esq. . . . .	5	1 0	164	..	35·04	..	..
d Marlow (Harleyford Gdns.) . . . . .	Sir Harold Clayton . . . . .	5	2 0	97	..	35·30	..	124
d Bourne End . . . . .	Major Forbes Holland . . . . .	5	1 0	91	..	33·91	164	140
d Bourne End (Hedsor) . . . . .	J. Wood, Esq. . . . .	8	1 0	170	..	34·43	154	140
d Hambleton (Hatchmans) . . . . .	Prof. G. E. Gask, C.M.G., D.S.O. . . . .	5	0 5	185	..	35·85	171	136
d High Wycombe (Lane End Res.) . . . . .	S. Young, Esq. . . . .	5	1 0	659	..	35·39	..	..
d Penn (Woodside) . . . . .	Miss E. M. T. Epps . . . . .	5	1 0	500	30·7	37·49	187	144
d Penn (Rayners) . . . . .	Mr. E. Peett . . . . .	5	1 10	547	29·4	35·98	160	135
d Radnage (Yewdene) . . . . .	Rev. H. E. Cooper . . . . .	5	0 11	430	..	39·44	171	150
d Hampden House . . . . .	The Earl of Buckinghamshire . . . . .	5	1 0	695	29·2	35·42	182	139
4.—THAMES—Colne. 133 sq. mi.								
d Wraybury School . . . . .	R. Watson, Esq., L.C.P. . . . .	5	0 8	59	..	30·45	..	..
d Slough (Ditton Park) . . . . .	G. B. Harrison, Esq. . . . .	5	2 0	70	24·7	32·59	164	123
d Slough (Langley) . . . . .	R. H. Major, Esq. . . . .	8	0 10	85	23·9	30·12	163	130
d Denham Golf Club . . . . .	The Secretary . . . . .	5	0 11	210	26·4	30·24	..	123
d Gerrards Cross (Bulstrode Gdns.) . . . . .	Mr. G. Taylor . . . . .	5	1 6	280	27·2	34·83	..	146
d Beaconsfield . . . . .	S. H. Dyer, Esq. . . . .	5	1 0	250	27·7	34·86	180	138
d Chalfont St. Giles (The Colony) . . . . .	J. W. Edwards, Esq. . . . .	8	1 1	340	..	38·03	183	134
d High Wycombe (Hazlemere Sch.) . . . . .	A. J. Chapman, Esq. . . . .	5	1 6	568	28·1	40·24	..	..
d Amersham Waterworks . . . . .	F. L. Gordon, Esq. . . . .	8	1 0	292	..	37·85	172	139
d Amersham Common (The Plantation) . . . . .	Mrs. G. H. Fawcett . . . . .	8	1 0	464	28·2	37·04	194	144
d Amersham Common (Stanmore) . . . . .	W. Garton, Esq. . . . .	5	1 6	517	30·6	38·55	182	138
d Gt. Missenden (Pumping Sta.) . . . . .	L. F. Hobbs, Esq., C.E. . . . .	5	1 0	372	27·6	37·04	180	138
d Chesham (Nashleigh Hill) . . . . .	Mrs. Hayes . . . . .	5	1 0	530	29·1	34·67	..	..
5.—OUSE. 293 sq. mi.								
d Edlesborough (Solaris) . . . . .	H. Simmons, Esq., M.B.A.A. . . . .	5	1 0	320	..	33·44	..	120
d Oving House . . . . .	Mrs. H. Yates Thompson . . . . .	5	1 0	515	26·4	33·25	180	136
d Swanbourne House School . . . . .	L. L. C. Evans, Esq. . . . .	5	1 0	411	26·3	31·42	..	137
d Mursley Hall . . . . .	Lady Beecham . . . . .	8	1 0	490	25·7	28·48	172	123
d Buckingham (Senior School) . . . . .	The Headmaster . . . . .	5	1 0	303	..	28·02	161	124
d Buckingham (Market Hill) . . . . .	A. Pettipher, Esq. . . . .	5	1 0	300	25·3	29·37	192	128
d Wavendon House . . . . .	S. H. Le Roy Lewis, Esq. . . . .	5	1 0	250	..	32·00	172	129
d Wolverton (Gables Lodge) . . . . .	J. Forster, Esq. . . . .	5	1 0	264	24·0	29·16	168	124
d Wolverton (Council School) . . . . .	The Headmaster . . . . .	5	5 0	263	22·9	29·27	..	..
d Newport Pagnell (Lovat Bank) . . . . .	F. W. Taylor, Esq. . . . .	5	1 6	250	..	30·86	166	122
d Newport Pagnell (Lathbury) . . . . .	F. W. Coates, Esq. . . . .	8	1 2	228	23·2	30·12	173	120
d Olney (Gresham Ho.) . . . . .	H. J. Wells, Esq. . . . .	8	1 0	150	..	30·07	171	123
d Turvey (Brayfield House) . . . . .	Major D. Farrer, J.P. . . . .	5	5 0	188	23·3	30·76	..	117
OXFORDSHIRE. (Area, 756 sq. mi.).								
1.—SEVERN—Upper Avon. 10 sq. mi.								
d Sibford Ferris (Woolman Cottage) . . . . .	Joshua Lamb, Esq. . . . .	5	1 0	570	27·3	29·94	169	120

## DIVISION III—SOUTH MIDLAND COUNTIES—(con.).

		Rain-gauge			1937.				
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-	Days	Days	
			Rim	Ground	age	fall.	with	with	
			above	above	Rain-		·01 in.	·04 in.	
			Ground.	Sea Level.	fall.		or	or	
							more.	more.	
OXFORDSHIRE—(con.).			in.	ft.	in.	ft.	in.		
2.—THAMES—Windrush & c. 261 sq. mi.									
D Kelmscott	R. Hobbs, Esq.	6	0	10	150	26·0	28·21	171	121
D Bampton (C.E. School)	E. W. Fry, Esq.	5	0	10	233	26·2	27·69	173	136
Broughton Poggs	J. N. Hardcastle, Esq.	5	1	0	275	26·7	28·33		
D Filkins	Hon. Sir Stafford Cripps, K.C.	5	2	0	279	25·1	27·08	179	125
D Witney (Cokethorpe)	Major H. G. Feilden	5	1	8	230	26·0	28·55		133
D Burford (Westhall Hill)	Capt. W. R. W. Kettlewell, R.N.	5	1	0	400		29·57	181	128
D Charlbury (Cornbury Park)	The Head Gardener	5	0	9	420		30·20		133
D Wootton Rectory	Rev. F. R. Marriott	5	1	0	375	26·8	27·97	166	131
Bruern Abbey (The Gardens)	F. S. Smith, Esq.	5	1	0	340	28·7	30·96	161	131
D Chadlington (The Manor)	P. Handy, Esq.	5	1	0	400	27·9	27·03	166	131
D Chadlington (Langston House)	Lt.-Col. F. W. Schofield, C.M.G.	5	1	0	430		29·90	180	138
D Woodstock (Sandford St. Martin)	B. E. Dunbar Kilburn, Esq.	5	1	0	500		29·05	169	126
D Chipping Norton (Heythrop Col.)	The Procurator	8	1	0	600	28·5	30·97	186	140
D Chipping Norton (Bungalow)	T. H. Pettipher, Esq.	5	1	0	750	28·1	31·12	202	137
D Chipping Norton (Choicehill)	E. W. Arkell, Esq.	5	1	0	500	27·0	28·67	163	132
3.—THAMES—Cherwell. 250 sq. mi.									
D Nuneham Park Gardens	The Head Gardener	8	1	0	280	25·0	29·55	179	151
D Oxford (Hincksey Pump. Sta.)	A. Carstairs, Esq., C.E.	8	1	0	187	24·4	28·04	188	124
D Oxford (Osney Lock)	Thames Conservancy	5	1	6	186	24·1	26·70	192	127
D Oxford (Magdalen College)	F. J. Parker, Esq.	5	1	0	186	23·8	26·67	173	120
D OXFORD (Radcliffe Met. Stn.) (+A)	The Professor of Geography	8	1	8	208	24·8	27·55	173	122
D Headington (Warneford Asy.)	Dr. A. W. Neill	5	1	0	300		26·71	154	124
D Oxford (Northmoor Road)	Rev. Canon J. S. Wimbush	8	1	0	210	24·5	27·29	172	125
D Headington Hill (Thornhill)	E. S. Fry, Esq.	5	1	0		24·7	28·17	152	116
D Elsfield (Home Farm)	Miss M. J. Parsons	5	1	0	355	24·7	29·63	174	126
D Tackley (Sturdys Castle) <i>new g.</i>	W. Evetts, Esq.	5	1	0	340	26·2	27·77	179	124
D Bicester (St. John's)	Rev. H. R. Long	5	0	10	240		28·72	187	130
D UPPER HEYFORD (AERODROME) (+A)	Meteorological Officer	8	1	0	408	26·0	27·74	175	125
D Steeple Aston (The Grange)	Arthur E. Bradshaw, Esq.	8	1	0	400	27·0	29·18	171	122
D Adderbury (The Green)	Miss L. C. Jansen	5			300		29·29		
D West Adderbury (Cross Hill)	Lt.-Col. H. E. du C. Norris	5	1	0	338		32·05	186	128
D West Adderbury (St. Amand's)	Rev. B. W. Bradford	5	1	0	350	26·5	29·67	180	124
D Adderbury (The Rookery)	C. C. Bradford, Esq.	8	1	0	323		31·39	186	137
D Banbury (Cotefield)	Capt. C. N. Keyser	5	1	0	300		29·49		131
D Banbury (Epwell Mill)	P. Withers, Esq.	5	1	0	520		29·59	168	118
D N. Newington (Orchard Ho.)	H. J. Busby, Esq.	5	1	3	392		29·62	172	123
D Banbury (Bloxham Road)	Dr. C. Royds Jones	5	1	0	416		28·17	174	120
D*Grimsbury (Banbury W.W.)	Banbury Water Co.	8	4	0	316		27·09		121
4.—THAMES—Thame & c. 210 sq. mi.									
D Caversham (Ranmore)	J. G. Sargent, Esq.	5	1	6	200		30·44	161	131
D Goring Heath	Rev. Canon F. T. Wintle	5	1	0	400	27·2	34·38	192	140
D Shiplake (Crescent Key)	A. E. Hobbs, Esq.	5	0	9	127		33·47	167	136
D Goring	G. C. Turner, Esq.	5	1	0	159	26·4	34·61	173	139
D Harpsden (Cray)	(+A) B. E. Dunbar Kilburn, Esq.	5	1	0	230	26·3	33·64	172	129
D Henley-on-Thames (Hart St.)	A. Edward Hobbs, Esq.	5	1	0	110	25·7	32·99	154	130
D Henley-on-Thames (Greys Lane)	G. F. Smith, Esq.	5	1	1	123	26·1	34·22	168	134
D Henley-on-Thames (Greys Gr.)	Mrs. H. Wolferstan	5	1	6	350	27·2	36·87	183	141
D Ipsden (Hailey)	Glynne Williams, Esq.	5	1	0	350	26·5	37·05	205	141
D Nettlebed (Joyce Grove) No. 1	Mr. F. Morby	5	1	0	590	31·8	39·06	169	142
D Swyncombe House	C. W. Christie-Miller, Esq.	5	1	0	515	29·5	37·74	171	144
D Swyncombe (Cookley House)	J. S. C. Bridge, Esq.	5	1	0	730		37·85	188	142
D Culham	F. Mitchell, Esq.	5	0	10	180	23·0	26·86	159	126
D Clifton Hampden (Manor House)	Lord Aldenham	5	1	0	190	23·7	28·60	181	124
D Watlington (Pyrton Manor)	Major H. Ducat Hamersley	5	1	0	325	26·7	33·44	179	136
D Wheatfield	Major A. V. Spencer, D.S.O.	5	0	11	260		32·38	161	130
D Toot Baldon (Potlands)	D. Clinkard, Esq.	5	1	0	288	25·4	28·63	159	125
5.—OUSE. 25 sq. mi.									

\* Reporting to Northamptonshire Natural History Society (where the return is received from the N.N.H.S. the asterisk is after the observer's name).

## DIVISION III—SOUTH MIDLAND COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam	Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
NORTHAMPTONSHIRE. (Area, 1,003 sq. mi.)								
1.—SEVERN—Upper Avon. 60 sq. mi.								
d Rugby (Kilsby Vicarage) .....	Rev. C. Ryder Macnally* ...	5	0	10	450	26·5	28·88	145 116
d Winwick Warren .....	Capt. P. L. Ransom .....	8	1	5	648	27·2	28·10	165 125
d Naseby Reservoir .....	Grand Union Canal Co. ....	5	2	0	519	25·7	26·38	194 131
2.—THAMES—Cherwell. 77 sq. mi.								
d Croughton .....	C. A. St. George Moore, Esq.,	5	1	0	430	25·6	29·68	160 122
d*King's Sutton (Manor House) .....	G. Morgan, Esq. ....	5	1	0	338	25·8	29·03	.. ..
3.—OUSE. 148 sq. mi.								
d*Brackley (Waterworks) .....	W. M. Oldreive, Esq. ....	5	1	5	471	26·1	29·15	148 123
d Hazelborough Woods .....	Forestry Commission .....	8	1	0	241	25·5	31·32	156 137
d Silverstone (The Chantry) .....	Miss A. M. Wood .....	5			450	..	29·59	173 117
d Silverstone (Council School) .....	J. P. Osborne, Esq. ....	5	1	0	400	25·9	30·26	153 119
d Wappenham (Lois Weedon Vic.) .....	Rev. E. V. Fenn .....	5	1	2	400	..	29·25	177 126
d Towcester (Bradden House) .....	Miss U. Grant-Ives .....	5	0	10	420	26·9	31·17	172 121
d Towcester (Easton Neston) .....	The Rt. Hon. Lord Hesketh..	8	1	0	325	25·8	31·27	186 125
d Hargrave Hall .....	Sir K. Murchison .....	5	1	0	273	23·7	29·95	.. ..
4.—NENE. 622 sq. mi.								
d Salcey Forest .....	Forestry Commission .....	8	1	3	370	26·4	30·60	163 121
d*Blisworth (Crieff House) .....	A. Westley, Esq. ....	5	1	0	351	24·9	29·86	180 115
d Litchborough Rectory .....	Rev. E. C. Green** .....	5	1	0	485	..	28·02	(165) (116)
d Blisworth (Grand Junc. Canal) .....	Grand Union Canal Co. ....	5	1	6	300	23·8	30·42	165 123
d*Little Houghton House .....	Mrs. U. C. Davidge .....	5	1	0	270	24·3	28·65	192 119
d Northampton (Hardingstone G. Stn.)	Electric Light & Power Co.**	5	1	0	189	..	26·98	161 114
d Northampton (Upton) .....	J. R. Foster, Esq. ....	5	1	0	270	..	27·42	156 120
d Northampton (St. Andrew's H.)	the late D. F. Rambout, Esq., M.D.	5	0	9	250	..	27·44	168 118
d Northampton (General Hosp.) .....	The Secretary-Supt.* .....	5	1	1	258	23·5	28·74	161 115
d*Northampton (Mental Hosp.) .....	F. Speight, Esq. ....	8	1	2	398	24·3	28·32	176 126
d*Northampton (Stimpson Av.) .....	W. C. Knill, Esq. ....	8	1	0†	329	..	28·37	165 123
d*Northampton (Mercers Row) .....	R. H. Primavesi, Esq. ....	5	12	0	250	23·6	30·79	178 128
d*Duston (Southfield Road) .....	W. P. Walker, Esq. ....	5	1	0	342	25·4	29·98	187 133
d Wollaston .....	G. Harris, Esq. ....	5	2	0	250	23·0	27·46	183 118
d Daventry (Tunnel End) .....	Grand Union Canal Co. ....	5	1	6	394	25·5	27·90	173 123
d*Althorp Park .....	Mr. G. Low .....	5	1	0	414	26·1	31·49	152 118
d Sywell Hall .....	Brig.-Gen. H. E. Stockdale..	5	1	0	371	26·3	30·19	167 122
d Wellingborough (Nene Wharf) .....	R. Nene Catchment Bd. ....	5	1	0	135	..	29·54	162 117
d*Wellingborough (Swanspool) .....	R. S. Henshaw, Esq., C.E. ..	5	1	0	169	24·3	30·41	185 131
d Wellingborough (Sewage Works) .....	R. S. Henshaw, Esq., C.E. ..	5	1	0	139	23·2	27·25	167 119
d§Wellingboro' (Bushfield W.W.) .....	R. S. Henshaw, Esq., C.E. ..	8	1	0	286	23·3	29·99	190 129
d*Watford Court .....	Lord Henley .....	8	1	0	430	26·5	28·69	.. 114
d*Ravensthorpe .....	W. C. Knill, Esq. ....	5	1	0	370	25·5	26·89	156 117
d West Haddon (Foxhill) .....	P. F. H. Wykeham, Esq., C.E.	8	1	0	440	..	28·72	165 128
d Hardwick Pumping Stn. ....	R. S. Henshaw, Esq., C.E. ..	5	1	0	318	..	28·17	161 115
d Orlingbury Pumping Station .....	R. S. Henshaw, Esq., C.E. ..	5	1	0	286	..	30·90	161 119
d Lamport Grange .....	Sir Ch. Frederick** .....	5	0	6	440	26·9	30·54	159 134
d Kettering (Cransley Furnaces) .....	New Cransley Iron & Steel Co.	5	1	0	218	..	30·15	182 127
d Kettering W.W. (Cransley) .....	Major J. P. Haugh .....	8	1	0	275	23·7	31·14	178 129
d*Kettering (Sewage Works) .....	Major J. P. Haugh .....	8	1	0	199	24·2	30·04	182 126
d Kettering W.W. (Thorpe Malsor) .....	Major J. P. Haugh .....	5	1	0	351	24·8	33·28	186 136
d Kettering W.W. (Clover Hill) .....	Major J. P. Haugh .....	5	1	0	344	24·2	28·56	166 122
d Thrapston (Drayton Ho.) .....	Mr. C. V. Craske .....	5	1	6	220	24·7	27·60	153 136
d Thrapston (Islip) .....	G. E. Abbott, Esq., O.B.E..	5	1	0	150	..	28·88	159 126
d Rothwell (Loddington) .....	Mr. J. Oliff .....	5	1	0	400	25·1	29·82	149 ..
d Tichmarsh Rectory .....	Rev. Canon A. M. Luckcock*	5	1	0	170	23·9	29·23	198 128
d Rothwell (Shotwell Mill W.W.) .....	The Surveyor U.D.C. ....	5	1	6	340	23·6	30·88	172 126
d Desborough U.D.C. Waterworks .....	A. Harris, Esq., C.E. ....	5	0	9	457	24·7	29·52	.. 120
d Barnwell (Lilford Hall) .....	Lord Lilford .....	8	1	0	..	23·8	28·57	169 139

\* Reporting to Northamptonshire Natural History Society (where the return is received from the N.N.H.S. the asterisk is after the observer's name).

† "Ground" is the roof of a reservoir 18 ft. above the general level.

\*\* Per River Nene Catchment Board.

§ Turf wall round gauge.

## DIVISION III—SOUTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	Rain-				
			above	above	fall.				
			Ground.	Sea Level.					
			in.	ft. in.	ft.	in.	in.		
<b>NORTHAMPTONSHIRE—(con.)</b>									
<b>4.—NENE—(con.).</b>									
d Oundle (Milton Road) .....	J. M. Siddons, Esq., C.E. ....	5	1 6	131	22·3	26·31	..	113	
d*Oundle (School) .....	The Headmaster .....	8	1 0	147	22·3	24·37	172	118	
d Oundle (Nene Wharf) .....	R. Nene Catchment Bd. ....	5	1 0	65	..	26·92	(166)	(116)	
d Corby .....	Messrs. Stewarts and Lloyds, Ltd.* ..	5	1 0	365	..	30·16	188	138	
d Peterborough (Woodston) .....	Central Sugar Co., Ltd. ....	5	1 0	25	22·3	25·56	177	112	
d Peterborough (Westbourne Ho.) .....	E. H. Colman, Esq. ....	5	1 0	35	21·6	25·88	170	122	
Castor .....	H. St. J. B. Paten, Esq. ....	5	1 6	100	..	27·65	..	..	
d Peterborough (Sewage P.S.) (+ A) .....	F. J. Smith, Esq., C.E. ....	8	0 10	9	..	24·59	156	128	
d Peterborough (Park Crescent) .....	S. M. Egar, Esq. ....	5	1 0	..	..	27·04	178	123	
d*Peterborough (Abbeyfields) .....	Major J. Shipley Ellis, J.P. ....	5	1 0	49	21·8	26·65	174	125	
d*Peterborough (Milton Park) .....	Mr. E. A. Parker .....	5	2 0	86	23·7	27·73	166	132	
d Wittering (Whitewater) .....	E. Betts, Esq. ....	8	1 0	241	23·7	26·87	167	130	
d Wittering (Bone Mill) .....	E. Betts, Esq. ....	8	1 0	..	23·5	26·55	164	127	
<b>5 —WELLAND. 96 sq. mi.</b>									
d Market Harboro' (Dingley Hall) .....	Mr. V. Read* .....	5	1 6	400	26·0	31·73	187	144	
d Gretton School .....	The Headmaster .....	5	0 10	380	..	27·73	180	133	
d Gretton (Hillside) .....	W. Leeson, Esq. ....	7	1 0	275	..	27·83	..	127	
d Easton-on-the-Hill .....	W. H. Tillson, Esq. ....	5	0 7	290	23·5	28·12	..	..	
d Market Deeping (Etton) .....	F. J. Smith, Esq., C.E. ....	8	1 0	25	21·8	24·43	181	123	
<b>HUNTINGDONSHIRE. (Area, 366 sq. mi.)</b>									
<b>1.—OUSE. 327 sq. mi.</b>									
d St. Neots (The Square) .....	Miss L. Sibley .....	5	0 10	50	21·9	31·79	175	130	
d Brampton School .....	W. T. Carter, Esq. ....	5	1 0	40	22·3	25·47	159	116	
d Hemingford Grey .....	G. F. Wilson, Esq. ....	5	1 6	20	21·9	23·93	..	118	
d St. Ives (Slepe House) .....	Dr. W. R. Grove .....	5	1 0	25	22·6	26·89	172	127	
d Huntingdon (Hinchingsbrooke) .....	W. Prowting, Esq. ....	5	2 0	70	22·4	26·90	165	124	
d Catworth (Hyltop)† .....	J. T. Annet, Esq. ....	5	0 10	238	23·7	27·24	156	118	
d Whittlesea Mere .....	Major R. G. Clark, C.E. ....	8	1 6	10	21·4	26·99	162	134	
<b>2.—NENE. 39 sq. mi.</b>									
<b>BEDFORDSHIRE. (Area, 467 sq. mi.)</b>									
<b>1.—THAMES—Colne. 20 sq. mi.</b>									
d Studham Hall .....	Mr. L. Seward .....	5	1 2	630	..	31·45	195	133	
d Whipsnade Park .....	The Zoological Society .....	5	1 0	704	..	36·09	212	138	
d Luton (Stockwood) .....	Capt. H. C. Ross-Skinner .....	5	1 0	539	..	35·87	168	146	
<b>2.—THAMES—Lea. 32 sq. mi.</b>									
d Luton (Pumping Station) .....	J. W. Tomlinson, Esq., C.E. ....	5	1 0	343	25·9	32·38	168	130	
d Dunstable (Priory Road) .....	A. Bishop, Esq. ....	8	1 0	476	..	32·42	176	124	
d Dunstable (Cement Works) .....	Works Manager .....	8	1 0	430	..	32·13	166	128	
d Luton (Wardown Park) .....	J. W. Tomlinson, Esq., C.E. ....	5	1 0	381	..	31·15	161	119	
d Luton (The Downs) .....	Lee Conservancy Catchm. Bd. ....	5	1 0	485	..	33·45	185	142	
d Luton (Hyde House) .....	Rev. W. F. Hicks, M.A. ....	5	1 6	400	..	32·86	181	131	
d Luton (Stopsley) .....	Lee Conservancy Catchm. Bd. ....	5	1 0	540	..	33·17	168	132	
<b>3.—OUSE. 408 sq. mi.</b>									
d Meppershall (High Street) .....	Mrs. G. Rainbow .....	5	0 5	250	..	28·67	..	127	
d Hockliffe (Lyndhurst) .....	C. J. Kilby, Esq. ....	5	1 0	350	..	31·88	157	130	
d Woburn (Experimental Farm) .....	Lawes Agricultural Trust .....	8	1 0	291	23·9	30·62	184	124	
d Woburn (Fruit Farm, Ridgmount) .....	E. J. Hobbs, Esq. ....	5	1 0	270	..	30·49	166	122	
d Letchworth (New Sewage Works) .....	The Surveyor, U.D.C. ....	5	1 0	195	..	31·66	171	131	
d Stotfold (Three Co. Mental Hos.) .....	Dr. L. O. Fuller .....	5	1 0	220	23·2	30·12	161	120	
d Silsoe (The Red House) .....	H. I. Godfrey, Esq. ....	5	..	..	..	29·54	146	121	
d Arlesey Sewage Works .....	The Surveyor, R.D.C.‡ .....	5	1 0	130	..	29·86	168	126	
d Aspley Guise .....	C. A. C. Bowlker, Esq., M.A. ....	5	1 0	408	..	31·87	167	135	

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† Gauge previously at Catworth (School House).

\*\*Per River Nene Catchment Board.

‡ Per Gt. Ouse Catchment Board.



## DIVISION III—SOUTH MIDLAND COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-fall.	Days with	Days with
			Rim	Ground	Rain-fall.		·01 in. or more.	·04 in. or more.
			above Ground.	above Sea Level.				
BEDFORDSHIRE—(con.).		in.	ft.	in.	ft.	in.		
3.—OUSE—(con.).								
d Shefford (Clifton Bury)	W. Inskip, Esq.	5	1	0	137	..	28·75	183
d Shefford (Clifton Road)†	Mrs. R. Alldritt	5	1	0	126	..	33·46	178
d Shefford (Stanford)	C. H. Inskip, Esq.	5	2	6	90	..	29·10	..
d Biggleswade (New Spring P.S.)	T. A. Staniforth, Esq.	5	1	6	180	..	27·95	179
d Pottton (Sewage Wks.)	C. M. Robinson, Esq.	5	1	2	118	..	30·10	..
d Sandy (Mogerhanger Park)	Dr. C. G. Welch	5	1	0	152	..	31·89	150
d Sandy (Sewage Works)	Sandy U.D.C.	5	1	0	72	..	28·00	161
d Bedford (Castle Road)	Miss M. E. Newbery	5	7	0	108	..	28·22	167
d Bedford (Bedford Park)	(+A) The Borough Engineer	8	1	3	117	..	28·34	163
d Goldington (Castle Mill House)	G. A. Rogers, Esq.	5	1	6	75	..	27·17	..
d Great Barford House	J. Arnold Whitchurch, Esq.	5	1	6	120	..	29·94	163
d Pavenham	C. D. Linnell, Esq.	5	..	..	..	..	27·39	..
d Sharnbrook (Glen Lui)	L. Stilemah-Gibbard, Esq.	5	1	0	210	..	30·38	164
4.—NENE. 7 sq. mi.								
CAMBRIDGESHIRE. (Area, 863 sq. mi.).								
1.—STOUR. 17 sq. mi.								
2.—OUSE. 741 sq. mi.								
d Ashwell (Odsey)	W. Herbert Fordham, Esq.	5	2	0	256	23·0	32·66	191
d Litlington Vicarage	Rev. M. de Courcy-Ireland	5	1	0	98	..	32·20	164
d Guilden Morden Vicarage	Rev. L. G. S. Price	5	1	0	140	21·9	31·07	172
d Abington Pigotts Hall	Rev. M. de Courcy-Ireland	5	1	0	87	21·8	35·50	164
d Melbourn (Melbourn Bury)	A. R. Fordham, Esq.	5	4	0	90	..	29·38	182
d Meldreth (Chiswick Farm)	A. A. Howard, Esq.	5	1	1	70	22·4	30·07	192
d Hildersham (Old Mill House)	Lt.-Col. O. B. Foster	5	0	11	108	..	26·18	202
d Sawston Village College	The Headmaster	5	1	0	70	..	(25·76)	177
d Wimpole Hall	W. J. Snell, Esq.	5	1	0	141	23·0	30·60	..
d Grantchester (Lyndewode)	J. Nutter, Esq.	5	1	0	31	22·6	28·38	171
d Fulbourn (Fleam Dyke)	Cambridge W.W. Co.	5	1	0	99	23·0	25·68	186
d Fulbourn Pumping Station	Cambridge W.W. Co.	5	1	0	37	22·9	24·07	169
d Fulbourn (Cambridge Mental Hos.)	The Head Gardener	5	1	0	72	..	28·35	153
d Cambridge W.W. (Cherryhinton)	Cambridge W.W. Co.	5	1	0	35	21·6	25·74	165
d Cambridge (Barrow Road)	N. T. Myers, Esq.	8	0	9	47	23·8	27·53	177
d Cambridge (Corporation Store Yd.)	G. W. Teasdale, Esq., C.E.	5	1	8	52	21·2	25·79	162
d CAMBRIDGE (BOTANIC GARDENS)	The Curator	5	1	1	41	21·8	27·01	158
d Cambridge (Trumpington Rd.)	Canon H. J. E. Burrell	5	1	6	50	..	27·26	168
d Cambridge (Corporation Ppg. Stn.)	G. W. Teasdale, Esq., C.E.	5	1	7	28	22·1	24·97	168
d CAMBRIDGE (UNIVERSITY FARM)	The Director	5	1	0	78	..	28·88	182
d Caxton	Dr. E. P. H. Dudley	5	1	0	155	23·3	27·13	154
d Quy Hall	Lt.-Col. J. C. W. Francis	5	0	9	23	22·6	29·22	162
d Girtton (Langton Close)	S. Welsford Pain, Esq.	5	1	0	68	..	30·26	..
d Boxworth (Manor House)	Capt. E. B. Thornhill, M.C.	5	1	0	76	23·4	30·94	181
d Oakington	A. H. V. Bloom, Esq.	5	1	3	27	..	29·63	..
d Waterbeach (Bottisham Lock)	Gt. Ouse Catchment Bd.	5	2	0	10	..	27·62	166
d Cottenham (Bernard House)	Miss K. Bull	6	1	6	30	22·1	33·98	195
d Conington (Conington Hall)	R. C. B. Gardner, Esq.	5	1	0	50	24·7	26·42	138
d Fordham (London House)	W. V. Bloom, Esq.	5	1	0	30	21·4	26·03	160
d Bluntisham (Brownhill Stauch)	Gt. Ouse Catchment Bd.	5	4	6	..	..	23·23	146
d Stretham Engine	E. Stevens, Esq.	5	1	0	13	21·2	27·82	154
d Stretham (Orchard House)	Miss Wright	8	4	6	42	22·0	30·11	156
d Ely (Roswell Pits)	Gt. Ouse Catchment Bd.	5	2	0	114	..	27·18	177
d Littleport (Highfield House)	H. G. Martin, Esq.	8	4	0	67	21·3	26·44	150
d Chatteris (Aylesby House)	S. W. Ruston, Esq.	5	1	6	31	22·5	26·56	..
d March	Major R. G. Clark, C.E.	9	2	0	10	22·8	28·07	144
d Upwell (Marmont Priory Lock)	Major R. G. Clark, C.E.	8	1	1	..	20·6	33·14	165
3.—NENE. 105 sq. mi.								
d Stanground Sluice	Major R. G. Clark, C.E.	8	1	6	15	21·7	24·80	158
d Thorney Toll (Elm Tree Farm)	G. Snushall, Esq.	5	3	0	10	..	26·44	..
d Parson Drove (Clows Cross)	W. Kingston, Esq.	8	1	0	6	22·1	28·27	201
d Wisbech (Queen's Road)	C. Dann, Esq.	5	1	6	10	23·0	27·22	175
d Wisbech (Tydd Manor)	A. H. Carter, Esq.	5	6	6	..	..	26·13	..

† Station previously called Shefford Council School.

## DIVISION IV—EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.				
		in.	ft. in.	ft.	in.	in.			
ESSEX—(Area, 1,532 sq. mi.)									
1.—THAMES.—Lea. 132 sq. mi.									
d West Ham (Abbey Mills) . . . . .	London County Council . . . . .	8	0 10	15	22·3	28·60	159	124	
d Leyton (Sewage Works) . . . . .	(+A) A. P. Howell, Esq., C.E. . . . .	5	0 9	22	23·0	29·22	162	121	
d Leytonstone (High Road) . . . . .	Miss G. Lister . . . . .	5	1 3	100	24·3	31·61	198	131	
d Lea Bridge (Waterworks) . . . . .	Met. Water Board . . . . .	5	1 0	23	22·0	28·95	163	122	
d Walthamstow (Ferry Lane) . . . . .	Met. Water Board . . . . .	5	1 0	30	22·6	30·80	165	122	
d Woodford (Haggar Lane) . . . . .	Met. Water Board . . . . .	8	1 0	176	23·0	31·89	161	127	
d Buckhurst Hill Reservoir . . . . .	Met. Water Board . . . . .	5	1 0	275	23·9	30·39	179	134	
d Buckhurst Hill (Queen's Rd.) . . . . .	A. J. Mead, Esq. . . . .	5	4 5	190	..	29·95	..	..	
d Chingford (Crescent Road) . . . . .	Miss M. L. Mathieson . . . . .	5	2 9	200	23·3	30·68	182	136	
d Chingford Mill . . . . .	Met. Water Board . . . . .	5	1 0	40	23·0	30·09	167	119	
d Loughton (High Beech Res.) . . . . .	Met. Water Board . . . . .	8	1 0	376	25·1	31·76	186	133	
d Waltham Abbey (Ramsey Marsh) . . . . .	Met. Water Board . . . . .	5	1 0	60	23·4	29·61	166	130	
d Waltham Abbey (Pumping Sta.) . . . . .	Met. Water Board . . . . .	5	1 8	62	23·3	29·92	171	125	
d Waltham Abbey (Upshire) . . . . .	Lee Conservancy Catchm. Bd. . . . .	5	1 0	270	24·4	31·00	182	135	
d Waltham Abbey (Gunpr. Fact.) . . . . .	The Superintendent . . . . .	5	1 0	64	..	28·99	..	..	
d Matching Green . . . . .	H. Nimmo, Esq. . . . .	5	0 9	250	..	32·48	201	145	
d Hatfield Broad Oak (Barrington) . . . . .	A. H. Gosling, Esq. . . . .	5	0 10	300	24·3	29·87	196	122	
d Bishop Stortford (Hassobury) . . . . .	Major W. S. Gosling . . . . .	5	0 10	290	25·0	29·13	182	..	
d Elsenham (Gaunts End) . . . . .	W. E. Greenfield, Esq. . . . .	5	1 0	363	24·6	31·10	(164)	(113)	
d Stausted (Bentfield Place) . . . . .	L. D. Gosling, Esq. . . . .	5	0 9	300	24·6	31·11	189	137	
2.—THAMES—Roding, & c. 316 sq. mi.									
d Grays (Sewage Works) . . . . .	The Manager . . . . .	8	1 6	7	20·3	26·56	158	107	
d Tilbury (Park View Obsy.) . . . . .	G. F. Andrassy, Esq., C.E. . . . .	5	1 0	4	20·2	23·54	145	118	
d Purfleet . . . . .	Thames Board Mills, Ltd. . . . .	8	1 0	4	..	26·40	176	113	
d Grays (Stanley Road) . . . . .	G. F. Andrassy, Esq., C.E. . . . .	5	3 3	21	21·7	27·52	139	115	
d Rainham (Riverside Sewage Wks.) . . . . .	Dagenham U.D.C. . . . .	8	1 6	0	19·3	26·30	156	112	
d EAST HAM (Central Park) . . . . .	The Corporation . . . . .	8	1 0	15	22·3	29·17	167	122	
d East Ham Well . . . . .	Met. Water Board . . . . .	5	1 0	17	21·6	26·32	171	117	
d Corringham (Pembroke Avenue) . . . . .	H. Mousley, Esq. . . . .	5	1 0	67	20·0	28·01	161	118	
d Dagenham Sanatorium . . . . .	The Medical Superintendent . . . . .	5	1 0	18	19·3	23·38	149	106	
d Forest Gate (Monega Road) . . . . .	C. E. Golding, Esq. . . . .	5	0 11	20	22·1	27·76	176	126	
d Ilford Sewage Works . . . . .	L. E. J. Reynolds, Esq., C.E. . . . .	5	1 0	31	20·9	28·77	169	117	
d Ilford (Loxford Park) . . . . .	L. E. J. Reynolds, Esq., C.E. . . . .	5	1 0	30	..	29·33	169	126	
d Ilford (Goodmayes Park) . . . . .	L. E. J. Reynolds, Esq., C.E. . . . .	5	1 0	38	..	30·09	168	118	
d Ilford (Valentines Park) . . . . .	(+A) L. E. J. Reynolds, Esq., C.E. . . . .	5	1 0	43	..	27·50	176	117	
d Ilford (Clayhall Park) . . . . .	L. E. J. Reynolds, Esq., C.E. . . . .	5	1 0	109	..	31·13	163	130	
d Ilford (Hainault Rec. Ground) . . . . .	L. E. J. Reynolds, Esq., C.E. . . . .	5	1 0	105	..	28·88	192	129	
d Leigh (Brick House) . . . . .	Miss I. Bentall . . . . .	5	0 10	136	..	28·85	160	125	
d South Benfleet (Hillside Road) . . . . .	H. A. Marshall, Esq. . . . .	5	1 0	55	21·2	29·80	161	122	
d Vange Pumping Station . . . . .	Southend Water Works Co. . . . .	5	1 0	43	..	27·69	166	114	
d Manor Park (City of L'dn. Cem'y.) . . . . .	The Superintendent . . . . .	5	0 6	50	22·8	27·46	(149)	(116)	
d Pitsea Pumping Station . . . . .	Southend Water Works Co. . . . .	5	1 0	28	20·6	28·50	(164)	(122)	
d Horndon (Eastern Sew. Works) . . . . .	Hornchurch U.D.C. . . . .	8	1 6	23	..	26·18	150	120	
d Hornchurch . . . . .	Hornchurch U.D.C. . . . .	8	1 3	95	21·0	27·77	171	126	
d Waustead (Red Bridge) . . . . .	Met. Water Board . . . . .	5	1 0	25	..	28·83	170	118	
d Havering-atte-Bower (Fernside) . . . . .	Benjamin Smith, Esq. . . . .	5	1 0	340	25·8	33·46	179	136	
d South Weald (Rochetts) . . . . .	G. W. Gardner, Esq. . . . .	8	1 10	225	..	29·99	..	127	
d Loughton (The Summit) . . . . .	Dr. F. Stoker . . . . .	5	0 9	340	..	29·15	187	135	
d Theydon Bois (Thriffs Hill) . . . . .	H. Kemsley, Esq. . . . .	5	1 0	245	23·6	26·90	170	128	
d Theydon Bois (Birch Hall) . . . . .	Mrs. Gerald Buxton . . . . .	5	1 0	300	23·8	29·81	167	134	
d Theydon Bois (The Vicarage) . . . . .	Mrs. M. C. Ames . . . . .	5	0 10	240	24·2	23·31	..	132	
d North Weald (Canes) . . . . .	G. Hart, Esq. . . . .	5	1 0	250	24·2	29·72	175	131	
3.—CROUCH. 186 sq. mi.									
d SOUTHEND (The Cliffs) . . . . .	The Corporation (Pier Master) . . . . .	8	1 0	90	19·7	29·63	162	114	
d Southend (S'thchurch Boulevard) . . . . .	H. J. G. Ralph, Esq. . . . .	8	1 0	66	21·0	30·20	177	125	
d Southend (Waterworks) . . . . .	Southend Water Works Co. . . . .	8	1 0	112	21·1	29·04	163	117	
d Westcliff-on-Sea . . . . .	Messrs. Boatman, F.S.M.C. . . . .	5	1 0	100	20·8	29·64	166	121	
d SHOEBOURNNESS . . . . .	Officer-in-Charge . . . . .	5	1 0	11	19·8	29·98	166	123	
d Leigh Reservoirs . . . . .	Southend Water Works Co. . . . .	5	1 0	177	20·9	30·91	185	125	

## DIVISION IV—EASTERN COUNTIES—(con.).

		Rain-gauge					1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
			Rim above Ground.	Ground above Sea Level.					
ESSEX—(con.).		in.	ft.	in.	ft.	in.	in.		
3.—CROUCH—(con.).									
d Eastwood Pumping Station	Southend Water Works Co.	8	1	0	50	21·0	30·45	175 124	
d Thundersley Reservoir	Southend Water Works Co.	5	1	0	277	21·3	30·55	163 124	
w Nevendon Pumping Station	Southend Water Works Co.	5	1	0	43	20·5	27·77	.. ..	
d Billericay (Service Tank)	Southend Water Works Co.	5	1	0	310	..	25·16	157 118	
d Billericay (Ramsden Hall)	T. W. Bacon, Esq.	5	0	9	260	23·8	30·58	149 130	
d Wickford (Runwell Hall)	Miss A. Kemble	5	0	7	75	24·2	29·64	146 121	
d Burnham-on-Crouch	T. H. Chambers, Esq.	5	1	0	8	..	28·00	139 113	
d Southminster (Dudswell)	Mrs. H. G. Owen	5	1	0	60	20·6	29·90	151 125	
d Southminster (The New Moor)	P. C. Attenborough, Esq.	5	1	6	72	..	27·41	139 115	
d Bradwell-on-Sea (Bradwell Hall)‡	H. D. Chillingworth, Esq.	5	4	0	27	..	28·62	153 121	
4.—BLACKWATER. 425 sq. mi.									
d Ingatestone (Trueloves)	W. Ransom, Esq.	5	1	0	249	23·1	30·71	172 124	
d Ingatestone (Fryerning)	A. E. Christy, Esq.	5	1	0	290	23·3	30·49	181 126	
d Margaretting (Furze Hill)	W. A. Gray, Esq.	5	1	3	200	..	30·56	182 128	
d Chelmsford (Longstomps Res.)	The Water Engineer	5	1	0	230	..	28·62	177 124	
d CHELMSFORD (Agr. Stn.)	The Prin. E. Anglia Inst. Ag.	5	1	0	193	..	28·63	176 127	
d Danbury Park Gdns.	The Head Gardener	5	1	6	120	..	28·92	.. 122	
d MALDON	Town Clerk	5	1	0	14	20·0	26·93	158 115	
d CHELMSFORD (County Gardens)	The Prin. E. Anglia Inst. Ag.	5	1	3	134	22·3	28·24	176 121	
d Chelmsford (Little Baddow)	A. L. Woodhouse, Esq.	5	1	0	180	22·1	27·66	154 118	
d Langford (Treatment Plant)	Southend Water Works Co.	8	1	5	40	21·8	27·00	168 118	
d Witham (Wickham Hall)	D. B. Smith, Esq.	5	0	10	60	20·8	27·55	.. 117	
d Hatfield Peverel (Boreham)	W. Seabrook & Sons, Ltd.	5	0	5	142	..	29·98	.. ..	
d Tolleshunt D'arcy (D'arcy Hall)	C. Weston Eve, Esq.	5	1	0	100	..	27·64	.. ..	
d Wickham Bishops	Mrs. Fowler	5	1	4	250	..	28·60	158 124	
d Tolleshunt D'arcy (Oxley Hill)	H. Campkin, Esq.	5	0	9	100	22·0	26·62	173 128	
d Pleshey Vicarage	Rev. C. H. B. Woodd, M.A.	8	1	3	200	22·4	28·91	179 122	
d Terling Place Gdns.	B. May, Esq.	5	1	2	100	..	26·24	171 122	
d Witham (Faulkbourne Hall)	Miss C. L. Parker	5	0	8	100	21·9	29·34	184 139	
d Little Leighs (Lavender Leez)	W. C. Neild, Esq.	5	1	2	192	22·3	27·93	144 120	
d Kelvedon (Inworth Hall)	Miss Powell	5	1	0	130	..	30·96	.. ..	
d Kelvedon (Messing Street)	Mrs. Calver	5	2	1	120	..	30·75	143 124	
d Kelvedon (Lawn House)	F. Randolph-Symmons, Esq.	5	1	0	96	23·0	30·49	158 126	
d Rivenhall (Park Gate Farm)	C. T. Richardson, Esq.	5	1	0	149	..	28·89	.. ..	
d Felsted School	E. H. Lockwood, Esq.	5	1	0	248	22·9	27·25	144 121	
d Little Dunmow (Throws)	Mrs. D. Hasler	5	0	9	276	..	27·13	167 126	
d Great Dunmow	Messrs. Hasler & Co., Ltd.	5	1	0	241	22·9	28·92	169 120	
d Rayne (Staneway)	Mrs. Burt	5	1	6	247	23·0	27·18	152 128	
d Great Bardfield (South Lodge)	A. W. Brunwin, Esq.	5	1	0	250	23·2	25·52	168 112	
d Saffron Walden (Pounce Hill)	S. G. Wall, Esq.	5	1	0	390	..	29·02	208 130	
5.—COLNE & C. 283 sq. mi.									
d St. Osyth (Wigborough Wick)	P. B. Smith, Esq.	5	1	6	10	..	27·90	.. 123	
d CLACTON-ON-SEA (Hospital Site)	The Town Clerk	8	1	0	53	20·5	31·12	174 133	
d Great Clacton (Clay Hall)	Miss E. A. Smith	5	1	0	45	20·4	30·54	.. ..	
d Tiptree W.W.	S. Essex Waterworks Co.	5	1	0	239	..	29·45	176 112	
d Little Holland (The Sluice House)	Essex Rivers Catchmt. Bd.	5	1	0	7	..	29·12	168 125	
d Tendring	C. N. Daniels, Esq.	5	1	0	80	..	31·34	169 135	
d Colchester (Hythe Gas Works)	Colchester Gas Co.	8	0	10	12	22·0	27·34	.. 117	
d Colchester (Castle Park) <i>new g.</i>	H. Collins, Esq., C.E.	8	1	2	87	..	28·71	169 125	
d Colchester (Waterworks)	H. Collins, Esq., C.E.	5	1	5	37	21·2	26·76	174 122	
d Colchester (Waterworks) <i>new g.</i>	H. Collins, Esq., C.E.	8	1	4	38	..	28·18	174 122	
d Lexden (Cherrywood)	J. W. Partridge, Esq.	5	1	0	120	..	28·88	150 121	
d Lexden (Hill House, S. No. 2)	S. F. Hurnard, Esq.	5	1	0	90	..	27·92	167 120	
d Great Bromley (Broughton)	W. A. Roberts, Esq.	5	1	0	115	23·1	29·09	159 121	
d Halstead (Attwoods)	R. E. Vaizey, Esq.	5	1	6	200	23·6	28·09	177 128	
d HALSTEAD (The Brewery)	F. N. Adams, Esq.	5	1	0	140	23·0	27·46	168 125	
d Sible Hedingham (White House)	T. Elrington, Esq.	5	1	0	150	..	26·83	184 131	

‡ Moved to Bellropes, ½ ml. N.W., 15.10.37

## DIVISION IV—EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
			Rim	Ground	Rain-fall.				
			above	above	Sea Level.				
			Ground.	Sea Level.					
ESSEX—(con.).									
		in.	ft.	in.	ft.	in.	in.		
5.—COLNE & C.—(con.)									
Gt. Maplestead (Monk's Hall) . . . . .	Miss J. Miller . . . . .	5	1	0	200	23·5	27·49	..	..
D Great Yeldham Hall . . . . .	G. A. Goodchild, Esq. . . . .	5	1	6	200	23·1	27·14	183	124
6.—STOUR. 110 sq. mi.									
D DOVERCOURT . . . . .	Borough Surveyor, Harwich . . . . .	5	1	0	47	21·1	27·26	149	123
D Mistley (The Maltings) . . . . .	Messrs. Brooks (Mistley) Ltd. . . . .	8	1	0	25	22·2	25·38	168	116
Nayland (Boxted) . . . . .	Carter and Blewitt, Ltd. . . . .	5	1	0	154	..	28·14	154	115
D Langham Waterworks <i>Standard</i> . . . . .	S. Essex Waterworks Co. . . . .	5	1	0	44	22·0	26·12	182	120
7.—OUSE. 80 sq. mi.									
D Widdington Rectory . . . . .	Rev. Jas. W. Court . . . . .	5	1	6	340	..	28·76	163	123
D Saffron Walden (Debden Road) . . . . .	A. Marsh, Esq. . . . .	5	1	0	305	..	29·54	179	130
D Great Chesterford Mills . . . . .	E. H. King, Esq. . . . .	5	1	0	130	22·7	28·31	179	125
SUFFOLK. (Area, 1,489 sq. mi.).									
1.—STOUR. 271 sq. mi.									
D Capel St. Mary School . . . . .	Bernard B. Taylor, Esq. . . . .	5	1	6	156	24·2	29·83	189	132
D Great Cornard (Brook House) . . . . .	Lt.-Comdr. I. R. Clover . . . . .	5	1	0	77	..	26·67	182	122
D Sudbury (Friars St.) . . . . .	E. Ransom, Esq. . . . .	5	1	6	93	23·2	27·00	205	127
D Sudbury (Waterworks Stn.) . . . . .	The Borough Surveyor . . . . .	5	1	0	131	..	27·32	171	131
D Hadleigh (Penlands) . . . . .	E. A. Lee, Esq. . . . .	5	1	0	185	24·4	31·84	192	140
D Waldringfield (Holbrook Hall) . . . . .	Mrs. F. Ramsay . . . . .	5	1	1	185	23·6	29·86	..	140
D Long Melford (Westgate Ho.) . . . . .	E. F. Colville, Esq. . . . .	5	1	0	146	..	25·90	179	131
D Har test (CHADACRE Agr. Inst.) . . . . .	The Principal . . . . .	5	1	0	250	25·1	26·84	186	136
2.—ORWELL. 166 sq. mi.									
D Trimley (The Avenue) . . . . .	R. L. T. Clarkson, Esq. . . . .	5	1	0	72	..	32·21	193	131
D COPDOCK . . . . .	(+A) F. L. Bland, Esq. . . . .	8	1	0	164	23·9	28·54	189	131
D Ipswich (Museum) . . . . .	F. M. Cullum, Esq. . . . .	8	1	0	72	23·5	25·13	184	129
D Ipswich (Henley Rd.) . . . . .	Percy Turner, Esq. . . . .	8	1	6	154	23·6	25·67	181	123
D Elmsett (Laurel Cottage) . . . . .	A. E. Ladbrook, Esq. . . . .	5	3	0	210	23·8	29·89	..	123
D Nettlestead (High Hall) . . . . .	Mrs. A. S. P. White Cooper . . . . .	5	1	6	236	23·4	29·11	160	134
D Coddennham (Shrubland Park) . . . . .	Mr. R. Norfolk . . . . .	5	1	6	162	24·2	29·27	167	138
D Coddennham (Cousins Hill) . . . . .	Miss Tidswell . . . . .	5	0	6	..	..	28·91	..	..
D Haughley (Haughley House) . . . . .	Mrs. S. H. Creagh . . . . .	5	1	0	180	..	22·74	168	124
D Haughley (Pine Lodge) . . . . .	A. A. Geater, Esq. . . . .	5	1	6	131	..	26·36	209	137
3.—DEBEN & C. 466 sq. mi.									
D FELIXSTOWE AERODROME . . . . .	(+A) The Meteorological Officer . . . . .	8	1	0	15	..	(26·37)	(178)	(122)
D FELIXSTOWE (Cemetery) . . . . .	The Borough Surveyor . . . . .	5	1	0	72	..	28·23	169	120
D Waldringfield . . . . .	Major B. R. M. Glossop . . . . .	8	1	0	70	23·8	31·65	190	130
D Woodbridge Abbey . . . . .	Col. R. J. Carthew . . . . .	8	1	0	46	24·3	29·83	174	134
D Orford (The Gables) . . . . .	Miss E. A. Rope . . . . .	5	1	1	30	23·9	30·51	196	122
D Woodbridge (Ransom Rd.) . . . . .	Rev. F. Shadwell . . . . .	5	..	..	100	..	30·71	190	139
D Melton (Greylands) . . . . .	Miss Jervis-White-Jervis . . . . .	5	1	6	50	24·3	30·43	177	140
D Melton (St. Audrey's Hospital) . . . . .	The Clerk and Steward . . . . .	8	1	3	90	23·8	30·10	170	130
D Butley (Neutral Farm) . . . . .	Sir Bernard Greenwell, Bt. . . . .	5	1	1	6	..	28·72	163	123
D Henley Hall . . . . .	Mrs. Gascoigne . . . . .	5	2	0	150	24·5	30·66	199	141
D Rendlesham Hall . . . . .	Mr. H. Long . . . . .	5	1	0	88	23·1	30·70	159	129
D Campsea Ashe (High House) . . . . .	Viscount Ullswater, G.C.B. . . . .	8	1	0	60	23·0	30·59	170	128
D Charsfield (Red House) . . . . .	Hugh P. Youngman, Esq. . . . .	5	1	9	150	24·1	29·38	..	..
D Blaxhall . . . . .	R. H. Sherwood, Esq. . . . .	5	1	0	..	23·4	31·86	191	136
D Snape (Wadd House) . . . . .	Capt. E. H. Buxton . . . . .	5	1	0	25	23·5	31·08	188	136
D Saxmundham . . . . .	Lt.-Col. C. R. Fryer . . . . .	5	1	7	50	..	27·65	..	..
D Leiston (Lower Abbey) . . . . .	Miss M. K. Rope . . . . .	5	1	4	30	23·0	27·85	178	131
D Heveningham Hall . . . . .	Hon. A. Vanneck . . . . .	5	0	7	100	25·5	34·02	186	156
D Southwold . . . . .	E. G. Naunton, Esq. . . . .	8	1	0	—1	..	26·18	154	123
D Halesworth (Highfield) . . . . .	Admiral E. F. Bruen, C.B. . . . .	5	0	8	90	..	32·12	207	144
D Southwold (Quay House) . . . . .	Miss P. Corns . . . . .	5	1	1	30	22·7	28·12	182	128
D Halesworth Rectory . . . . .	Rev. H. C. Newbery . . . . .	5	1	0	50	25·1	31·35	192	145
D Halesworth (Estate Office) . . . . .	G. W. Stanford, Esq. . . . .	5	1	5	125	..	31·76	193	137
D Wrentham (Sotterley Hall) . . . . .	M. E. St. J. Barne, Esq. . . . .	5	0	10	40	24·5	29·05	203	142

## DIVISION IV—EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim	Ground					
			above	above					
			Ground.	Sea Level.					
SUFFOLK—(con.)									
		in.	ft. in.	ft.	in.	in.			
4.—YARE & C. 208 sq. mi.									
d Horham Rectory	Rev. J. E. Soden	5	1 3	175	26.7	32.22	195	157	
d BUNGAY (FLIXTON HALL)	Sir Shafto Adair, Bart.	5	1 0	79	23.4	28.62	166	140	
d Bungay (Bridge House)	R. Aylmer-Coates, Esq.	5	1 0	22	..	29.71	186	137	
d LOWESTOFT (Secondary School)	The Town Clerk	5	1 0	82	23.5	25.03	182	120	
d Lowestoft (Briar Clyffe)	H. Hollingsworth, Esq.	5	0 7	..	23.6	24.89	186	125	
d Herringfleet House	G. H. Wyllys, Esq.	5	1 0	55	25.2	28.95	206	139	
d Lound Pumping Station	Lowestoft Water & Gas Co.	8	1 0	33	24.0	26.57	181	135	
d Fritton Warren	Miss V. M. Upcher	5	1 0	42	25.9	27.36	..	128	
d Fritton Hall	Major A. R. Buxton	8	0 11	30	24.7	27.95	209	138	
d Yarmouth (Burgh Hall)	H. P. Frederick, Esq.	5	1 0	40	24.9	30.25	200	136	
5.—OUSE. 378 sq. mi.									
d Newmarket (Sewage Outfall)	W. H. Eley, Esq., C.E.	5	1 0	81	23.2	29.74	..	127	
d Bury St. Edmunds (Westley Hall)	Mrs. Burrell	5	1 0	226	25.1	31.88	158	146	
d Bury St. Edmunds (Barton Lodge)	S. Cox, Esq.	5	0 7	250	..	28.17	156	133	
d Hengrave Hall	Sir John Wood, Bart.	5	1 5	85	22.9	30.44	..	..	
d Bury St. Edmunds (Troston Hall)	F. S. Beauford, Esq.	5	1 0	130	23.0	28.41	179	131	
d MILDENHALL Aerodrome	(+A) Meteorological Officer	8	1 0	15	..	27.17	180	125	
d Isleham Lock	Gt. Ouse Catchment Bd.	5	..	10	..	25.66	179	125	
d Barningham (The Beeches)	Miss A. K. Lingwood	5	0 9	136	22.6	28.95	..	..	
d Elveden Hall	The Earl of Iveagh, C.B.	5	1 0	130	23.9	27.82	202	149	
NORFOLK. (Area, 2,041 sq. mi.).									
1.—YARE. 658 sq. mi.									
d Diss (The Cedars)	Dr. G. O. B. Vincent	5	0 8	108	..	25.39	(161)	(124)	
d Diss (Roydon Hall)	R. S. Copeman, Esq.	5	1 0	150	..	26.64	181	137	
d Pulham St. Mary (Brook House)	E. Beevor, Esq.	5	1 0	125	..	28.91	185	138	
d Pulham St. Mary (Hill House)	W. G. Rutter, Esq.	5	1 0	120	24.7	29.23	209	149	
d Denton Lodge	Lt.-Col. C. A. Kemball	5	0 7	90	..	29.25	181	146	
d Ditchingham	W. G. Rutter, Esq.	5	1 0	25	23.9	32.08	219	144	
d Ashwellthorpe (Tacolneston Hall)	C. H. Walter, Esq.	5	1 0	..	..	30.52	194	150	
d Beccles (Raveningham Hall)	N. H. Bacon, Esq.	5	1 6	60	24.6	29.60	169	133	
d Hapton Parsonage	Lt.-Col. H. C. Copeman	5	1 0	120	..	27.00	176	146	
d Spooner Row (School)	Owen Potter, Esq.	5	1 0	160	..	29.38	..	135	
d Loddon (Chedgrave Manor)	C. E. Dupuis, Esq.	5	1 6	17	24.2	25.87	188	129	
d Wymondham (Morley School)	T. E. Ormond, Esq.	5	1 0	157	25.3	30.66	212	147	
d Wymondham	J. B. Pomeroy, Esq.	5	1 3	118	..	29.55	179	137	
d Hingham	F. B. Law, Esq.	5	1 0	193	25.1	29.74	191	150	
d Ketteringham	Lt.-Col. R. F. Boileau	5	1 0	135	..	27.26	206	136	
d GORLESTON (C. G. Station)	Station Officer (M.O.)	8	1 0	5	24.5	25.38	175	126	
d Norwich (Carrow Abbey Gdns.)	The Misses Colman	5	1 0	41	25.2	27.49	188	139	
d Norwich (Southwell Lodge)	J. H. Willis, Esq.	5	1 0	110	25.9	25.96	197	139	
d Norwich (Heigham Cemetery)	L. Alan Jewell, Esq.	5	1 2	93	25.5	26.27	184	131	
d Thorpe St. Andrew (Pine Banks)	H. J. Jarrold, Esq.	5	1 7	140	..	26.85	180	134	
d Norwich (Catton Hall)	D. G. Buxton, Esq.	5	1 0	100	..	25.64	187	132	
d Sprowston (Oak Lodge)	A. Cozens Hardy, Esq.*	5	1 0	100	25.2	28.00	211	142	
d Wendling (Astrantia)	Mrs. A. H. Turner	5	1 7	170	..	31.82	215	147	
d Taverham (Deighton Hills)	T. B. Norgate, Esq.	5	1 0	100	..	27.44	180	138	
d Swanton Morley Rectory	Rev. R. N. Usher	5	1 0	105	24.3	31.50	172	143	
d Bylaugh Park	Mrs. Rice	5	1 0	..	24.8	32.15	192	147	
d Swanington (Heath House)	P. Norgate, Esq.	5	1 3	101	25.6	28.36	191	147	
d East Bilney Hall	K. W. Hervey, Esq.*	5	1 0	140	26.6	33.07	..	132	
d Cawston (The Poplars)	H. A. Wells, Esq.	5	0 8	148	26.6	30.45	198	149	
2.—YARE—Bure & c. 368 sq. mi.									
d Acle	Miss Davie*	5	0 6	51	25.1	27.61	(206)	(132)	
d Norwich (SPROWSTON, Church Farm)	Director, Norfolk Ag. Stn.	5	1 0	93	..	29.07	197	140	
d Yarmouth (Ormesby St. Michael)	Gt. Yarmouth W.W. Co.	8	1 0	22	26.2	25.29	223	130	
d Yarmouth (Scratby)	Harvey Palmer, Esq.	5	1 0	70	..	24.39	196	123	
d Coltishall Hall	Rev. H. Rogers	5	1 6	25	25.5	30.33	186	146	

\* Per Norfolk Rainfall Organisation.

## DIVISION IV—EASTERN COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-	Days	Days
			Rim	Ground	Rain-	fall.	with	with
			above	above	fall.		·01 in.	·04 in.
			Ground.	Sea Level.			or	or
							more.	more.
NORFOLK—(con.).								
2.—YARE—Bure &c.—(con.).								
d Wroxham (Hoveton House) . . . . .	Mrs. I. C. Blofeld . . . . .	5	1 0	100	..	30·22	195	141
d Buxton (Sunnymead) . . . . .	W. S. Tillett, Esq. . . . .	8	1 0	50	..	30·92	215	149
d Hevingham (Rippon Hall) . . . . .	Rev. A. F. Marsham* . . . . .	5	0 7	90	26·4	30·74	..	(154)
d Aylsham (Woodgate Ho.) . . . . .	Lt.-Col. P. W. Purdy* . . . . .	5	1 0	100	..	31·12	189	150
d Worstead (Lyngate Cottage) (+A) . . . . .	Miss F. E. Hooper . . . . .	8	1 6	50	26·5	28·49	186	142
d Aylsham (Wilderness) . . . . .	J. Peed, Esq. . . . .	5	1 0	80	..	33·35	169	150
d Hindolveston (School House) . . . . .	The Headmaster . . . . .	5	1 0	300	28·2	35·03	206	154
d North Walsham (The Paston Sch.) . . . . .	Major P. Pickford . . . . .	5	1 0	100	..	30·63	199	144
d North Walsham (Worstead Lo.) . . . . .	F. J. Frostick, Esq. . . . .	5	1 2	170	..	28·64	182	134
d Walcott-on-Sea . . . . .	Lt.-Col. R. S. Hunt, D.S.O. . . . .	5	2 0	17	..	25·83	189	136
d Mundesley . . . . .	R. C. Gold, Esq. . . . .	5	1 0	150	..	29·10	177	119
d Cromer (Northrepps Hall) . . . . .	Lt.-Col. C. R. Gurney . . . . .	5	1 2	226	26·7	30·63	192	145
d Hanworth Rectory . . . . .	Rev. Wilson W. White . . . . .	5	0 10	95	..	29·50	197	148
3.—STIFFKEYS & C. 290 sq. mi.								
d Harpley Dams House . . . . .	R. E. Wilson, Esq. . . . .	5	..	..	..	32·77	..	127
d Sandringham House Gardens . . . . .	Mr. C. H. Cook . . . . .	5	1 0	121	27·0	33·76	192	150
d Thorpland Hall . . . . .	Miss C. Lee Warner . . . . .	5	1 0	157	..	32·85	210	149
d Syderstone (The Rectory) . . . . .	Rev. B. D. Reed . . . . .	5	1 0	210	..	29·21	183	138
d Snettisham (The Hollies) . . . . .	Dr. P. G. E. Jolley . . . . .	5	0 7	47	..	29·87	178	127
d Melton Constable Park . . . . .	The Head Gardener . . . . .	8	0 11	287	..	31·03	182	138
d CROMER (Howards Hill) . . . . .	Clerk to the U.D.C. . . . .	8	1 0	178	23·8	27·79	186	132
d West Runton . . . . .	Miss J. Vernon-Harcourt . . . . .	5	1 0	113	..	32·27	..	133
d Langham Episcopi . . . . .	Lt.-Col. F. S. Butcher* . . . . .	5	0 6	139	23·2	29·29	193	144
d Upper Sheringham (The Gables) . . . . .	H. E. S. Upcher, Esq.* . . . .	5	..	..	..	31·45	172	137
d Sheringham Hall . . . . .	Miss E. Upcher . . . . .	5	0 9	136	23·6	30·78	163	135
d Sheringham (Skelding) . . . . .	F. Hall-Smith, Esq. . . . .	5	1 0	70	..	29·91	171	133
d Sheringham (Sheringham Ho.) . . . . .	Rev. E. C. S. Upcher . . . . .	5	1 6	150	..	28·43	166	140
d Wells (Holkham Hall) . . . . .	Earl of Leicester, G.C.V.O. . . . .	5	0 3	43	23·1	27·62	..	..
d Hunstanton (Le Strange Arms H'l.) . . . . .	Capt. C. E. Gray . . . . .	5	0 10	20	..	27·03	166	118
d§HUNSTANTON . . . . .	The Advancement Assn. . . . .	5	1 1	105	..	28·03	185	126
4.—OUSE & C. 709 sq. mi.								
d Garboldisham Manor . . . . .	Major E. W. Denny, D.S.O. . . . .	8	1 0	70	23·2	28·91	204	142
d Thetford (Kilverstone Hall) . . . . .	Baron Fisher of Kilverstone . . . . .	8	1 0	70	21·7	30·70	193	139
d Thetford Waterworks . . . . .	C. W. Holmes, Esq. . . . .	8	1 0	165	23·8	28·35	218	137
d Attleborough (Quidenham Hall) . . . . .	Earl of Albemarle . . . . .	5	1 0	100	24·1	28·36	..	141
d THETFORD (LYNFORD NURSERY) . . . . .	Forestry Commission . . . . .	5	1 0	99	..	28·30	178	133
d Old Buckenham (The Grange) . . . . .	W. D. Haughton, Esq. . . . .	5	1 1	180	..	28·78	182	149
d Hargham Hall . . . . .	Sir H. R. Beever, Bart., M.D. . . . .	5	0 5	116	24·9	28·45	194	137
d Methwold (Duchy of Lancs. Sch.) . . . . .	The Headmaster . . . . .	5	0 9	50	..	32·00	181	136
d Attleborough (Breccles Hall) . . . . .	J. E. Fitt, Esq. . . . .	5	0 6	..	..	29·83	..	..
d Caston (Flaxmoor) <i>new g.</i> . . . .	Lt.-Col. T. S. N. Hardinge . . . . .	5	1 0	150	..	27·84	183	132
d Watton (Merton Hall) . . . . .	Sir C. S. B. Rensham . . . . .	5	1 0	153	..	29·77	..	140
d Watton . . . . .	E. H. Codling, Esq. . . . .	5	1 0	200	25·7	30·60	185	140
d Denver Sluice . . . . .	Gt. Ouse Catchment Bd. . . . .	5	1 7	10	..	29·62	219	142
d Great Cressingham . . . . .	J. W. Montgomery, Esq. . . . .	5	1 2	90	..	30·64	187	139
d Denver (Crow Hall) . . . . .	C. A. F. Wingfield, Esq. . . . .	5	0 6	100	..	27·01	174	125
d Downham (Dial House) . . . . .	Messrs. T. H. Wenn & Co. . . . .	5	1 6	..	..	28·12	177	133
d Downham Market <i>new g.</i> . . . .	J. W. Jackson, Esq. . . . .	5	1 6	112	..	27·52	177	122
d Outwell (Well Creek Sluice) . . . . .	Major R. G. Clark, C.E. . . . .	8	2 6	16	22·0	28·10	..	120
d Swaffham (The Villa) . . . . .	Mr. J. H. Mack . . . . .	5	0 9	246	26·3	33·31	177	149
d Swaffham . . . . .	Messrs. Vynne & Everett, Ltd. . . . .	5	2 7	210	..	30·57	..	..
d Little Dunham (Dunham Cott.) . . . . .	Miss S. Blamire . . . . .	5	1 0	319	27·2	33·47	196	159
d Kings Lynn (Narford) . . . . .	G. F. Attwood, Esq. . . . .	5	1 0	53	..	30·24	163	127
d Wiggshall (St. Germans Sluice) . . . . .	Major R. G. Clark, C.E. . . . .	8	1 6	9	23·1	32·47	185	151
d East Winch (Holland House) . . . . .	J. C. Cottam, Esq. . . . .	5	1 6	55	23·3	29·31	..	..
d TERRINGTON St. Clement (C. Sch.) . . . . .	Horticultural Supt. Norfolk C.C. . . . .	5	1 0	15	..	30·30	162	119
d Gayton Waterworks . . . . .	J. C. Matthew, Esq., C.E. . . . .	5	1 0	131	..	28·96	177	134
d King's Lynn (Manure Works) . . . . .	J. S. Brown, Esq. . . . .	5	1 2	0	..	28·89	..	..
d Grimston (School House) . . . . .	J. R. Steward, Esq. . . . .	5	1 2	62	..	29·89	195	127
5.—NENE. 16 sq. mi.								
d Emneth (Inglethorpe Manor) . . . . .	Miss R. Bland . . . . .	5	1 0	6	22·5	29·32	187	143

\*Per Norfolk Rainfall Organisation.

§ Turf wall round gauge.

## DIVISION V—SOUTH-WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average Rain-fall.	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
WILTSHIRE. (Area, 1,370 sq. mi.).			in.	ft.	in.	in.		
<b>1.—LOWER AVON. 383 sq. mi.</b>								
d Warminster (Sturford Mead) . . . . .	Rt. Hon. Visc. Weymouth . . . . .	5	1	3	..	40·91	173	144
d Westbury (Wellhead) . . . . .	The Waterworks Engineer . . . . .	5	1	0	321	34·32	173	124
d Westbury (Braemar) . . . . .	Mrs. F. D. Richards . . . . .	5	1	0	250	35·34	170	133
d Market Lavington (Old House) . . . . .	Miss A. Pleydell Bouverie . . . . .	5	0	9	290	32·97	160	133
d Gt. Cheverell (Timoleague) . . . . .	Rev. H. S. Travers . . . . .	5	0	6	370	34·55	..	..
d Easterton (Kestrals) . . . . .	R. Lake, Esq. . . . .	5	1	0	370	31·93	158	123
d Trowbridge (Town Hall) . . . . .	The Engineer . . . . .	8	0	10	131	31·89	170	124
d Bradford on Avon (Iford Manor) . . . . .	Major J. Michael Peto . . . . .	5	1	1	101	35·85	170	140
d Bradford on Avon (Manvers Ho.) . . . . .	Dr. C. E. S. Flemming . . . . .	5	1	3	130	36·36	167	138
d Seend (Cleeve House) (R) . . . . .	Mrs. Heward Bell . . . . .	8	1	0	160	36·30	174	132
d Holt (The Retreat) . . . . .	A. T. M. Beaven, Esq. . . . .	5	1	0	144	35·38	171	135
d Seend (Ferrun Towers) . . . . .	Mrs. M. G. Haigh . . . . .	8	1	3	200	37·69	..	136
d Devizes (Broadleas) . . . . .	W. H. L. Ewart, Esq. . . . .	5	1	7	400	32·96	162	131
d Devizes (Nurstead) . . . . .	T. H. Thornely, Esq. . . . .	5	1	2	390	33·29	174	131
d Rowdeford Gardens . . . . .	Mrs. R. E. S. Thomas . . . . .	5	1	6	..	32·10	..	131
d Great Chalfield . . . . .	Major R. F. Fuller . . . . .	5	1	2	165	33·39	..	129
d Little Chalfield . . . . .	Miss C. E. Baker . . . . .	5	1	0	180	33·91	199	140
d Melksham (Beechfield) . . . . .	Lt.-Col. Sir G. R. Blake . . . . .	5	2	7	129	34·00	172	136
d Bowood House . . . . .	The Marquess of Lansdowne, K.G., P.C. . . . .	5	0	4	306	34·60	157	134
d Calne (Castle Walk) . . . . .	P. W. Phillips, Esq. . . . .	5	1	0	..	33·48	156	132
d Calne (Compton Bassett Gdns.) . . . . .	Mr. R. Devening . . . . .	5	0	10	324	36·01	152	136
d Chippenham Water Works . . . . .	The Borough Surveyor . . . . .	5	1	2	144	32·80	176	134
d Chippenham (Monkton Park) . . . . .	Lord Methuen . . . . .	5	1	7	200	31·90	162	128
d Chippenham (Kington Langley) . . . . .	Mrs. Charles Garnett . . . . .	8	1	0	172	34·16	..	..
d Wroughton (Basset Down Ho.) . . . . .	Mrs. Arnold Forster . . . . .	5	1	0	500	34·55	176	142
d Tockenham Manor . . . . .	Major G. J. Buxton . . . . .	5	1	0	400	31·85	172	130
w Luckington Court . . . . .	Col. Sir E. Johnson-Ferguson, Bt. . . . .	5	0	8	400	30·71	..	..
d Sherston School . . . . .	The Headmaster . . . . .	5	1	0	375	32·72	158	125
d Malmesbury (Lea House) . . . . .	Rev. H. Milnes-Walker . . . . .	5	1	6	260	32·26	152	134
<b>2.—STOUR. 33 sq. mi.</b>								
d Mere (Charnage) . . . . .	W. G. B. White, Esq. . . . .	5	1	0	426	35·72	180	141
d Stourhead . . . . .	Sir H. H. A. Hoare, Bart. . . . .	5	1	2	583	47·04	192	153
<b>3.—EAST AVON. 554 sq. mi.</b>								
d Broad Chalk . . . . .	Mrs. H. N. Burroughes . . . . .	5	4	1	362	42·31	186	147
d Longford Castle Gardens . . . . .	The Earl of Radnor . . . . .	5	1	0	139	38·40	175	142
d Salisbury (Harnham) . . . . .	E. F. Taunton, Esq., Junr. . . . .	5	1	0	200	38·59	202	152
d Salisbury (Folkestone Rd.) . . . . .	M. A. Chaplin, Esq. . . . .	5	0	8	180	38·12	171	140
d Fonthill House Gardens . . . . .	Hugh Morrison, Esq. . . . .	5	1	0	400	44·73	177	149
d Salisbury (Sewage Works) . . . . .	(+A) S. R. Little, Esq., C.E. . . . .	8	1	0	147	33·42	164	131
d Salisbury (Manor Road) . . . . .	Miss L. C. D. Awdry . . . . .	5	1	0	250	35·85	187	144
d Salisbury (Atherton House) . . . . .	Wilfrid Fletcher, Esq. . . . .	5	1	0	250	35·92	177	133
d Salisbury (Newlands) . . . . .	Dr. T. W. Newton Dunn . . . . .	5	1	0	200	35·88	(162)	(134)
d Wilton (Stone Lodge) . . . . .	Major B. W. Parker . . . . .	5	1	6	175	41·30	170	139
d Stratford-sub-Castle (Manor Ho.) . . . . .	Miss F. Carpenter . . . . .	5	0	9	168	36·33	171	143
d Woodford Vicarage . . . . .	Rev. M. I. Holme . . . . .	5	0	10	200	36·93	210	140
d Porton (W.D. Exp'l. Stn.) (+A) . . . . .	Meteorological Officer . . . . .	5	0	11	363	34·45	157	132
d Steeple Langford (Woodstock) . . . . .	Miss A. J. Powell . . . . .	5	1	0	257	38·43	178	135
d Maiden Bradley House . . . . .	The Duke of Somerset . . . . .	5	1	0	620	45·69	..	..
d Maiden Bradley . . . . .	R. Luff, Esq.* . . . .	4	3	0	600	43·91	..	146
d AMESBURY (BOSCOMBE DOWN Aero) (+A) . . . . .	Meteorological Officer . . . . .	8	1	0	417	34·62	171	131
d Warminster (Crockerton P.S.) . . . . .	W. H. Edwards, Esq. . . . .	5	1	0	460	41·85	..	138
d Heytesbury . . . . .	Dr. Hammond T. Hinton . . . . .	5	1	0	300	39·95	178	143
d Warminster (Henford) . . . . .	Mrs. Robinson . . . . .	5	1	8	400	42·08	188	149
d Warminster (The Croft) . . . . .	Rev. T. Lloyd Herbert . . . . .	5	0	7	420	36·04	183	143
d Warminster (St. John's Lodge) . . . . .	D. Vesey, Esq. . . . .	5	1	6	400	37·52	161	145
d LARKHILL (School of Artillery) (+A) . . . . .	Meteorological Officer . . . . .	5	1	0	440	33·53	170	128
d Warminster (Smallbrook Ho.) . . . . .	G. E. Vicary, Esq. . . . .	5	0	8	420	38·57	177	138

\* Per Mid-Wessex Rainfall Association.

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with	Days with
			Rim	Ground	Rain-fall.		·01 in. or more.	·04 in. or more.
			above Ground.	above Sea Level.				
WILTSHIRE—(con.).			in.	ft.	in.	ft.	in.	
3.—EAST AVON—(con.)								
d Orcheston St. Mary	F. J. Wardale, Esq.	5	0	9	285	..	35·40	.. 118
d Tilshead (The Manor House)	C. A. Kempson, Esq.	5	1	0	355	..	33·72	159 118
d Marlborough (Wilcot Manor)	Lady Ernest St. Maur	5	1	0	400	..	33·02	.. ..
d Bishops Cannings	A. J. Combes, Esq.	5	1	0	446	30·3	37·50	186 142
4.—TEST. 77 sq. mi.								
d Landford (Northlands)	Cedric R. Boulton, Esq.	5	1	0	180	30·7	38·31	183 139
d Ludgershall (Conholt Park)	E. A. Wigan, Esq.	8	1	0	800	33·9	38·88	186 145
5.—THAMES—Kennet. 169 sq. mi.								
d Bishops Cannings (Shepherds Shore)	Devizes Gas & Water Dept.	8	2	1	564	..	34·50	171 136
d MARLBOROUGH College	The Headmaster	5	1	1	424	31·1	37·02	180 138
d Marlborough (Cardigan Rd.)	Mrs. M. O. Kinder	5	1	11	550	..	36·37	.. ..
d Aldbourne (Manor House)	Capt. W. Brown, J. P.	5	1	0	435	..	35·82	199 149
d Aldbourne (Upham House)	Lady Currie	5	1	0	881	30·3	37·44	170 139
6.—THAMES—Cole & c. 154 sq. mi.								
d Chiseldon (The Manor House)	Mrs. Waugh	5	1	1	550	..	34·33	183 141
d Wroughton (Swindon W.W.)	J. B. L. Thompson, Esq., C.E.	5	1	3	448	..	31·52	170 132
d Chiseldon (Hodson House)	A. Ashford, Esq.	5	0	9	560	29·0	32·14	169 133
d Swindon (Volta Road)	H. Cook, Esq.	5	1	0	330	..	28·91	176 133
d Swindon (Town Gardens)	J. B. L. Thompson, Esq., C.E.	5	1	4	471	27·5	28·61	181 136
d Purton (Restrop House)	Col. A. Canning	5	1	3	444	27·7	29·92	163 132
d Purton (Modern School)	The Headmaster	5	1	0	395	..	30·71	171 137
d Swindon (Blunsdon House)	Major F. W. Jagger	5	1	0	450	..	29·11	.. ..
d Fairford (Marston Hill)	Maj. R. Hamilton Stubber	5	0	10	350	..	30·21	.. 139
DORSETSHIRE. (Area, 983 sq. mi.).								
1.—PARRETT. 61 sq. mi.								
d Evershott (Melbury House)	Mr. W. G. Lee	5	2	0	460	38·7	47·53	171 145
d Chedington Court	Sir Henry Peto, Bart.	8	1	0	605	38·5	44·96	182 140
d Lillington (Manor Farm)	G. W. Payne, Esq.	5	2	2	275	..	38·03	187 146
d Sherborne Castle	Mr. Edwin Hill	5	1	0	195	32·5	41·64	179 148
d Sherborne (Crendle Court)	A. Tyrwhitt Drake, Esq.	5	0	9	380	..	42·36	170 151
d Sherborne (Barton Gardens)	C. E. Bean, Esq., C.E.	8	1	0	285	..	39·92	178 141
d Sherborne (Castleton)	Reading T. Grantham, Esq.	5	1	6	200	31·8	42·53	.. ..
2.—AXE. 25 sq. mi.								
d Broadwindsor (Blackdown Ho.)	Lt.-Col. E. Harris-St. John	5	1	0	600	40·8	50·24	192 146
d Thorncombe (Greenhill)	Mrs. A. D. Wilde	5	0	9	575	..	49·11	164 140
d Forde Abbey	G. D. Roper, Esq.	5	0	10	200	37·7	47·84	176 141
3.—FROME & C. 501 sq. mi.								
d PORTLAND BILL (Lighthouse)	Lightkeeper (M.O.)	8	1	0	32	25·2	36·86	166 131
d Easton (Tophill School)	The Headmaster	5	0	10	280	..	39·42	174 137
d Portland (H.M. Naval Depot)	The Works Officer	8	1	0	25	..	39·92	(172) (138)
d Corfe Castle (Encombe)	Sir Ernest Scott, K.C.M.G.	5	1	0	200	..	44·02	.. 131
d Weymouth (Lansdowne Villa)	Paym.-Capt. T. Seaman, R.N.	5	7	0	100	..	39·36	175 139
d WEYMOUTH (WESTHAM) (+A)	The Town Clerk	5	1	0	16	28·0	39·56	160 128
d Weymouth (Springfield)	Major J. H. C. Devenish	5	1	3	96	27·9	38·65	189 135
d SWANAGE	The Surveyor, U.D.C.	5	1	0	14	..	37·70	172 132
d Swanage (Grammar School)	The Headmaster	5	1	0	75	..	38·24	176 130
d Chickerell (Montevideo)	The late Mrs. N. M. Richardson, O.B.E.	5	1	0	100	28·9	39·11	186 140
d Steeple (Manor House)	Major F. H. Swann	5	0	8	231	34·8	42·43	185 152
d Corfe Castle (Yondover)	C. K. Crowther, Esq.	8	0	8	120	..	43·74	172 142
d Creech Grange	J. W. G. Bond, Esq., C.B.	5	1	0	228	37·1	47·02	192 150
d Langton Herring (Higher Farm)	E. A. Sparks, Esq.	5	1	0	170	..	38·28	184 149



## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Sea Level.				
DORSETSHIRE—(con.).		in.	ft.	in.	ft.	in.	in.	
3.—FROME & C.—(con.).								
D Winfrith Rectory	Rev. C. S. Pugh	5	3	0	200	..	44·06	189 144
D Abbotsbury (West Street)	J. C. P. White, Esq.	5	1	6	147	29·2	41·86	171 147
D Abbotsbury (West End)	The Earl of Ilchester	8	1	6	..	..	43·51	176 156
D Upwey (Friar Waddon)	R. Davison, Esq.	5	1	0	215	..	42·31	178 149
D Upwey (Higher Well)	R. Davison, Esq.	8	1	0	289	..	43·66	179 151
D Warmwell.	Weymouth W. W. Co.	5	1	0	134	..	44·54	160 146
D Wareham (East Holme)	Miss L. S. Bond	5	1	0	23	33·9	44·04	168 141
D Wareham (The King's Barrow)	Major R. Feilden	5	1	4	15	34·6	46·95	180 146
D Wareham (Binnegar Hall)	Mr. J. W. Hayward	5	1	0	65	33·8	44·52	180 140
D Wareham (Stockford)	W. Bond, Esq.	8	1	0	65	33·4	44·02	192 140
D Wareham (Trigon)	Mrs. L. Sturdy	8	1	4	60	32·1	42·03	180 138
D Dorchester (Littlemayne)	E. R. Sykes, Esq.	5	1	0	200	..	41·86	180 151
D Burton Bradstock (White Ho.)	Maj. J. M. Wratlaw	5	1	0	50	..	35·91	160 143
D Dorchester (Kingscote)	Mrs. H. M. Ffooks	5	0	9	200	38·3	44·01	167 140
D Dorchester Waterworks	H. D. Strange, Esq.	8	1	0	314	36·6	44·84	169 135
D Dorchester (Stinsford)	J. Wyndham Hull, Esq.	5	1	0	207	37·4	45·24	178 143
D Dorchester (Birkin House)	Mrs. Weber	5	1	0	230	37·4	47·21	176 144
D Bradford Peverell House	H. F. Middleton, Esq.	5	1	0	370	..	49·06	184 150
D Puddletown (Clyffe Ho.)	(A) Maj. W. Van de Weyer	8	4	0	200	..	41·40	197 137
D POOLE	(+A) Medical Officer of Health	5	1	0	18	..	39·60	177 126
D Poole (Pitwines Gasworks)	P. G. G. Moon, Esq.	8	1	0	8	..	39·92	170 130
D Poole (HOLTON HEATH R.N.Cordite Fac.)	The Superintendent	8	1	0	64	..	42·84	176 133
D Parkstone (Balmoral Rd.)	Mrs. P. V. Hall	5	1	0	..	..	42·39	189 137
D Parkstone (Firgrove)	F. R. Wadman, Esq.	5	1	3	175	28·6	37·68	178 137
D Parkstone (Chevington Croft)	Col. E. C. Castleman-Smith, C.B.	5	0	10	200	..	40·24	172 137
D Parkstone (Rosemead)	S. Hyla Greves, Esq.	5	1	0	172	..	42·61	177 137
D Parkstone (St. Osmund's Road)	A. D. Stables, Esq.	5	1	3	60	32·2	43·67	161 143
D Parkstone (The Laurels)	J. N. Blanchard, Esq.	5	1	2	115	..	40·72	179 135
D Charminster (Brooklands)	K. P. Druce, Esq.	5	0	10	200	..	50·28	161 144
D Branksome (Bourne Valley)	P. G. G. Moon, Esq.	8	1	3	84	30·0	40·12	170 130
D Branksome (Alderney Res.)	P. G. G. Moon, Esq.	8	1	3	213	..	42·13	187 141
D Broadstone (Sewage Works)	J. Bantten, Esq.	5	1	0	26	29·2	38·91	170 135
D Lyme Regis (Horn Bridge)	E. T. Stoward, Esq.	5	1	0	83	33·2	43·25	182 147
D Lyme Regis (Rotherfield)	Rev. E. J. Synge	5	1	0	145	34·3	42·67	199 143
D Lyme Regis (Overton)	C. Wanklyn, Esq.	5	0	10	400	30·9	41·23	212 148
D Bridport (Coneygar)	Bridport Waterworks Co.	5	1	0	110	32·9	38·87	(192) (156)
D Bridport (Symondsburys)	P. G. Fry, Esq.	5	1	0	83	..	38·19	171 149
D Bridport (Ryall)	W. T. Bridges, Esq.	5	1	6	460	..	43·52	173 139
D Tolpuddle Parsonage	Mrs. Ashton Radcliffe	5	0	7	100	32·9	43·66	179 143
D Puddletown Vicarage	Rev. Canon A. L. Helps	5	4	6	200	35·8	48·25	181 148
D Bere Regis (Barrow Hill)	A. E. Lucas, Esq.	5	1	0	120	32·9	40·48	167 128
D Bere Regis (Bloxworth House)	F. G. A. Lane, Esq.	5	1	6	118	33·7	42·26	183 138
D Lytchett Matravers (Kit Robins)†	H. Blanchard, Esq.	5	1	0	300	..	41·80	180 143
D Wynford House	Lt.-Col. Lord Wynford, D.S.O.	5	1	0	410	43·5	50·91	206 161
D Netherbury (The Chantry)	Lt.-Col. H. L. Kitson	5	1	0	150	35·2	45·93	182 146
D Beamminster (East Street)	W. A. Stiby, Esq.	5	1	0	183	37·6	45·60	184 141
D Cerne Abbas (Long Street)	Capt. G. Jensen	5	1	0	375	..	52·70	184 152
D Minterne	Col. The Lord Digby, D.S.O.	5	0	9	640	..	49·50	.. 131
D Evershot (Stickland's Sch.)	The Headmaster	5	0	10	550	..	51·85	198 152
4.—STOUR. 384 sq. mi.								
D Wimborne (Merley House)	Capt. A. Hambro	5	1	0	350	..	42·86	.. 138
D Wimborne (Corfe Mullen W.W.)	G. V. Sparrow, Esq., C.E.	5	1	0	81	32·9	40·35	158 135
D Wimborne (Corfe Mullen, For. Hill)	E. Philip Belben, Esq.	8	1	0	300	32·5	42·80	.. 141
D Winterborne Whitchurch Vic.	Rev. H. H. Tilney Bassett	8	1	0	200	35·8	46·12	.. 136
D Sturminster Marshall	F. Hewitt, Esq.	8	1	0	85	32·6	41·88	.. 137
D Wimborne (Stapehill)	W. J. Marchant, Esq.	5	1	0	95	..	40·38	153 124
D Wimborne (Walsford Bridge P.S.)	P. G. G. Moon, Esq.	8	1	3	70	..	40·98	173 137
D Wimborne (Melbury Lodge)	Rev. W. S. Clarke	5	1	6	150	..	43·67	172 144
D Blandford (Whitecliff St.)	E. Westcott, Esq.	5	1	0	152	..	45·00	177 133
D Blandford (King's Road)	D. Blanchard, Esq.	5	1	0	195	..	43·89	173 137

† Station previously in Dorsetshire, 4.

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-	Days	Days
			Rim	Ground	above	Rain-	fall.	with	with
			above	above	above	fall.		or	or
			Ground.	Sea Level.				more.	more.
DORSETSHIRE—(con.).			in.	ft. in.	ft.	in.	in.		
<b>4.—STOUR—(con.).</b>									
d Blandford (Bryanston Gdns.)	Mr. J. Jaques	5	1 0	185	..	45·62	175	154	
d Blandford (Bryanston School)	The Headmaster	5	1 0	280	..	46·03	175	141	
d Blandford (Lefton)	Brig.-Gen. B. F. B. Stuart, C.M.G.	8	1 8	230	..	41·61	179	134	
d Glanville's Wootton (Manor Ho.)	H. B. Debenham, Esq.	5	0 9	350	35·2	44·95	176	148	
d Holwell (Little Westrow)†	Miss H. B. Warry	5	1 0	252	34·4	43·37	..	..	
d Wimborne St. Giles (St. Giles Ho.)	The Earl of Shaftesbury, K.P.	5	1 0	165	33·4	41·96	171	145	
d Child Okeford Manor	J. H. L. Glasbrook, Esq.	5	1 0	250	..	43·66	170	140	
d Iwerne Minster (Preston House)	Major H. W. Aston	5	1 0	220	33·2	40·21	172	136	
d Iwerne Minster Vicarage	Rev. R. A. Bond	5	1 3	234	..	41·61	168	134	
d Sturminster Newton	Louis Dawes, Esq.	5	1 0	225	..	43·33	185	144	
d Iwerne Minster (West Lodge)	Col. H. S. Woodhouse	5	1 1	600	..	46·30	189	151	
d Fontmell Magna (Glebe Cottage)	Dr. J. Appleyard	5	1 0	300	..	40·13	165	132	
d Marnhull.	W. Gaye, Esq.	5	1 4	220	..	39·54	170	138	
d Pentridge (Cobley)	F. B. Eastwood, Esq.	5	1 0	500	..	40·77	..	..	
d Fifehead Magdalen	H. Wells, Esq.	5	0 9	500	..	41·31	182	142	
d SHAFTESBURY (C.E. School)	The Headmaster	5	1 0	722	32·5	36·91	190	152	
<b>5.—EAST AVON. 12 sq. mi.</b>									
SOUTH DEVONSHIRE. (Area, 1,707 sq. mi.)									
<b>1.—PARRETT. 7 sq. mi.</b>									
<b>2.—TAMAR &amp; C. 395 sq. mi.</b>									
d Plymouth (Boveysand Lodge)	Capt. J. J. Case	5	1 6	75	34·1	38·76	..	143	
d\$PLYMOUTH (Mt. BATTEN AERO.)†	(+A) Meteorological Officer	8	1 0	82	..	40·57	189	142	
d Plymouth (Eastern Kings)	Comdr. J. M. Scott, R.N.	5	1 0	80	..	36·02?	175	141	
d PLYMOUTH (THE HOE)....	(+A) Messrs. Prigg, Linton & Ivory	8	1 0	117	36·7	41·36	184	144	
d Plymouth (Drake's Reservoir)	A. Atkinson, Esq., C.E.	5	1 0	149	37·5	40·09	182	147	
d Plymouth (Freedom Pk.)†	(+A) Messrs. Prigg, Linton & Ivory	8	1 0	208	39·4	41·59	186	150	
d Devonport (Rowdens Res.)	A. Atkinson, Esq., C.E.	5	1 0	201	35·1	39·90	181	145	
d Plymouth (Hartley Reservoir)	A. Atkinson, Esq., C.E.	5	1 0	321	39·9	46·26	187	159	
d Bickleigh (Roborough Reservoir)	A. Atkinson, Esq., C.E.	5	1 0	548	46·2	55·74	199	154	
d Lee Moor House	R. Martin, Esq.	8	1 0	900	62·4	67·93	203	177	
d Roborough (Maristow Gdns.)	G. F. Hedger, Esq.	5	1 0	60	..	59·37	190	160	
d Sheepstor (Redstone)	A. Atkinson, Esq., C.E.	5	1 0	760	59·0	59·37	214	162	
d Sheepstor (Burrator)	A. Atkinson, Esq., C.E.	5	1 0	755	59·1	57·75	215	161	
d Sheepstor (Head Weir)	A. Atkinson, Esq., C.E.	5	1 0	720	57·0	58·36	214	165	
d Dousland Reservoir	A. Atkinson, Esq., C.E.	5	1 0	721	51·8	56·67	211	165	
M Dartmoor (Deancombe Farm)	A. Atkinson, Esq., C.E.	5	1 0	807	..	61·82	..	..	
d Yelverton (Yarrow-Dousland)	R. R. Brown, Esq.	5	0 8	700	..	64·03	210	169	
d Yelverton (Uppaton)	Com. J. R. Burton, R.N. (retd.)	5	1 5	605	..	54·36	198	163	
d Dartmoor (Lowery)	A. Atkinson, Esq., C.E.	5	1 0	899	..	53·56	215	159	
M Dartmoor (Leather Tor Farm)	A. Atkinson, Esq., C.E.	5	1 0	910	59·0	61·25	..	..	
M Dartmoor (Siward's Cross)	A. Atkinson, Esq., C.E.	5	1 0	1074	60·7	62·75	..	..	
d Whitchurch (Grenofen)	H. Chichester, Esq.	5	1 2	325	46·1	53·25	207	160	
d Whitchurch (Langstone)	F. J. R. Coleridge, Esq.	5	1 0	700	51·4	62·57	192	172	
d Whitchurch (Holwell)	F. C. Radcliffe, Esq.	5	1 2	500	..	60·21	230	179	
d TAVISTOCK	W. J. Monk, Esq.	5	1 0	457	47·6	49·96	200	158	
d Horrabridge (Furzeter)	Col. M. C. Collier	8	0 11	550	..	62·69	220	170	
d Tavistock (The Library)	The Librarian	8	1 0	282	44·8	47·81	194	155	
M Dartmoor (Double Waters)	A. Atkinson, Esq., C.E.	5	1 0	1165	64·2	63·21	..	..	
M Dartmoor (N. Hessary Tor)	A. Atkinson, Esq., C.E.	5	1 0	1398	..	67·65	..	..	
d Mary-Tavy (Blackdown)	H. K. G. Rogers, Esq.	5	1 0	855	..	58·35	199	176	
d North Brentor (Langstone)	H. C. Gallop, Esq.	5	0 6	1000	..	53·77	..	169	
d Coryton Manor	T. Newman, Esq.	5	1 2	450	43·5	54·09	197	165	
d Lifton (Tulip Trees)	R. H. Arundell, Esq.	5	1 2	350	..	49·89	223	160	
d Lew Down (Coombe Trenchard)	H. M. Sperling, Esq.	5	1 0	450	44·0	48·17	187	157	
d Lydford (Naseby)	Col. H. E. Molesworth, C.M.G., D.S.O.	5	1 2	950	..	56·56	205	177	
d Werrington Park	Mr. R. M. Gregory	5	1 0	600	..	49·11	203	161	
d Ashwater (Barn Park Bungalow)	Miss Jamieson	5	1 0	550	42·6	46·03	192	160	
d Holsworthy (Bodmeryic)	W. J. Rogers, Esq.	5	0 11	476	42·3	47·27	199	161	

† Moved from Westrow House, 300 yards, on 27.6.1937. § Exposure not orthodox.

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

		Rain-gauge			1937.			
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
SOUTH DEVONSHIRE—(con.).			in.	ft.	in.	ft.	in.	
3.—ERM & C. 217 sq. mi.								
d Salcombe (Fairhaven)	C. Shillitoe, Esq.	5	1	0	150	..	40·71	..
d Malborough (Upalong)	Dr. A. Ward	5	1	6	365	..	44·78	186
d West Alvington	Rev. H. C. B. Lethbridge	5	1	0	180	..	48·55	195
d Kingsbridge (Senior School)	The Headmaster	5	1	0	100	..	49·10	163
d Kingsbridge	W. N. Patey, Esq.	5	1	6	150	..	47·77	(164) (147)
d Stoke Fleming (Windward)	Miss E. L. Garrett	5	1	0	380	..	49·61	193
d Yealmpton (Torre)	Miss M. Wimbush	5	0	11	100	35·5	48·49	200
d Yealmpton (West Park)	D. M. Yonge, Esq.	5	1	3	150	..	47·68	187
d Loddiswell (Hazelwood Ho.)	Hon. Mrs. Peek	5	1	0	..	..	53·54	174
d Ermington (Strode)	Capt. H. Gore Hawker	5	1	0	75	41·4	53·42	193
d Ivybridge (Filham House)	H. Alger, Esq.	5	1	0	161	46·0	50·94	189
d Wrangaton (Plymouth M. Hos.)	Messrs. Prigg, Lindon & Ivory	5	1	0	607	54·2	62·97	180
d South Brent (Beechfield)	J. A. Kingwell, Esq.	5	1	0	500	61·0	67·90	169
d South Brent (Badworthy)	Miss D. B. Latham	5	1	2	550	64·4	74·10	187
d South Brent (Didworthy San.)	The Medical Officer	5	1	0	675	..	72·08	(167) (154)
d South Brent (Brent Moor)	W. E. Nicholls, Esq.	8	0	9	850	..	84·01	220
Cornwood (Yealm Head No. 5)	W. H. Thompson, Esq., C.E.	5	1	0	540	..	68·08	206
Cornwood (Yealm Head No. 1)	W. H. Thompson, Esq., C.E.	5	1	0	943	..	77·22	..
d S. Brent (Brentmoor House)	W. A. Pritchard, Esq.	5	..	..	1000	..	79·50	..
§Cornwood (Yealm Head No. 2)	W. H. Thompson, Esq., C.E.	5	1	0	1305	..	72·88	..
Cornwood (Yealm Head No. 4)	W. H. Thompson, Esq., C.E.	5	1	0	1415	..	70·43	..
§Cornwood (Yealm Head No. 3)	W. H. Thompson, Esq., C.E.	5	1	0	1416	..	73·10	..
4.—DART. 197 sq. mi.								
d Dartmouth (Naval College)	The Curator, Science Lab.	8	1	0	220	..	50·52	..
Churston Ferrers (Greenway)	Mrs. C. Williams	5	0	9	..	40·8	53·12	170
Brixham	Torbay Paint Co., Ltd.	8	0	10	164	..	42·36	..
d Brixham (Combe Bank)	Sir H. Clayton, Bt.	5	6	6	115	36·7	45·46	183
d Waddeton Court	Sir A. L. Goodson, Bart.	5	1	0	175	40·5	48·29	..
d Stoke Gabriel (Maisonette)	W. L. Collett, Esq.	5	1	0	100	42·8	58·84	192
d Totnes (Dundridge Gardens)	Mr. C. K. Pugsley	5	1	0	250	48·3	60·09	..
d PAIGNTON (Victoria Park)	Town Council (C. Bellinger)	8	1	1	12	..	44·13	175
d Paignton (Claylands)	G. M. Rosling, Esq.	8	1	2	150	35·7	48·88	188
d Totnes (Walrood House)	W. J. Toope, Esq.	5	1	2	40	41·8	54·52	..
d Totnes (Berry Pomeroy Vic.)	Rev. Preb. H. M. Drake	5	1	0	160	..	48·43	170
d Totnes (Dartington Hall) ‡	J. B. E. Patterson, Esq.	5	1	0	175	..	52·20	180
d Totnes (Staverton)	J. A. Devenish, Esq.	5	0	11	50	..	46·69	168
d Broadhempston (Sneydhurst)	H. S. Burbury, Esq.	5	1	6	200	..	46·56	176
d Ipplepen Vicarage	Rev. R. D. Cooke	5	1	0	266	36·8	47·00	174
d Holne (Church Park Cottage)	L. W. Frost, Esq.	5	1	6	620	59·8	72·51	201
d Ashburton (West St.)	W. T. Hannaford, Esq.	5	1	0	250	..	56·07	191
d Ashburton (Melrose)	H. G. Brown, Esq.	5	1	0	400	..	55·14	200
d Dartmoor (Fox Tor)	E. Rowlands, Esq., C.E.	5	0	7	1160	..	83·69	233
d Dartmoor (Strane Valley)	E. Rowlands, Esq., C.E.	5	0	7	1180	..	78·29	235
d Dartmoor (Swincombe)	E. Rowlands, Esq., C.E.	5	0	7	1120	..	80·29	218
d Princetown (Huccaby House)	Lt.-Col. H. H. Joll, D.S.O.	5	1	0	900	54·6	74·55	232
d Princetown (Wydemeet)	Colin M. E. May, Esq.	5	1	0	900	58·2	78·60	197
d PRINCETOWN (H.M. Prison) (+A)	The Governor	5	1	0	1430	81·9	79·09	202
w Dartmoor (Cowsic Valley)	A. Atkinson, Esq., C.E.	5	1	0	1323	72·9	80·86	..
m Dartmoor (White Tor)	A. Atkinson, Esq., C.E.	5	1	0	1439	..	73·80	..
m Dartmoor (Devil's Tor)	A. Atkinson, Esq., C.E.	5	1	0	1570	..	79·21	..
m Dartmoor (Cowsic Head)	A. Atkinson, Esq., C.E.	5	1	0	1465	..	80·15	..
5.—TEIGN. 209 sq. mi.								
d Torquay (Middle Lincombe Rd.)	Miss L. M. Brown	5	1	0	250	30·9	37·94	182
d TORQUAY (Abbey Park)	The Corp. (C. Bellinger)	5	1	0	27	33·0	41·04	174
d Torquay (St. Marychurch)	Miss M. E. Coulson	5	1	0	300	..	45·46	192
d NEWTON ABBOT (SEALE HAYNE COLL.)	The Principal	5	1	0	375	34·7	43·36	184
d Teignmouth (Woodlands)	Major T. B. Harris	8	1	2	98	31·5	39·35	165

§ Gauge over-exposed on moor.

‡ Gauge moved 1½ mile in April, 1936.

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
SOUTH DEVONSHIRE—(con.).		in.	ft.	in.	ft.	in.	in.	
5.—TEIGN—(con.)								
D TEIGNMOUTH (Den Gardens) . . . . .	Medical Officer of Health . . .	8	1	0	20	31·8	40·05	174 120
D Teignmouth (Hazledown Res.) . . . . .	G. F. Rossiter, Esq. . . . .	8	1	0	425	32·4	44·30	181 153
D Teignmouth (Shaldon Res.) . . . . .	G. F. Rossiter, Esq. . . . .	5	1	0	213	34·9	43·76	179 143
D Teignmouth (Landscape Res.) . . . . .	G. F. Rossiter, Esq. . . . .	8	1	0	132	33·2	44·00	177 145
D Kingsteignton (Firleigh Rd.) . . . . .	M. B. B. Heath, Esq. . . . .	6	1	0	130	..	44·66	183 140
D Ilstington (Silver Birches) . . . . .	J. F. Caley, Esq. . . . .	5	1	0	825	..	61·19	203 166 <sup>1</sup>
D Bovey Tracey (Whiddon) . . . . .	G. F. Wright, Esq. . . . .	5	1	2	150	..	47·36	179 148
D Dawlish (Luscombe Castle) . . . . .	Peter Hoare, Esq. . . . .	8	1	2	175	35·9	47·17	204 151
D Bovey Tracey (Hedgebarton) . . . . .	W. K. Kitson, Esq. . . . .	5	1	6	1137	59·2	65·04	200 166
D Chudleigh (Farmborough) . . . . .	Major F. E. Koebel . . . . .	5	1	3	350	..	46·10	174 147
D Chudleigh (Scotleigh) . . . . .	J. P. Hepburn, Esq. . . . .	5	1	3	280	..	43·40	177 144
W Ashcombe (Thorns Reservoir) . . . . .	Surveyor (Dawlish U.D.C.) . . .	5	1	0	550	36·4	49·74	.. ..
D Manaton (Heathercombe) . . . . .	B. W. Chafy, Esq. . . . .	5	1	0	1300	..	69·88	203 170
d Hennock (Hazlewood) . . . . .	R. P. Kitson, Esq. . . . .	5	1	0	650	..	45·98	.. 149
D Lustleigh (Sun Hill) . . . . .	Rev. H. Muir . . . . .	5	1	0	650	..	49·96	194 151
D Moretonhampstead (Bullaton) . . . . .	N. G. Elliot, Esq., C.E. . . . .	8	1	0	928	42·2	47·30	223 161
D Moretonhampstead (Mardon) . . . . .	N. G. Elliot, Esq., C.E. . . . .	8	1	0	837	40·6	50·33	223 164
D North Bovey (Manor House) . . . . .	Mr. J. T. Laurence . . . . .	5	1	0	700	49·0	56·58	211 168
M Chagford (Hurstons Ridge) . . . . .	N. G. Elliot, Esq., C.E. . . . .	5	1	0	1350	..	76·40	.. ..
M Chagford (Toms Hill) . . . . .	N. G. Elliot, Esq., C.E. . . . .	5	1	6	1500	..	80·66	.. ..
M Chagford (Whiteridge) . . . . .	N. G. Elliot, Esq., C.E. . . . .	5	1	6	1650	..	80·65	.. ..
M Chagford (Hemstone) . . . . .	N. G. Elliot, Esq., C.E. . . . .	5	1	6	1350	..	79·94	.. ..
D Christow (Kennick) No. 1 . . . . .	N. G. Elliot, Esq., C.E. . . . .	8	1	0	836	41·6	50·48	212 159
D Christow (Kennick) No. 2 . . . . .	N. G. Elliot, Esq., C.E. . . . .	8	1	0	850	..	46·82	221 157
D Chagford (Fernworthy) . . . . .	N. G. Elliot, Esq., C.E. . . . .	5	1	0	1150	..	70·21	255 178
D Chagford (Metherall) . . . . .	(+A) N. G. Elliot, Esq., C.E. . . .	8	1	0	1150	..	68·67	254 177
M Chagford (Thornworthy Down) . . . . .	N. G. Elliot, Esq., C.E. . . . .	5	1	6	1250	..	74·59	.. ..
M Chagford (Crownhall) . . . . .	N. G. Elliot, Esq., C.E. . . . .	5	1	0	1320	..	78·05	.. ..
D Christow (Smithacott) . . . . .	N. G. Elliot, Esq., C.E. . . . .	8	1	0	861	41·4	49·95	209 151
D MORETONHAMPSTEAD . . . . .	(+A) G. B. Davie, Esq. . . . .	8	1	0	798	..	52·96	197 154
D Moretonhampstead (Hayne) . . . . .	G. B. Davie, Esq. . . . .	5	1	0	600	..	51·08	200 153
M Moretonhampstead (Blackingstone) . . . . .	N. G. Elliot, Esq., C.E. . . . .	8	1	0	1158	42·5	46·84	.. ..
D Christow (Laployd) . . . . .	N. G. Elliot, Esq., C.E. . . . .	5	1	0	1041	41·6	48·21	210 154
D Chagford (Thornworthy) . . . . .	Miss W. H. Varwell . . . . .	5	1	0	1175	59·6	71·51	208 169
D Chagford (Huish) . . . . .	Col. P. Hart Dyke, D.S.O. . . .	5	1	3	595	45·5	53·71	217 166
6.—EXE. 445 sq. mi.								
D EXMOUTH (Waterworks Road) . . . . .	Engineer and Surveyor . . . . .	5	1	0	195	28·6	37·22	181 132
D Exmouth (Filters, Salterton Road) . . . . .	Engineer and Surveyor . . . . .	8	8	6	195	31·5	39·08	189 139
D Exmouth (Littleham) . . . . .	W. Malan, Esq. . . . .	5	0	7	155	..	39·25	191 145
D Exmouth (Filters, Capel Lane) . . . . .	Engineer and Surveyor . . . . .	5	8	0	240	30·3	39·64	188 138
D Lympstone (Manor House) . . . . .	Miss L. Shelden . . . . .	5	0	11	54	30·8	40·38	194 135
D Woodbury (Oakhayes) . . . . .	E. S. Chattock, Esq. . . . .	5	1	0	200	..	40·13	171 143
D Woodbury (South Croft) . . . . .	Lt.-Col. T. C. Fraser . . . . .	5	1	0	200	..	41·72	190 137
d Topsham (Altamira) . . . . .	Mrs. Wimbush . . . . .	5	0	9	120	29·3	36·09	.. 142
D Exminster (Trood House) . . . . .	Lt.-Col. T. L. Orniston . . . . .	5	1	11	75	..	41·00	181 136
D Exeter (Countess Wear) . . . . .	N. Taylor, Esq. . . . .	5	0	10	73	..	40·41	188 141
D Exeter (Hatfield, Longdown) . . . . .	C. Holman, Esq. . . . .	5	0	10	450	33·8	41·34	162 127
d Aylesbeare (Rosamondford) . . . . .	A. T. Loran, Esq. . . . .	5	0	9	220	31·4	43·81	.. 129
d Exeter (Devon and Exeter Inst.) . . . . .	The Librarian . . . . .	5	13	7	155	30·5	38·19	175 137
Exeter (The Close) . . . . .	Rev. Canon D. McLaren . . . . .	5	0	9	120	..	39·56	.. 137
D Exeter (Magdalen Rd.) . . . . .	Major H. W. N. Shewell . . . . .	5	1	6	110	..	40·71	178 138
D Exeter (St. German's Lodge) . . . . .	The late Rev. J. H. Hopkinson . .	5	1	0	350	..	42·99	182 143
D Tedburn St. Mary Rectory . . . . .	Rev. H. Rusbridger . . . . .	5	0	10	400	34·5	39·89	212 163
d Rockbeare Manor . . . . .	Lt.-Col. H. Spencer Follett . . .	5	0	10	180	30·7	40·81	.. 139
D Cheriton Bishop (Horslake) . . . . .	L. Collings-Wells, Esq. . . . .	5	2	9	500	33·3	41·16	191 151
D Bramford Speke . . . . .	Col. C. F. Stevens . . . . .	5	1	0	170	30·4	38·28	172 150
d Crediton (U.D.C.) . . . . .	The Surveyor . . . . .	5	1	3	198	32·8	38·07	.. 146
Crediton (Haywards School) . . . . .	C. Luxton, Esq. . . . .	5	1	0	186	33·3	38·03	.. ..
D Crediton (Kinross) . . . . .	W. L. Thomson, Esq., B.Sc. . . .	5	1	0	300	31·7	36·87	178 142
D Silverton (KILLERTON) . . . . .	Rt. Hon. Sir F. Dyke Acland, Bt., P.C.	5	1	0	159	31·0	40·02	179 150
D Thorverton (School House) . . . . .	The Headmaster . . . . .	5	1	0	194	34·7	40·60	180 144

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with	Days with
			Rim	Ground	Rain-			·01 in.	·04 in.
			above	above	fall.			or	or
			Ground.	Sea Level.				more.	more.
SOUTH DEVONSHIRE—(con.).									
			in.	ft.	in.	ft.	in.		
6.—EXE—(con.).									
d Crediton (Okefield) .....	Seymour F. Pope, Esq. ....	5	1	0	325	32·2	37·94	208	150
d Copplesstone (Copplesstone House) .....	Miss M. Pope .....	5	0	11	315	34·4	40·37	212	154
d Bradninch (Dunmore House) .....	Miss H. R. Hepburn .....	5	1	0	300	34·0	40·76	177	150
d CULLOMPTON .....	Murray T. Foster, Esq. ....	5	1	0	202	35·3	41·24	182	156
d Cullompton Court .....	Dr. E. S. Cardell .....	5	1	0	200	34·5	41·33	225	155
d Kentisbeare .....	A. E. Painter, Esq. ....	5	1	0	304	37·1	39·27	187	152
d Tiverton (St. Aubyn's Park) .....	F. C. Fox Strangways, Esq. ....	5	1	0	394	38·8	42·12	196	155
d Tiverton (Halberton) .....	Miss M. G. Izat .....	5	0	6	250	40·8	46·56	196	155
d Tiverton (Blundell's School) .....	E. G. Peirce, Esq. ....	5	1	6	270	37·3	40·95	203	152
d Culmstock (The Knap) .....	T. Langdon Hine, Esq. ....	5	1	0	440	..	41·29	205	151
d Hemyock Place .....	N. J. Hitchings, Esq. ....	5	2	6	835	36·2	40·42	..	..
d Bampton (Oakford) .....	Miss M. E. Tedder .....	5	1	0	650	43·2	48·32	193	163
d Morebath Manor .....	C. H. W. Malet, Esq. ....	5	1	0	650	44·3	48·41	203	172
7.—AXE & C. 237 sq. mi.									
d Budleigh Salterton (West Ways) ..	J. Hartree, Esq. ....	5	1	3	140	..	38·09	..	132
d Budleigh Salterton (Braywick) ..	E. Fisher, Esq. ....	5	1	0	120	..	36·31	(174)	(133)
d Budleigh Salterton (Tidwell Ho.) ..	Mrs. J. H. F. Foster .....	5	1	0	100	..	35·80	174	136
d Budleigh Salterton (Knowle Hill) ..	Lt.-Col. J. B. MacFarlan .....	5	0	7	245	..	38·25	..	..
d Budleigh Salterton (Knowle Ho.) ..	Mrs. Pepys .....	5	1	2	230	..	38·22	..	144
d Budleigh Salterton .....	R. Jones-Bateman, Esq. ....	5	0	10	360	..	42·17	199	154
Budleigh Salterton (Squabmoor) ..	Engineer and Surveyor .....	5	1	0	267	31·9	37·84	..	..
East Budleigh (Bicton Common) ..	Engineer and Surveyor .....	5	1	0	300	32·2	42·34	..	..
d East Budleigh (Bicton Gardens) ..	The Head Gardener .....	5	1	0	90	31·4	41·23	..	..
d Salcombe Regis (Steepphill) .....	Burleigh D. Kilburn, Esq. ....	5	1	0	150	..	38·25	190	152
d Sidmouth (U.D.C.) .....	The Borough Surveyor .....	5	1	0	25	..	35·31	179	136
d Sidmouth (Loretto) .....	S. Horsley, Esq. ....	5	1	6	125	..	37·69	190	140
d Sidmouth (Somerton Lodge) .....	Dr. C. Woodhouse .....	5	1	0	60	..	37·88	173	143
d Newton Poppleford (Haymans) ..	E. W. Cox, Esq., J.P. ....	5	1	0	118	..	40·76	..	140
d SEATON (Seafeld) .....	U.D.C. (Lt.-Col. H. Anderson Neville) ..	5	1	0	43	..	41·95	180	139
d Seaton (Bunt's Hill) .....	Dr. R. H. Norman .....	5	0	10	200	..	41·21	189	143
d Seaton (Homermead) .....	T. F. Tracy, Esq. ....	5	1	0	185	..	43·24	183	142
d Lyme Regis (Pinhay) .....	Mr. W. F. Shillabeer .....	5	1	11	465	34·9	41·24	181	135
d Axminster (Uplyme) .....	Miss M. O. Williams .....	5	1	0	650	..	43·35	..	..
Ottery St. Mary (Great Brake) ..	E. L. Cooper, Esq. ....	5	1	0	480	..	45·83	176	138
d Ottery St. Mary (Broad Oak) .....	Miss Tallant .....	5	1	2	300	..	46·38	203	154
d Ottery St. Mary (Little Close) ..	P. M. Miller, Esq. ....	5	0	9	250	..	44·69	194	152
d Ottery St. Mary (West Hill) .....	B. Stansbury, Esq. ....	5	1	6	340	34·2	48·06	217	159
d Ottery St. Mary (Broad Street) ..	W. D. Badcock, Esq. ....	5	1	0	170	36·3	44·75	187	146
d Musbury (Ashe House) .....	Mrs. J. Peat .....	5	1	0	116	..	49·61	180	141
d Axminster (Gamberlake House) ..	Col. A. L. Bayley .....	5	4	6	115	..	46·73	..	145
d Axminster (Lea Combe House) ..	Major A. C. F. Luttrell .....	5	1	6	170	38·4	50·16	160	146
d Honiton (Feniton Court) .....	Col. A. D. Acland, C.B.E. ....	8	1	0	235	36·4	46·22	194	158
Honiton (Beech Grove) .....	Mrs. M. Baker .....	5	0	10	340	38·0	47·44	..	..
d Membury (Yarty House) .....	Major W. H. Wilkin .....	5	1	0	245	..	45·22	194	146
d Honiton (Cotleigh House) ..	Maj. J. M. Salisbury-Trelawny, M.C. ....	5	1	6	540	..	50·92	181	155
d Stockland (Post Office) .....	G. James Clarke, Esq. ....	5	1	0	350	40·5	52·85	176	141
NORTH DEVONSHIRE. (Area, 898 sq. mi.)									
1.—NORTH COAST STREAMS. 77 sq. mi.									
d Croyde (Baggy Point) .....	Miss C. M. Hyde .....	5	1	0	35	30·1	28·43	167	131
d Ilfracombe (Reservoir) .....	A. J. Westaway, Esq. ....	5	1	0	395	46·9	45·49	197	165
d Ilfracombe (Langleigh) .....	H. B. Holland, Esq. ....	5	1	0	127	42·2	39·34	189	158
d ILFRACOMBE (Bowling Green) .....	A. J. Westaway, Esq. ....	5	1	0	25	37·4	37·46	181	146
2.—TAW. 442 sq. mi.									
Spreyton (Lynderies) .....	Lt.-Col. J. Simpson .....	5	1	0	660	36·3	41·56	..	..
d Witheridge .....	Rev. J. A. S. Castlehow .....	5	1	0	600	38·9	41·66	178	157
Chittlehamholt .....	Rev. H. Carter .....	5	1	0	420	37·7	38·78	177	..
d East Anstey Rectory .....	Rev. J. S. Payne .....	5	0	9	750	45·7	46·82	188	164

## DIVISION V—SOUTH WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground Sea Level.	Rain- above fall.				
NORTH DEVONSHIRE—(con.).			in.	ft. in.	ft. in.	in.			
2.—TAW—(con.).									
D East Anstey (Rhyll Manor) . . . . .	Mrs. E. L. Hancock . . . . .	5	1 0	850	46·4	51·90	189	177	
D Filleigh (Castle Hill Gardens) . . . . .	The Countess Fortescue . . . . .	5	1 0	317	43·1	42·24	172	147	
D BARNSTAPLE (N. Dev. Athenæum) . . . . .	The Librarian . . . . .	8	1 0	25	36·6	38·45	197	149	
D Barnstaple (Fort Hill) . . . . .	Miss M. A. Sterry . . . . .	5	1 0	197	38·6	42·14	203	158	
D Barnstaple (Westaway) . . . . .	Major O. L. Trechmann . . . . .	5	1 0	140	39·0	42·10	193	153	
D Goodleigh (Willesleigh House) . . . . .	Lt.-Col. Montagu H. Hall . . . . .	5	1 0	375	39·6	43·23	200	161	
D Goodleigh (Gunn Cottage) . . . . .	Major H. Sandford Claye . . . . .	5	1 0	720	43·4	45·11	210	165	
D Braunton (The Linhay) . . . . .	J. E. Gladstone, Esq. . . . .	5	1 0	70	..	36·99	194	156	
D Braunton . . . . .	A. J. Besly, Esq. . . . .	5	1 0	145	34·7	37·93	187	148	
D Challacombe . . . . .	A. J. Westaway, Esq. . . . .	5	1 0	815	62·8	64·23	221	185	
D Georgeham (Spreacombe Manor) . . . . .	A. Leigh Barker, Esq. . . . .	5	0 9	340	38·8	36·10	200	151	
D Kentisbury . . . . .	Noel Irwin, Esq.† . . . . .	5	1 0	557	51·1	51·45	235	179	
3.—TORRIDGE. 342 sq. mi.									
Dartmoor (Cranmere Pool) . . . . .	S. R. Harry, Esq., for M.O. . . . .	5	1 0	1845	..	85·90	..	..	
Dartmoor (Newbridge) . . . . .	S. R. Harry, Esq., for M.O. . . . .	5	1 0	1500	..	61·10	..	..	
D Okehampton (Uplands) . . . . .	The late E. P. Burd, Esq. . . . .	5	1 0	700	51·4	57·85	205	165	
D Okehampton (Exeter Road) . . . . .	Capt. R. Deedes . . . . .	5	1 6	750	..	50·19	206	172	
D Monkokehampton . . . . .	Rev. R. Y. Holmes . . . . .	5	0 6	245	39·1	34·65	(179)	(155)	
D Torrington (Enfield) . . . . .	G. M. Doe, Esq. . . . .	5	1 0	337	39·3	35·31	196	147	
D Parkham (Melbury Reservoir) . . . . .	A. E. Parry, C.E. . . . .	5	1 0	517	54·6	55·61	212	168	
D Buckland Brewer (The Cottage) . . . . .	Miss B. G. Rogers . . . . .	5	0 11	469	46·3	42·26	210	155	
D Littleham (Orleigh Court) . . . . .	W. H. Rogers, Esq. . . . .	5	1 0	260	44·5	41·24	187	154	
D Bideford (Jennett's Res.) . . . . .	Borough Surveyor . . . . .	5	1 0	62	40·8	35·45	179	145	
D Bideford (Gammaton Res.) . . . . .	Borough Surveyor . . . . .	5	1 0	350	..	38·44	183	142	
D Westleigh (Council School) . . . . .	Miss M. E. Read . . . . .	5	3 3	170	37·0	32·26	174	138	
D Northam (Chope Barton) . . . . .	Rev. H. G. de C. Stevens-Guille . . . . .	5	1 0	180	42·7	37·66	232	148	
D Westward Ho! (Royal Golf Club) . . . . .	Major A. Newton-King . . . . .	5	1 6	10	34·4	33·61	..	146	
4.—WEST COAST STREAMS. 32 sq. mi.									
D Hartland (Fosfelle) . . . . .	The late R. P. Chope, Esq., B.A., J.P. . . . .	5	1 0	480	46·0	45·02	171	151	
5.—EXE. 5 sq. mi.									
CORNWALL. (Area, 1,363 sq. mi.).									
1.—CAMEL & N.W. COAST STREAMS. 458 sq. mi.									
Crowan (Boswyn Res. . . . .	Camborne Water Co.* . . . . .	..	..	511	47·6	51·38	193	160	
D Lelant . . . . .	Mrs. Tyringham . . . . .	5	1 3	50	44·4	40·97	184	153	
D St. Ives (Hasletown Vicarage) . . . . .	Rev. T. C. F. Barlett . . . . .	5	1 0	328	..	43·47	201	157	
D St. Ives (Bussow Moor) . . . . .	The Borough Surveyor . . . . .	5	0 9	350	48·6	43·72	193	157	
D St. Ives (Cemetery) . . . . .	The Borough Surveyor . . . . .	5	1 1	124	..	50·52	163	146	
D Camborne . . . . .	Miss J. Osborne . . . . .	5	2 6	402	44·1	47·23	..	..	
D Camborne (Uplands) . . . . .	H. G. Rix, Esq. . . . .	5	1 0	210	40·8	40·39	198	163	
D St. Ives (Liscoruah) . . . . .	Col. J. M. Findlay, D.S.O.* . . . . .	5	0 9	300	47·3	41·03	(197)	(160)	
D REDRUTH (Trewirgie) . . . . .	A. P. Jenkin, Esq., J.P. . . . .	5	1 0	397	45·3	49·33	215	161	
D Redruth (Green Lane Nurseries) . . . . .	F. Sanders, Esq. . . . .	5	1 0	270	41·2	47·92	..	..	
D St. Agnes (Church Town) . . . . .	Dr. W. C. Whitworth . . . . .	5	1 0	318	..	41·27	192	152	
D Newquay (Reservoir) . . . . .	C. C. Vigurs, Esq., B.A., M.D. . . . .	5	1 0	214	33·4	35·22	..	..	
D NEWQUAY (Mount Wise) No. 1	The U.D.C. (C.C. Vigurs, B.A., M.D.) . . . . .	5	1 0	182	33·2	33·23	183	143	
D Bodmin (Castle Hill House) . . . . .	Mrs. Leslie . . . . .	5	0 8	484	49·4	48·66	221	169	
D Helland (Tredethy) . . . . .	Capt. G. Wilson, R.N. . . . .	5	0 6	340	42·7	51·32	198	168	
D Little Petherick (St. Petroc Minor) . . . . .	Miss A. T. Skilbeck . . . . .	5	1 2	150	32·0	34·31	222	144	
D Wadebridge (Treworman) . . . . .	Brig.-Gen. L. J. Hext, C.M.G. . . . .	5	1 0	30	36·0	39·99	190	160	
D Trevone (Pentonwarra) . . . . .	W. M. Lindley, Esq. . . . .	5	1 0	25	..	35·34	183	143	
D St. Minver (Treberick) . . . . .	A. T. Roseveare, Esq. . . . .	8	1 0	70	32·0	37·80	192	147	
D Camelford (Stannon Clay Wks.) . . . . .	English China Clays, Ltd. . . . .	8	1 6	800	54·8	63·72	221	180	
D Delabole . . . . .	Delabole Slate Co., Ltd. . . . .	5	2 3	620	..	49·61	194	169	
D TRINTAGEL . . . . .	Trust Houses, Ltd. . . . .	5	1 0	280	..	36·48	184	149	
D BUDE (School House) . . . . .	Clerk to the U.D.C. . . . .	5	1 0	50	33·4	33·78	191	148	
D Bude (Trelana) . . . . .	G. A. C. Thynne, Esq. . . . .	5	2 0	200	34·7	35·12	..	..	
D Kilkhampton . . . . .	J. E. Heasman, Esq. . . . .	5	5 0	500	42·0	44·18	189	146	

† For Royal Meteorological Society.

\* Per Cornwall Rainfall Association.

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

		Rain-gauge					1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.	
			Rim above Ground.	Ground above Sea Level.					
CORNWALL—(con.).									
2.—FOWEY & S.E. COAST STREAMS. 620 sq. mi.									
D THE LIZARD (C. Guard Stn.)	Station Officer (M.O.)	8	1	0	240	33·3	36·71	198 165	
M Lizard (Tregullas House)	A. P. Jenkin, Esq.	5	1	0	244	35·2	37·69	.. ..	
D Ruan Minor	Miss H. F. Shepherd	5	1	6	210	36·0	34·67	188 152	
D Mullion (Council School)	E. J. Perry, Esq.	5	1	1	206	37·4	41·86	195 163	
D Mullicn	H. H. Penrose, Esq.	5	0	10	178	35·3	40·92	182 151	
D Porthcurno	Eastern Telegraph Co.	5	1	0	150	36·2	36·37	199 148	
St. Keverne (Lanarth)	M. P. Williams, Esq.	5	1	3	310	43·7	44·10	193 173	
d Bosahan (St. Martin-in-Meneage)	Hon. Mrs. Colborne Vivian	5	1	3	180	..	45·89	.. 166	
Porthleven	J. J. Emmott, Esq.*	5	1	0	100	..	39·24	197 156	
D Helston (Tenderah)	Miss H. K. Tyacke	5	1	7	220	42·0	46·65	192 165	
Sithney (Council Sch.)	R. Trend, Esq.	5	1	1	296	41·2	44·81	.. 171	
D Constantine (Pons-a-Verran)	A. Mayne, Esq.	8	1	0	60	39·6	43·60	207 163	
D Newlyn (Headland View)	C. Harpur, Esq.	5	0	10	130	..	47·61	210 166	
D Penzance (Trewidden)	Mrs. C. Williams	5	1	0	275	43·2	49·77	177 158	
d St. Michael's Mount	Lord St. Levan	..	..	..	50	..	37·88	.. 138	
D PENZANCE (Morrab Gardens)	The Town Clerk	5	1	0	55	40·9	44·27	187 147	
D Penzance (Tregwainton House)	Lt.-Col. E. H. W. Bolitho	8	1	0	400	46·4	47·82	196 157	
D GULVAL (Experimental Stn.)	Cornwall County Council	5	1	0	20	41·5	43·70	184 144	
D Wendron (Ninemaidens)	W. E. Benney, Esq.	5	0	10	700	..	60·38	199 165	
D FALMOUTH (OBSERVATORY) .. (+A).	The Supt. for Roy. Cornwall Poly. Soc.	5	1	0	167	43·6	43·26	183 141	
D Falmouth (Trefusis)	Lt.-Col. The Hon. H. W. F. Trefusis	5	1	3	200	39·5	40·09	179 148	
d Halwin (Council Sch.)	F. P. Jenkin, Esq.	5	1	0	540	..	52·85	.. ..	
D Penryn (Ashfield)	J. G. Stephens, Esq.	5	1	0	95	42·2	45·03	199 151	
Penryn (Roskrow)	Mrs. E. Stephen*	..	..	..	550	49·8	44·30	(188) (165)	
D Devoran (Devoran House)	Rev. A. S. Rashleigh	5	1	0	50	..	46·23	192 155	
D Gwennap (Trevince)	C. H. Beauchamp, Esq.	12	1	0	240	45·5	50·20	201 164	
D St. Day (Council School)	R. R. Blewett, Esq.	5	0	9	390	49·2	51·50	213 169	
Tregoney (Trewarthenick)	P. A. Welman, Esq.*	6	0	10	200	..	43·12	.. ..	
D Truro (Tregolls)	Miss C. L. Rashleigh	5	1	0	65	41·6	46·44	190 152	
D Truro W.W. (Lower Tregurrow)	W. J. Lean, Esq.	5	1	0	71	42·2	47·58	184 150	
D Mevagissey	C. Metcalfe, Esq.	5	1	0	100	42·3	46·58	178 147	
D St. Ewe (Council School)	The Headmaster	5	1	0	300	..	44·38	178 150	
D Tresillian	Chas. Nicholson, Esq.	5	0	10	50	..	44·48	173 143	
D Polperro	The late Mrs. F. H. Perry Coste	5	1	5	100	37·6	37·15	174 151	
D St. Austell (Trevarna)	W. M. Coode, Esq.	5	1	0	300	45·8	52·73	191 162	
d East Looe	W. D. Clague, Esq.	5	1	0	50	..	45·56	(176) (147)	
D Downderry (Yardley Ho.)	B. W. Sutherns, Esq., C.E.	8	1	3	50	..	42·88	190 146	
D Looe (Morval)	Capt. A. H. Tremayne, R.N.	5	1	0	150	46·1	50·56	184 146	
D Lostwithiel (The Terrace)	R. Pease, Esq.	5	1	0	110	49·2	52·73	191 159	
D St. Keyne (Locrenton)	Rear-Adml. R. Wykes-Sneyd	5	0	10	250	..	55·11	202 164	
D Liskeard (Penmilder)	Miss D. P. Foster	5	1	0	260	..	55·17	191 156	
D Liskeard (Treventon)	E. R. Foster, Esq.	5	1	0	360	..	53·82	202 166	
3.—TAMAR & C. 279 sq. mi.									
D Devonport (Empacombe)	Miss M. C. Algate	5	2	6	20	36·8	45·08	193 160	
D Devonport (Cremyll)	S. B. Wilcox, Esq.	5	1	2	25	36·3	41·46	185 151	
D Torpoint (Trethill House)	Col. J. D. A. Roberts	5	1	0	200	34·5	39·73	195 164	
Torpoint (Wilcove)	G. P. Jenkin, Esq.*	..	..	..	40	39·1	46·80	.. ..	
D† St. MELLION (ELLBRIDGE EXP. STN.).	The Horticultural Supt.	5	1	0	200	..	49·54	189 155	
D St. Mellion (Pentillie Castle)	The Head Gardener	5	1	0	150	..	56·47	184 168	
Gunnislake (Drakewalls)	J. D. Woolcock, Esq.*	5	1	0	573	..	58·67	197 167	
d Stoke Climsland School	T. Oates, Esq.	5	1	0	458	..	59·77	.. ..	
D Launceston (North Hill)	Miss M. E. Hale	5	1	0	475	..	67·11	224 167	
D Launceston (Landue)	Miss S. E. Tregoning	5	0	11	225	42·5	47·59	216 161	
D Launceston (Hexworthy)	R. B. Rogers, Esq.	5	1	0	270	42·1	47·13	193 145	
D Launceston (Pendruccombe)	Mrs. H. W. Suttie	5	1	0	469	..	46·01	193 152	
Egloskerry (Tregeare)	Mrs. Lethbridge*	5	1	6	513	43·1	55·16	.. ..	
D North Tamerton (Davies)	W. S. Bray, Esq.	5	4	1	390	35·9	48·87	228 167	
4.—INSULAR. —Isles of Scilly. 6 sq. mi.									
D St. Mary's (C. GUARD STN.)	Station Officer (M.O.)	8	1	0	163	31·9	37·28	209 148	
D Treco Abbey	Maj. A. A. Dorrien Smith, D.S.O.	5	1	0	40	33·4	39·01	198 149	

\* Per Cornwall Rainfall Association.

† Turf wall round gauge.

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Dist. m.	Rain-gauge				1937.		
			Height of		Average Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	Rain- fall.	
			Rim above Ground.	Ground above Sea Level.					
SOMERSETSHIRE. (Area, 1,624 sq. mi.).			in.	ft. in.	ft.	in.		in.	
<b>1.—LOWER AVON. 294 sq. mi.</b>									
d Wanstrow (The Manor Cottage) . . .	P. E. B. Warburton, Esq. . .	5	1 0	465	37·7	42·88	..	..	..
d Shepton Mallet (Pondsmead) . . .	R. A. Hobhouse, Esq. . .	8	1 0	710	44·9	46·05	191	161	..
d Frome W.W. (Egford) . . .	L. Slaughter, Esq. . .	8	2 0	270	35·8	39·56	185	142	..
d Frome (Selwood School) . . .	Miss E. M. Coombs . . .	5	1 9	320	33·9	37·74	175	143	..
d Mells (Selwood) . . .	Miss E. G. Horner . . .	5	1 0	344	37·2	38·46	173	143	..
d Binegar (Gurneyslade) . . .	Rev. B. S. Rawlinson . . .	5	1 0	588	43·3	47·46	172	161	..
d Stratton-on-Fosse (Downside Ab.) .	Rev. B. S. Rawlinson . . .	8	1 0	600	41·5	43·56	195	154	..
d Orchardleigh Park . . .	Major A. C. Duckworth . . .	8	1 0	320	32·8	41·00	177	141	..
d Lullington . . .	H. G. Chislett, Esq. . .	5	1 0	200	..	37·43	167	138	..
d Chilcompton (The Woodlands) . . .	C. H. M. Thring, Esq. . .	5	0 10	450	..	44·67	206	157	..
d Chewton Mendip (The Priory) . . .	Earl Waldegrave . . .	5	1 0	550	45·0	45·12	182	153	..
w East Harptree (Pitt Farm) . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	..	..	46·84	..	..	..
d Midsomer Norton (Dymboro) . . .	Dr. A. Bulleid . . .	5	3 3	355	35·8	37·72	174	137	..
d Midsomer Norton (C.E. School) . . .	J. Poyner, Esq. . .	5	1 0	330	..	38·59	..	..	..
d Radstock . . .	H. Finister, Esq. . .	8	1 0	229	..	37·37	174	138	..
d Litton (Sherborne Res.) . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	340	40·0	41·15	183	147	..
w Harptree Hill . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	784	..	44·04	..	..	..
d East Harptree (Harptree House) . .	Lt.-Col. H. W. Kettlewell . .	5	0 8	345	..	44·36	176	150	..
w East Harptree (Harptree Court) . .	A. M. Paterson, Esq., C.E. . .	5	1 0	..	..	41·34	..	..	..
d Hinton Blewett Manor . . .	Maurice Church, Esq. . .	5	1 3	500	39·6	40·82	195	155	..
w North Widcombe . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	..	..	36·48	..	..	..
w Chew Stoke (Heron's Green) . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	..	..	37·02	..	..	..
d Pensford (Sutton Court) . . .	Mr. F. Ford . . .	8	1 0	280	37·7	40·32	207	151	..
d Midford (Court Essington) . . .	E. H. Atchley, Esq. . .	5	2 6	450	..	36·24	163	145	..
d Midford (Pumping Station) . . .	Combe Down W.W. Co., Ltd. .	5	1 0	135	..	35·09	178	135	..
w Chew Stoke (Moorledge) . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	220	..	34·28	..	..	..
d Chew Stoke (Walley Court) . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	..	..	35·17	180	145	..
d Pensford (Hunstrete House) . . .	H. Leyborne Popham, Esq. .	5	0 9	400	33·7	33·21	199	140	..
w Ridgehill . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	..	..	35·06	..	..	..
d Chew Magna . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	180	36·3	33·93	182	137	..
d Pensford (Publow School Ho.) . . .	A. Hayes, Esq. . .	5	1 0	230	33·2	33·12	181	137	..
w Winford (Upper Littleton) . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	..	..	36·88	..	..	..
w Chew Magna (Norton) . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	430	..	33·61	..	..	..
d BATH (Henrietta Park) . . .	Medical Officer of Health . .	5	1 0	67	30·3	32·64	176	132	..
d Bath (Monkton Combe) . . .	W. G. Lock, Esq. . .	5	1 0	450	30·3	35·62	198	146	..
d Bath (Combe Lodge) . . .	Major T. H. Clark . . .	5	1 0	520	31·4	36·39	160	134	..
d Bath (Statutory Hospital) . . .	Bath Corporation . . .	5	1 0	520	32·8	33·12	160	136	..
d Bath (Mount Beacon House) . . .	Lady Stothert . . .	5	1 2	450	31·5	32·17	182	129	..
d Bath (Lambridge House) . . .	C. Standen Paine, Esq. . .	5	1 0	..	..	30·89	..	..	..
d Bath (Bathwick Hill) . . .	M. J. Lipscomb, Esq. . .	5	1 2	215	..	35·42	..	..	..
d Bath (Charlcombe) . . .	Bath Corporation W.W. . .	5	1 6	325	31·4	33·27	165	130	..
w Felton (Upper Town) . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	..	..	38·48	..	..	..
d Bath (Hamilton Road) . . .	Miss J. Macnab . . .	5	1 0	500	..	34·67	152	136	..
d Bath (Lower Swainswick) . . .	G. R. Marsh, Esq. . .	5	1 0	145	..	34·00	161	136	..
d Whitchurch (The Mead) . . .	N. L. Butt, Esq. . .	5	0 6	300	..	30·93	187	130	..
d Batheaston (Mumfords) . . .	G. Lipscomb, Esq. . .	5	1 2	200	..	34·05	..	135	..
d Batheaston Reservoir . . .	Bath Corporation W.W. . .	5	1 0	248	31·1	32·81	176	133	..
d Keynsham (Wellsway) . . .	A. E. Stephens, Esq. . .	8	1 0	133	29·6	26·85	..	..	..
d Bath (Brockham End) . . .	H. A. Holland, Esq. . .	5	1 4	720	29·9	32·82	183	137	..
d Barrow Gurney Reservoir . . .	A. M. Paterson, Esq., C.E. . .	5	1 0	300	36·2	34·24	175	140	..
d Lansdown . . .	Bath Corporation W.W. . .	5	1 0	380	..	34·17	174	135	..
d LONG ASHTON (Research Station) .	The Principal . . .	8	0 8	162	34·1	35·24	194	135	..
d Walton-in-Gordano . . .	Lt.-Col. Sir Chas. Miles, Bt. .	5	0 9	80	..	33·05	201	141	..
d Failand House . . .	H. G. Tanner, Esq. . .	5	1 0	380	34·6	33·06	187	149	..
d Portishead (Bristol Rd.) . . .	Portishead Dist. Water Co. .	5	1 6	24	34·9	30·75	174	132	..
d Portishead (Redcliffe Bay) . . .	A. E. Heaven, Esq. . .	5	0 10	200	..	32·17	165	125	..
<b>2.—YEO, AXE &amp; BRUE. 405 sq. mi.</b>									
d Bratton Seymour (Bratton Lodge) .	Lt.-Col. H. R. Phipps* . . .	5	1 0	465	..	37·50	(186)	(139)	..
d Bruton (Great Down Cottage) . . .	F. K. Makins, Esq. . .	5	1 0	280	..	37·16	176	144	..

\* Per Mid-Wessex Rainfall Association.



## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge					1937.		
			Height of		Average		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.	
			Rim	Ground	Ground	Rain-fall.				
			above	above	Sea Level.					
			in.	ft. in.	ft. in.	in.				
SOMERSETSHIRE—(con.).										
2.—YEO, AXE and BRUE—(con.).										
d Street (Leigh Holt)†	P. T. Clothier, Esq.	5	1	0	186	36.37	173	140		
d Ditchat Rectory	Rev. H. H. Tripp, M.A.*	5	1	0	212	37.39	177	151		
d Street (Overleigh House)	Mrs. J. B. Clark	5	0	10	100	36.75	186	135		
r Street (Hindhayes)	Mrs. W. Bancroft Clark	5	1	6	78	36.16	184	139		
d Street (Portway)	J. E. Clark, Esq.	5	1	0	80	38.80	176	138		
d Street (Millfield)	Dr. Hilda Clark	5	1	1	100	36.32	171	141		
d Catcott (The Crift)	Rev. H. Buckton	5	1	0	100	33.07	177	142		
d Glastonbury (Bere Lane)	Mrs. Mee	5	0	8		36.55	166	145		
d Edington	Major A. C. F. Luttrell	5	1	6	90	35.18	165	146		
d Chilton Polden (West House)	Mr. E. Chick	5	1	0	100	38.03	187	150		
d Cossington Manor	J. C. Macro Wilson, Esq.	5	1	0	110	33.77	165	143		
d Shepton Mallet (Pilton)	Miss E. M. Allen	5	1	3	354	40.24	155	134		
d Shepton Mallet (Charlton)	C. E. Burnell, Esq., J.P.	5	1	0	481	42.94	207	160		
d Shepton Mallet (Field House)	Sir F. H. Berryman	5	1	0	500	42.72	187	151		
d Shepton Mallet (Sewage Farm)	The Surveyor, U.D.C.	5	1	0	330	42.20	174	155		
d Wells (St. Cuthbert's Lo.)	Miss H. S. Laidlay	5	1	0	135	37.55	185	141		
d Wells (Mental Hospital)	The Medical Superintendent.	5	1	2	300	36.12	167	142		
d Wells (Wookey Hole Paper Mills)	W. S. Hodgkinson & Co., Ltd.	5	2	1	174	38.92				
d Wookey Hole (Wookey Ho.)	E. T. Wilson, Esq.	5	1	0	200	39.81	185	156		
d Burnham (Chalbury)	Miss A. E. Smith-Spark	5	1	0	20	33.56	188	140		
d Burnham	W. H. Chowins, Esq., C.E.	8	0	8	24	34.81	181	144		
d Burnham (Berrow Road)	Miss M. Robinson	5	1	0	10	32.27	163	129		
d Draycott	Miss E. Parrett.	5	1	0	150	37.65	162	138		
d Cheddar (Pumping Station)	A. M. Paterson, Esq., C.E.	5	1	0	50	36.89	186	148		
w Charterhouse	A. M. Paterson, Esq., C.E.	5	1	0	619	44.77				
w Compton Martin	A. M. Paterson, Esq., C.E.	5	1	0	276	38.58				
d Shipham (Studleigh End)	Miss E. M. Garaway	5	0	6	550	36.35	175	142		
w Ubley (Rookery Farm)	A. M. Paterson, Esq., C.E.	5	1	0	525	42.86				
d Winscombe (The Down)	J. Grubb, Esq.	5	1	0	295	38.37	194	160		
w Blagdon Hill	A. M. Paterson, Esq., C.E.	5	1	0	550	40.83				
d Blagdon (Pumping Station)	A. M. Paterson, Esq., C.E.	5	1	0	112	38.89	174	139		
w Blagdon (Coombe Lodge)	A. M. Paterson, Esq., C.E.	5	1	0	388	39.83				
w Nempnett (West Town)	A. M. Paterson, Esq., C.E.	5	1	0	263	35.93				
w Burrington (Burrington Links)	A. M. Paterson, Esq., C.E.	5	1	0	335	39.55				
d Banwell (Council School)	W. J. Sheppard, Esq.	5	1	4	62	36.48	184	137		
d WESTON-SUPER-MARE (Clarence Pk.)	Medical Officer of Health	5	1	0	28	34.42	166	129		
d Churchill (Langford House)	Sidney Hill, Esq., J.P.	8	0	10	90	41.98	195	154		
w Butcombe (Cholwell)	A. M. Paterson, Esq., C.E.	5	1	0	370	37.50				
d Yatton (Chelvey)	A. M. Paterson, Esq., C.E.	5	1	0	60	32.96	185	131		
d Backwell Hill	W. Garnett, Esq.	5	1	0	490	28.92	161	125		
d West Town	Theodore Robinson, Esq.	5	1	0	80	32.55	179	126		
d Clevedon (Gas Works)	J. Harger Pye, Esq.	5	1	2	22	31.03		124		
d Clevedon W.W. (Tickenham Rd.)	J. Harger Pye, Esq.	5	1	6	70	30.18	168	126		
d Wraxall Court	Mr. G. Hyde	5	0	10	200	34.43	184	134		
3.—PARRETT. 568 sq. mi.										
d Chard (High St. Council Sch.)†	The Headmaster	5	1	2	400	48.06	184	164		
d Chard (Snowdon)	A. J. Dening, Esq.	5	1	0	400	50.22	195	148		
d Crewkerne (The Reservoir)	E. H. Munford, Esq.	8	1	0	426	41.75	176	140		
d Crewkerne (Bincombe House)	Mrs. R. H. Symons	5	1	3	293	42.87	172	145		
d Chaffcombe House	Col. L. H. Noblett	5	0	10	400	48.32	187	143		
d Combe St. Nicholas	Rev. G. de Y. Aldridge	5	1	6	580	54.31	200	164		
d Hardington Manderville	L. Dawson Campbell, Esq.	5	1	0	400	43.69	174	144		
d Coker Court Gardens	Mr. T. H. Gilham	5	1	6	255	41.05	170	149		
d Ilminster	The Surveyor	8	0	6	182	44.54		182		
d Ilminster (Dillington Park) (R)	Mr. W. Goldthorpe	8	3	0	161	41.92	172	135		
d Yeovil (Reckleford School)	The Headmaster	5	2	0	150	40.32	167	135		

† Gauge moved from Hill Close, November 17, 1937.

\* Per Mid-Wessex Rainfall Association.

† Moved  $\frac{1}{2}$  ml. N.W. from Forton Road., October, 1937.

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Aver-		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	age	Rain-			
			above	above	fall.	fall.			
			Ground.	Sea Level.					
SOMERSETSHIRE—(con.).			in.	ft. in.	ft.	in.	in.		
<b>3.—PARRETT—(con.).</b>									
d Yeovil (Pen Mill Sewage Works) . . .	Dr. C. W. Gee . . . . .	5	1 0	102	30·6	38·99	195	148	
d Pitminster (Blagdon Hill) . . . . .	G. L. Sidey, Esq. . . . .	5	0 10	650	..	51·34	208	158	
d Stoke-under-Ham . . . . .	Miss M. H. Gillett . . . . .	8	1 0	80	31·2	39·98	173	142	
d Angersleigh (Leigh Court) . . . . .	A. Eastwood, Esq. . . . .	8	1 0	360	35·0	46·01	200	148	
d Ashbrittle (Kyrle) . . . . .	Major J. H. Mathias . . . . .	5	0 9	525	..	42·95	200	153	
d Bradford (Stoford Manor) . . . . .	W. Simms, Esq. . . . .	5	0 6	120	..	41·32	186	144	
d Runnington (Runnington Ho.) . . . .	Mrs. H. F. Lee . . . . .	5	1 0	200	..	38·45	188	141	
d West Lambrook (Rodwell) . . . . .	J. M. Brierley, Esq. . . . .	5	1 0	105	..	37·33	175	133	
d Martock Vicarage . . . . .	Prebendary Saunders . . . . .	5	0 9	61	29·6	35·60	169	130	
d Rimpton . . . . .	P. B. Cardwell, Esq.* . . . .	5	1 0	147	..	34·23	182	140	
d Taunton (The Park) . . . . .	P. J. Gough, Esq. . . . .	5	1 0	71	29·5	38·13	187	134	
d Queen Camel (England's Side) . . . .	J. A. Brendon, Esq. . . . .	5	1 0	100	..	35·68	180	143	
d Milverton (Old Halls) . . . . .	Mrs. Bere . . . . .	5	1 8	250	..	37·46	190	151	
d Milverton (Spring Grove) . . . . .	J. O. Lloyd, Esq. . . . .	5	1 0	500	36·7	39·73	..	..	
d Wiveliscombe (Culverhead) . . . . .	Lt. Col. H. Jefferys Taylor, D.S.O. .	5	1 0	430	39·6	41·65	189	148	
d Langport (The Grange) <i>new g</i> . . . . .	Miss V. M. Page . . . . .	5	1 0	50	..	35·46	190	138	
d Langport (Council School) . . . . .	H. G. Jefferies, Esq. . . . .	5	1 0	52	28·1	38·45	169	142	
d Somerton (The Grange) . . . . .	R. W. Pretor-Pinney, Esq. . . .	5	1 0	106	27·8	34·25	167	132	
d Wiveliscombe (Council School) . . . .	The Headmaster . . . . .	5	1 1	410	..	41·41	177	147	
d Wiveliscombe (Bulland Lodge) . . . .	Mrs. A. J. Capel . . . . .	4	0 10	750	..	45·23	195	168	
d Bishop's Lydeard (Ash Priors) . . . .	H. Ross, Esq. . . . .	5	0 8	200	..	34·52	197	145	
d Bishop's Lydeard (Watts Ho.) . . . .	Lady Boles . . . . .	5	1 2	320	..	32·61	172	140	
d Bagborough Rectory . . . . .	C. Hubert Lance, Esq. . . . .	9	1 0	470	34·1	37·45	202	154	
d Spaxton (Bush House) . . . . .	Capt. A. M. Stancomb, R.N. . . .	5	1 0	350	..	37·61	175	142	
d Bridgwater (Blake Gardens) . . . . .	R. A. Watson, Esq. . . . .	5	3 1	27	28·5	41·45	176	151	
d Bridgwater (Wembdon Road) . . . .	H. Corder, Esq. . . . .	5	0 6	30	29·9	37·66	179	144	
d Over Stowey (Quantock San.) . . . .	Medical Superintendent . . . .	5	1 0	500	..	38·51	164	135	
d Cannington (Ashford) . . . . .	R. A. Watson, Esq. . . . .	5	1 1	102	31·4	36·50	..	132	
d CANNINGTON (Farm Inst.) . . . . .	The Principal . . . . .	5	1 0	95	..	36·18	197	142	
d Bridgwater (Fiddington) . . . . .	J. M. Lee, Esq. . . . .	5	1 0	100	..	39·65	183	147	
<b>4.—NORTH COAST STREAMS. 158 sq. mi.</b>									
d Elworthy (Willett) . . . . .	H. C. Venning, Esq. . . . .	5	1 0	450	35·1	38·76	163	136	
d Crowcombe (Rexton Gorse) . . . . .	R. Cooper, Esq. . . . .	5	0 10	530	..	39·42	..	..	
d Crowcombe (Crowcombe Ho.) . . . .	Dr. B. M. Young . . . . .	5	0 5	474	..	42·53	..	..	
d Crowdon Hall . . . . .	Capt. J. W. Bridges . . . . .	5	2 5	800	37·8	42·85	174	146	
d Bicknoller (Orchards) . . . . .	Dr. Howse† . . . . .	5	0 10	290	..	41·01	..	..	
d Bicknoller (Ford) . . . . .	John Tracey, Esq. . . . .	5	1 2	150	33·0	40·22	204	149	
d Roadwater (Lowood) . . . . .	H. D. Badcock, Esq. . . . .	5	1 0	200	33·5	39·87	197	144	
d Dodington . . . . .	Miss W. J. Malet . . . . .	5	1 0	450	..	40·24	190	149	
d Bicknoller (Weacombe Ho.) . . . . .	The late O. T. Sadler, Esq.† . .	5	1 0	320	34·2	39·58	..	..	
d Williton (Aller Farm) . . . . .	R. G. Hosegood, Esq.† . . . .	5	3 0	200	32·4	39·40	..	..	
d Williton (Eastfield) . . . . .	Miss E. Heathcote . . . . .	5	1 0	200	..	38·09	195	142	
d Williton (The White House) . . . . .	S. L. Rogers, Esq., I.P. . . . .	5	1 0	97	30·6	39·29	185	147	
d Kilve Court . . . . .	Mrs. Cooke-Hurle . . . . .	5	1 0	150	30·0	39·64	187	150	
d Old Cleeve . . . . .	Rev. Preb. E. P. Liddon . . . .	7	1 0	150	30·8	36·78	205	144	
d Stogursey (Fairfield House) . . . . .	Lord St. Audries . . . . .	5	1 0	150	31·1	37·27	181	141	
d Bridgwater (Stockland Manor) . . . .	Lt. Col. H. T. Daniel* . . . . .	5	..	..	..	35·92	169	141	
d Carhampton (The Croft) . . . . .	E. W. Darby, Esq. . . . .	5	1 0	100	..	42·29	200	160	
d Wootton Courtney (Greenacres) . . . .	Dr. K. Anderson . . . . .	5	1 6	400	34·0	35·89	197	151	
d Dunster . . . . .	P. R. Day, Esq. . . . .	5	1 0	160	32·2	39·42	186	141	
d Dunster (The Priory) . . . . .	A. B. Burney, Esq.* . . . .	5	0 9	200	32·0	37·59	(173)	(145)	
d Stolford (Whitewick Farm) . . . . .	C. Mackenzie, Esq. . . . .	5	0 9	10	..	34·14	172	137	
d Minehead (Blenheim Gardens) . . . .	A. Douglas Barron, Esq. . . .	5	1 0	37	33·4	37·39	183	142	
d Minehead (Weirfield) . . . . .	Rev. A. G. Robinson . . . . .	5	0 11	110	..	35·52	198	142	
d Porlock (Lynch Mead Allerford) . . . .	J. Dyke Acland, Esq. . . . .	5	1 3	113	34·0	35·00	204	139	
d Porlock (Bush Steep) . . . . .	Mrs. W. P. Holmes . . . . .	5	0 9	130	38·2	39·45	188	149	
d West Porlock House . . . . .	Mrs. G. Blathwayt . . . . .	5	1 6	40	42·7	42·66	..	144	
d West Porlock (Underway) . . . . .	N. G. Hadden, Esq. . . . .	5	1 0	80	45·0	43·65	..	154	
d Culbone (Lillycombe) . . . . .	E. T. MacDermot, Esq. . . . .	5	1 0	1210	51·4	50·91	221	175	

\* Per Mid-Wessex Rainfall Association. † Per S. L. Rogers, Esq.

## DIVISION V—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.			
			Height of		Average Rain fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
			Rim above Ground.	Ground above Sea Level.					
SOMERSETSHIRE—(con.).			in.	ft. in.	ft. in.	in.	in.		
5.—EXE. 122 sq. mi.									
D Churchstanton (Stapley)	The Misses Church	5	1 0	600	..	53·63	206	163	
D Churchstanton (Widcombe)	G. Clinton Baker, Esq.	8	1 0	900	..	51·58	188	157	
D Exbridge	Exe Valley Fishery Co.	5	3 0	420	43·3	42·96	193	154	
D Brushford Rectory	Rev. B. J. de Boe	5	1 0	450	44·5	44·82	204	161	
D Brushford Nurseries	Mr. G. Ruff	5	1 5	450	43·8	44·21	209	163	
D Dulverton C.E. School	C. J. R. Weaver, Esq.	5	0 9	550	47·8	46·77	196	165	
D Dulverton (Barons Down)	B. S. Bullivant, Esq.	5	0 11	860	42·3	42·59	210	168	
D Winsford	Capt. R. S. Le Bas	5	1 0	620	54·3	51·13	216	163	
Exford (Stockleigh Lodge)	Mrs. Wiggint†	5	1 0	1000	55·4	55·87	..	..	
6.—AXE. 42 sq. mi.									
D Wayford Manor	H. L. P. Baker, Esq.	5	0 10	425	..	48·48	173	156	
D Cricket St. Thomas	Mr. C. G. Rose	5	1 0	444	39·3	49·87	170	155	
7.—STOUR. 35 sq. mi.									
D Temple Combe Rectory	Rev. Preb. R. W. Windsor*	5	1 4	250	34·9	44·22	161	144	
D Horsington Marsh	P. Parsons, Esq.*	5	0 6	210	..	40·45	168	144	

## DIVISION VI—WEST MIDLAND COUNTIES.

GLOUCESTERSHIRE. (Area, 1,237 sq. mi.).

<b>1.—WYE. 50 sq. mi.</b>								
Chepstow (Castleford)	Mrs. W. R. Lysaght	5	1 0	146	35·8	36·71	162	138
St. Briavels (St. Briavels Ho.)	Mrs. F. Andrews	5	1 0	750	43·4	44·11	162	141
Redbrook Pumping Station	C. W. D. Ward, Esq.	5	1 0	225	..	38·33	178	138
English Bicknor (Bicknor House)	T. F. Harvey, Esq.	5	1 0	490	32·6	34·16	160	130
<b>2.—SEVERN—Right Bank Tributaries. 185 sq. mi.</b>								
Forest of Dean (PARKEND)	Forestry Commission	8	1 0	325	..	36·11	171	133
Coleford (Cannop Colliery)	The Manager	5	1 0	330	..	37·39	177	134
Newnham-on-Severn School	The Headmaster	5	1 0	100	..	35·17	173	129
Westbury-on-Severn (Ninnage L.)	E. S. Vines, Esq.	5	1 0	120	29·2	30·16	150	125
Newent (Taynton)	M. Phillips Price, Esq.	5	1 0	60	29·3	30·66	172	131
Oxenhall (Dymock Woods)	Forestry Commission	8	1 0	232	27·6	31·21	151	128
Bromsberrow Heath Pump. Stn.	W. Osborne Thorp, Esq., C.E.	5	1 0	181	26·2	31·15	162	119
Tewkesbury (Forthampton Ct.)	Mr. B. Webster	5	1 0	48	26·9	27·21	167	128
Tewkesbury (Upper Lode)	J. E. Bradley, Esq.	5	1 0	41	25·2	24·92	158	128
<b>3.—SEVERN—Left Bank Tributaries. 369 sq. mi.</b>								
Thornbury (Thornbury Park)	Capt. R. A. Bennett	5	1 3	70	32·2	31·00	167	128
Tortworth Court	The Head Gardener	8	1 0	264	31·5	30·25	153	121
Tortworth School	E. A. Smith, Esq.	5	1 6	264	31·8	31·14	180	127
Avening House	Lady Eleanor Byng	8	1 3	350	32·3	34·30	172	133
Avening (Gatcombe)	Col. H. C. Ricardo	6	1 0	550	31·6	38·97	180	143
Berkeley Castle Gardens	Mr. T. B. Ashbee	5	1 6	60	29·1	31·19	166	131
Cam (Drake Lane)	F. G. Francis, Esq.	5	1 0	350	..	33·71	194	130
Nailsworth (Three Corners)	F. R. Rushton, Esq.	5	0 9	325	34·0	34·55	188	136

‡ Per Sir L. Rogers, Esq.

\* Per Mid Wessex Rainfall Association.

§ Turf wall round gauge on new site.

## DIVISION VI—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Dian	Rain-gauge			Average Rain- fall.	1937.		
			Height of Rim above Ground.	Ground above Sea Level.	Days with ·01 in. or more.		Days with ·04 in. or more.		
GLOUCESTERSHIRE—(con.).						in.			
3.—SEVERN—Left Bank Tributaries—(con.).									
d Berkeley (Sharpness Docks) . . . . .	A. J. Cullis, Esq., C.E. . . . .	5	1	3	50	29·5	33·97	168	132
d Minchinhampton (Box House) . . . . .	Mrs. J. H. Sharp . . . . .	5	1	0	500	..	37·26	..	138
d Minchinhampton (The Shard) . . . . .	E. H. Denne, Esq. . . . .	5	0	8	500	32·0	33·50	171	132
d Minchinhampton (Rectory Cott.) . . . . .	G. W. Fisher, Esq. . . . .	5	1	0	610	33·9	36·40	192	136
d Minchinhampton (Camp Field) . . . . .	Miss B. M. Legh . . . . .	5	1	6	640	33·9	38·00	189	137
d Chalford W.W. . . . .	Stroud Water Co. . . . .	5	2	0	241	..	32·64	159	131
d Frocester Manor . . . . .	Capt. J. E. H. Graham-Clarke. . . . .	5	1	3	80	..	29·45	..	..
d Stroud (Rodborough Common) . . . . .	Major H. Napier-Rowlatt . . . . .	5	0	10	600	..	35·36	160	139
d Stroud (Thrupp) . . . . .	George G. Loane, Esq. . . . .	5	1	0	300	..	33·99	176	131
d Stroud (Stanley Park Gdns.) . . . . .	Sir P. S. Marling, Bt., V.C., C.B. . . . .	8	1	0	365	33·2	36·48	151	137
d Stonehouse (Wycliffe College) . . . . .	W. A. Sibly, Esq. . . . .	5	1	0	120	29·0	29·63	158	127
d Stonehouse Council School . . . . .	The Headmaster . . . . .	5	1	0	136	..	29·77	177	132
d Stroud (Berrimans) . . . . .	E. Armitage, Esq. . . . .	5	1	0	750	34·0	35·87	..	..
d Whitminster (Parklands) . . . . .	W. Grey Robinson, Esq., J.P. . . . .	5	1	3	103	..	30·71	165	129
d Miserden Park . . . . .	The Agent . . . . .	5	1	2	780	..	37·01	190	144
d Whitminster (The Junction) . . . . .	A. J. Cullis, Esq., C.E. . . . .	5	1	0	32	..	28·59	184	126
d Haresfield Court . . . . .	Miss Tidswell . . . . .	5	0	10	100	30·2	31·61	172	141
d Harescombe Grange . . . . .	Stamford Hutton, Esq. . . . .	5	1	0	557	29·3	31·08	180	141
d Cranham (Woodside) . . . . .	J. H. Edwards, Esq. . . . .	5	1	5	650	..	30·93	207	131
d Quedgeley House . . . . .	Miss M. F. Curtis-Hyaward . . . . .	5	1	0	65	27·9	27·54	167	137
d Witcombe Reservoir . . . . .	C. J. Scudamore, Esq., C.E. . . . .	8	1	0	297	29·2	29·96	170	128
d Brockworth (The Kia) . . . . .	Mrs. Grace Buckle . . . . .	5	1	4	220	27·1	28·21	163	121
d Gloucester (The Lannett)† . . . . .	R. H. Ellis, Esq. . . . .	5	1	3	56	26·6	24·95	165	122
d Gloucester (Llanthony Lock) . . . . .	J. E. Bradley, Esq. . . . .	5	1	2	39	25·4	24·05	160	126
d Gloucester (Maisemore Lock) . . . . .	J. E. Bradley, Esq. . . . .	5	1	1	39	25·1	25·01	168	127
d Churchdown (Barrow Hill) . . . . .	Mrs. J. H. Jones . . . . .	5	1	0	225	27·9	26·35	185	132
d Dowdeswell Reservoir . . . . .	G. Gould Marsland, Esq., C.E. . . . .	5	1	3	357	30·0	31·42	165	132
d Cheltenham (Hewletts Res.) . . . . .	G. Gould Marsland, Esq., C.E. . . . .	8	1	6	419	27·7	29·64	173	131
d Cheltenham (Sandford Mead) . . . . .	G. Gould Marsland, Esq., C.E. . . . .	5	2	4	210	26·3	26·43	157	128
d CHELTENHAM (Montpellier Gds.) (+ A) . . . . .	The Town Clerk . . . . .	5	1	0	214	26·5	26·46	164	128
d Prestbury (Delhome) . . . . .	Miss E. M. Heberden . . . . .	5	0	9	300	..	30·39	197	136
d Bishops Cleeve . . . . .	Mrs. L. G. Lascelles . . . . .	5	0	10	150	..	28·95	169	129
d Tewkesbury Pumping Station . . . . .	G. Gould Marsland, Esq., C.E. . . . .	5	1	0	47	23·9	25·55	179	124
4.—SEVERN—Upper Avon. 68 sq. mi.									
d Blockley . . . . .	Miss E. M. Richardson . . . . .	5	1	0	550	29·4	34·36	177	138
d Winchcombe (Sudeley Castle) . . . . .	Major J. H. D. Brocklehurst. . . . .	5	1	0	357	29·8	33·09	147	131
d Broadway (Buckland Manor) . . . . .	Mr. J. Whiteley . . . . .	5	1	0	300	27·7	32·01	181	139
d Campden (Research Station) . . . . .	The Director . . . . .	5	1	0	389	..	30·77	168	128
5.—LOWER AVON & C. 208 sq. mi.									
d Bath (Monkswood Reservoir) . . . . .	Bath Corporation W.W. . . . .	5	1	0	365	..	35·93	189	137
d Marshfield (Ashwicke) . . . . .	Major M. E. W. Pope . . . . .	5	1	0	600	..	33·95	..	..
d Bristol (Tyndalls Park) . . . . .	(+ A) O. W. Dunscombe, Esq. . . . .	5	1	6	150	33·1	35·05	204	133
d Bristol (Hopewell Hill) . . . . .	W. Gloucester Water Co. . . . .	5	1	0	381	30·5	32·74	179	137
d Bristol (Sneyd Park) . . . . .	Mrs. A. M. Tanner . . . . .	5	1	8	300	..	32·70	..	130
d Clifton (Oakfield Road) . . . . .	A. M. Paterson, Esq., C.E. . . . .	5	1	0	200	33·0	33·07	181	129
d Clifton (All Saints Road) . . . . .	H. T. Coles, Esq. . . . .	5	0	11	200	..	34·90	194	141
d Bristol (St. Andrew's Park) . . . . .	H. Vicars Webb, Esq. . . . .	5	1	6	200	32·6	33·05	201	126
d HORFIELD . . . . .	(+ A) G. H. Brown, Esq. . . . .	5	1	0	206	..	33·85	189	137
d Shirehampton (Kings Weston) . . . . .	P. Napier Miles, Esq. . . . .	8	1	0	220	..	30·76	184	135
d Winterbourne (Kendleshirs) . . . . .	J. Marsh, Esq. . . . .	5	1	0	180	..	28·77	..	..
d Frampton Cotterell (Park Ho.) . . . . .	H. H. Harding, Esq. . . . .	5	1	0	158	29·8	32·00	181	129
d Badminton Gardens . . . . .	The Head Gardener . . . . .	5	1	0	407	..	37·23	174	149
d Almondsbury (Ridgewood) . . . . .	R. E. Potter, Esq. . . . .	5	0	10	200	29·7	28·96	..	..
d Shipton Moyne P.S. . . . .	W. Gloucester Water Co. . . . .	5	1	0	312	..	34·58	181	139
d Long Newton . . . . .	Mr. P. A. Day . . . . .	5	1	0	350	..	33·01	167	132

† Station formerly called Gloucester (The Park).

## DIVISION VI—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Rim	Height of	Average	Rain-fall.	Days with	Days with
			above	Ground	above		·01 in.	·04 in.
			Ground.	Sea Level.	fall.		or more.	or more.
GLOUCESTERSHIRE—(con.)			in.	ft.	in.	ft.	in.	
6.—THAMES—Right Bank Tributaries. 17 sq. mi.								
7.—THAMES—Windrush & c. 340 sq. mi.								
d Somerford Keynes (Manor Ho.)	F. Fawcett, Esq.	5	0	9	340	27·9	28·44	160
d Fairford (Dunfield, Kempsford)	A. T. Iles, Esq.	5	1	0	260	25·6	28·51	174
d Lechlade (St. John's Lock)	Thames Conservancy	5	1	7	237	24·3	28·52	180
d Lechlade (Claydon House)	T. T. S. Metcalfe, Esq.	5	1	0	250	25·9	28·22	176
d CIRENCESTER (R. Agric. Coll.)	The Principal	5	1	0	443	..	32·23	188
d Fairford (Draycott)	Miss F. A. Edmonds	5	2	0	200	..	29·81	165
d Cirencester (Gwynfa)	Nigel Woods, Esq.	5	1	0	354	30·8	32·11	185
d Daglingworth Manor	J. Herbert Scrutton, Esq.	8	0	10	450	32·2	36·03	192
d Great Barrington	H. J. Barrett, Esq.	5	1	6	417	28·8	30·29	169
d Northleach (Sherborne House)	The Rt. Hon. Lord Sherborne	5	1	6	440	30·7	31·28	168
d Northleach (Leygore Manor)	Arthur E. Moss, Esq.	5	1	0	580	29·4	30·48	187
d Andoversford (Hampden House)	Rear Adm. J. S. Salmond, R.N.	5	1	0	730	..	34·32	189
d Bourton-on-Water (Eastfield)	E. W. Kendall, Esq.	5	1	6	434	30·1	32·15	168
d Bourton-on-Water (Chardwar)	Miss A. B. Moore	5	1	6	436	30·3	31·47	166
d Stow-on-the-Wold (Icomb Place)	Capt. G. H. Simpson Hayward	8	1	3	500	29·3	33·37	161
d Stow-on-the-Wold (Icomb Hill)	Capt. Alan Gee	5	0	10	600	..	34·11	..
d Winchcombe (Temple Guiting Ho.)	Major C. Stacey	5	1	3	700	31·6	36·26	184
HEREFORDSHIRE. (Area, 840 sq. mi.).								
1.—WYE. 685 sq. mi.								
d Goodrich Court Gardens	Mrs. G. R. Trafford	5	1	8	200	29·7	36·83	171
d Walford (Hill Court Gardens)	Mrs. G. R. Trafford	5	1	1	126	28·4	30·87	168
d Ross-on-Wye	(+A) F. J. Parsons, Mus. Bac. (M.O.)	5	1	0	223	28·2	30·32	165
d Ross (Birchlea)	Miss M. L. Southall	5	1	0	210	28·2	30·93	179
d Bridstow (Ashe Leigh)	Major W. Stanley R. Cox	5	1	0	225	27·4	29·06	172
d Kentchurch Rectory	The late Rev. R. P. Dansey	5	1	0	220	34·6	38·14	181
d Ross (The Chantry)	M. F. Maclean, Esq.	5	1	0	475	..	30·83	175
d Perrystone Court	Lt. Gen. G. S. Clive, D.S.O.	5	1	3	450	25·5	31·32	166
d Vowchurch (Ladywell House)	A. S. Wood, Esq.	5	1	0	400	34·9	35·83	184
d HEREFORD (BELMONT ABBEY)	The Abbot	8	1	0	292	27·5	33·01	184
d Peterchurch (Hinton Hall)	F. Boddington, Esq.	5	1	0	480	..	39·41	175
d Hereford (Breinton Court)	Mrs. R. E. H. Bailly	5	1	0	238	25·9	28·60	173
d Tarranton (Aldersend)	J. H. Whiting, Esq.	5	1	2	360	..	28·27	166
d Dorstone (Oaklands)	Robert Gray, Esq.	5	1	0	486	..	41·11	195
d Bartestree (Pomona Fruit Farm)	The Secretary	5	1	0	270	..	25·62	..
d Hereford (Holmer Hall)	Miss M. S. Hopton	5	1	7	244	25·1	29·55	172
d Tyberton Court	Major C. B. Lee-Warner	5	0	10	276	..	33·28	164
d Credenhill (Stretton Sugwas)	Mrs. S. H. Armitage	5	1	0	226	25·8	30·96	178
d Credenhill	F. E. Whiting, Esq.	5	1	5	275	27·5	28·48	157
d Westhide (The Court)	H. R. Jenkins, Esq.	5	1	0	250	..	25·50	163
d Clifford School	The Headmaster	5	1	7	490	..	35·42	199
d Burghill (Hereford Co. Mental H.)	The Medical Superintendent	5	0	10	300	26·3	27·98	167
d Ocle Pychard (Ocle Court)	G. Cresswell, Esq.	8	1	0	298	27·8	26·76	175
d Weobley (Garnstone)	Lt. Col. R. N. H. Verdin	5	1	2	442	..	29·85	176
d Sarnesfield Court	Rev. W. Marshall	5	1	0	378	..	29·96	175
d Pembridge (Moor Court)	C. A. Benn, Esq.	5	1	6	400	..	28·23	156
d Pembridge (Burton Court)	Mrs. P. Clowes	5	1	6	400	28·4	31·52	188
d Bromyard (Birchyfields)	Lt. Col. J. E. Knott, D.S.O.	5	1	3	545	..	28·31	161
d BROMYARD (Dumbleton Cot.)	Miss M. A. Philpott	5	1	0	393	29·0	30·77	178
d Kington (Lynhales)	Mrs. R. F. Hibbert	5	1	0	620	32·8	31·51	184
d Lyonsall (Castle Weir)	Col. H. R. Pettit	5	1	0	500	..	30·79	..
d Kington (Hill Court)†	J. E. Barendt, Esq.	5	1	7	595	..	33·27	175
d Monkland Cottage	Capt. N. J. Bengough	5	1	1	450	..	27·76	167
d Leominster (Hennor)	Capt. L. R. Hibbert	5	1	1	417	..	25·58	174
d Kimbolton (Grantsfield)	J. M. Hutchinson, Esq.	5	1	0	424	28·4	28·14	186

† New gauge—New site.

## DIVISION VI—WEST MIDLAND COUNTIES—(con.).

						Rain-gauge		Average Rain- fall.	1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Ground		Rain- fall.		Days with ·01 in. or more.	Days with ·04 in. or more.	
			Rim above Ground.	Sea Level.	above Sea Level.	above Sea Level.					
HEREFORDSHIRE—(con.).		in.	ft.	in.	ft.	in.	in.				
1.—WYE—(con.).											
d Shobdon Rectory	Rev. P. J. Simpson	8	1	2	434	..	28·71	172	134		
d Byton Rectory	Rev. P. D. Irwin	5	1	0	500	..	30·79	179	130		
d Presteigne (Middlemoor)	A. M. Wilson, Esq.	5	1	0	480	..	31·50	178	135		
2.—SEVERN—Right Bank Tributaries. 155 sq. mi.											
d Ledbury (Donnington Hall)	Col. C. Spence-Colby, C.M.G.	5	0	9	240	..	28·10	..	..		
d Much Marcle (The Mount)	Miss A. M. Charles	5	1	0	240	25·8	29·58	156	128		
d Much Marcle (Hall Court)	Mrs. J. J. S. Powell	5	1	0	200	..	28·35	158	120		
Little Marcle (School House)	J. G. Waggett, Esq.	5	1	3	139	..	26·58	181	113		
Ledbury (The Twerne)	L. J. C. Riley, Esq.	5	1	0	400	..	30·01	208	135		
d Colwall (The Downs)	F. M. Day, Esq.	5	1	0	500	..	30·13	155	118		
SHROPSHIRE (Area, 1,343 sq. mi.).											
1.—MERSEY—Weaver. 27 sq. mi.											
2.—DEE. 30 sq. mi.											
d Ellesmere (Seven Sisters)	C. Adam, Esq.	5	0	10	300	..	25·38	179	124		
d Whitchurch (Fenns Bank)	M. W. Sowden, Esq., C.E.	8	1	0	271	27·1	26·73	176	139		
d Overton (Sodylt Hall)	W. H. Horsfall, Esq.	5	1	0	266	29·7	29·70	..	127		
3.—SEVERN.—Right Bank Tributaries. 722 sq. mi.											
d Bucknell Vicarage	Rev. W. A. Woodhouse	5	1	0	480	..	29·97	165	129		
d Ludlow (Hill Crest)	C. B. Marston, Esq.	5	1	3	350	..	28·43	154	127		
d Bromfield (Oakly Park)	The Head Gardener	5	1	2	300	29·7	28·35	150	126		
d Bromfield (Warwick House)	F. Brayshaw, Esq.	5	1	0	320	30·3	29·88	184	137		
d Bitterley Grammar School	The Headmaster	5	1	0	509	28·1	30·07	154	127		
d Stanton Lacy Vicarage	Miss I. Armitage	5	1	2	304	28·1	29·54	175	131		
d Culmington Manor	T. W. Shaw, Esq.	8	1	6	600	29·6	29·80	..	129		
d Burwarton Hall	Rt. Hon. Viscount Boyne	5	0	9	894	33·6	35·30	172	143		
d Craven Arms (Westhope Cottage)	Mrs. L. S. Swinnerton Dyer	5	0	11	610	..	28·41	174	134		
d Lydbury North	Erskine Edmonds, Esq.	5	1	0	500	..	32·26	200	138		
d Lydbury North (Totterton)	Major W. H. B. Whitaker	5	0	6	700	30·8	31·22	202	141		
d Bishops Castle (The Vicarage)	Rev. Canon H. J. Smith	5	1	7	596	32·8	28·49	164	124		
d Bishops Castle (The Mount)	F. Lavender, Esq.	5	1	0	735	..	26·24	193	132		
d Church Stretton (Sewage Works)	E. J. Marsh, Esq.	5	1	0	582	33·7	37·77	203	138		
d Church Stretton (St. Margaret's)	Rev. J. H. Kidson	5	0	11	672	..	37·86	196	146		
d Wentnor (Stanbatch)	P. Jackson, Esq.	5	1	3	1019	..	36·61	196	140		
d Bridgnorth (Cantreyn)	W. Bayliss, Esq.	5	1	0	290	26·7	29·82	170	135		
d Chirbury (Marrington Hall)	Lt.-Col. S. D. Price-Davies	5	1	0	490	29·5	24·14	161	127		
d Church Stretton (Woolstaston)	Mrs. Mathews	5	1	3	745	31·9	36·39	177	136		
d Broseley (Boys' School)	The Headmaster	5	0	8	485	..	32·94	..	..		
d Cressage (Harnage Grange)	Lt.-Col. G. P. Pollitt	5	1	0	420	..	27·84	167	119		
d Shrewsbury (Wenlock Road)	L. W. Sharpe, Esq.	5	1	0	229	..	24·04	177	127		
d Meole Brace Hall	J. B. Hoare, Esq.	5	1	1	250	..	23·14	..	117		
d Shrewsbury (Beckbury House)	G. H. Horsfall, Esq.	5	0	9	220	22·1	27·22	174	138		
d Shrewsbury (Radbrook Hall)	Major D. D. Macpherson, J.P.	5	0	8	235	24·3	24·83	..	125		
d Shrewsbury (Longden Road)	Miss M. Deedes	5	1	6	250	..	26·17	170	122		
d SHREWSBURY (Monkmoor)	Medical Officer of Health	8	1	0	184	..	24·55	186	126		
4.—SEVERN.—Left Bank Tributaries. 564 sq. mi.											
Bridgnorth (Coton Hall)	Capt. W. Colville	5	1	6	460	27·8	30·02	172	..		
d Bridgnorth (Stanmore Hall)	The Hon. E. Hamilton-Russell	5	1	0	297	..	27·18	180	121		
d Ackleton (The Folley)	H. J. Bath, Esq.	5	1	0	230	..	26·91	168	123		
d Shifnal (Hatton Grange)	Mr. G. Risebrow	5	1	6	262	26·1	29·33	211	141		
d Madeley (C. E. Schools)	The Headmaster	5	1	0	373	..	31·21	181	135		
d Shifnal (Cosford W.W.)	B. L. McMillan, Esq., C.E.	5	0	11	222	..	27·28	167	126		
d Wellington W.W. (Wrekin Res.)	W. Walker, Esq.	5	1	4	478	25·7	34·15	..	131		
d Shrewsbury (Cophorne)	W. H. Purslow, Esq.	8	1	0	252	..	23·32	177	123		
d Shrewsbury (Coton Hill)	Dr. M. Gepp	5	1	1	190	22·1	23·19	171	123		
d Newport (Aston Hall)	Col. R. Leeke	5	0	11	280	27·7	28·87	167	125		
Pentreheylin Hall	H. P. Hall, Esq.	8	1	6	200	..	22·35	..	..		
d NEWPORT (Harper Adams Ag. Coll.)	The Principal	5	1	0	211	24·8	27·22	179	122		
d Newport (Chetwynd Park)	Mrs. Burton Borough	5	1	0	240	28·3	29·50	175	128		

## DIVISION VI—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Rain-fall.	Day with .01 in. or more.	Day with .04 in. or more.
			Rim	Ground					
			above	above					
			Ground.	Sea Level.					
			in.	ft. in.	ft.	in.	in.		
SHROPSHIRE—(con.).									
4.—SEVERN—(con.).									
d Grinshill (Sansaw Hall Gardens) . . . . .	Mrs. Brian Bibby . . . . .	5	1	3	300	25.7	26.41	205	127
d Cheswardine (Knighton Res.) . . . . .	Canal Engineer, L.M.&S.R. . . . .	8	1	0	351	30.0	30.33	..	133
d Wem (Senior Schools) . . . . .	The Headmaster . . . . .	5	0	9	265	..	24.69	..	126
d Cheswardine Hall . . . . .	Col. R. C. Donaldson Hudson . . . . .	5	1	6	530	29.1	31.81	171	133
d Oswestry (Mount Res.) . . . . .	G. W. Lacey, Esq., C.E. . . . .	5	1	0	698	34.5	31.16	184	142
d Oswestry (Cross Street) . . . . .	A. R. Mackavoy, Esq. . . . .	5	1	0	398	..	29.39	188	136
d Norton-in-Hales School . . . . .	Chas. Chadwick, Esq. . . . .	5	1	3	350	30.5	33.19	183	135
STAFFORDSHIRE. (Area, 1,166 sq. mi.).									
1.—MERSEY—Weaver. 50 sq. mi.									
d Madeley Vicarage . . . . .	Rev. W. Garner* . . . . .	5	1	0	350	..	27.81	160	131
d Biddulph Grange . . . . .	The Secretary . . . . .	5	1	5	572	33.8	34.55	181	130
2.—SEVERN—Left Bank Tributaries. 160 sq. mi.									
d Kinver (Prestwood) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	179	..	26.81	177	130
d Kingswinford (Ashwood P.S.) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	207	24.9	26.36	171	123
d Wolverhptn. (Dimmingsdale W.W.) . . . . .	B. L. McMillan, Esq., C.E. . . . .	5	0	9	323	..	25.12	160	119
d Wolverhampton (Copthorne Road) . . . . .	K. C. Berrington, Esq. . . . .	5	0	9	505	..	26.05	172	119
d Wolverhampton (West Park) . . . . .	Dr. R. H. H. Jolly . . . . .	5	1	0	430	27.1	26.55	186	126
d Tettenhall (The Hollies) . . . . .	R. C. Sikes, Esq., C.E. . . . .	5	1	0	355	26.7	27.25	184	127
d Tettenhall Waterworks . . . . .	B. L. McMillan, Esq. . . . .	5	0	10	468	..	27.21	178	127
d Shifnal (Weston Park) . . . . .	Earl of Bradford . . . . .	5	1	6	400	27.3	30.29	178	133
d Norbury Junction . . . . .	Canal Engineer, L.M. & S.R. . . . .	8	1	0	331	28.0	30.36	154	123
d Market Drayton (Ches. J. San.)† . . . . .	The Medical Supt. . . . .	5	1	0	581	..	29.03	159	135
d Maer Hall Gardens . . . . .	Miss Harrison, M.B.E. . . . .	8	1	6	390	32.5	33.38	159	142
3.—TRENT—Right Bank Tributaries. 513 sq. mi.									
d West Bromwich . . . . .	(+A) D. Ellison, Esq., C.E. . . . .	8	1	7	543	26.2	28.50	166	127
d Wednesbury (Ocker Hill) . . . . .	Birmingham Canal Navgt. . . . .	5	1	0	476	26.6	28.17	182	132
d Walsall (Bescot Sewage Farm) . . . . .	M. E. Habershon, Esq. . . . .	5	0	11	376	26.9	27.18	185	127
d Walsall (Wednesbury Sew. Wks.) . . . . .	G. Wicks, Esq. . . . .	5	1	0	378	27.9	26.58	190	126
d Walsall (Pleck) . . . . .	J. C. W. Day, Esq. . . . .	5	1	0	400	..	28.30	183	133
d Walsall (Gorway) . . . . .	J. Cleland, Esq. . . . .	5	1	0	440	..	27.57	151	119
d Darlaston (Sewage Works) . . . . .	S. E. Hammonds, Esq. . . . .	8	1	6	393	..	26.17	166	124
d Bilston (The Lunt Outfall) . . . . .	A. F. B. Sidwick, Esq., C.E. . . . .	8	1	0	419	27.3	27.50	171	132
d Aldridge (Bourne Vale) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	419	25.1	27.53	163	125
d Wolverhptn. (Short Heath Cl. Sch.) . . . . .	The Headmaster . . . . .	5	1	0	488	..	30.20	183	132
d Shenstone (Little Hay) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	298	..	27.74	166	119
d Bloxwich (Sneyd Res.) . . . . .	Birmingham Canal Navgt. . . . .	5	1	0	507	25.5	28.42	186	130
d Pelsall (Goscote Sew. Wks.) . . . . .	M. Habershon, Esq. . . . .	5	1	0	435	..	30.98	179	140
d Brownhills (Sandhills) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	407	..	27.90	174	121
d Brownhills . . . . .	S. Harrison, Esq., C.E. . . . .	5	1	8	492	26.8	29.89	167	130
d Chasetown . . . . .	Cannock Chase Colliery Ltd. . . . .	5	1	0	508	..	31.92	165	132
d Brewwood (Slade Heath P.S.) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	340	24.9	29.49	164	134
d Hammerwich (Cannock Chase Res.) . . . . .	Birmingham Canal Navgt. . . . .	5	1	0	475	25.3	30.00	165	130
d Whittington (Old Hall) . . . . .	E. R. Corn, Esq., J.P. . . . .	5	1	0	221	..	29.07	172	117
d Cannock (Longford Lane Sew. Wks.) . . . . .	Cannock U.D.C. . . . .	5	1	0	400	..	25.10	159	118
d Cannock (Heath Hayes Sew. Wks.) . . . . .	Cannock U.D.C. . . . .	5	1	0	530	..	29.22	161	134
d Brewwood (Belvide Reservoir) . . . . .	Canal Engineer, L.M. & S.R. . . . .	5	1	0	367	..	29.89	206	143
d Elford . . . . .	W. H. Haile, Esq., C.E. . . . .	5	1	0	178	..	25.24	174	112
d Hednesford (Scout House) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	702	..	30.95	175	134
d Rugeley (Longdon Lodge) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	413	26.1	26.31	161	129
d Hednesford (Pye Green) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	768	..	30.47	176	143
d Lichfield (Hanch Reservoir) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	259	26.9	26.75	173	118
d Alrewas (C.E. School) . . . . .	The Headmaster . . . . .	5	0	4	150	..	27.68	159	114
d Brereton . . . . .	The Headmaster . . . . .	5	1	3	300	..	29.09	189	134
d Rugeley (Slitting Mill) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	299	..	29.67	178	135
d Rugeley (Brindley Bank) . . . . .	F. J. Dixon, Esq., C.E. . . . .	5	1	0	254	26.6	26.51	157	123
d Rugeley (Nethermoor) . . . . .	G. H. Grummitt, Esq. . . . .	5	1	0	300	29.6	27.84	164	128
d Milford Waterworks . . . . .	W. Plant, Esq., C.E. . . . .	5	1	0	246	27.5	28.56	171	126

\* Per Cheshire Rivers Catchment Board.

† Station previously in Shropshire, 4.

## DIVISION VI—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.			
			Height of		Average Rain-fall.	Rain-fall.	Day with ·01 in. or more.	Day with ·04 in. or more.		
			Rim above Ground.	Ground above Sea Level.						
STAFFORDSHIRE—(con.).			in.	ft. in.	ft.	in.	in.			
3.—TRENT—Right Bank Tributaries—(con.).										
d Stafford (Victoria Pleasure Gnd.)	W. Plant, Esq., C.E.	5	1	6	249	27·2	29·93	165	129	
d Eccleshall (Johnson Hall)	Major W. Moat	5	1	2	400	27·5	30·14	168	122	
d Yarlet Hall	K. E. Tarling, Esq.	5	1	0	405	..	28·74	171	127	
d Eccleshall (Sugnal Hall)	C. E. Lowe, Esq.	5	1	0	430	..	32·63	151	127	
d Stone (Meece House)	The Head Gardener	5	1	2	750	28·3	28·66	..	..	
d Standon (Hatton W.W.)	P. Wilkinson, Esq., C.E.	5	1	0	355	29·0	32·15	159	132	
d Whitmore Pumping Station	L.M. & S. Rly.	5	1	0	325	..	27·96	..	117	
4.—TRENT—Left Bank Tributaries. 193 sq. mi.										
d Burton Reservoir	F. J. Dixon, Esq., C.E.	5	1	0	309	25·1	24·32	152	108	
d Burton (Shobnall)	Messrs. Bass & Co., Ltd.	5	1	0	157	24·6	24·59	172	117	
d Burton-on-Trent (Outwoods)	F. J. Dixon, Esq., C.E.	5	1	0	310	..	27·10	176	118	
d Burton (Borough Hospital)	Dr. J. M. Cowie	5	1	0	220	..	25·71	163	112	
d Barlaston (Highfields)	His Hon. Judge Burgis	5	1	0	450	..	30·99	164	131	
d Longton (The Meir)	P. Wilkinson, Esq., C.E.	5	1	0	617	31·7	33·17	170	138	
d Hanley Sewage Works	W. H. Makepeace, Esq.	5	1	0	386	..	29·76	167	126	
5.—TRENT—Dove. 250 sq. mi.										
d Rocester (Dove Leys)	Sir Percival Heywood, Bt.	5	1	6	350	33·5	33·16	181	131	
d Oakamoor (Lightoaks)	M. A. Bolton, Esq.	5	1	6	650	34·9	31·98	171	132	
d MAYFIELD	(+A) Graham C. Lawson, Esq.	8	1	0	374	32·3	31·07	170	125	
d Ilam School	The Headmaster	5	0	8	450	..	39·25	179	150	
d Alstonfield (The Manor)	B. R. S. Pemberton, Esq.	5	1	0	925	39·1	38·85	201	161	
d Leek (Wall Grange P. Stn.)	P. Wilkinson, Esq., C.E.	5	1	0	456	34·7	31·79	173	138	
d Leek (Moorhill)†	A. Y. Worthington, Esq.	5	1	0	680	37·2	34·07	184	143	
m Leek (Withens, Upper Hulme)	T. A. Gilchrist Esq.	5	1	1	1084	..	32·59	..	..	
WORCESTERSHIRE. (Area, 732 sq. mi.).										
1.—SEVERN—Right Bank Tributaries. 222 sq. mi.										
d Upton-on-Severn (The Eades)	Roger D. Tennant, Esq.	5	0	9	100	26·9	29·26	199	130	
d Upton-on-Severn (Berryfield Ho.)	Miss R. V. Naish	5	1	0	50	..	28·31	..	124	
d Malvern (British Camp Res.)	W. Osborne Thorp, Esq., C.E.	5	1	0	677	28·5	29·32	155	123	
d Malvern (Barnard's Green)	W. Osborne Thorp, Esq., C.E.	5	1	0	130	..	29·38	171	119	
d MALVERN (Free Library)	W. Osborne Thorp, Esq., C.E.	5	1	0	380	27·6	29·95	159	123	
d Malvern (Alexandra Rd.)	C. Harington Cotton, Esq.	8	1	2	360	..	29·14	167	146	
d Malvern (St. James' Road)	Rev. F. H. Fowler	5	1	6	300	..	29·11	165	126	
d West Malvern	W. Osborne Thorp, Esq., C.E.	5	1	0	832	28·9	27·84	151	124	
d Malvern (Worcester Road)	Rev. Canon J. L. Bryans	5	0	8	280	..	29·79	164	133	
d Knightwick Sanatorium	Dr. H. Gordon Smith	5	1	0	300	25·9	27·65	170	126	
d Worcester (Diglis Lock)	J. E. Bradley, Esq.	5	1	0	49	24·7	25·62	157	123	
d Martley Rectory	Rev. J. F. Hastings	5	1	0	220	26·7	26·75	166	126	
d Shelsley Beauchamp	W. Lionel Moore, Esq.	5	0	10	132	..	26·49	..	116	
d Ombersley (Holt Lock)	J. E. Bradley, Esq.	5	1	1	55	25·3	26·72	162	123	
d Stanford Rectory	Rev. J. B. Hewitt	5	1	1	360	28·4	27·89	155	117	
d Stockton-on-Teme (Eardiston)	Miss M. Wallace	5	1	0	200	26·7	29·29	179	128	
d Stourport (Astley Town)	Mrs. A. M. Batley	5	0	11	175	25·5	27·37	188	128	
d Stourport (Dunley Hall)	Sir Sidney Lea, Bt.	5	1	0	240	..	26·33	166	122	
d Bewdley (Winterdyne)	Miss K. M. Sturt	5	1	0	175	25·9	26·41	189	121	
2.—SEVERN—Left Bank Tributaries. 200 sq. mi.										
d Earl's Croome (Levant Lodge)	F. W. Burnett, Esq.	5	2	0	110	26·3	28·29	176	129	
d Earl's Croome Court	The Lady Barbara Smith	5	1	6	110	..	26·91	161	119	
d Kempsey (Napleton Ho.)	Major H. Berkeley Hill	5	1	3	100	26·9	25·92	..	119	
d Kempsey Vicarage	Rev. E. B. R. de Jersey	5	0	9	50	..	27·39	160	128	
d Worcester (Waterworks)	W. Ransom, Esq., C.E.	5	1	0	52	23·2	25·95	163	119	
d WORCESTER (PERDISWELL)	The Agricultural Organiser	5	1	0	94	..	26·02	159	114	
d Worcester (Bevere Lock)	J. E. Bradley, Esq.	5	1	1	52	24·5	24·64	167	119	

† Station formerly called Leek (Hillesdon).



## DIVISION VI—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Day with	Days with
			Rim	Ground	Rain-fall.		·01 in. or more.	·04 in. or more.
			above Ground.	above Sea Level.				
WORCESTERSHIRE—(con.).								
		in.	ft.	in.	ft.	in.		
2.—SEVERN—Left Bank Tributaries—(con.).								
D Droitwich (Sewage Works).....	Borough Engineer & Surveyor.	5	1	0	106	25·4	24·67	159
D Bromsgrove (Tardebigge Res.).....	A. J. Cullis, Esq., C.E.....	5	1	0	455	27·5	29·23	185
D Bromsgrove (Burcot P.S.).....	F. H. Bullock, Esq.....	5	1	0	432	..	28·42	172
D Barnt Green (Upwood).....	Miss M. Gibbins.....	5	1	0	650	..	31·54	211
D Stourport (Lincombe Lock).....	J. E. Bradley, Esq.....	5	1	0	62	25·6	25·34	..
D Bromsgrove (Washing Stocks P.S.).....	F. H. Bullock, Esq.....	5	1	0	366	..	26·07	162
D Bewdley (C.E. School).....	J. Bates, Esq.....	8	1	0	70	26·4	25·03	176
D Kidderminster (Park Hall).....	K. H. Wilson, Esq.....	5	1	0	200	25·7	26·98	186
D Bewdley (Elan Aqueduct).....	J. W. Wilkinson, Esq., C.E.....	5	1	0	91	26·7	28·14	172
D Clent Hall.....	Miss H. M. Wilson.....	5	1	0	600	..	27·82	175
D Wolverley (Hill Ho.).....	J. Christopher Wilson, Esq.....	5	0	9	250	..	26·64	154
D Halesowen (Romsley).....	F. J. Dixon, Esq., C.E.....	5	1	0	614	30·6	31·22	167
D West Hagley (Glenthorne).....	W. Nock, Esq.....	5	1	0	400	28·1	29·86	180
D Pedinore (The Dene).....	T. Grazebrook, Esq.....	5	0	9	340	26·5	28·20	184
D Stourbridge (Pumping Station).....	G. P. Deeley, Esq.....	8	1	0	212	27·1	32·38	174
D Netherton (Lodge Farm Res.).....	Birmingham Canal Navgtn.....	5	1	0	445	..	28·49	177
D Dudley (Priory Hall).....	F. H. Gibbons, Esq., C.E.....	8	1	0	584	..	27·36	176
D Dudley (Trindle House).....	S. Staffs. Mines Drain. Comrs.....	5	1	0	575	..	28·14	..
3.—SEVERN—Upper Avon. 251 sq. mi.								
D Bredon (Bredon House)†.....	Col. M. F. Grant.....	5	1	1	120	24·5	30·44	179
D Broadway (Farncombe).....	Capt. F. Burges, O.B.E.....	5	0	5	850	..	33·85	163
D Eckington (The Orchard).....	Rev. C. Price.....	5	1	0	120	..	27·51	156
D Defford (The Vicarage).....	Rev. N. C. R. Campbell.....	5	1	0	110	..	29·05	(170)
D Evesham (Bengeworth).....	Messrs. Ross Bros., Ltd.....	5	1	0	128	22·9	26·45	165
D Evesham (Sewage Works).....	J. Abbott, Esq., C.E.....	5	1	9	85	22·6	26·22	156
D Evesham (High Street).....	N. A. Field, Esq.....	5	1	1	100	..	27·15	165
D Pershore (Three Springs).....	C. A. Mumford, Esq.....	5	3	0	72	..	27·64	163
D Evesham (Sheriff's Lench).....	Dr. G. E. Harthan.....	5	1	0	350	..	27·93	187
D Alcester (Cookhill).....	T. Barber, Esq.....	5	1	0	400	24·5	27·87	171
D Redditch (Hewell Gardens).....	Mr. F. Molyneux.....	5	1	0	469	27·7	30·50	177
D Alvechurch (Fairfield).....	D. McMichael, Esq., J.P.....	5	1	0	400	29·4	29·22	..
D Bromsgrove (Lr. Bittall Res.).....	A. J. Cullis, Esq., C.E.....	5	1	0	457	..	29·33	188
4.—THAMES—Windrush & c. 3 sq. mi.								
5.—TRENT—Right Bank Tributaries. 56 sq. mi.								
D Halesowen (Frankley).....	J. W. Wilkinson, Esq., C.E.....	5	0	10	571	30·7	31·47	204
D Northfield (Frankley Lodge Rd.).....	A. A. Barnes, Esq., C.E.....	5	1	0	548	..	31·46	195
D Oldbury (Barnford Hill Pk.).....	W. Greenwood, Esq., C.E.....	5	0	9	607	..	28·92	175
D Dudley (Shavers End) No. 1.....	F. J. Dixon, Esq., C.E.....	5	1	0	745	..	28·40	173
WARWICKSHIRE. (Area, 944 sq. mi.).								
1.—SEVERN—Upper Avon. 640 sq. mi.								
D Long Compton (Weston Park).....	Mrs. H. A. Warriner.....	8	1	0	510	26·5	29·42	..
D Tredington.....	N. H. Walton, Esq.....	5	1	0	200	..	28·28	172
D Stratford-on-Avon (Crimsote).....	Mrs. E. Canning.....	5	1	3	230	..	27·44	..
D Kineton (Kineton House).....	J. Fielden, Esq., J.P.....	5	1	6	280	..	27·67	178
D Stratford-on-Avon (Milcote).....	F. W. Jones, Esq., C.E.....	5	1	6	122	23·6	27·84	..
D Stratford-on-Avon (Thurlaston).....	Miss M. A. Everard.....	5	1	0	134	24·2	27·17	171
D Bidford (Moor Hall).....	(+A) E. H. Cubberley, Esq.....	5	1	0	125	24·0	28·38	171
D Temple Grafton Court.....	L. Lonsdale, Esq.....	8	1	3	270	24·8	26·71	..
D Alcester (Ragley Hall).....	Mr. C. Harding.....	5	1	0	270	25·8	29·32	..
D STRATFORD-ON-AVON (Clopton Ho.).....	A. W. Beecham, Esq.....	5	1	0	210	..	25·85	187
D Ashorne (Victoria Cottage).....	G. T. Osborn, Esq.....	5	1	0	160	24·7	27·05	..

† Station formerly called Bredon (The Croft). Gauge moved 250 yds. W., 1.8.38.

## DIVISION VI—WEST MIDLAND COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
WARWICKSHIRE—(con.).		in.	ft.	in.	ft.	in.	in.	
1.—SEVERN—Upper Avon—(con.).								
D Stratford-on-Avon (Snitterfield)	F. W. Jones, Esq., C.E.	5	1	6	274	25·2	28·74	170 128
D Southam (Stockton House)	G. B. Blyth, Esq.	5	1	0	394	23·1	25·94	173 119
D Studley College	The Headmistress	5	0	9	256	27·0	26·52	165 122
D Warwick Castle Gardens	Mr. H. F. Smale	5	1	0	197	25·3	27·85	179 124
D Warwick (St. Nicholas Pk.)	R. Wormell, Esq., C.E.	5	1	0	155	..	25·89	171 113
D LEAMINGTON SPA (Pump Rm. Gdns.)	Medical Officer of Health	8	1	0	163	24·0	28·25	156 120
D Leamington Spa (Campion Ter. P.S.)	The Borough Engineer	5	1	0	215	..	28·51	155 123
D Leamington Spa (Woodland Grange)	H. M. Blenkinsop, Esq.	8	1	0	200	..	29·04	191 125
D Leek Wootton (The Lodge)	W. F. Mitchell, Esq.	5	1	0	249	..	29·48	182 125
D Rugby (Frankton Manor)	Col. W. H. Biddulph, J.P.	5	1	0	350	..	27·41	151 117
D Dunchurch Hall	C. H. Cooke, Esq.	5	1	1	400	..	27·70	163 127
D Dunchurch Lodge Gardens	Major H. S. Cayzer	5	1	0	380	24·4	28·18	157 130
D Stretton-on-Dunsmore (Manor Ho.)	Mrs. Lister-Kaye	5	1	0	280	..	28·93	162 124
D Rugby (Bilton Grange)	Mr. L. W. Bass	5	1	0	400	..	28·53	162 129
D RUGBY (Caldecott)	Headmaster, Rugby School	5	1	0	390	25·6	27·24	172 128
D Rugby (Avon W.W.)	W. H. Spicer, Esq., C.E.	5	1	0	282	..	28·19	168 127
D Ryton-on-Dunsmore (Ryton Ho.)	Charles Browett, Esq.	5	1	2	260	26·0	30·63	.. 121
D Coventry (Whitley P.S.)	City Engineer, Coventry	8	1	0	238	..	27·97	171 129
D Coventry (Stoke)	(+A) W. R. Griffiths, Esq.	5	1	0	267	..	27·15	158 128
D COVENTRY (City Hospital)	Medical Officer of Health	8	1	0	241	26·0	27·87	171 128
D Coventry (Rosehill)	Miss H. Rotherham	5	0	10	330	..	27·62	169 134
D Nuneaton (Bedworth Waterworks)†	Waterworks Manager	5	1	1	337	..	28·79	156 120
D Astley Vicarage	Rev. I. F. H. Carr-Gregg	5	1	0	440	..	28·67	150 128
2.—THAMES—Windrush & c. 2 sq. mi.								
3.—THAMES—Cherwell. 15 sq. mi.								
4.—TRENT—Right Bank Tributaries. 287 sq. mi.								
D Coventry (Balsall St. C. Sch.)	The Headmaster	5	1	3	400	..	29·00	174 137
D Northfield (Wych Elm)	J. B. Shewell, Esq.	5	1	4	540	29·3	29·25	183 127
D Highters Heath Res.	J. W. Wilkinson, Esq., C.E.	5	1	0	517	..	28·30	183 123
D Northfield (Bartley Res. No. 1)	A. A. Barnes, Esq., C.E.	5	1	0	600	..	30·53	190 132
D Moseley (Cotton Lane)	U. A. Baker, Esq.	5	1	0	500	..	30·95	185 132
D Bartley (Bromwich Wood)	J. W. Wilkinson, Esq., C.E.	5	1	0	611	..	30·32	189 133
D Selly Oak (Bournville)	Messrs. Cadbury Bros., Ltd.	8	1	0	463	29·1	31·09	190 138
D Selly Oak (Shenley Fields Rd.)	Mrs. Neave	8	1	0	550	..	29·35	(186) (136)
D Selly Oak (Frederick Rd.)	W. Garden, Esq.	5	1	0	540	29·2	31·59	184 140
D BIRMINGHAM (SPARKHILL)	D. H. Owen, Esq.	5	1	0	425	28·1	29·46	171 125
D BIRMINGHAM (EDGBASTON)	Midland Inst. (A. J. Kelley)	8	1	0	535	26·5	28·88	174 127
D Birmingham (Carpenter Road)	L. Ashby Bolton, Esq.	5	1	1	480	28·1	28·88	192 133
D Birmingham (Icknield Port)	Birmingham Canal Navgtn.	5	1	0	490	..	29·04	182 122
D Birmingham (Stechford)	Birmingham Drainage Bd.	5	1	6	303	..	27·33	177 126
D Birmingham (Saltley S.W.)	Birmingham Drainage Bd.	5	1	0	292	..	27·89	158 125
D Nuneaton (The Quarry)	Miss K. E. Smith	5	1	0	321	..	26·76	179 120
D Ullesthorpe (High Cross)	J. Parker Toone, Esq.	5	1	0	..	..	28·18	165 128
D Birmingham (Handsworth Pk.) (+A)	The City Engineer	8	1	4	424	..	27·92	155 124
D Whitacre (Birmingham W.W.)	J. W. Wilkinson, Esq., C.E.	5	1	0	269	26·0	27·49	172 118
D Birmingham (Erdington)	J. W. Wilkinson, Esq., C.E.	5	1	0	442	..	27·42	159 125
D Birmingham (Erdington, Spring Ln.) (+A)	The City Engineer	8	1	0	386	..	27·38	151 123
D Minworth Greaves	Birmingham Drainage Bd.	5	1	6	276	24·3	26·67	164 126
D Nuneaton P.S.	R. C. Moon, Esq., C.E.	5	1	3	269	..	24·45	150 117
D Nuneaton (Hartshill Sewage Wks.)	R. C. Moon, Esq., C.E.	5	1	2	288	..	26·29	146 116
D Sutton Coldfield (The Park)	Borough Surveyor	5	1	0	370	26·4	29·22	154 129

## DIVISION VII—NORTH MIDLAND COUNTIES.

LEICESTERSHIRE. (Area, 824 sq. mi.).

<b>1.—SEVERN—Upper Avon. 41 sq. mi</b>									
D Welford (The Reservoir) . . . . .	Grand Union Canal Co. . . . .	5	2	0	430	25·1	30·00	192	128
D North Kilworth W.W. . . . .	Market Harborough U.D.C. . . . .	5	1	0	490	..	31·16	166	133
D Lutterworth (Waterworks) . . . . .	The Surveyor . . . . .	8	1	9	414	24·8	27·49	..	120

† Station formerly called Bedworth Waterworks.

## DIVISION VII—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
LEICESTERSHIRE—(con.).			in.	ft.	in.	in.		
<b>2.—WELLAND. 96 sq. mi.</b>								
d Market Harborough (Nithsdale Av.)	G. C. Wooldridge, Esq.	5	1	0	260	..	26·42	178 124
d Market Harboro' (Shrewsbury Ave.)	P. J. Harris, Esq., B.Sc.	5	1	0	356	..	27·14	177 124
d Market Harboro' (Grammar Sch.)	P. J. Harris, Esq., B.Sc.	5	1	0	350	..	24·74	.. ..
d Kibworth Beauchamp	Dr. E. V. Phillips	5	1	0	390	25·7	28·84	161 140
d Horninghold Hall	W. R. Crabtree, Esq.	5	1	6	328	..	30·42	.. ..
d East Norton	Mrs. F. A. Wortley	5	1	0	460	..	28·20	158 127
<b>3.—WITHAM. 7 sq. mi.</b>								
<b>4.—TRENT—Right Bank Tributaries. 680 sq. mi.</b>								
d Frolesworth	W. P. Widdowson, Esq.	5	1	0	370	..	25·80	166 117
d Hinckley (Bowling Green Rd.)	S. Webster, Esq.	5	1	0	300	..	27·39	170 123
d Wistow Hall Gardens	The Lord Cottesloe, C.B.	5	1	0	309	23·6	25·92	163 124
d Countesthorpe (Wigston Sew. Fm.)	The Surveyor	8	0	9	257	22·8	26·15	203 114
d Kirkby Mallory	The Hon. Maud Russell	5	1	0	386	..	25·07	167 122
d Leicester (London Rd.)	L. Herbert, Esq.	5	4	0	300	..	29·17	165 115
d Leicester (Stoughton Drive)	Theodore B. Ellis, Esq.	5	1	0	315	..	28·70	193 119
d Leicester (Town Hall Square) (+A)	A. T. Gooseman, Esq., C.E.	5	1	0	212	..	27·16	161 123
d Leicester City Mental Hosp.	The Steward	8	1	0	266	24·2	29·60	169 126
d Leicester (Gillroes Cemetery)	A. T. Gooseman, Esq., C.E.	5	1	0	294	..	28·17	154 122
d Osbaston Hall	Sir Thomas Cope, Bart.	8	1	0	393	25·0	28·29	181 118
d Lowesby Hall Gdns.	A. King, Esq.	5	0	9	517	..	27·32	174 125
d Thornton Reservoir	G. T. Edwards, Esq., C.E.	8	1	2	370	26·2	29·08	146 125
d Baggrave Hall	Mrs. A. E. Burnaby	5	1	6	350	..	27·26	154 109
d Cropston (Bradgate Res.)	G. T. Edwards, Esq., C.E.	8	1	0	245	27·2	31·04	158 127
d Barkby Hall	Victor R. Pochin, Esq.	5	1	0	227	24·5	29·77	162 125
d Ulverscroft (Chitterman Ho.) new g	C. Booth, Esq.	5	0	11	650	..	30·38	169 122
d Netherseal (Chilcote)	F. J. Dixon, Esq., C.E.	5	1	0	240	..	24·18	146 112
d Rothley (West Lawn)	A. A. Ironside, Esq.	5	0	10	240	..	27·35	141 114
d Swithland (The Brand)	G. T. Edwards, Esq., C.E.	8	1	0	171	26·0	29·34	150 123
d Ashby de-la-Zouche	Miss A. I. Bayford	5	0	10	450	..	24·21?	159 113
d Charnwood Forest (Charley Hall)	Mrs. J. B. Martin	5	1	0	500	28·2	30·95	149 117
d Asfordby Hill (Ironworks)	Stanton Ironworks Co., Ltd.	5	1	1	324	23·0	28·79	174 115
d Melton Mowbray (White Lodge)	H. K. Barker, Esq.	8	1	6	237	22·9	27·93	171 116
d Charnwood For. (Blackbrook R.)	W. Granger, Esq., C.E.	5	1	0	379	26·4	26·87	.. 110
d Loughborough (Park Road)	W. Llewellyn Mold, Esq.	5	1	0	190	23·7	26·64	155 106
d Loughborough (Nanpantan Res.) (+A)	W. Granger, Esq., C.E.	5	1	0	269	26·1	28·52	158 111
d Loughborough (Fairmount Drive)	B. N. Wale, Esq., B.Sc.	5	0	6	210	..	27·00	158 109
d Loughborough (The Widenings)	Mrs. A. Butler	5	1	0	197	24·5	26·74	177 115
d Loughborough (Sewage Farm) (+A)	W. Granger, Esq., C.E.	8	1	0	135	23·1	24·97	140 104
d Burton-on-Wolds (Burton Hall)	Earl of Huntingdon	5	1	0	270	24·2	27·71	.. 116
d Prestwold Hall Gardens	Mr. W. I. Coe	8	1	0	209	24·7	26·35	153 109
d Scalford	Melton Mowbray, U.D.C.	8	0	10	343	..	30·97	.. ..
d Waltham-on-the-Wolds	G. Higgins, Esq.	5	1	0	560	..	31·64	140 120
d Grantham (BELVOIR CAS. Gdns.)	The Duke of Rutland, K.G.	8	1	0	259	25·1	28·08	159 114
<b>RUTLAND. (Area, 152 sq. mi.).</b>								
<b>1.—WELLAND. 125 sq. mi.</b>								
d Uppingham (Ridlington)	C. Wortley, Esq.	5	1	0	534	25·3	29·28	164 138
d Ketton	C. F. Burroughes, Esq.	5	1	0	106	..	25·80	167 119
d Hambleton Manor	Major J. Orr-Ewing, M.C.	5	1	0	400	23·9	30·15	161 136
<b>2.—WITHAM. 5 sq. mi.</b>								
<b>3.—TRENT—Right Bank Tributaries. 22 sq. mi.</b>								
<b>LINCOLNSHIRE. (Area, 2,645 sq. mi.).</b>								
<b>1.—NENE. 99 sq. mi.</b>								
d Tydd (North Level Sluice)	Mr. S. Watson	5	1	0	10	23·3	30·11	217 134

|| Record too low, gauge over-sheltered.

## DIVISION VII—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
				Height of	Aver-		Rain-	Days	Days
				Rim	age		fall.	with	with
				above	Rain-			·01 in.	·04 in.
				Ground.	fall.			or	or
				Sea Level.				more.	more.
LINCOLNSHIRE—(con.).			in.	ft. in.	fc.	in.	in.		
<b>2.—WELLAND. 341 sq. mi.</b>									
d Crowland	F. Husband-Clutton, Esq., M.R.C.S.	5	1 0	10	21·9	26·63	..	124	
d Market Deeping (Wilsthorpe)	F. J. Smith, Esq.	8	1 0	51	20·9	25·87	162	125	
d Spalding (Pode Hole)	H. Bain, Esq.	8	1 3	12	23·5	29·86	215	129	
d Spalding (Grammar School)	The Headmaster	5	1 4	14	..	26·35	173	112	
d Spalding (Surveyors Depot)	The Surveyor	5	3 0	14	..	27·58	171	119	
d Bourne (Guthram)	L. I. Clark, Esq., C.E.	8	1 6	19	21·1	27·72	195	122	
d Holbeach (Manor Farm)	F. H. Bowser, Esq.	5	3 3	..	..	28·74	161	121	
d Spalding (Weston St. Mary)	W. J. Atkinson, Esq.*	5	1 0	10	..	30·54	182	139	
d Spalding (Spalding Marsh)	Messrs. Seymour Cobley, Ltd.	5	0 8	0	21·6	28·62	..	..	
d Surfleet (Iceni Nurseries)	Capt. R. G. M. Wilson	5	0 10	12	..	30·06	145	118	
d Holbeach (Bingham Lo.)	F. H. Bowser, Esq.	5	4 2	..	..	32·73	149	114	
<b>3.—WITHAM &amp; C. 1085 sq. mi.</b>									
d Stainby Rectory	Rev. W. L. de B. Thorold	4	0 9	496	24·5	27·07	..	108	
d Denton Manor	The late Sir C. G. E. Welby, Bt., C.B.	5	0 9	310	25·6	29·99	166	126	
d Billingborough	N. Hodgkinson, Esq.	5	0 10	50	..	25·78	..	..	
d Grantham (Saltersford P.S.)	The Manager	5	0 6	188	24·1	27·92	167	120	
d Grantham (Central School)	The Headmaster	5	0 8	191	..	25·84	156	101	
d Newton	Culverthorpe Dairy Farms Ltd.	5	1 0	150	..	24·60	..	..	
d Sleaford (Aisby)	Culverthorpe Dairy Farms Ltd.	5	1 7	260	..	26·42	..	..	
d Wyberton (Tytton Hall)	V. A. C. Durand, Esq.	5	1 0	10	..	33·98	173	116	
d Fishtoft School	W. Rimington, Esq.	5	1 0	0	20·8	29·69	148	108	
d Boston (Black Sluice, Skirbeck)	L. I. Clark, Esq., C.E.	8	1 3	11	22·8	34·92	172	121	
d Boston (Grand Sluice)	F. H. Tomes, Esq., C.E.	8	0 9	17	22·9	31·29	153	116	
d Boston (Bargate End)	A. O. Scrivener, Esq.	8	1 4	9	21·6	29·84	155	111	
d Leasingham Rectory	Rev. A. R. Tucker	5	1 6	100	..	23·85	156	114	
d CRANWELL (Aerodrome)	(+A) Officer-in-Charge	8	1 0	203	23·2	24·42	160	112	
d Wildmore	V. A. C. Durand, Esq.	5	1 0	12	..	27·99	168	117	
d New Leake (Lade Bank Engine)	V. A. C. Durand, Esq.	5	1 0	10	22·6	24·97	..	114	
d Carrington Grange	T. J. Ward, Esq.	5	4 0	13	23·4	31·08	164	125	
d Boston (Eastville)	V. A. C. Durand, Esq.	5	1 0	10	..	24·95	171	117	
d Carlton-le-Moorland	Mrs. J. Brocklebank	5	1 2	50	23·3	24·84	162	119	
d Blankney Hall Gardens	Mr. N. G. Cleaver	5	0 9	57	24·0	26·86	176	128	
d East Kirkby (E. Kirkby Manor)	Capt. R. S. Fieldsend	5	1 0	35	23·8	29·28	185	132	
d Revesby Reservoir	T. H. Tyson, Esq.	5	2 0	124	24·5	28·10	..	115	
d Woodhall Spa (Waterworks)	W. Jeffrey, Esq.	5	1 0	25	..	25·39	..	117	
d Horncastle†	F. J. Harvey, Esq.	5	1 0	170	24·8	28·88	197	128	
d Lincoln (Swallowbeck)	W. R. Pennell, Esq.	8	1 0	34	22·9	24·26	164	108	
d Bardney (Sugar Factory)	British Sugar Corp'n. Ltd.	5	1 0	17	..	25·69	163	118	
d Lincoln (Skellingthorpe Hall)	A. H. Bergne-Coupland, Esq.	5	1 0	40	23·1	25·41	147	127	
d Lincoln (Burton Rd.)	G. W. Valley, Esq.	5	1 3	250	..	24·34	..	..	
d Sudbrooke (The Manor Ho.)	Miss A. M. Scorer	5	1 0	55	..	26·81	176	125	
d Hackthorn Hall	Maj. W. Cracroft-Amcotts, M.C., J.P.	5	4 8	102	23·2	26·25	165	115	
<b>4.—GREAT EAU &amp; C. 443 sq. mi.</b>									
d Little Steeping	V. A. C. Durand, Esq.	5	1 0	10	..	27·10	148	121	
d Firsby	V. A. C. Durand, Esq.	5	1 0	26	..	28·25	187	127	
d SKEGNESS (Marine Gardens)	The Surveyor	8	1 0	15	23·3	26·69	161	117	
d East Keal Rectory	Rev. R. H. Simpson	5	1 0	180	25·2	26·76	184	128	
d Spilsby	G. F. Taylor, Esq.	5	1 4	124	26·3	28·79	150	114	
d Spilsby (Raithby Hall Gdns.)	Mr. E. Burgess	5	1 1	200	..	27·13	184	138	
d Hagworthingham (Manor House)	W. W. Clark, Esq.	5	1 0	200	27·2	27·12	153	126	
d Mablethorpe (Trusthorpe Hall)	I. N. Woodiwiss, Esq.	8	1 3	10	25·2	26·98	189	122	
d MABLETHORPE	The Engineer & Surveyor	5	1 0	7	..	26·35	163	127	
d Louth (Westgate)	J. W. Fenwick, Esq.	5	0 9	120	28·0	27·46	210	123	
d Wold Newton Manor	W. Maurice Wright, Esq.	5	1 6	230	27·2	30·06	212	155	
d Grainsby Hall	Mr. J. Butters	5	1 0	75	27·2	30·66	208	141	

\* Per R. Nene Catchment Board.

† Gauge moved  $\frac{1}{2}$  mile E., 29.4.37.

## DIVISION VII—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Aver- age Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	Rain- fall.	Days with ·01 in. or more.
			Rim above Ground.	Ground above Sea Level.					
LINCOLNSHIRE—(con.).			in.	ft. in.	ft. in.	in.			
<b>5.—HUMBER—Right Bank Tributaries. 428 sq. mi.</b>									
d North Willingham House	Mrs. Charles Wright	5	3	0	125	28·6	32·37	231	161
d Glentham (Bishop Bridge)	A. R. Haynes, Esq.	5	1	1	20	..	29·31	177	125
d Kirkby-cum-Osgodby (Cl. Sch.)	The Headmaster	5	1	0	50	..	26·69	..	..
d Brigg (Sugar Factory)	British Sugar Corp'n. Ltd.	5	1	0	8	..	26·81	164	120
d Brigg (Thornholme)	E. I. Brown, Esq.	5	1	5	22	..	28·40	178	122
d Brigg (Wrawby Road)	A. R. Haynes, Esq.	5	1	1	22	25·0	28·32	171	124
d CLEETHORPES (Kings Parade)	The Engineer & Surveyor	5	1	0	23	24·0	28·09	185	125
d Grimsby (Little Coates, P.S.)	The Engineer & Manager	5	1	0	14	..	28·62	204	137
d Grimsby (Portland Place)	W. J. Wood, Esq., C.E.	5	1	8	13	24·7	31·75	208	159
d Grimsby (Westlands)	Major G. L. Bennett	5	1	0	23	23·7	27·41	189	132
d Grimsby Park	Mr. J. Johnson	5	1	6	105	27·0	27·56	166	116
d Immingham (Compressor Stn.)	Grimsby R.D.C.	5	1	1	13	..	27·75	205	129
d Ulceby (Wootton Lodge)	H. M. Webb, Esq.	5	1	0	100	27·1	30·94	163	127
d Normanby	J. C. Atkinson-Clark, Esq.	5	1	0	185	..	28·65	177	122
d Ferriby Sluice	F. Straw, Esq.	5	1	0	18	24·5	28·83	194	121
<b>6.—TRENT—Right Bank Tributaries. 172 sq. mi.</b>									
d Woolsthorpe	L. & N.E. Rly. Co.	5	1	3	182	23·4	27·33	..	110
d Torksey	Miss M. Burt	5	3	0	18	23·2	25·44	178	117
d Gate Burton Hall	The Hon. Mrs. Sandars	5	4	0	97	23·1	26·03	..	108
d Scunthorpe (Brumby Senior Sch.)	The Headmaster	5	1	6	100	..	31·08	154	121
d Scunthorpe (Henderson Av. Sch.)	W. E. Ramsden, Esq.	5	3	6	140	..	29·06	162	123
<b>7.—TRENT—Left Bank Tributaries. 77 sq. mi.</b>									
d Wroot (S. Level Pump Station)	G. H. Simmons, Esq., C.E.	10	1	6	8	21·7	31·45	144	110
d West Butterwick (Croft House)	West Butterwick Drainage Bd.	..	..	..	20	..	29·15	193	126
d Crowle (N. Level Pump Station)	G. H. Simmons, Esq., C.E.	5	2	0	10	22·0	29·11	..	..
d Crowle (Snowdrop Villa)	Crowle Drainage Board	5	1	0	17	..	26·91	169	120
NOTTINGHAMSHIRE. (Area, 843 sq. mi.).									
<b>1.—WITHAM. 10 sq. mi.</b>									
<b>2.—TRENT—Right Bank Tributaries. 218 sq. mi.</b>									
d SUTTON BONINGTON (Agric. Coll.) (+A)	The Principal	5	1	0	157	21·7	26·19	141	104
d Ruddington (Westlands)	J. D. Walker, Esq.	5	1	0	100	24·3	24·59	155	107
d Nottingham (Wilford Hill Res.)	F. W. Davies, Esq., C.E.	8	1	0	295	23·1	25·00	..	..
d East Bridgford	Mrs. Beaumont	5	1	0	150	..	23·16	146	99
d Newark	J. H. Clarke, Esq., C.E.	5	0	9	43	23·4	22·22	159	103
d Newark (Sewage Works)	J. H. Clarke, Esq., C.E.	5	1	0	33	..	21·37	144	92
d Kelham (Sugar Factory)	British Sugar Corp'n. Ltd.	5	1	0	33	..	23·85	151	100
d North Collingham	Miss M. Bergne-Coupland	5	2	6	40	..	24·26	..	..
<b>3.—TRENT—Derwent. 2 sq. mi.</b>									
<b>4.—TRENT—Erewash. 42 sq. mi.</b>									
d Nottingham (STRELLEY Hall)	Miss Edge	5	1	0	378	..	27·52	145	112
d Bulwell (Watnall Reservoir)	F. W. Davies, Esq., C.E.	8	1	0	468	29·0	28·15	155	118
d Eastwood Waterworks	F. W. Davies, Esq., C.E.	8	1	3	243	25·9	27·28	171	114
d Eastwood Hall	Messrs. Barber, Walker & Co., Ltd.	5	1	0	218	..	26·62	(151)	(112)
d Eastwood (Moorgreen Res.)	L. & N.E. Rly. Co.	5	2	0	301	27·4	27·79	161	117
<b>5.—TRENT—Left Bank Tributaries. 569 sq. mi.</b>									
d ATTENBOROUGH	Messrs. R. J. T. & B. P. Granger	8	1	0	89	..	26·12	162	105
d Beeston (Council Depot)	G. C. Hardy, Esq.	5	1	0	121	24·5	26·10	151	103
d Bramcote Reservoir	F. W. Davies, Esq., C.E.	8	1	0	327	..	26·35	161	113
d Nottingham (Sneinton P.S.) ‡	R. M. Finch, Esq., C.E.	8	1	0	83	22·5	25·49	160	109
d NOTTINGHAM (The Castle)	R. M. Finch, Esq., C.E.	8	1	0	192	23·6	24·30	155	106

‡ Moved from Trent Lane, 1,300 ft. N.E., 22.3.37.

|| Exposure unorthodox in certain directions.

## DIVISION VII—NORTH MIDLAND COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Sea Level.	Rain-fall.			
NOTTINGHAMSHIRE—(con.).		in.	ft. in.	ft.	in.	in.		
5.—TRENT—Left Bank Tributaries—(con.).								
d Nottingham (Colwick Sugar Fact.)	British Sugar Corpn., Ltd.	5	0 9	70	..	23·39	..	..
d Nottingham (Colwick Hill Res.)	F. W. Davies, Esq., C.E.	8	1 0	314	..	24·41	..	..
d Nottingham (Stoke Bardolph)	R. M. Finch, Esq., C.E.	8	1 0	66	22·6	26·24	..	..
d Nottingham (Mapperley Hill)	The Medical Superintendent	8	1 0	400	24·9	25·15	163	110
d Bagthorpe (Isolation Hospital)	Dr. Cyril Banks	8	2 0	190	25·3	26·23	174	112
d Nottingham (Basford W.W.)	F. W. Davies, Esq., C.E.	8	1 0	168	24·3	24·83	154	106
d Burton Joyce Waterworks	F. W. Davies, Esq., C.E.	8	1 0	65	25·2	30·20	157	118
d Nottingham (Woodthorpe)	A. B. Tinn, Esq., F.R.Met.S.	5	1 0	225	..	26·50	171	117
d Bulcote (Corporation Farm)	R. M. Finch, Esq., C.E.	8	1 3	65	23·6	25·41	..	..
d Lowdham (Chilwell Nurseries)	A. J. Pearson, Esq.	5	1 0	90	21·4	23·29	..	..
d Bulwell (Bestwood W.W.)	F. W. Davies, Esq., C.E.	8	1 0	312	25·7	25·11	164	112
d Daybrook (Red Hill Reservoir)	F. W. Davies, Esq., C.E.	8	1 0	404	26·8	26·97	190	118
d Daybrook (Ramsale Hill Res.)	F. W. Davies, Esq., C.E.	8	1 0	504	28·1	27·35	193	120
d Bulwell Hall Park	R. M. Finch, Esq., C.E.	8	1 0	252	27·3	27·43	165	120
d Papplewick (Waterworks)	F. W. Davies, Esq., C.E.	8	1 0	317	27·0	28·00	162	118
d Southwell (The Residence)	Ven. Archd. W. J. Conybeare	5	1 0	100	24·7	25·06	137	101
d Southwell (The Nurseries)	H. Merryweather, Esq.	5	1 0	125	..	26·01	150	108
d Sutton-in-Ashfield (Rushley P.S.)	Messrs. G. & F. W. Hodson	5	1 0	462	27·1	30·94	..	..
d Sutton-in-Ashfield (Sewage Wks.)	F. J. Grierson, Esq.	5	1 0	453	28·9	30·74	166	120
d Mansfield (Rainworth W.W.)	J. Gibson, Esq., C.E.	5	1 0	360	27·5	27·27	..	110
d MANSFIELD (Carr Bank)	Borough Surveyor	8	0 10	357	27·9	28·73	146	122
d Mansfield (Crow Hill)	W. Pickard, Esq.	8	1 0	405	27·6	30·72	166	123
d Clipstone Waterworks	J. Gibson, Esq., C.E.	5	1 0	225	25·9	27·16	151	104
d Warsop	The Surveyor	8	1 0	192	..	27·89	174	109
d Ollerton (Boughton W.W.)	F. W. Davies, Esq., C.E.	8	1 0	141	24·6	28·30	161	108
d Ollerton (Thoresby Gardens)	Mr. A. J. Simmons	5	1 0	125	26·6	29·20	..	..
d Welbeck Abbey	Mr. Chas. Harris	8	0 10	196	..	28·97	185	117
d Clumber Gardens	The Agent	5	1 6	164	..	30·88	167	127
d Elkesley Pumping Station	Lincoln W.W.	5	1 0	120	24·0	28·90	..	104
d Worksop (Bracebridge S.W.)	The Boro' Engineer	8	1 0	97	..	29·33	152	112
d Worksop (Osberton Gardens)	Head Gardener	5	1 0	70	23·8	25·75	166	107
d Retford (Morton Hall)	W. H. Mason, Esq.	9	1 0	140	23·7	29·89	..	106
d Retford (Sewage Disposal Wks.)	R. E. Wilson, Esq.	5	1 0	74	..	29·76	150	124
d Retford (Babworth Hall)	Lt.-Col. J. A. C. Whitaker	5	1 0	98	22·9	27·90	155	109
d Worksop (Wigthorpe Hill)	R. C. P. Ramsden, Esq.	5	1 0	100	23·7	29·09	155	101
d WORKSOP (Hodsock)	(+A) E. Dixon, Esq.	8	1 0	56	23·6	27·64	162	..
d Harworth Colliery	Messrs. Barber, Walker & Co.	5	1 0	120	..	29·47	151	106
d Scrooby	J. Mallender, Esq., F.R.H.S.	5	1 0	44	23·1	27·65	172	107
d Bawtry Hall (The Gardens)	Mr. F. E. Hogbin	5	1 0	31	23·1	30·06	160	119
d Bawtry Council Sch.	J. Rushworth, Esq.	5	1 0	37	..	29·87	160	117
6.—OUSE—Don. 2 sq. mi.								
DERBYSHIRE. (Area, 1,017 sq. mi.).								
1.—MERSEY, UPPER. 93 sq. mi.								
Buxton (Goyts Moss Farm)	Stockport Corporation W.W.	5	1 0	1410	..	46·40	..	..
d Buxton (Goytsbridge Farm)	Stockport Corporation W.W.	5	1 0	910	..	43·18	189	151
d Fernilee (Brownhill Farm)	Stockport Corporation W.W.	5	1 0	1040	..	40·87	..	..
d Fernilee (Wythen)	Stockport Corporation W.W.	5	1 0	1100	..	43·06	187	157
d Fernilee (Upr. Hall Farm)	Stockport Corporation W.W.	5	1 0	960	..	42·37	190	156
d Whaley Bridge (Taxal Lo.)††	Mrs. Ramsden-Jodrell, C.B.E.	5	1 0	700	..	32·83	172	136
d Sett (Dimpus)	Stockport Corporation W.W.	5	1 0	1250	..	46·79	..	..
d Upper Sett	Stockport Corporation W.W.	5	1 0	1420	..	54·58	..	..
d Sett (Tunstead Clough)	Stockport Corporation W.W.	5	1 0	1125	..	43·70	..	..
d Hayfield (Cluthar Rock) new site.	Stockport Corporation W.W.	5	1 0	1700	..	55·19	..	..
d Kinder (Red Brook)	Stockport Corporation W.W.	5	1 0	1950	..	54·08	..	..
d Kinder (Source)	Stockport Corporation W.W.	5	1 0	2050	..	51·90	..	..
d Hayfield (Kinder Filters)	Stockport Corporation W.W.	5	1 6	800	..	42·22	198	1 4

†† Station previously in Cheshire, 1.

§ Turf wall round gauge.

## DIVISION VII—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Aver-	Rain-	Rain-	Days	Days
			Rim	Ground	age	fall.	fall.	with	with
			above	above	Rain-			·01 in.	·04 in.
			Ground.	Sea Level.	fall.			or	or
								more.	more.
DERBYSHIRE—(con.).			in.	ft.	in.	ft.	in.		
<b>1.—MERSEY, UPPER—(con.).</b>									
§ Kinder (Upper Moor) .....	Stockport Corporation W.W.	5	1	0	1280	..	45·93	..	..
§ Kinder (Hollin Head) .....	Stockport Corporation W.W.	5	1	0	950	..	46·44	199	161
§ Park Hall (Middle Moor) .....	Stockport Corporation W.W.	5	1	0	1170	..	43·63	..	..
§ Ashop Clough (Sandy Heys) .....	Stockport Corporation W.W.	5	1	0	2040	..	54·44	..	..
§ Hayfield (Leygateh'd Moor) <i>new site</i>	Stockport Corporation W.W.	5	1	0	1530	..	41·76	..	..
§ Upper Holingworth Clough .....	Stockport Corporation W.W.	5	1	0	1625	..	42·53	..	..
§ Glossop W.W. (Swineshaw) .....	Geo. Faulds, Esq., C.E.	12	1	0	733	43·2	34·61	183	147
§ Bleaklow Hill (Downstone Rocks) ..	Manchester Corp'n. W.W.	5	1	0	1718	..	48·82	..	..
§ Bleaklow Hill (Far Black Clough) ..	Manchester Corp'n. W.W.	5	1	0	1683	..	48·75	..	..
<b>2.—MERSEY—Weaver. 2 sq. mi.</b>									
<b>3.—TRENT—Right Bank Tributaries. 68 sq. mi.</b>									
d Stanton-by-Bridge W.W. ....	H. Raven, Esq., C.E.	8	1	2	144	24·2	28·49	177	117
<b>4.—TRENT—Dove. 156 sq. mi.</b>									
d Rodsley Pumping Station .....	The Engineer .....	5	1	0	415	..	28·72	(175)	(124)
d Ashbourne (Windmill Lane) .....	Rev. E. R. Redfern .....	5	1	4	535	..	30·94	..	127
d Hognaston Vicarage .....	Rev. C. L. O'Ferrall .....	5	1	4	650	..	32·32	169	120
<b>5.—TRENT—Left Bank Tributaries. 84 sq. mi.</b>									
d Egginton .....	W. Bromley, Esq. ....	5	1	0	153	..	26·15	..	..
d Etwall (Blakeley Lodge) .....	C. H. Hawley, Esq. ....	5	1	0	189	24·1	23·93	138	118
d Etwall (Sewage Farm) .....	Borough Engineer & Surveyor	5	1	8	201	25·2	24·70	149	115
d Etwall Hall .....	Col. M. Dawson .....	5	1	3	235	..	26·59	164	119
d Shardlow .....	M. R. Evans, Esq. ....	5	1	0	111	..	25·45	..	..
d Mickleover (C. Mental Hospital) ..	Medical Superintendent ..	5	0	9	320	24·4	24·31	142	108
d Littleover (Hilltop) .....	E. McInnes, Esq. ....	5	1	0	346	25·8	25·28	163	111
<b>6.—TRENT—Derwent. 426 sq. mi.</b>									
d Spondon (Derby Sewage Wks.) .....	E. H. Bennett, Esq., C.E. ...	5	1	3	135	25·5	23·27	133	99
d Derby (Park Grove) .....	Messrs. J. Davis & Son, Ltd.	5	1	0	198	..	26·42	152	112
d Derby (L.M. & S. Railway) .....	F. J. Dutton, Esq. ....	5	1	0	156	25·1	24·34	..	..
d Derby (Royal Infirmary) .....	A. Taylor, Esq. ....	5	1	0	211	26·3	27·41	147	125
d Derby (The Arboretum) .....	(+A) E. H. Bennett, Esq., C.E. ...	6	1	6	196	26·2	24·22	158	104
d Derby (Markeaton Park) .....	(R) E. H. Bennett, Esq., C.E. ...	5	1	6	190	..	27·30	170	113
d Breadsall Priory .....	E. S. Haslam, Esq. ....	5	1	6	370	..	27·91	138	119
d Duffield (The Kirkstyles) .....	Messrs. J. Davis & Son, Ltd.	5	1	0	235	28·3	31·37	166	126
d Heanor (Denby) .....	J. R. Groom, Esq. ....	5	1	0	440	..	29·47	..	108
d BELPER (Herbert Strutt School) ..	The Principal .....	5	1	0	222	29·9	27·70	157	115
d Ambergate Reservoir, No. 61 .....	Derwent Valley Water Bd.	5	1	0	680	28·9	31·96	162	127
d Wirksworth (Cranford Road)** .....	The Surveyor, U.D.C. ....	5	1	0	550	..	34·81	161	135
d Whatstandwell (Meerbrk. Sough) ..	Messrs. G. & F. W. Hodson ..	5	1	0	246	33·6	30·53	165	125
d Brackenfield (Lindway Res.) .....	R. F. Ward, Esq., C.E. ....	5	1	0	595	31·9	34·04	165	131
d Matlock Bath (Lower Tower) .....	Miss E. Chadwick .....	5	1	1	500	33·7	34·48	170	131
d Matlock (Rockside Hydro.) .....	J. H. Goodwin, Esq. ....	5	1	0	637	32·6	34·78	168	126
d Darley Dale (Whitworth Inst.) .....	E. Evans, Esq. ....	5	1	0	361	32·9	35·39	161	120
d Clay Cross (Press Reservoirs) .....	Gilbert Grith, Esq. ....	8	1	0	810	31·7	36·51	185	129
M Buxton (Hurdlow Top) .....	L.M. & S. Rly. Co. ....	8	1	10	1267	..	51·59	..	..
d Chatsworth Gardens .....	Mr. J. G. Weston .....	5	1	0	436	34·7	33·55	170	119
d Baslow (Titheacre) .....	Mrs. S. E. Milner, O.B.E. ...	5	1	6	500	..	37·37	186	140
d Buxton (Portobello Bar) .....	F. Langley, Esq., C.E. ....	8	1	0	1600	55·9	42·81	215	155
d Buxton (Stanley Moor) .....	F. Langley, Esq., C.E. ....	8	1	0	1340	52·1	39·69	215	156
d Buxton (Burbage Edge) .....	F. Langley, Esq., C.E. ....	8	1	0	1400	52·8	39·08	215	153
d Buxton (Ashwood Dale S.W.) .....	V. Longbottom, Esq. ....	5	3	0	1010	..	39·32	193	152
d Buxton (Terrace Slopes) .....	The Town Clerk .....	8	1	0	1007	48·4	44·64	197	153
d† Buxton (Lightwood) .....	F. Langley, Esq., C.E. ....	8	0	11	1191	..	40·86	213	160
d Bamford (Engineer's Office) No. 60 ..	Derwent Valley Water Bd.	8	1	0	509	37·8	39·90	249	146
d Bamford Filters .....	No. 70A Derwent Valley Water Bd.	8	1	0	660	39·1	40·88	212	147

§ Turf wall round gauge.

† Exposure unorthodox.

\*\* Station formerly called Wirksworth (Derby Road). Gauge moved  $\frac{1}{2}$  mile N. on 1.1.37.

## DIVISION VII—NORTH-MIDLAND COUNTIES—(con.).

		Rain-gauge			1937.			
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
DERBYSHIRE—(con.).		in.	ft.	in.	ft.	in.	in.	
6.—TRENT—Derwent—(con.).								
w Froggat Edge (Stoke Flat)	J. G. Bown, Esq.	5	1	0	924	36·5	41·13	..
d Holmesfield (Barbrook Res.)	Gilbert Frith, Esq.	8	1	0	1080	35·6	40·46	210
d Holmesfield (White Edge)	Sheffield Corporation W.W.	5	1	0	1209	..	39·22	..
d Burbage (Lower Burbage)	(+ A) Sheffield Corporation W.W.	8	1	0	924	36·2	39·62	207
d Hope (Cement Works)	Messrs. G. & T. Earle, Ltd.	5	1	0	580	..	37·85	177
d Hope (Killhill Bridge), No. 56	D. W. Chadwick, Esq.	5	1	0	565	40·4	37·77	193
Stanedge (Redmires)	Sheffield Corporation W.W.	5	1	0	1395	..	45·86	..
d Bamford (Yorkshire Br. Weir)†59B	Derwent Valley Water Bd.	5	1	0	560	36·7	39·19	..
d Edale Mill	No. 84 Derwent Valley Water Bd.	5	1	0	725	..	39·86	..
m Upper Booth	No. 85 Derwent Valley Water Bd.	5	1	0	950	..	43·92	..
m Edale End	No. 83 Derwent Valley Water Bd.	5	1	0	632	..	39·48	..
m Ladybower	No. 73 Derwent Valley Water Bd.	5	1	0	985	..	44·97	..
w Grimbocar	No. 90 Derwent Valley Water Bd.	5	1	0	700	..	43·67	..
d Derwent Vicarage	No. 67A Derwent Valley Water Bd.	8	1	0	675	43·6	42·96	212
m Hagg Farm	No. 81 Derwent Valley Water Bd.	8	1	0	700	..	42·86	..
m Blackden Brook	No. 89 Derwent Valley Water Bd.	5	1	0	1070	..	52·73	..
d R. Ashop (Weir)	No. 80A Derwent Valley Water Bd.	5	1	0	795	..	49·96	233
d Fairholmes (Nursery)	No. 26A Derwent Valley Water Bd.	5	1	0	685	42·8	45·41	198
m Nether Seal Clough	No. 79B Derwent Valley Water Bd.	5	1	0	1320	..	53·35	..
m Nether Red Clough	No. 78 Derwent Valley Water Bd.	5	1	0	1370	..	56·57	..
m Ashop Head	No. 43A Derwent Valley Water Bd.	5	1	0	1670	..	53·07	..
m Ouzelden Clough	No. 75 Derwent Valley Water Bd.	5	1	0	885	..	46·64	..
m Urchin Clough	No. 88 Derwent Valley Water Bd.	5	1	0	1190	..	54·08	..
m Alport Moor (Alport Castles) No. 82	Derwent Valley Water Bd.	5	1	0	975	..	48·35	..
w Derwent Dale (Birchinlee) No. 23	Derwent Valley Water Bd.	8	1	0	890	50·3	46·37	..
m Lady Clough Moor	No. 41B Derwent Valley Water Bd.	5	1	0	1720	50·3	55·80	..
m Featherbed Top	No. 77 Derwent Valley Water Bd.	5	1	0	1665	..	51·03	..
d Derwent Dale (Howden Dam) 17	Derwent Valley Water Bd.	8	1	0	845	47·7	45·13	220
w Derwent Dale (Ridge Farm) 13A	Derwent Valley Water Bd.	5	1	0	883	52·4	48·04	..
m Westend Moor (Blacklow Cote) 15A	Derwent Valley Water Bd.	5	1	0	970	51·3	48·72	..
m Alport Moor	No. 38B Derwent Valley Water Bd.	5	1	0	1709	54·4	54·64	..
m Deep Grain	No. 74 Derwent Valley Water Bd.	5	1	0	1360	..	52·83	..
w Derwent Dale (Slippery Stones) 62	Derwent Valley Water Bd.	5	1	0	908	49·4	46·50	..
m Ronsley Moor	No. 86 Derwent Valley Water Bd.	5	1	0	1660	..	55·22	..
m Bleaklow Hill	No. 87 Derwent Valley Water Bd.	5	1	0	2050	..	52·30	..
m Broadhead Clough	No. 63 Derwent Valley Water Bd.	5	1	0	1010	52·8	46·97	..
m Barrow Clough	No. 71 Derwent Valley Water Bd.	5	1	0	1330	..	52·99	..
7.—TRENT—Erewash. 50 sq. mi.								
d Long Eaton (Town Hall)	H. Raven, Esq., C.F.	8	0	10	105	23·4	24·44	156
d Ilkeston (New Stanton)	Stanton Ironworks Co., Ltd.	5	1	6	150	25·2	(27·55)	..
d Ilkeston (Sewage Works)	The Borough Surveyor	5	1	11	132	..	24·19	144
d Codnor (Cross Hill)	A. F. Pine, Esq.	5	1	0	394	27·7	28·91	159
d Codnor Park	L. M. & S. Rly. Co.	5	1	0	243	..	29·18	178
8.—OUSE—Don. 138 sq. mi.								
d Chesterfield (Walton San.)	Dr. A. Niven Robertson	5	1	0	450	29·5	32·67	150
d Chesterfield (Linacre Res.)	C. Boldry, Esq.	8	1	0	430	30·4	37·41	197
d Chesterfield (Linacre Res.)	C. Boldry, Esq.	5	1	0	475	29·7	36·10	197
d Chesterfield (Sewage Works)	S. Thornhill, Esq.	5	1	0	223	24·9	31·79	156
d Chesterfield (Crowhole Res.)	Gilbert Frith, Esq.	5	1	0	605	..	34·81	150
d Horsley Gate	Miss E. Wilson	5	1	0	650	..	39·70	187
d Spinkhill (Mt. St. Mary's College)	Rev. S. B. Hayward	5	1	0	340	..	30·63	163

† Gauge moved 500 ft. S.S.E. in January, 1936.



## DIVISION VIII—NORTH-WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.			
			Height of Rim above Ground.	Ground above Sea Level.	Aver- age Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.		
CHESHIRE. (Area, 1,014 sq. mi.).			in.	ft. in.	ft.	in.	in.			
1.—MERSEY, UPPER. 187 sq. mi.										
D Langley (Twelve Ashes) . . . . .	E. Hamson, Esq., C.E. . . . .	6	0	9	903	..	34·36	169	130	
D Langley (Trentabank Res.) . . . . .	E. Hamson, Esq., C.E. . . . .	6	0	9	854	..	34·28	174	129	
D Langley (Bottoms Res.) . . . . .	E. Hamson, Esq., C.E. . . . .	5	1	3	664	38·5	33·41	171	136	
D Macclesfield (Leadbeaters Res.) . . . . .	E. Hamson, Esq., C.E. . . . .	5	1	0	608	33·1	27·41	166	130	
Buxton (Goytsclough) . . . . .	Stockport Corporation W.W. . . . .	5	1	0	1175	..	45·33	..	..	
D MACCLESFIELD (West Park) . . . . .	E. Hamson, Esq., C.E. . . . .	5	1	0	500	34·1	31·70	176	136	
D Macclesfield (Whirley) . . . . .	L. H. Lomas, Esq. . . . .	5	1	1	495	..	31·02	180	135	
d Rainow (The Clough) . . . . .	Miss Anna Neave . . . . .	5	1	3	815	34·4	31·85	(181)	(132)	
Taxal (No. 9) . . . . .	Stockport Corporation W.W. . . . .	5	1	0	1430	..	45·75	..	..	
D Prestbury Sewage Wks. . . . .	F. T. Hambleton, Esq.* . . . .	5	1	0	320	..	27·95	182	127	
D Knutsford (Hazelfield) . . . . .	H. P. Ashworth, Esq. . . . .	5	1	0	213	30·3	28·72	167	126	
Alderley Edge (Elm Grove)† . . . . .	E. H. Morris, Esq. . . . .	5	1	0	300	..	(27·79)	..	..	
D Taxal (Oldfield) . . . . .	Stockport Corporation W.W. . . . .	5	1	6	820	..	42·38	188	159	
D Disley (Lyme Park) . . . . . (B)	Stockport Corporation W.W. . . . .	5	1	0	720	..	28·12	183	137	
D Disley (Higher Stoneridge) . . . . .	Stockport Corporation W.W. . . . .	5	1	0	750	..	31·65	183	140	
D Runcorn (Weston Point) . . . . .	Weaver Navigatn. Trustees . . . . .	8	1	0	17	31·3	26·61	175	130	
D Appleton Reservoir . . . . .	Warrington W.W. . . . .	5	1	0	120	..	28·86	172	117	
D Moore (Uplands) . . . . .	Lt.-Com. G. K. Rylands, R.N., J.P. . . . .	5	1	0	120	..	25·64	168	115	
D High Lane (Lyme View) . . . . .	S. Arrowsmith, Esq. . . . .	5	1	0	602	..	28·01	178	139	
D Thelwall (The Clough) . . . . .	E. W. Reynolds, Esq. . . . .	5	1	0	95	31·4	27·41	193	142	
D Thelwall Lea . . . . .	E. H. Rideout, Esq. . . . .	5	1	0	90	..	25·80	178	136	
D Altrincham (Norman's Pl.) . . . . .	Miss G. A. Griffiths . . . . .	5	1	0	150	..	25·95	173	125	
D Dunham Massey (Sewage Works) . . . . .	Bucklow R.D.C.* . . . . .	5	1	0	55	..	26·51	192	133	
Cheadle (Adswood) . . . . .	R. W. Wright, Esq. . . . .	5	1	0	186	..	26·64	..	..	
D Stockport (Isolation Hospital) . . . . .	Medical Officer of Health . . . . .	5	1	2	285	..	23·86	179	127	
D Sale (Sewage Works) . . . . .	The Manager . . . . .	5	0	10	70	..	28·57	177	134	
D Romiley (Greave) . . . . .	F. Edwards, Esq. . . . .	5	1	0	510	..	31·47	197	146	
D Godley Reservoir . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	488	34·8	30·58	183	141	
D Dukinfield (Higher Reservoir) . . . . .	M. T. B. Whitson, Esq., C.E.. . . . .	5	1	6	495	..	31·05	181	141	
§ Torside (Clough Edge) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1452	..	41·83	..	..	
D Arnfield Reservoir . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	512	..	34·93	193	137	
D Rhodes Wood Reservoir . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	545	42·7	38·39	202	155	
§ Hollingworth Hall Moor . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1194	..	37·78	..	..	
D Torside Reservoir . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	669	..	39·35	204	156	
D Stalybridge (Market Ground Yd.) . . . . .	M. T. B. Whitson, Esq., C.E.. . . . .	5	1	0	373	..	32·38	186	150	
D Stalybridge (Brushes Filter Ho.) . . . . .	M. T. B. Whitson, Esq., C.E.. . . . .	5	1	6	615	39·2	34·79	195	149	
D Swineshaw Moor (Lees Hill) . . . . .	M. T. B. Whitson, Esq., C.E. . . . .	5	1	0	1168	..	38·03	..	..	
D Woodhead Reservoir . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	665	48·3	40·98	203	166	
§ Arnfield Moor . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1290	..	43·96	..	..	
§ Crowden (Span Gutter) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1530	..	47·17	..	..	
§ Pikenaze Moor (Audernshaw C.) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1148	..	52·62	..	..	
§ Woodhead (Pikenaze) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	926	..	46·04	..	..	
§ Swineshaw Moor (Boar Flat) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1190	..	42·79	..	..	
§ Westend Moor (Stonefold) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1691	..	49·94	..	..	
§ Withens Moor (West Withens) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1382	..	53·50	..	..	
§ Crowden (Meadow Clough) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1425	..	50·39	..	..	
§ Long Ridge Moss (Near Broadslate) . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1663	..	51·99	..	..	
§ Longside Moss . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1418	..	51·40	..	..	
§ Upper Heyden . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1708	..	53·66	..	..	
§ Grains Moss . . . . .	Manchester Corp'n. W.W. . . . .	5	1	0	1573	..	51·37	..	..	
2.—MERSEY—Weaver. 489 sq. mi.										
D Audlem (Newholme) . . . . .	C. Caffin, Esq.* . . . .	5	1	0	220	..	28·99	155	121	
D Wirswall Hall . . . . .	F. H. Illingworth, Esq. . . . .	5	1	2	505	..	28·40	182	146	
D Cholmondeley Estate Office . . . . .	A. H. Munro, Esq.* . . . .	5	1	0	300	..	30·06	178	138	
D Nantwich (Baddiley W.W.) . . . . .	Nantwich U.D.C. . . . .	5	1	0	231	28·3	27·74	152	127	
D Nantwich (Dorfold Hall) . . . . .	Weaver Navigatn. Trustees . . . . .	8	1	0	190	28·8	28·98	188	132	
D Nantwich (Reaseheath Hall) . . . . .	Weaver Navigatn. Trustees . . . . .	8	1	0	130	29·1	27·16	183	126	
D Crewe (Isolation Hospital) . . . . .	Leonard Reeves, Esq., C.E. . . . .	5	1	4	181	27·6	28·99	164	121	
n Congleton (Sewage Works) . . . . .	The Borough Surveyor . . . . .	5	1	0	248	30·1	31·14	171	130	

\* Per Cheshire Rivers Catchment Board.

† Gauge moved 75 yds. E.S.E., September 15th.

§ Turf wall round gauge.

## DIVISION VIII—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	above	Rain-fall.			
			above	above	above	above			
			Ground.	Sea Level.	Sea Level.	Sea Level.			
CHESHIRE—(con.).									
		in.	ft.	in.	ft.	in.	in.		
<b>2.—MERSEY—Weaver—(con.).</b>									
d Congleton (Buglawton Vic.)	Weaver Navigation Trustees	8	1	0	307	30·5	30·67	151	122
d Tarporley (Tirley Garth Gdns.)	Mr. J. B. Allan	5	3	6	450	30·0	32·08	190	131
d Bosley School	The Head Teacher*	5	1	0	500	..	(31·34)	..	120
d Middlewich	I.C.I. (Alkali), Ltd.	5	1	0	138	..	28·07	175	127
d Middlewich (Bostock Hall)	Capt. W. H. France-Hayhurst	5	1	0	157	30·3	29·83	166	128
d Cranage (Mental Institution)	The Clerk & Steward	5	1	0	170	..	29·92	156	118
d Delamere (Linmere)	Forestry Commission	8	0	9	250	..	34·20	178	142
d Hartford (Hollybank)	Giles Owen, Esq.	5	1	0	160	..	29·72	171	122
d Northwich (Sandiway, W.W.)	J. Birtwistle, Esq.	8	1	0	163	..	32·03	192	133
d Northwich (Hunts Lock)	Weaver Navigation Trustees	8	1	0	47	30·0	29·74	171	126
d Northwich (Winnington)	I.C.I. (Alkali) Ltd.	5	1	0	64	29·2	26·80	171	118
d Northwich (Lostock Gralam)	I.C.I. (Alkali) Ltd.	5	1	0	75	..	28·09	174	120
<b>3.—MERSEY LOWER &amp; C. 142 sq. mi.</b>									
Tarporley (Willington Hall)	Major C. W. Tomkinson	5	1	0	220	29·4	31·31	165	127
d Mouldsworth	A. J. Robinson, Esq.	5	1	0	145	..	29·01	..	..
d Frodsham (Castle Park)	Engineer & Surveyor	8	1	9	45	..	25·69	153	115
d Hooton Waterworks	A. J. Robinson, Esq.	5	1	0	97	30·3	30·10	178	133
d Eastham	H. B. Vernon, Esq.	5	1	0	100	31·9	(30·65)	(182)	(134)
d Crosshill Reservoir, <i>old g.</i>	R. F. Baker, Esq.	5	1	0	237	..	29·08	178	130
d Crosshill Reservoir, <i>new g.</i>	R. F. Baker, Esq.	5	1	0	212	..	28·82	178	127
d Prenton Waterworks	A. J. Robinson, Esq.	5	1	6	91	28·1	30·30	172	140
d Birkenhead (BIDSTON OBS'Y.) (+A)	The Director	8	1	0	198	27·9	27·65	184	133
d HOYLAK (Recreation Gd.)	The Surveyor	5	1	0	23	28·1	26·54	176	125
d Wallasey (Caithness Drive)	H. Procter, Esq.	5	1	1	75	..	30·39	182	132
d WALLASEY (New Brighton)	Medical Officer of Health	5	1	0	57	29·7	27·31	173	125
<b>4.—DEE. 127 sq. mi.</b>									
d Eaton Hall Gardens	Mr. N. F. Barnes	5	1	2	72	26·9	27·53	184	134
d Eccleston	E. Wells, Esq.	5	1	1	94	26·8	28·72	(190)	(135)
d Rowton (Holly Bank)	J. H. Salmon, Esq.	5	1	5	213	27·3	30·55	164	126
d Chester (Waterworks)	C. Wilfrid Bennett, Esq.	5	0	10	85	26·4	25·16	173	122
Burton	R. A. L. Billson, Esq.	5	1	0	210	..	25·17	..	..
d Neston (Vine House)	D. P. Russell, Esq.	5	1	0	111	27·4	27·88	179	134
d Heswall (St. Fillan's)	Capt. J. Deedes	5	1	0	40	..	25·23	169	121
d Heswall (Greta)	Dr. T. Guthrie	5	1	0	230	..	29·82	187	127
d West Kirby (Caldy Manor)	Mr. E. L. Barker	5	6	0	131	27·9	26·34	..	..
West Kirby (Hilbre House)	Egerton Macdona, Esq.	5	0	9	25	27·8	26·88	..	..
d West Kirby (Monk's Way)	Miss G. S. Kirkby	5	1	0	113	28·9	26·90	179	126
d WEST KIRBY (St. Andrew's Vic.)	The Rev. E. F. Robson	5	1	0	25	27·9	25·62	174	126
SOUTH LANCASHIRE. (Area, 700 sq. mi.).									
<b>1.—ALT &amp; C. 103 sq. mi.</b>									
d Litherland (Hatton Hill Pk.)	G. W. Ponsford, Esq., C.E.	5	1	0	59	..	27·53	..	..
d Ormskirk (Bickerstaffe P. Stn.)	C. Burton Ede, Esq., C.E.	5	0	9	128	33·2	27·47	(171)	(137)
d Ormskirk (Springfield P. Stn.)	C. Burton Ede, Esq., C.E.	5	0	11	70	33·1	26·88	(175)	(139)
d Formby (The Dunes)	J. Harold Coney, Esq.	5	0	9	30	29·8	23·87	160	129
<b>2.—MERSEY, LOWER. 244 sq. mi.</b>									
d Garston	Liverpool Corporation	5	1	0	81	30·7	29·16	171	133
d Garston (Grassendale Park)	A. G. Isaacson, Esq.	5	1	0	30	30·1	30·03	191	124
d Aigburth (Beech Lawn)	T. H. Edwards, Esq.	8	1	0	120	30·0	30·02	188	128
d Liverpool (Lark Lane)	Liverpool Corporation	5	9	1	90	..	29·24	177	133
d Liverpool (Smithdown Road)	Liverpool Corporation	5	1	0	135	31·7	27·99	175	129
d Liverpool (Monument Pl.) (+A)	Liverpool Corporation	5	1	3	124	..	28·67	173	125
d Liverpool (Rathbone Road)	Liverpool Corporation	5	1	0	198	34·3	31·45	190	138
d Liverpool (Breckside Park)	Liverpool Corporation	5	0	9	132	33·2	30·25	180	144
d Liverpool (Queens Drive)	Liverpool Corporation	5	1	0	119	33·3	29·87	191	139
d Warrington (Howley Yard)	The Borough Surveyor	8	5	1	26	..	28·01	155	115
d Irlam (Sewage Works)	The Engineer	5	1	0	42	..	23·95	..	124

\* Per Cheshire Rivers Catchment Board.

## DIVISION VIII—NORTH-WESTERN COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-	Days	Days
			Rim	Ground	age	fall.	with	with
			above	above	Rain-		·01 in.	·04 in.
			Ground.	Sea Level.	fall.		or	or
			in.	ft. in.	ft. in.	in.		
SOUTH LANCASHIRE—(con.).								
3.—MERSEY, LOWER—(con.).								
D Winwick P. Stn. ....	Warrington W.W. ....	5	1 0	115	..	27·96	169	134
D St. Helens (Eccleston Hill) ....	A. P. Statham, Esq., C.E. ....	12	1 0	265	33·6	27·00	176	124
D St. Helens (Victoria Park) ....	Dr. F. Hauxwell. ....	8	1 5	160	33·9	28·25	193	125
d Earlstown (Newton Cemetery) ....	T. E. Clough, Esq. ....	5	1 0	75	33·6	26·43	..	..
d Lowton (Newton Road) ....	G. H. Coe, Esq. ....	5	2 0	121	..	30·52	..	134
D St. Helens (Windle Hall) ....	W. H. Pilkington, Esq. ....	5	1 0	160	..	26·53	182	134
D Leigh (Sewage Works) ....	(+A) T. N. Cockroft, Esq., B.Sc. ....	5	1 0	67	32·6	27·25	168	125
3.—MERSEY—Irwell. 299 sq. mi.								
D Stretford (Sewage Farm) ....	Stretford U.D.C. ....	8	1 1	65	..	25·89	182	133
D Stretford (Longford Yard) ....	Stretford U.D.C. ....	8	1 1	87	..	27·29	184	134
D Manchester (Hullard Park) ....	Stretford U.D.C. ....	8	1 1	100	32·4	26·68	166	143
D Manchester (Old Trafford) ....	Stretford U.D.C. ....	8	1 1	107	..	25·24	177	128
D Urmston (Sew. Wks., Davyhulme) .	Manchester Cor., Rivers Dpt. ....	8	1 0	72	30·9	26·17	180	138
D MANCHESTER (BARTON AIRPORT) (+A)	Meteorological Officer ..	8	1 0	70	..	26·65	183	128
D Patricroft (Eccles Sewage Wks.) .	C. J. Girling, Esq. ....	5	1 0	42	30·3	25·29	181	125
D Eccles (Cavendish Grove) ....	T. G. Barlow, Esq. ....	5	1 0	91	..	26·51	176	130
D MANCHESTER (OLDHAM ROAD) .	Medical Officer of Health ..	5	1 0	191	34·3	27·47	182	137
D MANCHESTER (WHITWORTH PARK) .	Manchester University ....	8	1 0	125	31·7	25·08	178	131
D Ashton-und.-Lyne (Knott H. Res.) .	M. T. B. Whitson, Esq., C.E. ....	8	1 0	605	..	31·54	205	146
D Prestwich Sewage Works ....	H. T. Ainsworth, Esq., C.E. ....	8	0 10	150	36·6	30·00	191	145
D Prestwich Res. ....	Manchester Corp'n. W.W. ....	5	1 0	357	..	28·57	190	143
D Prestwich (Heaton Park) ....	Manchester Corporation ....	8	1 0	312	36·8	27·77	184	135
D Prestwich (Heaton Park Res.) .	Manchester Corp'n. W.W. ....	5	1 0	355	37·1	28·80	203	141
D Oldham Gas Works ....	Ernest Parry, Esq., C.E. ....	5	5 9	602	39·0	31·08	219	143
D Oldham (Brushes Clough) No. 3. .	C. J. Batley, Esq., C.E. ....	5	1 0	921	46·7	33·94	206	157
D Royton (Public Park) ....	The Engineer and Surveyor ..	5	1 0	502	..	31·54	207	163
D BOLTON (Queen's Park) .	(+A) The Corp'n. (E. Hendy) ....	5	1 0	342	43·1	35·95	193	151
d Bolton (L.M.S.R.) .	No. 1 L.M. & S. Rly. Co. ....	5	1 0	299	..	34·39	..	..
D Bolton (Heaton Reservoir) .	Bolton Corporation W.W. ....	5	1 0	500	43·5	36·35	193	153
D Bolton W.W. (Harpers Farm) .	Bolton Corporation W.W. ....	5	1 0	872	..	40·40	..	..
D Bolton (Bloomfield, Heaton) .	Mrs. F. Taylor, J.P. ....	5	1 0	530	43·1	36·49	193	150
D Bury (L.M.S.R.) .	No. 5 L.M. & S. Rly. Co. ....	5	1 0	294	..	32·43	189	147
D Bury (Greenhill Road) ....	R. Moore, Esq. ....	5	2 7	399	..	31·96	165	141
D Bury (Parsons Lane) ....	Irwell Valley Water Bd. ....	5	9 6	316	42·4	30·72	173	142
D Bury (Bridge Hall) ....	Miss C. Wrigley ....	8	1 0	..	42·2	32·00	207	153
D New Hey (Sewage Works) ....	Mr. J. B. Ogden ....	8	1 0	513	41·6	32·22	183	148
D Milnrow (Butterworth Hall) .	C. J. Batley, Esq., C.E. ....	5	1 0	512	43·8	36·95	230	162
D Milnrow (Piethorne, Kitcliffe) .	C. J. Batley, Esq., C.E. ....	5	1 0	766	..	36·41	205	166
D Milnrow (Piethorne, Coldgreave) .	C. J. Batley, Esq., C.E. ....	5	1 0	832	46·3	37·42	205	164
D Rochdale (Roch Mills Sew. Wks.) .	S. H. Morgan, Esq., C.E. ....	8	1 1	363	44·5	29·31	195	154
D Rochdale (Broadfield Pk. Obsy.) .	Medical Officer of Health ..	8	0 8	472	43·9	28·95	200	153
D Rochdale (Fieldhead Yard) .	S. H. Morgan, Esq., C.E. ....	8	1 0	473	44·8	33·32	195	151
D Rochdale (Ashworth Moor Res.) .	Heywood Water Board ....	5	1 2	956	..	33·26	197	150
D Bolton (Egerton House) <i>old g.</i> .	E. H. Ashworth, Esq. ....	5	1 0	633	49·6	39·80	..	..
D Bolton (Egerton House) <i>new g.</i> .	E. H. Ashworth, Esq. ....	5	1 0	633	48·8	40·57	..	..
D Bury (Gin Hall) ....	No. 1 Irwell Valley Water Bd. ....	5	1 0	475	43·7	35·56	192	150
D Bury (Gin Hall) ....	No. 2 Irwell Valley Water Bd. ....	5	1 0	475	44·5	35·19	192	154
D Bolton W.W. (Springs) ....	Bolton Corporation W.W. ....	5	1 0	810	54·5	43·07	210	165
D Bolton W.W. (Eagley) ....	Bolton Corporation W.W. ....	5	1 0	546	52·3	41·47	..	..
D Turton (Turton Tower) ....	Turton U.D.C. ....	5	1 0	584	..	39·45	204	145
M Bolton W.W. (Hordern) ....	Bolton Corporation W.W. ....	5	1 0	1160	53·6	41·50	..	..
D Bolton W.W. (Delph) ....	Bolton Corporation W.W. ....	5	1 0	710	51·2	40·39	217	158
M Bolton W.W. (Longworth) .	Bolton Corporation W.W. ....	5	1 0	770	52·4	40·63	..	..
D Bolton W.W. (Wayoh) .	Bolton Corporation W.W. ....	5	1 0	608	51·6	40·17	206	154
§ Bolton W.W. (Holden's Farm) .	Bolton Corporation W.W. ....	5	1 0	955	52·1	41·08	..	..
D Bolton W.W. (Top-o'-th-Brow) .	Bolton Corporation W.W. ....	5	1 0	935	55·2	43·71	..	..

§ Turf wall round gauge.

## DIVISION VIII—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	above	Rain-fall.			
			above	above	above	fall.			
			Ground.	Sea Level.	Sea Level.				
SOUTH LANCASHIRE—(con.).			in.	ft. in.	ft.	in.	in.		
<b>3.—MERSEY, Irwell—(con.).</b>									
D Bolton W.W. (Entwistle) . . . . .	Bolton Corporation W.W.	5	1 0	692	53·2	41·63	212	152	
Bolton W.W. (Bromiley Heys) . . . . .	Bolton Corporation W.W.	5	1 0	925	51·5	40·12	..	..	
§ Bolton W.W. (Hulton Pasture) . . . . .	Bolton Corporation W.W.	5	1 0	1130	49·7	40·79	..	..	
§ Bolton W.W. (Moorside) . . . . .	Bolton Corporation W.W.	5	1 0	850	50·2	39·51	..	..	
Bolton W.W. (Clough) . . . . .	Bolton Corporation W.W.	5	1 0	1150	55·0	42·03	..	..	
Bolton W.W. (Cranberry Moss) . . . . .	Bolton Corporation W.W.	5	1 0	982	53·0	40·75	..	..	
M Bolton W.W. (Slater Lane) . . . . .	Bolton Corporation W.W.	5	1 0	985	51·8	39·49	..	..	
Bolton W.W. (Brown Lowe) . . . . .	Bolton Corporation W.W.	5	1 0	1200	51·8	41·79	..	..	
Bolton W.W. (Longshoot) . . . . .	Bolton Corporation W.W.	5	1 0	930	..	42·06	..	..	
Bolton W.W. (Ugnow) . . . . .	Bolton Corporation W.W.	5	1 0	1090	51·1	39·01	..	..	
D Rochdale (Hamer Pasture Res.) . . . . .	Rochdale Corporation W.W.	5	1 0	760	48·6	36·65	201	159	
D Rochdale (Naden Filters) . . . . .	Heywood Water Board	5	1 0	761	..	36·93	180	149	
M Norden (Higher Red Lumb) . . . . .	Heywood Water Board	5	1 3	1125	..	37·84	..	..	
W Norden (Far Knowl Farm) . . . . .	Heywood Water Board	5	1 3	..	47·2	38·39	..	..	
W Rochdale (Naden Dean) <i>old g</i> . . . . .	Heywood Water Board	5	1 4	948	..	30·34	..	..	
W Rochdale (Naden Dean) <i>new g</i> . . . . .	Heywood Water Board	5	1 4	948	..	32·53	..	..	
D Littleborough (Longden End) . . . . .	C. J. Batley, Esq., C.E.	5	1 0	751	47·4	38·47	206	162	
D Littleborough (Hollingworth L'ke) . . . . .	C. J. Batley, Esq., C.E.	8	1 0	610	40·6	31·78	192	143	
D Littleborough (Broadhead) . . . . .	C. J. Batley, Esq., C.E.	8	1 0	1337	..	37·46	(215)	(154)	
D Littleborough (Blackstone Edge) . . . . .	C. J. Batley, Esq., C.E.	8	1 0	1268	45·0	42·41	219	169	
D Littleborough (Uppr. Chelburn) . . . . .	C. J. Batley, Esq., C.E.	8	1 0	725	47·5	40·73	219	165	
D Littleborough (Chelburn) . . . . .	C. J. Batley, Esq., C.E.	8	1 0	700	..	34·85	219	152	
M Ramsbottom (Killgate Brook) . . . . .	Heywood Water Board	5	1 0	978	..	37·29	..	..	
D Ramsbottom (L.M.S.R.) . . . . .	No. 3 L. M. & S. Rly. Co.	5	1 0	418	47·7	37·02	..	..	
M Ramsbottom (Cheesden Barn) . . . . .	Heywood Water Board	5	1 0	997	..	34·80	..	..	
D Edenfield (Rochdale Rd.) . . . . .	Irwell Valley Water Bd.	5	1 0	665	..	40·46	207	151	
D Edenfield (New Hall Nurseries) . . . . .	Irwell Valley Water Bd.	5	1 0	800	..	41·19	205	157	
D Edenfield (Scout Moor Res.) . . . . .	No. 2 Irwell Valley Water Bd.	5	1 0	1275	..	43·05	208	162	
D Waterfoot (Cragg Reservoir) <i>new site</i> . . . . .	Bacup Boro' Council	5	1 0	1325	..	46·23	226	174	
D Waterfoot (Cowe Reservoir) <i>new site</i> . . . . .	Bacup Boro' Council	5	1 0	925	..	47·21	226	176	
D Rochdale (Spring Mill Whitworth) . . . . .	Rochdale Corporation W.W.	5	1 0	720	51·5	42·10	183	165	
D Wardle (Watergrove Mill) . . . . .	Rochdale Corporation W.W.	5	1 0	775	..	41·94	189	169	
D Rochdale (Cowm, Whitworth) . . . . .	Rochdale Corporation W.W.	5	1 0	762	51·5	43·72	..	169	
D Helmshore (Clough House) . . . . .	A. C. Cullen, Esq.	5	1 0	650	50·3	40·44	185	151	
D Haslingden (Holden Wood) No. 1 . . . . .	Irwell Valley Water Bd.	5	1 0	670	52·1	41·15	192	155	
D Haslingden (Holden Wood) No. 2 . . . . .	Irwell Valley Water Bd.	5	1 0	670	51·4	39·78	192	153	
D Haslingden (Calf Hey) . . . . .	No. 1 Irwell Valley Water Bd.	5	1 0	800	50·9	41·15	191	156	
D Haslingden (Ogden) . . . . .	No. 1 Irwell Valley Water Bd.	5	1 0	740	..	38·75	192	156	
D Haslingden (Ogden) . . . . .	No. 2 Irwell Valley Water Bd.	5	1 0	740	..	39·76	191	155	
D Bacup (Sheephouse Res.) <i>new site</i> . . . . .	Bacup Boro' Council	5	1 0	975	..	42·79	207	162	
D Bacup (L.M.S.R.) . . . . .	No. 4 L. M. & S. Rly. Co.	5	1 0	875	47·1	40·55	205	158	
D Rawtenstall Cemetery . . . . .	J. Johnson, Esq.	8	1 1	572	49·6	36·11	..	141	
D Haslingden (L.M.S.R.) . . . . .	No. 2 L. M. & S. Rly. Co.	5	1 0	715	..	35·44	..	142	
D Rawtenstall (Cloughbottom) No. 1 . . . . .	Irwell Valley Water Bd.	5	1 0	1025	47·4	37·73	185	173	
D Rawtenstall (Clowbridge Res.) No. 1 . . . . .	Irwell Valley Water Bd.	5	1 0	930	47·6	38·66	190	164	
D Rawtenstall (Clowbridge Res.) No. 2 . . . . .	Irwell Valley Water Bd.	5	1 0	930	51·6	41·26	190	164	
<b>4.—MERSEY, UPPER. 54 sq. mi.</b>									
D Didsbury (Linden Road) . . . . .	L. G. King, Esq.	8	1 6	110	31·0	25·69	167	128	
D Northenden Sewage Wks. . . . .	Manchester Cor., Rivers Dept.	8	1 0	81	..	25·06	175	130	
D MANCHESTER (BURNAGE SCHOOL) . . . . .	Manchester Education Com.	5	1 0	147	..	24·35	179	126	
D Chorlton-cum-Hardy Sew. Works. . . . .	Manchester Cor., Rivers Dept.	8	1 0	95	30·5	24·06	178	129	
D Fallowfield (Platt Field Park) . . . . .	Manchester Corporation	8	1 0	118	30·6	23·11	161	125	
D Denton Reservoir . . . . .	Manchester Corpn. W.W.	5	1 0	306	..	30·80	191	146	
D Gorton Reservoir . . . . .	Manchester Corpn. W.W.	5	1 0	263	..	28·79	189	152	
D Ashton-u-Lyne (Henrietta St. Yd.) . . . . .	M. T. B. Whitson, Esq., C.E.	7	1 0	394	37·2	29·52	178	144	
D Lower Swineshaw Reservoir . . . . .	M. T. B. Whitson, Esq., C.E.	8	1 6	884	43·6	35·24	193	158	
D Swineshaw Moor . . . . .	M. T. B. Whitson, Esq., C.E.	5	1 0	1340	..	41·78	..	..	
D Mossley (Manor House Yard) . . . . .	M. T. B. Whitson, Esq., C.E.	5	1 0	636	41·5	32·31	192	148	

§ Turf wall round gauge.

## DIVISION VIII—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.				
			Height of Rim above Ground.	Ground above Sea Level.	Average Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.		
CENTRAL LANCASHIRE. (Area, 536 sq. mi.).			in.	ft.	in.	ft.	in.	in.		
1.—RIBBLE & C. 326 sq. mi.										
Darwen (Spring Bank) . . . . .	T. Anderton, Esq. . . . .	5	1	0	710	..	39·61	..	..	..
Darwen (Sunnyhurst Hey Res.) . . . . .	E. Marsden, Esq., C.E. . . . .	8	1	5	915	49·5	38·39	204	159	..
Darwen (Earnsdale Reservoir) . . . . .	E. Marsden, Esq., C.E. . . . .	8	1	0	705	47·4	38·97	204	159	..
DARWEN (Bold Venture Park) . . . . .	Medical Officer of Health . . . . .	8	1	1	724	50·1	38·93	219	157	..
Darwen (Hoddlesden) . . . . .	No. 1 W. Pickstone, Esq., C.E. . . . .	8	1	6	680	49·1	37·86	193	153	..
Darwen (Daisy Green) . . . . .	No. 1 W. Pickstone, Esq., C.E. . . . .	8	1	6	969	..	37·90	197	163	..
Darwen (Pickup Bank) . . . . .	No. 2 W. Pickstone, Esq., C.E. . . . .	8	1	6	727	..	41·04	197	159	..
D Whithnell . . . . .	No. 2 L. C. King-Wilkinson, Esq. . . . .	5	1	3	535	..	31·34	193	152	..
d Brindle (Whiteholme) . . . . .	Mrs. Victor H. Gatty . . . . .	5	1	8	315	39·3	27·22	..	..	..
d Haslingden (Mitchell's Ho. Res.) . . . . .	A. J. Harrison, Esq. . . . .	5	1	6	950	45·0	40·55	211	162	..
d Haslingden (Mitchell's Ho. Res.) No. 2 . . . . .	A. J. Harrison, Esq. . . . .	5	1	6	984	..	38·41	211	160	..
d Blackburn (Guide Reservoir) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	610	44·9	34·61	190	168	..
d Blackburn (Witton) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	315	42·0	27·34	183	139	..
d Blackburn (Fever Hosp.) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	570	..	32·00	198	150	..
d HUTTON (Lancs. C.C. Hort. Stat.) . . . . .	The Director of Education . . . . .	5	1	0	82	..	26·39	156	135	..
d St. Anne's-on-Sea (South Side) . . . . .	Dr. J. P. Litt . . . . .	5	1	0	25	31·4	26·01	163	125	..
d Accrington (Oak Hill Park) . . . . .	(+A) The Borough Engineer . . . . .	5	1	0	645	..	35·50	196	147	..
d Preston (Moor Park) . . . . .	(+A) Preston Corporation . . . . .	8	1	0	110	35·3	28·84	203	143	..
d Samlesbury Sewage Works . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	240	36·9	26·42	186	138	..
w Causeway Side (Burnley W.W.) . . . . .	J. Shepherd, Esq. . . . .	8	1	0	1116	41·7	34·40	..	..	..
w Sheddin (Burnley W.W.) . . . . .	J. Shepherd, Esq. . . . .	8	1	0	960	41·9	33·07	..	..	..
d Cant Clough S. Side (Burnley W.W.) . . . . .	J. Shepherd, Esq. . . . .	8	1	0	900	42·3	31·69	201	154	..
d Cant Clough N. Side (Burnley W.W.) . . . . .	J. Shepherd, Esq. . . . .	8	1	0	900	41·5	30·95	200	153	..
d Huncoat (Burnley Road Res.) . . . . .	A. J. Harrison, Esq. . . . .	9	1	10	620	43·0	31·63	172	134	..
d Huncoat (Burnley Rd. Res.) <i>new g.</i> . . . .	A. J. Harrison, Esq. . . . .	5	1	0	624	..	30·91	172	139	..
d Wilpshire (Brooklyn Road) . . . . .	H. W. Apperley, Esq. . . . .	5	1	0	408	40·7	32·33	208	154	..
d Great Harwood (Parsonage Res.) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	0	631	40·7	31·59	189	153	..
d Great Harwood (Dean Clough) . . . . .	A. J. Harrison, Esq. . . . .	12	1	6	540	45·6	34·11	198	157	..
d BURNLEY (Queen's Park) . . . . .	Medical Officer of Health . . . . .	8	1	0	458	..	29·89	196	146	..
d Burnley (Swinden) <i>upper g.</i> . . . .	J. Shepherd, Esq. . . . .	8	0	6	820	43·6	33·09	213	162	..
d Burnley (Swinden) <i>lower g.</i> . . . .	J. Shepherd, Esq. . . . .	8	1	0	745	44·3	31·88	213	160	..
d Padiham (Altham Sew. Works) . . . . .	Granville Berry, Esq., C.E. . . . .	5	1	0	225	40·9	30·96	183	150	..
d Padiham (Gawthorpe Hall) . . . . .	Lord Shuttleworth . . . . .	8	1	0	282	40·7	28·52	170	133	..
d Padiham (Huntroyde) . . . . .	E. G. Howsin, Esq. . . . .	5	1	0	423	41·1	33·70	186	147	..
d Alston Reservoir . . . . .	E. C. Oakes, Esq., C.E. . . . .	8	1	2	332	41·0	29·60	208	149	..
Nelson (Red Spa Moor) . . . . .	Nelson Corporation W.W. . . . .	5	1	2	1285	..	37·60	..	..	..
d Nelson (Coldwell Res.) S. . . . .	No. 2 Nelson Corporation W.W. . . . .	5	1	0	960	46·3	34·96	210	160	..
d Nelson (Victoria Park) . . . . .	Nelson Corporation W.W. . . . .	5	1	0	375	41·8	33·63	187	155	..
d Nelson (Walton Lane) . . . . .	Medical Officer of Health . . . . .	5	1	0	540	40·6	33·87	186	153	..
d STONYHURST (College) . . . . .	(+A) The Director . . . . .	8	1	10	377	46·5	33·23	204	142	..
d Cowley Brook (Preston W.W.) . . . . .	E. C. Oakes, Esq., C.E. . . . .	8	1	2	616	..	37·02	216	163	..
d Spade Mill (Preston W.W.) . . . . .	E. C. Oakes, Esq., C.E. . . . .	8	1	2	374	41·7	31·39	210	158	..
m Jeffery Hill (Preston W.W.) . . . . .	E. C. Oakes, Esq., C.E. . . . .	8	1	2	900	47·3	37·30	..	..	..
d Sabden (Churn Clough Res.) . . . . .	Granville Berry, Esq., C.E. . . . .	5	1	0	790	41·2	36·86	235	157	..
w Sabden (Craggs Dole) . . . . .	Granville Berry, Esq., C.E. . . . .	8	1	0	1050	46·0	35·06	..	..	..
w Newchurch (Cock Dole) . . . . .	Granville Berry, Esq., C.E. . . . .	5	1	0	1090	47·0	36·69	..	..	..
d Barley (Ogden Reservoir) . . . . .	Nelson Corporation W.W. . . . .	5	1	6	950	46·0	38·91	202	160	..
d Pendle Hill (Buttock) . . . . .	Nelson Corporation W.W. . . . .	5	1	0	1175	..	43·41	199	161	..
d Colne (Swinden Sew. Works) . . . . .	T. H. Hartley, Esq. . . . .	5	1	0	423	42·0	35·11	190	154	..
Colne (Cemetery) . . . . .	T. H. Hartley, Esq. . . . .	5	3	0	525	..	31·29	..	..	..
Barrowford Reservoir . . . . .	Leeds & Liverpool Canal Co. . . . .	8	1	0	473	41·0	37·72	..	..	..
Foulridge (Upper Reservoir) . . . . .	Leeds & Liverpool Canal Co. . . . .	8	1	0	582	40·5	34·85	..	..	..
Foulridge (Reedy Moor) . . . . .	Leeds & Liverpool Canal Co. . . . .	5	1	0	553	..	35·54	..	..	..
d Chatburn School . . . . .	E. P. Aldersley, Esq. . . . .	5	0	11	322	43·0	32·64	182	148	..
Clitheroe (Downham Hall) . . . . .	R. C. Assheton, Esq. . . . .	5	1	6	464	..	32·36	..	..	..
2.—RIBBLE—Douglas. 156 sq. mi.										
d Wigan W.W. (Billinge Higher End) . . . . .	The Borough Engineer . . . . .	5	1	0	374	..	31·10	189	143	..
d Orrell (Upholland Gram. Sch.) . . . . .	The Headmaster . . . . .	5	1	0	325	35·5	27·10	181	134	..
d Wigan (Gidlow Sen. Sch.) . . . . .	The Headmistress . . . . .	8	0	11	150	..	28·58	168	129	..

§ Turf wall round gauge.

## DIVISION VIII—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
CENTRAL LANCASHIRE—(con.).			in.	ft. in.	ft. in.	in.		
<b>2.—RIBBLE—Douglas—(con.).</b>								
D Wigan W.W. (Worthington) . . . . .	The Borough Engineer . . . . .	5	1 0	225	35·4	29·16	173	143
D Horwich (Lower Rivington) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	5	1 0	440	38·7	30·89	194	139
w Horwich (Lower Knoll) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1 6	742	41·2	33·43	..	..
w Rivington (Brown Hill) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1 6	844	..	32·24	..	..
w Rivington (Brown Hill) <i>new g.</i> . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	5	1 0	727	..	35·50	..	..
D Rivington (Stoneshouse) . . . . .	No. 1 Lt.-Col. F. Hibbert, C.E. . . . .	10	1 4	629	..	34·58	204	153
D Rivington (Stoneshouse) . . . . .	No. 2 Lt.-Col. F. Hibbert, C.E. . . . .	5	1 0	607	..	33·54	207	153
w Rivington (Stoneshouse) . . . . .	No. 3 Lt.-Col. F. Hibbert, C.E. . . . .	8	1 3	629	..	31·49	..	..
w Rivington (Hurst Hill) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1 0	1029	..	37·72	..	..
w Rivington (Great Hill) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1 0	1240	..	36·67	..	..
w Rivington (Coppice Stile) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1 0	879	..	30·21	..	..
w Rivington (Gamekeeper's) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1 1	850	45·4	34·28	..	..
w Roddlesworth . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	5	1 0	725	..	35·56	..	..
D Chorley (Com. Bk. Sew. Wks.) . . . . .	J. Slater, Esq. . . . .	5	1 0	179	..	25·33	196	130
D LEYLAND (Worden Hall) . . . . .	(+A) H. Nowell Farrington, Esq. . . . .	5	1 0	125	34·9	25·30	177	131
w Darwen (Higher Hill) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1 6	733	..	31·52	..	..
D Bamber Bridge (Cuerden Hall) . . . . .	J. Alleyne Robinson, Esq. . . . .	5	1 0	230	35·7	25·01	168	140
<b>3.—COAST STREAMS. 52 sq. mi.</b>								
D SOUTHPORT (Bedford Rd. Park) . . . . .	The Corpn. (A. Goodwill) . . . . .	5	1 0	37	32·0	24·85	168	127
D Southport (Hesketh Park) . . . . .	(+A) The Corpn. (A. Goodwill) . . . . .	8	1 0	37	32·0	25·00	172	126
D Crossens Pumping Stn. . . . .	A. E. Jackson, Esq., C.E. . . . .	5	0 4	15	..	26·24	161	131
<b>4.—OUSE—Aire. 2 sq. mi.</b>								
d Watersheddes Reservoir . . . . .	J. Noel Wood, Esq., M.C., C.E. . . . .	5	1 0	1115	48·4	41·76	(213)	(169)
d Watersheddes Res. . . . .	No. 2 J. Noel Wood, Esq., M.C., C.E. . . . .	5	1 0	1115	..	45·35	(213)	(169)
Foulridge (Canal Office) . . . . .	Leeds & Liverpool Canal Co. . . . .	8	1 0	497	43·5	32·55	..	..
NORTH LANCASHIRE. (Area, 609 sq. mi.).								
<b>1.—DUDDON &amp; C. 77 sq. mi.</b>								
d Barrow-in-Furness (Gas Works) . . . . .	Claude Diamond, Esq. . . . .	5	1 0	17	37·6	33·56	..	138
D Barrow-in-Furness (Sewage Wks.) . . . . .	W. C. Persey, Esq., C.E. . . . .	5	1 0	20	39·3	33·81	199	136
D Barrow-in-Furness (Risedale C. Sch.) . . . . .	The Headmaster . . . . .	5	1 0	55	..	33·76	176	132
D Little Urswick (North View) . . . . .	Miss I. Dobson . . . . .	5	1 6	130	44·4	41·24	190	135
D Ulverston (Poaka Beck) . . . . .	Claude Diamond, Esq. . . . .	5	1 0	512	52·1	41·33	188	151
D Broughton-in-Furness (Hesketh Hall) . . . . .	C. E. Shawfield, Esq. . . . .	5	1 4	130	..	56·86	176	153
d Duddon Valley (Seathwaite Sch.) . . . . .	The Headmistress . . . . .	5	1 0	348	77·8	75·09	..	..
w Duddon Val. (Seathwaite Tarn) . . . . .	Claude Diamond, Esq. . . . .	5	1 0	1221	92·7	89·31	..	..
<b>2.—LEVEN &amp; C. 135 sq. mi.</b>								
D Cartmel (Holker Hall) . . . . .	Lord Richard Cavendish . . . . .	5	0 9	85	44·5	41·43	207	151
D Ulverston (Pengwerne) . . . . .	C. J. Chapman, Esq. . . . .	5	1 2	124	50·1	42·75	204	148
D Ulverston (Pengwerne) <i>Paddock</i> . . . . .	C. J. Chapman, Esq. . . . .	8	1 2	128	..	43·83	203	149
d Haverthwaite (Outwood) . . . . .	Sir Bryan Fell, K.C.M.G. . . . .	5	1 0	65	..	(46·95)	(196)	(154)
Cartmell Fell (Ghyll Head Res.) . . . . .	J. N. Leckie, Esq. . . . .	8	1 0	425	63·1	52·53	..	..
D Torver (Greystones) . . . . .	J. C. Appleyard, Esq. . . . .	5	1 0	350	..	60·77	211	176
Coniston (Thwaite Cottage) . . . . .	Mrs. J. B. Cohen . . . . .	5	1 0	150	..	70·98	208	181
D Coniston (Holywath) . . . . .	Mrs. Hext . . . . .	8	0 9	250	..	77·60	230	176
D Hawkshead (Low House, Sawrey) . . . . .	Mrs. W. H. Baines . . . . .	8	1 0	342	65·3	59·39	188	179
d Hawkshead (Foundation Sch.) . . . . .	The Headmaster . . . . .	5	1 0	214	71·1	57·97	..	..
d Hawkshead (Bettyfold) . . . . .	H. T. Gnosspeilus, Esq. . . . .	5	1 0	500	78·0	56·38	..	..
D Hawkshead Hill . . . . .	Miss R. E. Sugden . . . . .	5	1 0	600	..	67·85	189	165
D Ambleside (Skelwith Fold) . . . . .	Miss C. Marshall . . . . .	5	1 0	333	81·0	60·54	203	167

§ Gauge over exposed on Moor.

|| Turf wall round gauge.

## DIVISION VIII—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	Ground	Rain-fall.			
			above	above	above				
			Ground.	Sea Level.	Sea Level.				
NORTH LANCASHIRE—(con.).			in.	ft.	in.	ft.	in.		
<b>3.—KENT &amp; C. 45 sq. mi.</b>									
d Heysham Harbour	L. M. & S. Rly. Co.	5	1	6	25	34·7	30·50	..	..
d MORECAMBE	The Chief Sanitary Inspector	8	1	0	23	37·0	30·22	176	139
d Hest Bank (Greendale)	W. Watson, Esq.	5	1	6	97	..	32·85	165	130
d Hest Bank (Hatlex Drive)	Miss P. M. Rhodes	5	1	0	35	..	35·04	(178)	(142)
d Bolton-le-Sands (Hill Close)	Miss F. M. Horner	5	1	0	80	..	32·85	..	135
d Yealand Conyers (Beechfield)	Miss D. E. Roper	5	1	0	250	..	33·54	183	134
d Yealand Conyers (Morecambe Lo.)	J. Rawlinson Ford, Esq.	5	1	0	278	42·9	39·98	205	158
d Silverdale (Hawthorn Bank)	Mrs. Robson	8	1	0	50	..	39·20	181	147
d Lindale (Ellerhow)	Lady Tomlinson	5	1	5	310	51·4	41·38	174	143
<b>4.—LUNE. 135 sq. mi.</b>									
d Hampson-in-Ellel	John Welch, Esq.	5	1	0	145	38·3	28·99	179	129
Bowland Forest (High Salter)	J. T. Sanderson, Esq.	5	1	0	1014	..	46·68	..	..
Bowland Forest (Whitray)	J. T. Sanderson, Esq.	5	1	0	1139	57·5	46·42	..	..
Bowland Forest (Lower Salter)	J. T. Sanderson, Esq.	5	1	0	572	52·8	37·47†	..	..
d Lancaster (Blea Turn Res.)	F. Hill, Esq., C.E.	5	1	0	330	..	31·87	183	138
d LANCASTER (Greg Obsy.) (+A.)	The Corp'n. (N. Holden, F.R.A.S.)	8	1	0	312	40·7	31·37	179	140
d Lancaster (Lune Aqueduct)	L. M. & S. Rly. Co.	8	1	0	74	38·4	30·34	..	141
d Morecambe (Bare Lane)	M. E. Burton, Esq., F.R.Met.S.	5	1	0	15	..	31·15	184	135
d Wray (Wray House)	Baldwin Bent, Esq., C.E.	5	1	0	170	..	34·10	181	142
d Wennington (Tatham Rectory)	Rev. A. S. Roberts	5	1	3	170	40·9	30·92	..	..
<b>5.—WYRE &amp; C. 213 sq. mi.</b>									
d Weeton Reservoir†	No. 1 Fylde Water Board	5	1	0	133	36·6	28·71	184	140
d BLACKPOOL (Stanley Park)	Medical Officer of Health	5	1	0	65	33·4	28·62	177	122
d Broughton (Newsham House)	W. B. S. Smith, Esq.	5	1	0	104	38·2	31·02	181	151
d Kirkham (Elswick Lodge)	L. G. King, Esq.	5	1	4	52	35·0	27·49	166	130
d St. Michael's-on-Wyre (Fairway)	E. W. Hornby, Esq.	5	1	0	26	36·0	28·46	184	137
d Fleetwood	Engineer and Surveyor	8	1	0	27	33·4	28·43	..	..
d FLEETWOOD (Memorial Park)	The Borough Council	5	1	0	21	..	30·18	172	136
d Garstang (Barnacre Reservoir)	Fylde Water Board	5	1	0	616	45·7	36·12	188	145
d Garstang (Grizedale Reservoir)	Fylde Water Board	5	1	0	517	43·6	33·66	182	141
d Garstang (Calder Intake)	Fylde Water Board	5	1	0	632	46·6	36·71	..	..
d Garstang (Grizedale Intake)	Fylde Water Board	5	1	0	644	46·6	36·13	..	..
d Wyresdale (Abbeystead Res.)	F. Hill, Esq., C.E.	5	1	0	366	47·9	41·39	181	159
d Abbeystead Gardens	Mr. Geo. Penk	5	1	0	420	50·1	40·20	202	165
d Damas Ghyll Reservoir	F. Hill, Esq., C.E.	5	1	0	590	..	37·50	184	151
m Quernmore (Old Gauge Basin)	F. Hill, Esq., C.E.	8	1	0	963	46·1	42·56	..	..
m Quernmore (Hare Syke)	F. Hill, Esq., C.E.	5	1	0	1610	..	55·03	..	..
<b>6.—INSULAR. 4 sq. mi.</b>									

## DIVISION IX—YORKSHIRE.

WEST RIDING. (Area, 2,803 sq. mi.).

**1.—LUNE. 178 sq. mi.**

d Austwick (Town Head)	T. Gordon, Esq.	5	1	0	525	42·4	34·21	200	146
d Austwick (Beck House)	Rev. J. Turner	5	1	1	475	44·3	32·90	193	144
d High Bentham (Inglefield)	Geoffrey Holmes, Esq.	5	1	0	412	..	34·02	194	146
d Sedbergh (Brigflatts)	The Misses Wilson	5	1	0	305	53·0	43·24	192	157
d Sedbergh (The Leyes)	Rev. A. J. K. Martyn	5	0	9	400	..	44·51	195	158
d Sedbergh (Havera Bank)	A. Mountain, Esq.	5	1	0	450	56·1	43·48	199	164

† Gauge moved 1 mile South, April, 1937.

## DIVISION IX—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	Rain-fall.				
			above	above	above				
			Ground.	Sea Level.	Sea Level.				
WEST RIDING—(con.).			in.	ft. in.	ft.	in.	in.		
<b>2.—RIBBLE. 225 sq. mi.</b>									
D Colne (Lower Coppy) . . . . .	J. F. Bedford, Esq., C.E. . . . .	5	1	7	975	..	35·99	196	149
D Colne (Laneshaw Res.) . . . . .	J. F. Bedford, Esq., C.E. . . . .	5	1	9	795	..	33·85	199	148
D Barnoldswick (Rainhall Road) . . . . .	J. Hiley, Esq., B.Sc. . . . .	5	1	0	549	38·1	29·69	187	142
Barnoldswick (Greenberfield L.) . . . . .	Leeds & L'pool Canal Co. . . . .	8	1	0	488	41·5	32·27	..	..
Slaidburn (Hareden Fell) . . . . .	E. C. Oakes, Esq., C.E. . . . .	8	1	2	1300	..	49·49	..	..
D Slaidburn (Hareden Valley) . . . . .	E. C. Oakes, Esq., C.E. . . . .	8	1	2	563	68·3	49·23	221	166
D Slaidburn (Langden Brook) . . . . .	E. C. Oakes, Esq., C.E. . . . .	8	1	2	556	68·6	52·37	225	171
Slaidburn (Holdron Moss) . . . . .	E. C. Oakes, Esq., C.E. . . . .	8	1	2	1300	..	49·92	..	..
D Slaidburn (Dunsop Houses) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	450	62·9	44·37	182	162
D Slaidburn (Footholme) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	565	62·2	45·02	181	161
M Slaidburn (Middle Knoll) . . . . .	W. Pickstone, Esq., C.E. . . . .	5	1	0	1288	67·5	46·80	..	..
D Slaidburn (Brennand) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	820	68·3	47·70	179	161
D Slaidburn (Croasdale House) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	600	51·0	40·37	184	154
D Slaidburn (Croasdale Valley) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	720	..	44·97	184	167
D Slaidburn (Whitendale) . . . . .	W. Pickstone, Esq., C.E. . . . .	8	1	6	830	70·0	51·81	180	169
M Slaidburn (Cabin Hill) . . . . .	W. Pickstone, Esq., C.E. . . . .	5	1	0	1559	63·0	49·10	..	..
M Slaidburn (Baxton Fell) . . . . .	W. Pickstone, Esq., C.E. . . . .	5	1	0	1525	75·8	55·05	..	..
D Settle (Cappleside) . . . . .	Mrs. Geldard . . . . .	5	0	10	500	49·9	37·32	199	163
D Settle (Gas Works) . . . . .	J. W. Shepherd, Esq. . . . .	8	2	6	450	43·9	34·78	200	155
D Settle (Giggleswick School) . . . . .	The Headmaster . . . . .	8	1	0	575	..	32·36	202	153
Horton-in-Ribblesdale . . . . .	Nathaniel Hunt, Esq. . . . .	5	1	0	800	52·2	50·60	..	..
<b>3.—MERSEY—Irwell. 2 sq. mi.</b>									
D Oldham (Strinesdale)† . . . . .	C. J. Batley, Esq., C.E. . . . .	5	1	0	791	44·7	31·82	205	147
<b>4.—MERSEY, UPPER. 35 sq. mi.</b>									
D Greenfield (Chew Mount) . . . . .	M. T. B. Whitson, Esq., C.E. . . . .	5	1	0	1578	50·7	49·88	225	168
Greenfield (Chew Reservoir) . . . . .	M. T. B. Whitson, Esq., C.E. . . . .	5	1	0	1648	..	55·09	..	..
D Greenfield (Sewage Disp. Wks.) . . . . .	The Manager . . . . .	5	1	1	499	..	33·31	204	155
D Greenfield (Yeoman Hey) . . . . .	M. T. B. Whitson, Esq., C.E. . . . .	5	1	0	784	49·1	43·82	209	167
Greenfield (Ashway Moss) . . . . .	M. T. B. Whitson, Esq., C.E. . . . .	5	1	0	1581	..	47·95	..	..
Greenfield (Birchen Clough) . . . . .	M. T. B. Whitson, Esq., C.E. . . . .	5	1	0	1018	51·4	45·40	..	..
Greenfield (Upperwood Moor) . . . . .	M. T. B. Whitson, Esq., C.E. . . . .	5	1	0	1518	..	47·58	..	..
Saddleworth Station . . . . .	L. M. & S. Rly. Co. . . . .	5	1	0	563	..	38·36	..	..
D Standedge (Cas. Shaw Broadhead) . . . . .	C. J. Batley, Esq., C.E. . . . .	8	1	0	957	51·5	42·49	215	182
M Standedge (Redbrook Res.) . . . . .	L. M. & S. Rly. Co. . . . .	5	1	0	1150	..	41·45	..	..
D Denshaw C.E. School . . . . .	The Head Teacher . . . . .	8	1	1	870	..	39·69	198	170
D Denshaw (Ox Hey) . . . . .	C. J. Batley, Esq., C.E. . . . .	8	1	0	1031	48·9	38·44	214	171
D Denshaw (Crawshaw Hey) . . . . .	C. J. Batley, Esq., C.E. . . . .	8	1	0	956	48·5	39·32	214	171
D Denshaw (New Year's Br.) . . . . .	C. J. Batley, Esq., C.E. . . . .	8	1	0	986	..	38·44	214	171
<b>5.—TRENT—Derwent. 9 sq. mi.</b>									
D Burbage (Parsons House) . . . . .	Sheffield Corporation W.W. . . . .	8	1	0	1309	..	41·05	195	146
Burbage (Higger Lodge) . . . . .	Sheffield Corporation W.W. . . . .	5	1	0	1225	36·8	40·51	..	..
Burbage (Upper Burbage) . . . . .	Sheffield Corporation W.W. . . . .	5	1	0	1364	36·1	43·70	..	..
M Howden Dean . . . . .	No. 72 Derwent Valley Water Bd. . . . .	5	1	0	960	..	48·33	..	..
M Derwent Dale (Howden Cl'gh) No. 64A . . . . .	Derwent Valley Water Bd. . . . .	5	1	0	1010	44·4	47·03	..	..
M Derwent Dale (Sandy Lee) No. 7A . . . . .	Derwent Valley Water Bd. . . . .	5	1	0	1320	..	50·28	..	..
<b>6.—TRENT—Left Bank Tributaries. 143 sq. mi.</b>									
D Lindrick Common (Woodside) . . . . .	Mrs. M. E. Eardley . . . . .	5	1	0	250	25·5	29·17	171	114
D Austerfield P.S. . . . .	Doncaster & Tickhill Joint Water Bd. . . . .	8	1	0	32	..	27·53	171	109
d Rossington Main Colliery . . . . .	Rossington Colliery Co., Ltd. . . . .	5	1	0	22	..	29·13	..	..
D Balby (Sewage Works)‡ . . . . .	F. O. Kirby, Esq., C.E. . . . .	5	1	0	29	..	27·64	160	97
D DONCASTER (Airport) . . . . .	The Corporation . . . . .	8	1	0	30	..	29·71	173	112
<b>7.—OUSE—Don. 574 sq. mi.</b>									
Burbage (Badger Ho.) . . . . .	Sheffield Corporation W.W. . . . .	5	1	0	1138	..	40·52	..	..
D Sheffield W.W. (Redmires R.) (R) . . . . .	Sheffield Corporation W.W. . . . .	10	5	0	1110	40·3	44·37	199	151

† Station formerly in West Riding, 4. ‡ Station formerly in West Riding, 7.



## DIVISION IX—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
WEST RIDING—(con.).			in.	ft. in.	ft.	in.	in.	
7.—OUSE—Don—(con.).								
D Sheffield W.W. (Redmires Res.) . . .	Sheffield Corporation W.W.	8	4 0	1110	39·9	43·92	205	154
D Sheffield W.W. (Redmires R.) <i>new g.</i>	Sheffield Corporation W.W.	5	1 0	1110	41·3	45·00	205	153
Rivelin (Oaking Clough) . . . . .	Sheffield Corporation W.W.	8	1 0	1160	39·8	45·08	..	..
Rivelin (Oaking Clough) .. No. 2	Sheffield Corporation W.W.	5	1 0	1185	..	45·93	..	..
Rivelin (Middle Moss) . . . . .	Sheffield Corporation W.W.	5	1 0	1168	41·0	46·51	..	..
D Sheffield W.W. (Rivelin) . . . . . (+A)	Sheffield Corporation W.W.	8	1 6	564	35·2	39·11	187	145
Sheffield W.W. (Black Clough) . . .	Sheffield Corporation W.W.	5	1 0	1175	40·3	47·59	..	..
D Sheffield W.W. (Crookes) . . . . .	Sheffield Corporation W.W.	5	1 0	629	..	34·92	173	131
D Sheffield W.W. (Crookes) . . . . .	Sheffield Corporation W.W.	8	2 0	629	..	33·36	173	126
D SHEFFIELD (Weston Pk.) . . . . .	The Corporation	5	1 0	429	30·4	35·36	174	127
Loxley Valley (Crawshaw Wood) . .	Sheffield Corporation W.W.	5	1 0	1175	..	41·93	..	..
Loxley Valley (Broadcar) . . . . .	Sheffield Corporation W.W.	5	1 0	1004	44·4	47·20	..	..
Loxley V. (Oaks Fm. Damflask) . .	Sheffield Corporation W.W.	5	1 0	650	36·1	38·83	..	..
Loxley V. (Loftshaw, Strines) . . .	Sheffield Corporation W.W.	5	1 0	1011	43·2	44·24	..	..
D Loxley Valley (Bradfield Filters) . .	Sheffield Corporation W.W.	8	1 0	551	..	39·94	191	133
D Loxley V. (Dale Dike Res.) . . . .	Sheffield Corporation W.W.	8	1 0	715	41·9	43·73	212	157
Loxley Valley (Brogging Moss) . . .	Sheffield Corporation W.W.	5	1 0	1360	..	49·94	..	..
Loxley V. (Thornseat) . . . . .	Sheffield Corporation W.W.	5	1 0	1326	42·6	46·18	..	..
Loxley V. (Rocher Flat) . . . . .	Sheffield Corporation W.W.	5	1 0	1106	37·1	40·01	..	..
Loxley V. (Emlin Moor) . . . . .	Sheffield Corporation W.W.	5	1 0	998	41·3	44·78	..	..
Loxley Valley (White Lee Moor) . .	Sheffield Corporation W.W.	5	1 0	1170	..	44·02	..	..
Loxley Valley (Hobson Moss) . . .	Sheffield Corporation W.W.	5	1 0	1530	..	50·71	..	..
D Rotherham (Ulley Res.) . . . . . No. 2	Vincent Turner, Esq., C.E.	5	1 0	184	23·4	28·74	144	108
D Rotherham (Ulley Res.) . . . . . No. 3	Vincent Turner, Esq., C.E.	5	1 0	132	23·2	29·90	144	111
D Wincobank (Sewage Works) . . . . . (+A)	J. H. Edmondson, Esq.	5	1 6	110	23·0	30·50	175	109
D Rotherham (Sitwell Vale) . . . . .	G. Howard, Esq., F.R.Met.S.	5	1 0	300	26·0	30·95	157	114
D ROTHERHAM (BROOM LANE) . . . . .	L. Atkinson, Esq.	5	1 0	284	..	29·04	152	109
D Rotherham (Kimberworth Sch.) . .	Vincent Turner, Esq., C.E.	5	1 0	258	24·7	30·41	182	107
D Rotherham (Spurley Hey C. Sch.) . .	Vincent Turner, Esq., C.E.	5	1 0	130	..	29·42	151	106
D Rotherham (Aldwarke Sew. Wks.) (+A)	James H. Kershaw, Esq.	5	1 4	71	24·7	29·15	157	107
D Rotherham (Thrybergh) . . . . .	F. O. Kirby, Esq., C.E.	8	1 0	184	23·8	30·00	172	110
D Ecclesfield (Sewage Works) . . . . .	J. Gregory, Esq., C.E.	5	0 7	172	25·6	32·97	159	121
D Conisborough (Firsby Res.) . . . . .	F. O. Kirby, Esq., C.E.	8	1 4	189	26·1	32·14	171	126
§ Ewden (Middle Moss) . . . . .	Sheffield Corporation W.W.	5	1 0	1600	51·0	49·00	..	..
Ewden (Broomhead Moor) . . . . .	Sheffield Corporation W.W.	5	1 0	1370	48·6	47·03	..	..
D Ewden (Canyard Brook) . . . . .	Sheffield Corporation W.W.	5	1 0	585	..	41·08	187	142
Ewden (Candle Rush) . . . . .	Sheffield Corporation W.W.	5	1 0	1400	..	48·57	..	..
Ewden (Wightwizzle) . . . . .	Sheffield Corporation W.W.	5	1 0	860	41·5	43·07	..	..
Ewden (Broomhead Hall) . . . . .	Sheffield Corporation W.W.	5	1 0	905	42·1	40·76	..	..
D Ewden (More Hall Reservoir) . . .	Sheffield Corporation W.W.	8	1 0	408	33·9	36·27	183	124
D Ewden (Broomhead Reservoir) . .	Sheffield Corporation W.W.	8	1 0	585	35·6	41·00	192	138
D Ewden (Broomhead Res.) <i>Check</i> . .	Sheffield Corporation W.W.	5	1 0	484	..	38·73	183	130
Ewden (Margery Hill) . . . . . No. 2	Sheffield Corporation W.W.	5	1 0	1784	..	50·64	..	..
Ewden (Waldershaigh) . . . . .	Sheffield Corporation W.W.	5	1 0	875	35·3	37·74	..	..
Ewden (Brown Edge) . . . . .	Sheffield Corporation W.W.	5	1 0	1325	50·5	47·49	..	..
D Wentworth Woodhouse . . . . .	Mr. A. Third	5	0 10	360	27·2	32·55	161	124
D Mexborough . . . . .	G. Fenwick Carter, Esq., C.E.	5	1 6	77	22·4	28·14	174	99
Wortley (Service Reservoir) . . . .	W. G. Lees, Esq., C.E.	5	1 0	700	30·0	34·47	205	135
Midhope Moor (Barnside) . . . . .	W. G. Lees, Esq., C.E.	5	1 0	1000	43·4	40·87	237	166
Little Don Val. (Laund Clough) . .	Sheffield Corporation W.W.	5	1 0	1515	..	51·73	..	..
D Little Don Val. (Underbank Res.) .	Sheffield Corporation W.W.	8	1 6	604	34·6	37·02	176	137
Little Don Val. (Brockholes) . . .	Sheffield Corporation W.W.	5	1 0	902	34·0	38·66	..	..
Little Don Val. (Sheep House) . . .	Sheffield Corporation W.W.	5	1 6	945	34·2	35·93	..	..
D Langsett Moor (Midhope) . . . . .	W. G. Lees, Esq., C.E.	5	1 0	823	..	41·95	197	147
D Langsett Moor (Up. Midhope) . . .	Sheffield Corporation W.W.	8	1 6	925	41·6	38·64	217	146
§ Langsett Moor (Mickleden) . . . .	Sheffield Corporation W.W.	5	1 0	1217	48·0	47·71	..	..
Langsett Moor (Mickleden) <i>Check</i> . .	Sheffield Corporation W.W.	5	1 0	1110	..	48·39	..	..
Langsett Moor (Catclough) . . . . .	Sheffield Corporation W.W.	8	1 0	1516	47·8	47·38	..	..
§ Langsett Moor (Fiddlers Green) . .	Sheffield Corporation W.W.	8	1 6	1493	48·7	47·52	..	..
Langsett Moor (Fiddler's G.) <i>Check</i> .	Sheffield Corporation W.W.	5	1 0	1480	..	49·08	..	..

§ Turf wall round gauge

## DIVISION IX—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Aver- age Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	Rain- fall.	Days with ·01 in. or more.
			Rim above Ground.	Ground above Sea Level.					
WEST RIDING—(con.).			in.	ft. in.	ft.	in.		in.	
<b>7.—OUSE—Don—(con.).</b>									
Langsett Moor (Border Hill) . . . . .	Sheffield Corporation W.W.	5	1	0	1148	46·9		43·21	
d Langsett Moor (Swinden Lodge)(+ A)	Sheffield Corporation W.W.	8	1	0	1032	44·0		40·82	220 148
d Langsett Moor (Flouch Road) . . . . .	Sheffield Corporation W.W.	8	1	0	960	40·3		40·58	208 151
d Wath-upon-Deerne (Chapel St.) . . . . .	Dr. T. Crowley	8	1	3	188	24·8		28·77	144 101
w§Dunford Bridge (Long Grain) † . . . . .	W. G. Lees, Esq., C.E.	5	1	0	1125	..		41·54	.. ..
d§Wogden Foot (Cat Clough) . . . . .	W. G. Lees, Esq., C.E.	5	1	0	889	..		41·31	.. ..
d Low Pasture P.S. . . . .	F. O. Kirby, Esq., C.E.	5	1	0	24	..		27·61	151 102
d Doncaster (Pumping Station) . . . . .	F. O. Kirby, Esq., C.E.	5	1	0	31	..		29·63	154 114
d Bolton-on-Deerne (Goldthorpe) . . . . .	E. Washington, Esq.	5	1	6	93	24·3		29·68	155 107
w Dunford Bridge (Windleden) . . . . .	G. E. V. Boldry, Esq., C.E.	5	2	2	1100	49·3		38·53	.. ..
d Dunford Bridge Res. . . . .	G. E. V. Boldry, Esq., C.E.	5	2	0	1111	49·2		39·65	202 155
w Dunford Bridge (Dearden) . . . . .	G. E. V. Boldry, Esq., C.E.	5	1	6	1244	49·3		36·59	.. ..
w Dunford Bridge (Harden) . . . . .	G. E. V. Boldry, Esq., C.E.	5	2	0	1300	50·9		39·47	.. ..
w Dunford Bridge (Snailsden) . . . . .	G. E. V. Boldry, Esq., C.E.	5	2	0	1477	50·8		37·95	.. ..
d Darfield (Sewage Wks.) . . . . .	The Surveyor	5	1	0	83	..		28·80	161 105
d Penistone (Scout Dike Res.) . . . . .	W. G. Lees, Esq., C.E.	5	1	0	730	32·8		33·93	187 135
d Penistone (Ingbirchworth Res.) . . . . .	W. G. Lees, Esq., C.E.	5	1	0	853	38·0		31·42	185 105
d Penistone (Spicer House) . . . . .	W. G. Lees, Esq., C.E.	5	1	0	985	..		34·85	.. ..
d Penistone (Broadstone Res.) . . . . .	W. G. Lees, Esq., C.E.	5	1	0	..	36·8		34·91	196 143
d Barnsley (Jordan Hill) . . . . .	W. G. Lees, Esq., C.E.	5	1	0	460	26·2		28·57	166 106
d Doncaster (Sandall Works) . . . . .	F. O. Kirby, Esq., C.E.	5	1	0	41	..		28·44	162 99
d Bentley Colliery . . . . .	Messrs. Barber, Walker & Co., Ltd.	5	1	0	23	..		28·83	.. ..
d Cawthorne (Cannon Hall) . . . . .	J. M. Spencer Stanhope, Esq.	5	0	11	418	29·1		29·99	152 113
d Barnsley (Burntwood Hall) . . . . .	J. Dymond, Esq.	5	1	0	378	25·9		29·35	185 117
d Kirk Bramwith . . . . .	C. E. Farran, Esq., C.E.	5	2	6	22	23·2		27·28	157 95
d Goole . . . . .	Aire & Calder Navigation	5	1	0	18	22·9		26·83	166 124
<b>8.—OUSE—Aire—Calder. 361 sq. mi.</b>									
d Holmbridge (Yateholme Res.) . . . . .	H. P. Joyce, Esq.	5	1	0	1009	59·2		53·17	201 173
d Holmbridge (Yateholme Farm) . . . . .	H. P. Joyce, Esq.	5	1	0	861	56·4		51·70	201 174
d Holmbridge (Bilberry Res.) . . . . .	J. P. Beveridge, Esq., C.E.	5	1	0	970	52·4		43·05	.. ..
d Holmfirth (Holme Styas Res.) . . . . .	Holmfirth U.D.C.	5	1	0	830	45·7		39·39	.. ..
d Holmfirth (Boshaw Whams R.) . . . . .	J. P. Beveridge, Esq., C.E.	5	1	0	930	49·7		40·34	.. ..
d§Hepworth (Spring Head) . . . . .	W. G. Lees, Esq., C.E.	5	1	0	1180	..		34·85	.. ..
d Holmfirth (Snape Res.) . . . . .	Holmfirth U.D.C.	6	1	0	1065	..		37·79	234 169
d Meltham (Harden Moss) . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	1212	..		41·03	.. ..
d Wessenden Head . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	1270	..		41·94	.. ..
d Wessenden (Holly Bank Moss) . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	1280	..		44·37	.. ..
d Wessenden (Old Reservoir) . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	1270	..		43·62	.. ..
d Wessenden (Butterley Moss) . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	1110	..		40·77	.. ..
d Meltham (Brow Grains) . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	900	45·0		40·36	.. ..
d Meltham (Royd Edge) . . . . .	C. L. Brook, Esq.	8	1	0	585	48·3		40·54	.. ..
d MELTHAM (Harewood Lodge) . . . . .	C. L. Brook, Esq.	8	1	0	514	44·5		39·35	209 151
d Meltham Grange . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	850	42·9		35·73	.. ..
† Marsden Reservoir . . . . .	L. M. & S. Rly. Co.	5	1	0	657	50·5		44·17	.. ..
d Marsden (Deer Hill) . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	1149	42·8		37·87	.. ..
d Marsden (Deer Hill) new g . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	1149	45·0		35·47	.. ..
d Slaithwaite (Blackmoorfoot) . . . . .	J. P. Beveridge, Esq., C.E.	8	1	0	800	43·1		33·80	208 151
d Slaithwaite (Inglewood) . . . . .	J. Woodhead, Esq.	5	1	0	546	43·5		38·52	218 156
d HUDDERSFIELD (RAVENSKNOWLE) . . . . .	The Corpn. (Dr Woodhead)	8	0	11	325	30·1		29·10	188 130
w Huddersfield (Langley Ter.) No. 1 . . . . .	S. Morris Bower, Esq.	5	1	0	761	33·7		35·64	.. ..
d HUDDERSFIELD (OAKES) . . . . .	S. Morris Bower, Esq.	5	1	0	761	34·3		35·32	223 151
w Moss Moor (Linsgreave) . . . . .	Wakefield Corpn. W.W.	5	1	0	1264	51·2		40·99	.. ..
d Rishworth (G. Walden Edge) old g . . . . .	Wakefield Corpn. W.W.	8	1	2	1135	49·3		39·82	237 173
d Rishworth (G. Walden Edge) check . . . . .	Wakefield Corpn. W.W.	5	1	0	1135	..		39·79	237 173
w Rishworth (Long Clough) . . . . .	Wakefield Corpn. W.W.	5	1	0	1000	..		41·41	.. ..
w Rishworth (Stott Hall) . . . . .	Wakefield Corpn. W.W.	5	1	0	935	45·6		38·14	.. ..
d Rishworth Lodge . . . . .	Wakefield Corpn. W.W.	5	0	11	950	..		36·58	211 165
d Rishworth (Green Withens Res.) . . . . .	Wakefield Corpn. W.W.	5	1	0	1205	48·2		38·61	226 175
w Rishworth (Pike End) . . . . .	Wakefield Corpn. W.W.	5	1	0	1225	..		39·77	.. ..
d Rishworth (Ringstone Res.) (lower) . . . . .	Wakefield Corpn. W.W.	5	1	0	962	45·8		38·27	218 153

§ Turf wall round gauge.

† Gauge on a steep bank.

† Gauge moved 167 yds. S.E., 30th September, 1937.

## DIVISION IX—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim	Ground					
			above	above					
			Ground.	Sea Level.					
WEST RIDING—(con.).									
		in.	ft. in.	ft.	in.		in.		
8.—OUSE—Aire—Calder—(con.).									
w Soyland Moor (Greystones) . . . . .	Wakefield Corpn. W.W. . . . .	5	1 4	1192	50.6	42.44	..	..	..
d Soyland Moor (Rishworth Drain) . . . . .	C. J. Batley, Esq., C.E. . . . .	8	1 0	1290	52.9	48.41	..	..	..
w Soyland Moor (Summit) (East) . . . . .	Wakefield Corpn. W.W. . . . .	5	0 11	1218	51.0	44.20	..	..	..
d Soyland Moor (Stansfield Hey) . . . . .	Wakefield Corpn. W.W. . . . .	5	1 0	700	..	36.01	209	152	..
d Soyland Moor (Baitings) . . . . .	Wakefield Corpn. W.W. . . . .	5	1 0	943	50.6	41.81	254	176	..
d Soyland Moor (Byron Edge) . . . . .	C. J. Batley, Esq., C.E. . . . .	8	1 0	1251	48.3	39.81	..	..	..
w Soyland Moor (Manshead) . . . . .	Wakefield Corpn. W.W. . . . .	5	1 0	1225	51.2	42.71	..	..	..
d Walsden (White Holme) . . . . .	C. J. Batley, Esq., C.E. . . . .	8	1 0	1240	..	40.76	..	..	..
d Walsden (Calf Lee) . . . . .	Rochdale Corporation . . . . .	8	1 0	960	..	40.17	211	166	..
d Walsden (Warland Res.) . . . . .	Rochdale Corporation . . . . .	8	1 0	1245	48.6	40.76	210	162	..
d Walsden (Warland Drain) . . . . .	Rochdale Corporation . . . . .	8	1 0	1250	51.9	40.88	210	160	..
Walton Hall . . . . .	E. T. B. Simpson, Esq. . . . .	5	0 10	137	22.5	27.09	..	..	..
u Horbury (Addingford Hos.) . . . . .	J. H. Horsfall, Esq. . . . .	8	1 0	169	23.3	28.84	169	116	..
d Mirfield (Cote Wall) . . . . .	F. P. Mitchell, Esq. . . . .	8	1 0	200	30.2	32.38	160	128	..
d Wakefield (Sewage Works) . . . . .	J. H. Garner, Esq., B.Sc. . . . .	5	1 0	71	..	26.94	152	104	..
d WAKEFIELD (Clarence Park) . . . . .	Wakefield Corpn. W.W. . . . .	5	1 0	124	25.4	28.43	200	115	..
d Normanton (Haw Hill Park) . . . . .	The Surveyor, U.D.C. . . . .	8	1 1	136	23.3	27.94	177	111	..
w Walsden (Ramsden Hill) . . . . .	Rochdale Corporation . . . . .	5	1 0	1326	52.0	37.76	..	..	..
d Walsden (Ramsden Reservoir) . . . . .	Rochdale Corporation . . . . .	5	1 0	993	52.7	38.86	191	160	..
d Todmorden (Fielden Hospital) . . . . .	L. A. Crabtree, Esq. . . . .	5	1 0	650	..	38.40	216	162	..
d Todmorden (Lower Laith) . . . . .	D. A. Lord, Esq. . . . .	5	0 7	500	..	37.91	230	159	..
d Todmorden (Sourhall Hospital) . . . . .	L. A. Crabtree, Esq. . . . .	5	1 0	1020	53.8	39.19	232	165	..
d Halifax (Public Library) . . . . .	E. Green, Esq. . . . .	8	1 0	625	34.3	32.98	206	151	..
d Dewsbury (Mitchell Laithes Sew. Wks.) . . . . .	The Manager . . . . .	8	1 0	115	..	27.36	168	114	..
d Dewsbury (Municipal Offices) (+A) . . . . .	The Borough Engineer . . . . .	5	1 6	225	..	25.41	162	107	..
d Dewsbury (Crow Nest Park) . . . . .	Superintendent of Parks . . . . .	8	1 0	300	..	27.18	160	120	..
d Batley (Staincliffe Reservoir) . . . . .	H. P. Joyce, Esq. . . . .	5	1 0	492	24.1	27.82	174	129	..
d Ardsley (Jaw Hill Filters) . . . . .	Wakefield Corpn. W.W. . . . .	5	1 0	315	22.4	28.10	166	128	..
d Ardsley Reservoir Upper . . . . .	Wakefield Corpn. W.W. . . . .	5	1 2	395	23.9	28.06	164	125	..
d Halifax W.W. (Albert Res.) . . . . .	E. P. Brook, Esq., C.E. . . . .	5	1 0	795	35.3	33.00	206	152	..
d Halifax W.W. (Gibbet Res.) . . . . .	E. P. Brook, Esq., C.E. . . . .	5	1 0	565	34.6	33.44	190	144	..
d Halifax W.W. (Ramsden Wood) . . . . .	E. P. Brook, Esq., C.E. . . . .	5	1 0	815	38.3	38.72	197	159	..
d Hebden Bridge (Burnside) . . . . .	Mrs. R. Redman . . . . .	5	1 0	830	43.9	39.12	246	170	..
d Halifax W.W. (Castle Carr Lo.) . . . . .	E. P. Brook, Esq., C.E. . . . .	5	1 0	1060	42.6	37.96	235	178	..
w Halifax W.W. (Midgley Moor) . . . . .	E. P. Brook, Esq., C.E. . . . .	8	1 0	1350	44.3	35.34	..	..	..
w Halifax W.W. (Warley Moor) . . . . .	E. P. Brook, Esq., C.E. . . . .	8	1 0	1325	43.0	34.20	..	..	..
d Halifax W.W. (Ogden) . . . . .	E. P. Brook, Esq., C.E. . . . .	5	1 0	990	43.5	37.06	199	158	..
w Halifax W.W. (Ovenden Moor) . . . . .	E. P. Brook, Esq., C.E. . . . .	8	1 0	1375	41.8	41.05	..	..	..
w Halifax W.W. (Gorple) . . . . .	E. P. Brook, Esq., C.E. . . . .	8	1 0	1320	..	32.44	..	..	..
d Halifax W.W. (Gorple Res.) . . . . .	E. P. Brook, Esq., C.E. . . . .	5	1 0	1028	..	41.57	226	180	..
d Halifax W.W. (Widdop) . . . . .	E. P. Brook, Esq., C.E. . . . .	5	1 0	1050	46.3	35.56	210	162	..
d Halifax W.W. (Walshaw Dean L.) . . . . .	E. P. Brook, Esq., C.E. . . . .	5	1 0	1040	48.1	37.94	199	160	..
w Halifax W.W. (Walshaw Dean) . . . . .	E. P. Brook, Esq., C.E. . . . .	8	1 0	1380	44.8	37.44	..	..	..
9.—OUSE—Aire. 504 sq. mi.									
d PONTEFRAC (The King's School) . . . . .	The Headmaster . . . . .	5	1 0	255	23.3	25.46	177	103	..
d Rawcliffe (Black Drain P.S.) . . . . .	G. H. Simmons, Esq. . . . .	5	0 10	12	..	28.18	164	115	..
d Pontefract (Roall W.W.) . . . . .	W. H. Newton, Esq., C.E. . . . .	8	1 0	42	23.0	27.62	173	111	..
d Rothwell (Lemonroyd Sew. Wks.) . . . . .	Rothwell U.D.C. . . . .	5	1 0	64	..	27.46	175	116	..
d Bradford (Brayshaw Reservoir) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	982	36.5	32.08	..	..	..
d Bradford (Lister Park) . . . . .	The Corporation . . . . .	8	1 0	439	33.9	30.39	189	128	..
d Bradford (Thornton Moor Filters) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	1190	44.3	43.70	219	177	..
d Bradford (Stubden Res.) . . . . .	No. 8 W. Newlands, Esq., C.E. . . . .	5	1 0	1071	44.9	37.86	202	153	..
d Bradford (Nan Scar, Oxenhope) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	1101	47.6	38.00	..	..	..
d Bradford (Stairs Top, Oxenhope) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	1360	52.4	46.44	..	..	..
d Bradford (Leeming Reservoir) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	850	41.0	38.58	209	160	..
d Bradford (Doe Park Reservoir) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	756	..	40.46	209	154	..
d Bradford (Leeshaw Res.) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	875	47.3	40.76	206	167	..
d Bradford (Chellow Dean Res.) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	645	34.5	33.72	180	141	..
d Bradford (Chellow Heights Res.) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	848	36.6	34.82	181	145	..
d Bradford (Hewenden Res.) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1 0	677	..	37.07	195	150	..

|| Exposure unorthodox.

## DIVISION IX—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of Rim above Ground.	Ground above Sea Level.	Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
WEST RIDING—(con.).			in.	ft. in.	ft.	in.	in.		
<b>9.—OUSE—Aire—(con.).</b>									
d Bradford (Heaton Reservoir) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	531	32·6	30·10	185	137
Leeds (Wortley Reservoir) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	307	28·1	28·81	186	121
Leeds (Knostrup) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	72	24·0	27·12	153	113
Leeds (Woodhouse Moor) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	307	26·7	29·44	199	129
d Seacroft (Leeds City Hospital) . . . . .	The Medical Superintendent. . . . .	8	1	0	235	29·3	30·02	159	123
Leeds (Weetwood Res.) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	328	27·5	29·86	196	138
d Leeds (Weetwood Garth) . . . . .	Mrs. F. Gott, J.P. . . . .	5	1	0	300	27·7	30·07	..	134
d Haworth (Harbour Lodge) . . . . .	J. Noel Wood, Esq., M.C., C.E..	8	1	0	1165	52·5	43·19	204	165
d Haworth (Lr. Laithe Res.) (+A) . . . . .	J. Noel Wood, Esq., M.C., C.E..	6	1	0	772	48·1	39·27	206	152
d Oakworth (Oldfield Filters) . . . . .	J. Noel Wood, Esq., M.C., C.E..	5	1	0	1008	44·6	42·83	209	164
d Oakworth (Oldfield Filters) No. 2 . . . . .	J. Noel Wood, Esq., M.C., C.E..	5	1	0	978	..	40·43	209	161
d Oakworth (Newsholme Dean) . . . . .	J. Noel Wood, Esq., M.C., C.E..	5	1	0	575	..	36·32	193	151
d Bingley (Sewage Works) . . . . .	The Surveyor U.D.C. . . . .	5	2	2	228	34·6	31·20	185	140
d Rawdon . . . . .	Rawdon U.D.C. . . . .	5	1	0	579	29·0	26·75	..	..
d BINGLEY (ST. IVES RES. STN.) . . . . .	The Director. . . . .	8	1	0	610	..	29·84	200	135
d§Bingley (Gilstead Filters) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	572	..	33·84	192	141
d Keighley (The Knowle) . . . . .	P. Clough, Esq. . . . .	5	1	0	390	38·0	32·81	202	145
d Bingley (East Morton) . . . . .	J. Rhodes, Esq. . . . .	5	1	0	530	32·2	32·47	207	148
Bingley (Sunnydale Reservoir) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	825	33·1	30·51	..	..
d Salterforth (Barnoldswick W.W.) . . . . .	Barnoldswick U.D.C. . . . .	8	1	4	832	46·6	37·73	..	..
d Earby (Sewage Works) . . . . . (+A)	The Surveyor . . . . .	5	1	9	426	39·3	28·49	176	136
m Silsden (Gill Grange) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	883	30·8	29·66	..	..
d Silsden Reservoir . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	560	31·2	34·34	193	146
m Silsden (Cringles Res. Site) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	715	31·3	31·38	..	..
d Elslack (Stories Farm) . . . . .	Barnoldswick U.D.C. . . . .	8	0	7	675	..	31·83	199	148
d Skipton (Brougham St. School) . . . . .	The Headmaster . . . . .	5	1	2	375	..	30·95	185	144
d Skipton (Town Hall) . . . . . (+A)	K. R. Robinson, Esq. . . . .	6	1	6	367	33·5	31·46	206	152
Gargrave (Banks Hill Banknewton) . . . . .	Leeds & Liv'pool Canal Co. . . . .	8	1	0	545	35·5	30·89	..	..
Gargrave (Ray Bridge Hill) . . . . .	Leeds & Liv'pool Canal Co. . . . .	8	0	10	459	34·2	33·93	..	..
d Skipton (Embsay Moor) . . . . . (+A)	K. R. Robinson, Esq. . . . .	5	1	3	670	..	29·65	201	150
Winterburn (Long Hill) . . . . .	Leeds & Liv'pool Canal Co. . . . .	8	1	0	705	37·8	32·41	..	..
<b>10.—OUSE—Wharfe. 408 sq. mi.</b>									
d Aberford (Lotherton Hall) . . . . .	Col. R. T. T. Gascoigne, D.S.O..	5	1	0	208	24·5	29·39	159	132
Adel (Eccup, East) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	375	29·3	28·54	191	137
Harewood (Arthington) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	139	32·0	29·75	186	129
d Harewood House . . . . .	Dowager Countess of Harewood. . . . .	5	0	10	300	29·7	33·25	..	130
d Ilkley (Silverwell Cottage) . . . . .	The Engineer & Surveyor . . . . .	5	1	0	900	38·2	38·08	214	167
d ILKLEY (Spence's Garden) . . . . .	The Engineer & Surveyor . . . . .	5	1	0	315	35·1	35·85	189	143
d ASKHAM BRYAN (Exptl. Farm) . . . . .	University of Leeds . . . . .	5	1	0	90	..	27·25	167	123
Leathley (Lindley Wood S.) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	312	31·6	30·64	201	146
d Ilkley (March Gill Reservoir) . . . . .	C. F. Hodgson, Esq., C.E. . . . .	5	1	0	655	34·0	30·28	177	128
d York (Middlethorpe Hall) . . . . .	Mr. J. Fletcher . . . . .	5	1	0	48	..	28·44	184	125
d York (Chalfonts) . . . . .	Arnold S. Rowntree, Esq. . . . .	5	1	0	57	..	30·53	164	128
d York (Bishopthorpe Road) . . . . .	J. Terry & Sons Ltd. . . . .	5	1	0	54	..	27·37	167	126
d York (Cherry Hill) . . . . .	Messrs. H. Richardson & Co. . . . .	5	1	6	50	24·2	26·53	..	..
d York (Acomb Landing) . . . . .	York W.W. Co. . . . .	5	1	0	40	22·6	29·21	182	125
m Skipton (Counter Hill) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	951	30·2	28·55	..	..
d Skipton (Chelker Reservoir) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	730	32·9	28·36	193	142
Fewston (Timble Ings) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	912	35·5	40·27	204	156
Fewston (Swinsty, East) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	460	34·4	34·36	191	146
Fewston, North . . . . .	H. Shortreed, Esq. . . . .	8	0	9	525	..	35·60	199	150
Fewston (Blubberhouses) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	575	37·1	38·48	218	165
d Bolton Abbey Estate Office . . . . .	A. Downs, Esq. . . . .	5	1	2	368	36·3	32·30	190	147
d§Barden Reservoir . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	746	41·8	37·86	223	161
m Upper Barden Reservoir . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	1164	..	39·93	..	..
Thruscross (Lane Head) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	950	..	42·16	221	154
m§Burnsall (Thorpe Fell) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	1649	..	39·90	..	..
m Burnsall (Sanded Beck) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	676	41·0	35·72	..	..
d Grassington (Greenways) . . . . .	Mrs. D. Sampson . . . . .	5	1	0	650	..	39·32	..	..
d Grimwith Reservoir . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	884	43·9	37·84	224	169
m Grimwith (Trunla Hill) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	1201	..	40·65	..	..
d Oughtershaw Hall . . . . .	Miss G. J. Woodd . . . . .	5	1	6	1175	68·7	50·59	230	173

§ Turf wall round gauge.

## DIVISION IX—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-	Days	Days
			Rim	Ground	fall.		fall.	with	with
			above	above	fall.			or	or
			Ground.	Sea Level.				more.	more.
WEST RIDING—(con.).			in.	ft.	in.	ft.	in.		
<b>11.—OUSE—Nidd. 254 sq. mi.</b>									
d Wetherby (Stockeld Park) . . . . .	C. E. Johnson, Esq. . . . .	5	1	2	500	25·8	30·03	..	124
Spofforth (Sewage Works) . . . . .	L. H. Clarke, Esq., C.E. . . . .	5	1	0	184	27·0	30·38	186	129
d Poppleton . . . . .	Second Anglo-Scottish Sugar Corpn. . . . .	8	0	10	45	..	28·33	..	..
d Wetherby (Ribston Gardens) . . . . .	P. Hornby, Esq. . . . .	5	1	2	130	26·5	28·81	..	..
m Harrogate W.W. (Ling Cottage) . . . . .	A. S. West, Esq., C.E. . . . .	5	1	0	740	30·5	32·15	..	..
m Harrogate W.W. (Broad Dubb) . . . . .	A. S. West, Esq., C.E. . . . .	5	1	0	725	31·8	32·27	..	..
m Harrogate W.W. (Cobblers Cott.) . . . . .	A. S. West, Esq., C.E. . . . .	5	1	0	730	30·9	30·69	..	..
d Harrogate W.W. (Ten Acres Res.) . . . . .	A. S. West, Esq., C.E. . . . .	8	1	6	620	..	35·97	220	154
d Harrogate W.W. (Scargill Res.) . . . . .	A. S. West, Esq., C.E. . . . .	8	1	0	646	32·4	35·24	211	144
d Harrogate W.W. (Beaver Dyke R.) . . . . .	A. S. West, Esq., C.E. . . . .	8	0	11	575	31·0	34·00	207	153
m Harrogate W.W. (John o' Gaunts) . . . . .	A. S. West, Esq., C.E. . . . .	5	1	0	600	31·2	33·04	..	..
m Harrogate W.W. (Long Stoop) . . . . .	A. S. West, Esq., C.E. . . . .	5	1	0	700	31·3	30·34	..	..
m Harrogate W.W. (Knab's Moor) . . . . .	A. S. West, Esq., C.E. . . . .	5	1	0	700	30·0	30·11	..	..
d HARROGATE (Harlow Moor Obsy.) . . . . .	L. H. Clarke, Esq., C.E. . . . .	5	1	0	478	30·6	28·84	175	120
d Harrogate (Harlow Hill Res.) . . . . .	A. S. West, Esq., C.E. . . . .	8	1	0	549	..	29·86	198	136
d Harrogate (Harlow Hill Res.) <i>new g</i> . . . . .	A. S. West, Esq., C.E. . . . .	8	1	6	561	..	29·93	198	136
d Harrogate (Duchy Road) . . . . .	J. S. Farrah, Esq. . . . .	5	1	0	450	29·2	31·31	178	131
d Harrogate (Irongate Bridge Res.) . . . . .	A. S. West, Esq., C.E. . . . .	8	1	6	455	29·3	33·21	202	149
d Knaresborough (Goldsb'ro' Hall Gdns) . . . . .	Mr. R. Wilson . . . . .	5	1	0	112	25·8	27·64	177	121
d Knaresborough (Water Tower) . . . . .	A. S. West, Esq., C.E. . . . .	8	1	0	240	..	28·87	178	128
d Harrogate (Bilton Sewage Works) . . . . .	L. H. Clarke, Esq., C.E. . . . .	5	1	0	208	28·5	32·21	206	138
d Birstwith Hall . . . . .	Sir F. A. Aykroyd, Bt. . . . .	5	1	6	375	34·4	33·47	198	145
d Birstwith (Swarcliffe) . . . . .	Capt. C. S. Greenwood . . . . .	5	1	0	510	33·9	33·69	180	157
d Pateley Br. (Ravensgill Lo.) . . . . .	A. Y. Barker, Esq. . . . .	5	5	0	500	..	39·04	207	156
d Ramsgill (Holme Ho. Gouthwaite) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	464	39·9	39·10	..	..
d Ramsgill (Raygill House) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	925	46·7	40·81	188	168
d Ramsgill . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	450	42·1	39·77	177	151
d Middlesmoor (Stean Moor) . . . . .	Sir F. A. Aykroyd, Bt. . . . .	5	1	6	1000	49·6	37·93	203	168
m Nidderdale (East Gill Head) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	1710	57·6	49·21	..	..
m Nidderdale (Rain Stang) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	1470	47·4	41·29	..	..
d Nidderdale (New Houses) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	755	45·8	42·54	194	166
d Nidderdale (West Houses) . . . . .	W. Newlands, Esq., C.E. . . . .	5	1	0	1165	52·5	50·21	238	182
<b>12.—OUSE—Ure. 110 sq. mi.</b>									
d Burton Leonard . . . . .	B. Coore, Esq. . . . .	5	1	0	290	..	26·00	170	118
d Dallow Moor (Harper Hill) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	819	..	37·06	183	164
d Ripon (Studley Royal Gdns.) . . . . .	F. M. Sutherland, Esq. . . . .	5	1	6	330	29·1	34·51	..	..
d Ripon (St. Olave's School) . . . . .	The Headmaster . . . . .	5	1	2	150	..	29·67	196	139
d Ripon (The Red House) . . . . .	F. D. Wise, Esq., C.E. . . . .	5	1	0	120	27·2	31·10	173	134
d Kirby Malzeard (Drovers' Inn) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	576	36·0	35·41	197	141
d Kirby Malzeard (Hawsett) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	820	37·1	36·55	179	144
d Kirby Malzeard (Hambleton Hill) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	1108	39·7	41·03	..	..
d Kirby Malzeard (Arunds) . . . . .	F. Scrivener, Esq. . . . .	5	1	0	450	..	34·10	..	..
d Kirby Malzeard (Bagwith Brae) . . . . .	H. Shortreed, Esq. . . . .	5	0	9	703	32·9	37·78	214	151
d Kirby M. (Stone & Ears Wham) . . . . .	H. Shortreed, Esq. . . . .	8	0	9	1118	39·7	44·49	..	..
<b>EAST RIDING. (Area, 1,176 sq. mi.).</b>									
<b>1.—OUSE—Left Bank Tributaries. 82 sq. mi.</b>									
d York (Heslington) . . . . .	Hon. L. de Yarburgh-Bateson . . . . .	8	0	8	35	25·3	30·86	181	128
d York (Dunnington Hall) . . . . .	Miss E. C. Hildyard . . . . .	8	1	2	110	24·6	30·44	195	147
<b>2.—OUSE—Derwent. 248 sq. mi.</b>									
d Birdsall Gardens . . . . .	Mr. J. Anderson . . . . .	5	1	2	308	29·2	34·98	181	126
d Westow Vicarage . . . . .	Rev. G. T. W. Purchas . . . . .	5	1	6	190	25·8	27·81	178	120
d Rillington (Scampston Hall) . . . . .	W. H. St. Quintin, Esq. . . . .	5	1	6	102	27·1	32·44	196	139
d Ganton (Golf Club) . . . . .	The Secretary . . . . .	5	1	2	100	..	32·62	193	130
d Ganton (Ganton Hall) . . . . .	H. Wrigley, Esq. . . . .	5	1	0	250	27·5	34·14	193	136

## DIVISION IX—YORKSHIRE—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam	Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
EAST RIDING—(con.).		in.	ft. in.	ft.	in.	in.		
3.—HUMBER—Left Bank Tributaries. 675 sq. mi.								
D SPURN HEAD (Lighthouse) <i>new g.</i>	Lightkeeper (M.O.)	8	1 0	29	24·0	29·07	191	139
d Patrington (Rose Cottage)	Miss S. A. Kirman, for M.O.	5	1 3	46	23·3	28·92	176	128
d HULL (Pearson Park)	The Superintendent	5	0 10	8	25·4	29·57	(184)	123
d Hull (Springhead)	T. H. Jones, Esq., C.E.	5	1 0	16	25·5	30·23	175	122
d Cottingham (Dunswell P.S.)	T. H. Jones, Esq., C.E.	5	1 0	6	..	29·80	192	128
d Holme-on-Spalding Moor	C. J. Pybus, Esq.	8	1 0	30	25·9	28·67	190	139
d Beverley (E. Riding Mental Hosp.)	Medical Superintendent	5	1 0	175	26·5	32·58	178	129
d Beverley (New Walk)	F. J. Affleck, Esq.	5	3 0	38	26·9	33·59	177	126
d Beverley (Gas Works)	The Engineer	5	1 0	21	..	32·80	188	128
d Beverley (Hull Bridge)	F. J. Affleck, Esq.	5	2 6	11	24·9	32·03	..	136
d Rise Park	R. Hollis, Esq.	8	1 0	65	..	33·51	179	128
d Market Weighton (Dalton Holme)	J. P. Jobling, Esq.	8	6 0	120	27·3	34·30	204	148
d Brandesburton Hall	The Matron	5	1 0	27	..	34·28	208	139
d Brandesburton (Hempholm Lk.)	F. J. Affleck, Esq.	5	2 7	11	24·6	31·89	..	136
d Driffild (Council School)	The Headmaster	5	1 9	69	27·2	37·32?	231	154
d Lowthorpe (The Elms)	F. K. Hawes, Esq.	5	1 0	63	26·5	28·80	192	126
4.—EAST COAST STREAMS. 171 sq. mi.								
D WITHERNSEA (Municipal Gdns.)	The Surveyor	5	1 0	31	..	30·62	182	132
d Bridlington (Corpn. Nurseries)	Parks Superintendent	5	1 0	60	25·6	37·07	222	147
d BRIDLINGTON (School)	The Headmaster	5	1 0	76	..	32·62	189	131
M Ganton (Willerby Wold)	Major W. F. Wormald	5	1 2	565	..	35·08	..	..
d Filey (Muston Road)	J. R. Wiseman, Esq.	8	2 0	150	24·8	(31·95)	..	(128)
NORTH RIDING. (Area, 2,155 sq. mi.).								
1.—OUSE—Ure. 273 sq. mi.								
Masham Moor (Arnagill Beck, W.)	A. S. West, Esq., C.E.	5	1 0	1210	..	44·98	..	..
Masham Moor (Arnagill Beck, E.)	A. S. West, Esq., C.E.	5	1 0	1150	..	41·58	..	..
Masham Moor (Grey Ridge)	A. S. West, Esq., C.E.	5	1 0	1330	..	47·48	..	..
Masham Moor (Low Ash Head)	A. S. West, Esq., C.E.	5	1 0	845	..	42·19	..	..
Masham Moor (Agill Head)	A. S. West, Esq., C.E.	5	1 0	1380	..	42·04	..	..
D West Tanfield Rectory	Mr. H. H. Milman	5	1 0	150	28·7	32·27	189	132
D Masham Moor (Roundhill Res.)	A. S. West, Esq., C.E.	8	1 0	743	37·6	41·61	245	157
D Masham Moor (Somerside)	H. Shortreed, Esq.	5	0 9	928	38·8	42·51	222	164
Masham Moor (High Sour Mire)	H. Shortreed, Esq.	5	0 9	884	..	37·72	..	..
Masham Moor (Leighton Res.)	H. Shortreed, Esq.	5	0 9	634	35·9	39·45	198	159
Masham Moor (Towler Hill)	H. Shortreed, Esq.	8	0 9	820	36·7	38·65	204	157
Masham Moor (Breary Bank)	H. Shortreed, Esq.	5	0 9	600	36·8	38·32	208	159
Masham Moor (Healey Pasture)	H. Shortreed, Esq.	5	0 9	620	36·1	37·21	206	160
Masham Moor (Low Houses)	H. Shortreed, Esq.	5	0 9	693	37·9	41·53	259	175
d Clifton Castle Gardens	Lady Cowell	5	0 10	380	29·9	32·18	(206)	(142)
D Middleham (Castle Hill)	C. T. Dixon-Johnson, Esq.	5	1 0	470	31·7	32·41	187	148
D West Burton (Flanders Hall)	G. T. Whitehead, Esq.	5	2 0	450	..	34·15	209	155
D West Witton (Ivy House)	J. B. Espiner, Esq.	5	1 0	605	34·1	36·12	201	152
D Leyburn (Spennithorne)	F. M. Curtis, Esq., F.R.Met.S.	5	1 0	358	..	32·64	206	138
D Leyburn (Bolton Hall)	The Head Gardener	5	1 0	420	32·6	34·56	197	145
D Leyburn (Overdale)	A. Rowntree, Esq.	5	1 0	550	..	33·19	183	141
D Askrigg (Yorebridge Gram. Sch.)	F. E. Chevins, Esq.	5	1 0	670	..	33·96	198	168
d Hawes Junction (Moorland Cottage)	W. Garnett, Esq.	5	1 6	1125	..	(52·17)	..	..
2.—OUSE—Swale. 569 sq. mi.								
D Dalton Parsonage	Rev. G. H. Chilman	5	1 0	79	23·0	25·85	178	133
d Coxwold (The Old Hall)	H. Geipel, Esq.	4	1 6	260	26·1	29·29	..	137
D Thirsk (Sowerby)	Mrs. M. Brown	5	1 0	110	24·1	27·74	196	130
D Thirsk (South Villa)	B. Foggitt, Esq.	5	1 0	115	24·7	26·50	183	124
M Felixkirk (Thirby)	A. J. Walker, Esq.	5	1 0	338	27·1	30·57	..	..
D Felixkirk (Mount St. John) . . (+A)	A. J. Walker, Esq.	5	1 0	540	..	29·86	193	137
D Felixkirk (Mount St. John) . . No. 1	A. J. Walker, Esq.	5	1 0	540	26·5	29·65	192	137
D Bedale (Snape School)	The Headmaster	5	1 0	145	..	31·42	186	128
D Boltby (Ravensthorpe Manor)	F. E. Walker, Esq.	5	1 7	661	27·4	31·85	202	135
M Boltbv. East	A. J. Walker, Esq.	5	1 0	459	26·2	33·82	..	..

## DIVISION IX—YORKSHIRE—(con.).

STATIONS	AUTHORITIES.	Diam.	Rain-gauge		Average	1937.		
			Rim	Height of		Rain-	Days	Days
			above	Ground	fall.	fall.	with	with
			Ground.	above	Ground.		·01 in.	·04 in.
			Sea Level.	Sea Level.	Sea Level.		or	or
							more.	more.
NORTH RIDING—(con.).			in.	ft. in.	ft.	in.	in.	
2.—OUSE—Swale—(con.).								
M Bolthby (High Paradise).....	A. J. Walker, Esq. ....	5	1 3	1144	32·8	34·90	..	..
D Bedale (The Hermitage) .....	C. Clarke, Esq., F.S.I. ....	5	0 10	465	26·3	27·81	152	127
D Maunby Hall .....	Major A. Hill-Walker, V.C. .	5	1 0	90	23·9	27·65	151	133
D Scruton Hall .....	A. Coore, Esq. ....	5	1 6	100	23·8	25·54	180	123
M Swaledale (Gunnorside Lodge) ..	Rt. Hon. Lord Rochdale .	5	1 0	900	47·8	40·06	..	..
D Northallerton (Brompton) .....	J. P. Yeoman, Esq. ....	5	1 0	150	23·7	26·31	(182)	(124)
Osmotherly (Oakdale W.W.) .....	Northallerton U.D.C. ....	5	1 0	600	..	32·95	..	..
D CATERICK (Aerodrome)..... (+A)	Meteorological Officer ....	8	1 0	175	..	25·64	180	121
D East Harlsey (Harlsey Hall) .....	Mrs. Constantine .....	5	1 0	370	..	29·37	..	125
D Reeth (Arkengarthdale) .....	Samuel Gott, Esq. ....	5	1 0	940	41·0	38·79	187	169
W Middleton Tyas .....	Mrs. Baker-Baker .....	5	0 10	380	25·7	27·34	..	..
3.—OUSE—Left Bank Tributaries. 153 sq. mi.								
D YORK (MUSEUM).....	Yorks. Phil. Soc. (Dr. W. L. Collinge)	5	1 0	57	24·3	28·46	192	124
D Stockton-on-Forest (Stockton Hall)	Mrs. Lloyd .....	5	1 1	30	21·5	24·21	..	107
Haxby (Moorlands) .....	E. G. Tew, Esq. ....	6	1 6	59	24·1	28·41	..	106
4.—OUSE—Derwent. 509 sq. mi.								
D Welburn .....	R. Child, Esq.....	5	1 0	200	26·1	32·16	210	142
D Malton (Broughton Road) .....	C. C. Laverack, Esq. ....	5	1 0	161	25·5	30·33	174	131
D Hovingham Hall .....	Capt. Sir W. A. Worsley, Bt..	5	0 9	119	29·0	33·51	186	148
D AMPLEFORTH Abbey .....	Rev. J. B. Boyan, O.S.B. .	5	1 0	313	..	32·33	187	138
D Oswaldkirk (Leyesthorpe Hall) ..	Major G. B. Foster .....	5	1 0	231	..	30·62	..	131
D Nunnington Hall Gdns. ....	The Head Gardener .....	5	1 0	110	..	29·97	..	124
D Wykeham (Gallows Hill) .....	Capt. G. A. Maxwell .....	5	1 4	150	..	36·99	183	150
D Helmsley (Boys' School).....	E. W. Williams, Esq.....	5	1 0	225	..	33·37	236	157
D Pickering (Houndgate) .....	Dr. J. L. Kirk .....	5	3 0	90	26·8	31·03	192	147
D Seamer (Irton Pump. Station) ..	H. V. Overfield, Esq., C.E. .	8	1 0	94	28·7	37·58	205	143
D Scarborough (Osgodby) .....	H. V. Overfield, Esq., C.E. .	8	1 0	166	26·1	37·22	205	146
D East Ayton (Derwent House) ..	A. H. Robinson, Esq. ....	5	1 4	110	27·0	37·48	198	146
D Kirkby Moorside (Ravenswyke) ..	Capt. V. H. Holt, M.C., J.P. .	5	1 0	270	27·2	30·51	167	137
D Thornton Dale (High Dalby Ho.) ..	J. A. Coulson, Esq. ....	5	1 0	325	..	33·55	170	131
D Farndale (The Vicarage) .....	W. J. E. Binnie, Esq., M.A., C.E.	8	1 0	475	..	42·33	216	162
5.—ESK & C. 278 sq. mi.								
D SCARBOROUGH .....	Medical Officer of Health ...	5	1 1	118	25·8	33·27	185	133
D Scarborough (Scalby) .....	Capt. Sir W. H. L. Wordsworth	5	1 0	210	..	37·91	193	147
D Egton Bridge (Bridgeholme) .....	Lt.-Col. R. Astley Smith ...	5	1 0	130	33·3	39·59	180	151
D Glaisdale (The Gables Gardens) ..	Mr. G. Horton .....	5	0 9	400	35·6	39·61	173	149
D Sleights (The Hall) .....	T. B. Cannell, Esq. ....	5	1 0	275	..	45·59	..	143
D Danby (The School House) .....	P. M. Horsfall, Esq. ....	5	1 0	220	30·7	42·00	179	146
D CASTLETON .....	J. W. Lynas, Esq. ....	5	1 0	500	35·2	41·02	201	162
D Danby Lodge .....	Miss M. H. Punch .....	5	1 0	450	..	41·44	208	162
D Whitby (Park Hall, Aislaby) .....	The Head Gardener .....	5	1 0	500	35·6	44·04	173	158
D WHITBY (Pannett Park) .....	Rev. J. H. Richardson .....	5	1 0	500	30·7	39·44	198	145
D Whitby (Westthorpe) .....	The Park Superintendent ..	8	1 0	148	..	37·83	184	136
D Whitby (Mulgrave Castle) .....	Rev. M. A. C. Horsfall .....	6	1 6	150	..	35·91	186	145
D Whitby (Guisborough) .....	The Head Gardener .....	5	1 0	410	29·1	39·87	198	146
D Guisborough (Lockwood Res.) .....	Cleveland Water Co. ....	8	1 0	632	33·0	37·60	221	156
D Guisborough (Waterworks) .....	Guisborough Water Co., Ltd.	5	1 0	600	..	34·75	185	140
D Saltburn (Skelton Castle) .....	Col. W. H. A. Wharton ....	5	0 9	272	28·1	31·83	224	159
6.—TEES. 373 sq. mi.								
D Ingleby Manor .....	Lord DeL'Isle & Dudley ...	5	1 0	460	33·9	36·21	203	142
D Kildale Hall .....	The late Major R. B. Turton. .	5	1 2	600	35·5	40·65	217	153
D Crathorne Hall Gardens .....	J. L. Dugdale, Esq. ....	5	1 3	185	25·0	26·04	179	134
D Barnham Park .....	Sir F. Millbank, Bart. ....	8	1 0	750	32·6	36·99	226	154
D Yarn (Worsall Hall) .....	Major H. K. D. Evans .....	5	1 0	60	..	25·63	..	133
D Nunthorpe (The Box) .....	G. D. Cochrane, Esq. ....	5	1 3	287	25·2	28·04	170	130
D Marton-in-Cleveland (Gartheen) ..	G. R. Collinson, Esq., C.E. .	5	1 0	160	23·5	25·68	193	126
D Middlesbrough (Albert Park) .....	R. Sutcliffe, Esq. ....	5	1 0	30	23·7	24·30	172	122

## DIVISION IX—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average	1937.		
			Height of	Ground	Rain-	Rain-	Days	Days
			Rim	above	fall.	fall.	with	with
			above	Sea Level.			or	or
			Ground.				more.	more.
NORTH RIDING—(con.).						in.		
6.—TEES—(con.).								
m Baldersdale (Aygill) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	1250	45.0	41.60	..	..
d Lartington Filters .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	725	30.2	31.87	196	145
m Baldersdale (Blackton Res.) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	937	40.5	37.10	..	..
m Baldersdale (Balderhead) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	1320	45.7	40.70	..	..
d Baldersdale (Hury R.) <i>old g site</i> .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	866	36.0	30.61	204	156
d Baldersdale (Hury R.) <i>new g site</i> .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	862	37.3	31.50	204	157
m Lunedale (Dow Crag) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	1720	56.0	49.20	..	..
m Lunedale (Lunehead) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	1450	55.6	47.50	..	..
m Lunedale (Selset) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	924	40.8	32.80	..	..
d Lunedale (Grassholme Res.) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	936	39.7	33.71	203	161
m Lunedale (Keekham) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	1660	59.5	52.90	..	..
m Lunedale (Hargill) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	1320	53.4	44.60	..	..

## DIVISION X—NORTHERN COUNTIES.

DURHAM. (Area, 1,011 sq. mi.).

## 1.—TEES &amp; C. 396 sq. mi.

d Darlington (South Park) .....	T. J. Morrison, Esq. ....	5	1 0	150	27.1	26.88	208	124
d Darlington (Broken Scar) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	158	26.2	26.79	191	130
d Darlington (Fighting Cocks Res.) .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	150	25.2	25.76	174	137
d Egglecliffe .....	G. C. Jones, Esq. ....	8	1 2	100	24.0	24.08	184	123
d Whorlton Vicarage .....	Rev. C. C. Lambert .....	5	1 0	400	25.7	(32.52)	(185)	(142)
d Barnard Castle (Bowes Museum) .....	S. E. Harrison, Esq. ....	6	1 0	500	30.4	32.36	218	146
d Barnard Castle (County School) .....	The Bursar .....	5	1 6	540	29.1	30.90	201	137
d Long Newton Reservoir .....	G. R. Collinson, Esq., C.E. . . . .	5	1 0	184	25.5	25.46	189	140
d Stockton-on-Tees (Hartburn) .....	Col. H. E. Kitching .....	5	1 0	80	24.4	27.05	202	140
d Stockton-on-Tees (Ropner Park) .....	Park Curator .....	5	0 10	61	22.9	23.12	..	..
d Stockton-on-Tees (Billingham) .....	I.C.I. (Fert. & Syn. Prod.) Ltd. . . . .	5	1 6	35	23.3	22.73	176	124
d Billingham-on-Tees .....	(+A) The Engineer & Surveyor .. .	8	1 0	58	..	22.85	176	125
d Staindrop (Raby Castle) .....	Lord Barnard .....	5	1 0	450	27.6	33.30	202	148
d Stillington Park .....	Messrs. Dorman, Long & Co., Ltd. . . . .	5	1 0	140	27.1	25.79	..	..
d Eggleston (Wood Hill) .....	E. A. Smith, Esq. ....	5	1 6	1200	..	(32.81)	(205)	(148)
d Middleton-in-Teesdale School .....	The Headmaster .....	5	1 0	740	35.9	37.00	..	..
d Middleton-in-Teesdale (Newbiggin) .....	R. Coggins, Esq. ....	5	1 0	900	40.8	38.08	215	159
d Hurworth Burn (Crookfoot Res.) .....	J. R. Bradshaw, Esq. ....	10	1 6	293	25.4	24.48	205	128
d West Hartlepool (Waterworks) .....	J. R. Bradshaw, Esq. ....	10	1 0	35	24.7	24.66	220	133
d Hurworth Burn Reservoir .....	J. R. Bradshaw, Esq. ....	10	1 0	357	26.5	27.77	208	133
d Hartlepool (Hart Reservoir) .....	J. R. Bradshaw, Esq. ....	10	1 0	172	..	22.92	189	123
d Shotton (New Winning P.S.) .....	A. B. E. Blackburn, Esq., C.E. . . . .	8	1 0	402	29.4	30.66	212	140
d Easington (Mill Hill Res.) .....	A. B. E. Blackburn, Esq., C.E. . . . .	8	1 0	521	..	30.09	222	147
d Seaham (Dalton Pumping Sta.) .....	A. B. E. Blackburn, Esq., C.E. . . . .	8	1 0	345	27.0	29.23	212	138

## 2.—WEAR. 464 sq. mi.

d Wolsingham (Shull) .....	Mrs. W. A. Mounsey .....	5	1 0	600	..	31.58	201	151
d Spennymoor (T. St. Charles' School) .....	C. K. Hanratty, Esq. ....	5	1 0	344	..	31.41	..	135
m Burnhope (Grass Meres) .....	H. Robinson, Esq., C.E. . . . .	5	1 3	1850	59.1	47.44	..	..
m Burnhope (Lodgegill Mine) .....	H. Robinson, Esq., C.E. . . . .	5	1 3	1950	61.4	50.60	..	..
d Burnhope Bridge .....	H. Robinson, Esq., C.E. . . . .	8	1 0	1160	..	45.43	234	185
m Cowshill (Wellheads Hush) .....	H. Robinson, Esq., C.E. . . . .	5	1 6	1690	52.7	45.85	..	..
d Durham (Houghall Hort. Sta.) .....	Durham County Council .....	5	1 0	160	27.9	32.39	..	132
d DURHAM .....	(+A) Univ. Obsy. (F. Sargent) .. .	8	1 0	336	24.6	31.16	197	139
d Weardale W.W. (Tunstall Res.) .....	H. Robinson, Esq., C.E. . . . .	8	1 2	724	32.4	32.08	197	151
d USHAW (COLLEGE) .....	The Headmaster .....	5	1 0	594	28.2	34.82	222	150
m Weardale W.W. (Waskerley 6) .....	H. Robinson, Esq., C.E. . . . .	8	1 0	1229	..	36.44	..	..
m Weardale W.W. (Waskerley 3) .....	H. Robinson, Esq., C.E. . . . .	8	1 0	1433	..	37.56	..	..
d Weardale W.W. (Waskerley) .....	H. Robinson, Esq., C.E. . . . .	8	1 0	1179	33.1	34.64	213	176



## DIVISION X—NORTHERN COUNTIES—(con.).

		Rain-gauge					1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
			Rim above Ground.	Ground above Sea Level.					
DURHAM—(con.).		in.	ft.	in.	ft.	in.	in.		
2.—WEAR—(con.).									
M Weardale W.W. (Waskerley 1)	H. Robinson, Esq., C.E.	8	1	0	1317	..	36·76	..	
D Consett (Crookhall)	Mrs. J. Shackleton	5	1	0	642	..	33·69	197 164	
D Ryhope Pumping Station	A. B. E. Blackburn, Esq., C.E.	8	1	1	228	25·4	31·03	201 141	
D Pelton Council School	The Headmaster	5	1	0	240	..	30·48	222 147	
D Washington (Glebe Sen. School)	A. Robson, Esq.	5	1	2	160	..	31·80	..	
D SUNDERLAND (Hendon Gas Works)	Sunderland Gas Co.	5	1	0	70	..	31·48	201 131	
D Sunderland (W.Hendon H.) No. 5.	Mrs. W. A. Mounsey	5	1	0	130	25·6	33·35	208 147	
D Sunderland (Mowbray Pk.)	(+A) Medical Officer of Health	5	1	0	105	25·6	30·98	187 135	
3.—TYNE, LOWER. 151 sq. mi.									
D Weardale W.W. (Hisehope Res.)	H. Robinson, Esq., C.E.	5	1	0	1450	..	43·09	213 169	
D Weardale W.W. (Smiddy Shaw)	H. Robinson, Esq., C.E.	8	1	3	1128	34·1	40·05	223 172	
D Consett Park Farm	T. Hutton, Esq., C.E.	8	1	0	630	..	35·31	201 163	
D Rowlands Gill (CHOPWELLWOOD)	Forestry Commission	8	1	0	446	28·7	31·85	202 157	
D Sunderland (Cleadon Pump. Stn.)	A. B. E. Blackburn, Esq., C.E.	8	1	0	216	24·4	31·55	192 130	
D South Shields (Bent's Park)	Dr. W. Campbell Lyons	5	1	0	36	24·2	33·58	210 153	
D South Shields (South Pier Wks.)	R. F. Hindmarsh, Esq., C.E.	5	1	0	17	..	29·26	193 128	
NORTHUMBERLAND. (Area, 2,015 sq. mi.).									
1.—EDEN. 20 sq. mi.									
2.—SOUTH TYNE. 232 sq. mi.									
D Haydon Bridge (Shaftoe Trust Sch.)	The Headmaster	5	0	8	240	..	33·34	204 140	
3.—TYNE, LOWER. 227 sq. mi.									
D Corbridge (Howden Dene)	T. D. Straker-Smith, Esq.	5	1	0	200	27·3	30·63	209 151	
D Newcastle (Leazes Park)	W. J. Steele, Esq., C.E.	5	1	0	255	26·4	34·55	181 153	
D Newcastle (Armstrong College)	University of Durham	5	1	0	183	..	33·92	186 153	
D Newcastle (Deaf & Dumb Inst.)	The Superintendent	5	1	8	201	24·7	30·80	193 136	
D Wallsend (Carville School)	E. L. Strong, Esq.	5	1	3	100	..	33·07	..	
D Tynemouth (Tyne Pier Works)	R. F. Hindmarsh, Esq., C.E.	5	1	0	54	25·1	29·63	184 134	
D TYNEMOUTH (C.G. Sta.) new g.	Chief Officer (M.O.)	8	1	0	108	24·5	31·89	193 134	
D Whittle Dene Filters (N'cas. W.W.)	A. Hardcastle, Esq., C.E.	5	1	1	353	26·6	29·24	223 158	
D Whittle Dene Res. (N'cas. W.W.)	A. Hardcastle, Esq., C.E.	5	0	6	380	25·3	29·72	223 152	
4.—NORTH TYNE. 433 sq. mi.									
D Ryal Cottage (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	10	0	9	463	29·1	30·27	..	
D Hallington Vill. (N'castle W.W.)	A. Hardcastle, Esq., C.E.	5	1	0	467	29·9	32·63	..	
D Hallington Res. (N'castle W.W.)	A. Hardcastle, Esq., C.E.	5	1	0	470	29·3	30·70	208 152	
D Hallington (Fawcett) (N'cas. W.W.)	A. Hardcastle, Esq., C.E.	5	1	2	537	28·2	32·52	..	
D Hallington (Cheviott) (N'cas. W.W.)	A. Hardcastle, Esq., C.E.	5	1	2	576	27·8	32·92	..	
D Camphill (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	5	1	0	650	29·4	33·08	..	
D Colt Crag Res. (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	5	1	0	654	29·3	32·73	222 160	
D Green Crag (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	5	1	0	900	30·4	34·34	..	
D BELLINGHAM (Highgreen)	Sir C. Morrison-Bell, Bt.	5	1	0	849	35·4	35·83	228 160	
D Countess Crag	A. Hardcastle, Esq., C.E.	5	1	0	1600	..	49·57	..	
D Redewater (Catcleugh)	A. Hardcastle, Esq., C.E.	5	1	0	819	40·2	45·44	249 181	
5.—COQUET & C. 840 sq. mi.									
D Whittington (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	8	0	9	528	28·1	30·83	..	
D Burnside (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	5	0	9	419	27·2	29·98	..	
D Kirkwhelpington	J. R. Wardle, Esq.	5	1	3	581	..	30·25	190 140	
D Morpeth (High Stanners)	R. Matheson, Esq., Jr.	8	1	0	90	28·0	34·20	197 142	
D Ashington (Bothal School)	J. Gray, Esq.	5	8	0	110	25·3	31·89	189 135	
D Morpeth (COCKLE PARK)	Northumberland Co. Council	8	1	0	325	29·3	35·20	221 153	
D Font Res. (Tynemouth W.W.)	J. W. McKerrow, Esq.	10	1	2	620	31·1	34·97	222 169	
D Acklington (Broomhill Colliery)	A. M. Morison, Esq.	5	1	4	92	24·9	40·58?	.. 143	
D Rothbury (Well Close)†	Miss J. L. Livingston	5	1	0	350	..	36·44	183 150	
D Amble	Amble U.D.C.	5	1	0	12	..	29·13	180 138	

†Station formerly called Rothbury (Waterleap). Gauge moved  $\frac{1}{2}$  mile. E. on 8.12.37.

## DIVISION X—NORTHERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.				
			in.	ft. in.	ft.	in.	in.		
NORTHUMBERLAND—(con.).									
5.—COQUET & C.—(con.).									
D Callaly Castle Gardens	E. J. Farmer, Esq.	5	1	0	300	..	36·14	205	151
D Howick Hall Gardens	The Rt. Hon. Earl Grey	8	1	0	110	28·2	35·07	210	154
D Doxford Hall	Rt. Hon. Walter Runciman, P.C.	5	1	0	150	..	36·37	206	152
D Chathill (Preston Tower)	G. G. Baker Cresswell, Esq.	8	1	0	140	28·3	35·58	186	150
D Belford (Newlands)	C. H. Sanderson, Esq.	5	4	8	160	..	29·99	205	151
6.—TWEED. 262 sq. mi.									
D Wooperton	Mrs. Burdon	6	1	6	..	30·0	33·39	163	144
D Ilderton (Lilburn Tower Gdns.)	Mr. W. Lovett	5	1	0	250	30·4	34·54	210	141
D Wooler (Victoria House)	Miss E. M. Dodds	5	1	0	176	26·8	35·33	..	..
Mindrum (Thornington House)	Leonard Briggs, Esq.	5	..	..	..	28·6	36·99	..	..
D BERWICK-ON-TWEED (Ramparts)	Borough Surveyor	5	1	0	76	23·4	25·94	187	127
7.—INSULAR. 1 sq. mi.									
CUMBERLAND. (Area, 1,516 sq. mi.).									
1.—EDEN & SOLWAY. 887 sq. mi.									
D Ullswater (Hallsteads)	F. A. Carr, Esq.	5	1	0	497	54·7	44·28	199	162
D Matterdale Council Sch.	The Headmaster	5	1	2	1000	..	55·93	187	161
D Penrith (Hutton John)	F. Huddleston, Esq., C.E.	5	1	0	688	45·1	38·43	216	152
D Penrith (Laurel Bank)	A. B. Sinclair, Esq.	5	1	0	480	36·4	28·53	192	129
D Penrith (Newton Rigg)	Cumberland County Council	8	1	0	560	36·4	29·52	208	123
D Uldale (Chapel House Res.)	J. R. Watters, Esq.	8	1	0	620	46·2	39·85	193	155
D Penrith (Nunwick Hall)	Lt.-Col. C. H. F. Thompson	5	2	0	258	31·8	26·77	181	142
D Troutbeck (Wellbank)	Miss R. A. S. Streatfeild	5	1	0	800	..	57·50	211	174
D Caldbeck (Friar Row)	Dr. Mabel Barker	5	1	0	520	..	38·22	211	165
M Allonby	W. H. Williamson, Esq., J.P.	5	1	0	25	..	27·13	..	..
D Wigton (Brookfield)	David W. Reed, Esq., B.Sc.	5	1	0	124	36·7	29·14	187	143
D Wreay Vicarage	Rev. Canon A. R. Hall	5	1	0	310	31·5	26·18	205	133
D Silloth	Miss A. P. Farries	5	1	0	27	..	29·42	169	141
D Geltsdale	P. Dalton, Esq., C.E.	5	1	2	778	36·8	33·41	222	159
D Carlisle (Spital Cemetery)	The Superintendent	8	1	0	114	31·8	26·47	195	135
Carlisle (Denton Holme)	W. Eggleston, Esq., J.P.	5	2	0	57	30·1	24·98	..	..
D Carlisle (Rose Hill)	H. Lonsdale, Esq.	8	1	0	105	..	26·60	191	128
D Carlisle (Scaleby Hall)	Lady Allison	5	1	0	111	33·7	27·39	189	141
D Bewcastle (Ashycroft)	Border R.D.C.	5	1	0	750	..	36·01	199	160
2.—DERWENT. 257 sq. mi.									
M Sprinkling Tarn	F. Bainbridge, Esq., for M.O.	5	1	6	1985	..	(129·80)	..	..
M Styhead Tarn	F. Bainbridge, Esq., for M.O.	5	1	0	1472	..	120·75	..	..
M Styhead B.	F. Bainbridge, Esq., for M.O.	5	1	6	1070	..	124·75	..	..
M Styhead A.	F. Bainbridge, Esq., for M.O.	5	1	0	1100	..	122·95	..	..
M Borrowdale (Stockley Bridge)	F. Bainbridge, Esq., for M.O.	5	1	0	585	..	116·25	..	..
Borrowdale (Seathwaite) garden	F. Bainbridge, Esq., for M.O.	5	1	6	423	122·0	109·00	..	..
M Helvellyn (Hill Top Gill)	Manchester Corp'n. W.W.	5	1	0	1050	..	81·23	..	..
M Ullscarf	Manchester Corp'n. W.W.	5	1	0	2100	119·8	94·59	..	..
M Helvellyn (Birkside)	Manchester Corp'n. W.W.	5	1	0	1900	..	84·53	..	..
M Wythburn	Manchester Corp'n. W.W.	5	1	0	610	96·8	80·42	..	..
M Helvellyn (Brown Rigg)	Manchester Corp'n. W.W.	5	1	0	1450	..	88·27	..	..
M Helvellyn (Brown Cove)	Manchester Corp'n. W.W.	5	1	0	2250	..	84·54	..	..

§ Turf wall round gauge.

## DIVISION X—NORTHERN COUNTIES—(con.).

		Rain-gauge			1937.				
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
			Rim above Ground.	Ground above Sea Level.					
CUMBERLAND—(con.).									
2.—DERWENT—(con.).									
D Watendlath Farm	W. Tyson, Esq., for M.O.	5	1	0	800	..	73·97	193	170
M§Armboth Fells (The Pewitts)	Manchester Corpn. W.W.	5	1	0	1650	..	83·16	..	..
M§Helvellyn (Whiteside)	Manchester Corpn. W.W.	5	1	0	2100	..	85·22	..	..
D Buttermere (Hassness)	E. Dixon, Esq.	6	1	0	350	105·9	83·99	218	181
D§Thirlmere (Dale Head Hall)	Manchester Corpn. W.W.	6	1	0	620	86·7	76·24	269	197
D Cockermouth (Loweswater)	Miss S. H. Frith	5	1	0	353	..	49·70	207	167
D Keswick (Lingholm Gardens)	J. Elson, Esq.	5	1	0	300	65·7	55·49	209	163
D Keswick (Derwent Island) new g	Denis Marshall, Esq.	5	1	0	290	57·0	46·26	216	168
D Keswick (High Hill)	Clerk to the U.D.C.	5	1	0	254	54·9	42·95	180	145
D Portinscale (High Moss)	Mrs. J. E. Brown	5	1	2	285	61·9	47·06	213	164
D High Lorton (The Bungalow)‡	Mrs. C. Wigham	5	1	0	300	..	48·92	193	152
D Keswick (Mirehouse)	Miss Spedding	5	1	6	280	49·8	44·65	..	132
D Workington (Stainburn Res.)	The Borough Surveyor	5	1	0	180	36·9	34·49	190	161
D Threlkeld (Blencathra Sanat.)	Medical Superintendent	5	1	0	885	61·5	51·18	209	177
D Bassenthwaite (Higham)	G. F. Fisher, Esq.	5	0	9	500	44·9	36·81	206	160
3.—WEST COAST STREAMS. 235 sq. mi.									
D Ravenglass (The Grove)	Walter Marchant, Esq.	5	1	0	70	42·5	36·97	184	145
D Braystones	H. H. Watson, Esq.	5	1	0	36	37·5	37·41	179	146
M West Water (Wasdale Head)	H. H. Watson, Esq.	5	1	0	280	..	76·31	..	..
D St. Bees (Fern Bank)	Lt.-Col. G. Dixon	5	1	6	60	42·7	40·69	197	154
M Ennerdale (Gillertwaite)	H. H. Watson, Esq.	5	1	0	445	..	75·28	..	..
D Whitehaven (Scragill Reservoir)	A. Wilson, Esq., C.E.	8	1	0	188	43·5	43·72	192	155
D Workington (Winscales House)	Miss E. W. Trench	5	1	6	440	37·2	34·03	188	143
4.—DUDDON & C. 50 sq. mi.									
D§Ulpha	Claude Diamond, Esq.	5	1	0	251	..	68·91	215	171
5.—SOUTH TYNE. 87 sq. mi.									
D Alston Vicarage	Rev. N. A. Walton	5	1	0	940	44·7	36·72	208	161
WESTMORLAND. (Area, 783 sq. mi.)									
1.—EDEN. 373 sq. mi.									
D Kirkby Stephen (Eden Place)	Mrs. Paul Mason	5	1	0	544	42·3	33·05	212	160
§Wasdale Pike	Manchester Corpn. W.W.	5	1	0	1825	..	69·12	..	..
Mosedale (Mosedale Cottage)	Manchester Corpn. W.W.	5	1	0	1443	87·8	78·03	..	..
§Mosedale (Artle Crag)	Manchester Corpn. W.W.	5	1	0	2134	..	79·19	..	..
Wet Sleddale (Mirethwaite)	Manchester Corpn. W.W.	5	1	0	995	64·7	53·15	233	176
M§Blea Water B.	Manchester Corpn. W.W.	5	1	0	1420	..	96·72	..	..
§Sleddale (High Wether Fowe)	Manchester Corpn. W.W.	5	1	0	1620	..	71·74	..	..
§Mardale (Riggindale)	Manchester Corpn. W.W.	5	1	0	892	..	87·23	..	..
§Shap (Birkbeck Fell)	Manchester Corpn. W.W.	5	1	0	935	56·0	41·40	..	..
Swindale Parsonage	Manchester Corpn. W.W.	5	1	0	875	..	56·92	..	..
§Mardale (Whelter)	Manchester Corpn. W.W.	5	1	0	908	..	67·30	..	..
§Mardale (Low Raise)	Manchester Corpn. W.W.	5	1	0	2465	..	71·66	..	..
Shap (Thornship Gill)	Manchester Corpn. W.W.	5	1	0	844	51·4	44·38	..	..
§Mardale (Guerness)	Manchester Corpn. W.W.	5	1	0	905	..	66·32	..	..
§Shap (Tailbert Head)	Manchester Corpn. W.W.	5	1	0	1100	55·6	41·88	227	161
M§Hawes Water (Wallow Crag)	Manchester Corpn. W.W.	5	1	0	1250	..	52·72	..	..
M Hawes Water (Naddle House)	Manchester Corpn. W.W.	5	1	0	825	60·5	50·09	..	..
Hawes Water (Measand)	Manchester Corpn. W.W.	5	1	0	824	69·6	55·62	..	..
Measand Beck (Keasgill)	Manchester Corpn. W.W.	5	1	0	1800	..	66·83	..	..
D§Hawes Water (Burn Banks)	Manchester Corpn. W.W.	5	1	0	835	..	54·25	226	172
D Patterdale Hall	M. Marshall, Esq.*	5	1	3	490	86·4	68·35	200	172
§Bampton (Atkinson's Grain)	Manchester Corpn. W.W.	5	1	0	2175	..	70·42	..	..
D Patterdale (Greenside Mine)	Matthew Place, Esq.	7	0	8	1100	91·9	72·04	..	..
M§Bampton (Low Kop) B	Manchester Corpn. W.W.	5	1	0	1750	..	54·87	..	..
Bampton (Walnhow)	Manchester Corpn. W.W.	5	1	0	615	46·5	44·26	212	160
Bampton (Stanegarth)	Manchester Corpn. W.W.	5	1	0	913	59·5	46·54	..	..
M Cawdale Beck (Howe Grain)	Manchester Corpn. W.W.	5	1	0	1642	..	52·14	..	..
§Heltondale (Kidmoor)	Manchester Corpn. W.W.	5	1	0	1025	..	45·62	..	..
D APPLEBY (Castle Bank)	Lady Holmes	5	1	0	440	35·0	25·24	187	133
D Morland	F. R. Markham, Esq.	5	1	0	455	35·6	30·17	177	132

§ Turf wall round gauge. ‡ Moved from Lorton (Kirkfell House). \* Per Miss Cordelia Marshall.

## DIVISION X—NORTHERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain-fall.	1937.			
			Height of Rim above Ground.	Ground above Sea Level.		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
WESTMORLAND—(con.).						in.			
1.—EDEN—(con.).									
D Penrith (Lowther Castle)	Mr. J. Jeffrey	5	1	0	760	41·8	31·82	166	132
D Penrith (Barton House)	Mrs. Legh Tolson	5	1	0	500	42·4	34·86	190	148
D Temple Sowerby (The Grange)	L. F. Phillips, Esq.	5	1	1	370	30·7	25·34	187	138
2.—LEVEN. 60 sq. mi.									
D Windermere (St. Rule)	Miss E. M. Bullock	5	1	0	350	..	53·48	198	165
D Windermere (Hammar Bank)	Mrs. H. Coutts	5	1	0	200	61·4	54·15	217	171
D Windermere (Holebird)	H. L. Groves, Esq.	5	1	0	483	68·0	58·42	242	182
D Windermere (Brockhole)	W. Gaddum, Esq.	5	1	6	175	66·3	54·22	205	165
D Ambleside (Wansfell)	Miss Wrigley	8	1	0	150	71·9	58·89	188	167
M Little Langdale (Fell Foot)	Miss C. Marshall	5	2	2	380	108·2	85·51	..	..
D Ambleside (White Craggs)	C. H. Hough, Esq.	5	1	7	200	72·1	59·07	..	158
D AMBLESIDE, THE LAKES (U.D.C.)	The Clerk to the Council	..	1	0	145	..	56·60	196	164
D Ambleside (Market Square)	G. A. Johnston, Esq., M.D.	5	1	0	180	75·1	64·05	205	173
D Rydal (The Stepping Stones)	Mrs. D. Dickson	5	1	3	190	80·6	63·39	216	175
D Rydal (High Close)	F. E. T. Jones Balme, Esq.	8	0	9	553	83·3	66·95	207	165
D Rydal (The Hall)	R. E. Porter, Esq.	5	1	0	354	82·1	67·79	214	177
D Grasmere (Huntingstile)	H. Pownall, Esq.	5	1	0	335	..	72·78	223	175
D New Dungeon Ghyll Hotel	Miss C. Marshall	5	1	1	310	110·2	89·05	236	188
Mickleden	Miss C. Marshall	5	1	6	490	130·8	97·78	..	..
D Grasmere (The Wray)	Miss G. M. Simpson	5	1	0	221	88·5	73·90	219	181
3.—KENT. 188 sq. mi.									
D Burton (Under Fell)	J. B. Hoyle, Esq.	5	0	9	225	42·3	35·37	189	154
D Heversham (Plumtree Hall)	Miss M. C. Watson	5	0	8	115	45·7	39·20	204	148
D Levens (Beathwaite)	Robert Bush, Esq.	5	1	0	105	46·8	39·76	204	149
D Killington Reservoir	L. M. & S. Rly. Co.	5	1	0	670	..	41·78	191	155
D Kendal Gasworks	Kendal Gas & Water Co.	5	1	11	140	..	38·91	193	151
D Kendal (Fisher Tarn Res.)	Kendal Gas & Water Co.	5	1	0	742	..	40·35	197	158
D Kendal (Underley Hill)	Miss M. Newby	5	1	0	270	..	40·56	170	149
D Kendal (Ellergreen)	J. W. Cropper, Esq.	5	1	6	270	58·2	47·80	193	164
D Kendal (Kent Lea)	R. J. Cragghill, Esq.	5	1	0	165	..	43·32	917	159
D Kendal (Potter Fell)	J. Cropper & Co., Ltd.	5	2	0	750	70·6	61·54	(214)	(181)
Troutbeck (Dubbs Reservoir)	J. N. Leckie, Esq.	5	1	3	745	..	54·35	..	..
D Kentmere Head Reservoir	Kendal Res. Commissioners	5	1	6	920	..	79·54	203	176
4.—LUNE. 122 sq. mi.									
D Kirkby Lonsdale (Stoop Lane)	Mrs. H. E. Hollins	5	2	0	210	..	38·70	195	157
D Barbon Manor	Lord Shuttleworth	5	1	3	650	46·7	38·95	181	161
Ravenstonedale (Railway Station)	J. T. Sanderson, Esq.	5	1	0	800	..	37·63	..	..
5.—TEES. 40 sq. mi.									
M Lunedale (Conny Pot)	G. R. Collinson, Esq., C.E.	5	1	0	1840	53·7	43·10	..	..
w Upper Teesdale (Moor House)	G. Manley, Esq.	5	1	0	1850	..	54·63	..	..

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS.

## MONMOUTH. (Area, 534 sq. mi.).

1.—RHYMNEY. 39 sq. mi.								
d Rumney (Witla Court) . . . . .	Mrs. Edwards . . . . .	5	1 0	175	39·4	34·55	..	..
D Machen (Machen Quarry) . . . . .	Machen Quarries, Ltd. . . . .	5	1 1	250	..	48·12	179	155
2.—EBBW. 88 sq. mi.								
D Rogerstone (Rhiwderin) . . . . .	Lady Forestier-Walker . . . . .	5	1 0	250	..	41·60	167	140
D Rogerstone (Newport Golf Links) . . . . .	Col. Blethyn T. Rees, C.E. . . . .	5	0 8	304	..	43·67	184	150
D Blackwood . . . . .	D. H. Price, Esq. . . . .	5	0 10	630	..	46·86	192	155
D Abertillery (The Park) . . . . .	S. E. Thomas, Esq. . . . .	5	1 0	700	57·2	55·38	189	158
d Tredegar Laboratory . . . . .	Tredegar Iron & Coal Co. Ltd. . . . .	5	2 0	950	59·8	50·28	..	..
D Ebbw Vale (Iron Works) . . . . .	Ebbw Vale Steel & Iron Co. Ltd. . . . .	8	1 0	902	56·6	48·90	181	156

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Dir. m.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	above	Rain-fall.			
			above	above	Sea Level.				
			Ground.	Sea Level.					
MONMOUTH—(con.).									
			in.	ft. in.	ft.	in.	in.		
<b>3.—USK &amp; C. 290 sq. mi.</b>									
Redwick	Col. Blethyn T. Rees, C.E.	5	1 0	24	..	30·66	164	136	
Portskewett (Sudbrook)	S. W. Moore, Esq., C.E.	8	1 0	51	..	31·36	162	131	
Newport (Stow Park)	J. Francis Jupp, Esq., C.E.	5	1 0	200	..	36·36	174	140	
Newport (Hospital)	Medical Officer of Health	8	1 0	265	..	42·72	186	141	
Newport W.W. (Friar St. Yard)	Newport Corporation	5	6 0	32	..	38·41	176	140	
Newport W.W. (Ynis-y-fro Res.)	Newport Corporation	5	1 0	130	..	42·81	208	147	
Caerleon (The Croft)	Col. Blethyn T. Rees, C.E.	5	1 0	51	..	38·61	198	148	
Newport W.W. (Pant-y-reos Res.)	Newport Corporation	5	1 0	485	..	47·19	188	150	
Newport W.W. (Llanvaches)	Newport Corporation	5	0 10	456	..	37·38	178	140	
Newport W.W. (Nantyridd)	Newport Corporation	5	1 0	500	..	40·25	177	149	
Chepstow (Itton Court)	Lady Curre	5	1 0	390	..	37·68	175	150	
Newport W.W. (Newchurch)	Newport Corporation	5	1 0	550	..	41·11	178	145	
Usk (Monmouth Agric. Instn.)	The Principal	5	1 0	70	..	42·84	152	140	
Abersychan (Glansychan)	Mr. H. Davey	5	1 2	699	55·0	59·38	220	163	
Goytre (Goytre Hall)	Mrs. Lionel Whitehead, O.B.E.	5	1 0	300	46·1	48·63	167	147	
Blaenavon (Estate Office)	E. J. John, Esq.	8	1 0	1144	55·1	58·09	176	141	
Abergavenny (Penpergwm)	Leslie R. Pym, Esq.	5	1 0	186	..	42·52	158	133	
Abergavenny (Plas Derwen)	Alan Whitehead, Esq.	5	1 3	200	..	46·07	190	143	
Abergavenny (Ty Clyd)	F. D. Llewelyn, Esq.	5	1 0	272	45·1	47·87	176	139	
Abergavenny (Richmond Road)	W. H. Edmunds, Esq.	8	1 0	256	40·6	44·41	173	128	
Abergavenny (Larchfield)	Dr. N. R. Phillips	5	1 0	240	37·5	40·73	168	130	
Abergavenny (The Chain)	Miss Baker-Gabb	5	1 0	310	..	44·94	182	140	
Grwyne Fawr (Coed Dias)	Miss Baker-Gabb	5	1 0	900	..	48·98	214	154	
<b>4.—WYE. 117 sq. mi.</b>									
Monmouth (Cornwall House)	P. G. Harvey, Esq., M.D.	5	0 11	55	..	33·22	155	123	
Trewyn	Mrs. C. C. Molyneux	5	0 10	500	..	43·64	179	138	
Grosmont	Miss D. K. Estcourt	5	1 0	420	..	39·76	189	144	
GLAMORGAN. (Area, 808 sq. mi.).									
<b>1.—LOUGHOR. 55 sq. mi.</b>									
Felindre (Blaenant Ddu)	J. Hassall, Esq., C.E.	5	1 3	346	..	50·05	212	174	
Felindre (Lower Lliw Res.)	J. Hassall, Esq., C.E.	8	1 3	426	..	47·86	207	172	
Felindre (Upper Lliw Res.)	(+A) J. Hassall, Esq., C.E.	8	1 3	599	..	54·73	207	178	
<b>2.—GOWER PENINSULA. 62 sq. mi.</b>									
Gower (Penrice Castle)	W. E. Harrison, Esq.	5	2 2	20	..	42·99	201	151	
Penmaen (Cefn Mor)	Mrs. R. A. Bostock	5	1 6	300	41·5	39·71	182	157	
Clyne Castle	Adml. A. Walker-Heneage-Vivian	5	1 0	50	..	38·03	190	160	
<b>3.—TAFE. 47 sq. mi.</b>									
SWANSEA (Victoria Park)	(+A) The Town Clerk	8	1 0	32	..	39·82	197	159	
Clydach (Wernfadog)	W. J. P. Player, Esq.	8	1 0	400	..	48·27	213	174	
Clydach	The Mond Nickel Co.	8	1 4	78	..	43·81	..	..	
Pontardawe	The Clerk to the R.D.C.	5	0 8	350	..	48·59	..	166	
Ystalyfera (Wern House)	Miss L. Williams	5	1 6	240	64·8	58·32	191	171	
<b>4.—NEATH. 82 sq. mi.</b>									
Briton Ferry (Brynsiriol)	H. A. Clarke, Esq., C.E.	5	1 0	33	..	39·35	181	156	
Briton Ferry (Cefn Court)	H. A. Clarke, Esq., C.E.	5	1 0	503	47·7	40·86	193	172	
Neath (Oil Refineries)	National Oil Refineries, Ltd.	5	1 0	145	..	40·52	193	155	
Neath (Cimla Reservoir)	H. A. Clarke, Esq., C.E.	5	1 0	360	..	42·34	198	163	
Neath (Gnoll Reservoir)	H. A. Clarke, Esq., C.E.	5	1 0	204	52·1	42·63	156	169	
Neath (Bryn-Teg)	H. P. Lloyd, Esq.	5	0 9	100	..	43·77	201	165	
Neath (Glynfelin)	T. Gibbins, Esq.	5	1 4	180	..	48·39	..	158	
Rhondda W.W. (Llyn Fawr Res.)	old g J. B. Hughes, Esq.	8	1 0	1220	88·6	76·10	216	188	
Rhondda W.W. (Llyn Fawr Res.)	new g J. B. Hughes, Esq.	5	1 0	1220	..	77·22	216	190	
Resolven (Forest Lodge)	Forestry Commission	5	0 7	100	..	55·43	200	168	
Pontardawe (Plas Cilybebyll)	J. H. P. Lloyd, Esq.	5	1 3	500	..	54·28	..	..	

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	above	Rain-fall.			
			above	above	above	fall.			
			Ground.	Sea Level.					
GLAMORGAN—(con.).			in.	ft. in.	ft.	in.	in.		
<b>5.—OGMORE &amp; C. 350 sq. mi.</b>									
D Barry (Port-y-Castell) . . . . .	E. Sawyer, Esq. . . . .	5	1 0	150	..	34·84	191	140	
Barry W.W. (Merthyr Dyfan R.) . . . . .	R. L. Aspinall, Esq., C.E. . . . .	5	1 0	300	37·6	35·95	..	..	
D Lower Penarth . . . . .	The Surveyor . . . . .	5	1 0	66	34·9	30·93	156	135	
D Penarth Cemetery . . . . .	The Surveyor . . . . .	5	1 4	99	..	32·76	159	133	
D Penarth (Council Offices) . . . . .	The Surveyor . . . . .	5	5 0	160	37·1	34·80	171	131	
D Dunraven Castle . . . . .	Dunraven Estates Co., Ltd. . . . .	5	1 0	71	..	34·90	179	147	
D Cardiff (Cogan Pumping Statn.) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1 0	121	37·7	38·44	181	140	
d Cowbridge (Tair Onen Nursery) . . . . .	Forestry Commission . . . . .	5	1 0	421	..	38·95	..	150	
D Fairwater (Glan Ely Hosp.) . . . . .	Medical Superintendent . . . . .	5	1 0	122	..	37·23	171	137	
D Barry W.W. (Pencoedtre Res.) . . . . .	R. L. Aspinall, Esq., C.E. . . . .	5	1 0	200	..	37·00	..	..	
D Cowbridge (Pentre Meyrick) . . . . .	F. E. P. Dunn, Esq. . . . .	5	1 0	300	..	38·71	190	147	
D Merthyr Mawr . . . . .	Col. J. I. D. Nicholl . . . . .	5	1 6	75	42·9	39·53	204	177	
D Bridgend (Eiwl Graig) . . . . .	H. J. Randall, Esq. . . . .	8	1 6	50	..	37·37	193	152	
Pencoed (Senior School) . . . . .	G. H. Cornish, Esq. . . . .	5	1 1	156	..	(38·99)	..	..	
Llanharan (Sew. Works) . . . . .	E. Whone, Esq. . . . .	5	1 0	175	..	42·71	190	155	
d Pencoed (Hecl-y-Cyw School) . . . . .	The Headmaster . . . . .	5	1 0	345	..	(42·46)	..	..	
D Port Talbot (Twyn-yr-hydd) . . . . .	E. N. David, Esq. . . . .	5	1 3	180	42·6	38·11	192	147	
D Port Talbot (Tanygroes) . . . . .	G. A. Morgan, Esq. . . . .	8	1 0	53	40·3	38·42	205	155	
D Maesteg (Salisbury Road) . . . . .	H. L. Davies, Esq. . . . .	5	1 0	650	..	60·22	196	172	
D Pontycymmer (Garw Sec. Sch.) . . . . .	The Headmaster . . . . .	..	3 0	550	..	68·90	209	180	
<b>6.—TAFF. 157 sq. mi.</b>									
D Llandaff (Pwllmelyn Road) . . . . .	A. L. Selby, Esq. . . . .	5	0 10	105	42·2	38·72	188	141	
D Rhubina Reservoir . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1 0	336	48·1	42·82	195	153	
D Pontypridd (Ty-Gwyn Res.) . . . . .	Pontypridd & Rhondda W.B. . . . .	5	1 0	720	..	51·13	..	..	
D Pontypridd (Treforest Central Sch.) . . . . .	The Headmaster . . . . .	5	1 0	360	..	49·68	183	152	
D Pontypridd (Lan Wood R.) <i>new site</i> . . . . .	Pontypridd & Rhondda W.B. . . . .	5	1 6	300	..	49·99	199	156	
D Pontypridd (Llanfabon) . . . . .	Pontypridd & Rhondda W.B. . . . .	5	1 0	600	..	53·25	207	162	
D Treharris Service Reservoir . . . . .	A. J. Marshall, Esq., C.E. . . . .	5	1 3	765	52·3	43·52	164	141	
D Mountain Ash (Darranlas Res.) . . . . .	W. G. Thomas, Esq., C.E. . . . .	5	0 11	540	63·0	53·14	198	156	
D Mountain Ash (Maesydderwen) . . . . .	W. N. Morgan, Esq. . . . .	5	1 0	483	56·6	51·45	197	152	
D Treherbert (Tyn-y-waun) <i>old g</i> . . . . .	Elwyn Jones, Esq. . . . .	5	1 0	801	87·0	74·97	220	169	
D Treherbert (Tyn-y-waun) <i>new g</i> . . . . .	Elwyn Jones, Esq. . . . .	5	1 0	801	..	74·75	220	181	
D Rhondda (Castell Nos Res.) . . . . .	Pontypridd & Rhondda W.B. . . . .	5	1 6	1060	..	70·82	205	175	
D Rhondda (Lluest Wen Filter) . . . . .	Pontypridd & Rhondda W.B. . . . .	5	1 6	1200	..	67·04	211	172	
D Rhondda (Lluest Wen Res.) . . . . .	Pontypridd & Rhondda W.B. . . . .	5	1 6	1280	89·0	64·42	211	174	
D Merthyr Tydfil (Penybryn Filters) . . . . .	A. J. Marshall, Esq., C.E. . . . .	5	1 3	937	54·0	50·50	227	177	
D Merthyr Tydfil (Hanover St.) . . . . .	O. Griffiths, Esq.* . . . .	5	1 0	650	..	50·23	192	161	
D Dowlais (Garth Filter Beds) . . . . .	A. C. Quiningborough, Esq. . . . .	5	1 0	1245	..	53·82	214	170	
<b>7.—RHYMNEY. 55 sq. mi.</b>									
D Cardiff (Roath Park) . . . . .	A. A. Pettigrew, Esq. . . . .	5	1 0	51	41·6	37·84	196	142	
D CARDIFF (Penylan) . . . . .	(+A) Medical Officer of Health . . . . .	5	1 0	202	41·4	36·47	190	140	
D Cardiff (Heathwood Road) . . . . .	W. R. Howell, Esq. . . . .	5	1 6	130	..	40·18	187	149	
D Cardiff (Heath Filters) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1 0	132	41·3	38·72	188	140	
D Llanishen Reservoir . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1 0	155	39·4	36·79	185	140	
D Lisvane Reservoir . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1 0	150	37·4	34·83	187	136	
D Rhymney Bridge Reservoir . . . . .	E. Watkin Edwards, Esq., C.E. . . . .	8	0 6	1150	56·8	52·32	214	180	
CARMARTHEN. (Area, 918 sq. mi.).									
<b>1.—TEIFI. 87 sq. mi.</b>									
<b>2.—TOWY &amp; C. 715 sq. mi.</b>									
D Pembrey (The Colony) . . . . .	Forestry Commission . . . . .	5	1 0	19	..	37·15	186	146	
D Kidwelly . . . . .	J. H. Montgomery, Esq. . . . .	5	1 6	60	..	42·91	202	152	
D Carmarthen (Model & Prac. Sch.) . . . . .	C. W. Wilford, Esq. . . . .	5	1 5	65	50·0	50·01	203	165	
D Llandilo (Dynevor Castle) . . . . .	Lord Dynevor . . . . .	8	1 4	202	53·2	45·13	213	171	
w Llyn-y-fan Fach (Waen Sychlwch) . . . . .	Llanelly R.D.C. . . . .	5	1 0	1647	83·2	89·72	..	..	
D Llyn-y-fan Fach (Nant Coch) . . . . .	Llanelly R.D.C. . . . .	5	1 0	1172	74·5	74·26	199	184	

‡ Turf wall round gauge.

\* Per Royal Meteorological Society.

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
CARMARTHEN—(con.).			in.	ft. in.	ft. in.	in.		
2.—TOWY & C.—(con.).								
w Llyn-y-fan Fach (Bua'r Llyn) . . . . .	Llanelly R.D.C. . . . .	5	1 0	1650	..	92·68	..	..
d Llyn-y-fan Fach (Troed-y-Foel) . . . . .	Llanelly R.D.C. . . . .	5	1 0	867	..	61·07	199	170
d Llanddeusant (Pontcrynfe) . . . . .	J. Thomas, Esq. . . . .	5	1 0	323	55·6	47·67	206	164
d Brechfa . . . . .	Capt. C. Joynson . . . . .	5	1 0	290	..	55·31	216	178
d Abergorlech . . . . .	S. L. Davies, Esq. . . . .	5	1 0	245	..	50·55	198	167
d Llandoverly (Nantyrhogfaen) . . . . .	D. T. M. Jones, Esq. . . . .	5	1 0	249	50·8	43·26	195	168
3.—LOUGHOR & C. 104 sq. mi.								
d Llanelly (Old Market Yard) . . . . .	J. H. Montgomery, Esq. . . . .	5	12 0	35	44·6	39·94	183	155
d Llanelly (Filter Beds) . . . . .	J. H. Montgomery, Esq. . . . .	5	1 0	237	45·1	44·61	197	168
d Llanelly (Cwmlliedi W.W.) . . . . .	J. H. Montgomery, Esq. . . . .	5	1 1	240	..	46·41	210	171
d Llanelly (Upper Lliedi Res.) . . . . .	J. H. Montgomery, Esq. . . . .	5	0 11	290	..	49·44	202	177
w Llannon Reservoir . . . . .	Llanelly R.D.C. . . . .	5	1 0	860	..	51·01	..	..
4.—TAWE. 7 sq. mi.								
5.—USK. 5 sq. mi.								
6.—WYE.								
PEMBROKE. (Area, 617 sq. mi.).								
1.—TEIFI. 37 sq. mi.								
2.—NEVERN & C. 91 sq. mi.								
d Goodwick (Trenewydd) . . . . .	Mrs. G. M. Johns . . . . .	5	1 0	300	..	35·74	198	149
3.—WEST COAST STREAMS. 82 sq. mi.								
4.—CLEDDAU & C. 407 sq. mi.								
d Pembroke (Stackpole Court) . . . . .	Mr. F. G. Garlick . . . . .	6	1 6	60	39·3	42·75	..	..
d TENBY (The Priory) . . . . .	The Town Clerk . . . . .	8	1 0	64	40·9	41·31	194	150
d ST. ANN'S HEAD (C. Guard Stn.) . . . . .	Station Officer (M.O.) . . . . .	8	1 0	142	35·3	34·18	188	143
d Pembroke Dock (County School) . . . . .	J. H. Garnett, Esq. . . . .	5	1 0	85	42·7	44·20	177	151
d Saundersfoot (Hean Castle) . . . . .	Lord Merthyr . . . . .	5	1 0	206	36·3	40·03	178	132
d Saundersfoot (Stepaside, Merryvale) . . . . .	J. C. Pickering, Esq. . . . .	5	1 0	105	..	39·66	191	156
d Haverfordwest (Cresborough) . . . . .	H. L. Puxley, Esq. . . . .	5	1 0	50	..	47·18	196	170
d Narbeth (Bloomfield) . . . . .	Miss L. Lewis Lloyd . . . . .	..	..	275	..	48·05	213	176
d HAVERFORDWEST (Hospital Gnds.) . . . . .	The Borough Surveyor . . . . .	5	1 0	127	..	44·39	192	160
d Maenclochog . . . . .	Milford Haven U.D.C. . . . .	5	..	720	..	63·72	236	207
CARDIGAN (Area, 688 sq. mi.).								
1.—DOVEY. 20 sq. mi.								
d Glandyfi (Ynyshir Hall) . . . . .	W. H. Mappin, Esq. . . . .	5	1 0	45	..	38·95	189	148
2.—YSTWYTH & C. 347 sq. mi.								
d Aberayron (Ciliau Aeron) . . . . .	G. C. Faber, Esq. . . . .	5	1 0	252	..	37·34	192	159
d Llanafan (Blaenddol) . . . . .	R. Roberts, Esq., for M.O. . . . .	..	..	..	..	50·00	..	..
d Llanafan (Crosswood Park) . . . . .	The Earl of Lisburne . . . . .	5	1 0	210	..	38·67	..	142
d Yspytty-ystwyth (Hafod) . . . . .	T. J. Waddingham, Esq. . . . .	5	1 3	580	56·4	52·39	218	185
d Ponterwyd (The Mill) . . . . .	J. H. Edwards, Esq. . . . .	5	1 0	74	..	57·40	213	192
d ABERYSTWYTH (Corporation Yard) . . . . .	The Town Clerk . . . . .	8	1 0	12	..	35·07	199	161
d Aberystwyth (North Parade) . . . . .	Dr. A. Thomas . . . . .	8	1 0	12	..	32·47	197	163
d ABERYSTWYTH (P.B.S.) . . . . .	Prof. R. G. Stapledon, M.A. . . . .	5	1 0	452	..	35·32	201	153
d TALLYBONT (LLETTY-EVAN-HEN) . . . . .	Prof. R. G. Stapledon, M.A. . . . .	5	1 0	950	..	41·03	193	162
3.—TEIFI. 260 sq. mi.								
d Llechryd (Castle Malgwyn) . . . . .	Mrs. Gower . . . . .	5	1 0	50	..	39·32	183	154
d Cardigan (Plas Llangoedmore) . . . . .	D. Berrington Davies, Esq. . . . .	5	1 0	120	..	42·06	183	161
d Cardigan (County School) . . . . .	The Headmaster . . . . .	5	1 6	72	..	(40·88)	(179)	(147)
d Lampeter (Falcondale) . . . . .	Sir A. Harford, Bt. . . . .	5	1 0	498	..	43·71	159	149

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.	
			Rim above Ground.	Ground above Sea Level.					
CARDIGAN—(con.).							in.		
4.—TOWY. 46 sq. mi.									
d Abergwesyn (Nantneuadd) . . . . .	Mr. A. Haines for M.O. . . . .	5	1	0	1000	..	(58·55)	..	(167)
m Tregaron (Maes-y-bettws) . . . . .	T. Jones, Esq., for M.O. . . . .	5	1	0	910	..	52·30	..	..
5.—WYE. 15 sq. mi.									
m§Birmingham W.W. (Llyn Gynon) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1500	70·7	61·20	..	..
m§Birmingham W.W. (Bwlchyrhendre) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1585	66·7	62·25	..	..
m Birmingham W.W. (Claerddu) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1470	76·7	64·90	..	..
m Birmingham W.W. (Gwngu) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1490	68·0	58·60	..	..
d§Birmingham W.W. (Abergwngu) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1150	66·0	58·50	..	187
m Plynlimon . . . . .	J. Thomas, Esq., for M.O. . . . .	5	1	0	1630	108·0	81·00	..	..
BRECON. (Area, 733 sq. mi.).									
1.—TOWY. 17 sq. mi.									
2.—TAWE. 41 sq. mi.									
d Ystradgynlais (Yniscedwyn Ho.) . . . . .	G. Coleman, Esq. . . . .	5	0	9	232	65·2	53·64	203	171
d Swansea W.W. (Nantyrwydd) . . . . .	J. Hassall, Esq., C.E. . . . .	5	0	10	908	84·3	64·80	216	180
3.—NEATH. 48 sq. mi.									
d Ystradfellte Reservoir . . . . .	The Engineer . . . . .	5	1	0	1147	85·4	61·32	196	158
4.—TAFF. 48 sq. mi.									
d Aberdare (Nanthir Reservoir) . . . . .	I. A. Bryant, Esq., C.E. . . . .	5	1	0	860	59·6	53·98	215	172
d Taf Fechan (Pontsticill) No. 12( + A) . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1031	..	54·63	225	175
m Taf Fechan (Pontsticill West) 14 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1254	..	48·55	..	..
d Cardiff W.W. (Llwynon Res.) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	860	62·7	57·53	213	171
w Cardiff W.W. (Nant Ffynnon) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1352	..	62·48	..	..
m Cardiff W.W. (Garn Ddu) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1340	..	61·47	..	..
d Cardiff W.W. (Garw-nant) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1100	..	64·10	209	170
w Cardiff W.W. (Nant-Gwineu) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1200	..	58·75	..	..
w Cardiff W.W. (Cefn Gougarn) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1362	..	65·88	..	..
w Cardiff W.W. (Llysio) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1080	..	62·12	..	..
d Taf Fechan (Pentwyn Res. S.) . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1120	..	62·10	221	177
Taf Fechan (Pentwyn Res. N.) . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1090	..	59·56	..	..
w Cardiff W.W. (Twyn Gareg) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1501	..	72·76	..	..
m Cardiff W.W. (Blaen Nant Ddu) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1550	..	70·51	..	..
d Cardiff W.W. (CANTREF R.) No. 2 . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1080	69·8	61·52	215	175
d Cardiff W.W. (Beacons Res.) No. 6 . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1340	79·3	69·54	223	177
w Cardiff W.W. (Nant Penig) No. 3 . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	2000	85·8	75·59	..	..
m Cardiff W.W. (Blaen Nant Crew) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	2090	..	73·47	..	..
d Cardiff W.W. (Storey Arms Field) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1430	..	77·82	221	181
w Cardiff W.W. (Blaen Taf Fawr) . . . . .	N. J. Peters, Esq., C.E. . . . .	5	1	0	1430	86·8	78·30	..	..
d Taf Fechan (Neuadd Rs.) No. 1A . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	6	1423	..	75·62	235	196
d Taf Fechan (Neuadd Rs.) No. 4 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1487	82·7	74·29	235	200
d Taf Fechan (Neuadd Rs.) No. 11 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1524	68·3	67·83	235	188
d Taf Fechan (Neuadd Rs.) No. 11A . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1520	..	76·04	235	202
m Taf Fechan (Neuadd Rs.) No. 2 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1993	72·7	72·85	..	..
m Taf Fechan (Neuadd Rs.) No. 5 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1515	..	73·50	..	..
m Taf Fechan (Neuadd Rs.) No. 10 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1700	72·7	67·55	..	..
m Taf Fechan (Neuadd Rs.) No. 3 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1843	60·6	68·95	..	..
m Taf Fechan (Neuadd Rs.) No. 7 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	2017	81·1	85·85	..	..
m Taf Fechan (Neuadd Rs.) No. 8 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1723	85·7	77·50	..	..
m Taf Fechan (Neuadd Rs.) No. 8A . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	1780	..	68·75	..	..
m Taf Fechan (Neuadd Rs.) No. 6 . . . . .	A. C. Quiningborough, Esq. . . . .	5	1	0	2099	92·4	81·60	..	..
5.—RHYMNEY. 2 sq. mi.									

§ Turf wall round gauge.



## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-	Days	Days
			Rim	Ground	fall.	fall.	with	with
			above	above	Rain-		·01 in.	·04 in.
			Ground.	Sea Level.	fall.		or	or
							more.	more.
BRECON—(con.).			in.	ft. in.	ft. in.	in.		
<b>6.—EBBW. 7 sq. mi.</b>								
D Ebbw Vale W.W. (Llangynidr) 1	P. I. Davies, Esq., C.E.	5	1 0	1413	58·8	62·43	191	179
D Ebbw V. W.W. (Llangynidr) W 3	P. I. Davies, Esq., C.E.	5	1 0	1468	..	62·09	191	178
D Ebbw V. W.W. (Llangynidr) NW2	P. I. Davies, Esq., C.E.	5	1 0	1471	..	61·96	191	178
D Ebbw Vale W.W. (Carno, S.)	P. I. Davies, Esq., C.E.	5	1 0	1262	..	62·31	191	178
D Ebbw Vale W.W. (Carno, E.)	P. I. Davies, Esq., C.E.	5	1 0	1391	..	61·74	191	179
D Ebbw Vale W.W. (Carno, W.)	P. I. Davies, Esq., C.E.	5	1 0	1412	..	63·15	191	180
D Ebbw Vale W.W. (Carno, N.)	P. I. Davies, Esq., C.E.	5	1 0	1491	..	61·91	191	179
<b>7.—USK. 299 sq. mi.</b>								
D Abergavenny (Gilwern)	Mrs. J. John	5	1 0	590	..	50·96	184	151
Torpantau (Darenfawr)	Newport Corporation	5	1 0	1172	..	65·34	..	..
Torpantau (Ynysposte)	Newport Corporation	5	1 0	741	..	61·28	..	..
Torpantau (Blaen-caer-fanell)	Newport Corporation	5	1 0	1584	..	62·07	..	..
D Talybont (Ffynonwen)	Newport Corporation	5	1 0	610	..	55·20	202	156
Talybont (Pwll Ifor)	Newport Corporation	5	1 0	1224	..	61·14	..	..
D Talybont (Aberclydach)	G. Garnons Williams, Esq.	8	0 9	520	..	45·01	..	140
D Crickhowell (Gwernvale)	H. Pirie-Gordon, Esq.	5	1 0	393	41·5	43·45	193	154
D Crickhowell (Glanusk Park)	Lord Glanusk	5	0 7	290	..	45·49	202	153
D Crickhowell (Penmyarth)	Lord Glanusk	5	0 8	370	..	42·85	209	159
M Swansea W.W. (Cray Rs.) No. 2	J. Hassall, Esq., C.E.	5	1 0	1019	..	76·05	..	..
D Swansea W.W. (Cray Rs.) No. 1 (+A)	J. Hassall, Esq., C.E.	5	1 0	1043	..	57·70	208	169
M Cray Post Office	J. A. Jones, Esq., for M.O.	5	1 0	930	..	(64·75)	..	..
D Talybont (Ashford)	J. Henderson, Esq.	5	1 0	390	..	44·38	183	145
D Llanfrynach (Ty-mawr)	Miss M. D. de Winton	5	1 0	450	..	42·90	193	141
D Crickhowell (Dan-y-Parc)	R. G. C. Sandeman, Esq.	8	1 0	230	..	44·32	189	141
M Crickhowell (Cwmdu Rectory)	Rev. W. A. Davies	5	1 0	430	..	40·30	..	..
M Crickhowell (Tal-y-maes)	Mrs. E. Jones, for M.O.	5	1 0	1250	..	44·65	..	..
D Trecastle (Blaenau-hydr)	Mrs. Morgan, for M.O.	5	1 0	970	..	64·10	..	..
D Brecon (Tairbull School)	I. L. Price, Esq.	5	1 0	660	52·0	49·77	185	156
D Brecon (Ffwdgrech)	Capt. J. D. D. Evans	8	1 1	570	..	46·37	166	141
D Brecon (Mount St. Sch. Gdns.)	The Headmaster	5	0 11	500	..	39·99	..	..
D Battle (Penoyre)	The late Mr. G. E. Weekes	5	1 0	830	..	42·29	197	154
D Black Mountains (Blaen-y-cwm)	W. Cory Goddard, Esq., C.E.	5	1 0	1423	..	55·34	185	166
D Black M. (Dam Site Grwyne Fawr)	W. Cory Goddard, Esq., C.E.	5	1 0	1620	..	57·77	185	169
M Upper Chapel (Tymawr)	Mrs. Probert	5	1 0	945	46·9	48·90	..	..
<b>8.—WYE. 271 sq. mi.</b>								
D Cathedine Rectory	Rev. D. H. Picton, for M.O.	5	1 6	650	..	30·81	153	132
D Talgarth (Arfryn)	F. T. Morgan, Esq.	5	3 6	450	33·2	38·09	156	134
D Talgarth (Pontiwal Sanatorium)	Dr. H. E. Watson	5	0 10	500	..	34·60	195	148
D Glasbury (Gwernfedyd Park)	H. H. Miller, Esq.	5	1 0	350	31·5	34·23	168	140
M Abergwesyn (Trallwn)	D. I. Felix, Esq., for M.O.	5	1 0	1000	..	65·80	..	..
D Beulah (Llwyn Madoc)	C. M. Evan-Thomas, Esq.	5	1 0	750	..	50·04	192	162
Llanafanfawr School	W. D. Swan, Esq.	5	0 8	800	..	45·66	..	..
M Newbridge (Pengraig)	Miss A. Williams, for M.O.	5	1 0	960	56·8	53·50	..	..
D Newbridge (Llysindinam)	Sir C. Venables Llewelyn, Bt.	5	1 3	646	41·2	39·24	201	153
M Birmingham W.W. (Cors-yr-hwch)	J. W. Wilkinson, Esq., C.E.	5	1 0	1775	91·7	78·60	..	..
M Birmingham W.W. (Esgair Ceiliog)	J. W. Wilkinson, Esq., C.E.	5	1 0	1560	82·3	71·10	..	..
M Birmingham W.W. (Llyn-Carw)	J. W. Wilkinson, Esq., C.E.	5	1 0	1775	82·9	74·15	..	..
M Birmingham W.W. (Nant-y-car)	J. W. Wilkinson, Esq., C.E.	5	1 0	1545	79·0	67·60	..	..
M Birmingham W.W. (Arban)	J. W. Wilkinson, Esq., C.E.	5	1 0	1500	78·8	65·60	..	..
M Birmingham W.W. (Tyn-y-pant)	J. W. Wilkinson, Esq., C.E.	5	1 0	1320	62·7	54·40	..	..
M Birmingham W.W. (Esgair Garthen)	J. W. Wilkinson, Esq., C.E.	5	1 0	1590	80·9	70·35	..	..
D Birmingham W.W. (Elan Village)	J. W. Wilkinson, Esq., C.E.	5	1 0	700	56·9	47·67	216	166

§ Turf wall round gauge.

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
RADNOR. (Area, 474 sq. mi.).								
1.—WYE. 424 sq. mi.		in.	ft.	in.	ft.	in.	in.	
d Glasbury-on-Wye (Hampton Sc.) . . . . .	D. W. Lloyd, Esq. . . . .	5	1	0	274	33·9	34·11	169 144
d Llyswen (Llanstephan Ho. Gdns.) . . . . .	Lady Philips . . . . .	5	1	3	440	..	40·77	160 143
d Builth (Cefndyrys) . . . . .	Capt. E. A. Thomas . . . . .	5	2	0	740	41·5	32·87	179 143
d New Radnor (Harpton Crt. Gdns.) . . . . .	Sir Henry Duff Gordon, Bt. . . . .	5	0	9	700	..	38·56	.. 143
d New Radnor (Maes-y-Fed) . . . . .	Mrs. C. F. Langston . . . . .	5	1	0	750	44·1	38·40	.. 145
d LLANDRINDOD WELLS (The Common) . . . . .	Clerk to the U.D.C. . . . .	5	1	0	772	..	33·84	180 148
§ Birmingham W.W. (Tyrmynydd) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	832	62·1	54·00	217 167
d Birmingham W.W. (Nantgwillt) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	840	63·2	54·31	221 174
d Birmingham W.W. (Dwfnant) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1050	67·8	59·90	.. ..
§ Birmingham W.W. (Esgair Gader) 2 . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1500	70·1	63·75	.. ..
§ Birmingham W.W. (Tynllidiart) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1006	67·5	56·20	.. ..
§ Birmingham W.W. (Claerwen) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1250	66·7	60·95	.. 191
d Pen-y-gareg (Penybont) . . . . .	John Jones, Esq. . . . .	5	1	0	900	..	54·54	199 177
d Birmingham W.W. (Tynant) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1020	68·8	58·21	216 184
d RHAYADER† . . . . .	R. Ashton, Esq., for M.O. . . . .	5	1	0	757	50·6	41·81	210 160
Rhayader (East Street) . . . . .	R. Ashton, Esq. . . . .	5	1	0	700	49·2	43·39	.. ..
§ Birmingham W.W. (Cerigllwydion) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1710	74·5	69·95	.. ..
§ Birmingham W.W. (Pen-y-gareg)† . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1500	..	47·68	.. ..
§ Birmingham W.W. (Pen-y-gareg) 2 . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1540	..	49·79	.. ..
§ Birmingham W.W. (Bryn Hir) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1470	78·9	69·20	.. ..
§ Birmingham W.W. (Abercaethon) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1240	70·8	60·85	.. ..
§ Birmingham W.W. (Calettwr) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1490	81·7	65·25	.. ..
§ Birmingham W.W. (Figin) No. 2 . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1700	85·2	76·55	.. ..
§ Birmingham W.W. (Aberhenllan) . . . . .	J. W. Wilkinson, Esq., C.E. . . . .	5	1	0	1070	68·9	57·80	.. ..
§ Llanbister (Llananno) . . . . .	Mrs. A. Jones, for M.O. . . . .	5	1	0	900	45·1	46·00	.. ..
2.—SEVERN—Right Bank Tributaries. 50 sq. mi.								
d Bucknell (Stanage Park) . . . . .	C. H. Walker, Esq. . . . .	5	1	0	715	..	34·89	.. ..
MONTGOMERY. (Area, 797 sq. mi.).								
1.—DOVEY. 120 sq. mi.								
d Machynlleth (Plas Llwyn Gwern) . . . . .	The Hon. R. E. B. Beaumont . . . . .	5	0	9	150	..	61·01	203 164
2.—YSTWYTH. 7 sq. mi.								
3.—WYE. 37 sq. mi.								
Llangurig (Dernol) . . . . .	E. A. Powell, Esq., for M.O. . . . .	5	1	0	870	61·5	(44·15)	.. ..
4.—SEVERN—Right Bank Tributaries. 154 sq. mi.								
d Llanidloes (Llidiartwaen Sch.) . . . . .	G. E. Edwards, Esq. . . . .	5	1	3	1150	..	37·90	188 148
d Newtown (Penarth Weir) . . . . .	Canal Engr., L.M. & S. Rly. . . . .	8	1	0	321	35·0	35·12	211 141
d Montgomery (The Gaol) . . . . .	Dr. R. E. Game Phillips . . . . .	5	1	0	450	..	27·74	186 137
5. SEVERN—Left Bank Tributaries. 479 sq. mi.								
d Berriew (Brithdir Hall) . . . . .	Mrs. F. E. Marston . . . . .	5	1	0	350	30·7	29·69	191 136
d Berriew (Glyncogen) . . . . .	H. H. Haines, Esq. . . . .	5	1	0	415	..	30·72	187 137
d Berriew (Tanyralit) . . . . .	H. H. Haines, Esq. . . . .	5	1	0	700	..	32·10	.. ..
d WELSHPOOL (County School) . . . . .	The Headmaster . . . . .	5	1	0	254	30·1	30·26	175 121
d Welshpool (Fron Llwyd) . . . . .	Col. G. B. D. Harrison . . . . .	5	1	3	500	33·7	31·11	174 143
d Garthbibio (Bwlch Tomlyd) . . . . .	J. R. Jones, Esq., for M.O. . . . .	5	1	0	1200	71·0	(56·80)	.. ..
d Llanfyllin (Llwyn) . . . . .	Major W. M. Dugdale . . . . .	5	0	10	450	..	34·09	178 136
d Lake Vyrnwy . . . . .	J. E. Bradley, Esq. . . . .	5	0	7	770	54·0	53·16	203 182
d Lake Vyrnwy (Bryn Gwyn) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	1311	..	49·66	.. ..
d Lake Vyrnwy (Bank Cynon Isaf) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	750	55·3	47·05	198 155
d Lake Vyrnwy (Ty Uchaf) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	860	..	49·77	.. ..
d Lake Vyrnwy (Heol-y-ffridd) No. 1 . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	913	..	58·92	.. ..
d Lake Vyrnwy (Heol-y-ffridd) No. 2 . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	830	..	53·87	.. ..
d Lake Vyrnwy (Tyn-y-ffridd) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	1010	..	51·26	.. ..
d Lake Vyrnwy (Lluestwen) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	1667	..	58·24	.. ..
d Lake Vyrnwy (Llwynrhiw) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	1428	..	59·29	.. ..
d Lake Vyrnwy (Nant Cawell) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	5	1	0	1550	..	65·55	.. ..
d Lake Vyrnwy (Craig-y-Gribin) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	1422	..	52·56	.. ..
d Lake Vyrnwy (Eunant Bridge) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	830	..	57·38	.. ..
d Lake Vyrnwy (Eunant Bridge) new ‡ . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	5	1	0	830	..	57·50	.. ..
d Lake Vyrnwy (Carreg Goch) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	1750	..	56·03	.. ..
d Lake Vyrnwy (Fawnog) . . . . .	Lt.-Col. F. Hibbert, C.E. . . . .	8	1	0	1315	55·7	49·33	.. ..

§ Turf wall round gauge. † Station formerly called Rhayader (Penralley). ‡ Gauge moved to better site, September, 1937

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.			
			Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rain-fall.	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.	
FLINT. (Area, 256 sq. mi.).			in.	ft. in.	ft.	fn.	in.		
1.—DEE. 198 sq. mi.									
D Hanmer (Gredington)	Lady Kenyon	5	1 0	300	30.4	27.17	157	137	
D Overton (Fairleigh)	Dr. B. J. E. Wright	5	1 0	220	26.8	29.13	187	134	
D Mold (Padeswood Hall)	The Resident Superintendent	5	1 0	350	..	35.72	217	155	
D Hawarden (County School)	C. F. Williams, Esq.	5	0 10	257	27.2	30.44	176	133	
D Mold (Alun County School)	The Headmaster	5	1 0	365	..	33.60	179	137	
D Mold (Mount Pleasant)	R. F. Baker, Esq., C.E.	5	1 0	503	..	32.99	178	143	
D Cilcain (No. 2 Reservoir)	Hawarden & Dist. W.W. Co.	5	1 0	785	..	35.91	195	149	
W Cilcain (No. 4 Reservoir)	Hawarden & Dist. W.W. Co.	5	1 0	900	..	35.03	..	..	
D Northop (Soughton Hall)	Sir John Banks	5	1 0	418	32.1	36.34	199	159	
D Cilcain (Cilcen Hall)	W.B. Yates, Esq., D.L., C.B.E.	5	1 0	700	29.7	32.75	213	134	
D Connah's Quay (Mold Road)	R. F. Baker, Esq., C.E.	5	1 0	43	..	29.56	192	141	
D Connah's Quay (Pengwladys)	R. F. Baker, Esq., C.E.	5	1 0	231	..	28.04	191	140	
D HAWARDEN BRIDGE	Messrs. J. Summers & Sons	8	1 0	17	24.3	27.65	178	126	
D SEALAND (Aerodrome)	(+A) Meteorological Officer	8	1 0	16	25.1	27.71	176	133	
d Halkyn (Bryn Aurl)	Capt. J. L. Francis	5	1 0	800	..	33.68	..	124	
D Mostyn	Darwen & Mostyn Iron Co., Ltd.	5	3 2	15	..	29.87	188	124	
2.—CLWYD. 51 sq. mi.									
D Bodfari (Nantlys)	D. F. Pennant, Esq., D.L.	5	1 5	178	27.4	28.06	174	125	
D St. Asaph (St. Beuno's Coll.)	The Procurator	5	1 0	450	..	32.72	229	149	
D Dyserth Castle	J. B. Price, Esq.	5	1 0	350	..	26.61	..	..	
D RHYL (Sewage Works)	(+A) Medical Officer of Health	8	1 0	31	25.8	25.51	178	119	
D PRESTATYN	Clerk to the U.D.C.	5	1 0	18	..	25.22	159	115	
3.—SEVERN—Left Bank Tributaries. 7 sq. mi.									
DENBIGH. (Area, 668 sq. mi.).									
1.—DEE. 278 sq. mi.									
Glynceiriog (Plas Nantyr)	C. B. Storey, Esq.	6	1 0	1450	49.7	32.95	..	..	
D Chirk Castle Gardens	Lord Howard de Walden	5	1 0	630	..	34.25	156	130	
D Llangollen (Oakleigh)	Miss J. B. Jagger	5	1 0	337	..	34.23	180	131	
D Llangollen (Vivod)	Capt. W. Best	5	1 0	640	..	34.46	166	133	
D Ruabon (Trevor Hall)	E. Lloyd Edwards, Esq.	8	1 2	500	30.9	35.75	177	145	
M Wrexham W.W. (Mountain Lo.)	J. A. Davies, Esq.	8	0 9	1100	..	34.37	..	..	
D Wrexham W.W. (Ty Mawr Res.)	J. A. Davies, Esq.	5	0 9	805	39.1	37.69	191	147	
D Wrexham W.W. (Pack Saddle Res.)	J. A. Davies, Esq.	5	0 9	370	32.0	32.26	196	133	
D Wrexham W.W. (Cae Llwyd Res.)	J. A. Davies, Esq.	8	0 9	918	41.1	39.47	191	153	
D Wrexham W.W. (Cae Llwyd Res.)	J. A. Davies, Esq.	5	0 9	918	40.5	38.81	192	149	
M Wrexham W.W. (Erwau)	J. A. Davies, Esq.	5	0 9	1200	..	38.09	..	..	
M Wrexham W.W. (Minera)	J. A. Davies, Esq.	5	0 9	1400	..	35.46	..	..	
D Wrexham (Beechley Road)	O. L. Jones, Esq., M.R.C.S.	2	1 0	285	..	28.29	..	..	
D Pendinas Reservoir	Brymbo Water Co.	5	0 6	1249	..	37.54	189	162	
D Nant-y-frith Reservoir	Brymbo Water Co.	5	0 6	1040	..	34.62	189	151	
D Llanfihangel-glyn-myfyr	R. F. Baker, Esq., C.E.	5	1 0	898	..	35.38	200	160	
D R. Alwen (Alwen Filter House)	R. F. Baker, Esq., C.E.	5	1 0	1100	..	37.47	221	160	
D R. Alwen (Alwen Dam)	R. F. Baker, Esq., C.E.	5	1 0	1189	..	39.18	221	167	
D R. Alwen (Hafod-Ilan-isaf) No. 2	R. F. Baker, Esq., C.E.	5	1 0	1172	39.2	35.24	221	160	
D R. Alwen (Hafod-Ilan-isaf) No. 3	R. F. Baker, Esq., C.E.	5	1 0	1169	36.8	37.62	221	163	
W Pentre Voelas (Nant Heilyn)	R. F. Baker, Esq., C.E.	5	1 0	1225	..	40.30	..	..	
D R. Brenig (Hafod-yr-Onen)	R. F. Baker, Esq., C.E.	5	1 0	1175	..	33.84	194	150	
M Nantglyn (Pant-y-maen)	R. F. Baker, Esq., C.E.	8	1 0	1320	..	42.95	..	..	
M Llyn Bran	R. F. Baker, Esq., C.E.	8	1 0	1428	..	44.70	..	..	
Llanferris (Glan-yr-Afon)	Miss A. Simpson	5	1 1	650	..	34.32	..	..	

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with	Days with
			Rim	Ground	Rain-fall.		·01 in.	·04 in.
			above	above	fall.		or	or
			Ground.	Sea Level.			more.	more.
DENBIGH—(con.).			in.	ft. in.	ft.	in.		
<b>2.—CLWYD &amp; C. 267 sq. mi.</b>								
M Derwen (Ty Cerrig) .....	Edgar Billson, Esq. ....	5	1 0	1030	..	(37·31)	..	..
d Pentre Celyn Council School .....	The Headmaster .....	5	1 3	400	30·1	30·06	..	..
d Clawdd-newydd No. 2 .....	R. F. Baker, Esq., C.E. ....	5	1 0	983	..	33·00	179	153
d Clawdd-newydd (Foel Fach) .....	Forestry Commission .....	5	..	1150	..	37·64	189	151
w Ruthin (Corwen Road) .....	R. F. Baker, Esq., C.E. ....	5	1 0	234	..	30·31	..	..
d Ruthin (Bwlch Tunnel) .....	R. F. Baker, Esq., C.E. ....	5	1 0	908	..	32·91	179	156
d Llyn Aled (Mael-y-Bryniau) .....	O. P. Cronshaw, Esq. ....	5	1 0	1250	..	38·76	216	156
d Llyn Aled (Rhyd-y-Bedd) .....	O. P. Cronshaw, Esq. ....	5	1 0	1170	..	41·18	217	166
d Llangynhafal (Plas Drw) .....	Major R. Bromhead .....	5	1 0	419	31·1	31·76	185	147
d Denbigh (Mental Hospital) .....	W. Barker, Esq. ....	5	1 0	316	..	29·97	176	145
d Llangwyfan (N. Wales San.) .....	Medical Superintendent .....	5	1 0	460	..	30·00	..	..
d Denbigh (Garn) .....	J. D. W. Griffith, Esq. ....	5	1 0	447	32·7	29·63	193	135
d Trefnant School .....	The Head Teacher .....	5	1 0	300	..	(28·57)	..	..
m Llanefydd (Dolwen Res., S.) .....	O. P. Cronshaw, Esq. ....	5	1 0	600	..	30·32	..	..
m Llanefydd (East) .....	O. P. Cronshaw, Esq. ....	5	1 0	570	..	30·42	..	..
d Llanefydd (Plas Uchaf Res.) .....	O. P. Cronshaw, Esq. ....	5	1 0	485	..	29·57	186	141
d Llanefydd (Glascoed Res.) .....	O. P. Cronshaw, Esq. ....	5	1 0	360	..	25·03	178	122
St. Asaph (Wigfair) .....	Col. H. C. Ll. Howard, C.M.G., D.S.O. ....	8	1 0	240	..	23·83	..	..
d Abergele (County School) .....	The Headmaster .....	5	1 0	50	..	24·37	175	116
d Abergele (Sea Road) .....	Sydney Wilson, Esq. ....	5	1 0	25	28·4	24·40	166	118
d COLWYN BAY (Eirias Park) .....	Borough Surveyor .....	5	1 0	118	31·1	22·84	184	124
<b>3.—CONWAY—4 sq. mi.</b>								
d Pentre Voelas (Voelas Hall) .....	Mr. T. N. Dickie .....	5	1 6	640	..	44·44	206	165
d Bettws-y-Coed (Talfryn) .....	R. J. Evans, Esq. ....	5	1 0	50	..	35·98	160	143
<b>4.—SEVERN—Left Bank Tributaries. 47 sq. mi.</b>								
d Llansilin (Penygwely Res.) .....	G. W. Lacey, Esq., C.E. ....	5	1 0	1095	..	32·05	172	138
MERIONETH. (Area, 661 sq. mi.).								
<b>1.—DEE. 218 sq. mi.</b>								
Afon Twrch (Nant-y-barcut) .....	R. Jones, Esq.* .....	5	1 0	1091	..	62·00	..	..
d Llanuwchllyn (Plas-deon) .....	A. E. Morris, Esq.* .....	5	1 0	555	..	48·76	177	158
Cwm Hirnant (Maesfallen) .....	E. O. Roberts, Esq.* .....	5	1 4	957	..	41·06	..	..
Afon Lliw (Blaen Lliw Isaf) .....	J. Pugh, Esq.* .....	5	1 6	1790	..	63·55	..	..
d Bala (Plas Coch Hotel) .....	W. Walker, Esq., Jun. ....	5	1 0	535	..	41·38	199	162
d Bala (Tegid Street) .....	(+A) D. R. Roberts, Esq.* .....	5	1 3	537	..	42·67	208	162
d Llandderfel (Palé Gardens) .....	Sir H. B. Robertson .....	8	1 0	606	48·2	42·16	180	161
Trawsfynydd (Cwm Prysor) .....	N. Wales Power Co., Ltd. ....	5	1 3	1300	..	65·91	..	..
Llyn Arenig Fach .....	J. Jones, Esq.* .....	5	1 5	1511	..	65·30	..	..
Corwen (Bryntirion) .....	Admiral Stapleton-Cotton ..	5	0 9	550	..	32·38	..	..
Afon Mynach (Hafod Nwydog) .....	N. D. Tee, Esq.* .....	5	1 0	1198	..	49·40	..	..
d Corwen (Rûg Gardens) .....	Col. R. Vaughan Wynn .....	8	1 3	600	36·2	31·09	182	147
w Derwen (Minffordd) .....	R. F. Baker, Esq., C.E. ....	5	1 0	971	..	33·14	..	..
<b>2.—CLWYD. 7 sq. mi.</b>								
<b>3.—GLASLYN. 92 sq. mi.</b>								
Trawsfynydd (Tyn Twll) .....	N. Wales Power Co., Ltd. ....	5	1 3	750	..	62·40	..	..
Trawsfynydd (Darn Gae) .....	N. Wales Power Co., Ltd. ....	5	1 5	950	..	52·25	..	..
d Minffordd (Plas Penrhyn) .....	Mrs. H. Kitching .....	5	0 8	220	..	42·75	202	155
d Pandyrddrwyrd (Main Dam) .....	N. Wales Power Co., Ltd. ....	5	1 3	650	..	52·79	(210)	(172)
d Minffordd (Hafod-Cae-Maen) .....	G. H. C. Haigh, Esq. ....	5	1 0	100	50·5	47·86	214	168
w Tyddyn-y-Careg (Hendre Mur) .....	N. Wales Power Co., Ltd. ....	5	1 3	660	..	51·70	..	..
d Tan-y-bwlch (Plas Gardens) .....	Mr. F. W. Dawe .....	5	1 0	55	..	50·78	199	158
d Tan-y-bwlch (Dol-y-Moch) .....	Mrs. Howland Jackson .....	5	1 0	55	..	(48·10)	..	..
d Festiniog (Hafod Fawr) .....	Forestry Commission .....	8	1 4	1000	74·6	51·78	182	165
d Blaenau Festiniog (Oakeley Q.) .....	J. Lloyd Humphreys, Esq. ....	5	1 0	1100	97·1	76·05	201	179
d Blaenau Festiniog (Llechweidd Q.) .....	Messrs. J. W. Greaves & Sons ..	5	1 0	700	..	82·35	258	208
d Blaenau Festiniog (Slate Q.) .....	Messrs. Votty & Bowydd Co. Ltd. ....	5	1 0	1060	..	74·28	211	191

\* Per River Dee Catchment Board.

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Aver- age Rain- fall.	Days with Rain- fall.	Days with Rain- fall.	Days with Rain- fall.	Days with Rain- fall.
			Rim above Ground.	Ground above Sea Level.					
			in.	ft. in.	ft.	in.	in.		
MERIONETH—(con.).									
4.—MAWDDACH & C. 262 sq. mi.									
D Towyn (Ynys-y-Maengwyn) . . . . .	R. Corbett, Esq. . . . .	5	1	0	14	..	36.33	187	152
D Towyn (Bronffynnon) . . . . .	Dr. T. Henry Jones . . . . .	5	1	0	180	..	38.22	198	148
D Towyn (Peniarth) . . . . .	Mrs. Wynne . . . . .	8	1	0	25	..	46.53	172	164
D Dolgelley (Bronygader) . . . . .	Lt.-Col. A. E. Jelf-Reveley . . . . .	5	1	0	200	..	55.86	..	..
D Dolgelley (Dol'rhyd) . . . . .	Col. P. H. Enthoven, D.L. . . . .	5	1	0	150	..	48.10	..	154
D Dolgelley (Borthwnog) . . . . .	Col. C. W. H. Crichton . . . . .	5	1	0	5	..	45.87	198	166
D Dolgelley (Bontddu) . . . . .	E. P. Beale, Esq. . . . .	5	0	10	50	58.8	47.74	190	161
D Llanbedr (Llwyn) . . . . .	A. Towers, Esq. . . . .	5	1	6	50	..	38.92	171	152
D Trawsfynydd Camp . . . . .	O. Eames, Esq. . . . .	5	1	0	800	67.0	56.36	184	169
5.—DOVEY. 82 sq. mi.									
D Aberdovey (Plas Penhelig) . . . . .	J. M. Howell, Esq., D.L. . . . .	5	1	0	100	..	38.10	181	155
D Pennal (Llwyn-Celyn) . . . . .	Lt.-Col. M. V. le P. Trench . . . . .	5	1	0	30	..	51.54	198	164
D Pennal (Talgarth Hall) . . . . .	Owen D. Jones, Esq. . . . .	5	0	9	125	..	50.15	214	157
Corris (Pantperthog) . . . . .	Forestry Commission . . . . .	5	1	0	200	..	62.67	..	..
6.—SEVERN—Left Bank Tributaries.									
CARNARVON. (Area, 572 sq. mi.).									
1.—BARDSEY ISLAND.									
2.—CONWAY & C. 146 sq. mi.									
Lake Cowlyd (Capel Curig) . . . . .	N. Wales Power Co. Ltd. . . . .	5	1	0	1400	..	73.41	..	..
Lake Cowlyd (Llethyr Gwyn) c . . . . .	C. F. Farrington, Esq., C.E. . . . .	5	1	0	1700	..	75.65	..	..
Lake Llwgwy . . . . .	N. Wales Power Co. Ltd. . . . .	5	..	..	1820	..	78.22	..	..
L. Cowlyd (Ffrith Carreg Wen.) A . . . . .	C. F. Farrington, Esq., C.E. . . . .	5	1	0	1168	..	67.80	..	..
Lake Cowlyd (Ffrith Fawr) B . . . . .	C. F. Farrington, Esq., C.E. . . . .	5	1	0	1700	..	72.80	..	..
Lake Cowlyd (Gors-y-Llithig) D . . . . .	C. F. Farrington, Esq., C.E. . . . .	5	1	0	1900	..	76.75	..	..
D Trefriw Wells . . . . .	C. P. Adamson, Esq. . . . .	5	1	0	25	..	40.96	(189)	(150)
D Lake Eigiau (Dam Site) . . . . .	(+A) N. Wales Power Co., Ltd. . . . .	5	1	5	1244	83.9	66.04	224	178
Llanbedr-y-Cennin (Melynllyn) . . . . .	W. T. Ward, Esq., C.E. . . . .	5	1	0	2065	..	84.48	..	..
Llanbedr-y-Cennin (Llyndulyn) old g . . . . .	W. T. Ward, Esq., C.E. . . . .	8	1	6	1632	93.6	74.02	..	..
Llanbedr-y-Cennin (Llyndulyn) new g . . . . .	W. T. Ward, Esq., C.E. . . . .	8	1	6	1632	102.7	81.36	..	..
Llanbedr-y-Cennin (Plasdulyn) . . . . .	W. T. Ward, Esq., C.E. . . . .	8	1	0	509	..	46.22	..	..
D Tyn-y-Groes (Dolcrwm) . . . . .	R. S. Fisher, Esq. . . . .	5	1	0	100	..	40.53	181	144
D Tyn-y-Groes (Roe Wen) . . . . .	Albert Wilson, Esq. . . . .	5	1	0	140	..	39.84	199	146
D Conway (Mussel Tks.) . . . . .	Ministry of Agric. & Fisheries . . . . .	5	1	0	50	..	25.41	174	124
Deganwy (Y Berlfa) . . . . .	Dr. Willoughby Gardner . . . . .	5	1	0	35	31.2	26.75	..	..
D LLANDUDNO (Cricket Ground) . . . . .	Medical Officer of Health . . . . .	5	1	1	22	28.1	25.85	172	125
3.—MENAI STRAITS. 221 sq. mi.									
D Edeyrn Tydweiliog (Cefnamlwch) . . . . .	The Head Gardener . . . . .	5	1	0	300	..	43.18	184	166
d Madryn Castle (Farm School) . . . . .	The Principal . . . . .	5	1	0	278	39.0	40.58	..	..
Nantlle (Dorothea Quarries) . . . . .	O. Giller, Esq. . . . .	8	60	0	350	..	39.56	..	..
Llandwrog (Glynllivon Park) . . . . .	Rt. Hon. Lord Newborough . . . . .	5	1	0	100	44.7	39.18	..	..
D Llandwrog (Glynllivon Nursery) . . . . .	Rt. Hon. Lord Newborough . . . . .	5	1	0	90	..	41.13	196	159
D Llandwrog (Glynllivon Garden) . . . . .	Rt. Hon. Lord Newborough . . . . .	5	1	0	100	..	43.47	198	164
Llandwrog (Glynllivon Fort) . . . . .	Rt. Hon. Lord Newborough . . . . .	5	1	0	180	..	49.67	198	173
D Waenfawr Council School . . . . .	D. R. Jones, Esq. . . . .	5	1	0	520	..	49.38	208	167
Carnarvon (Belan Fort) . . . . .	Col. R. Vaughan Wynn . . . . .	5	1	0	20	33.9	31.57	..	..
D Llanbellig (Cefn Rhos) . . . . .	Miss M. F. Preece . . . . .	8	1	0	..	..	41.47	213	162
D Bethesda (Penrhyn Quarries) . . . . .	A. H. Richards, Esq. . . . .	8	1	0	527	65.8	43.24	175	147
d Bangor (Town Hall) . . . . .	Water Engineer & Surveyor . . . . .	8	1	6	50	..	32.28	..	149
D Bangor (Penrhyn Castle Gdns.) . . . . .	Mr. J. Kneller . . . . .	5	1	0	150	..	34.19	196	155
D ABER (University Coll. Farm) . . . . .	Prof. R. G. White . . . . .	5	1	0	60	..	37.56	201	144
D Llanfairfechan (Cae Cawr) . . . . .	W. Timmins, Esq. . . . .	5	1	0	400	..	34.95	178	145
D Llanfairfechan (School House) . . . . .	The Surveyor, U.D.C. . . . .	5	1	0	120	37.9	39.96	167	138
D Penmaenmawr (Plas Uchaf) . . . . .	R. W. Barnes, Esq. . . . .	5	1	2	470	..	39.24	168	152

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.			
			Height of		Average Rain- fall.	Days with or more.	Days with or more.	Days with or more.		
			Rim above Ground.	Ground above Sea Level.						
CARNARVON—(con.).			in.	ft. in.	ft.	in.	in.			
4.—ERCH & C. 155 sq. mi.										
D Abersoch (Craig-y-Mor) . . . . .	The late Lady Winterbotham . . . . .	8	1 0	55	..	37·24	194	160		
D Pwllheli (West End) . . . . .	B. V. Howell, Esq. . . . .	8	1 3	9	..	40·42	215	161		
W Pwllheli (Bodfean Hall) . . . . .	Col. R. Vaughan Wynn . . . . .	5	1 3	155	43·7	41·38	..	..		
D Pwllheli (Bodfean Hall Gdns.) . . . . .	Col. R. Vaughan Wynn . . . . .	5	3 9	155	43·2	39·43	182	158		
D Criccieth (Bron Eifion) . . . . .	J. E. Greaves, Esq. . . . .	5	1 0	100	..	38·99	174	156		
5.—GLASLYN. 50 sq. mi.										
D Portmadoc (Wern) . . . . .	R. M. Greaves, Esq. . . . .	5	1 0	20	..	44·04	218	167		
D Beddgelert (Co. School) . . . . .	The Headmaster . . . . .	5	1 0	133	..	70·93	..	..		
Beddgelert (Hafod Ruffydd) . . . . .	F. C. Best, Esq. . . . .	5	1 0	490	..	74·52	..	..		
W Hafodtanygraig . . . . .	Arnold White, Esq. . . . .	5	1 6	280	..	83·79	..	..		
D Snowdon (Cwm Dyli) No. 11 (+A) . . . . .	N. Wales Power Co., Ltd. . . . .	5	1 0	310	117·9	99·12	215	189		
M Snowdon (Cwm Dyli, Old Rd.) 14 . . . . .	N. Wales Power Co., Ltd. . . . .	5	0 10	325	..	96·57	..	..		
M Snowdon (Llewedd) . . . . .	No. 2 N. Wales Power Co., Ltd. . . . .	5	1 3	1485	..	87·70?	..	..		
M Snowdon (Delta) . . . . .	No. 7 N. Wales Power Co., Ltd. . . . .	5	1 0	1435	..	140·15	..	..		
M Snowdon (Glaslyn) . . . . .	No. 3 N. Wales Power Co., Ltd. . . . .	5	0 8	2050	..	132·90	..	..		
M Snowdon (Teryn) . . . . .	No. 1 N. Wales Power Co., Ltd. . . . .	5	1 0	1080	..	129·60	..	..		
D Snowdon (Llydaw Intake) No. 10 . . . . .	N. Wales Power Co., Ltd. . . . .	5	1 0	1480	..	124·53	(215)	(205)		
W Snowdon (L. Llydaw Copper M.) 9 . . . . .	N. Wales Power Co., Ltd. . . . .	5	1 5	1480	..	128·63	..	..		
M Snowdon (Llyn Llydaw) . . . . .	No. 5 N. Wales Power Co., Ltd. . . . .	5	1 0	1470	..	98·15	..	..		
M Snowdon (Grib Goch) . . . . .	No. 8 N. Wales Power Co., Ltd. . . . .	5	1 3	2340	..	131·25	..	..		
ANGLESEY. (Area, 275 sq. mi.).										
D Bryn-siencyn (Trefarthyn) . . . . .	Miss E. Meyrick . . . . .	5	1 0	30	..	34·04	175	143		
D Llangadwaladr (Bodorgan) . . . . .	Sir George Meyrick, Bt. . . . .	5	1 0	100	37·5	34·02	188	146		
Plas Cadnant . . . . .	Major T. Fanning Evans . . . . .	5	1 3	156	..	34·59	173	144		
D Pen-y-Parc . . . . .	Com. Sir R. Williams-Bulkeley, Bt., K.C.B. . . . .	5	1 6	372	..	35·80	192	149		
D Llangefni (Glanaber) . . . . .	M. Spencer Rogers, Esq. . . . .	8	1 2	70	..	39·82	185	148		
D Llangefni (Fronheulog) . . . . .	A. H. Withinshaw, Esq. . . . .	5	1 0	125	..	43·50	..	140		
D Llangadwaladr (Treffos) . . . . .	C. Pantion Vivian, Esq. . . . .	5	..	318	..	38·73	..	140		
D Llangwilog (Trescawen) . . . . .	Mrs. Pritchard-Rayner . . . . .	5	1 0	239	42·2	38·74	191	159		
D Penmon (Tros-yr-afon) . . . . .	R. R. M. Jones, Esq. . . . .	8	1 4	60	..	34·74	200	141		
D Bodedern (Presaddfed) . . . . .	Lt.-Col. W. A. Fox-Pitt . . . . .	5	1 0	150	38·9	36·06	169	151		
D HOLYHEAD (Salt Island) . . . . .	(+A) Assistant-in-Charge (M.O.) . . . . .	8	1 0	26	34·9	33·44	192	135		
D Llanerchymedd (Llwydiarth Esgob) . . . . .	E. Thomas, Esq. . . . .	5	1 0	175	38·1	40·83	195	161		
D Lligwy . . . . .	Lord Boston . . . . .	5	1 0	170	..	36·39	..	126		
Amlwch (Dyffryn Adda) . . . . .	Major T. Fanning Evans . . . . .	5	1 3	178	36·3	34·93	190	151		
ISLE OF MAN. (Area, 227 sq. mi.)										
D DOUGLAS (Borough Cemetery) . . . . .	The Borough Surveyor . . . . .	8	1 0	284	41·2	44·55	192	151		
D Douglas (Clype Res., Onchan) . . . . .	T. C. Greenfield, Esq., C.E. . . . .	8	1 0	440	43·9	48·19	234	157		
D West Baldwin Reservoir . . . . .	T. C. Greenfield, Esq., C.E. . . . .	5	1 0	475	55·7	61·27	208	173		
D Maughold Head . . . . .	Com'rs. of N. Lighth's . . . . .	5	0 6	230	..	35·92	..	..		
D Ramsey (Town Hall) . . . . .	The Town Surveyor . . . . .	8	13 0	25	43·8	41·19	..	..		
D Ramsey (North Promenade) . . . . .	The Town Surveyor . . . . .	5	2 6	10	..	42·20	188	133		
D POINT OF AYRE . . . . .	Com'rs. of N. Lighth's . . . . .	8	1 0	30	..	33·15	190	141		
CHANNEL ISLANDS. (Area, 76 sq. mi.).										
JERSEY. 45 sq. mi.										
D La Rocque (Sandhurst) . . . . .	H. C. Bisson, Esq. . . . .	5	1 6	10	..	30·81	179	140		
D St. Saviour (Petit Menage) . . . . .	G. T. Robin, Esq. . . . .	5	0 10	30	..	39·07	198	152		

## DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Rim	Height of Ground	Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			above Ground.	above Sea Level.				
CHANNEL ISLANDS—(con.).			in.	ft. in.	ft. in.	in.		
<b>JERSEY—(con.).</b>								
D Grouville .....	L. de Carteret Malet, Esq.*	5	1 6	70	..	40·74	190	153
D St. HELIERS (Harbour Office) .....	The Greffier	8	1 0	28	..	37·68	176	137
D St. Heliars (St. Louis Obs.) .....	Rev. Ch. Rey, S.J.	8	1 5	180	30·4	39·25	190	149
D St. Brelade (La Sergenté) .....	W. Benest, Esq.	5	1 4	194	..	37·21	194	155
D St. Aubins (Belle Vue) .....	C. J. Sumner, Esq.	5	1 0	220	..	37·82	195	146
D St. Lawrence (Beaumont Marsh) .....	F. A. Laxen, Esq.*	5	1 0	60	..	40·02	170	146
D Millbrook (St. Helier W.W.) .....	A. J. Jenkins, Esq., C.E.	5	0 11	53	..	41·11	176	146
D Handois Reservoir .....	A. J. Jenkins, Esq., C.E.	5	1 0	272	..	44·40	200	162
D Trinity (States Exptl. Farm) .....	States of Jersey*	5	0 10	340	..	42·35	197	155
<b>GUERNSEY. 25 sq. mi.</b>								
D Torteval (La Colombier) .....	E. W. Sarre, Esq.**	5	1 0	237	..	40·83	204	156
D St. Martin's (Les Blanchés) .....	B. T. Rowswell, Esq.	5	1 0	309	..	40·73	193	156
D St. Martin's (Hât Nez) .....	A. A. Allain, Esq., C.E.	5	0 8	336	..	40·80	191	152
D Villiaze .....	A. A. Allain, Esq., C.E.	5	0 6	302	..	41·81	190	153
D St. PETER PORT (Grange Road) .....	States Met. Committee	5	1 0	175	33·2	43·33	202	163
D Castel (King's Mills) .....	A. A. Allain, Esq., C.E.	5	2 0	47	..	36·79	198	149
D Robais (Colborne Villa) .....	T. J. Guilbert, Esq., C.E.	5	1 0	116	..	38·90	200	159
D Menheniot Vineries .....	Major H. Roper	5	1 1	97	..	41·59	199	156
D Les Quartiers .....	A. Higgs, Esq.	5	1 2	40	..	37·86	199	146
D Vale (La Turquie Hill) .....	H. W. Smith, Esq.	5	0 11	40	..	38·03	199	150
<b>SARK. 2 sq. mi.</b>								
D Pointe Robert .....	B. T. Rowswell, Esq.	5	1 0	214	..	34·32	186	142
<b>HERM. 1 sq. mi.</b>								
D Herm .....	Sir Percival Perry	5	1 6	20	..	35·50	181	138
<b>ALDERNEY. 3 sq. mi.</b>								
D St. Anne's .....	B. T. Rowswell, Esq.	5	1 0	235	..	37·76	177	145

\* Per A. J. Jenkins, Esq., C.E.

\*\* Per States Met. Committee.

## SCOTLAND.

## DIVISION XII—SOUTHERN COUNTIES.

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average	Rain-fall.	Days with	Days
			Rim	Ground	Rain-fall.		·01 in. or more.	·04 in. or more.
		in.	ft. in.	ft.	in.	in.		
WIGTOWN. (Area, 488 sq. mi.)								
1.—LOCH RYAN. 46 sq. mi.)								
D Castle Kennedy (Lochinch)	Earl of Stair	8	1 0	85	..	41·69	203	173
2.—WESTERN GALLOWAY, 44 sq. mi.								
D Logan House	K. McDouall, Esq.	8	1 0	80	37·3	38·27	254	153
Corsewall	Com'rs. of N. Lighthouses	8	4 1	48	..	37·05	195	149
3.—LUCE BAY. 186 sq. mi.								
D Whithorn (Physgill)	F. B. Hopkins, Esq.	5	1 0	170	36·4	37·83	202	148
D Whithorn (Glasserton)	Adm. Johnston Stewart, C.B.	5	1 0	225	39·5	38·82	197	153
D Port William (Monreith)	W. J. Milne, Esq.	5	1 0	145	38·5	38·73	154	135
Stoneykirk (Ardwell House)	Sir E. MacTaggart Stewart, Bt.	8	2 6	50	36·3	36·85	..	..
D New Luce (Public School)	J. Mackay, Esq.	5	1 0	200	46·6	43·26	206	157
4.—CREE & WIGTOWN BAY. 212 sq. mi.								
D Garlieston (Galloway Ho.)	P. H. Fletcher, Esq.	5	0 11	40	39·1	37·73	200	156
D Garlieston (Culderry)	Capt. A. Walmsley	5	1 0	25	..	40·54	188	156
D Kirkcowan (Craighlaw)	The late Major W. M. F. Hamilton	5	1 0	300	48·3	41·82	213	163
D Newton Stewart (Little Barraer)	Brig.-Gen. G. M. P.	5	1 0	180	44·8	41·90	213	160
	Hawthorn, C.B.E., D.S.O.							
D Newton Stewart (Duncree)	Maj.-Gen. Sir Keith Stewart, K.C.B.	5	1 0	125	..	39·85	215	164
KIRKCUDBRIGHT. (Area, 902 sq. mi.)								
1.—DOON. 16 sq. mi.								
w Rig of Millmore	Galloway Water Power Co.	5	1 0	1450	..	57·21	..	..
2.—CREE & WIGTOWN BAY. 222 sq. mi.								
d Borge (Corseyard)	J. Douglas Brown, Esq.	5	1 0	20	39·8	36·26	..	151
w Kirroughtree Forest	J. McK. Graham, Esq.	5	1 3	350	..	47·19	..	..
3.—DEE. 377 sq. mi.								
D Threave	Major C. L. Gordon	5	1 0	275	..	46·01	190	161
D Mossdale (Hensol)	Lady Charles Kennedy	8	1 0	200	51·7	45·26	232	171
D Mossdale (Barney Water)	Galloway Water Power Co.	5	1 0	240	..	47·41	183	162
D Orchara	Galloway Water Power Co.	5	1 0	450	..	55·80	173	162
D Clatteringshaws (Tunnel Intake)	Galloway Water Power Co.	5	1 0	600	70·5	54·35	231	169
D Craigenallie	Galloway Water Power Co.	5	1 0	740	80·1	67·87	174	163
D Loch Dee	Galloway Water Power Co.	5	1 0	800	81·5	74·93	..	..
D Dalry (Glenlee)	Glenlee Power Station	5	1 0	181	..	50·27	205	169
D Dalry (Garroch)	Arthur Young, Esq.	8	1 0	250	59·7	52·74	216	173
D Dalry (Glendarroch)	Miss M. Barbour	5	2 0	190	54·5	47·83	215	178
D Backhill-of-the-Bush	Galloway Water Power Co.	5	1 0	890	80·7	66·91	171	155
D Dalry (Forrest Lodge)	Sir John Wood, Bart.	5	1 0	500	63·2	61·09	214	176
D Carsphairn (Carliars Cairn)	Galloway Water Power Co.	5	1 0	1250	91·8	65·35	..	..
D Carsphairn (Shiel)	Mr. W. Ritchie	5	1 0	825	73·9	(56·78)	173	166
D Carsphairn (Fingland)	Galloway Water Power Co.	5	1 0	940	..	46·66	200	159
D Carsphairn (Knockgray)	Miss Clark Kennedy	8	1 0	641	56·0	54·21	237	187
D Carsphairn (Cornharrow)	Galloway Water Power Co.	5	1 0	810	..	49·48	194	167
D Carsphairn (Moorbrock)	Galloway Water Power Co.	5	0 9	1000	..	55·47	..	..
D Carsphairn (Knockgarroch)	Galloway Water Power Co.	5	1 0	740	58·2	50·20	..	..
D Carsphairn (Lorg)	Galloway Water Power Co.	5	1 0	960	..	71·23	..	194
D Carsphairn Moor	Galloway Water Power Co.	5	1 0	790	65·6	57·52	198	162
4.—URR & C. 196 sq. mi.								
D Auchencairn (Balcary)	Miss K. M. Buchanan	5	0 9	30	..	47·95	..	156
D Auchencairn (Craigshall)	W. M. Thomson, Esq.	5	1 0	12	..	46·11	196	153
D Auchencairn (Torr House)	Thomas Owens, Esq.	5	1 0	50	47·1	44·74	..	..
D Dalbeattie (Drumstachall)	Mrs. Hanbury	8	0 11	400	46·1	46·80	193	169
D Castle Douglas (Corbieton)	Miss A. G. Biggar	5	0 9	175	..	41·44	200	166
D Chipperkyle	Lt.-Col. J. A. Pollok Morris	5	1 6	310	..	40·79	..	155
5.—NITH & C. 91 sq. mi.								
D Lochrutton (Dumfries W.W.)	J. Smellie, Esq.	5	1 0	273	44·0	45·18	213	164
D Carruchan	Mrs. Clark-Maxwell	5	1 0	73	..	39·16	196	154



## DIVISION XII—SOUTHERN COUNTIES—(con.).

STATIONS	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground					
			above	above					
			Ground.	Sea Level.					
<b>DUMFRIES.</b> (Area, 1,074 sq. mi.)									
<b>1.—CLYDE—Right Bank Tributaries.</b> 5 sq. mi.									
<b>2.—URR.</b> 6 sq. mi.									
<b>3.—NITH &amp; C.</b> 421 sq. mi.									
D RUTHWELL (Comlongon Cas.)	W. Brown for the Earl of Mansfield	5	1 0	67	35·5	31·10	186	148	
D DUMFRIES (Crichton Roy. Inst.)	C. C. Easterbrook, Esq., M.D.	5	1 0	140	36·8	34·50	191	150	
d Dunscore (Speddoch)	J. N. Clark-Maxwell, Esq.	5	0 11	320	..	48·04	(183)	(158)	
D Blackwood	T. W. Kennedy, Esq.	5	1 6	90	41·1	46·43	208	188	
D Moniaive (Glencrosh)	Miss Macmillan	5	1 1	400	51·0	49·19	186	156	
D Maxwellton House	Lieut.-Col. Sir J. E. Laurie, Bt.	5	1 3	375	..	46·08	188	154	
D Durrisdeer (Drumlanrig)	R. A. S. Ritchie, Esq.	5	0 9	191	43·6	48·92	241	177	
<b>4.—ANNAN.</b> 367 sq. mi.									
d Eastriggs (Dornoch House)	C. W. Grieve, Esq.	5	0 6	50	..	28·02	..	143	
d Dalton (Whitcroft)	The late Lady Maitland-Heriot	5	0 8	240	40·1	35·62	..	152	
d Dalton (Kirkwood)	Captain J. Steel	5	1 8	250	..	38·30	197	156	
D Moffat (Huntly Lodge)	W. R. Morton, Esq.	8	1 3	428	..	44·53	222	164	
D Evan Water School	Mrs. Grossart	5	1 0	560	51·2	47·34	193	159	
<b>5.—ESK.</b> 275 sq. mi.									
d Eaglesfield (Springkell Gdns.)	Col. Sir E. A. Johnson-Ferguson	5	1 0	303	41·3	(36·54)	..	..	
D Canonbie (Irvine House)	Sir J. Milne Home	5	0 9	200	46·5	37·10	189	151	
M Langholm (Ewes)	Mrs. Lyall	5	1 0	445	51·8	45·23	..	..	
D ESKDALEMUR Observatory (+A)	The Superintendent	8	1 4	794	56·3	51·21	211	167	
<b>ROXBURGH.</b> (Area, 666 sq. mi.)									
<b>1.—NORTH TYNE.</b> 6 sq. mi.									
<b>2.—TWEED LOWER—Right Bank Tributaries.</b> 57 sq. mi.									
D Yetholm (Old Graden)	P. S. Short, Esq.	5	1 0	500	..	32·17	205	145	
<b>3.—TWEED—Teviot &amp; c.</b> 431 sq. mi.									
D Hawick (WOLFELEE)	T. Lockie for Mrs. Browne	5	1 0	537	37·6	35·95	209	154	
D Todshawhaugh	R. J. Usher, Esq.	5	1 0	450	..	30·62	196	139	
D Denholm (Spital Tower)	J. G. Leadbetter, Esq.	5	0 9	410	32·7	31·04	230	160	
D Jedburgh (Jedneuk)	Capt. John S. Aikman, M.C.	5	1 0	270	26·3	26·00	206	126	
D Jedburgh (Crailing)	Major J. A. Paton	5	1 0	190	27·6	27·32	199	131	
D Linton (Clifton Park)	T. R. B. Elliot, Esq.	5	1 0	250	..	29·43	206	140	
D Melrose (Bowden, Kippilaw)	W. A. Henderson, Esq.	5	1 1	500	..	32·98	195	145	
D St. Boswells (Monksford)	A. Mitchell, Esq.	5	0 11	320	26·9	29·43	183	145	
<b>4.—TWEED—Ettrick &amp; c.</b> 10 sq. mi.									
D Melrose (Asylum) gauge A	T. C. Mitchell, Esq.	5	0 6	480	31·4	31·54	204	142	
D Melrose (Asylum) gauge B	T. C. Mitchell, Esq.	5	1 0	480	30·8	30·55	204	142	
<b>5.—TWEED—Gala.</b> 6 sq. mi.									
<b>6.—TWEED—Leader &amp; c.</b> 25 sq. mi.									
<b>7.—TWEED, LOWER—Left Bank Tributaries.</b> 25 sq. mi.									
D KELSO (Broomlands)	J. C. Scott, Esq.	5	1 0	193	26·0	28·34	192	133	
<b>8.—ESK.</b> 106 sq. mi.									
w Newcastleton Forest	Forestry Commission	5	1 0	700	48·5	40·18	..	..	

## DIVISION XIII—SOUTH-EASTERN COUNTIES.

SELKIRK. (Area, 268 sq. mi.).

**1.—TWEED—Teviot & c.** 34 sq. mi.

D Selkirk (Whitmuir Hall)	Miss M. E. Maxwell	5	1 0	800	32·5	36·33	223	157	
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## DIVISION XIII—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			Average Rain- fall.	1937.		
			Height of		ft.		in.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.					
SELKIRK—(con.).									
2.—TWEED—Ettrick & c. 192 sq. mi.									
d Ettrick Manse .....	Rev. W. Addison .....	5	1	2	787	55·6	44·84	296	167
3.—TWEED, UPPER—Right Bank Tributaries. 17 sq. mi.									
4.—TWEED, UPPER—Left Bank Tributaries. 19 sq. mi.									
d Galashiels (The Peel, Clovenfords) ..	Mr. A. V. Bruce .....	5	1	0	450	35·5	37·35	..	..
5.—TWEED—Gals. 6 sq. mi.									
PEEBLES. (Area, 348 sq. mi.)									
1.—TWEED, UPPER—Right Bank Tributaries. 127 sq. mi.									
M Edin. W.W. (Ravenscraig) ....	3. Edinburgh Water Engineer. 8	1	6	2258	..	65·38	..	..	
M Edin. W.W. (Gameshope Loch) 4	Edinburgh Water Engineer. 8	1	6	1860	70·6	61·74	..	..	
M Edin. W.W. (Loch Craig Head) 2	Edinburgh Water Engineer. 8	1	6	2627	..	65·17	..	..	
M Edin. W.W. (Gameshope Farm) 5	Edinburgh Water Engineer. 8	1	6	1538	..	69·20	..	..	
M Edin. W.W. (Talla Linns Foot) 6	Edinburgh Water Engineer. 8	1	6	966	61·8	50·74	..	..	
M Edin. W.W. (Quarter Hill) .....	7. Edinburgh Water Engineer. 8	1	0	1196	..	41·88	..	..	
d Edin. W.W. (Victoria Lodge) ..	8. Edinburgh Water Engineer. 5	1	0	900	50·0	44·01	226	172	
2.—TWEED, UPPER—Left Bank Tributaries. 192 sq. mi.									
d Stobo Castle .....	Mr. J. Finnie .....	5	1	0	594	34·9	35·82	199	155
d Peebles (Golf Course) .....	The Town Clerk .....	5	1	0	629	..	28·73	178	140
d West Linton (Woodlea Cottage) ..	Edinburgh Water Engineer. 5	0	11	801	..	37·50	206	163	
d WEST LINTON (Cairnton) .....	Dr. R. Graham Yooll .....	5	1	0	820	..	39·57	202	167
d West Linton (Baddingsgill Res.) ..	A. Simpson, Esq. ....	8	1	0	1100	..	45·25	245	168
3.—ESK. 23 sq. mi.									
d Eddlestone (Portmore Res.) .....	Edinburgh Water Engineer. 5	0	6	1000	35·2	38·97	239	164	
d Carlops (North Esk Res.) .....	J. Gilmour, Esq. ....	5	1	0	1150	39·5	46·09	221	170
4.—CLYDE—Right Bank Tributaries. 6 sq. mi.									
BERWICK. (Area, 457 sq. mi.)									
1.—TWEED—Gala. 6 sq. mi.									
2.—TWEED—Leader. 92 sq. mi.									
d Earlston (Cowdenknowes) .....	T. A. Mole, Esq. ....	5	1	3	300	28·8	31·26	..	..
Lauder (Allanbank) .....	J. G. S. Turnbull, Esq. ....	5	1	0	650	..	35·31	..	..
3.—TWEED, LOWER—Left Bank Tributaries. 115 sq. mi.									
d Coldstream (Lochton) .....	J. Aitchison, Esq. ....	5	1	0	151	25·9	29·75	198	133
d Swinton House .....	(+A) Rev. A. E. Swinton. ....	5	1	0	200	26·4	30·03	196	133
Paxton (Tweedhill) .....	H. I. Brackenbury, Esq. ....	5	1	0	50	..	28·04	..	..
4.—TWEED—Whiteadder. 164 sq. mi.									
d MARCHMONT House .....	Capt. J. H. F. McEwen, M.P. 5	1	0	498	32·2	34·39	211	136	
d Duns (Nesbet House Gdns.) .....	Mr. W. Cowieson .....	5	1	0	290	26·8	34·32	199	146
d Duns (Oxendean) .....	A. C. Fraser, Esq. ....	8	0	9	600	..	38·02	193	147
d Duns Castle .....	Mrs. F. S. Hay .....	5	1	0	500	30·8	36·63	201	146
d Duns (Manderston) .....	Mr. P. Dalgleish .....	5	2	6	356	30·7	36·91	220	150
d Longformacus (Whitchester) ....	C. Robinson, Esq. ....	5	1	0	838	..	37·92	204	153
5.—EAST COAST STREAMS. 80 sq. mi.									
d St. Abb's Head, new g. ....	Com'rs of N. Lighthouses. ...	8	5	6	212	..	29·83	190	130

## DIVISION XIII—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain-fall.	1937.			
			Height of Rim above Ground.	Ground above Sea Level.		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.	
EAST LOTHIAN. (Area, 267 sq. mi.)			<i>in.</i>	<i>ft.</i>	<i>in.</i>	<i>ft.</i>	<i>in.</i>		
1.—TWEED—Leader. 1 sq. mi.									
2.—TWEED—Whiteadder. 35 sq. mi.									
3.—EAST COAST STREAMS. 69 sq. mi.									
M Garvald (Donolly Reservoir) . . . . .	A. Robertson, Esq., C.E. . . . .	5	1	0	550	32.8	(32.45)	..	..
M Garvald (Thorner Reservoir) . . . . .	A. Robertson, Esq., C.E. . . . .	5	1	0	700	..	(38.89)	..	..
D Haddington (Beech Hill) . . . . .	H. V. de Pree, Esq. . . . .	5	1	0	413	..	31.89	192	135
D Broxmouth . . . . .	J. Easson, Esq. . . . .	4	1	0	50	..	27.12	148	123
D DUNBAR (Public Park) . . . . .	Burgh Surveyor . . . . .	5	1	0	75	..	28.36	184	133
4.—TYNE & C. 114 sq. mi.									
D Lammermuir H. (West Hopes) . . . . .	J. Ross, Esq. . . . .	5	1	0	736	34.4	43.67	196	171
w Lammermuir H. (Stobshiel Res.) . . . . .	B. J. Ross, Esq. . . . .	5	1	0	950	33.0	38.20	..	..
w Lammermuir H. (Stobshiel Res.) . . . . .	A. J. Ross, Esq. . . . .	5	1	0	998	28.1	36.17	..	..
w Lammermuir H. (Lammerloch Res.) . . . . .	J. Ross, Esq. . . . .	5	1	0	900	..	38.75	..	..
5.—FIRTH OF FORTH. 48 sq. mi.									
Longniddry (Eventyr) . . . . .	Miss E. M. MacGregor . . . . .	5	1	5	20	..	28.43	..	..
D East Fortune Sanatorium . . . . .	The Clerk of Works . . . . .	5	1	4	101	23.5	28.88	142	117
D Dirleton . . . . .	James Curr, Esq. . . . .	5	1	0	149	..	28.17	186	125
D North Berwick Reservoir . . . . .	A. Robertson, Esq., C.E. . . . .	5	1	0	150	25.4	27.58	180	127
D NORTH BERWICK (Gas Works) . . . . .	The Town Council . . . . .	5	1	0	118	24.1	27.61	183	132
6.—INSULAR.									
Fidra . . . . .	Com'rs. of N. Lighthouses . . . . .		..	..	21.0		24.13	165	127
MIDLOTHIAN. (Area, 369 sq. mi.)									
1.—TWEED—Gala. 68 sq. mi.									
D Stow (Cragdale) . . . . .	J. Pringle, Esq. . . . .	5	0	6	642	33.0	34.98	221	147
2.—TYNE. 28 sq. mi.									
D Oxenford Castle Gardens . . . . .	Mr. D. M. Welsh . . . . .	5	1	6	409	26.6	34.68	196	153
2.—FIRTH OF FORTH. 3 sq. mi.									
4.—ESK. 116 sq. mi.									
M Moorfoot Hills (Bowbate), <i>old g.</i> . . . .	Edinburgh Water Engineer . . . . .	11	0	6	1260	46.6	45.01	..	..
M Moorfoot Hills (Bowgate), <i>new g.</i> . . . .	Edinburgh Water Engineer . . . . .	8	1	0	1260	..	45.58	..	..
D Moorfoot Hills (Gladhouse Res.) . . . . .	Edinburgh Water Engineer . . . . .	5	0	6	915	35.3	40.92	224	171
D Moorfoot Hills (Rosebery) . . . . .	Edinburgh Water Engineer . . . . .	5	0	6	750	32.1	35.60	214	159
D Moorfoot Hills (Edgelaw) . . . . .	Edinburgh Water Engineer . . . . .	5	0	6	654	31.9	31.62	209	144
D Gorebridge . . . . .	W. S. B. Brown, Esq. . . . .	5	1	0	560	29.3	33.68	207	151
M Pentland Hills (Harehill) . . . . .	Edinburgh Water Engineer . . . . .	5	1	2	1297	42.0	37.46	..	..
D Pentland Hills (Martyrs Cross) . . . . .	Edinburgh Water Engineer . . . . .	5	1	0	750	35.5	37.98	217	160
D Pentland Hills (Loganlea) . . . . .	Edinburgh Water Engineer . . . . .	5	1	0	811	38.5	40.12	199	158
D Pentland Hills (Glencorse Fil.) . . . . .	Edinburgh Water Engineer . . . . .	5	1	0	638	35.0	35.68	192	145
D Pentland Hills (Glen Cottage) . . . . .	Edinburgh Water Engineer . . . . .	5	1	3	739	38.6	39.23	203	153
D Newbattle (Public School) . . . . .	W. Fowler, Esq. . . . .	5	1	0	300	25.7	32.92	180	137
5.—ALMOND & C. 153 sq. mi.									
D Pentland Hills (Crosswood) . . . . .	Edinburgh Water Engineer . . . . .	5	0	10	950	39.5	34.25	215	149
D Pentland Hills (Harperrig) . . . . .	Edinburgh Water Engineer . . . . .	5	1	0	900	38.8	38.50	225	162
D Pentland Hills (Morton) . . . . .	Edinburgh Water Engineer . . . . .	5	1	0	749	37.4	35.60	221	141
D West Calder (Addiewell) . . . . .	Scottish Oils, Ltd. . . . .	12	21	0	620	35.7	33.84	..	..
D BOGHALL . . . . .	(+A) Edin. & E. of S. Coll. of Ag. . . . .	8	1	0	639	33.1	34.68	205	154
D BALERNO (Shothead) . . . . .	A. B. Buchanan Smith, Esq. . . . .	5	1	0	750	..	34.79	183	138
D Pentland Hills (Harlaw Res.) . . . . .	Edinburgh Water Engineer . . . . .	5	1	0	800	33.4	32.28	202	138
M Pentland Hills (Bonaly Res.) . . . . .	Edinburgh Water Engineer . . . . .	11	0	8	1112	38.0	34.10	..	..
D Pentland Hills (Clubbiedean Res.) . . . . .	Edinburgh Water Engineer . . . . .	5	0	9	773	30.4	33.16	192	141
M Pentland Hills (Swanston) . . . . .	Edinburgh Water Engineer . . . . .	11	1	0	550	31.6	33.14	..	..
D Pentland Hills (Fairmilehead) . . . . .	Edinburgh Water Engineer . . . . .	5	1	0	590	30.8	32.98	199	141

## DIVISION XIII—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain-fall.	1937.		
			Height of Rim above Ground.	Ground above Sea Level.		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
MIDLOTHIAN—(con.)						in.		
5.—ALMOND & C.—(con.).						in.		
D Liberton (Alnwick Hill) . . . . .	Edinburgh Water Engineer .	5	1	0	407	28.5	31.43	183 131
Liberton (Hawkhead Grove) . . . . .	G. M. Stuart, Esq. . . . .	5	1	0	350	..	32.59	.. ..
D Colinton (Firhill Tank) . . . . .	Edinburgh Water Engineer .	5	0	10	412	29.0	29.22	207 127
D LIBERTON (College Gdns.) . . . . .	Edin. & E. of S. Coll. of Ag. .	5	1	0	190	27.7	31.90	182 125
D Liberton (The Inch) . . . . .	Gen. Sir Robert Gilmour, Bt. .	5	1	0	60	..	31.26	185 125
D EDINBURGH (BLACKFORD HILL). The Astronomer Royal for Scot. .		8	1	0	441	26.3	28.97	197 118
D EDINBURGH (UNIV. KING'S B.) . . . .	Prof. Sir T. Hudson Beare . .	5	1	0	225	..	30.22	185 120
D Edinburgh (Gogar Park) . . . . .	The late R. Cross, Esq. . . .	5	1	0	155	..	31.13	220 130
D Edinburgh (Napier Road) . . . . .	Mrs. H. G. Harrison . . . . .	5	1	0	300	26.2	31.17	209 124
D Edinburgh (Corstorphine) . . . . .	J. Laughton, Esq. . . . .	5	0	8	180	..	30.90	184 118
D Edinburgh (The Academy) . . . . .	W. P. D. Wightman, Esq., Ph.D. .	5	1	0	70	25.9	28.47	(172) (121)
D Edinburgh (St. Roque) . . . . .	Mr. S. Suttie . . . . .	5	0	10	270	27.7	30.74	182 123
D Edinburgh (Royal Botanic Gd.) . . .	Prof. Sir W. Wright-Smith . .	5	1	0	74	26.5	28.09	164 117
6.—CLYDE—Right Bank Tributaries. 1 sq. mi.								
WEST LoTHIAN. (Area, 120 sq. mi.)								
1.—ALMOND & C. 60 sq. mi.								
M Uphall . . . . .	No. 7. Edinburgh Water Engineer .	8	1	4	646	..	31.08	.. ..
M Uphall . . . . .	No. 8. Edinburgh Water Engineer .	8	1	4	577	32.7	31.41	.. ..
M Uphall . . . . .	No. 6. Edinburgh Water Engineer .	8	1	4	680	31.9	31.52	.. ..
M Uphall . . . . .	No. 3. Edinburgh Water Engineer .	8	1	2	711	32.2	31.08	.. ..
d Uphall . . . . .	Scottish Oils, Ltd. . . . .	8	0	10	380	31.4	32.96	.. ..
D Uphall (Houstoun House) . . . . .	J. W. Shairp, Esq. . . . .	5	1	0	420	..	32.11	188 144
Winchburgh (Hopetown Oil Wks.) . . .	Scottish Oils, Ltd. . . . .	8	2	2	327	33.3	30.27	.. ..
Dalmeny House . . . . .	The Earl of Rosebery . . . .	5	1	0	50	25.9	27.93	.. ..
2.—FORTH—Right Bank Tributaries. 59 sq. mi.								
D Bathgate (Filters) . . . . .	No. 1. A. L. Reid, Esq. . . . .	5	0	9	640	33.2	30.49	180 134
M Bathgate (Petershill Res.) . . . . .	No. 2. A. L. Reid, Esq. . . . .	5	0	9	710	30.3	(29.55)	.. ..
M Torphichen (Lochcote) . . . . .	Wm. Beattie, Esq. . . . .	5	0	9	550	33.5	33.69	.. ..
D Uphall (Beecraigs) . . . . .	Edinburgh Water Engineer .	5	1	0	531	32.6	35.78	207 156
M Carribber Reservoir . . . . .	Wm. Beattie, Esq. . . . .	5	0	9	350	33.1	32.62	.. ..
D Linlithgow (Grange) . . . . .	Miss J. G. Cadell . . . . .	5	0	9	430	30.2	33.17	185 144
D Linlithgow (Preston House) . . . . .	Mr. J. Hay . . . . .	5	1	0	380	32.6	30.92	190 144
3.—CLYDE.—Right Bank Tributaries. 1 sq. mi.								

## DIVISION XIV—SOUTH-WESTERN COUNTIES.

LANARK. (Area, 881 sq. mi.)

1.—TWEED, UPPER—Left Bank Tributaries. 20 sq. mi.

2.—ALMOND. 14 sq. mi.

3.—FORTH—Right Bank Tributaries. 9 sq. mi.

D Airdrie (Forrestburn Res.) . . . . .	A. Simpson, Esq., C.E. . . . .	5	1	0	722	37.1	34.97	172 151
4.—CLYDE—Right Bank Tributaries. 378 sq. mi.								
D Crawford (Camps Res.) . . . . .	The late Jas. McMillan, Esq. .	11	0	10	969	44.9	40.42	209 162
D Crawford (Camps Res.) . . . . .	(+A) The late Jas. McMillan, Esq. .	5	0	10	969	43.8	39.45	209 162
D Crawford (Camps Res.) . . . . .	No. 3. The late Jas. McMillan, Esq. .	11	0	10	969	..	41.00	209 162
M Coulter Reservoir . . . . .	L. Costley, Esq., C.E. . . . .	11	1	0	1250	49.0	50.02	.. ..
M Lamington (Cowgill Reservoir) . . .	J. Chisholm, Esq., C.E. . . .	5	1	0	1012	42.4	38.10	.. ..
D Biggar (Shieldhill) . . . . .	Miss Dunlop . . . . .	5	1	0	850	31.5	33.09	224 150
D Lamington House . . . . .	Rt. Hon. Lord Lamington . .	5	1	0	730	36.9	37.39	217 155
Carluke (Coldstream Reservoir) . . .	L. Costley, Esq., C.E. . . . .	11	1	0	800	36.2	27.60	.. ..
Carluke . . . . .	J. Barr, Esq. . . . .	5	0	5	640	..	29.63	.. ..
D CARLUKE (Law Junction) . . . . .	Dr. W. A. Galbraith . . . . .	5	1	0	534	..	27.78	206 132
Wishaw (Kirk Road) . . . . .	J. Y. Scott, Esq. . . . .	6	1	0	480	32.1	27.55	.. ..
Wishaw (Coronation Street) . . . . .	A. Hinshelwood, Esq. . . . .	5	1	3	510	..	28.24	.. ..
D Glasgow (Tollcross Park) . . . . .	W. Besant, Esq. . . . .	5	0	6	85	37.4	29.82	203 145

## DIVISION XIV—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Aver- age Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	Rain- fall.	Days with ·01 in. or more.
			Rim above Ground.	Ground above Sea Level.					
LANARK—(con.).			in.	ft. in.	ft.	in.		in.	
<b>4.—CLYDE—Right Bank Tributaries—(con.).</b>									
D Glasgow Green.....	W. Besant, Esq. ....	5	0	6	35	36·0	32·61	201	160
D Glasgow (Alexandra Park).....	W. Besant, Esq. ....	5	0	6	141	36·0	31·08	195	145
D Glasgow (Riddrie).....	K. M. Topping, Esq., B.Sc. ....	5	1	0	252	36·4	31·24	199	154
D Glasgow (Botanic Gardens).....	W. Besant, Esq. ....	5	0	6	110	34·7	30·82	192	146
D Glasgow (Kelvingrove Park).....	W. Besant, Esq. ....	5	0	6	48	36·1	27·78	..	150
D Glasgow (Victoria Park).....	W. Besant, Esq. ....	5	0	6	30	36·1	28·97	189	154
D Glasgow (Ruchill Park).....	W. Besant, Esq. ....	5	0	6	222	36·0	31·41	205	148
D Glasgow (Springburn Park).....	W. Besant, Esq. ....	5	0	6	351	36·9	31·66	212	150
M Clarkston (Roughrigg Res.).....	J. Chisholm, Esq., C.E. ....	5	1	0	664	35·8	31·65	..	..
D Airdrie (Broomknoll Street).....	J. Chisholm, Esq., C.E. ....	5	1	0	402	35·0	28·48	175	144
D Gartcosh (Gartloch Hospital).....	Mr. Donald McMillan, Esq. ....	5	1	0	291	37·8	31·33	199	147
D Caldercruix (Hillend Res.).....	Mr. Boyd Drummond ....	5	3	0	620	37·3	33·46	..	..
D Chryston School House.....	W. V. Forrest, Esq. ....	5	1	0	298	..	32·07	193	151
<b>5.—CLYDE—Left Bank Tributaries. 448 sq. mi.</b>									
Elvanfoot (Potrenick Burn).....	L. Costley, Esq., C.E. ....	11	1	0	1004	64·4	50·28	..	..
Elvanfoot (Peden Reservoir).....	L. Costley, Esq., C.E. ....	11	1	0	964	62·1	51·74	..	..
D Douglas (Monksfoot).....	T. Steele, Esq. ....	5	1	0	780	..	41·42	218	175
D Douglas Castle Gardens.....	The Earl of Home ....	8	1	3	700	41·1	40·95	196	165
D Strathaven (Glengavel Res.), <i>new site</i>	The late J. McMillan, Esq. ....	5	1	0	839	47·6	46·03	208	166
D Symington (Birkwood).....	Col. D. E. Brand, D.S.O. ....	5	1	6	725	..	31·80	204	138
D Strathaven (DUNGAVEL).....	A. K. Foulis, for the Duke of Hamilton & Brandon ....	5	1	0	798	43·9	43·88	209	163
D Strathaven (Dunside Res.).....	The late J. McMillan, Esq., C.E. ....	5	0	10	1010	46·4	42·41	209	163
D Strathaven (Dunside Res.) <i>new site</i>	The late J. McMillan, Esq., ....	5	1	0	1002	48·4	43·86	209	163
D Strathaven (Kype Res.).....	George Allison, Esq. ....	5	1	0	941	46·6	45·07	239	183
w Lesmahagow (Auchtyfardle).....	Mrs. Lauder ....	5	1	0	578	35·3	33·26	..	..
D Strathaven (East Overton Ho.).....	Mrs. H. Lee Dykes ....	5	1	0	700	42·4	38·43	162	147
D Stonehouse (Sanatorium).....	W. A. Chapman, Esq. ....	5	0	7	526	36·6	32·62	203	152
D Stonehouse (Glassford Filters).....	The late J. McMillan, Esq., C.E. ....	5	0	9	775	39·8	35·88	222	169
D Hamilton W.W. (Townhill).....	George Allison, Esq. ....	5	1	0	430	35·6	28·92	186	141
D Hamilton (Wellhall Road).....	S. B. Becket, Esq. ....	5	1	6	234	34·4	28·04	200	142
D Hamilton (Woodlea).....	W. Fletcher, Esq. ....	5	1	4	192	..	27·64	191	137
D Carmunnock (Carnbooth).....	R. Robertson, Esq., C.E. ....	5	1	0	365	39·8	31·13	188	143
D Cambuslang (Greenlees Filters).....	The late J. McMillan, Esq., C.E. ....	5	1	0	322	36·3	30·46	200	157
D Glasgow (Dumbreck).....	W. Gillies, Esq., L.L.B. ....	5	1	0	76	36·5	30·71	197	147
D Glasgow (Maxwell Drive).....	Rev. F. C. Newbery ....	5	1	0	60	..	29·47	..	128
D Glasgow (Bellahouston Park).....	W. Besant, Esq. ....	5	0	6	80	34·6	32·10	199	154
D Glasgow (Elder Park).....	W. Besant, Esq. ....	5	0	6	25	37·0	32·97	195	157
<b>6.—IRVINE. 2 sq. mi.</b>									
<b>7.—AYR. 1 sq. mi.</b>									
<b>8.—NITH. 2 sq. mi.</b>									
<b>9.—ANNAN. 7 sq. mi.</b>									
AYR. (Area, 1,135 sq. mi.)									
<b>1.—CLYDE—Left Bank Tributaries. 7 sq. mi.</b>									
D Glengarnock (Chemical Works).....	Messrs. Colvilles, Ltd. ....	8	15	0	105	54·4	40·14	178	148
<b>2.—FIRTH OF CLYDE. 60 sq. mi.</b>									
D Ardrossan (Burnfoot).....	J. C. Duncan, Esq., C.E. ....	5	1	0	63	..	36·69	202	147
D Stevenston (Greenhead Filters).....	W. G. Guild, Esq. ....	5	1	0	186	41·6	34·54	185	152
D Ardrossan (Busbie Res.).....	J. C. Duncan, Esq., C.E. ....	5	1	0	370	..	40·45	..	..
D Seamill.....	The late A. McDonald, Esq. ....	5	1	6	37	..	33·16	178	130
D West Kilbride School.....	Alex. M. Fleming, Esq. ....	5	1	0	200	..	36·48	187	145
D West Kilbride (Crosbie Res.).....	W. Gray, Esq. ....	5	1	0	400	..	35·55	..	..
D West Kilbride (Hunterston).....	Lt.-Gen. Sir A. Hunter- Weston, K.C.B. ....	5	1	0	40	42·4	39·16	196	157
D Fairlie (Southannan).....	H. W. Rowe, Esq. ....	5	1	0	20	..	47·20	201	164
D Fairlie (Water Works).....	W. Gray, Esq. ....	5	1	0	270	..	45·43	..	..
D Largs (Stevenson Institute).....	G. Arkieson, Esq. ....	5	1	0	20	..	41·17	174	144

## DIVISION XIV—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
AYR—(con.).			in.	ft. in.	ft. in.	in.		
<b>2.—FIRTH OF CLYDE—(con.).</b>								
d Largs (Woodbank) .....	A. Simpson, Esq. ....	5	1 0	25	..	42·83	195	153
d Largs (Noddsdale) .....	Mr. Alex S. McKenzie .....	5	1 0	250	..	49·88	213	162
d Largs (Middleton Filters) .....	G. Arkieson, Esq. ....	5	1 0	230	..	43·34	190	149
d Skelmorlie (West Park) .....	J. Wilkinson, Esq. ....	5	1 6	150	53·5	47·53	198	159
Shaws W.W. (Knockencorsan) <i>new site</i> J. MacAlister, Esq., C.E. ....		5	1 0	1040	..	54·30	..	..
Shaws W.W. (Largs Road) .....	J. MacAlister, Esq., C.E. ....	5	1 0	910	57·0	55·10	..	..
<b>3.—IRVINE &amp; C. 296 sq. mi.</b>								
d AYR (Heathfield) .....	Medical Officer of Health. ....	5	1 0	43	..	27·14	..	145
d PRESTWICK .....	Burgh Surveyor .....	5	1 0	17	..	27·03	185	135
d Prestwick (Ladykirk Filters) .....	F. Pritty, Esq., C.E. ....	6	1 0	185	..	31·70	188	142
d TROON .....	The Town Council (M. S. Brodie, Esq.) ..	5	1 0	15	..	29·07	187	139
d Symington .....	T. McMillan, Esq., M.A. ....	5	1 0	290	..	32·19	(184)	(142)
d Hurlford (Carnell) .....	G. D. Findlay Hamilton, Esq. ....	5	1 0	300	..	34·13	178	143
Troon (Collenan Reservoir) The Town Council (M. S. Brodie, Esq.) ..		5	1 0	203	..	33·42	..	..
d Treesbank .....	Mr. A. B. Stewart .....	5	1 0	150	..	37·09	188	157
d Irvine (Gailes) .....	H. W. Aitken, Esq. ....	5	1 0	12	35·9	32·74	186	153
d Cessnock Castle .....	J. Harling Turner, Esq. ....	5	1 0	275	..	35·88	190	151
d Newmilns (Lanfine) .....	D. Wardhaugh, Esq. ....	5	1 6	500	..	38·28	204	157
d Kilmarnock (Craig House) .....	Mrs. Pollok Morris .....	5	1 0	70	..	33·99	..	147
d Kilmarnock (The Mount) .....	J. L. Lawson, Esq.* .....	5	0 9	100	..	34·36	225	146
d Templetonburn .....	F. C. Howie, Esq. ....	5	1 0	140	..	34·90	197	153
d Darvel (Kirkland Park) .....	W. Dunbar Esq. ....	5	1 0	350	..	38·92	191	157
Raithhill .....	W. Dunbar, Esq. ....	5	1 0	640	..	43·43	..	..
d KILMARNOCK (Kay Park) .....	(+A) W. Dunbar, Esq. ....	5	4 0	132	..	33·67	188	145
d Kilmarnock (Dean Castle) .....	W. Dunbar, Esq. ....	5	1 0	190	40·7	34·30	194	149
d Irvine (Cuninghame Home) .....	J. Gillespie, Esq. ....	5	1 0	24	..	34·15	175	142
d Kilmarnock (North Craig Res.) .....	W. Dunbar, Esq. ....	5	1 0	319	41·2	38·58	201	158
d Montgreenan Gardens .....	A. Dow, Esq. ....	5	0 9	180	..	39·78	202	157
d Fenwick (Whiteliehill) .....	W. Dunbar, Esq. ....	5	1 0	915	..	42·69	..	..
d Fenwick (Hareshawmuir) .....	W. Dunbar, Esq. ....	5	1 0	600	48·5	40·56	183	157
d Croilburn .....	W. Dunbar, Esq. ....	5	1 0	725	..	41·55	..	..
d Fenwick (Amlaird Filters) .....	W. Dunbar, Esq. ....	5	1 0	590	43·3	38·62	191	152
Craigenduntun Reservoir .....	W. Dunbar, Esq. ....	5	1 0	805	46·4	43·66	..	..
d Loch Goin Reservoir .....	W. Dunbar, Esq. ....	5	1 0	865	49·4	44·41	..	..
d Blair Gardens .....	W. Dunbar, Esq. ....	5	1 0	155	..	43·48	190	160
d Moor Farm .....	W. Dunbar, Esq. ....	5	1 0	810	..	42·38	..	..
d Stewarton Filters .....	C. Mc. L. Bodie, Esq. ....	5	1 6	515	..	42·83	191	157
d Dunlop (Kirkland) .....	The late R. Clement, Esq. ....	5	1 0	400	..	42·63	178	152
d Dalry (Munnoch Reservoir) .....	W. G. Guild, Esq. ....	5	1 0	325	47·9	43·58	215	162
d Dalry (Caaf Reservoir) .....	W. G. Guild, Esq. ....	5	1 3	515	53·2	48·01	216	168
d Dalry (Birkheadsteel) .....	W. G. Guild, Esq. ....	5	1 0	520	..	49·81	216	171
d Dalry W.W. (Filters) .....	W. Gray, Esq. ....	5	1 0	320	46·5	40·70	196	160
d Dalry (Templand) .....	A. Shanks, Esq. ....	5	1 0	154	..	40·23	193	159
d Dalry W.W. (Thirdpart) .....	W. Gray, Esq. ....	5	1 0	560	52·0	41·62	..	..
d Dalry (Knockendon) .....	W. G. Guild, Esq. ....	5	1 0	750	..	47·70	..	..
d Dalry (Bradshaw) .....	W. G. Guild, Esq. ....	5	1 0	1050	..	46·10	..	..
d Dalry (Campmill Reservoir) .....	James Lee, Esq. ....	5	1 0	611	..	53·82	..	..
d Beith (Filter Station) .....	W. Gray, Esq. ....	5	1 0	412	54·5	42·71	194	153
d Kilbirnie (Hole House Filters) .....	W. Gray, Esq. ....	5	1 0	377	..	54·17	224	182
M Kilbirnie (Pundeavon Res.) .....	W. Gray, Esq. ....	11	1 0	898	..	59·56	..	..
<b>4.—AYR. 222 sq. mi.</b>								
d AYR Cemetery .....	J. Young, Esq., C.E. ....	5	1 0	40	34·8	29·44	160	141
d AUCHINCRAIVE .....	W. Scotland Agric. Coll. ....	8	1 0	89	..	30·10	186	141
d Catrine .....	Messrs. J. Findlay & Co. Ltd. ....	5	1 0	300	..	29·55	188	138
d Montgomerie .....	E. S. Arthur, Esq. ....	5	1 2	340	..	32·50	188	147
d Muirkirk (Dalfarm Farm) .....	W. Dunbar, Esq. ....	5	1 0	715	..	43·83	176	159
d Muirkirk (Kaimshill) .....	A. B. Thomson, Esq. ....	5	1 6	750	43·4	38·35	202	159
d Mauchline (Hillhead Tank) .....	W. Gray, Esq. ....	5	1 0	564	..	33·62	180	136
Sorn (Blackside Water Tank) .....	W. Gray, Esq. ....	5	1 0	840	..	35·94	..	..

\* Per W. Dunbar, Esq.

## DIVISION XIV—SOUTH-WESTERN COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
AYR—(con.).								
5.—DOON. 119 sq. mi.		in.	ft.	in.	ft.	in.	in.	
d Tunskeen	Galloway Water Power Co.	5	1	0	1010	..	59·92	.. 159
Loch Recawr	J. Young, Esq., C.E.	5	1	0	933	..	52·10	.. ..
Loch Finlas	J. Young, Esq., C.E.	5	1	0	849	55·1	47·54	.. ..
d Dalmellington (Mossdale Filters)	W. Gray, Esq.	5	1	0	764	..	37·71	209 162
d Dunaskin (Ardoon)	Messrs. Bairds & Dalmellington Ltd.	5	1	0	686	..	39·58	187 157
d Patna (Kerse Filters)	W. Gray, Esq.	11	1	0	743	44·1	30·45	.. ..
d Maybole (Otterden)	Robert Coombe, Esq.	5	1	3	314	..	36·38	192 147
d Dalrymple (Knockjarder W.W.)	J. Young, Esq., C.E.	5	1	0	287	..	33·86	185 144
d Ayr (Doonholm)	Col. N. Kennedy, D.S.O.	5	1	0	90	38·8	35·63	195 157
d Alloway (Doonside)	Mr. R. McLeod	5	1	5	99	..	36·41	212 160
6.—CULZEAN BAY & C. 32 sq. mi.								
d TURNBERRY (Hotel)	Resident Manager	5	1	0	30	..	29·91	187 142
d Maybole (Culzean Castle Gdns.)	Mr. W. J. Orr	8	1	3	138	36·4	29·88	155 131
7.—GIRVAN. 105 sq. mi.								
d Girvan (Glendoune Gardens)	Mr. J. Melbourne	5	1	0	100	41·8	37·05	194 161
Loch Bradan	M. S. Brodie, Esq.	11	0	10	990	57·6	46·93	.. ..
d Dailly (Capelrig Cottage)	J. Simons, Esq.	5	0	9	120	..	38·97	176 158
8.—STINCHAR & C. 155 sq. mi.								
d Glenapp Castle Gardens	Mr. A. W. Taylor	5	0	7	100	..	47·80	.. 144
d Ballantrae (Windyknowe)	Capt. J. M. Borland, C.B., D.S.O	5	1	0	62	..	38·02	207 158
d COLMONELL (Knockdolian)	D. Gordon for Capt. McConnell	5	1	0	170	44·8	39·86	207 153
d Pinwherry (Alticane)	D. I. W. Gray, Esq.	5	1	0	200	51·4	42·03	205 165
d Girvan (Pinmore)	Major E. C. Maxwell	5	0	5	207	49·8	42·77	225 166
d Barr (Alton Albany)	Lt.-Cdr. G. Hughes-Onslow, D.S.C.	5	1	6	330	..	42·42	212 163
9.—LOCH RYAN. 12 sq. mi.								
10.—LUCE BAY. 15 sq. mi.								
d Ballantrae (Lagafater Lodge)	Cedric R. Boulton, Esq.	5	0	11	792	64·8	52·43	.. 183
11.—CREE. 40 sq. mi.								
12.—DEE. 9 sq. mi.								
13.—NITH. 62 sq. mi.								
Afton Res. (Afton Water)	W. Gray, Esq.	5	1	0	1525	..	70·75	.. ..
Afton Res. (Alwhat Burn)	W. Gray, Esq.	5	1	0	1435	..	82·50	.. ..
Afton Res. (Montraw Burn)	W. Gray, Esq.	5	1	0	1554	83·3	74·25	.. ..
Afton Res. (Montraw)	W. Gray, Esq.	5	1	0	1372	83·9	77·95	.. ..
Afton Res. (Green Burn)	W. Gray, Esq.	5	1	0	1415	..	75·85	.. ..
d Afton Res. (Filters)	(+A) W. Gray, Esq.	5	1	0	1361	84·7	63·90	231 176
d Glen Afton (Ayr Sanatorium)	Dr. Wm. A. Murray	5	1	0	833	53·2	49·40	224 166
d New Cumnock (Power Stn.)	New Cumnock Collieries, Ltd.	5	1	0	764	55·8	42·10	165 146
14.—INSULAR. 1 sq. mi.								
Ailsa Craig	Com'rs. of N. Lighthouses	5	1	0	35	27·0	26·38	163 134
RENFREW. (Area, 241 sq. mi.).								
1.—CLYDE—Right Bank Tributaries. 3 sq. mi.								
2.—CLYDE—Left Bank Tributaries. 194 sq. mi.								
Gorbals Dist. W.W. (Nether Cairn)	J. Cochrane, Esq.	12	0	5	700	55·4	(42·05)	.. ..
Gorbals Dist. W.W. (Waulk Glen)	J. Cochrane, Esq.	12	0	5	280	47·2	(39·70)	.. ..
Paisley W.W. (Muirhead)	James Lee, Esq.	5	1	0	482	53·9	43·20	.. ..
Paisley W.W. (Springside)	James Lee, Esq.	5	1	0	532	59·1	45·51	.. ..
Paisley W.W. (Back Thornlymuir)	James Lee, Esq.	12	1	0	646	50·9	43·89	.. ..
Paisley W.W. (Stanely)	James Lee, Esq.	5	1	0	190	..	38·16	.. ..
d Howwood (Midton House)	A. D. McNab, Esq.	5	1	3	232	56·9	44·48	164 145
d Pollokshaws (Rouken Glen)	W. Besant, Esq.	5	0	6	156	43·2	33·53	203 149
d Glasgow (The Linn Park)	W. Besant, Esq.	5	1	0	180	33·8	31·23	193 163
d Pollokshaws (Pollok House)	Sir J. Stirling Maxwell, Bt.	5	1	0	50	36·5	29·92	203 148
d Glasgow (Queen's Park)	W. Besant, Esq.	8	0	9	150	36·1	32·94	229 159
d Glasgow (Maxwell Park)	W. Besant, Esq.	5	0	6	69	35·7	28·89	204 148
d Kilbarchan (Milliken Park)	The late M. Douglas Anderson, Esq.	5	1	0	80	..	39·83	168 155
d Kilbarchan (Glentyan)	R. H. Hunter, Esq.	5	1	1	300	52·6	43·82	211 150

## DIVISION XIV—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground					
			above	above					
			Ground.	Sea Level.					
RENFREW—(con.).									
2.—CLYDE—Left Bank Tributaries—(con.).									
D PAISLEY (Coats Observatory) . . . . .	Obs. Com. (J. Woodrow) . . . . .	8	1 0	106	40·7	33·98	183	143	
D Houston Manse . . . . .	Rev. George Muir . . . . .	5	1 0	103	47·7	38·47	191	146	
§ Shaws W.W. (Duchal Moor) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	1150	..	67·00	..	..	
§ Shaws W.W. (Creuch Hill) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	1350	..	60·00	..	..	
Shaws W.W. (Green Water) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	788	68·1	57·40	..	..	
D RENFREW (ABBOTSINCH) (+A) . . . . .	Meteorological Officer . . . . .	8	1 0	19	37·0	31·27	188	130	
D Kilmacolm W.W. . . . .	James Grier, Esq. . . . .	5	1 0	600	69·0	48·69	211	170	
D Kilmacolm Village . . . . .	James Grier, Esq. . . . .	5	1 0	300	51·7	46·22	211	166	
D Shaws W.W. (Gryfe Reservoir) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	640	64·0	53·28	207	160	
D Shaws W.W. (Mansfield) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	573	65·2	49·81	205	162	
Shaws W.W. (Darnaff Moor) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	850	64·5	52·60	..	..	
3.—FIRTH OF CLYDE. 34 sq. mi.									
w Shaws W.W. (Kelly Dam) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	640	63·6	53·00	..	..	
Inverkip (Daff Burn Reservoir) . . . . .	Alex. Duthie, Esq. . . . .	8	1 0	506	58·4	54·93	..	..	
w Douglihill Filters (Pt. Glas. W.W.) . . . . .	James Murray, Esq., C.E. . . . .	8	1 6	550	53·4	39·98	..	..	
w Parkhill Filters (Pt. Glas. W.W.) . . . . .	James Murray, Esq., C.E. . . . .	8	1 6	275	48·1	37·09	..	..	
§ Shaws W.W. (Compens. Res.) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	600	..	53·96	217	168	
D Shaws W.W. (Loch Thom) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	643	65·4	56·82	219	166	
w Shaws W.W. (Shielhill) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	962	64·2	55·40	..	..	
D Shaws W.W. (New Yett's Dam) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	800	63·2	53·90	220	168	
w Shaws W.W. (Spango Burn) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	757	62·6	58·30	..	..	
D Shaws W.W. (Hole Glen) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	603	61·6	51·39	225	165	
D GREENOCK (Prospect Hill) (+A) . . . . .	J. MacAlister, Esq., C.E. . . . .	5	1 0	199	58·2	45·48	196	157	
D Gourcock (Levan Farm) . . . . .	W. Millar, Esq. . . . .	5	1 0	221	..	48·64	218	159	
D Gourcock (Coves Reservoir) . . . . .	Alex. Duthie, Esq. . . . .	5	1 0	221	53·4	45·61	181	137	
4.—IRVINE. 10 sq. mi.									

## DIVISION XV—WEST MIDLAND COUNTIES.

DUMBARTON. (Area, 270 sq. mi.)

1.—FORTH—Right Bank Tributaries. 10 sq. mi.

2.—FIRTH OF CLYDE &amp; COWAL. 52 sq. mi.

D CARDROSS (Kilmahew) . . . . .	Claud A. Allan, Esq. . . . .	5	1 0	130	44·7	37·97	192	159	
D HELENSBURGH (Valve House) . . . . .	J. N. Stirling, Esq., C.E. . . . .	5	1 0	293	53·0	45·99	200	160	
D Rosneath Castle Gardens . . . . .	Mr. J. Dawson . . . . .	5	1 0	80	50·8	43·47	211	157	
D Garelochhead (Faslane) . . . . .	P. J. Macfarlan, Esq. . . . .	5	1 3	25	..	53·53	199	167	
Garelochhead (Gartnod) . . . . .	Miss M. I. M. Robertson . . . . .	5	1 4	10	..	53·10	..	..	
D Garelochhead (Ardarroch Gdns.) . . . . .	F. A. Bush, Esq. . . . .	5	1 0	100	..	61·05	232	179	
D Arrochar (Benreoch Tighness) . . . . .	Mr. S. D. Little . . . . .	5	1 0	50	81·2	72·51	218	185	
D Arrochar (Braeside) . . . . .	J. Lindsay, Esq. . . . .	5	1 0	40	77·4	62·38	214	170	
3.—CLYDE—Leven. 149 sq. mi.									
D Renton (Carman Filters) . . . . .	W. Buchanan, Esq. . . . .	8	4 0	292	46·8	40·06	179	159	
d Loch Lomond Park . . . . .	W. Besant, Esq. . . . .	5	1 0	156	50·2	49·70	..	204	
Helensburgh (Blairmairn) . . . . .	No. 1 J. N. Stirling, Esq., C.E. . . . .	8	1 0	575	..	57·70	..	..	
Helensburgh (Blairmairn) . . . . .	No. 2 J. N. Stirling, Esq., C.E. . . . .	5	1 0	1250	..	63·13	..	..	
Helensburgh (Blairmairn) . . . . .	No. 3 J. N. Stirling, Esq., C.E. . . . .	5	1 0	1580	..	64·23	..	..	
M Glen Finlas Reservoir . . . . .	No. 1 George Beaton, Esq. . . . .	5	1 1	782	69·1	62·49	..	..	
M Glen Finlas Reservoir . . . . .	No. 2 George Beaton, Esq. . . . .	5	1 6	1194	67·0	60·46	..	..	
M Glen Finlas Reservoir . . . . .	No. 3 George Beaton, Esq. . . . .	5	1 5	1627	75·2	57·60	..	..	
M Glen Finlas Reservoir . . . . .	No. 4 George Beaton, Esq. . . . .	5	2 0	2040	73·6	58·78	..	..	
M Glen Finlas Reservoir . . . . .	No. 5 George Beaton, Esq. . . . .	5	0 10	1635	64·6	52·20	..	..	
M Glen Finlas Reservoir . . . . .	No. 6 George Beaton, Esq. . . . .	5	1 0	1172	62·8	58·03	..	..	
D Glen Finlas Reservoir . . . . .	No. 7 George Beaton, Esq. . . . .	5	1 6	810	..	71·30	201	170	
4.—CLYDE—Right Bank Tributaries. 59 sq. mi.									
D Drumchapel (Wastdale) . . . . .	F. C. Thomson, Esq. . . . .	5	1 0	49	37·5	30·12	204	44	
w Bearsden (Glenarnock) . . . . .	A. Lithgow, Esq. . . . .	8	1 0	132	40·7	34·83	..	..	
Bearsden (Torrin Mor) . . . . .	J. Lewis Ferguson, Esq. . . . .	5	1 0	224	..	31·09	..	..	
d Gartshore Gardens . . . . .	Mr. Hector Macdonald . . . . .	5	1 0	261	..	(35·86)	(201)	(156)	
D Milngavie (Douglaston) . . . . .	Mr. J. Hamilton . . . . .	5	1 0	150	42·3	39·17	189	154	
D Duntocher (Cochno Filters) . . . . .	E. T. Collins, Esq. . . . .	5	1 0	400	44·2	36·52	172	152	

§ Turf wall round gauge.



## DIVISION XV—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	fall.				
			above	above					
			Ground.	Sea Level.					
<b>DUMBARTON—(con.).</b>									
		<i>in.</i>	<i>ft. in.</i>	<i>ft.</i>	<i>in.</i>		<i>in.</i>		
<b>4.—CLYDE—Right Bank Tributaries—(con.).</b>									
Kilpatrick Hills (Greenside Res.)	E. T. Collins, Esq.	5	1 0	876	51·8	47·83	..	..	
Kilpatrick Hills (Loch Cochno)	E. T. Collins, Esq.	5	1 0	909	52·8	46·52	..	..	
Kilpatrick Hills (Jaw Reservoir)	E. T. Collins, Esq.	5	1 0	912	53·9	50·37	..	..	
<b>STIRLING. (Area, 463 sq. mi.).</b>									
<b>1.—FORTH—Right Bank Tributaries. 263 sq. mi.</b>									
D Polmont (Vellore)	R. M. W. Brown, Esq.	5	1 0	320	32·0	31·67	182	147	
M Polmont (Carhowden)	T. B. G. Harvey, Esq.	5	1 0	110	..	30·65	..	..	
D Falkirk (Inglewood, Laurieston)	Miss H. S. D. Ballantine	5	1 0	133	34·8	33·41	173	146	
D Falkirk (Westbank) <i>Garden</i>	A. Nimmo, Esq.	5	1 0	75	36·0	34·00	192	152	
D Falkirk (Westbank) <i>Lawn</i>	A. Nimmo, Esq.	5	1 0	105	33·6	32·54	192	147	
D Falkirk (Arnotdale)	W. Gibson, Esq.	5	1 0	105	33·7	32·03	190	142	
Falkirk (Kerse)	Robert Johnston, Esq.	8	1 0	18	31·9	29·79	..	..	
Falkirk (Kerse) <i>new g.</i>	Robert Johnston, Esq.	5	1 0	18	..	30·43	..	..	
D Grangemouth (Burgh Depôt)	J. C. Wallace, Esq., C.E.	5	1 0	15	30·9	30·29	185	135	
M Little Denny Reservoir	Stirling & Falkirk W. Bd.	8	1 0	326	42·8	37·60	..	..	
M Little Denny Filters	Stirling & Falkirk W. Bd.	8	1 0	243	42·4	38·30	..	..	
M Kilsyth (Faughlin Res.)	Stirling & Falkirk W. Bd.	8	1 0	707	54·4	49·56	..	..	
Kilsyth (Kirkburn)	Stirling & Falkirk W. Bd.	8	1 0	745	..	44·61	..	..	
Denny (Buckieburn Reservoir)	Stirling & Falkirk W. Bd.	8	1 0	825	45·3	48·62	..	..	
Denny (Buckieburn Filters)	Stirling & Falkirk W. Bd.	8	1 0	760	42·1	34·00?	..	..	
Loch Coulter	Stirling & Falkirk W. Bd.	8	1 0	713	..	37·78	..	..	
M Earlsburn Reservoir	Stirling & Falkirk W. Bd.	8	1 0	1202	56·8	50·42	..	..	
D Stirling (North Third Res.)	J. C. Wallace, Esq., C.E.	8	0 10	574	49·4	41·41	223	179	
D Stirling (Touch Res.)	No. 3 D. B. Marrs, Esq.	8	1 0	759	49·1	40·89	221	162	
D Stirling (Touch Res.)	No. 2 D. B. Marrs, Esq.	8	1 0	707	47·9	39·52	221	162	
D Stirling (Touch Res.)	No. 1 D. B. Marrs, Esq.	8	1 0	455	47·6	41·96	221	165	
d Polmaise Castle Gardens	Mr. J. McAndie	5	1 1	220	..	38·96	..	134	
w Touch Gardens	Mr. T. Davidson	5	1 0	90	..	39·35	..	..	
Endrick Lodge	W. M. Wallace, Esq.	5	1 0	136	..	34·01	..	..	
D STIRLING (Sauchie House)	The Town Council (J. Fyfe)	5	1 0	151	35·9	32·05	185	139	
D Stirling (Craigforth)	Mrs. A. J. Couper	5	1 0	32	39·2	33·33	236	160	
D Gargunock House	V. H. C. Stirling, Esq.	5	1 0	85	41·8	36·42	204	159	
D Kippen (Arngomery)	Mr. A. Leitch	5	4 6	150	46·5	38·55	224	165	
Meiklewood	Mr. J. McNaughton	5	1 0	35	..	34·75	..	..	
Duchray Valley (Ben Lomond)	J. Cochrane, Esq.	8	0 6	1500	89·2	65·80	..	..	
Duchray Valley (Glen Dhu)	J. Cochrane, Esq.	8	1 0	500	81·8	67·50	..	..	
Duchray Valley (Comer)	J. Cochrane, Esq.	8	1 0	600	86·5	69·55	..	..	
Duchray Valley (Achaidd Burn)	J. Cochrane, Esq.	8	1 0	1200	94·4	75·20	..	..	
Duchray Val. (Hd. of Main Stream)	J. Cochrane, Esq.	8	1 0	950	88·8	69·25	..	..	
<b>2.—FORTH—Teith. 5 sq. mi.</b>									
d Stronachlachar (Invergyle)	J. Cochrane, Esq.	8	1 0	376	83·2	67·00	..	209	
<b>3.—FORTH—Left Bank Tributaries. 15 sq. mi.</b>									
D Bridge of Allan (The Lea)	Mr. W. Watt	5	0 8	100	35·4	32·58	226	145	
D Bridge of Allan (Langlands)	W. H. Gillespie, Esq.	5	1 0	45	..	32·21	186	137	
<b>4.—CLYDE—Leven. 128 sq. mi.</b>									
Kilpatrick H. (Burncrooks Res.)	E. T. Collins, Esq.	5	1 0	835	51·9	46·33	..	..	
Strathblane (Blanehead)	J. Cochrane, Esq.	8	1 0	250	50·6	40·95	..	..	
d Killearn (Burnbrae)	G. Gray, Esq.	5	1 0	320	..	40·48	(190)	(152)	
d Fintry (Police Station)	D. Taylor, Esq.	5	1 0	300	..	49·95	..	126	
Drymen (Pk. of Drumquhassle)	Sir George A. Mitchell	5	1 3	67	..	38·80	..	..	
D Balfron (High School)	E. G. McHutchon, Esq., M.A.	5	1 1	340	..	42·92	208	163	
Loch Arklet (Corrieichon)	J. Cochrane, Esq.	8	0 6	870	82·6	63·60	..	..	
Loch Arklet (Corriearklet)	J. Cochrane, Esq.	8	0 6	950	85·2	72·70	..	..	
<b>5.—CLYDE—Right Bank Tributaries. 52 sq. mi.</b>									
Strathblane (Mugdock Res.)	J. Cochrane, Esq.	8	0 6	320	46·2	40·95	..	..	
D Milngavie (Eastertoun)	Major R. M. Ker	5	1 0	450	46·4	38·41	193	153	
D Kilsyth (Innsbridge)	J. Milne, Esq.	5	4 6	197	47·7	42·66	216	169	
D Lennoxton	W. R. Patterson, Esq.	5	1 0	200	..	45·04	197	160	

## DIVISION XV—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge					1937.		
			Height of		Average			Rain-fall.	Days with	Days with
			in.	ft.	in.	ft.	in.	in.	·01 in. or more.	·04 in. or more.
<b>BUTE. (Area, 218 sq. mi.)</b>										
<b>1.—ISLE OF BUTE. 50 sq. mi.</b>										
d Rothesay (Dhu Loch W.W.)	A. Stephen, Esq.	5	1	6	273	..	..	42·45	200	162
d ROTHESAY (Ardencraig)	A. H. Finlay, Esq.	5	1	0	200	49·0	..	44·39	201	158
<b>2.—CUMBRAES. 4 sq. mi.</b>										
d Millport (St. Andrew's Home)	Dr. J. H. Paul	5	0	9	10	..	..	39·81	197	153
d Millport (Marine Biog. Stat.)	R. Elmhirst, Esq.	5	1	0	16	38·0	..	36·90	194	152
d Millport (Water Works)	J. Dymock, Esq.	10	3	6	167	..	..	29·31	..	..
<b>3.—ARRAN. 164 sq. mi.</b>										
Holy Island (Pillar Rock)	Com'rs. of N. Lighthouses	5	0	11	68	48·6	..	41·25	180	151
d Dougarie Lodge	David Reside, Esq.	5	1	2	10	46·0	..	44·26	210	165
<b>ARGYLL. (Area, 3,181 sq. mi.)</b>										
<b>1.—TAY—Tummel. 36 sq. mi.</b>										
<b>2.—SOUND OF ARISAIG, SOUND OF MULL &amp; C. 317 sq. mi.</b>										
d Morvern (ARDTORNISH)	A. Cameron for O. H. Smith, Esq.	5	1	0	48	83·3	..	61·74	212	200
d Morvern (Drimnin)	Mrs. Gordon	5	1	0	225	62·7	..	47·72	221	182
d Morvern (Drumbuy)	Mr. Iain MacMillan	5	1	0	80	..	..	54·43	223	173
d Loch Sunart (Glenborrodale)	A. M. Fletcher, Esq.	5	1	0	50	69·0	..	52·47	190	177
d Acharacle (Shielbridge)	A. M. Fletcher, Esq.	8	3	0	51	68·2	..	52·88	223	198
d Loch Shiel (Polloch House)	Forestry Commission	5	1	1	17	83·5	..	68·21	..	179
<b>3.—LOCH LINNHE—Right Bank Tributaries. 139 sq. mi.</b>										
d Morvern (Kingairloch)	Mrs. G. H. Strutt	5	1	0	40	98·2	..	79·97	213	188
Corran Lighthouse	Com'rs. of N. Lighthouses	5	1	0	13	81·0	..	62·16	..	170
d Ardgour House	Mrs. Maclean of Ardgour	5	0	10	60	90·4	..	73·02	236	185
<b>4.—LOCH LINNHE—Left Bank Tributaries. 165 sq. mi.</b>										
d Barcaldine	Forestry Commission	5	1	0	50	65·9	..	48·76	178	160
Glen Creran (Fasnacloich)	T. A. Robertson, Esq.	5	1	8	100	..	..	63·05	..	..
d Duror (Achara)	The late W. D. Stewart, Esq.	5	1	2	45	70·7	..	47·53	..	..
d Duror (Achadh Nan Sqiath)	G. H. Malcolm, Esq.	5	3	8	30	..	..	49·64	174	160
d Glencoe Gardens	Mr. N. Fraser	8	1	0	85	..	..	65·01	208	174
d Glenleven (Blackwater House)	4. British Aluminium Co., Ltd.	8	1	0	1069	80·8	..	64·67	..	..
d Glenleven (Blackwater Dam, S.)	2(+A) British Aluminium Co. Ltd.	8	1	0	1072	84·0	..	66·40	241	184
d Glenleven (Kinlochleven)	1. British Aluminium Co. Ltd.	8	1	0	140	86·4	..	68·80	220	178
<b>5.—LOCH ETIVE. 197 sq. mi.</b>										
<b>6.—LOCH ETIVE—Loch Awe. 319 sq. mi.</b>										
<b>7.—FIRTH OF LORNE. 112 sq. mi.</b>										
d Kilmelfort (Arduaine)	Mrs. Campbell of Arduaine	5	0	9	23	57·6	..	54·79	..	167
d Kilmelfort (Ardmaddy C.)	Rt. Hon. The Earl of Breadalbane	5	1	0	70	..	..	58·96	219	173
w Oban (Gleann-a-Bhearraidh Res.)	D. Galloway, Esq.	8	1	6	400	57·5	..	50·57	..	..
d OBAN	D. Galloway, Esq.	8	1	1	229	..	..	46·76	188	150
<b>8.—SOUND OF JURA. 163 sq. mi.</b>										
d Lochgilphead (Poltalloch)	Mr. D. S. Melville	5	1	6	135	52·7	..	53·41	202	180
<b>9.—KINTYRE, WEST. 146 sq. mi.</b>										
Mull of Kintyre	Com'r. of N. Lighthouses	5	1	0	270	40·9	..	43·05	198	178
d Largie Castle	Mrs. Moreton Macdonald	5	1	1	160	48·4	..	46·83	211	170
d West Loch Tarbert (Dunmore)	Capt. J. V. Taylor	5	1	8	100	..	..	49·72	185	161
<b>10.—KINTYRE, EAST. 177 sq. mi.</b>										
d Campbeltown (South Park)	The late J. A. Gardiner, Esq.	8	0	8	20	50·6	..	49·32	228	189
d Carradale (Torrisdale Castle)	The late Major W. M. Hall	5	1	0	84	62·6	..	58·62	214	179
d Carradale (Saddell Manse)	Rev. J. A. Argyll Baker	5	1	5	25	..	..	56·94	209	174
d Monybacach (Skipness)†	C. A. M. Oakes, Esq.	5	1	2	14	48·8	..	49·35	218	177
<b>11.—LOCH FYNE. 264 sq. mi.</b>										
d Ardlamont (Kilbride)	J. W. Turnbull, Esq.	5	1	0	110	49·0	..	42·13	191	162
d Ardrishraig (Canal Office)	E. A. Bly, Esq., C.E.	5	1	0	48	67·9	..	56·05	201	177
d Crarae Lodge	Capt. G. I. Campbell	5	1	0	20	68·2	..	59·95	193	169
d Strachur Park	Lady G. Campbell	5	1	8	25	66·7	..	61·20	213	186
d Brenchoillie	A. R. Page, Esq.	5	1	0	240	..	..	60·81	186	162
d Inveraray Castle Gardens	A. R. Page, Esq.	5	1	0	40	77·2	..	77·38	186	173
d Ardkinglas	J. R. Taylor, Esq.	8	1	6	37	70·8	..	63·21	214	176

† Station formerly known as Skipness Castle.

## DIVISION XV—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937		
			Height of		Aver-		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim above Ground.	Ground above Sea Level.	age Rain-fall.				
ARGYLL—(con.).			in.	ft. in.	ft.	in.	in.		
<b>12.—FIRTH OF CLYDE &amp; COWAL. 242 sq. mi.</b>									
d Toward (Knockdow Gardens) . . . . .	Sir Norman Lamont, Bt. . . . .	5	1	6	101	59.7	49.53	206	166
d Toward (Inverchaolain) . . . . .	Sir Norman Lamont, Bt. . . . .	5	1	0	..	67.9	62.94	199	163
d Dunoon . . . . .	W. Rodger, Esq., C.E. . . . .	5	1	0	132	..	57.70	193	163
d Ardnadam (Hafton Ho.) . . . . .	A. P. N. Aitken, Esq. . . . .	5	1	3	87	76.5	61.86	..	152
d DUNOON (Ben More Forest Sch.) . . . . .	Forestry Commission . . . . .	5	1	0	46	..	68.24	215	183
d Loch Eck (Ben More) . . . . .	H. G. Younger, Esq. . . . .	5	1	3	40	86.6	71.31	235	188
d Strachur (GLENBRANTER) . . . . .	Forestry Commission . . . . .	5	1	0	188	88.2	67.18	181	169
d Lochgoilhead (Ardgoil) . . . . .	W. Besant, Esq. . . . .	5	0	6	20	86.3	65.58	204	177
d Lochgoilhead (Nuthill) . . . . .	Mrs. Henderson . . . . .	5	1	0	15	74.8	61.33	..	..
d Glencroe (Guithas Cottage) . . . . .	J. M. Reid, Esq. . . . .	5	1	2	120	101.0	82.59	216	180
<b>13.—CLYDE—Leven. 4 sq. mi.</b>									
<b>14.—INSULAR. 900 sq. mi.</b>									
Sanda Lighthouse . . . . .	Com'rs. of N. Lighthouses . . . . .	5	2	9	134	36.8	36.88	180	163
Islay (Rhinn) . . . . .	Com'rs. of N. Lighthouses . . . . .	7	3	6	74	..	33.07?	224	136
Islay (Lochindaal) . . . . .	Com'rs. of N. Lighthouses . . . . .	5	0	7	45	44.0	46.11	191	168
Islay (McArthur's Head) . . . . .	Com'rs. of N. Lighthouses . . . . .	5	0	6	173	58.4	(51.43)	198	174
d Islay (Eallabus) . . . . .	J. MacKillop, Esq. . . . .	5	1	0	68	48.9	47.77	227	180
d Islay (Dunlossit) . . . . .	Mr. James Hogg . . . . .	5	1	0	100	55.0	(47.04)	(217)	(173)
Islay (Rhuvaal) . . . . .	Com'rs. of N. Lighthouses . . . . .	5	1	0	69	42.0	40.49	212	172
d Jura (Ardfin) . . . . .	C. G. Campbell, Esq. . . . .	5	1	0	160	53.8	46.94	252	177
d Jura (Tarbert) . . . . .	Lord Astor . . . . .	5	1	0	30	..	50.00	213	175
d Jura (Ardlussa) . . . . .	W. Hargreaves Brown, Esq. . . . .	5	0	9	100	..	47.29	227	167
d COLONSAY . . . . .	Lord Strathcona . . . . .	5	1	0	87	..	44.68	252	187
Fladda Lighthouse . . . . .	Com'rs. of N. Lighthouses . . . . .	5	1	6	25	..	(42.48)	..	120
d Seil (An Cala)† . . . . .	Col. Hon. A. C. Murray, C.M.G., D.S.O. . . . .	5	1	6	30	..	55.30	..	..
Lismore (Mousedale) . . . . .	Com'rs. of N. Lighthouses . . . . .	7	3	10	38	43.7	(36.44)	178	167
d Mull (Bunessan) . . . . .	D. Macdonald, Esq. . . . .	5	1	0	50	51.6	45.23	..	133
d Mull (Auchnacraig) . . . . .	G. W. Duncan, Esq. . . . .	8	1	0	50	..	62.61	178	166
Mull (Ben More) . . . . .	J. MacPhail, Esq., for M.O. . . . .	5	2	0	2800	135.8	109.90	..	..
d Mull (Ulva) . . . . .	Mrs. F. W. Clark . . . . .	5	1	0	30	64.8	50.34	223	182
d Mull (Salen) . . . . .	J. Cameron, Esq. . . . .	5	1	6	60	..	59.74	..	..
d Mull (Gruline) . . . . .	J. W. Melles, Esq. . . . .	8	1	0	100	79.0	65.17	258	196
d Mull (Tobermory) . . . . .	Col. Bryce Allan . . . . .	5	0	7	90	..	52.19	225	188
Mull, Sound of . . . . .	Com'rs. of N. Lighthouses . . . . .	..	..	..	..	61.5	46.68	..	158
d TIREE . . . . .	(+A) J. R. Morrison, M.A., B.Sc. (M.O.) . . . . .	8	1	0	22	44.7	34.52	213	152
d Coll (Breachacha Castle Gdn.) . . . . .	Brig.-Gen. E. M. P. Stewart . . . . .	5	1	1	30	..	41.18	205	180
d Coll (Acha Lodge) . . . . .	Brig.-Gen. E. M. P. Stewart . . . . .	5	1	0	95	..	42.68	177	162

## DIVISION XVI—EAST MIDLAND COUNTIES.

## CLACKMANNAN. (Area, 55 sq. mi.)

## 1.—FORTH, LOWER—Left Bank Tributaries. 55 sq. mi.

d Alloa House Gardens . . . . .	Earl of Mar & Kellie, K.T. . . . .	5	3	0	40	33.2	32.98	202	147
d Tillicoultry (Westbourne) . . . . .	Mrs. Willison . . . . .	5	1	0	66	34.5	33.99	189	143
m Glendevon (Broich Burn) . . . . .	No. 2. H. F. Hodge, Esq., C.E. . . . .	8	1	0	1333	71.7	61.93	..	..
m Glendevon (Burnfoot Hill) . . . . .	No. 8. H. F. Hodge, Esq., C.E. . . . .	8	1	0	1721	49.2	46.35	..	..
m Glendevon (Backhill) . . . . .	No. 9. H. F. Hodge, Esq., C.E. . . . .	8	1	0	1067	58.3	48.44	..	..
d Glendevon (Backhill) . . . . .	H. F. Hodge, Esq., C.E. . . . .	8	1	0	1067	59.9	51.66	216	176

## KINROSS. (Area, 87 sq. mi.)

## 1.—FORTH, LOWER—Left Bank Tributaries. 15 sq. mi.

## 2.—LEVEN &amp; C. 67 sq. mi.

d Loch Leven Sluice . . . . .	Mr. J. Thomson . . . . .	8	0	9	360	35.8	35.09	168	141
d Loch Leven Sluice . . . . .	Mr. J. Thomson . . . . .	5	1	0	360	..	36.38	168	144
d Milnathort (Laurel Bank) . . . . .	Capt. L. Kininmonth . . . . .	5	1	0	398	36.3	35.41	184	147
d Earnieside . . . . .	W. Phillips, Esq. . . . .	8	1	3	900	..	39.33	170	147
d Milnathort (Ledlanet) . . . . .	Sir James C. Calder, K.B.E. . . . .	5	1	3	700	47.1	38.34	202	155
d Milnathort (Ochil Hills San.) . . . . .	The Medical Superintendent . . . . .	5	1	0	800	47.3	43.68	221	185

† Station formerly called Seil (Easdale).

§ Gauge over-exposed.

## DIVISION XVI—EAST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			Average Rain-fall.	1937.			
			Height of		Rain-fall.		Days with ·01 in. or more.	Days with ·04 in. or more.		
			Rim above Ground.	Ground above Sea Level.						
			in.	ft.	in.	ft.	in.			
KINROSS—(con.).								in.		
3.—EDEN. 2 sq. mi.										
4.—TAY—Earn. 3 sq. mi.										
FIFE. (Area, 505 sq. mi.).										
1.—FORTH, LOWER—Left Bank Tributaries. 68 sq. mi.										
D DUNFERMLINE	.....The Carnegie Dunfermline Trust	5	1	0	237	..	30·74	189	135	
D Kincardine (Tulliallan)	.....T. S. Craig, Esq.	5	1	0	90	33·8	31·69	175	138	
Carnock (Craigluscar Res.)	.....D. H. Shaw, Esq., C.E.	12	0	4	480	36·1	48·30	..	..	
2.—LEVEN & C. 208 sq. mi.										
d Dunfermline (Fordell House)	.....Mr. W. Sibbald	5	1	0	250	32·0	33·12	..	121	
d Burntisland (Cullaloe Res.)	.....J. A. Waddell, Esq.	5	1	0	294	..	28·64	..	118	
D KIRKCALDY (Victoria Hosp.)	.....Medical Officer of Health	5	1	0	137	30·0	32·29	156	123	
D Cowdenbeath (Sewage Wks.)	.....C. A. Alexander, Esq.	5	1	0	390	..	36·59	192	138	
Cleish Hills (Craiggaferal)	.....C. A. Alexander, Esq.	5	1	0	760	41·0	38·34	..	..	
Cleish Hills (Roscobie Res.)	.....C. A. Alexander, Esq.	5	1	0	660	39·6	37·19	..	..	
D Kirkcaldy (Carberry)	.....R. Ritchie, Esq.	5	1	0	326	..	32·58	170	132	
Cleish Hills (Blairadam)	.....C. A. Alexander, Esq.	5	1	0	670	35·8	34·45	..	..	
Cleish Hills (Lochglow Res.)	.....C. A. Alexander, Esq.	5	1	0	900	39·3	35·24	..	..	
D Leslie (Lothrie Reservoir)	.....R. Ritchie, Esq.	5	1	0	700	36·7	36·92	222	151	
Lower Largo (Cardy House)	.....J. Gillies, Esq.	5	4	6	15	..	29·23	..	..	
D Colinsburgh (Cairnie House)	.....Maj. R. A. Anstruther, D.S.O.	5	3	6	125	28·8	27·20	183	138	
D Colinsburgh (Balcarres)	.....Mr. W. Adams	5	1	0	300	..	31·09	210	145	
D Carnbee (Ovenstone W.W.)	.....C. Birrell, Esq.	5	1	0	168	25·8	31·40	183	144	
3.—EDEN & C. 205 sq. mi.										
D Cupar (Clatto Reservoir)	.....Jas. M. Alexander, Esq.	5	1	0	505	30·1	36·39	242	149	
D Cameron Waterworks	.....Burgh Surveyor	5	1	0	478	29·9	36·51	199	158	
D Cupar (Pitlair)	.....Mr. P. Webster	5	1	0	126	29·5	31·87	178	137	
D CUPAR (The Asylum)	.....The Medical Superintendent	5	1	0	210	27·7	30·98	178	130	
D Kingsbarns	.....Miss M. R. Nimmo	5	1	0	35	..	28·48	180	131	
D Cupar (Over Rankeillour)	.....H. Giles Walker, Esq.	5	1	0	200	28·7	30·16	188	124	
D St. Andrews (Waterworks)	.....Burgh Surveyor	5	1	0	217	27·3	30·49	171	134	
D St. ANDREWS	.....Burgh Surveyor	5	1	0	13	27·1	30·63	177	130	
D LEUCHARS (Aerodrome)	.....(+A) The Meteorological Officer	8	1	0	36	25·7	29·99	177	129	
4.—FIRTH OF TAY. 25 sq. mi.										
D Newport (Tayfield)	.....W. Berry, Esq.	5	0	7	100	28·3	35·01	198	152	
D Newport (Seabank)	.....J. Grant Bruce, Esq.	5	4	6	15	27·5	31·72	175	127	
D TAYPORT (Lgtse.) Dundee H. Trust. (J. H. Thomson, M.Sc.)	.....	5	1	0	27	26·3	33·86	202	136	
5.—TAY—Earn. 1 sq. mi.										
6.—INSULAR.										
Isle of May	.....Com'rs. of N. Lighthouses	5	4	0	180	..	18·60	146	113	
PERTH. (Area, 2,535 sq. mi.)										
1.—FORTH—Right Bank Tributaries. 17 sq. mi.										
D Gartmore House Gardens	.....Mr. H. B. Matheson	5	1	0	160	56·0	46·12	214	163	
D Loch Dhu	.....J. Cochrane, Esq.	8	0	6	325	79·8	62·65	..	181	

## DIVISION XVI—EAST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain- fall.	1937.			
			Height of Rim above Ground.	Ground above Sea Level.		Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
PERTH—(con.).		in.	ft.	in.	ft.	in.	in.		
2.—FORTH, UPPER—Left Bank Tributaries. 84 sq. mi.									
Ledard .....	J. Cochrane, Esq. ....	8	0	6	1500	69·0	62·14	..	..
3.—FORTH—Teith. 221 sq. mi.									
Ochertyre (Stirling) .....	Lt.-Col. J. C. Dundas, D.S.O. 5	1	0		14	39·4	33·82	..	..
Loch Drunkie .....	J. Cochrane, Esq. ....	8	1	0	420	62·4	53·55	..	..
Ben Venue (Glasaholile) .....	J. Cochrane, Esq. ....	5	1	0	380	59·8	54·13	227	174
Invertrossachs .....	Sir James R. Wilson, Bt. ....	8	1	0	1150	79·4	65·70	..	..
Loch Vennachar .....	J. Cochrane, Esq. ....	5	1	0	275	55·3	50·64	203	163
Bridge of Turk .....	J. Cochrane, Esq. ....	5	1	0	275	63·7	52·10	194	156
Loch Katrine (Tunnel Hill Top) ..	J. Cochrane, Esq. ....	8	0	6	830	79·0	59·90	..	..
Ben Ledi .....	J. Cochrane, Esq. ....	8	1	0	1400	67·0	56·37	..	..
Achnahard .....	J. Cochrane, Esq. ....	8	1	0	474	65·5	55·90	..	..
Callander (Leny House) .....	Capt. M. Murray Buchanan. 5	1	0		340	56·9	44·35	..	..
Strone Bridge .....	J. Cochrane, Esq. ....	8	1	0	380	71·7	58·80	..	..
Glen Meann .....	J. Cochrane, Esq. ....	8	1	0	800	76·5	61·00	..	..
Glen Finlas .....	J. Cochrane, Esq. ....	8	1	0	1200	78·3	63·30	..	..
Glengyle .....	J. Cochrane, Esq. ....	8	0	6	380	89·9	74·05	..	214
Upper Glengyle .....	J. Cochrane, Esq. ....	8	1	0	750	94·7	75·45	..	..
Allt a' Choin .....	J. Cochrane, Esq. ....	8	1	0	1250	88·2	80·00	..	..
Balquhidder (Blaircreach) .....	J. M. Fergusson, Esq. ....	5	1	0	460	92·7	78·82	..	..
Balquhidder (Stronvar) .....	J. Gault, Esq. ....	5	1	0	422	74·2	49·88	..	..
4.—FORTH, LOWER—Left Bank Tributaries. 107 sq. mi.									
Dunblane .....	W. L. Gibson, Esq. ....	5	1	0	250	40·0	38·62	(174)	(138)
Glendevon (Glenquey Res.) .....	No. 2 H. F. Hodge, Esq., C.E. ....	8	1	0	945	58·0	46·63	215	166
Glendevon (Frandy) .....	H. F. Hodge, Esq., C.E. ....	8	1	0	911	61·6	55·50	227	174
Glendevon (Glensherup) .....	D. H. Shaw, Esq., C.E. ....	12	0	4	945	59·0	45·96	..	..
Glendevon (Bald Hill) .....	No. 1 H. F. Hodge, Esq., C.E. ....	8	1	0	1202	58·0	45·95	..	..
Glendevon (Wether Hill) .....	No. 10 H. F. Hodge, Esq., C.E. ....	8	1	0	1408	48·8	38·88	..	..
5.—LEVEN. 1 sq. mi.									
6.—EDEN. 4 sq. mi.									
7.—TAY—Earn. 376 sq. mi.									
Gleneagles (Lochside) .....	B. Chinnery-Haldane, Esq. ....	8	1	0	447	45·4	(40·59)	..	..
Gleneagles House .....	B. Chinnery-Haldane, Esq. ....	5	1	0	400	..	42·62	207	158
Upper Farg (Plains) .....	H. F. Hodge, Esq., C.E. ....	8	1	0	900	35·9	34·08	..	..
Upper Farg (Main Bank) .....	H. F. Hodge, Esq., C.E. ....	5	1	0	642	31·3	30·59	204	138
Dunning (Kippen House) .....	Lady Wilson .....	5	1	0	450	44·6	41·05	200	157
Abernethy (Glenfarg House) .....	Norman I. Nasmyth, Esq. ....	5	0	10	120	34·0	33·61	181	154
Bridge of Earn (Ballendrick) .....	G. M. Taylor, Esq. ....	5	1	0	50	31·5	34·60	202	134
Lochearnhead (Ardloch) .....	S. Moir, Esq. ....	5	1	0	370	61·2	49·69	224	174
Lochearnhead (Edinchip) .....	Sir Malcolm MacGregor, Bt. ....	5	1	0	513	69·0	58·57	208	168
Comrie (Dunira Gardens) .....	W. Gilchrist Macbeth, Esq. ....	5	1	6	200	..	44·16	185	145
CRIEFF (Strathearn Hydro) .....	G. Reid for Dr. G. Meikle ..	5	1	0	478	40·9	35·70	196	151
8.—TAY—Almond & c. 149 sq. mi.									
PERTH (Wellshill Cemetery) .....	The Town Council (J. Ritchie) 5	1	0		77	30·8	30·75	167	158
Glen Almond (Auchnafree) .....	Lt.-Col. J. A. C. Whitaker. ....	5	1	0	1015	64·6	54·19	180	159
9.—TAY—Strathday below Dunkeld. 33 sq. mi.									
Murthly (Douglasfield) .....	W. A. Rae, Esq. ....	5	1	0	237	34·5	32·44	169	132
Dunkeld (Snaigow) .....	W. H. Cox, Esq. ....	5	1	0	370	34·7	35·82	203	151
Dunkeld (Kincairney Lodge) .....	Mrs. Richmond .....	8	1	0	400	33·9	34·82	213	153



## DIVISION XVI—EAST MIDLAND COUNTIES—(con.).

		Rain-gauge				1937.		
STATIONS.	AUTHORITIES.	Diam.	Height of		Average Rain-fall.	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim above Ground.	Ground above Sea Level.				
ANGUS. (Area, 875 sq. mi.).								
1.—TAY—Isle. 211 sq. mi.								
D KETTINS School.....	W. B. Ogilvie, Esq. ....	5	1 0	218	32.0	31.97	183	127
d Newtyle .....	C. W. Wheeler, Esq. ....	5	1 0	295	..	33.75	..	..
D Glamis Castle.....	Mr. D. McInnes .....	5	0 7	250	30.9	38.29	194	153
D Forfar (Yeaman Street) .....	W. P. Welsh, Esq. ....	5	1 6	226	..	34.20	185	145
D Kirriemuir (Lintrathen).....	(+A) G. Baxter, Esq., C.E. ....	8	1 0	700	34.7	34.90	211	144
M Kirriemuir (Balnakeilly) .....	G. Baxter, Esq., C.E. ....	5	1 0	700	34.1	36.91	..	..
M Kirriemuir (Dykends) .....	G. Baxter, Esq., C.E. ....	5	1 0	750	36.4	36.92	..	..
M Kirriemuir (Creich Hill, N.) .....	G. Baxter, Esq., C.E. ....	5	1 0	1491	40.5	41.18	..	..
M Kirriemuir (Backwater) .....	G. Baxter, Esq., C.E. ....	5	1 0	850	..	42.31	..	..
M Kirriemuir (Westerton) .....	G. Baxter, Esq., C.E. ....	5	1 0	900	..	(44.55)	..	..
M Kirriemuir (Macritch) .....	G. Baxter, Esq., C.E. ....	5	1 0	1300	38.7	41.45	..	..
M Kirriemuir (Newton) .....	G. Baxter, Esq., C.E. ....	5	1 0	735	37.4	39.28	..	..
M Kirriemuir (Longdrum) .....	G. Baxter, Esq., C.E. ....	5	1 0	1045	39.3	45.40	..	..
M Kirriemuir (Glendye) .....	G. Baxter, Esq., C.E. ....	6	1 0	1050	44.9	(46.92)	..	..
M Kirriemuir (Barney) .....	G. Baxter, Esq., C.E. ....	5	1 0	1130	40.2	45.30	..	..
M Kirriemuir (Glenhead) .....	G. Baxter, Esq., C.E. ....	5	1 0	1340	..	47.85	..	..
M Kirriemuir (Dalvanie) .....	G. Baxter, Esq., C.E. ....	5	1 0	1020	..	44.20	..	..
M Kirriemuir (Glen Damff) .....	G. Baxter, Esq., C.E. ....	5	1 0	1360	43.7	(47.35)	..	..
2.—FIRTH OF TAY. 80 sq. mi.								
D CARNOUSTIE (BUDDON NESS LT.)...Dundee Harbour Trust	(J. H. Thomson, M.Sc.)	5	0 11	10	26.4	30.01	194	139
D DUNDEE HARBOUR...Dundee H. Trust (J. H. Thomson, M.Sc.)		5	0 11	14	27.4	30.80	173	124
D Dundee (Stobsmuir Res.) .....	G. Baxter, Esq., C.E. ....	5	1 0	278	..	34.23	173	130
d Dundee (Camperdown Works) ...	Messrs. Cox Bros., Ltd. ....	5	1 0	300	26.8	36.23	..	..
D Balruddery .....	H. S. Sharp, Esq. ....	5	1 0	266	29.8	36.46	167	136
D DUNDEE (MAYFIELD) .....	The Director of Studies .....	8	1 0	147	26.2	33.62	189	138
D Monifieth .....	W. Davie, Esq. ....	5	1 4	50	..	30.35	199	126
D Monifieth (Mains of Ardestie) .....	F. D. Booth, Esq. ....	5	1 0	100	..	30.83	178	127
3.—SOUTH ESK & C. 371 sq. mi.								
D CARNOUSTIE .....	Burgh Surveyor.....	8	1 0	39	27.2	29.04	185	129
D Monikie Reservoir .....	G. Baxter, Esq., C.E. ....	5	1 0	494	34.7	37.78	207	152
D Monikie (Crombie Reservoir) .....	G. Baxter, Esq., C.E. ....	5	1 0	528	35.2	39.30	208	156
M Monikie (Fallaws) .....	G. Baxter, Esq., C.E. ....	8	3 0	585	33.2	36.80	..	..
D ARBROATH (W. Cemetery) The Town Council (J. W. Robertson)		5	1 0	93	25.6	32.49	162	128
w Arbroath (Muirheads Res.) .....	T. A. Hogg, Esq. ....	5	1 0	251	28.1	32.82	..	..
Forfar (Pitscandly House) .....	J. T. Ewen, Esq. ....	5	1 8	300	..	34.46	..	..
D MONTROSE .....	D. Maxwell, Esq. ....	5	1 0	16	..	33.13	171	113
D Montrose (West End Park) .....	D. Maxwell, Esq. ....	5	1 0	19	..	36.59	188	142
D Brechin (Argyll Street) .....	J. Hutton, Esq. ....	5	1 0	225	34.1	35.81	193	142
D Forfar W.W. (Den of Ogil) .....	Alex. C. Miller, Esq. ....	12 x 4	3 1	633	..	43.69	193	153
D Glenogil Waterworks .....	T. A. Hogg, Esq. ....	5	1 0	770	40.9	42.64	184	148
d Glen Prosen (Pearsie House) .....	G. M. Wedderburn, Esq. ....	5	1 0	600	39.1	(36.46)	..	..
M Glen Prosen (Cormuir) .....	G. Baxter, Esq., C.E. ....	5	1 0	870	..	45.10	..	..
D Glen Prosen (Balnaboth Gdns.) ...	C. A. O. McLean, Esq. ....	5	1 0	1000	..	34.69	227	171
4.—NORTH ESK & C. 213 sq. mi.								
D MONTROSE (SUNNYSIDE ASYLUM)...The Medical Superintendent		5	1 0	200	27.0	33.92	181	130
Brechin (Stracathro Gardens) .....	Mr. A. Dunlop .....	5	2 0	200	30.5	32.82	..	..

## DIVISION XVII—NORTH-EASTERN COUNTIES.

KINCARDINE. (Area, 382 sq. mi.).								
1.—NORTH ESK & C. 99 sq. mi.								
D Laurencekirk (Johnston Lodge) .....	R. B. Pearson, Esq. ....	5	1 0	400	33.1	40.46	197	142
D Fettercairn (Fasque) .....	James Mann, Esq. ....	5	0 10	320	36.0	41.40	217	153
D Fordoun (Auchenblae) .....	D. N. Collie, Esq. ....	5	1 0	325	..	37.69	203	130
2.—BERVIE, COWIE & C. 139 sq. mi.								
Todhead Pt. Lighthouse .....	Com'rs. of N. Lighthouses ..	5	1 9	114	..	24.78	193	153
D Stonehaven .....	The Town Council.....	5	1 0	125	..	32.15	186	127
D Stonehaven (Mains of Cowie) .....	John Hart, Esq. ....	5	1 1	100	..	28.74	158	112

## DIVISION XVII—NORTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Height of Rim above Ground.	Ground above Sea Level.	Aver- age Rain- fall.			
KINCARDINE—(con.).						in.		
3.—DEE. 144 sq. mi.								
D Strachan (Bridge of Dye)	J. Mann, Esq.	5	1 0	513	43·9	43·87	223	152
D Banchory (Invery)	Major Jas. Kerr	5	1 0	225	34·8	43·28	192	146
D Banchory (Woodlands Sch.)	D. B. McKelvie, Esq.	5	1 0	300	..	37·18	179	135
D Banchory (Invercarnie)	T. F. Henderson, Esq., C.E.	5	0 9	208	31·9	38·85	213	144
ABERDEEN. (Area, 1,974 sq. mi.).								
1.—DEE. 672 sq. mi.								
M Glen Muick	T. F. Henderson, Esq., C.E.	5	1 0	1370	45·1	(56·18)	..	..
D Glen Muick (Inchnabobart)	T. F. Henderson, Esq., C.E.	5	1 0	1270	..	54·63	234	191
D Aitnach	T. F. Henderson, Esq., C.E.	5	1 0	1260	41·9	58·19	..	..
D BRAEMAR (Bank)	R. A. Lees, Esq.	5	1 0	1111	35·4	39·82	197	150
D Braemar (Derry Lodge)	T. F. Henderson, Esq., C.E.	5	1 0	1400	38·1	35·71	214	175
Glen Tanar (Mansion House)	Lord Glentanar	5	1 0	553	..	45·07	205	142
D BALMORAL Castle Gardens	(+A) Mr. Alex. Stuart	5	1 0	927	33·0	37·07	221	145
D Abergeldie Castle Gardens	Mr. Wolseley Collie	5	1 0	800	32·4	36·82	185	149
D Ballater (Irrigation Farm)	T. F. Henderson, Esq., C.E.	5	1 0	637	33·2	37·64	188	133
M Beinn Bhreac	T. F. Henderson, Esq., C.E.	5	1 0	2700	47·1	31·74	..	..
D Aboyne (Irrigation Farm)	T. F. Henderson, Esq., C.E.	5	1 0	380	..	36·00	202	133
D Aboyne	T. F. Henderson, Esq., C.E.	5	1 0	412	31·0	36·65	201	137
D Dess House	W. R. Davidson, Esq.	5	1 8	480	31·2	38·52	198	152
D Glen Gairn (Gairn Shiel Lodge)	T. F. Henderson, Esq., C.E.	5	1 0	1100	34·4	44·19	198	148
D Glen Gairn (Corndavon)	T. F. Henderson, Esq., C.E.	5	1 0	1500	37·3	30·47	202	155
D Torphins (School House)	Dr. George Davidson	5	1 4	480	..	33·96	186	136
M Lumphanan	T. F. Henderson, Esq., C.E.	5	1 0	490	31·6	33·70	..	..
D Drumoak (Drum Castle)	Mrs. Irvine	5	1 0	320	30·9	36·48	208	142
D LOGIE COLDSTONE School	Duncan Paterson, Esq., M.A., B.Sc.	5	1 0	608	30·9	(33·56)	(206)	(141)
D Aberdeen (Mannofield Res.)	T. F. Henderson, Esq., C.E.	5	1 0	171	30·5	36·91	219	148
D Craigiebuckler	Macaulay Institute for Soil Research	5	1 0	220	..	37·94	213	154
2.—DON. 512 sq. mi.								
D ABERDEEN Observatory	(+A) Assistant-in-Charge	8	1 0	79	29·5	31·31	203	133
D Strathdon (Tornashean)	Mr. J. Duncan	5	3 6	1020	..	32·99	216	148
D Strathdon (Estates Office)	D. D. Laurie, Esq.	5	1 2	990	35·0	34·88	..	..
D Craibstone (Stn. Meethill Field)	Prof. J. Hendrick	5	1 0	275	33·6	35·63	198	147
D DYCE (Craibstone)	(+A) Abr. & N. of S. Coll. of Ag.	8	1 0	300	31·5	34·06	194	145
3.—YTHAN & C. 285 sq. mi.								
D Ellon (Esslemont House)	Capt. R. Wolrige Gordon, M.C.	5	1 6	100	..	37·93	236	182
D Ellon (Auchmacoy)	Earl of Caithness	5	1 0	150	..	33·45	202	161
D Haddo House	The Marquis of Aberdeen	5	1 0	186	31·5	34·78	238	161
D Fyvie Castle	Col. Sir C. R. Forbes-Leith, Bt.	5	1 0	200	33·9	34·64	182	155
4.—UGIE & C. 257 sq. mi.								
New Deer School House	J. A. Thomson, Esq.	5	1 0	397	32·3	31·22	..	..
D Peterhead (Stockbridge)	J. Robertson, Esq.	5	1 0	150	28·5	29·97	253	158
D Peterhead (Mains of Buthlaw)	W. Johnston, Esq.	5	1 6	120	30·3	26·26	220	155
D Peterhead (Forehill Works)	J. Dickie, Esq., C.E.	5	0 8	133	30·3	31·67	212	165
Kinnaird Head	Com'rs. of N. Lighthouses	5	1 0	62	23·5	28·13	167	148
5.—DEVERON & C. 248 sq. mi.								
Huntly (Union Bank Ho.)	F. G. Allordice, Esq.	5	1 0	500	..	34·94	..	..
D Huntly (Cruchie)	Miss C. Joss	5	1 0	400	31·7	33·47	221	159



## DIVISION XVII—NORTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.			
			Height of Rim above Ground.	Ground above Sea Level.	Average Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
BANFF. (Area, 630 sq. mi.).			in.	ft. in.	ft.	in.	in.		
1.—YTHAN. 1 sq. mi.									
2.—DEVERON & C. 344 sq. mi.									
d Drummur Castle	G. Clinton Chessor, Esq.	5	1 10	620	36·4	35·11	180	150	
w Milltown (Rothiemay Castle)	Lt.-Col. Ian Forbes, D.S.O.	5	0 8	290		39·34	..	..	
d Keith Station	Mr. A. Munro	5	1 0	356	33·8	36·06	..	..	
d Turriff (Forglen Gardens)	Mr. G. Stuart	5	1 0	220	31·9	33·33	222	172	
d Gamrie (Clenterty P. School)	T. H. Smith, Esq.	5	1 0	420	40·1	33·84	201	161	
d BANFF	Town Council (I. H. Gordon)	5	0 9	130	26·8	27·17	221	149	
Buckie (Rochonnie)	W. Hendry, Esq.	5	1 4	324	27·0	23·82	..	..	
Buckie (West Church Street)	W. Hendry, Esq.	5	1 4	75	26·2	22·66	..	..	
d Cullen House Gardens	Mr. M. Harrower	5	1 2	150	30·6	26·92	176	153	
3.—SPEY—Right Bank Tributaries. 285 sq. mi.									
d Ballindalloch	C. Mackenzie, Esq.	8	1 0	630	33·0	32·16	209	157	
d Aberlour Orphanage	J. G. White, Esq.	5	1 0	350	32·7	30·97	185	146	
MORAY. (Area, 477 sq. mi.).									
1.—DEVERON & C. 7 sq. mi.									
2.—SPEY—Right Bank Tributaries. 35 sq. mi.									
d Fochabers (GORDON CASTLE)	C. Webster for the Duke of Richmond & Gordon, K.G.	5	1 0	104	29·8	27·92	200	138	
3.—SPEY—Left Bank Tributaries. 133 sq. mi.									
d Grantown-on-Spey	W. Currie, Esq.	5	1 0	700	31·1	(25·17)	..	..	
d Aberlour (Wester Elchies)	Mr. W. McGregor	5	1 0	550	34·2	26·55	160	119	
4.—LOSSIE & C. 154 sq. mi.									
d Kellas (Kellas House)	G. Christie, Esq.	5	0 8	446	..	27·78	197	152	
d Lhanbryde (Blackhills House)	T. N. Christie, Esq.	5	3 6	310	29·2	30·05	208	172	
d Elgin (Kirkhill)	P. J. Macdonald, Esq.	5	1 7	35	..	22·52	188	133	
d Elgin (The Bield)	Mrs. Harrison	5	1 4	120	..	23·55	182	128	
d Elgin (Rotha)	Miss M. E. Young	5	1 0	80	25·8	23·21	..	..	
d Elgin (Whinnyknowe)	Sir Edward Wallace	5	1 0	100	..	23·98	184	136	
d Elgin (Gordonstoun School)	K. A. Campbell, Esq.	5	1 0	37	..	26·20	208	153	
d Duffus (Hopeman Lodge)	Mrs. Gordon Duff	8	0 6	65	..	24·23	..	109	
d Lossiemouth (Moray Golf Club)	The Secretary	5	1 0	53	..	19·557	..	..	
5.—FINDHORN & C. 148 sq. mi.									
d Forres (Drumduan)	The MacKinnon of MacKinnon	5	3 0	120	..	22·81	162	119	
d Forres (Drumduan Gdns.)	Mr. G. Dyker	8	5 0	50	..	22·98	164	121	
d FORRES (Hydro)	The Town Clerk	5	1 0	155	..	22·73	181	121	
NAIRN. (Area, 163 sq. mi.).									
1.—FINDHORN & C. 102 sq. mi.									
d Drynahan Lodge	John Myles, Esq.	5	0 4	755	..	34·20	207	152	
d Ardclach (Glenferness)	Mr. J. May	8	1 0	700	34·8	32·22	..	146	
d Lethen	Col. Hon. I. M. Campbell, D.S.O.	5	1 6	300	..	26·52	171	129	
2.—NAIRN & C. 61 sq. mi.									
d Caudor (Auchindoune)	Col. Hon. I. M. Campbell, D.S.O.	5	1 0	425	..	26·69	171	133	
d Cawdor Castle	Mr. James Taylor	5	0 9	225	29·2	25·06	196	138	
d Nairn (Balblair)	Major R. H. Allanby	5	1 0	94	24·5	24·50	181	119	
d Nairn (Urchany Res.)	The Town Council	5	1 0	291	..	24·91	..	..	
d Nairn (Achareidh)	Major K. S. Clarke	8	1 0	59	24·3	24·29	199	129	
d NAIRN (Golf Course)	The Town Clerk	8	1 0	20	24·9	23·66	176	110	

## DIVISION XVIII—NORTH-WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average		Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim	Ground	Ground	Rain-fall.			
			above	above	Sea Level.				
			in.	ft. in.	ft.	in.	in.		
INVERNESS. (Area, 4,146 sq. mi.).									
1.—TAY—Tummel. 28 sq. mi.									
d Loch Ericht (Ben Alder Lodge) . . .	Mr. E. Mackintosh . . . . .	5	1	0	1175	52·5	41·19	188	161
2.—SPEY—Right Bank Tributaries. 437 sq. mi.									
d DALWHINNIE . . . . .	J. Phillips, Esq., (M.O.) . . .	8	1	0	1176	46·7	42·18	215	165
d Nethy Bridge (Aultmore) . . . . .	T. Muir, Esq. . . . .	5	1	0	800	..	26·45	186	130
3.—SPEY—Left Bank Tributaries. 257 sq. mi.									
d Cluny Castle . . . . .	Mr. A. Macdonald . . . . .	5	1	0	816	39·9	32·97	197	149
d Glenshero . . . . .	British Aluminium Co., Ltd. 8	1	0	880	49·1	34·84	240	151	
m Loch Spey . . . . .	British Aluminium Co., Ltd. 5	1	0	1164	67·5	45·18	..	..	
Glen Spey (Mealgarve) . . . . .	British Aluminium Co., Ltd. 8	1	0	1135	..	44·03	..	..	
d Laggan (Gergask) . . . . .	Miss J. R. Gillies . . . . .	8	1	0	870	38·4	26·97	180	132
d Kingussie (The Birches) . . . . .	Miss Jessie Dallas . . . . .	8	1	0	810	31·5	26·20	224	140
d Carr Bridge (Crannich) . . . . .	Mrs. J. A. Doak . . . . .	5	1	0	900	29·6	23·01	186	133
4.—FINDHORN. 164 sq. mi.									
d Tomatin (Dalmigavie Lodge) . . . .	Mr. A. Kennedy . . . . .	5	1	2	1150	..	27·73	200	163
5.—NAIRN & C. 131 sq. mi.									
w Loch Duntelchaig . . . . .	Mr. M. McPhee . . . . .	8	1	0	702	..	22·99	..	..
6.—NESS—Right Bank Tributaries. 252 sq. mi.									
d Fort Augustus (Auchterawe) . . . .	Forestry Commission . . . . .	5	0	6	136	..	35·52	..	..
d Loch Ness (Foyers, Stronelaig) . . .	British Aluminium Co., Ltd. 8	1	0	1250	47·9	51·72	244	198	
d Loch Ness (Garthbeg) . . . . .	British Aluminium Co., Ltd. 8	1	0	630	41·5	33·19	213	162	
d Loch Ness (Foyers) . . . . .	British Aluminium Co., Ltd. 8	1	0	52	38·2	28·81	203	138	
d Loch Ness (Aberchalder) . . . . .	British Aluminium Co., Ltd. 8	1	0	700	40·5	36·04	223	147	
d INVERNESS (Culduthel Res.) . . . .	Mr. M. McPhee . . . . .	5	1	0	242	27·6	24·21	157	123
7.—NESS—Garry & C. 185 sq. mi.									
m Loch Quoich (Loan) . . . . .	Col. D. W. Cameron of Lochiel 5	1	0	750	146·1	80·93	..	..	
d Loch Quoich (Kinlochquoich) . . . .	Col. D. W. Cameron of Lochiel 5	1	0	560	119·3	80·67	..	..	
d Loch Quoich (Glenquoich) . . . . .	Mr. G. Johnstone* . . . . .	5	1	2	569	110·7	71·96	202	177
d Loch Oich (Port McDonnell) . . . . .	A. R. Crawford* . . . . .	5	1	0	122	..	39·18	159	123
8.—NESS—Moriston. 120 sq. mi.									
d Glenmoriston (Ceannacroc) . . . . .	J. Grant, Esq. . . . .	5	1	0	450	66·7	44·77	200	153
d Glenmoriston (Invermoriston Hotel) .	P. J. Kydd, Esq. . . . .	5	1	0	70	47·5	26·38	..	..
9.—NESS—Enrick. 131 sq. mi.									
d Glen Urquhart (Corrimony) . . . . .	Col. John Haig, D.S.O. . . . .	5	1	0	520	43·0	30·68	..	146
d Inverness (Ruigh Ard Asylum) . . .	The Medical Supt. . . . .	5	0	11	330	29·9	28·49	200	138
10.—BEAULY. 341 sq. mi.									
11.—CROMARTY FIRTH. 13 sq. mi.									
12.—SOUND OF SLEAT. 259 sq. mi.									
d Loch Nevis (Inverie Gardens) . . . .	Mr. H. Milne . . . . .	5	1	0	15	85·6	60·14	236	188
13.—SOUND OF ARISAIG. 126 sq. mi.									
d Moidart (Kinlochmoidart) . . . . .	Col. R. N. Stewart . . . . .	5	1	0	13	69·4	55·81	205	194
d Arisaig (Faire-na-Sguir) . . . . .	Miss C. G. Astley-Nicholson. 5	1	0	30	..	36·10	211	152	
d Arisaig House . . . . .	Mr. W. Grant . . . . .	5	1	0	40	62·9	45·72	205	174
14.—LOCH LINNHE—Right Bank Tributaries. 48 sq. mi.									
d Loch Eil (Achdaliu) . . . . .	Col. D. W. Cameron of Lochiel 5	1	0	100	61·8	45·17	213	169	

\* Per Capt. W. N. McClean.

## DIVISION XVIII—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
			Rim above Ground.	Ground above Sea Level.					
INVERNESS—(con.).			in.	ft. in.	ft.	in.	in.		
<b>15.—LOCHY—Right Bank Tributaries. 143 sq. mi.</b>									
d Glen Loy (Erracht).....	Major E. C. Cameron	5	1	0	150	..	(59·95)	(215)	(190)
d Loch Arkaig (Achnacarry).....	Col. D. W. Cameron of Lochiel	5	1	0	128	82·0	52·14	207	172
d Loch Arkaig (Glendessary).....	Col. D. W. Cameron of Lochiel	5	1	6	300	106·6	69·06	..	178
<b>16.—LOCHY—Left Bank Tributaries. 362 sq. mi.</b>									
d Clunes (L. Lochy W.).....	Col. D. W. Cameron of Lochiel	5	1	6	110	..	51·71	208	162
Loch Treig (Creaguaineach).....	British Aluminium Co., Ltd.	5	1	0	825	74·0	51·60	..	..
Loch Ossian (Strathossian Ho.).....	British Aluminium Co., Ltd.	8	1	0	1180	70·2	52·43	..	..
Fort William (Allt'a Mhuilinn).....	British Aluminium Co., Ltd.	8	1	0	1000	85·1	68·49	..	..
d Fort William (The Factory).....	British Aluminium Co., Ltd.	8	1	0	75	69·6	56·46	222	170
Roybridge (Lairig Road).....	British Aluminium Co., Ltd.	8	1	0	1650	91·2	62·83	..	..
Spean Bridge (The Cour).....	British Aluminium Co., Ltd.	5	1	0	1050	92·5	68·41	..	..
Sgurr Finisgaig.....	British Aluminium Co., Ltd.	8	1	0	1850	91·6	68·17	..	..
d Loch Treig (Fersit).....	British Aluminium Co., Ltd.	8	1	0	850	62·9	52·32	230	189
Tulloch (Allt Laire).....	British Aluminium Co., Ltd.	5	1	0	1050	..	45·14	..	..
Roybridge (Allt Leachdach).....	British Aluminium Co., Ltd.	8	1	0	650	..	47·76	..	..
Loch Pattack.....	Sir J. F. Ramsden, Bt.	5	0	9	1420	64·5	42·70	..	..
Glen Spean (Craigbeg).....	British Aluminium Co., Ltd.	8	1	0	860	54·9	39·99	..	..
d Spean Bridge (Spean Lodge).....	Major G. A. C. Davy	5	1	6	150	..	48·06	200	156
w Loch Lochy (Invergloyle).....	Mr. J. Clark for Miss J. Allan	5	1	0	200	58·9	47·52	..	..
d Loch Laggan (Ardverkie).....	Sir J. F. Ramsden, Bt.	5	0	6	838	54·0	35·67	229	131
<b>17.—LOCH LINNHE—Left Bank Tributaries. 120 sq. mi.</b>									
d North Ballachulish (Alltshellach).....	B. Chinnery-Haldane, Esq.	5	1	0	80	74·3	58·04	217	184
d ONICH.....	Forestry Commission	5	1	3	48	72·8	57·59	223	179
d Glenleven (Blackwater Dam, N).....	7. British Aluminium Co., Ltd.	8	1	0	1072	85·5	66·62	236	188
Glenleven (Loch Bilde Mhor).....	8. British Aluminium Co., Ltd.	8	1	6	1130	94·9	67·48	..	..
Glenleven (Corrour).....	5. British Aluminium Co., Ltd.	8	1	6	1260	70·1	49·86	..	..
d Glenleven (Corrour) <i>new g.</i> .....	British Aluminium Co., Ltd.	8	1	0	1350	..	52·26	152	136
d FORT WILLIAM (Teviot).....	J. W. Ainslie, Esq.	8	1	0	34	77·4	58·19	208	165
d Fort William (Glasdrum).....	British Aluminium Co., Ltd.	5	1	0	216	..	58·51	212	173
<b>18.—INSULAR, INNER HEBRIDES. 786 sq. mi.</b>									
Isle of Eigg.....	Rt. Hon. Viscount Runciman	5	1	0	150	53·5	49·27	..	..
d Skye (Kyleakin, Dunringell).....	The late Maj. A. D. Mackinnon	5	2	1	80	62·4	45·25	233	169
Oronsay Lighthouse.....	Com'rs. of N. Lighthouses	5	0	6	10	52·7	40·69	213	167
d Skye (Portree).....	D. Dewar, Esq.	5	1	0	65	61·7	51·50	253	201
d Skye (Dunvegan).....	Mrs. Mackenzie	5	3	0	47	65·8	51·03	208	189
d Skye (DUNTULM, Kilmuir).....	Seton Gordon, Esq.	5	1	0	294	..	40·70	234	190
<b>19.—INSULAR, OUTER HEBRIDES. 243 sq. mi.</b>									
d Barra (SKALLARY).....	J. Smith, Esq.	8	0	10	30	..	35·57	244	185
d Barra (CRAIGSTON).....	J. Reilly, Esq.	5	1	0	22	..	42·95	204	185
S. Uist (Ushenish Light).....	Com'rs. of N. Lighthouses	5	1	0	178	..	34·63	..	148
d Lochmaddy (Vallay).....	G. Beveridge, Esq.	5	1	0	30	..	34·56	240	155
d North Uist (Newton).....	J. MacAskill, Esq.	5	1	0	41	..	38·08	231	176
d N. Harris (Amhuinsuidh Castle).....	Norman Robertson, Esq.	5	1	3	12	57·5	48·67	213	191
ROSS & CROMARTY. (Area, 3,237 sq. mi.).									
<b>1.—NESS—Moriston. 35 sq. mi.</b>									
d Glenmoriston (Cluanie Lo.).....	D. Stobbart, Esq.*	5	1	0	750	..	58·68	205	177
<b>2.—BEAULY. 109 sq. mi.</b>									
<b>3.—MORAY FIRTH COAST STREAMS. 64 sq. mi.</b>									
d FORTROSE.....	The Town Clerk	5	1	0	69	23·4	21·74	171	111
d Fearn (Geanies).....	Mr. A. Munro	5	0	11	200	23·1	17·17	..	..

\* Per Capt. W. N. McClean.

## DIVISION XVIII—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.			
			Height of Rim above Ground.	Ground above Sea Level.	Average Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.	
ROSS & CROMARTY—(con.).			in.	ft. in.	ft.	in.	in.		
<b>4.—CROMARTY FIRTH. 714 sq. mi.</b>									
d Muir of Ord (Fairburn)	Major J. S. Stirling	5	1 0	500	..	26·50	161	147	
d Dingwall (The Academy)	The Rector	5	1 0	18	29·0	21·76	161	117	
d Lochluichart (East)	Ross-shire Electric Supply Co.	5	1 0	165	..	30·45	212	139	
d Lochluichart (West)	Ross-shire Electric Supply Co.	5	1 0	325	..	30·80	..	129	
<b>5.—DORNOCH FIRTH. 355 sq. mi.</b>									
d Tain (Ardlarach)	Col. C. MacIver Ritchie	5	1 0	400	31·8	23·83	204	130	
Tarbetness	Com'rs. of N. Lighthouses	5	1 10	62	23·0	17·15	..	..	
<b>6.—ENARD BAY. 78 sq. mi.</b>									
<b>7.—LOCH BROOM &amp; C. 367 sq. mi.</b>									
d Inverbroom (Glackour)	Forestry Commission	5	1 0	65	..	37·10	221	167	
d Ullapool	Dr. D. Wallace	5	1 6	75	48·0	28·83	205	141	
<b>8.—LOCH EWE, LOCH TORRIDON &amp; C. 423 sq. mi.</b>									
d Kinlochewe (Greenhill)	The late R. Matheson, Esq.	5	0 9	85	..	45·30	231	176	
Loch Maree (Letterewe)	M. MacLennan, Esq.	5	1 0	32	..	38·13	..	..	
d Poolewe (Inverewe Gardens)	R. G. Sawyer, Esq.	5	0 9	20	55·2	35·80	195	172	
<b>9.—LOCH CARRON, LOCH ALSH &amp; C. 401 sq. mi.</b>									
d Glenshiel (Kyle)	Capt. W. N. McClean	5	1 0	1300	..	84·59	276	197	
d Glenshiel (Ratagan)	Forestry Commission	5	1 0	12	80·0	58·83	204	178	
d Loch Duich (Inverinate)	J. Finlayson, Esq.	5	1 0	28	..	58·43	208	180	
Ardelve (Conchra)	Miss D. MacRae	5	0 6	70	..	43·40	..	..	
d Loch Carron (Dunhulladale)	Mrs. G. J. Campbell	5	1 0	9	70·5	48·52	221	170	
Applecross Gardens	Mr. J. McCowan	5	1 6	70	57·3	42·39	..	..	
d ACHNASHELLACH	Forestry Commission	5	1 0	225	84·4	53·73	(211)	(177)	
<b>10.—INSULAR, OUTER HEBRIDES. 691 sq. mi.</b>									
d Stornoway (Lurebost School)	K. Smith, Esq.	5	0 6	100	..	36·06	..	..	
Stornoway Lighthouse	Com'rs. of N. Lighthouses	5	0 6	28	..	(33·16)	193	167	
d STORNOWAY (C. GUARD STN.)	Station Officer (M.O.)	8	1 0	79	47·3	35·78	247	177	
Butt of Lewis Lighthouse	Com'rs. of N. Lighthouses	8	3 9	51	39·6	31·43	182	157	

## DIVISION XIX—NORTHERN COUNTIES.

SUTHERLAND: (Area, 2,080 sq. mi.).

**1.—DORNOCH FIRTH. 413 sq. mi.**

d Lairg . . . . .	A. Gunn, Esq. . . . .	5	1 0	330	37·3	30·64	168	141
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**2.—FLEET, BRORA & C. 309 sq. mi.****3.—HELMSDALE & C. 226 sq. mi.**

## DIVISION XIX—NORTHERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
SUTHERLAND—(con.).			in.	ft. in.	ft. in.	in.		
<b>4.—NORTH COAST STREAMS. 736 sq. mi.</b>								
D Skerry (Borgie) . . . . .	Forestry Commission . . . . .	5	1 0	110	37·5	31·99	226	168
d Melvich . . . . .	A. MacIntosh, Esq. . . . .	5	1 0	200	36·0	29·42	..	131
Cape Wrath . . . . .	Com'rs. of N. Lighthouses . . . . .	5	0 9	346	..	29·63	219	176
<b>5.—LOCH LAXFORD &amp; C. 256 sq. mi.</b>								
D Loch More (Achfary) . . . . .	Mr. J. Munro . . . . .	5	1 0	137	75·8	54·08	246	208
<b>6.—ENARD BAY. 138 sq. mi.</b>								
<b>7.—INSULAR. 2 sq. mi.</b>								
CAITHNESS. (Area, 696 sq. mi.).								
<b>1.—BERRIEDALE, DUNBEATH &amp; C. 169 sq. mi.</b>								
Berriedale (Langwell) . . . . .	Duke of Portland . . . . .	5	1 6	150	33·8	28·74	..	..
Clythness . . . . .	Com'rs. of N. Lighthouses . . . . .	5	1 5	133	29·6	27·42	180	135
<b>2.—WICK &amp; C. 184 sq. mi.</b>								
D Wick (C. Guard Stn.) . . . . .	Station Officer (M.O.) . . . . .	8	1 2	81	29·9	26·91	213	149
Nosshead . . . . .	Com'rs. of N. Lighthouses . . . . .	5	0 9	129	25·1	(22·25)	..	..
<b>3.—THURSO &amp; C. 238 sq. mi.</b>								
D Thurso (Buckies) . . . . .	J. H. M. Davidson, Esq. . . . .	5	0 11	240	39·0	33·65	236	175
Dunnet Head . . . . .	Com'rs. of N. Lighthouses . . . . .	5	1 0	331	30·2	32·08	194	171
Duncansby Head . . . . .	Com'rs. of N. Lighthouses . . . . .	5	..	196	31·4	27·42	216	154
<b>4.—FORSS &amp; C. 104 sq. mi.</b>								
D Reay (The Manse) . . . . .	Rev. Dugald Carmichael . . . . .	9	1 0	49	36·2	31·92	235	165
<b>5.—INSULAR. 1 sq. mi.</b>								
Stroma . . . . .	Com'rs. of N. Lighthouses . . . . .	5	3 0	54	25·5	22·36	217	135
ORKNEY. (Area, 389 sq. mi.).								
Pentland Skerries Lighthouse . . . . .	Com'rs. of N. Lighthouses . . . . .	5	3 0	70	..	26·33	175	154
Hoy (Cantickhead) . . . . .	Com'rs. of N. Lighthouses . . . . .	5	3 10	68	32·9	26·09	173	142
Hoy (Graemsay Sound, High) . . . . .	Com'rs. of N. Lighthouses . . . . .	5	1 4	29	35·8	27·52	163	132
Hoy (Graemsay Sound, Low) . . . . .	Com'rs. of N. Lighthouses . . . . .	8	4 4	40	35·9	35·94	219	182
D DEERNES . . . . .	W. J. Moar, Esq. . . . .	5	1 0	160	35·4	30·90	245	170
D KIRKWALL (Bignold Park) . . . . .	The Town Council . . . . .	5	1 0	113	36·9	29·85	229	166
Hellyar Holm . . . . .	Com'rs. of N. Lighthouses . . . . .	5	1 3	35	32·9	26·80	209	165
Auskerry . . . . .	Com'rs. of N. Lighthouses . . . . .	5	1 0	22	..	31·91?	194	152
Shapinsay (Balfour Castle) . . . . .	Mr. W. Liddell . . . . .	5	0 6	50	32·0	26·58	..	..
Sanday (Start Point) . . . . .	Com'rs. of N. Lighthouses . . . . .	5	1 0	27	31·1	34·17	210	175
North Ronaldshay . . . . .	Com'rs. of N. Lighthouses . . . . .	5	0 9	22	32·8	(34·74)	204	152
SHETLAND. (Area, 558 sq. mi.).								
D LERWICK (The Knab C.G. Stn.) . . . . .	District Officer (M.O.) . . . . .	8	1 0	156	35·4	33·49	232	166
D LERWICK OBSERVATORY . . . . .	(+A) Meteorologist-in-Charge . . . . .	8	1 0	269	38·1	37·31	249	174
Eshaness . . . . .	Com'rs. of N. Lighthouses . . . . .	..	..	..	34·6	30·74	..	142
D Bixter (Vementry) . . . . .	Andrew Tait, Esq. . . . .	5	1 1	25	37·2	34·73	208	167
D BALTASOUND (Halligarth) . . . . .	T. E. Saxby, Esq., F.R.F.P.S., J.P. . . . .	5	1 0	31	42·1	46·20	307	199

|| Gauge overexposed.

## IRELAND.

## DIVISION XX.—MUNSTER.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain-fall.	1937.		
			Height of Rim above Ground.	Height of Ground above Sea Level.		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
CORK. (Area, 2,873 sq. mi.)						in.		
1.—SHANNON—Left Bank Tributaries. 79 sq. mi.								
2.—DINGLE BAY. 4 sq. mi.								
3.—KENMARE & C. 47 sq. mi.								
4.—BANTRY BAY. 197 sq. mi.								
d Bantry (The Rectory) . . . . .	Rev. J. W. Grainger, M.A. . . . .	5	0 7	200	..	68·80	212	188
d Garinish Island . . . . .	M. Mackenzie, Esq. . . . .	5	2 6	24	70·4	67·60	218	187
5.—DUNMANUS BAY. 57 sq. mi.								
6.—BANDON & C. 694 sq. mi.								
d Castle Townshend (GlenBarrahane) . . . . .	Sir M. P. Coghill, Bt. . . . .	5	1 3	100	44·7	48·44	203	164
d Castle Townshend (Seafield) . . . . .	Major H. Chavasse . . . . .	5	1 0	40	47·6	48·45	198	162
d Clonakilty (Shannon Vale Ho.) . . . . .	T. J. Bennett, Esq. . . . .	5	1 3	135	..	43·82	..	..
d Kilbrittain (Rathclarin Rectory) . . . . .	Rev. R. J. Colthurst . . . . .	5	0 11	300	..	46·52	199	164
d Kinsale (Scilly House) . . . . .	J. J. Orr, Esq., M.D. . . . .	5	1 0	62	38·5	43·53	191	151
d Kinsale (Nohoval Rectory) . . . . .	Rev. H. Hadden . . . . .	5	0 6	272	39·0	43·45	..	..
7.—CORK HARBOUR. 726 sq. mi.								
d Cloyne (The Deanery) . . . . .	The Very Rev. Dean of Cloyne . . . . .	5	1 0	100	..	39·43	179	157
d Cork (Rochelle School) . . . . .	Miss K. McK. Johnston . . . . .	5	1 0	50	..	45·60	..	..
d Cork (University College) . . . . .	(+A) Prof. H. N. Walsh . . . . .	5	1 0	57	40·0	41·97	196	154
d Cork (University College Farm) . . . . .	Prof. C. Boyle . . . . .	5	2 0	75	..	47·41	207	163
d Cork (Wellington Road) . . . . .	R. C. Sikes, Esq., C.E. . . . .	5	2 2	120	40·3	44·13	198	151
d Middleton (BALLINACURRA) . . . . .	Messrs. John H. Bennett, Ltd. . . . .	8	1 0	24	40·4	42·01	203	156
8.—WOMANAGH & C. 118 sq. mi.								
d ROCHES POINT (C. Guard Station) . . . . .	Miss Roche (M.O.) . . . . .	8	1 0	22	41·9	44·99	225	166
d Shanagarry (Kinoith) . . . . .	Miss L. P. Strangman . . . . .	5	1 0	75	35·2	39·99	170	148
9.—BLACKWATER. 922 sq. mi.								
d Millstreet (Convent) . . . . .	Sister Columba . . . . .	5	1 0	412	..	53·02	219	180
d Mallow (Longueville) . . . . .	Major L. Longfield . . . . .	5	1 0	310	37·3	48·70	239	167
d Mallow (Hazlewood) . . . . .	E. MacLysaght, Esq. . . . .	5	0 11	360	39·5	41·59	216	171
d Kanturk (Castlecarr) . . . . .	Mrs. Norton Barry . . . . .	..	..	..	37·6	42·28	229	179
10.—SUIR. 3 sq. mi.								
11.—INSULAR. 26 sq. mi.								
KERRY. (Area, 1,851 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 372 sq. mi.								
d Ballylongford Rectory . . . . .	Rev. C. Murray . . . . .	5	3 6	60	..	39·17	231	174
2.—TRALEE BAY & C. 221 sq. mi.								
3.—DINGLE BAY. 789 sq. mi.								
d VALENTIA OBSERVATORY . . . . .	(+A) The Superintendent . . . . .	8	1 3	30	55·7	63·94	248	200
d Gap of Dunloe (Gearhanneen) . . . . .	J. Casey, Esq., for M.O. . . . .	8	1 0	75	94·0	88·30	..	..
d Killarney (Flesk Mills) . . . . .	J. Lawlor, Esq. . . . .	8	2 6	96	54·9	58·91	203	182
d Killorglin (Callinafercy) . . . . .	Maj. M. R. Leeson-Marshall . . . . .	5	2 0	40	51·9	53·62	..	165
d Bally McElligott Rectory . . . . .	Rev. G. Maxwell . . . . .	5	0 11	20	..	45·04	233	180
d Kenmare (Derreen) . . . . .	Marquess of Lansdowne . . . . .	..	..	55	..	79·75	209	191

## DIVISION XX.—MUNSTER—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.				
			Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.		
			Rim above Ground.	Ground above Sea Level.						
KERRY—(con.).			<i>in.</i>	<i>ft.</i>	<i>in.</i>	<i>ft.</i>	<i>in.</i>	<i>in.</i>		
4.—KENMARE & C. 426 sq. mi.										
D Darrynane Abbey	Miss F. O'Connell	5	1	0	13	51·0	56·03	227	193	
D Kennmare (Dromore Castle)	Lt.-Col. E. Hood	5	0	9	90	65·1	71·79	246	210	
Kennmare (Sheen Falls)	Marquess of Lansdowne	5	0	11	25	65·6	70·15	..	..	
5.—BLACKWATER. 30 sq. mi.										
6.—INSULAR. 13 sq. mi.										
WATERFORD. (Area, 715 sq. mi.).										
1.—BLACKWATER. 243 sq. mi.										
d Tallow (Moore Hill)	E. Perceval-Maxwell, Esq.	5	1	6	100	..	46·85	..	154	
D Lismore Castle	E. E. Hey, Esq.	5	1	2	85	42·8	44·44	198	163	
2.—COLLIGAN & C. 259 sq. mi.										
3.—SUIR. 213 sq. mi.										
d Knockaderry Reservoir (No. 2)	D. Sheedy, Esq., C.E.	5	1	0	248	41·3	46·84	(190)	(156)	
D WATERFORD (Gortmore)	Mrs. N. H. White	5	1	2	137	38·9	42·08	200	147	
D Portlaw (Mayfield)	M. Sheehan, Esq.	5	0	10	35	43·1	44·64	199	160	
D CARRICK-ON-SUIR (SESKIN)	L. Grubb, Esq.	8	1	0	535	45·0	47·96	215	158	
TIPPERARY. (Area, 1,660 sq. mi.).										
1.—SHANNON—Left Bank Tributaries. 582 sq. mi.										
Birdhill (Parteen Weir)	Electricity Supply Board	5	2	3	110	..	44·50	..	..	
D Nenagh (Traverston)	Miss A. H. Norris	5	1	0	333	45·2	47·65	241	200	
D Killaloe (Ballina)	Office of Public Works	5	1	0	126	45·3	45·89	223	177	
D Nenagh (Castle Lough)	Mrs. H.M. Parker-Hutchinson	5	1	3	120	39·5	42·61	246	200	
D Cloughjordan (Modreeny)	Capt. G. W. Whitfield	5	1	0	275	..	37·79	212	174	
D Terryglass (Slevyre)	B.-Gen. C.J. Hickie, C.M.G.	8	1	0	143	31·9	32·38	222	141	
2.—BLACKWATER. 21 sq. mi.										
3.—SUIR. 965 sq. mi.										
D Clonmel (Ballingarrone Ho.)	W. Bagwell, Esq.	5	0	10	225	..	41·53	209	169	
D Cahir (Abbey)	Mrs. W. Rochfort	5	1	0	160	39·2	54·16?	210	182	
d Tipperary (Church Street)	T. J. Breen, Esq.	5	7	0	300	..	43·51	182	..	
D Cashel (Ballinamona)	E. W. M. Murphy, Esq.	5	1	0	262	36·8	40·31	228	168	
4.—BARROW—Nore. 92 sq. mi.										
D Roscrea (Timoney Park)	Mrs. H.M. Parker-Hutchinson	5	1	0	475	36·2	38·13	233	174	
LIMERICK. (Area, 1,040 sq. mi.).										
1.—SHANNON—Right Bank Tributaries. 7 sq. mi.										
2.—SHANNON—Left Bank Tributaries. 944 sq. mi.										
D Abbeyfeale (Springmount Sch.)	J. F. O'Kelly, Esq.	5	1	0	360	41·1	37·63	..	..	
D Abbeyfeale (The Presbytery)	Rev. T. Hogan	5	1	0	290	..	42·36	235	178	
D Knocklong (Kilfrush)	Mrs. Gubbins	5	1	3	312	37·8	40·58	..	..	
D FOYNES (Coolnanes)	The Lord Monteagle, C.M.G., M.V.O.	8	1	0	43	39·7	36·43	207	168	
D Foynes (National School)	W. Purtill, Esq.	5	2	8	16	39·5	36·85	210	168	
D Pallaskenry	T. O'Byrne, Esq.	8	1	0	20	..	34·55	210	156	
D Limerick (Mulgrave Street)	Messrs. W. J. Shaw & Sons	5	1	1	60	38·2	37·52	222	176	
D Limerick (The Crescent)†	W. J. C. Horne, Esq.	5	1	0	50	38·6	36·92	222	169	
D Castleconnell Rectory	Rev. Canon L. G. Davis	5	1	0	88	41·2	40·33	223	171	

† Station formerly called Limerick (Boat Club). Gauge moved  $\frac{1}{2}$  mile S., 31.5.37.

## DIVISION XX.—MUNSTER—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of Rim above Ground.	Ground above Sea Level.	Average Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
LIMERICK—(con.).		in.	ft. in.	ft.	in.	in.		
3.—BLACKWATER. 64 sq. mi.								
4.—SUIR. 25 sq. mi.								
CLARE. (Area, 1,270 sq. mi.).								
1.—GALWAY BAY, SOUTH. 100 sq. mi.								
2.—MAL BAY & C. 294 sq. mi.								
D Inagh (Mount Callan) . . . . .	Capt. R. G. Tottenham . . . .	5	1 0	479	67·2	70·15	2·4	197
3.—SHANNON—Right Bank Tributaries. 854 sq. mi.								
Ardnacrusha (Power Station) . . . .	Electricity Supply Board . . .	5	1 6	89	..	37·78	..	..
D Dromoland Castle . . . . .	Dowager Lady Inchiquin . . .	5	1 6	45	40·0	38·78	191	170
D Tuamgraney (Raheen Ho.) . . . . .	E. MacLysaght, Esq. . . . .	5	1 2	190	41·9	46·03	203	177
4.—INSULAR. 22 sq. mi.								

## DIVISION XXI.—LEINSTER.

WEXFORD. (Area, 902 sq. mi.).								
1.—BARROW. 43 sq. mi.								
2.—OWENDUFF & C. 240 sq. mi.								
D Foulks Mills (Longraigue) . . . . .	Miss J. Deane . . . . .	5	1 1	226	39·3	42·26	191	154
3.—SLANEY & C. 467 sq. mi.								
D Johnstown Castle . . . . .	Lady Maurice Fitzgerald . . .	5	1 3	200	37·0	48·82	186	170
D Enniscorthy (Woodbrook) . . . . .	Mrs. S. W. Blacker . . . . .	5	1 0	370	48·8	53·81	204	187
4.—OWENAVORRAGH & C. 146 sq. mi.								
D Gorey (Courtown House) . . . . .	Earl of Courtown . . . . .	5	1 0	60	34·7	40·37	229	163
D Gorey (Rani's Gate) . . . . .	Lt.-Cmdr. A.C.L. Ellis, R.N.R. .	5	4 2	170	..	37·29	173	147
5.—OVOCA & C. 6 sq. mi.								
KILKENNY. (Area, 798 sq. mi.).								
1.—SUIR. 162 sq. mi.								
D Piltown (Bessborough) . . . . .	The Earl of Bessborough . . .	8	3 7	60	37·7	39·73	188	150
2.—BARROW—Nore. 527 sq. mi.								
D Thomastown (Mall House) ‡ . . . .	J. Molony, Esq. . . . .	5	1 0	90	..	36·31	192	149
D Castlecomer House . . . . .	Capt. R. H. Prior-Wandesforde .	5	1 0	380	39·6	39·83	202	166
3.—BARROW. 109 sq. mi.								
WICKLOW. (Area, 781 sq. mi.).								
1.—BARROW. 12 sq. mi.								
2.—SLANEY. 200 sq. mi.								
D Shillelagh (Coolattin Gardens) . . .	Mr. F. W. Cox . . . . .	5	0 9	383	41·9	41·23	203	180
3.—OVOCA & C. 241 sq. mi.								
D Rathdrum (Avondale) . . . . .	Lands & Fisheries Dept. . . .	5	1 0	400	..	50·75	197	163

‡ Gauge moved 70 yds. E. in April, 1937.



## DIVISION XXI.—LEINSTER—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
WICKLOW—(con.).			in.	ft. in.	ft. in.	in.		
<b>4.—VARTRY &amp; C. 193 sq. mi.</b>								
D Rathnew (Clonmannon) . . . . .	R. H. S. Truell, Esq. . . . .	5	1 6	27	33·1	38·28	203	150
Roundwood (Vartry Lodge) . . . . .	Dublin Corporation . . . . .	5	5 6	720	..	45·41?	..	..
Roundwood . . . . .	Dublin Corporation . . . . .	5	1 8	750	44·6	49·78	..	..
D NEWCASTLE (Killadreenan) . . . . .	The Med. O. Nat. Hos. Cons. . . . .	8	1 2	256	36·0	41·32	211	149
D Greystones (Burnaby Lodge) . . . . .	Capt. C. H. West . . . . .	5	1 0	95	..	43·85	196	146
<b>5.—LIFFEY &amp; C. 135 sq. mi.</b>								
Granabeg School . . . . .	Electricity Supply Board . . . . .	5	1 3	..	..	52·67	..	..
Pollaphuca . . . . .	Electricity Supply Board . . . . .	5	1 0	..	..	35·56	..	..
D Blessington Rectory . . . . .	Rev. W. Reeves Scully . . . . .	5	0 8	670	38·0	35·00	229	168
Manor Kilbride . . . . .	Electricity Supply Board . . . . .	5	1 0	..	..	39·42	..	..
CARLOW. (Area, 346 sq. mi.).								
<b>1.—BARROW—Nore. 9 sq. mi.</b>								
<b>2.—BARROW. 216 sq. mi.</b>								
D Bagnalstown (Fenagh House) . . . . .	D. R. P. Beresford, Esq., O.B.E. . . . .	5	1 0	340	34·9	38·47	214	142
D Carlow (Browne's Hill) . . . . .	B. Gen. R. Browne Clayton . . . . .	5	1 0	291	34·1	34·92	..	..
<b>3.—SLANEY. 121 sq. mi.</b>								
D Hacketstown Rectory . . . . .	Rev. C. S. S. Ellison . . . . .	5	1 6	590	39·5	41·48	235	165
LEIX. (Area, 664 sq. mi.).								
<b>1.—SHANNON—Left Bank Tributaries. 25 sq. mi.</b>								
<b>2.—BARROW—Nore. 339 sq. mi.</b>								
D Abbey Leix (Blandsfort) . . . . .	Mrs. Hum Bland . . . . .	5	1 0	532	36·5	38·63	223	164
D Mountrath (Baunreagh) . . . . .	Lands & Fisheries Dept. . . . .	5	1 2	810	54·6	56·59	191	168
<b>3.—BARROW. 300 sq. mi.</b>								
D Mountmellick (Summer Grove) . . . . .	W. A. Robinson, Esq. . . . .	5	1 0	252	..	36·43	186	154
OFFALY. (Area, 772 sq. mi.).								
<b>1.—SHANNON—Left Bank Tributaries. 560 sq. mi.</b>								
D BIRR CASTLE . . . . .	The Earl of Rosse . . . . .	8	1 0	173	32·6	34·66	209	155
D Meelick (Victoria Lock) . . . . .	Office of Public Works . . . . .	5	1 0	121	29·9	37·20	213	156
Banagher . . . . .	Electricity Supply Board . . . . .	5	1 6	130	30·8	34·82	..	..
D Ferbane (Turraun Peat Works) . . . . .	Turf Development Bd. Ltd. . . . .	8	1 4	165	32·5	(31·65)	..	..
D Ballycumber (Bellair Ho.) . . . . .	Mrs. F. B. Mulock . . . . .	5	1 2	290	33·9	34·27	225	157
<b>2.—BARROW—Nore. 5 sq. mi.</b>								
<b>3.—BARROW. 156 sq. mi.</b>								
D Portarlington (Clonsast) . . . . .	Turf Development Bd. Ltd. . . . .	5	1 6	270	..	31·84	..	..
Edenderry (Tubberdaly Ho.) . . . . .	J. Murphy, Esq. . . . .	5	1 0	330	33·5	36·70	..	..
<b>4.—BOYNE. 51 sq. mi.</b>								
D Edenderry (The Tunnel) . . . . .	C. T. Calwell, Esq., C.E. . . . .	8	3 7	265	..	32·48	..	..
KILDARE. (Area, 654 sq. mi.)								
<b>1.—BARROW. 332 sq. mi.</b>								
D Athy (Moone) . . . . .	E. Shackleton, Esq. . . . .	5	0 10	274	..	32·70	207	153
D Athy (Cromaboo Bridge) . . . . .	Office of Public Works . . . . .	5	0 11	185	..	29·64	178	131
D Monasterevin (Pass Bridge) . . . . .	Office of Public Works . . . . .	5	0 8	208	..	30·39	196	151

## DIVISION XXI.—LEINSTER—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			1937.		
			Height of		Average	Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.
			Rim above Ground.	Ground above Sea Level.	Rain-fall.			
KILDARE—(con.).			in.	ft. in.	ft. in.	in.		
<b>2.—LIFFEY. 246 sq. mi.</b>								
Caragh .....	Electricity Supply Board	5	1	0	..	30·40	..	..
d Straffan House .....	F. B. Barton, Esq.	5	1	0	256	31·4	198	143
d Clongowes Wood College .....	The Principal	8	1	4	246	30·2	(222)	(138)
<b>3.—BOYNE. 76 sq. mi.</b>								
DUBLIN. (Area, 354 sq. mi.).								
<b>1.—VATRY &amp; C. 23 sq. mi.</b>								
d Shankill (Sherrington) .....	Lt.-Col. J. C. W. Erck	5	1	0	115	29·6	36·09	185 145
d Carrickmines (Claremount) .....	Mrs. W. A. Ormsby	5	0	11	300	..	33·45	201 139
Killiney (Rathleigh) .....	H. R. Maunsell, Esq.	5	3	6	..	28·1	32·62	.. ..
<b>2.—LIFFEY &amp; C. 188 sq. mi.</b>								
Brittas School .....	Electricity Supply Board	5	1	0	..	40·71	..	..
d Kingstown (Harbour Yard) .....	Office of Public Works	8	1	0	52	28·3	33·59	182 132
d Kingstown (People's Park) .....	Dr. T. J. Lydon	8	0	9	25	..	31·40	202 136
d RATHFARNHAM Castle .....	The Rev. Father the Rector	8	1	0	169	28·4	34·30	201 141
d Belgard Castle .....	Hugh A. C. Maude, Esq.	5	0	10	450	..	28·39	.. 123
d Rathmines (Neville Road) .....	T. H. Mason, Esq.	5	1	0	100	28·0	35·00	192 146
d Dublin (Ringsend Pumpg. Stn.) .....	H. Nicholls, Esq.	10	0	9	23	26·3	29·83	207 144
d DUBLIN (TRINITY COLLEGE) .....	R. W. Ditchburn, Esq.	8	1	0	13	26·1	29·22	192 126
d DUBLIN (PHENIX PARK) .....	The Director of O.S. Office	8	1	0	155	27·6	28·67	211 134
d HAZELHATCH (PEAMOUNT SAN.) .....	The Superintendent	5	1	0	366	..	27·11?	.. ..
d Clontarf (Pumping Station) .....	H. Nicholls, Esq.	5	3	9	17	24·4	31·19	206 136
d GLASNEVIN (Botanic Gardens) .....	The Keeper	8	1	0	55	27·9	31·30	206 137
d Howth (Danesfort) .....	Mrs. H. E. Guinness	5	0	9	460	..	32·99	182 146
d Howth Castle .....	J. Gaisford St. Lawrence, Esq.	5	1	6	35	28·7	30·15	.. 141
<b>3.—NANNY, DELVIN &amp; C. 142 sq. mi.</b>								
Malahide (Seamount) .....	J. G. Jameson, Esq.	5	1	0	150	28·0	32·53	202 ..
d Lusk (Nevitt) .....	W. Monks, Esq.	5	1	0	139	29·2	30·63	203 135
d Skerries (Milverton Hall) .....	Capt. E. G. Woods	5	1	0	190	28·0	29·36	193 133
d Balbriggan (Ardgillan) .....	No. 1 Capt. E. R. Taylor	5	1	0	203	29·0	29·80	(215) (131)
<b>4.—INSULAR. 1 sq. mi.</b>								
d Lambay Island .....	Lord Revelstoke	5	1	0	20	27·4	29·55	.. ..
MEATH. (Area, 909 sq. mi.).								
<b>1.—SHANNON—Left Bank Tributaries. 32 sq. mi.</b>								
<b>2.—LIFFEY &amp; C. 72 sq. mi.</b>								
d Dunboyne (Stirling, Clonee) .....	Mr. J. Pilkington	8	1	0	231	33·3	31·05	179 139
<b>3.—NANNY, DELVIN &amp; C. 150 sq. mi.</b>								
<b>4.—BOYNE. 560 sq. mi.</b>								
d Summerhill House .....	Mr. W. Lauder	5	1	0	372	33·7	33·68	203 147
d Dunsany Castle Gardens† .....	Lord Dunsany	5	1	0	323	33·8	31·74	189 156
d Navan (Tara Hall) .....	C. Moore-Brabazon, Esq.	5	1	3	350	..	32·31	185 147
d Athboy (Frayne) .....	Dr. Beryl F. E. Moore	5	0	9	310	..	34·20	226 144
d Athboy (Frankville) .....	Mrs. C. P. Coghill	5	1	3	227	..	39·33	.. 151
d Beauparc (St. Cloud) .....	W. J. Hopkins, Esq.	5	1	0	215	31·5	34·69	202 154
d Kells (Headfort) .....	The Marquis of Headfort	8	1	0	227	37·0	37·25	179 139
<b>5.—DUNDALK BAY. 95 sq. mi.</b>								

† Gauge moved 50 yds. N. in Feb., 1937.

## DIVISION XXI.—LEINSTER—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge			Average Rain-fall.	1937.			
			Height of Rim above Ground.	Ground above Sea Level.	Rain-fall.		Days with ·01 in. or more.	Days with ·04 in. or more.		
WESTMEATH. (Area, 712 sq. mi.).			in.	ft.	in.	ft.	in.	in.		
1.—SHANNON—Left Bank Tributaries. 517 sq. mi.										
D Athlone.....	Office of Public Works	5	1	0	116	34·2	37·01	..	160	
D Athlone (Twyford House) .....	J. B. Hodson, Esq.	5	1	0	187	37·0	39·57	209	170	
D Moate (Coolatore) .....	H. A. S. Upton, Esq.	5	1	6	369	33·5	33·88	222	158	
D Mullingar (Belvedere House) .....	Col. C. Howard Bury	5	1	0	367	36·3	35·91	211	156	
D Mullingar (Ballynegall Gardens) .....	Major Hawkesworth Smyth	5	0	5	357	39·0	34·05	179	145	
D Castlepollard (Pakenham Hall) ...	The Earl of Longford	5	3	0	300	36·6	33·14	191	141	
2.—BOYNE. 195 sq. mi.										
LOUTH. (Area, 316 sq. mi.)										
1.—BOYNE. 32 sq. mi.										
2.—DUNDALK BAY & C. 264 sq. mi.										
Dundalk (Ballymacallet Mt.).....	The Surveyor.....	5	0	10	670	..	46·90	..	..	
D Dundalk (Ravensdale) .....	The Surveyor	8	0	10	200	..	37·03	201	141	
3.—CARLINGFORD LOUGH. 20 sq. mi.										
D Greenore .....	S. Wilson, Esq.....	5	1	6	20	31·9	34·78	180	137	
LONGFORD. (Area, 424 sq. mi.)										
1.—ERNE. 61 sq. mi.										
2.—SHANNON—Left Bank Tributaries. 363 sq. mi.										
D Ballymahon (New Castle).....	Col. W. A. King-Harman ...	5	1	0	200	36·7	39·24	210	167	
Keenagh .....	Electricity Supply Board ...	5	1	6	..	..	32·07	..	..	
D Cloondraha .....	Office of Public Works	5	1	0	132	31·5	31·96	212	150	
D NEWTOWNFORBES (Cas.F.Gns.)... J. Boyle for The Earl of Granard.	8	1	0	154	37·6	35·94	171	166		
Gaique School .....	Electricity Supply Board ...	5	1	9	390	..	32·44	..	..	
DIVISION XXII.—CONNAUGHT.										
GALWAY. (Area, 2,377 sq. mi.)										
1.—ERIFF & C. 141 sq. mi.										
D Moyard (Ballynakill Rectory) .....	Rev. B. C. B. Irwin	5	2	0	70	..	65·13	248	209	
2.—GALWAY BAY NORTH. 277 sq. mi.										
3.—CORRIB. 846 sq. mi.										
D Galway (Grammar School) .....	The Headmaster	5	1	0	64	40·0	40·18	246	166	
D Moycullen (Moycullen Ho.) .....	Major S. Perry	5	1	0	400	..	51·19	236	174	
D Ballynahinch Castle .....	H. H. Maharaja of Nawanagar	5	1	9	41	61·0	63·93	..	177	
D Tuam Palace Gardens.....	G. H. Greenham, Esq.	5	1	0	140	44·0	42·15	254	172	
4.—GALWAY BAY, SOUTH. 281 sq. mi.										
5.—SHANNON—Right Bank Tributaries. 803 sq. mi.										
D Portumna .....	Electricity Supply Board ...	5	3	0	..	..	34·16	205	148	
D Ahascragh (Clonbrock) .....	The Hon. Miss Dillon	5	1	0	198	41·6	40·42	..	165	
Mt. Bellew B.N.S. ....	Electricity Supply Board	5	2	0	200	42·4	40·55	..	..	
Ballygar .....	Electricity Supply Board	5	..	..	200	..	38·66	..	..	
Glenamaddy .....	Electricity Supply Board ...	5	2	0	..	..	38·17	..	..	
6.—INSULAR. 29 sq. mi.										

## DIVISION XXII.—CONNAUGHT—(con.).

STATIONS.	AUTHORITIES.	Di. m.	Rain-gauge			1937.		
			Height of Rim above Ground.	Ground above Sea Level.	Aver- age Rain- fall.	Rain- fall.	Days with ·01 in. or more.	Days with ·04 in. or more.
ROSCOMMON. (Area, 961 sq. mi.).			in.	ft.	in.	ft.	in.	in.
1.—SLIGO BAY. 6 sq. mi.								
2.—MOY. 11 sq. mi.								
3.—CORRIB. 16 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 928 sq. mi.								
Roscommon	Electricity Supply Board	5	1	6	140	36·70	..	..
Lanesborough	Electricity Supply Board	5	1	6	140	32·71	..	..
d Strokestown (Castlenode)	W. J. Walpole, Esq.	5	1	6	160	34·59	200	149
MAYO. (Area, 2,149 sq. mi.).								
1.—SLIGO BAY. 10 sq. mi.								
2.—MOY & C. 797 sq. mi.								
d Castlebar Rectory	Rev. J. Jackson, M.A.	5	1	0	145	49·14	240	196
d Ballina (The Rectory)	Rev. C. J. A. Harris, B.A.	5	1	0	75	44·35	235	187
3.—BLACKSOD BAY & C. 411 sq. mi.								
d BLACKSOD POINT	Sub-Postmistress (M.O.)	8	1	0	10	49·63	242	196
4.—CLEW BAY. 254 sq. mi.								
d Louisburgh (Old Head House)	Mrs. F. N. Neil	5	1	6	120	(41·52)	(229)	(189)
d Westport House	The Marquess of Sligo	5	1	0	35	42·48	215	180
d MALLARANNY	Chief Eng. G.S. Ry. Dublin	5	1	0	120	59·30	237	206
5.—ERIFF & C. 121 sq. mi.								
d Aasleagh House	The Marquess of Sligo	5	1	0	30	96·20	256	223
d Delphi Lodge	The Marquess of Sligo	5	1	0	110	97·51	266	242
6.—CORRIB. 432 sq. mi.								
d Tourmakeady (Drimbawn Ho.)	Capt. E. G. Woods	5	1	0	100	48·13	272	148
7.—SHANNON—Right Bank Tributaries. 35 sq. mi.								
8.—INSULAR. 86 sq. mi.								
SLIGO. (Area, 716 sq. mi.)								
1.—DROWES & C. 49 sq. mi.								
2.—SLIGO BAY. 444 sq. mi.								
d Collooney (MARKREE CAS.)	The late Mjr. Cooper's Trus.	5	1	0	122	40·61	242	197
d Sligo (Ard-na-veagh)	R. J. Kirwan, Esq., C.E.	5	1	0	90	39·51	246	195
3.—MOY & C. 166 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 56 sq. mi.								
5.—INSULAR. 1 sq. mi.								
LEITRIM. (Area, 615 sq. mi.)								
1.—ERNE. 152 sq. mi.								
2.—DROWES & C. 85 sq. mi.								
3.—SLIGO BAY. 135 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 47 sq. mi.								
Drumkeeran (Leckawn)	Electricity Supply Board	5	1	5	350	50·05	..	..
5.—SHANNON—Left Bank Tributaries. 196 sq. mi.								
d Ruskey	Office of Public Works	5	1	0	141	38·00	205	180
d Cloone	Electricity Supply Board	5	1	6	210	34·04	..	..
d Carrick-on-Shannon (Monastery)	Brother Mark	5	1	5	200	40·72	..	..
d Drumshanbo (Lough Allen Sluice)	Office of Public Works	5	1	0	169	34·47	230	142

## DIVISION XXIII.—ULSTER.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.		
			Height of		Average	Rain-fall.	Rain-fall.	Days with or more.	Days with or more.
			Rim	Ground					
			above	above	fall.				
			Ground.	Sea Level.					
CAVAN. (Area, 753 sq. mi.).									
1.—ERNE. 489 sq. mi.									
D Crossdoney (Kevit Castle) . . . . .	Dr. F. P. Smith . . . . .	5	1	0	211	35.5	34.72	204	166
2.—SHANNON—Right Bank Tributaries. 34 sq. mi.									
Glangevlin . . . . .	Electricity Supply Board . . . . .	5	2	0	500	..	53.97	..	..
3.—SHANNON—Left Bank Tributaries. 91 sq. mi.									
4.—BOYNE. 122 sq. mi.									
5.—DUNDALK BAY. 17 sq. mi.									
FERMANAGH. (Area, 713 sq. mi.).									
1.—ERNE. 667 sq. mi.									
D Newtownbutler (Crom Castle) . . . . .	G. R. J. Corbett, Esq. . . . .	5	1	1	200	38.7	33.93	244	160
D Florencecourt . . . . .	Earl of Enniskillen . . . . .	5	1	0	274	48.5	42.26	240	165
D Enniskillen (Castle Coole) . . . . .	Lady Dorothy Lowry-Corry . . . . .	5	1	0	240	41.0	36.18	242	162
D Enniskillen (Portora School) . . . . .	The Headmaster . . . . .	5	1	0	251	40.3	29.86	..	..
D Colebrooke . . . . .	Sir Basil Brooke, Bt. . . . .	5	1	6	250	..	37.51	214	168
D Belleek (Roscor) . . . . .	Mrs. Dick . . . . .	5	1	0	500	..	47.75	251	197
D Belleek (Heronshaw) . . . . .	T. Beacom, Esq. . . . .	5	1	2	150	45.5	41.71	219	193
D Castle Archdale . . . . .	Mrs. Archdale . . . . .	5	1	0	247	..	37.60	215	169
2.—DROWES & C. 46 sq. mi.									
MONAGHAN. (Area, 498 sq. mi.).									
1.—ERNE. 208 sq. mi.									
2.—DUNDALK BAY. 132 sq. mi.									
3.—BANN—Lough Neagh, West. 158 sq. mi.									
ARMAGH. (Area, 514 sq. mi.)									
1.—DUNDALK BAY. 118 sq. mi.									
D Crossmaglen (Anamar) . . . . .	P. Norris, Esq. . . . .	5	1	1	384	36.2	36.69	195	154
2.—CARLINGFORD LOUGH. 23 sq. mi.									
D Bessbrook (The Woodhouse) . . . . .	J. S. W. Richardson, Esq. . . . .	5	1	0	260	37.2	37.71	227	166
3.—BANN—Lough Neagh, East. 37 sq. mi.									
4.—BANN, UPPER. 144 sq. mi.									
D Markethill (Whitecross) . . . . .	Government of N. Ireland . . . . .	5	1	0	400	..	36.05	226	176
5.—BANN—Lough Neagh, West. 192 sq. mi.									
D Keady (Derrynoose Rec.) . . . . .	Rev. T. F. Campbell . . . . .	5	1	0	380	..	33.30	240	155
D Tynan Abbey . . . . .	Capt. C. N. L. Stronge . . . . .	5	1	0	167	..	32.17	208	158
D ARMAGH (Observatory) . . . . .	(+A) The Dir. of Obsy. (M.O.) . . . . .	8	1	0	204	31.7	30.66	204	151
D Richhill (Sandymount) . . . . .	Mrs. C. B. Lamb . . . . .	5	1	6	200	29.3	32.60	194	155
DOWN. (Area, 961 sq. mi.)									
1.—CARLINGFORD LOUGH. 104 sq. mi.									
D Newry (Bridge Street House) . . . . .	C. Blaney, Esq. . . . .	5	1	0	23	38.1	35.81	201	150
2.—DUNDRUM BAY & C. 173 sq. mi.									
D Silent Valley (Belfast W.W.) . . . . .	C. F. Wheeler, Esq., C.E. . . . .	5	1	0	426	..	55.44	229	181
D Annalong (Belfast W.W.) . . . . .	C. F. Wheeler, Esq., C.E. . . . .	5	2	9	435	47.5	47.62	235	163
D Mourne Mount's (Fofanny Res.) . . . . .	J. E. Croasdaile, Esq., M.A. . . . .	5	1	0	938	64.4	69.80	162	143
D Seaforde . . . . .	T. W. Forde, Esq. . . . .	8	1	0	180	38.3	42.65	218	179

## DIVISION XXIII.—ULSTER—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge				1937.			
			Height of		Average Rain-fall.	Rain-fall.	Days with ·01 in. or more.	Days with ·04 in. or more.		
			Rim above Ground.	Ground above Sea Level.						
DOWN—(con.).			in.	ft. in.	ft.	in.	in.			
<b>3.—STRANGFORD LOUGH. 260 sq. mi.</b>										
D Strangford .....	G. L. Hildebrand, Esq. ....	5	0	8	30	..	33·59	208	149	
D Saintfield House .....	Rev. Canon E. H. Blackwood-Price	5	0	9	300	34·9	37·34	262	151	
D Newtownards (Grey Abbey) .....	H. H. K. Worsley, Esq. ....	5	1	0	30	..	38·73	224	170	
<b>4.—COAST STREAMS. 47 sq. mi.</b>										
D DONAGHADEE (C. Guard Stn.) .....	The Station Officer (M.O.) ..	8	1	0	40	31·3	34·59	216	147	
D Donaghadee (Craignmore) .....	Miss E. E. Coates .....	5	1	0	60	30·6	34·70	222	139	
D Donaghadee (Orlock Reservoir) ...	The Resident Engineer .....	5	1	0	43	..	33·94	192	146	
<b>5.—BELFAST LOUGH. 206 sq. mi.</b>										
D Dromara .....	Government of N. Ireland ..	5	1	0	..	..	43·93	208	173	
D Annaghanoon .....	W. J. Gibson, Esq. ....	5	1	0	200	..	31·71	..	..	
D Waringstown (The Forge) .....	W. J. Gibson, Esq. ....	5	1	0	187	32·2	31·95	220	157	
D HILLSBOROUGH (Research Stn.) .....	The Secretary .....	5	1	0	388	..	34·88	213	157	
<b>6.—BANN—Lough Neagh, East. 7 sq. mi.</b>										
<b>7.—BANN, UPPER. 162 sq. mi.</b>										
D Portadown (Moyallon House) .....	Mr. J. Eccles. ....	5	0	7	130	32·6	30·98	169	145	
<b>8.—INSULAR. 2 sq. mi.</b>										
ANTRIM. (Area, 1,193 sq. mi.)										
<b>1.—BELFAST LOUGH. 107 sq. mi.</b>										
d Lisburn School .....	The Headmaster .....	8	1	0	208	34·1	(36·27)	(215)	(157)	
d Lambeg (Glenmore House) .....	Linen Industry Res. Assn. ..	8	0	11	100	..	(40·06)	..	..	
d Dunmurry (Warren House) .....	Col. H. R. Charley .....	5	0	10	110	..	41·31	228	164	
d Belfast (Queen's University) .....	J. A. Badger, Esq. ....	5	1	0	62	34·5	40·23	218	160	
d Belfast (Sewage Works) .....	R. B. Donald, Esq., C.E. ....	8	1	0	26	35·8	41·38	225	153	
d Belfast (Oldpark Filters) .....	C. F. Wheeler, Esq., C.E. ....	5	1	0	203	39·0	36·91	184	143	
d Carrickfergus (Dorisland) .....	C. F. Wheeler, Esq., C.E. ....	5	1	0	250	..	39·56	210	166	
d Carrickfergus (S. Woodburn) .....	C. F. Wheeler, Esq., C.E. ....	5	1	0	640	44·5	44·99	235	175	
d Carrickfergus (N. Woodburn) .....	C. F. Wheeler, Esq., C.E. ....	5	1	0	735	45·5	47·29	237	174	
d Carrickfergus (Copeland) .....	C. F. Wheeler, Esq., C.E. ....	5	1	0	427	40·0	37·24	228	172	
d Carrickfergus (L. Mourne) .....	C. F. Wheeler, Esq., C.E. ....	5	1	0	596	42·5	39·42	226	161	
<b>2.—GLENARM &amp; C. 186 sq. mi.</b>										
D Larne (Sallagh Springs) .....	J. E. Croasdaile, Esq., M.A. .	5	1	0	566	50·0	49·23	227	201	
<b>3.—BUSH &amp; C. 193 sq. mi.</b>										
D Ballycastle (Magherintemple) .....	Capt. J. Casement, D.S.O. ...	5	1	0	230,	42·6	42·05	258	172	
<b>4.—BANN, LOWER. 112 sq. mi.</b>										
<b>5.—BANN—Lough Neagh, East. 590 sq. mi.</b>										
D Stoneyford (Belfast W.W.) .....	C. F. Wheeler, Esq., C.E. ...	5	1	0	453	..	37·28	198	154	
D ALDERGROVE (Aerodrome) .....	(+A) Meteorological Officer .....	8	1	0	238	33·0	34·48	218	145	
D Randalstown (Hollybrook) .....	N. F. Webb, Esq. ....	5	1	0	120	..	40·29	230	197	
D Ballymena (Harryville) .....	J. R. Williams, Esq. ....	5	1	5	150	41·5	42·33	232	196	
D Broughshane (Tullymore Sch.) .....	E. W. Thomson, Esq. ....	5	1	2	218	..	40·83	244	165	
D Broughshane (Quolie) ‡ .....	Capt. H. Simpson, C.E. ....	5	1	3	864	47·3	48·65	251	193	
<b>6.—INSULAR. 5 sq. mi.</b>										
LONDONDERRY. (Area, 816 sq. mi.)										
<b>1.—LOUGH SWILLY. 6 sq. mi.</b>										
D Londonderry (Dunruadh) .....	J. H. Welch, Esq. ....	5	0	6	130	40·5	35·50	240	180	

‡ Gauge over-exposed.

‡ Gauge moved 67 ft. S, 12th November, 1937.

## DIVISION XXIII.—ULSTER—(con.).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge		Average Rain-fall.	1937.			
			Height of Rim above Ground.	Height of Ground above Sea Level.		Rain-fall.	Days with .01 in. or more.	Days with .04 in. or more.	
LONDONDERRY—(con.).						in.			
2.—BUSH & C. 9 sq. mi.									
3.—BANN, LOWER. 240 sq. mi.									
D Upperlands (Ardtara)	H. J. Clark, Esq.	5	2	0	250	..	44·88	226	203
D Garvagh (Moneydig)	J. Porter, Esq.	5	1	0	121	38·8	41·17	249	180
D Coleraine (Ingledene)	W. R. Johnston, Esq.	5	3	4	55	..	37·91	233	170
4.—BANN—Lough Neagh West. 196 sq. mi.									
5.—FOYLE & C. 365 sq. mi.									
M Glenedra (Spelhoagh Mountain)	Londonderry C.B.C.	5	1	0	1333	60·0	54·12	..	..
M Glenedra Hill	Londonderry C.B.C.	5	1	0	1333	62·5	58·07	..	..
M Glenedra Lodge	Londonderry C.B.C.	5	1	0	950	57·0	54·12	..	..
M Glenedra (Altagarran Mountain)	Londonderry C.B.C.	5	1	0	1230	..	56·09	..	..
M Dungiven (Labbyheige)	Londonderry C.B.C.	5	1	0	1150	..	57·28	..	..
M Altnaheglish (Altabrogy Burn)	Londonderry C.B.C.	5	1	0	967	..	58·10	..	..
M Glenedra Intake	Londonderry C.B.C.	5	1	0	740	..	56·38	..	..
M Altnaheglish (Glack Burn)	Londonderry C.B.C.	5	1	0	967	..	53·30	..	..
D Dungiven (Banagher Filters)	Londonderry C.B.C.	5	1	0	373	..	50·83	259	188
D Londonderry (Creggan Res.)	Mr. W. Hutchison	8	1	0	325	41·8	39·53	283	210
D Limavady (Roevista Manse)	Rev. W. Browne	5	1	0	70	37·0	28·47	203	144
D Limavady (Drenagh)	M. M. McCausland, Esq.	5	1	6	80	37·0	(32·50)	(230)	(156)
TYRONE. (Area, 1,257 sq. mi.)									
1.—ERNE. 46 sq. mi.									
2.—BANN—Lough Neagh, West. 442 sq. mi.									
D Dungannon (Aloha)	Major R. Stevenson	5	1	0	275	37·2	40·06	229	181
D Castlecaulfield (Parkanaur)	(R). Capt. Y. A. Burges	8	0	9	250	..	34·38	229	159
Cookstown	A. J. Black, Esq.	5	1	0	350	..	42·02	..	..
3.—FOYLE. 769 sq. mi.									
D Omagh (Edenfel)	Miss H. M. Buchanan	8	1	0	280	40·1	39·82	252	177
D Newtown Stewart (Barons Ct.)	Capt. E. W. Ross	5	1	0	250	43·0	36·33	215	163
D Sion Mills (Sion House)	Capt. J. C. Herdman	5	1	0	100	39·0	36·42	211	174
DONEGAL. (Area, 1,875 sq. mi.).									
1.—DONAGH & C. 146 sq. mi.									
D Carndonagh (Rocksmount)	Cecil Porter, Esq.	5	1	0	50	..	41·57	240	196
D MALIN HEAD (C.G. Stn.)	P. Farren, Esq. (M.O.)	8	1	0	84	39·6	35·58	234	171
2.—LOUGH SWILLY. 273 sq. mi.									
D Buncrana Rectory	Rev. R. P. Meredith	5	1	0	50	..	37·04	245	179
3.—SHEEPHAVEN & C. 307 sq. mi.									
D Dunfanaghy (St. Patrick's)	W. T. Arnold, Esq.	8	1	0	30	39·0	34·57	271	216
Mulroy Gardens	The Earl of Leitrim	5	0	4	50	..	39·78	..	..
D Rosapenna Hotel	Rosapenna Hotel Co.	5	1	0	30	..	33·53	219	167
4.—GWEEBARRA & C. 341 sq. mi.									
5.—DONEGAL BAY. 322 sq. mi.									
D Dunkineely (Killaghtee Ho.)	Rev. Canon J. C. Steele*	5	1	0	148	..	40·07	230	174
6.—ERNE. 68 sq. mi.									
7.—DROWES & C. 10 sq. mi.									
8.—FOYLE. 396 sq. mi.									
9.—INSULAR. 12 sq. mi.									

\* Per Royal Meteorological Society.

§ Gauge over-exposed on Moor.

# BRITISH RAINFALL, 1937

PART IV.



## RAINFALL OVER THE BRITISH ISLES, 1901 to 1930.

By JOHN GLASSPOOLE, M.Sc., Ph.D.

### 1. *Introduction.*

The International Climatological Commission, which met at Wiesbaden in May, 1934, recommended the use of the period 1901 to 1930 as the standard in computing climatological normals. This recommendation was adopted the following year at the Conference of Directors of the various Meteorological Services at Warsaw.

Averages of temperature and sunshine at British stations for the period 1901 to 1930 have been published in M.O.364 and M.O.377 respectively, and averages for the more recent period 1906 to 1935 in M.O.407 and M.O.408<sup>1</sup>. The revision of averages of rainfall presents greater difficulties than is the case with either temperature or sunshine. The variations in rainfall from place to place are large, and a closer network of stations is therefore required than with the other meteorological elements. Moreover the variations in rainfall from place to place, and the fluctuations with time, have been studied in considerable detail. Such investigations<sup>2</sup> have involved the use of averages. Any change in the period used as the standard would therefore break the continuity in the comparisons of current statistics with these investigations dealing with the falls of earlier years.

The existing standard period for rainfall of the British Isles is 1881 to 1915, this period being adopted about 1921. As a preliminary stage in any change from one period to another, as the standard for reference, it is very desirable to compare the averages for the two periods. Averages have therefore been computed for the period 1901 to 1930 for a relatively small selection of stations, so that a preliminary indication of the differences from the values for 1881 to 1915 can be ascertained. These differences are considered for values of the year, seasons and months.

### 2. *Records used in the comparison of averages for the periods 1881 to 1915 and 1901 to 1930.*

Monthly averages for the period 1901 to 1930 were computed for 69 well distributed stations with homogeneous records covering the period 1881–1930. Details of these averages are given in Table I. Corresponding averages for the period 1881 to 1915 are published in the Book of Normals, Section V, M.O.236 (V)<sup>1</sup>. Each monthly average for the period 1901 to 1930 was expressed as a percentage of the corresponding value for 1881 to 1915. The complete series

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<sup>1</sup> H.M.S.O. publication.

<sup>2</sup> Details of maps of rainfall and computations dealing with rainfall over the British Isles as a percentage of the average are set out in Appendix I.

of percentage values is given in Table II. The positions of the individual stations are shown by dots on Fig. 1.

3. *Maps showing the distribution of the percentage values for the year, seasons and months.*

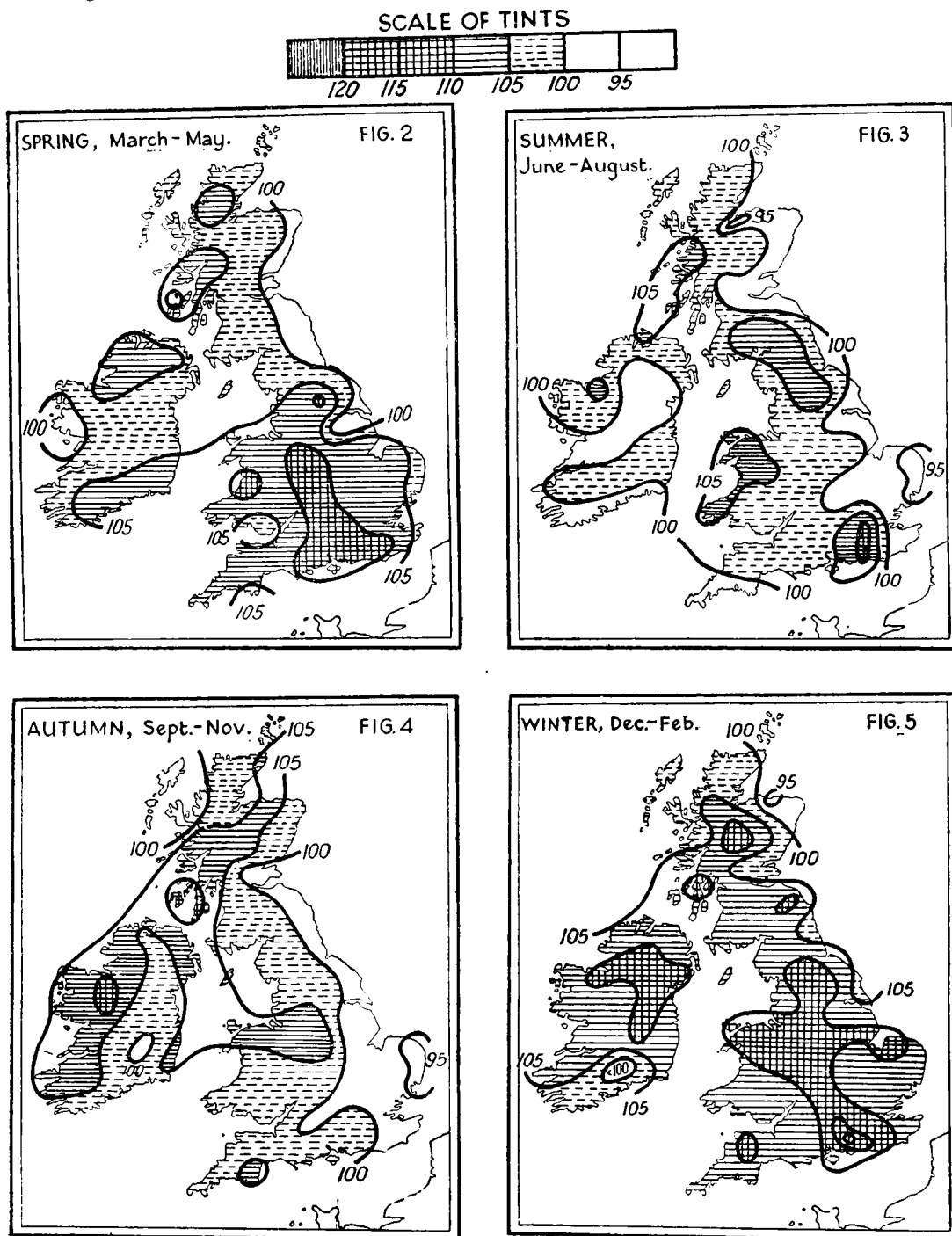
Isopercental lines were drawn on maps prepared from the values given in Table II.



Fig. 1.

The map of annual values is reproduced as Fig. 1. Practically everywhere the rainfall of the period 1901 to 1930 exceeded that for 1881 to 1915, the smallest percentage values being 99 at both Rendlesham Hall, in Suffolk, and Gordon Castle, in Morayshire.

The percentages exceeded 105 over most of the south-western half of England and Wales, the south-west of Scotland, and the northern



half of Ireland. The largest values were 111 at Islay (Eallabus), 110 at Brighton and Grayshott, 109 at Markree Castle, in Co. Sligo, and Wetherby (Ribston Hall), near York, and 108 at Llandudno, Wrexham and Derby. The smallest percentage values occur in

general along the east coast of Great Britain, and the largest values in three areas:—(1) the north-west of Ireland and south-west of Scotland, (2) between Llandudno and Aberystwyth in the west and York and Worcester in the east, and, (3) over parts of Sussex and Hampshire.

So far as the areas in (1) are concerned, the years 1917, 1918 and 1923 were unusually wet there, while 1885, 1888 and 1895 were dry. In the case of (2) the area was dry in 1887 and 1888, but wet in 1918, 1920, 1923, 1927, 1928 and 1930. Over the area set out in (3) relatively dry years occurred in the 'nineties, and wet years in 1916 and from 1923 to 1930. Section 4 deals further with this question of the variations in the annual rainfall, 1881 to 1930.

Maps of percentage values for the *summer and winter half-years* separately show a distribution similar to that of the annual map, Fig. 1, but there is a larger area with over 105 per cent. in the case of the map for the winter. For both periods the least values occur mainly along the east coast of Great Britain. The smallest values for the winter are 97, 98 and 98 at Gordon Castle, Aberdeen and Rendlesham Hall, respectively, and for the summer 99 at both St. Austell and Rendlesham Hall. For the winter 110 per cent. occurs in four areas, *viz.*, in Islay, from Co. Sligo to Co. Tyrone, from Chester to Derby and in the west of Sussex, and for the summer in Islay and from London to Brighton.

Maps showing the distribution during the four seasons are reproduced as Figs. 2 to 5. The following main features of these maps may be enumerated:—

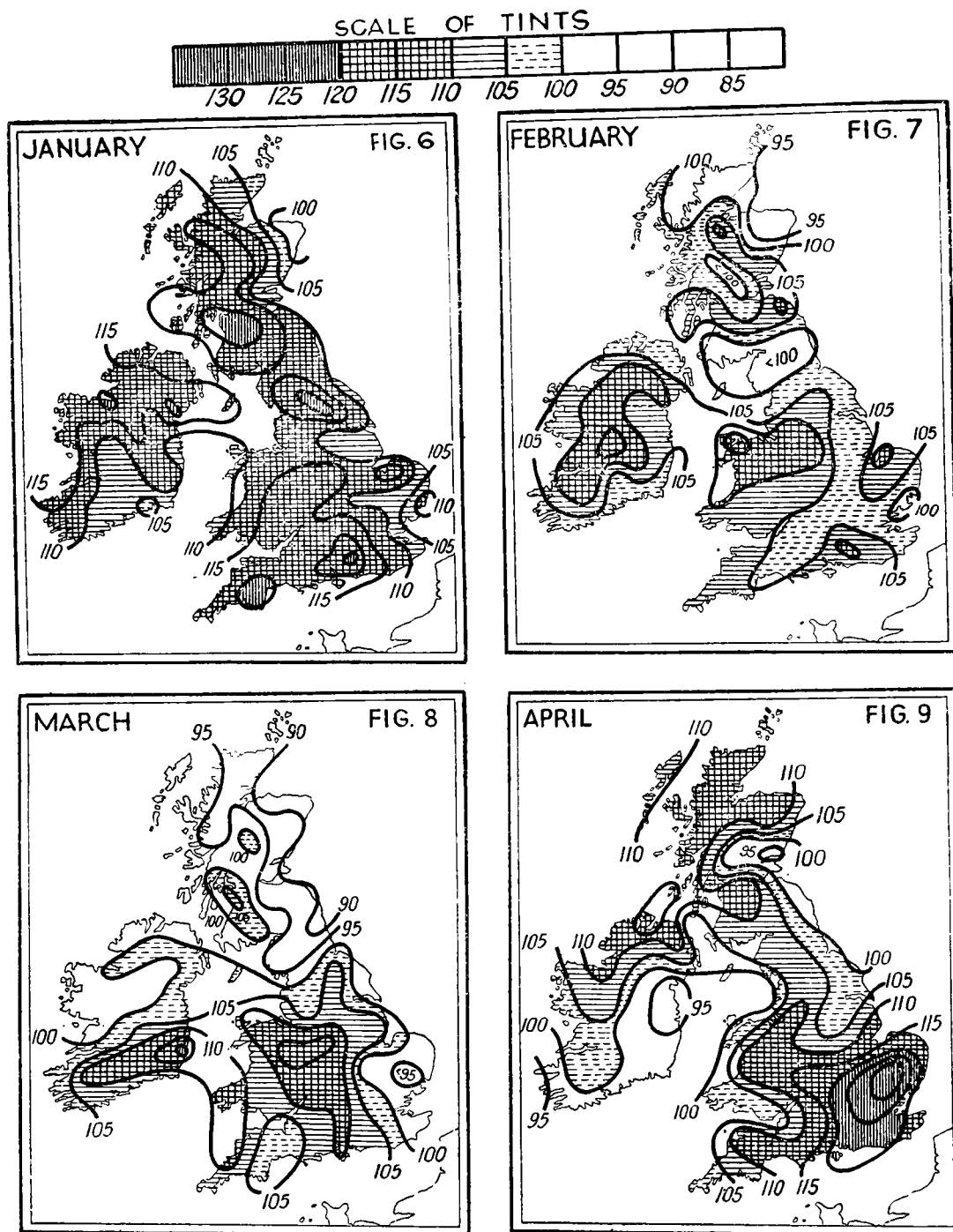
*Spring, March to May, Fig. 2:—*A large area with over 110 per cent. extending from Derby to Dorsetshire and Kent.

*Summer, June to August, Fig. 3:—*Areas along the east of Great Britain, over much of Ireland, and in the south-west of England with less than 100 per cent., and small areas in the neighbourhood of the Moray Firth and near Yarmouth with less than 95 per cent.

*Autumn, September to November, Fig. 4:—*Areas extending from the Firth of Tay to Kent, in the north-west of Scotland, and in Co. Leix with less than 100 per cent., and less than 95 per cent. near Yarmouth.

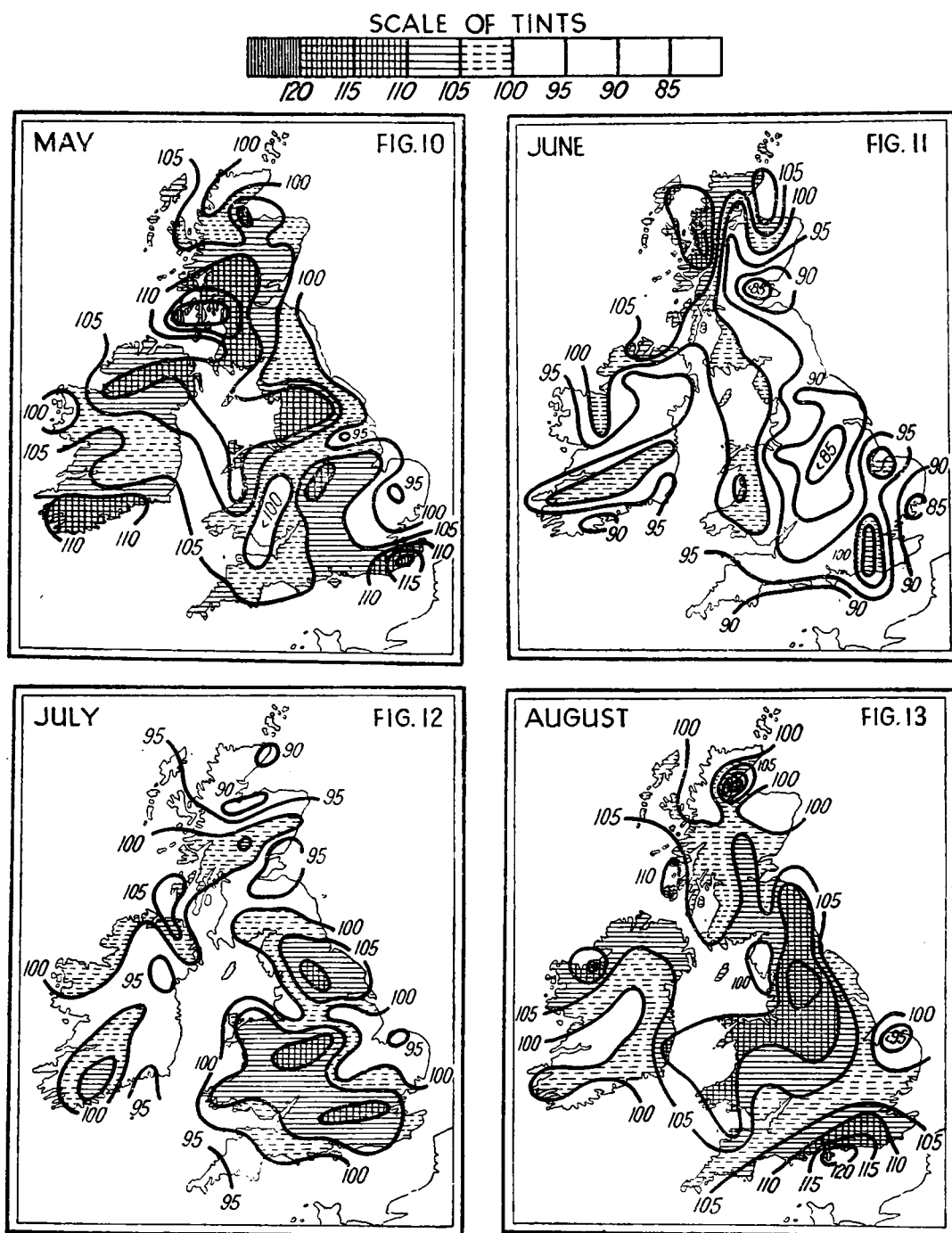
*Winter, December to February, Fig. 5:—*Areas in central England and Wales, stretching from Kendal to the Isle of Wight, and from Anglesey to Norfolk, and smaller areas in Scotland and Ireland, with over 110 per cent., and on the Sussex and Hampshire borders as much as 120 per cent. Over a small area in Morayshire there is only 95 per cent.

The *Monthly Percentage Maps*, Figs. 6–17, show many of the features of the annual and seasonal maps, but they give wider extremes.



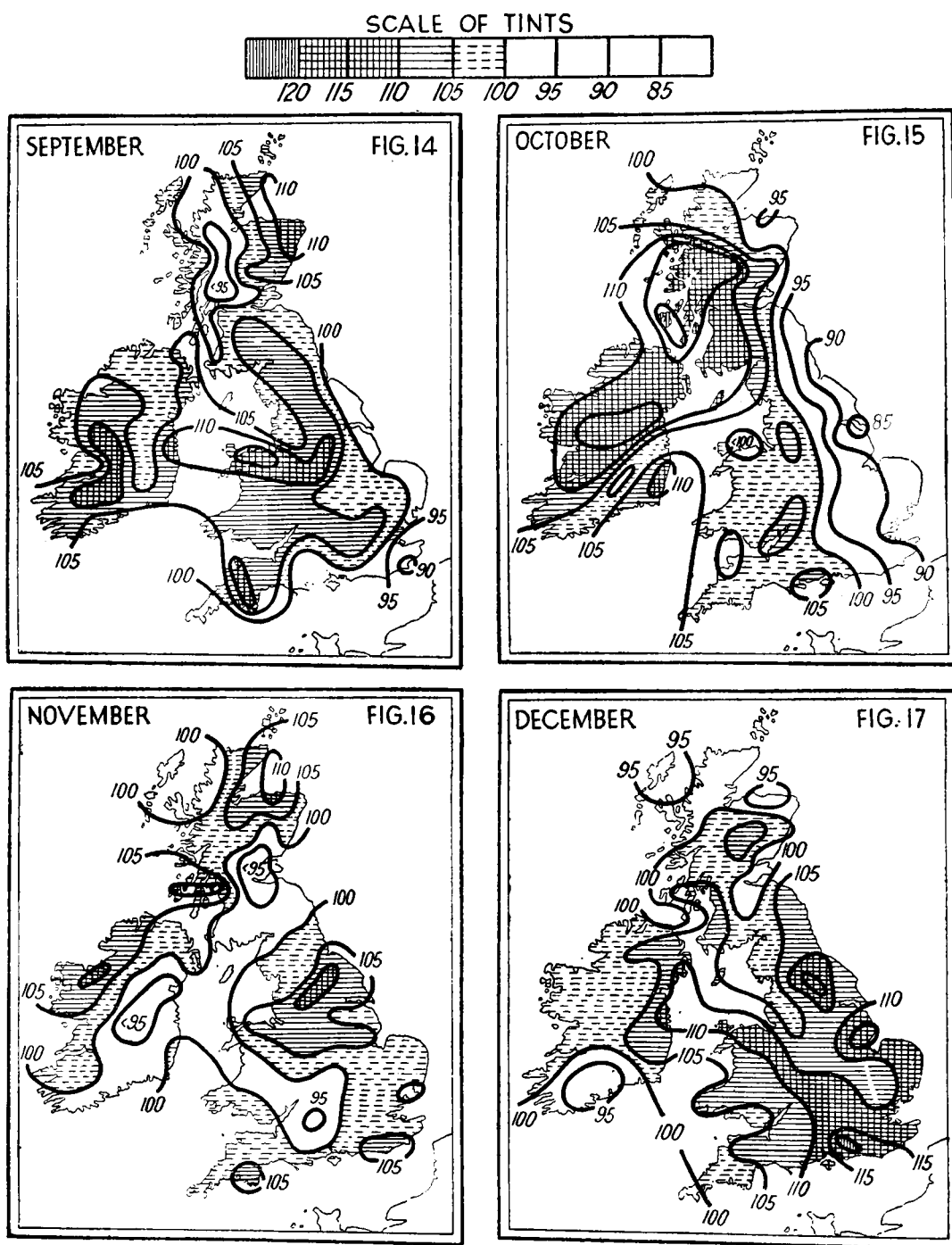
Values of 120 or more occur in January, March, April, May, August, October and December. In general this amount occurs only at a few stations for each month. In April, however, there is a large area with 120 per cent. or more to the east of a line from Wellingborough

to the Isle of Wight with 135 per cent. at Bury St. Edmunds. At this station the averages for April in the two periods 1881 to 1915



and 1901 to 1930 are 1.53 in. and 2.06 in. respectively. Recent Aprils of 1918-20, 1924-26 and 1930 were all wet, while those of

1890, 1891, 1893 and 1896 were unusually dry. On the other hand there are areas with less than 90 per cent. for March, June, July,



September and October, and less than 85 per cent. in June and October.

Table I.—Average Rainfall, 1901 to 1930.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
<b>ENGLAND AND WALES, etc.</b>		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
London . . . . .	St. Pancras (Camden Square) . . . . .	2.10	1.73	1.88	1.94	1.79	2.20	2.72	2.43	1.97	2.41	2.43	2.67	26.27
Kent . . . . .	Tenterden . . . . .	2.39	2.06	2.10	1.95	1.91	1.72	2.19	2.47	1.92	3.28	3.19	3.59	28.77
Sussex . . . . .	Brighton W.W. (Lewes Road) . . . . .	2.91	2.31	2.29	2.17	1.96	2.00	2.45	2.84	2.22	3.97	3.68	4.01	32.81
Hampshire . . . . .	Ventnor (Royal National Hospital) . . . . .	2.99	2.23	2.26	2.07	1.80	1.65	2.00	2.47	2.40	4.11	3.26	3.73	30.97
" . . . . .	Grayshott . . . . .	3.44	2.88	2.76	2.42	2.33	2.19	2.66	3.12	2.47	4.17	3.53	4.60	36.57
Oxford . . . . .	Oxford (Radcliffe) . . . . .	2.16	1.71	1.88	1.93	1.98	2.03	2.52	2.34	1.86	2.74	2.28	2.78	26.21
Northants. . . . .	Wellingborough (Swanspool) . . . . .	2.02	1.61	1.79	1.79	2.03	1.86	2.19	2.50	1.81	2.36	2.14	2.59	24.69
Suffolk . . . . .	Rendlesham Hall . . . . .	1.78	1.38	1.60	1.70	1.47	1.56	2.25	2.06	1.88	2.24	2.23	2.63	22.78
" . . . . .	Bury St. Edmunds (Westley Hall) . . . . .	1.96	1.61	1.78	2.06	1.70	1.93	2.53	2.60	2.06	2.47	2.33	2.57	25.60
Norfolk . . . . .	Little Dunham (Dunham Cottage) . . . . .	2.27	1.81	1.92	1.87	2.00	2.26	2.62	2.55	2.29	2.77	2.61	2.74	27.71
Wiltshire . . . . .	Bishops Cannings . . . . .	2.68	2.15	2.40	2.29	2.13	2.22	2.74	3.19	2.19	3.36	2.68	3.48	31.51
Sth. Devonshire . . . . .	Ashburton (Druid House) . . . . .	6.17	4.96	4.55	3.30	2.75	2.31	2.99	4.00	3.44	6.22	6.01	7.75	54.45
Nth. " . . . . .	Barnstaple (N. Devon Athenæum) . . . . .	3.82	2.92	2.89	2.37	2.06	2.13	2.63	3.62	3.02	4.49	3.95	4.66	38.56
Cornwall . . . . .	St. Austell (Trevarna) . . . . .	5.07	4.09	3.77	2.95	2.64	2.38	3.06	3.72	3.09	5.46	5.12	6.21	47.56
Gloucester . . . . .	Quedgeley House . . . . .	2.61	2.04	2.31	1.94	2.03	2.16	2.66	2.98	2.09	3.24	2.43	3.07	29.56
Shropshire . . . . .	Church Stretton (Woolstaston) . . . . .	2.92	2.47	2.74	2.41	2.56	2.30	2.82	3.46	2.17	3.67	3.01	3.71	34.24
Worcestershire . . . . .	Bromsgrove (Tardebigge Res.) . . . . .	2.39	1.85	2.13	2.02	2.39	2.14	2.77	3.22	2.08	3.02	2.49	3.02	29.52
Lincolnshire . . . . .	Boston (Black Sluice, Skirbeck) . . . . .	1.78	1.48	1.70	1.54	1.86	1.82	2.15	2.49	1.76	2.55	2.12	2.51	23.76
Nottinghamshire . . . . .	Workop (Hodsock) . . . . .	1.86	1.61	1.77	1.53	1.82	1.65	2.23	2.78	1.68	2.36	2.04	2.55	23.88
Derbyshire . . . . .	Mickleover . . . . .	2.35	1.87	2.07	1.82	2.21	2.01	2.72	3.09	1.98	2.75	2.37	2.85	28.09
Sth. Lancashire . . . . .	Bury (Gin Hall) . . . . .	4.59	3.58	3.44	2.71	3.06	2.82	3.57	5.16	3.42	4.76	4.61	4.96	46.68
Central " . . . . .	Southport (Hesketh Park) . . . . .	2.91	2.17	2.40	1.84	2.25	2.10	2.74	3.69	2.83	3.60	3.29	3.46	33.28
Yorkshire, W.R. . . . .	Wetherby (Ribston Hall) . . . . .	2.52	1.87	2.11	1.85	2.38	1.89	2.84	3.22	1.92	2.87	2.60	2.89	28.96
" E.R. . . . .	Hull (Pearson Park) . . . . .	1.99	1.63	1.80	1.58	1.95	1.79	2.50	2.98	1.67	2.55	2.34	2.57	25.35
" N.R. . . . .	Leyburn (Bolton Hall) . . . . .	3.56	2.75	2.92	2.19	2.47	1.80	2.82	3.33	2.18	3.61	3.34	3.94	34.91
" " . . . . .	Middlesbrough (Albert Park) . . . . .	1.76	1.31	1.61	1.40	1.85	1.77	2.74	2.80	1.64	2.57	2.28	2.16	23.89
Northumberland . . . . .	Hallington Fawcett (N'castle W.W.) . . . . .	2.39	1.84	1.91	1.64	2.05	1.91	2.81	3.48	2.14	3.00	2.59	2.88	28.64
Glamorgan . . . . .	Cardiff (Ely Pumping Station) . . . . .	4.43	3.22	3.36	2.60	2.48	2.39	3.20	4.41	3.28	5.02	4.19	5.25	43.83
Pembroke . . . . .	Haverfordwest (Grammar School) . . . . .	4.92	3.71	3.86	2.67	2.58	2.63	3.45	4.72	3.63	5.69	5.19	6.07	49.12
Cardigan . . . . .	Aberystwyth (Gogerddan) . . . . .	4.55	3.62	3.77	2.90	3.09	3.30	4.05	5.37	3.87	5.34	4.59	5.28	49.73
Denbigh . . . . .	Wrexham W.W. (Pack Saddle Res.) . . . . .	2.96	2.46	2.66	2.23	2.50	2.14	2.63	3.34	2.45	3.92	3.43	3.85	34.57
Carnarvon . . . . .	Llandudno . . . . .	2.65	2.26	2.29	1.73	1.98	1.96	2.41	3.14	2.46	3.25	3.06	3.31	30.50
Isle of Man . . . . .	Douglas (Borough Cemetery) . . . . .	3.92	3.20	3.04	2.42	2.79	2.45	3.01	4.16	3.39	5.03	4.69	5.15	43.25
<b>SCOTLAND</b>														
Berwickshire . . . . .	Marchmont House . . . . .	2.56	2.30	2.48	1.96	2.46	2.13	2.89	3.68	2.43	3.60	2.94	3.06	32.49
Midlothian . . . . .	West Calder (Addiewell) . . . . .	3.68	2.75	2.76	2.29	2.54	2.20	3.00	3.80	2.88	3.74	3.22	3.71	36.57



Table I.—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
<b>SCOTLAND—(con.)</b>														
Ayrshire . . . . . 8	Girvan (Pinmore) . . . . .	in. 5.54	in. 4.13	in. 3.71	in. 3.16	in. 3.08	in. 2.98	in. 3.50	in. 4.55	in. 3.76	in. 5.67	in. 5.29	in. 6.32	in. 51.69
Argyllshire . . . . . 9	Mull of Kintyre . . . . .	3.74	3.48	2.87	2.79	3.04	2.61	2.97	4.44	3.60	4.31	4.19	4.51	42.55
" . . . . . 14	Islay (Eallabus) . . . . .	5.53	4.39	3.65	3.37	3.31	2.80	3.60	4.84	4.28	5.95	6.11	6.21	54.04
Perthshire . . . . . 7	Crieff (Strathearn Hydro.) . . . . .	4.41	3.43	3.14	2.19	2.77	2.18	2.97	4.60	2.74	4.28	3.91	4.62	41.24
" . . . . . 14	Blair Atholl . . . . .	3.88	3.00	2.66	2.05	2.26	1.83	2.64	3.56	2.46	3.63	3.49	4.06	35.52
Angus . . . . . 3	Monikie (Crombie Reservoir) . . . . .	2.98	2.68	2.54	1.98	2.77	1.87	3.07	4.14	2.75	3.73	3.21	3.47	35.19
Aberdeenshire . . . . . 1	Balmoral Castle Gardens . . . . .	3.08	2.56	2.72	2.37	2.47	1.74	2.57	3.03	2.48	3.58	3.56	3.71	33.87
" . . . . . 2	Aberdeen . . . . .	2.37	2.19	2.31	2.16	2.58	1.72	2.98	2.86	2.61	3.26	3.25	3.54	31.83
Morayshire . . . . . 2	Fochabers (Gordon Castle) . . . . .	2.02	1.80	1.99	1.99	2.26	2.28	2.87	3.05	2.72	2.99	3.26	2.41	29.64
Inverness-shire . . . . . 6	Loch Ness (Foyers) . . . . .	4.92	3.60	3.08	2.43	2.51	2.08	2.56	3.12	2.79	3.48	4.15	4.47	39.19
" . . . . . 7	Loch Quoich (Glenquoich) . . . . .	15.32	10.39	8.90	7.34	5.88	5.76	6.31	8.37	8.76	11.77	12.33	14.47	115.60
Ross & Cromarty . . . . . 4	Alness (Ardross Castle) . . . . .	4.11	3.37	2.99	2.73	2.95	2.17	2.85	3.58	2.95	3.92	4.26	4.11	39.99
" . . . . . 8	Loch Torridon (Bendamph) . . . . .	11.12	7.75	7.53	5.89	4.65	4.75	4.98	6.43	6.67	8.16	8.89	9.91	86.73
" . . . . . 10	Stornoway (Coastguard Station) . . . . .	5.79	4.46	4.01	3.31	2.75	2.57	2.87	4.00	3.98	5.16	5.61	5.78	50.29
Caithness . . . . . 2	Wick (Coastguard Station) . . . . .	2.52	2.16	2.05	2.28	2.01	2.02	2.32	2.75	2.74	2.91	3.45	3.05	30.26
<b>IRELAND</b>														
Co. Cork . . . . . 7	Cork (University College) . . . . .	4.41	3.94	3.26	2.61	2.64	2.27	2.88	3.30	2.76	3.92	3.93	4.80	40.72
Co. Kerry . . . . . 3	Valentia Observatory . . . . .	6.28	5.40	4.64	3.47	3.48	3.19	3.68	4.95	4.50	5.97	5.61	6.76	57.93
Co. Waterford . . . . . 3	Waterford (Brook Lodge) . . . . .	3.79	3.36	3.03	2.51	2.55	2.58	3.05	3.88	2.94	4.27	3.65	4.55	40.16
Co. Tipperary . . . . . 1	Nenagh (Castle Lough) . . . . .	4.33	3.58	3.22	2.55	2.54	2.33	3.17	3.81	2.88	3.88	3.85	4.67	40.81
" . . . . . 3	Cahir (Abbey) . . . . .	4.23	3.42	3.19	2.68	2.61	2.45	3.14	3.65	2.85	3.85	3.58	4.38	40.03
Co. Wexford . . . . . 4	Gorey (Courtown House) . . . . .	3.48	2.84	2.80	2.16	2.33	2.31	2.85	3.74	2.62	3.91	3.56	4.13	36.73
Co. Leix . . . . . 2	Abbey Leix (Blandsfort) . . . . .	3.74	2.99	2.87	2.50	2.53	2.67	3.08	4.00	2.75	3.53	3.16	3.93	37.75
Co. Offaly . . . . . 1	Birr Castle . . . . .	3.09	2.72	2.51	2.11	2.35	2.15	3.07	3.67	2.55	3.24	2.88	3.39	33.73
Co. Dublin . . . . . 2	Dublin City (FitzWilliam Square) . . . . .	2.41	2.01	2.00	1.78	2.11	1.94	2.54	3.18	2.16	2.75	2.63	2.74	28.25
Co. Westmeath . . . . . 1	Mullingar (Belvedere House) . . . . .	3.72	3.06	2.71	2.29	2.51	2.46	3.25	4.09	2.73	3.64	3.24	3.81	37.51
Co. Louth . . . . . 3	Greenore . . . . .	3.01	2.54	2.36	2.00	2.51	2.27	2.70	3.66	2.41	3.26	2.89	3.50	33.11
Co. Galway . . . . . 5	Ahascragh (Clonbrock) . . . . .	4.21	3.51	3.27	2.70	2.98	2.79	3.44	4.27	3.51	4.27	4.10	4.73	43.78
Co. Mayo . . . . . 4	Westport House . . . . .	5.35	4.22	3.68	2.84	2.82	2.52	3.17	4.43	3.59	4.96	5.28	5.86	48.72
Co. Sligo . . . . . 2	Collooney (Markree Castle) . . . . .	4.71	3.77	3.46	2.95	3.04	2.96	3.55	4.96	3.58	4.48	4.75	4.92	47.13
Co. Armagh . . . . . 5	Armagh (Observatory) . . . . .	3.01	2.48	2.29	2.11	2.49	2.28	2.72	3.75	2.50	3.09	2.77	3.25	32.74
Co. Down . . . . . 2	Seaforde . . . . .	3.68	3.28	2.96	2.61	2.94	2.57	3.15	4.02	2.98	3.98	3.93	4.74	40.84
Co. Antrim . . . . . 5	Ballymena (Harryville) . . . . .	4.17	3.31	3.12	2.95	3.16	2.85	3.60	4.57	3.23	4.21	4.17	4.69	44.03
Co. Londonderry . . . . . 5	Londonderry (Creggan Res.) . . . . .	4.06	3.33	3.18	3.03	2.81	2.99	3.63	5.02	3.34	3.92	4.30	4.50	44.11
Co. Tyrone . . . . . 3	Omagh (Edenfel) . . . . .	4.18	3.43	3.27	2.85	2.84	2.64	3.31	4.44	3.12	4.12	3.98	4.45	42.63

Table II.—Average Rainfall, 1901 to 1930, expressed as a percentage of the average, 1881 to 1915.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
<b>ENGLAND AND WALES, etc.</b>		%	%	%	%	%	%	%	%	%	%	%	%	%
London . . . . . 2	St. Pancras (Camden Square) . . . . .	113	104	103	126	102	109	114	110	108	92	103	112	107
Kent . . . . . 1	Tenterden . . . . .	111	105	98	120	122	90	105	108	90	94	106	115	105
Sussex . . . . . 3	Brighton W.W. (Lewes Road) . . . . .	116	108	107	124	113	109	107	118	97	98	107	119	110
Hampshire . . . . . 1	Ventnor (Royal National Hospital) . . . . .	116	106	110	123	106	90	99	124	97	105	102	113	107
" . . . . . 7	Grayshott . . . . .	127	112	108	123	108	98	109	112	102	100	104	121	110
Oxford . . . . . 3	Oxford (Radcliffe) . . . . .	119	104	114	121	106	91	106	103	109	95	99	113	106
Northants. . . . . 4	Wellingborough (Swanspool) . . . . .	109	100	100	120	105	89	96	105	101	94	100	110	102
Suffolk . . . . . 3	Rendlesham Hall . . . . .	98	99	95	120	97	83	97	103	98	86	100	112	99
" . . . . . 5	Bury St. Edmunds (Westley Hall) . . . . .	109	107	94	135	93	92	101	100	104	91	101	107	102
Norfolk . . . . . 4	Little Dunham (Dunham Cottage) . . . . .	116	112	101	116	103	101	95	94	100	89	101	112	102
Wiltshire . . . . . 3	Bishops Cannings . . . . .	115	101	107	113	109	92	110	103	100	101	94	106	104
Sth. Devonshire . . . . . 4	Ashburton (Druid House) . . . . .	121	105	102	108	103	90	98	107	111	103	106	103	105
Nth. " . . . . . 2	Barnstaple (N. Devon Athenæum) . . . . .	117	108	110	112	100	95	98	110	112	99	101	105	105
Cornwall . . . . . 2	St. Austell (Trevarna) . . . . .	118	107	110	105	109	92	91	103	97	104	104	102	104
Gloucester . . . . . 3	Quedgeley House . . . . .	115	105	113	111	104	91	109	105	109	108	99	107	106
Shropshire . . . . . 3	Church Stretton (Woolstaston) . . . . .	115	112	116	112	99	95	115	106	107	101	102	110	107
Worcestershire . . . . . 2	Bromsgrove (Tardebigge Res.) . . . . .	116	108	113	117	111	87	110	108	106	105	101	111	107
Lincolnshire . . . . . 3	Boston (Black Sluice, Skirbeck) . . . . .	110	101	109	114	106	100	98	104	100	93	106	117	104
Nottinghamshire . . . . . 5	Workshop (Hodsock) . . . . .	105	105	105	104	91	83	98	113	111	90	104	108	101
Derbyshire . . . . . 6	Mickleover . . . . .	116	113	116	105	112	84	111	114	111	102	106	108	108
Sth. Lancashire . . . . . 3	Bury (Gin Hall) . . . . .	112	114	101	111	110	92	99	115	101	108	110	104	107
Central " W.R. . . . . 11	Southport (Hesketh Park) . . . . .	114	103	108	99	118	97	96	106	103	102	105	107	104
Yorkshire " E.R. . . . . 3	Wetherby (Ribston Hall) . . . . .	122	108	108	105	115	90	114	118	107	96	111	117	109
" " N.R. . . . . 1	Hull (Pearson Park) . . . . .	111	98	99	101	101	87	107	102	97	85	107	107	100
" " " . . . . . 6	Leyburn (Bolton Hall) . . . . .	123	103	99	106	113	89	111	118	108	96	102	114	107
Northumberland . . . . . 4	Middlesbrough (Albert Park) . . . . .	110	101	103	102	96	94	107	102	99	86	108	111	101
Glamorgan . . . . . 5	Hallington Fawcett (N'wc'stle W.W.) . . . . .	111	95	87	100	103	95	103	114	105	93	102	107	101
Pembroke . . . . . 4	Cardiff (Ely Pumping Station) . . . . .	117	107	105	103	99	96	103	102	106	105	101	103	104
Cardigan . . . . . 2	Haverfordwest (Grammar School) . . . . .	107	106	113	102	103	97	108	113	103	105	103	107	106
Denbigh . . . . . 1	Aberystwyth (Gogerddan) . . . . .	111	112	109	111	117	106	105	110	106	101	97	105	107
Carnarvon . . . . . 2	Wrexham W.W. (Pack Saddle Res.) . . . . .	113	112	114	112	103	90	105	111	116	102	106	115	108
Isle of Man . . . . . 5	Llandudno . . . . .	110	116	113	102	111	103	108	111	115	97	106	114	108
	Douglas (Borough Cemetery) . . . . .	117	100	103	99	111	101	98	109	104	111	99	104	105
<b>SCOTLAND</b>														
Berwickshire . . . . . 4	Marchmont House . . . . .	114	111	94	97	100	92	95	111	101	94	98	109	101
Midlothian . . . . . 5	West Calder (Addiewell) . . . . .	123	104	91	115	109	95	93	107	105	109	91	96	102

Table II.—(con.).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
<b>SCOTLAND—(con.)</b>														
Ayrshire . . . . .8	Girvan (Pinmore) . . . . .	% 117	% 97	% 98	% 106	% 103	% 103	% 96	% 102	% 98	% 113	% 99	% 106	% 104
Argyllshire . . . . .9	Mull of Kintyre . . . . .	% 113	% 106	% 93	% 103	% 107	% 100	% 93	% 105	% 107	% 123	% 101	% 99	% 104
" . . . . .14	Islay (Eallabus) . . . . .	% 118	% 105	% 96	% 117	% 125	% 107	% 106	% 111	% 102	% 125	% 114	% 105	% 111
Perthshire . . . . .7	Crieff (Strathearn Hydro) . . . . .	% 109	% 97	% 98	% 100	% 111	% 83	% 100	% 109	% 96	% 109	% 90	% 103	% 101
" . . . . .14	Blair Atholl . . . . .	% 118	% 109	% 103	% 99	% 113	% 94	% 105	% 107	% 105	% 119	% 101	% 108	% 107
Angus . . . . .3	Monkie (Crombie Reservoir) . . . . .	% 105	% 107	% 91	% 94	% 107	% 89	% 93	% 103	% 106	% 107	% 99	% 96	% 100
Aberdeenshire . . . . .1	Balmoral Castle Gardens . . . . .	% 112	% 99	% 95	% 110	% 106	% 102	% 101	% 100	% 103	% 99	% 97	% 110	% 102
" . . . . .2	Aberdeen . . . . .	% 99	% 95	% 90	% 105	% 104	% 95	% 101	% 99	% 111	% 100	% 101	% 102	% 100
Morayshire . . . . .2	Fochabers (Gordon Castle) . . . . .	% 100	% 94	% 86	% 114	% 107	% 112	% 90	% 96	% 109	% 95	% 113	% 90	% 99
Inverness-shire . . . . .6	Loch Ness (Foyers) . . . . .	% 117	% 111	% 96	% 112	% 103	% 94	% 85	% 102	% 95	% 104	% 106	% 101	% 103
" . . . . .7	Loch Quoich (Glenquoich) . . . . .	% 112	% 101	% 92	% 113	% 107	% 117	% 98	% 102	% 102	% 118	% 102	% 99	% 104
Ross & Cromarty . . . . .4	Alness (Ardross Castle) . . . . .	% 108	% 102	% 92	% 113	% 113	% 96	% 94	% 121	% 101	% 102	% 106	% 99	% 104
" . . . . .8	Loch Torridon (Bendamph) . . . . .	% 118	% 98	% 100	% 113	% 102	% 116	% 92	% 97	% 96	% 102	% 96	% 97	% 102
" . . . . .10	Stornoway (Coastguard Station) . . . . .	% 112	% 100	% 98	% 109	% 107	% 111	% 95	% 101	% 101	% 100	% 96	% 92	% 101
Caithness . . . . .2	Wick (Coastguard Station) . . . . .	% 102	% 95	% 90	% 115	% 97	% 112	% 88	% 100	% 110	% 98	% 110	% 99	% 101
<b>IRELAND</b>														
Co. Cork . . . . .7	Cork (University College) . . . . .	% 109	% 106	% 109	% 100	% 117	% 90	% 106	% 98	% 103	% 101	% 98	% 94	% 102
Co. Kerry . . . . .3	Valentia Observatory . . . . .	% 115	% 104	% 102	% 95	% 110	% 100	% 97	% 103	% 109	% 107	% 103	% 102	% 104
Co. Waterford . . . . .3	Waterford (Brook Lodge) . . . . .	% 103	% 103	% 110	% 99	% 110	% 96	% 94	% 101	% 106	% 109	% 97	% 97	% 102
Co. Tipperary . . . . .1	Nenagh (Castle Lough) . . . . .	% 109	% 115	% 104	% 102	% 103	% 95	% 101	% 96	% 102	% 114	% 96	% 101	% 103
" . . . . .3	Cahir (Abbey) . . . . .	% 106	% 99	% 111	% 100	% 104	% 104	% 105	% 101	% 112	% 100	% 97	% 94	% 102
Co. Wexford . . . . .4	Gorey (Courtown House) . . . . .	% 112	% 101	% 121	% 99	% 105	% 95	% 97	% 112	% 106	% 111	% 102	% 108	% 106
Co. Leix . . . . .2	Abbey Leix (Blandsfort) . . . . .	% 114	% 112	% 110	% 96	% 104	% 103	% 98	% 101	% 101	% 100	% 95	% 107	% 103
Co. Offaly . . . . .1	Birr Castle . . . . .	% 109	% 119	% 105	% 98	% 105	% 93	% 104	% 96	% 111	% 111	% 93	% 103	% 103
Co. Dublin . . . . .2	Dublin City (FitzWilliam Square) . . . . .	% 105	% 106	% 103	% 94	% 103	% 100	% 99	% 105	% 113	% 103	% 99	% 111	% 103
Co. Westmeath . . . . .1	Mullingar (Belvedere House) . . . . .	% 116	% 110	% 100	% 97	% 102	% 95	% 102	% 98	% 102	% 117	% 95	% 103	% 103
Co. Louth . . . . .3	Greenore . . . . .	% 120	% 110	% 103	% 92	% 109	% 92	% 95	% 104	% 104	% 115	% 94	% 107	% 104
Co. Galway . . . . .5	Ahascragh (Clonbrock) . . . . .	% 109	% 113	% 98	% 106	% 107	% 100	% 99	% 102	% 113	% 117	% 102	% 101	% 105
Co. Mayo . . . . .4	Westport House . . . . .	% 115	% 107	% 94	% 105	% 99	% 93	% 102	% 109	% 101	% 110	% 108	% 102	% 105
Co. Sligo . . . . .2	Collooney (Markree Castle) . . . . .	% 121	% 110	% 102	% 112	% 111	% 101	% 103	% 115	% 106	% 110	% 112	% 103	% 109
Co. Armagh . . . . .5	Armagh (Observatory) . . . . .	% 119	% 112	% 97	% 100	% 105	% 91	% 94	% 104	% 102	% 114	% 98	% 104	% 103
Co. Down . . . . .2	Seaforde . . . . .	% 117	% 108	% 101	% 100	% 112	% 93	% 99	% 107	% 108	% 112	% 104	% 115	% 107
Co. Antrim . . . . .5	Ballymena (Harryville) . . . . .	% 112	% 102	% 99	% 112	% 110	% 98	% 105	% 107	% 104	% 114	% 103	% 106	% 106
Co. Londonderry . . . . .5	Londonderry (Creggan Res.) . . . . .	% 113	% 104	% 99	% 118	% 107	% 106	% 99	% 108	% 101	% 106	% 105	% 103	% 106
Co. Tyrone . . . . .3	Omagh (Edenfel) . . . . .	% 118	% 115	% 104	% 108	% 110	% 94	% 97	% 104	% 102	% 112	% 105	% 105	% 106

4. *General rainfall over the British Isles 1901 to 1930 compared with that for 1881 to 1915.*

The general percentage value over the British Isles for each month can be determined by taking the mean of the values in Table I. It was noted, however, that certain areas in Ireland were over-represented, and the values for Seaforde, Greenore and Birr Castle were therefore omitted. For other areas there were no stations, e.g., the south-east of Somerset, south of Radnor, Cumberland, north of Argyllshire, Dumfries-shire, south of Leitrim and near Foynes. For places in these areas monthly values were read off the maps. With these modifications the means of the values given in Table II were evaluated and these are given in Table IV.

Table III.—*General percentages from Table II.*

(Rainfall 1901 to 1930 as percentage of 1881 to 1915.)

	England and Wales.	Scotland.	Ireland.	British Isles.
	%	%	%	%
January .....	114	112	112	113
February .....	106	102	108	105
March .....	106	95	103	102
April .....	112	108	103	108
May .....	106	108	107	106
June .....	94	101	97	97
July .....	104	96	100	101
August .....	108	104	104	106
September .....	104	103	105	104
October .....	98	108	110	104
November .....	103	101	101	102
December .....	109	101	103	105
Year .....	105	103	104	104

The rainfall of 1901 to 1930 exceeded that of 1881 to 1915 over the British Isles generally in each month except June, while January was 13 per cent. wetter. Less rain occurred in 1901 to 1930, over England and Wales in both June and October, over Scotland in both March and July, and over Ireland in June only.

The general monthly amounts in inches for the period 1881 to 1915 over England and Wales, Scotland, Ireland, and the British Isles as a whole are given in the Rainfall Atlas.<sup>3</sup> Utilising the percentage values in Table III it is possible to compute values in inches for the period 1901 to 1930. These values are given in Table IV.

<sup>3</sup> General values of monthly and annual maps for the period 1881 to 1915 are given in the *Rainfall Atlas of the British Isles*, published by the Royal Meteorological Society, 1926.

Table IV.—*General rainfall (inches) 1901 to 1930.*

	England and Wales.	Scotland.	Ireland.	British Isles.
	in.	in.	in.	in.
January .....	3·41	5·51	4·57	4·27
February .....	2·71	4·28	3·81	3·43
March .....	2·82	3·84	3·47	3·28
April .....	2·37	3·24	2·82	2·72
May .....	2·43	3·24	2·93	2·77
June .....	2·30	2·86	2·75	2·54
July .....	2·99	3·64	3·36	3·27
August .....	3·62	4·71	4·35	4·10
September .....	2·64	4·11	3·29	3·21
October .....	3·90	5·28	4·47	4·39
November .....	3·59	5·35	4·31	4·24
December .....	4·28	5·92	5·09	4·97
Year .....	37·06	51·98	45·22	43·19

It should be noted that these estimates are dependent upon the values for 1881 to 1915 and are not based on maps in inches for the period 1901 to 1930, which have not yet been prepared.

Over the British Isles generally the total during the three consecutive months April to June is only 8·0 in. compared with as much as 13·6 in. during October to December. The six months February to July give 18·0 in. or only 42 per cent. of the total for the whole year. The wettest month over each area is December, and the driest June. This differs from the distribution for the period 1881 to 1915 when, over England and Wales, October was the wettest month and April the driest month over both England and Wales and the British Isles as a whole, April ranking with May as the driest months over Ireland. The change from a minimum in June to a maximum six months later, in December, was common to the two periods only for Scotland. During the period 1881 to 1915 this type of distribution (referred to by Salter as the "orographical type"<sup>4</sup>) occurred in coastal regions, where the seasonal distribution was dependent mainly on the frequency and strength of the south-west winds. It is reasonable to conclude, therefore, that in the period 1901 to 1930 this type of distribution prevailed over a greater part of the British Isles than was the case in 1881 to 1915, and confirmation of this is given at the end of the next section.

5. *General rainfall over the British Isles 1901 to 1930 compared with that for 1870 to 1899.*

Before the period 1881 to 1915 was adopted in *British Rainfall*, the period 1875 to 1909 was used as the standard, and prior to that 1870 to 1899. On both occasions when the standard was changed

<sup>4</sup> See *Rainfall of the British Isles*, by Carle Salter, University of London Press Ltd., 1921, pp. 26-27, and p. 207.

a comparison was given of the old and new monthly averages for the British Isles as a whole. We have thus (a) a comparison of the rainfall 1870 to 1899 with that for 1875 to 1909<sup>5</sup>, (b) of 1881 to 1915 with that for 1875 to 1909<sup>6</sup>, and (c) in Table IV, Section 5 of this paper, a comparison of 1901 to 1930 with that for 1881 to 1915. Utilising these values a comparison can be obtained of the rainfall 1901 to 1930 with that for 1870 to 1899. The comparison is given in Table V.

Table V.—*Rainfall, 1901 to 1930, as per cent. of 1870 to 1899.*

	%		%
January .....	111	July .....	94
February .....	108	August .....	107
March .....	114	September .....	86
April .....	110	October .....	99
May .....	110	November .....	99
June .....	93	December .....	115
Year .....		103%	

The rainfall of the recent period was therefore greater than that of the earlier period, and this was due mainly to wetter winters and springs. June and July and the autumn months were drier, especially September.

In a recent article in the *Meteorological Magazine*<sup>7</sup> the wetter winters and drier summers during the recent period were accounted for by the increased frequency of winds from W.S.W. during the winter, and by the prevailing wind direction being slightly more northerly in the summer.

The relationship between the rainfall during the period 1901 to 1930 and that for the existing standard period 1881 to 1915, has been defined in detail. In conjunction with existing rainfall maps for the period 1881–1915 this comparison will provide a means of preparing maps of the rainfall in inches for the period 1901 to 1930, should that be required for general climatological purposes.

#### APPENDIX I.

##### DETAILS OF RAINFALL MAPS AND COMPUTATIONS USING THE PERIOD 1881 TO 1915 AS THE STANDARD.

(1). Monthly and annual averages for 578 stations were published in the Book of Normals, Section V, M.O.236(V).

(2). Maps of the average annual and monthly rainfall are published in the *Rainfall Atlas* of the Royal Meteorological Society, 1926.

<sup>5</sup> See *British Rainfall*, 1910, p. 142.

<sup>6</sup> See *British Rainfall*, 1920, p. 258.

<sup>7</sup> Vol. 70, 1935, pp. 153–7, *The Change of Climate in the British Isles*.

(3). Serial general monthly values, expressed as a percentage of the average 1881 to 1915, are available for England back to 1727, and for Scotland, Ireland and the British Isles as a whole back to 1870. The original papers giving these details are set out below :—

- (a) "Annual Rainfall, 1868 to 1921, England and Wales, Scotland, Ireland and the British Isles." *Meteorological Magazine*, 1923, p. 103.
- (b) "Monthly Rainfall, 1881 to 1924, England and Wales, Scotland, Ireland and the British Isles." *British Rainfall*, 1924, pp. 258–261.
- (c) "Annual Rainfall, 1727 to 1927, England." *Meteorological Magazine*, 1928, p. 4.
- (d) "Monthly Rainfall, 1727 to 1931, England and Wales." *British Rainfall*, 1931, pp. 300–305.

Corresponding values for subsequent years have been published in Tables XXI and XXIII of the annual volumes of *British Rainfall*, and values as under (b) for earlier years back to 1870 are available in manuscript.

(4). Maps of the British Isles showing the percentage rainfall of each year 1868 to 1923 are to be found in the "Rainfall Atlas of the British Isles," published by the Royal Meteorological Society, and those for subsequent years in the annual volumes of *British Rainfall*.

(5). Similar maps of monthly rainfall are available, although unpublished, for the period 1870 to 1920, those for subsequent years being published in the annual volumes of *British Rainfall*.

(6). Numerous other investigations have been carried out using the period 1881 to 1915 as the standard. Amongst these may be mentioned :—

- (a) "The Drought of 1921." *Q.J.R. Meteor. Soc.*, Vol. 48, 1922, pp. 139–166. "The Wet Summer of 1924 and other Wet Seasons in the British Isles." *Q.J.R. Meteor. Soc.*, Vol. 52, 1926, pp. 363–385. These papers give maps of unusually dry and unusually wet periods respectively since 1864, the rainfall being expressed as percentage of the average 1881 to 1915.
- (b) "The Variability of Average Monthly Rainfall throughout the Year." *Q.J.R. Meteor. Soc.*, Vol. 53, 1927, pp. 127–142.
- (c) "The Distribution over the British Isles of the Average Number of Days with Rain during each Month of the Year." *Q.J.R. Meteor. Soc.*, Vol. 54, 1928, pp. 89–101; and "The Distribution over the British Isles in time and space of the Annual Number of Days with Rain." *British Rainfall*, 1926, pp. 260–279.

- (d) "Average and Extreme Seasonal Rainfall over the British Isles." *Trans. Inst. Water Engineers*, 1928, pp. 51-69 ; and, "The Distribution of the Average Seasonal Rainfall over Europe." *Q.J.R. Meteor. Soc.*, Vol. 55, 1929, pp. 55-69.
- (e) "The Rainfall over the British Isles of each of the Eleven Decades during the period 1820 to 1929." *Q.J.R. Meteor. Soc.*, Vol. 59, 1933, pp. 253-258.
- (b) "The Reliability of Rainfall over the British Isles." *Trans. Inst. Water Engineers*, 1930.
- (g) "The Fluctuations of Annual Rainfall." *British Rainfall*, 1921, pp. 288-300. "Fluctuations of Monthly Rainfall." *British Rainfall*, 1922, pp. 234-259. "A Comparison of the Fluctuations of Annual Rainfall over the British Isles." *British Rainfall*, 1922, pp. 260-266. "The Relation between Annual Rainfall over Europe and that at Oxford and Glenquoich." *British Rainfall*, 1925, pp. 254-269.



**NOTES ON SOME UNUSUAL FEATURES OF THE RAINFALL OF 1937, viz., THE WET PERIOD JANUARY TO MAY, 1937, AND THE DRY PERIOD AUGUST TO DECEMBER, 1937.**

BY JOHN GLASSPOOLE, M.Sc., Ph.D.

The incidence of rainfall during 1937 presents certain unusual features, which are not dealt with adequately under the usual sections in Part II on "Monthly" or "Seasonal Rainfall." It is shown in Section 8 that over the British Isles generally the rainfall of each month January to May exceeded the average. Although June was drier than usual, July gave an excess, so that the rainfall of June and July together approximated closely to the average. Subsequently dry months predominated from August to December. September was the only month with an excess, and that only amounted to 3 per cent. The rainfall of January to May stands out therefore in marked contrast with that of August to December. In discussing the rainfall of these two periods separately we shall consider the rainfall during groups of consecutive months, and also, the daily rainfall during the three months preceding the flooding of the Great Ouse, which reached peak conditions about March 17th.

*Rainfall, January to May, 1937.*

The rainfall of this period is considered under four groups:—  
(a) January to February, (b) January to March, (c) January to April, and (d) January to May. The four sketch maps, Figs. 1, 2, 3 and 4, define the rainfall, expressed as percentages of the average for the corresponding periods.

The rainfall January to February, 1937 (Fig. 1), was in excess of the average everywhere, except in the north-west of Scotland, and exceeded twice the average over most of the area to the south of a line drawn roughly from the Severn Estuary to the Wash, in the neighbourhood of the Cheshire Plain, to the south of the Wicklow Mountains, and in part of Aberdeenshire. As much as three times the average was recorded in part of Hampshire. Over the Thames Valley above Teddington the general rainfall for January and February was 9.2 inches, exceeding that of any similar period since before 1881, the next wettest period being that of 1915 with 8.5 inches. This large amount was due mainly to frequent rains, no one of which was especially remarkable. During the period January 12th to February

28th some rain fell on every day but three. The wettest periods were the five days January 20th to 24th with 1·8 inch, the six days February 2nd to 7th with 1·8 inch, and the seven days February 21st to 27th with 1·9 inch.

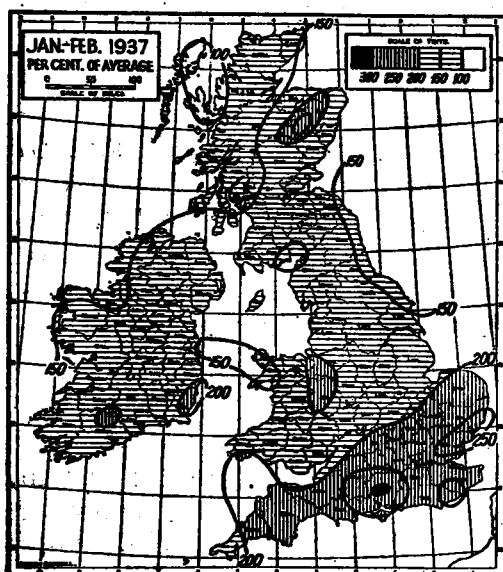


Fig. 1.

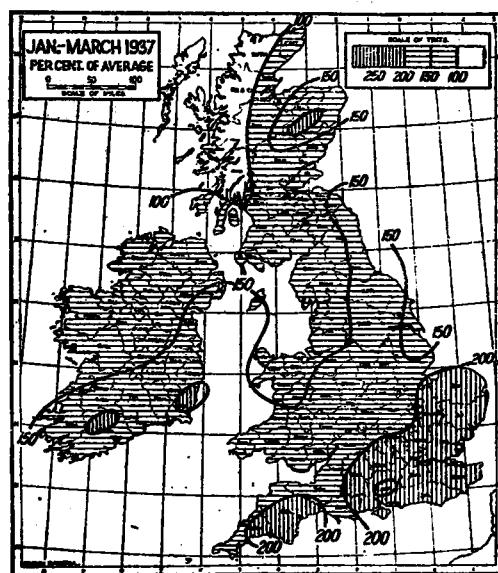


Fig. 2.

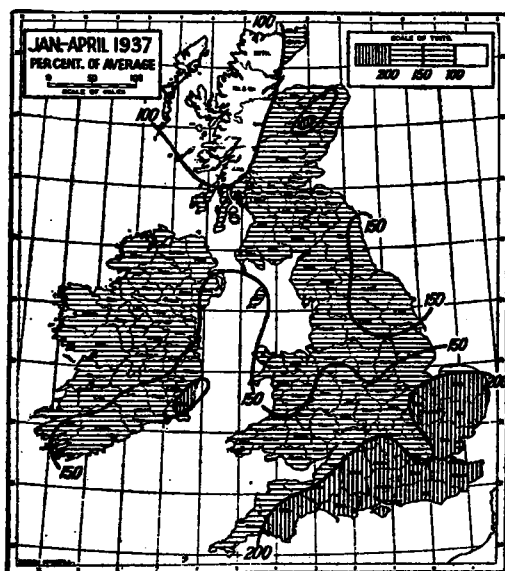


Fig. 3.

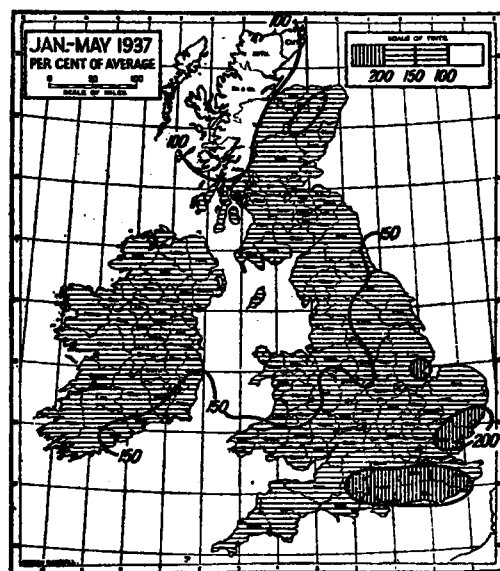


Fig. 4.

The map of the rainfall January to March, 1937, Fig. 2, shows a similar distribution, but the area with less than the average in the north-west of Scotland is larger and the areas with twice the average are smaller. At Camden Square (London), the total was equal to the average up to the beginning of July, at Tenterden (Kent), up to the last week of August, and at Ovington (Hampshire), until well into September.

In Fig. 3, January to April, 1937, there is a large area in the south-east of England with more than twice the average for that period. The total of these four months at Qvington (Hampshire), was as much as the average from January 1st until the first week of October.

Fig. 4, January to May, 1937, shows three areas with more than twice the average. One of these, that near Boston, was due more especially to the persistent rains of May 11th and 12th, and 20th to 26th. At Balmoral Castle the total of this period is less than twice the average. It will be seen from Section 8 that the large totals in this area included the heavy rains of January, when the total of 11·80 inches exceeded four times the average. This large total was due to a series of cyclonic rains, especially during the fourteen days, the 12th to 25th. March was also wet with 5·31 inches. At Ovington (Hampshire), the total for these five months exceeded the average from January 1st up to the end of October.

The rainfall amounts at certain selected stations are set out in Table I for the four periods referred to above. The first seven of these stations represent the area in the south-east of England where the rainfall January to May, 1937, reached twice the average for that period. The values for Balmoral and Gorey (Courtown House), are added since they are the most striking percentage values in Scotland and Ireland respectively. Table I also gives for each station the averages for the four periods and also the average annual amount. The rainfall experienced during 1937 is expressed in two ways (1) as a percentage of the average for the corresponding period, and 2) as a percentage of the average annual amount.

Table I.—*Rainfall, January to May, 1937.*

Station and County.	Annual Average (A) (in.)	Jan.-Feb., 1937			
		Rain (in.)	Average (in.)	%	% of (A).
(1) Tenterden (Ashenden)..... Kent .....	27·50	10·35	4·12	251	38
(2) Ovington Rectory ..... Hants. ....	33·18	16·23	5·30	306	49
(3) Sherborne St. John ..... Hants. ....	28·96	11·42	4·52	253	39
(4) Chelmsford (County Gardens) Essex.....	22·30	7·60	3·01	252	34
(5) Rendlesham Hall ..... Suffolk .....	23·14	8·46	3·22	263	37
(6) Bishops Cannings..... Wilts. ....	30·32	11·29	4·44	254	37
(7) Boston (Black Sluice) ..... Lincs. ....	22·81	6·16	3·08	200	27
(8) Balmoral Castle ..... Aberdeen .....	33·04	14·81	5·36	276	45
(9) Gorey (Courtown House) .. Wexford .....	34·67	12·82	5·93	216	37

Table I.—(*con.*).

	Jan.—March, 1937.				Jan.—April, 1937.				Jan.—May, 1937.			
	Rain (in.)	Average (in.)	%	% of (A).	Rain (in.)	Average (in.)	%	% of (A).	Rain (in.)	Average (in.)	%	% of (A).
(1)	15·05	6·26	240	55	17·55	7·88	223	64	20·41	9·45	216	74
(2)	20·42	7·89	259	62	22·89	9·78	234	69	25·95	11·95	217	78
(3)	15·52	6·76	230	54	17·81	8·53	209	61	20·91	10·47	200	72
(4)	10·08	4·74	213	45	12·85	6·02	213	58	15·39	7·46	206	69
(5)	10·96	4·90	224	47	13·68	6·32	216	59	17·55	7·83	224	76
(6)	14·92	6·69	223	49	19·08	8·71	219	63	21·33	10·66	200	70
(7)	9·19	4·64	198	40	11·69	5·99	195	51	16·98	7·75	219	74
(8)	20·12	8·22	245	61	21·08	10·37	203	64	22·81	12·69	180	69
(9)	18·94	8·24	230	55	22·58	10·43	216	65	23·66	12·65	187	68

The figures showing the rainfall of the various groups of months, expressed as a percentage of the average annual amounts, are very interesting. The total January to February, 1937, at Ovington almost reached half the average for the whole year. At five of the representative stations, *viz.*, Tenterden, Ovington, Sherborne St. John, Balmoral Castle, and Gorey (Courtown House), the totals January to March, 1937, exceeded half the average for the whole year. At Ovington and Rendlesham Hall the totals January to May, 1937, were 78 and 76 per cent. respectively of the average annual amounts.

A comparison is given in Table II of the rainfall recorded during certain groups of months in the period January to May, 1937, with that for similar wet periods at four stations with long records. At Camden Square (London) the rainfall of January, 1937, was exceeded in ten earlier Januarys; at Tenterden on one occasion; at Oxford on 13 occasions; but at Ovington January, 1937, was the wettest January on record. At these four stations the two, three, four and five consecutive months commencing with January, 1937, gave totals greater than in any similar months of earlier years (apart from January to April, 1937, at Camden Square, where slightly more was recorded in 1919). In most cases the totals for 1937 were appreciably in excess of the previous wettest periods on record for similar groups of months.

It should be noted that in each case wetter groups of consecutive months had occurred. Thus at Ovington November to December, 1911, gave 16·80 inches; December, 1914, to February, 1915, gave

23·40 inches ; November, 1914 to February, 1915, gave 27·49 inches ; and November, 1911, to March, 1912, gave 30·74 inches. All these amounts exceeded those which occurred in 1937.

Table II.—*Comparison of the Rainfall, January to May, 1937, with Earlier Wet Periods at Selected Stations with long records.*

CAMDEN SQUARE (LONDON), 1858–1937, 80 YEARS.						
			Jan.–Feb.	Jan.–Mar.	Jan.–April.	Jan.–May.
Total 1937	..	..	7·80	10·76	13·40	16·29 in.
Previous largest	{ Amount	..	7·62	9·49	13·42	13·75 in.
	{ Year	..	1866	1919	1919	1919
TENTERDEN (KENT), 1864–1937, 74 YEARS.						
Total 1937	..	..	10·35	15·05	17·55	20·41 in.
Previous largest	{ Amount	..	9·20	11·56	14·07	16·16 in.
	{ Year	..	1925	1877	1919	1925
OVINGTON RECTORY (HANTS.), 1877–1937, 61 YEARS.						
Total 1937	..	..	16·23	20·42	22·89	25·95 in.
Previous largest	{ Amount	..	12·74	14·69	17·41	19·94 in.
	{ Year	..	1915	1919	1922	1915
OXFORD (RADCLIFFE OBSERVATORY), 1815–1937, 123 YEARS.						
Total 1937	..	..	8·07	11·12	13·75	16·37 in.
Previous largest	{ Amount	..	6·53	10·42	11·79	14·35 in.
	{ Year	..	1915	1916	1919	1818

*Rainfall preceding the Flooding in the Great Ouse Catchment Area which culminated on March 17th, 1937.*

The Great Ouse drains an area extending roughly from Buckingham to the Wash at King's Lynn, reaching as far east as Bury St. Edmunds in Suffolk. Much of the Great Ouse catchment area is included in one of the normally driest parts of the British Isles. About half the area has an average of less than 25 inches and a large part has only 22 to 24 inches. In the south and west the average is rather greater but probably nowhere exceeds 30 inches, although that amount is probably reached in the neighbourhood of Dunstable Downs.

Over this area the rainfall of October to December, 1936, had not been unusual, in fact the total was slightly less than the normal. The heaviest rain occurred well before the beginning of 1937, *viz.*, from November 11th to 17th. The general rainfall of these seven days over the area amounted to about 1·65 inch, of which the two days, 11th and 12th, gave ·71 inch and the two days, 16th to 17th, ·79 inch.

The rainfall during the beginning of January, 1937, was also not remarkable, and it was not until the 12th and 13th that the total of two consecutive days gave as much as ·20 inch. Subsequently

rains were frequent, although the individual daily amounts were not remarkable. From January 10th until March 17th some rain fell on almost every day, there being at no time more than three consecutive days without measurable rain over the valley as a whole.

Details of the daily amounts recorded at seven representative stations are included in Table III, together with the mean daily amounts for 13 selected stations over the area. It will be noted that the rainfall was fairly evenly distributed over the area day by day, and that the daily entries are in no case exceptional. Fairly heavy falls of rain were, however, unusually frequent. Thus the general rainfall for the eleven days January 15th to 25th amounted to 2.00 inches, or more than the average for the whole of January. Heavy rain also occurred during the two days, January 30th to 31st, amounting to .55 inch, and the two days February 7th and 8th with .51 inch. The next fifteen days were not so wet although the total amounted to 1.05 inches. Subsequently heavier falls occurred, especially during four periods, *viz.*, the four days February 24th to 27th with 1.10 inch; the three days March 5th to 7th with .65 inch; the five days March 10th to 14th with 1.54 inch; and finally the 16th and 17th with .51 inch.

The total rainfall during these 65 days, or over two months, amounted to 8.77 inches, or a mean fall per day of .135 inch.

The Engineer, Great Ouse Catchment Board, reports that the tide rose to 117 ft. 8 in. at Denver Sluice on March 15th. In these circumstances it is of interest to consider the general meteorological situation. A depression moved east-north-east from the mouth of the English Channel across south-east England to Denmark. In spite of the low barometer (976 m.b.) there were never any very steep pressure gradients associated with the system, or they were confined to very restricted areas and characterised by very pronounced "in curvature." Winds on the East Anglian coast and further north became north-easterly and moderate, with the advance of the depression on the 14th with very slight gradients over the North Sea. During the evening of Saturday, the 14th, the gradient became northerly over most of the British Isles and was at the most 60 m.p.h. for a time over East Anglia with the system centred between Yarmouth and Flushing. The surface winds at this period were, however, mostly only force 4 (13-18 m.p.h.) on the 18h reports except at a considerable distance to the south-west and west of the centre. There was an increase in the easterly gradient in the southern part of the North Sea, but there is no evidence that this exceeded 45 to 50 m.p.h. to the eastward of the East Anglian and Lincolnshire coast. By the early hours of the morning the winds on the east coast had backed to north or north-west, and with a pressure gradient of 50 to 60 m.p.h. at the most from the Shetlands southward to the Belgian coast.

Table III.—Rainfall in Great Ouse Catchment Area January 12th to March 17th.

	Swaffham. (The Villa).	Littleport (Highfield House)	Whittlesea Mere	Bury St. Edmunds (Westley House)	Cambridge (Botanic Gdns.)	St. Neots (The Square)	Woburn (Experimental Farm)	MEAN*		MEAN*	Feb. 14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Mar. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17					
Jan. 12	.28	.13	.10	.22	.06	.05	.12	.13		.13																																					
" 13	.05	.08	.10	.10	.09	.14	.14	.10		.10																																					
" 14	—	—	—	—	.01	.05	.01	.01		.01																																					
" 15	.08	—	.08	—	.01	.04	.12	.06		.06																																					
" 16	.21	.22	.18	.14	.17	.28	.13	.17		.17																																					
" 17	.10	.11	.17	.20	.16	.18	.21	.20		.20																																					
" 18	.08	.42	.29	.76	.52	.29	.24	.37		.37																																					
" 19	—	.02	.05	—	.04	.06	.09	.04		.04																																					
" 20	.25	.13	.25	.23	.11	.12	.11	.20		.20																																					
" 21	.16	.05	.06	.06	.06	.10	.18	.10		.10																																					
" 22	.25	.20	.27	.36	.22	.21	.33	.26		.26																																					
" 23	.12	.23	.21	.14	.22	.24	.17	.20		.20																																					
" 24	.52	.27	.26	.42	.31	.27	.19	.33		.40																																					
" 25	.06	—	.05	.26	.05	.04	.07	.07		.42																																					
" 26	—	—	—	—	—	—	tr.	tr.		.06																																					
" 27	—	—	—	—	—	—	.03	tr.		.21																																					
" 28	.39	—	.06	.15	—	.05	tr.	tr.		.21																																					
" 29	.28	.28	.23	.29	.22	.24	.31	.08		—																																					
" 30	.15	.25	.22	.30	.19	.25	.31	.26		.11																																					
" 31	—	.03	—	—	—	—	tr.	tr.		.06																																					
Feb. 1	.07	.03	.02	.02	.01	.27	.27	.20		.27																																					
" 2	.14	.08	.05	.09	.07	.01	.43	.41		.40																																					
" 3	.21	.21	.07	.18	.27	.27	.43	.20		.50																																					
" 4	—	—	—	—	.02	.01	.02	.01		.18																																					
" 5	.35	.20	.35	—	.36	.44	.66	.42		.18																																					
" 6	.16	.08	.11	.52	.05	.16	.04	.09		.79																																					
" 7	.02	.08	.09	.09	.05	.01	.03	.03		.04																																					
" 8	.16	.32	.33	.24	.32	.36	.30	.30		.40																																					
" 9	.02	.32	.33	.24	.32	.36	.30	.30		.40																																					
" 10	.02	.32	.33	.24	.32	.36	.30	.30		.40																																					
" 11	.02	.32	.33	.24	.32	.36	.30	.30		.40																																					
" 12	.30	.32	.33	.24	.32	.36	.30	.30		.40																																					
" 13	.05	.04	.01	.24	.01	.36	.03	.04		—																																					

\* Mean of 13 selected stations.

By 1 h. on 15th the wind at Spurn Head had increased to north-west 6 (25–31 m.p.h.), and to force 5 (19–24 m.p.h.) at Tynemouth and Gorleston. The steeper gradient across the North Sea was already rapidly decreasing by 7 h., although it was now in being over a much more considerable area. At Spurn Head the wind was then west-north-west 7 (32–38 m.p.h.), and on the Dutch coast west 7 at Helder with force 5 winds (19–24 m.p.h.) from a point or two north of west in eastern and south-east England. Although the wind increased to gale for a time on the Dutch coast, there was no marked change on the English side until the winds moderated generally during the afternoon. The flooding was therefore apparently primarily due to the accumulation of flood water after persistent heavy winter rains, rather than to the “piling” up of the tidal water in the south-west of the North Sea.

*Rainfall, August to December, 1937.*

During the five months, August to December, the rainfall was less than the average in most parts of the British Isles, but the deficiencies were most striking in Scotland. Maps have been prepared showing the rainfall as a percentage of the averages for the following three periods:—Fig. 5, August to October; Fig. 6, August to November; and Fig. 7, August to December.

*August to October, 1937.* (Fig. 5). The rainfall of this period was less than the average over the greater part of the country, but there were small excesses in parts of Kent, Shropshire, in the neighbourhood of the Firths of Forth and Tay, and near the Moray Firth, as well as in central Ireland from Co. Dublin to Offaly. There were five areas with less than 75 per cent., of which the largest extend from the English Lake District to the Wash, from Penzance to Oxford, and include much of the Western Highlands of Scotland. There was only half the average at Hull.

*August to November, 1937* (Fig. 6). The rainfall of this period was less than the average in all parts of the British Isles, and over the greater part of the United Kingdom there was less than 75 per cent. In the neighbourhood of Ben Nevis there was only half the usual amount. At Glenleven (Corrour) the total only amounted to 10·98 inches or 13·48 inches less than the average for that period.

*August to December, 1937* (Fig. 7). The rainfall of this period varied from less than 50 per cent. of the average in the Western Highlands of Scotland to 100 per cent. in the neighbourhood of the Isle of Wight. There was less than 75 per cent. over the greater part of Scotland, the north-west of England, the north of Ireland, in the neighbourhood of Cork, and from Penzance to Oxford. The deficiency at Glenleven (Corrour) during these five months amounted to no less than 20·03 inches.



It is clear from the diagrams that the deficiency of rainfall was most remarkable in the Western Highlands of Scotland, and details are given for four stations in this area. An examination of these records shows that, although the deficiency was most marked during

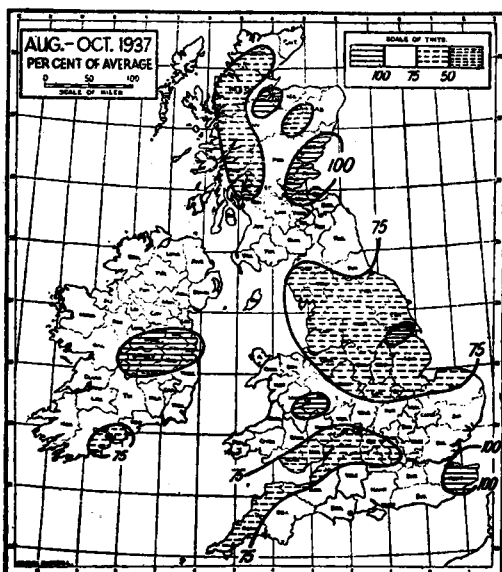


Fig. 5.



Fig. 6.

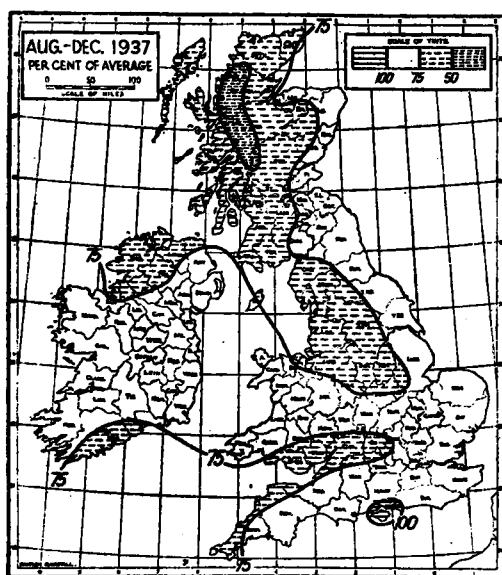


Fig. 7.

the period August to December, the dry weather commenced in this area as early as March, when persistent rains were still the feature of the weather in the south of England. For these four stations the monthly totals are given, in Table IV, for the period March to December, both in inches and as percentages of the monthly averages.

Table IV.—*Rainfall, March to December, 1937.*

	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
(1) Glenquoich . . in. (Inverness-shire) . . . . . %	2.80 29	2.94 45	3.73 68	6.25 127	6.31 98	4.25 52	9.63 111	4.26 43	2.71 23	4.07 28
(2) Glenleven (Corrour) . . in. (Inverness-shire) . . %	2.26 39	2.06 51	3.36 87	4.13 123	6.40 155	3.20 59	4.30 80	2.38 39	1.10 15	2.70 29
(3) Ullapool . . . in. (Ross-shire) . . %	1.89 45	.61 20	1.47 58	1.77 75	2.69 85	1.68 47	3.90 104	2.59 53	1.83 34	1.37 22
(4) Achnashellach in. (Ross-shire) . . %	2.01 28	1.87 33	2.96 66	4.10 103	3.81 74	3.38 51	6.62 91	4.32 54	2.67 29	2.17 22

The dry weather experienced during the period March to September has been dealt with in Section 9, where it is shown that the rainfall was less than 70 per cent. of the average. For the whole period March to December the totals for these stations are set out below, together with the values for the recent dry period November, 1935, to June, 1936, as discussed in *British Rainfall*, 1936, p. 269.

	Nine Months. March–December, 1937.			Eight Months. November, 1935–June, 1936.		
	Rain (in.)	Average (in.)	%	Rain (in.)	Average (in.)	%
(1)	46.95	76.94	61	36.69	77.48	47
(2)	31.89	49.13	65	27.40	48.99	56
(3)	19.80	34.96	57	16.48	32.68	50
(4)	33.91	60.35	56	26.01	57.30	45

The incidence of the dry period March to December, 1937, with only 60 per cent. over a large part of the Western Highlands, is all the more remarkable in that it followed so quickly on the dry period November, 1935, to June, 1936, with only 50 per cent. of the average.

In Table V details are given of the rainfall during the three periods August to October, August to November, and August to December, 1937, recorded at the four stations. The rainfall at each of these four stations for the five months, August to December, would

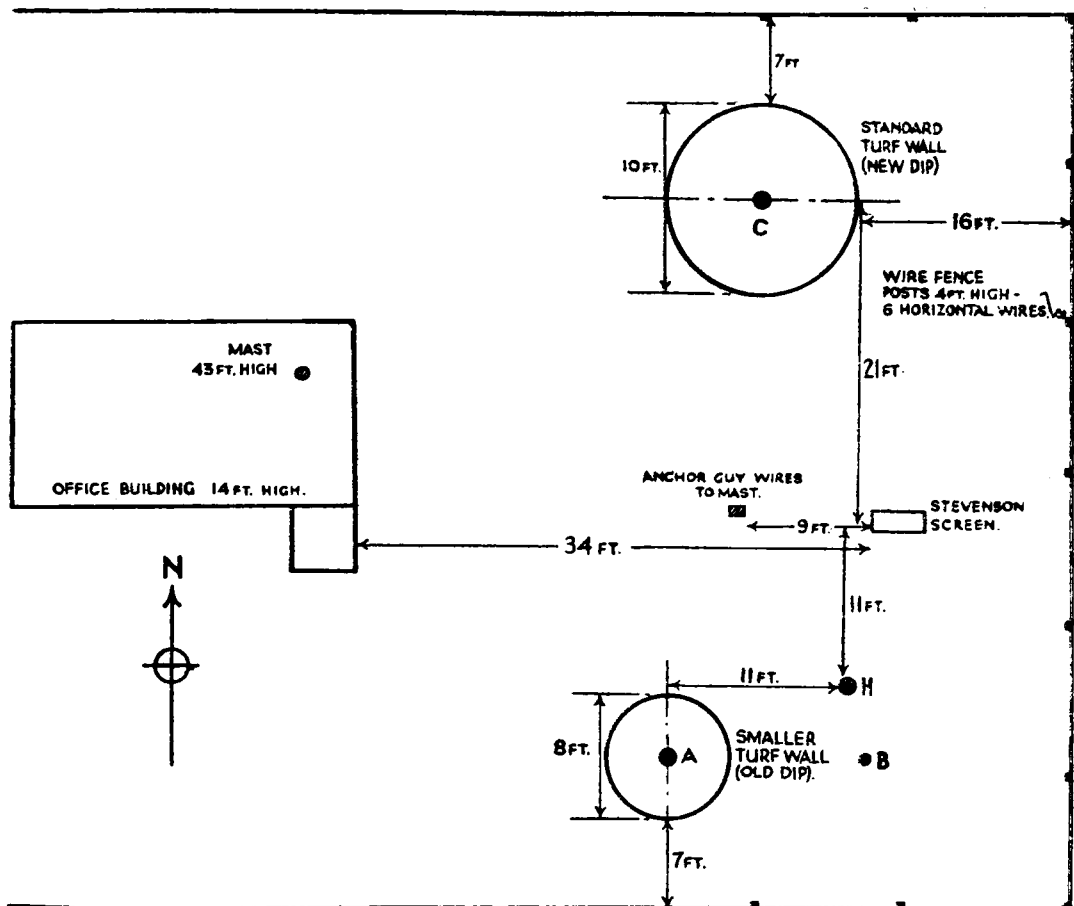
Table V.—*Rainfall, August to December, 1937.*

	Annual Average (A) (in.)	August–October, 1937.				August–November, 1937.				August–December, 1937.			
		Rain (in.)	Aver- age (in.)	%	% of (A)	Rain (in.)	Aver- age (in.)	%	% of (A)	Rain (in.)	Aver- age (in.)	%	% of (A)
(1)	110·75	18·14	26·85	68	16	20·85	38·99	53	19	24·92	53·65	46	23
(2)	70·10	9·88	16·97	58	14	10·98	24·46	45	16	13·68	33·71	41	20
(3)	48·00	8·17	12·15	67	17	10·00	17·48	57	21	11·37	23·78	48	24
(4)	84·40	14·32	21·95	65	17	16·99	31·07	55	20	19·16	41·11	47	23

be defined as an “engineer’s drought” adopting the definition put forward by Symons in 1887 as “a period of three or more consecutive months the aggregate of which is less than half the average for that period.”

## MEASUREMENTS OF WIND VELOCITY AT THE LEVEL OF THE RIM OF THE RAIN-GAUGE AT HOLYHEAD.

The attached diagram gives a rough plan of the positions of the Office buildings and of the instruments at the meteorological station at Holyhead. The question arose as to which of the rain-gauges



Plan of position of rain-gauges at Holyhead.

marked A and C on the plan should be used as the standard gauge. C is surrounded by a standard turf wall and A by a smaller, sloping turf wall which is really a combination of pit and wall. The standard turf wall is shown on p. 276 of *British Rainfall*, 1933. The diameter of the inside of the turf wall at C is 10 ft., whereas that at A is only 8 ft., and this turf wall has a rounded top, the sides sloping gradually to the level of the ground. The floor of the turf wall is some 4 inches

below the level of the outside ground, the rim of the gauge being 1 ft. above this floor. It appeared that both positions of the rain-gauges were affected to some extent by the Office building; the position C for south-west winds and the position A for north-west winds. In strong winds it would be necessary to go a considerable distance from the building to get rid altogether of the wind effect. Such a large enclosure is impracticable at Holyhead. It was decided that of the two positions A is the better because more rain falls with south-west than with north-west winds.

The question then arose as to whether the smaller non-standard turf wall around A afforded sufficient protection from over-exposure. For some  $3\frac{1}{2}$  years a small cup anemometer was placed inside the turf wall round A with the cups at the level of the rim of the rain gauge; observations were taken twice daily at 13h. and 17h. 30m. for a run of 10 minutes. These observations were taken under the supervision of the Assistant-in-Charge, Mr. Forbes Bentley and were analysed by him. The results of 301 observations when a velocity of 25 m.p.h. or more was registered by the pressure tube anemograph at a height of 43 ft. above the ground are summarised in the following table:—

Wind force on Beaufort Scale	Number of Obsns.	Mean of all observations of speed at 1 foot	Mean of all speeds measured by P.T. anemograph	Values in Col 3. expressed as percentages of values in Col. 4
Column 1	2	3	4	5
Force 6.. ..	217	m.p.h. 6.7	m.p.h. 26.9	% 25
„ 7.. ..	61	8.4	34.6	24
„ 8.. ..	21	10.1	41.6	24
„ 9.. ..	2	16.8	48.5	35
Forces 6-9 ..	301	7.4	29.6	25

The results of measurements of wind velocity at rain-gauge level at other stations are summarised in an article entitled "Wind at the Level of a Rain-gauge" by Lieut.-Col. E. Gold in the *Meteorological Magazine* for March, 1928, and in an article in *British Rainfall*, Part IV, 1930, pp. 280-3. The general conclusion was that the exposure of a gauge could be regarded as satisfactory for comparison with other rain-gauges if the wind at the level of the rim did not exceed 10-15 m.p.h.

An examination of the data for Holyhead shows that 15 m.p.h. was exceeded only once—on October 30th, 1932, in a north-west wind when the pressure tube anemometer registered 50 m.p.h.—and that 10 m.p.h. was exceeded only in 9 per cent. of the observations. On eight occasions readings above 12 m.p.h. were registered and it is significant that in each case the wind direction was from some northerly point; five times from north-west, twice from north and once from north-east. It may be concluded, therefore, that the rain-gauge A is adequately sheltered by the smaller turf wall under the conditions which prevail at Holyhead. As already explained, some peculiar features are introduced by the presence of a building near the gauge, and it would not be justifiable to assume from these experiments that a turf wall of smaller dimensions than the standard would usually afford sufficient protection in a very exposed situation.

L. F. LEWIS.

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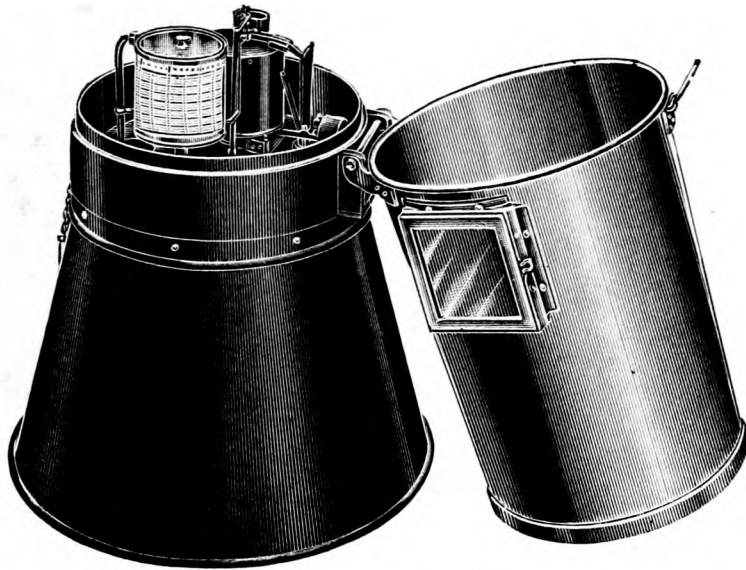
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