

# **Station Tables in Met Office Monthly Weather Reports - Volume 1**

## **Met Office Monthly Weather Report 1909**

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MWR\_1909.pdf pages 7-8 : List of stations - by district/county  
MWR\_1909.pdf pages 9-10 : List of stations and volunteers

## **Met Office Monthly Weather Report 1910**

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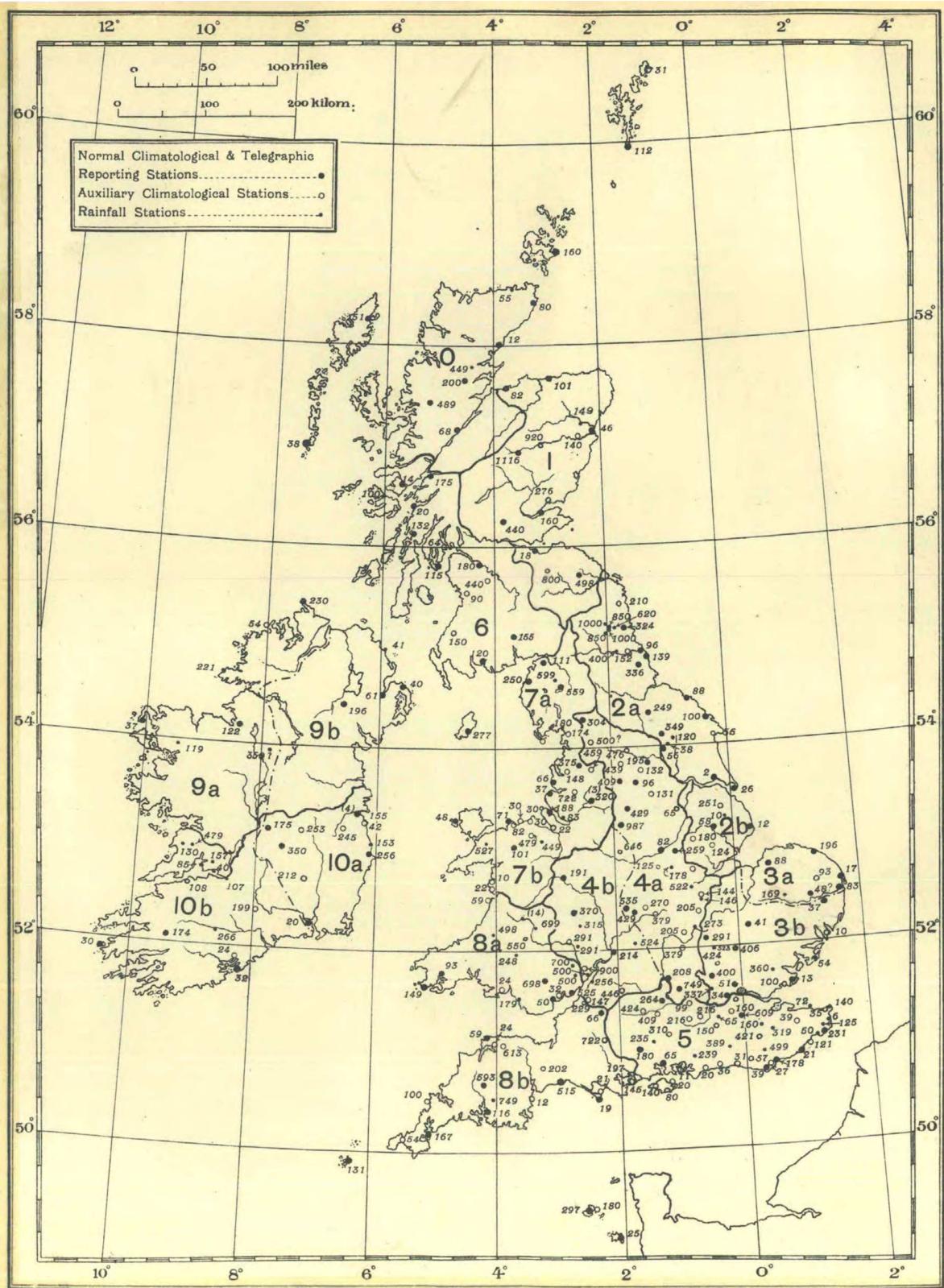
THE  
**MONTHLY WEATHER REPORT**  
OF THE  
**METEOROLOGICAL OFFICE**  
FOR THE YEAR  
**1909**

ISSUED AS A SUPPLEMENT TO THE  
**WEEKLY WEATHER REPORT**  
(VOL. XXVI.—NEW SERIES)  
AND FORMING  
PART II. OF THE BRITISH METEOROLOGICAL YEAR BOOK, 1909.

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Published by the Authority of the Meteorological Committee.

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Scale 1 : 5,000,000. The heights of the stations above Mean Sea Level are inserted against the positions, and will serve to identify the names of the stations as given in the List of Stations on pp. IV. and V.

Ordnance Survey, Southampton, 1909.

## LIST OF STATIONS.

The Stations included in the Monthly Report and in the Weekly Weather Report are shown in the following list, arranged under the Districts. The positions of the stations may be identified on the accompanying map by the numbers which give their heights in feet above the Mean Sea Level.

*Height above Mean Sea Level.*—The figures given in this column refer, in general, to the height of the ground on which the rain gauge stands. At Sunshine Stations which do not possess a rain gauge, the height refers to the sunshine recorder.

*Nature of Information published.*—The character of the information given for each station is indicated by the following symbols :—

- W. Weekly Weather Report. Temperature and rainfall data.
- Bright Sunshine data.
- M. Monthly Weather Report. Full summary in the international form.
- m. Monthly Weather Report. Abridged summary of temperature and rainfall.

*Average Values.*—Reference is made to Publications of the Office containing average values for long periods by means of the following letters :—

- a. Appendix III. of the Weekly Weather Report for 1906. Monthly averages of mean maximum, mean minimum and mean temperature, and of rainfall for the 35 years 1871-1905 and (when available) of bright sunshine for the twenty-five years 1881-1905.
- b. Appendix I. to the volume of "Meteorological Observations at Stations of the Second Order" for 1891. Monthly averages for all elements for the fifteen years 1876-1890.
- c. "Temperature Tables of the British Islands," 1871-1900. Monthly average of mean maximum, mean minimum and mean temperature generally for the thirty years 1871-1900, together with information on the extremes of temperature in the same period.
- d. "Rainfall tables of the British Islands," Part I., 1866-80, Part II., 1880-90. Monthly averages of rainfall for lustra and for the periods named.

*Royal Observatory, Greenwich.*—The averages for Temperature and Rainfall, with which the current values are compared, are for the 65 years 1841-1905. The averages for sunshine are for the period 1897-1906.

*Radcliffe Observatory, Oxford.*—The averages with which the figures given in the second line are compared, are for the 54 years 1855-1908 in the case of pressure, and for the 94 years 1815-1908 in that of rainfall. The values for the current months given in this second line are the means of observations at 8 a.m., Noon, and 8 p.m., reduced to mean daily values by the application of monthly corrections based on observations during the period 1880-1887. The value given under the heading "Cloud" is the mean of observations at 8 a.m., Noon, and 8 p.m. The total rainfall and the maximum rainfall in a day are taken from the daily readings of the self-recording rain gauge, which correspond to the civil day ending at midnight.

*Meteorological Societies.*—Data for stations marked **R** are supplied by the Royal Meteorological Society, and for stations marked **S** by the Scottish Meteorological Society. Stations marked M or S are in connection with one or other of the Societies as well as with the Office.

Stations.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.	Stations.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.
<b>O. SCOTLAND, N.</b>							
<i>a. Islands.</i>							
b. Mainland.							
<i>a.</i>							
Balta Sound - - - S	31	W, ○, m.	—	Aberdeen - - - - -	46	W, ○, M.	<b>a, c.</b>
Castlebay, Barra Island - - - S	38	W, ○, M.	—	Balmoral - - - - -	920	W, m.	—
Deerness - - - S	160	○, M.	<b>a, b, c.</b>	Balruddery - - - - -	276	○, m.	—
Stornoway - - - S	51	W, ○, M.	<b>a, c.</b>	Crathes - - - - -	140	○, m.	—
Sumburgh Head - - -	112	W, M.	<b>a, c.</b>	Crieff - - - - -	440	W, M.	—
<i>b.</i>				Dundee - - - - -	160	M.	<b>c, d.</b>
Dunrobin Castle - - - <del>W, M.</del>	12	M.	<b>c, d.</b>	Edinburgh - - - - -	253	○	<b>a, d.</b>
Fort Augustus - - - <del>W, M.</del>	68	W, ○, M.	<b>a, c.</b>	Gordon Castle - - - - -	101	○, W, M.	<b>c, d.</b>
Fort William - - - <del>W, M.</del>	175	W, M.	<b>a, c.</b>	Leith - - - - -	18	W, M.	<b>a, c.</b>
Glencarron - - - <del>W, M.</del>	489	W, M.	<b>a, c.</b>	Marchmont - - - - -	498	W, ○, M.	<b>a, c.</b>
Stratheffer Spa - - - <del>W, M.</del>	200	W, ○, M.	<b>a.</b>	Nairn - - - - -	82	W, ○, M.	<b>a, c.</b>
Wick - - - - -	80	W, M.	<b>a, c.</b>	Stonehaven - - - - -	786	○	—
				Tillypronie - - - - -	1,116	M.	—
				West Linton - - - - -	800	W, ○, m.	—

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>2. ENGLAND, N.E.</b>							
<i>a. Northern.</i>							
Alnwick Castle	210	W, m.	a.	Bexhill-on-Sea	27	m.	—
Ampleforth	349	m.	—	Bognor	20	○, m.	—
Cockle Park	324	○, M.	a.	Bournemouth	145	○, m.	—
Durham	336	W, ○, M.	a, b, c.	Brighton	31	○, m.	—
Newcastle	152	○, m.	a.	Broadstairs	140	○, m.	—
Routon	249	W, M.	c.	Bucklebury	409	m.	—
Scarborough	100	W, ○, M.	a, c.	Dover	231	○, m.	—
Seaham	139	M.	a, c, d.	Dungeness	21	W, M.	a, c.
Shields	96	W, M.	a, c, d.	Eastbourne	39	○, M.	a.
Whitby	88	○, M.	a, d.	Epsom	160	m.	—
York	56	W, ○, M.	a, c, d.	Folkestone	121	○, m.	—
<i>b. Southern.</i>							
Fulbeck	180	W, ○, M.	a.	Hastings (St. Leonards)	178	W, ○, M.	a, c, d.
Hull	2	○, M.	a.	Hove	57	○	—
Lincoln	58	W, M.	a, d.	Lewes	—	m.	—
Raunceby	124	○, M.	a.	Littlestone	—	○	a.
Skegness	12	W, ○, M.	—	Maidenhead	99	m.	—
Spurn Head	26	W, M.	a, c.	Margate	35	W, ○, m.	a, c, d.
Tealby	251	m.	a.	Marlborough	424	W, ○, m.	a, c.
<b>3. ENGLAND, E.</b>							
<i>a. Northern.</i>							
<i>b. Southern.</i>							
Cromer	196	W, ○, M.	—	Matfield	319	m.	—
Geldeston	37	W, ○, M.	a, c, d.	Fortsouth	11	○, M.	a.
Hillington	88	W, ○, M.	a, b, c.	Ramsgate	—	○	—
Lowestoft	83	○, M.	a, d.	Reading	264	M.	d.
Norwich	93	W, m.	d.	Salisbury	180	M.	a, d.
Yarmouth	17	W, ○, M.	a, c.	Sandown	20	m, ○.	—
Bennington	406	M.	a, c.	Southampton	65	W, ○, M.	a, c, d.
Berkhamsted	400	○, M.	a, c.	Swartaton	310	W, m.	a, c.
Cambridge	41	W, ○, M.	a, d.	Totland Bay	140	○, m.	a.
Clacton-on-Sea	54	W, ○, M.	—	Tunbridge Wells	421	W, ○, m.	a, c.
Felixstowe	10	W, ○, m.	—	Ventnor	80	○, M.	a, c.
Rothamsted	424	W, ○, m.	a, c, d.	Westbourne	30	○	—
Shoeburyness	13	W, m.	a, d.	Wisley, Surrey	150	W, ○, m.	—
Southend	100	○, m.	a.	Wokingham	216	m.	—
Woburn	291	M.	—	Worthing	36	○, m.	a, c.
<b>4. MIDLAND COUNTIES.</b>							
<i>a. Eastern.</i>							
Bawtry	65	W, m.	a, c.	<b>5. ENGLAND, S.E.</b>			
Belvoir Castle	259	○, M.	a, d.	Bexhill-on-Sea	27	m.	—
Birmingham, Edgbaston	535	W, ○, M.	a, d.	Bognor	20	○, m.	—
Bradford	439	○, m.	(d.)	Bournemouth	145	○, m.	—
Coventry	270	○, m.	a.	Brighton	31	○, m.	—
Garforth	195	○, M.	—	Broadstairs	140	○, m.	—
Harrogate	476	W, ○, m.	a.	Bucklebury	409	m.	—
Huddersfield	409	M.	—	Dover	231	○, m.	—
Kingston-on-Soar	125	m.	—	Dungeness	21	W, M.	—
Nottingham	82	W, ○, M.	a.	Eastbourne	39	○, M.	—
Oxford	208	W, ○, M.	a, c.	Epsom	160	W, ○, M.	a, c, d.
Raunds	205	W, m.	—	Folkestone	180	W, ○, M.	a, c, d.
Rugby	379	m.	a, c.	Kilmarnock	90	W, ○, m.	a.
Sheffield	429	○, M.	a, c, d.	Laudale	14	W, M.	a, c.
Wakefield	96	M.	a, c.	Oban	20	○, m.	—
Winslow	379	m.	—	Poltalloch	132	W, M.	c.
Worksop	56	○, m.	a, d.	Rothesay	115	W, M.	c, d.
<i>b. Western.</i>							
Bath	66	W, ○, M.	a.	Thorntonhall	440	○, m.	—
Buxton	987	W, ○, M.	a, b.	<b>6. SCOTLAND, W. (a.)</b>			
Cheadle (Tean)	646	W, m.	a, b, c.	ISLE OF MAN (b.)	120	W, M.	a.
Cheltenham	214	○, M.	a, c.	Bally, Gatehouse	150	W, m.	—
Cirencester	446	W, ○, m.	a, c.	Colmonell	160	W, M.	a.
Hereford	291	W, m.	a.	Dumfries	180	W, ○, M.	a, c, d.
Mayfield (Staffs)	374	m.	—	Glasgow	90	W, ○, m.	a.
Shrewsbury	191	W, M.	a, d.	Kilmarnock	14	W, M.	—
Stokesay	370	M.	—	Laudale	20	○, m.	—
<b>7. a. ENGLAND, N.W.</b>							
Aspatria	250	W, ○, M.	a.	Oban	132	W, M.	c.
Blackpool	66	W, ○, M.	a.	Poltalloch	115	W, M.	c, d.
Burnley	459	○, m.	—	Rothesay	440	○, m.	—
Carnforth	174	○, m.	—	Thorntonhall	27	W, ○, M.	a.
Darwen	722	○, M.	—	<b>London.</b>			
Hawarden Bridge	22	m.	—	Bunhill Row (City)	80	○	a.
Hoylake	730	○, m.	—	Camden Square	110	○, M.	a, d.
Lancaster	311	○, m.	—	Greenwich	155	W, ○, M.	a, c, d.
Liverpool (Bidston Obs.)	188	W, ○, M.	—	Kew	18	W, ○, M.	a, c, d.
Manchester (Frestwich)	320	W, ○, M.	—	Norwood	220	M.	a.
" (Oldham Road)	190	○, M.	—	Plumstead	300	○	—
" (Whitworth Park)	125	○, M.	—	Tottenham	51	W, ○, M.	—
Newton Rigg	559	W, ○, M.	—	Westminster	27	W, ○, M.	a.
Southport	37	○, M.	—	<b>6. SCOTLAND, W. (a.)</b>			
Stonyhurst	375	W, ○, M.	a, c, d.	<b>ISLE OF MAN (b.)</b>			

Station.	Height in feet above M.S.L.	Character of information published.	Averages.	Station.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>(b) NORTH WALES.</b>							
Aberdovey	22	○, m.	—	Black sod Point	37	W, M.	a.
Bettws-y-Coed	101	W, ○, M.	—	Malin Head	230	W, M.	a, c.
Colwyn Bay	82	○, m.	—	Markree Castle	122	W, ○, M.	a, b, c.
Holyhead	48	W, M.	a, c.	b. Armagh	196	W, ○, M.	a, c, d.
Llandudno	M	71	W, ○, M.	Belfast	61	○, M.	a, d.
Rhyl	30	○, m.	a.	Donaghadee	40	W, M.	a, c.
St. Asaph (St. Beuno's Coll.)	479	m.	—				
Towyn	M	10	○, m.				
<b>8. a. SOUTH WALES.</b>							
<b>b. ENGLAND, S.W.</b>							
Aberystwyth	M	59	○, m.	Clongowes Wood College	245	○, m.	—
Cardiff	—	50	W, ○, M.	Dublin, City	47	W, M.	a, b, c.
Haverfordwest	—	93	○	Trinity College	12	○, M.	—
Llangammarch Wells	—	550	W, ○, m.	" Phoenix Park	155	○, M.	a, c.
Pembroke (St. Ann's Head)	—	149	W, ○, M.	" Glasnevin	67	m.	a, c.
Port Talbot	—	179	○	Kilkenny	212	W, m.	a, c.
Swansea	—	24	m.	Kingstown	42	m.	—
Tenby	—	79	○	Mountmellick	253	m.	—
Arlington	—	613	W, m.	Waterford	20	W, M.	a.
Clifton (Bristol)	—	229	W, ○, m.				
Cullompton	—	202	W, ○, m.	Ballinaurra	24	○, m.	—
Falmouth	—	167	W, ○, M.	Birr Castle	175	W, ○, M.	a, b, c.
Forest of Dean	—	200	m.	Cahir	199	W, m.	—
Newquay "	—	100	○, m.	b. Foynes	108	W, m.	a, c.
Penzance	—	54	○, m.	Killarney	174	W, M.	a, c.
Plymouth	—	116	W, ○, M.	Roche's Point	32	W, M.	a, c.
Portland Bill	—	19	W, M.	Valencia	30	W, ○, M.	a, c.
Rousdon	—	515	○, M.				
Salcombe	—	300	○				
Shaftesbury	—	722	W, m.				
Torquay	—	12	○				
Weymouth	—	21	○, m.				
Whitchurch	—	593	M.				
Woolacombe	—	59	○, M.				
<b>9. IRELAND, N.</b>							
<i>a. Western.</i>							
<i>b. Eastern.</i>							
<b>10. IRELAND, S.</b>							
<i>a. Eastern.</i>							
<i>b. Western.</i>							
<b>11. ENGLISH CHANNEL.</b>							
<i>a. Western.</i>							
<i>b. Eastern.</i>							

## CORRECTIONS FOR MONTHLY WEATHER REPORT, JANUARY TO AUGUST, 1909.

- January, p. xii. ... Bognor.—Rainfall, 1.16 ins.; number of days, 18.  
 February, p. xxi. ... Kew.—Overcast, 11.  
 March, p. xxix. ... District 1.—Bright sunshine, total hours, 56.  
 p. xxx. ... Westminster.—Mean temperature, 39.5. Difference, - 3.4  
 p. xxxi. ... Portsmouth.—Clear sky, 8.  
 p. xxxi. ... Southport.—Clear sky, 3.  
 p. xxxii. ... Margate.—Rainfall, 2.53 ins. Difference, + 1.10.  
 April, p. xxxiii. ... Yarmouth.—Dep. of wet third col., 24.  
 p. xxxiii. ... Geldeston.—Dep. of wet third col., 26.  
 p. xxxix. ... Wick.—Hail, 1.  
 p. xl. ... West Linton.—Rainfall, 2.54 ins.  
 June, p. lx. ... Westminster.—Cloud amount, 6 p.m., 7.5.  
 p. lxi. ... Cheadle.—Mean maximum, 58.7.  
 July, p. lxxi. ... Douglas.—Hail, 0.  
 August, p. lxxxix. ... Cheltenham.—Vap. Pressure III., .424.

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1909, together with the NAMES of their STATIONS :—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Aberdovey - - -	W. J. Eves.	Garforth - - -	Prof. Seton, for the Yorkshire College, Leeds.
Aberystwyth - - -	Dr. Thomas, for the District Council.	Glasgow - - -	E. T. Danson.
Alnwick Castle - - -	Robert Kyle, for the Duke of Northumberland, K.G.	Glengarron - - -	Prof. Becker, and the Staff of Observatory.
Ampleforth - - -	Rev. B. A. Barnett, O.S.B.	Gordon Castle - - -	D. D. Munro.
Arlington (N. Devon) - - -	Miss Chichester.	Greenwich - - -	C. Webster, for the Duke of Richmond and Gordon.
Armagh - - -	J. L. E. Dryer, Ph.D., and Staff of Observatory.	Guernsey (Villa Carey) (Fort Road) - - -	Astronomer Royal. F. E. Carey, M.D. A. Collenette.
Aspatria - - -	J. Smith Hill, B.A., B.Sc.		
Ballinacurra - - -	John H. Bennett	Harrogate - - -	C. E. Rivers, for the Corporation.
Balmoral - - -	J. M. Troup, for J. Michie, M.V.O.	Hastings (St. Leonards) - - -	H. Colborne, M.R.C.S., for the Corporation.
Balruddery - - -	G. Davie, for J. White.	Haverfordwest - - -	F. Phillips.
Balt Sound - - -	T. Edmonston Saxby, L.R.C.S.	Hawarden Bridge - - -	F. B. Stevens.
Bath - - -	W. H. Symonds, M.D., for the Corporation.	Hesford (Belmon) - - -	Canon T. B. Harrington, O.S.B.
Bawtry (Hesley Hall) - - -	B. W. Whittaker, J.P.	Hillington - - -	Rev. H. E. B. Folkes, M.A.
Belfast - - -	W. H. Divers, for the Duke of Rutland.	Hove - - -	A. Griffith, M.D., M.O.H., for the Corporation.
Belvoir Castle - - -	Rev. J. Dunn Parkes, LL.D.	Hoylake - - -	Tom Robinson, for Urban District Council.
Bennington - - -	E. Mawley.	Huddersfield - - -	J. Firth, for the Corporation.
Berkhamsted - - -	Hugh W. Fox, M.D., for the Rural District Council.	Hull - - -	H. B. Witty, for the Corporation.
Bettws-y-Coed - - -	G. Briley, M.P.S., for Rural District Council.		
Bexhill-on-Sea - - -	Alfred Crosswell, for the Midland Institute.		
Birmingham (Edgbaston) - - -			
Blackpool - - -	E. W. Rees Jones, M.D., for the Corporation.	Kilkenny Castle - - -	E. Sutton, for the Marquis of Ormonde, K.P.
Bognor - - -	H. C. L. Morris, M.D., and Herbert Gardner.	Killarney - - -	E. W. Griffin, M.D.
Bournemouth - - -	C. H. Morris, M.D., for the Corporation.	Kilmarnock - - -	D. J. Robt, for West of Scotland Agricultural College.
Bradford - - -	H. Landor, M.D., for the Corporation.	Kington-on-Soar - - -	Fred Wakely, for the Midland Agricultural and Dairy College.
Brighton - - -	D. Forbes, M.D., for the Corporation.	Kingstown - - -	R. A. O'Donovan, M.D., for the Corporation.
Brondstair - - -	W. H. White, for the District Council.		
Buckebury - - -	J. W. Harris, for A. W. Sutton.		
Burnley - - -	Thos. Holt, M.D., for the Corporation.		
Buxton - - -	F. T. Kieldsen.		
Cahir - - -	R. W. Smith, Junr.	Lancaster - - -	N. Holden, F.R.A.S., for the Corporation.
Cally Gatehouse - - -	R. Thomson, for Col. F. Murray, Baillie.	Landale - - -	J. A. Fletcher.
Cambridge - - -	R. Irwin Lynch, M.A., for the Botanic Garden Syndicate.	Lewes - - -	The Rev. G. Brand.
Cardiff - - -	E. W. Rees Jones, M.D., for the Corporation.	Linton - - -	W. Barr, for the Corporation.
Carmarth - - -	W. Farmer.	Littlestone-on-Sea - - -	H. T. Tubbs.
Cheadle - - -	Col. B. H. Phillips.	Llandudno - - -	W. Little, for Town Council.
Cheltenham - - -	A. C. Saxby, for the Corporation.	Llangammarch Wells - - -	W. Black Jones, M.D., M.O.H.
Cirencester - - -	M. Kershaw, B.A., for the R. A. College.	London (Bunhill Row) - - -	Messrs. De la Rue.
Clacton-on-Sea - - -	A. W. Shadick, for the Town Council.	" (Camden Sq.) - - -	H. G. Waller, D.Sc., LL.D.
Clifton (the College) - - -	D. Rintoul, M.A.	" (Plumstead) - - -	J. G. Waller.
Clonowes Wood, College, near Morpeth - - -	Rev. J. J. Nerney S.J.	" (Westminster) - - -	H. Cowdray.
Cookie Park, near Morpeth - - -	T. E. W. Dobson, for Northumberland County Council.	Lowestoft - - -	C. W. Edwards, for the Corporation.
Colmonell - - -	A. Ogg, for J. W. McConnell.		
Colwyn Bay - - -	W. Jones, A.M.I.C.E., for District Council.	Maidenhead - - -	G. H. Palmer.
Coventry - - -	P. High Snell, M.D., for the Corporation.	Manchester (Oldham Road) - - -	J. Niven, M.A., M.B., for the Corporation.
Crathes - - -	R. Smith.	Manchester (Prestwich) - - -	F. Gore for the Medical Superintendent of the Asylum.
Crief - - -	Dr. Meikle.	Manchester (Whitworth Pk.) - - -	W. A. Harwood for the University of Manchester.
Cromer - - -	W. H. Archer, for the District Council.	Marchmont - - -	J. A. Wood, for Sir H. P. Campbell, Bt.
Cullompton - - -	M. T. Foster.	Margate - - -	J. Stokes, J.P., for the Corporation.
Darwen - - -	F. G. Howarth, M.B., for the Corporation.	Market Boscombe Castle - - -	W. H. Young, for Captain Cooper.
Deerness - - -	M. Spence.	Marlborough - - -	Meddows Taylor, for the College.
Douglas, Isle of Man - - -	F. Cottle, for the Corporation.	Matfield - - -	D'Arcy Reeve.
Dover - - -	W. C. Hawke, for the Corporation.	Mayfield - - -	G. C. Lawson.
Dublin (City) - - -	Sir John W. Moore, M.D.	Mountmellick - - -	W. A. Robinson.
" (Glasgow) - - -	P. T. MacLennan, M.R.I.A.		
" (Phoenix Park) - - -	La-Col. J. Perry, R.E.	Newcastle-on-Tyne - - -	N. H. Martin, F.C.S., F.R.S.E.
(Trinity College) - - -	Prof. Thrift.	Newquay - - -	O. G. Vivers, B.A., M.D., for Urban Council.
Dumfries - - -	C. C. Easterbrook, M.D., Crichton R. Institute.	Newton Rigg - - -	W. T. Lawrence, for the Cumberland County Council.
Dundee - - -	J. Carnochan.	Nottingham - - -	J. Brown, A.M.I.C.E., City Engineer.
Dunrobin Castle - - -	D. Melville, for the Duke of Sutherland, K.G.	Norwich - - -	A. W. Preston.
Durham - - -	Prof. R. A. Sampson, M.A., F.R.S.	Norwood - - -	W. Marriott.
Eastbourne - - -	S. R. Henderson, for the Corporation.		
Edinburgh - - -	Regius Keeper, Botanic Gardens.	Oban - - -	E. Bally, M.D., M.O.H.
Epsom - - -	Spencer C. Russell.	Oxford - - -	A. A. Rimbault, M.A., F.R.S., for the Radcliffe Observatory.
Felixstowe - - -	Coastguard, for the Urban District Council.		
Folkstone - - -	A. E. Nichols, C.E., for the Corporation.	Penzance - - -	C. H. Benn, for the District Council.
Forest of Dean - - -	V. F. Leese.	Plymouth - - -	E. Whitehead, A.M.I.C.E., for the Corporation.
Fonthill Glastonbury - - -	P. H. Glastonbury.	Pollardoch - - -	D. S. Melville.
Fort William - - -	W. T. Kilgour.	Portsmouth - - -	A. Mearns Fraser, M.D., for the Corporation.
Foyne - - -	J. J. Aloern, for Lord Monteagle, K.P.	Port Talbot - - -	Miss Talbot and G. Lipscombe.
Fulbeck - - -	Rev. Vere F. Willson, M.A.		

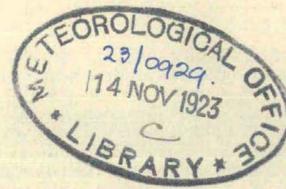
THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1909, together with the NAMES of their STATIONS—*cont.* :—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Ramsgate - - -	T. G. Taylor, C.E., for the Corporation.	Tealby - - -	Rev. S. Lewin, B.A.
Ranby Hall - - -	J. Hope, for General Sir M. Willson, K.C.B.	Tenby - - -	R. J. Truscott, for the Corporation.
Raunds - - -	Léon H. Lea,	Thornthorpe - - -	J. Wilson, for A. Henderson Bishop.
Reading (Leighton Park School)	John Ridges, M.A.	Tillypronie - - -	Robert Littlejohn, for Sir John F. Clark, Bart.
Rhyl - - -	A. A. Goodall, C.E., for District Council.	Torquay - - -	F. March, for the Corporation.
Rothesay - - -	The Lawes' Agricultural Trust.	Totland Bay - - -	J. Dover, M.A.
Routton - - -	D. Penney,	Tottenham - - -	J. F. Butler-Hogan, M.D., LL.D., for District Council.
Rousdon - - -	J. Hanagan, for Sir Hugh Bell, Bart.	Towyn - - -	E. Lewys Lloyd, M.D., for the District Council.
Rugby (the School)	C. Grover, for the Hon. Lady Peek.	Tunbridge Wells - -	F. G. Smart, M.A., M.B.
St. Asaph - - -	Rev. D. E. Shorto, M.A.	Ventnor Hospital - -	Miss M. Gibson.
Salcombe - - -	Rev. J. Rowland, S.J.	Wakefield - - -	Alex. French, M.R.C.S., L.R.C.P.
Salisbury - - -	V. W. Twinning, M.D., for the Corporation.	Waterford - - -	Rev. L. B. Birkett.
Sandown - - -	Thos. Challis, for the Earl of Pembroke, G.C.V.O.	Westbourne - - -	Rev. J. S. Begg.
Scarborough - - -	C. E. Gilchrist, for Free Library.	Weymouth - - -	J. J. Brown, Hon. Borough Meteorologist.
Seaford - - -	G. H. Aird,	Whitby - - -	T. Newbitt, for the Lit. and Phil. Soc.
Shaftesbury - - -	Rev. F. Ehlers.	Whitchurch - - -	E. E. Glyde.
Sheffield - - -	R. Howarth, F.R.A.S.	Winslow - - -	R. A. Easton.
Shoebury Ness - - -	Supt. of Experiments.	Wisley - - -	The Superintendent, for the Roy. Hort. Society.
Shrewsbury - - -	Capt. C. S. Reid, R.E.	Woburn - - -	H. M. Frear, F.C.S., for the Royal Agricultural Society.
Skegness - - -	S. Coetmore Jones, for the District Council.	Wokingham - - -	The Medical Superintendent of the Sanatorium.
Southampton - - -	A. Vaughan, for Director General, Ordnance Survey.	Woolacombe - - -	R. N. Kivell.
Southend-on-Sea - - -	P. J. Elkford, C.E., for the Corporation.	Worksop - - -	Lt.-Col. H. Mellish, J.P.
Southport - - -	J. Baxendell, for the Corporation.	Worthing - - -	R. H. Wilshaw, M.B., D.P.H., for the Corporation.
Stokesay - - -	Rev. W. M. D. La Touche, B.A.		
Stonehaven - - -	J. Hart, for the Corporation.		
Stonyhurst - - -	Rev. W. Sidgreaves, S. J. and the Staff of Observatory.		
Stratheffer Spa - - -	H. W. Kaye, B.A., M.B.		
Swansea - - -	B. Bliss, for the Corporation.		
Swaraton - - -	Rev. W. L. W. Eyre, M.A.		
		York (Museum) - -	Oxley Grabham, M.A., for the York Phil. Soc.
		" (Bootham) - -	H. Richardson, M.A.

Meteorological Office,  
London, S.W.,  
October 25th, 1909.

FOR OFFICIAL USE.

THE



MONTHLY WEATHER REPORT  
OF THE  
METEOROLOGICAL OFFICE  
FOR THE YEAR  
**1910**

ISSUED AS A SUPPLEMENT TO THE  
**WEEKLY WEATHER REPORT**  
(VOL. XXVII.-NEW SERIES)

AND FORMING

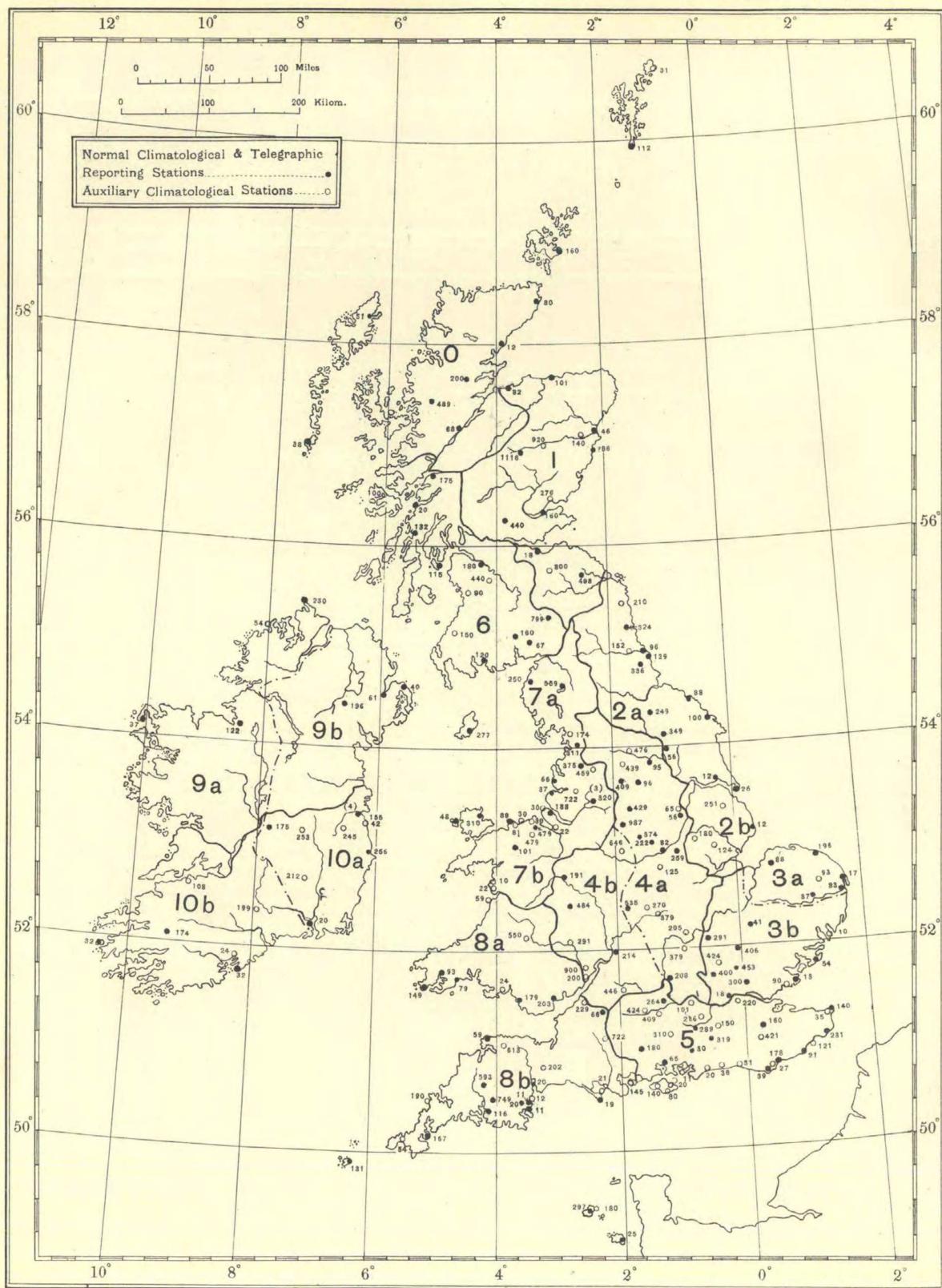
PART II. OF THE BRITISH METEOROLOGICAL YEAR BOOK, 1910.

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Published by the Authority of the Meteorological Committee.

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MONTHLY WEATHER REPORT, POSITION AND HEIGHTS OF STATIONS, DECEMBER, 1910.



## LIST OF STATIONS.

The Stations included in the Monthly Report and in the Weekly Weather Report are shown in the following list, arranged under the Districts. The positions of the stations may be identified on the accompanying map by the numbers which give their heights in feet above the Mean Sea Level.

*Height above Mean Sea Level.*—The figures given in this column refer, in general, to the height of the ground on which the rain gauge stands. At Sunshine Stations which do not possess a rain gauge, the height refers to the sunshine recorder.

*Nature of Information published.*—The character of the information given for each station is indicated by the following symbols :—

- W. Weekly Weather Report. Temperature and rainfall data.  
O Bright Sunshine data.  
M. Monthly Weather Report. Full summary in the international form.  
m. Monthly Weather Report. Abridged summary of temperature and rainfall.

*Average Values.*—Reference is made to Publications of the Office containing average values for long periods by means of the following letters:—

- a. Appendix III. of the Weekly Weather Report for 1906. Monthly averages of mean maximum, mean minimum and mean temperature, and of rainfall for the 35 years 1871-1905 and (when available) of bright sunshine for the twenty-five years 1881-1905.
  - b. Appendix I. to the volume of "Meteorological Observations at Stations of the Second Order" for 1891. Monthly averages for all elements for the fifteen years 1876-1890.
  - c. "Temperature Tables of the British Islands," 1871-1900. Monthly average of mean maximum, mean minimum and mean temperature generally for the thirty years 1871-1900, together with information on the extremes of temperature in the same period.
  - d. "Rainfall tables of the British Islands," Part I., 1866-80, Part II., 1880-90. Monthly averages of rainfall for lustra and for the periods named.

*Royal Observatory, Greenwich.*—The averages for Temperature and Rainfall, with which the current values are compared, are for the 65 years 1841–1905. The averages for sunshine are for the period 1897–1906.

*Radcliffe Observatory, Oxford.*—The averages with which the figures given in the second line are compared, are for the 54 years 1855–1908 in the case of pressure, and for the 94 years 1815–1908 in that of rainfall. The values for the current months given in this second line are the means of observations at 8 a.m., Noon, and 8 p.m., reduced to mean daily values by the application of monthly corrections based on observations during the period 1880–1887. The value given under the heading “Cloud” is the mean of observations at 8 a.m., Noon, and 8 p.m. The total rainfall and the maximum rainfall in a day are taken from the daily readings of the self-recording rain gauge, which correspond to the civil day ending at midnight.

*Meteorological Societies.*—Data for stations marked **M** are supplied by the Royal Meteorological Society, and for stations marked **S** by the Scottish Meteorological Society. Stations marked **M** or **S** are in connection with one or other of the Societies as well as with the Office.

Stations.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.	Stations.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.
<b>O. SCOTLAND, N.</b>				<b>1. SCOTLAND, E.</b>			
<i>a.</i> Islands.				Aberdeen	-	W, ○, M.	<b>a, c.</b>
<i>b.</i> Mainland.				Balmoral	-	W, m.	—
Baltasound - - - S	31	W, ○, m.	—	Balruddery	-	○, m.	—
Castlebay, Barra Island - - S	38	W, ○, M.	—	Crathes	-	○, m.	—
Deerness - - - S	160	○, M.	<b>a, b, c.</b>	Crief	-	W, M.	—
Stornoway - - - S	51	W, ○, M.	<b>a, c.</b>	Dundee	-	W, M.	<b>c, d.</b>
Sumburgh Head - - -	112	W, M.	<b>a, c.</b>	Edinburgh	-	○, M.	<b>a, d.</b>
Dunrobin Castle - - - <b>g</b>	12	M.	<b>c, d.</b>	Gordon Castle	-	○, M.	<b>c, d.</b>
Fort Augustus - - - <b>g</b>	68	W, ○, M.	<b>a, c.</b>	Leith	-	W, M.	<b>a, c.</b>
Fort William - - - <b>g</b>	175	W, M.	<b>a, c.</b>	Marchmont	-	W, ○, M.	<b>a, c.</b>
Glencarroll - - - <b>g</b>	489	W, M.	<b>a, c.</b>	Nairn	-	W, ○, M.	<b>a, c.</b>
Strathpeffer Spa - - - <b>g</b>	200	W, ○, M.	<b>a.</b>	Stonehaven	-	W, M.	<b>a, c.</b>
Wick - - - -	80	W, M.	<b>a, c.</b>	Tillypronie	-	○, M.	—
				West Linton	-	W, ○, m.	—
					1,116		
					800		

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>2. ENGLAND, N.E.</b>				<b>5. ENGLAND, S.E.</b>			
<i>a. Northern.</i>				Basingstoke	289	m.	—
Alnwick Castle	210	W, m.	a.	Bexhill-on-Sea	27	m.	—
Ampleforth	349	m.	—	Bognor	20	○, m.	—
Cockle Park	324	○, M.	a.	Bournemouth	145	○, m.	—
Durham	336	W, ○, M.	a, b, c.	Brighton	31	○, m.	a, d.
Newcastle	152	○, m.	a.	Broadstairs	140	○, m.	—
Routton	249	W, M.	c.	Bucklebury	409	m.	—
Scarborough	M 100	W, ○, M.	a, c.	Dover	231	○, m.	—
Seaham	139	M.	—	Dungeness	21	W, M.	a, c.
Shields	96	W, M.	a, c, d.	Eastbourne	39	○, M.	a.
Whitby	88	○, M.	a, d.	Epsom	M 160	m.	—
York	56	W, ○, M.	a, c, d.	Folkestone	121	○, m.	—
<i>b. Southern.</i>				Hastings (St. Leonards)	178	W, ○, M.	a, c, d.
Fulbeck	180	W, ○, M.	a.	Hove	—	○	—
Hull	12	○, M.	a.	Littlestone	—	○	a.
Lincoln	58	W, M.	a, d.	Maidenhead	101	m.	—
Ranceby	124	○, M.	a.	Margate	M 35	W, ○, m.	a, c, d.
Skegness	12	W, ○, M.	—	Marlborough	M 424	W, ○, m.	a, c.
Spurn Head	26	W, M.	a, c.	Matfield	319	m.	—
Tealby	251	m.	a.	Portsmouth	M 11	○, M.	a.
<b>3. ENGLAND, E.</b>				Ramsgate	—	○	—
<i>a. Northern.</i>				Reading	264	M.	d.
<i>b. Southern.</i>				Salisbury	180	m.	a, d.
Cromer	196	W, ○, M.	—	Sandown	20	m, ○.	—
Geldeston	37	W, ○, M.	a, c, d.	Southampton	65	W, ○, M.	a, c, d.
Hillington	M 88	W, ○, M.	a, b, c.	Swansea	M 310	W, m.	a, c.
Lowestoft	83	○, M.	a, d.	Totland Bay	140	○, m.	a.
Norwich	M 93	W, m.	d.	Tunbridge Wells	M 421	W, ○, m.	a, c.
Yarmouth	17	W, ○, M.	a, c.	Ventnor	80	○, M.	a, c.
Bennington	M 406	M.	a, c.	Westbourne	150	○, m.	—
Berkhamsted	M 400	○, M.	a, c.	Wisley, Surrey	216	W, ○, m.	—
Cambridge	41	W, ○, M.	a, d.	Wokingham	M 36	○, m.	a, c.
Clacton-on-Sea	54	W, ○, M.	—	Worthing	—	—	—
Felixstowe	10	W, ○, M.	—	<b>LONDON.</b>			
Rothamsted	424	W, ○, m.	a, c, d.	Bunhill Row (City)	80	○	a.
Shoeburyness	13	W, m.	a, d.	Camden Square	110	○, M.	a, d.
Southend	90	○, m.	a.	Greenwich	155	W, ○, M.	a, c, d.
Woburn	291	M.	—	Hampstead	453	—	—
<b>4. MIDLAND COUNTIES.</b>				Kew	18	W, ○, M.	a, c, d.
<i>a. Eastern.</i>				Norwood	M 220	M.	a.
Bawtry	65	W, m.	a, c.	Plumstead	300	—	—
Belper	222	m.	—	Tottenham	51	W, ○, M.	—
Belvoir Castle	259	○, M.	a, d.	Westminster	27	W, ○, M.	a.
Birmingham, Edgbaston	535	W, ○, M.	a, d.	<b>6. SCOTLAND, W. (a.) ISLE OF MAN (b.)</b>			
Bradford	439	○, M.	(d.)	Cally, Gatehouse	120	W, M.	a.
Coventry	270	○, m.	a.	Colmell	150	W, m.	—
Garforth	195	○, M.	—	Dumfries	160	W, M.	a.
Harrogate	M 476	W, ○, m.	a.	Eckedalemuir	799	○, M.	—
Huddersfield	409	M.	—	Glasgow	180	W, ○, M.	a, c, d.
Kingston-on-Soor	125	m.	—	Kilmarnock	90	W, ○, m.	—
Nottingham	82	W, ○, M.	a.	Oban	20	○, m.	—
Oxford	M 208	W, ○, M.	a, c.	Poltalloch	132	W, M.	c.
Raunds	205	W, m.	—	Rothesay	115	W, M.	c, d.
Rugby	379	m.	a, c.	Ruthwell	67	M.	—
Sheffield	429	○, M.	a, c, d.	Thorntonhall	440	○, m.	—
Wakefield	96	M.	a, c.	Douglas	M 277	W, ○, M.	a, c, d.
Winslow	379	m.	—	<b>7. a. ENGLAND, N.W.</b>			
Worksop	56	○, m.	a, d.	Aspatria	250	W, ○, M.	a.
<i>b. Western.</i>				Blackpool	M 66	W, ○, M.	a.
Bath	M 66	W, ○, M.	a.	Burnley	459	○, m.	d.
Buxton	M 987	W, ○, M.	a, b.	Carnforth	174	○, m.	—
Cheadle (Tean)	M 646	W, m.	a, b, c.	Darwen	722	○, M.	—
Cheltenham	M 214	○, M.	a, c.	Hawarden Bridge	22	m.	a.
Cirencester	M 446	W, ○, m.	a, c.	Hoylake	730	○, m.	a.
Hereford	M 291	W, m.	a.	Lancaster	311	○, m.	—
Mayfield (Staffs)	M 374	m.	—	Liverpool (Bidston Obs.)	188	W, ○, M.	a, c.
Shrewsbury	191	W, M.	d.	Manchester (Prestwich)	320	W, ○, M.	a, c.
Wistanstow	M 484	M.	—	" (Oldham Road)	190	○, M.	a.
				" (Whitworth Park)	125	○, M, ○.	—
				Newton Rigg	559	W, ○, M.	a.
				Southport	M 37	○, M.	a.
				Stonyhurst	M 375	W, ○, M	a, c, d.

Station.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.	Station.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.
<b>(b) NORTH WALES.</b>							
Aberdovey	22	○, m.	—				
Bettws-y-Coed	101	W, ○, M.	—				
Colwyn Bay	82	○, m.	—				
Holyhead	48	W, M.	a, c.				
Llandudno	M	89	W, ○, M.	a, b, c, d.			
Llaneugrad		310	M.				
Rhyl		30	○, m.	a.			
St. Asaph (St. Beuno's Coll.)		479	m.	—			
Towyn	M	10	○, m.	—			
<b>8. a. SOUTH WALES. b. ENGLAND, S.W.</b>							
Aberystwyth	M	59	○, m.	—			
Cardiff	203	W, ○, M.	a, d.				
Haverfordwest		93	○	—			
a. Llangammarch Wells		550	W, ○, m.	a.			
Pembroke (St. Ann's Head)		149	W, ○, M.	a, c.			
Port Talbot		179	○	—			
Swansea		24	m.	—			
Tenby		79	○	a.			
Arlington		613	W, m.	a, c.			
Clifton (Bristol)		229	W, ○, m.	a, d.			
Cullompton		202	W, ○, m.	a, c.			
Falmouth		167	W, ○, M.	a, c.			
Forest of Dean		200	m.	—			
Fowey		900	—	—			
Newquay		—	m.	—			
Paignton		100	○, m.	a, d.			
Penzance		11	m.	—			
Plymouth		54	○, m.	d.			
Portland Bill		116	W, ○, M.	a, c.			
Salcombe		19	W, M.	—			
Shaftesbury		300	○	—			
Sheepstor		722	W, m.	a, d.			
Teignmouth		749	m.	—			
Torquay		19	m.	—			
Weymouth		12	○	a, d.			
Whitchurch		21	○, m.	—			
Woolacombe		593	M.	—			
		59	○, M.	a.			
<b>9. IRELAND, N.</b>							
a. Western.							
b. Eastern.							
Blackrod Point			37	W, M.	a.	—	
Dunfanaghy			54	m.	—		
Malin Head			230	W, M.	a, c.	—	
Markree Castle			122	W, ○, M.	a, b, c.	—	
<b>10. IRELAND, S.</b>							
a. Eastern.							
b. Western.							
Clongowes Wood College			245	○, m.	—		
Dublin, City			47	W, M.	a, b, c.	—	
" Trinity College			12	○, M.	—		
" Phoenix Park			155	○, M.	a, c.	—	
" Glasnevin			67	m.	a, c.	—	
Newcastle, Co. Wicklow			256	m.	—		
Kilkenny			212	W, m.	a, c.	—	
Mountmellick			42	m.	—		
Waterford			253	m.	—		
			20	W, M.	a.	—	
<b>11. ENGLISH CHANNEL.</b>							
Guernsey (Villa Carey)			180	W, ○, m.	a.	—	
Brooklyn			297	○, M.	a, c.	—	
Jersey (St. Aubin's)			25	W, M.	a, c.	—	
" (St. Helier's)			—	○	a.	—	
Scilly			181	W, ○, M.	a, c.	—	

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1910, together with the NAMES of their STATIONS :—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Aberdovey	W. J. Eves.	Cahir	R. W. Smith, Junr.
Aberystwyth	Dr. A. Thomas, for the District Council.	Cally Gatehouse	W. Thomson, for Col. F. Murray, Baillie.
Alnwick Castle	Robert Kyle, for the Duke of Northumberland, K.G.	Cambridge	R. Irwin Lynch, M.A., for the Botanic Garden Syndicate.
Ampleforth	Rev. T. J. Barton, O.S.B.	Cardiff	E. Wallford, M.D., for the Corporation.
Arlington (N. Devon)	Miss Chisholm-Saxby.	Carmarth	W. Farmer.
Armagh	J. L. E. Dreyer, Ph.D., and Staff of Observatory.	Chelmsford	Col. G. Phillips.
Aspatria	J. Smith Hill, B.A., B.Sc.	Cheltenham	J. C. Saxby, for the Corporation.
Ballincarrra	John H. Bennett.	Cirencester	M. Kershaw, B.A., for the R. A. College.
Balmonal	J. M. Trotter, M.V.O.	Clacton-on-Sea	A. W. Shadick, for the Town Council.
Baldruddery	G. Davie, for J. White.	Clifton (the College)	D. Rintoul, M.A.
Balsound	T. Edmondston Saxby L.R.C.S.	Clongowes Wood	Rev. J. J. Nerney, S.J.
Basingstoke	A. M. Pitkin, F.R.G.S.	Cockle Park, near Morpeth,	T. E. W. Dobson, for Northumberland County Council.
Bath	W. H. Symons, M.D., for the Corporation.	Colmonell	A. Orr, for J. W. McConnell.
Bawtry (Hesley Hall)	B. I. Whitaker, J.P.	Colwyn Bay	W. Jones, A.M.I.C.E., for District Council.
Belper	W. White, B.A., and G. Robinson, for Prof. Morton.	Coventry	E. Hugh Snell, M.D., for the Corporation.
Belvoir Castle	W. W. Divers, B.Sc., F.C.S.	Crathes	J. Smith.
Bennington	W. H. Divers, for the Duke of Rutland.	Crief	Dr. Meikle.
Berkhamsted	Rev. J. Dunne Parkes, LL.D.	Cromer	W. H. Archer, for the District Council.
Bettws-y-Coed	E. Mawley.	Cullompton	M. T. Foster.
Bexhill-on-Sea	Hugh W. Fox, M.D., for the Rural District Council.	Darwen	F. G. Howarth, M.B., for the Corporation.
Birmingham	G. Brisley, M.P.S., for Rural District Council.	Deerness	M. Spence.
(Edgbaston)	Alfred Crosswell, for the Midland Institute.	Douglas, Isle of Man	F. Cottle, for the Corporation.
Blackpool	E. W. Rees Jones, M.D., for the Corporation.	Dover	W. C. Hawke, for the Corporation.
Bognor	H. C. L. Morris, M.D., and Herbert Gardner.	Dublin (City)	Sir J. W. Moore, M.R.C.P.
Bournemouth	C. Dales, for the Corporation.	" (Glasnevin)	J. W. Moore, M.R.C.P.
Bognor Regis	H. Land, for the Corporation.	(Phoenix Park)	Lt.-Col. J. Perry, R.E.
Brighton	W. F. Trotter, M.D., for the Corporation.	(Trinity College)	Prof. Thrift.
Broadstairs	J. W. White, for A. W. Sutton.	Dumfries	C. C. Easterbrook, M.D., Crichton R. Institute.
Buckebury	J. W. Harris, for A. W. Sutton.	Dundee	J. Carnochan.
Burnley	Thos. Holt, M.P., for the Corporation.	Dunfanaghy	J. J. MacGrath, L.R.C.P.S.
Buxton	F. T. Kielsden.	Dunrobin Castle	D. Melville, for the Duke of Sutherland, K.G.
		Durham	Prof. R. A. Sampson, M.A., F.R.S.

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1910, together with the NAMES of their STATIONS—cont.:-

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Eastbourne - - -	S. R. Henderson, for the Corporation.	Oban - - -	E. Baily, M.D., M.O.H.
Edinburgh - - -	Regius Keeper, Botanic Gardens.	Oxford - - -	A. A. Rambaut, M.A., F.R.S., for the Radcliffe Observatory.
Epsom - - -	Spencer C. Russell.	Paignton - - -	T. J. Rogers, for Town Council.
Felixstowe - - -	Montague Humphrey, for the Urban District Council.	Penzance - - -	C. H. Benn, for the District Council.
Folkestone - - -	John Ward Stainer, for the Corporation.	Plymouth - - -	H. Victor Prigg, A.M.I.C.E., for the Corporation.
Forest of Dean - - -	V. F. Leese.	Poltalloch - - -	D. S. Melville.
Port Augustus - - -	John von Dieckhoff.	Portsmouth - - -	A. Mearns Fraser, M.D., for the Corporation.
Port William - - -	W. T. Kilgour.	Port Talbot - - -	Miss Talbot and G. Lipscombe.
Powery - - -	Dr. W. H. Boger.	Ramsgate - - -	T. G. Taylor, C.E., for the Corporation.
Foyernes - - -	J. J. Alcorn, for Lord Monteagle, K.P.	Raunceby Hall - - -	J. Hope, for General Sir M. Willson, K.C.B.
Fulbeck - - -	Rev. Vere F. Willson, M.A.	Raunds - - -	Leon H. Lee.
Gasforth - - -	Prof. Soton, for the Yorkshire College, Leeds.	Reading (Leighton Park School) - - -	C. J. Evans, M.A.
Geddesdon - - -	E. T. Dowson.	Rhyl - - -	A. A. Goodall, C.E., for District Council.
Glasgow - - -	Prof. Becker and the Staff of Observatory.	Rothamsted - - -	The Lawes' Agricultural Trust.
Glencarron - - -	D. D. Munro.	Rothesay - - -	D. Penney.
Gordon Castle - - -	C. Webster, for the Duke of Richmond and Gordon.	Rounton - - -	J. Hanagan, for Sir Hugh Bell, Bart.
Greenwich - - -	Astronomer Royal.	Rugby (the School) - - -	Rev. D. E. Shorto, M.A.
Guernsey (Villa Carey) " (Port Road)	F. E. Carey, M.D. A. Collette.	Ruthwell - - -	W. H. Whellan, for A. Johnstone Douglas.
Harrogate - - -	C. E. Rivers, for the Corporation.	St. Asaph - - -	Rev. J. Rowland, S.J.
Hastings (St. Leonards)	H. Colborne, M.R.C.S., for the Corporation.	Salcombe - - -	W. Coleridge Roberts, for the Corporation.
Haworth (West)	W. H. Phillips.	Salisbury - - -	Thos. Challis, for the Earl of Pembroke, G.C.V.O.
Hawarden Bridge - - -	F. B. Summers.	Sandown - - -	C. E. Gilchrist, for Free Library.
Hereford (Belmont)	Canon T. B. Harrington, O.S.B.	Scarborough - - -	John Knight, M.D., D.P.H., for the Corporation.
Hillington - - -	Rev. H. E. B. Folkes, M.A.	Seaham - - -	G. H. Aird.
Hove - - -	A. Griffith, M.D., M.O.H., for the Corporation.	Shaftesbury - - -	Rev. J. Elivers.
Hoylake - - -	Tom Robinson, for Urban District Council.	Sheffield - - -	J. Howorth, F.R.A.S.
Huddersfield - - -	J. Firth, for the Corporation.	Shepton - - -	Rev. H. N. Breton, M.A.
Hull - - -	H. B. Witty, for the Corporation.	Shoeburyness - - -	Supt. of Experiments.
Kilkenny Castle - - -	E. Sutton, for the Marquis of Ormonde, K.P.	Shrewsbury - - -	Capt. C. S. Reid, R.E.
Killarney - - -	E. W. Griffin, M.D.	Skegness - - -	S. Coetmore Jones, for the District Council.
Kilmarnock - - -	Thomas Moffat, for West of Scotland Agricultural College.	Southampton - - -	A. Vaughan, for Director General, Ordnance Survey.
Kingston-on-Soor - - -	Fred Wakery, for the Midland Agricultural and Dairy College.	Southend-on-Sea - - -	E. J. Elford, C.E., for the Corporation.
Kingstown - - -	The late R. A. O'Donovan, M.D., for the Corporation.	Southport - - -	J. Baxendell, for the Corporation.
Lancaster - - -	N. Holden, F.R.A.S., for the Corporation.	Stokesay - - -	Rev. W. M. D. La Touche, B.A.
Llandudno - - -	W. Little, for Town Council.	Stonehaven - - -	J. Hart, for the Corporation.
Llaneugrad - - -	W. E. Sotheby.	Stonyhurst - - -	Rev. W. Sidgreaves, S. J. and the Staff of Observatory.
Llangammarch Wells - - -	W. Black Jones, M.D., M.O.H.	Strathpeffer Spa - - -	E. W. Kaye, B.A., M.B.
Landale - - -	J. A. Fletcher.	Swansea - - -	D. Bliss, for the Corporation.
Limerick - - -	Rev. W. O'Leary, S.J.	Swarraton - - -	Rev. W. L. W. Eyre, M.A.
Lincoln - - -	W. Barr, for the Corporation.	Tealby - - -	Rev. S. Lewin, B.A.
Littlestone-on-Sea - - -	H. T. Tuck.	Teignmouth - - -	G. Rossiter, for M.O.H.
London (Bunhill Row)	Messrs. De la Rue.	Tenby - - -	Miss Mildred B. Truscott, for the Corporation.
" (Camden Sq.)	H. R. Mill, D.Sc., LL.D.	Thorntonhall - - -	J. Wilson, for A. Henderson Bishop.
" (Plumstead)	J. G. Waller.	Tillywhoppy - - -	Robert Littlejohn, for Sir John F. Clark, Bart.
" (Westminster)	Rev. H. B. Workman, D. Lit.	Torquay - - -	F. March, for the Corporation.
Lowestoft - - -	C. W. Edwards, for the Corporation.	Tothand Bay - - -	J. Dover, M.A.
Maidenhead - - -	G. H. Palmer.	Tottenham - - -	J. F. Butler-Hogan, M.D., LL.D., for District Council.
Manchester (Oldham Road)	J. Niven, M.A., M.B., for the Corporation.	Towyn - - -	E. Lewis Lloyd, M.D., for the District Council.
Manchester (Prestwich)	F. Gore, for the Medical Superintendent of the Asylum.	Tunbridge Wells - - -	F. G. Smart, M.A., M.B.
Manchester (Whitworth Pk.)	Professor Rutherford and W. L. Lansbury, for the University of Manchester.	Ventnor Hospital - - -	Miss M. Gibson.
Marchmont - - -	J. A. Wood, for Sir H. E. Campbell, Bt.	Wakefield - - -	Alex. French, M.R.C.S., L.R.C.P.
Markree Castle - - -	J. R. Jackson, J.P., for the Corporation.	Watford - - -	J. N. White.
Mariborough - - -	J. R. Armstrong, for Captain Cooper.	Wetherby - - -	Rev. J. S. Begg.
Matfield - - -	Meddows Taylor and G. G. Becker, for the College.	West Linton - - -	J. J. Brown, Hon. Borough Meteorologist.
Mayfield - - -	D'Arcy Reeve.	Weymouth - - -	T. Newbitt, for the Lit. and Phil. Soc.
Mountmellick - - -	G. C. Lawson.	Whitby - - -	E. E. Glyde.
Newcastle-on-Tyne - - -	W. A. Robinson.	Whitchurch - - -	R. A. Gleeson.
Newcastle, Co. Wicklow	N. H. Martin, F.C.S., F.R.S.E.	Winslow - - -	The Superintendent, for the Roy. Hort. Society.
Newquay - - -	J. T. Crowe, M.D., National Hospital for Consumption.	Wistaston - - -	Rev. W. M. D. LaTouche, B.A.
Newton Biggs - - -	C. C. Vigurs, B.A., M.D., for Urban Council.	Woburn - - -	H. M. Frear, F.C.S., for the Royal Agricultural Society.
Nottingham - - -	W. T. Lawrence, for the Cumberland County Council.	Wokingham - - -	The Medical Superintendent of the Sanatorium.
Norwich - - -	J. Brown, A.M.I.C.E., City Engineer.	Woolacombe - - -	R. N. Kivell.
Norwood - - -	A. W. Preston.	Worksop - - -	Lt.-Col. H. Mellish, J.P.
	W. Marriott.	Worthing - - -	R. H. Wilshaw, M.B., D.P.H., for the Corporation.
		York (Museum) - - -	Oxley Grabham, M.A., for the York Phil. Soc.
		" (Bootham) - - -	H. Richardson, M.A.

Meteorological Office,  
London, S.W.,

FOR OFFICIAL USE.

THE

# MONTHLY WEATHER REPORT

OF THE

METEOROLOGICAL OFFICE

FOR THE YEAR

1911

ISSUED AS A SUPPLEMENT TO THE

WEEKLY WEATHER REPORT

(VOL XXVIII.-NEW SERIES)

AND FORMING

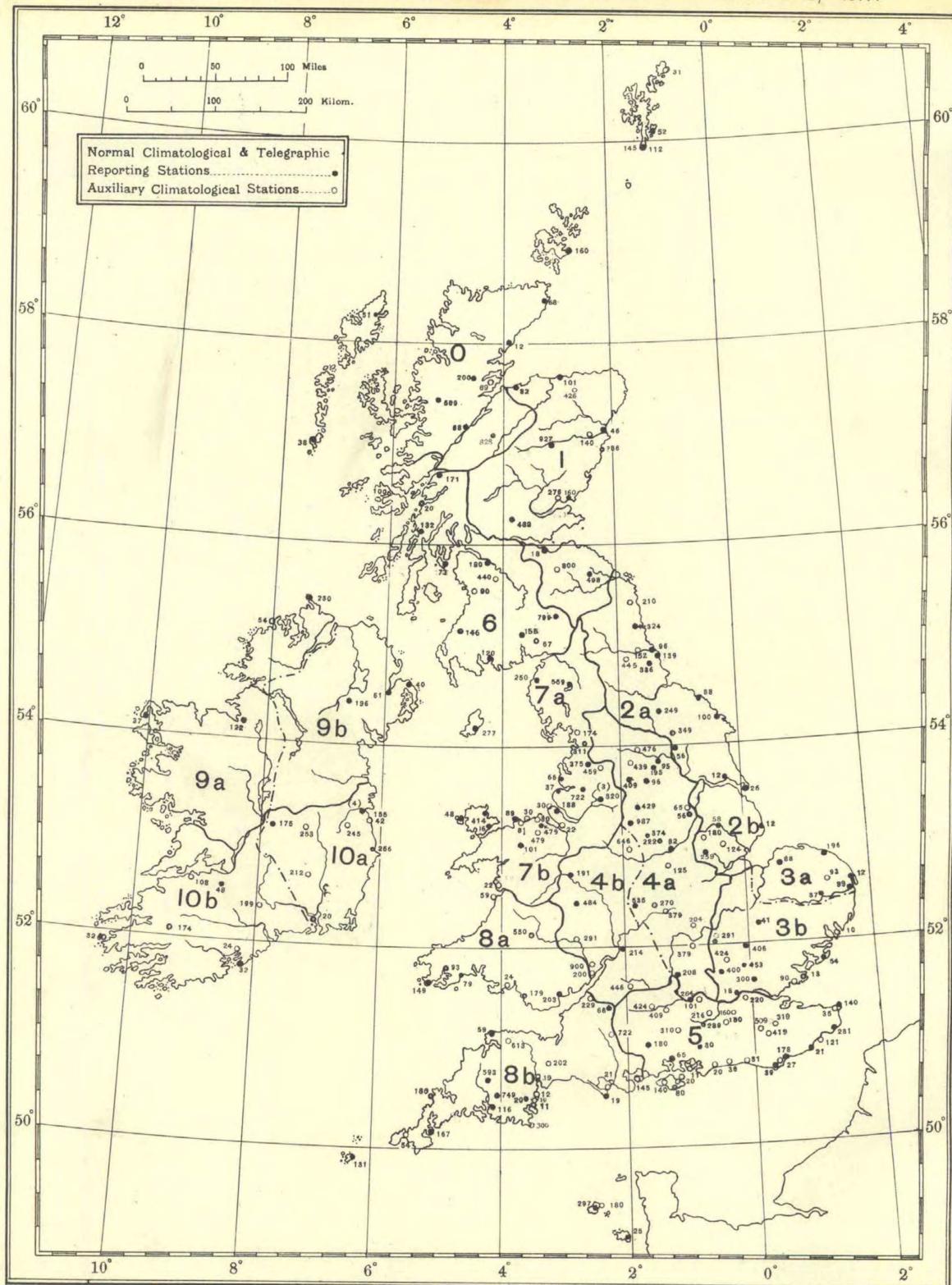
PART II. OF THE BRITISH METEOROLOGICAL AND MAGNETIC  
YEAR BOOK, 1911.

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Published by the Authority of the Meteorological Committee.

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MONTHLY WEATHER REPORT, POSITIONS AND HEIGHTS OF STATIONS, 1911.



Scale 1:5,000,000.

The heights of the stations above Mean Sea Level are inserted against the positions, and will serve to identify the names of the stations as given in the List of Stations on pp. IV. and V.

Ordnance Survey Southampton 1912.

## LIST OF STATIONS.

The Stations included in the Monthly Report and in the Weekly Weather Report are shown in the following list, arranged under the Districts. The positions of the stations may be identified on the accompanying map by the numbers which give their heights in feet above the Mean Sea Level.

*Height above Mean Sea Level.*—The figures given in this column refer, in general, to the height of the ground on which the rain gauge stands. At Sunshine Stations which do not possess a rain gauge, the height refers to the sunshine recorder.

*Nature of Information published.*—The character of the information given for each station is indicated by the following symbols :—

- W. Weekly Weather Report. Temperature and rainfall data.
- Bright Sunshine data.
- M. Monthly Weather Report. Full summary in the international form.
- m. Monthly Weather Report. Abridged summary of temperature and rainfall.

*Average Values.*—Reference is made to Publications of the Office containing average values for long periods by means of the following letters :—

- a. Appendix III. of the Weekly Weather Report for 1906. Monthly averages of mean maximum, mean minimum and mean temperature, and of rainfall for the 35 years 1871-1905 and (when available) of bright sunshine for the twenty-five years 1881-1905.
- b. Appendix I. to the volume of "Meteorological Observations at Stations of the Second Order" for 1891. Monthly averages for all elements for the fifteen years 1876-1890.
- c. "Temperature Tables of the British Islands," 1871-1900. Monthly average of mean maximum, mean minimum and mean temperature generally for the thirty years 1871-1900, together with information on the extremes of temperature in the same period.
- d. "Rainfall tables of the British Islands," Part I., 1866-80, Part II., 1880-90. Monthly averages of rainfall for lustra and for the periods named.

*Royal Observatory, Greenwich.*—The averages for Temperature and Rainfall, with which the current values are compared, are for the 65 years 1841-1905. The averages for sunshine are for the period 1897-1911.

*Radcliffe Observatory, Oxford.*—The averages with which the figures given in the second line are compared, are for the 54 years 1855-1908 in the case of pressure, and for the 94 years 1815-1908 in that of rainfall. The values for the current months given in this second line are the means of observations at 8 a.m., Noon, and 8 p.m., reduced to mean daily values by the application of monthly corrections based on observations during the period 1880-1887. The value given under the heading "Cloud" is the mean of observations at 8 a.m., Noon, and 8 p.m. The total rainfall and the maximum rainfall in a day are taken from the daily readings of the self-recording rain gauge, which correspond to the civil day ending at midnight.

*Meteorological Societies.*—Data for stations marked **MS** are supplied by the Royal Meteorological Society, and for stations marked **S** by the Scottish Meteorological Society. Stations marked M or S are in connection with one or other of the Societies as well as with the Office.

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>O. SCOTLAND, N.</b>							
<i>a. Islands.</i>							
Baltsaund	8	31	W, ○, m.	—			
Castlebay, Barra Island	-	38	W, ○, M.	—			
Deerness	-	8	160	○, M.	a, b, c.		
Stornoway	-	-	51	W, ○, M.	a, c.		
Sumburgh Head	-	-	112	W, M.	a, c.		
Lerwick	-	-	52	W, M.	—		
<i>b. Mainland.</i>							
Dunrobin Castle	-	99	12	M.	c, d.		
Fort Augustus	-	68	W, ○, M.	a, c.			
Fort William	-	171	W, M.	a, c.			
Glencarron	-	500	W, M.	a, c.			
Kingussie	-	828	M.	—			
Strathpeffer Sp.	-	200	W, ○, M.	a.			
Wick	-	68	W, M.	a, c.			
Forres	-	69	○, m.	—			
Inch	-	426	○, m.	—			
Dunrossness	-	145	m.	—			
<b>1. SCOTLAND, E.</b>							
Aberdeen	-	-	46	W, ○, M.	a, c.		
Balmoral	-	-	927	W, M.	—		
Balruddery	-	-	276	○, m.	—		
Crathes	-	-	140	○, m.	—		
Crief	-	-	432	W, M.	—		
Dundee	-	-	160	M.	c, d.		
Gordon Castle	-	-	101	W, ○, M.	c, d.		
Leith	-	-	18	W, M.	a, c.		
Marchmont	-	-	498	W, ○, M.	a, c.		
Nairn	-	-	82	W, ○, M.	a, c.		
Stonehaven	-	-	786	○, m.	—		
West Linton	-	-	800	W, ○, M.	—		

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.				
<b>2. ENGLAND, N.E.</b>											
a. Northern.											
Alnwick Castle	210	W, m.	a.	Basingstoke	289	m.	—				
Ampleforth	349	m.	—	Bexhill-on-Sea	27	○, m.	—				
Chopwellwood	446	○, m.	—	Bognor	20	○, m.	—				
Cockle Park	324	○, M.	a.	Bournemouth	145	○, m.	—				
Durham	336	W, ○, M.	a, b, c.	Brighton	31	○, M.	—				
Newcastle	152	○, m.	a.	Broadstairs	140	○, m.	—				
Routton	249	W, M.	c.	Bucklebury	409	m.	—				
Scarborough	100	W, ○, M.	a, c.	Dover	231	○, M.	—				
Seaham	139	M.	a, c, d.	Dungeness	21	W, M.	a, c.				
Shields	96	W, M.	a, c, d.	Eastbourne	39	○, M.	a.				
Whitby	88	○, M.	a, d.	Eltham	209	m.	—				
York	56	W, ○, M.	a, c, d.	Epsom	160	m.	—				
b. Southern.				Folkestone	121	○, m.	—				
Fulbeck	180	W, m.	a.	Hastings (St. Leonards)	178	W, ○, M.	a, c, d.				
Hull	12	○, M.	a.	Hove	—	○	a.				
Lincoln	58	W, M.	a, d.	Littlestone	—	○	—				
Ranby	124	○, m.	a.	Maidenhead	101	m.	—				
Skegness	12	W, ○, M.	—	Margate	35	W, ○, M.	a, c, d.				
Spurn Head	26	W, M.	a, c.	Marlborough	424	W, ○, M.	a, c.				
<b>3. ENGLAND, E.</b>											
a. Northern.				Matfield	319	m.	—				
b. Southern.				Portsmouth	11	○, M.	a.				
Cromer	196	W, ○, M.	—	Ramsgate	—	○	—				
Geldeston	37	W, ○, M.	a, c, d.	Reading	264	M.	d.				
Hillington	211	W, ○, M.	a, b, c.	Salisbury	180	M.	a, d.				
Lowestoft	88	○, M.	a, d.	Sandown	20	○, m.	—				
Norwich	89	○, M.	d.	Sandown	509	m.	—				
Yarmouth	93	W, m.	a, c.	Southampton	65	W, ○, M.	a, c, d.				
Bennington	406	M.	a, c.	Swartmore	310	W, m.	a, c.				
Berkhamsted	400	○, M.	a, c.	Totland Bay	140	○, m.	a.				
Cambridge	41	W, ○, M.	a, d.	Tunbridge Wells	419	W, ○, m.	a, c.				
Clacton-on-Sea	54	W, ○, M.	—	Ventnor	80	○, M.	a, c.				
Felixstowe	10	W, ○, m.	—	Westbourne	30	○	—				
Rothamsted	424	W, ○, m.	a, c, d.	Wisley, Surrey	150	W, ○, m.	—				
Shoeburyness	13	W, m.	a, d.	Wokingham	216	m.	—				
Southend	90	○, m.	a.	Worthing	36	○, m.	a, c.				
Woburn	291	○, M.	—	<b>LONDON.</b>							
<b>4. MIDLAND COUNTIES.</b>								Bunhill Row (City)	80	○	a.
a. Eastern.				Camden Square	110	○, M.	a, d.				
Bawtry	65	W, m.	a, c.	*Dulwich	170	M.	—				
Belper	222	m.	—	Greenwich	155	W, ○, M.	a, c, d.				
Belvoir Castle	259	○, M.	a, d.	Hampstead	450	M.	—				
Birmingham, Edgbaston	535	W, ○, M.	a, d.	Kew	18	W, ○, M.	a, c, d.				
Bradford	439	○, m.	(d.)	Norwood	220	M.	a.				
Coventry	270	○, M.	a.	Plumstead	300	○	—				
Garforth	195	○, M.	—	South Kensington	31	M.	—				
Harrogate	476	W, ○, m.	a.	Tottenham	51	W, ○, M.	—				
Huddersfield	409	○, M.	—	Westminster	27	W, ○, M.	a.				
Kingston-on-Sovr	125	m.	—	<b>6. SCOTLAND, W. (a.)</b>							
Nottingham	82	W, ○, M.	a.	<b>ISLE OF MAN (b.)</b>							
Oxford	208	W, ○, M.	a, c.	Cally, Gatehouse	120	W, M.	a.				
Raunds	204	W, m.	—	Colmonell	146	W, M.	—				
Rugby	379	m.	a, c.	Dumfries	155	W, M.	a.				
Sheffield	429	○, M.	a, c, d.	Eskdalemuir	799	○, M.	—				
Wakefield	96	M.	a, c.	Glasgow	180	W, ○, M.	a, c, d.				
Winslow	379	m.	—	a. Kilmarnock	90	W, ○, m.	—				
Worksop	56	○, m.	a, d.	Oban	20	○, m.	—				
b. Western.				Poltalloch	132	W, M.	c.				
Bath	M	66	W, ○, M.	Rothesay	173	W, M.	d.				
Buxton	M	987	W, ○, M.	Ruthwell	67	○, m.	—				
Cheadle (Tean)	646	W, m.	a, b, c.	Thorntonhall	440	○, m.	—				
Cheltenham	214	○, M.	a, c.	Douglas	277	W, ○, M.	a, c, d.				
Cirencester	446	W, ○, m.	a, c.	<b>7. a. ENGLAND, N.W.</b>							
Hereford	291	W, m.	a.	Aspatria	250	W, ○, M.	a.				
Mayfield (Staffs)	374	m.	—	Blackpool	66	W, ○, M.	a.				
Shrewsbury	191	W, M.	d.	Burnley	459	○, m.	d.				
Wistanstow	484	M.	—	Carnforth	174	○, m.	—				

\* Dulwich took the place of Norwood from June.

Station.	Height in feet above M.S.L.	Character of information published.	Averages.	Station.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>(b) NORTH WALES.</b>							
Aberdovey	22	O. m.	—	Blackrod Point	37	W. M.	a.
Bettws-y-Coed*	150	W. O. M.	—	Dunfanaghy	54	m.	—
Colwyn Bay	82	O. m.	—	Malin Head	230	W. M.	a, c.
Dwyran†	16	M.	—	Markree Castle	122	W. O. M.	a, b, c.
Holyhead	48	W. M.	a, c.	Armagh	196	W. O. M.	a, c, d.
Llandudno	M	W. O. M.	a, b, c, d.	Belfast	61	O. M.	a, d.
Llaneuengrad	414	M.	—	Donaghadee	40	W. M.	a, c.
Rhyl	30	O. m.	a.				
St. Asaph (St. Beuno's Coll.)	479	m.	—				
<b>8. a. SOUTH WALES.</b>							
<b>b. ENGLAND, S.W.</b>							
Aberystwyth	59	O. m.	—	Clongowes Wood College	245	O. m.	—
Cardiff	203	W. O. M.	a, d.	Dublin, City	47	W. M.	a, b, c.
Haverfordwest	93	O.	—	" Trinity College	12	O. M.	—
Llangammarch Wells	550	W. O. M.	a.	" Phoenix Park	155	O. M.	a, c.
Pembroke (St. Ann's Head)	149	W. O. M.	a, c.	" Glasnevin	67	m.	a, c.
Port Talbot	179	O.	—	Newcastle, Co. Wicklow	256	m.	—
Swansea	24	O. m.	—	Kilkenny	212	W. m.	a, c.
Tenby	79	O.	a.	Kingstown	42	O. m.	—
Arlington	613	W. m.	a, c.	Mountmellick	253	m.	—
Clifton (Bristol)	229	W. O. M.	a, d.	Waterford	20	W. m.	a.
Cullompton	202	W. O. M.	a, c.				
Falmouth	167	W. O. M.	a, c.	Ballinacurra	24	O. m.	—
Forest of Dean	200	m.	—	Birr Castle	175	W. O. M.	a, b, c.
" "	900	m.	—	Cahir	199	W. m.	—
Fowey	51	O. m.	—	Poynes	108	W. m.	a, c.
Newquay	189	O. M.	a, d.	Killarney	174	W. m.	a, c.
Paignton	11	O. m.	—	Limerick	48	M.	—
Penzance	54	O. m.	d.	Roche's Point	32	W. M.	a, c.
Plymouth	116	W. O. M.	a, c.	Valencia	32	W. O. M.	a, c.
Portland Bill	19	W. M.	—				
Salcombe	300	O.	—				
Shaftesbury	722	W. m.	a, d.				
Sheepstor	749	m.	—				
Teignmouth	19	O. m.	—				
Torquay	12	O.	a, d.				
Weymouth	21	O. m.	—				
Whitchurch	593	M.	—				
Woolacombe	59	O. M.	a.				

\* The thermometer screen stands on ground 100 ft. above M.S.L.

† Dwyran took the place of Llaneuengrad in July.

**9. IRELAND, N.**  
**10. IRELAND, S.**

a. Eastern.	—
b. Western.	—
Clongowes Wood College	245
Dublin, City	47
" Trinity College	12
" Phoenix Park	155
" Glasnevin	67
Newcastle, Co. Wicklow	256
Kilkenny	212
Kingstown	42
Mountmellick	253
Waterford	20
Ballinacurra	24
Birr Castle	175
Cahir	199
Poynes	108
Killarney	174
Limerick	48
Roche's Point	32
Valencia	32

**11. ENGLISH CHANNEL.**

Guernsey (Villa Carey)	180	W. O. M.	a.
Brooklyn	297	O. M.	a, c.
Jersey (St. Aubin's)	25	W. M.	a, c.
" (St. Helier's)	—	O.	a.
Scilly	131	W. O. M.	a, c.

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1911, together with the NAMES of their STATIONS :—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Aberdovey	W. J. Eves.	Bradford	H. Lander, for the Corporation.
Aberystwyth	A. Thomas, M.D., for the District Council.	Brighton	D. Forbes, M.D., for the Corporation.
Alnwick Castle	Robert Kyle, for the Duke of Northumberland, K.G.	Broadstairs	Howard Hunt, C.E., for the District Council.
Ampleforth	Rev. R. C. Hesketh, O.S.B.	Bucklebury	J. W. Cook, for A. W. Sutton.
Arlington (N. Devon)	Miss Chichester.	Burnley	Thomas Holt, M.D., for the Corporation.
Armagh	J. L. E. Dreyer, Ph.D., and Staff of Observatory.	Buxton	W. Pilkington.
Aspatria	J. Smith Hill, B.A., B.Sc.	Cahir	R. W. Smith, Junr.
Ballinacurra	John H. Bennett.	Cally Gatehouse	W. Thompson, for Col. F. Murray, Baillie, Syndicate.
Balmoral	J. M. Troup, for J. Michie, M.V.O.	Cambridge	E. Walford, M.D., for the Corporation.
Bairuderry	G. Davie, for J. White.	Cardiff	W. Farmer.
Baltasound	T. Edmonston Saxby, F.R.C.S., Ed.	Cheadle	Col. B. H. Phillips.
Basingstoke	A. M. Pitkin, F.R.G.S.	Cheltenham	A. C. Saxby, for the Corporation.
Bath	W. H. Symons, M.D., for the Corporation.	Christianswood	J. F. Annerley.
Bawtry (Hesley Hall)	B. G. Jackson, for the Corporation.	Cirencester	Prof. W. Kershaw, B.A., for the R. A. College.
Belfast	J. Wyke, B.A., and G. Robinson, for Prof. Morton.	Clifton (the College)	J. W. Shadick, for the Town Council.
Belper	W. H. Divers, for the Duke of Rutland.	Clongowes Wood	D. Rintoul, M.A.
Belvoir Castle	W. W. Tunnicliffe, B.Sc., F.C.S.	College, Cockle Park, near Morpeth.	Rev. J. J. Nerney, S.J., and Rev. C. J. Byrne, S.J.
Bennington	The late Rev. J. Dunne Parker, LL.D., and Miss Parker.	Colmoneell	T. E. W. Dobson, for Northumberland County Council.
Berkhamsted	E. Hawley.	Colwyn Bay	A. Orr, for J. W. McConnell.
Bettws-y-Coed	Hugh Fox, M.D., for the Rural District Council.	Coventry	R. Jones, A.M.I.C.E., for Urban District Council.
Bexhill-on-Sea	G. Brisley, M.P.S., for Rural District Council.	Crathes	E. Hugh Snell, M.D., for the Corporation.
Birmingham (Edgbaston).	Alfred Cresswell, for the Midland Institute.	Crieff	J. Smith.
Blackpool	E. W. Ross Jones, M.D., for the Corporation.	Cromer	George Reid, for Dr. Meikle.
Bognor	H. C. L. Morris, M.D., and A. G. Thompson.	Cullompton	W. H. Archer, for the District Council.
Bournemouth	C. Dales, for the Corporation.		M. T. Foster.

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1911, together with the NAMES of their STATIONS—cont.:

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Darwen - - -	F. G. Lowarth, M.B., for the Corporation.	Newcastle-on-Tyne -	N. H. Martin, F.C.S., F.R.S.E.
Deerness - - -	M. Spence.	Newcastle, Co. Wicklow -	J. T. Crowe, M.D. and C. D. Hanan, M.B., National Hospital for Consumption.
Douglas, Isle of Man - - -	F. Cottle, for the Corporation.	Newquay - - -	C. O. Williams, B.A., M.D., for Urban Council.
Dover - - -	W. C. Hawke, for the Corporation.	Newton Rigg - - -	W. T. Lawrence, for the Cumberland County Council.
Dublin (City) - - -	Sir John W. Moore, M.D.	Nottingham - - -	J. Brown, A.M.L.C.E., City Engineer.
" (Glasnevin) - - -	Sir F. W. Moore, M.R.I.A.	Norwich - - -	A. W. Preston.
" (Phoenix Park) - - -	Dr. J. I. J. Perry, R.E.	Norwood - - -	W. Marriott.
Dulwich - - -	Prof. T. H. Huxley.	Oban - - -	E. Baily, M.B., M.O.H.
Dumfries - - -	W. Marriott.	Oxford - - -	The Radcliffe Observer.
Dundee - - -	C. C. Easterbrook, M.D., Crichton R. Institute.	Paisley - - -	F. J. Rodgers, for Town Council.
Dunfanaghy - - -	J. C. Carnochan.	Plymouth - - -	C. H. Price, for the District Council.
Dunrobin Castle - - -	J. J. MacGrath, L.R.C.P.S.	Poitloch - - -	H. Victor Pring, A.M.L.C.E., for the Corporation.
Dunrossness - - -	D. McVille, for the Duke of Sutherland, K.G.	Portsmouth - - -	D. S. Melville, for Col. E. D. Malcolm, C.B., R.E.
Durham - - -	Rev. W. Wetheringham.	Port Talbot - - -	A. Mearns Fraser, M.D., for the Corporation.
Dwyran - - -	F. C. H. Carpenter.	Ramsgate - - -	Miss Talbot and G. Lipscombe.
Eastbourne - - -	W. E. Sotheby.	Ranby - - -	T. G. Taylor, C.E., for the Corporation.
Eltham - - -	S. R. Henderson, for the Corporation.	Ranby Hall - - -	J. Hope, for General Sir M. Wilson, K.C.B.
Epsom - - -	Miss A. Bramwell, B.Sc.	Raunds - - -	Leon, G. H. Lee.
Felixstowe - - -	Spencer C. Russell.	Reading (Leighton Park School) - - -	C. I. Evans, M.A.
Folkestone - - -	Montague Humphrey, for the Urban District Council.	Rhyl - - -	A. A. Goodall, C.E., for District Council.
Forest of Dean - - -	The Borough Engineer, for the Corporation.	Rochester - - -	The Royal National Trust.
Fort Augustus - - -	V. F. Rose.	Rothschild - - -	D. Penney, for Robert Henderson.
Fortress - - -	Rev. C. van Dieckhoff, O.S.B.	Routon - - -	J. Hanagan, for Sir Hugh Bell, Bart.
Fort William - - -	Alfred Thom, M.A.	Rugby (the School) - - -	Rev. D. E. Shorto, M.A.
Fowey - - -	W. T. Kilgour.	Ruthwell - - -	W. H. Whellens, for A. Johnston Douglas, D.L., J.P.
Foyne - - -	Dr. W. H. Boger.	St Asaph - - -	Rev. J. Rowland, S.J. and Rev. C. Ballon, S.J., B.Sc.
Fulbeck - - -	J. J. Alcorn, for Lord Monteagle, K.P.	Salcombe - - -	The late J. Fairweather, for the Corporation.
Garforth - - -	Rev. Vere F. Wilson, M.A.	Salisbury - - -	Thos. Challis, for the Earl of Pembroke, G.C.V.O.
Gelderton - - -	Prof. Seton, B.Sc., for the Yorkshire College, Leeds.	Sandown - - -	C. E. Gilchrist, for Free Library.
Glasgow - - -	E. T. Dowson.	Scarborough - - -	John Knight, M.D., D.P.H., for the Corporation.
Glencarron - - -	Prof. Becker and the Staff of Observatory.	Seaford - - -	G. A. Atkinson.
Gordon Castle - - -	D. D. Munro.	Sevenoaks - - -	W. Tattersall.
Greenwich - - -	C. Gordon, for the Duke of Richmond and Gordon K.G.	Shaftesbury - - -	Rev. F. Ehlers.
Grenzsey (Villa Carey) - - -	Astronomer Royal.	Sheffield - - -	E. Howarth, F.R.A.S.
" (Fort Road) - - -	F. E. Carey, M.D.	Sheepstor - - -	Rev. H. N. Breton, M.A.
Harrogate - - -	A. Collenette.	Shrewsbury - - -	Supt. of Experiments.
Hastings (St. Leonards) - - -	G. E. Rivers, A.M.L.C.E., for the Corporation.	Skegness - - -	Capt. J. S. Reid, R.E.
Haverfordwest - - -	H. Colborne, M.R.C.S., for the Corporation.	Southampton - - -	S. Coetmore Jones, for the District Council.
Hawarden Bridge-Hereford (Belmont) - - -	J. W. Phillips.	Southend-on-Sea - - -	A. Vaughan, for Director General, Ordnance Survey.
Hillington - - -	The Prior.	Southport - - -	E. J. Elford, C.E., for the Corporation.
Hove - - -	The late Rev. H. E. B. Folkes, M.A.	Stonehaven - - -	J. Baxendell, for the Corporation.
Hoylake - - -	A. Griffith, M.D., M.O.H., for the Corporation.	Stonyhurst - - -	J. Hart, for the Corporation.
Huddersfield - - -	Tom Rock and R. W. Fraser, for U.D. Council.	Stratheffer Spa - - -	R. B. Gregoreaves, S. J. and the Staff of Observatory.
Hull - - -	J. Finch, for the Corporation.	Swansea - - -	H. W. Kaye, B.A., M.B.
Inch - - -	H. H. Witty, for the Corporation.	Swarraton - - -	D. Bliss, for the Corporation.
Kilkenny Castle - - -	J. Bissett.	Tenby - - -	Rev. W. L. W. Eyre, M.A.
Killarney - - -	E. Sutton, for the Marquis of Ormonde, K.P.	Tel�mouth - - -	Teignmouth, for M.O.H.
Kilmarnock - - -	E. W. Griffin, M.D.	Tenby - - -	Miss Mildred B. Truscott, for the Corporation.
Kingston-on-Sooar - - -	Thomas Moffat, for West of Scotland Agricultural College.	Thorntonhall, Lanarkshire - - -	J. Wilson, for A. Henderson Bishop.
Kingstown - - -	Fred Wakerly, for the Midland Agricultural and Dairy College.	Torquay - - -	F. March, for the Corporation.
Kingussie - - -	J. S. Vaughan, L.L.D., for the Corporation.	Tottenham - - -	J. Dove, M.A.
Lancaster - - -	W. V. de Watteville, M.D.	Tunbridge Wells - - -	J. T. Butler-Hogan, M.D., LLD., for District Council.
Llandudno - - -	N. Holden, F.R.A.S., for the Corporation.	Ventnor Hospital - - -	F. G. Smart, M.A., M.B.
Llanegwad - - -	W. Little, for Town Council.	Wakefield - - -	Miss M. Gibson.
Llanymnach Wells - - -	W. E. Sotheby.	Westbourne - - -	Alex French, M.R.C.S., L.R.C.P.
Limerick - - -	W. Blackett, M.D., M.O.H.	West Linton - - -	J. N. White.
Lincoln - - -	Rev. W. O'Leary, S.J.	Weymouth - - -	Rev. L. B. Birkett.
Littlestone-on-Sea - - -	W. Barr, for the Corporation.	Whitby - - -	Rev. J. S. Begg.
London (Bunhill Row) - - -	W. Ryals (for H. T. Tubbs).	Whitborth - - -	I. J. Brown and J. H. Bolam, Hon. Borough Meteorologist.
" (Camden Sq.) - - -	Messrs. De la Rue.	Whitborth - - -	T. Newall, for the Lit. and Phil. Soc.
" (Hammersmith) - - -	H. R. Mill, D.Sc., LL.D.	Whitborth - - -	R. B. Glyde.
Lowestoft - - -	J. G. Waller.	Whitborth - - -	R. A. Easton.
Maidenhurst - - -	Rev. H. B. Workman, D. Lit.	Wimborne - - -	The Superintendent, for the Roy. Hort. Society.
Manchester (Oldham Road) - - -	C. W. Edwards, for the Corporation.	Wistaston - - -	Rev. W. M. D. LaTouche, B.A.
Manchester (Prestwich) - - -	F. Gore, for the Medical Superintendent of the Asylum.	Woburn - - -	H. M. Freear, F.C.S., for the Royal Agricultural Society.
Manchester (Whitworth Pk.) - - -	Professor Rutherford and W. L. Lansbury, for the University of Manchester.	Wokingham - - -	The Medical Superintendent of the Sanatorium.
Marchmont - - -	J. A. Wood, for Sir J. H. P. Hume-Campbell, Bt.	Woolacombe - - -	T. S. Watkinson.
Marquette - - -	J. M. Colkitt, J.P., for the Corporation.	Worksop - - -	Lt.-Col. H. Mellish, J.P.
Markree Castle - - -	J. R. Armstrong, for Captain Cooper.	Worthing - - -	R. H. Wilshaw, M.B., D.P.H., for the Corporation.
Marlborough - - -	Meddows Taylor and G. G. Beecher, for the College.	York (Museum) - - -	Oxley Graham, M.A., for the York Phil. Soc.
Matfield - - -	D'Arcy Reeve.	" (Bootham) - - -	H. Richardson, M.A.
Mayfield - - -	G. C. Lawson.		
Mountmellick - - -	W. A. Robinson.		

Meteorological Office,  
London, S.W.,

FOR OFFICIAL USE.

M.O. 209b.

THE

# MONTHLY WEATHER REPORT

OF THE

METEOROLOGICAL OFFICE

FOR THE YEAR

1912

ISSUED AS A SUPPLEMENT TO THE

## WEEKLY WEATHER REPORT

(VOL XXIX.-NEW SERIES)

AND FORMING

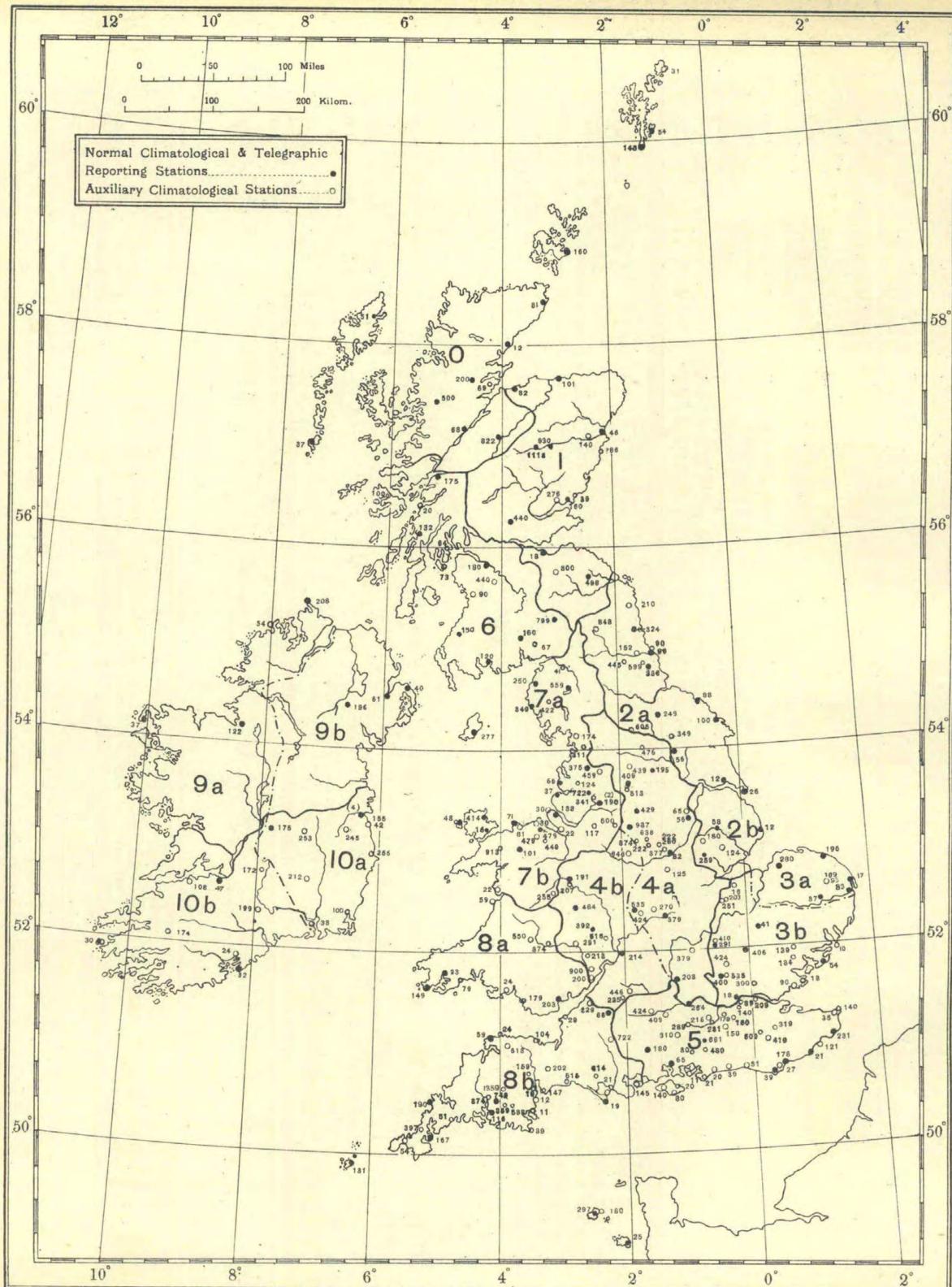
PART II. OF THE BRITISH METEOROLOGICAL AND MAGNETIC  
YEAR BOOK, 1912.

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Published by the Authority of the Meteorological Committee.

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MONTHLY WEATHER REPORT, POSITIONS AND HEIGHTS OF STATIONS, 1912.



Ordnance Survey, Southampton, 1912.

Scale 1:5,000,000.

The heights of the stations above Mean Sea Level are inserted against the positions, and will serve to identify the names of the stations as given in the List of Stations on pp. V, VI. and VII.

the Beaufort Scale from 1906), the number of days of fog (from 1906), the number of days of ground frost (minimum temperatures on the grass, 30° and below, from 1908), and the mean value of the pressure at Mean Sea Level (1912). The differences from the average in the case of pressure, temperature, rainfall and sunshine are included for those places for which averages are available.

III. Abridged summaries of extremes of temperature, rainfall, sunshine, earth temperatures, grass minimum temperatures, and weather phenomena for auxiliary climatological stations, together with differences from the average where averages are available.

IV. A plate of four maps showing :—

- i. The monthly distribution of pressure and winds based on the morning observations at telegraphic reporting stations ; also the average distribution of pressure for the month for the period 1871-1905.
- ii. The movements of depressions.
- iii. The distribution of mean temperature over the land and in the coastal waters.
- iv. The distribution of bright sunshine. This map was added for the first time in the issue for 1908.

V. A full page map showing by means of isohyetal lines the distribution of the month's precipitation. These maps are prepared by Dr. H. R. Mill, the Director of the British Rainfall Organization, and are based on data from nearly 1,000 stations.

VI. Summaries for the twelve districts of the temperature of the air, rainfall and duration of bright sunshine based on observations at the stations of the Weekly Weather Report. Summaries of the amount of cloud, and of the temperature of the earth and the extreme values of pressure are also included.

VII. Additional values of sunshine and rainfall for a few stations not included in the general tables.

VIII. Notes explanatory of the methods used in dealing with the observations for the preparation of the statistical tables.

LIST OF STATIONS.

The Stations included in the Monthly Weather Report and in the Weekly Weather Report are shown in the following list, arranged under the Districts. The positions of the stations may be identified on the accompanying map by the numbers which give their heights in feet above the Mean Sea Level.

*Height above Mean Sea Level.*—The figures given in this column refer, in general, to the height of the ground on which the rain gauge stands. At Sunshine Stations which do not possess a rain gauge, the height refers to the sunshine recorder.

*Nature of Information published.*—The character of the information given for each station is indicated by the following symbols :—

- W. Weekly Weather Report. Temperature and rainfall data.
- Bright Sunshine data.
- M. Monthly Weather Report. Full summary in the international form.
- m. Monthly Weather Report. Abridged summary of temperature and rainfall.

*Average Values.*—Reference is made to Publications of the Office containing average values for long periods by means of the following letters :—

- a. Appendix III. of the Weekly Weather Report for 1906. Monthly averages of mean maximum, mean minimum and mean temperature, and of rainfall for the 35 years 1871-1905 and (when available) of bright sunshine for the twenty-five years 1881-1905.
- b. Appendix I. to the volume of "Meteorological Observations at Stations of the Second Order" for 1891. Monthly averages for all elements for the fifteen years 1876-1890.
- c. "Temperature Tables of the British Islands," 1871-1900. Monthly average of mean maximum, mean minimum and mean temperature generally for the thirty years 1871-1900, together with information on the extremes of temperature in the same period.
- d. "Rainfall tables of the British Islands," Part I., 1866-80, Part II., 1880-90. Monthly averages of rainfall for lustra and for the periods named.

*Royal Observatory, Greenwich.*—The averages for Temperature and Rainfall, with which the current values are compared, are for the 65 years 1841-1905. The averages for sunshine are for the period 1897-1911.

The summary of wind direction is based upon continuous records and the numbers given are proportional to the actual recorded duration for the whole month of wind from the different directions.

The summary of wind force is obtained from the records of a cup anemograph having 5 in. cups and 15 in. arms. The factor used is 3. Winds above 37 miles per hour are reckoned as gales and winds between 21 and 37 miles per hour as strong winds.

*Radcliffe Observatory, Oxford.*—The averages with which the figures given in the second line are compared, are for the 57 years 1855-1911 in the case of pressure, and for the 97 years 1815-1911 in that of rainfall. The values for the current months given in this second line are the means of observations at 8 a.m., Noon, and 8 p.m., reduced to mean daily values by the application of monthly corrections based on observations during the periods 1880-1887 and 1900-1905. The value given under the heading "Cloud" is the mean of observations at 8 a.m., Noon, and 8 p.m. The total rainfall is taken from the daily readings of the self-recording rain gauge, which correspond to the civil day ending at midnight.

*Meteorological Societies.*—Data for stations marked **S** are supplied by the Scottish Meteorological Society.  
Stations marked **S** are in connection with the Society as well as with the Office.

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>O. SCOTLAND, N.</b>							
<i>a. Islands.</i>							
<i>b. Mainland.</i>							
Baltasound	S 31	W, $\odot$ , m.	—	Cromer	196	W, $\odot$ , M.	—
Castlebay, Barra Island	38	W, $\odot$ , M.	—	Geldiston	37	W, $\odot$ , M.	<b>a, c, d.</b>
Deerness	S 160	$\odot$ , M.	<b>a, b, c.</b>	Hillington	88	W, $\odot$ , M.	<b>a, b, c.</b>
Dunrossness	145	m.	—	Little Massingham	280	W, $\odot$ , M.	—
Lerwick*	52	W, M.	<b>a, c.</b>	Lowestoft	89	$\odot$ , M.	<b>a, d.</b>
Stornoway	51	W, $\odot$ , M.	<b>a, c.</b>	Norwich	93	W, m.	<b>d.</b>
<b>b. SCOTLAND, E.</b>							
Dunrobin Castle	12	M.	<b>c, d.</b>	Peterborough (Eys)	—	—	—
Fort Augustus	68	W, $\odot$ , M.	<b>a, c.</b>	Yarmouth	12	W, $\odot$ , M.	<b>a, c.</b>
Fort William	171	W, M.	<b>a, c.</b>	<b>3. ENGLAND, E.</b>			
Fortrose	69	$\odot$ , m.	—	Bennington	406	M.	<b>a, c.</b>
Glencarron	500	W, M.	<b>a, c.</b>	Berkhamsted	400	$\odot$ , M.	<b>a, c.</b>
Kingussie	828	M.	<b>a.</b>	Cambridge	41	W, $\odot$ , M.	<b>a, d.</b>
Strathpeffer Sp.	200	W, $\odot$ , M.	<b>a.</b>	Clacton-on-Sea	134	m.	—
Wick	68	W, M.	<b>a, c.</b>	Felixstowe	54	W, $\odot$ , M.	—
<b>1. SCOTLAND, E.</b>							
Aberdeen	46	W, $\odot$ , M.	<b>a, c.</b>	Halstead	10	W, $\odot$ , m.	—
Balmoral	927	W, M.	—	Hemel Hempstead	139	m.	—
Balruddery	276	$\odot$ , m.	—	Rothamsted	555	—	—
Braemar	—	M.	<b>a, c.</b>	Shoeburyness	424	W, $\odot$ , m.	<b>a, c, d.</b>
Carnoustie	—	—	—	Southend	13	W, m.	<b>a, d.</b>
Crathes	S 140	$\odot$ , m.	—	Woburn	291	$\odot$ , M.	—
Crieff	432	W, M.	—	<b>4. MIDLAND COUNTIES.</b>			
Dundee	160	M.	<b>c, d.</b>	<i>a. Eastern.</i>			
Gordon Castle	101	W, $\odot$ , M.	<b>c, d.</b>	Bawtry	65	W, m.	<b>a, c.</b>
Leith	18	W, M.	<b>a, c.</b>	Belper	222	m.	—
Marchmont	498	W, $\odot$ , M.	<b>a, c.</b>	Belper (Quarry Bank)	280	m.	—
Nairn	82	W, $\odot$ , M.	<b>a, c.</b>	Belvoir Castle	259	$\odot$ , M.	<b>a, d.</b>
Stonehaven	86	$\odot$ , m.	—	Birmingham, Edgbaston	535	W, $\odot$ , M.	<b>a, d.</b>
West Linton	S 800	W, $\odot$ , m.	—	Bradford	439	$\odot$ , m.	(d.)
<b>2. ENGLAND, N.E.</b>				Buxton	987	W, $\odot$ , M.	<b>a, b.</b>
<i>a. Northern.</i>				Coventry	270	$\odot$ , M.	<b>a.</b>
Alnwick Castle	210	W, m.	<b>a.</b>	Garforth	195	$\odot$ , M.	—
Ampleforth	349	m.	—	Harrogate	476	W, $\odot$ , m.	<b>a.</b>
Bellingham	848	m.	—	Huddersfield	409	$\odot$ , M.	—
Chopwellwood	445	$\odot$ , m.	—	Kingston-on-Soar	125	m.	—
Cockle Park	324	$\odot$ , M.	<b>a.</b>	Matlock	636	m.	—
Durham	336	W, $\odot$ , M.	<b>a, b, c.</b>	Meltham	513	m.	—
Newcastle	152	$\odot$ , m.	<b>a.</b>	Nottingham	82	W, $\odot$ , M.	<b>a.</b>
Routon	249	W, M.	<b>c.</b>	Oxford	208	W, $\odot$ , M.	<b>a, c.</b>
Scarborough	100	W, $\odot$ , M.	<b>a, c.</b>	Raunds	204	W, m.	—
Shields	96	W, M.	<b>a, c, d.</b>	Rugby	379	m.	<b>a, c.</b>
Tynemouth	90	m.	—	Sheffield	429	$\odot$ , M.	<b>a, c, d.</b>
Ushaw	599	m.	—	Sparkhill	425	m.	—
West Witton	605	W, m.	<b>a, d.</b>	Strelley	377	m.	—
Whitby	88	$\odot$ , M.	<b>a, c, d.</b>	Thrapston	251	$\odot$ , m.	—
York	56	W, $\odot$ , M.	—	Wakefield	96	M.	<b>a, c.</b>
<i>b. Southern.</i>				Winslow	379	m.	—
Fulbeck	180	W, m.	<b>a.</b>	Worksop	56	$\odot$ , m.	<b>a, d.</b>
Hull	12	$\odot$ , M.	<b>a.</b>	<i>b. Western.</i>			
Lincoln	58	W, M.	<b>a, d.</b>	Bath	66	W, $\odot$ , M.	<b>a.</b>
Raunds	124	$\odot$ , m.	<b>a.</b>	Bronyard	393	m.	—
Skegness	12	W, $\odot$ , M.	—	Cheadle (Tean)	646	W, m.	<b>a, b, c.</b>
Spurn Head	26	W, M.	<b>a, c.</b>	Cheltenham	214	$\odot$ , M.	<b>a, c.</b>

\* Lerwick. Averages used are computed from the values for Sumburgh Head.

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>5. ENGLAND, S.E.</b>							
Aldershot	231	m.	—	Aspatria	250	W, ○, M.	a.
Basingstoke	289	m.	—	Blackpool	66	W, ○, M.	a.
Bexhill-on-Sea	27	○, m.	—	Burnley	459	○, m.	d.
Bognor	20	○, m.	—	Carnforth	174	○, m.	—
Bournemouth	145	○, m.	—	Darwen	722	○, M.	—
Brighton	31	○, M.	a, d.	Egremont	354	○, M.	—
Broadstairs	140	○, m.	—	Hawarden Bridge	22	W, m.	a.
Bucklebury	409	m.	—	Hoylake	? 30	○, m.	a.
Croydon (Addington)	472	m.	—	Lancaster	311	○, m.	—
Dover	231	○, M.	—	Leyland	124	○, m.	—
Dungeness	21	W, M.	a, c.	Liverpool (Bidston Obs.)	188	W, ○, M.	a, c.
Eastbourne	39	○, M.	a.	Macclesfield	500	m.	—
Eltham	209	m.	—	Manchester (Oldham Road)	19c	○, M.	a.
Folkestone	121	○, m.	—	" (Whitworth Park)	125	○, M.	—
Grayshott	661	○, M.	—	Newton Rigg	559	W, ○, M.	a.
Hastings (St. Leonards)	178	W, ○, M.	a, c, d.	Northwich	117	m.	—
Hove	—	○	—	Seacley	41	m.	—
Littlestone	—	○	a.	Seathwaite	422	m.	—
Malmesbury	235	m.	—	Southport	37	○, M.	a.
Margate	35	W, ○, M.	a, c, d.	Stonyhurst	375	W, ○, M.	a, c, d.
Marlborough	424	W, ○, M.	a, c.				
Matfield	319	m.	—				
Midhurst	480	○, m.	—				
New Malden	39	○, m.	—				
Portsmouth	11	○, M.	a.				
Ramsgate	—	○	—				
Reading	264	M.	d.				
Salisbury	180	M.	a, d.				
Sandown	20	○, m.	—				
Selsey Bill	21	○, m.	—				
Sevenoaks	509	m.	—				
Southampton	65	W, ○, M.	a, c, d.				
Swarraton	310	W, m.	a, c.				
Totland Bay	140	○, m.	a.				
Tunbridge Wells	419	W, ○, M.	a, c.				
Ventnor	80	○, M.	a, c.				
Wallington	144	m.	—				
Westbourne	30	○	—				
Wisley, Surrey	150	W, ○, M.	—				
Woking	180	m.	—				
Wokingham	216	m.	—				
Worthing	36	○, m.	a, c.				
<b>LONDON.</b>							
Bunhill Row (City)	80	○	a.				
Camden Square	110	○, M.	a, d.				
Enfield	203	○, m.	—				
Greenwich	155	W, ○, M.	a, c, d.				
Golden Green	233	m.	—				
Hampstead	450	M.	—				
Hampstead (Redington Rd.)	375	m.	—				
Kew	18	W, ○, M.	a, c, d.				
Plumstead	300	○	—				
South Kensington†	31	M.	—				
Tottenham	51	W, ○, M.	—				
Westminster	27	W, ○, M.	a.				
<b>6. SCOTLAND, W. (a) ISLE OF MAN (b)</b>							
Ardnam	64	m.	—				
Cally, Gatehouse	120	W, M.	a.				
Colmonell	146	W, M.	—				
Dumfries	155	W, M.	a.				
Eskdalemuir	799	○, M.	—				
Glasgow	180	W, ○, M.	a, c, d.				
Kilmarnock	90	W, ○, M.	—				
Oban	20	○, m.	—				
Poltalloch	132	W, M.	c.				
Rothesay	173	W, M.	c, d.				
Ruthwell	67	○, m.	—				
Thorntonhall	440	○, m.	—				
Douglas	277	W, ○, M.	a, c, d.				
<b>7. a. ENGLAND, N.W.</b>							
Aspatria	250	W, ○, M.	a.				
Blackpool	66	W, ○, M.	a.				
Burnley	459	○, m.	d.				
Carnforth	174	○, m.	—				
Darwen	722	○, M.	—				
Egremont	354	○, M.	—				
Hawarden Bridge	22	W, m.	a.				
Hoylake	? 30	○, m.	a.				
Lancaster	311	○, m.	—				
Leyland	124	○, m.	—				
Liverpool (Bidston Obs.)	188	W, ○, M.	a, c.				
Macclesfield	500	m.	—				
Manchester (Oldham Road)	19c	○, M.	a.				
" (Whitworth Park)	125	○, M.	—				
Newton Rigg	559	W, ○, M.	a.				
Northwich	117	m.	—				
Seacley	41	m.	—				
Seathwaite	422	m.	—				
Southport	37	○, M.	a.				
Stonyhurst	375	W, ○, M.	a, c, d.				
<b>b. NORTH WALES.</b>							
Aberdovey	22	○, m.	—				
Bettws-y-Coed*	150	W, ○, M.	—				
Colwyn Bay	82	○, m.	—				
Dwyran	16	M.	—				
Holyhead	48	W, M.	a, c.				
Llanberis (Pen-y-gwryd)	913	m.	—				
Llandudno	89	W, ○, M.	a, b, c, d.				
Rhyl	30	○, m.	a.				
Ruthin	449	m.	—				
St. Asaph (St. Beuno's Coll.)	479	m.	—				
Welshpool	255	m.	—				
<b>8. a. SOUTH WALES. ENGLAND, S.W.</b>							
Aberystwyth	59	○, m.	—				
Cardiff	203	W, ○, M.	a, d.				
Gwernyfed	374	m.	—				
Haverfordwest	93	○	—				
Llangammarch Wells	550	W, ○, M.	a.				
Pembroke (St. Ann's Head)	149	W, ○, M.	a, c.				
Port Talbot	179	○	—				
Swansea	24	○, m.	—				
Tenby	79	○	a.				
Arlington	613	W, m.	a, c.				
Ashburton	583	m.	—				
Clifton (Bristol)	229	W, ○, m.	a, d.				
Cullompton	202	W, ○, m.	a, c.				
Dorchester	314	○, m.	—				
Falmouth	167	W, ○, M.	a, c.				
Forest of Dean	200	m.	—				
" "	900	○, m.	—				
Fowey	51	○, m.	—				
Ilfracombe	394	○, m.	—				
Killerton	24	○, m.	—				
Minehead	160	m.	—				
Newquay	104	○, m.	—				
Paignton	189	○, M.	—				
Penzance	11	○, m.	—				
Plymouth	54	○, m.	d.				
Portland Bill	116	W, ○, M.	a, c.				
Princetown	19	W, M.	—				
Redruth	1,359	m.	—				
	397	m.	—				

\* The thermometer screen stands on ground 100 ft. above M.S.L.

† The thermometer screen is 60 ft. above the ground.

Station.	Height in feet above M.S.L.	Character of information published.	Averages.	Station.	Height in feet above M.S.L.	Character of information published.	Averages.				
<b>8. b. ENGLAND, S.W. continued.</b>											
Rousdon	515	○, m.	—	Clongowes Wood College	245	○, m.	—				
Salcombe	300	○	—	Dublin, City	47	W, M.	a, b, c.				
Shaftesbury	722	W, m.	a, d.	" Trinity College	12	○, M.	—				
Shepton	749	m.	—	" Phoenix Park	155	○, M.	a, c.				
Sidmouth	147	m.	—	" Glasnevin	67	m.	a, c.				
Tavistock	374	m.	—	Newcastle, Co. Wicklow	256	m.	—				
Teignmouth	19	○, m.	—	Kilkenny	212	W, m.	a, c.				
Torquay	12	○	a, d.	Kingstown	42	○, m.	—				
Weston-super-Mare	29	○, m.	—	Mountmellick	253	m.	—				
Weymouth	21	○, m.	—	Waterford	20	W, m.	a.				
Woolacombe	59	○, M.	a.	Waterford (Training College)	20	m.	—				
<b>9. IRELAND, N.</b>											
a. Western.											
b. Eastern,											
Black sod Point	37	W, M.	a.	Ballinacurra	24	○, m.	—				
Dunfanaghy	54	m.	—	Birr Castle	175	W, ○, M.	a, b, c.				
Malin Head	230	W, M.	a, c.	Cahir	199	W, m.	—				
Markree Castle	122	W, ○, M.	a, b, c.	Foynes	108	W, m.	a, c.				
Newtownforbes	167	m.	—	Killarney	174	W, m.	a, c.				
Armagh	196	W, ○, M.	a, c, d.	Limerick	48	M.	—				
Belfast	61	○, M.	a, d.	Roche's Point	32	W, M.	a, c.				
Donaghadee	40	W, M.	a, c.	Valencia	32	W, ○, M.	a, c.				
Donabate	55	m.	—	<b>10. IRELAND, S.</b>							
a. Eastern.											
b. Western.											
Clongowes Wood College	245	○, m.	—	Guansey (Villa Carey)	180	W, ○, m.	a.				
Dublin, City	47	W, M.	—	Brooklyn	297	○, M.	a, c.				
" Trinity College	12	○, M.	—	Jersey (St. Aubin's)	25	W, M.	a, c.				
" Phoenix Park	155	○, M.	—	" (St. Helier's)	—	○	a.				
" Glasnevin	67	m.	—	Scilly	131	W, ○, M.	a, c.				
Newcastle, Co. Wicklow	256	m.	—	<b>11. ENGLISH CHANNEL.</b>							
Kilkenny	212	W, m.	—								
Kingstown	42	○, m.	—								
Mountmellick	253	m.	—								
Waterford	20	W, m.	a.								
Waterford (Training College)	20	m.	—								
Wexford	99	m.	—								

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1912, together with the NAMES of their STATIONS :—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Aberdovey	W. J. Eves.	Brighton	D. Forbes, M.D., for the Corporation.
Aberystwyth	A. Thomas, M.D., for the Urban Council.	Broadstairs	Howard Hurd, Q.E., for the District Council.
Aldershot	E. W. Routley, M.D., M.R.C.P.	Bromyard	T. V. Philpott, M.A., and Miss Philpott.
Alnwick Castle	Robert Kyle, for the Duke of Northumberland, G.B.	Bromsgrove	G. W. Nye, for A. W. Sutton.
Ampleforth	Rev. H. de Normanville, O.S.B.	Burnley	Thos. Holt, M.D., for the Corporation.
Ardnadam	The Rev. J. Cairns Mitchell, B.D.	Buxton	W. Pilkington.
Arlington (N. Devon)	Miss Chichester.	Cahir	R. W. Smith, Junr.
Armagh	J. L. E. Dreyer, Ph.D., and Staff of Observatory.	Cally Gatehouse	R. Thomson, for Col. F. Murray Baillie.
Ashton	J. S. Amery.	Cambridge	R. Irwin Lynch, M.A., for the Botanic Garden Syndicate.
Aspatria	J. Smith Hill, B.A., B.Sc.	Cardiff	E. Walford, M.D., for the Corporation.
Ballinacurra	John H. Bennett.	Carnforth	Farnham
Balmoral	J. M. Troup, for J. Michie, M.V.O.	Carmarthe	R. Sinclair, C.E.
Balrudery	G. Davie, for J. Martin White.	Chesterfield	R. Horne, for Col. B. H. Philips.
Baltasound	T. Edmonston Saxby, F.R.C.S. Ed.	Cheltenham	Dr. Thresh.
Basingstoke	T. M. Phillips, F.R.C.S., and T. Y. Philpott, M.A.	Chopwellwood	A. C. Saxby, for the Corporation.
Bath	W. H. Symons, M.D., for the Corporation.	Cirencester	J. F. Annand and J. McLaren.
Bawtry (Hesley Hall)	B. L. Whitaker, J.P.	Clacton-on-Sea	Prof. M. Kershaw, B.A., for the R. A. College.
Belfast	I. Wylie, B.A., and G. Robinson, for Prof. Morton.	Clifton (the College)	A. W. Smith, for the Urban District Council.
Belper	J. W. Tunnicliffe, B.Sc., F.C.S.	Clongowes Wood	D. Birrell, M.A.
Belper (Quarry Bank)	John Hunter.	Cockle Park, near Morpeth	Rev. J. Neary, S.J.
Belvoir Castle	W. G. Smith, for the Duke of Rutland.	Colmonell	R. Thornton, for Northumberland County Council.
Bellingham	Capt. C. Morrison Bell.	Colwyn Bay	A. Ogg, for J. W. McConnell.
Bennington	The late Rev. J. Dunne Parker, LL.D., and Miss Parker.	Cromarty	W. J. Smith, A.M.I.C.E., for Urban District Council.
Berkhamsted	E. Mawley.	Crathes	E. Hugh Snell, M.D., for the Corporation.
Bettws-y-Coed	Hugh W. Fox, M.D., for the Rural District Council.	Crief	J. Smith.
Bexhill-on-Sea	G. Briley, M.P.S., for Rural District Council.	Cromer	George Reid, for Dr. Meikle.
Birmingham (Edgbaston)	Alfred Cresswell, for the Midland Institute.	Croydon (Addington)	W. H. Archer, for the District Council.
Blackpool	E. W. Rees Jones, M.D., for the Corporation.	Cullompton	Borough Engineer.
Bognor	A. G. Thompson.	Darwen	M. T. Foster.
Bolton	Thos. Midgley.	Deerness	F. G. Haworth, M.B., for the Corporation.
Bournemouth	C. Dales, for the Corporation.	Dorchester	M. Spence.
Bradford	H. Lander, for the Corporation.		H. D. Strange.
Braemar	A. M. Shirran.		

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1912, together with the NAMES of their STATIONS—cont.:

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Douglas, Isle of Man	F. Cottle, for the Corporation.	Macclesfield	John Dale.
Dover	W. C. Hawke, C. E., for the Corporation.	Malmesbury	G. Deadman, for C. E. Bertodano.
Dublin (City)	Sir John W. Moore, M.D., D.Sc.	Malvern	A. Mander, F.C.S.
" (Glennevin)	Sir W. Moore, M.R.I.A.	(Oxford Road)	J. Niven, M.A., M.B., for the Corporation.
" (Phoenix Park)	Mr-Cdr. C. O. J. Perry, R.E.	Manchester	Professor Rutherford and W. T. Lantsberry, for the University of Manchester.
" (Trinity College)	Prof. Thrift.	Marchmont	J. A. Wood, for Sir J. H. P. Hume-Campbell, Bt.
Dumfries	C. C. Easterbrook, M.D., Crichton R. Institute.	Margate	J. Stokes, J.P., for the Corporation.
Dundee	J. Carnochan.	Marek Castle	J. R. Armstrong, for Captain Cooper.
Dunfanaghy	J. J. MacGrath, L.R.C.P.	Marlborough	G. G. Barker, M.A., and Meddowes Taylor, for the College.
Dunrobin Castle	Mr Melville, for the Duke of Sutherland, K.G.	Matfield	D'Arcy Reeve.
Dunrossness	Bew W. Fotheringham.	Matlock	J. D. Evans.
Durham	F. C. H. Carpenter, M.A.	Mayfield	G. C. Lawson.
Dwyryd	W. E. Sotheby.	Meltham	C. L. Brooke.
Eastbourne	S. R. Henderson, for the Corporation.	Midhurst	The Medical Superintendent.
Egremont	J. W. Sherwin.	Minehead	E. A. Jones, for R. Shafto Adair.
Eltham	Miss A. Bramwell, B.Sc.	Mountmellick	W. A. Robinson.
Enfield	W. P. Warren.	Newcastle, Co. Wicklow	C. D. Hanan, M.B., National Hospital for Consumption.
Felixstowe	Montague Humphrey, for the Urban District Council.	New Malden	W. J. Carter.
Folkestone	The Borough Engineer, for the Corporation.	Newquay	C. G. Edwards, B.A., M.D., for Urban Council.
Forest of Dean	V. F. Leese.	Newton Rigg	W. T. Lawrence, for the Cumberland County Council.
Fort Augustus	Rev. C. von Dieckhoff, O.S.B.	Newtonforbes	J. A. Boyle, for the Earl of Granard.
Fortrose	Archd. Thom, M.A.	Northwick	J. A. Samer.
Forres	W. T. Langford.	Nottingham	A. Brown, A.M.I.C.E., City Engineer.
Fowey	Dr. W. H. Boger.	Norwich	A. W. Preston.
Foyntons	J. Alcorn, for Lord Monteagle, K.P.	Norwich (Southwell)	J. H. Willis.
Fulbeck	J. Charlton, for W. V. R. Fane.	Oban	E. Baily, M.B., M.O.H.
Garforth	Prof. Seton, B.Sc., for the University of Leeds.	Oxford	The Radcliffe Observer.
Geddesden	E. T. Howson.	Paignton	A. J. Holman, for Town Council.
Glasgow	Prof. L. Becker, Ph.D., and the Staff of Observatory.	Penzance	C. H. Benn, for the District Council.
Glencarrown	D. D. Munro.	Peterborough (Rye)	S. W. Egan.
Golders Green	J. W. Duncan, and the Secretary, Hampstead Garden Suburb Trust.	Plymouth	H. Victor Prigg, A.M.I.C.E., for the Corporation.
Gordon Castle	C. Webster, for the Duke of Richmond and Gordon.	Pettalach	D. McEvilly, for Col. E. D. Malcolm, C.B., R.E.
Grayshott	Mrs. C. Lyndon	Portsmouth	A. Mearns Fraser, M.D., for the Corporation.
Greenwich	The Astronomer Royal.	Port Talbot	Miss Talbot and G. Lipscombe.
Guernsey (Villa Carey)	F. E. Carey, M.D.	Princetown	G. Berry.
" (Fort Road)	A. Collenette.	Ramsgate	T. G. Taylor, C.E., for the Corporation.
Gwernyfed	J. Slade.	Ranecoeby Hall	J. Hope, for the late General Sir M. Willson, K.C.B., and the Rev. Y. F. Willson.
Halstead	E. T. Adams, F.R.A.S.	Raunds	Leon, G. H. Lee.
Hampstead	E. L. Hawke, for the Hampstead Scientific Society.	Reading (Leighton Park School)	C. L. Evans, M.A.
Hampstead (Redington Road)	H. W. Braby, B.A.	Redruth	A. P. Jenkins.
Harrogate	C. E. Rivers, A.M.I.C.E., for the Corporation.	Rhyl	A. A. Goodall, C.E., for District Council.
Hastings (St. Leonards)	H. Colborne, M.R.C.S., for the Corporation.	Ross	H. Southall, J.P.
Haverfordwest	J. W. Phillips.	Rothamsted	The Lawes Agricultural Trust.
Hawarden Bridge	John Summers & Sons, Ltd.	Rothesay	D. Penney, for Robert Henderson.
Hemel Hempstead	Elliott Kitchener, M.A.	Rounton	J. Hanagan, for Sir Hugh Bell, Bart.
Hereford (Belmont)	The Prior and Rev. J. C. Maddox, O.S.B.	Rousdon	G. Grover, for Hon. Lady Peck.
Hill	Col. G. G. G. G. for the Corporation.	Roxburgh (the School)	R. G. Short, M.A.
Hoylake	R. W. Fraser, for U.D. Council.	Ruthin	Dr. G. A. Grace-Court.
Huddersfield	J. Firth, for the Corporation.	Ruthwell	W. H. Whellicens, for A. Johnstone Douglas, D.L., J.P.
Hull	H. B. Witty, for the Corporation.	St. Asaph	Rev. J. Rowland, S.J., and Rev. R. Adamson, S.J., B.Sc.
Iffracombe	O. M. Prouse, A.M.I.C.E.	Salcombe	Capt. John Partridge.
Kilkenny Castle	E. Sutton, for the Marquis of Ormonde, K.P.	Salisbury	Thos. Challis, for the Earl of Pembroke, G.C.V.O.
Killarney	E. W. Griffin, M.D.	Sandown	C. E. Gilchrist, for Free Library.
Killerton	J. P. Linton, for Sir T. D. Acland, Bart.	Scalby	Sir R. A. Allison, J.P., D.L.
Kilmarnock	B. P. Bayly, for West of Scotland Agricultural College.	Scarborough	John Bright, M.D., D.P.H., for the Corporation.
Kingston-on-Sovar	Fred Wakerly, for the Midland Agricultural and Dairy College.	Seaford	A. Pepperell.
Kingston upon Hull	J. S. Vaughan, LL.D., for the Corporation.	Selsey Bill	E. Heron Allen.
Kingussie	W. de Watteville, M.D.	Sevenoaks	W. Tattersall.
Lancaster	N. Holden, F.R.A.S., for the Corporation.	Shaftesbury	Rev. F. Ehlers.
Leyland	H. Nowell Flarington.	Sheffield	E. Howarth, F.R.A.S.
Llanberis	A. Lockwood.	Sheffield	Rev. H. C. H. M.A.
Llandudno	W. Little, for Town Council.	Shrewsbury	Sur. of Experiments.
Llanymarcho Wells	Rev. Black Davies, M.D., M.O.H.	Sidmouth	Capt. C. S. Reid, R.E.
Limerick	Rev. W. O'Leary, M.A.	Skegness	Miss C. S. Radford.
Lincoln	W. Barr and H. Hoe, for the Corporation.	Southampton	S. Coetmore Jones, for the District Council.
Little Massingham	Rev. H. L. Breerton.	Southport	A. Vaughan, for Director General, Ordnance Survey.
Littlestone-on-Sea	W. Ryals (for H. T. Tubbs).	Southend-on-Sea	E. H. Elford, C.E., for the Corporation.
London (Bunhill Row)	T. De la Rue & Co., Ltd.	Sparkhill	J. Baddeley, for the Corporation.
" (Camden Sq.)	H. R. Mill, D.Sc., LL.D.	Stonehaven	D. H. Owen.
" (Plumstead)	J. G. Waller.	Stonyhurst	J. Hart, for the Corporation.
" (Westminster)	Rev. H. B. Workman, D. Lit.	Strelley	Rev. W. Sidgreaves, S. J. and the Staff of Observatory.
Lowestoft	C. W. Edwards, for the Corporation.	Stratpfeffer Spa	T. L. K. Edge.
		Swansea	H. W. Kaye, B.A., M.B.
		Swarraton	D. Bliss, for the Corporation.
			Rev. W. L. W. Eyre, M.A.

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Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Taystock	W. J. Monk.	Welshpool	W. E. Whitehouse and W. H. Brooks.
Telmmouth	G. Rossiter, for M.O.H.	Westbourne	Rev. L. B. Birkett.
Tenby	Miss Mildred B. Truscott, for the Corporation.	West Linton	Rev. J. S. Beagg.
Thorntonhall,	J. Wilson, for A. Henderson Bishop.	Weston-Super-Mare	Sydney C. Smith.
Lanarkshire.		West Witton	J. J. Espin.
Thrapston	E. N. Plevins.	Wixford	Charles Bain.
Torquay	F. Mason, for the Corporation.	Weymouth	I. J. Brown and J. H. Bolam, Hon. Borough Meteorologist.
Torrey Bay	J. D. Lever, M.A.	Whitby	The Literary and Philosophical Society.
Tottenham	The Medical Officer, for District Council.	Winslow	R. A. Easton.
Tunbridge Wells	The late F. G. Smart, M.A., M.B.	Wisley	The Secretary, for the Roy. Hort. Society.
Tynemouth	J. E. Burnett.	Wistanstow	Rev. W. M. D. LaTourne, B.A.
Ushaw	Rev. C. Gelderd.	Woburn	Rev. M. Freear, F.C.S., for the Royal Agricultural Society.
Ventnor Hospital	Miss M. Gibson.	Woking	G. C. H. Simmonds.
Wallington	F. Campbell Bayard.	Wokingham	The Medical Superintendent of the Sanatorium.
Waterford	J. N. White.	Woolacombe	T. S. Watkinson, for Miss Chichester.
Wellington	J. W. Nowell, for the C.W.S.	Worksop	Lt.-Col. H. Mellish, J.P.
		Worthing	R. H. Wishaw, M.B., D.P.H., for the Corporation.
		York (Museum)	Oxley Graham, M.A., for the York Phil. Soc.
		" (Bootham)	H. Richardson, M.A.

Meteorological Office,  
London, S.W.

## CORRECTIONS FOR MONTHLY WEATHER REPORT, 1912.

At Dungeness, Blacksod Point, and Donaghadee, the rainfall and number of rain days are in error, owing to the omission of all daily values below .05 in. The detailed corrections are given below. The number of days of absolute drought at Dungeness referred to in the Summary for April, is incorrectly quoted as 44 in the Summary for May. The duration of drought was only 20 days, and rain was recorded on four days during April.

At Balmoral the hours of observation should be 9, 3,—instead of 9, —, 3, and at Grayshott except in July, December, and for the Annual Summary, Observations at 9 a.m. only were used.

At Greenwich the readings of the maximum and minimum thermometers are taken in the morning. Read *a* for *p* on p. xii., xxii., etc.

NOTE.—The height above the ground of the thermometer screen at South Kensington was given erroneously as 90 ft. It is 60 ft., the value 90 ft. being the height above M.S.L.

January,	p. x.	Wick.—Barometer (Station Level), 9-781.
	p. x.	Kingussie.—Barometer (Station Level), 8-968.
	p. x.	Cromer.—Hours of Observations, 9, —, 9.
	p. xi.	Portsmouth.—Gales, 0, Force, 4-7, 30.
	p. xi.	Eastbourne.—Precipitation, >0·04 in., 13.
	p. xi.	Dungeness.—Rain, Total Fall, 2·43 in.; Diff. from Normal, +0·58; Days of Precipitation, 16.
	p. x. and xi.	Ventnor.—Dry Bulb, 43·5, 45·0, —; Dep. of Wet, 1·4, 2·0, —; Vap. Pressure, 251, 253, —; Humidity, 89, 85, —; Cloud, 8·0, 8·3, —.
	p. xii.	Glasgow.—Mean Min., 35·0, Mean of A. and B., 38·4; Diff. from Normal, 0·0.
	p. xii.	Belfast.—Mean Min., 34·4, Mean of A. and B., 39·5, Lowest Min., date 9th.
	p. xiii.	Southport.—Fog, 5.
	p. xiii.	Aspatria.—Rainfall, Diff. from Normal, —1·29.
	p. xiii.	Blacksod Pt.—Rainfall, Total Fall, 4·86 in.; Diff. from Normal, —0·08; Days of Precipitation, 15.
	p. xiii.	Donaghadee.—Rainfall, Total Fall, 3·81 in.; Diff. from Normal, +1·03; Days of Precipitation, 20.
	p. xiv.	Thrapston.—Mean Max., 42·2, Mean Min., 32·9, Mean of A. and B., 37·6; Absolute Max., 51, Absolute Min., 19.
	p. xvii.	Ilfracombe.—Height of Gauge above M.S.L., 195 ft.
February,	p. xx.	Worksop.—Barometer, Diff. from Normal, —319.
	p. xx.	Oxford.—Hours of Observations, 8, —, 8.
	p. xx. and xxi.	Ventnor.—Dry Bulb, 43·6, 45·8, —; Dep. of Wet, 1·1, 1·8, —; Vap. Pressure, 259, 267, —; Humidity, 91, 87, —; Cloud, 7·6, 8·3, —.
	p. xxi.	Dungeness.—Rainfall, Total Fall, 2·10 in.; Diff. from Normal, +0·78; Days of Precipitation, 20.
	p. xxii.	Southport.—Barometer (M.S.L.), 9-626.
	p. xxii.	Markree Castle.—Mean Max., 47·5, Mean of A. and B., 40·4; Diff. from Normal, —0·1.
	p. xxii.	Belfast.—Mean Min., 35·6, Mean of A. and B., 41·4, Lowest Min., 4th.
	p. xxiii.	Blacksod Pt.—Rainfall, Total Fall, 3·87 in.; Diff. from Normal, +0·31; Days of Precipitation, 21.
	p. xxiii.	Donaghadee.—Rainfall, Total Fall, 2·81 in.; Diff. from Normal, +0·56; Days of Precipitation, 18.

M.O. 214b.

METEOROLOGICAL OFFICE.

BRITISH METEOROLOGICAL AND MAGNETIC YEAR BOOK, 1913.

PART II.

THE

MONTHLY WEATHER REPORT

FOR THE YEAR

1913

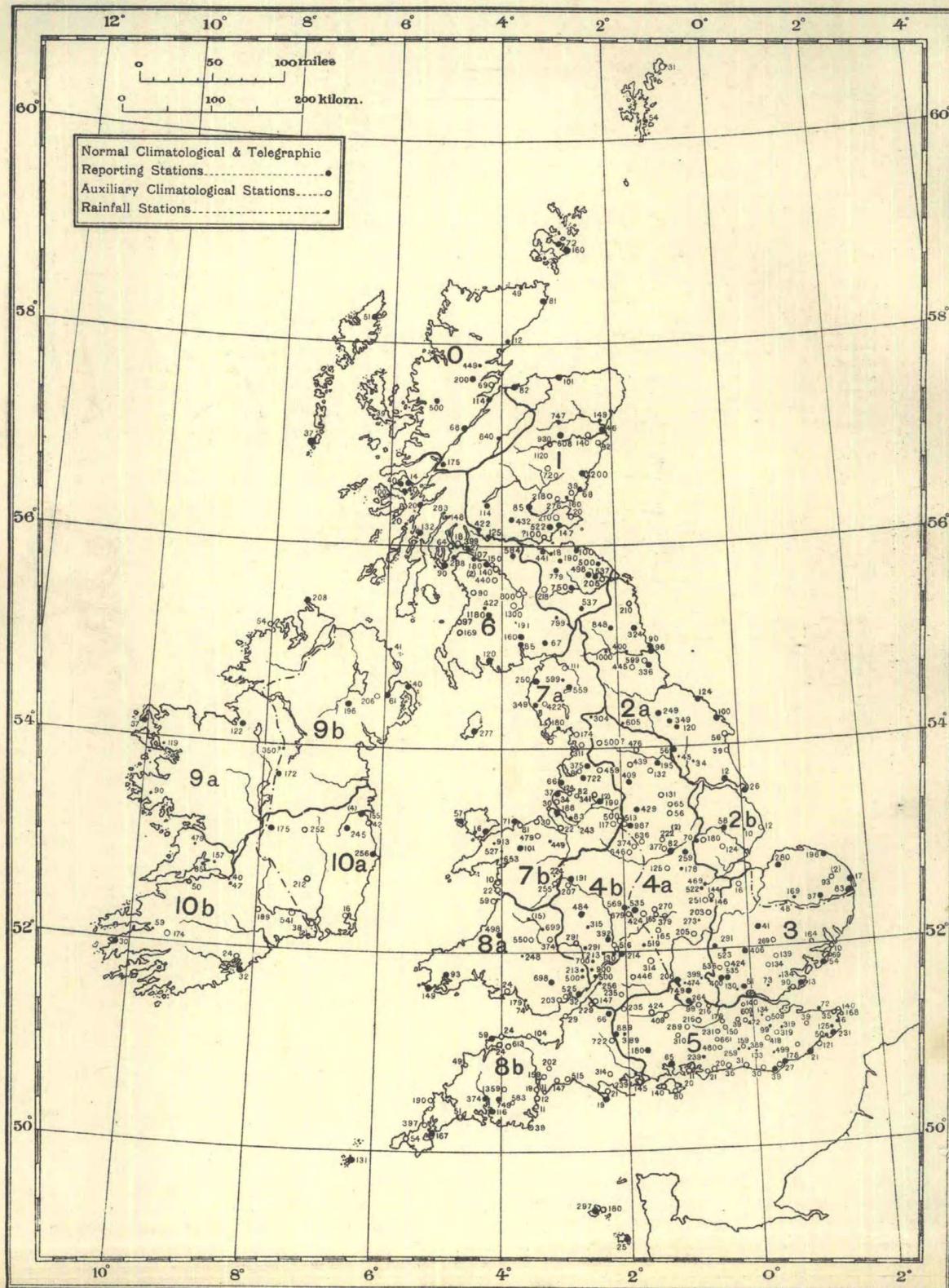
ISSUED AS A SUPPLEMENT TO THE

WEEKLY WEATHER REPORT

(VOL. XXX.—NEW SERIES).

Published by the Authority of the Meteorological Committee.

MONTHLY WEATHER REPORT 1913.  
Map showing Positions of Climatological Stations.



Scale 1:5,000,000.

Printed by Malby & Sons from transfer supplied by Ordnance Survey, Southampton 1914.

The heights of the stations above Mean Sea Level are inserted against the positions, and will serve to identify the names of the stations as given in the List of Stations on pp. 26 to 46. The Stations in the London District are not all shown. Figures in brackets indicate the number of Rainfall Stations in the vicinity of the dot.

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In District 6 the observations published each month up to April for Glasgow refer to the University Observatory; the values for subsequent months refer to Springburn Park. The Monthly Summaries from May to the end of the year are given below (p. ix b). Throughout the year the Observatory readings were used in the computation of Weekly and Monthly District Values.

VII. Additional values of sunshine and rainfall for a few stations not included in the general tables.

VIII. Notes explanatory of the methods used in dealing with the observations for the preparation of the statistical tables.

## LIST OF STATIONS.

The Stations included in the Monthly Weather Report and in the Weekly Weather Report are shown in the following list, arranged under the Districts. The positions of the stations may be identified on the accompanying map by the numbers which give their heights in feet above the Mean Sea Level.

*Height above Mean Sea Level.*—The figures given in this column refer, in general, to the height of the ground on which the rain gauge stands. At Sunshine Stations which do not possess a rain gauge, the height refers to the sunshine recorder.

*Nature of Information published.*—The character of the information given for each station is indicated by the following symbols:—

- W. Weekly Weather Report. Temperature and rainfall data.
- Bright Sunshine data.
- M. Monthly Weather Report. Full summary in the international form.
- m. Monthly Weather Report. Abridged summary of temperature and rainfall.

*Average Values.*—Reference is made to Publications of the Office containing average values for long periods by means of the following letters:—

- a. Appendix III. of the Weekly Weather Report for 1906. Monthly averages of mean maximum, mean minimum and mean temperature, and of rainfall for the 35 years 1871-1905 and (when available) of bright sunshine for the twenty-five years 1881-1905.
- b. Appendix I. to the volume of "Meteorological Observations at Stations of the Second Order" for 1891. Monthly averages for all elements for the fifteen years 1876-1890.
- c. "Temperature Tables of the British Islands," 1871-1900. Monthly average of mean maximum, mean minimum and mean temperature generally for the thirty years 1871-1900, together with information on the extremes of temperature in the same period.
- d. "Rainfall tables of the British Islands," Part I., 1866-80, Part II., 1880-90. Monthly averages of rainfall for lustra and for the periods named.

*Royal Observatory, Greenwich.*—The averages for Temperature and Rainfall, with which the current values are compared, are for the 65 years 1841-1905. The averages for sunshine are for the period 1897-1911.

The summary of wind direction is based upon continuous records and the numbers given are proportional to the actual recorded duration for the whole month of wind from the different directions.

The summary of wind force is obtained from the records of a cup anemograph having 5 in. cups and 15 in. arms. The factor used is 3. Winds above 37 miles per hour are reckoned as gales and winds between 21 and 37 miles per hour as strong winds.

*Radcliffe Observatory, Oxford.*—The averages with which the figures given in the second line are compared are for the 57 years 1855-1911 in the case of pressure, and for the 97 years 1815-1911 in that of rainfall. The values for the current months given in this second line are the means of observations at 8 a.m., Noon, and 8 p.m., reduced to mean daily values by the application of monthly corrections based on observations during the periods 1880-1887 and 1900-1905. The value given under the heading "Cloud" is the mean of observations at 8 a.m., Noon, and 8 p.m. The total rainfall is taken from the daily readings of the self-recording rain gauge, which correspond to the civil day ending at midnight.

## APPENDIX.

## MONTHLY NORMALS OF TEMPERATURE, RAINFALL, AND SUNSHINE.

The average values used for purposes of comparison in this volume of the Monthly Weather Report are in most cases those given in Appendix III. of the Weekly Weather Report for 1906 and cover periods of various lengths ending in 1905. The averages have now been recalculated up to the end of 1910 and a new table containing them is being issued as Appendix IV. of the Weekly Weather Report for 1913. This Appendix is illustrated by 52 maps which show the normal distribution of maximum temperature, minimum temperature, rainfall and sunshine for each month and for the whole year.

*Meteorological Societies.*—Data for stations marked S have been supplied by the Scottish Meteorological Society. Stations marked S are in connection with the Society as well as with the Office.

Stations	Height in feet above M.S.L.	Character of information published.	Averages.	Stations	Height in feet above M.S.L.	Character of information published.	Averages.
<b>O. SCOTLAND, N.</b>							
<i>a. Islands.</i>							
<i>b. Mainland.</i>							
a. Baltasound	31	W, O, m.	—	Cromer	196	W, O, M.	—
Castlebay, Barra Island	37	W, O, M.	—	Geldston	37	W, O, M.	a, c, d.
Deerness	160	O, M.	a, b, c.	Little Massingham	280	W, O, M.	—
Lerwick*	54	W, M.	a, c.	Lowestoft	83	O, M.	a, d.
Stornoway	51	W, O, M.	a, c.	Norwich	93	W, m.	d.
<i>b.</i>				Peterborough (Eye)	16	m.	—
Dunrobin Castle	12	M.	c, d.	Yarmouth	17	W, O, M.	a, c.
Fort Augustus	68	W, O, M.	a, c.	Bennington	406	M.	a, c.
Fort William	171	W, M.	a, c.	Berkhamsted	400	O, M.	a, c.
Fortrose	69	O, m.	—	Cambridge	41	W, O, M.	a, d.
Glencarron	500	W, M.	a, c.	Chelmsford	134	m.	—
Kingussie	840	M.	—	Clacton-on-Sea	54	W, O, M.	—
Strathpeffer Spa	200	W, O, M.	a.	Felixstowe	10	W, O, m.	—
Wick	81	W, M.	a, c.	Halstead	139	m.	—
<b>1. SCOTLAND, E.</b>				Hemel Hempstead	535	m.	—
Aberdeen	46	W, O, M.	a, c.	Ipswich (Copdock)	164	m.	—
Balmoral	930	W, M.	—	Ridgewell	269	m.	—
Balnuderry	276	O, m.	—	Rothamsted	424	W, O, m.	a, c, d.
Braemar	1,120	M.	a, c.	Shoeburyness	13	W, m.	a, d.
Carnoustie	39	m.	—	Southend	90	O, m.	a.
Crathes	8	O, m.	—	Walton-on-Naze	69	m.	—
Crief	140	W, M.	—	Woburn	291	O, M.	—
Dundee	432	M.	c, d.	<b>4. MIDLAND COUNTIES.</b>			
Gordon Castle	160	W, M.	c, d.	<i>a. Eastern.</i>			
Leith	101	W, O, M.	a, c.	Bawtry	65	W, m.	a, c.
Marchmont	498	W, O, M.	a, c.	Belper	222	m.	—
Nairn	82	W, O, M.	a, c.	Belper (Quarry Bank)	280	m.	—
St. Andrews	20	m.	—	Belvoir Castle	259	O, M.	a, d.
Stonehaven	92	O, m.	—	Birmingham, Edgbaston	535	W, O, M.	a, d.
West Linton	8	W, O, M.	—	Bradford	439	O, m.	(d.)
<b>2. ENGLAND, N.E.</b>				Buxton	987	W, O, M.	a, b
<i>a. Northern.</i>				Coventry	270	O, M.	a.
Alnwick Castle	210	W, m.	a.	Garforth	195	O, M.	—
Ampleforth	349	m.	—	Harrogate	476	W, O, m.	a.
Bellingham	848	m.	—	High Wycombe	249	m.	—
Chopwellwood	445	O, m.	—	Huddersfield	409	O, M.	—
Cockle Park	324	O, M.	a.	Kingston-on-Soar	125	m.	—
Durham	336	W, O, M.	a, b, c.	Matlock	636	m.	—
Routton	249	W, M.	c.	Meiltham	513	m.	—
Scarborough	100	W, O, M.	a, c.	Nottingham	82	W, O, M.	a.
Shields	96	W, M.	a, c, d.	Oxford	208	W, O, M.	a, c.
Tynemouth	90	m.	—	Raunds	203	W, m.	—
Ushaw	599	m.	—	Rugby	379	m.	a, c.
West Witton	605	W, m.	—	Sheffield	429	O, M.	a, c, d.
Whitby	124	O, M.	a, d.	Sparkhill	424	m.	—
York	56	W, O, M.	a, c, d.	Skelley	377	m.	—
<i>b. Southern.</i>				Thrapston	251	O, m.	—
Fulbeck	180	W, m.	a.	Wakefield	96	O, m.	—
Hull	12	O, M.	a.	Worksop	56	O, m.	a, d.
Lincoln	58	W, M.	a, d.	<i>b. Western.</i>			
Raunceby	124	O, m.	a.	Bath	66	W, O, M.	a.
Skegness	12	W, O, M.	—	Bromyard	392	m.	—
Spurn Head	26	W, M.	a, c.	Cheadle (Tean)	646	W, m.	a, b, c.

\* Lerwick. Averages used are computed from the values for Sumburgh Head.

Stations.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.	Stations.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.
<b>5. ENGLAND, S.E.</b>				<b>7. a. ENGLAND, N.W.</b>			
Aldershot	231	m.	—	Aspatria	250	W, O, M.	a.
Basingstoke	289	m.	—	Blackpool	66	W, O, M.	a.
Bexhill-on-Sea	27	O, m.	—	Blandellsands	34	m.	—
Bognor	20	O, m.	—	Bolton	341	O, m.	—
Bournemouth	145	O, m.	—	Burnley	459	O, m.	d.
Brighton	31	O, M.	a, d.	Carnforth	174	O, m.	—
Broadstairs	140	O, m.	—	Darwen	722	O, M.	—
Bucklebury	409	m.	—	Egremont	349	O, M.	—
Croydon (Addington)	472	m.	—	Hawarden Bridge	22	W, m.	a.
Dover	231	O, M.	—	Hoylake	30	O, m.	a.
Dungeness	21	W, M.	a, c.	Hutton	82	O, m.	—
Eastbourne	39	O, M.	a.	Lancaster	311	O, m.	—
Eltham	209	m.	—	Leyland	124	O, m.	—
Folkestone	121	O, m.	—	Liverpool (Bidston Obs.)	188	W, O, M.	a, c.
Grayshot	661	O, M.	—	Macclesfield	500	m.	—
Hastings (St. Leonards)	178	W, O, M.	a, c, d.	Manchester (Oldham Road)	190	O, M.	a.
Hove	—	O	—	" (Whitworth Park)	125	O, M.	—
Littlestone	—	O	a.	Newton Rigg	559	W, O, M.	a.
Malmesbury	235	m.	—	Northwick	117	m.	—
Margate	35	W, O, M.	a, c, d.	Scalby	111	m.	—
Marlborough	424	W, O, M.	a, c.	Seathwaite	422	m.	—
Matfield	319	m.	—	Southport	37	O, M.	a.
Midhurst	480	O, m.	—	Stonyhurst	375	W, O, M	a, c, d.
New Malden	39	O, m.	—				
Portsmouth	11	O, M.	a.				
Ramsgate	168	O	—				
Reading (Leighton Pk. School)	264	M.	d.				
" (University Coll.)	152	—	—				
" (Shinfield)	199	—	—				
Salisbury (Wilton)	180	M.	a, d.				
Sandown	20	O, m.	—				
Selsey Bill	21	O, m.	—				
Sevenoaks	509	m.	—				
Southampton	65	W, O, M.	a, c, d.				
Swartaton	310	W, m.	a, c.				
Totland Bay	140	O, m.	—				
Tunbridge Wells	418	W, O, M.	a, c.				
Ventnor	80	O, M.	—				
Wallington	140	m.	—				
Westbourne	30	O	—				
Wisley, Surrey	150	W, O, M.	—				
Woking	179	m.	—				
Wokingham	216	m.	—				
Worthing	36	O, m.	a, c.				
<b>LONDON.</b>				<b>b. NORTH WALES.</b>			
Bunhill Row (City)	80	O	a.	Aberdovey	22	O, m.	—
Camden Square	110	O, M.	a, d.	Bettws-y-Coed*	147	W, O, M.	—
Enfield	203	O, m.	—	Colwyn Bay	81	O, m.	—
Greenwich	155	W, O, M.	a, c, d.	Dwyran	16	M.	—
Golders Green	279	m.	—	Holyhead	57	W, O, M.	a, c.
Hampstead	450	M.	—	Llanberis (Pen-y-gwryd)	913	m.	—
Hampstead (Redington Rd.)	375	m.	—	Llandudno	71	W, O, M.	a, b, c, d.
Kew	18	W, O, M.	a, c, d.	Rhyl	30	O, m.	a.
Plumstead	300	O	—	Ruthin	449	m.	—
South Kensington†	31	M.	—	St. Asaph (St. Beuno's Coll.)	479	m.	—
Tottenham	51	W, O, M.	—	Welshpool	255	m.	—
Westminster	27	W, O, M.	a.				
<b>6. SCOTLAND, W. (a.)</b> <b>ISLE OF MAN (b.)</b>				<b>8. a. SOUTH WALES.</b>			
Ardnadam	64	m.	—	Aberystwyth	59	O, m.	—
Cally, Gatehouse	120	W, M.	a.	Cardiff	203	W, O, M.	a, d.
Colmonell	169	W, M.	—	Gwernyfed	374	m.	—
Dumfries	160	W, M.	a.	Haverfordwest	98	O	—
Eskdalemuir	799	O, M.	—	Llangammarch Wells	550	W, O, M.	a.
Glasgow Obs.	180	W, O, M.	a, c, d.	Pembroke (St. Ann's Head)	149	W, O, M.	a, c.
" (Springburn Park)	355	O, M.	—	Port Talbot	179	O	—
Kilmarnock	90	W, O, M.	—	Swansea	24	O, m.	—
Oban	20	O, m.	—	Tenby	79	O	a.
Poltalloch	132	W, M.	c.	Arlington	613	W, m.	a, c.
Rothesay	90	W, O, M.	c, d.	Ashburton	583	m.	—
Ruthwell	8	O, m.	—	Clifton (Bristol)	229	W, O, m.	a, d.
Thorntonhall	440	O, m.	—	Culmpton	202	W, O, m.	a, c.
Douglas	277	W, O, M.	a, c, d.	Dorchester	314	O, m.	—

\* The thermometer screen stands on ground 100 ft. above M.S.L.

† The thermometer screen is 60 ft. above the ground.

Station.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.	Station.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.
<b>8. b. ENGLAND, S.W.</b> <i>continued.</i>				<b>10. IRELAND, S.</b>			
Rousdon - - - - 515	○, m.	—		a. Eastern.			
Salcombe - - - 89	○	—		b. Western.			
Shaftesbury - - - 722	W, m.	a, d.		Clongowes Wood College - 245	○, m.		
Sheepstor - - - 749	m.	—		Dublin, City - 47	W, M.		a, b, c.
Sidmouth - - - 147	m.	—		“ Trinity College - 12	○, M.		—
Tavistock - - - 374	m.	—		“ Phoenix Park - 155	○, M.	a, c.	
Teignmouth - - - 19	○, m.	a, d.		“ Glasnevin - 67	m.	a, c.	
Torquay - - - 12	○	—		Kilkenny, Co. Wicklow - 256	m.	—	
Weston-super-Mare - - - 29	○, m.	—		Kingstown - 212	W, m.	a, c.	
Weymouth - - - 21	○, m.	—		Mountmellick - 42	○, m.	—	
Woolacombe - - - 59	○, M.	a.		Waterford - 252	m.	—	
				Waterford (Training College) - 38	W, m.	a.	
				Waterford - 20	m.	—	
				Wexford - 116	m.	—	
<b>9. IRELAND, N.</b>							
a. Western.							
b. Eastern.							
Black sod Point - - - 37	W, M.	a.		Ballinacurra - - - 24	○, m.		
Dunfanaghy - - - 54	m.	—		Birr Castle - 175	W, ○, M.	a, b, c.	
Malin Head - - - 208	W, M.	a, c.		Cahir - 199	W, m.	—	
Maree Castle - - - 122	W, ○, M.	a, b, c.		Foyne - 108	W, m.	a, c.	
Newtownforbes - - - ?172	m.	—		Killarney - 174	W, m.	a, c.	
				Limerick - 48	M.	—	
				Roche's Point - 32	W, M.	a, c.	
				Valencia - 30	W, ○, M.	a, c.	
<b>11. ENGLISH CHANNEL.</b>							
Armagh - - - 196	W, ○, M.	a, c, d.		Guernsey (Villa Carey) - 180	W, ○, m.		
Belfast - - - 61	○, M.	a, d.		Brooklyn - 297	○, M.	a, c.	
Donaghadee - - - 27	W, M.	a, c.		Jersey (St. Aubin's) - 25	W, M.	a, c.	
Lisburn - - - 206	m.	—		“ (St. Helier's) - —	○.	a.	
				Scilly - 181	W, ○, M.	a, c.	

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1913, together with the NAMES of their STATIONS :—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Aberdovey - - -	W. J. Eves. A. Thomas, M.D., for the Urban Council.	Brighton - - -	D. Forbes, M.D., for the Corporation.
Aberystwyth - - -	E. W. Routley, M.D., M.R.C.P.	Broadstairs - - -	Howard Hurd, C.E., for the District Council.
Aldershot - - -	Robert Kyle, for the Duke of Northumberland, K.G.	Bromyard - - -	T. V. Philpott, M.A., and Miss Philpott.
Alnwick Castle - - -	Rev. Mr. de Normanville, O.S.B.	Bucklebury - - -	G. W. Nye and J. E. Henshall, for A. W. Sutton.
Ampleforth - - -	The Rev. J. Cairns Mitchell, B.D.	Burnley - - -	Thos. Holt, M.D., for the Corporation.
Arundel - - -	Miss Chichester.	Buxton - - -	W. Pilkington.
Arlington (N. Devon) - - -	J. L. E. Dreyer, Ph.D., and Staff of Observatory.	Cahir - - -	R. W. Smith, Junr.
Armagh - - -	J. S. Amery.	Cally (Gatehouse)-	W. Thompson, for Col. F. Murray Baillie.
Ashburton - - -	J. Smith Hill, B.A., B.Sc.	Cambridge - - -	R. Irwin Lynch, M.A., for the Botanic Garden.
Aspintria - - -		Cardiff - - -	Symonds, E. Walford, M.D., for the Corporation.
Ballinaeoura - - -	John H. Bennett.	Carmarth - - -	W. Farmer.
Balmoral - - -	J. M. Troup, for J. Michie, M.V.O.	Carnoustie - - -	P. Sinclair, C.E.
Balruddery - - -	G. Davis, for J. Martin White.	Cheadle - - -	R. Horne, for Col. B. H. Philips.
Baltasound - - -	T. Edmonston Saxby, F.R.C.S., Ed.	Chelmsford - - -	D. Phillips.
Basingstoke - - -	A. M. Pittkirk, F.R.C.S., and T. V. Philpott, M.A.	Cheltenham - - -	J. C. Saxby, for the Corporation.
Bath - - -	W. H. Symons, M.D., for the Corporation.	Chippingwood - - -	J. F. Annand and J. McLaren.
Bawtry (Hesley Hall) - - -	B. L. Witaker, J.P.,	Cirencester - - -	Prof. M. Kershaw, B.A., for the R. A. College.
Belfast - - -	J. Wyke, B.A., and G. Robinson, for Prof. Morton.	Clacton-on-Sea - - -	A. W. Shadick, for the Urban District Council.
Belper - - -	W. W. Tunnicliffe, B.Sc., F.C.S.	Clifton (the College) - - -	D. Rintoul, M.A.
Belper (Quarry Bank) - - -	John Hunter.	Clongowes Wood - - -	Rev. J. Neary, S.J.
Belvoir Castle - - -	W. H. Rivers, for the Duke of Rutland.	Cockle Park, near Morpeth - - -	R. Thornton, for Northumberland County Council.
Bellingham - - -	C. G. Morrison Bell.	Colomend - - -	A. Ogg, for J. W. McConnel.
Bentingdon - - -	Miss Parker and Miss A. H. Parker.	Colwyn Bay - - -	W. Jones, A.M.I.C.E., for Urban District Council.
Berkhamsted - - -	E. Mayley.	Craethes - - -	E. Hugh Snell, M.D., for the Corporation.
Bettws-y-Coed - - -	Hugh W. FOX, M.D., for the Rural District Council.	Crofton - - -	J. Smith.
Bexhill-on-Sea - - -	G. Brisley, M.P.S., and G. H. Weston, M.D., M.O.H., for Rural District Council.	Cromer - - -	George Reid, for Dr. Meikle.
Birmingham (Edgbaston) - - -	Alfred Creswell, for the Midland Institute.	Croydon (Addington) - - -	W. H. Archer, for the District Council.
Blackpool - - -	E. W. Rees Jones, M.D., for the Corporation.	Cullompton - - -	Borough Engineer.
Bognor - - -	A. G. Thompson.	Darwen - - -	M. T. Foster.
Bolton - - -	Thos. Midgley.	Deerness - - -	F. G. Haworth, M.B., for the Corporation.
Bournemouth - - -	C. Dales, for the Corporation.	Dorchester - - -	M. Spence.
Bradford - - -	H. Lander, for the Corporation.		H. D. Strange (Borough Engineer).
Braemar - - -	A. M. Shirran.		

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1913, together with the NAMES of their STATIONS—*cont.*:-

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Douglas, Isle of Man	F. Cottle, for the Corporation.	Macclesfield	John Dale.
Dover	W. C. Hawke, C.E., for the Corporation.	Malmesbury	G. Deadman, for C. E. Bertodano.
Dublin (City)	Sir G. Moore, M.D., D.Sc.	Malvern	A. Mander, F.C.S., and E. W. Harris.
" (Glasnevin)	Sir F. W. Moore, M.R.I.A.	Manchester	J. Niven, M.A., M.B., for the Corporation.
" (Phoenix Park)	The Superintendent, Ordnance Survey Office.	(Oldham Road).	
" (Trinity College)	Prof. Thrift.	Manchester	Professor Rutherford and W. T. Lantsberry, for the University of Manchester.
Dumfries	C. C. Easterbrook, M.D., Crichton R. Institute.	(Whitworth Pk.).	J. A. Wood, for Sir J. H. P. Hume-Campbell, Bt.
Dundee	J. Carnochan.	Marchmont	J. Stokes, J.P., for the Corporation.
Dunfanaghy	J. J. MacGrath, L.R.C.P.	Margate	J. L. Strong, for Captain Cooper.
Dunrobin Castle	D. Melville, for the Duke of Sutherland.	Markree Castle	G. G. Beecher, M.A., and Meddows Taylor, for the College.
Durham	C. H. Carpenter, M.A.	Marlborough	D'Arcy Reeve.
Dwyran	W. E. Sotheby.	Matfield	J. D. Evans.
Eastbourne	S. R. Henderson, for the Corporation.	Matlock	G. C. Lawson.
Egremont	J. W. Shipton.	Mayfield	C. L. Brook.
Eltham	Miss A. Bramwell, B.Sc.	Meatham	The Medical Superintendent (Sanatorium).
Enfield	W. P. Warren.	Mitchurst	E. A. Jones, for R. Shatto Adair.
Felixstowe	Montague Humphrey, for the Urban District Council.	Minehead	W. A. Robinson.
Folkestone	The Borough Engineer, for the Corporation.	Mountmellick	
Forest of Dean	V. F. Leese.	Newcastle, Co. Wick-	C. D. Hanan, M.B., National Hospital for Con-
Fort Augustus	Rev. C. von Dieckhoff, O.S.B.	New Malden	W. J. Carter.
Forrose	Archd. Thom, M.A.	Newquay	G. C. Vigurs, B.A., M.D., for Urban Council.
Fort William	W. T. Kilgour.	Newton Biggs	W. T. Lawrence, for the Cumberland County Council.
Fowey	Dr. W. H. Boger.	Newtownforbes	J. A. Boyle, for the Earl of Granard.
Foynes	J. J. Alcorn, for Lord Monteagle, K.P.	Northwick	J. A. Saner.
Fulbeck	J. Charlton, for W. V. R. Fane.	Nottingham	A. Brown, A.M.I.C.E., City Engineer.
Garforth	Prof. Seton, B.Sc., for the University of Leeds.	Norwich	A. W. Preston.
Geddesdon	T. D. Dawson.	Norwich (Southwell)	J. H. Willis.
Glasgow	Prof. L. Becker, Ph.D., and the Staff of Observatory.	Oban	E. Baily, M.B., M.O.H.
Glencairn	D. D. Munro.	Oxford	The Radcliffe Observer.
Golders Green	J. W. Duncan, and the Secretary, Hampstead Garden Suburb Trust.	Paignton	A. J. Holman, for Town Council.
Gordon Castle	Garden Suburb Trust, for the Duke of Richmond and Gordon, K.G.	Penzance	C. H. Benn, for the District Council.
Grayshott	Mrs. C. Lyndon.	Peterborough (Eye)	S. M. Eggar.
Greenwich	The Astronomer Royal.	Plymouth	H. Victor Prigg, A.M.I.C.E., for the Corporation.
Guernsey (Villa Carey) (Fort Road)	F. E. Carey, M.D.	Polbath	D. S. McEvilly, for Col. E. H. Malcolm, C.B., R.E.
Gwernyfed	A. Collenette.	Poole	A. Kenneth Fraser, M.D., for the Corporation.
Halstead	J. Slade, for Col. Wood.	Port Talbot	Miss Talbot and G. Lipscombe.
Hampstead (Redington Road).	E. T. Adams, F.R.A.S.	Princeton	G. Berry.
Harrowgate	E. L. Hawke, for the Hampstead Scientific Society.	Ramsgate	T. G. Taylor, C.E., for the Corporation.
Hastings (St. Leonards)	H. W. Braby, B.A.	Ranoeby Hall	J. Hope, for the Rev. Y. F. Willson.
Haverfordwest	C. E. Rivers, A.M.I.C.E., for the Corporation.	Raunds	Leon G. Lee.
Hawarden Bridge	H. Colborne, M.R.C.S., for the Corporation.	Reading (Leighton Park School)	C. L. Evans, M.A.
Hemel Hempstead	J. W. Phillips.	† " (University College)	H. N. Dickson, D.Sc.
Hereford (Belmont)	John Summers & Sons, Ltd.	Bedruth	A. P. Jenkins.
Hill	Elliott Kitchener, M.A.	Rhay	A. A. Goodall, C.E., for District Council.
Holyoke	The architect, Mr. G. C. Maddox, O.S.B.	Ross	H. Southall, J.P.
Huddersfield	R. W. Fraser, for U.D. Council.	Rothamsted	The Lawes' Agricultural Trust.
Hull	J. Firth, for the Corporation.	Rothsay	D. Penney, for Robert Henderson, and R. D. Whyte, for the Buteshire Nat. Hist. Soc.
Iffracombe	H. B. Witty, for the Corporation.	Routoun	J. Hangman, for Sir Hugh Bell, Bart.
Kilkenny Castle	O. M. Prouse, A.M.I.C.E.	Rousdon	G. Gouver, for Hon. Lady Peek.
Killarney	E. Sutton, for the Marquis of Ormonde, K.P.	Ruthin	R. D. G. M. M. M. Dr. G. A. Grace-Calvert.
Kilmarnock	E. W. Griffin, M.D.	Ruthwell	W. H. Whellens and William Brown, for A. Johnstone Douglas, D.L., J.P.
Kingston-on-Soor	J. Wilson, for Sir T. D. Acland, Bart.	St. Asaph	Rev. J. Rowland, S.J., and Rev. R. Adamson, S.J., B.Sc.
Kingstown	B. J. Poetry, for West of Scotland Agricultural College.	Salcombe	Capt. John Partridge.
Kingussie	Fred Wakery, for the Midland Agricultural and Dairy College.	Salisbury	Thos. Hallis, for the Earl of Pembroke, G.C.V.O.
Lancaster	J. S. Vaughan, LL.D., for the Corporation.	Sandown	C. E. Gilchrist, for Free Library.
Leyland	W. de Watteville, M.D.	Scalby	Sir R. A. Allison, J.P., D.L.
Llanberis	N. Holden, F.R.A.S., for the Corporation.	Scarborough	Stanley F. Linton, M.O.H., for the Corporation.
Llandudno	H. Nowell Marlington.	Selby	A. Pease, for the Corporation.
Llanymynech Wells	A. Lockwood.	Sevenoaks	Mr. E. Heron Allen.
Limerick	W. Black Jones, M.D., M.O.H.	Shaftesbury	W. Tattersall.
Lincoln	Rev. W. O'Leary, S.J.	Sheffield	Rev. F. Ehlers.
Little Massingham	W. Barr and H. Hoe, for the Corporation.	Shepton	E. Howarth, F.R.A.S.
Littlestone-on-Sea	Rev. H. L. Brereton.	Shoebutyness	Rev. H. H. Breton, M.A.
London (Bunhill Row)	W. Ryals, for H. T. Tubbs.	Shrewsbury	Supt. of Experiments.
" (Camden Sq.)	T. De la Rue & Co., Ltd.	Sidmouth	Col. C. S. Reid, R. E., and Capt. H. E. Rathbone, R.N.
" (Pimlico)	H. R. Milne, D.Sc., LL.D.	Skegness	Miss C. Radford.
" (Westminster)	H. G. Waller.	Southampton	S. Coetmore Jones, for the District Council.
Lowestoft	W. Clever, for Rev. H. B. Workman, D. Lit.	Southend-on-Sea	A. Vaughan, for Director General, Ordnance Survey.
	C. W. Edwards, for the Corporation.	Sparkhill	E. P. Eliot, C.E., for the Corporation.

\* See pp. iv., ix.

† See p. ix.

ix (a)

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Tavistock - - -	W. J. Monk.	Westbourne - - -	Rev. L. B. Birkett.
Teignmouth - - -	G. Rossiter, for M.O.H.	West Linton - - -	Rev. J. S. Begg and Dr. J. Ritchie Jeffrey.
Tenby - - -	Miss Mildred B. Truscott, for the Corporation.	Weston-Super-Mare - - -	Sydney C. Smith.
Thorntonhall - Lanarkshire.	J. Wilson, for A. Henderson Bishop.	West Witton - - -	J. B. Espinasse.
Torquay - - -	F. March, for the Corporation.	Wexford - - -	Charles Main.
Totland Bay - - -	J. Dover, M.A.	Weymouth - - -	I. J. Brown and J. H. Bolam, Hon. Borough Meteorologist.
Tottenham - - -	The Medical Officer, for District Council.	Whitby - - -	T. Woodhouse Parkinson, for the Literary and Philosophical Society.
Tunbridge Wells - - -	The late F. G. Smart, M.A., M.B.	Winslow - - -	R. A. Easton.
Tynemouth - - -	J. E. Burnett.	Wiley - - -	The Superintendent, for the Roy. Hort. Society.
Ushaw - - -	Rev. C. Gelderd.	Wistanstow - - -	Rev. Mr. M. D. LaTouche, B.A.
Ventnor Hospital - -	Miss M. Gibson.	Woburn - - -	H. M. Freear, F.C.S., for the Royal Agricultural Society.
Wallington - - -	F. Campbell Bayard.	Woking - - -	G. C. H. Simmonds.
Waterford - - -	J. N. White.	Wokingham - - -	The Medical Superintendent of the Sanatorium.
Wellington - - -	J. W. Nowell, for the C.W.S.	Woolacombe - - -	T. S. Watkinson, for Miss Chichester.
Welshpool - - -	W. E. Whitehouse and W. H. Brooks.	Worksop - - -	Lt.-Col. H. Mellish, J.P.
		Worthing - - -	R. H. Wilshaw, M.B., D.P.H., for the Corporation.
		York (Museum) - - -	Oxley Grabham, M.A., for the York Phil. Soc.
		" (Bootham) - - -	The Meteorological Curator.

Meteorological Office,  
London, S.W.

## CORRECTIONS FOR MONTHLY WEATHER REPORT, 1913.

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 p. lxviii. ... District Values.—6. Scotland, W.—Sunshine, Daily Mean, 5·35 hr.; Diff. from Normal, — 1·03.  
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FOR OFFICIAL USE.

M.O. 217b.

METEOROLOGICAL OFFICE.

BRITISH METEOROLOGICAL AND MAGNETIC YEAR BOOK, 1914.

PART II.

THE

MONTHLY WEATHER REPORT

FOR THE YEAR

1914

ISSUED AS A SUPPLEMENT TO THE

WEEKLY WEATHER REPORT

(VOL. XXXI.—NEW SERIES).

Published by the Authority of the Meteorological Committee.

LONDON :

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1915.

## IV. A plate of four maps showing :—

- i. The monthly distribution of pressure and winds based on observations at telegraphic reporting stations; also the average distribution of pressure for the month for the period 1871-1905. Isobars are drawn for intervals of 2 millibars or 1 millibar.
- ii. The movements of depressions.
- iii. The distribution of mean temperature over the land and in the coastal waters.
- iv. The distribution of bright sunshine in hours per day. This map was added for the first time in the issue for 1908.

V. A full page map showing by means of isohyetal lines the distribution of the month's precipitation. These maps are prepared by Dr. H. R. Mill, the Director of the British Rainfall Organization, and are based on data from nearly 1,000 stations.

VI.—Table II, giving Summaries of the observations of pressure, temperature, humidity, cloud, and wind made at set hours (9 a.m. [3 p.m.] and 9 p.m. at normal climatological stations, and 7 a.m., 1 p.m. and 9 p.m., or at 7 a.m. [1 p.m.], 6 p.m., at telegraphic reporting stations). The difference from the average in the case of pressure is also included for those places for which averages are available.

VII.—Table III, giving Summaries of the records of extreme and mean air temperature and of earth temperature at 1 foot and 4 feet, rainfall and sunshine, and of weather observations, with differences from the averages in the case of air temperature, rainfall and sunshine for those places for which averages are available.

Tables II and III together include all the items comprised in the international form of monthly climatological summary, and they give in addition information regarding the duration of bright sunshine, earth temperature at 1 foot and 4 feet (from 1906), the number of observations of fresh or strong winds (forces 4-7 of the Beaufort Scale, from 1906), the number of days of fog (from 1906), the number of days of ground frost (minimum temperature on the grass, 30° and below, from 1908), and the pressure at mean sea level, from 1912.

VIII.—Table IV.—Additional values of sunshine for a few stations not included in the general tables.

IX.—Table V.—Summary of wind velocity for anemograph stations.

## LIST OF STATIONS.

The Stations included in the Monthly Weather Report and in the Weekly Weather Report are shown in the following list, arranged under the Districts.

*Height above Mean Sea Level.*—The figures given in this column refer, in general, to the height of the ground on which the rain gauge stands. At Sunshine Stations which do not possess a rain gauge, the height refers to the sunshine recorder.

*Nature of Information published.*—The character of the information given for each station is indicated by the following symbols :—

- W. Weekly Weather Report. Temperature and rainfall data.
- Bright Sunshine data.
- M. Monthly Weather Report. Full summary (Tables II and III).
- m. Monthly Weather Report. Abridged summary of temperature, sunshine, and rainfall (Table III only).

*Average Values.*—Reference is made to Publications of the Office containing average values for long periods by means of the following letters :—

- a. Appendix III. of the Weekly Weather Report for 1906. Monthly averages of mean maximum, mean minimum and mean temperature, and of rainfall for the 35 years 1871-1905 and (when available) of bright sunshine for the twenty-five years 1881-1905.
- b. Appendix I. to the volume of "Meteorological Observations at Stations of the Second Order" for 1891. Monthly averages for all elements for the fifteen years 1876-1890.
- c. "Temperature Tables of the British Islands," 1871-1900. Monthly averages of mean maximum, mean minimum and mean temperature generally for the thirty years 1871-1900, together with information on the extremes of temperature in the same period.
- d. "Rainfall tables of the British Islands," Part I., 1866-80, Part II., 1880-90. Monthly averages of rainfall for lustra and for the periods named.

*Royal Observatory, Greenwich.*—The averages for Temperature and Rainfall, with which the current values are compared, are for the 70 years 1841-1910. The averages for sunshine are for the period 1897-1914.

The summary of wind direction is based upon continuous records and the numbers given are proportional to the actual recorded duration for the whole month of wind from the different directions.

The summary of wind force is obtained from the records of a cup anemograph having 5 in. cups and 15 in. arms. The factor used is 3. Winds above 37 miles per hour are reckoned as gales and winds between 21 and 37 miles per hour as strong winds.

*Radcliffe Observatory, Oxford.*—The averages with which the figures given in the second line are compared are for the 57 years 1855-1911 in the case of pressure, and for the 97 years 1815-1911 in that of rainfall. The values for the current months given in this second line are the means of observations at 8 a.m., Noon, and 8 p.m., reduced to mean daily values by the application of monthly corrections based on observations during the periods 1880-1887 and 1900-1905. The value given under the heading "Cloud" is the mean of observations at 8 a.m., Noon, and 8 p.m. The total rainfall is taken from the daily readings of the self-recording rain gauge, which correspond to the civil day ending at midnight.

Stations.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.	Stations.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.
<b>O. SCOTLAND, N.</b>							
<i>a. Islands. b. Mainland.</i>							
Baltasound	31	W, ○, m.	—	Fulbeck	180	W, m.	a.
Castlebay, Barra Island	37	W, ○, M.	—	Hull	12	○, M.	a.
Deerness	160	W, ○, M.	a, b, c.	Lincoln	58	W, M.	a, d.
Lerwick*	54	W, M.	a, c.	Rauceby	124	○, m.	a.
Stornoway	51	W, ○, M.	a, c.	Skegness	12	W, ○, M.	—
Dunrobin Castle	12	M.	c, d.	Spurn Head	26	W, M.	a, c.
Fort Augustus	68	W, ○, M.	a, c.				
Fort William	171	W, M.	—				
Fortrose	69	○, m.	—				
Glencarron	500	W, M.	a, c.				
Inverness	98	○, M.	—				
Kingussie	840	M.	—				
Strathpeffer Spa	200	W, ○, M.	a.				
Wick	81	W, M.	a, c.				
<b>1. SCOTLAND, E.</b>							
Aberdeen	46	W, ○, M.	a, c.	Cromer	196	W, ○, M.	—
Arbroath	69	M.	—	Geldeston	37	W, ○, M.	a, c, d.
Balmoral	930	W, M.	—	Little Massingham	280	W, ○, M.	—
Balraddyne	276	○, m.	—	Lowestoft	83	○, M.	a, d.
Banff	3	○, M.	—	Norwich	93	W, m.	d.
Bangour	587	M.	—	Yarmouth	17	W, ○, M.	a, c.
Braemar	1,120	M.	a, c.	Bennington	406	M.	a, c.
Carnoustie	39	○, m.	—	Berkhamsted	400	○, M.	a, c.
Colinsburgh	180	m.	—	Cambridge	41	W, ○, M.	a, d.
Crathes	140	○, m.	—	Chelmsford	134	m.	—
Crieff	432	W, M.	—	Clacton-on-Sea	54	W, ○, M.	—
Dalkeith	190	m.	—	Copdock	164	m.	—
Dundee	160	M.	c, d.	Felixstowe	10	W, ○, m.	—
Edinburgh, Blackford Hill Obs., University	442	○, M.	—	Halstead	139	m.	—
Gordon Castle	101	W, ○, M.	c, d.	Hemel Hempstead	535	m.	—
Kelso (Broomlands)	195	m.	—	Ridgewell	269	m.	—
Kettins	218	m.	—	Rothamsted	424	W, ○, m.	a, c, d.
Kirkcaldy	90	m.	—	Shoeburyness	13	W, m.	a, d.
Lathalman	505	M.	—	Southend	90	○, m.	a.
Lednathie	720	m.	—	Walton-on-Naze	69	m.	—
Leith	18	W, M.	a, c.	Woburn	291	○, M.	—
Logie Coldstone	608	m.	—				
Marchmont	498	W, ○, M.	a, c.				
Nairn	82	W, ○, M.	a, c.				
Perth	77	○, M.	—				
St. Andrews	20	○, m.	—				
Stonehaven	86	○, m.	—				
Stronvar	422	m.	—				
The Glen	750	m.	—				
West Linton	770	W, ○, M.	—				
Wolfelee	537	m.	—				
<b>2. ENGLAND, N.E.</b>							
<i>a. Northern.</i>							
Alnwick Castle	210	W, m.	a.	Bawtry	65	W, m.	a, c.
Ampleforth	349	m.	—	Belper	222	m.	—
Bellingham	848	m.	—	Belper (Quarry Bank)	280	m.	—
Chopwellwood	445	○, m.	—	Belvoir Castle	259	○, M.	a, d.
Cockle Park	324	○, M.	a.	Birmingham, Edgbaston	535	W, ○, M.	a, d.
Durham	336	W, ○, M.	a, b, c.	Bradford	439	○, m.	d.
Rounton	249	W, M.	c.	Buxton	987	W, ○, M.	a, b
Scarborough	100	W, ○, M.	a, c.	Coventry	270	○, M.	a.
Shields (to June)	96	W, M.	a, c, d.	Eye	16	m.	—
Tynemouth C.G.S. (from July)	72	—	—	Garforth	195	○, M.	—
Tynemouth (Percy Park)	90	m.	—	Harrogate	476	W, ○, m.	a.
Ushaw	599	m.	—	Hodsock	56	○, m.	a, d.
West Witton	605	W, m.	—	Huddersfield	409	○, M.	—
Whitby	124	○, M.	a, d.	Kingston-on-Soar	125	m.	—
York	56	W, ○, M.	a, c, d.	Matlock	636	m.	—
				Meltham	513	m.	—
				Nottingham	82	W, ○, M.	a.
				Oxford	208	W, ○, M.	a, c.
				Raunds	203	W, m.	—
				Rugby	379	m.	a, c.
				Sheffield	429	○, M.	a, c, d.
				Sparkhill	424	m.	—
				Skelley	377	m.	—
				Wakefield	96	○	—
<b>2. ENGLAND, N.E.—continued.</b>							
<i>b. Southern.</i>							

\* Lerwick. Averages used are computed from the values for Sumburgh Head.

	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.		Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>4. MIDLAND COUNTIES—cont.</b>									
b. Western.						Richmond	-	—	—
Bath	-	66	W, ○, M.	a.	South Kensington†	-	31	○ M.	—
Bromyard	-	392	m.	—	Tottenham	-	51	W, ○, M.	—
Cheadle (Tean)	-	646	W, m.	a, b, c.	Westminster	-	27	W, ○, M.	a.
Cheltenham	-	214	○, M.	a, c.					
Cirencester	-	446	W, ○, m.	a, c.					
Hereford	-	291	W, m.	a.					
Leamington Spa	-	165	m.	—					
Malvern	-	516	m.	—					
Mayfield (Staffs)	-	374	m.	—					
Ross (The Graig)	-	213	m.	—					
, (Chasedale)	-	201	m.	—					
Shrewsbury	-	191	W, M.	d.					
Wellington	-	207	m.	—					
Wistanstow	-	484	M.	—					
<b>5. ENGLAND, S.E.</b>									
Addington	-	472	m.	—	<b>LONDON—continued.</b>				
Aldershot	-	231	m.	—	Richmond	-	—	—	
Basingstoke	-	289	m.	—	South Kensington†	-	31	○ M.	—
Bexhill-on-Sea	-	27	○, m.	—	Tottenham	-	51	W, ○, M.	—
Bognor	-	20	○, m.	—	Westminster	-	27	W, ○, M.	a.
Bournemouth	-	145	○, m.	—					
Brighton	-	31	○, M.	a, d.					
Broadstairs	-	140	○	—					
Buckleybury Place	-	409	m.	—					
Dover	-	231	○, M.	—					
Dungeness	-	21	W, M.	a, c.					
Eastbourne	-	39	○, M.	a.					
Folkestone	-	121	○, m.	—					
Grayshot	-	661	○, M.	—					
Hove	-	—	○	—					
Littlestone	-	—	○	—					
Malmesbury	-	235	m.	—					
Margate	-	35	W, ○, m.	a, c, d.					
Marlborough	-	424	W, ○, m.	a, c.					
Matfield	-	319	m.	—					
Midhurst	-	480	○, m.	—					
New Malden	-	39	○, m.	—					
Portsmouth	-	11	○, M.	a.					
Ramsgate	-	168	○	—					
Reading (Leighton Pk. School)	-	264	M.	d.					
Ryde	-	129	○, M.	—					
Salisbury (Wilton)	-	180	M.	a, d.					
Sandown	-	20	○, m.	—					
Selsey Bill	-	21	○, m.	—					
Sevenoaks	-	509	m.	—					
Southampton	-	65	W, ○, M.	a, c, d.					
South Farnborough	-	234	○, M.	—					
St. Leonards	-	178	W, ○, M.	a, c, d.					
Totland Bay	-	140	○, m.	a.					
Tunbridge Wells	-	418	W, ○, m.	a, c.					
Ventnor	-	80	○, M.	a, c.					
Wallington	-	140	m.	—					
Westbourne	-	30	○	—					
Wisley, Surrey	-	150	W, ○, m.	—					
Woking	-	179	m.	—					
Wokingham	-	216	m.	—					
Worthing	-	36	○, m.	a, c.					
<b>LONDON.</b>									
Bunhill Row (City)	-	80	○	a.					
Camden Square	-	110	○, M.	a, d.					
Enfield	-	203	○, m.	—					
Greenwich	-	149	W, ○, M.	a, c, d.					
Golders Green	-	279	m.	—					
Hampstead	-	450	M.	—					
Hampstead (Redington Rd.)	-	375	m.	—					
Kew	-	18	W, ○, M.	a, c, d.					
Plumstead	-	300	○	—					
<b>6. a. SCOTLAND, W. b. ISLE OF MAN</b>									
Ardnadam	-	—	—	—	Ardtornish	-	64	m.	—
Ardbeg	-	—	—	—	Buchlyvie	-	48	M.	—
Ardbreck	-	—	—	—	Cally	-	118	m.	—
Ardbreck	-	—	—	—	Carmonell	-	120	W, M.	a.
Ardbreck	-	—	—	—	Cargen	-	85	m.	—
Ardbreck	-	—	—	—	Drumlanrig	-	170	W, M.	—
Ardbreck	-	—	—	—	Dumbarton	-	191	m.	—
Ardbreck	-	—	—	—	Dumfries	-	10	m.	—
Ardbreck	-	—	—	—	Dungavel	-	160	W, ○, M.	a.
Ardbreck	-	—	—	—	Eskdalemuir	-	800	m.	—
Ardbreck	-	—	—	—	Glasgow Observatory	-	799	○, M.	—
Ardbreck	-	—	—	—	Springburn Park	-	180	W, ○, M.	a, c, d.
Ardbreck	-	—	—	—	Greenock	-	351	○, M.	—
Ardbreck	-	—	—	—	Hamilton	-	200	m.	—
Ardbreck	-	—	—	—	Kilmarnock	-	140	m.	—
Ardbreck	-	—	—	—	Leadhills	-	90	W, ○, m.	—
Ardbreck	-	—	—	—	Oban	-	1310	m.	—
Ardbreck	-	—	—	—	Paisley	-	18	○, m.	—
Ardbreck	-	—	—	—	Pitlochry	-	106	○, M.	—
Ardbreck	-	—	—	—	Rothesay	-	132	W, M.	c.
Ardbreck	-	—	—	—	Ruthwell	-	67	○, m.	—
Ardbreck	-	—	—	—	Thorntonhall	-	440	○, m.	—
Ardbreck	-	—	—	—	Turnberry	-	96	○, m.	—
Ardbreck	-	—	—	—	Douglas	-	277	W, ○, M.	a, c, d.
<b>7. a. ENGLAND, N.W.</b>									
Aspatria	-	—	—	—	Ashburton	-	250	W, ○, M.	a.
Blackpool	-	—	—	—	Bolton	-	66	W, ○, M.	a.
Blundellsands	-	—	—	—	Burnley	-	34	m.	—
Bolton	-	—	—	—	Carnforth	-	341	○, m.	—
Bolton	-	—	—	—	Darwen	-	459	○, m.	d.
Bolton	-	—	—	—	Egremont	-	174	○, m.	—
Bolton	-	—	—	—	Hawarden Bridge	-	722	○, M.	—
Bolton	-	—	—	—	Hoylake	-	32	W, m.	a.
Bolton	-	—	—	—	Hutton	-	30	○, m.	a.
Bolton	-	—	—	—	Lancaster	-	82	○, m.	—
Bolton	-	—	—	—	Leyland	-	311	○, m.	—
Bolton	-	—	—	—	Liverpool (Bidston Obs.)	-	124	○, m.	—
Bolton	-	—	—	—	Macclesfield	-	188	W, ○, M.	a, c.
Bolton	-	—	—	—	Manchester (Oldham Road)	-	500	m.	—
Bolton	-	—	—	—	Newton Rigg	-	125	○, M.	—
Bolton	-	—	—	—	Northwich	-	559	W, ○, M.	a.
Bolton	-	—	—	—	Scaleby	-	117	m.	—
Bolton	-	—	—	—	Southport	-	111	m.	—
Bolton	-	—	—	—	Stockport	-	37	○, M.	a.
Bolton	-	—	—	—	Stonyhurst	-	254	M.	—
Bolton	-	—	—	—	Welshpool	-	375	W, ○, M.	a, c, d.
<b>b. NORTH WALES.</b>									
Aberdovey	-	—	—	—	Aberdovey	-	22	○, m.	—
Bettws-y-Coed*	-	—	—	—	Bettws-y-Coed*	-	147	W, ○, M.	—
Colwyn Bay	-	—	—	—	Colwyn Bay	-	81	○, m.	—
Dyrran	-	—	—	—	Dyrran	-	16	M.	—
Holyhead	-	—	—	—	Holyhead	-	15	W, ○, M.	a, c.
Llanaberis (Pen-y-gwryd)	-	—	—	—	Llanaberis (Pen-y-gwryd)	-	913	m.	—
Llandudno	-	—	—	—	Llandudno	-	71	W, ○, M.	a, b, c, d.
Rhyl	-	—	—	—	Rhyl	-	30	○, m.	a.
Ruthin	-	—	—	—	Ruthin	-	449	m.	—
Welshpool	-	—	—	—	Welshpool	-	255	m.	—

\* The thermometer screen stands on ground 100 ft. above M.S.L.

+ The thermometer screen is 60 ft. above the ground.

Station.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.	Station.	Height in feet above M.S.L.	Character of informa- tion published.	Averages.
<b>8. a. SOUTH WALES.</b>							
<b>b. ENGLAND, S.W.</b>							
Aberystwyth - - -	59	○, m.	—	Blacksoad Point - - -	?	W, M.	a.
Bude - - -	49	○, m.	—	Dunfanaghy - - -	54	m.	—
Cardiff - - -	203	W, ○, M.	a, d.	Malin Head - - -	208	W, M.	a, c.
Gwernyfed - - -	374	m.	—	Markree Castle - - -	122	W, ○, M.	a, b, c.
Haverfordwest - - -	250	○	—	Newtownforbes - - -	? 172	m.	—
Llangammarch Wells - - -	550	W, ○, M.	a.	Armagh - - -	196	W, ○, M.	a, c, d.
Pembroke (St. Ann's Head) - - -	149	W, ○, M.	a, c.	Belfast - - -	61	○, M.	a, d.
Port Talbot - - -	179	○	—	Donaghadee - - -	39	W, M.	a, c.
Swansea - - -	24	○, m.	—	Lisburn - - -	101	W, M.	—
Tenby - - -	79	○, m.	a.		206	m.	—
<b>9. IRELAND, N.</b>							
<i>a. Western.</i>							
b. Eastern.				Blacksoad Point - - -	?	W, M.	a.
				Dunfanaghy - - -	54	m.	—
				Malin Head - - -	208	W, M.	a, c.
				Markree Castle - - -	122	W, ○, M.	a, b, c.
				Newtownforbes - - -	? 172	m.	—
				Armagh - - -	196	W, ○, M.	a, c, d.
				Belfast - - -	61	○, M.	a, d.
				Donaghadee - - -	39	W, M.	a, c.
				Lisburn - - -	101	W, M.	—
<b>10. IRELAND, S.</b>							
<i>a. Eastern.</i>							
b. Western.				Clongowes Wood College - - -	245	○, m.	—
				Dublin, City - - -	47	W, M.	a, b, c.
				" Trinity College - - -	12	○, M.	—
				" Phoenix Park - - -	155	○, M.	a, c.
				" Glasnevin - - -	67	m.	a, c.
				" Shankill - - -	59	M.	—
				Newcastle, Co. Wicklow - - -	256	m.	—
				Kilkenny - - -	212	W, m.	a, b, c.
				Kingstown - - -	42	○, m.	—
				Mountmellick - - -	252	m.	—
				Waterford - - -	20	W, m.	a.
				Waterford (Training College) - - -	20	m.	—
				Wexford - - -	116	m.	—
				Ballinacurra - - -	24	○, m.	—
				Birr Castle - - -	175	W, ○, M.	a, b, c.
				Cahir - - -	199	W, m.	—
				Foyne - - -	50	W, m.	a, c.
				Kilarney - - -	174	W, m.	a, b, c.
				Limerick - - -	47	M.	—
				Roche's Point - - -	32	W, M.	a, b, c.
				Seskin (Carrick on Suir) - - -	541	W, ○, M.	—
				Valencia - - -	30	W, ○, M.	a, c.
<b>11. ENGLISH CHANNEL.</b>							
<i>a. English Channel.</i>							
Guernsey (Villa Carey) - - -	180	W, ○, m.	a.				
Brooklyn - - -	297	○, M.	a, c.				
Jersey (St. Aubin's) - - -	25	W, M.	a, b, c.				
(St. Helier's) - - -	—	○.	a.				
Scilly - - -	131	W, ○, M.	a, c.				

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1914, together with the NAMES of their STATIONS :—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Aberdovey - - -	W. J. Eves.	Ballingeandra - - -	John H. Bennett.
Aberystwyth - - -	A. Thomas, M.D., for the Urban Council.	Balmoral - - -	J. M. Troup, for J. Michie, M.V.O.
Aldershot - - -	E. W. Routley, M.D., M.R.C.P.	Balnuderry - - -	G. Davie, for J. Martin White.
Alnwick Castle - - -	Robert Kyle, for the Duke of Northumberland, K.G.	Baltsaund - - -	T. Edmonston Saxby, F.R.C.S., Ed.
Ampleforth - - -	Rev. H. de Normanville, O.S.B.	Banff - - -	A. J. Leigh, B.Sc., for Dr. Spriggs.
Arbroath - - -	J. Campbell.	Bangour - - -	D. Hendry.
Arundel - - -	R. Barnes.	Basingstoke - - -	W. H. Pick, B.Sc.
Ardtornish - - -	R. Brooks.	Bath - - -	W. H. Pick, B.Sc., for the Corporation.
Arlington (N. Devon) - - -	Miss Chichester.	Bawtry (Hesley Hall) - - -	B. L. Whittaker, J.P.
Armagh - - -	J. L. E. Dreyer, Ph.D., and Staff of Observatory.	Belfast - - -	J. Wylie, B.A., and G. Robinson, for Prof. Morton.
Asburton - - -	J. S. Amery.	Belper - - -	W. W. Tunnicliffe, B.Sc., F.C.S.
Aspatria - - -	J. Smith Hill, B.A., B.Sc.	Belper (Quarry Bank) - - -	John Hunter.
		Belvoir Castle - - -	W. H. Divers, for the Duke of Rutland.

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1914, together with the NAMES of their STATIONS—cont.:—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Bellingham - - -	Capt. C. Morrison Bell.	Fortrose - - -	Archd. Thom, M.A.
Bennington - - -	Miss Parker and Miss A. H. Parker.	Fort William - - -	W. T. Kilgour.
Berkhamsted - - -	E. Mawley.	Fowey - - -	Dr. W. H. Boyer.
Bettws-y-Coed - - -	Hugh W. Fox, M.D., for the Rural District Council.	Foyne - - -	J. Little, for Lord Monteagle, K.P.
Bexhill-on-Sea - - -	G. H. Weston, M.D., M.O.H., for District Council.	Fulbeck - - -	J. Charlton, for W. V. R. Fane.
Birmingham (Edgbaston). - - -	Alfred Creswell, for the Midland Institute.		
Blackpool - - -	E. W. Rees Jones, M.D., for the Corporation.	Garforth - - -	Prof. Seton, B.Sc., for the University of Leeds.
Blundellsands - - -	Hugh Montgomery.	Geddesdon - - -	Prof. E. T. Dowson and Miss S. S. Dowson.
Bognor - - -	A. G. Thompson.	Glasgow - - -	Prof. L. Becker, Ph.D., and the Staff of Observatory.
Bolton - - -	Thomas Middleby.	Glencairn - - -	D. D. Munro.
Bournemouth - - -	C. Dales, for the Corporation.	Golders Green - - -	J. W. Duncan and the Secretary, Hampstead Garden Suburb Trust.
Bradford - - -	H. Lander, for the Corporation.	Gordon Castle - - -	C. W. Wood, for the Duke of Richmond and Gordon, K.G.
Braemar - - -	A. M. Shirran.	Grayshott - - -	Mrs. C. Lyndon.
Brighton - - -	D. Forbes, M.D., for the Corporation.	Greenock - - -	D. Macalister, C.E.
Brostoke - - -	H. J. P. Williams, O.B., for the District Council.	Greenwich - - -	The Astronomer Royal.
Bromsgrove - - -	T. V. Philpott, M.A., and Miss Philpott.	Guernsey (Villa Carey) (Brooklyn) - - -	F. E. Carey, M.D.
Buchlyvie - - -	Rev. J. A. Macdonald.	Gwernyfed - - -	A. Collenette.
Bucklebury - - -	G. W. Nye and J. E. Henshall, for A. W. Sutton.		J. Slade, for Col. Wood.
Bude - - -	Karl Durston.		
Burnley - - -	Thos. Holt, M.D., for the Corporation.	Halstead - - -	E. T. Adams, F.R.A.S.
Buxton - - -	W. Pilkinson.	Hamilton - - -	T. D. Wallace.
Cahir - - -	R. W. Smith, Junr.	Hampstead - - -	E. L. Hawke, for the Hampstead Scientific Society.
Cally (Gatehouse) - - -	W. Thomson, for Col. F. Murray Baillie.	Hampstead (Redding Road) - - -	H. W. Braby, B.A.
Cambridge - - -	R. Irwin Lynch, M.A., for the Botanic Garden Synchrotron.	Harrowgate - - -	C. E. Rivers, A.M.I.C.E., for the Corporation.
Cardiff - - -	E. Walford, M.D., for the Corporation.	Hastings (St. Leonards) - - -	H. Colborne, M.R.C.S., for the Corporation.
Carryon - - -	Col. R. F. Dodgeon, D.L.	Haverfordwest - - -	J. W. Williams.
Carnforth - - -	W. Farmer.	Hawarden Bridge - - -	John Summers & Sons, Ltd.
Carnoustie - - -	D. Maxwell, C.E.	Hawthorn - - -	Elliott Kitchener, M.A.
Cheadle - - -	R. Horne, for Col. B. H. Phillips.	Hawthorn (Belmont) - - -	The Prior, and Rev. E. C. Williams, O.S.B.
Chelmsford - - -	L. H. H. H. Williams, B.Sc.	Hove - - -	A. Griffith, M.D., M.O.H., for U.D. Council.
Chesham - - -	A. C. Sachy, for the Corporation.	Huddersfield - - -	R. W. Fraser, for U.D. Council.
Chipping-northwood - - -	A. F. Amand and J. McLaren.	Hull - - -	J. Firth, for the Corporation.
Cirencester - - -	Prof. M. Kershaw, B.A., for the R. A. College.	Hutton - - -	H. B. Wittey, for the Corporation.
Clacton-on-Sea - - -	A. W. Shadick, for the Urban District Council.		H. Lloyd Snape, M.D.
Clifton (the College) - - -	D. Rintoul, M.A.		
Clongowes Wood College, - - -	Rev. J. Neary, S.J.	Iffracombe - - -	O. M. Prouse, A.M.I.C.E.
Cockle Park, near Morpeth. - - -	R. Thornton, for Northumberland County Council.	Inverness - - -	W. G. MacConnachie, M.A.
Colinsburgh - - -	Rev. R. Dick.		
Colmonell - - -	A. Ogg, for J. W. McConnel.	Kelso - - -	J. C. Scott.
Colwyn Bay - - -	W. Jones, A.M.I.C.E., for Urban District Council.	Kettins - - -	W. Andrew.
Copdock - - -	P. F. Bland.	Kilkenny Castle - - -	E. Sutton, for the Marquis of Ormonde, K.P.
Coventry - - -	H. Hall Snell, M.D., for the Corporation.	Killarney - - -	E. W. Griffin, M.A.
Crathes - - -	J. Smith.	Killerton - - -	J. Wilson, for Sir T. D. Acland, Bart.
Crichton - - -	George Reid, for Dr. Meikle.	Kilmarnock - - -	P. D. Bryer, for West of Scotland Agricultural College.
Cromer - - -	W. P. Baker, for the District Council.	Kingston-on-Soar - - -	J. C. Wallace, and H. M. McCreath, for the Midland Agricultural and Dairy College.
Croydon (Addington) - - -	Borough Engineer.	Kingstown - - -	J. S. Vaughan, LL.D., for the Corporation.
Cullompton - - -	M. T. Foster.	Kirkcaldy - - -	W. de Watteville, M.D.
			Rev. J. S. Begg.
Dalkeith - - -	J. Whytock.	Lancaster - - -	N. Holden, F.R.A.S., for the Corporation.
Darwen - - -	F. G. Haworth, M.B., for the Corporation.	Lathallan - - -	Dr. W. H. Bryce.
Deerness - - -	M. Spence.	Leadhills - - -	J. M'Farlane, J.P.
Dorchester - - -	H. D. Strange (Borough Engineer).	Leamington Spa - - -	H. Gibbons Ward.
Douglas, Isle of Man - - -	F. Cottle, for the Corporation.	Leathal - - -	W. G. Linn.
Dover - - -	W. G. Lowe, C.E., for the Corporation.	Leek - - -	H. Nowell Farrington.
Drumlanrig - - -	D. Ingles.	Llanberis - - -	A. Lockwood.
Dublin (City) - - -	Sir John W. Moore, M.D., D.Sc.	Llangollen - - -	W. Little, for Town Council.
" (Phoenix Park) - - -	Sir F. W. Moore, M.R.I.A.	Llangammarch Wells - - -	W. Black Jones, M.D., M.O.H.
" (Trinity College) - - -	The Superintendent, Ordnance Survey Office.	Limerick - - -	Rev. W. O'Leary, S.J.
Dumbarton - - -	Prof. Thrift.	Lincoln - - -	Rev. Mr. Mr. H. H. Hoe, for the Corporation.
Dunfermline - - -	W. G. Easterbrook, M.D., Crichton R. Institution.	Lisburn - - -	J. Bidder, M.A.
Dundee - - -	W. Shepherd, for Supt. of Parks.	Lode Massingham - - -	Rev. H. L. Breerton.
Dunfanaghy - - -	J. J. MacGrath, L.R.C.P.	Littlestone-on-Sea - - -	W. Ryals, for H. T. Tubbs.
Dungavel - - -	T. D. Wallace.	Logie Coldstone - - -	J. B. Anderson.
Dunrobin Castle - - -	M. Melville, for the Duke of Sutherland.	London (Bunhill Row) - - -	T. De la Rue & Co., Ltd.
Durham - - -	F. C. H. Carpenter, M.A.	" (Camden Sq.) - - -	H. R. G. D.Sc., LL.D.
Dwyran - - -	W. E. Sotheby.	" (Plumstead) - - -	W. Clover, for Rev. H. B. Workman, D. Lit.
Dyce, Aberdeenshire - - -	J. E. Crombie, M.D.	" (Westminster) - - -	C. W. Edwards, for the Corporation.
		Lowestoft - - -	
Eastbourne - - -	S. R. Henderson, for the Corporation.	Macclesfield - - -	John Dale.
Edinburgh - - -	Prof. D. A. Sampson, F.R.S., and Prof. T. Hudson	Malmesbury - - -	G. Deadman, for C. E. Bertodano.
	Boare F.R.S.	Malvern - - -	E. W. Harris.
Egremont - - -	J. W. Sherwen.	Manchester (Oldham Road) - - -	J. Niven, M.A., M.B., for the Corporation.
Eltham - - -	Miss A. Bramwell, B.Sc.	Manchester (Whitworth Pk.) - - -	Professor Rutherford and R. Tunstall, for the University of Manchester.
Enfield - - -	W. P. Warren.	Marchmont - - -	J. A. Walker.
Exmouth - - -	Samuel Hutton.	Margate - - -	D. R. McCombe and C. J. Pembie.
Eye - - -	S. M. Eggar.	Markree Castle - - -	J. R. Armstrong, for Captain Cooper.
		Marlborough - - -	G. G. Becher, M.A., and Meddowes Taylor, for the College.
Felixstowe - - -	Montague Humphrey, for the Urban District Council.		
Folkstone - - -	The Borough Engineer, for the Corporation.		
Forest of Dean - - -	V. F. Leese and L. S. Osmaston		
Fort Augustus - - -	Rev. C. von Dieckhoff, O.S.B.		

## ix (a)

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1914, together with the NAMES of their STATIONS—cont. :-

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Matfield - - -	D'Arcy Reeve.	Sevenoaks - - -	W. Tattersall.
Matlock - - -	J. D. Evans.	Shafesbury - - -	Rev. F. Ehlers.
Mayfield - - -	G. C. Lawson.	Shankill, Co. Dublin -	E. F. Hale.
Meltham - - -	C. L. Brook.	Sheffield - - -	E. Howorth, F.R.A.S.
Midhurst - - -	The Medical Superintendent (Sanatorium).	Shepton - - -	Rev. H. H. Breton, M.A.
Minehead - - -	E. A. Jones, for R. Shafte Adair.	Shoeburyness - - -	Supt. of Experiments.
Mountmellick -	W. A. Robinson.	Shrewsbury - - -	Capt. H. E. Rathbone, R. E.
Newcastle, Co. Wicklow -	C. D. Hanan, M.B., National Hospital for Consumption.	Sidmouth - - -	Miss C. Radford.
New Malden - - -	W. Parker.	Skegness - - -	R. G. Hawkins, for the District Council.
Newquay - - -	C. C. Vigar, B.A., M.D., for Urban Council.	Southampton - - -	A. Vaughan, for Director General, Ordnance Survey.
Newton Rigg - - -	W. T. Lawrence, for the Cumberland County Council.	Southend-on-Sea -	E. J. Elford, C.E., for the Corporation.
Newtownforbes - - -	J. A. Boyle, for the Earl of Granard.	Southport - - -	J. Baxendell, for the Corporation.
Northwich - - -	J. A. Sauer.	South Shields -	Secretary Tyne Improvement Commission.
Nottingham - - -	A. Brown, A.M.I.C.E., City Engineer.	Sparks - - -	D. O. Morris.
Norwich - - -	A. W. Preston.	Stockport - - -	P. Taylor, Jr.
Norwich (Southwell) -	J. H. Willis.	Stonehaven - - -	J. Hart, for the Corporation.
Oban - - -	E. Baily, M.D., M.O.H.	Stonyhurst - - -	Rev. W. Sidgreaves, S. J. and the Staff of Observatory.
Oxford - - -	The Radcliffe Observer	Strelley - - -	T. L. K. Edge.
Paisley - - -	J. Woodrow, F.R.A.S.	Strathegger Spa -	N. McLean, for H. W. Kaye, B.A., M.B.
Paisnton - - -	A. J. Holman, for Town Council.	Stronvar - - -	G. Dickson.
Perth - - -	the late A. M. Roeder and Henry Coates, F.R.S.E.	Swansea - - -	D. Bliss, for the Corporation.
Pendennis Castle - - -	Lt.-Col. Marshall.		
Penzance - - -	C. H. Benn, for the District Council.		
Plymouth - - -	H. Victor Prigg, A.M.I.C.E., for the Corporation.		
Potterton - - -	D. S. Melville, for Col. E. D. Malcolm, C.B., R.E.		
Portsmouth - - -	A. Mearns Fraser, M.D., for the Corporation.		
Port Talbot - - -	Miss Talbot and G. Lipscombe.		
Princetown - - -	G. Berry.		
Quilty - - -	W. Barrington, M.Inst.C.E., for the West and South Clare Railway.		
Ramsgate - - -			
Ranby Hall - - -	T. G. Taylor, C.E., for the Corporation.		
Raunds - - -	J. Hope, for the Rev. Y. F. Wilson.		
Reading (Leighton Park School) -	Leon G. H. Lee.		
Redruth - - -	C. I. Evans, M.A.		
Rhyd - - -	A. P. Jenkins.		
Richmond - - -	A. A. Goodall, C.E., for District Council.		
Ross (The Graig) -	Town Advancement Ass., Ltd., C. Capel Smith, Secretary.		
Ross (Chasedale) -	H. Southall, J.P.		
Rosyth Dockyard -	F. J. Parsons.		
Rothamsted - - -	The Superintending Civil Engineer.		
Rothsay - - -	The Lawes' Agricultural Trust.		
Routon - - -	D. Pennington, R. D. Whyte, for the Buteshire Nat. Hist. Soc.		
Rousdon - - -	J. Hanagan, for Sir Hugh Bell, Bart.		
Rugby (the School) -	G. Grover, for Hon. Lady Peck.		
Ruthin - - -	J. H. Simpson.		
Ruthwell - - -	Dr. G. A. Grace-Calvert.		
Salcombe - - -	William Brown, for A. Johnstone Douglas, D.L., J.P.		
Salisbury - - -	Capt. John Partridge.		
Sandown - - -	Thos. Challis, for the Earl of Pembroke, G.C.V.O.		
Scalby - - -	C. E. Gilchrist, for Free Library.		
Scarborough - - -	Sir R. A. Allison, J.P., D.L.		
Seaby Bill - - -	Stanley F. Linton, M.O.H., for the Corporation.		
Sesklin, Carrick on Suir -	E. Heron Allen.		
St. Andrews - - -	W. Watson.		
St. Andrews - - -	Capt. John Partridge.		
Salcombe - - -	Thos. Challis, for the Earl of Pembroke, G.C.V.O.		
Salisbury - - -	C. E. Gilchrist, for Free Library.		
Sandown - - -	Sir R. A. Allison, J.P., D.L.		
Scalby - - -	Stanley F. Linton, M.O.H., for the Corporation.		
Scarborough - - -	E. Heron Allen.		
Seaby Bill - - -	J. Ernest Grubb, J.P.		
York (Museum) -	Oxley Grabham, M.A., for the York Phil. Soc.		
" (Bootham) -	The Meteorological Curator.		

Meteorological Office,  
London, S.W.

M.O. 222b.

FOR OFFICIAL USE.

METEOROLOGICAL OFFICE.

BRITISH METEOROLOGICAL AND MAGNETIC YEAR BOOK, 1915.

PART II.

THE

MONTHLY WEATHER REPORT

FOR THE YEAR

1915

ISSUED AS A SUPPLEMENT TO THE

WEEKLY WEATHER REPORT

(VOL. XXXII.—NEW SERIES).

Published by the Authority of the Meteorological Committee.

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1916.

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## LIST OF STATIONS.

The Stations included in the Monthly Weather Report and in the Weekly Weather Report are shown in the list printed on p. vi, arranged under the Districts.

*Height above Mean Sea Level.*—The figures given in this column refer, in general, to the height of the ground on which the rain gauge stands. At Sunshine Stations which do not possess a rain gauge, the height refers to the sunshine recorder. At anemograph stations for which rainfall data is not published monthly, the height refers to the vane of the anemometer.

*Nature of Information published.*—The character of the information given for each station is indicated by the following symbols:—

- W. Weekly Weather Report. Temperature and rainfall data.
- w. Weekly Weather Report. Bright sunshine data.
- © Monthly Weather Report. Bright Sunshine data.
- M. Monthly Weather Report. Full summary (Tables III and IV).
- m. Monthly Weather Report. Abridged summary of temperature, rainfall and sunshine if available (Table III only).
- ↙ Monthly Weather Report. Summary of autographic records of wind (Table II). A corresponding weekly summary appears in the Weekly Weather Report for most of these stations.

*Average Values.*—Reference is made to Publications of the Office containing average values for long periods by means of the following letters:—

- a. Appendix III. of the Weekly Weather Report for 1906. Monthly averages of mean maximum, mean minimum and mean temperature, and of rainfall for the 35 years 1871-1905 and (when available) of bright sunshine for the twenty-five years 1881-1905.
- b. Appendix I. to the volume of "Meteorological Observations at Stations of the Second Order" for 1891. Monthly averages for all elements for the fifteen years 1876-1890.
- c. "Temperature Tables of the British Islands," 1871-1900. Monthly averages of mean maximum, mean minimum and mean temperature generally for the thirty years 1871-1900, together with information on the extremes of temperature in the same period.
- d. "Rainfall tables of the British Islands," Part I., 1866-80, Part II., 1880-90. Monthly averages of rainfall for lustra and for the periods named.

*Royal Observatory, Greenwich.*—The averages for Temperature, with which the current values are compared, are for the 75 years 1841-1915. The averages for rainfall are for the 65 years 1841-1905, and those for sunshine are for the period 1897-1914.

The summary of wind direction is based upon continuous records and the numbers given are proportional to the actual recorded duration for the whole month of wind from the different directions.

The summary of wind force is obtained from the records of a cup anemograph having 5 in. cups and 15 in. arms. The factor used is 3. Winds above 43 miles per hour are reckoned as gales and winds between 21 and 43 miles per hour are classed as "force 4-7."

*Radcliffe Observatory, Oxford.*—The averages are for the 60 years 1855-1914 in the case of pressure, and for the 100 years 1815-1914 in that of rainfall. The pressure values are the means of observations at 9 a.m., Noon, and 9 p.m., reduced to mean daily values by the application of monthly corrections based on observations during the periods 1880-1887 and 1900-1905. The value given under the heading "Cloud" is the mean of observations at 9 a.m., Noon, and 9 p.m. Of the two values given for total rainfall and days of precipitation (1 mm. or more) those in the first line are derived from the daily measurements at 9 a.m. with an ordinary rain gauge, and those in the second line from daily readings of autographic records for the civil day ending at midnight.

	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.		Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>O. SCOTLAND, N.</b>									
a.	<i>a. Islands.</i>					Dungavel	798	m.	—
	<i>b. Mainland.</i>					Eskdalemuir	799	W, w, ○, M.	—
	Baitasound	31	W, ○, m.	—		Glasgow Observatory	180	W, w, ○, M.	—
	Castlebay, Barra Island	37	W, w, ○, M.	—		Springburn Park	351	○, M.	—
	Deerness	160	W, ○, M.	a, b, c.		Greenock	199	m.	—
	Lerwick*	54	W, M.	a, c.		Hamilton	140	m.	—
	Stormoway	51	W, w, ○, M.	a, c.		Helensburgh	221	○, m.	—
	Dunrobin Castle	12	M.	c, d.		Kilmarnock	90	W, w, ○, M.	—
	Fort Augustus	68	W, w, ○, M.	a, c.		Leadhills	1310	m.	—
	Fort William	171	W, M.	a, c.		Oban	18	○, M.	—
	Fortrose	69	○, m.	—		Paisley	106	○, M.	—
b.	Glen Carron	500	W, M.	a, c.		Poltalloch	132	W, m.	c.
	Inverness	98	○, M.	—		Rothesay	200	W, w, ○, M.	c, d.
	Kingussie	840	M.	—		Ruthwell	67	○, m.	—
	Strathpeffer Spa	200	W, w, ○, M.	a.		Thorntonhall	440	○, m.	—
	Wick	81	W, M.	a, c.		Turnberry	96	○, m.	—
<b>1. SCOTLAND, E.</b>									
	Aberdeen	46	W, w, ○, M.	a, c.	b.	Douglas	277	W, w, ○, M.	a, c, d.
	Arbroath	67	M.	—	<b>6. a. SCOTLAND, W.</b>				
	Balmakewan	140	—		<b>b. ISLE OF MAN—</b>				
	Balmoral	930	W, M.	—	<i>continued.</i>				
	Balruddery	276	W, ○, M.	—		Dungavel	798	m.	—
	Banff	3	○, M.	—		Eskdalemuir	799	W, w, ○, M.	—
	Bangour	587	M.	—		Glasgow Observatory	180	W, w, ○, M.	—
	Braemar	1,120	M.	a, c.		Springburn Park	351	○, M.	—
	Carnoustie	39	○, m.	—		Greenock	199	m.	—
	Colinsburgh	130	m.	—		Hamilton	140	m.	—
	Crathes	140	W, ○, M.	—		Helensburgh	221	○, m.	—
	Crieff	432	W, M.	—		Kilmarnock	90	W, w, ○, M.	—
	Dalkeith	130	m.	—		Leadhills	1310	m.	—
	Dundee, E. Necropolis	160	M.	c, d.		Oban	18	○, M.	—
	Coll. Gdn.	244	○, m.	—		Paisley	106	○, M.	—
	Dyce	220	—			Poltalloch	132	W, m.	c.
	Edinburgh, Blackford Hill Obs.	441	W, w, ○, M.	—		Rothesay	200	W, w, ○, M.	c, d.
	" University	227	M.	—		Ruthwell	67	○, m.	—
	Libertont Coll. Gdn.	190	m.	—		Thorntonhall	440	○, m.	—
	Gordon Castle	101	W, w, ○, M.	c, d.		Turnberry	96	○, m.	—
	Kelso (Broomlands)	195	m.	—					
	Kettins	218	m.	—	<b>2. ENGLAND, N.E.</b>				
	Kirkcaldy	90	m.	—	<i>a. Northern.</i>				
	Lathallan	505	M.	—	<i>b. Southern.</i>				
	Lednathie	720	m.	—		Alnwick Castle	210	W, m.	a.
	Leith†	18	W, M.	a, c.		Ampleforth	319	m.	—
	Logie Coldstone	608	m.	—		Bellingham	848	m.	—
	Marchmont	498	W, w, ○, M.	a, c.		Chopwellwood	445	○, m.	—
	Nairn	82	W, w, ○, M.	a, c.		Cockle Park	324	w, ○, M.	a.
	Perth	76	○, M.	a, c.		Durham	336	W, w, ○, M.	a, b, c.
	Rosyth	85	—			Rounton	249	W, M.	c.
	St. Andrews	20	○, m.	—		Scarborough	100	W, w, ○, M.	a, c.
	Stonehaven	86	○, m.	—		South Shields	72	—	—
	Stronavar	422	m.	—		Tynemouth (Coast Guard)	72	W, M.	a, c, d.
	Glen	750	m.	—		Ushaw	599	m.	—
	West Linton	770	W, w, ○, M.	—		West Witton	605	W, m.	—
	Wolfelee	537	m.	—		Whitby	124	○, M.	a, d.
<b>6. a. SCOTLAND, W.</b>									
<b>b. ISLE OF MAN.</b>									
	Ardnadam	64	m.	—		York	56	W, w, ○, M.	a, c, d.
	Ardtornish	48	M.	—		Fulbeck	180	W, m.	a.
	Buchlyvie	118	m.	—		Hull	12	○, M.	a.
	Cally	120	W, M.	a.		Lincoln	58	W, M.	a, d.
	Cardross	130	○, m.	—		Raunceby	124	w, ○, m.	a.
a.	Cargen	85	m.	—		Skegness	12	w, ○, M.	—
	Colmonell	170	W, M.	—		Spurn Head	26	W, w, ○, M.	a, c.
	Drumlanrig	191	m.	—					
	Dumbarton	10	m.	—	<b>3. ENGLAND, E.</b>				
	Dumfries	160	W, w, ○, M.	a.	<i>a. Northern.</i>				
					<i>b. Southern.</i>				
						Cromer	196	W, w, ○, M.	—
						Geldeston	37	W, w, ○, M.	a, c, d.
						Little Massingham	280	W, w, ○, M.	—
						Lowestoft	83	○, M.	a, d.
						Norwich	93	W, w, ○, M.	d.
						Yarmouth (Gorleston)	13	W, w, ○, M.	a, c.
						Bennington	406	○, M.	a, c.
						Berkhamsted	400	○, M.	a, c.
						Cambridge	41	W, w, ○, M.	a, d.
						Chelmsford	134	m.	—
						Claughton-on-Sea	54	W, w, ○, M.	—
						Coppdock	164	○, m.	—
						Felixstowe	10	○, m.	—
						Halstead	139	m.	—
						Hemel Hempstead	535	M.	—
						Ridgeway	269	m.	—
						Rothamsted	424	W, w, ○, M.	a, c, d.
						Shoeburyness	13	m, ○, M.	a.
						Southend	90	○, m.	—
						Walton-on-Naze	69	○, M.	—
						Woburn	291	○, M.	—

\* Lerwick. Averages used are computed from the values for Sumburgh Head.

† Leith. Site changed and Height 30 ft. from November.

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>4. MIDLAND COUNTIES.</b>							
<i>a. Eastern. b. Western.</i>							
Bawtry	65	W, m.	a, c.	Sevenoaks	509	m.	—
Belper	222	m.	—	Southampton	65	W, w, ○, M.	a, c, d.
Belper (Quarry Bank)	280	M.	—	South Farmborough	234	○, M.	—
Belvoir Castle	259	○, M.	a, d.	St. Leonards (Hastings)	178	W, w, ○, M.	a, c, d.
Benson	186	M, m.	—	Totland Bay	140	○, m.	—
Birmingham, Edgbaston	535	W, w, ○, M.	a, d.	Tunbridge Wells	354	W, w, ○, m.	a, c.
Bradford	439	○, m.	d.	Ventnor	80	W, w, ○, m.	a, c.
Buxton	987	W, w, ○, M.	a, b	Wallington	140	m.	—
Coventry	270	○, M.	a.	Warlingham	642	m.	—
Eye	16	m.	—	Westbourne	30	○	—
Garforth	195	○, M.	—	Wisley, Surrey	150	W, w, ○, m.	—
Harragate	476	W, w, ○, m.	a.	Woking	179	m.	—
Hodsock (Worksop)	56	w, ○, M.	a, d.	Wokingham	216	m.	—
Huddersfield	409	○, M.	—	Worthing	36	w, ○, m.	a, c.
Kingston-on-Soar	125	m.	—				
Matlock	636	○, m.	—				
Meltham	513	m.	—				
Nottingham	82	W, w, ○, M.	a.				
Oundle	147	○, m.	—				
Oxford	208	W, w, ○, M.	a, c.				
Raunds	203	W, w, m.	—				
Rugby	379	m.	—				
Sheffield	429	w, ○, M.	a, c, d				
Sparkhill	424	m.	—				
Strelley	377	○, m.	—				
Wakefield	124	○, m.	—				
Bath	66	W, w, ○, M.	a.				
Bromyard	392	m.	—				
Cheadle (Tean)	646	W, m.	a, b, c.				
Cheltenham	214	○, M.	a, c.				
Cirencester	446	W, ○, m.	a, c.				
Hereford	291	W, m.	a.				
Leamington Spa	165	○, m.	—				
Malvern	516	w, ○, m.	—				
Mayfield (Staffs)	374	○, m.	—				
Ross (The Craig)	213	m.	—				
" (Chasedale)	201	○, m.	—				
Rugeley	679	○, m.	—				
Shrewsbury	191	W, M.	d.				
Wellington	207	m.	—				
Wistanstow	481	M.	—				
<b>5. ENGLAND, S.E.</b>							
Addington	472	m.	—				
Aldershot	231	m.	—				
Basingstoke	289	m.	—				
Bognor	20	○, m.	—				
Bournemouth	145	○, m.	—				
Brighton	31	○, M,	a, d.				
Broadstairs	140	○	—				
Bucklebury Place	409	m.	—				
Dover	231	○, M,	—				
Dungeness	21	W, M.	a, c.				
Eastbourne	39	○, M.	a.				
Folkestone	121	○, m.	—				
Grayshott	661	○, m.	—				
Hove	—	○	—				
Malmesbury	235	M.	—				
Margate	53	W, w, ○, m.	a, c, d.				
Marlborough	424	W, w, ○, m.	a, c.				
Matfield	319	m.	—				
Midhurst	480	○, m.	—				
New Malden	39	○, m.	—				
Portsmouth	11	○, M.	a.				
Ramsgate	168	○, m.	—				
Reading (Leighton Pk. School)	264	○, M.	d.				
Ryde	129	○, m.	—				
Salisbury (Wilton)	180	W, M.	a, d.				
Sandown	20	○, m.	—				
Selsey Bill	21	○, m.	—				
<b>5. ENGLAND, S.E.—continued.</b>							
<b>5. ENGLAND, S.E.—continued.</b>							
Severnside	—	—	—	Sevenoaks	509	m.	—
Southampton	65	W, w, ○, M.	a, c, d.	South Farmborough	234	○, M.	—
St. Leonards (Hastings)	178	W, w, ○, M.	a, c, d.	Totland Bay	140	○, m.	—
Tunbridge Wells	354	W, w, ○, m.	a, c.	Ventnor	80	W, w, ○, m.	a, c.
Wallington	140	m.	—	Wallington	642	m.	—
Warlingham	30	○	—	Westbourne	30	m.	—
Wiseley, Surrey	150	W, w, ○, m.	—	Woking	179	m.	—
Wokingham	216	m.	—	Wokingham	216	m.	—
Worthing	36	w, ○, m.	a, c.	Worthing	36	w, ○, m.	—
<b>LONDON.</b>							
Bunhill Row (City)	80	○	—	Bunhill Row (City)	80	○	a.
Camden Square	110	W, w, ○, M.	a, d.	Camden Square	110	W, w, ○, M.	—
Enfield	203	○, m.	—	Enfield	203	○, m.	—
Greenwich	149	W, w, ○, M.	a, c, d.	Greenwich	149	W, w, ○, M.	—
Golders Green	279	m.	—	Golders Green	279	m.	—
Hampstead	450	W, w, ○, M.	—	Hampstead	450	W, w, ○, M.	—
Kew	18	W, w, ○, M.	a, c, d.	Kew	18	W, w, ○, M.	—
Plumstead	300	○	—	Plumstead	300	○	—
Richmond	—	—	—	Richmond	—	—	—
South Kensington†	31	○, M,	—	South Kensington†	31	○, M,	—
Tottenham	51	W, w, ○, M.	—	Tottenham	51	W, w, ○, M.	—
Westminster	27	W, w, ○, M.	a.	Westminster	27	W, w, ○, M.	a.
<b>7. a. ENGLAND, N.W.</b>							
Aspatria	250	W, w, ○, M.	a.	Aspatria	250	W, w, ○, M.	a.
Blackpool	66	W, w, ○, M.	a.	Blackpool	66	W, w, ○, M.	a.
Blundellsands	34	m.	—	Blundellsands	34	m.	—
Bolton	341	○, m.	—	Bolton	341	○, m.	—
Burnley	459	○, m.	d.	Burnley	459	○, m.	d.
Carnforth	174	○, m,	—	Carnforth	174	○, m,	—
Darwen	722	○, M.	—	Darwen	722	○, M.	—
Egremont	349	○, M.	—	Egremont	349	○, M.	—
Hawarden Bridge	22	W, m.	a.	Hawarden Bridge	22	W, m.	a.
Hoylake	30	w, ○, m.	—	Hoylake	30	w, ○, m.	—
Hutton	82	○, m.	—	Hutton	82	○, m.	—
Lancaster	311	○, m.	—	Lancaster	311	○, m.	—
Leyland	124	○, M.	—	Leyland	124	○, M.	—
Liverpool (Bidston Obs.)	188	W, w, ○, M.	a, c.	Liverpool (Bidston Obs.)	188	W, w, ○, M.	a, c.
Macclesfield	500	m.	—	Macclesfield	500	m.	—
Manchester (Oldham Road)	190	w, ○, M.	a.	Manchester (Oldham Road)	190	w, ○, M.	a.
" (Whitworth Park)	125	W, w, ○, M.	—	" (Whitworth Park)	125	W, w, ○, M.	—
Morecambe	24	○, m.	—	Morecambe	24	○, m.	—
Newton Rigg	559	W, w, ○, M.	a.	Newton Rigg	559	W, w, ○, M.	a.
Northwich	117	m.	—	Northwich	117	m.	—
Scalby	111	m.	—	Scalby	111	m.	—
Southport	37	W, w, ○, M.	a.	Southport	37	W, w, ○, M.	a.
Stockport	254	M.	—	Stockport	254	M.	—
Stonyhurst	375	W, w, ○, M.	a, c, d.	Stonyhurst	375	W, w, ○, M.	a, c, d.
<b>b. NORTH WALES.</b>							
Aberdovey	22	w, ○, m.	—	Aberdovey	22	w, ○, m.	—
Bettws-y-Coed*	147	W, w, ○, M.	—	Bettws-y-Coed*	147	W, w, ○, M.	—
Colwyn Bay	81	○, m.	—	Colwyn Bay	81	○, m.	—
Holyhead	15	W, w, ○, M.	a, c.	Holyhead	15	W, w, ○, M.	a, c.
Llanberis (Pen-y-gwryd)	913	m.	—	Llanberis (Pen-y-gwryd)	913	m.	—
Llandudno	71	W, w, ○, M.	a, b, c, d.	Llandudno	71	W, w, ○, M.	a, b, c, d.
Rhyl	30	○, m.	a.	Rhyl	30	○, m.	a.
Ruthin	449	m.	—	Ruthin	449	m.	—
Welshpool	255	m.	—	Welshpool	255	m.	—

\* The thermometer screen stands on ground 100 ft. above M.S.L.

† The thermometer screen is 60 ft. above the ground.

Station.	Height in feet above M.S.L.	Character of information published.	Averages.	Station.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>8. a. SOUTH WALES.</b>							
<b>b. ENGLAND, S.W.</b>							
Aberystwyth	59	w, $\odot$ , m.	—	Blackrod Point	?	W, M.	a.
Bude	49	$\odot$ , m.	—	Dunfanaghy	54	m.	—
Cardiff	203	W, w, $\odot$ , M.	a, d.	Malin Head	208	W, w, $\odot$ , M.	a, c.
Gwernyfed	374	m.	—	Mallaranny	—	$\odot$	—
Haverfordwest	250	$\odot$ , m.	—	Markree Castle	122	W, w, $\odot$ , M.	a, b, c.
Llangammarch Wells	550	W, w, $\odot$ , M.	a.	Newtownforbes	? 172	m.	—
Pembroke (St. Ann's Head)	149	W, w, $\odot$ , M.	a, c.	Armagh	196	W, w, $\odot$ , M.	a, c, d.
Port Talbot	179	$\odot$	—	Belfast	61	M.	a, d.
Swansea	24	$\odot$ , m.	—	Donaghadee	101	W, M.	a, c.
Tenby	79	$\odot$ , m.	a.	Lisburn	206	m.	—
<b>9. IRELAND, N.</b>							
<i>a. Western.</i>							
<i>b. Eastern.</i>							
Blackrod Point	—	—	—	Blackrod Point	?	W, M.	a.
Dunfanaghy	54	m.	—	Dunfanaghy	54	m.	—
Malin Head	208	W, w, $\odot$ , M.	—	Malin Head	208	W, w, $\odot$ , M.	a, c.
Mallaranny	—	$\odot$	—	Mallaranny	—	$\odot$	—
Markree Castle	122	W, w, $\odot$ , M.	—	Markree Castle	122	W, w, $\odot$ , M.	a, b, c.
Newtownforbes	? 172	m.	—	Newtownforbes	? 172	m.	—
<b>10. IRELAND, S.</b>							
<i>a. Eastern.</i>							
<i>b. Western.</i>							
Clongowes Wood College	245	$\odot$ , M.	—	Clongowes Wood College	245	$\odot$ , M.	—
Dublin, City	47	W, M.	—	Dublin, City	47	W, M.	a, b, c.
" Trinity College	12	W, $\odot$ , M.	—	" Trinity College	12	W, $\odot$ , M.	a, c.
" Phoenix Park	155	W, $\odot$ , M.	—	" Phoenix Park	155	W, $\odot$ , M.	a, c.
" Glasnevin	67	M.	—	" Glasnevin	67	M.	—
" Shankill	59	M.	—	" Shankill	59	M.	—
Newcastle, Co. Wicklow	256	m.	—	Newcastle, Co. Wicklow	256	m.	—
Kilkenny	212	W, m.	—	Kilkenny	212	W, m.	a, c.
Kingstown	42	$\odot$ , m.	—	Kingstown	42	$\odot$ , m.	—
Mountmellick	252	m.	—	Mountmellick	252	m.	—
Seskin (Carraig-on-Suir)	541	W, w, $\odot$ , M.	—	Seskin (Carraig-on-Suir)	541	W, w, $\odot$ , M.	—
Waterford	20	W, m.	—	Waterford	20	W, m.	a.
Waterford (Training College)	20	m.	—	Waterford (Training College)	20	m.	—
Wexford	116	m.	—	Wexford	116	m.	—
<b>11. ENGLISH CHANNEL.</b>							
Ballinacurra	24	w, $\odot$ , m.	—	Ballinacurra	24	w, $\odot$ , m.	—
Birr Castle	175	W, w, $\odot$ , M.	—	Birr Castle	175	W, w, $\odot$ , M.	a, b, c.
Cahir	199	W, m.	—	Cahir	199	W, m.	—
Foynes	50	W, m.	—	Foynes	50	W, m.	a, c.
Killarney	174	W, m.	—	Killarney	174	W, m.	a, c.
Limerick	47	M.	—	Limerick	47	M.	—
Quilty	100	—	—	Quilty	100	—	—
Roche's Point	32	W, M.	—	Roche's Point	32	W, M.	a, c.
Valencia	30	W, w, $\odot$ , M.	—	Valencia	30	W, w, $\odot$ , M.	a, c.
Weaver Point	160	—	—	Weaver Point	160	—	—

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Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Aberdovey	W. J. Evans.	Ballymacurra	John H. Bennett.
Aberystwyth	A. Thomas, M.D., for the Urban Council.	Ballymakewan	William Low, B.Sc.
Aldershot	E. W. Routley, M.D., M.R.C.P.	Balmoral	J. M. Troup, for J. Michie, M.V.O.
Aldwick Castle	Robert Kyle, for the Duke of Northumberland, K.G.	Baltruddery	G. Davie, for J. Martin White.
Ampleforth	Rev. H. de Normanville, O.S.B.	Baltasound	T. Edmonston Saxby, F.R.C.S., Ed.
Arbroath	J. Campbell.	Banff	A. J. Leigh, B.Sc., and A. B. Weir, B.Sc., for Dr. Spriggs.
Arnoldham	Rev. J. Calles Mitchell, B.D.	Bangour	D. Henry.
Asdaingham	R. H. P. and W. D. Besant.	Baddingstone	W. J. Pickett, B.Sc.
Arlington (N. Devon)	Miss Chichester.	Bath	W. H. Symons, M.D., for the Corporation.
Armagh	J. L. E. Dreyer, Ph.D., and Staff of Observatory.	Bawtry (Hesley Hall)	B. L. Whitaker, J.P.
Ashburton	J. S. Amery.	Belfast	J. Wyke, B.A., and G. Robinson, for Prof. Morton.
Aspatria	J. Smith Hill, B.A., B.Sc.	Belper	W. W. Tunnicliffe, B.Sc., F.C.S.

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Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Belper (Quarry Bank)-	John Hunter.	Forstose - - -	Arend, Thom, M.A.
Bervoir Castle -	W. H. Divors, for the Duke of Rutland.	Fort William - - -	W. T. Kilgour.
Bellington -	Capt. C. Morrison Bell.	Fowey - - -	F. E. Ross.
Bennington -	Miss Parker and Miss A. H. Parker.	Foynes - - -	J. Little, for Lord Monteagle, K.P.
Berkhamsted -	E. Mawley.	Fulbeck - - -	J. Charlton, for W. V. R. Fane.
Bettws-y-Coed -	Hugh W. Fox, M.D., for the Rural District Council.		
Birmingham (Edgbaston), Blackpool -	Alfred Cresswell, for the Midland Institute.		
Blundellsands -	E. W. Rees Jones, M.D., for the Corporation.	Garforth - - -	Prof. Seton, B.Sc., for the University of Leeds.
Bognor -	Hugh Montgomery.	Gedlestone - - -	the late E. T. Dowson and Miss S. S. Dowson.
Bolton -	A. G. Thompson.	Glasgow - - -	Prof. L. Becker, Ph.D., and the Staff of Observatory.
Bournemouth -	Thos. Midgley.	Glen, Peeblesshire -	Alexander Black.
Bradford -	R. H. Landis, for the Corporation.	Glenecar - - -	D. D. Munro.
Braemar -	H. Landis, for the Corporation.	Golders Green - - -	J. W. Duncan and the Secretary, Hampstead Garden Suburb Trust.
Brighton -	E. A. Shirran.	Gordon Castle - - -	C. Webster, for the Duke of Richmond and Gordon.
Broadstairs -	D. Forbes, M.D., for the Corporation.	Grayshott - - -	Mrs. C. Lyndon.
Bryonyard -	Howard Hurd, C.E., for the District Council.	Greenock - - -	D. Macalister, C.E.
Buckingham Place -	R. V. Philpot, M.A., and Miss Philpot.	Greenwich - - -	The Astronomer Royal.
Bude -	R. J. McDonald.	Guernsey (Villa Carey) (Brooklyn) -	F. E. Carey, M.D.
Burnley -	G. W. Nye, J. E. Henshall, for A. W. Sutton.	" (Brooklyn) -	A. Collenette.
Buxton -	Karl Durston.	Gwernyfed -	J. Slade, for J. J. Crosfield.
Cahir -	Thos. Holt, M.D., for the Corporation.		
Cally (Gatehouse)-	W. Pilkington.	Halstead - - -	E. T. Adams, F.R.A.S.
Cambridge -		Hamilton - - -	T. D. Wallace.
Cardiff -	R. W. Smith, Junr.	Hampstead - - -	E. J. Hawke, for the Hampstead Scientific Society.
Cardsross -	W. Thomson, for Col. F. Murray Baillie.	Harrogate - - -	C. E. Rivers, A.M.I.C.E., for the Corporation.
Cargen -	R. Irwin Lynch, M.A., for the Botanic Garden Syndicate.	Hastings (St. Leonards) -	H. Colborne, M.R.C.S., for the Corporation.
Carnforth -	E. Walford, M.D., for the Corporation.	Haverfordwest - - -	J. W. Phillips.
Carnoustie -	E. Walford, M.D., for the Corporation.	Hawarden Bridge -	John Summers & Sons, Ltd.
Cheadle -	E. Walford, M.D., for the Corporation.	Helensburgh -	Jas. A. Stirling, B.C.E.
Chelmsford -	E. Walford, M.D., for the Corporation.	Hemel Hempstead -	E. H. King, M.A.
Cheltenham -	A. C. Saxby, for the Corporation.	Hertford (Bennetts) -	The Provost, and Rev. E. C. Williams, O.S.B.
Chopwellwood -	J. F. Annand and J. McLaren.	Hove - - -	A. Griffith, M.D., M.O.H., for the Corporation.
Cirencester -	Prof. M. Kershaw, B.A., for the R. A. College.	Hoylake - - -	R. W. Fraser, for U.D. Council.
Clacton-on-Sea -	A. W. Shadick, for the Urban District Council.	Huddersfield -	J. Firth, for the Corporation.
Clifton (the College) -	D. R. Hinton, M.A.	Hull - - -	H. B. Witty, for the Corporation.
Clongowes Wood -	Rev. F. Kenny, S.J.	Hutton - - -	H. Lloyd Snape, M.D.
Cockle Park, near Morpeth. -	D. B. Johnstone-Wallace, for Northumberland County Council.	Iffracombe - - -	O. M. Prouse, A.M.I.C.E.
Colinsburgh -	Rev. R. Dick.	Inverness - - -	W. G. MacConnaugie, M.A.
Compton -	A. Org. for T. W. McConnell.	Kelso (Broomlands) -	J. C. Scott.
Colwyn Bay -	W. Jones, A.M.I.C.E., for Urban District Council.	Kettins - - -	W. Andrew.
Copdock -	F. I. Bland.	Kilkenny Castle -	E. Sutton, for the Marquis of Ormonde, K.P.
Coventry -	E. Hugh Snell, M.D., for the Corporation.	Killarney - - -	E. J. Green, M.D.
Crathes -	J. Smith.	Killerton - - -	J. Wilson, for Sir T. D. Acland, Bart.
Crief -	G. Reid for Dr. Gordon Meikle.	Kilmarnock - - -	Prof. R. A. Berry, for West of Scotland Agricultural College.
Cromer -	Clerk to the Urban District Council.	Kingston-on-Soar -	J. C. Wallace, and H. M. McCreathe, for the Midland Agricultural and Dairy College.
Croydon (Addington) -	Borough Engineer.	Kingstown - - -	J. S. Vaughan, LL.D., for the Corporation.
Culmpton -	M. T. Foster.	Kirkcaldy - - -	W. de Watteville, M.D.
Dalkeith -	J. Whytock.	Lancaster - - -	Rev. J. S. Begg, M.A.
Darwen -	E. G. Haworth, M.B., for the Corporation.	Lathallan - - -	N. Holden, F.R.A.S., for the Corporation.
Deerness -	M. Spence.	Leahill - - -	Mr. W. H. Brown.
Dorchester -	H. D. Strange (Borough Engineer).	Leamington Spa - - -	I. McParlane, J.P.
Douglas, Isle of Man -	F. Cottle, for the Corporation.	Lednathie - - -	H. Gibbons Ward.
Dover -	W. C. Hawke, C.E., for the Corporation.	Leyland - - -	W. G. Lindsay.
Drumlanrig (Galloway) -	D. Inglis.	Llanberis - - -	H. Nowell Flarington.
Dublin (Sly) -	W. Moore, M.D., D.Sc.	Llandudno - - -	A. L. Wood.
" (Phoenix Park)-	Sir F. W. Moore, M.R.I.A.	Llangollen - - -	W. Little, for Town Council.
" (Trinity College)	The Superintendent, Ordnance Survey Office.	Limerick - - -	F. Griffiths.
Dumbarton -	Prof. Thirlfitt.	Lincoln - - -	Rev. W. O'Leary, S.J., and Rev. M. Saul, S.J.
Dumfries -	Wm. Denby and Bros.	Little Massesham -	J. P. Mason, for M.O.H.
Dundee, E. Necropolis -	Col. Easton, M.D., Crichton R. Institution.	Londisburn -	J. Ridges, M.A.
College Gdn. -	W. Shepherd, for Supt. of Parks.	Lord Crewe -	R. R. Crewe, M.A.
Dunfanaghy -	James Malach.	London (Bunhill Row) (Camden Sq.) -	J. B. Anderson.
Dungavel -	J. J. MacGrath, L.R.C.P.	" (Plumstead) -	T. De la Rue & Co., Ltd.
Dunrobin Castle -	T. D. Wallace.	" (Westminster) -	H. R. Mill, D.Sc., LL.D.
Durham -	M. Melville, for the Duke of Sutherland.	Lowestoft - - -	J. G. Waller.
Dyce, Aberdeenshire -	The Meteorological Observer.		W. Clover, for Rev. H. B. Workman, D. Lit.
	J. E. Crombie, L.L.D.		C. W. Edwards, for the Corporation.
Eastbourne -	W. W. Brown, for the M.O.H.	Macclesfield - - -	John Dale and Sam H. Moss.
Edinburgh, University -	Prof. T. Hudson Boare, F.R.S.E.	Mallaranny - - -	The Managers of the Hotel for the M.G.W. Railway.
" Blackford Hill. -	The Astronomer Royal for Scotland.	Malmesbury - - -	G. Denman, for C. E. Bertodano.
" Liberton Coll. Gdn. -	J. Harris for Edinburgh and East of Scotland College of Agriculture.	Malvern - - -	E. W. Harris.
Epsomont -	J. W. Sherwin.	Manchester (Oldham Road) -	J. Niven, M.A., M.B., for the Corporation.
Enfield -	W. P. Warren.	Manchester (Whitworth Pk.) -	Professor Rutherford and R. Tunstall, for the University of Manchester.
Exmouth -	Samuel Hutton.	Marchmont - - -	J. A. Goddard.
Eye -	S. M. Egar.	Margate - - -	D. R. McCombe and C. J. Pemble.
Felixstowe -	Montague Humphrey, for the Urban District Council.	Markree Castle - - -	J. R. Armstrong, for Captain Cooper.
Folkstone -	The Borough Engineer, for the Corporation.	Marlborough - - -	G. G. Becher, M.A., and Meddowes Taylor, for the College.
Fort Augustus -	Rev. C. von Dieckhoff, O.S.B.		

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Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Matfield - - -	D'Arcy Reeve.	Selsey Bill - - -	E. Heron Allen.
Matlock - - -	J. D. Evans.	Seskin, Carrick-on-Suir - - -	J. Ernest Grubb, J.P.
Mayfield - - -	G. C. Lawson.	Sevenoaks - - -	W. Tattersall.
Meltham - - -	C. L. Brook.	Shaftesbury - - -	Rev. F. Ehlers and Alexander Macdonnel, M.A.
Midhurst - - -	The Medical Superintendent (Sanatorium).	Shaw Hill, Co. Dublin - - -	H. Taylor.
Minehead - - -	Rev. R. H. Palmer, for Sir R. Shafte Adair, Bart.	Sheffield - - -	E. H. Worth, F.R.A.S.
Morecambe - - -	H. H. Wright and T. B. Lamb, for the Borough Council.	Sheepstor - - -	Rev. H. H. Breton, M.A.
Mountmellick - - -	W. A. Robinson.	Shoeburness - - -	Supt. of Experiments.
Newcastle, Co. Wicklow - - -	C. D. Hasan, M.B., National Hospital for Consumption.	Shrewsbury - - -	Col. H. L. Jessop, R.E.
New Malden - - -	W. J. Carter.	Sidmouth - - -	Miss C. Radford.
Newquay - - -	C. C. Vigurs, B.A., M.D., and A. D. Braggins, for Urban Council.	Skegness - - -	R. H. Watkins, for the District Council.
Newton Rigg - - -	W. T. Lawrence, for the Cumberland County Survey.	Southampton - - -	A. Vaughan, for Director General, Ordnance Survey.
Newtownforbes - - -	J. A. Boyle, for the Earl of Granard.	Southend-on-Sea - - -	E. J. Elford, C.E., for the Corporation.
Northwich - - -	J. A. Saner.	Southport - - -	J. Baxendell, for the Corporation.
Nottingham - - -	A. Brown, A.M.I.C.E., City Engineer.	South Shields - - -	Secretary Tyne Improvement Commission.
Norwich - - -	A. W. Preston.	Stockport - - -	D. H. Owen.
Norwich (Southwell) - - -	J. H. Willis.	Stonehaven - - -	F. T. Moore, Jr.
Oban - - -	E. Bally, M.D., M.O.H.	Stonyhurst - - -	J. Hart, for the Corporation.
Oundle (The School) - - -	F. W. Sanderson, M.A.	Strelley - - -	Rev. W. Sidgreaves, S. J. and the Staff of Observatory.
Oxford - - -	The Radcliffe Observer.	Strathpeffer Spa - - -	T. L. K. Edge.
Paisley - - -	The Convener, The Coats Observatory.	Stratton-on-Fosse - - -	N. McLean, for H. W. Kaye, B.A., M.B.
Paiton - - -	A. J. Holman, for Town Council.	Stronavar - - -	R. P. Brookfield.
Perth - - -	Henry Coates, F.R.S.E.	Swansea - - -	G. Dickson.
Pendennis Castle - - -	Lt.-Col. Marshall.		D. Bliss, for the Corporation.
Pembroke - - -	H. B. Bowring, for District Council.		
Plymouth - - -	H. Victor Prizz, A.M.I.C.E., for the Corporation.		
Poitloch - - -	D. S. Melville, for Col. E. D. Malcolm, C.B., R.E.		
Portsmouth - - -	A. Mearns Fraser, M.D., for the Corporation.		
Port Talbot - - -	Miss Talbot and G. Lipscombe.		
Princetown - - -	G. Berry.		
Quilty - - -	W. Barrington, M.Inst.C.E., for the West and South Clare Railway.		
Ramsgate - - -	T. G. Taylor, C.E., for the Corporation.		
Ranceby Hall - - -	J. Hope, for the Rev. Y. F. Willson.		
Raunds - - -	Leon, G. H. Lee.		
Reading (Leighton Park School) - - -	C. I. Evans, M.A.		
Redruth - - -	A. P. Jenkins.		
Rhyd - - -	A. A. Goodall, C.E., for District Council.		
Richmond - - -	Town Advancement Ass., Ltd., C. Capel Smith, Secretary.		
Ridgewell - - -	Miss E. W. Gurney.		
Ross (The Graig) - - -	J. Soutarill, J.P.		
Ross (Chasdale) - - -	F. J. Parsons.		
Rosyth Dockyard - - -	The Superintending Civil Engineer.		
Rothamsted - - -	The Lawes' Agricultural Trust.		
Rothesay - - -	J. Davidson and R. D. Whyte, for the Buteshire		
Roumton - - -	J. Hanagan, for Sir Hugh Bell, Bart.		
Rousdon - - -	G. Grover, for Hon. Lady Peck.		
Rugby (the School) - - -	J. H. Simpson and B. B. Dickinson, M.A.		
Rugeley - - -	P. W. Battin, for the Marquis of Anglesey.		
Ruthin - - -	Dr. G. A. Grace-Calvert.		
Ruthwell - - -	William Brown, for A. Johnstone Douglas, D.L., J.P.		
Ryde - - -	The Borough Engineer.		
St. Andrews - - -	W. Watson.		
Salecombe - - -	Capt. John Partridge.		
Salisbury - - -	Thos. Challis, for the Earl of Pembroke, G.C.V.O.		
Sandown - - -	C. E. Gilchrist, for Free Library.		
Scalby - - -	Sir R. A. Allison, J.P., D.L.		
Scarborough - - -	Stanley F. Linton, M.O.H., for the Corporation.		
		Wakefield - - -	The Waterworks Engineer.
		Warlingham - - -	R. H. Curtis.
		Watford - - -	E. Carritt and Bayard.
		Welshpool - - -	W. D. Lewis.
		Westbourne - - -	Rev. L. B. Birkett.
		West Linton - - -	Dr. J. Ritchie Jeffrey.
		Weston-Super-Mare - - -	Sydney C. Smith and W. H. Allen, for District Council.
		West Witton - - -	J. L. Esther.
		Wexford - - -	Charles Bain.
		Weymouth - - -	J. H. Bolam, Hon. Borough Meteorologist.
		Whitby - - -	T. Woodhouse Parkinson, for the Literary and Philosophical Society.
		Wisley - - -	The Superintendent, for the Roy. Hort. Society.
		Wistanstow - - -	Rev. M. J. LaTouche, B.A.
		Woking - - -	T. Hobbs, for the Royal Agricultural Society.
		Wokingham - - -	G. C. H. Simmonds.
		Wolfelee - - -	The Medical Superintendent of the Sanatorium.
		Woolacombe - - -	W. Steedman.
		Worksop - - -	T. S. Watkinson, for Miss Chichester.
		Worthing - - -	Lt.-Col. H. Mellish, J.P.
			R. H. Wilshaw, M.B., D.P.H., for the Corporation.
		York (Museum) - - -	Oxley Graham, M.A., for the York Phil. Soc.
		" (Bootham) - - -	The Meteorological Curator.

NAPIER SHAW,

Director.

Meteorological Office,  
London, S.W.  
5th May, 1916.

M.O. 222b.

FOR OFFICIAL USE.

METEOROLOGICAL OFFICE.

BRITISH METEOROLOGICAL AND MAGNETIC YEAR BOOK, 1916.

PART II.

THE

MONTHLY WEATHER REPORT

FOR THE YEAR

1916

ISSUED AS A SUPPLEMENT TO THE

WEEKLY WEATHER REPORT

(VOL. XXXIII.—NEW SERIES).

Published by the Authority of the Meteorological Committee.

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1917.

Subscription price, including the Weekly Weather Report, Thirty Shillings, post free.

The stations from which the District Values of Temperature and Rainfall are computed are indicated in Table III by the symbol ¶ and the corresponding stations for Sunshine by the symbol §.

III.—Table II.—Summary of autographic records of wind.

All the records are obtained from instruments of the Dines Pressure Tube type except where otherwise stated. Notes on the classification of the winds will be found on p. 167.

IV. A plate of four maps showing :—

- i. The monthly distribution of pressure and winds based on observations at telegraphic reporting stations; also the normal distribution of pressure for the month for the period 1871-1905. Isobars are drawn for intervals of 2 millibars or 1 millibar.
- ii. The movements of depressions.
- iii. The distribution of mean temperature over the land and in the coastal waters.
- iv. The distribution of bright sunshine in hours per day. A similar map was added for the first time in the issue for 1908.

V. A full page map showing by means of isohyetal lines the distribution of the month's precipitation. These maps are prepared by Dr. H. R. Mill, the Director of the British Rainfall Organization, and are based on data from nearly 1,000 stations.

VI.—Table III, giving Summaries of the records of extreme and mean air temperature and of earth temperature at 1 foot and 4 feet, rainfall and sunshine, and of weather observations, with differences from the averages in the case of air temperature, rainfall and sunshine for those places for which averages are available.

VII.—Table III(a).—Additional values of sunshine for a few stations not included in Table III.

VIII.—Table IV, giving Summaries of the observations of pressure, temperature, humidity, cloud, and wind made at set hours (9 a.m. [3 p.m.] and 9 p.m. at normal climatological stations, and 7 a.m., 1 p.m. and 9 p.m., or at 7 a.m. [1 p.m.], 6 p.m., at telegraphic reporting stations). The difference from the average in the case of pressure is also included for those places for which averages are available.

Tables II and III together include all the items comprised in the international form of monthly climatological summary, and they give in addition information regarding the duration of bright sunshine, earth temperature at 1 foot and 4 feet (from 1906), the number of observations of fresh or strong winds (forces 4-7 of the Beaufort Scale, from 1906), the number of days of fog (from 1906), the number of days of ground frost (minimum temperature on the grass, 30° and below, from 1908), and the pressure at mean sea level, from 1912.

LIST OF STATIONS.

The Stations included in the Monthly Weather Report and in the Weekly Weather Report are shown in the list printed on p. v, arranged under the Districts.

*Height above Mean Sea Level.*—The figures given in this column refer, in general, to the height of the ground on which the rain gauge stands. At Sunshine Stations which do not possess a rain gauge, the height refers to the sunshine recorder. At anemograph stations for which rainfall data are not published monthly, the height refers to the vane of the anemometer.

*Nature of Information published.*—The character of the information given for each station is indicated by the following symbols :—

- W. Weekly Weather Report. Temperature and rainfall data.
- w. Weekly Weather Report. Bright sunshine data.
- ◎ Monthly Weather Report. Bright Sunshine data.
- M. Monthly Weather Report. Full summary (Tables III and IV).
- m. Monthly Weather Report. Abridged summary of temperature, rainfall and sunshine if available (Table III only).
- μ Monthly Weather Report. Summary of autographic records of wind (Table II). A corresponding weekly summary appears in the Weekly Weather Report for most of these stations.

*Average Values.*—Reference is made to Publications of the Office containing average values for long periods by means of the following letters :—

- a. Appendix III. of the Weekly Weather Report for 1906. Monthly averages of mean maximum, mean minimum and mean temperature, and of rainfall for the 35 years 1871-1905 and (when available) of bright sunshine for the twenty-five years 1881-1905.
- b. Appendix I. to the volume of "Meteorological Observations at Stations of the Second Order" for 1891. Monthly averages for all elements for the fifteen years 1876-1890.
- c. "Temperature Tables of the British Islands," 1871-1900. Monthly averages of mean maximum, mean minimum and mean temperature generally for the thirty years 1871-1900, together with information on the extremes of temperature in the same period.
- d. "Rainfall tables of the British Islands," Part I., 1866-80, Part II., 1880-90. Monthly averages of rainfall for lustra and for the periods named.

*Royal Observatory, Greenwich.*—The averages for Temperature, with which the current values are compared, are for the 75 years 1841–1915. The averages for rainfall are for the 65 years 1841–1905, and those for sunshine are for the period 1897–1914.

The summary of wind direction is based upon continuous records and the numbers given are proportional to the actual recorded duration for the whole month of wind from the different directions.

The summary of wind force is obtained from the records of a cup anemograph having 5 in. cups and 15 in. arms. The factor used is 3. Winds above 43 miles per hour are reckoned as gales and winds between 21 and 43 miles per hour are classed as "force 4-7."

*Radcliffe Observatory, Oxford.*—The averages are for the 60 years 1855–1914 in the case of pressure, and for the 100 years 1815–1914 in that of rainfall. The pressure values are the means of observations at 9 a.m., Noon, and 9 p.m., reduced to mean daily values by the application of monthly corrections based on observations during the periods 1880–1887 and 1900–1905. The value given under the heading "Cloud" is the mean of observations at 9 a.m., Noon, and 9 p.m. Of the two values given for total rainfall and days of precipitation (1 mm. or more) those in the first line are derived from the daily measurements at 9 a.m. with an ordinary rain gauge, and those in the second line from daily readings of autographic records for the civil day ending at midnight.

#### STANDARDS OF TIME.

The Summer Time Act which received the Royal Assent on 17th May, 1916, provided that the time for general purposes, from 21st May to 30th September, 1916, inclusive, should be one hour in advance of Greenwich and Dublin Mean Time in Great Britain and Ireland respectively. In accordance with the clause stating that nothing in the Act should affect the use of Greenwich Mean Time for meteorological purposes, circulars were addressed to observers recommending them to make their observations at the same hours by Greenwich or Dublin Time as heretofore. At the majority of stations this recommendation was adopted but in a few cases circumstances made it necessary to adhere to the same hour by civil time throughout the year. The times of observation at such stations during the summer months are given in Table III of the monthly issues. The issue for September should be consulted as the most accurate in this respect. At three stations Felixstowe, Eastbourne and Morecambe, the morning observations were made for a short period at 8h. G.M.T. In the case of Cambridge a permanent change was made on May 21st, the hours 8h, 20h, G.M.T. being adopted for observations in winter and summer.

In the Monthly Weather Report a distinction was made between Table III which is a summary of records for the whole day and Table IV which is devoted to observations at fixed hours. A change of the time of observation for the summer months excluded a station from Table IV but did not affect its position in Table III.

From October 1st Greenwich Mean Time was adopted for civil purposes in Ireland, so that there were three standards of time in operation in the course of the year in that country, Dublin Mean Time from January 1st to May 20th, Irish Summer Time from May 21st to September 30th, and Greenwich Mean Time from October 1st to the end of the year.

The Irish stations fall into four categories :—

(a) Those in which the times of observation given in the Monthly Weather Report refer to Greenwich Mean Time throughout the year. These are all telegraphic stations.

Blackrod Point, Malin Head, Donaghadee, Birr Castle, Valencia Observatory and Roche's Point.

(b) Those in which the times refer to Dublin Mean Time or to Local Mean Time throughout.

Dunfanaghy, Lisburn, Armagh, Trinity College, Phoenix Park, Newcastle, Clongoweswood, Kilkenny, Seskin, Ballinacurra.

(c) Those in which the times refer to Dublin Mean Time up to September 30th, and to Greenwich Mean Time thereafter.

Markree Castle, Belfast, Dublin City, Glasnevin, Shankill (Ranelagh), Mountmellick, Waterford (Rocklands), Cahir, Foynes, Mungrange College.

(d) Those in which civil time was used throughout the year.

Newtownforbes, Waterford (Training College), Killarney.

#### SEA-TEMPERATURE.

On page xi. below, space has been found for a Table of Sea-temperatures. Such a Table showing the mean temperature for periods of four weeks was published for the years 1912–1915 with the Preface to the Weekly Weather Report. Sea-temperatures were shown week by week from 1907 to 1915 in a table in the Weekly Weather Report, but this Table was discontinued in 1916 owing to the interruption by the war of the punctual communication of observations. It may be mentioned, however, that on the Monthly Meteorological Charts of the North Atlantic, five maps are exhibited, in which the most recent information regarding the surface temperature of the ocean, and of the air over the ocean is shown. The data relate to successive periods of seven days, and the area includes the water in the immediate neighbourhood of the British Isles.

NAPIER SHAW,  
Director.

Meteorological Office,  
London, S.W.7,  
June 22nd, 1917.

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>O. SCOTLAND, N.</b>							
a. Islands.				Dungavel	798	m.	—
b. Mainland.				Eskdalemuir	794	W, w, $\odot$ , M, $\mu$ .	—
Baltasound	31	W, $\odot$ , m.	—	Glasgow Observatory	180	W, w, $\odot$ , M.	—
Castlebay, Barra Island	37	W, w, $\odot$ , M.	—	" Springburn Park	351	$\odot$ , M.	a, c, d.
Deerness	160	W, w, $\odot$ , M.	a, b, c.	Greenock	199	m.	—
Lerwick*	54	W, M.	a, c.	Hamilton	140	m.	—
Stornoway	51	W, w, $\odot$ , M.	a, c.	Helensburgh	21	$\odot$ , m.	—
Dunrobin Castle	12	M.	c, d.	Kilmarnock	90	W, w, $\odot$ , m.	—
Fort Augustus	68	W, w, $\odot$ , M.	a, c.	Leadhills	1310	m.	—
Fort William	171	W, M.	a, c.	Oban	18	$\odot$ , M.	—
Fortrose	69	$\odot$ , m.	—	Paisley	106	$\odot$ , M, $\mu$	—
Glencarvon	500	W, M.	a, c.	Peltalloch	132	W, m.	c.
Inverness	98	$\odot$ , M.	—	Rothesay	200	W, w, $\odot$ , M.	c, d.
Kingussie	840	M.	—	Ruthwell	67	$\odot$ , m.	—
Strathpeffer Spa	200	W, w, $\odot$ , M.	a.	Thorntonhall	440	$\odot$ , m.	—
Wick	81	W, M.	a, c.	Turnberry	96	$\odot$ , m.	—
<b>1. SCOTLAND, E.</b>							
Aberdeen	46	W, w, $\odot$ , M, $\mu$ .	a, c.	Douglas	277	W, w, $\odot$ , M.	a, c, d.
Arbroath	67	—		<b>6. a. SCOTLAND, W.</b>			
Balmakewan	140	—		<b>b. ISLE OF MAN—</b>			
Balmoral	930	W, M.	—	continued.			
Balruddery	276	w, $\odot$ .	—	Dungavel	798	m.	—
Banff	3	$\odot$ , M.	—	Eskdalemuir	794	W, w, $\odot$ , M, $\mu$ .	—
Bangour	587	M.	—	Glasgow Observatory	180	W, w, $\odot$ , M.	—
Braemar	1,120	M.	a, c.	" Springburn Park	351	$\odot$ , M.	—
Carnoustie	39	$\odot$ , m.	—	Greenock	199	m.	—
Crathes	140	w, $\odot$ , M.	—	Hamilton	140	m.	—
Crieff	432	W, M.	—	Helensburgh	21	$\odot$ , m.	—
Dalkeith	190	m.	—	Kilmarnock	90	W, w, $\odot$ , m.	—
Dundee, E. Necropolis	160	M.	c, d.	Leadhills	1310	m.	—
Coll. Gdn.	244	$\odot$ , m.	—	Oban	18	$\odot$ , M.	—
Dyce	305	$\mu$ .	—	Paisley	106	$\odot$ , M, $\mu$	—
Edinburgh, Blackford Hill Obs.	441	W, w, $\odot$ , M, $\mu$ .	—	Peltalloch	132	W, m.	c.
University	227	m.	—	Rothesay	200	W, w, $\odot$ , M.	c, d.
Liberton Coll. Gdn.	190	m.	—	Ruthwell	67	$\odot$ , m.	—
Gordon Castle	101	W, w, $\odot$ , M.	c, d.	Thorntonhall	440	$\odot$ , m.	—
Kelso (Broomlands)	195	m.	—	Turnberry	96	$\odot$ , m.	—
Kettins	218	m.	—	Douglas	277	W, w, $\odot$ , M.	a, c, d.
Kirkcaldy	90	m.	—	<b>2. ENGLAND, N.E.</b>			
Lethallan	505	M.	—	a. Northern.			
Lednathie	720	m.	—	Alnwick Castle	210	W, m, $\mu$	a.
Leith	30	W, M.	a, c.	Ampleforth	348	m.	—
Logie Coldstone	608	m.	—	Bellingham	848	m.	—
Marchmont	498	W, w, $\odot$ , M.	a, c.	Chopwellwood	445	$\odot$ , m.	—
Montrose	16	$\odot$ , m.	—	Cockle Park	324	w, $\odot$ , M.	a.
Nairn	82	W, w, $\odot$ , M.	a, c.	Durham	336	W, w, $\odot$ , M.	a, b, c.
Perth	76	$\odot$ , M.	—	Routon	249	W, M.	c.
Rosyth	85	$\mu$ .	—	Scarborough	100	W, w, $\odot$ , M.	a, c.
Smeaton	100	m.	—	South Shields	72	$\mu$ .	—
St. Andrews	20	$\odot$ , m.	—	Tynemouth (Coast Guard)	72	W, M.	a, c, d.
Stronvar	422	m.	—	Ushaw	599	m.	—
Glen	754	m.	—	West Witton	605	W, m.	—
West Linton	770	W, w, $\odot$ , M.	—	Whitby	124	$\odot$ , M.	a, d.
Wolfelee	537	m.	—	York	56	W, w, $\odot$ , M.	a, c, d.
<b>6. a. SCOTLAND, W.</b>							
<b>b. ISLE OF MAN.</b>							
a. Ardnamadam	64	m.	—	Cromer	196	W, w, $\odot$ , M.	—
Ardtornish	48	M.	—	Geldeston	37	W, w, $\odot$ , M.	a, c, d.
Buchlyvie	118	m.	—	Little Massingham	280	W, w, $\odot$ , M.	—
Cally	120	W, M.	a.	Lowestoft	83	$\odot$ , M.	a, d.
Cardross	130	$\odot$ , m.	—	Norwich	98	W, w, $\odot$ , M.	d.
Carogen	85	m.	—	Yarmouth (Gorleston)	13	W, w, $\odot$ , M, $\mu$ .	a, c.
Colmonell	170	W, M.	—	Bennington	406	$\odot$ , M.	a, c.
Drumlanrig	191	m.	—	Berkhamsted	400	$\odot$ , M.	a, d.
Dumbarton	10	m.	—	Cambridge	41	W, w, $\odot$ , M.	a, d.
Dumfries	160	W, w, $\odot$ , M.	a.	Chelmsford	134	m.	—
<b>3. ENGLAND, E.</b>							
a. Northern.							
b. Southern.							
b. Ardnamadam	64	m.	—	Clacton-on-Sea	54	W, w, $\odot$ , M.	—
Ardtornish	48	M.	—	Copdock	164	$\odot$ , m.	—
Buchlyvie	118	m.	—	Felixstowe	10	$\odot$ , m.	—
Cally	120	W, M.	—	Halstead	139	m.	—
Cardross	130	$\odot$ , m.	—	Hemel Hempstead	535	M.	—
Carogen	85	m.	—	Ridgewell	269	m.	—
Colmonell	170	W, M.	—	Rothamsted	424	W, w, $\odot$ , M.	a, c, d.
Drumlanrig	191	m.	—	Shoebury Ness	18	m, $\mu$ .	a, d.
Dumbarton	10	m.	—	Southend	90	$\odot$ , m.	a.
Dumfries	160	W, w, $\odot$ , M.	a.	Walton-on-Naze	69	$\odot$ , m.	—
				Woburn	291	$\odot$ , M.	—

\* Lerwick. Averages used are computed from the values for Sumburgh Head.

Stations.	Height in feet above M.S.L.	Character of information published.	Averages.	Stations.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>4. MIDLAND COUNTIES.</b>							
<i>a. Eastern.</i>							
Bawtry	65	W, m.	a, c.	Sevenoaks	509	m.	—
Belper	222	m.	—	Southampton	64	W, w, ○, M.	—
Belper (Quarry Bank)	280	M.	—	South Farnborough	234	○, M.	a, c, d.
Belvoir Castle	259	○, M.	a, d.	St. Leonards (Hastings)	178	W, w, ○, M.	a, c, d.
Benson	186	M, μ	d.	Totland Bay	140	○, m.	—
Birmingham, Edgbaston	535	W, w, ○, M.	a, d.	Tunbridge Wells	354	W, w, ○, m.	a, c.
Bradford	439	○, m.	—	Ventnor	59	W, w, ○, M.	a, c.
Buxton	987	W, w, ○, M.	a, b.	Wallington	140	m.	—
Coventry	270	○, M.	a.	Warlingham	642	μ	—
Eye	16	m.	—	Westbourne	30	○	—
Garforth	192	○, M.	—	Wisley, Surrey	150	W, w, ○, m.	—
Harrowgate	479	W, w, ○, m.	a.	Woking	179	m.	—
Hodsock (Worksop)	56	w, ○, M.	a, d.	Wokingham	215	m.	—
Huddersfield	409	○, M.	—	Worthing	85	w, ○, M.	a, c.
Kingston-on-Sooar	125	m.	—				
Matlock	636	○, m.	—				
Meltham	513	m.	—				
Nottingham	82	W, w, ○, M.	a.				
Oundle	147	○, m.	—				
Oxford	208	W, w, ○, M.	a, c.				
Raunds	203	W, w, ○, m.	—				
Rugby	379	m.	—				
Sheffield	429	w, ○, M.	a, c, d.				
Sparkhill	424	m.	—				
Strelley	377	○, m.	—				
Wakefield	124	○, m.	—				
Bath	66	W, w, ○, M.	a.				
Bromyard	392	m.	—				
Cheadle (Tean)	646	W, m.	a, b, c.				
Cheltenham	214	○, M.	a, c.				
Hereford	291	W, m.	a.				
Leamington Spa	165	○, m.	—				
Malvern	516	w, ○, m.	—				
Mayfield (Staffs)	374	○, m.	—				
Ross (Chasedale)	201	○, M.	—				
Rugeley	679	○, m.	d.				
Shrewsbury	191	W, M.	—				
Wellington	207	m.	—				
Wistanstow	481	M.	—				
<b>5. ENGLAND, S.E.</b>							
Addington	472	m.	—				
Aldershot	231	m.	—				
Ardingly	439	m.	—				
Basingstoke	289	m.	—				
Bognor	20	○, m.	—				
Bournemouth	145	○, m.	—				
Brighton	31	○, M, μ	a, d.				
Broadstairs	140	○	—				
Bucklebury Place	409	m.	—				
Canterbury	40	m.	—				
Dover	231	○, M, μ	—				
Dungeness	21	W, M.	a, c.				
Eastbourne	35	○, M.	a.				
Folkestone	121	○	—				
Graysshot	661	○, m.	—				
Hove	—	○	—				
Littlehampton	18	○, m.	—				
Malmesbury	235	M.	—				
Margate	51	W, w, ○, m.	a, c, d.				
Marlborough	424	W, w, ○, m.	a, c.				
Midhurst	480	○, m.	—				
New Malden	39	○, m.	—				
Portsmouth	11	○, M.	a.				
Ramsgate	168	○, m.	—				
Reading (Leighton Pk. School)	264	○, M.	d.				
Ryde	129	○, m.	—				
Salisbury (Wilton)	180	W, M.	a, d.				
Sandown	30	○, m.	—				
Selsey Bill	21	○, m.	—				
<b>5. ENGLAND, S.E.—continued.</b>							
Sevenoaks	509	m.	—				
Southampton	64	W, w, ○, M.	—				
South Farnborough	234	○, M.	—				
St. Leonards (Hastings)	178	W, w, ○, M.	—				
Totland Bay	140	○, m.	—				
Tunbridge Wells	354	W, w, ○, m.	—				
Ventnor	59	W, w, ○, M.	—				
Wallington	140	m.	—				
Warlingham	642	μ	—				
Westbourne	30	○	—				
Wisley, Surrey	150	W, w, ○, m.	—				
Woking	179	m.	—				
Wokingham	215	m.	—				
Worthing	85	w, ○, M.	a, c.				
<b>LONDON.</b>							
Bunhill Row (City)	80	○	a.				
Camden Square	110	W, w, ○, M.	a, d.				
Emfield	203	○, m.	—				
Greenwich	149	W, w, ○, M.	a, c, d.				
Hampstead	450	W, w, ○, M.	—				
Plumstead	300	○	—				
Richmond (Kew Obs.)	18	W, w, ○, M, μ	a, c, d.				
Richmond (Richmond Park)	190	○	—				
South Kensington	31	○, M, μ	—				
Tottenham	51	W, w, ○, M.	—				
Westminster	27	W, w, ○, M.	a.				
<b>7. a. ENGLAND, N.W.</b>							
Aspatria†	250	W, w, ○, M.	a.				
Blackpool	66	W, w, ○, M.	a.				
Blundellsands	34	m.	—				
Bolton	341	○, m.	—				
Burnley	459	○, m.	d.				
Carnforth	174	○, m, μ	—				
Darwen	722	○, M.	—				
Egremont	349	○, M.	—				
Hawarden Bridge	22	W, m.	a.				
Hoylake	30	w, ○, m.	a.				
Hutton	82	○, m.	—				
Lancaster	311	○, m.	—				
Leyland	124	○, M.	—				
Liverpool (Bidston Obs.)	188	W, w, ○, M.	a, c.				
Macclesfield	500	m.	—				
Manchester (Oldham Road)	190	w, ○, M.	a.				
" (Whitworth Park)	125	W, w, ○, M.	—				
Morecambe	24	○, m.	—				
Newton Rigg	559	W, w, ○, M.	a.				
Northwick	117	m.	—				
Scalby	111	m.	—				
Southport	37	W, w, ○, M, μ	a.				
Stockport	254	M.	—				
Stonyhurst	375	W, w, ○, M.	a, c, d.				
<b>b. NORTH WALES.</b>							
Aberdovey	22	w, ○, m.	—				
Bettws-y-Coed*	147	W, w, ○, M.	—				
Colwyn Bay	81	○, m.	—				
Holyhead	15	W, w, ○, M, μ	a, c.				
Llanberis (Pen-y-gwryd)	913	m.	—				
Llandudno	71	W, w, ○, M.	a, b, c, d.				
Rhyl	30	○, m.	a.				
Ruthin	449	m.	—				
Welshpool	255	m.	—				

\* The thermometer screen stands on ground 100 ft. above M.S.L.

† Aspatria (Mealsgate) 487 ft. from May.      ‡ Grounds of the Natural History Museum.

Station.	Height in feet above M.S.L.	Character of information published.	Averages.	Station.	Height in feet above M.S.L.	Character of information published.	Averages.
<b>8. a. SOUTH WALES.</b>							
<b>b. ENGLAND, S.W.</b>							
Aberystwyth	59	w, $\odot$ , m.	—	Blacksd Point	327	W, M.	a.
Bude	49	$\odot$ , m.	—	Dunfanaghy	54	m.	—
Cardiff	203	W, w, $\odot$ , M.	a, d.	Malin Head	208	W, w, $\odot$ , M.	a, c.
Gwernyfed	374	m.	—	Mallaranny	119	$\odot$	—
Haverfordwest	250	$\odot$ , m.	—	Markree Castle	122	W, w, $\odot$ , M.	a, b, c.
Llangammarch Wells	550	W, w, $\odot$ , M.	a.	Newtownforbes	168	M.	—
Pembroke (St. Ann's Head)	149	W, w, $\odot$ , M.	a, c.	Armagh	196	W, w, $\odot$ , M.	a, c, d.
Port Talbot	179	$\odot$	—	Belfast	61	M.	a, d.
Swansea	24	$\odot$ , m.	—	Donaghadee	101	W, M.	a, c.
Tenby	64	$\odot$ , m.	a.	Lisburn	206	m.	—
<b>9. IRELAND, N.</b>							
<i>a. Western.</i>							
<i>b. Eastern.</i>							
Arlington	613	W, m.	a, c.	Clongowes Wood College	245	$\odot$ , M.	—
Ashburton	583	m.	—	Dublin, City	47	W, M.	a, b, c.
Bude	49	$\odot$ , m.	—	" Trinity College	12	$\odot$ , M.	—
Clifton (Bristol)	229	W, w, $\odot$ , m.	a, d.	" Phoenix Park	155	w, $\odot$ , M.	a, c.
Cullompton	202	W, w, $\odot$ , m.	a, c.	" Glasnevin	67	M.	a, c.
Dorchester	314	$\odot$ , m.	—	" Shankill	59	M.	—
Exmouth	11	$\odot$ , m.	—	" Ranelagh	66	M.	—
Falmouth	167	W, w, $\odot$ , M.	a, c.	Newcastle, Co. Wicklow	256	m.	—
Fowey	51	$\odot$ , m.	—	Kilkenny	212	W, m.	a, c.
Iffracombe	24	$\odot$ , m.	—	Kingstown	42	$\odot$ , m.	—
Killerton	159	m.	—	Mountmellick	252	m.	—
Minehead	104	$\odot$ , m.	—	Seskin (Carrick-on-Suir)	541	W, w, $\odot$ , M.	—
Newquay	189	W, w, $\odot$ , M.	a, d.	Waterford, Rocklands	20	W, m.	a.
Paignton	11	$\odot$ , m.	—	Waterford (Training College)	20	m.	—
Pendennis	256	$\mu$	—	<b>10. IRELAND, S.</b>			
Penzance	54	$\odot$ , m.	d	<i>a. Eastern.</i>			
Plymouth	116	W, w, $\odot$ , M, $\mu$	a, c.	<i>b. Western.</i>			
Portland Bill	19	W, M.	—	Clongowes Wood College	245	$\odot$ , M.	—
Princetown	1,359	M.	—	Dublin, City	47	W, M.	a, b, c.
Redruth	397	m.	—	" Trinity College	12	$\odot$ , M.	—
Rousdon	515	$\odot$ , m.	—	" Phoenix Park	155	w, $\odot$ , M.	a, c.
Salcombe	39	$\odot$ , m.	—	" Glasnevin	67	M.	a, c.
Shaftesbury	722	W, m.	a, d.	" Shankill	59	M.	—
Sheepstor	749	M.	—	" Ranelagh	66	M.	—
Sidmouth	147	m.	—	Newcastle, Co. Wicklow	256	m.	—
Stratton-on-Fosse F	600	m.	—	Kilkenny	212	W, m.	a, c.
Tavistock	374	m.	—	Kingstown	42	$\odot$ , m.	—
Teignmouth	19	$\odot$ , M.	—	Mountmellick	252	m.	—
Torquay	12	$\odot$ , m.	a, d.	Seskin (Carrick-on-Suir)	541	W, w, $\odot$ , M.	—
Weston-super-Mare	29	$\odot$ , m.	—	Waterford, Rocklands	20	W, m.	a.
Weymouth	21	w, $\odot$ , m.	—	Waterford (Training College)	20	m.	—
Woolacombe	59	$\odot$ , M.	a.	<b>11. ENGLISH CHANNEL.</b>			
<i>a. English Channel.</i>							
Guernsey (Villa Carey)	180	W, w, $\odot$ , m.	a.	<i>b. Western.</i>			
Brooklyn	295	$\odot$ , M.	a, c.	<i>c. Eastern.</i>			
Jersey (St. Aubin's)	25	W, M.	a, c.	<i>d. Northern.</i>			
(St. Helier's)	—	w, $\odot$ ,	a.	<i>e. Southern.</i>			
Scilly	131	W, w, $\odot$ , M, $\mu$	a, c.	<i>f. Welsh.</i>			

+ January to June only.  
F January and February only.

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1916, together with the NAMES of their STATIONS :—

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Aberdovey	W. J. Eves and R. Williams for U.D.C.	Balinacurra	John H. Bennett.
Aberystwyth	A. Thomas, M.D., for the Urban Council.	Balmakewan	William Low, B.Sc.
Aldeburgh	E. W. Routley, M.D., M.R.C.P.	Balmoral	J. M. Troup, for Dr. Michie, M.V.O.
Alnwick Castle	Edmund Kyle, for the Duke of Northumberland,	Balruddery	G. Davie, for Mr. Martin White.
Ampleforth	Rev. H. H. Formanville, O.S.B. (K.G.)	Bardosound	T. E. Weston-Skeen, F.R.C.S., Ed.
Arbroath	J. Campbell.	Banff	A. B. Weir, B.Sc., for Dr. Spriggs.
Ardingly	G. W. Loder, J.P., D.L.	Bangour	D. Hendry, for John Keay, M.D.
Armadale	Rev. J. Cairns Mitchell, B.D.	Basingstoke	W. H. Pick, B.Sc.
Ardtornish	W. D. Bassett.	Bath	W. H. Symons, M.D., for the Corporation.
Arlethorpe (N. Devon)	Miss A. Winchester.	Bawtry (Hesley Hall)	B. I. Whitaker, J.P.
Armagh	J. E. Dreyer, Ph.D., and Staff of Observatory.	Belfast	J. H. D. A. and G. Robinson, for Prof. Morton.
Ashburton	J. S. Amory.	Belper	W. W. Tunnicliffe, B.Sc., F.C.S.
Aspetru	J. Smith Hill, B.A., B.Sc., and J. Ferguson, for Silloth Water Board.	Belper (Quarry Bank)	John Hunter.

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Committee are indebted for observations contributed to the Monthly Weather Report during 1916, together with the NAMES of their STATIONS—cont.:-

Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Belvoir Castle - - -	W. H. Divers, for the Duke of Rutland.	Fortrose - - -	Arend Thom, M.A.
Bellingham - - -	Capt. C. Morrison Bell.	Fort William - - -	W. T. Kalgan.
Bennington - - -	Miss Parker and Miss A. H. Parker.	Fowey - - -	F. E. Ross, for the Borough Council.
Berkhamsted - - -	E. Mawley.	Foynes - - -	J. Little, for Lord Montagle, K.P.
Bettws-y-Coed - - -	Penrhys Bouch, for the Rural District Council.	Fulbeck - - -	J. Charlton, for W. V. R. Fane.
Birmingham (Edgbaston). - - -	Alfred Cresswell, for the Midland Institute.		
Blackpool - - -	E. W. Rees Jones, M.D., for the Corporation.	Garforth - - -	Prof. Seton, B.Sc., for the University of Leeds.
Blundellsands - - -	Hugh Montgomery.	Geddesdon - - -	Miss S. S. Dawson.
Bognor - - -	A. G. Thompson.	Glasgow - - -	Prof. L. Becker, Ph.D., and the Staff of Observatory.
Bolton - - -	Tom Mcleay.	Glen, Peeblesshire - - -	Alexander Black.
Bournemouth - - -	C. Dales, for the Corporation.	Glencarron - - -	D. Munro.
Bradford - - -	H. Lander, for the Corporation.	Gordon Castle - - -	C. Walker, for the Duke of Richmond and Gordon, K.G.
Braemar - - -	A. M. Shirran.	Grayshott - - -	Mrs. C. Lyndon.
Brighton - - -	A. McIntosh, for the Medical Officer of Health.	Greenock - - -	D. Macalister, M. Inst. C.E.
Broadstairs - - -	Howard Hurd, C.E., for the District Council.	Greenwich - - -	The Astronomer Royal.
Bromyard - - -	T. V. Phillips, M.A., and A. Hicks.	Guerney (Villa Carey) (Brooklyn) - - -	F. E. Carey, M.D.
Buckbye Place - - -	R. E. A. Macdonald.	Gwernyfed - - -	A. Collette.
Bude - - -	J. E. Henshall, for A. W. Sutton.		J. Slade, for J. J. Crosfield.
Burnley - - -	Karl Durston and F. J. Worden.		
Buxton - - -	Thos. Holt, M.D., for the Corporation.		
	W. Pilkington.		
Cahir - - -	R. W. Smith, Junr.	Halstead - - -	E. T. Adams, F.R.A.S.
Cally (Gatehouse)- - -	W. Thomson, for Col. F. Murray Baillie.	Hamilton - - -	J. J. Storror, for the Duke of Hamilton and Brandon.
Cambridge - - -	R. Irwin Lynch, M.A., for the Botanic Garden Syndicate.	Hampstead - - -	E. L. Hawke, for the Hampstead Scientific Society.
Cardiff - - -	E. Walker, M.D., for the Corporation.	Harrogate - - -	C. E. Rivers, A.M.I.C.E., for the Corporation.
Castroos - - -	Charles A. Allan.	Hastings (St. Leonards) - - -	H. Colborne, M.R.C.S., for the Corporation.
Carson - - -	Col. R. F. Dodgeon, D.L.	Haverfordwest - - -	J. W. Phillips.
Carnforth - - -	W. Farren.	Hawarden Bridge - - -	John Rivers & Sons, Ltd.
Carnoustie - - -	D. Maxwell, C.E.	Holmesthorpe - - -	The Burgh Surveyor.
Cheadle - - -	A. J. Newdick, for Col. B. H. Phillips, C.M.G.	Hornbeamstead (Belmont) - - -	Elliott Kitchener, M.A.
Chelmsford - - -	R. M. Wilson, B.Sc.	Hove - - -	The Prior.
Cheltenham - - -	R. A. C. Saxby, for the Corporation.	Hoylake - - -	Medical Officer of Health.
Chorlwood - - -	J. F. Annand.	Huddersfield - - -	R. W. Fraser, for U.D. Council.
Clacton-on-Sea - - -	A. W. Shadick, for the Urban District Council.	Hull - - -	J. Firth, for the Corporation.
Clifton (the College) - - -	D. Rintoul, M.A.	Hutton - - -	H. B. Witte, for the Corporation.
Clongowes Wood College, Cookle Park, near Morpeth. - - -	Rev. P. Kenny, S.J. and Rev. J. Mahoney, S.J.	Iffracombe - - -	H. Lloyd Sape, M.D.
Colwyn Bay - - -	D. R. Johnstone-Wallace, for Northumberland County Council.	Inverness - - -	Borough Surveyor.
Copdock - - -	A. Ogg, for J. W. McConnell.		W. G. MacConnachie, M.A.
Coventry - - -	W. Jones, A.M.I.C.E., for Urban District Council.		
Cressex - - -	E. G. Snell, M.D., for the Corporation.	Kelso (Broomlands) - - -	J. C. Scott.
Crieff - - -	J. Smith.	Kettins - - -	W. Andrew.
Cromer - - -	G. Reid for Dr. Gordon Melkie.	Kilkenny Castle - - -	E. Sutton, for the Marquis of Ormonde, K.P.
Croydon (Addington) - - -	Clerk to the Urban District Council.	Killarney - - -	E. W. Grimes, M.A.
Cullompton - - -	Borough Engineer.	Killerton - - -	J. Williams, for Sir T. D. Acland, Bart.
	M. T. Foster.	Kilmarnock - - -	Prof. R. A. Berry, for West of Scotland Agricultural College.
Dalkeith - - -	J. Whytock.	Kingston-on-Soar - - -	P. W. Bailey, for the Midland Agricultural and Dairy College.
Darwen - - -	F. G. Haworth, M.B., for the Corporation.	Kingstown - - -	Medical Officer of Health.
Deerness - - -	M. Spence.	Kingussie - - -	W. de Watteville, M.D.
Dorchester - - -	H. G. George (Borough Engineer).	Kirkcaldy - - -	Rev. J. S. Begg, M.A.
Douglas, Isle of Man - - -	P. Cottile, for the Corporation.		
Dover - - -	W. C. Hawke, C.E., for the Corporation.	Lancaster - - -	N. Holden, F.R.A.S., for the Storey Institute.
Drumlanrig - - -	D. Inglis.	Lathallan - - -	Dr. W. H. Bryan.
Dublin (City) - - -	Sir John W. Moore, M.D., D.Sc.	Leadburn - - -	J. M'Farlane, M.B.
" (Phoenix Park) - - -	Sir F. W. Moon, M.R.I.A.	Leamington Spa - - -	Medical Officer of Health.
" (Trinity College) - - -	The Surveyor General Ordnance Survey Office.	Leyland - - -	W. G. Lindsay.
Dumbarton - - -	C. D. Clark, for Prof. Thrift.	Llanaberis - - -	H. Nowell Marlington.
Dunfermline - - -	Wm. Denny and Bros.	Llandudno - - -	A. Lockwood.
Dundee, E. Necropolis College Gdn. - - -	C. C. Easterbrook, M.D., Crichton R. Institution.	Llanymarcho Wells † - - -	W. Williams, for Town Council.
Dunfanaghy - - -	Alex. Macrae.	Limerick - - -	F. Griffiths.
Dunfermline - - -	J. James Macloch.	Little Massingham - - -	Rev. R. W. Gallaghern, S.J.
Dunfermline - - -	J. M. McGrath, L.R.C.P.	Lincoln - - -	M.O.H. for the Corporation.
Dunfermline - - -	J. J. Storror, for the Duke of Hamilton and Brandon.	Lisburn - - -	Medical Officer of Health.
Dunrobin Castle - - -	D. Melville, for the Duke of Sutherland.	Little Massingham - - -	Rev. J. Anderson.
Durham - - -	The Meteorological Observer.	London (Borough Row) (Camden Sq.) - - -	T. De la Rue & Co., Ltd.
Dyce, Aberdeenshire - - -	J. E. Crombie, L.L.D.	" (Plumstead) - - -	H. R. Mill, D.Sc., LL.D.
		" (Westminster) - - -	J. G. Waller.
Eastbourne - - -	S. R. Henderson and W. W. Brown, for the M.O.H.	Lowestoft - - -	W. Clover, for Rev. H. B. Workman, D. Lit.
Edinburgh, University Blackfriars Hill - - -	Prof. T. Hudson Beare, F.R.S.E.	Lyme Regis - - -	C. W. Edwards, for the Corporation.
" Liberton Coll. Gdn. - - -	The Astronomer Royal for Scotland.		Henry Ellis.
Egremont - - -	J. Harris for Edinburgh and East of Scotland College of Agriculture.		
Enfield - - -	J. Sherwin.	Macclesfield - - -	Sam H. Moss.
Exmouth - - -	W. P. Warren.	Mallaranny - - -	The Manageress of the Hotel for the M.G.W. Railway.
Eye - - -	Samuel Hutton.	Malmesbury - - -	G. C. Chapman, for C. E. Bertodano.
	S. M. Egar.	Malvern - - -	E. W. Harris.
Felixstowe - - -	Montague Humphrey, for the Urban District Council.	Manchester (Oldham Road), Manchester (Whitworth Pk.) - - -	Medical Officer of Health.
Folkestone - - -	The Borough Engineer, for the Corporation.	Marchmont - - -	J. A. Wood.
Fort Augustus - - -	Rev. C. von Dieckhoff, O.S.B.	Margate - - -	C. J. Pemble, for the Corporation.
		Markree Castle - - -	J. R. Armstrong, for Captain Cooper.
		Marlborough - - -	A. Robson and Meddows Taylor, for the College.

† Discontinued during year.

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Names of Stations.	Names of Observers.	Names of Stations.	Names of Observers.
Matlock - - -	J. D. Evans, for District Council.	Selsey Bill - - -	E. Heron Allen.
Mayfield - - -	G. C. Lawson.	Seskin, Carrick-on-Suir - - -	J. Ernest Grubb, J.P.
Meltham - - -	C. L. Brook.	Sevenoaks - - -	W. Tattersall.
Midhurst - - -	The Medical Superintendent (Sanatorium).	Shafesham - - -	Urban District Council.
Minehead - - -	Rev. Mr. Palmer, for Sir R. Shatto Adair, Bart.	Shankill, Co. Dublin† - - -	Alexander Macdonnel, M.A.
Morecambe - - -	H. H. Wright and T. B. Lamb, for the Borough Council.	Sheffield - - -	H. Payne.
Mountmellick - - -	W. A. Robinson.	Sheepstor - - -	E. H. Barth, F.R.A.S., for the Corporation.
Newcastle, Co. Wicklow. - - -	Dr. F. O'B. Kennedy, National Hospital for Consumption.	Sheoburyness - - -	Rev. H. Bretton, M.A.
New Malden - - -	W. J. Carter.	Shrewsbury - - -	Sup. of Experiments.
Newquay - - -	A. D. Braggins, A.M.I.C.E., for Urban Council.	Sidmouth - - -	The Superintendent, Ordnance Survey Office.
Newton Rigg - - -	W. J. Lawrence, for the Cumberland County Council.	Skegness - - -	Miss C. Radford.
Newtownforbes - - -	J. A. Boyle, for the Earl of Granard.	Southampton - - -	R. H. Jenkins, for the District Council.
Newtownich - - -	J. A. Saner, M.I.C.E.	Southend-on-Sea - - -	A. Vaughan, for Director General, Ordnance Survey.
Nottingham - - -	A. Brown, M.I.C.E., City Engineer.	Southport - - -	E. J. Elford, C.E., for the Corporation.
Norwich - - -	A. W. Preston.	South Shields - - -	J. Baxendell, for the Corporation.
Norwich (Southwell) - - -	J. H. Willis.	Sparkhill - - -	Secretary Tyne Improvement Commission.
Oban - - -	E. Baily, M.D., M.O.H., and T. Culbert, C.S.I.	Stockport† - - -	D. H. Owen.
Oundle (The School) - - -	F. W. Sanderson, M.A.	Stonyhurst - - -	F. T. Moore Jr.
Oxford - - -	The Radcliffe Observer.	Strelley - - -	Rev. W. Sidgreaves, S. J. and the Staff of Observatory.
Paisley - - -	The Convener, The Coats Observatory.	Strathpeffer Spa - - -	T. L. K. Edge.
Paignton - - -	A. J. Holman, for Town Council.	Stratton-on-Fosse - - -	N. McLean, for H. W. Kaye, B.A., M.B.
Perth - - -	Henry Coates, F.R.S.E.	Stronavar - - -	Rev. P. P. Brookfield.
Pembroke Castle - - -	J. H. Benn, for the District Council.	Swansea - - -	G. Dickson.
Penzance - - -	H. Victor Prigg, A.M.I.C.E., for the Corporation.		D. Bliss, for the Corporation.
Plymouth - - -	D. S. Melville, for Col. E. D. Malcolm, C.B., R.E.		
Poltalloch - - -	A. Mearns Fraser, M.D., for the Corporation.		
Portsmouth - - -	Miss Talbot and G. Lipscombe.		
Port Talbot - - -	G. Berry.		
Princetown - - -			
Quilty - - -	W. Barrington, M.Inst.C.E., for the West and South Clare Railway.		
Ramsgate - - -	T. G. Taylor, C.E., for the Corporation.		
Ranelagh (Co. Dublin) - - -	H. Payne.		
Raunceby Hall - - -	J. Hope, for the Rev. V. F. Willson.		
Raunds - - -	Léon, G. H. Lee and G. Lee.		
Reading (Leighton Park School) - - -	C. L. Evans, M.A.		
Redruth - - -	A. P. Jenkins.		
Rhyl - - -	Borough Surveyor.		
Richmond - - -	Town Advancement Ass., Ltd., C. Capel Smith, Secretary.		
Ridgewell - - -	Mrs. G. E. W. Gurney.		
Ross (Chasedale) - - -	F. J. Parker, Mrs. Birt, and Mrs. H. E. Purchas.		
Rosyth Dockyard - - -	The Superintending Civil Engineer.		
Rothsamsted - - -	The Lawes' Agricultural Trust.		
Rothesay - - -	J. Davidson and R. D. Whyte, for the Buteshire Nat. Hist. Soc.		
Roumton - - -	J. Hanagan, for Sir Hugh Bell, Bart.		
Rousdon - - -	G. G. Peacock, Lady Peck.		
Rugby (the School) - - -	B. H. Dickinson, M.A.		
Rugeley† - - -	P. W. Batten, for the Marquis of Anglesey.		
Ruthin - - -	Dr. G. A. Crace-Calvert.		
Ruthwell - - -	William Brown, for A. Johnstone Douglas, D.L.J.P.		
Ryde - - -	The Borough Engineer.		
St. Andrews - - -	W. Watson, C.E., Borough Surveyor.		
Salisbury - - -	Capt. John Partrice.		
Sandown - - -	W. H. St. John, Esq., of Pembroke, G.C.V.O.		
Scalby - - -	C. E. Gilchrist, for District Council.		
Scarborough - - -	Sir R. A. Allison, J.P., D.L.		
	Medical Officer of Health.		
		York (Museum) - - -	Oxley Graham, M.A., for the York Phil. Soc.
		" (Bootham) - - -	The Meteorological Curator.

† Discontinued during year.