M.O. Form 2373

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THE DAILY WEATHER REPORT

BRITISH SECTION

1st October to 31st December

1940

METEOROLOGICAL OFFICE
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AIR MINISTRY, METEOROLOGICAL OFFICE,
LONDON, W.C.2

FORECAST DISTRICTS AND STATIONS IN GREAT BRITAIN AND IRELAND

Stations printed on pp. 1 and 4 are shown in capitals—LERWICK.
Stations whose observations are given on page 2 are shown thus :— 115 Cape Wrath.

FORECAST DISTRICTS and the Counties comprised within them

1. England, S.E.
Kent.
Sussex.
Surrey.
Hampshire.
Berkshire.
Wiltshire.

2. England, E.
Essex.
Middlesex.
Hertford.
Bedford.
Huntingdon.
Cambridge.
Suffolk.
Norfolk.
Lincoln.

3. Midlands, E.
Buckingham.
Oxford.
Northampton.
Warwick.
Leicester.
Rutland.
Nottingham.

4. Midlands, W.
Gloucester.
Hereford.
Worcester.
Shropshire.
Stafford.

5. England, S.W.
Dorset.
Somerset.
Monmouth.
Devon.
Cornwall.

6. Wales, S.
Glamorgan.
Brecknock.
Carmarthen.
Pembroke.
Cardigan.
Radnor.

7. Wales, N.
Montgomery.
Merioneth.
Flint.
Denbigh.
Carnarvon.
Anglesey.

8. England, N.W.
Cheshire.
Lancashire.
Westmorland.
Cumberland.

9. Midlands, N.
Derby.
Yorkshire, W.

10. England, N.E.
Yorkshire, N. & E.
Durham.
Northumberland.

11. Scotland, S.E.
Roxburgh.
Selkirk.
Peebles.
Berwick.
Haddington.
Edinburgh.

11. Scotland, S.E. (cont.)
Linlithgow.
Clackmannan
Kinross
Fife.
Forfar.

12. Scotland, S.W., and Isle of Man.
Isle of Man.
Dumfries.
Kirkcudbright.
Wigtown.
Ayr.
Lanark.
Renfrew.
Dumbarton.
Stirling.

13A. Scotland, W.
Argyll.
Bute.

13B. Scotland, N.W.
Hebrides.
Western parts of Inverness, Ross and Cromarty, Sutherland.
(Boundary line runs from Rannoch Station through Fort Augustus, Beauly and Lairg to Melvich.)

14. Mid Scotland.
Perth.

15. Scotland, N.E.
Kincardine.
Aberdeen.
Banff.
Elgin.
Nairn.
Caithness.
Eastern parts of Inverness, Ross, Sutherland.

16. Orkneys and Shetlands.

17. Ireland, N.W.
Galway.
Roscommon.
Mayo.
Sligo.
Leitrim.

18. Ireland, N.E.
Meath.
West Meath.
Longford.
Cavan.
Fermanagh.
Monaghan.
Louth.
Armagh.
Down.
Antrim.
Londonderry.
Tyrone.
Donegal.

19. Ireland, S.E.
Waterford.
Wexford.
Kilkenny.
Carlow.
Wicklow.
Offaly.
Leix.
Kildare
Dublin.

20. Ireland, S.W.
Cork.
Kerry
Limerick
Tipperary.
Clare.

NOTES ON THE INFORMATION CONTAINED IN THE DAILY WEATHER REPORT

Standard of Time.—Greenwich Mean Time is exclusively used throughout the Report.

Stations.—*Kew.*—Temperature readings at Kew are taken in a large louvred screen placed against the north wall of the observatory. The thermometer bulbs are at a height of 10 feet above the ground immediately surrounding the building. This ground is raised a few feet above the general level of the Old Deer Park in which the observatory stands.

London Observations.—As from 1st January, 1934, the rainfall measurements at all the London stations where rain gauges are maintained, refer to two periods, day and night. The day period at Kew and Croydon is 7h. to 18h. G.M.T.; at all other stations it is 9h. to 18h. G.M.T.

Point of Ayre.—The first observations are made at 0030 G.M.T. instead of at 0100 G.M.T.

Heights of Stations.—The heights of British Stations above M.S.L. refer to the plot of ground on which the rain gauge is situated.

Pressure.—The distribution of barometric pressure at Mean Sea Level is shown by means of isobars which are drawn for intervals of 2 millibars on page 2 of the Report and for intervals of 4 millibars on Page 3.

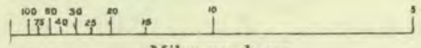
The wind at a height of 1,500–2,000 feet above ground usually blows *along* the isobars and, for the same temperature, pressure and latitude, the speed of the wind is inversely proportional to the distance between the isobars, *e.g.*, for isobars 1 inch apart for the chart on Page 2 the speed of the upper wind is about 12 m.p.h. in latitude 55°, with a temperature of 50° F. and a pressure of 1,015 mb; if, however, the isobars are ½ inch apart the corresponding speed is 24 m.p.h.

The scale below can be used to determine the theoretical wind as deduced from the pressure distribution on either chart. On the assumption that the path of the air is straight this theoretical wind is called the Geostrophic Wind.

If the distance between consecutive isobars is measured along the scale from the left-hand extremity the geostrophic wind is shown by the scale in miles per hour.

GEOSTROPHIC WIND SCALE FOR

8 mb isobars on $1 : 4 \times 10^7$ Charts.
or 2 mb ,, ,, $1 : 10^7$,,



Miles per hour.

This scale applies under the following conditions :—

Pressure, 1,015 mb. Temperature, 50° F. Latitude, 55°.

Corrections.—For an increase of 10 mb pressure, subtract 1% from velocity; for an increase of 10° F. add 2%. From Latitude 55° to Latitude 65° subtract 1% for each degree *above* 55°. From Latitude 55° to Latitude 45° add 1½% for each degree *below* 55°.

Temperature.—Temperature is specified in degrees Fahrenheit, and is shown on the charts by means of figures written alongside the positions of the stations.

Relative Humidity.—Relative Humidity at British stations is calculated from the following hygrometric formulæ :—

$$\text{Relative humidity} = \frac{100x}{F}$$

$x = f - \cdot 444\,(t - t')$ for wet bulb readings above 32° F.
$x = f - \cdot 400\,(t - t')$ for wet bulb readings below 32° F.

where x is the vapour pressure in mb.
F the saturation vapour pressure at the temperature of the dry bulb;
For air temperatures below 32° F. the value of F used is that appropriate to an ice surface.
f the saturation vapour pressure at the temperature of the wet bulb;
For wet bulb temperatures below 32° F. the value of f used is that appropriate to an ice surface.
t the dry bulb temperature; and
t' the wet bulb temperature.

The entries in columns 7 and 21 are limited to 10, 25, 35, etc., to 85, 92 and 97. Entry 10 indicates that relative humidity is from 0 to 19 : 25, between 20 and 29 ;.....and so on ; 92, from 90 to 94 ; 97 between 95 and 100.

Wind.—All wind directions specified in the reports are "true," as distinguished from "magnetic." The arrows indicating wind direction are drawn to fly with the wind. Each feather denotes two steps on the Beaufort Scale; thus force 5 is indicated by two whole feathers and one half feather.

Adjusted Readings.—Where an instrumental reading is found to be in error and some adjustment is necessary, such adjusted reading is published in brackets thus (59).

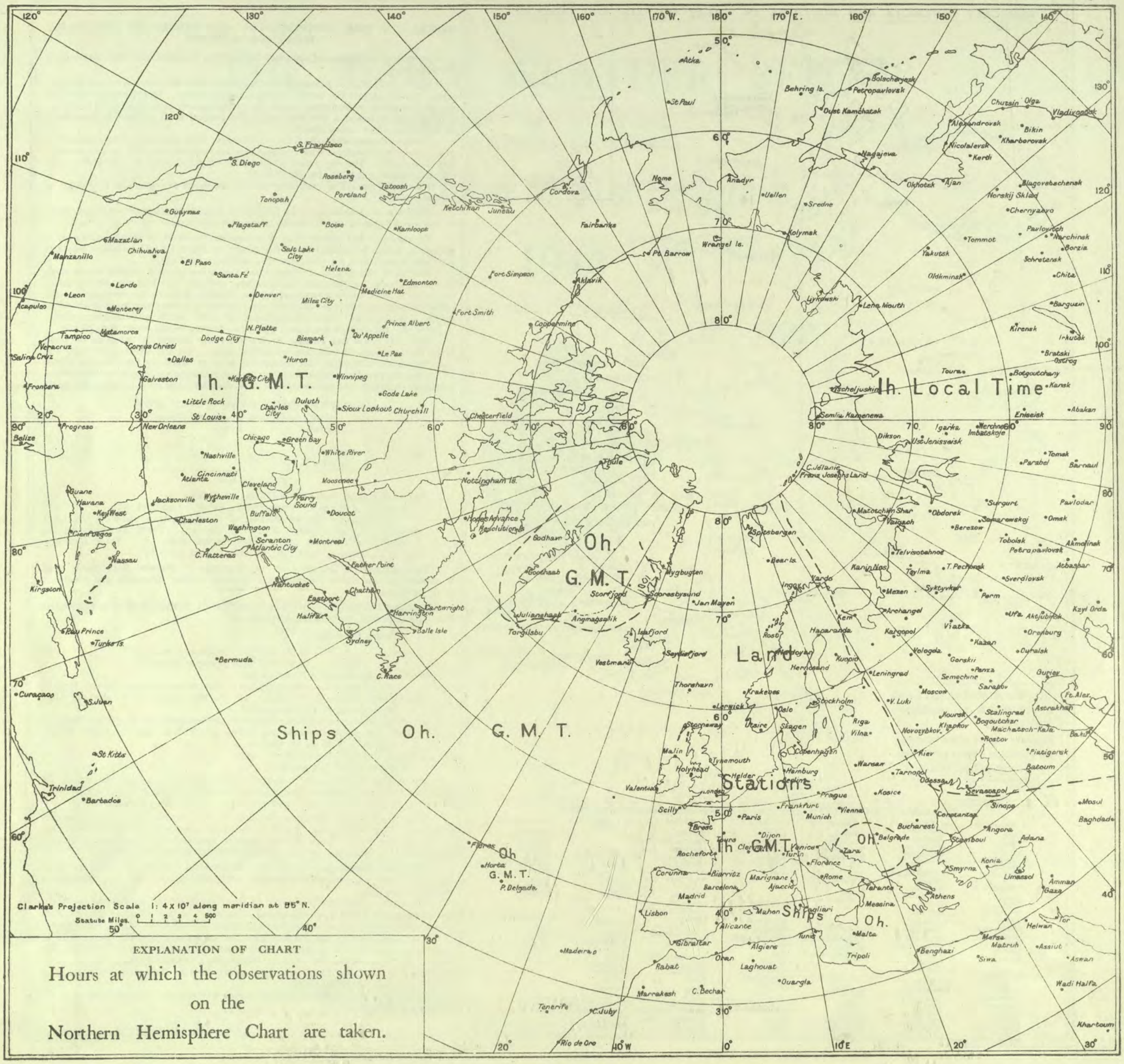
The entries in the British Section of the Report for the stations in the main tables on pages 1 and 4 are compared with those in the returns received from the stations at the end of the month and errors in the Report so found are noted.

N.B.—Readers of the Report who are unacquainted with the method of construction and the use of weather charts are recommended to read "The Weather Map: An Introduction to Modern Meteorology," (2nd Edition, 1930), to be purchased from H.M. Stationery Office, York House, Kingsway, W.C.2, price 3s. 2d. post free. (Reprinted 1938.)

Corrections and additions can be obtained, if required, on application to the Meteorological Office.

H.M.S.O. Press, Cornwall House, S.E.1.

B.39/4049. No. 80501. D. 2714. Gp. 948.300. 4/41



EXPLANATION OF CHART

Hours at which the observations shown on the Northern Hemisphere Chart are taken.

INTRODUCTION

The Daily Weather Report has been issued in three sections since April 1, 1919. The section of which this forms the Introduction is known as the " British Section."

NOTES REGARDING THE BRITISH SECTION.

Description of each issue :—The British section is issued daily by 12.30 p.m. (except that Sunday's issue is printed on Monday) and contains—

(*a*) On pp. 1 and 4 two tables of observations taken generally at 13h. and 18h. G.M.T. of " yesterday," and at 1h. and 7h. G.M.T. of " to-day " from about 45 stations in the British Isles, which regularly report to the Meteorological Office, and of the weather in the intervening intervals. These observations are telegraphed in a figure and letter code. The stations are arranged according to Forecast Districts as described at the foot of p. 2 of the report, and also on p. 4 of this Introduction. Whenever it is possible to do so without occupying too much space, the decoded values are set out in full in the table ; in other cases, code figures are entered ; these are interpreted by reference first to the number printed at the head of the column, and then to the Explanation printed at the foot of pp. 1 and 4, where the column numbers are shown in connexion with each of the separate classes of observation.

(*b*) Observations made at nine London Stations during the 24 hours ending 7h. or 9h.

(*c*) Table of atmospheric pollution for " yesterday " for South Kensington and Kew Observatory.

(*d*) Observations for " yesterday evening " and " this morning " from five capital cities on the Continent of Europe.

(*e*) On p. 2, a table of weather reports from Auxiliary Stations the positions of which are shown in the Map on p. III.

(*f*) A weather chart (scale 1 : 10,000,000) for the British Isles and the neighbouring parts of the Continent and of the Atlantic. An explanation of the chart is printed below it.

(*g*) A " general inference " drawn up by the forecaster from all the weather charts available. This inference sets out the meteorological changes in progress and the deductions to be drawn from them.

(*h*) Weather forecasts for the 24 hours commencing 12 noon of the day of issue for 20 districts into which the British Isles are divided.

(*i*) A " further outlook," i.e., an indication of the changes to be expected after the expiry of the term of the forecasts, if the meteorological conditions are such as to warrant the issue of such an extension.

(*j*) On p. 3, a weather chart for the greater part of the Northern Hemisphere, including the whole of Europe, part of N. Africa, the Northern part of the N. Atlantic, N. America and usually a part of Russia in Asia.

The observations presented on this chart are not synchronous, but as from 1st January, 1938, a change was made which gives approximately synchronous observations over a larger area than formerly.

Till the end of December, 1937, the chart could be divided into the following three sectors as regards hour of observation.

Sector.	Hour of Observation.
U.S.S.R. (approx. 170° E. to 30° E.)	7h. local time.
30° E. to 40° W.	6h. or 7h. G.M.T. (Azores 8h.).
40° W. to 170° W.	oh. or 1h G.M.T.

From January 1st, 1938, these have been reduced to the two sectors :—

Sector.	Hour of Observation.
U.S.S.R. (approx. 170° E. to 30° E.).	1h. local time.
30° E. to 170° W.	oh. or 1h. G.M.T.

The improvement in the charts effected by this change is most marked over mid-Atlantic. Previously a difference of six hours had existed between observations from ships on opposite sides of the lines of longitude 40° W.

The gain in one respect has meant a sacrifice in another. The network of land stations in Europe and Africa making observations at 1h. is not so close as that of stations observing at 7h. This is particularly notable in Scandinavia, the Balkans and North Africa.

In the case of Iceland entries of weather, temperature and wind do not now appear on the chart, but pressure values at 1h. G.M.T. are available and are used in drawing the isobars.

Wind :—The force of the wind is indicated in each issue of the Report by figures on the Beaufort Scale. The equivalents between numbers of the Beaufort Scale and the indications of an anemometer when exposed at a height of 30 to 40 feet above the ground are set out at the foot of p. 2 of each issue. Stations where such anemometers are installed determine their Beaufort numbers from their anemometers. At stations where anemometers are not in use, the force of the wind is estimated by means of the specification set out below. All wind directions are " true " or geographical, as distinguished from " magnetic."

Gale Warnings :—A note regarding the meaning of gale warnings and the method of indicating in the Report to what districts warnings may have been issued is also shown below.

THE INTERNATIONAL AND UPPER AIR SECTIONS.

The other two sections of the Daily Weather Report are Royal quarto in size.

The International Section contains 4 pp. per day and is issued daily by 3.30 p.m., but the issues for Saturday and Sunday are made on Monday. The " International Section " contains information received from the Continent of Europe, the Mediterranean Basin, Iceland and the Azores, and from ships on the Atlantic, arranged as follows :—

(*a*) Two weather maps (Scale 1 : 20,000,000) for Europe, the Mediterranean and Eastern Atlantic for 18h. yesterday and 7h. to-day.

(*b*) Two inset maps (Scale 1 : 20,000,000) for Northwest Europe for 13h. yesterday and 1h. to-day.

(*c*) Table of meteorological observations taken at about 80 stations, mostly on the Continent of Europe (not for the British Isles).

(*d*) Table of meteorological observations received by Wireless Telegraphy from Ships on the Northern Atlantic.

This section is very useful to one who wishes to trace the passage of various weather systems, since the 4 charts for each 24 hours enable the reader to follow the course of events in detail. From 1st March, 1933, the positions of well-defined warm, cold and occluded fronts have been indicated on the weather maps.

Upper Air Section :—The third section, called the " Upper Air Section " consists of 2 pp. Royal quarto per day and the issue for " yesterday " is published immediately prior to the issue of the British Section for " to-day." It contains maps, diagrams and tables showing upper air currents, pressures and temperatures over the British Isles and the Continent of Europe.

THE BEAUFORT SCALE OF WIND FORCE

Beaufort Number.	Admiral Beaufort's General Description of Wind	Specification for use on Land, based on observations made at British Land Stations.	Limits of Mean Velocities Statute Miles per Hour as recorded by well exposed anemometers about 40 feet above ground.
0	Calm	Calm ; smoke rising vertically	Less than 1
1	Light air ...	Direction of wind shown by smoke drift	1–3
2	Slight breeze ...	Wind felt on face ; leaves rustle	4–7
3	Gentle breeze...	Leaves and small twigs in constant motion ; wind extends light flag	8–12
4	Moderate breeze	Raises dust and loose paper ; small branches are moved ...	13–18
5	Fresh breeze ...	Small trees in leaf begin to sway ; crested wavelets on inland waters...	19–24
6	Strong breeze...	Large branches in motion ; whistling heard in telegraph wires	25–31
7	Moderate gale...	Whole trees in motion ; inconvenience felt when walking against wind	32–38
8	Fresh gale ...	Breaks twigs off trees ; generally impedes progress ...	39–46
9	Strong gale ...	Slight structural damage occurs (chimney pots and slates removed)	47–54
10	Whole gale ...	Seldom experienced inland ; trees uprooted...	55–63
11	Storm	Very rarely experienced ; accompanied by widespread damage	64–75
12	Hurricane ...	... ...	Above 75

GALE WARNINGS *

The Meteorological Office issues warnings to ports and fishing stations of gales on or near the coasts of the British Isles. When one of these notices has been received at a station a black canvas cone is hoisted. The Signals remain hoisted after the receipt of a warning telegram until danger of a gale is passed.

The *North Cone* (point upwards) is hoisted for gales commencing from a Northerly point.

For gales commencing from East or West the North Cone will be hoisted if the gale is expected to change to a Northerly direction.

The *South Cone* (point downwards) is hoisted for gales commencing from a Southerly point. Such gales often veer, sometimes as far as Northwest.

For gales commencing from East or West the South Cone will be hoisted if the gale is expected to change to a Southerly direction.

The districts to which warnings are sent are shown in the Report by the following symbols written on page 2 against the forecast districts to which they apply :—

▲ North Cone hoisted : ▼ South Cone hoisted :

The time or times of issue of the gale warning telegrams is shown below the " further outlook " on page 2 of the Report.

* Note—The public issue of Gale Warnings is suspended for the duration of the war.

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THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

MONTHLY SUPPLEMENT,
November 1940 No. 287.

Wet and stormy, becoming more settled, and colder in the South.

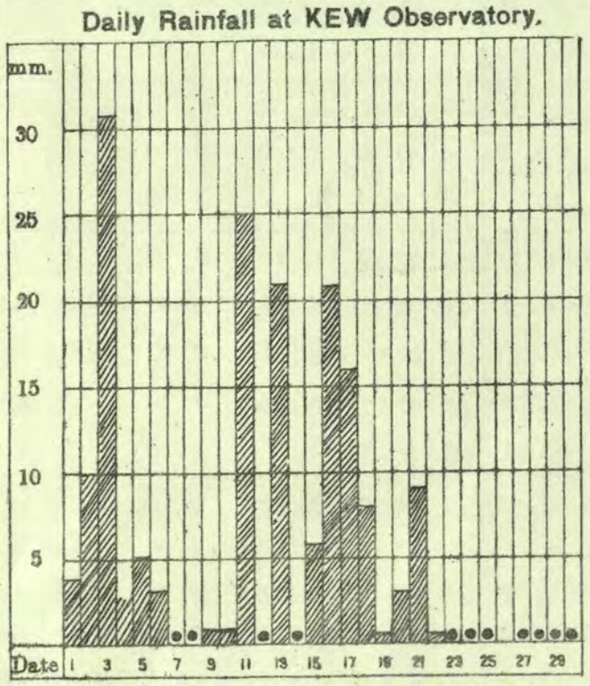
During the first three weeks of the month the country as a whole was under the influence of a succession of complex low pressure systems. Prevailing conditions were unsettled and rather mild but there were some brief fair periods associated with feeble ridges of high pressure moving quickly eastwards. On the 22nd the Azores anticyclone began to extend northeast giving more settled but colder weather in the South.

A feature of the month's weather was the prevalence of strong, squally winds and few places escaped Southerly gales. Persistently stormy conditions were experienced in the West and North. Scattered thunderstorms occurred in England and Wales and more frequently in North Scotland, while in many widely separated districts rainfall totals exceeded previous records by substantial amounts. In the North, Aberdeen with 184mm was 20mm above the previous highest in 1872 and locally in Southeast England records were exceeded by as much as 30%.

Snow was reported on several occasions from Scotland and on the night of the 13th–14th there were slight falls in Southern England.

Sunshine totals in Scotland were well below average and Leuchars had the dullest November on record. In the South and Southeast recorded amounts were generally above normal, mainly due to the anticyclonic conditions at the end of the month. During this period night fog and ground frosts were common inland in England and Wales.

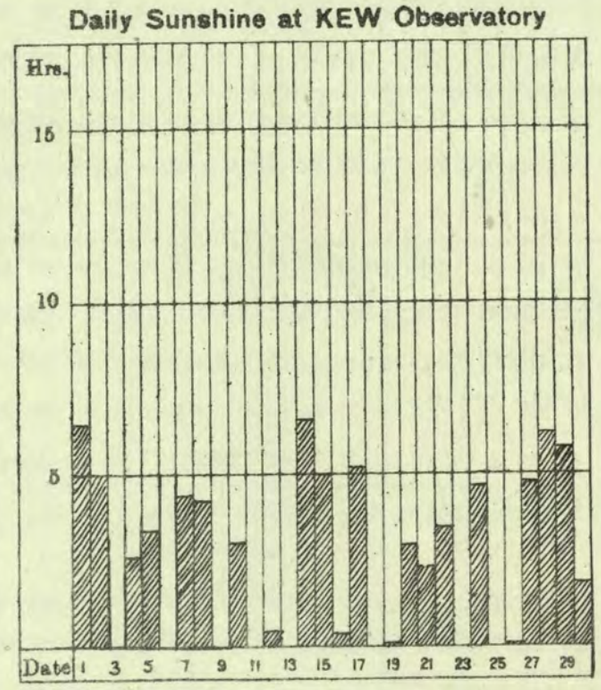
Daily Rainfall at KEW Observatory.



● = Less than 0·5 mm.

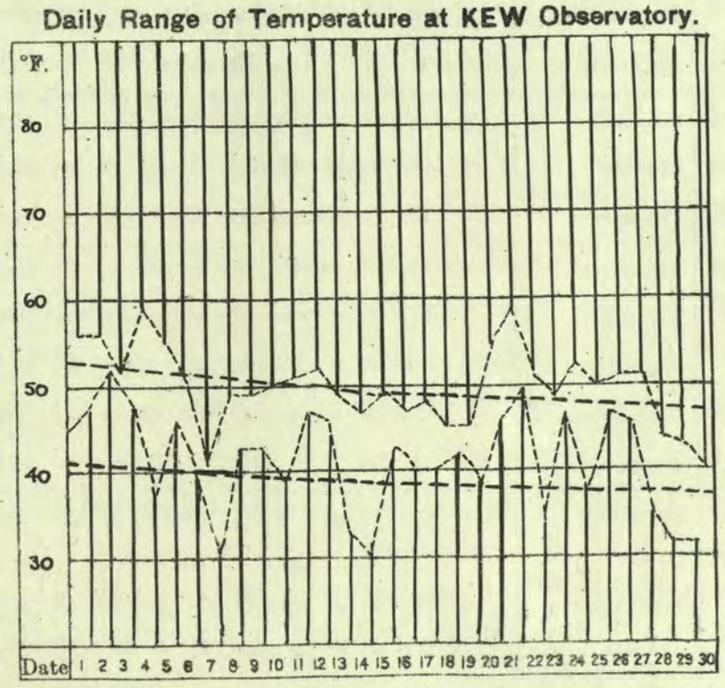
RAINFALL. Total for Month. 172 mm.

Daily Sunshine at KEW Observatory



SUNSHINE. Total for Month. 77 hrs.

Daily Range of Temperature at KEW Observatory.



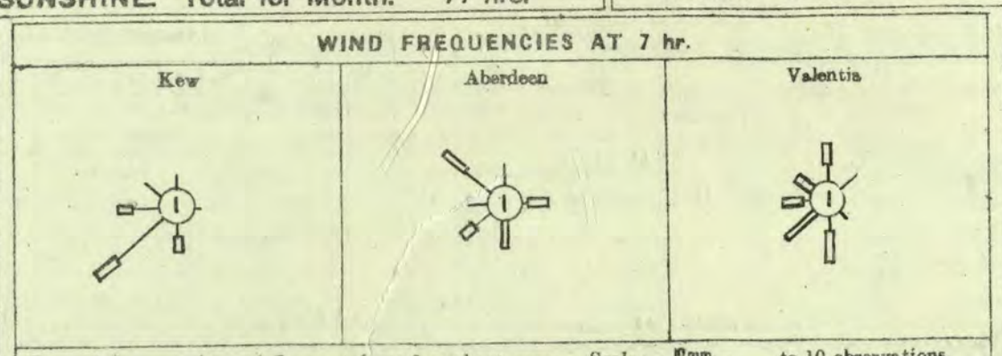
TEMPERATURE. The pecked curves indicate the maximum temperature recorded each day, and the minimum temperature each night throughout the month. The chain lines show normal values.

MEAN VALUES FOR THE MONTH.*

Stations.	Pressure Mean	Pressure Difference from average	Temperature Mean	Temperature Difference from average
	mb.	mb.	°F.	°F.
Kew	1007·5	−7·1	45·6	+1·3
Aberdeen	1000·7	−9·1	42·5	+0·2
Valentia	1007·1	−5·7	48·8	+1·3

*Pressure—The mean is for the 24 hours. It is derived from values at 7 h. and 18 h. duly corrected.
Temperature—mean of Max. and Min.

WIND FREQUENCIES AT 7 hr.



Forces 1–3 —— ; forces 4–7 ; force 8 or above . Scale ; 10mm to 10 observations.
The figure in the centre of the circle gives the number of calms.

"RUN" of WIND, or total displacement of air relative to the anemographs.

	miles.
Kew ...	7659
Aberdeen ...	6145
Lerwick ...	14269
Valentia ...	10866

SUMMARY OF RECORDS OF TEMPERATURE, LOW CLOUD, VISIBILITY,

District.	Stations.	† Temperature. Number of daily readings within fixed limits. Maximum. 33°–41°	42°–50°	51°–59°	60°–68°	Average Maximum.	Minimum. 23° or below	24°–32°	33°–41°	42°–50°	51°–59°	Average Minimum.	Extremes—Warmest and Coldest. Days. Highest Max.	Date.	Lowest Max.	Date.	Nights. Highest Min.	Date.	Lowest Min.	Date.	Number of Ground Frosts.	Low Cloud. Number of observations within fixed limits. 7 h. Below 1,000 ft.	1,000–5,000 ft.	5,000–8,000 ft.	13 h. Below 1,000 ft.	1,000–5,000 ft.	5,000–8,000 ft.	18 h. Below 1,000 ft.	1,000–5,000 ft.	5,000–8,000 ft.	Fog, Mist and Good Visibility. Number of observations within fixed limits. 7 h. Dense fog.	Thick fog.	Fog.	Mist.	Good Visibility.	13 h. Dense fog.	Thick fog.	Fog.	Mist.	Good Visibility.
						°F.						°F.	°F.		°F.		°F.		°F.																					
1	London ... (Kew Obsy).	1	14	15	0	48·6	0	4	10	15	1	40·0	59	4	40	30	52	3	30	15	12	3	23	0	0	27	0	1	23	0	0	3	2	0	5	0	0	1	0	12
	Croydon ...	1	10	17	2	49·1	0	3	13	13	1	39·4	61	4, 21	41	30	52	3	25	30	3	6	10	0	2	21	0	5	17	0	0	0	2	3	5	0	0	1	2	8
	Calshot** ... (Southampton)	0	7	22	1	50·1	0	1	12	15	2	41·5	60	1	43	30	56	3	31	30	3	6	19	1	5	22	0	8	13	1	0	0	2	0	11	0	0	1	0	21
	Lympne ...	0	14	16	0	47·9	0	4	12	12	2	39·4	58	3, 4	42	28	55	3, 4	30	29	11	7	19	0	6	19	1	9	13	1	0	1	1	1	17	0	0	1	0	23
2	Shoeburyness ...	0	11	17	2	49·2	0	1	12	17	0	39·0	61	4	43	28, 30	50	3, 22	30	30	9	5	13	2	4	19	0	2	16	2	0	0	3	3	10	0	0	0	0	16
	Gorleston ...	0	16	14	0	48·6	0	0	11	19	0	40·8	58	21	42	28	50	22	34	15, 28, 30	3	2	23	0	1	23	0	4	20	0	0	1	0	0	5	0	0	0	1	13
	Cranwell ...	2	21	7	0	47·1	0	3	15	12	0	37·1	56	1	41	29, 30	45	2, 26, 27	30	30	6	7	16	0	5	15	1	5	16	0	0	2	2	3	1	0	0	1	1	10
3	Birmingham ... (Edgbaston)	2	22	6	0	46·9	0	1	18	11	0	39·0	55	2	40	28	45	3, 21, 26	31	30	6	9	7	0	7	17	1	8	15	1	0	0	7	2	9	0	0	1	3	12
4	Ross-on-Wye ...	1	16	13	0	48·4	0	2	11	17	0	39·0	56	1, 2	36	30	49	3, 26	24	30	9	1	23	0	2	26	0	5	25	0	0	0	1	1	22	0	0	0	2	20
5	The Lizard ...	0	9	21	0	*	0	0	4	22	4	*	58	3	45	29	55	3	38	28	*	2	28	0	1	29	0	4	26	0	0	0	0	0	26	0	0	1	0	26
7	Holyhead ...	0	14	16	0	49·7	0	0	2	27	1	44·4	57	2	47	28	51	26	40	15	0	3	27	0	2	27	0	1	28	0	0	0	0	0	25	0	0	0	0	22
8	Chester ... (Sealand)	1	18	11	0	48·3	0	2	11	16	1	38·2	55	2	39	30	52	26	29	30	5	0	27	1	4	23	1	1	27	1	0	0	0	1	9	0	0	0	1	14
10	Tynemouth ...	0	23	7	0	47·5	0	0	11	18	1	40·4	58	2	43	28, 29	51	26	33	30	0	0	28	0	0	28	0	0	28	0	0	0	1	1	7	0	0	1	2	10
11	Leuchars ...	0	23	7	0	46·7	0	4	17	9	0	36·3	57	1	42	11	50	26	30	5, 16	14	2	25	0	3	25	0	4	21	0	0	0	0	1	21	0	0	0	1	21
12	Renfrew ...	1	22	7	0	46·1	0	5	12	12	1	36·1	53	3, 20, 24, 25, 26	37	15	51	26	27	15	12	1	27	1	1	28	1	1	24	2	0	0	0	4	14	0	0	2	0	20
	Eskdalemuir ...	5	24	1	0	43·9	1	6	19	4	0	34·3	53	2	37	15	47	26	21	15	11	14	13	0	8	20	0	13	13	0	0	1	0	0	18	0	0	0	0	23
13B	Stornoway	1	23	6	0	47·2	0	1	18	11	0	39·6	55	25	41	15	50	26	31	15	*	2	28	0	1	29	0	1	29	0	0	0	0	0	26	0	0	0	0	27
15	Aberdeen ..	3	23	4	0	46·2	0	5	18	6	1	38·3	55	1	39	5	51	26	29	5	8	0	27	1	1	26	0	1	25	1	0	0	1	0	15	0	0	1	0	16
18	Aldergrove ...	0	23	7	0	*	0	4	17	9	0	*	57	2	43	27, 29	50	26	28	15	12	1	25	1	4	24	0	0	27	0	0	0	0	0	27	0	0	0	0	29
19	Dublin ... (Phœnix Park)					49·8						36·9										*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Birr Castle ...	1	14	15	0	48·6	0	5	15	10	0	38·2	59	2	37	17	50	26	27	28	10	0	27	0	0	28	0	1	21	0	0	0	0	0	30	0	0	1	0	29
20	Valentia ... (Cahirciveen)	0	9	21	0	51·2	0	2	4	21	3	43·7	58	2	45	29	52	26	30	29	2	1	29	0	4	25	0	2	28	0	0	0	0	0	29	0	0	0	0	23

UPPER AIR TEMPERATURE.

Pressure. mb.	Normal Height. Feet.	Mildenhall. Normal Temp. °F.	Mean. °F.	No. of Reports.	Aldergrove. Mean. °F.	No. of Reports.	Mean. °F.	No. of Reports.
950	1740	42·0	43·0	60	43·2	60		
850	4960	34·2	34·3	60	33·5	60		
750	7950	25·3	25·3	60	24·9	60		
650	11620	14·2	14·5	60	13·5	60		
550	15750	0·3	−0·1	60	−0·8	60		

UPPER WINDS.

No. of records of Velocity (km./hr.) within fixed limits.

Station Height. Metres.	Lympne. *No. of Obs.	6 to 25	26 to 50	51 to 75	76 to 100	Above 100	Plymouth (Mt. Batten). *No. of Obs.	6 to 25	26 to 50	51 to 75	76 to 100	Above 100	Holyhead. *No. of Obs.	6 to 25	26 to 50	51 to 75	76 to 100	Above 100	Renfrew. *No. of Obs.	6 to 25	26 to 50	51 to 75	76 to 100	Above 100	Station. Height. Metres.
		kilometres per hour.						kilometres per hour.						kilometres per hour.						kilometres per hour.					
500 above ground.	46	3	21	16	5	0	37	7	26	4	0	0	28	8	15	2	0	3	64	17	37	10	0	0	500 above ground.
1000 above M.S.L.	36	3	17	12	5	1	24	4	13	7	0	0	21	9	11	0	0	0	44	13	23	6	1	0	1000 above M.S.L.
2000 „ „	22	4	7	6	4	1	10	2	5	3	0	0	10	2	3	0	0	0	13	4	7	2	0	0	2000 „ „
3000 „ „	9	1	4	4	0	0	4	1	2	1	0	0	3	0	1	2	0	0	7	2	0	1	1	0	3000 „ „
4000 „ „	6	1	0	5	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4000 „ „

† The readings and averages used, are, except in the case of Phœnix Park, the maximum for the period 7 h.–18 h., and the minimum for the period 18 h.–7 h. The readings and averages for Phœnix Park are for daily periods ending 21 h. Averages are for periods of at least 10 years (See M.O. 364).

* Winds of 0—5 km./hr. are included in the number of observations.

METEOROLOGICAL OFFICE, AIR MINISTRY. KINGSWAY. LONDON. W.C.2.
N. K. JOHNSON D.Sc., A.R.C.S., Director.

SUNSHINE, RAINFALL, AND HUMIDITY ..... November ..... 1940.

District.	Stations.	Sunshine: Number of Days with Duration. Nil.	0·1—3h.	3·1—6h.	6·1—9h.	Above 9h.	Maximum Duration. Hours.	Date.	Total for past 12 months. Hours.	Difference from average. Hours.	Total for Month. Hours.	Difference from average. Hours.	Highest and Lowest Totals on record for Month. First year of record.	Highest. Hrs.	Year.	Lowest. Hrs.	Year.	Rainfall: ‡Number of days with amount. 0, trace or 0·1 mm.	0·2—1 mm.	1·1—5 mm.	5·1—15 mm.	15·1—25 mm.	Above 25 mm.	Maximum fall in 24 hrs. mm.	Date.	Total for past 12 months. mm.	Difference from Average. mm.	Total for Month.‡ mm.	Difference from Average. mm.	Highest and Lowest Totals on record for Month. First year of record.	Highest. mm.	Year.	Lowest. mm.	Year.	Days with Thunder.	Days with Snow or Sleet.
1	London ... (Kew Obsy).	7	10	10	3	0	6·6	14	1635	+166	77	+24	1880	81	1883	26	1888, 1932	10	5	5	5	4	1	31	3	650	+44	172	+116	1856	130	1926	10	1858	2	0
	Croydon ...	6	13	10	1	0	7·8	1	1621	+96	71	+19	1922	83	1923	28	1932	11	3	4	6	3	3	33	3	681	+2	197	+128	1921	160	1929	24	1932	0	1
	Calshot** ... (Southampton)	7	6	12	5	0	7·0	28, 29	1302	+156	91	+18	1881	109	1923	31	1888	10	4	6	4	2	4	33	3	717	+71	202	+135	1871	176	1935	13	1879	1	0
	Lympne ...	5	13	9	3	0	7·3	8	1805	+40	74	+5	1921	108	1925	35	1934	12	2	5	6	4	1	33	3	654	−70	172	+91	1920	173	1926	26	1932	1	0
2	Shoeburyness ...	5	11	11	2	0	7·5	1	1691	−25	83	+17	1919	104	1920	43	1934, 1936	13	4	4	5	2	2	30	3	543	+40	138	+84	1920	105	1929	17	1920	1	0
		(No Sunshine Record on 17th)																																		
	Gorleston ...	7	11	7	5	0	7·6	1	*	*	80	+4	1908	106	1920	37	1912	8	5	7	7	3	0	23	13	584	−38	145	+84	1871	208	1878	20	1920	0	0
	Cranwell ...	9	10	9	2	0	6·6	15	1582	+44	73	+7	1921	97	1925	38	1932	11	4	7	6	1	1	29	21	573	−17	117	+70	1917	124	1935	22	1920	0	0
3	Birmingham ... (Edgbaston)	10	9	11	0	0	5·6	27	1424	+120	62	+16	1887	93	1913	13	1912	9	2	9	9	0	0	37	21	824	+150	180	+119	1893	181	1929	17	1920	0	0
4	Ross-on-Wye ...	5	15	7	3	0	7·3	22	1576	+91	71	+8	1915	108	1923	26	1934	10	7	5	4	2	2	32	21	739	+22	158	+94	1859	227	1929	14	1933	0	0
5	Falmouth ... (Observatory)	9	10	9	2	0	7·3	22	1847	+137	71	−5	1881	145	1923	38	1917	8	1	10	5	2	4	41	11	1005	−102	240	+118	1871	340	1929	21	1901	4	0
7	Holyhead ...	11	14	2	3	0	7·3	7	1585	+35	40	−24	1914	124	1925	36	1922	8	5	7	6	3	1	25	5	890	+3	154	+49	1871	204	1877	38	1922	0	0
8	Chester ... (Sealand)	10	11	6	3	0	7·1	7, 22	1505	+129	57	+4	1928	89	1938	34	1934	9	2	10	7	2	0	23	17	785	+147	130	+71	1922	116	1929	27	1922	1	0
10	Tynemouth ...	*	*	*	*	*	*	*	*	*	*	*	1935	*	*	*	*	9	8	7	5	1	0	17	17	700	+79	88	+34	1915	112	1933	19	1922	1	0
11	Leuchars ...	11	14	3	2	0	6·4	3, 15	1361	−109	42	−28	1922	101	1925	46	1933	14	1	5	9	0	1	26	2	701	+48	114	+56	1922	129	1931	13	1937	0	0
12	Renfrew ...	10	14	6	0	0	5·1	29	1175	−18	39	−5	1921	60	1927	28	1932, 1936	9	1	10	7	3	0	24	19	884	−55	148	+49	1921	205	1938	14	1937	0	0
	Eskdalemuir ...	9	13	6	2	0	6·6	29	1293	+52	49	−6	1910	89	1925	28	1938	5	8	3	9	4	1	25	2	1296	−133	180	+33	1910	297	1938	30	1937	0	0
13B	Stornoway	8	16	4	2	0	8·0	7	1068	−147	49	+3	1881	67	1911	19	1881	5	3	7	15	0	0	15	25	983	−283	152	+4	1870	250	1898	45	1933	0	0
15	Aberdeen ...	9	15	5	1	0	6·1	4	1299	−30	49	−10	1881	83	1904	32	1924	8	4	6	9	2	1	39	5	867	+119	184	+109	1871	164	1872	31	1904	0	1
18	Aldergrove ...	8	16	4	2	0	6·6	7	1204	*	49	*	1927	77	1930	35	1939	8	5	9	7	1	0	22	5	919	+81	113	+31	1926	135	1931	18	1934, 1937	0	1
19	Dublin ... (Phœnix Park)												1881	104	1935	36	1888													1865	159	1916	10	1922		
	Birr Castle ...	9	9	12	0	0	5·2	9, 22	1297	−9	59	−2	1881	95	1881, 1909	26	1917	11	2	12	2	3	0	21	8	802	−25	106	+27	1862	188	1939	21	1922	0	0
20	Valentia ... (Cahirciveen)	10	8	10	2	0	7·0	7	1644	+276	70	+7	1880	118	1909	33	1917	4	4	11	8	1	2	29	8	1293	−121	183	+44	1866	310	1931	20	1879	2	0

MINIMUM SURFACE HUMIDITY.

No. of Days (Mdt. to Mdt.) with Minima between Fixed Limits.

Stations.	95 to 100 %	90 to 94 %	80 to 89 %	70 to 79 %	60 to 69 %	50 to 59 %	40 to 49 %	30 to 39 %	20 to 29 %	0 to 19 %
London (Kew)	0	2	5	10	10	2	1	0	0	0
Ross-on-Wye ...	0	1	6	12	8	3	0	0	0	0
Falmouth (Obsy.)	1	5	16	8	0	0	0	0	0	0
Renfrew ...	0	0	9	18	3	0	0	0	0	0
Eskdalemuir ...	0	0	8	12	6	4	0	0	0	0
Aberdeen ...	0	3	4	15	8	0	0	0	0	0
Valentia ...	0	2	5	12	8	3	0	0	0	0

STATE OF GROUND AT 18 h.

No. of Days each type was recorded.

Stations.	0	1	2	3	4	5	6	7	8	9
London (Kew)	0	30	0	0	0	0	0	0	0	0
Ross-on-Wye	0	30	0	0	0	0	0	0	0	0
Renfrew ...	0	29	1	0	0	0	0	0	0	0
Eskdalemuir	0	28	0	2	0	0	0	0	0	0
Aberdeen ...	0	30	0	0	0	0	0	0	0	0
Valentia ...	3	27	0	0	0	0	0	0	0	0

CODE for State of Ground.

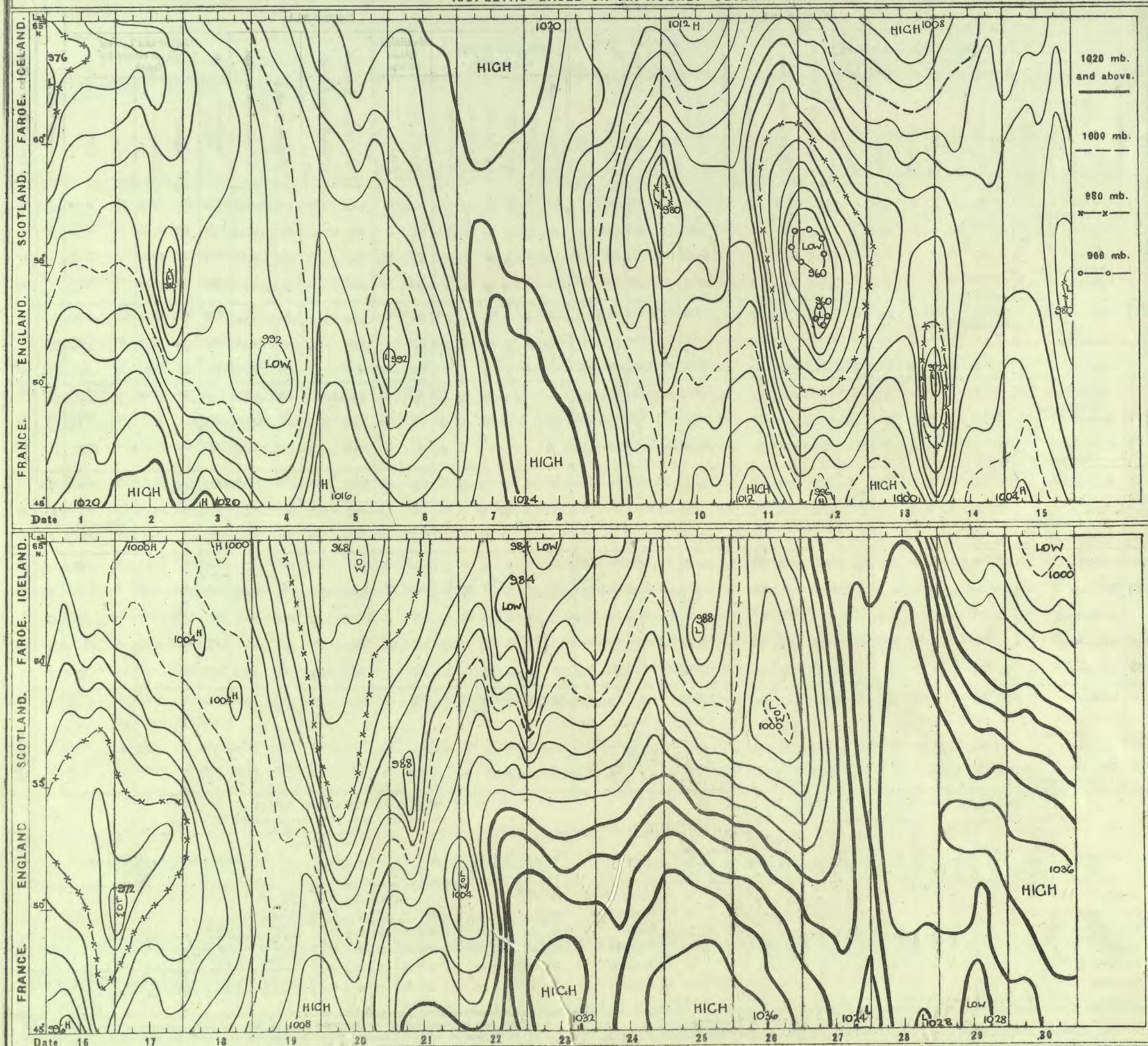
0 Dry.
1 Wet.
2 Flooded.
3 Frozen hard and dry.
4 Partly covered with snow or hail.
5 Covered with ice or glazed frost.
6 Covered with thawing snow.
7 Covered with snow, less than 6 ins., but ground not frozen.
8 Covered with snow, less than 6 ins., and ground frozen.
9 Covered with snow, greater than 6 ins. deep.

** The extremes of rainfall and sunshine from Calshot are supplemented by those from Southampton.

‡ Based in part on reports made by telegraph in which the day and night measurements are rounded off to the nearest whole millimetre. Small discrepancies may arise between these totals and those given in the Monthly Weather Report which are based on readings taken to 0·1 mm.

PRESSURE: ICELAND TO GULF OF LIONS ..... November 1940

ISOPLETHS BASED ON SIX-HOURLY OBSERVATIONS.



* The diagram is obtained by drawing a line from Akureyri in Iceland to the south of France near Marseilles. The points at which the isobars drawn for 4 mb. pressure intervals intersect this line at 1h., 7h., 13h., and 18h. are plotted consecutively and joined to shew the variation of pressure from day to day at any point in the line. The line terminates at Lat. 66° N., Long. 18° W., in the north; at Lat. 44½° N., Long. 4° E., in the south.

H.M.S.O. Press, Cornwall House, S.E.1.

G.32/3981. Wt. 8048. D.3702. Gp. 948. 300. 12/40

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 1st November 1940.

No. 28834

OBSERVATIONS at 13h. G.M.T. 31st October

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	999·1	-60	SE'S	4	r₀r₀	56	92	6	5	-	-	10	10	1500
	Croydon	998·8	-74	S'E	5	RR	56	92	6	6	2	-	9+	10	700
	S. Farnborough	1000·2	-58	S'E	2	r₀r₀	56	92	6	6	7	-	9	10	900
	Boscombe Down	995·8	-82	S'W	7	RR	56	97	5	6	2	-	9	10	800
	Calshot (Soton.)	999·0	-72	S'W	7	rr	50	97	6	6	-	-	10	10	300
	Lympne	1006·3	-30	S	3	r₀r₀	54	92	5	6	-	-	10	10	200
	Manston	1004·5	-30	S	5	c/r	54	97	6	6	-	-	10	10	800
2	Shoeburyness	1003·8	-36	S'E	4	c/r	55	97	7	3	2	-	4-6	10	2500
	Felixstowe	1003·3	-28	S'W	4	r₀r₀	53	97	5	5	2	-	2-3	10	1200
	Gorleston	1003·2	-24	SSW	4	rr	55	92	6	6	-	-	10	10	1500
	Mildenhall	1000·4	-32	S'E	4	ir₀	55	85	6	5	7	-	7-8	10	1200
	Cranwell	998·0	-42	SSW	5	r₀r₀	53	92	5	6	-	-	10	10	1000
3	Birmingham	995·7	-56	ESE	2	rr	51	97	5	6	-	-	10	10	450
	Upper Heyford	997·6	-64	SE	3	rr	52	97	6	6	2	-	7-8	10	800
4	Ross-on-Wye	991·3	-94	SE	4	rr	53	97	6	6	-	-	10	10	800
5	Hartland Point	986·8	-128	SSW	8	rr	57	97	7	6	2	-	9+	10	1500
	Bristol	994·1	-90	SSE	4	rr	56	97	6	6	2	-	9	10	600
	Portland Bill	997·1	-80	SW	6	rr	56	92	6	5	-	-	10	10	1500
	Plymouth	994·1	-82	SW'W	7	rr	57	97	5	6	2	-	7-8	10	100
	The Lizard	992·3	-40	SSW	8	rr	58	97	5	5	-	-	10	10	1000
	Scilly (St. Mary's)	990·8	-52	SW'S	7	rr	58	97	6	6	-	-	10	10	500
	Guernsey														
6	Pembroke	988·0	-60	ENE	6	RR	52	97	4	5	-	-	10	10	1500
7	Holyhead	993·6	-24	SSW	2	RR	51	92	6	-	2	-	10	10	1400
	Chester (Sealand)	994·8	-32	SE	3	rr	52	92	6	-	2	-	10	10	1500
8	Manchester	995·7	-34	S'E	3	rr	52	92	6	6	2	-	10	10	1000
10	Spurn Head	998·7	-18	SSE	3	rr	51	97	6	6	-	-	10	10	1500
	Catterick	995·7	-20	SSW	3	z₀	54	85	5	5	2	-	2-3	10	1500
	Tynemouth	995·7	-18	SSW	4	c	54	85	6	8	-	-	9+	9+	1400
11	St. Abbs Head	991·3	-12	SW	5	cq	53	75	8	4	7	8	2-3	9+	2500
	Leuchars	989·8	-12	SW	4	c	54	75	7	8	7	9	9	9	2500
12	Renfrew (Abbots L.)	990·6	-4	SW'S	4	c	53	75	8	9	7	3	7-8	9+	1500
	Eskdalemuir	992·1	-14	SW'W	5	c	51	85	6	5	-	-	10	10	800
	Point of Ayre	993·0	-12	W'S	3	c	53	85	7	8	2	-	7-8	10	1500
13A	Tiree	986·8	+6	SW	4	bc	53	85	8	8	-	-	4-6	4-6	1500
13B	Stornoway	983·5	+12	SW	4	pr	50	85	7	8	6	3	9	9+	1200
15	Dalwhinnie	988·9	+2	S	6	rr	46	92	6	5	-	2	4-6	9	800
	Aberdeen	989·2	-14	S'W	3	c	53	75	6	7	7	-	4-6	7-8	2500
	Wick	985·8	-4	SSW	4	c	51	85	8	5	7	8	4-6	7-8	2500
16	Lerwick	986·6	-12	S'E	7	c	50	92	7	8	3	-	7-8	9+	800
17	Blacksod Point	992·9	+14	WSW	3	c	53	75	8	3	-	-	7-8	7-8	2500
18	Malin Head	989·1	+16	W	5	c	51	92	7	6	-	-	9	9	4000
	Aldergrove	991·8	-6	SW'S	3	c	51	85	8	5	2	-	2-3	10	2500
19	Birr Castle	994·4	-2	SW	1	c/pr	50	92	8	8	-	-	7-8	7-8	1500
20	Valentia Obsy. †	996·2	+14	W	4	bc	55	75	8	2	-	-	2-3	2-3	2500
	Roches Point	993·9	-10	WNW	2	c/r	50	92	8	5	3	5	4-6	7-8	1500

OBSERVATIONS at 18h. G.M.T. 31st October

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Form. Med. (24)	Form. High (25)	Amount. Low 0–10 (26)	Amount. Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	992·8	-12	SW	6	c/r	58	92	5	5	-	-	7-8	7-8	800	1	*
	Croydon	992·8	-24	S'W	5	rr	58	97	5	6	2	-	9+	10	500	1	*
	S. Farnborough	994·2	-2	SW'S	6	bc/r	59	85	7	5	-	-	4-6	4-6	700	1	*
	Boscombe Down	995·6	+30	W'S	6	bcq	52	85	7	5	-	1	2-3	2-3	1200	1	*
	Calshot (Soton.)	996·2	+14	WSW	4	b/d	57	97	6	1	-	-	Tr	Tr	2000		
	Lympne	997·3	-40	S	7	RR	56	97	4	6	-	-	10	10	100	1	§
	Manston	995·4	-42	SW'S	8	r₀r₀	57	97	4	6	-	-	10	10	100		*
2	Shoeburyness	993·7	-34	S'W	6	ir₀	57	97	6	6	2	-	7-8	10	450	1	*
	Felixstowe	992·3	-60	SSW	7	c/r	55	97	5	5	-	-	10	10	800	1	5
	Gorleston	990·8	-70	SSW	7	rr	54	92	6	6	-	-	10	10	800	1	4
	Mildenhall	988·3	-66	SSW	6	ir	60	85	6	6	2	-	4-6	10	700	1	*
	Cranwell	987·4	-10	NW	8	rr	50	97	5	6	-	-	10	10	200	2	*
3	Birmingham	992·9	+30	WNW	5	c	48	85	8	6	-	-	10	10	800	1	*
	Upper Heyford	993·0	+24	NNW	7	c/pr	52	85	9	9	6	-	7-8	7-8	700	1	*
4	Ross-on-Wye	996·0	+70	W	4	bc	50	75	8	5	-	-	4-6	4-6	2500	1	*
5	Hartland Point	1000·7	+94	WNW	5	b	52	75	8	5	-	-	1	1	1500	1	4
	Bristol	997·1	+62	WNW	4	b	51	85	8	2	-	-	1	1	2000	1	*
	Portland Bill	999·5	+48	W	6	c	*	92	7	5	-	-	9	9	2500	1	5
	Plymouth	1001·8	+82	NW	6	z₀	51	85	6	5	-	-	Tr	Tr	1200	1	3
	The Lizard	1004·0	+16	WNW	5	bc	51	85	8	8	-	-	4-6	4-6	2500	1	4
	Scilly (St. Mary's)	1003·6	+68	WNW	8	bc	52	85	8	8	4	-	4-6	4-6	1000	1	3
6	Pembroke	998·8	+52	WNW	6	bcq	53	85	8	6	-	-	4-6	4-6	1000	1	4
7	Holyhead	995·2	+30	W	5	c	52	85	7	2	4	-	7-8	7-8	2500	1	2
	Chester (Sealand)	993·8	+30	WNW	4	c	47	85	7	5	3	-	7-8	7-8	2800	1	*
8	Manchester	992·5	+14	WNW	4	c/r	47	92	5	5	7	-	4-6	9	2500	2	*
10	Spurn Head	992·5	-70	SSE	7	iR	54	97	6	6	-	-	9+	9+	450	2	4
	Catterick	991·9	-10	NNW	2	r₀r₀	47	97	4	5	-	-	10	10	2000	1	
	Tynemouth	993·4	-10	SW	1	rr	49	92	5	-	2	-	10	10	1200	1	2
11	St. Abbs Head	990·5	-2	SSW	3	c	49	85	8	4	2	-	4-6	9+	2500	0	2
	Leuchars	990·1	+4	SSW	3	c	51	85	7	5	1	-	7-8	10	1500		*
12	Renfrew (Abbots L.)	990·6	+6	WSW	3	ir₀	50	92	7	5	7	-	7-8	9	2100	1	*
	Eskdalemuir	991·3	-4	WSW	4	ir₀	48	85	6	6	2	-	4-6	10	800	1	*
	Point of Ayre	993·3	+16	WNW	5	bc	52	85	8	8	-	-	4-6	4-6	2500	1	3
13A	Tiree	990·3	+14	WSW	3	c/pr	51	92	8	8	-	-	7-8	7-8	1500	1	3
13B	Stornoway	986·9	+20	SW	4	c/pr	49	92	7	8	6	-	4-6	7-8	1500	1	5
15	Dalwhinnie	989·7	+14	SW	1	c	45	97	6	5	4	-	4-6	7-8	1500	1	*
	Aberdeen	989·5	+2	SSW	3	bc	51	85	6	5	7	-	2-3	4-6	2500	1	3
	Wick	986·9	+14	SW	3	c/pr	49	92	7	5	7	8	4-6	9	2500		
16	Lerwick	985·2	-4	S'E	6	c	50	92	7	8	7	-	4-6	9	800	1	*
17	Blacksod Point	997·1	+36	W	4	bc	50	75	8	9	-	-	4-6	4-6	1500	1	4
18	Malin Head	992·0	+28	WNW	5	c/pr	50	85	7	6	-	-	9	9	2500	0	4
	Aldergrove	994·4	+30	WSW	3	c	46	85	8	5	4	-	4-6	4-6	2500	2	*
19	Birr Castle	999·6	+32	SW	1	bc	47	85	8	-	4	-	0	2-3	-	1	*
20	Valentia Obsy. †	1002·5	+42	W	3	pr	52	85	8	8	-	-	9	9	2500	1	5
	Roches Point	1001·4	+46	WNW	3	bc	52	75	8	8	-	-	4-6	4-6	2500	1	3

PAST 24 HOURS.

District	Stations	Weather. 7h.—18h. 31st. (37)	13h.—18h. 31st. (38)	18h. 31st. to 1h. 1st. (39)	1h.—7h. 1st. (40)
1	London (Kew)	crrrmo	errmo	r₀bcb	bbcm₀
	Croydon	Rrrdr₀	cRrr	rrm₀bcb	
	S. Farnborough	crrRc	cRRr₀r₀bc	bccm₀b	b,cbc
	Boscombe Down	cir₀irmo	Errbc	bw	bm₀w
	Calshot (Soton.)	errmo	crr dd b	bm₀bbm₀w	
	Lympne	md₀rm₀r₀	r₀rrr₀r₀	cm₀r₀rcbb	
	Manston	cmo r₀r₀	cmorr₀	cr₀r₀cbcbm₀	b
2	Shoeburyness	corrc	crrr₀cm₀	cm₀r₀bm₀	bm₀
	Felixstowe	cm₀r₀r₀m₀	or₀r₀rr	ir₀bm₀	
	Gorleston	corr	orrq	orcbcq	
	Mildenhall	cm₀cr₀r₀m₀	cmorrccm₀r	cm₀ircbcb	b
	Cranwell	cm₀rrm₀	R,r₀r₀	cr₀r₀bcbm₀	bm₀
3	Birmingham	orr	orRrc	cb	b
	Upper Heyford			cbbm₀	bm₀
4	Ross-on-Wye	codorr	rrqcqrbc		
5	Hartland Point	rrc	r₀r₀c	bc	bccp
	Bristol	prriRc	orrRqb	b	bbcbw
	Portland Bill	orr	orrc	bcbc	bcbc
	Plymouth	cmorr₀rr	cm₀r₀rrcb	b	bbcbm₀bcm
	The Lizard	rfrrq	cbc	bc	bcw
	Scilly (St. Mary's)	r₀r₀rr	crcbc	bc	bcp₀c
6	Pembroke	oifrrq	oRfRfbcq	cq	bc
7	Holyhead	lm₀rr₀	RRm₀bc	bcb	bbc
	Chester (Sealand)	irmo	rRirm₀c	cbm₀b	
8	Manchester	mor₀r₀rr	rrRRfm₀r	cm₀bm₀	
10	Spurn Head	oir	Rr	cqbc,	b
	Catterick		crrmor₀rm	or₀r₀mb	
	Tynemouth		corr	orrbc	
11	St. Abbs Head		c	crbcq	
	Leuchars	bcm₀c		bc	bcbm₀H
12	Renfrew (Abbots L.)	bccpr₀	cr₀Rir₀		b
	Eskdalemuir	cm₀	cm₀		cprbc
	Point of Ayre	c	cbc	bb	bbc
13A	Tiree	bc			
13B	Stornoway	cpR	cpr		
15	Dalwhinnie	cRR	cir		Cirbc
	Aberdeen	b,cz₀	ir₀bc		bz₀
	Wick	c		bc	bccbc
16	Lerwick	c	cpr	cprbc	cpr
17	Blacksod Point	bcc	prbc	pr₀bc	ir
18	Malin Head	ccpr₀	cpr₀c	ccbcbc	bccpr₀c
	Aldergrove	bcc	ccprcbc	bcbw	bwbcc
19	Birr Castle	cbr	bc	b	bcir
20	Valentia Obsy. †	cir₀bc	bbccpr₀	bbcc pr₀c	bcpr₀irlirc
	Roches Point	rrc	bc	bbc	RRir

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). ⸗gale.
⊕ Solar halo. ☽ lunar halo. ⌓Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9+" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

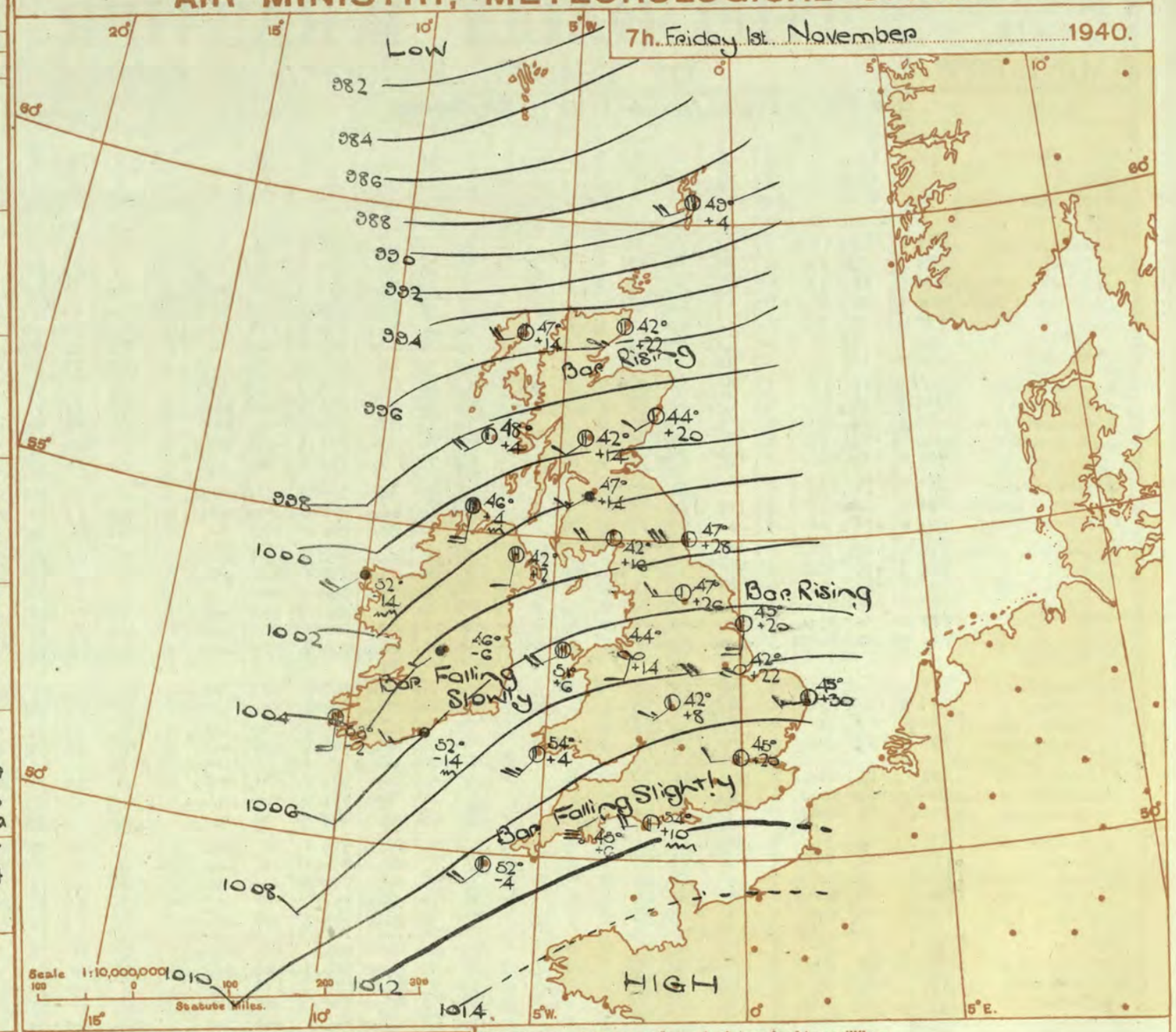
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Friday 1st November 1940.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 31st October			18h. G.M.T.			01h. G.M.T. 1st November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	59	01764	17515	87	25754	18384	80	01754	18584			
115	54	14854	49685	53	81854	55586	52	81744	55587	54	14844	55685
203												
206	87	81955	20485	83	02964	20385				50	00953	00083
210	27	02953	18524				5-	25954	54584	10	00961	20421
220												
230	9-	02747	16487	8-	25747	18387				9-	81736	55586
245	10	02752	53518				50	01764	24314	50	00861	22311
260	11	02753	53526	57	02764	18227	50	00761	24301	70	00841	20301
277	52	02742	18428	83	81866	23587	50	00851	22481	77	01841	20404
279				--	05648	16428						
285	9-	82748	24588	6-	64748	26568				20	01744	26314
288	52	05553	17428	02	67348	28168	04	00790	56421	10	00861	16101
273	16	01762	19485							33	01553	13305
301	62	64535	16368	27	22653	25366	20	00752	59512	80	02755	22415
321	6-	64528	18368	6-	62528	53568	40	01663	25413	03	05690	21302
299	62	22845	22568	6-	66428	30268	50	05643	22313	50	00752	24202
292	6-	62638	18368	6-	67338	24368	50	00852	55462	50	01844	22304
310	--	64628	20468	--	22428	32568				--	01633	20513
316	62	62524	17468	50	22544	24464	50	01653	24413	00	17590	20100
333	62	64415	04268	87	01752	28213	20	00752	24302	54	02955	00006
334	--	66758	20468								01764	22204
340				5-	02865	26465	50	00761	00001	53	01863	18204
136	62	64525	17468	62	62636	52668	00	00790	24660	50	01741	20401
336	--	64642	20468		02753	24566					01851	24412
350				5-	22827	50567				03	05690	18302
368												
379	6-	64518	14468	50	05644	55424	00	05690	20300	00	48109	22309
390	62	64547	14468	62	62536	50668	00	05500	20400	50	08463	20203
382	62	64645	12468	50	02734	26524				50	04762	00002
438	02	64428	22668							81	02742	24515
430	6-	64528	48568	62	62418	49768	50	01744	26314	03	01764	18304
409	62	62627	52968	10	00942	27512	50	00753	21413	54	05742	16312

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Friday 1st November
1 S.E. England 2 E. England ... 3 E. Midlands ...	Moderate or fresh west to southwest wind; fair or fine at first, cloudy with some rain this evening, bright periods later; rather mild.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ...	Moderate or fresh southwest wind; cloudy, some rain at first, bright periods, and occasional showers later; rather mild.
10 N.E. England 11 S.E. Scotland	As 0-3
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland	As 4-9
15 N. E. Scotland 16 Orkneys and Shetlands	Moderate or fresh west to southwest wind; mainly cloudy, but some bright intervals; occasional rain; rather mild.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate or fresh west to southwest wind; cloudy, some rain in east at first, bright periods, occasional showers later; rather mild.

GENERAL INFERENCE.

Pressure is low near Iceland and high over Southern Spain. A trough of low pressure near the west coast of Ireland will move east. Weather will be fair or fine in the east most of the day but rain in the west will spread eastwards reaching East England in the late evening.

FURTHER OUTLOOK.

Unsettled; west to southwest winds; rain at times.

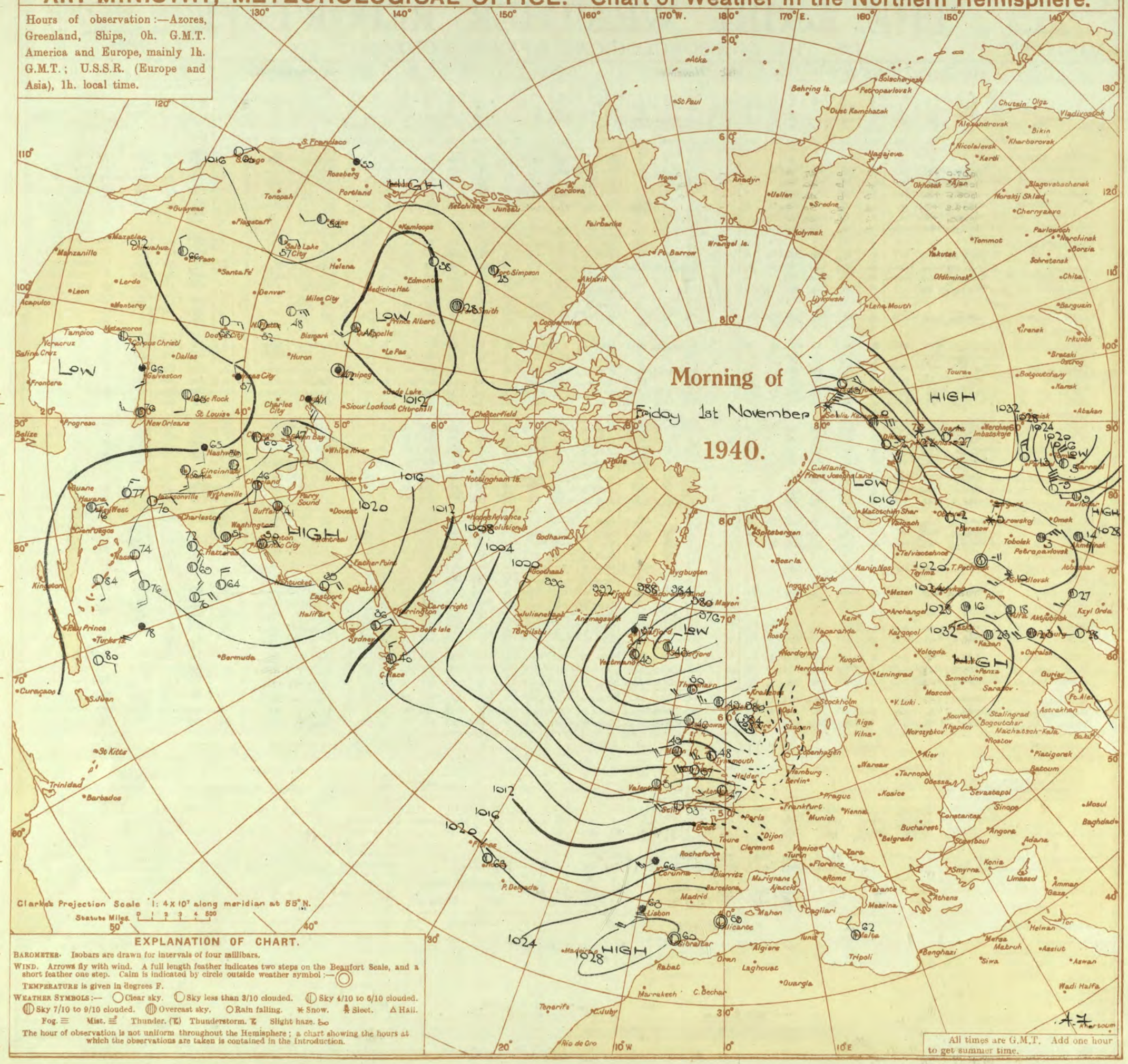
Forecasts issued at 10.30 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 1st November, 1940.

No. 28834.

OBSERVATIONS at 1 hr. G.M.T. 1st November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1007.0	+24	W	2	b	47	85	6	–	–	–	0	0	–
	S. Farnborough	226	1008.3	+40	WSW	4	b	46	92	7	–	–	–	0	0	–
	Boscombe Down	417	1008.5	+36	SW	3	b	46	92	7	–	–	–	0	0	–
	Calshot (Sthmtn.)	8	1008.8	+34	W	4	z_0	50	85	6	5	–	–	1	1	2500
	Lympne ...	346	1008.6	+54	W	2	b	46	85	8	–	–	–	0	0	–
	Manston ...	154	1006.8	+46	WNW	3	z_0	47	85	6	–	–	–	0	0	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1008.3	+46	W	4	z_0	48	85	6	–	–	–	0	0	–
	Gorleston ...	5	1002.8	+54	WSW	4	bc	47	92	6	2	–	–	2-3	2-3	1500
	Mildenhall ...	19	1003.9	+46	WSW	5	b	48	85	7	–	–	–	0	0	–
	Cranwell ...	240	1003.3	+50	W	5	z_0	44	97	5	–	–	–	0	0	–
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1006.6	+40	W'S	3	z_0	43	97	6	–	–	–	0	0	–
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1008.5	+24	WNW	5	bc	53	85	8	5	–	–	4-6	4-6	1500
	Bristol ...	209	1008.4	+34	W'S	2	b	48	85	7	–	–	–	0	0	–
	Portland Bill ...	32	1008.8	+28	WSW	6	bc	54	85	7	5	–	–	4-6	4-6	4000
	Plymouth ...	82	1010.7	+26	W'N	3	b	51	92	7	5	–	–	1	1	1200
	The Lizard ...	240	1011.2	+20	W'S	5	bc	53	92	8	8	–	–	2-3	2-3	2000
	Scilly (St. Mary's)	163	1010.3	+18	WSW	4	bc	53	92	7	5	–	–	4-6	4-6	1500
	Guernsey ...	175														
6	Pembroke ...	142	1007.9	+20	W	5	c q	54	88	7	8	–	–	7-8	7-8	2500
7	Holyhead ...	26	1004.1	+36	W'S	5	bc	51	85	7	2	3	–	1	2-3	2500
	Chester (Sealand)	16	1004.1	+36	W	3	b	50	75	7	5	–	–	Tr	Tr	2500
8	Manchester ...	70	1003.0	+40	W	4	z_0	48	85	6	5	–	–	1	1	3000
10	Spurn Head ...	29	999.7	+24	WSW	6	b	48	85	7	–	–	–	0	0	–
	Catterick ...	175	1000.0	+46	WNW	2	b	47	85	7	–	–	–	0	0	–
	Tynemouth ...	108	997.5	+28	W	5	bc	48	85	7	2	–	–	4-6	4-6	2800
11	St. Abbs Head	280	994.3	+30	W	8	bc	49	65	8	4	–	–	1	1	2500
	Leuchars ...	36	994.4	+28	W	4	z_0	46	85	6	5	–	–	9	9	3200
12	Renfrew (Abbots I.)	19	997.6	+26	WSW	4	b	46	85	8	5	–	–	Tr	Tr	7200
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1001.1	+36	WNW	6	b	49	85	8	–	–	–	1	1	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	999.4	+20	WSW	4	c/pr	46	92	7	5	–	–	7-8	7-8	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	996.6	+18	SW	3	bc	46	92	7	8	7	–	4-6	4-6	1500
16	Lerwick ...	156	988.2	+14	W'S	5	c	49	85	7	5	7	–	4-6	9	1500
17	Blacksod Point	18	1002.1	+18	W	4	bc	49	85	8	3	–	–	9	9	1500
18	Malin Head ...	84	998.7	+26	SW'W	4	bc/pr	49	85	7	3	3	–	4-6	4-6	2500
	Aldergrove ...	268	1001.4	+26	SW	3	b	44	92	8	2	–	–	2-3	2-3	1800
19	Birr Castle ...	173	1004.7	+16	WNW	1	b	44	92	8	–	–	–	0	0	–
20	Valentia Obsy.	30	1005.6	+6	S'E	3	c	51	85	8	8	–	–	7-8	7-8	2500
	Roches Point	22	1007.1	+16	W'N	3	bc	47	85	8	5	–	–	2-3	2-3	2500

OBSERVATIONS at 7 hr. G.M.T. 1st November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1011.2	+10	SW	3	z_0	46	92	6	8	–	–	4-6	4-6	2500	1	*
	Croydon ...	1011.3	+20	W	2	bc	45	97	6	5	–	–	4-6	4-6	4000	1	*
	S. Farnborough	1011.6	+10	SW	5	bc	46	92	8	5	3	–	2-3	2-3	3000	1	*
	Boscombe Down	1011.4	+10	SW'S	2	b	44	92	7	5	3	–	1	2-3	2000	1	*
	Calshot (Sthmtn.)	1011.8	+10	W'S	3	b	48	92	7	8	4	–	1	1	2500	1	1 §
	Lympne ...																*
	Manston ...	1011.6	+20	WSW	5	b	41	97	7	–	–	5	0	1	–		*
2	Shoeburyness ...	1011.3	+14	SW'W	3	b	45	92	6	–	3	–	0	1	–	1	*
	Felixstowe ...	1009.8	+18	W'S	3	z_0	45	86	6	–	7	–	0	1	–	1	
	Gorleston ...	1008.6	+30	W'S	3	bc	48	85	6	5	–	–	2-3	2-3	2500	1	2
	Mildenhall ...	1009.0	+20	WSW	4	b	44	85	7	5	–	–	Tr	Tr	4000	1	*
	Cranwell ...	1008.5	+22	W	4	z_0	42	92	6	–	–	–	0	0	–	1	*
3	Birmingham ...	1009.8	+8	SW	3	b	42	92	6	–	–	3	0	2-3	–	1	*
	Upper Heyford	1010.1	+10	SSW	2	z_0	40	97	6	–	4	–	0	Tr	–		*
4	Ross-on-Wye																*
5	Hartland Point	1009.4	0	WSW	5	bc	53	85	8	3	4	–	2-3	4-6	2000	1	4
	Bristol ...	1011.0	+10	S	3	b	47	86	8	2	4	–	1	2-3	2500	1	*
	Portland Bill ...	1012.0	+10	W	4	bc	54	88	8	5	–	–	4-6	4-6	2500	1	4
	Plymouth ...	1011.8	+6	NE	1	m	45	97	4	2	4	–	4-6	4-6	1400	1	2
	The Lizard ...	1011.2	-2	SSW	4	bc	53	97	8	4	–	–	4-6	4-6	2000	1	2
	Scilly (St. Mary's)	1010.2	-4	SW'S	4	c/pr	52	92	7	8	2	–	4-6	9+	1500	1	3
	Guernsey ...																
6	Pembroke ...	1008.4	+4	SW'S	5	bc	54	85	8	2	–	–	2-3	2-3	2500	1	2
7	Holyhead ...	1006.0	+6	SW	4	bc	51	85	8	5	3	–	4-6	7-8	3500	1	2
	Chester (Sealand)	1007.3	+14	SSW	2	z_0	44	85	6	5	–	–	7-8	7-8	2000	1	*
8	Manchester ...	1006.6	+10	SW	2	z_0	41	92	6	5	–	–	2-3	2-3	3000	1	*
10	Spurn Head ...	1006.1	+20	SSW	4	bc	45	85	7	4	–	–	2-3	2-3	4000	1	2
	Catterick ...	1005.3	+26	W	3	b	47	85	8	5	–	–	1	1	3500	1	*
	Tynemouth ...	1003.0	+28	W	6	bc	47	85	7	2	–	–	2-3	2-3	2000	1	2
11	St. Abbs Head	1000.1	+26	W	6	c q	46	75	8	4	–	–	9+	9+	2500	0	3
	Leuchars ...	999.5	+22	WSW	3	b	44	85	7	–	4	–	0	1	–	1	*
12	Renfrew (Abbots I.)	1001.5	+14	SW'W	3	pr	47	85	7	9	–	–	7-8	7-8	1200	1	*
	Eskdalemuir ...	1002.7	+16	W	4	bc	42	85	7	5	–	–	2-3	2-3	1500	1	*
	Point of Ayre ...	1004.8	+10	WSW	3	bc	45	97	8	8	–	–	4-6	4-6	2500	1	2
13A	Tiree	998.3	+4	SW'W	4	bc/pr	48	85	7	8	–	–	4-6	4-6	1500		
13B	Stornoway ...	995.0	+14	WSW	4	c/pr	47	86	7	3	–	–	4-6	7-8	2000	1	2
15	Dalwhinnie ...	999.3	+14	SW	2	bc	42	85	8	8	–	–	4-6	4-6	2500	1	*
	Aberdeen ...	998.1	+20	SW	2	bc	44	75	6	5	–	–	Tr	Tr	4000	1	2
	Wick ...	995.1	+22	SW	3	bc	42	92	8	5	4	–	2-3	2-3	1500	1	2
16	Lerwick ...	991.4	+4	W'S	4	c	49	85	7	8	7	–	4-6	7-8	800	1	*
17	Blacksod Point	1000.4	-14	SW	4	ir	52	85	8	6	–	–	10	10	1500	2	4
18	Malin Head ...	1000.8	+4	SSW	4	c	46	85	8	9	8	2	2-3	7-8	2500	1	4
	Aldergrove ...	1003.2	+2	S'W	2	c	42	92	7	5	2	–	2-3	9+	1200	1	*
19	Birr Castle ...	1004.1	-6	SW	1	ir	46	92	7	5	–	–	10	10	2500	1	*
20	Valentia Obsy.	1004.0	-2	SSW	4	c/r	53	92	8	6	2	–	4-6	10	1500	1	3
	Roches Point	1004.9	-14	W'S	3	ir	52	97	7	6	2	–	7-8	9+	800	1	4

PAST 24 HOURS.

District	Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 31st Hrs. (36)
1	London (Kew)	58	45	35	14	Tr	0.0
	Croydon ...	58	45	42	21	1	0.0
	S. Farnborough	59	44	37	17	–	0.0
	Boscombe Down	58	43	38	17	Tr	0.0
	Calshot (Sthmtn.)	59	42	42	8	–	0.0
	Lympne ...	57					
	Manston ...						
2	Shoeburyness ...	57	44	33	6	Tr	0.0
	Felixstowe ...	55	44	40	7		0.0
	Gorleston ...	57	45	39	12	0.6	0.0
	Mildenhall ...	60	44	37	8	0.4	0.0
	Cranwell ...	58	41	39	19	0.1	0.0
3	Birmingham ...	58	42	37	25	–	0.0
	Upper Heyford	59			15		*
4	Ross-on-Wye	59			15		
5	Hartland Point	58	51	48	11	Tr	0.3
	Bristol ...	60	45	34	12	–	0.2
	Portland Bill ...	58	51	*	8	–	*
	Plymouth ...	58	44	41	–	–	0.3
	The Lizard ...	58	50	*	8	–	0.5
	Scilly (St. Mary's)	58	52	*	9	0.2	2.8
	Guernsey ...						
6	Pembroke ...	56	52	*	32	Tr	1.3
7	Holyhead ...	56	49	46	11	–	0.0
	Chester (Sealand)	55	43	33	15	Tr	0.0
8	Manchester ...	54	41	30	18	Tr	0.0
10	Spurn Head ...	54	44	*	9	0.5	0.0
	Catterick ...	54	45	38	6	0.3	0.0
	Tynemouth ...	53	47	42	6	3	*
11	St. Abbs Head	54	46	*	–	Tr	*
	Leuchars ...		43	38		Tr	3.0
12	Renfrew (Abbots I.)	53	45	39	1	0.3	0.0
	Eskdalemuir ...	51	42	40	Tr	1	0.0
	Point of Ayre ...	55	45	*	1	–	0.0
13A	Tiree			*	2		
13B	Stornoway ...	53	45	*	2	1	1.1
15	Dalwhinnie ...	47	41	34	15	5	0.0
	Aberdeen ...	54	43	32	Tr	–	2.4
	Wick ...	53	42	*		–	*
16	Lerwick ...	52	48	*	Tr	1	0.0
17	Blacksod Point	60	48	*	0.5	6	*
18	Malin Head ...	52	44	*	1	2	0.1
	Aldergrove ...	54	40	35	0.1	–	0.4
19	Birr Castle ...	55	42	37	0.6	0.6	1.4
20	Valentia Obsy.	55	49	43	3	3	4.2
	Roches Point	57	47	*	11	10	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon (24 hrs. ended 9h.)	Weather Night (24 hrs. ended 9h.)	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
Kew...	18	$c_0 r r_0 m_0$	$c r r_0 m_0$	$c r_0 b c b m_0$	58	45	35	14	Tr	0.0	*	*	6
Croydon	217	$r_0 r r d_0 r_0$	c R r r	$r r m_0 b c b$	58	45	42	21	1	0.0	*	*	6
Greenwich (Royal Observatory)...	149	c r R R	r R q r $_0$	q b c	59	45	38	12	–	0.0	92	83	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	60	44	38	14.2		–	92	91	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	59	40	37	14.2	Tr	–	94	92	*
Camden Square	110			*						*	*		*
Kensington	80	bc	bc	*	60	45	33	13	0.8		94	92	*
Hampstead Observatory	450	or	or	bc	58	–	51	12.4	1.5	–	*	95	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 1st

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
0.1	7-8h 31st	<0.1	Rest of Period

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome														

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 „
2 Fog	550 „
3 Moderate fog	1,100 „
4 Mist or haze	1½ miles.
5 Poor visibility	2½ „
6 Moderate „	6½ „
7 Good „	12½ „
8 Very good „	31 „
9 Excellent „	beyond 31m.

COLUMN 30 — Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 2nd November 1940.

No. 28835

OBSERVATIONS at 13h. G.M.T. 1st November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1011·9	-6	SW'W	3	c	55	65	7	7	-	5	4-6	7-8	2500
	Croydon ...	1011·7	-6	SW	1	bc	59	55	7	1	-	4	4-6	4-6	3000
	S. Farnborough	1012·1	-2	SW	4	bc	57	65	8	8	6	8	4-6	4-6	2500
	Boscombe Down	1011·4	-8	SSW	3	c	52	75	8	2	7	8	4-6	7-8	2000
	Calshot (Soton.)	1012·6	-2	WSW	3	cjp	58	75	8	8	3	4	7-8	9	1900
	Lympne ...	1013·6	-2	SSW	2	c	55	75	8	2	-	-	9	9	3000
	Manston ...	1012·3	-10	SW	3	c	57	65	8	2	3	6	2-3	7-8	2800
2	Shoeburyness ...	1020·3	-6	SW	3	bc	56	75	7	7	-	1	2-3	2-3	4000
	Felixstowe ...	1011·4	0	SW	3	zo	56	75	6	1	-	5	2-3	4-6	2500
	Gorleston ...	1011·0	0	WSW	3	bc	56	65	7	-	4	-	0	2-3	-
	Mildenhall ...	1010·7	-2	SW'W	3	bc	57	65	7	1	-	2	2-3	4-6	2500
	Cranwell ...	1009·3	-6	SW'S	4	c	54	75	7	5	7	5	2-3	7-8	2500
3	Birmingham	1008·8	-6	SSW	3	c	53	75	8	5	7	-	4-6	9+	2500
	Upper Heyford	1010·7	-2	SW	3	c	56	65	8	7	5	9	2-3	7-8	3500
4	Ross-on-Wye ...	1009·3	-6	SSW	4	c	54	75	8	8	-	2	4-6	9	2500
5	Hartland Point	1008·4	-14	WSW	6	dodo	55	85	8	9	7	-	2-3	9+	1500
	Bristol ...	1010·9	-6	SSW	4	iro	55	75	8	5	2	-	4-6	9+	1200
	Portland Bill ...	1011·9	+8	NNE	4	c	56	85	8	5	-	-	10	10	4000
	Plymouth ...	1011·8	-2	SW'W	4	c	57	75	7	7	7	5	7-8	9+	1400
	The Lizard ...	1011·7	-4	SSW	4	c	55	92	8	8	6	-	7-8	7-8	2500
	Scilly (St.Mary's)	1010·5	-4	WSW	5	rr	54	92	6	5	2	-	4-6	10	1000
	Guernsey ...														
6	Pembroke ...	1006·8	-2	W'S	6	rr	52	92	6	5	-	-	10	10	800
7	Holyhead ...	1004·2	-18	SW	4	c	54	97	6	8	7	-	4-6	9+	1500
	Chester (Sealand)	1006·3	-14	S'E	3	c/r	53	85	6	6	2	-	4-6	10	1200
8	Manchester ...	1006·8	-10	SSE	3	ir	50	92	6	5	7	-	7-8	10	3400
10	Spurn Head ...	1007·7	0	SW'S	4	c	55	65	6	4	7	1	2-3	9	5700
	Catterick ...	1005·7	-4	SW	4	iro	53	75	6	5	7	-	4-6	10	2500
	Tynemouth ...	1005·0	0	SW	3	c	53	65	6	5	-	-	7-8	7-8	3200
11	St. Abbs Head	1002·8	+8	S	4	c	49	75	8	4	7	-	4-6	7-8	2500
	Leuchars ...	1001·6	-2	SW	2	zo	49	85	6	8	7	-	4-6	7-8	2500
12	Renfrew (Abbots I.)	1002·0	-6	SSW	4	rr	49	92	6	5	2	-	2-3	10	1500
	Eskdalemuir ...	1003·1	-8	WSW	5	rr	47	92	7	-	2	-	10	10	1500
	Point of Ayre ...	1003·3	-14	SW	3	c	52	92	8	5	7	-	4-6	9+	1500
13A	Tiree ...	999·0	-2	S	3	c	48	92	7	5	-	-	9+	9+	1000
13B	Stornoway ...	997·1	+4	SW	4	bc/pr	50	75	8	8	6	3	2-3	2-3	2000
15	Dalwhinnie ...	*	-2	SSW	2	c	45	85	8	8	3	-	4-6	9+	2500
	Aberdeen ...	1000·2	+2	SW'W	3	bc	53	65	8	1	3	-	1	2-3	4000
	Wick ...	997·4	+6	WSW	3	bc	51	75	8	2	4	3	2-3	4-6	2500
16	Lerwick...	994·8	+14	WSW	4	c	50	75	8	8	7	-	4-6	7-8	1500
17	Blacksod Point..	1001·6	+4	WSW	4	c	53	85	8	3	-	9	2-3	7-8	1500
18	Malin Head ...	1000·4	-6	SSW	2	c	49	92	8	5	7	8	2-3	7-8	2500
	Aldergrove ...	1002·0	-10	SW'S	3	c	51	85	8	5	-	-	9	9	1500
19	Birr Castle ...	1004·3	0	SW	2	c/pr	53	85	8	8	-	-	7-8	7-8	1500
20	Valentia Obsy. †	1006·5	+8	SW'W	5	bc	57	75	9	2	-	5	4-6	4-6	2500
	Roches Point ...	1006·6	+6	W	3	bc	57	75	8	3	-	5	2-3	4-6	1500

OBSERVATIONS at 18h. G.M.T. 1st November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1010·2	-2	SW'S	4	c	53	85	7	5	-	2	4-6	7-8	1500	1	*
Croydon	1010·7	-4	S	2	c	52	85	6	5	7	-	4-6	7-8	2000	0	*
S. Farnborough	1010·7	-2	SW	4	c	52	85	7	8	7	-	1	9+	3000	1	*
Boscombe Down	1009·9	-2	S'W	4	c	51	92	7	5	7	-	2-3	9	2000	0	*
Calshot (Soton.)	1011·2	-4	WSW	4	c	54	85	7	5	7	-	2-3	9	4000	1	2
Lympne	1012·6	+6	-	0	bc	49	97	7	5	-	-	4-6	4-6	5000	1	§3
Manston	1011·0	-6	SSW	3	b	50	85	7	-	3	4	0	1	-		*
Shoeburyness	1011·2	-6	SSW	4	bc	51	85	8	4	4	-	2-3	4-6	5700	1	*
Felixstowe	1009·7	-10	SSW	3	c	50	85	7	-	7	6	0	7-8	-	1	2
Gorleston	1009·3	-10	SSW	3	c	52	75	6	-	7	-	0	7-8	-	0	2
Mildenhall	1008·7	-10	S'W	4	c	54	75	7	5	2	-	7-8	10	3000	1	*
Cranwell	1007·4	-2	W	5	rr	51	85	6	6	-	-	10	10	1100	1	*
Birmingham	1007·4	-4	WSW	3	roro	49	92	6	6	2	-	9	10	800	1	*
Upper Heyford	1009·1	-6	SW'S	4	c	51	85	7	5	7	6	2-3	7-8	2500	1	*
Ross-on-Wye	1008·4	0	SW	3	c/r	50	85	8	5	-	-	9+	9+	1500	1	*
Hartland Point	1009·5	+12	WSW	5	c	53	97	8	8	4	-	4-6	9+	1500	1	4
Bristol	1009·5	0	SW	4	rr	51	92	6	6	2	-	4-6	10	800	1	*
Portland Bill	1010·2	-16	SW	4	c	55	85	7	5	-	-	10	10	4000	1	4
Plymouth	1011·3	+6	W'N	5	bc	52	92	6	8	3	-	2-3	4-6	1000	1	3
The Lizard	1012·2	+20	W	5	bc	53	92	8	8	4	-	2-3	4-6	2500	1	3
Scilly (St.Mary's)	1011·9	+14	W'S	5	bc	54	92	8	8	4	-	1	4-6	1500	1	3
Guernsey																
Pembroke	1008·0	0	W'S	6	bcq	54	85	7	5	7	-	4-6	4-6	2000	1	4
Holyhead	1004·9	+6	SW'S	3	c	53	97	7	9	-	-	9	9	2200	1	2
Chester (Sealand)	1005·6	-2	SSW	1	bc	51	85	6	5	-	1	4-6	4-6	2000	1	*
Manchester	1005·6	-2	S'W	2	m/r	49	97	4	5	7	-	4-6	9+	2100	2	*
Spurn Head	1005·9	-4	SW'S	2	ir	50	92	7	6	3	-	4-6	9+	2500	1	2
Catterick	1003·6	-10	SE'E	1	zo	50	85	5	5	7	-	4-6	7-8	1200	1	
Tynemouth	1004·3	-14	S	2	c/r	49	92	5	-	2	-	10	10	1500	1	2
St. Abbs Head	1000·9	-10	SSW	3	iro	47	92	8	5	4	-	7-8	10	2500	1	2
Leuchars	1000·2	-8	-	0	roro	47	92	6	5	1	-	9	10	1500	1	*
Renfrew (Abbots I.)	1000·6	-6	SW	3	pr	50	85	7	8	-	-	4-6	4-6	1500	1	*
Eskdalemuir	1001·9	+2	WSW	4	c	47	92	6	5	-	-	10	10	800	1	*
Point of Ayre	1003·2	+2	WSW	3	bc	49	92	8	8	4	1	Tr	2-3	2500	1	2
Tiree	998·7	0	-	0	bc	44	97	8	5	-	-	4-6	4-6	2500	0	2
Stornoway	997·5	+2	SW	1	c	45	85	8	8	7	3	2-3	7-8	2000	1	1
Dalwhinnie		+2	SW	1	o	42	97	7	5	2	-	7-8	10	1500	1	*
Aberdeen	1000·4	-2	SW'W	2	iro	48	85	4	5	2	-	Tr	10	4000	1	2
Wick	998·2	+6	NNW	2	c	45	75	8	5	1	8	9	9	1500	1	2
Lerwick	995·7	+6	WSW	4	c/pr	46	85	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1002·2	+6	W'S	4	bc	50	85	8	3	-	-	4-6	4-6	1500	3	1
Malin Head	1000·2	+12	W	5	PR	50	92	6	9	-	-	9	9	2500	0	4
Aldergrove	1002·3	+8	SW'W	3	c/pr	48	85	8	8	-	2	2-3	9	2500	2	*
Birr Castle	1005·5	+6	SW	2	c/pr	49	85	8	3	7	-	2-3	9	800	1	*
Valentia Obsy. †	1008·2	+12	WSW	4	c/r	51	85	8	8	2	-	7-8	9+	2500	1	3
Roches Point	1008·2	+12	W	3	c	53	85	8	3	7	5	4-6	7-8	1500	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 1st (37)	13h.—18h. 1st (38)	18h. 1st to 1h. 2nd (39)	1h.—7h. 2nd (40)
London (Kew)	bcmowbbc	bccirocbc	crororoc	crorocbcmo
Croydon		bc	*	*
S. Farnborough	bcbbc	bcproc	bcrrmo	bmobc
Boscombe Down	bc	c	bcc,bmo	bc
Calshot (Soton.)	bbc,c	bcproc	bc	crorombbc
Lympne		cproc	cproPRbc	bcbbcw
Manston	bbc	bc	bccroroc	bc
Shoeburyness	bmobc	bc	bccpc	cbc
Felixstowe	bcmoczo	bczoc	emobirbc	bcmo
Gorleston	bc	occ	bcoroc	cbc
Mildenhall	bbmobzo	bcc	corrmobccmo	bcmobmbcmo
Cranwell	bmoic	c,rrmo	rmobcmo	bcmo
Birmingham	bcpro	cro	robcc	cprbc
Upper Heyford	bmobc	bccir	crrcbcbw	bbcmobmobc
Ross-on-Wye	bbcc	ccor	cdc	cpbc
Hartland Point	bccrc	crr	bccpl	cbcc
Bristol	b,ciro	crr)R	crrbccprmo	bcpro
Portland Bill	bcc	c	*	bc
Plymouth	bcmoc ⊕	ccmororoRRbc	bcbcbccpr	bccprbcmocmo
The Lizard	bcc	prcbc	cprlq	bcc
Scilly (St.Mary's)	crr	crrobc	bcpql	bcpol
Guernsey				
Pembroke	crrqo	rcbcq	bcq	*
Holyhead		cmobcc	qprbc	bcc
Chester (Sealand)		rrrobc	bcmob	bbcprob
Manchester		morrorom	moprbc	bmo
Spurn Head	c	cir	c	bc
Catterick	bciromo	crorommom	cmormbc	bc
Tynemouth	bcc	cororo	cpro	cbc
St. Abbs Head	bcqe	ciro	bc	bc
Leuchars	bbmobcc	iromo	crorobcbw	bcbmob
Renfrew (Abbots I.)	bcprocmrr	crrirmo	cproPRKqPR	bccpro
Eskdalemuir	bccrr	rrocir		pbcc
Point of Ayre	roroc	bc	bbc	bcc
Tiree		bcc	cpr	cpr
Stornoway		cPR	bccrq	crrprbc
Dalwhinnie	bcprc	cpro	*	cprbc
Aberdeen	bzob	bciro		prob
Wick	bc	c	cbcb	bprobc
Lerwick	cpr	cpr	cbcpr	bc
Blacksod Point	pr	cbc	bc	rr
Malin Head	cpreiroiroc	cproc	cPRbcpqbc	cprproco
Aldergrove	ciromoRRc	bcprobc	bcbw	bwc
Birr Castle	cpr	cpr	cpr	bbccrr
Valentia Obsy. †	cbcbbc	bcprophrq	rcrrttroirbcc	crrroroir
Roches Point	cpobc	c	prbc	irrr

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ. line squall. l, lightning.
o, overcast sky. p, passing showers.

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
⊕ Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

Abridged observations of additional stations in the

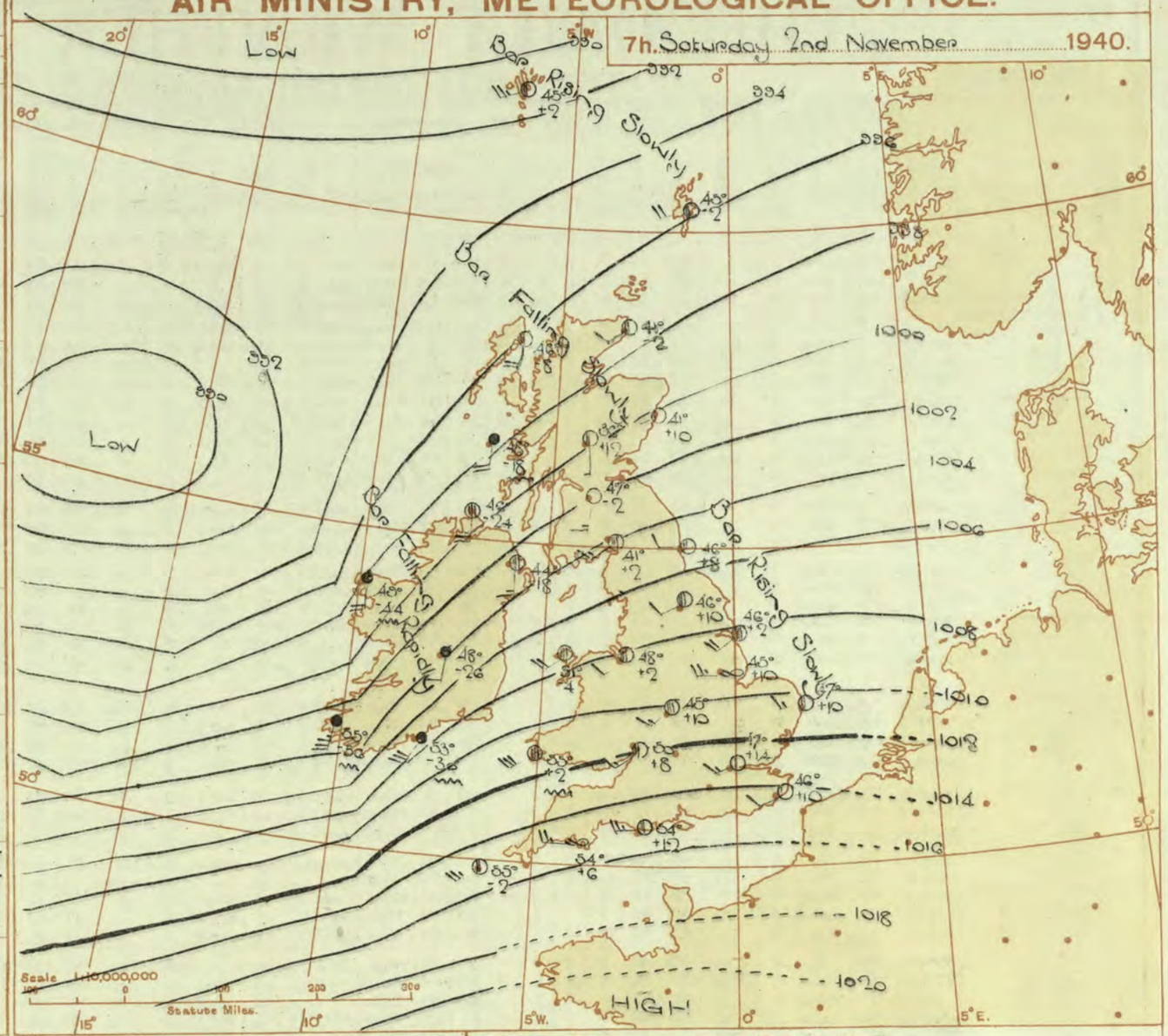
AVIATION WEATHER CODE

	13h. G.M.T. 1st November			18h. G.M.T.			01h. G.M.T. 2nd November			07h. G.M.T.		
IIIi	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109							8-	01862	23312	80	01864	19215
115	87	14844	55624	87	02844	24485	51	01853	22424	51	02854	20415
203							5-	02946	16416			
206	84	01864	22214	57	22855	20168	50	01853	22213	50	00853	22283
210	84	01864	22814	5-	02865	20228						
220										20	01754	22314
230	62	64645	20288	86	61646	16167	8-	81745	53485	8-	27845	53485
245							50	05653	30113	50	01952	28214
260	58	02854	19316	40	01864	20314	80	81854	20214	80	01853	51314
277				23	02842	19327	40	00858	23403	52	02851	20318
279				--	05544	20315	--	08444	20314			
285	6-	63738	22428	6-	22737	24467				8-	03738	24688
288	81	02850	14328	57	21544	17467	51	25754	21386	50	01852	20385
273	84	01663	20205							32	63654	14368
301	52	63564	14868	87	05552	20364	8-	05655	24585	87	25655	24487
321	57	05662	18428	52	61546	21368	50	05661	21361	55	05662	21314
299	51	05545	22328	52	64548	22468	5-	08445	22315	57	05643	22314
292	52	61655	19388	52	05544	14368	50	05653	20263	47	01743	20314
310	--	82628	24488	--	57209	20569				--	01634	24414
316	57	05654	18317	52	62545	20268	50	05561	22101	54	05561	20216
333	62	64646	24368	8-	02755	20365	20	25753	24483	26	02953	24418
334	--	53768	22158								01853	22213
340	62	61645	16468	5-	22755	20366	50	01765	14185			
126	13	01852	20414	03	01790	18414	51	05634	20368	07	05690	21462
336	--	62754	20508		03741	20468					03742	
350	14	01853	18514	57	02747	18328						
368												
379	77	02754	22826	02	05690	20328	50	05562	22312	00	02790	18315
390	73	05655	20313	57	47345	18217	53	08443	21364	00	05690	24482
382	17	01753	19514	5-	02756	18426	50	05651	21301	50	02862	22215
438	80	01754	23384							57	01753	24614
430	80	01854	22315	57	02763	22317	03	00790	24313	20	01751	24214
409	27	01845	18727	54	02835	22525	3-	01744	20584	57	01743	20584

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Saturday 2nd November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Saturday 2nd November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate or fresh west-southwest wind backing south, strong tonight veering west tomorrow; mainly cloudy, rain later today, bright periods showers with local hail and thunder tomorrow; rather mild becoming cooler.
5 S.W. England 6 South Wales ...	Southerly gale veering west; cloudy with rain at first, bright intervals, squally showers with local hail and thunder tomorrow; rather mild, becoming cooler.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Fresh southwest wind backing south strong, veering west later; cloudy rain spreading eastwards today, bright intervals squally showers with local hail and thunder later; average temperature.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland	Fresh southerly wind becoming variable, finally northwest; cloudy some rain at first showers with local hail and thunder later, average temperature.
15 N. E. Scotland 16 Orkneys and Shetlands	Fresh southerly wind backing southeast becoming variable and finally northwest moderate or fresh; cloudy with rain at times; becoming rather cold.
17 N. W. Ireland 18 N. E. Ireland	As 7 - 12.
19 S. E. Ireland 20 S. W. Ireland	South - southwest gale veering northwest and moderating; cloudy some rain at first, bright periods squally showers, local hail and thunder later; Rather mild becoming cool.

GENERAL INFERENCE.

A deep depression centred about 400 miles westward of Scotland and an associated trough of low pressure over West Ireland are moving east. Rain will spread from the west to all districts. Gales are probable today on the southwestern coast, extending up the English Channel tonight.

FURTHER OUTLOOK.

Unsettled, bright intervals and showers.

Gale Warning issued at 0825 G.M.T. on 2nd November, 1940. in districts 5, 6, 19 & 20.

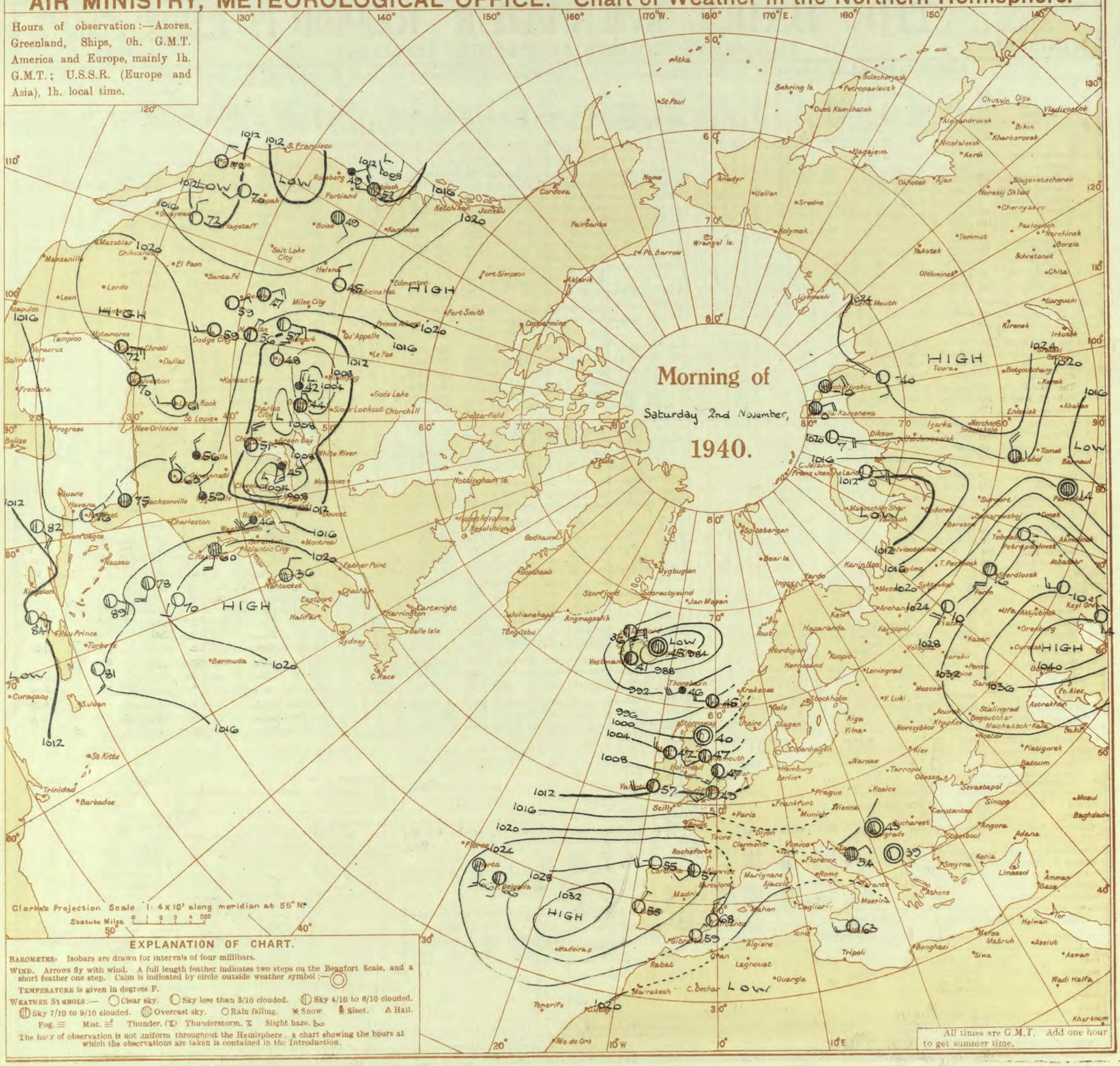
Forecasts issued at 10.30 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Saturday 2nd November. 1940.
No. 28,835.

OBSERVATIONS at 1 hr. G.M.T. 2nd. November.

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1010.7	+4	SW	3	zo	49	85	6	4	-	-	2-3	2-3	2500
	S. Farnborough	226	1011.5	+8	WSW	4	zo	48	92	6	5	-	-	2-3	2-3	2500
	Boscombe Down	417	1012.0	+10	SW	4	bc	47	97	7	5	-	-	4-6	4-6	2000
	Calshot (Sthmtn.)	8	1012.4	+10	W	3	zo	50	92	6	-	4	-	0	1	-
	Lympne ...	346	1012.3	0	SW	3	bc	49	97	7	5	-	8	2-3	4-6	2500
	Manston ...	154	1010.4	-2	SW	1	bc	49	92	7	5	7	-	4-6	4-6	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1009.2	+2	W'S	3	zo	49	92	6	-	7	-	0	2-3	-
	Gorleston ...	5	1008.5	0	W'S	2	c	50	92	6	5	-	-	7-8	7-8	1500
	Mildenhall ...	19	1008.6	+2	SW	3	zo	48	97	6	-	1	-	0	4-6	-
	Cranwell ...	240	1007.6	-2	W	4	zo	45	97	6	5	-	-	2-3	2-3	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1009.8	+2	SW'W	2	zo	47	97	6	5	-	-	Tr	Tr	2500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1011.5	+8	WSW	5	c	53	85	8	8	-	-	7-8	7-8	1500
	Bristol ...	209	1010.9	+2	SW	4	pr	50	92	6	2	-	-	10	10	1400
	Portland Bill ...	32	1012.6	+8	SW	5	c	54	92	7	5	-	-	7-8	7-8	4000
	Plymouth ...	82	1014.5	+10	W'N	3	bc	51	85	7	4	-	-	4-6	4-6	1400
	The Lizard ...	240	1015.0	+4	W	6	c/pr	54	85	7	8	-	-	7-8	7-8	1500
	Scilly (St. Mary's)	163	1014.6	+10	WSW	5	bc/pr	52	85	7	9	6	-	4-6	4-6	1000
	Guernsey ...	175														
6	Pembroke ...	142	1009.8	+4	W'S	7	bcq	53	75	7	8	-	-	4-6	4-6	2500
7	Holyhead ...	26	1006.7	+8	WSW	5	bc/r	51	92	8	5	9	-	4-6	4-6	2500
	Chester (Sealand)	16	1007.0	+4	WNW	2	bc	49	85	7	5	-	-	2-3	2-3	2000
8	Manchester ...	70	1006.4	+2	SW	3	zo	45	85	6	5	-	-	2-3	2-3	2500
10	Spurn Head ...	29	1005.6	0	SSW	3	c	47	97	7	5	-	-	7-8	7-8	4000
	Catterick ...	175	1004.2	+6	W	2	c	49	85	7	5	-	-	7-8	7-8	4500
	Tynemouth ...	108	1004.6	+2	SW	2	c/pr	47	85	6	2	-	-	7-8	7-8	2500
11	St. Abbs Head	280	1001.2	+2	W	3	bc	42	92	8	4	4	-	2-3	4-6	2500
	Leuchars ...	36	999.9	0	W	1	zo	44	92	6	5	-	-	2-3	2-3	2800
12	Renfrew (Abbots I.)	19	1001.5	+6	SW	3	c/pr	46	85	8	8	-	-	2-3	2-3	2400
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1004.5	+10	W	4	bc	49	92	8	8	4	-	4-6	4-6	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	997.2	-2	S	6	rr	46	92	6	8	2	-	7-8	10	1000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	998.0	-2	SW	3	bc	38	92	7	5	7	-	2-3	2-3	1500
16	Lerwick ...	156	996.2	0	WSW	4	bc/pr	45	85	8	8	7	-	4-6	4-6	1500
17	Blacksod Point	18	1004.4	+2	W	3	bc	50	85	7	3	-	-	4-6	4-6	1500
18	Malin Head ...	84	1002.2	+10	W	3	bc	47	92	8	6	-	-	4-6	4-6	2500
	Aldergrove ...	268	1004.7	+12	SW	3	b	43	97	8	5	-	1	Tr	1	2500
19	Birr Castle ...	173	1007.6	+6	WSW	2	pr	46	92	7	8	-	-	7-8	7-8	1500
20	Valentia Obsy.	30	1009.9	+8	SW'W	4	c	53	85	8	6	1	-	4-6	9	2500
	Roches Point	22	1010.3	+10	W'S	3	bc	49	92	8	3	-	-	2-3	2-3	1500

OBSERVATIONS at 7 hr. G.M.T. 2nd. November. — PAST 24 HOURS.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 1st. Hrs. (36)
London (Kew)	1013.0	+14	WSW	3	zo	47	92	6	5	-	4	1	4-6	2500	1	*	56	47	40	Tr	4	6.5
Croydon	1012.9	+14	WSW	3	b	47	85	6	-	4	1	0	1	-	1	*	59	46	43	-	3	7.8
S. Farnborough	1013.4	+14	WSW	3	bc	46	92	8	5	4	2	2-3	4-6	2000	1	*	58	45	40	Tr	1	6.2
Boscombe Down	1013.7	+14	SW'S	3	bc	46	85	8	5	-	6	2-3	4-6	2500	1	*	58	45	43	-	2	5.0
Calshot (Sthmtn.)	1014.0	+12	W'S	3	c	50	85	7	8	4	2	1	7-8	2500	1	§2	54	48	45	Tr	2	5.6
Lympne	1014.0	+10	WSW	2	b	46	92	8	8	-	8	Tr	1	2000	1	*	56	46	41	Tr	1	3.7
Manston	1012.7	+14	W	2	bc	47	92	8	8	4	1	2-3	2-3	2500								
Shoeburyness	1013.1	+12	SW	3	bc	49	85	6	-	1	5	0	2-3	-	1	*	58	48	42	-	2	7.5
Felixstowe	1010.7	+10	W'S	4	c	47	92	7	1	4	8	Tr	7-8	3000	1	2	*	47	43	-	1	7.7
Gorleston	1009.8	+10	W	3	bc	47	92	7	-	7	-	0	4-6	-	1	2	57	47	40	-	1	7.6
Mildenhall	1010.2	+12	SW'W	4	zo	47	92	6	5	1	6	1	4-6	4500	1	*	58	46	40	-	1	7.1
Cranwell	1009.1	+10	W	5	zo	45	85	6	5	5	2	2-3	7-8	2500	1		56	45	40	2	3	5.4
Birmingham	1010.4	+10	SW	3	c	45	92	8	-	-	6	0	7-8	-	1	*	58	44	38	0.6	3	3.9
Upper Heyford	1012.2	+18	WSW	2	c	42	92	7	-	4	6	0	7-8	-	1	*	57	41	34	0.4	2	*
Ross-on-Wye	1011.0	+8	SW'W	3	bc	50	75	8	6	-	2	1	2-3	2500	1	*	56	47	42	3	0.4	3.0
Hartland Point	1011.7	-4	WNW	5	c	54	85	8	8	1	-	4-6	7-8	1500	1	4	55	51	49	4	0.3	0.6
Bristol	1013.0	+14	WSW	5	pr	51	85	7	8	7	-	4-6	9+	1500	1	*	57	48	44	3	3	3.8
Portland Bill	1014.1	+12	W	5	bc	54	85	8	5	-	-	4-6	4-6	4000	1	5	56	53		-	3	
Plymouth	1015.1	+6	W	5	zo	54	85	6	2	1	-	7-8	10	1200	1	2	57	50	*	3	1	1.6
The Lizard	1015.5	+4	W'S	5	c	55	92	8	5	2	-	9	10	1500	0	4	57	52	*	4	1	3.0
Scilly (St. Mary's)	1014.7	-2	SW'W	5	bc	55	85	7	5	7	-	4-6	4-6	1200	1	3	56	51		4	0.5	3.4
Guernsey																						
Pembroke	1009.7	+2	SW'W	6	cq	55	85	7	8	-	-	9+	9+	1700	1	4	56	51	*	9	0.2	0.0
Holyhead	1006.5	-4	SW	4	c	51	92	8	8	2	-	1	9+	2500	1	2*	55	49		7	0.6	6.6
Chester (Sealand)	1007.7	+2	SW'W	2	c	48	85	7	5	-	7	Tr	9+	2500	1	*	53	44	31	4	0.3	1.3
Manchester	1007.3	+2	SSW	3	zo	46	85	6	5	3	-	2-3	4-6	3000	1		52	43	37	6	1	1.2
Spurn Head	1007.2	+2	SW	4	c	46	92	7	4	7	1	2-3	7-8	4000	1	2*	56	45	*	1	0.6	2.5
Catterick	1006.0	+10	SW'W	2	c	46	92	9	5	7	-	2-3	9	3500	1		53	45	40	1	0.1	1.2
Tynemouth	1005.0	+8	W	2	bc	46	85	5	2	-	-	2-3	2-3	2000	1	1	54	46	44	1	0.2	*
St. Abbs Head	1001.5	+8	WSW	4	bc	44	85	8	4	4	-	2-3	2-3	3000	0	2	50	42	*	0.2	Tr	*
Leuchars	1001.6	+6	W	2	bc	41	92	7	1	7	-	1	2-3	3200	1	*	57	41	34	0.5	1	2.3
Renfrew (Abbots I.)	1002.0	-2	SSW	3	c	47	85	7	8	4	5	4-6	7-8	2000	1	*	51	44	39	1	4	0.5
Eskdalemuir	1003.8	+2	SW'W	3	c	41	92	6	5	7	1	4-6	9	800	1		48	39	35	2	4	0.0
Point of Ayre	1004.8	0	SW'W	3	c	47	92	8	8	4	7	1	6	2500	0	2	54	46		1	0.2	1.5
Tiree	997.6	-18	S	4	pr	48	92	7	8	-	-	9	9	1200	1	4	49	41	*	0.1	1	0.5
Stornoway	995.8	-8	SSW	4	bc	46	85	8	2	6	-	1	2-3	2500	1	2*	51	44	*	1	5	3.4
Dalwhinnie	1000.2	+12	SSE	1	bc	36	85	8	8	5	-	2-3	4-6	2500	1		45	36	30	3	3	1.1
Aberdeen	999.8	+10	WSW	2	b	41	92	7	5	-	-	Tr	Tr	2500	1	2	55	35	31	0.1	1	4.0
Wick	997.4	-2	SW	3	bc	41	92	8	5	4	3	2-3	4-6	2500	1	1*	53	38	*	-	0.2	
Lerwick	996.0	-2	WSW	4	bc	45	92	8	5	-	-	4-6	4-6	1500	1		50	44		1	Tr	4.5
Blacksod Point	998.3	-44	S	4	rr	49	92	8	6	-	-	10	10	1150	1	4	55	46	*	2	4	*
Malin Head	999.5	-24	S	5	c	46	85	7	5	-	-	9	9	2500	1	3*	54	44	*	3	2	1.8
Aldergrove	1002.8	-18	S	3	c	44	85	7	5	7	-	2-3	10	1200	1		53	42	38	2	-	2.4
Birr Castle	1003.2	-26	SSW	2	rr	48	92	7	6	1	-	7-8	10	1500	1	*	55	45	42	3	6	1.8
Valentia Obsy.	1002.1	-56	SSW	7	ir	55	97	6	6	-	-	10	10	1500	1	5	57	48	45	4	7	3.8
Roches Point	1006.3	-30	SW'W	6	rr	53	97	7	6	2	-	7-8	10	800	1	4	57	48	*	1	5	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew...	18	bcmdwbbc	bcirsebc	crdrobcmo	56	47	40	Tr	4	6.5	*	*	6
Croydon ...	217	*	bc	*	59	46	43	-	3	7.8	*	*	7
Greenwich (Royal Observatory)...	149	bc	bcc	crRbcPb●	58	46	41	-	7	7.0	65	83	6
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	59	47	42	3			75	90	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	58	46	40	-	3	*	82	87	*
Camden Square ...	110			*									*
Kensington ...	80	*	*	*	59	47	39	-	3		*	89	*
Hampstead Observatory ...	450	bc	bc●	orbc	57	*	41	-	2		*	94	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 2nd.

	Max.	Time.	Min.	Time.
South Kensington.	0.1	16-18h 1st.	<0.1	0-6h 2nd
Kew Observatory.				

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...														

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

Objects not visible at
0 Dense fog 55 yards.
1 Thick fog 220 „
2 Fog 550 „
3 Moderate fog 1,100 „
4 Mist or haze 1½ miles.
5 Poor visibility 2½ „
6 Moderate „ 6¼ „
7 Good „ 12½ „
8 Very good „ 31 „
9 Excellent „ beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Precipitous.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 3rd November 1940.

No. 28,836

OBSERVATIONS at 13h. G.M.T. 2nd November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1010.0	-32	SW'S	5	c	55	75	8	5	-	-	10	10	1500
	Croydon ...	1011.0	-28	SSW	3	c	56	76	7	6	7	-	2-3	10	1500
	S. Farnborough	1010.8	-34	SSW	6	ir	56	85	4	5	2	-	9	10	1400
	Boscombe Down	1010.0	-40	SE	5	rr	49	92	7	-	2	-	10	10	800
	Calshot (Soton.)	1012.2	-32	SW'W	6	c	58	85	7	5	2	-	9	10	800
	Lympne ...	1014.0	-10	W	3	c/r	55	85	7	6	7	-	4-6	10	2500
	Manston ...	1012.0	-16	SSW	3	ir	55	75	7	5	7	-	2-3	10	2000
2	Shoeburyness ...	1011.7	-20	SSW	2	c	54	85	8	4	2	-	7-8	10	4000
	Felixstowe ...	1010.7	-12	SW'W	4	rr	53	85	6	-	2	-	0	10	3600
	Gorleston ...	1008.9	-12	SW'W	4	c	52	85	7	-	2	-	0	10	-
	Mildenhall ...	1008.7	-22	SSW	4	ir	51	75	6	-	2	-	10	10	1500
	Cranwell ...	1006.0	-34	SSW	4	rr	49	92	6	5	-	-	10	10	800
3	Birmingham	1004.6	-52	SSW	4	rr	50	97	6	6	-	-	10	10	800
	Upper Heyford	1008.4	-34	SW'S	4	ir	52	85	6	6	2	-	4-6	10	800
4	Ross-on-Wye ...	1005.0	-50	SW'S	6	rr	51	85	7	6	-	-	10	10	1500
5	Hartland Point	1005.2	-48	WSW	8	rr	56	85	6	6	2	-	7-8	10	800
	Bristol ...	1008.1	-42	SSW	5	rr	53	85	7	-	2	-	10	10	800
	Portland Bill ...	1011.9	-24	SW	6	o	54	92	7	5	-	-	10	10	2500
	Plymouth ...	1011.3	-32	SW'W	6	z	57	85	6	6	2	-	9+	10	1000
	The Lizard ...	1011.7	-30	SW	7	c	57	85	7	8	1	-	9	10	1500
	Scilly (St. Mary's)	1010.1	-30	SW'S	7	c	57	85	6	5	7	-	4-6	10	1500
	Guernsey ...														
6	Pembroke ...	1000.6	-52	SW	9	rr	55	85	5	8	-	-	10	10	1000
7	Holyhead ...	993.4	-74	SSW	7	rr	55	97	5	6	2	-	7-8	10	500
	Chester (Sealand)	997.8	-90	SSE	5	rr	50	92	6	6	2	-	9	10	1200
8	Manchester ...	998.6	-86	S'E	5	rr	49	92	6	6	2	-	4-6	10	400
10	Spurn Head ...	1002.8	-24	S'E	5	rr	49	97	6	5	-	-	10	10	4000
	Catterick ...	998.8	-62	S	4	rr	48	92	6	5	2	-	9+	10	1500
	Tynemouth ...	999.0	-36	S	4	c/pr	50	85	6	5	-	-	9+	9+	2000
11	St. Abbs Head	995.4	-56	SSE	5	rr	46	92	7	5	-	-	10	10	2500
	Leuchars ...	993.9	-60	SE	3	ir	47	85	7	5	2	-	4-6	10	2200
12	Renfrew (Abbots I.)	990.5	-90	SE'E	4	RR	46	97	6	5	2	-	4-6	10	1000
	Eskdalemuir ...	991.9	-88	S'E	4	RR	44	85	6	-	2	-	10	10	800
	Point of Ayre ...	987.1	-150	SW	6	rr	55	97	7	8	2	-	7-8	10	1500
13A	Tiree ...	985.4	-76	SE'S	4	rr	45	97	6	-	2	-	10	10	800
13B	Stornoway ...	991.2	-34	SSE	5	rr	47	85	7	5	2	-	9	10	1500
15	Dalwhinnie ...	991.6	-62	SSE	4	ir	42	85	6	5	2	-	4-6	10	1500
	Aberdeen ...	994.9	-44	S	3	c	46	85	6	5	2	-	tr	10	1500
	Wick ...	993.0	-86	SSW	3	c	47	85	8	5	7	6	2-3	7-8	2500
16	Lerwick...	993.9	-18	S	4	c	49	85	8	5	3	-	4-6	7-8	1500
17	Blacksod Point...	986.3	+14	NW	5	c	52	75	7	3	-	9	4-6	9	1500
18	Malin Head ...	970.8	-116	SSW	4	ir	48	97	5	6	-	-	10	10	450
	Aldergrove ...	983.3	-134	SSW	5	c/p	53	97	7	6	2	-	9+	10	700
19	Birr Castle ...	990.9	-38	WSW	6	rr	58	92	7	6	2	-	4-6	10	1500
20	Valentia Obsy. †	986.7	-14	SW	8	ir	58	97	6	6	2	-	9	10	1500
	Roches Point ...	988.7	-24	SSW	7	rr	56	97	6	6	2	-	7-8	10	800

OBSERVATIONS at 18h. G.M.T. 2nd November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1002.8	-42	SW	6	z	56	85	6	5	-	-	10	10	1500	1	*
Croydon	1004.1	-38	SW	4	rr	56	85	6	6	2	-	9+	10	600	1	*
S. Farnborough	1004.4	-36	SW	7	rr	55	85	6	6	2	-	9	10	1200	1	*
Boscombe Down	1004.1	-16	SW	6	ir	55	92	6	6	2	-	7-8	10	600		*
Calshot (Soton.)	1006.6	-10	WSW	7	rr	57	85	6	5	2	-	9+	10	800	1	4
Lympne	1008.2	-30	SW	6	c/p	56	85	6	6	8	-	10	10	900	1	§
Manston	1004.9	-30	SW	6	c/p	56	85	6	6	2	-	7-8	10	800		*
Shoeburyness	1004.6	-44	SW	5	c/p	56	85	5	6	2	-	7-8	10	1500	1	*
Felixstowe	1002.5	-44	SW'S	6	rr	54	85	6	5	2	-	9+	10	3000	1	4
Gorleston	1000.1	-60	SW'S	6	rr	52	85	5	6	-	-	10	10	1500	1	3
Mildenhall	998.6	-58	SSW	7	rr	55	85	6	6	2	-	4-6	10	600	1	*
Cranwell	994.5	-26	SW'W	7	ir	53	97	6	6	-	-	10	10	500	1	*
Birmingham	997.1	-26	SW	5	rr	55	92	8	9	-	-	10	10	450	1	*
Upper Heyford	1000.8	-36	SW	7	rr	54	97	5	6	2	-	9+	10	900	1	*
Ross-on-Wye	999.3	-30	SW	6	rr	56	92	7	6	-	-	10	10	1500	1	*
Hartland Point	1000.2	-4	WSW	8	ir	56	92	6	6	2	-	7-8	10	800	1	5
Bristol	1002.6	-12	SW	7	rr	56	92	6	6	2	-	9+	10	800	1	*
Portland Bill	1006.3	-30	SW	6	o	54	92	7	5	-	-	10	10	2500	1	5
Plymouth	1007.5	-22	WSW	8	id	57	92	6	6	2	-	9+	10	600	1	4
The Lizard	1008.4	-16	SW	8	c/pr	57	92	7	8	2	-	9	10	1000	1	5
Scilly (St. Mary's)	1007.1	-10	SW	7	c	57	85	6	5	-	-	9+	9+	1000	1	4
Guernsey																
Pembroke	997.6	-8	SW'W	9	cq	57	92	6	8	2	-	7-8	10	1500	1	4
Holyhead	992.4	+26	WSW	7	c	55	75	7	2	1	-	2-3	9	2400	1	5
Chester (Sealand)	991.6	-12	WSW	6	id	59	85	6	6	2	-	2-3	10	1000	1	*
Manchester	991.1	-10	SW	6	c	58	85	7	5	-	-	7-8	10	500	2	*
Spurn Head	989.1	-24	S'W	8	cq	54	85	7	6	-	-	9	9	1500	1	4
Catterick	986.1	-40	W	6	rr	57	85	6	6	2	-	7-8	9+	800	1	
Tynemouth	981.6	-64	SSW	5	c	58	85	6	9	-	-	7-8	7-8	1400	1	2
St. Abbs Head	975.7	-56	WSW	5	c/p	48	97	6	5	5	-	7-8	9+	1500	1	3
Leuchars	977.2	-90	NE	5	rr	45	97	5	5	2	-	9	10	500	2	*
Renfrew (Abbots I.)	983.5	+26	WNW	5	dd	42	92	6	5	2	-	7-8	10	1400	2	*
Eskdalemuir	979.8	-14	W'N	7	c	51	75	7	5	-	-	10	10	800	1	*
Point of Ayre	987.6	+50	W'N	8	c	53	75	7	8	1	-	7-8	9	1500	1	5
Tiree	987.7	+30	NW'W	3	c	45	92	7	5	-	-	7-8	7-8	1500	1	3
Stornoway	988.1	-4	NW	1	rr	44	97	7	5	2	-	9	10	1500	1	1
Dalwhinnie	984.8	-22	N	1	rr	37	85	6	5	-	-	10	-10	1500	1	*
Aberdeen	982.2	-80	SW	4	rr	43	92	6	6	2	-	2-3	10	1500	1	3
Wick	986.7	-28	SE	3	pr	48	85	7	8	2	-	4-6	10	1500	1	2
Lerwick	990.2	-12	SE	3	c	45	85	8	5	7	-	4-6	7-8	1500	1	*
Blacksod Point	995.2	+34	W	4	c	49	85	7	9	-	9	4-6	7-8	1500	1	4
Malin Head	989.3	+70	NNW	5	PR	47	92	6	6	-	-	9+	9+	1500	1	4
Aldergrove	990.2	+86	W	5	c/p	49	75	8	5	7	-	9	9+	1700	2	*
Birr Castle	996.6	+30	WNW	2	o/p	50	92	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	999.7	+24	WNW	4	rr	53	92	6	6	2	-	9+	10	1500	1	3
Roches Point	998.5	+6	WSW	6	rr	57	97	6	6	2	-	7-8	10	800	1	5

PAST 24 HOURS.

Stations	Weather 7h.—13h. 2nd (37)	Weather 13h.—18h. 2nd (38)	Weather 18h. 2nd to 1h. 3rd (39)	Weather 1h.—7h. 3rd (40)
London (Kew)	cm⊕c	cricm	cmrm	crm
Croydon	irc	crrm	rrrm	rrrm
S. Farnborough	bcir	rrrmc	rrRrc	rRrc
Boscombe Down		cir	ciricm	circr
Calshot (Soton.)	bc⊕oc	cirrim	crm	crrm
Lympne	bwc⊕	crr	cddm	cdrr
Manston	bcir	cirr	cdrm	cdr
Shoeburyness	cclrc	cprmc	cmrr	cmrr
Felixstowe	bcm	orrr	rrir	irikd
Gorleston	bc	orr	orrq	orr
Mildenhall	bcmoir	oirzozr	crRm	crrmc
Cranwell	crrm	rricm	imcm	cmicm
Birmingham	cir	orr	orir	orr
Upper Heyford	bcmcir	crrm	crrcRr	crrmcir
Ross-on-Wye	bcdoqr	rqdqrq	rqdqrq	rrp
Hartland Point	rrc	circ	cirrr	crr
Bristol	cprcrm	crr RRrr	crrm	cRRr
Portland Bill	o	o	orr	oR
Plymouth	cm	cmirrdd	cmrr	cmrrRR
The Lizard	q	cprcq	crrq	rrq
Scilly (St. Mary's)	c	cdc	crr	rrcir
Guernsey				
Pembroke	ormq	circmq	qrrmo	oirmrr
Holyhead	Rrrqc	crmc	c	c
Chester (Sealand)	crrmc	cmrcd	idirc	embc
Manchester	rrrr	cmrrqc	cbc	cprprm
Spurn Head	cr	qpp	cq	cqc
Catterick	ccrrm	rrrm	cr prbcm	bcm bc
Tynemouth	bccp	corrc	cbcq	bc
St. Abbs Head	corr	cqrrc	rrcq	crbcq
Leuchars	bbcic	ciro RR	rrRRid	irmb
Renfrew (Abbots I.)	cprrRR		bcidpr	bbcprb
Eskdalemuir	rrRR	RRrc	cbc	bcprb
Point of Ayre	rr	c	cbcbc	bcbbc
Tiree	orR	corrd	prbc	bcpr
Stornoway	bccprrr	crr	crr	crrbc
Dalwhinnie	ciro	rro		cir
Aberdeen	bcz	crrr	rrr	crr
Wick	bcc	cpp	cprc	c
Lerwick	bcc	c	cbc	bcc
Blacksod Point	c	cbc	bc	bc
Malin Head	circ	ccprc	bcprPR	bccpr
Aldergrove	crrmrr	crRirc	cbbcw	bcwb
Birr Castle	crr	cir	c	bcc
Valentia Obsy. †	irrcir	cirrrd	irrrr	rrdd rr
Roches Point	rr	rrddrr	rr	irr

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s$_o$, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s$_o$/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r$_o$, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
⊕ Solar halo. ⊕ lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4–6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

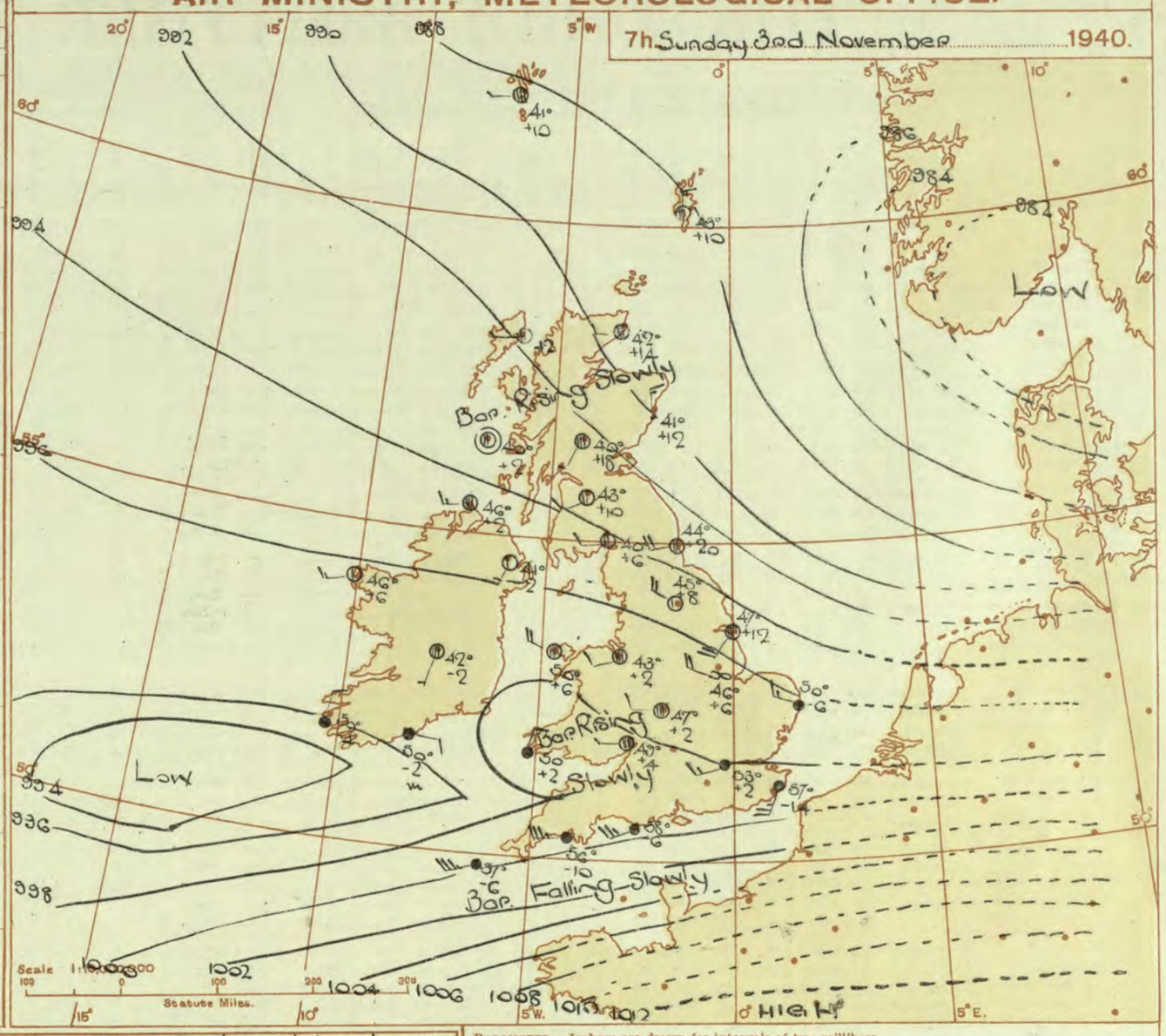
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

13h. G.M.T. 2nd November				18h. G.M.T.				01h. G.M.T. 3rd November				07h. G.M.T.			
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN		$C_L C_M$	wwVhN$_h$	DDFWN		$C_L C_M$	wwVhN$_h$	DDFWN	
109	31	01852	18404	52	02764	12315		80	02745	26125		82	02855	26227	
115	52	02954	16486	52	02844	12386		52	81844	20387		52	62844	32287	
203															
206	52	02863	12227	62	64635	08268		5-	64628	00068		87	22855	00065	
210	57	02954	14417	62	64636	06368									
220												20	01863	14103	
230	62	64644	12268	62	64645	32468		80	00852	28462		44	00852	00012	
245	52	61758	-----									70	01954	25214	
260	52	62764	10268	62	52546	28368		50	01763	22413					
277	52	64636	16668	8-	14848	58768		40	00853	23483		80	00842	23402	
279				--	22645	18865									
285	8-	66588	18568	9-	81736	24886									
288	02	64568	15428	67	32744	53665									
273	33	65653	22566									34	01651	12282	
301	02	64538	14568	51	14644	56868		51	02753	59628		8-	02856	2836	
321	62	63664	25568	62	61625	53668		51	02762	55526		57	05661	24315	
299	5-	64548	22368	5-	14538	53728		50	01742	23602		50	00742	24302	
292	5-	64548	17368	5-	22647	53668		54	01752	24614		50	01842	2-213	
310	--	46209	24540												
316	02	62548	20368	62	54526	52668		52	22644	24368		57	05644	24227	
333	62	64625	53868	62	22635	55768		8-	81648	26268		52	02863	26227	
334	--	66548	24268												
340	62	64646	49568	52	62736	51768		52	62646	20268		27	02861	24167	
136	52	63635	17468	62	62635	17668		52	22755	22668		57	02774	23366	
336				--	64533	24668									
350	52	61784	18463									52	02855	24267	
368															
379	62	64635	18668	6-	62518	53668		6-	62638	55568		5-	22747	24168	
390	62	22544	18467	62	61425	18568		62	62425	53568		57	22634	25368	
382	62	62746	18528	6-	62638	53668		62	64646	54568		62	22845	26168	
438	81	02755	24587									--	64628	57768	
430	57	02745	22518	5-	61638	55768		6-	58538	57868		62	58526	57768	
409	52	05637	53768	52	05736	20068		02	64628	53868		02	64518	53768	

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Sunday 3rd November, 1940
1 S.E. England 2 E. England ... 3 E. Midlands ...	Wind S.W. increasing strong, with gale on coasts; veering and moderating by tomorrow; dull and rainy, becoming fair tomorrow; fog on coastal hills thunder locally later today; mild today, then cooler
4 W. Midlands ... 5 S.W. England 6 South Wales ...	Wind S.W., strong to gale, veering W - NW. and moderating; dull and rainy, with hill fog today; becoming fair apart from a few showers; mild, becoming cooler.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Wind rather variable, light to fresh, becoming moderate N.W.; becoming dull and rainy; thunder locally; improving towards end of period; average temperature.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands 17 N. W. Ireland 18 N. E. Ireland	Moderate to light W. to N.W. winds; considerable fair periods; some showers, chiefly in the West and North; chance of local morning fog patches; average temperature.
19 S. E. Ireland 20 S. W. Ireland	As 4-6.

GENERAL INFERENCE.

A depression off S.W. Ireland will move E.N.E across England and Wales to Denmark. Southwesterly gales will continue in the Channel today, and strong winds will be renewed in S. and S.E. England. There will be another prolonged period of rain over most of England and Wales today and tonight, but weather will become fair by tomorrow. Elsewhere there will be bright periods and showers. Thunder will occur locally.

FURTHER OUTLOOK.

Fair periods, especially in the South; some showers in the North and West.

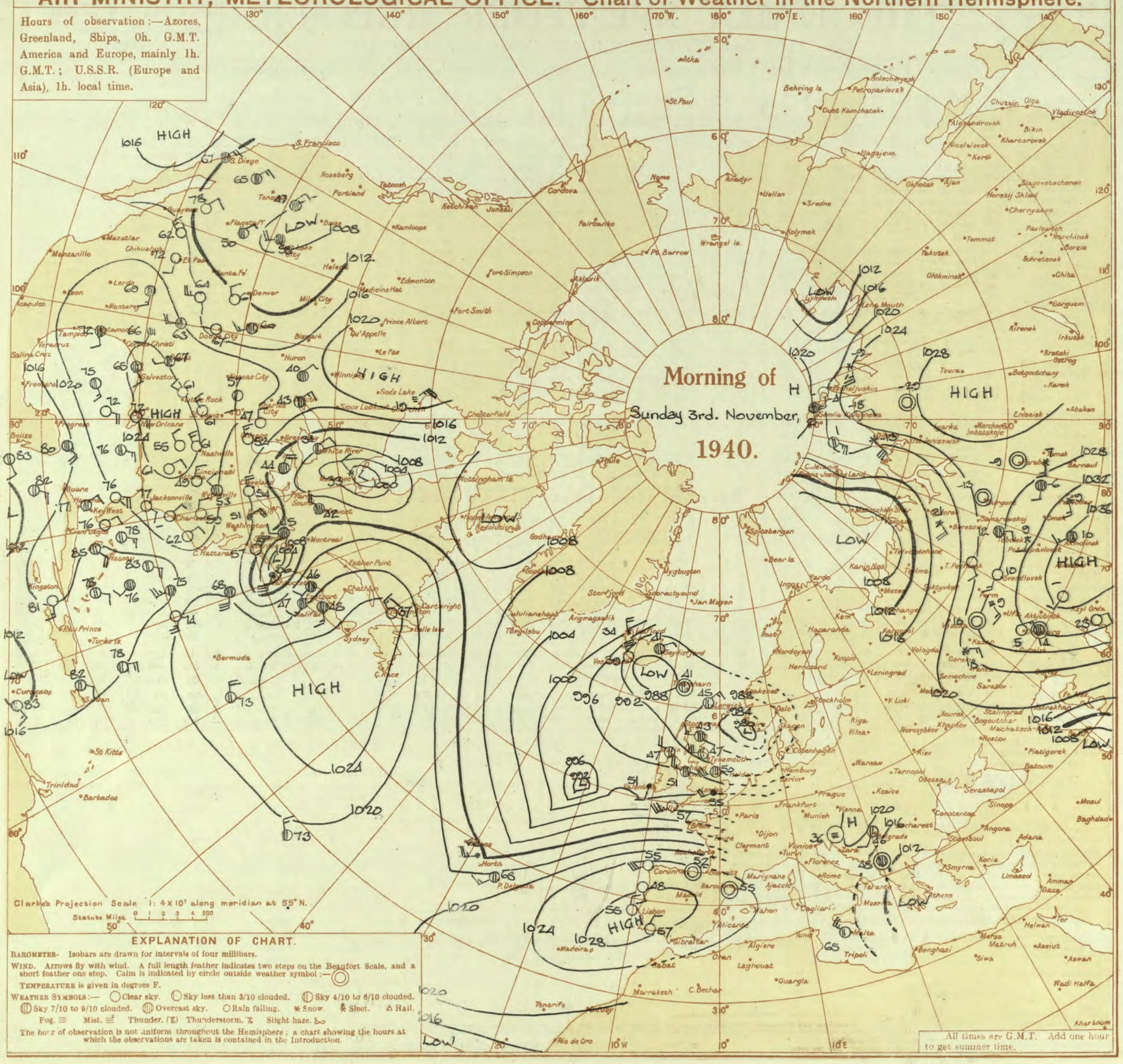
Gale warning in operation in districts 1, 5, 6, 19 + 20.

Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 3rd November 1940.

No 28836

OBSERVATIONS at 1 hr. G.M.T. 3rd November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1000·4	-16	SW	4	r°r°		97	6	6	-	-	10	10	800
	S. Farnborough	226	1000·8	-18	SW'W	6	rr	56	92	6	6	-	-	10	10	1200
	Boscombe Down	417	1000·5	-14	SW'S	6	ir°	56	92	5	6	2	-	9	10	1500
	Calshot (Sthmtn.)	8	1002·4	-18	WSW	6	r°r°	57	92	6	5	-	-	10	10	500
	Lympne ...	346	1003·4	-20	SW	7	d°d°	55	97	6	6	2	-	9+	10	900
	Manston ...	154	1000·8	-12	SW	8	r°r°	57	92	6	6	-	-	10	10	400
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	997·6	-14	WSW	6	dr	55	92	6	6	-	-	10	10	1100
	Gorleston ...	5	996·6	+8	W	4	r°r°	57	92	6	6	-	-	10	10	1500
	Mildenhall ...	19	996·7	+4	WSW	5	r°r°	53	92	6	6	2	-	7-8	10	1300
	Cranwell ...	240	995·5	+18	W'N	6	z°	51	85	6	5	-	-	10	10	800
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	998·2	-8	W	5	rr	54	92	5	6	2	-	7-8	10	300
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	996·4	-30	WSW	9	rr	55	97	6	6	2	-	7-8	10	800
	Bristol ...	209	999·3	-22	SW	6	rr	56	97	5	6	2	-	9+	10	800
	Portland Bill ...	32	1001·8	-20	SW	7	rr	54	85	7	5	-	-	10	10	2500
	Plymouth ...	82	1003·3	+24	W	8	rr	56	97	5	6	2	-	9+	10	400
	The Lizard ...	240	1003·1	-36	SW	8	rr	56	97	6	5	-	-	10	10	1000
	Scilly (St.Mary's)	163	1002·2	-30	SW	7	c/r	57	97	6	5	2	-	7-8	10	1000
	Guernsey ...	175														
6	Pembroke ...	142	997·8	-2	W	4	rr	55	97	6	5	-	-	10	10	1000
7	Holyhead ...	26	996·2	+2	W	5	c	51	75	7	5	-	-	10	10	1800
	Chester(Sealand)	16	996·6	+8	W	3	c	51	75	7	5	2	-	9	10	2500
8	Manchester ...	70	995·7	+6	W'S	4	bc	49	85	7	5	-	-	4-6	4-6	1500
10	Spurn Head ...	29	992·8	+20	WSW	7	cq	50	75	6	5	-	-	7-8	7-8	4000
	Catterick ...	175	992·[illegible]	+30	WNW	4	z	47	85	6	5	-	-	2-3	2-3	2500
	Tynemouth ...	108	990·5	+36	W	6	bcq	47	75	7	2	4	-	2-3	2-3	2000
11	St. Abbs Head	280	989·2	+40	NW	6	ir°	45	75	8	5	2	-	4-6	9+	2000
	Leuchars ...	36	989·7	-34	W	2	ir°	48	85	6	-	2	-	10	10	3500
12	Renfrew (Abbots I.)	19	991·5	+14	W	3	bc/pr	44	85	7	8	-	-	2-3	2-3	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	994·6	+16	NW'W	6	bc	49	85	8	-	4	-	0	2-3	-
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	989·9	+8	W	2	rr	43	97	7	5	7	-	9	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	987·4	+12	WNW	3	c	42	97	7	5	-	-	7-8	10	1500
16	Lerwick ...	156	987·6	-6	NE	3	bc	45	85	8	5	3	-	4-6	4-6	1500
17	Blacksod Point	18	996·8	0	W	3	c	48	85	8	4	-	-	7-8	7-8	2500
18	Malin Head ...	84	993·5	+4	WNW	4	bc	47	75	7	9	-	-	4-6	4-6	2500
	Aldergrove ...	268	995·2	+12	WSW	3	bc	48	92	8	5	-	-	4-6	4-6	2000
19	Birr Castle ...	173	997·8	-4	WSW	1	c	47	92	8	5	-	-	10	10	2500
20	Valentia Obsy.	30	998·2	-10	SSW	2	rr	51	97	6	6	2	-	7-8	10	800
	Roches Point	22	997·9	-12	W	3	rr	52	97	7	6	2	-	7-8	10	800

OBSERVATIONS at 7 hr. G.M.T. 3rd November — PAST 24 HOURS.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 2nd Hrs. (36)
London (Kew)	997·7	+6	SW'S	2	r°r°	52	97	6	5	-	-	10	10	1500	1	*	56	52	50	1	9	5·0
Croydon	998·0	+2	WSW	3	r°r°	53	97	5	6	-	-	10	10	500	1	*	56	52	51	2	16	1·7
S. Farnborough	997·7	+2	SW'S	2	r°r°	53	92	7	5	2	-	4-6	10	1200	2	*	57	53	51	1	12	0·9
Boscombe Down	998·7	+16	SW'W	3	r°r°	52	97	6	-	2	-	10	10	1500	1	*		51	50		14	1·0
Calshot (Sthmtn.)	999·0	-6	WSW	5	r°r°	58	97	5	6	2	-	9	10	400	1	4	58	56	55	0·2	7	1·0
Lympne	999·8	-14	SSW	5	r°r°	57	97	6	6	2	-	9+	10	500	1	§5	56	55	53	1	6	3·1
Manston	997·9	-2	NW	4	rr	57	92	5	6	-	-	10	10	400		*						
Shoeburyness	998·5	0	SW	5	rr	51	97	6	6	2	-	4-6	10	800	1	*	56	50	50	2	7	1·7
Felixstowe	996·7	-2	NWW	3	r°r°	49	97	5	5	2	-	7-8	10	1400	1	2	54	49	48	4	14	1·7
Gorleston	996·0	-6	WNW	3	r°r°	50	92	6	6	-	-	10	10	1500	1	2	52	49	46	3	9	0·0
Mildenhall	996·6	0	SW'W	2	r°/p	48	92	7	5	2	-	7-8	10	2500	1	*	56	48	46	3	13	0·8
Cranwell	996·1	+6	W'N	4	z°	46	92	6	5	7	-	4-6	9	1400	1	*	54	44	43	5	1	0·0
Birmingham	998·0	+2	W	2	c	47	85	6	5	7	-	7-8	9+	1500	1	*	55	45	43	11*	11	0·0
Upper Heyford	998·2	+6	W'S	2	ir°	47	97	9	5	2	-	7-8	10	2000	1	*	54	47	45	5	15	*
Ross-on-Wye	998·4	+4	W'S	1	o	49	97	8	5	-	-	10	10	2500	1	*	56	49	47	9	16	0·4
Hartland Point	998·2	0	W	3	rr	53	97	6	-	2	-	10	10	1000	1	4	57	52	51	2	13	0·0
Bristol	998·5	+6	W	3	ir	52	97	6	-	2	-	10	10	400	1	*	57	52	50	11	46	0·0
Portland Bill	999·3	-4	WSW	7	RR	52	92	6	5	-	-	10	10	1500	1	5	55	51	*	-	5	*
Plymouth	999·7	-10	SW	7	RR	56	97	5	6	2	-	9+	10	400	1	5	57	55	55	-	13	0·0
The Lizard	1000·0	-10	SW	8	rr	57	97	6	5	-	-	10	10	800	1	5	57	55	*	0·5	9	0·0
Scilly (St.Mary's)	999·4	-6	SWW	7	ir	57	97	6	5	-	-	10	10	1000	1	4	57	56	*	0·1	5	0·0
Guernsey																						
Pembroke	998·6	+2	N'E	2	rr	50	97	6	5	2	-	4-6	10	1000	1	2	57	49	*	13	17	0·0
Holyhead	996·8	+6	WNW	4	c	50	75	8	8	7	-	2-3	9+	2500	1	3	57	49	47	15	-	0·0
Chester(Sealand)	996·8	+6	W	1	c	46	85	7	2	1	7	1	9+	1000	1	*		46	37	3	Tr	0·0
Manchester	996·2	+2	W'S	2	c	48	92	7	2	3	-	2-3	7-8	2500	1	*	59	42	34	6	0·3	0·0
Spurn Head	994·5	+12	SW'W	4	c	47	85	6	5	7	-	4-6	7-8	4000	0	3	54	45	*	1	-	0·4
Catterick	994·7	+8	WNW	3	bc	45	75	8	-	3	-	0	2-3	-	0	*	58	44	32	4	0·1	0·0
Tynemouth	993·6	+20	W	4	bc	44	85	8	2	-	1	2-3	2-3	3600	1	2	58	44	40	4	-	*
St. Abbs Head	990·4	+6	WNW	7	bcq	44	65	9	2	4	-	1	2-3	2500	0	3	48	41	*	20	0·6	*
Leuchars	991·4	+14	W	3	b	42	85	8	5	4	-	1	2-3	3500	2	*	47	39	30	22	4	0·0
Renfrew (Abbots I.)	993·6	+10	WSW	2	bc	43	85	8	8	-	-	2-3	2-3	2500	1	*	48	42	34	21	0·1	0·0
Eskdalemuir	994·0	+6	W	2	b	40	85	8	5	-	-	1	1	1500	1	*	53	39	35	25	1	0·0
Point of Ayre	995·8	+4	WNW	4	bc	47	85	8	2	4	-	1	2-3	1500	1	3	58	46	*	7	-	0·0
Tiree	992·4	+2	-	0	bc	40	92	8	7	4	-	2-3	2-3	2500	1	2	48	39	*	11	1	0·0
Stornoway	1012·2	+8	W	1	bc/pr	42	92	7	8	-	-	2-3	2-3	1500	1	1	48	40	*	3	3	0·4
Dalwhinnie	1023·6	+18	SW	1	c	40	85	8	5	-	-	9+	9+	1500	1	*	43	35	35	9	6	0·0
Aberdeen	990·8	+12	NNW	3	r°r°	41	92	8	6	7	-	7-8	9	2500	1	2	47	41	39	8	9	1·1
Wick	989·7	+14	W	2	c	42	92	8	5	7	1	7-8	9+	2500	1	1	49	41	*	Tr	2	*
Lerwick	988·5	+10	N	3	c	43	85	8	8	7	-	4-6	7-8	1500	1	*	51	42	*	-	-	4·3
Blacksod Point	996·4	-6	W	3	bc	46	85	8	4	-	-	4-6	4-6	1500	1	3	49	47	*	9	1	*
Malin Head	994·0	+2	W	3	cjp	46	85	7	3	-	-	7-8	7-8	2500	1	3	50	44	*	24	3	0·4
Aldergrove	995·9	-2	SW	3	b	41	97	8	5	-	-	1	1	600	2	*	57	40	35	8	Tr	0·0
Birr Castle	997·6	-2	SSW	1	c	42	97	7	5	-	-	9	9	2500	1	*	59	41	38	16	0·5	0·0
Valentia Obsy.	996·6	-4	NNE	1	ir°	50	97	8	5	-	-	10	10	2500	1	2	58	50	48	9	19	0·0
Roches Point	996·9	-2	SE	2	rr	50	97	7	6	2	-	7-8	10	800	1	4	58	50	*	14	14	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs.	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
Kew	18	cm⊕c	cr ir° cm	cm r°r°m	56	52	50	1	9	5·0	*	*	
Croydon	217	ir°c	cr°r°m	rr r°m	56	52	51	2	16	1·7	*	*	4
Greenwich (Royal Observatory)	149	c	crc	rrim	57	54	50	1	15				
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	58	50	50	11			87	98	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*									*
Camden Square	110	bc	bcor	*	58	50	46	3	11	*	*	91	*
Kensington	80	crc	cor	*	57	50	50	2	9		90	99	*
Hampstead Observatory	450	or	or.	o	55	-	45	2	10		*	96	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 3rd

South Kensington.			
Max.	Time.	Min.	Time.

Kew Observatory.			
Max.	Time.	Min.	Time.
<0·1	whole	period	

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22.—Code for surface visibility.

Objects not visible at
0 Dense fog 55 yards.
1 Thick fog 220 ,,
2 Fog 550 ,,
3 Moderate fog 1,100 ,,
4 Mist or haze 1¼ miles.
5 Poor visibility 2½ ,,
6 Moderate ,, 6¼ ,,
7 Good ,, 12½ ,,
8 Very good ,, 31 ,,
9 Excellent ,, beyond 31m.

COLUMN 30.—Code for State of Sea.
0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Precipitous.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2
N. K. JOHNSON, D.Sc., A.R.C.S., Director.

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AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 4th November, 1940.

No. 28,837.

OBSERVATIONS at 13h. G.M.T. 3rd November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	997.9	-14	SE	1	rr	51	92	5	6	2	-	7-8	10	2500
	Croydon ...	998.3	-10	—	0	r_or_o	51	97	4	-	2	-	10	10	1800
	S. Farnborough	1009.0	-14	ESE	1	rr	51	97	5	6	2	-	9	10	500
	Boscombe Down	997.3	-18	SSE	2	rr	53	97	5	-	2	-	10	10	400
	Calshot (Soton.)	997.9	-10	WSW	4	r_or_o	58	97	6	6	-	-	10	10	500
	Lympne ...	1001.1	-2	NW	1	rr	50	97	6	6	2	-	9+	10	800
	Manston ...	998.8	-6	W'S	2	r_or_o	49	97	6	7	2	-	9+	10	500
2	Shoeburyness ...	999.5	0	SW'S	1	rr	50	97	6	6	2	-	4-6	10	800
	Felixstowe ...	998.4	+6	W'S	2	r_or_o	51	85	6	5	2	-	9	10	3000
	Gorleston ...	997.9	+6	W'N	2	o	51	85	6	5	2	-	4-6	10	2200
	Mildenhall ...	997.8	-2	WSW	2	z_o	50	85	6	-	7	-	0	10	—
	Cranwell ...	998.0	-2	SSE	3	z_o	49	85	6	5	-	-	10	10	2500
3	Birmingham	998.0	-2	SSW	1	ir_o	49	85	4	5	-	-	10	10	800
	Upper Heyford	998.0	-6	—	0	r_or_o	49	97	6	6	2	-	7-8	10	600
4	Ross-on-Wye ...	997.0	-10	E'N	2	r_or_o	51	97	5	6	-	-	10	10	800
5	Hartland Point	995.0	-30	WSW	8	r_or_o	56	97	6	-	2	-	10	10	600
	Bristol ...	996.9	-14	—	0	pp	54	97	6	-	2	-	10	10	720
	Portland Bill ...	997.7	-14	SW	7	RR	57	92	6	5	-	-	10	10	1500
	Plymouth ...	998.2	-10	W'S	7	rr	57	97	5	6	-	-	10	10	100
	The Lizard ...	998.7	-12	SW	7	o	58	97	6	5	-	-	10	10	1000
	Scilly (St. Mary's)	997.7	-14	SW'W	6	r_or_o	58	97	5	5	-	-	10	10	800
	Guernsey ...														
6	Pembroke ...	996.2	-8	E	3	rr	51	97	6	5	-	-	10	10	1000
7	Holyhead ...	996.0	-6	—	0	c	51	75	8	8	7	-	7-8	10	2500
	Chester (Sealand)	996.7	-6	—	0	c	50	75	7	5	7	-	9	10	6000
8	Manchester ...	996.3	-2	SW'W	1	z_o	49	85	5	9	1	-	7-8	10	2500
10	Spurn Head ...	996.8	+6	W'S	4	o	49	85	6	-	2	-	0	10	—
	Catterick ...	996.4	+6	—	0	c	49	75	8	8	7	-	Tr	9+	4000
	Tynemouth ...	996.0	+16	W	4	bc	49	75	7	2	3	2	4-6	4-6	3400
11	St. Abbs Head	993.9	+8	WNW	4	c	46	65	8	4	5	4	2-3	7-8	2500
	Leuchars ...	994.2	+10	W	3	bc	49	65	9	1	9	-	Tr	4-6	4000
12	Renfrew (Abbots I.)	994.8	+2	WSW	2	bc	51	75	8	8	6	3	4-6	7-8	3000
	Eskdalemuir ...	994.8	0	W	3	c	46	75	8	8	-	2	2-3	7-8	1500
	Point of Ayre ...	996.4	+2	WNW	3	c	50	75	8	1	1	-	Tr	9+	2500
13A	Tiree ...	993.8	0	NE'E	1	bc	50	75	9	2	-	-	4-6	4-6	3000
13B	Stornoway ...	994.0	+10	NW	1	c/pr	47	85	8	9	6	-	7-8	9	1800
15	Dalwhinnie ...	994.0	+8	N	1	bc	46	65	8	7	-	-	4-6	4-6	2500
	Aberdeen ...	993.8	+14	NW	3	bc	48	85	8	8	-	-	2-3	2-3	4000
	Wick ...	992.7	+12	WNW	2	bc	46	85	8	8	7	1	2-3	4-6	1500
16	Lerwick...	991.7	+16	N	4	c	50	65	8	8	7	4	4-6	7-8	2800
17	Blacksod Point..	996.1	-12	SW	1	c	49	85	8	-	7	-	0	10	—
18	Malin Head ...	994.3	+2	W	2	c/pr	48	92	8	9	-	-	7-8	7-8	4000
	Aldergrove ...	995.6	-10	SW	2	c	45	85	7	-	7	7	0	10	—
19	Birr Castle ...	995.9	-10	ESE	1	c	49	92	7	5	1	-	7-8	10	2500
20	Valentia Obsy. †	993.4	-22	NE	2	d_od_o	51	97	5	5	-	-	10	10	800
	Roches Point ...	994.4	-16	SE	2	rr	53	97	7	6	2	-	7-8	10	800

OBSERVATIONS at 18h. G.M.T. 3rd November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	995.6	-10	ENE	3	pp	50	92	5	6	2	-	7-8	10	1500	1	*
Croydon	994.9	-14	—	0	pf	50	97	2	-	2	-	10	10	100	1	*
S. Farnborough	994.6	-20	WSW	4	rr	54	97	5	6	2	-	7-8	10	1000	2	*
Boscombe Down	994.2	-8	SW	4	rr	57	97	5	6	2	-	9	10	400	1	*
Calshot (Soton.)	996.1	-6	WSW	5	pp	58	97	5	6	-	-	10	10	500	1	4
Lympne	996.5	-6	WSW	3	ip	58	97	5	6	2	-	9+	10	200	1	§
Manston	996.0	-8	—	0	pp	49	97	5	-	2	-	10	10	300		*
Shoeburyness	997.2	-12	ENE	2	r_or_o	49	97	5	6	2	-	4-6	10	1500	1	*
Felixstowe	996.9	-10	NNE	2	r_or_o	47	97	5	6	2	-	9	10	1800	1	1
Gorleston	997.5	0	W	1	r_or_o	50	92	6	6	-	-	10	10	800	1	2
Mildenhall	996.8	-4	N'W	1	r_or_o	48	97	6	6	2	-	4-6	10	700	1	*
Cranwell	996.0	-10	S'W	2	r_or_o	46	92	6	6	-	-	10	10	2000	1	*
Birmingham	995.6	-14	ESE	2	pf	47	97	3	6	-	-	10	10	450	1	*
Upper Heyford	995.2	-10	E	2	rr	47	97	5	6	2	-	7-8	10	300	1	*
Ross-on-Wye	994.5	-14	NE	1	r_or_o	49	97	4	-	2	-	10	10	450	1	*
Hartland Point	992.3	-12	W	5	r_or_o	56	97	5	5	-	-	10	10	500	1	4
Bristol	994.0	-16	—	0	pp	55	97	4	-	2	-	10	10	700	1	*
Portland Bill	995.5	-12	SW	6	pp	58	85	7	5	-	-	10	10	1500	1	5
Plymouth	995.6	-14	WSW	8	rr	58	97	4	6	-	-	10	10	100	1	5
The Lizard	995.2	-14	SW	7	r_or_o	58	97	5	5	-	-	10	10	800	1	5
Scilly (St. Mary's)	994.3	-16	SW	6	r_or_o	58	97	5	6	-	-	10	10	500	1	4
Guernsey																
Pembroke	991.7	-2	SWW	2	F	54	97	1	-	-	-	10	10	<150	1	2
Holyhead	993.6	-16	E'N	3	ir_o	49	85	8	8	2	-	2-3	10	2000	1	1
Chester (Sealand)	995.0	-10	E	1	m	47	85	4	5	2	-	7-8	10	4000	1	*
Manchester	995.1	-12	SSW	1	cf+	45	97	3	5	7	-	4-6	10	2200	1	*
Spurn Head	995.8	0	-	0	c	47	92	6	-	2	-	0	10	-	0	1
Catterick	995.8	-4	-	0	c	42	92	8	5	7	-	1	9	4000	0	
Tynemouth	996.0	-2	W	3	z_o	46	85	5	8	-	-	4-6	4-6	3200	1	2
St. Abbs Head	994.5	-4	W	2	bc	45	75	8	4	4	-	2-3	2-3	2500	0	2
Leuchars	994.5	+2	-	0	bc	41	85	8	5	4	-	1	2-3	4000	1	*
Renfrew (Abbots I.)	994.6	0	-	0	pr	46	92	6	8	-	-	9+	9+	2000	1	*
Eskdalemuir	994.9	0	S'W	1	c	42	92	7	5	-	-	9+	9+	1500	1	*
Point of Ayre	994.9	-2	SW	1	c	41	92	8	4	7	-	1	7-8	2500	1	1
Tiree	994.0	0	NNE	1	bc	42	92	9	7	-	-	2-3	2-3	3000	0	1
Stornoway	994.9	+12	WNW	1	c	44	85	8	5	7	-	7-8	10	2000	1	1
Dalwhinnie	995.8	+2	N	1	c	40	85	8	4	-	-	9	9	1500	0	*
Aberdeen	994.9	+12	NW	1	b	37	97	6	8	-	-	Tr	Tr	4000	1	1
Wick	994.6	+16	WNW	2	bc	42	85	7	8	6	8	2-3	4-6	2500	1	1
Lerwick	993.6	+14	NNW	3	bc	48	85	8	8	-	-	4-6	4-6	2500	1	*
Blacksod Point	995.5	0	-	0	r_or_o	47	85	8	7	-	-	9+	9+	1500	1	1
Malin Head	994.2	+2	SSW	1	c	44	92	8	2	6	2	2-3	7-8	4000	1	3
Aldergrove	994.8	+2	SE	1	fg	40	97	7	7	3	1	Tr	7-8	2500	2	*
Birr Castle	994.8	+2	ESE	1	r_or_o	46	97	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	994.2	+12	WSW	1	c	51	92	8	5	1	-	9	9+	2500	1	1
Roches Point	993.1	+4	WN	1	df	53	97	3	5	-	-	10	10	220	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 3rd (37)	13h.—18h. 3rd (38)	18h. 3rd to 1h. 4th (39)	1h.—7h. 4th (40)
London (Kew)	cr_orrm_o	cr_orfr_orr	$crrr_om$	$cm_or_orrm_o$
Croydon	$mr_ofr_or_o$	ofrfr	fr_orr	
S. Farnborough	rdrrc		$rrr_od_orm_oc$	cm_orrd
Boscombe Down	crr	crr	$crrcd_od_ocid$	cir_o
Calshot (Soton.)	crrRRm	$cr_or_oRm_o$	$cr_or_om_o$	cr_or_orr
Lympne	cr_orrm_o	$brrm_o$	$crrr_or_om$	cm_orrr_of
Manston	$r_or_orrm_o$		$crrr_or_om_o$	$r_or_od_orr$
Shoeburyness	$crrm_oc$	cm_oRrc	rrRR	r_or_oprc
Felixstowe	$cr_or_oir_om_o$	$cr_or_om_o$	r_or_oiR	$oddd_orm_o$
Gorleston	or_oc	cor_or_o	or_or_o	or_or_o
Mildenhall	$c,cm_oir_ocm_o$	$cmir_or_or_o$	$cr_or_oodr_om_o$	$oddm_or_o$
Cranwell	cm_o		$r_or_oir_or_of$	$r_od_or_or_of$
Birmingham	cr_oom	cir_orf	$frir_o$	fir_orr
Upper Heyford	$cir_occr_or_om_o$	cr_or_orrm	$cr_or_orrr_or_o$	$m_ood_od_or_or_o$
Ross-on-Wye	$d_ocr_odor_o$	r_omrrm_o	rrmd	irmR
Hartland Point	$orrr_o$	or_or_o		cr
Bristol	cir_or_orr	$orrm_om$		
Portland Bill	oR	orr	oR_o	orr
Plymouth		cm_orrdd	$fmrrcm_or_or_o$	$cm_or_or_orrcm_o$
The Lizard	rrq	oqpp	idrr	rrbcq
Scilly (St. Mary's)	cr_or_o	or_or_o	or_oor	r_or_obc
Guernsey				
Pembroke			c	$oifrrm_oc$
Holyhead	c	cir_oc	id_oir_oc	cm_oc
Chester (Sealand)	cm_oz_oc	cir_om_oc	cmr_or_odd	ddm_om_o
Manchester	ccm	cm_om	$cfFr_or_om$	$cmr_or_om_om$
Spurn Head	co	o	or_o	cm_o
Catterick	c	ccw	cm_owcw	$cwcm_ow$
Tynemouth	bc	bccbc	bccbc	bcc
St. Abbs Head	bcqc	cbc	bc	bcq
Leuchars	bbc	bccbc	bcm_ox	
Renfrew (Abbots I.)	$bcpr_obc$	cpr_o	cm_omff	$cffwid_of$
Eskdalemuir	bbcc	cpr_oc	cprbc	$bccm_o$
Point of Ayre	c	cw	bcbc	r_or_oc
Tiree	bc	bc	bc	bc
Stornoway	$bcpr_oc$	c	cbc	cbc
Dalwhinnie	cbc	bcc	*	cbc
Aberdeen	r_obcb	bbm_o	bbm	bxbc
Wick	prcbc	bc	bcb	
Lerwick	c	cbc	bc	bcc
Blacksod Point	c	rr	bc	bc
Malin Head	c	$ccpr_oc$	cPRbcprbc	
Aldergrove	b,cm_oc	cbcfg	fglmFebfe	bFebfm
Birr Castle	c	or_or_o	bbcc	f
Valentia Obsy. †	$cir_or_opd_od_o$	$dddd_oddd_odf$	$cbccid_ocid_o$	$bcpid_ocir_o$
Roches Point	rr	dddf	c	c

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog „ less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. „ wet.
2 .. „ flooded.
3 .. „ frozen hard and dry.
4 .. „ partly covered with snow or hail.
5 .. „ covered with ice or glazed frost.
6 .. „ covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. „ covered with snow, less than 6 ins., but ground frozen.
9 .. „ covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

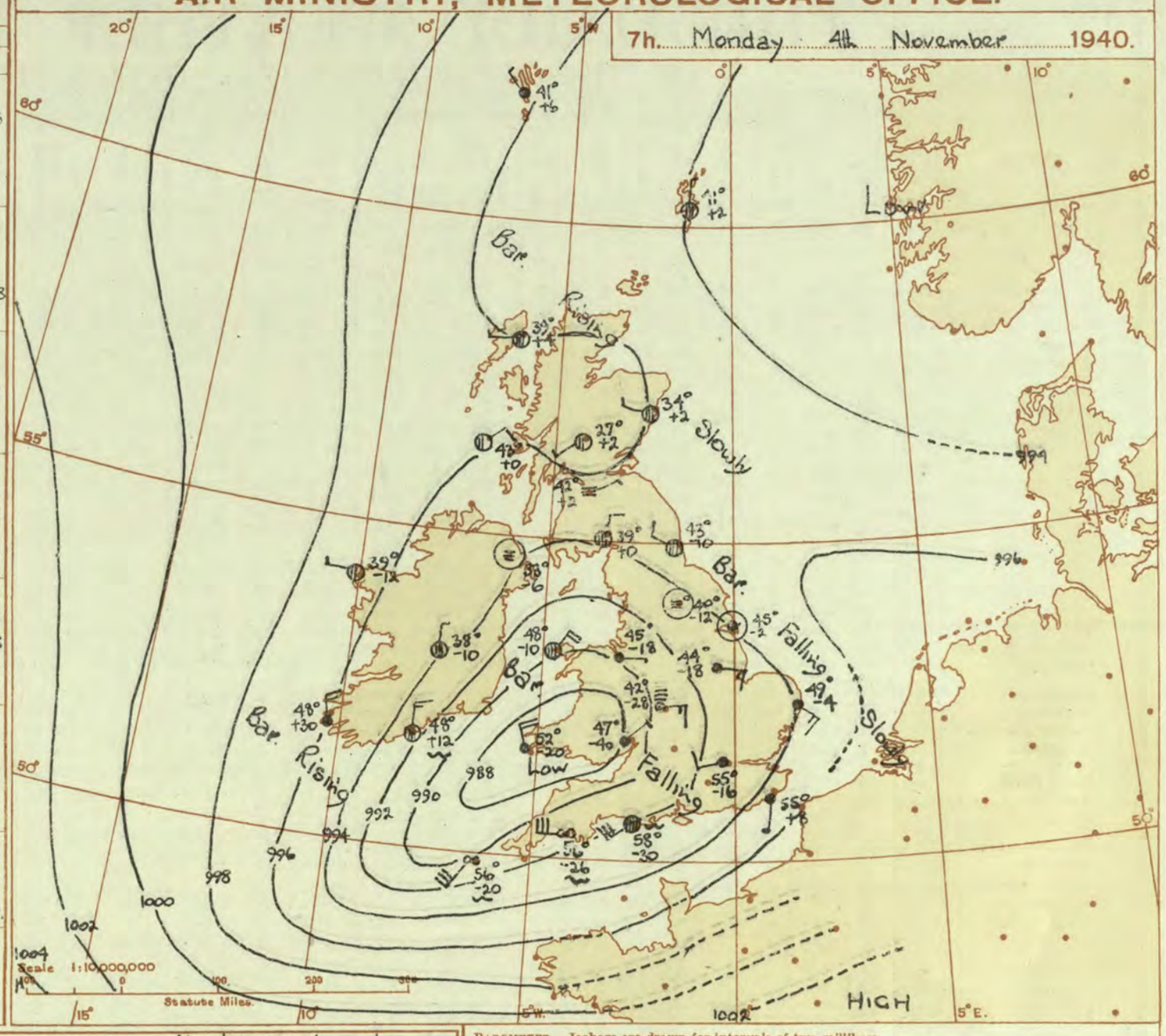
Note.—The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

13h. G.M.T. 3rd November				18h. G.M.T.				01h. G.M.T. 4th November				07h. G.M.T.			
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN		$C_L C_M$	wwVhN$_h$	DDFWN		$C_L C_M$	wwVhN$_h$	DDFWN	
109	80	25955	26385	80	00961	20281									
115	52	81944	20385	52	10944	28215		52	02944	20326		87	10854	20325	
203															
206	8-	01865	24115	56	02865	00086		50	01863	00023		50	00868	00013	
210	84	02955	22305	46	02965	22126									
220															
230	80	00953	00014	45	01851	00014		50	00862	00002		5-	02946	04126	
245	84	01963	28424	4-	02955	28115		51	02765	24228					
260	19	05682	24116	40	05563	00003		00	47190	00040		50	43262	00043	
277	81	02841	22328	23	05642	08124		00	47290	27240		53	22863	32267	
279	--	02763	24447												
285												5-	03638	10228	
288	50	02861	20327	07	02790	14227		53	03664	00027		52	47365	00028	
273												00	09890	16100	
301	57	02752	23128	57	05565	00028		5-	62548	08168		02	62448	08168	
321				5-	08458	00028		--	67358	16168		--	44309	02149	
299	57	02744	24315	5-	05643	22215		5-	05648	00028		87	02844	00025	
292	17	02951	20117	57	05665	22127		5-	05558	30128		51	08445	00008	
310															
316	52	02576	22128	62	67345	00068		62	52455	08168		02	57348	08168	
333	52	02964	16123	52	62745	04168		5-	02757	00067		5-	02658	00028	
334												--	03548	04128	
340								6-	62448	00068		62	61635	10368	
136	51	02773	22328	02	62590	18168		02	63668	00068		02	57418	04268	
336												--	64533	28468	
350	5-	62768	16368									6-	67128	08268	
368															
379				02	64618	30168		--	57200	06250		--	67109	08169	
390				62	64436	23168		5-	57228	10268		62	67218	00068	
382	5-	62658	12168	02	64548	07268		5-	05528	00028		62	41645	12258	
438	3-	67318	24768									02	67009	22469	
430				62	64527	24568		62	51527	22558		6-	64518	20368	
409	02	67308	20663	02	64508	22768		02	64418	20568		3-	02736	52666	

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N, = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Monday 4th November, 1940
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind S.W. to W., fresh, strong to gale on coast at first, veering N.W. to N. falling light; cloudy, some local occasional rain or drizzle at first, becoming fair to fine; rather widespread fog developing tonight, persisting in places tomorrow; colder than of late.
5 S.W. England 6 South Wales ...	Wind veering N.W. to N. strong locally at first, becoming N.W. moderate; bright periods, local showers at first; some fog inland tonight; colder.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Winds northerly, moderate, backing N.W. to W., light; cloudy, local rain at first, becoming fair; fog developing in places tonight, tending to persist locally tomorrow; rather cold, frost locally at night
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Light variable winds, freshening from S.W. tomorrow; considerable bright periods today; showers or occasional rain tomorrow; fog locally tonight and tomorrow morning; rather cold, frost at night
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind W. backing S.W., light to moderate, freshening; bright periods local showers today; more general showers or occasional rain tomorrow; local fog in morning; rather cold, with frost locally at night.

GENERAL INFERENCE:

A complex and deepening depression centred over the Bristol Channel is moving quickly E.N.E, and will be followed by a feeble ridge of relatively high pressure. A further disturbance will develop on the Atlantic, & move slowly towards our N.W. coasts. There will be some occasional rain at first in the eastern counties, but otherwise weather will be mainly fair today, & considerable fog is expected to develop tonight. Western districts will experience showers or occasional rain tomorrow.

FURTHER OUTLOOK.

Further Outlook.

Continuing Unsettled.

▼ Gale warning issued at 0825 2/11 for districts 5, 6, 19 & 20, and at 1040 2/11 for district 1

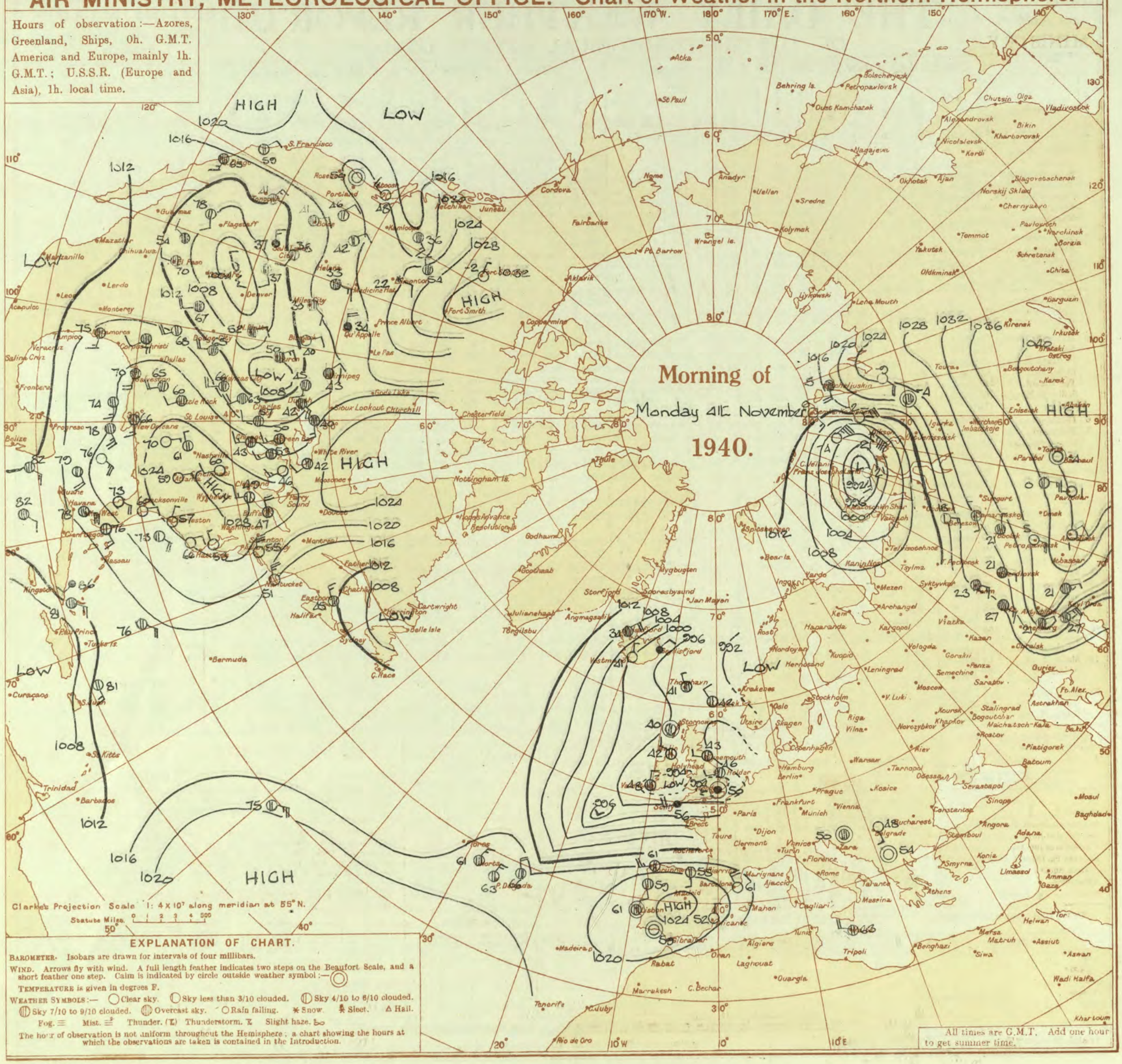
Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press Cornwall House S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 4th November, 1940.

No. 28,837.

OBSERVATIONS at 1 hr. G.M.T. 4th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	993.2	+2	–	0	$r_o r_o$	50	97	4	–	2	–	10	10	800
	S. Farnborough	226	993.5	+2	WNW	2	°/r	54	97	5	5	2	–	9	10	2200
	Boscombe Down	417	993.5	+2	WSW	2	c/d	55	97	7	5	2	–	2-3	10	500
	Calshot (Sthmtn.)	8	994.6	–2	W'S	4	z_o	58	97	6	5	–	–	10	10	900
	Lympne ...	346	994.9	–6	SW	5	$r_o r_o$	58	97	5	6	2	–	9+	10	400
	Manston ...	154	992.4	–18	SSW	2	$r_o r_o$	55	97	5	6	–	–	10	10	300
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	993.5	–14	E'S	4	dd	50	97	5	5	–	–	10	10	300
	Gorleston ...	5	995.2	–2	NE'E	3	$r_o r_o$	49	85	6	6	–	–	10	10	800
	Mildenhall ...	19	994.4	–6	NNE	2	dr	45	97	5	–	2	–	10	10	600
	Cranwell ...	240	995.5	0	E'S	2	$r_o r_o$	44	97	3	6	–	–	10	10	1200
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	994.2	+2	NE	3	z_o	49	97	6	–	2	–	10	10	500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	994.2	+4	W	4	r	55	97	8	5	2	–	7-8	9+	1500
	Bristol ...	209	993.7	+2	W	1	°/f	51	97	5	–	2	–	10	10	200
	Portland Bill ...	32	995.0	+10	SW	6	o	55	97	7	5	–	–	10	10	2500
	Plymouth ...	82	996.7	+10	W	6	$r_o r_o$	56	97	5	6	2	–	9+	10	400
	The Lizard ...	240	996.0	+4	SW'W	4	rr	57	97	6	5	–	–	10	10	800
	Scilly (St. Mary's)	163	995.8	–2	SW	4	$r_o r_o$	56	97	6	6	–	–	10	10	500
	Guernsey ...	175														
6	Pembroke ...	142	993.8	+2	W'S	2	c	54	97	7	8	2	–	4-6	9+	1000
7	Holyhead ...	26	993.4	–2	ENE	3	c/r	48	85	6	5	–	–	9	9	2000
	Chester (Sealand)	16	994.6	0	E	1	dd	46	92	5	5	2	–	10	10	1500
8	Manchester ...	70	994.8	–2	–	0	m	45	92	4	5	–	–	10	10	2000
10	Spurn Head ...	29	995.0	0	WSW	1	c/r	46	97	6	6	2	–	2-3	9+	2500
	Catterick ...	175	995.7	0	–	0	c	40	97	7	–	7	–	0	9+	–
	Tynemouth ...	108	996.0	0	W	1	bc	43	85	6	5	–	–	4-6	4-6	2800
11	St. Abbs Head	280	995.5	–4	–	0	bc	44	85	8	4	4	–	1	2-3	2500
	Leuchars ...	36	995.4	+2	W	1	z_o	34	97	6	–	4	–	0	2-3	–
12	Renfrew (Abbots I.)	19	995.5	0	ENE	1	cf	43	97	3	5	–	–	9+	9+	1800
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	994.6	0	SE	1	bc	43	85	8	4	–	–	2-3	2-3	4000
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	995.7	+4	–	0	bc	40	85	7	5	–	–	4-6	4-6	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	995.3	+2	WSW	1	bc	36	97	8	5	1	–	2-3	2-3	2500
16	Lerwick ...	156	995.5	+6	NW	2	bc	42	85	8	5	–	–	4-6	4-6	2500
17	Blacksod Point	18	995.6	0	–	0	bc	45	85	8	4	–	–	4-6	4-6	2500
18	Malin Head ...	84	994.2	0	WNW	2	bc	42	86	8	5	–	–	4-6	4-6	2500
	Aldergrove ...	268	995.5	+2	–	0	F+	34	97	1	–	–	–	0	0	–
19	Birr Castle ...	173	994.8	0	N	1	c	43	97	7	5	–	–	10	10	1500
20	Valentia Obsy.	30	993.3	–10	N	2	c	48	92	8	5	1	–	9	9	4000
	Roches Point	22	993.0	–6	N'W	3	c	49	97	8	5	–	–	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 4th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	990.5	–36	SSW	3	rr	53	97	5	6	2	–	7-8	9	1500	1	*
Croydon	990.5	–16	WSW	2	$r_o r_o$	55	97	5	6	2	–	4-6	10	300		*
S. Farnborough	990.6	–34	SSE	3	rr	55	97	6	8	3	–	4-6	7-8	2000	2	*
Boscombe Down	989.8	–38	S'E	5	$r_o r_o$	55	97	6	6	2	–	9+	10	600	1	*
Calshot (Sthmtn.)	991.9	–22	SSW	4	$r_o r_o$	56	97	5	5	–	–	10	10	500	1	§2
Lympne	996.3	+8	SSW	1	rr	55	97	4	–	2	–	10	10	100	1	*
Manston	993.7	0	–	0	rr	51	97	5	6	2	–	9	10	400		
Shoeburyness	994.2	–4	–	0	ir	51	97	3	5	–	–	10	10	800	1	*
Felixstowe	993.4	–6	ESE	4	$d_o d_o$	50	97	7	5	–	–	10	10	500	1	2
Gorleston	994.9	–4	SE	3	$r_o r_o$	49	92	6	6	–	–	10	10	1000	1	2
Mildenhall	992.8	–14	E'S	2	$r_o r_o$	46	97	5	6	2	–	4-6	10	500		*
Cranwell	993.4	–18	E'S	3	$r_o r_o$	44	97	3	6	–	–	10	10	700	1	
Birmingham	990.6	–28	E	3	rf	42	97	3	6	–	–	10	10	450	1	*
Upper Heyford	991.2	–18	NE	3	f	46	97	2	–	–	–	10	10	<150	1	*
Ross-on-Wye	989.1	–40	NE'E	1	RR	47	97	3	–	2	–	10	10	450	1	*
Hartland Point	986.8	–50	WSW	6	c	56	92	7	6	2	–	7-8	9+	1500	1	4
Bristol	989.1	–38	SSW	3	c/r	55	97	8	6	7	–	9	9+	700		*
Portland Bill	990.7	–30	SW	6	o	58	92	7	5	–	–	10	10	2500	1	5
Plymouth	991.9	–26	W	6	z_o	56	97	5	9	–	–	9+	10	400	1	5
The Lizard	991.6	–10	WSW	7	bc	54	97	8	8	–	–	4-6	4-6	2000	1	5
Scilly (St. Mary's)	989.9	–20	SW	6	z_o	56	92	7	8	–	–	2-3	2-3	1500	1	4
Guernsey																
Pembroke	987.4	–20	N'W	4	rr	52	97	6	8	2	–	7-8	10	1000	1	2
Holyhead	990.3	–10	NE	4	c	48	92	6	5	7	–	2-3	10	4000	1	3
Chester (Sealand)	991.3	–18	E	1	id_o	45	92	6	5	–	–	10	10	1200	1	*
Manchester	992.0	–20	E'N	1	m	45	86	4	5	2	–	9	10	1500	1	
Spurn Head	994.0	–2	–	0	id_o	45	92	6	5	–	–	10	10	2500	1	1
Catterick	994.2	–12	–	0	m	40	97	4	–	2	–	10	10	1500	0	*
Tynemouth	995.1	–10	NW	2	c	43	85	6	8	–	–	7-8	7-8	2500		
St. Abbs Head	995.2	–4	WNW	1	c	43	92	8	8	7	7	4-6	10	2500	0	1*
Leuchars																*
Renfrew (Abbots I.)	995.7	+2	ENE	1	cf–	42	92	3	5	–	–	9+	9+	3000	1	*
Eskdalemuir	994.9	0	NNE	2	c	39	92	6	5	–	–	10	10	800	1	
Point of Ayre	993.3	–8	ENE	4	c	46	92	8	8	7	–	7-8	10	2500	1	3
Tiree	994.7	0	NE	2	bc	43	92	9	7	4	–	2-3	2-3	3500	0	2
Stornoway	995.9	+4	W	1	bc	39	92	8	5	–	–	4-6	4-6	2000	1	1
Dalwhinnie	*	+2	SW	1	bc	27	92	8	5	–	–	4-6	4-6	2500	3	*
Aberdeen	996.2	+2	WNW	1	c	34	92	6	8	–	–	7-8	7-8	2500	3	1
Wick																
Lerwick	995.8	+2	N'E	1	c	41	85	8	5	7	–	4-6	7-8	1500	1	*
Blacksod Point	996.3	+12	W	1	bc	39	97	8	4	–	–	4-6	4-6	2500	0	2
Malin Head																
Aldergrove	994.2	–6	–	0	fg	33	97	7	8	3	–	Tr	1	2500	1	*
Birr Castle	994.8	–10	N	1	c	38	97	8	5	–	–	7-8	7-8	2500	1	*
Valentia Obsy.	995.6	+30	N'W	4	PR	48	85	8	8	–	–	7-8	7-8	2500	1	2
Roches Point	992.1	+12	N	3	c	48	97	8	5	–	–	9+	9+	1500	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 3rd Hrs. (36)
London (Kew)	52	48	48	15	16	0.0
Croydon	52			19		
S. Farnborough	54	52	50	21	9	0.0
Boscombe Down	58	54	52	20	4	0.0
Calshot (Sthmtn.)	58	55	54	24	[illegible]	0.0
Lympne	58	55	42	22	11	0.0
Manston						
Shoeburyness	53	47	47	10	21	0.0
Felixstowe	51	45	45	4	13	0.0
Gorleston	52	44	40	0.6	9	0.0
Mildenhall	51			3		
Cranwell	49	43	42	0.5	3	0.0
Birmingham	49	42	42	7	8	0.0
Upper Heyford	50	45	45	7	8	*
Ross-on-Wye	51	47	47	10	19	0.0
Hartland Point	57	54	53	18	5	0.0
Bristol	55			20		*
Portland Bill	58	54	*	10	5	
Plymouth	58	55	54	21	7	0.0
The Lizard	58	53	*	11	6	0.0
Scilly (St. Mary's)	58	55	*	13	4	0.0
Guernsey						
Pembroke	55	52	*	13	14	0.0
Holyhead	51	46	44	Tr	Tr	0.0
Chester (Sealand)	51	45	44	Tr	2	0.0
Manchester	50	43	42	–	0.6	0.0
Spurn Head	60	44	*	–	Tr	0.0
Catterick	49	38	34	–	Tr	0.3
Tynemouth	50	40	35	–		
St. Abbs Head	48	43	*	–	–	*
Leuchars	51			–		
Renfrew (Abbots I.)	53	40	37	0.1	Tr	3.0
Eskdalemuir	47	34	30	Tr	0.3	3.1
Point of Ayre	50	40	*	–	1	0.0
Tiree	53	39	*	–	–	6.8
Stornoway	49	38	*	0.3	–	3.8
Dalwhinnie	47	23	15	–	Tr	2.9
Aberdeen	48	32	25	Tr	–	5.3
Wick			*	1	1	*
Lerwick	50	39	*	–	–	6.5
Blacksod Point	51	39	*	Tr	0.5	*
Malin Head			*	1		
Aldergrove	47	32	28	–	Tr	0.6
Birr Castle	49	37	35	3	0.2	0.0
Valentia Obsy.	52	47	47	4	0.3	0.0
Roches Point	54	47	*	9	0.4	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
Kew ...	18	$cr_o rrm_o$	$cr_o rfcr_o rr$	$crrr_o m_o$	52	48	48	15	16	0.0	*	*	8
Croydon ...	217	$mr_o frr_o r_o$	$o_f r f r$	$fr_o rr$	52			19			*	*	
Greenwich (Royal Observatory) ...	149	rrm	rRR	RRcrrc	51	47	47	17	15	0.0	94	88	6
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	0.0	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	52	48	48	27		0.0	99	91	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	56	47	45	13	14	0.0	97	94	*
Camden Square ...	110			*						*	*		*
Kensington ...	80	ofr	cmr	*	52	48	47	9	18		99	95	*
Hampstead Observatory ...	450	or	orf.	bc	49	–	47	7	17	0.0	*	97	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 4th.

	Max.	Time.	Min.	Time.
South Kensington				
Kew Observatory	0.5	16h 3rd	<0.1	3-6h 4th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...							*	*						

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
THE BEAUFORT SCALE OF WIND is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

Code		Objects not visible at
0	Dense fog	55 yards.
1	Thick fog	220 ,,
2	Fog	550 ,,
3	Moderate fog	1,100 ,,
4	Mist or haze	1¼ miles.
5	Poor visibility	2½ ,,
6	Moderate ,,	6¼ ,,
7	Good ,,	12½ ,,
8	Very good ,,	31 ,,
9	Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 5th November 1940.

No. 28838

OBSERVATIONS at 13h. G.M.T. 4th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	988.3	-12	SW	5	ido	57	85	7	9	7	-	7-8	9+	1500
	Croydon	988.8	-10	WSW	4	c/pr	56	92	7	2	6	-	4-6	7-8	2000
	S. Farnborough	989.3	-10	SWW	5	pr	58	85	6	8	3	-	9	10	2200
	Boscombe Down	990.2	+2	W	5	pr	56	85	7	8	-	-	9+	9+	1000
	Calshot (Soton.)	990.2	-10	WS	5	c/pr	57	97	6	8	6	-	4-6	7-8	2500
	Lympne	991.7	-8	WSW	4	pr	58	85	7	8	-	-	9+	9+	900
	Manston	989.6	-8	WSW	6	bc	59	75	8	8	4	-	4-6	4-6	1200
2	Shoeburyness	989.6	-8	SW	3	iro	60	75	8	8	6	-	7-8	9	1500
	Felixstowe	987.5	-18	NW	3	c/pr	57	85	7	2	6	-	7-8	7-8	2000
	Gorleston	986.9	-4	NE	7	c/p	50	92	6	6	-	-	9	9	1000
	Mildenhall	987.6	-2	E	3	c/r	50	97	8	5	2	-	9+	10	2000
	Cranwell	992.2	+6	NE	4	rr	45	97	5	6	-	-	10	10	600
3	Birmingham	993.4	+20	N	2	rr	45	92	4	6	-	-	10	10	800
	Upper Heyford	990.4	+16	NNW	3	c/r	47	92	6	5	2	-	7-8	10	800
4	Ross-on-Wye	994.2	+34	NW	3	c/r	47	92	6	6	-	-	10	10	1500
5	Hartland Point	997.2	+62	NNW	5	c	53	75	5	8	7	-	7-8	9+	1500
	Bristol	993.4	+48	NW	3	z	49	92	5	8	7	-	1	9+	2500
	Portland Bill	993.8	+20	NW	6	c	56	92	7	2	-	-	7-8	7-8	4000
	Plymouth	998.0	+68	NWW	5	c/pr	53	85	7	8	2	-	9	10	1400
	The Lizard	1000.1	+40	NW	7	bcq	54	85	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1001.8	+72	WNW	6	c	55	65	7	8	6	-	4-6	9	1500
	Guernsey														
6	Pembroke	997.2	+40	NW	7	cq	52	85	7	8	6	-	9	9+	2500
7	Holyhead	995.8	+36	N'E	3	PR	50	85	5	9	-	-	9+	9+	1200
	Chester (Sealand)	994.9	+34	NNW	2	roro	45	92	4	-	2	-	10	10	600
8	Manchester	994.1	+22	N'E	3	rr	45	85	4	-	2	-	10	10	700
10	Spurn Head	991.3	-2	NNE	4	rr	47	92	6	6	2	-	4-6	10	2500
	Catterick	995.3	+10	N	2	roro	44	97	4	6	2	-	4-6	10	1000
	Tynemouth	996.0	+6	E	3	c	48	75	8	8	-	-	9	9	2000
11	St. Abbs Head	996.6	+4	NE	1	roro	44	85	8	3	2	-	4-6	9+	2000
	Leuchars	997.3	+10	NE'E	3	bc	45	75	6	2	4	-	2-3	2-3	4000
12	Renfrew (Abbots I.)	998.1	+8	-	0	bc	49	75	9	2	-	9	2-3	2-3	4000
	Eskdalemuir	996.6	+14	NE'E	3	c	45	75	7	8	-	-	7-8	7-8	2500
	Point of Ayre	996.9	+22	NE	4	c	49	85	8	7	4	4	4-6	7-8	4000
13A	Tiree	997.8	+4	N'E	1	bc	48	75	8	1	-	-	2-3	2-3	3500
13B	Stornoway	998.5	+6	SSW	1	c	51	55	9	5	5	3	4-6	7-8	2500
15	Dalwhinnie	*	+14	NNE	1	bc	41	75	8	1	-	-	2-3	2-3	2500
	Aberdeen	997.9	+8	N'W	2	bc	47	75	8	8	-	1	2-3	2-3	2500
	Wick	[illegible]	+6	NW	1	bc	50	75	9	3	6	3	1	2-3	3000
16	Lerwick	998.0	+8	NE'N	1	c	48	75	8	5	3	-	4-6	9	1500
17	Blacksod Point	1000.1	+16	W'N	1	bc	52	65	8	3	-	-	4-6	4-6	4000
18	Malin Head	998.2	+16	ENE	1	bc	50	75	8	4	-	-	4-6	4-6	5700
	Aldergrove	998.5	+18	W'S	1	bc	45	92	7	2	3	-	1	4-6	2500
19	Birr Castle	1001.3	+26	N	1	bc	50	75	8	2	-	-	2-3	2-3	2500
20	Valentia Obsy. †	1003.2	+24	W'N	3	c	53	65	9	8	-	-	7-8	7-8	4000
	Roches Point	1002.0	+34	N	4	c	51	75	8	8	-	-	7-8	7-8	2500

OBSERVATIONS at 18h. G.M.T. 4th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1001.7	+82	WNW	4	zo	50	85	5	5	-	-	10	10	1500	1	*
Croydon	1000.9	+94	WNW	3	m	49	85	4	5	-	-	7-8	10	1200	1	*
S. Farnborough	1002.8	+60	W	5	zo	48	85	6	5	-	-	10	10	2000	1	*
Boscombe Down	1003.7	+66	NW'W	4	zo	48	75	6	4	-	-	1	1	2000	1	*
Calshot (Soton.)	1004.2	+82	WNW	4	zo	51	85	6	-	-	-	0	0	-	1	2
Lympne	1000.3	+94	NW	5	c	50	92	7	8	-	-	10	10	1200	1	§5
Manston	998.9	+86	NW'W	6	cq	49	92	5	6	2	-	9	10	200	*	*
Shoeburyness	1000.6	+110	NW'W	3	iro	49	97	5	6	2	-	7-8	10	1500	1	*
Felixstowe	997.8	+84	NW'W	4	iro	48	92	5	5	-	-	10	10	1000	1	2
Gorleston	997.0	+70	NNE	3	rr	48	92	6	6	-	-	10	10	1000	1	3
Mildenhall	999.0	+86	NW	3	rr	47	97	6	6	2	-	4-6	10	4000	1	*
Cranwell	1000.9	+74	NW	4	roro	44	92	5	6	-	-	10	10	600	2	*
Birmingham	1003.2	+60	WNW	3	m	44	92	4	6	-	-	9+	9+	800	1	*
Upper Heyford	1002.3	+72	WNW	4	zo	45	92	6	5	-	-	10	10	900	1	*
Ross-on-Wye	1004.1	+50	W	4	zo	47	85	6	5	-	-	9	9	2500	1	*
Hartland Point	1006.7	+52	NNW	4	c	50	75	8	2	6	-	4-6	7-8	1500	1	3
Bristol	1004.9	+68	NW	4	zo	47	85	6	8	-	-	2-3	2-3	3000	1	*
Portland Bill	1006.2	+40	W	6	bc	54	85	8	5	-	-	4-6	4-6	2500	0	5
Plymouth																
The Lizard	1009.2	+30	WNW	5	bc	51	75	8	8	6	-	4-6	4-6	2000	0	3
Scilly (St. Mary's)	1009.0	+34	W'N	4	bc	52	85	8	8	4	3	2-3	4-6	1500	1	4
Guernsey																
Pembroke																
Holyhead	1003.1	+42	NW'W	4	bcq	50	75	8	8	-	-	4-6	4-6	2800	1	3
Chester (Sealand)	1002.7	+50	WNW	2	zo	45	92	5	8	-	-	7-8	7-8	2500	1	*
Manchester	1002.4	+54	N'W	2	m/r	43	97	4	5	-	-	7-8	9+	2800	1	*
Spurn Head	999.1	+26	NW'W	3	RR	46	92	7	6	2	-	7-8	9+	2500	1	2
Catterick	1001.5	+40	NNW	2	c/r	43	85	6	5	-	-	9	9	2000	1	4
Tynemouth	1001.7	+40	NW	3	c/pr	45	85	7	2	-	-	7-8	7-8	2500	1	2
St. Abbs Head	1000.8	+20	NW	1	c	45	85	8	5	4	-	4-6	7-8	2500	1	1
Leuchars	1001.6	+30	W	1	zo	42	75	6	-	3	-	0	2-3	-	1	*
Renfrew (Abbots I.)	1002.6	+32	W'S	2	bf	39	92	2	-	-	-	0	0	-	1	*
Eskdalemuir	1001.1	+32	-	0	b	40	85	8	5	-	-	2-3	2-3	2500	1	*
Point of Ayre	1002.6	+26	W	2	b	43	85	8	2	4	-	Tr	1	2500	0	1
Tiree	1001.4	+10	-	0	c	46	85	8	5	-	-	9+	9+	2800	0	1
Stornoway	1001.6	+8	-	0	bc	41	92	7	5	-	-	2-3	2-3	2000	1	0
Dalwhinnie	*	+22	SSW	1	b	29	92	8	4	-	-	Tr	Tr	4000	0	*
Aberdeen	1001.3	+24	NW	2	b	38	92	7	8	-	-	1	1	2500	1	1
Wick	1000.4	+16	WNW	3	c/pr	42	92	8	8	7	-	4-6	7-8	1500	1	1
Lerwick	999.3	+10	S'E	1	c	43	85	8	8	3	-	4-6	7-8	1500	1	*
Blacksod Point	1000.9	+4	S	2	c	50	85	8	3	-	-	7-8	7-8	800	0	2
Malin Head	1002.1	+24	-	0	bc	44	75	8	4	-	1	2-3	2-3	5700	1	2
Aldergrove	1003.0	+30	S'W	1	b	41	92	9	4	-	-	Tr	Tr	4000	1	*
Birr Castle	1004.5	+16	SW	1	bc	42	92	8	-	3	-	0	2-3	-	1	*
Valentia Obsy. †	1005.2	+10	SW	4	c/pr	50	85	9	8	-	-	7-8	7-8	2500	1	3
Roches Point	1006.2	+20	NW'W	3	c/pr	51	75	8	3	4	-	4-6	7-8	1500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 4th (37)	Weather 13h.—18h. 4th (38)	Weather 18h. 4th to 1h. 5th (39)	Weather 1h.—7h. 5th (40)
London (Kew)	cromcido	cqprcido	bbcw ffx	bbcw ffx
Croydon	roproproi	c	cmo, bm	bmo
S. Farnborough	Rbcprc	pRprobc	*	bmoxbc
Boscombe Down	cirompr	pr	bmo	*
Calshot (Soton.)	cgdo cpm	croqbc	bmow	bcpromo
Lympne	cmrrpro	cpro qc	cpro bmo	bmowbxfg
Manston	rr mcpro	prqdoci m	cirobcmo	*
Shoeburyness	circfcir	Ptlrc	cmoirob	bmobm x
Felixstowe	roroRR pro	crrtlrroro	crorocmo	bmow
Gorleston	orrcq	cororr	ororoc	cbczoF
Mildenhall	croromorrc	circrr mo	crroromo	cmobmow
Cranwell	orrmo	orrroromo	roroiro bm	brnfm
Birmingham	orrro	rorqc	cb	bbc
Upper Heyford	ofcrrm RR	crorom oc	cbcbmofbo	bbmobcmo
Ross-on-Wye	Rmrroro	cbcc		
Hartland Point	crrpc	cbcc	cbccp	cbcp
Bristol	cpromo	cprobcb	bmow	bcmopro
Portland Bill	c	cbc	bc	orr
Plymouth	cmoprocproc		bcmobbcpro	bcmoprcrr
The Lizard	prbcq	bc	bclw	prbcc
Scilly (St. Mary's)	bccq	cbc	bcw	bcprbc
Guernsey				
Pembroke			bcprq	bbcq
Holyhead	cmPRc	moPrqbc	bc	bcPRqr
Chester (Sealand)	mddo	orom bcc	cprmob	bcprc
Manchester	ff rororr	cmrrroro	cFF	bcFF
Spurn Head	crr	crr	cbc	bcf
Catterick	fgdmroro	cmororom	cmobmow	bmofx
Tynemouth	cpc	cpr	cpobc	bcc
St. Abbs Head	crr	crc	bc	bcc
Leuchars	bcmoxbcl	bcmo,bc	wbcm cbmox	bcmox
Renfrew (Abbots I.)	cfmbc	bco ff	bbcffFFwx	bcbffxcfgr
Eskdalemuir	cmobc	bc	bcbx	bbcxcoido
Point of Ayre	cbcc	bc	bbw	bcPR
Tiree	bc	bcc	bbc	bccir
Stornoway		cbc	bcb	bbc
Dalwhinnie	bc	bc	*	bcc
Aberdeen	bcb	b	b	bcmox
Wick	bc	bcpro	prcbc	bcc
Lerwick	c	c	cifmo	c
Blacksod Point	bc	bc	bc	probc
Malin Head	c	bc	bcbcc	cbc
Aldergrove	bFFjfbc	bc	bfgciroc	rorir bc
Birr Castle	bc	bc	b	oiroc
Valentia Obsy. †	cprobcv	bcvprb	cbcprobcpr	bcqprcPR
Roches Point	bcc	bcpoc	prPR	prPR

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/so, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
so/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. ro, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.

With present weather is combined, whenever possible, the general character of the weather.

A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.

Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.

An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.

"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.

"9+" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:— Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

Note.—The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.

Abridged observations of additional stations in the

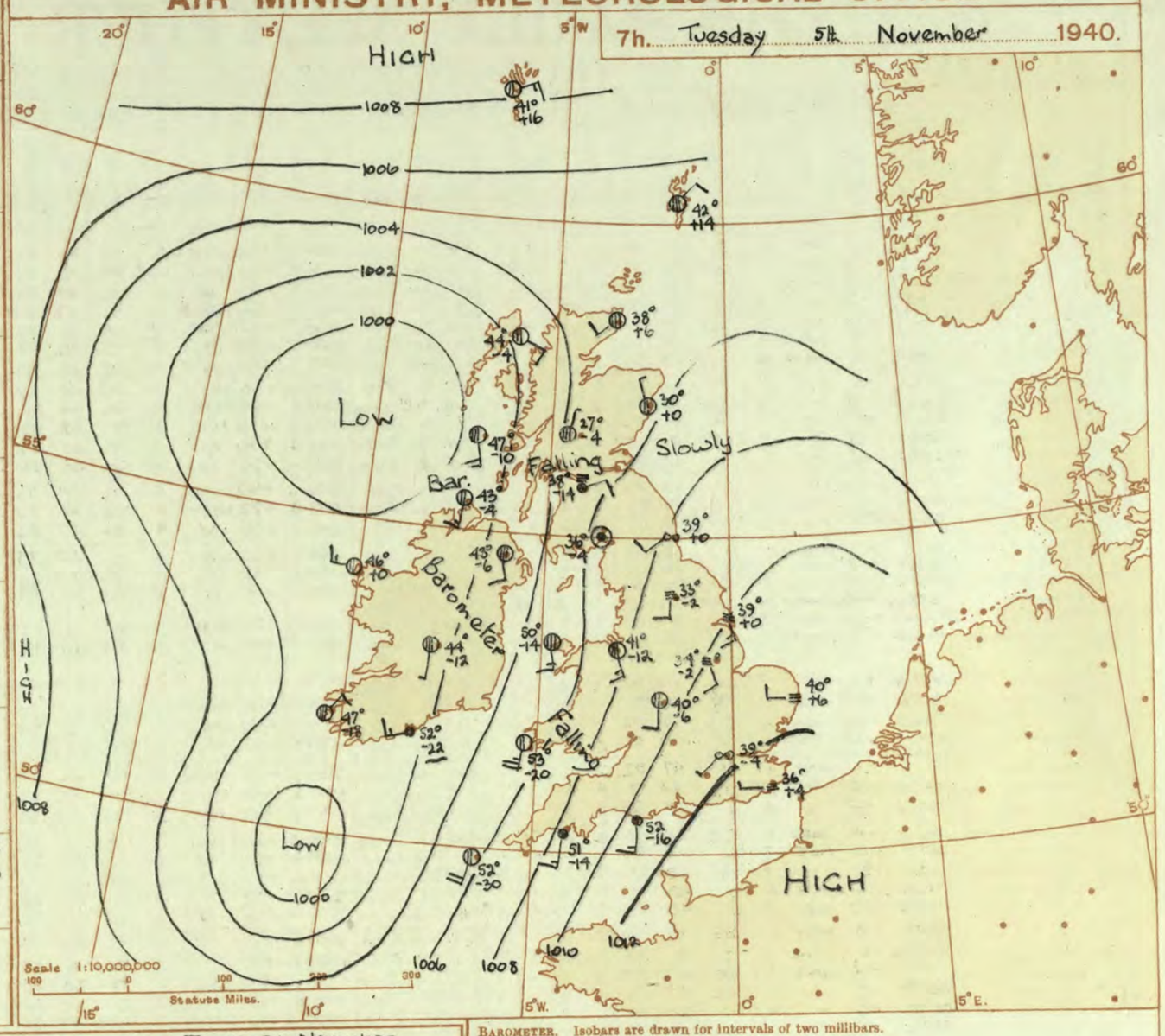
AVIATION WEATHER CODE

	13h. G.M.T. 4th November			18h. G.M.T.			01h. G.M.T. 5th November			07h. G.M.T.		
IIIC$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN
10930	01963	24314	9-	25755	24285	50	00852	24102	80	01563	18213
11587	81954	20415	87	01954	28385	51	81344	20385	51	01954	20185
203	01953	08213	7-	01963	16213				5-	01964	08414
20674	01873	24123	50	00961	24211				50	01863	25113
210			40	00961	20301	50	00861	00001	57	01863	14104
22053	01954	04104	50	01763	05103						
23050	01963	50013	54	00861	00012	5-	01864	00014	52	62645	10268
24580	01954	32324	00	00990	24110	50	00761	24201	57	02765	24226
2608-	25565	32185	40	05571	00001	00	43330	00040	57	61464	00045
27780	01853	28113	53	05663	26113	50	05672	10112	27	02955	17367
27957	05666	28316									
2856-	63738	02368	6-	22737	28367				9-	25637	12587
28882	05654	04368	57	25444	24185	00	05550	20180			
27336	01753	29104							43	01553	14315
3018-	61468	32268	5-	05556	32186	5-	08456	10126	52	05556	14428
32162	62535	32268	62	67236	28368	00	08490	24161	03	47290	16244
29962	62745	07468	80	01743	02413	50	05643	25213	57	08443	22314
292 52	62643	28288	52	05544	28466				--	48009	00049
310--	53428	04548	--	02426	32466				--	02628	24418
31662	62435	32368	62	62434	32168	00	08490	18180	--	47009	00049
33350	05654	03326	9-	81757	30387	80	01754	00014	9-	82657	16287
334	52318	32258							--	01843	04164
34062	67326	28368	2-	05566	28266	50	00762	15312	50	05665	14315
13562	61727	05468	5-	64668	29468	50	05532	25362	--	46109	00049
336	22642	20568	53	28425	" "				--	64632	24468
350									53	02765	16316
368											
37962	61568	30368	5-	05545	61425	00	05550	22200	54	05653	16113
39087	05645	20517	62	61427	28468	00	47330	25210	04	47290	16142
38262	58627	30468	5-	08457	26427	00	05530	23100	55	05652	16113
438 92	02535	24638							80	02754	28215
4309-	25637	55587	50	05643	26583	00	05630	26200	83	81555	00016
409						54	01753	16313	23	02643	16485

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
C$_L$ C$_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Tuesday 5th November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Tuesday 5th November
1 S.E. England 2 E. England ... 3 E. Midlands ...	Freshening south wind, strong to gale tonight at exposed places, veering westerly to northwesterly tomorrow; fair at first apart from scattered showers; some rain evening and night, mainly fair tomorrow; mild today, cooler tomorrow.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ...	Fresh or strong south wind, gale locally, veering west to northwest later; occasional rain becoming continuous this evening, bright intervals and showers tomorrow; mild today, cooler tomorrow.
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Wind south to variable finally northwest, fresh at times, but mainly moderate or light; fair at first, continuous rain evening and early night, bright intervals and local showers tomorrow; average temperature, cooler tomorrow.
13 {A. W. Scotld. B.N.W.Scotland.} 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands 17 N. W. Ireland 18 N. E. Ireland	Light variable wind, freshening from east, backing north; mainly fair today, rain tonight, bright intervals and showers tomorrow; cool.
19 S. E. Ireland 20 S. W. Ireland	Fresh northeast wind backing northwest; rain at first, bright intervals and showers later; cool.

GENERAL INFERENCE.

A new depression is approaching our southwest coasts and will move northeast across the British Isles. Strong south to southwest winds will again develop in the South and may reach gale force on our southwest and south coasts. Rain will spread northeast across the country but today will be fair in the East.

FURTHER OUTLOOK.

Northwest winds; bright intervals, local showers, chiefly in the West and extreme North, local morning fog

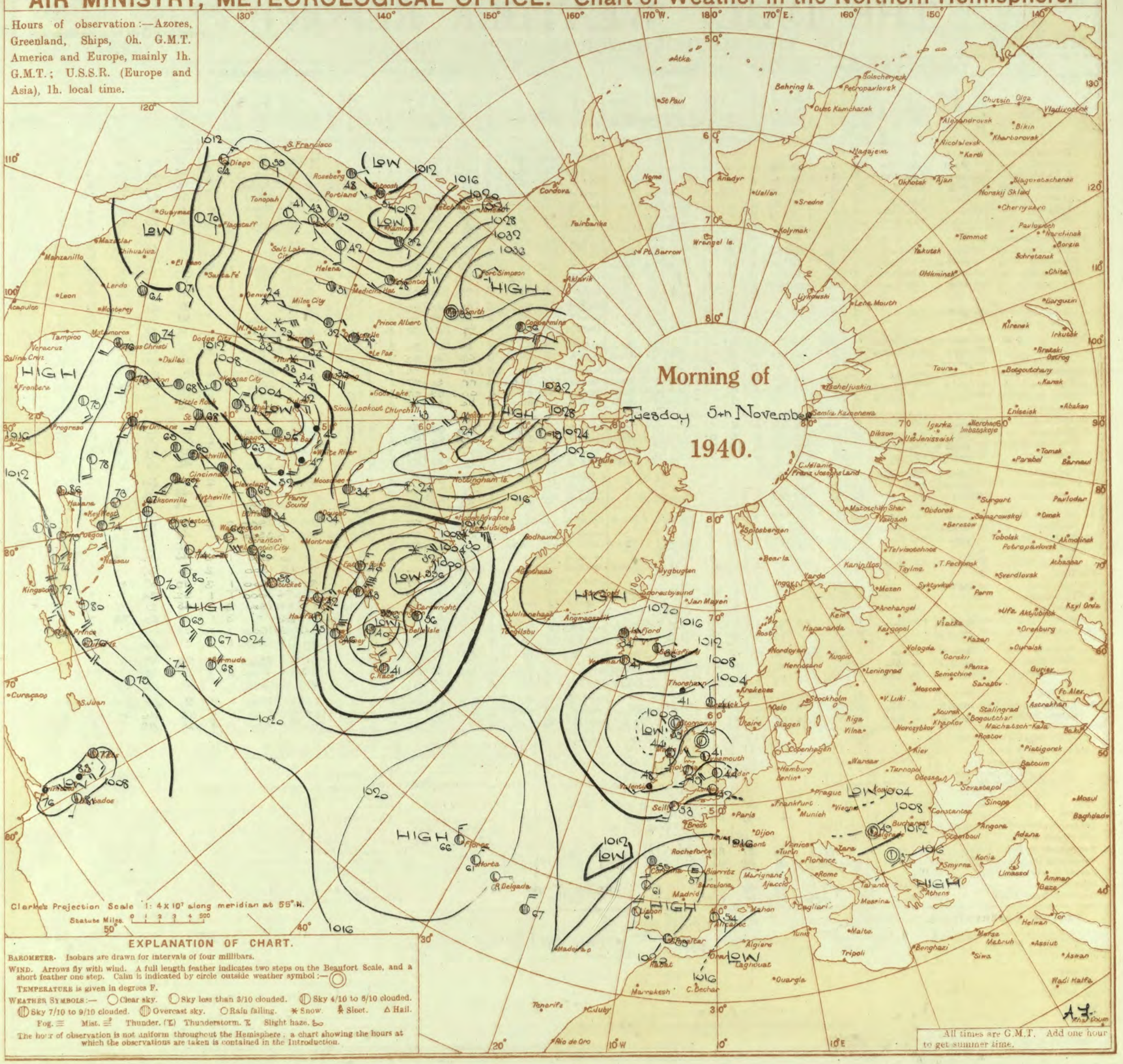
▼Gale warning issued at 0920 on 5.11.40. in districts 5 and 6.

Forecasts issued at 10.30 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Tuesday 5th November 1940.
No 28, 8.38

OBSERVATIONS at 1 hr. G.M.T. 5th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1011.5	+30	NW	2	Zo	42	92	5	-	-	-	0	0	-
	S. Farnborough	226	1012.0	+24	SW'W	2	Zo	39	92	6	-	-	1	0	Tr	-
	Boscombe Down	417	1012.3	+20	SW	2	Zo	40	85	6	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1012.4	+22	W	3	Zo	42	92	6	-	-	-	0	0	-
	Lympne ...	346	1012.0	+34	W	2	Zo	42	92	6	-	-		0	0	-
	Manston ...	154	1010.9	+30	WNW	3	Zo	44	92	5	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1010.3	+30	W'N	4	Zo	46	92	6	5	-	-	9	9	1500
	Gorleston ...	5	1005.6	+3	WNW	3	c	46	92	6	5	-	-	7-8	7-8	1500
	Mildenhall ...	19	1009.7	+34	W'S	3	Zo	43	92	6	5	-	-	9	9	3600
	Cranwell ...	240	1008.4	+22	W	4	m	41	97	4	-	-	-	0	0	--
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1010.6	+22	W	3	b	37	97	7	-	-	.	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1009.8	+4	WSW	5	pr	53	85	8	3	-	-	9	9	1500
	Bristol ...	209	1011.8	+14	WSW	2	Zo	44	85	6	5	-	-	Tr	Tr	3500
	Portland Bill ...	32	1012.8	+14	W	4	bc	53	85	8	5	-	-	4-6	4-6	2500
	Plymouth ...	82	1012.2	+8	SW	3	bc	43	92	6	8	-	-	4-6	4-6	2000
	The Lizard ...	240	1011.7	+2	SW'S	4	bc	53	92	8	8	-	-	4-6	4-6	2000
	Scilly (St. Mary's)	163	1010.6	-4	SW'S	4	bcjp	53	92	7	8	-	-	4-6	4-6	1500
	Guernsey ...	175														
6	Pembroke ...	142	1008.7	-2	SW	5	bcq	53	85	8	2	-	-	2-3	2-3	2500
7	Holyhead ...	26	1007.1	+6	SSW	3	bc	49	75	8	5	3	-	2-3	2-3	4000
	Chester (Sealand)	16	1008.8	+12	SE'S	1	b	39	92	6	-	3	-	0	Tr	-
8	Manchester ...	70	1008.6	+22	E	1	F	37	97	0	-	-	-	10	10	<150
10	Spurn Head ...	29	1008.2	+24	W'S	4	bc	44	92	6	-	4	-	0	2-3	-
	Catterick ...	175	1008.5	+24	-	c	Zo	37	92	6	-	-	-	0	0	-
	Tynemouth ...	108	1007.1	+20	W	3	bc	41	85	6	-	4	-	0	2-3	-
11	St. Abbs Head	280	1006.1	+12	W	3	bc	41	75	7	4	-	-	2-3	2-3	2500
	Leuchars ...	36	1005.9	+16	WSW	2	b	36	85	6	-	-	-	0	0	-
12	Renfrew (Abbots I.)	19	1006.5	+10	-	0	bcF+	32	97	1	5	-	-	4-6	4-6	3500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1006.4	+10	SW'S	2	b	38	97	8	4	4	-	Tr	1	4000
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1003.8	+10	-	0	b	39	85	7	2	6	-	Tr	1	4000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1003.0	+14	W	2	bc	37	92	7	5	7	-	2-3	2-3	2500
16	Lerwick ...	156	1003.5	+14	N	2	c	41	92	7	5	7	-	4-6	9	1500
17	Blacksod Point	18	1001.0	+4	W	4	bc	49	85	8	3	-	-	4-6	4-6	1500
18	Malin Head ...	84	1002.4	-6	S'E	3	c	44	85	7	8	-	-	9	9	2500
	Aldergrove ...	268	1004.8	-2	SSE	3	rbr	43	85	6	5	2	-	7-8	10	3400
19	Birr Castle ...	173	1005.0	-2	SW	2	b	43	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1004.7	-8	SW	3	pr	48	92	8	3	-	-	7-8	7-8	2500
	Roches Point	22	1006.4	-6	W'S	3	PR	48	92	7	3	-	-	9	9	800

OBSERVATIONS at 7 hr. G.M.T. 5th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1011.9	+2	ESE	2	bcf	38	92	3	5	-	1	2-3	2-3	2500	1	*
Croydon ...	1012.0	-4	SW	2	Zo	39	97	5	-	4	-	0	2-3	-	1	*
S. Farnborough	1011.8	-10	SE'E	2	Zo	39	92	6	5	3	6	Tr	4-6	3000	1	*
Boscombe Down	1010.9	-12	SE'E	3	Zo	37	97	6	8	-	4	2-3	9+	2500	1	
Calshot (Sthmtn.)	1011.6	-8	SE	1	c/pr	49	92	6	8	4	2	2-3	7-8	2000	1	
Lympne ...	1013.8	+4	W	1	fg	36	97	7	-	-	4	0	4-6	-	1	*
Manston ...	1013.3	*	SW	2	Zo	40	*	6	-	-	*	0	2-3	-	*	
Shoeburyness ...	1012.8	+4	SW	1	bcm	41	97	4	-	4	-	2-3	2-3	-	1	*
Felixstowe ...	1011.8	+2	W	2	Zo	40	92	5	-	4	-	0	Tr	-	1	1
Gorleston ...	1011.7	+6	W	2	F+	40	97	1	5	-	-	10	10	<150	1	2
Mildenhall ...	1011.3	+2	S'W	2	Zo	39	92	6	-	7	-	0	Tr	-	1	*
Cranwell ...	1010.4	-2	SSE	2	m	34	97	4	-	3	1	0	1	-	1	
Birmingham ...	1009.7	+6	S	2	bc	40	92	5	-	7	-	0	4-6	-	1	*
Upper Heyford	1010.7	-6	SE	2	Zo	37	92	6	5	5	5	1	4-6	3000	1	*
Ross-on-Wye	1009.3	-6	N	1	fg	41	97	5	5	-	9	2-3	4-6	800	1	*
Hartland Point	1006.8	-16	S	4	bc	47	92	8	3	4	1	1	2-3	2000	1	3
Bristol ...	1009.9	-14	S'E	3	c/pr	48	92	7	8	6	-	7-8	9	4500	1	*
Portland Bill ...	1010.0	-16	S	3	rr	52	92	8	5	-	-	10	10	2500	1	3
Plymouth ...	1008.1	-14	SSW	3	rr	51	97	6	8	-	-	9+	9+	1800	1	2
The Lizard ...	1007.1	-20	S	4	c	53	97	8	8	2	-	9	10	2000	1	4
Scilly (St. Mary's)	1005.8	-30	SSW	4	bc	52	85	8	8	-	-	4-6	4-6	1500	1	3
Guernsey ...																
Pembroke ...	1004.9	-20	SSW	5	bcq	53	85	8	8	7	-	4-6	4-6	3000	1	3
Holyhead ...	1004.8	-14	S'E	3	c/pr	50	85	8	9	2	-	9	9+	2200	1	2
Chester (Sealand)	1007.3	-12	SSE	3	c	41	92	7	5	-	-	7-8	7-8	4000	1	*
Manchester ...	1008.4	-12	E'S	1	ir	40	97	5	5	7	-	4-6	9	3400	1	
Spurn Head ...	1009.7	0	S'E	3	m	39	92	4	5	-	-	4-6	4-6	800	1	2
Catterick ...	1008.7	-2	S	2	rf	33	97	2	-	-	-	10	10	<150	1	*
Tynemouth ...	1007.5	0	SW	2	Zo	39	92	5	8	-	-	7-8	7-8	2400	1	2
St. Abbs Head	1005.5	-6	SW	4	c	41	92	7	4	4	8	2-3	7-8	2500	0	2
Leuchars ...	1005.6	-4	—	0	m	31	97	4	5	7	6	2-3	7-8	3500	1	*
Renfrew (Abbots I.)	1004.7	-14	ENE	2	rf	38	97	3	5	-	-	10	10	1600	1	*
Eskdalemuir ...	1006.4	-4	—	0	ido	36	97	6	5	-	-	10	10	450	1	2
Point of Ayre ...	1004.4	-14	SSW	4	c/pr	48	92	8	8	7	-	2-3	7-8	1500	1	2
Tiree ...	1000.1	-10	S'E	4	c/r	47	97	7	5	-	-	9+	9+	1500	1	3
Stornoway ...	1003.5	-4	ESE	2	bc	44	75	9	2	6	8	Tr	4-6	3000	1	1
Dalwhinnie ...	*	-4	NNE	1	c	27	92	7	5	1	-	4-6	7-8	1500	3	
Aberdeen ...	1006.0	0	NNW	1	bc	30	92	6	-	-	6	0	2-3	-	3	1
Wick ...	1004.8	+6	SW	2	c	38	92	8	5	7	8	4-6	7-8	1500	1	1
Lerwick ...	1005.2	+14	NE	2	c	42	85	8	5	7	-	4-6	7-8	1500	1	*
Blacksod Point	1000.5	0	W	3	bc	46	85	8	3	-	-	2-3	2-3	2500	1	1
Malin Head ...	1000.3	-4	S'W	3	bc	43	85	8	2	-	2	2-3	4-6	4000	0	2
Aldergrove ...	1002.9	-6	S'E	2	c	43	85	7	8	7	1	4-6	9	1800	1	*
Birr Castle ...	1002.5	-12	S	1	c	44	92	8	5	1	-	7-8	10	2500	1	*
Valentia Obsy.	1000.9	-18	NE'N	2	c	47	92	8	5	-	-	7-8	7-8	4000	1	1
Roches Point	1001.6	-22	WSW	3	ir	52	92	7	6	2	-	7-8	9+	800	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine Hrs. (36)
London (Kew)	59	37	24	3	Tr	2.7
Croydon ...	61	38	36	3	Tr	1.9
S. Farnborough	60	33	29	3	7	1.6
Boscombe Down	59	34	32	0.5	-	2.4
Calshot (Sthmtn.)	61	41	38	2	Tr	1.7
Lympne ...	58	34	27	7	Tr	0.6
Manston ...	*	*	*	*	*	*
Shoeburyness ...	61	40	30	6	0.5	2.8
Felixstowe ...	60	40	34	5	1	2.0
Gorleston ...	52	40	36	14	6	0.1
Mildenhall ...	50	38	30	26	1	0.0
Cranwell ...	46	33	26	15	1	0.0
Birmingham ...	45	38	32	17	..	0.0
Upper Heyford	52	35	27	27	-	*
Ross-on-Wye	48	38	30	17	Tr	0.1
Hartland Point	56	47	44	2	0.1	1.7
Bristol ...	59	42	32	2	Tr	1.5
Portland Bill ...	50	51		-	1	
Plymouth ...	59	42	36		4	0.2
The Lizard ...	57	50	*	0.5	1	5.9
Scilly (St. Mary's)	56	50		-	0.4	5.2
Pembroke ...	53	50	*		0.5	3.1
Holyhead ...	50	47	41	1	2	0.1
Chester (Sealand)	47	37	29	2	1	0.0
Manchester ...	46	31	27	5	Tr	0.0
Spurn Head ...	47	38	*	12	0.2	0.0
Catterick ...	44	32	27	2	-	0.0
Tynemouth ...	48	37	35	2	0.4	*
St. Abbs Head	47	37	*	11	-	*
Leuchars ...	47	30	25	-	-	4.5
Renfrew (Abbots I.)	50	29	20	-	2	3.9
Eskdalemuir ...	46	26	19	-	0.2	1.5
Point of Ayre ...	50	37		-	2	4.0
Tiree ...	49	37	*	-	1	7.3
Stornoway ...	52	36	*	-	-	5.9
Dalwhinnie ...	45	21	13	-	Tr	5.2
Aberdeen ...	47	29	23	-	-	6.1
Wick ...	48	35	*	0.2	0.2	
Lerwick ...	51	40	*	-	-	5.0
Blacksod Point	53	47	*	-	4	*
Malin Head ...	50	38	*	0.1	-	5.7
Aldergrove ...	48	35	28	-	1	4.6
Birr Castle ...	51	40	34	-	0.5	5.0
Valentia Obsy.	55	46	42	1	9	5.8
Roches Point	54	48	*	0.1	8	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
Kew ...	18				59	37	24	3	Tr	2.7	*	*	3
Croydon ...	217				61	38	36	3	Tr	1.9	*	*	5
Greenwich (Royal Observatory) ...	149												
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	61	37	35	3			97	98	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	61	37	27	5	1		93	91	*
Camden Square ...	110			*						*	*		*
Kensington ...	80	bcct	cpc	*	62	37	26	4	0.2		89	98	*
Hampstead Observatory ...	450	bcor	or	orbc	59	-	33	1	1		*	95	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 5th

South Kensington Max.	Time.	Min.	Time.
0.1	14-23h 4k	<0.1	1-6h 5k

Kew Observatory Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...														

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1½ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6½ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 6th November 1940.

No. 28839

OBSERVATIONS at 13h. G.M.T. 5th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1007.6	-26	SSE	3	zo	54	75	6	8	4	6	4-6	9+	2500
	Croydon	1008.2	-26	SSE	4	c	55	75	6	2	4	2	4-6	9	2500
	S. Farnborough	1007.3	-34	S	4	c	55	75	7	8	6	6	4-6	7-8	2000
	Boscombe Down	1005.4	-40	S	5	c	53	85	7	3	-	-	7-8	9	3000
	Calshot (Soton.)	1007.0	-32	S	5	bc	55	85	8	8	-	1	4-6	4-6	2500
	Lympne	1011.0	-18	S	2	c/pr	53	85	8	2	-	8	4-6	7-8	2500
	Manston	1010.1	-22	SSE	2	pr	50	92	7	8	3	-	9	9+	1200
2	Shoeburyness	1009.8	-22	S'E	3	c	53	92	7	8	4	6	9	9+	4000
	Felixstowe	1010.0	-18	S'E	3	c	54	75	8	5	3	6	1	7-8	2000
	Gorleston	1010.6	-16	S'W	4	bc	51	75	7	-	5	-	0	2-3	-
	Mildenhall	1008.4	-22	S'E	3	bc	53	75	7	-	3	6	0	4-6	-
	Cranwell	1007.9	-20	SSE	4	c	50	85	7	5	-	-	7-8	7-8	2500
3	Birmingham	1005.2	-26	S	3	c/pr	49	92	6	5	7	-	7-8	9+	1500
	Upper Heyford	1007.3	-24	SSE	2	c/pr	48	97	6	8	3	-	7-8	9+	2500
4	Ross-on-Wye	1003.5	-34	SSE	3	bc/pr	53	85	7	8	-	3	2-3	2-3	2500
5	Hartland Point	999.8	-48	SSE	4	c/r	54	85	8	8	6	-	7-8	9+	1500
	Bristol	1004.5	-38	S'E	4	c	55	75	8	9	6	3	7-8	7-8	2500
	Portland Bill	1004.0	-40	S	5	bc	55	92	8	5	4	-	4-6	4-6	4000
	Plymouth	1001.9	-46	SSW	4	c	55	85	7	9	2	-	1	9+	1400
	The Lizard	999.1	-40	S	7	rr	52	92	6	5	-	-	10	10	1000
	Scilly (St. Mary's)	997.8	-46	SSW	5	c	52	85	8	8	7	3	4-6	9+	1200
	Guernsey														
6	Pembroke	998.5	-20	S'E	6	cq	54	85	5	8	2	-	7-8	9+	2500
7	Holyhead	1000.2	-32	SE'E	3	rr	49	97	6	8	2	-	9	10	1500
	Chester (Sealand)	1003.4	-26	SE'S	2	zo	49	85	6	5	7	-	4-6	9+	3000
8	Manchester	1004.2	-30	SSE	4	zo	49	85	5	5	7	-	4-6	10	3000
10	Spurn Head	1007.6	-10	SE'E	4	c	48	75	7	3	1	2	2-3	7-8	4000
	Catterick	1006.9	-14	SSW	1	f-	38	97	3	-	-	-	10	10	<150
	Tynemouth	1006.4	-18	SSW	2	m	45	85	4	5	-	-	9	9	1500
11	St. Abbs Head	1004.6	-10	SSE	3	c	46	85	8	4	7	2	2-3	7-8	2500
	Leuchars	1004.2	-12	-	0	roro	43	97	4	5	2	-	4-6	10	2500
12	Renfrew (Abbots I.)	1002.7	-16	SE	1	zo	48	85	6	5	7	6	4-6	10	2500
	Eskdalemuir	1003.3	-16	S	1	c	44	85	6	5	-	-	10	10	800
	Point of Ayre	1001.4	-20	SSE	4	roro	50	92	8	8	2	-	4-6	10	1500
13A	Tiree	999.6	-2	S'E	3	c	50	85	8	8	-	-	7-8	7-8	1500
13B	Stornoway	1002.8	-6	ENE	3	c	45	85	8	2	6	6	tr	10	3000
15	Dalwhinnie	1004.2	-12	SE	4	c	39	85	7	8	4	-	7-8	7-8	1500
	Aberdeen	1005.3	-10	NNW	1	f	37	92	3	5	7	-	tr	7-8	4000
	Wick	1004.8	-4	SSE	3	c	47	75	8	2	6	6	4-6	9	2500
16	Lerwick	1006.8	+4	NNW	1	c/pr	43	92	8	8	7	-	4-6	7-8	800
17	Blacksod Point	1000.2	-4	W	1	bc	52	75	8	3	5	-	2-3	4-6	2500
18	Malin Head	998.8	-6	S	1	bc	50	75	8	2	-	1	2-3	2-3	3700
	Aldergrove	1000.2	-18	-	0	c/d	48	85	7	5	7	-	4-6	10	3000
19	Birr Castle	999.5	-18	N	1	roro	47	97	7	6	2	-	4-6	10	1500
20	Valentia Obsy. †	999.8	-6	N'W	4	c/pr	51	85	9	8	1	-	4-6	9+	2500
	Roches Point	996.7	-24	E'N	3	rr	47	97	7	6	2	-	7-8	10	800

OBSERVATIONS at 18h. G.M.T. 5th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1000.4	-44	SE	4	zo	50	75	6	5	2	-	4-6	10	2500	1	*
Croydon	1001.5	-40	SSW	3	zo	50	85	6	4	7	-	4-6	10	1500	1	*
S. Farnborough	999.6	-46	SE'E	3	zo	50	85	6	5	7	-	4-6	10	3000	1	*
Boscombe Down	997.4	-46	SE	5	rr	49	92	6	6	2	-	7-8	10	600	1	*
Calshot (Soton.)	998.1	-58	SSE	6	RR	52	97	5	6	-	-	10	10	600	1	5
Lympne	1004.6	-34	SSE	4	c	51	85	8	5	7	-	4-6	10	2000	1	§ 4
Manston	1003.2	-44	S'E	6	c	50	85	7	5	7	-	1	9+	1600	*	*
Shoeburyness	1003.6	-40	SE	3	c	51	85	6	5	7	-	7-8	9	2500	1	*
Felixstowe	1003.8	-36	SSE	5	bc	51	78	7	4	3	8	tr	4-6	2500	1	3
Gorleston	1005.1	-20	S	5	zo	51	85	6	-	1	-	0	9	-	1	3
Mildenhall	1002.5	-36	SE	3	c	49	85	7	-	7	6	0	7-8	-	1	*
Cranwell	1002.4	-30	SE'S	4	zo	46	92	5	5	-	6	1	4-6	1500	1	*
Birmingham	999.5	-42	SE	3	zo	48	85	6	5	7	-	7-8	10	1500	1	*
Upper Heyford	999.9	-*	SSE	3	c	48	85	7	8	7	6	4-6	7-8	2000	1	*
Ross-on-Wye	997.0	-26	SE	3	rr	49	92	6	6	-	-	10	10	1500	1	*
Hartland Point	993.5	-24	S	3	c	48	92	8	8	6	-	4-6	7-8	1500	1	3
Bristol	996.9	-22	SE	4	rr	49	92	6	-	2	-	10	10	700	1	*
Portland Bill	996.9	-40	SSE	5	RR	53	92	7	5	-	-	10	10	2500	1	5
Plymouth	995.3	-30	SW	4	pr	52	85	7	9	6	3	7-8	9	1200	1	3
The Lizard	994.7	-20	W'N	7	c/q	49	92	8	8	2	-	7-8	9+	1200	1	4
Scilly (St. Mary's)	996.1	+8	NW'W	6	pr	49	85	7	9	7	-	7-8	10	1000	1	3
Guernsey																
Pembroke	992.4	-18	WSW	4	roro	51	92	7	8	2	-	7-8	9+	1500	1	3
Holyhead	994.8	-24	E'N	4	roro	49	97	6	5	2	-	7-8	10	1500	1	2
Chester (Sealand)	997.7	-24	SE	3	zo	49	85	6	5	2	-	4-6	9+	2600	1	*
Manchester	999.2	-28	ESE	3	m	48	85	4	5	7	8	4-6	9+	3800	1	*
Spurn Head	1002.2	-16	ESE	5	c	49	92	7	5	4	-	4-6	7-8	2500	1	3
Catterick	1001.7	-22	SSE	2	df	46	97	3	5	-	-	10	10	500	1	4
Tynemouth	1002.9	-8	S	3	o/f	48	92	5	5	-	-	10	10	1800	1	.2
St. Abbs Head	1002.3	-12	S	3	c	44	92	6	5	2	-	7-8	10	2000	0	1
Leuchars	1001.8	-6	-	0	ido	42	97	6	-	2	-	10	10	1500	1	*
Renfrew (Abbots I.)	1000.9	-8	E'N	3	rf	45	97	3	5	2	-	9	10	1000	1	*
Eskdalemuir	1000.4	-12	ESE	2	rr	43	92	6	-	2	-	10	10	450	1	*
Point of Ayre	997.0	-20	SSE	5	rr	49	97	6	8	2	-	7-8	10	1500	1	3
Tiree	999.1	+4	SE'E	3	c	47	92	7	8	-	-	9+	9+	1500	0	3
Stornoway	1002.0	0	ENE	3	c	45	85	7	5	7	-	7-8	9+	2500	1	2
Dalwhinnie	*	-4	SE	2	c	40	92	6	5	2	-	7-8	10	800	1	*
Aberdeen	1003.5	-6	NNW	1	cf	38	97	3	5	7	-	7-8	10	1500	1	1
Wick	1004.0	-2	SE	3	c/pr	47	85	7	5	2	-	7-8	10	1500	1	1
Lerwick	1006.9	+2	ENE	3	c	44	75	8	5	7	-	4-6	7-8	1500	1	*
Blacksod Point	999.8	+4	W	3	bc	46	85	8	3	-	-	2-3	2-3	2500	0	3
Malin Head	998.7	-4	-	0	c	47	85	8	9	-	4	2-3	7-8	4000	0	0
Aldergrove	997.7	-10	-	0	roro	44	97	5	6	2	-	9+	10	3500	2	*
Birr Castle	998.4	+4	N	2	c	45	92	8	5	-	-	9	9	2500	1	*
Valentia Obsy. †	1002.1	+22	NNW	5	bc	50	65	9	8	-	-	4-6	4-6	2500	1	
Roches Point	997.6	+18	N'W	5	c	49	85	8	6	4	5	4-6	7-8	1500	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 5th (37)	13h.—18h. 5th (38)	18h. 5th to 1h. 6th (39)	1h.—7h. 6th (40)
London (Kew)	cffxrocmo	cbcmo	cmorroc	irorrmo
Croydon	bcmocpro	cbccmo	crororrbc	rorrro
S. Farnborough	bcmocpro	ezomov	errob	b,crrror
Boscombe Down	cmororopR	cprociro		crorocbpro
Calshot (Soton.)	cprprombc	firoRRmo	RRprbc	rrororcmo
Lympne	bccpro	bccbc	cmorr	cmorrcroro
Manston	bmov,pro	cprobcc	rrroromo	rorobciro
Shoeburyness	bmxbcc	cpbcmo	rrRRq	robciro
Felixstowe	bmobc	bcciroc	bcoiRrr	oirirocmo
Gorleston	offbc	bcc	bccq	ororoqc
Mildenhall	bmobc	bccbc	bcroroom	ororocirom
Cranwell	bcmoc	crorocm,bc	bcc,rrm	orrmo
Birmingham	bcc pro	cpro	corr	orrfo
Upper Heyford	bc,roropr	mo,cmbcc	crrmocmo	cmororomo
Ross-on-Wye	pocbccp	bcpoccr	rrc	oir
Hartland Point	bccir	crrc	cir	cpbcc
Bristol	cprc	cprorrmo	bbcmo,bc	cbcc
Portland Bill	oRc	oR	bcc	cc
Plymouth	rrcprc	pr	cprbc	bcbcpro
The Lizard	crrq	cprcq	bcq	prbcc
Scilly (St. Mary's)	cpoqrc		cpq,bc	bcpq
Guernsey				
Pembroke	bccprq	pr	ciroq	cq
Holyhead	Prrrc	rrroroc	rrroroc	crrmoc
Chester (Sealand)	cmo	cmoiroc	crrmoo	rrroroc
Manchester	morocmo	cmocm	bcmocmoro	cmororr
Spurn Head	c	rrc	bcc	ciro
Catterick	oFxof	ofidof	cmbbcmo	bcmocmo
Tynemouth	cm	comiro	oirrc	c
St. Abbs Head	c	cmo	morrc	iroc
Leuchars	ciro,crorom	rorom	oidoidororom	ororo
Renfrew (Abbots I.)	r	cffrrro	crfrf	cffiromo
Eskdalemuir	idoroc	ciroorr		irocirо
Point of Ayre	roro	rr	roroc	c
Tiree	c	c		
Stornoway	bcc	c	cbcc	
Dalwhinnie	cpr	ciroo	*	ciroc
Aberdeen	mocf	firocf	fciR	crrzo
Wick	bc	cproc	cirlq	rrcq
Lerwick	cpr	cpr	vpr	cpr
Blacksod Point	bc	bc	bc	PRc
Malin Head	bcc	c	circrorc	crorc
Aldergrove	cidoc	crorom	rororrmo	rrRRm
Birr Castle	croro	c	bcb	bbcc
Valentia Obsy. †	cproc	prbcvpr	bcvqpro	bcprbcpr
Roches Point	rr	irc	bc	prbcb

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:— Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

Note.—The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.

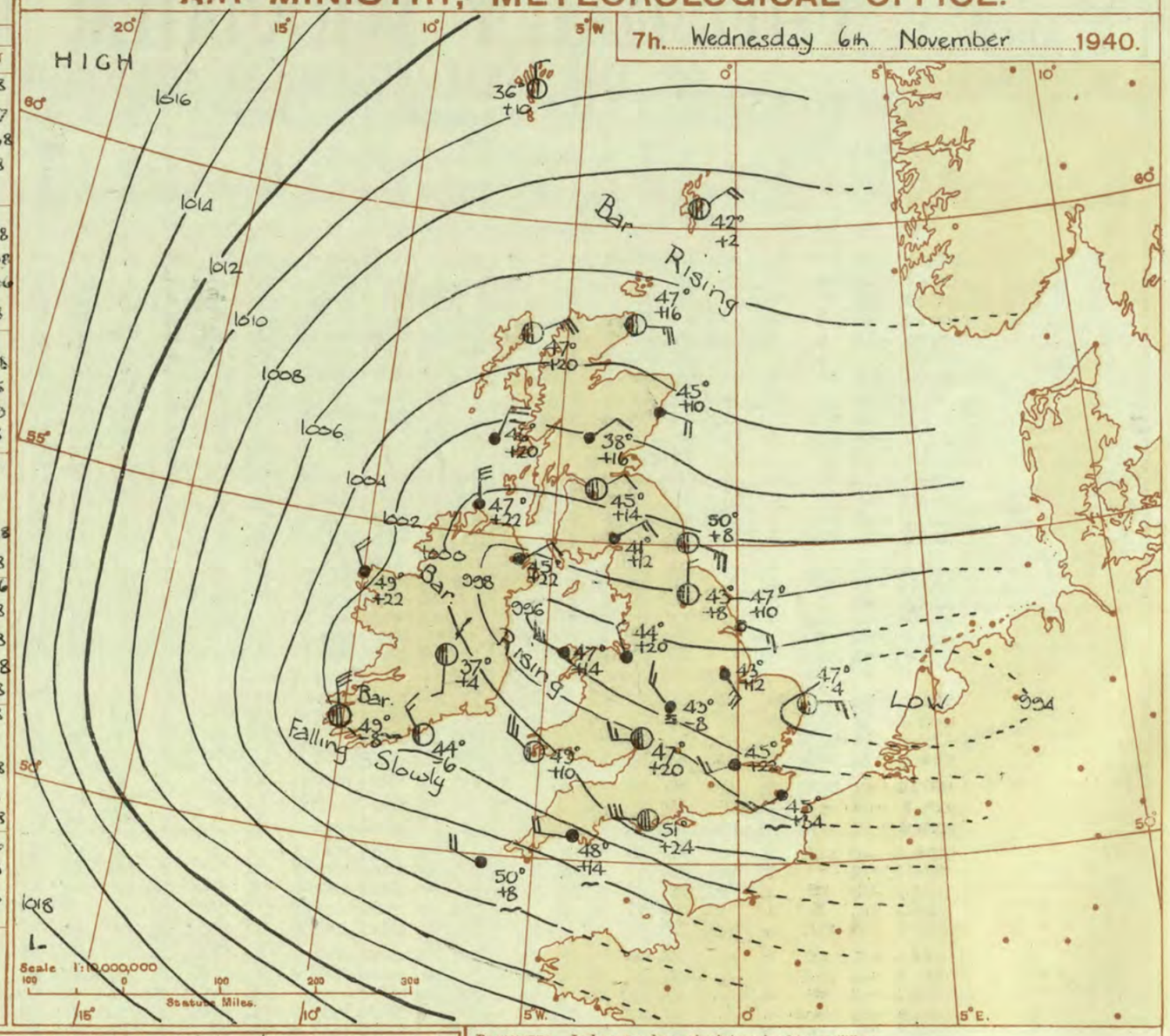
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 5th November			06h. G.M.T.			01h. G.M.T. 6th November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	86	01963	14104	8-	01854	11214	87	02745	09485	82	25745	06588
115	52	02954	08426	53	01854	08425	87	62735	08488	52	02834	08667
203	--	68087	25856	55	02954	08415	5-	01945	08515	8-	62848	04468
206	52	62655	00028	57	01753	04164	5-	08548	00028	5-	64648	04168
210				52	02755	10268	5-	61758	08168			
220	62	66726	15368	62	91736	16298						
230	87	02755	10216	52	61644	06288	52	64646	00068	5-	02748	08168
245	57	22655	00067	52	05547	12328	5-	62458	08468	5-	64658	37468
260	47	02754	12287	57	25255	00068	62	61544	06168	53	47365	00066
277	87	62745	14488	62	64536	08468	02	62568	15368	07	02790	05368
279				--	62438	12268						
285	5-	03538	14328	--	67109	08369				6-	63638	08568
288	57	05665	14283				50	05664	09324	87	05655	16225
273	18	01752	09104							--	67303	32269
301	52	61575	14468	52	05564	12468	62	62644	09268	62	64544	07168
321	87	03664	15327	00	05590	14386	57	05665	08316	62	62644	06168
299	57	05644	20315	5-	22638	17468	5-	05644	09514			
292	57	05554	16267	52	05546	14168	5-	05657	12217			
310	--	46209	16449	--	46209	20449				--	64428	08528
316	57	02544	16368	5-	08464	12365	02	62558	06268	62	54436	03368
333	62	62855	12468	62	64646	12468	8-	22748	06368	9-	64647	97646
334	--	64648	08268							--	64548	08168
340	53	05534	16427	5-	05558	12428	6-	64538	10468	52	62656	28168
136	03	01790	14344	04	51890	12382	52	65647	10368	02	62768	09368
336	--	62642	24468	--	61742	14468				--	63642	28568
350	57	22646	14467	47	01543	12314				6-	61738	21268
368												
379	5-	61747	14227	51	02743	12327	57	05644	24124	62	64636	24568
390	87	05654	16326				52	22535	00065	62	62637	22368
382	86	25755	11285	57	02756	11328	01	05550	00014	62	62735	22468
438	57	01854	20415							9-	02746	57766
430	23-	01754	16415	62	61635	13668	86	25745	24386	23	01752	57513
409	62	64623	13688	9-	25737	12487	20	01743	59683	8-	01855	24586

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Wednesday 6th November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Wednesday 6th Nov: 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate variable wind finally north, fresh, strong locally on coasts, backing N.W.; occasional rain at first, with perhaps local thunder; fair tomorrow; rather cold.
5 S.W. England 6 South Wales ...	Fresh W. wind, veering N.W., strong; bright intervals; Showers; rather cold.
7 North Wales ... 8 N.W. England	Moderate or fresh N.E. wind, backing N. to N.W. strong locally on coasts; occasional Showers, some bright intervals; rather cold.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Moderate or fresh N.E. wind, backing N. to N.W. tomorrow; mainly cloudy; Showers; rather cold.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B. N.W. Scotland.	As 7-8
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	As 9-11
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Freshening N.W. wind, strong on coasts, decreasing later; bright intervals; Showers; rather cold.

GENERAL INFERENCE.

An elongated depression extending from North Wales to the Southern North Sea is moving east, and a ridge of high pressure is approaching Ireland from the Atlantic. There will be occasional rain or showers in most districts at first, but fair weather will spread slowly from the west later.

FURTHER OUTLOOK.

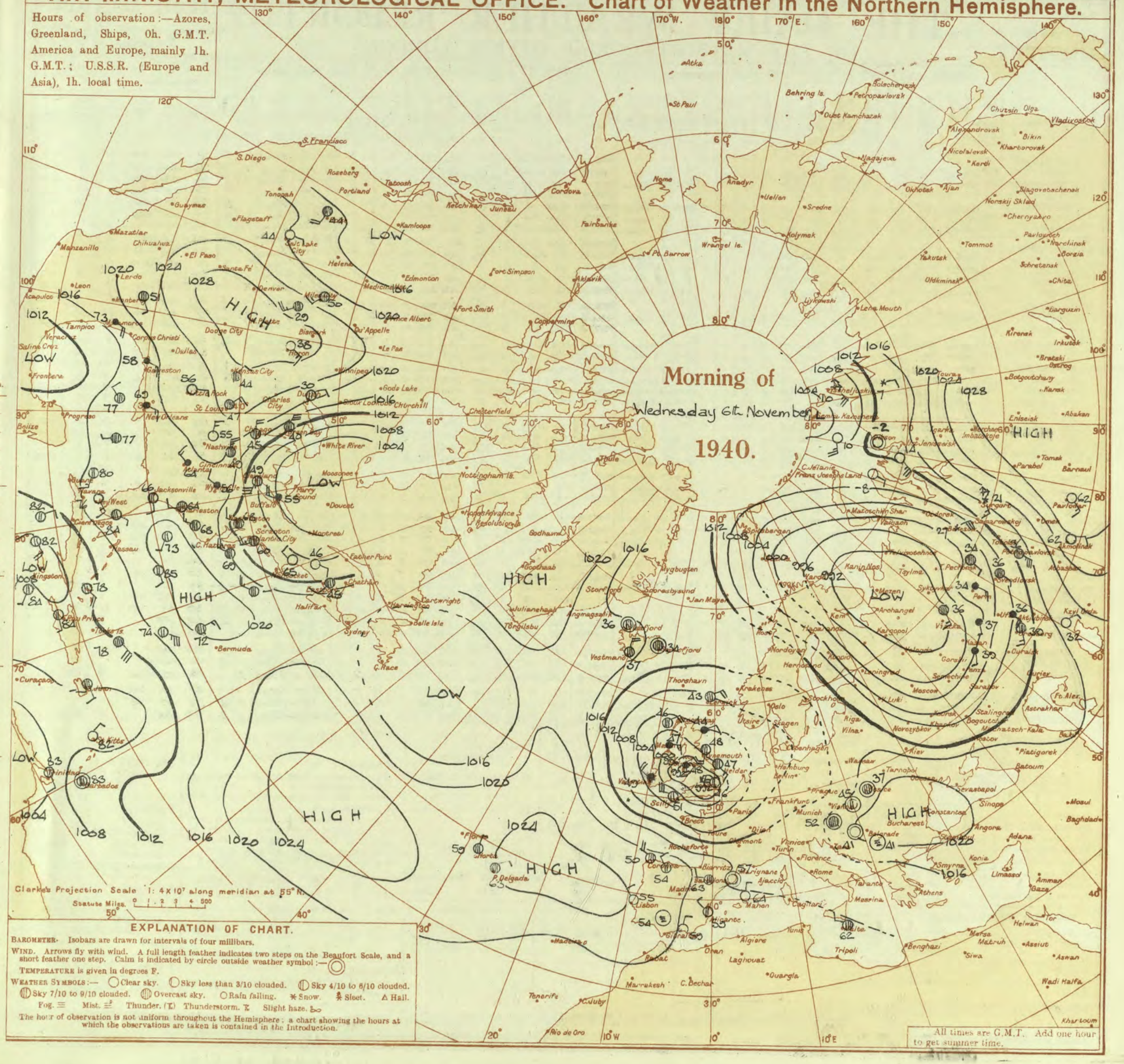
A fair interval with local morning fog

Forecasts issued at 1030h.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 6th November 1940.

No. 28839

OBSERVATIONS at 1 hr. G.M.T. 6th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	993.4	-10	W	1	z0	46	97	6	–	4	–	0	2-3	–
	S. Farnborough	226	993.1	-6	S'W	2	z0	44	97	6	3	–	–	Tr	Tr	2500
	Boscombe Down	417														
	Calshot (Sthmtn.)	8	995.4	0	W	4	z0	49	92	6	5	7	–	4-6	9+	2500
	Lympne ...	346	996.0	-32	SSE	2	rr	47	97	6	6	2	–	9	10	1000
	Manston ...	154	994.4	-30	SE'S	3	r0r0	47	97	6	6	2	–	9	10	400
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	995.7	-34	SE'E	6	ir	46	92	6	–	2	–	10	10	3800
	Gorleston ...	5	997.1	-30	SSE	6	c	51	85	6	5	–	–	10	10	1500
	Mildenhall ...	19	993.8	-38	ESE	5	r0r0	45	85	6	–	2	–	10	10	3800
	Cranwell ...	240	994.0	-42	E'S	4	rr	46	92	5	6	–	–	10	10	1200
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	993.9	-6	–	0	z0	46	97	6	6	–	–	9	9	1100
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	997.6	+32	NW	6	c	50	75	8	8	–	–	7-8	7-8	1500
	Bristol ...	209	993.7	+2	WSW	4	r0r0	47	97	6	6	–	–	7-8	7-8	1400
	Portland Bill ...	32	995.1	+18	SW	7	c	53	92	7	5	–	–	10	10	2500
	Plymouth ...	82	1000.0	+30	W'N	6	bc	49	75	7	2	–	3	1	2-3	1400
	The Lizard ...	240	1002.3	+24	WNW	7	bc	51	75	8	8	–	–	4-6	4-6	1500
	Scilly (St. Mary's)	163	1003.2	+26	WNW	6	bc	51	75	8	8	–	–	4-6	4-6	1500
	Guernsey ...	175														
6	Pembroke ...	142	995.3	+24	WNW	7	oq	49	85	7	8	–	–	9	9	1000
7	Holyhead ...	26	992.6	0	ENE	4	r0r0	48	97	6	6	2	–	7-8	10	900
	Chester (Sealand)	16	994.0	-6	ESE	3	rr	46	92	5	–	2	–	10	10	2700
8	Manchester ...	70	995.1	-8	E'S	3	ir0	47	89	5	6	2	–	4-6	7-8	2200
10	Spurn Head ...	29	996.1	-28	E'S	5	c	50	75	6	4	1	–	2-3	7-8	4000
	Catterick ...	175	997.5	-18	SE	3	z0	45	92	6	5	–	–	4-6	4-6	2000
	Tynemouth ...	108	999.8	-10	S	3	c	48	92	6	2	–	–	7-8	7-8	2000
11	St. Abbs Head	280	999.4	-12	ESE	2	c/r	46	97	7	5	2	–	7-8	10	2000
	Leuchars ...	36	999.6	-8	–	0	r0r0	47	97	4	–	2	–	10	10	1200
12	Renfrew (Abbots I.)	19	998.8	-6	ENE	3	r0f	45	97	3	6	2	–	9	10	700
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	994.9	0	SE'S	5	c	50	86	6	8	2	–	7-8	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1003.6	+6	ENE	4	c	46	85	7	5	7	–	2-3	9+	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1003.7	-2	ESE	5	ir0	48	85	7	5	7	–	7-8	10	800
16	Lerwick ...	156	1007.8	+4	ENE	4	c	43	75	8	8	7	–	4-6	7-8	800
17	Blacksod Point	18	999.9	0	W	2	bc	45	85	8	3	–	–	4-6	4-6	2500
18	Malin Head ...	84	998.2	+4	E	3	r0r0	47	92	5	6	–	–	9+	9+	800
	Aldergrove ...	268	995.3	+2	NW'W	2	rr	44	97	5	6	2	–	9+	10	300
19	Birr Castle ...	173	999.7	+6	NNW	1	b	40	92	8	–	–	–	0	0	–
20	Valentia Obsy.	30	1002.7	+4	WNW	4	pr	49	75	9	3	–	–	7-8	7-8	2500
	Roches Point	22	1001.4	+10	NNW	4	b	45	89	8	5	–	–	1	1	2500

OBSERVATIONS at 7 hr. G.M.T. 6th November — PAST 24 HOURS.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 5th Hrs. (36)
London (Kew)	996.4	+26	SW'W	4	rr	46	92	6	6	2	–	9+	10	800	1	*	55	46	34	0·1	5	3.5
Croydon	995.9	+22	WSW	3	r0r0	45	97	6	6	2	–	9	10	1000	1	*	56	44	42	Tr	8	5.0
S. Farnborough	997.1	+26	WSW	5	e/r	46	85	8	7	3	–	9	9+	2500	1	*	56	43	35	0·2	9	4.0
Boscombe Down	998.7	+30	W'S	4	c	44	85	8	8	7	8	1	9	1500	1		53	42	39	4	10	0.6
Calshot (Sthmtn.)	998.9	+26	W	5	c	47	85	7	8	7	1	Tr	7-8	2500	1	§3	56	47	44	3	13	3.7
Lympne	997.8	+34	SW	3	rr	45	97	7	6	2	–	9	10	700	1	4	54	44	36	1	19	4.7
Manston	995.8	+26	WSW	3	ir0	45	92	6	6	2	–	9+	10	700	*		*	*	*	*	*	*
Shoeburyness	996.0	+20	SW	3	ir0	47	92	5	6	2	–	7-8	10	800	1	*	54	46	42	Tr	7	5.8
Felixstowe	999.9	0	NW'N	1	z0	45	97	6	5	–	–	Tr	9+	2000			54	44	42	0·1		6.0
Gorleston	994.9	-4	E	3	c/r	47	85	6	8	–	–	9+	9+	1500	1	3	52	47	44	–	4	6.2
Mildenhall	994.0	+6	E'S	2	ir0	45	97	6	5	2	–	9	10	1500	1	*	54	44	40	Tr	3	4.9
Cranwell	995.4	+12	SE	5	rr	43	92	6	6	2	–	4-6	10	600	2		51	42	41	1	9	3.7
Birmingham	995.4	+8	NW	3	rf	43	92	3	6	–	–	10	10	450	1	*	50	42	41	Tr	16	2.4
Upper Heyford	994.8	+14	SW'W	4	r0r0	44	97	7	6	2	–	9	10	700	1	*	54	42	36	0·5	11	
Ross-on-Wye	997.2	+20	W	3	e/r	47	85	8	6	–	–	9+	9+	1500	1	*	53	45	43	2	7	2.2
Hartland Point	1000.3	+14	WNW	6	bc	50	75	8	3	–	–	4-6	4-6	1500	1	4	54	47	45	8	6	0.7
Bristol	999.0	+30	W	6	c	47	85	8	8	7	–	1	7-8	2500	1		56	43	37	5	6	1.7
Portland Bill	999.7	+24	W	6	c	51	97	8	5	–	9	7-8	7-8	2500	1	5	55	50		20	2	
Plymouth	1003.1	+14	W	4	pr	48	75	8	3	–	–	9	9	1500	1	3	56	47	44	7	3	1.6
The Lizard	1004.4	+10	W	6	c	50	75	8	8	6	–	7-8	7-8	1500	0	4	55	47	*	8	1	0.8
Scilly (St. Mary's)	1004.9	+8	W'N	4	pr	50	75	8	1	–	–	4-6	4-6	1200	1	4	55	48		3	2	0.9
Guernsey																						
Pembroke	999.7	+10	WNW	5	bcq	49	75	7	8	–	–	4-6	4-6	2000	1	3	55	46	*	9	3	0.0
Holyhead	994.6	+14	W'N	6	r0r0	47	97	6	6	2	–	9	10	800	1	3	51	47		11	14	0.0
Chester (Sealand)	996.4	+20	NW	1	r0r0	44	97	5	6	2	–	9	10	1500	1	*	50	44	43	Tr	7	0.6
Manchester	996.1	+14	NE	2	r0r0	44	85	4	–	2	–	10	10	2200	1		51	44	41	1	1	0.0
Spurn Head	995.9	+10	ESE	3	ir0	47	92	7	5	–	–	9+	9+	1500	1	3	49	47	*	1	0.6	4.1
Catterick	998.0	+8	N	1	z0	43	97	6	5	7	–	4-6	9+	1500	1		46	42	*	Tr	Tr	0.0
Tynemouth	999.4	+8	ESE	5	c	50	89	7	8	–	–	7-8	7-8	2000	1	2	48	47	44	0·5	3	*
St. Abbs Head	999.8	+4	NE	3	ir0	47	85	8	5	2	–	9	10	2000	1	4	47	44	*	–	5	*
Leuchars	1000.7	+10	E	1	ir0	45	97	6	5	2	–	7-8	10	1200	1	*	46	41	40	Tr	3	0.0
Renfrew (Abbots I.)	1000.6	+14	ENE	2	c	45	97	7	5	–	–	9+	9+	2500	1	*	49	44	38	6	7	0.2
Eskdalemuir	999.8	+12	NE'E	3	ir0	41	97	6	6	2	–	7-8	10	450	1		44	40	37	2	4	0.0
Point of Ayre	997.3	+16	E'S	3	c	49	85	7	5	7	–	4-6	9+	1500	1	3	50	48		8	6	0.0
Tiree	1002.1	+20	NNE	4	rr	46	97	7	–	2	–	10	10	1200	1	3	52	45	*	0·3	4	0.3
Stornoway	1006.3	+20	ENE	5	c	47	89	8			–	4-6	9+	2000	1	3	47	44	*	–	–	2.2
Dalwhinnie	*	+16	NE	2	ir0	38	92	5	5	–	–	10	10	800	1		41	36	35	1	4	0.1
Aberdeen	1003.5	+14	E'S	4	rr	45	85	6	6	2	–	4-6	10	1500	1	2	39	37	35	0·2	39	0.0
Wick	1005.4	+16	E	5	cq	47	85	8	9	2	–	7-8	10	1500	1	2	47	45	*	Tr	4	
Lerwick	1007.9	+2	NE	4	c	42	75	8	8	3	–	4-6	7-8	1500	1		47	40		8	2	0.9
Blacksod Point	1002.0	+22	NW	4	PR	49	85	8	9	–	–	10	10	1500	1	3	53	40	*	–	1	*
Malin Head	1000.0	+22	N	6	r0r0	47	92	6	9	–	–	9+	9+	450	1	3	51	44	*	–	9	4.2
Aldergrove	998.5	+22	NE'E	2	ir0	45	97	6	5	2	–	4-6	10	2500	2		48	42	41	3	19	0.0
Birr Castle	1000.7	+4	S	1	c	37	92	7	5	–	–	9	9	2500	1	*	47	34	28	2	–	0.0
Valentia Obsy.	1002.2	-8	NW'N	6	c	49	85	8	8	–	–	7-8	7-8	1500	1	4	52	47	41	1	1	1.9
Roches Point	1001.4	-6	NW'W	3	bc	44	85	8	5		–	4-6	4-6	2500	1	3	53	44	*	10	0.3	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew ...	18	cffxr0cm0	cbccm0	cm0rr0m0	55	46	34	0.1	5	3.5	*	*	6
Croydon ...	217	bcm0cpr0	cbccm0	cr0r0rrbc	56	44	42	Tr	8	5.0	*	*	*
Greenwich (Royal Observatory) ...	149	bc	cpbcc	crrcrr	54	43	35	r	9	4.5	74	86	6
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	56	45	41	7			75	92	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	55	42	33	–	7	*	81	96	*
Camden Square ...	110			*							*		*
Kensington ...	80	bcpbc	bc	*	56	45	35	0.4	6		87	90	*
Hampstead Observatory ...	450	bcb	bc	bcor	53	–	39	0.1	8		*	72	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 6th.

	Max.	Time.	Min.	Time.
South Kensington.				
Kew Observatory.	0.2	9h 5th	<0.1	0-6h 6th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Precipitous.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 7th November 1940.

No. 28840

OBSERVATIONS at 13h. G.M.T. 6th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1000·6	+12	W	4	c	51	65	8	8	1	-	4-6	9+	1500
	Croydon	999·7	+12	W'N	3	z₀	(52)	65	6	2	7	-	4-6	9+	2500
	S. Farnborough	1001·4	+2	W'S	5	c	52	65	8	2	4	6	4-6	7-8	3000
	Boscombe Down														
	Calshot (Soton.)	1002·3	+6	WNW	4	c/pr	51	85	8	2	3	8	4-6	7-8	3500
	Lympne	1001·4	+12	W'S	5	c	52	65	8	1	6	3	4-6	7-8	2500
	Manston	999·9	+16	WSW	4	pr	48	85	6	8	-	-	9+	9+	1200
2	Shoeburyness	1000·0	+20	W	2	ir₀	48	85	5	6	2	-	7-8	10	450
	Felixstowe	998·1	+16	W'N	4	r₀r₀	46	92	6	6	2	-	9+	10	800
	Gorleston	997·1	+12	N'W	3	c	48	85	7	8	-	-	9+	9+	1500
	Mildenhall	997·8	+18	W'N	1	ir₀	46	97	6	6	2	-	4-6	9+	600
	Cranwell	1000·0	+20	N	3	c	46	92	6	5	-	-	9+	9+	1500
3	Birmingham	1001·6	+12	NNW	2	rr	44	92	4	6	-	-	10	10	800
	Upper Heyford	1000·5	+26	W'N	4	r₀r₀	44	92	7	6	2	-	7-8	10	700
4	Ross-on-Wye	1000·7	+8	W'N	3	c	52	55	8	8	6	8	2-3	7-8	2500
5	Hartland Point	1000·6	-14	W	6	cjp	51	85	8	8	-	3	7-8	7-8	1500
	Bristol	1002·4	+14	W	5	pr	48	85	7	9	-	-	9+	9+	1100
	Portland Bill	1003·1	+4	W	6	c	54	85	8	2	4	-	7-8	9	4000
	Plymouth	1003·7	-10	W	5	c/pr	50	85	8	3	-	3	4-6	9	1800
	The Lizard	1004·0	-16	WSW	6	bc	51	85	8	8	7	-	4-6	4-6	2000
	Scilly (St. Mary's)	1003·6	-22	W'N	7	bc/pr	51	75	8	9	6	3	4-6	4-6	1200
	Guernsey														
6	Pembroke	1000·8	+2	NW'W	3	bc	51	75	8	2	-	-	4-6	4-6	2500
7	Holyhead	999·9	+32	ENE	5	c	49	85	6	5	7	-	4-6	10	3000
	Chester (Sealand)	1001·3	+16	NE	1	r₀r₀	47	85	5	6	2	-	4-6	10	1500
8	Manchester	1001·3	+22	WNW	1	f	45	97		5	2	-	9	10	1800
10	Spurn Head	999·5	+14	NNE	3	c	50	75	6	2	4	1	7-8	9	4000
	Catterick	1002·1	+14	NE	2	z₀	49	85	6	5	7	-	4-6	9	4000
	Tynemouth	1003·0	+16	E	4	c/pr	48	85	7	2	-	-	9+	9+	3000
11	St. Abbs Head	1003·9	+14	E	2	c	48	75	8	8	2	-	4-6	10	2000
	Leuchars	1005·2	+22	N	3	r₀r₀	43	92	7	5	2	-	7-8	10	900
12	Renfrew (Abbots I.)	1005·3	+22	NE	3	r₀r₀	46	85	8	5	7	-	9	10	1500
	Eskdalemuir	1003·6	+12	NE'E	3	c	47	75	7	5	1	-	4-6	10	2500
	Point of Ayre	1003·0	+24	NNE	4	c	51	85	7	2	4	5	Tr	9	1500
13A	Tiree	1007·3	+20	N'E	6	c	47	75	8	5	-	-	9+	9+	1500
13B	Stornoway	1011·3	+22	NNE	5	iR	44	92	7	8	7	-	9	9+	1000
15	Dalwhinnie	*	+24	NNE	2	s₀s₀	34	97	5	5	-	-	10	10	800
	Aberdeen	1006·6	+16	NE	3	r₀r₀	45	92	6	6	2	-	7-8	10	1500
	Wick	1008·8	+14	ENE	6	c	47	75	8	5	7	-	7-8	10	1500
16	Lerwick	1011·0	+10	NE'E	4	pr	42	85	7	8	7	-	4-6	9	800
17	Blacksod Point	1009·4	+28	N	6	c	51	75	7	9	-	-	7-8	7-8	800
18	Malin Head	1006·0	+40	N	3	c/pr	48	85	7	9	-	-	9	9	2500
	Aldergrove	1004·1	+24	NNE	2	c	50	75	7	8	3	6	2-3	9+	2500
19	Birr Castle	1004·7	+32	NNE	1	c/r	45	97	7	6	2	-	4-6	10	1500
20	Valentia Obsy. †	1008·9	+26	N'W	6	pr	52	75	8	9	7	-	7-8	9	2500
	Roches Point	1003·6	+14	NW'N	5	pr	49	85	8	3	-	-	9	9	1500

OBSERVATIONS at 18h. G.M.T. 6th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1003·8	+20	WNW	2	r₀r₀	46	85	6	6	2	-	7-8	10	1500	1	*
Croydon	1003·9	+34	W	2	z₀	46	85	5	5	-	-	10	10	2000	1	*
S. Farnborough	1004·2	+20	N	1	c	47	85	7	5	4	9	7-8	9+	3000	1	*
Boscombe Down	1003·9	+10	-	0	c	45	92	7	8	7	-	7-8	9	2500	1	*
Calshot (Soton.)	1003·8	+6	NW'W	1	z₀	47	92	6	8	7	-	4-6	9+	3500	1	1
Lympne	1004·3	+20	WNW	4	e	46	85	6	9	-	-	9+	9+	1200	1	§
Manston	1002·9	+24	WNW	3	pr	45	92	6	9	-	-	10	10	1100		*
Shoeburyness	1003·7	+18	NW	2	r₀r₀	48	97	5	6	2	-	4-6	10	450	1	*
Felixstowe	1001·7	+26	WN	4	c/r₀	45	92	6	5	7	-	4-6	9+	6000	1	1
Gorleston	1000·4	+20	NW'N	4	ir₀	47	85	6	8	2	-	7-8	10	1400	1	2
Mildenhall	1002·1	+14	WNW	3	ir₀	45	97	6	5	2	-	7-8	10	1500	1	*
Cranwell	1004·2	+30	N'E	3	c	45	85	5	5	-	-	7-8	7-8	1500	1	*
Birmingham	1004·5	+20	NNW	2	m	48	92	4	6	7	-	9	10	800	1	*
Upper Heyford	1003·8	+20	-	0	r₀r₀	43	97	5	6	2	-	9	10	800	1	*
Ross-on-Wye	1004·2	+30	NE	2	ir₀	51	92	6	5	-	-	10	10	800	1	*
Hartland Point	1003·6	+24	N	3	c	49	75	8	8	-	-	7-8	7-8	1500	1	3
Bristol	1004·1	+10	N	1	cf+	44	97	5	4	-	8	2-3	9+	1800	1	*
Portland Bill	1002·7	-4	W	4	c	54	85	7	5	7	-	7-8	10	4000	1	4
Plymouth	1004·0	+18	NW'N	3	pr	49	85	4	9	-	-	9	9	1600	1	3
The Lizard	1004·9	+10	NW	4	PR	48	92	7	8	2	-	7-8	9+	1500	1	3
Scilly (St. Mary's)	1005·3	+4	NW	7	c/pr	49	85	7	9	7	-	7-8	10	1000	1	4
Guernsey																
Pembroke	1004·1	+22	N'E	3	c	48	85	7	5	-	-	9+	9+	3000	1	2
Holyhead	1006·3	+34	NNE	4	c	51	75	6	8	1	-	2-3	10	2800	1	2
Chester (Sealand)	1005·8	+30	NW'W	2	m	44	92	4	5	-	-	4-6	4-6	2500	1	*
Manchester	1005·5	+34	N'W	2	m	42	85	4	5	-	8	2-3	7-8	2500	2	*
Spurn Head	1003·8	+14	N	4	bc	47	85	7	4	-	-	2-3	2-3	4000	1	2
Catterick	1006·3	+18	N'E	2	m	44	92	4	8	3	-	4-6	7-8	2800	1	
Tynemouth	1007·4	+22	NNE	4	c	49	85	8	8	-	-	9+	9+	2800	1	2
St. Abbs Head	1007·3	+16	NE	3	r₀r₀	45	92	8	5	2	-	4-6	9+	2000	1	2
Leuchars	1009·2	+36	NNE	2	r₀r₀	42	92	6	-	2	-	10	10	2000	2	*
Renfrew (Abbots I.)	1010·6	+34	NNE	3	r₀r₀	42	85	7	-	2	-	10	10	2900	1	*
Eskdalemuir	1007·9	+26	N'E	3	rr	43	85	6	6	-	-	10	10	800	1	*
Point of Ayre	1007·4	+32	NE'N	4	c	50	85	7	5	4	8	2-3	9	2500	1	3
Tiree	1013·1	+26	S'E	6	bc	47	75	8	8	3	-	4-6	4-6	1800	0	4
Stornoway	1016·4	+26	NW	3	bc/pr	39	92	8	3	6	-	2-3	2-3	2500	1	2
Dalwhinnie	*	+22	NNE	2	r₀r₀	37	97	5	5	-	-	10	10	800	1	*
Aberdeen	1010·7	+26	N'E	3	r₀r₀	43	92	6	6	2	-	9	10	1500	1	3
Wick	1012·6	+16	NNE	5	c/pr	43	65	8	8	7	-	7-8	9+	1500	1	2
Lerwick	1013·0	+12	NNW	4	phr	40	85	7	8	7	-	4-6	9	1500	1	*
Blacksod Point	1016·0	+40	N	6	pr	48	85	6	9	-	-	9+	9+	1500	1	4
Malin Head	1012·4	+40	N	6	pr	47	75	6	9	-	-	9+	9+	1500	1	3
Aldergrove	1009·4	+34	NW	2	c/pr	46	92	6	3	7	-	7-8	10	2000	2	*
Birr Castle	1011·1	+36	N	2	c	46	85	8	8	-	-	7-8	7-8	1500	1	*
Valentia Obsy. †	1015·6	+46	N	6	pr	50	85	8	9	-	-	9	9	2500	1	5
Roches Point	1010·8	+52	N	5	c	48	85	8	8	-	-	7-8	7-8	1500	1	3

PAST 24 HOURS. — WEATHER.

Stations	7h.—13h. 6th (37)	13h.—18h. 6th (38)	18h. 6th to 1h. 7th (39)	1h.—7h. 7th (40)
London (Kew)	cr₀bm₀c	cm₀r₀c	cr₀cm₀	cr₀cbcm₀
Croydon	cir₀c	cpr₀m	cm₀bcm₀m	bbcm₀w
S. Farnborough	cbc	bcc	cm₀bw	bmbcbm₀c
Boscombe Down		cpr₀	cm₀jfbcm₀	bm₀bfx
Calshot (Soton.)	bccpr₀	bcPRm₀	cm₀bcm₀w	bm₀w
Lympne	crrbc	bccm₀	bcmm₀w	m₀rr₀c
Manston	ir₀pr₀m₀	cpr₀	cpr₀r₀r₀cm₀	cr₀r₀cm₀
Shoeburyness	cr₀r₀m₀	crbr₀r₀m₀	cr₀r₀bcr₀	cr₀b
Felixstowe	cd₀d₀r₀r₀m₀	or₀r₀c	cir₀cmm₀r₀r₀	or₀r₀cm₀
Gorleston	or₀r₀ir₀	cir₀	oirq	ocbcq
Mildenhall	cr₀r₀d₀d₀r₀m₀	cr₀rm₀pr₀c	cir₀m₀	bcm₀b,c
Cranwell	cr₀r₀cm₀	cbccm₀	cm₀,bm₀	bcbbcm₀
Birmingham	fr₀rm	or₀m₀c	cm	cr₀bcf
Upper Heyford	cr₀r₀rrr₀r₀	cr₀r₀irm₀	cr₀r₀bcm₀fbm₀	bmcm₀
Ross-on-Wye	c	c	r₀cm₀om₀	om₀cm₀
Hartland Point	bccp	cp	clbcc	cr₀
Bristol	cbccpr	cprPRm₀	cbcm₀,bcbm₀	bm₀mbcm
Portland Bill	c	c	cbc	bcc
Plymouth	bcpr₀	cpr₀cbccpr	cbmcm₀bcm₀	
The Lizard	bcpr	cpr	cprc	prbcc
Scilly (St. Mary's)	bcp₀q	bccpq	cp	c
Guernsey				
Pembroke	cqpr₀bc	pr₀c	irlc	
Holyhead	ir₀m₀c	c	lPRm₀c	cm₀bcc
Chester (Sealand)	r₀r₀m₀d₀m₀c	r₀r₀cm	bclmc	cm₀rr₀c
Manchester	mr₀r₀frr	obcffm	bcmbm	cmr₀r₀
Spurn Head	c	cbc	c	bcc
Catterick	cm₀	m₀pr₀cm	pr₀ir₀m₀	ir₀m₀bc
Tynemouth	cp	cpc	corr	oirbc
St. Abbs Head	c	crr	cqrrc	bcq
Leuchars	cr₀r₀m₀f	or₀r₀m₀	or₀r₀bcm₀	bcm₀bx
Renfrew (Abbots I.)		cr₀dr₀r₀	r₀r₀cbcm₀	bx
Eskdalemuir	ir₀c	crr	cbcbx	rrc
Point of Ayre	c	c	r₀r₀	bcb
Tiree	od₀c	cbc	bc	bc
Stornoway	cpriR	ciRbc	bcbpr	cpr
Dalwhinnie	s₀s₀o	r₀r₀o	*	cbcc
Aberdeen	crrr₀	crr₀	r₀bcb	b
Wick	pr₀cq	cpr₀c	cprbc	pr₀c
Lerwick	cpr	cphr	cphrc	cir
Blacksod Point	pr₀bcq	pr₀	bc	bc
Malin Head	cpr₀cpr₀	ccpr₀pr₀c	bcc	bc
Aldergrove	cir₀m₀c	cm₀pr₀	RRr₀r₀pr₀	bxpr₀bx
Birr Castle	cir₀	c		b
Valentia Obsy. †	cir₀cpr₀	cpr₀cPRq	bcpr₀bcbq	prbcprbcbbcqpr₀
Roches Point	cpr₀	bcc	b	bcb

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m, mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). ↗ gale.
⊕ Solar halo. ⊕ lunar halo. ⌂ Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6: similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29 —STATE OF GROUND.

0 . . Ground dry.
1 . . ,, wet.
2 . . ,, flooded.
3 . . ,, frozen hard and dry.
4 . . ,, partly covered with snow or hail.
5 . . ,, covered with ice or glazed frost.
6 . . ,, covered with thawing snow.
7 . . Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 . . ,, covered with snow, less than 6 ins., but ground frozen.
9 . . ,, covered with snow greater than 6 ins. deep.
– . . Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

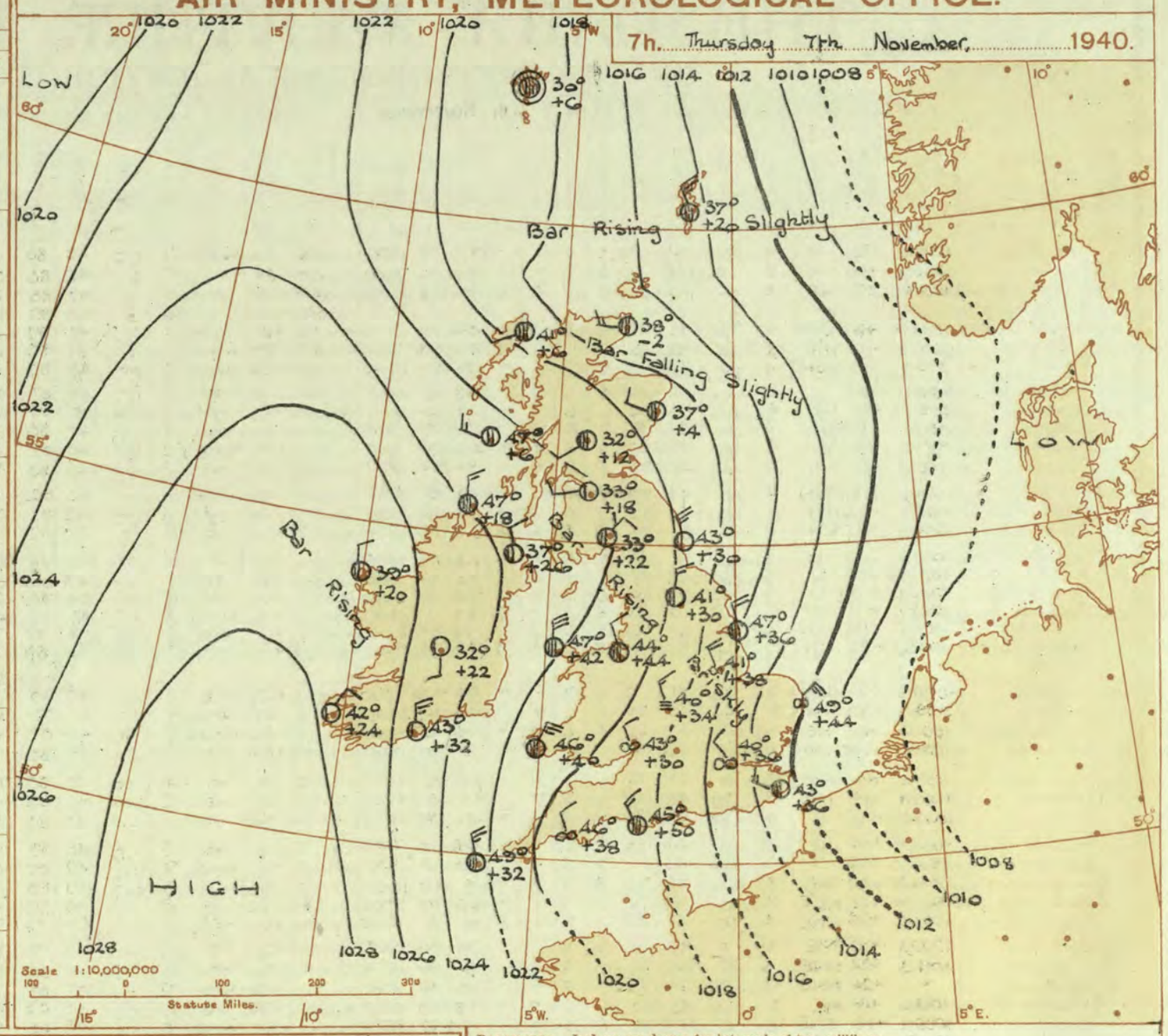
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 6th November				18h. G.M.T.			01h. G.M.T. 7th November				07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN		$C_L C_M$	wwVhN$_h$	DDFWN		$C_L C_M$	wwVhN$_h$	DDFWN
109	82	25354	03586	27	25353	02283		80	01851	24281		8-	25747	32487
115	87	81834	08687	52	10844	32585		87	81954	28485		52	81944	28485
203														
206	52	62735	00068	52	22665	03468		00	00890	00000		57	02854	25315
210								50	01964	29414		57	02963	21315
220	62	64844	03367											
230	57	10865	02428	02	61848	02468		54	00862	32263		55	05758	02113
245	62	64635	03368	02	62658	05568		50	00761	32421		10	01962	16214
260	52	52535	06268	62	66643	02268		50	00763	28103		00	01890	00018
277	84	02864	30226	57	22665	03468		50	02755	32465		17	00951	28213
279														
285	8-	02737	08327	8-	02786	02226						36	81734	32684
288	87	05656	06227	86	05553	03224		8-	61558	01828		86	05554	28264
273												00	00690	28100
301	52	08454	06166	00	47190	00040		5-	62557	00067		53	05564	32364
321	27	05654	03267	57	05666	30328		57	55563	30414		57	61655	30466
299	87	05644	05415	8-	02745	02415		80	01743	02613		8-	25754	32485
292	23	05654	03315	87	05654	02186		51	05553	30315		56	02655	30316
310	--	53528	04458	--	46828	04328						-	05626	04526
316	52	21445	32258	07	08490	30226		50	05564	32314		54	05544	32314
333	61	64644	26168	51	02644	32228		6-	63646	30388		9-	81757	02587
334	--	61644	08168									-	02753	04225
340	61	62654	00068	5-	05548	28168		50	08454	30214		5-	05646	30256
136	86	81754	03387	57	81666	31288		8-	02755	04815		87	01744	32314
336	--	62742	28468	--	03754	32428						--	03754	32418
350	62	62527	26268									07	05590	03214
368														
379	6-	62638	26468	--	48209	04869		00	05590	32400		00	05590	32303
390	6-	62648	24368	62	29548	24368		50	05553	26313		07	05690	30416
382	77	02854	24427	47	61668	00068		00	05590	30300		07	08490	30403
438	80	14754	24714											
430	80	23844	24584	47	05668	26115		07	05590	30313		07	05590	30416
409	36	10844	21584	26	25845	31485		8-	25746	31586		8-	02846	31486

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Thursday 7th November, 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Thursday 7th November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate or fresh N.W. wind, strong on coasts, decreasing; mainly fair apart from showers near the East Coast; local morning fog; rather cold, ground frost at night.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ...	Moderate or fresh N.W. wind, decreasing; bright periods; local showers; local morning fog; rather cold; ground frost at night.
10 N.E. England 11 S.E. Scotland	Fresh N.W. wind, strong on coasts, decreasing later; bright intervals; showers; rather cold, ground frost at night.
12 S.W. Scotland & Isle of Man.	As 5-9.
13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Fresh N.W. wind, strong on coasts, decreasing later; bright intervals; showers; snow showers on high ground; rather cold; ground frost locally at night.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light or moderate N.W. winds; mainly fair; local showers; local morning fog; frost at night.

GENERAL INFERENCE.

An anticyclone is developing off S.W. Ireland, and a shallow trough of low pressure off North Scotland is moving Southeast. There will be bright intervals in all districts with some showers chiefly in coast areas and in North and East Scotland, and near the East Coast of England.

FURTHER OUTLOOK.

N.W. winds; a fair interval in the South with local morning fog; perhaps rain in the North.

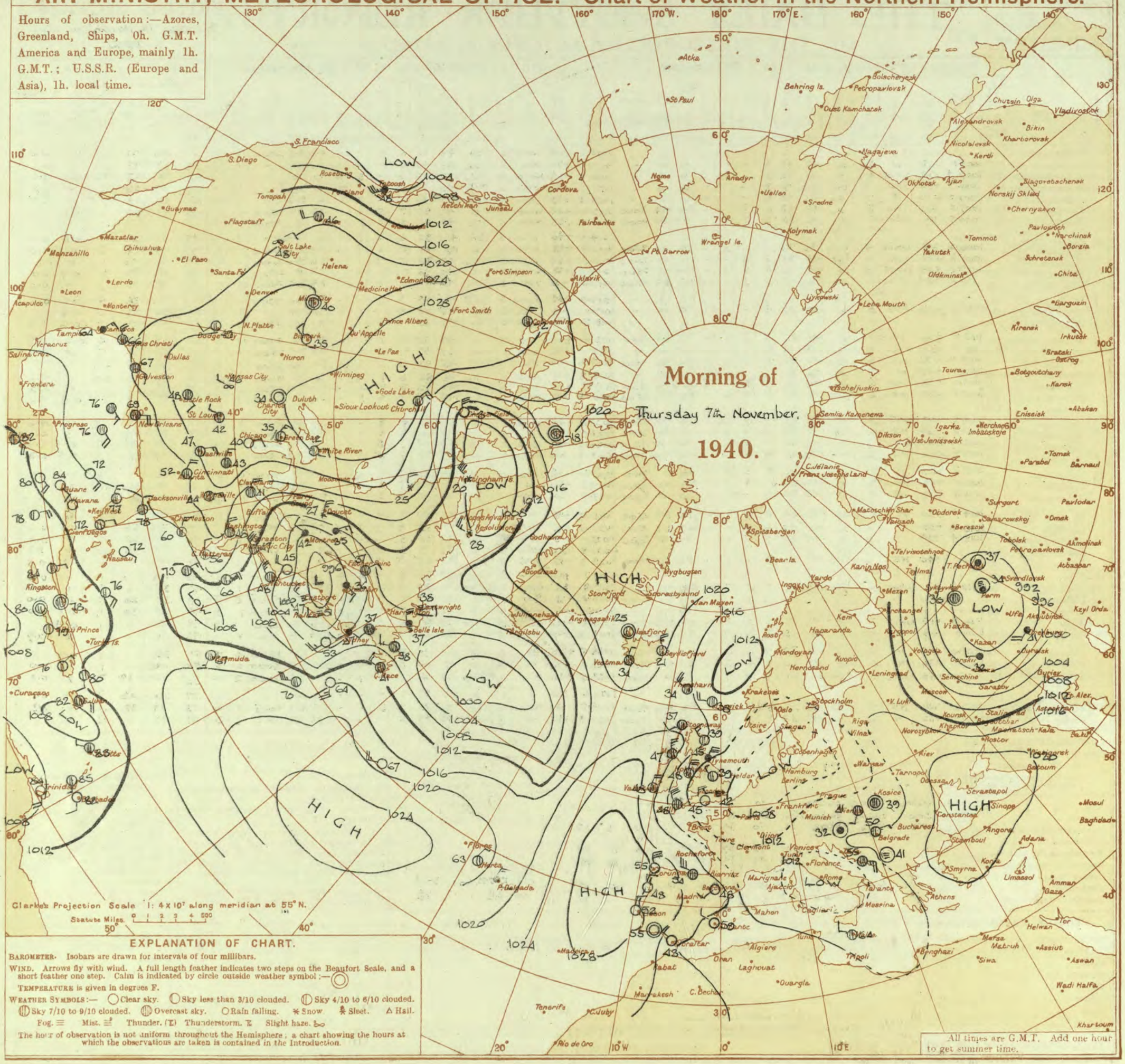
▼ Gale warning issued 0720 7.11.40 for districts 15 and 16.

Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 7th November 1940.

No. 28840

OBSERVATIONS at 1 hr. G.M.T. 7th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1009.1	+28	W	2	m	42	97	4	-	-	-	0	0	-
	S. Farnborough	226	1009.4	+30	WNW	2	m	41	92	5	-	3	-	0	1	-
	Boscombe Down	417	1010.9	+32	N'W	2	f+	42	97	3	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1009.2	+30	N	4	20	45	92	6	-	-	1	0	1	-
	Lympne ...	346	1007.5	+18	SW	3	20	43	92	5	5	-	-	4.6	4.6	3000
	Manston ...	154	1006.5	+16	NW	3	20	46	92	6	5	-	-	9+	9+	1000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1006.2	+18	NNW	4	r0r0	46	92	5	-	2	-	10	10	3500
	Gorleston ...	5	1005.9	+32	NNE	6	c/pr	49	85	6	6	-	-	10	10	1500
	Mildenhall ...	19	1007.7	+24	NNW	3	c/r	44	92	6	5	1	-	4.6	9	2500
	Cranwell ...	240	1010.2	+28	NNW	4	20	39	97	5	5	-	-	2.3	2.3	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1010.2	+28	NNE	3	m	39	97	4	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1012.5	+36	N	5	c	48	85	8	8	-	-	7.8	7.8	1500
	Bristol ...	209	1011.7	+34	NNW	2	20	42	92	5	-	-	-	0	0	-
	Portland Bill ...	32	1009.9	+36	NW	2	bc	48	85	8	5	-	-	4.6	4.6	4000
	Plymouth ...	82	1012.9	+46	N	3	20	46	85	6	-	-	8	0	2.3	-
	The Lizard ...	240	1014.1	+32	NNE	5	bc	45	92	8	8	-	-	4.6	4.6	1500
	Scilly (St. Mary's)	163	1015.1	+38	NNW	6	c/pr	48	92	7	8	6	-	4.6	7.8	1500
	Guernsey ...	175														
6	Pembroke ...	142	1014.2	+24	NNE	3	ir	45	97	7	8	-	-	9+	9+	2500
7	Holyhead ...	26	1013.5	+34	N'E	6	c/pr	48	85	6	9	2	-	7.8	9+	1200
	Chester (Sealand)	16	1012.8	+30	WNW	2	c	45	85	5	5	-	-	9+	9+	3500
8	Manchester ...	70	1012.4	+30	NW	2	m	42	92	4	5	-	-	4.6	4.6	3200
10	Spurn Head ...	29	1008.9	+26	N	5	c	47	95	7	5	6	-	4.6	9	4000
	Catterick ...	175	1012.5	+28	NNW	2	ir	44	92	5	5	1	-	4.6	10	2000
	Tynemouth ...	108	1012.8	+30	NE	6	r	45	92	6	-	2	-	10	10	2000
11	St. Abbs Head	280	1014.7	+30	N	5	cq	46	65	8	4	1	-	4.6	7.8	2500
	Leuchars ...	36	1016.4	+30	-	0	20	40	85	6	5	-	-	2.3	2.3	2500
12	Renfrew (Abbots I.)	19	1018.4	+34	-	0	b	40	85	7	5	-	-	Tr	Tr	3000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1015.1	+40	NE	6	r0r0	45	85	7	6	2	-	4.6	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1019.4	+8	WSW	2	c/pr	37	92	7	5	7	4	7.8	9+	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1016.8	+14	WNW	2	bc	37	75	8	2	4	-	2.3	2.3	1500
16	Lerwick ...	156	1013.6	+6	W	4	c	38	75	7	8	7	-	4.6	7.8	1500
17	Blacksod Point	18	1023.0	+44	N	3	bc	45	75	8	3	-	-	2.3	2.3	1500
18	Malin Head ...	84	1020.4	+34	N	5	bc	47	65	8	2	6	-	2.3	4.6	2500
	Aldergrove ...	268	1019.0	+38	NNW	1	b/pr	39	97	7	8	-	-	1	1	4000
19	Birr Castle ...	173														
20	Valentia Obsy.	30	1023.0	+22	N'E	4	bc/pr	48	75	8	3	-	-	2.3	2.3	4000
	Roches Point	22	1019.2	+30	N	6	b	47	85	8	5	-	-	1	1	4000

OBSERVATIONS at 7 hr. G.M.T. 7th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1005.8	+24	NNW	2	20	40	85	5	5	-	4	4.6	7.8	2500	1	*
Croydon ...	1015.1	+36	NW	2	20	40	92	5	-	4	1	0	2.3	-	1	*
S. Farnborough	1016.4	+40	NW'N	3	20	39	92	5	-	3	6	0	10	-	1	*
Boscombe Down	1017.1	+32	N'W	3	m/f	40	92	4	-	-	2	0	2.3	-	1	*
Calshot (Sthmtn.)	1016.2	+38	N	4	20	44	92	5	-	7	2	0	7.8	-	1	1
Lympne ...	1013.2	+36	WNW	3	c	43	92	7	5	3	-	2.3	7.8	1500	1	§
Manston ...	1012.6	+38	NNW	5	20	45	85	6	2	7	-	1	9	2000		*
Shoeburyness ...	1014.2	+40	N'W	3	bc	41	92	6	-	5	4	0	4.6	-	1	*
Felixstowe ...	1012.9	+42	NNW	3	c	42	85	7	2	4	-	7.8	7.8	3000	1	2
Gorleston ...	1013.5	+44	NE'N	5	20	49	92	6	8	-	-	4.6	4.6	1500	1	4
Mildenhall ...	1014.8	+38	NNW	4	c	40	92	7	5	7	-	7.8	9	2500	1	*
Cranwell ...	1017.0	+38	NNW	4	20	41	97	5	5	-	-	7.8	7.8	2000	1	*
Birmingham ...	1018.2	+34	NNW	3	bcf	40	97	3	5	-	-	4.6	4.6	4000	1	*
Upper Heyford	1017.1	+42	NE	3	m	38	97	4	-	7	6	0	9+	-	1	*
Ross-on-Wye	1018.7	+30	N'W	2	20	43	85	6	5	-	-	9+	9+	2500	1	*
Hartland Point	1018.6	+34	N	5	c	48	85	8	8	-	-	9	9	2000	1	3
Bristol ...	1018.9	+46	NW	1	m	39	97	4	5	7	-	2.3	7.8	2500	1	*
Portland Bill ...	1017.6	+50	NW	3	c	45	92	6	5	7	-	4.6	10	2500	1	2
Plymouth ...	1018.8	+38	NNW	2	20	46	85	6	1	4	-	Tr	1	3000	1	2
The Lizard ...	1019.7	+30	NW	4	c	45	92	8	8	2	-	4.6	7.8	1500	1	2
Scilly (St. Mary's)	1020.4	+32	NNW	5	c	49	75	7	8	1	-	4.6	9	1200	1	4
Guernsey ...																
Pembroke ...	1021.0	+40	NNE	5	cq	46	92	7	8	-	-	9+	9+	2500	1	2
Holyhead ...	1021.2	+42	N	6	c	47	75	8	8	-	-	9+	9+	2700	1	4
Chester (Sealand)	1020.2	+44	NNW	2	c/r	44	85	7	5	-	-	9+	9+	3000	1	*
Manchester ...	1019.8	+38	NNW	2	20	43	85	7	5	-	-	7.8	7.8	3600	1	*
Spurn Head ...	1015.6	+36	N'W	4	c	47	85	7	4	5	-	7.8	9	4000	0	3
Catterick ...	1019.3	+30	N	3	bc/r	41	85	7	8	3	-	2.3	2.3	2000	1	*
Tynemouth ...	1019.5	+30	NNW	5	bc	43	85	8	2	-	-	4.6	4.6	3200	1	3
St. Abbs Head	1018.5	+18	N	5	bcq	41	75	8	4	4	1	2.3	4.6	2500	0	3
Leuchars ...	1020.0	+16	W	3	bc	37	85	8	2	7	-	Tr	2.3	2500	1	*
Renfrew (Abbots I.)	1022.1	+18	W'S	2	bc	33	85	8	-	-	6	0	2.3	-	1	*
Eskdalemuir ...	1021.9	+22	NE'N	2	b	33	75	8	5	-	1	Tr	1	2500	1	*
Point of Ayre ...	1022.3	+32	NNE	5	b	45	65	8	4	-	-	1	1	4000	1	3
Tiree	1021.7	+6	WNW	3	bc	47	65	8	8	-	-	4.6	4.6	2100	0	3
Stornoway ...	1019.8	+6	WSW	2	c/pr	41	85	7	5	7	-	7.8	9+	2000	1	1
Dalwhinnie ...	1021.0	+12	SW	1	c	32	85	8	7	1	-	2.3	7.8	2500	0	*
Aberdeen ...	1018.5	+4	WNW	2	b	37	85	7	5	-	1	Tr	1	4000	1	2
Wick ...	1016.8	-2	W	3	c/pr	38	97	8	5	7	1	4.6	9+	2500	1	2
Lerwick ...	1014.8	+20	NNW	5	c	37	75	8	8	7	-	4.6	9+	1500	1	*
Blacksod Point	1026.5	+20	N	2	b	39	85	8	3	-	-	1	1	1500	0	2
Malin Head ...	1023.5	+18	N	3	c	47	65	8	2	6	-	4.6	7.8	4000	0	3
Aldergrove ...	1023.9	+26	N'W	2	bc/pr	37	85	8	2	1	-	1	2.3	2000	2	*
Birr Castle ...	1026.6	+22	S	1	b	32	97	8	-	-	-	0	0	-	1	*
Valentia Obsy.	1027.7	+24	NE'N	2	bc	42	75	8	5	-	-	2.3	2.3	4000	1	0
Roches Point	1025.8	+32	N	5	b	43	85	8	-	-	-	0	0	-	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 6th Hrs. (36)
London (Kew)	51	40	31	3	0.2	0.0
Croydon ...	52	39	37	0.1	1	0.1
S. Farnborough	54	38	32	Tr	0.1	3.3
Boscombe Down	52	39	36	1	-	5.2
Calshot (Sthmtn.)	53	43	39	1	-	5.5
Lympne ...	52	41	35	1	0.6	5.0
Manston ...						
Shoeburyness ...	48	41	36	7	0.3	0.0
Felixstowe ...	47	41	38	2	0.5	0.0
Gorleston ...	48	45	43	1	11	0.0
Mildenhall ...	48	39	32	5	0.4	0.0
Cranwell ...	48	37	35	3	-	0.0
Birmingham ...	44	39	36	8	0.1	0.0
Upper Heyford	45	38	33	6	0.4	*
Ross-on-Wye	52	42	39	0.1	0.2	1.4
Hartland Point	52	46	45	4	0.3	0.9
Bristol ...	52	39	31	2	Tr	4.4
Portland Bill ...	55	42	*	0.2	-	*
Plymouth ...	55	44	36	0.5	-	4.3
The Lizard ...	54	43	*	1	4	5.2
Scilly (St. Mary's)	54	47	*	2	0.4	4.0
Guernsey ...						
Pembroke ...	52	43	*	0.2	7	4.0
Holyhead ...	51	46	45	0.4	3	0.1
Chester (Sealand)	47	41	35	2	0.4	0.0
Manchester ...	45	39	31	3	0.5	0.3
Spurn Head ...	51	46	*	3	-	1.8
Catterick ...	49	41	36	0.2	1	0.5
Tynemouth ...	52	42	35	1	10	*
St. Abbs Head	49	40	*	1	6	*
Leuchars ...	47	34	26	7	0.5	0.0
Renfrew (Abbots I.)	46	31	25	2	3	0.0
Eskdalemuir ...	48	33	26	0.5	6	0.7
Point of Ayre ...	51	44	*	-	2	0.4
Tiree	48	44	*	1	-	0.0
Stornoway ...	47	35	*	5	1	0.5
Dalwhinnie ...	38	29	22	8	0.3	0.0
Aberdeen ...	45	35	30	18	0.1	0.0
Wick ...	48	33	*	1	0.4	*
Lerwick ...	46	36	*	0.4	2	2.7
Blacksod Point	51	39	*	1	0.2	*
Malin Head ...	50	40	*	1	1	0.0
Aldergrove ...	50	35	29	Tr	7	0.8
Birr Castle ...	47	31	26	2	-	0.1
Valentia Obsy.	53	42	32	3	1	2.3
Roches Point	51	43	*	2	-	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon (24 hrs. ended 9h.)	Weather Night (24 hrs. ended 9h.)	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset. hrs. (Yesterday.)	Humidity 15h. G.M.T. % (Yesterday.)	Humidity 9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew ...	18	crobmoc	cmororo	crocbcmo	51	40	31	3	0.2	0.0	*	*	5
Croydon ...	217	ciroc	cpromo	cmobcmw	52	39	37	0.1	1	0.1	*	*	4
Greenwich (Royal Observatory) ...	149	rrc	croro	cbcmo	50	40	34	3	-	0.0	76	82	5
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	0.0	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	52	42	37	3	*	0.0	85	89	*
Regents Pk. (Botanic Gardens) ...	168	*	*	*	50	41	39	4	0.1	0.0	86	84	*
Camden Square ...	110			*						*	*		*
Kensington ...	80	cre	bcpbc	*	51	41	33	3	0.8		82	88	*
Hampstead Observatory ...	450	or	or	orbc	47		35	2	1	0.0	*	93	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 7th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
0.1	17-24h 6th	<0.1	3-7h 7th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...											*	*		

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6½ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 8th November 1940.

No. 28841

OBSERVATIONS at 13h. G.M.T. 7th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	°Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	1022.1	+16	N'W	4	z	50	65	6	7	-	8	4-6	4-6	2500
	Croydon	1021.1	+20	NW	4	z	49	75	5	8	-	-	4-6	4-6	3000
	S. Farnborough	1022.3	+18	N'W	3	bc	52	65	7	2	4	-	4-6	4-6	2900
	Boscombe Down	1022.9	+12	NNW	4	z	48	75	6	1	-	-	2-3	2-3	2000
	Calshot (Soton.)	1022.1	+18	N'E	4	b	51	75	7	1	-	-	Tr	Tr	3200
	Lympne	1020.0	+30	NNW	4	c	49	85	8	2	-	-	7-8	7-8	2000
	Manston	1020.2	+32	N'W	4	c	49	85	8	8	-	-	7-8	7-8	3000
2	Shoeburyness	1020.9	+24	N'W	2	bc	51	85	6	7	4	-	2-3	4-6	4000
	Felixstowe	1020.0	+28	N'W	4	bc	53	65	8	2	-	1	4-6	4-6	3000
	Gorleston	1020.1	+28	N'E	5	c/pr	51	85	7	8	-	-	7-8	7-8	1800
	Mildenhall	1021.5	+26	NNW	2	c/pr	46	92	9	9	-	-	9	9	1500
	Cranwell	1022.7	+18	N	4	z	49	75	6	5	-	-	4-6	4-6	3500
3	Birmingham	1024.3	+14	NNW	3	z	46	85	5	5	-	-	7-8	7-8	4000
	Upper Heyford	1022.8	+18	N	4	z	47	85	6	2	-	-	4-6	4-6	1500
4	Ross-on-Wye	1023.9	+10	N'W	3	c	47	75	6	5	-	-	9+	9+	2500
5	Hartland Point	1024.9	+22	NNE	3	c	49	75	8	2	6	-	4-6	7-8	1500
	Bristol	1024.6	+20	N	2	c	47	85	7	8	-	-	9+	9+	2000
	Portland Bill	1023.2	+20	N	2	bc	51	92	7	5	-	-	4-6	4-6	4000
	Plymouth	1024.5	+14	NNW	3	b	52	75	8	1	-	1	1	1	3000
	The Lizard	1025.4	+20	N	3	bc	53	65	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1026.2	+18	N	4	bc	52	75	8	8	6	-	2-3	2-3	1800
	Guernsey														
6	Pembroke	1025.2	+10	NNE	4	bc	50	65	8	8	-	-	4-6	4-6	3000
7	Holyhead	1025.5	+10	NNW	3	bc	49	65	9	1	-	6	4-6	4-6	3500
	Chester (Sealand)	1024.9	+14	W'S	3	bc	48	65	8	7	-	1	2-3	2-3	3000
8	Manchester	1024.4	+20	NW'W	3	b	48	65	7	1	-	-	Tr	Tr	3500
10	Spurn Head	1021.4	+22	NNW	4	c	49	75	7	4	3	1	4-6	7-8	4000
	Catterick	1023.4	+8	WNW	2	c	47	55	8	1	-	2	Tr	7-8	2500
	Tynemouth	1022.6	+6	W	3	bc	44	65	7	2	3	2	2-3	4-6	3200
11	St. Abbs Head	1019.7	-8	NNW	5	c	44	65	9	4	4	8	7-8	7-8	2500
	Leuchars	1020.5	-6	SW	3	c	44	85	7	5	7	-	4-6	9+	4500
12	Renfrew (Abbotsinch)	1022.4	-6	W	4	c	49	65	9	8	-	6	4-6	9+	2000
	Eskdalemuir	1022.2	0	WNW	4	c	45	65	8	7	4	6	1	7-8	2500
	Point of Ayre	1024.5	+6	NW'N	4	bc	49	75	8	4	4	8	1	4-6	4000
13A	Tiree	1021.7	-2	W'N	5	c	48	75	8	8	-	-	9	9+	1500
13B	Stornoway	1019.4	-10	WSW	2	c/pr	43	85	8	8	7	7	2-3	10	1600
15	Dalwhinnie	1020.5	-4	WSW	3	ir	38	92	7	5	-	-	10	10	1500
	Aberdeen	1018.8	-2	WNW	3	c	44	85	7	8	7	3	7-8	9	2500
	Wick	1018.2	0	W	3	c	40	92	8	5	7	9	4-6	9	1500
16	Lerwick	1016.2	+4	NNW	4	c	37	65	8	5	7	-	7-8	9	1500
17	Blacksod Point	1026.9	-4	WS	1	bc	51	65	8	2	-	4	2-3	4-6	2500
18	Malin Head	1024.0	-4	NW'W	2	c	49	55	8	5	6	-	4-6	7-8	5700
	Aldergrove	1025.2	-6	W'S	3	c	48	65	8	1	-	4	Tr	7-8	3500
19	Birr Castle	1027.5	-2	SW	1	c	50	65	7	-	-	5	0	9	-
20	Valentia Obsy. †	1028.9	-4	S	2	bc	53	65	9	1	-	2	1	4-6	-
	Roches Point	1028.4	+2	N	3	bc	50	75	8	1	-	5	1	2-3	4000

OBSERVATIONS at 18h. G.M.T. 7th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	°Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Form. Med. (24)	Form. High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1025.4	+16	NW'N	2	z	47	75	6	5	3	-	7-8	9	2500	1	*
	Croydon	1025.0	+18	NNW	2	z	46	85	5	5	-	-	9+	9+	5000	1	*
	S. Farnborough	1026.8	+20	W'N	1	z	46	85	6	5	-	-	4-6	4-6	4500	1	*
	Boscombe Down	1026.1	+18	-	0	m	48	85	4	5	-	-	2-3	2-3	5000	1	*
	Calshot (Soton.)	1025.5	+20	NW	2	z	47	85	5	5	-	-	4-6	4-6	1500	1	1
	Lympne	1025.0	+30	N	2	c	43	92	7	8	6	-	4-6	7-8	2000	1	5m
	Manston	1024.0	+10	NNW	3	c	47	92	7	2	-	-	7-8	9+	2500		*
2	Shoeburyness	1024.8	+26	NNW	2	c	45	92	7	5	3	-	4-6	7-8	4000	1	*
	Felixstowe	1024.0	+22	NW	2	z	42	85	6	-	-	1	0	Tr	600	1	0
	Gorleston	1028.1	+10	NW'N	2	bc	46	75	6	5	-	-	4-6	4-6	2500	1	2
	Mildenhall	1024.5	+12	W'N	2	c	39	92	8	5	6	7	1	10	3000	1	*
	Cranwell	1024.9	+8	W	2	z	39	85	5	-	3	-	0	4-6	-	1	*
3	Birmingham	1026.4	+14	NW	2	fg	41	85	4	-	-	-	0	0	-	1	*
	Upper Heyford	1026.8	+16	-	0	z	42	85	5	5	-	-	2-3	2-3	5000	1	*
4	Ross-on-Wye	1026.0	+12	N	1	b	42	85	8	5	-	-	Tr	Tr	2500	1	
5	Hartland Point	1026.6	+8	N	2	bc	48	75	8	8	4	-	4-6	4-6	2500	1	3
	Bristol	1026.9	+10	W'S	1	z	44	85	5	5	-	-	9	9	3000	1	
	Portland Bill	1027.5	+20	N	2	bc	47	92	7	5	-	-	4-6	4-6	2500	1	2
	Plymouth	1027.0	+10	NNE	2	z	47	75	6	4	-	8	2-3	2-3	5000	0	1
	The Lizard	1027.0	+6	N	3	bc	46	85	8	8	4	-	2-3	4-6	2000	1	2
	Scilly (St. Mary's)	1027.8	+6	N	2	bc	47	75	8	8	-	-	2-3	2-3	1500	1	2
	Guernsey																
6	Pembroke	1027.5	+4	NW'N	2	bc	45	75	9	4	4	8	1	2-3	3000	1	1
7	Holyhead	1028.0	+6	W	3	c	47	65	7	1	-	-	7-8	7-8	3500	1	2
	Chester (Sealand)	1025.5	+2	SW'N	1	bc	42	75	7	5	-	-	2-3	2-3	3000	1	*
8	Manchester	1025.0	+6	WSW	2	z	37	85	6	5	3	-	Tr	1	4000	1	*
10	Spurn Head	1022.8	0	SW'W	3	bc	43	85	7	-	1	-	0	2-3	-	0	2
	Catterick	1022.0	-2	W'S	2	z	42	55	6	-	4	2	0	2-3	-	0	
	Tynemouth	1022.6	0	W	3	bc	44	75	6	2	3	-	2-3	4-6	3000	1	2
11	St. Abbs Head	1018.6	-2	WNW	6	cq	46	75	9	8	5	-	4-6	7-8	2500	0	3
	Leuchars	1018.4	-2	W	3	c	44	75	8	5	7	-	4-6	9	3200	1	*
12	Renfrew (Abbotsinch)	1021.7	-2	W'S	2	c/pr	43	85	7	8	3	2	4-6	7-8	1600	1	*
	Eskdalemuir	1022.2	-2	W'N	5	bc	41	75	8	5	7	-	2-3	4-6	1500	1	*
	Point of Ayre	1024.4	0	NW'W	4	bc	47	75	8	4	4	1	1	2-3	2500	0	2
13A	Tiree	1020.4	-4	WNW	4	c/pr	48	75	7	8	-	-	7-8	7-8	1500	1	4
13B	Stornoway	1018.1	-8	WSW	2	pr	42	92	8	8	7	-	9	10	900	1	2
15	Dalwhinnie	1018.2	-4	WSW	2	ir	38	85	7	5	1	-	4-6	9	800	1	*
	Aberdeen	1018.1	-4	WNW	1	c/r	41	85	6	5	7	-	Tr	9	4000	1	2
	Wick																
16	Lerwick	1016.8	0	NNW	4	c/s	38	85	7	8	2	-	7-8	10	800	4	*
17	Blacksod Point	1024.4	-14	WSW	2	bc	49	75	8	4	-	9	2-3	4-6	2500	0	1
18	Malin Head	1022.5	-6	NW'W	4	c/pr	46	85	7	5	6	-	4-6	9	4000	0	3
	Aldergrove	1024.7	-2	SW'W	3	c	48	85	9	-	4	6	0	7-8	-	0	*
19	Birr Castle	1027.2	-4	SW	1	bc	37	92	8	5	-	-	4-6	4-6	2500	1	*
20	Valentia Obsy. †	1027.8	-10	SSE	3	c	46	75	9	5	7	8	1	9	4000	1	0
	Roches Point	1027.7	-2	W	2	bc	45	75	8	-	-	5	0	4-6	-	1	2

PAST 24 HOURS.

District	Stations	Weather. 7h.—13h. (37)	13h.—18h. (38)	18h. to 1h. (39)	1h.—7h. (40)
1	London (Kew)	bcm	bccm	cbcmow	bcwffx
	Croydon		cm	cmobmw	bmw
	S. Farnborough	cbmbc	bccbm	bcbFx	bFxbcm
	Boscombe Down	bmbcm	bcmcm	bmbcmw	bmjfxif
	Calshot (Soton.)	bcmb		cmbmo	bcmobmow
	Lympne	cbcpr	prrc	bmwFF	
	Manston	cpcbc	bcpgc	bmwf	bwfbccmo
2	Shoeburyness	bcmpbc	bcmbc	cbwxm	bmbfx
	Felixstowe	cpvbc	cprbm	bmow	bmowcm
	Gorleston	bccpr	cpgbc	bcb	bbcxc
	Mildenhall	cpgmprv	cpgbcvc	cbcmwbmx	bmobcmox
	Cranwell		bccbcm	bcbmo	bbcmo
3	Birmingham	fbcc	cb	b	bcx
	Upper Heyford	cmbccm	cbcm	bbcmbcmo	bccmbcmx
4	Ross-on-Wye	c	cbccbcb	b	bx
5	Hartland Point	c	cbc	bc	bcc
	Bristol	bcmfmcw	cw, bcm	bmw, bbcm	bbcmowx
	Portland Bill	cbc	bcbc	bm	c
	Plymouth	bcm, pgcb	bbcbcm	bcmobcm	bcmomw
	The Lizard	bc	pgbc	bcc	bcc
	Scilly (St. Mary's)	cbc	b	bcb	bbcc
	Guernsey				
6	Pembroke	cqprbc	bc	bc	cv
7	Holyhead	cbbc	bcc	cbc	bcc
	Chester (Sealand)	cmbbc	bcbbc	bbcbmo	bbcmow
8	Manchester	cmbzb	bbcm	bmofmwcf	bcmcmmo
10	Spurn Head	cbcc	cbc	bcb	bc
	Catterick	bcbcy	cybcym	bcymoc	c
	Tynemouth		bc	qwrbc	bc
11	St. Abbs Head	bc	cq	cbcq	bcq
	Leuchars	bxbcc	cmc	ccwbw	bwcw
12	Renfrew (Abbotsinch)	bbcxc	cpgpr	cpro	proPRbc
	Eskdalemuir	bxbcc	cbc	cpro	cmo
	Point of Ayre	bc	bc	b	c
13A	Tiree		PRbc	bcpr	cir
13B	Stornoway	cpr	cPR	cprbc	bccpr
15	Dalwhinnie	circo	circ	*	circo
	Aberdeen	bcc	circc	czo	cprc
	Wick	cpgc		cprob	bcroc
16	Lerwick	c	cisS	cps	cps
17	Blacksod Point	cbc	bc	c	c
18	Malin Head	cbcbcyc	cprcprc	cprcprc	c
	Aldergrove	c	cbcc	cbcc	cbcc
19	Birr Castle	bbcc	cbc	bcb	bcc
20	Valentia Obsy. †	bbcv	bcvcv	cv	bccv
	Roches Point	bc	bc	bcc	c

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog „ less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m, mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s$_o$, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s$_o$/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r$_o$, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
⊕ Solar halo. ◐ lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large Cu (or Cb) and Sc.
9 Large Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

† Sea disturbance reported from Dungeness.

COLUMN 29—STATE OF GROUND.

0 .. Ground dry.
1 .. „ wet.
2 .. „ flooded.
3 .. „ frozen hard and dry.
4 .. „ partly covered with snow or hail.
5 .. „ covered with ice or glazed frost.
6 .. „ covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. „ covered with snow, less than 6 ins., but ground frozen.
9 .. „ covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

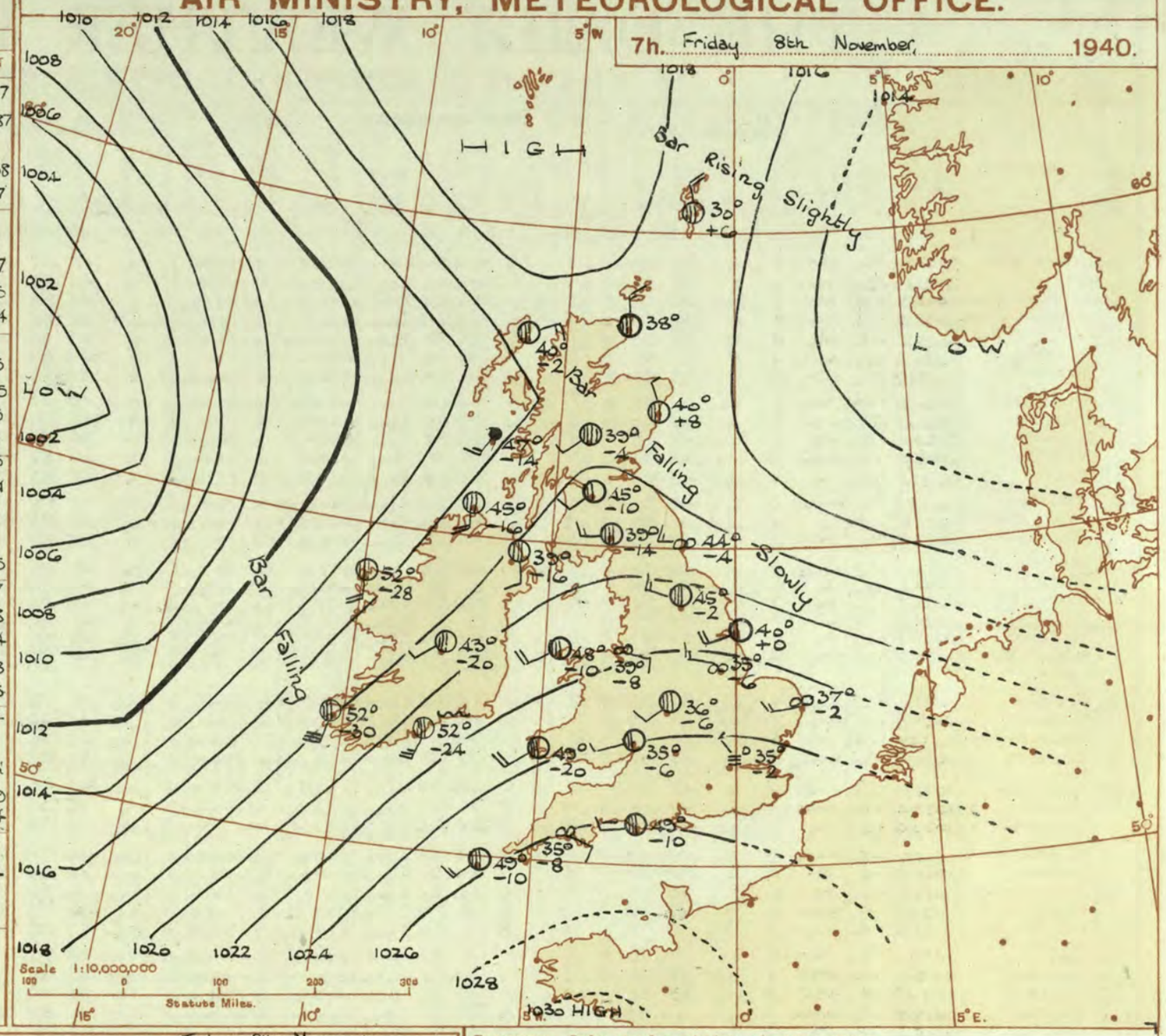
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 7th November			18h. G.M.T.			01h. G.M.T. 8th November			07h. G.M.T.		
III	$C_L C_M$	$ww V h N_h$	DDFWN	$C_L C_M$	$ww V h N_h$	DDFWN	$C_L C_M$	$ww V h N_h$	DDFWN	$C_L C_M$	$ww V h N_h$	DDFWN
109	52	02864	27326	52	02755	00087	5-	22748	03468	5-	71647	32377
115	52	62835	12388	53	10944	24365	52	88834	32487	52	81844	04487
203												
206	87	02854	22327	52	61845	25267	5-	25858	24283	8-	81848	00058
210	87	81846	26487	5-	25807	22387	5-	25857	23387	56	02856	00087
220												
230	87	25855	24488	86	81746	24487	86	01858	22383	8-	02855	30188
245	57	02964	24327	57	22864	22168	53	01882	23213	5-	02867	22227
260	07	05690	22318	50	05654	22287	5-	02875	22315	89	81864	24385
277	20	01853	27414	14	00951	25412	50	01864	24424	57	01862	23424
279												
285	13	01852	30615	43	01853	30515				20	25745	28485
288	80	02752	26215	04	01890	20224	07	02790	20316	07	02890	16225
273										13	01553	16405
301	10	00762	30313	80	17654	28314	5-	01765	28315	59	02753	24415
321				00	05590	26112	07	08490	28313	07	05590	22315
299	8-	25744	32484	57	05653	22214	50	05543	22213	54	08443	22214
292	10	01862	32415	04	01790	24213	57	02665	23218	44	01861	22113
310				--	01633	24413						
316	84	05654	30314	04	05590	24214	50	05563	00003	54	05563	24215
333	20	00862	03313	40	01952	00014	40	02761	26113	27	02864	25327
334	--	01853	24103							--	03544	04128
340	20	05663	30313	50	05350	20204	00	01790	24114	53	01972	22314
136	86	25853	01484	86	01863	29214	00	05590	22210	54	05661	23303
336	--	02853	32415							--	02753	32415
350				00	05590	24210				07	05590	16214
368												
379	5-	05547	32327	00	05590	28110	03	05690	26101	03	05690	24213
390	84	01754	30484	50	08453	26113	00	08490	23210	--	48109	00049
382	23	05653	32314	50	08461	00001	04	08490	00001	57	41463	32144
438	53	01743	32414							50	02545	25315
430	10	05653	32403	5-	05577	30217	00	08490	28104	03	08490	00014
409	26	01854	32484	10	05752	00012	10	00763	18113	13	02852	18126

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Friday 8th November
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light southwest wind backing south and freshening, veering southwest later. Fair at first; rain spreading from West during night. Average temperature.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Freshening south wind, strong on coasts, veering southwest. Fair at first, rain during night followed by bright intervals and showers. Average temperature.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Freshening south to southeast wind, strong on coasts veering southwest. Fair at first, rain later. Average temperature.
13 { A. W. Scotld B. N.W. Scotland.	Freshening southeast to east wind, strong on coasts tending to veer. Local rain at first; a period of continuous rain later: cold.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Fresh south wind, strong on coasts veering southwest. Rain at first; bright intervals and showers later. Average temperature.

GENERAL INFERENCE.

A wedge of high pressure is crossing the British Isles and a trough of low pressure is approaching West Ireland. Weather will be fair to-day over most of Great Britain but rain will spread eastward tonight probably reaching the East tomorrow morning.

FURTHER OUTLOOK.

Unsettled.

Gale warnings issued 0700 8.11.40 for districts 17 and 20 and at 0810 8.11.40 for districts 12 (part) 13 A & B and 19.

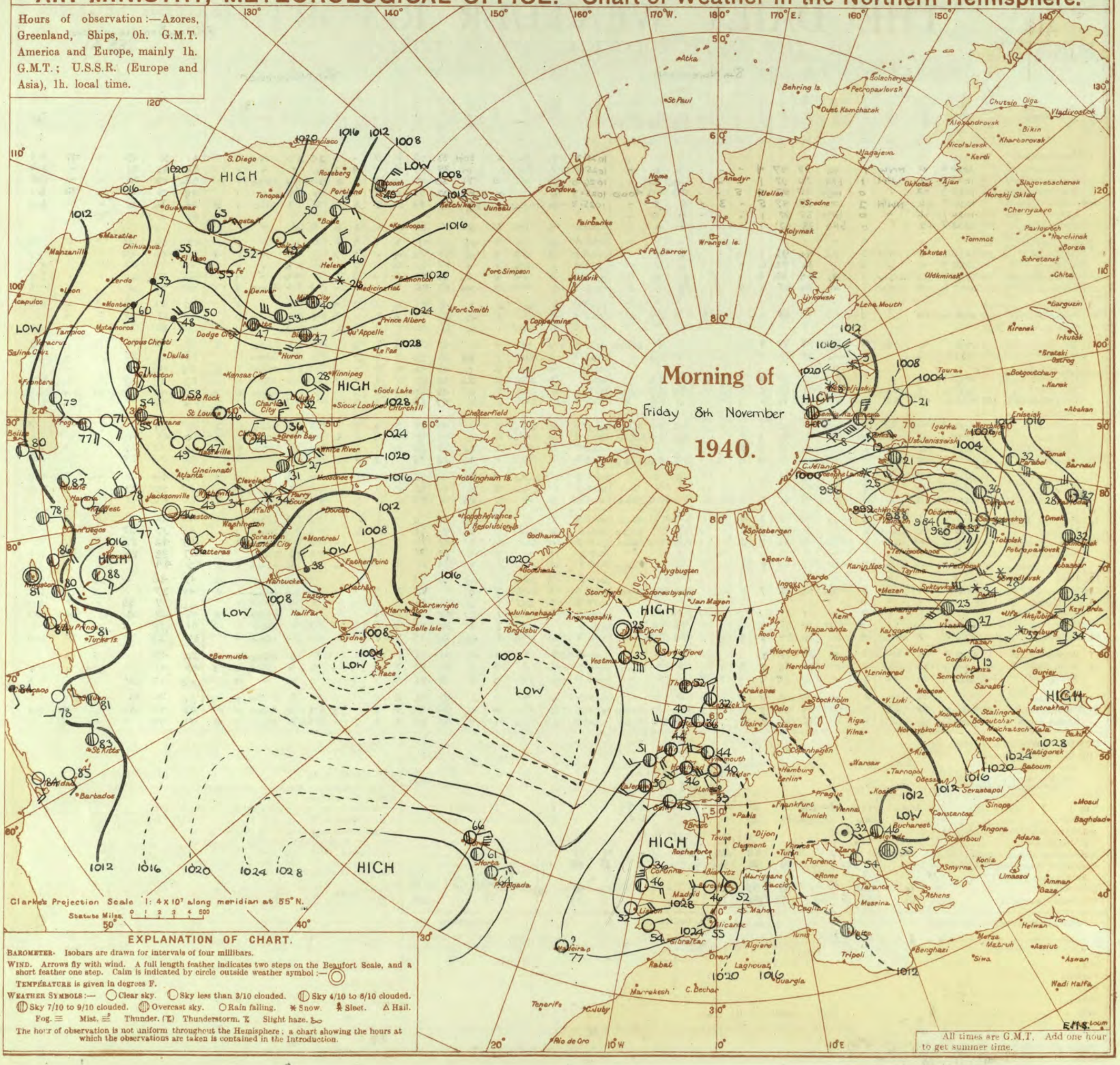
Forecasts issued at 1030 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 8/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 8th November 1940.

No. 28841

OBSERVATIONS at 1 hr. G.M.T. 8th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1026·6	0	NNW	1	m	39	97	4	-	-	-	0	0	-
	S. Farnborough	226	1027·1	-2	W'N	1	bF+	30	97	1	-	-	-	0	0	-
	Boscombe Down	417	1027·3	-2	-	0	mjf	35	97	4	5	-	-	2-3	2-3	4000
	Calshot (Sthmtn.)	8	1026·7	+2	NW'N	2	Zo	39	97	5	-	3	-	0	9	-
	Lympne ...	346	1026·1	+6	-	0	bF+	35	97	1	-	-	-	0	0	-
	Manston ...	154	1025·7	+2	-	0	bF+	38	97	1	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1025·1	0	W'N	3	zo	40	92	5	-	-	-	0	0	-
	Gorleston ...	5	1023·8	0	W	3	b	36	92	6	-	-	-	0	0	-
	Mildenhall ...	19	1024·9	-2	WSW	3	Zo	34	92	6	-	-	-	0	0	-
	Cranwell ...	240	1024·6	-4	WNW	3	zo	36	97	5	5	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1026·6	+2	W	2	Zo	31	97	5	-	-	8	0	7-8	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1026·7	-6	WNW	2	b	47	75	8	1	-	-	1	1	2500
	Bristol ...	209	1027·3	-2	-	0	Zo	35	92	5	-	3	-	0	2-3	-
	Portland Bill ...	32														
	Plymouth ...	82	1028·1	-2	E	1	m	35	97	4	-	-	8	0	4-6	-
	The Lizard ...	240	1027·6	-8	NW	2	c	44	85	8	8	6	-	7-8	7-8	2000
	Scilly (St. Mary's)	163	1028·0	-8	SW	1	bc	45	75	8	-	4	-	0	2-3	-
	Guernsey ...	175														
6	Pembroke ...	142	1026·3	-4	SW'W	3	bc	47	65	7	2	7	-	2-3	4-6	3000
7	Holyhead ...	26	1024·1	-12	SW'W	4	bc	46	75	8	7	-	-	4-6	4-6	2800
	Chester (Sealand)	16	1024·6	-8	SW	1	zo	40	75	5	5	-	-	1	1	4000
8	Manchester ...	70	1024·2	-8	SW	1	m/f	35	92	4	5	3	-	2-3	4-6	4000
10	Spurn Head ...	29	1021·4	-4	SW'W	5	b	40	85	6	-	-	-	0	0	-
	Catterick ...	175	1021·3	-14	W	4	c	43	75	7	-	7	-	0	9	-
	Tynemouth ...	108	1020·8	-6	W	4	bc	44	85	7	8	-	-	4-6	4-6	3200
11	St. Abbs Head	280	1017·3	-6	W	7	bcq	44	75	8	4	4	-	2-3	4-6	2500
	Leuchars ...	36	1017·8	-10	WSW	2	bc	41	85	7	5	-	-	2-3	2-3	3500
12	Renfrew (Abbots I.)	19	1019·6	-14	S'W	1	bc/pr	42	92	7	5	-	-	4-6	4-6	4500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1022·7	-10	WNW	5	b	47	75	8	4	-	5	Tr	1	4000
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1017·6	-4	W	3	bc/pr	40	92	7	5	-	-	4-6	4-6	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1015·2	-10	W	2	bc/pr	36	97	7	6	-	-	4-6	4-6	800
16	Lerwick ...	156	1016·5	-2	NNW	4	c	32	85	8	8	6	-	4-6	7-8	1500
17	Blacksod Point	18	1019·8	-12	SW	3	c	51	85	8	-	7	-	0	9	-
18	Malin Head ...	84	1019·9	-20	S'W	4	c	44	85	7	8	-	-	9	9	2500
	Aldergrove ...	268	1022·4	-14	SW	3	c	41	85	8	-	7	8	0	9	-
19	Birr Castle ...	173		-18	SW	2	b	40	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1023·2	-22	S'W	4	c	50	85	9	5	-	7	4-6	9+	4000
	Roches Point	22	1025·5	-16	WSW	3	c	45	85	8	5	-	-	7-8	7-8	2500

OBSERVATIONS at 7 hr. G.M.T. 8th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1025·2	-2	SW	2	bcf+	33	92	2	5	-	-	2-3	2-3	2500	1	*
Croydon ...	1025·7	-2	NW	1	m	35	97	4	-	4	1	0	1	-	1	*
S. Farnborough	1026·0	-6	-	0	m/f	30	97	4	5	3	2	2-3	4-6	2500	1	*
Boscombe Down	1025·8	-6	-	0	cF+	32	97	1	-	-	-	0	7-8	-	1	*
Calshot (Sthmtn.)	1025·8	-6	NW'W	1	bcjf	39	92	5	5	3	5	Tr	2-3	<150	1	0
Lympne ...																*
Manston ...	1025·0	-4	WSW	3	zo	37	85	5	-	3	6	0	9	-		*
Shoeburyness ...	1025·4	-6	W'S	1	cf	39	97	3	-	4	7	0	10	-	1	*
Felixstowe ...	1024·5	-2	W'S	3	m	37	85	4	-	4	7	0	10	-	1	1
Gorleston ...	1023·1	-2	W'S	1	c	37	92	6	-	7	-	0	7-8	-	1	2
Mildenhall ...	1023·7	-2	SW	3	Zo	34	92	6	-	7	1	0	4-6	-	1	*
Cranwell ...	1023·3	-6	W'N	3	zo	35	85	5	5	-	-	4-6	4-6	2000	1	*
Birmingham ...	1024·0	-6	SW	2	c	36	85	6	-	7	4	0	7-8	-	1	*
Upper Heyford	1025·4	-8	SW	2	zo	32	97	6	5	-	8	2-3	4-6	4000	3	*
Ross-on-Wye	1024·4	-6	WSW	1	bc	35	92	7	-	7	2	0	2-3	-	1	*
Hartland Point	1023·6	-6	W	4	c	49	75	8	5	6	-	4-6	7-8	2500	1	3
Bristol ...	1025·8	-2	SSE	1	bc	35	92	7	5	7	-	Tr	2-3	3000	1	*
Portland Bill ...	1025·1	-10	W	2	c	49	92	8	5	-	-	7-8	7-8	4000	1	2
Plymouth ...	1026·1	-8	ESE	2	Zo	35	97	5	1	-	7	2-3	10	2800	0	1
The Lizard ...	1025·7	-6	SW	3	c	48	85	8	8	2	-	9	10	1500	0	2
Scilly (St. Mary's)	1025·3	-10	SW	3	c	49	65	8	8	7	3	4-6	7-8	1600	1	2
Pembroke ...	1022·5	-20	SW'W	4	c	49	65	9	8	7	-	7-8	9+	3000	1	3
Holyhead ...	1021·4	-10	SW'W	4	c	48	75	8	7	3	6	4-6	9+	2800	1	3
Chester (Sealand)	1022·8	-8	E'S	2	Zo	39	85	6	5	3	-	4-6	7-8	4000	1	*
Manchester ...	1022·5	-6	SSW	1	Zo	38	85	5	5	7	-	2-3	10	5500	1	*
Spurn Head ...	1020·5	0	SW'W	4	bc	40	85	7	-	1	1	0	2-3	-	0	3
Catterick ...	1019·9	-2	WNW	3	c	45	75	8	5	7	-	2-3	9	5500	0	*
Tynemouth ...	1019·3	-4	W	3	Zo	44	85	6	2	3	-	4-6	4-6	3200	1	2
St. Abbs Head	1015·8	-8	W	6	cq	45	75	9	4	5	-	2-3	7-8	2500	0	3
Leuchars ...	1016·6	-2	ESE	1	c	40	92	7	5	3	-	4-6	7-8	3500	1	*
Renfrew (Abbots I.)	1017·9	-10	SW	2	c	45	92	8	8	-	-	7-8	7-8	2500	1	*
Eskdalemuir ...	1018·8	-14	W	3	c	39	92	7	5	7	-	4-6	10	2500	1	
Point of Ayre ...	1019·9	-12	WSW	3	c	44	85	8	4	7	6	Tr	10	2500	0	2
Tiree ...	1014·7	-14	SW'S	3	dd	47	97	7	-	2	-	10	10	1500	1	3
Stornoway ...	1017·0	-2	ENE	3	c	40	85	7	5	-	-	7-8	7-8	2000	1	2
Dalwhinnie ...	1017·3	-4	SW	1	o	39	92	8	5	1	-	9	10	1500	1	*
Aberdeen ...	1016·4	+8	N'W	1	c	40	92	7	8	-	-	9	9	2500	1	2
Wick ...	1016·6		N	3	c	38	85	8	5	7	-	7-8	9	1500	1	2
Lerwick ...	1016·3	+6	N'W	4	c/ps	30	85	8	8	7	-	4-6	7-8	1500	4	*
Blacksod Point	1014·4	-28	S	4	cq	52	85	8	3	-	-	9	9	2500	1	3
Malin Head ...	1016·1	-16	S	4	c	45	85	7	8	-	-	9	9	1500	0	3
Aldergrove ...	1019·0	-16	S'E	2	c	39	92	7	-	7	7	0	9+	-	1	*
Birr Castle ...	1019·0	-20	SW	1	c	43	92	8	5	-	-	9	9	2500	1	*
Valentia Obsy.	1017·2	-30	S'W	6	c	52	85	9	5	-	8	7-8	10	2500	0	5
Roches Point	1020·2	-24	SSW	5	c	52	85	8	6	7	-	7-8	9	1500	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 7th hrs. (36)
London (Kew)	41	31	23	-	Tr	4·4
Croydon ...	51	33	31	-	-	2·4
S. Farnborough	52	28	23	-	-	4·5
Boscombe Down	48	31	25	-	Tr	6·1
Calshot (Sthmtn.)	52	36	31	-	-	6·4
Lympne ...	51			Tr		
Manston ...						
Shoeburyness ...	53	36	25	-	-	5·2
Felixstowe ...	53	36	32	1	-	3·7
Gorleston ...	52	35	32	0·1	-	4·4
Mildenhall ...	50	33	25	1	-	2·8
Cranwell ...	49	35	31	-	-	4·8
Birmingham ...	46	35	22	*	-	0·4
Upper Heyford	47	31	22	-	-	*
Ross-on-Wye	40	32	26	-	-	0·8
Hartland Point	51	45	36	Tr	-	2·8
Bristol ...	48	33	25	-	-	1·7
Portland Bill ...			*	-	-	*
Plymouth ...	54	43				
The Lizard ...	53	34	29	Tr	-	5·3
Scilly (St. Mary's)	55	42	*	Tr	-	6·8
Guernsey ...	53	43	*	-	-	4·5
Pembroke ...	51	44	*	1	-	5·5
Holyhead ...	50	45	41	-	-	7·3
Chester (Sealand)	48	38	26	-	-	7·1
Manchester ...	48	35	25	-	-	6·6
Spurn Head ...	50	40	*	Tr	-	4·2
Catterick ...	47	39	33	-	-	7·7
Tynemouth ...	45	42	37	-	-	*
St. Abbs Head	46	42	*	-	-	*
Leuchars ...	45	37	28	-		0·6
Renfrew (Abbots I.)	49	42	33	1	3	3·1
Eskdalemuir ...	47	38	36	-	0·4	6·1
Point of Ayre ...	50	44	*	-	-	7·5
Tiree ...	49	40	*	4	3	0·1
Stornoway ...	45	37	*	4	0·5	8·0
Dalwhinnie ...	40	37	33	1	1	0·0
Aberdeen ...	45	39	33	0·1	0·2	0·3
Wick ...	41	(32)	*		1	*
Lerwick ...	39	29	*	0·3	Tr	0·0
Blacksod Point	52	47	*	-	-	*
Malin Head ...	49	41	*	0·3	1	3·2
Aldergrove ...	48	37	31		-	6·6
Birr Castle ...	51	36	31	-	-	5·0
Valentia Obsy.	53	42	31	-	Tr	7·0
Roches Point	51	44	*	-	-	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h. other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon (24 hrs. ended 9h.)	Weather Night (24 hrs. ended 9h.)	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset. hrs. (Yesterday.)	Humidity 15h. G.M.T. % (Yesterday.)	Humidity 9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew ...	18	bcmo	becmo	bcmjuffx	41	31	23	-	Tr	4·4	*	*	2
Croydon ...	217		cmo	cmobmw	51	33	31	-	-	2·4	*	*	5
Greenwich (Royal Observatory) ...	149												
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	52	35	33	Tr			81	97	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	51	35	26	-	-		73	95	*
Camden Square ...	110			*						*	*		*
Kensington ...	80	bc	bec	*	48	35	25	-	*		77	98	*
Hampstead Observatory ...	450	bc	bc	bc	49	35	28	-	-		*	94	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 8th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
0·2	20-24h 7th	<0·1	12-14h 6th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...														

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 9th November 1940.

No. 28842.

OBSERVATIONS at 13h. G.M.T. 8th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1022.7	-18	SW	3	c	48	65	7	2	5	6	4-6	7-8	2500
	Croydon ...	1023.0	-18	W	1	z	50	55	5	7	4	2	2-3	4-6	3500
	S. Farnborough	1023.3	-18	SW	4	c	50	65	8	1	4	9	1	7-8	3500
	Boscombe Down	1023.4	-24	SSW	2	c	48	75	7	8	7	-	4-6	9	2500
	Calshot (Soton.)	1023.1	-22	SW	4	bc	53	65	8	7	4	2	2-3	4-6	2800
	Lympne ...	1023.0	-22	W'S	3	bc	48	65	8	-	4	3	0	2-3	-
	Manston ...	1023.0	-18	W	3	c	50	55	8	1	-	6	Tr	9	3000
2	Shoeburyness ...	1022.9	-18	WSW	2	bc	50	75	5	-	4	4	0	2-3	-
	Felixstowe ...	1022.1	-18	W'S	3	z_0	47	65	6	-	7	6	0	7-8	1600
	Gorleston ...	1021.3	-14	W	3	c	48	85	6	-	3	-	0	7-8	-
	Mildenhall ...	1021.3	-20	SW'W	4	c	46	75	8	-	9	4	0	7-8	-
	Cranwell ...	1020.7	-22	WSW	4	z_0	46	75	6	-	-	8	0	7-8	-
3	Birmingham	1021.1	-16	SW	2	bc	46	75	7	5	-	-	4-6	4-6	7200
	Upper Heyford	1022.7	-18	SSW	3	z_0	47	75	6	-	4	6	0	9	-
4	Ross-on-Wye ...	1021.0	-20	SW'S	3	c_0	48	75	7	1	-	7	1	9+	2500
5	Hartland Point	1019.5	-28	WSW	3	c	50	75	8	2	7	8	4-6	7-8	2000
	Bristol ...	1022.2	-18	SSW	3	c	49	65	8	1	7	7	Tr	9+	3000
	Portland Bill ...	1022.1	-20	SW	3	c	58	92	8	5	4	-	4-6	9	4000
	Plymouth ...	1022.0	-28	WSW	3	c	52	65	8	8	3	6	7-8	9+	3500
	The Lizard ...	1021.3	-24	SSW	4	bc	53	75	8	8	6	-	4-6	4-6	2600
	Scilly (St. Mary's)	1020.3	-26	SSW	4	c	53	65	8	8	7	-	4-6	9+	1800
	Guernsey ...														
6	Pembroke ...	1013.2	-14	SW	4	cq	52	75	8	8	7	-	7-8	9+	2500
7	Holyhead ...	1016.7	-30	SSW	5	c	52	75	8	5	7	-	7-8	10	2000
	Chester (Sealand)	1019.0	-22	S	2	z_0	50	75	6	7	7	-	4-6	9+	3500
8	Manchester ...	1019.3	-18	S'W	3	c	47	75		-	4	8		9+	
10	Spurn Head ...	1018.3	-10	SSW	4	bc	48	65	6	5	-	1	4-6	4-6	4000
	Catterick ...	1017.5	-18	WSW	1	c	49	65	8	8	3	5	4-6	9	3000
	Tynemouth ...	1017.7	-12	SW	3	z_0	50	75	6	8	-	-	7-8	7-8	2500
11	St. Abbs Head	1015.0	-12	SW	3	bc	48	75	8	4	7	2	2-3	4-6	2500
	Leuchars ...	1014.5	-14	-	0	ir_0	45	92	5	-	2	-	10	10	1800
12	Renfrew (Abbots I.)	1014.8	-18	SW	2	ir_0	48	85	6	5	2	-	9	10	2800
	Eskdalemuir ...	1015.8	-18	WSW	4	c	44	85	7	7	1	-	7-8	10	1500
	Point of Ayre ...	1016.0	-24	SW'W	3	c	52	85	8	8	7	7	4-6	10	1500
13A	Tiree ...	1009.8	-24	S	4	c	49	92	7	6	7	-	4-6	7-8	1800
13B	Stornoway ...	1013.2	-24	ENE	4	rr	43	92	7	5	2	-	7-8	10	1500
15	Dalwhinnie ...	1014.5	-18	SW	2	ir_0	42	92	7	8	-	-	9+	9+	800
	Aberdeen ...	1015.0	-14	NW	1	ir_0	41	85	7	6	2	.	2-3	9+	1500
	Wick ...	1015.4	-12	E	3	c	39	85	8	8	7	8	7-8	9	1500
16	Lerwick...	1016.1	+2	N'E	3	bc	37	55	8	5	-	-	4-6	4-6	1500
17	Blacksod Point..	1005.6	-46	S'E	6	r_0r_0	51	97	7	6	-	-	10	10	<150
18	Malin Head ...	1009.8	-34	S	5	c	49	85	8	4	-	4	4-6	7-8	2500
	Aldergrove ...	1013.5	-34	S'W	3	c	48	85	7	-	7	-	9	9+	1900
19	Birr Castle ...	1012.2	-40	SSW	3	c	51	85	8	5	1	-	7-8	10	2500
20	Valentia Obsy. †	1008.2	-58	S'W	7	r_0r_0	54	97	6	6	-	-	10	10	800
	Roches Point ...	1013.5	-38	S	6	c	53	85	8	6	2	-	7-8	9+	800

OBSERVATIONS at 18h. G.M.T. 8th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1019.8	-12	S'W	2	z_0	46	85	6	5	1	-	4-6	4-6	2500	1	*
Croydon	1020.2	-18	SSW	2	z_0	45	85	5	5	-	-	4-6	4-6	3000	1	*
S. Farnborough	1019.6	-16	SSE	2	z_0	46	85	5	4	3	8	2-3	7-8	4000	1	*
Boscombe Down	1018.9	-18	S	3	z_0	43	86	6	5	-	-	2-3	2-3	2500	1	*
Calshot (Soton.)	1019.5	-20	W'S	2	c	51	75	8	7	7	-	7-8	9	2500	1	2
Lympne	1021.3	-6	SW	1	z_0	45	75	6	-	2	7	0	10	-	1	§
Manston	1020.9	-6	SW	2	c	42	75	7	-	7	6	0	9+	-		*
Shoeburyness	1020.5	-12	W'S	2	c	47	85	6	5	7	-	4-6	10	5700	1	*
Felixstowe	1020.0	-8	SW	2	m	45	75	4	-	7	7	0	9+	-	1	1
Gorleston	1019.5	-12	SW'S	2	c	45	85	6	-	7	-	0	9+	-	1	2
Mildenhall	1019.1	-12	S'W	2	z_0	43	89	6	-	7	-	0	9+	-	1	*
Cranwell	1018.5	-10	SW	2	z_0	41	85	6	5	-	-	2-3	2-3	3000	0	*
Birmingham	1017.6	-20	SSW	2	c	43	85	6	5	-	8	4-6	4-6	5700	1	*
Upper Heyford	1018.8	+22	S'W	2	bc	41	92	7	5	4	7	4-6	4-6	3000	1	*
Ross-on-Wye	1016.9	+14	S	3	bc	47	75	7	5	-	1	2-3	2-3	2500	1	*
Hartland Point	1015.3	-22	S	3	c	49	85	8	5	1	-	4-6	9+	1500	1	3
Bristol	1018.2	-20	S	2	z_0	46	75	6	4	3	8	2-3	4-6	4500	1	*
Portland Bill	1018.3	-12	SW	4	c	53	92	8	5	7	-	7-8	10	4000	1	3
Plymouth	1017.9	-22	SW	4	c	53	75	8	7	7	-	9	9+	3000	0	3
The Lizard	1016.9	-30	SSW	6	bc	52	85	8	8	-	-	4-6	4-6	2500	0	3
Scilly (St. Mary's)	1015.0	-30	S'W	5	e	53	85	8	5	3	-	7-8	9+	1800	1	3
Guernsey																
Pembroke	1013.2	-29	S'W	6	cq	53	85	8	8	-	-	9+	9+	2500	1	4
Holyhead	1011.5	-20	S	5	ir_0	51	85	8	6	2	-	4-6	10	2000	1	3
Chester (Sealand)	1015.1	-22	SE'E	2	bc	43	85	6	5	4	-	Tr	4-6	4000	1	*
Manchester	1016.0	-16	S'E	3	z_0	44	85	6	5	-	-	2-3	2-3	4000	1	*
Spurn Head	1016.9	-6	SSW	3	bc	43	85	6	-	-	1	0	2-3	-	0	2
Catterick	1015.3	-10	S	1	m	45	85	4	5	-	6	4-6	7-8	2500	0	
Tynemouth	1015.8	-10	SW	3	z_0	46	85	6	8	-	-	4-6	4-6	3200	1	2
St. Abbs Head	1012.2	-12	SSW	3	ir_0	46	85	8	4	7	-	2-3	7-8	2500	1	2
Leuchars	1011.9	-16	E	1	ir_0	45	92	5	5	-	-	9+	9+	1200	1	*
Renfrew (Abbots I.)	1010.1	-30	SE	2	ir_0	47	92	6	5	7	-	7-8	10	2000	1	*
Eskdalemuir	1012.4	-18	S'W	3	rr	44	97	6	-	2	-	10	10	220	1	*
Point of Ayre	1010.9	-30	SSW	5	r_0r_0	50	92	7	8	2	-	7-8	10	1500	1	3
Tiree	1004.6	-30	SSE	5	d_0d_0	50	92	7	6	-	-	10	10	1600	1	4
Stornoway	1018.2	-24	ESE	5	r_0r_0	46	92	7	5	2	-	4-6	10	1000	1	3
Dalwhinnie	1010.0	-14	SSE	3	ir_0	41	92	6	5	1	-	7-8	10	800	1	*
Aberdeen	1012.4	-18	SSE	3	r_0r_0	43	92	6	6	2	-	9	10	1500	1	2
Wick	1012.5	-16	SSE	5	r_0r_0	40	92	7	6	2	-	7-8	10	1500	1	2
Lerwick	1015.3	-4	NW	2	c	33	92	8	9	3	-	4-6	7-8	1500	3	*
Blacksod Point	1001.1	-14	SSW	4	ir	53	92	7	6	-	-	10	10	<150	1	3
Malin Head	1002.8	-46	S'E	5	pr	49	92	6	6	7	-	4-6	9	1500	0	3
Aldergrove	1006.9	-44	SSE	4	ir_0	49	92	6	6	2	-	4-6	10	1400	1	*
Birr Castle	1005.3	-30	S	3	rr	51	92	7	6	2	-	4-6	10	1500	1	*
Valentia Obsy. †	1003.7	-32	S	4	r_0r_0	52	97	6	8	2	-	7-8	10	800	1	4
Roches Point	1006.8	-36	S	7	rr	53	97	6	6	2	-	7-8	10	800	1	5

PAST 24 HOURS.

Stations	Weather 7h.—13h. 8th (37)	Weather 13h.—18h. 8th (38)	Weather 18h. 8th to 1h. 9th (39)	Weather 1h.—7h. 9th (40)
London (Kew)	bcffxc	cem_0bcm_0	$crobecm_0p$	cm_0w
Croydon	bcm_0	bcz_0ycz_0	bcm_0cm_0pr	
S. Farnborough	$bcfm_0c$	$cbcm_0$	$cprbmcm_0$	cm_0
Boscombe Down	$bbfbm_0bc$	$cbcm_0$	$bcm_0cir_0fm_0$	cm_0cir_0
Calshot (Soton.)	bcfbc	$bccpr_0c$	cpr_0bcc	cir_0c
Lympne	Ff_0bcm	bcc	cz_0c	
Manston	bm_0cy	cyc		
Shoeburyness	$cfbmm_0$	bcm_0bc	cm_0ir_0bc	b,c
Felixstowe	bcmz	$bcz_0cz_0m_0$	$cmir_0bm_0$	bm_0cm_0
Gorleston	cbcc	c	cbc	bcc
Mildenhall	bm_0xbc	$bcccm_0$	cm_0, bcm_0w	bcm_0wc
Cranwell	bcz_0	$cbcm_0$	bcm_0	$bccm_0$
Birmingham	cbcc	cbc	bcc	cir_0o
Upper Heyford	cm_0	cz_0cbc	$cr_0r_0m_0c$	$cm_0r_0r_0m_0$
Ross-on-Wye	bcc	cbc	bcco	$orod_0$
Hartland Point	bcc	cbcc	c	rrc
Bristol	bcc	$cbcm_0$	bcm_0c	$cr_0r_0rm_0$
Portland Bill	c	cc	c	orr
Plymouth	cmc	c	c	ccr_0r_0rr
The Lizard	cbc	cbc	crr	rr
Scilly (St. Mary's)	c	c	p_0crr	$crrir_0$
Guernsey				
Pembroke	vqc	pr_0cq	crrq	oqrrc
Holyhead	cpr_0c	pr_0ir_0	$cm_0r_0r_0o$	oRmoc
Chester (Sealand)	$bcmm_0c$	ccz_0	$bccm_0c$	cir_0wc
Manchester	cm_0z	$cbcz_0$	bcm_0cmm	$cz_0r_0r_0$
Spurn Head	c	cbc	bcc	c
Catterick	c	ccm_0cm	cf	$cm_0d_0od_0m$
Tynemouth	bcc	cbc	bcc	bcc
St. Abbs Head	cbc	ir_0c	c	cm_0rr
Leuchars	$cwbm_0cir_0$	cm_0ir_0	$cm_0ir_0r_0r_0rr$	oRRmorr
Renfrew (Abbots I.)	cm_0ir_0	cm_0ir_0	$cm_0ir_0r_0r_0rr$	$crrr_0r_0$
Eskdalemuir	c	cir_0rr	ir_0crr	$rrcr_0r_0$
Point of Ayre	c	cr_0r_0	rrrr	rr
Tiree	$odrd_0$	oid	odrc	orr
Stornoway		crr	rr	crr
Dalwhinnie	cir	cir_0o	*	RRo
Aberdeen	$ccir_0$	cr_0r_0	cr_0r_0	cr_0r_0
Wick	cpr_0c	cpr_0r_0	r_0qrr	irq
Lerwick	cbcy	bcc	c	c
Blacksod Point	rr	ir	rr	cbc
Malin Head	cpr_0c	$cprpr_0c$	$cepr_0c$	oprcrrc
Aldergrove	c	$cor_0r_0m_0$	rrr_0r_0iR	$cirir_0m_0$
Birr Castle	c	crr	crrc	bc
Valentia Obsy. †	$cir_0crrr_0r_0$	$r_0r_0rrcr_0r_0$	$r_0r_0r_0cir_0bc$	$cir_0bcprcbc$
Roches Point	ir_0c	rr	rrc	bbc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_0, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_0/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_0, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6: similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

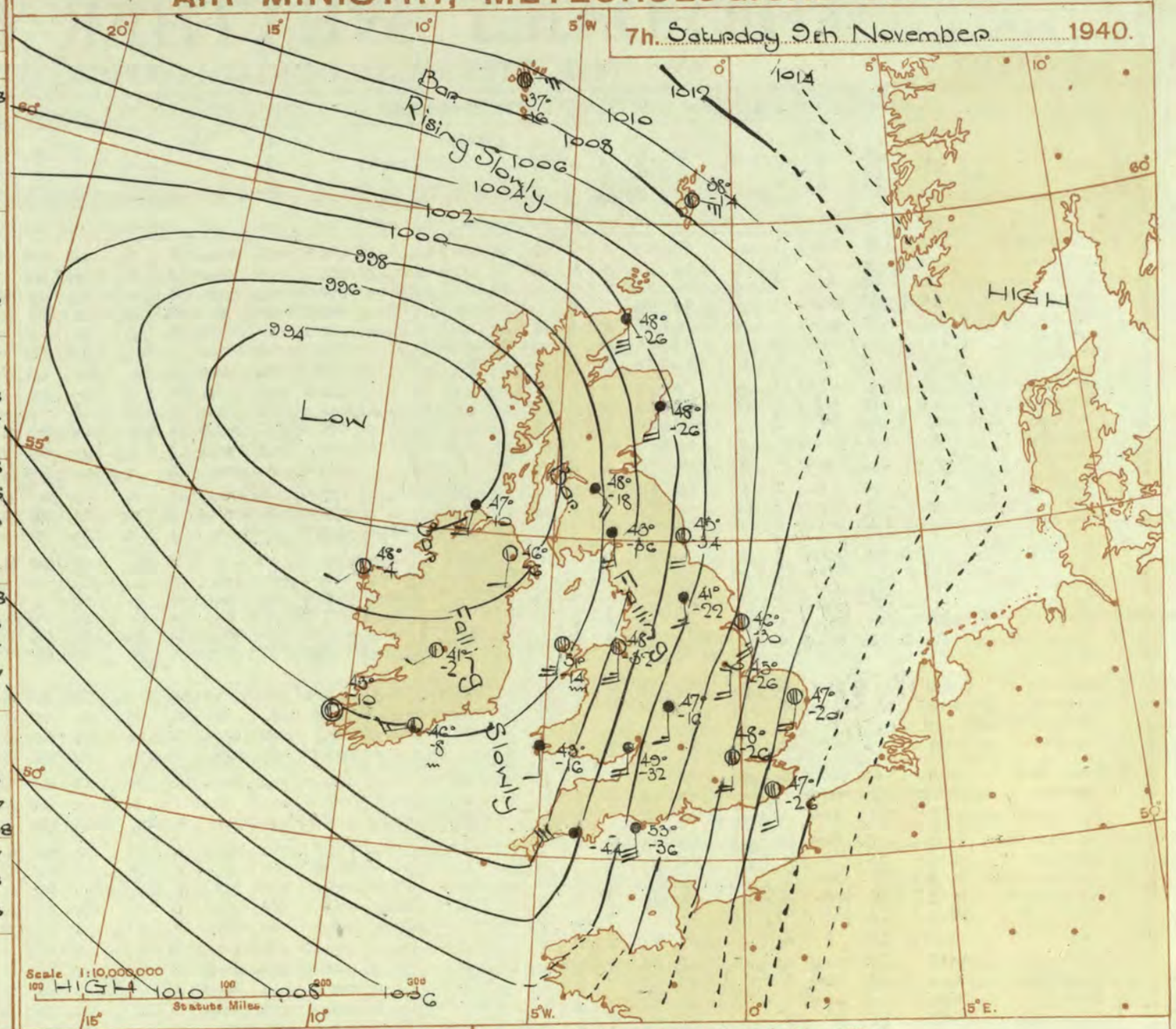
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Saturday 9th November 1940.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

13h. G.M.T. 8th November				18h. G.M.T.				01h. G.M.T. 9th November				07h. G.M.T.			
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN		$C_L C_M$	wwVhN$_h$	DDFWN		$C_L C_M$	wwVhN$_h$	DDFWN	
109	79	02855	04216					6-	62628	45768		6-	64648	45568	
115				52	62835	43588		52	81835	43588		52	62735	12583	
203				51	01954	08466						5-	64848	08468	
206	52	61744	04258	52	61744	08268		62	62645	08368		62	62645	06368	
210								5-	64748	08368		52	02846	12568	
220	62	62735	15268	92	05636	15428									
230	52	02944	16267	62	62646	16268		6-	64638	16368		62	64735	16268	
245	52	61756	09368	51	61446	22168		51	62646	16568		5-	62548		
260	83	02752	22227	57	02865	14167		62	62668	14468		52	61754	45468	
277	57	02876	19468	52	62744	19468		62	64636	18768		62	62647	19368	
279	--	51762	20428					--	22652	49468		--	02754	19628	
285	8-	02747	24527	8-	61637	20367						--	67109	08669	
288	17	02862	20326	53	05664	18329		07	17590	17225		57	62654	14428	
273	33	01653	14615									37	63253	18365	
301	81	05663	16428	53	05665	16497		57	05655	47567		52	61599	14568	
321	03	05690	19414					07	05590	14313		51	05575	16428	
299	57	08443	22214	57	08543	22214		5-	05544	22314		5-	05645	22415	
292	54	17654	22215	5-	05567	18117		51	41464	14247		62	62426	16328	
310	--	05535	20215	--	08433	20313									
316	04	08490	20225	00	47590	18125		07	45290	00042		52	22456	16468	
333	82	02865	19468	52	61856	18667		5-	22748	16868		62	64635	49768	
334	--	03855	20228									--	13654	16558	
340	83	02864	18326	13	05551	14315		57	05663	17426		57	05645	15567	
136	00	02790	20315	03	01790	18327		07	05590	16316		07	05690	14467	
336	--	02853	04415	--	02853	16517						--	22742		
350	77	02753	17217	03	00690	18212									
368															
379	50	05662	20227					5-	41637	14267		62	62626	16268	
390	07	05590	24314	57	08454	20127		53	41455	16245		52	05576	16327	
382	17	02862	20317	03	05590	00014		57	05653	14328		52	22646	15468	
438	56	01754	24414									5-	14757	19627	
430	07	01790	20214	87	25755	20388		53	05654	18415		5-	02648	18528	
409				5-	02867	17427		52	62647	15568		02	64638	16468	

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. ~~ Rough. ≈≈ High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Saturday 9th November
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Fresh southerly wind, increasing to strong to gale at times in exposed places, veering southwesterly and moderating to-morrow. Much rain today, heavy at times, showers and a few bright intervals tomorrow. Rather mild today, somewhat cooler tomorrow.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Strong southerly wind veering southwesterly, moderate, freshening westerly later. Occasional rain or showers with a few bright intervals; average temperature.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	As 1-4.
12 S.W. Scotland & Isle of Man. 13 {A. W. Scotld. B.N.W.Scotland.} 14 Mid Scotland	Strong to gale southeasterly wind, veering and decreasing later. Intermittent rain at first, showers and some bright intervals later. Average temperature.
15 N. E. Scotland 16 Orkneys and Shetlands	Strong to gale southeasterly wind, backing easterly. Intermittent rain; average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light or moderate southwesterly wind, veering slowly west to northwest and freshening. Occasional local rain or showers and bright intervals; cool.

GENERAL INFERENCE.

A deep depression northwest of Ireland and an associated trough in the Irish Sea are moving slowly eastward. A belt of rain, heavy at times, over England, Wales and Scotland, is moving eastwards, and showery conditions with a few bright intervals over Ireland will spread later today and tonight across Wales, England and Western Scotland. In East and Northeast Scotland rainy weather will continue.

FURTHER OUTLOOK.

Showers and bright intervals in the West and South, spreading later to the North.

Gale warning issued at 0700 8.11.40 in districts 17 and 20, at 0810 8.11.40 in districts 12, 13, 18 and at 1930 8.11.40 in districts 1(part) 5, 6, 7, 8, 11, 15 & 16.

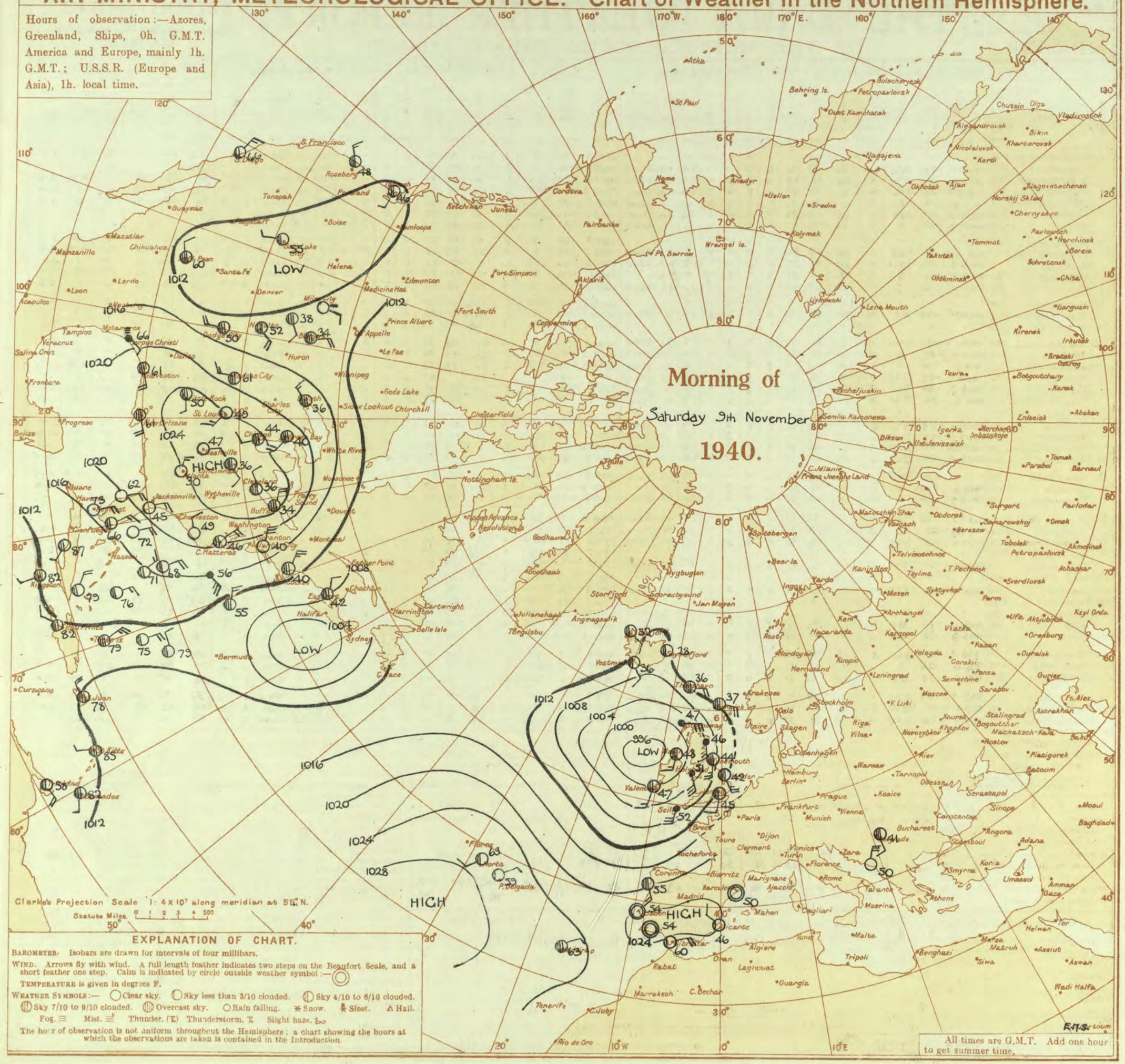
Forecasts issued at

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere : a chart showing the hours at which the observations are taken is contained in the Introduction.

All times are G.M.T. Add one hour to get summer time.

Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 9th November 1940.

No. 28842

OBSERVATIONS at 1 hr. G.M.T. 9th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1014.5	-26	SSW	2	zo	45	92	6	5	-	-	4-6	4-6	2000
	S. Farnborough	226	1013.6	-30	S'E	3	zo	48	85	6	5	3	-	4-6	10	2500
	Boscombe Down	417	1011.8	-24	SSE	4	zo	48	85	6	5	3	-	4-6	4-6	6000
	Calshot (Sthmtn.)	8	1013.0	-32	S	5	c	51	85	7	5	-	-	10	10	3000
	Lympne ...	346	1016.8	-22	SSE	3	bc	47	85	7	2	-	-	4-6	4-6	3500
	Manston ...	154	1015.8	-26	S	2	zo	42	92	6	5	-	-	1	1	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1015.5	-28	SW'S	3	zo	48	85	6	5	-	-	1	1	2500
	Gorleston ...	5	1015.4	-22	SSW	2	bc	45	92	6	5	-	-	2-3	2-3	2500
	Mildenhall ...	19	1014.0	-26	S	3	zo	43	85	6	-	7	-	0	4-6	-
	Cranwell ...	240	1013.0	-26	S	2	zo	37	97	6	5	-	-	4-6	4-6	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1012.9	-34	SSE	3	c/r	43	97	6	5	7	6	2-3	9	2500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1006.5	-40	SSW	4	c	51	75	8	5	1	-	2-3	9	2000
	Bristol ...	209	1010.5	-42	S	4	c	50	85	7	5	7	-	7-8	9+	4000
	Portland Bill ...	32	1011.0	-30	S	5	c	54	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1009.7	-34	S'W	5	c	53	75	7	5	2	-	7-8	10	1400
	The Lizard ...	240	1008.7	-36	S'W	8	rr	52	85	7	8	2	-	10	10	1000
	Scilly (St. Mary's)	163	1005.6	-56	S'W	6	rr	52	97	6	6	2	-	7-8	10	1200
	Guernsey ...	175														
6	Pembroke ...	142	1005.4	-24	S'W	8	rr	52	92	7	8	2	-	7-8	10	1500
7	Holyhead ...	26	1002.4	-40	SSE	6	roro	51	92	6	-	2	-	10	10	1100
	Chester (Sealand)	16	1007.5	-26	SE'S	4	c	44	85	7	5	7	-	4-6	7-8	3500
8	Manchester ...	70	1008.4	-34	SSE	4	zo	45	75	5	5	7	8	4-6	10	3500
10	Spurn Head ...	29		-22	SSE	5	c	42	92	6	4	-	-	7-8	7-8	4000
	Catterick ...	175	1009.6	-30	S	3	f-	38	97	3	-	7	-	0	9	-
	Tynemouth ...	108	1010.4	-20	S	5	c	49	85	6	8	-	-	9+	9+	3200
11	St. Abbs Head	280	1007.2	-22	S	4	c	43	92	7	5	2	-	7-8	10	2000
	Leuchars ...	36	1005.9	-28	SE	3	rr	45	97	6	5	-	-	10	10	1700
12	Renfrew (Abbots I.)	19	1002.5	-32	SE'E	4	rr	46	92	5	6	2	-	2-3	10	1400
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1003.5	-34	S'W	6	rr	50	97	7	6	2	-	7-8	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1000.7	-26	ESE	6	rr	47	92	6	5	2	6	9	10	800
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1006.0	-26	SSE	6	ir	46	97	7	5	2	-	7-8	10	800
16	Lerwick ...	156	1012.3	-12	ESE	4	c	37	65	7	5	7	-	7-8	9+	800
17	Blacksod Point	18	996.7	-20	SW	3	RR	48	92	7	6	-	-	10	10	<150
18	Malin Head ...	84	996.6	-26	S	3	c	48	92	7	9	-	-	9	9	1500
	Aldergrove ...	268	998.9	-34	SSE	3	rr	48	97	6	6	2	-	4-6	10	1200
19	Birr Castle ...	173	997.9	-24	SSW	2	c	48	97	7	6	1	-	4-6	10	1500
20	Valentia Obsy.	30	999.3	-10	SSW	3	c	47	92	8	5	-	-	7-8	7-8	1500
	Roches Point	22	999.4	-20	WSW	4	c/r	51	97	8	6	-	5	4-6	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 9th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)
London (Kew)	1008.1	-30	S	4	zo	49	85	6	5	-	-	10	10	1500
Croydon	1008.8	-26	S	4	c	48	97	6	5	-	-	9+	10	1400
S. Farnborough	1007.8	-30	S'E	4	zo	49	85	6	5	-	-	10	10	1600
Boscombe Down	1005.3	-30	SSE	6	roro	48	92	6	6	2	-	7-8	10	1500
Calshot (Sthmtn.)	1007.3	-28	S	6	iro	51	85	6	5	7	-	7-8	10	2800
Lympne	1012.5	-26	SSE	4	c	47	85	7	5	7	-	4-6	9	1200
Manston	1011.7	-22	S	5	zo	43	92	6	5	3	-	Tr	7-8	1200
Shoeburyness	1011.9	-24	S	5	c	48	85	7	5	-	-	7-8	10	4000
Felixstowe	1010.9	-24	S	5	zo	48	85	6	5	7	-	7-8	10	2500
Gorleston	1011.2	-20	SSW	4	c	47	85	6	5	-	-	7-8	7-8	2500
Mildenhall	1008.7	-26	S	4	c	47	85	7	5	7	-	4-6	10	5000
Cranwell	1007.3	-26	S	4	zo	45	92	5	5	-	-	10	10	1500
Birmingham	1004.3	-16	SSE	3	roro	47	97	6	6	-	-	10	10	800
Upper Heyford	1006.7	-28	S'W	5	roro	47	92	6	6	2	-	7-8	10	800
Ross-on-Wye	1003.4	-32	S'E	4	ido	49	92	6	6	2	-	7-8	10	1500
Hartland Point	1000.2	-30	S	4	rr	49	97	7	6	2	-	4-6	10	1500
Bristol	1004.2	-30	S	4	roro	49	92	6	6	2	-	4-6	10	800
Portland Bill	1004.6	-36	SSE	6	rr	53	92	7	5	-	-	10	10	1500
Plymouth		-44			rr		97	6	6	2	-	9+		600
The Lizard	999.9	-30	W	2	rr	50	97	6	5	-	-	10	10	1000
Scilly (St. Mary's)	999.8	-20	NW	4	c/r	52	97	7	6	2	-	7-8	10	1500
Guernsey														
Pembroke	999.0	-16	S	2	rr	49	97	6	8	2	-	7-8	10	1200
Holyhead	997.4	-14	SSW	5	c/r	51	92	7	6	2	-	4-6	10	900
Chester (Sealand)	1000.6	-32	SSE	5	c	48	85	7	5	2	-	4-6	9+	4500
Manchester	1001.9	-34	SSE	4	zo	48	85	6	5	7	-	4-6	10	2800
Spurn Head	1006.9	-30	SE'S	5	c	46	85	6	5	4	-	7-8	9+	2500
Catterick	1003.4	-22	S	3	dodo	41	97	4	-	2	-	10	10	800
Tynemouth	1003.7	-34	S	4	c	45	85	6	8	-	-	9+	9+	3200
St. Abbs Head	1000.4	-34	SE	6	roro	42	92	6	5	2	-	7-8	10	2000
Leuchars	999.8	-30	SE	5	rr	45	92	5	-	2	-	10	10	1200
Renfrew (Abbots I.)	997.0	-18	SE'E	4	iro	48	85	6	6	2	-	7-8	10	1700
Eskdalemuir	998.7	-36	S'E	4	roro	43	92	5	-	2	-	10	10	450
Point of Ayre	996.5	-20	SSW	5	rr	50	97	7	6	2	-	7-8	10	800
Tiree	991.7	-18	SSW	2	ir	48	92	7	-	2	-	10	10	1200
Stornoway	994.2	-36	ESE	6	rr	42	97	6	5	2	-	10	10	800
Dalwhinnie	*	-28	SE	9	iro	42	92	5	5	-	-	10	10	800
Aberdeen	1001.5	-26	S'E	4	roro	48	92	6	6	2	-	7-8	10	1500
Wick	1000.5	-26	SSE	6	ir	48	92	7	5	2	-	7-8	10	800
Lerwick	1008.9	-14	ESE	5	c	38	85	7	8	2	-	7-8	10	800
Blacksod Point	995.3	-4	SW	2	bc	48	85	8	3	-	-	4-6	4-6	1500
Malin Head	992.7	-10	SSW	4	dodo	47	97	7	8	-	9	7-8	7-8	1500
Aldergrove	995.1	-6	SSW	2	b	46	97	7	5	7	1	1	1	1200
Birr Castle	997.3	-2	SW	1	bc	41	97	8	5	-	-	2-3	2-3	2500
Valentia Obsy.	997.1	-10	-	0	bc	43	92	8	5	-	-	4-6	4-6	2500
Roches Point	997.9	-8	WSW	3	bc	46	92	8	5	-	5	2-3	4-6	2500

PAST 24 HOURS.

Stations	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 8th Hrs. (36)
London (Kew)	1	*	49	43	29	Tr	0.3	4.3
Croydon		*	53			Tr		
S. Farnborough	1	*	51	43	36	1	0.3	4.0
Boscombe Down	1	*	50	41	36	-	1	3.0
Calshot (Sthmtn.)	1	§4	54	48	44	Tr	Tr	3.6
Lympne			51			-		
Manston		*						
Shoeburyness	1	*	51	46	39	-	Tr	5.9
Felixstowe	1	3	48	44	38	-	0.4	3.8
Gorleston	1	2	50	40	32	-	-	2.3
Mildenhall	0	*	49	40	33	Tr	Tr	3.7
Cranwell	0	*	47	35	29	-	-	5.6
Birmingham	1	*	47	40	35	*	1	2.5
Upper Heyford	1	*	49	39	28	-	1	*
Ross-on-Wye	1	*	50	44	39	-	1	3.5
Hartland Point	1	3	51	48	46	-	7	1.7
Bristol	1	*	50	45	38	-	1	3.6
Portland Bill	1	5	54	51	*	-	0.4	*
Plymouth	1	3	54	50	48	-	9	1.9
The Lizard	2	2	54	48	*	-	28	2.8
Scilly (St. Mary's)	1	3	54	50	*	-	18	1.5
Guernsey								
Pembroke	1	3	53	48	*	Tr	16	8.0
Holyhead	1	4	53	49	48	Tr	8	0.0
Chester (Sealand)	1	*	52	42	36	-	Tr	1.9
Manchester	1	*	49	42	38	-	0.1	0.4
Spurn Head	1	3	49	40	*	-	0.4	5.4
Catterick	0	*	50	37	35	-	Tr	1.5
Tynemouth	1	2	50	43	40	-	-	*
St. Abbs Head	1	3	50	42	*	Tr	2	*
Leuchars	2	*	46	43	37	Tr	13	0.0
Renfrew (Abbots I.)	1	*	49	46	44	0.1	10	0.0
Eskdalemuir	1	*	46	41	41	2	11	0.0
Point of Ayre	1	4	52	48	*	0.5	2	0.0
Tiree	1	2	50	47	*	1	9	0.0
Stornoway	1	4	46	45	*	3	9	0.0
Dalwhinnie	1	*	(44)	41	39	0.5	20	0.0
Aberdeen	1	2	43	43	42	1	3	0.5
Wick	1	3	41	37	*	0.2	2	*
Lerwick	1	*	40	32	*	-	-	5.8
Blacksod Point	1	3	55	45	*	3	9	*
Malin Head	0	3	50	45	*	0.5	4	0.3
Aldergrove	2	*	50	45	41	1	14	0.0
Birr Castle	1	*	51	40	36	10	11	0.0
Valentia Obsy.	1	0	54	43	37	19	10	0.0
Roches Point	1	4	54	46	*	10	20	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
Kew ...	18	bcffxc	ccmo bcmo	crocmow	49	43	29	Tr	0.3	4.3	•	•	
Croydon ...	217	bcmo	bczo yczo		53						•	•	6
Greenwich (Royal Observatory) ...	149												
City (Bunhill Row) ...	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park) ...	27	•	•	•	51	38	38	0.7			75	87	•
Regents Pk. (Botanic Gardens)‡ ...	168	•	•	•	50	35	30	-	0.3		72	78	•
Camden Square ...	110			•						•	•		•
Kensington ...	80	c	c	•	52	42	30	-	0.3		47	94	•
Hampstead Observatory ...	450										•		•

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 9th.

	Max.	Time.	Min.	Time.
South Kensington				
Kew Observatory	0.4	8-10h 8th	<0.1	0-7h 9th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...											•	•		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22.—Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 „
2 Fog	550 „
3 Moderate fog	1,100 „
4 Mist or haze	1½ miles.
5 Poor visibility	2½ „
6 Moderate „	6¼ „
7 Good „	12½ „
8 Very good „	31 „
9 Excellent „	beyond 31m.

COLUMN 30.—Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 10th November 1940.

No. 28843

OBSERVATIONS at 13h. G.M.T. 9th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1002.1	-20	SSE	5	iro	48	85	6	5	2	-	9	10	1500
	Croydon ...	1002.9	-36	SE	3	ir	46	92	5	6	7	-	9	10	900
	S. Farnborough	1001.6	-36	SE'S	4	roro	47	92	6	5	2	-	9	10	700
	Boscombe Down	998.5	-44	SE'S	5	rr	46	97	6	6	2	-	9	10	700
	Calshot (Soton.)	1000.0	-46	S'E	6	roro	49	92	6	5	-	-	10	10	700
	Lympne ...	1006.5	-34	SSW	5	c	47	75	7	5	9	-	2-3	9+	1500
	Manston ...	1005.0	-40	SSE	6	z	47	75	6	-	7	-	0	9+	-
2	Shoeburyness ...	1005.4	-36	SSE	5	c	48	85	8	5	7	-	2-3	10	4000
	Felixstowe ...	1005.3	-36	SSE	6	c	47	75	7	5	7	-	7-8	9+	5000
	Gorleston ...	1006.0	-36	S'E	6	c	48	85	6	5	-	-	9+	9+	2500
	Mildenhall ...	1002.9	-38	SE'S	5	c	47	75	7	5	7	-	2-3	10	2500
	Cranwell ...	1002.1	-30	S'E	5	roro	48	85	6	6	-	-	10	10	600
3	Birmingham	999.7	-30	SSE	3	rr	45	97	6	6	-	-	10	10	800
	Upper Heyford	1000.6	-38	SSE	4	c/d	46	85	6	6	2	-	4-6	10	700
4	Ross-on-Wye ...	996.5	-40	SE	4	rr	47	92	6	6	2	-	9	10	1500
5	Hartland Point	996.3	-14	SW	3	ir	48	97	7	5	2	-	4-6	10	1500
	Bristol ...	997.0	-42	SE	4	roro	48	97	7	6	2	-	9	10	700
	Portland Bill ...	997.5	-40	S	6	rr	52	92	7	5	-	-	10	10	1500
	Plymouth ...	997.0	-10	NNW	1	rr	49	97	6	9	2	-	7-8	10	800
	The Lizard ...	997.9	-8	W	4	c	52	85	8	8	1	-	9	10	2900
	Scilly (St. Mary's)	998.4	-8	WNW	2	c	51	85	8	8	7	-	7-8	9+	1200
	Guernsey ...														
6	Pembroke ...	996.1	-14	WNW	2	c	50	92	7	8	2	-	7-8	10	2500
7	Holyhead ...	995.5	-18	WSW	1	c	50	85	6	8	7	-	9	9+	2800
	Chester (Sealand)	996.9	-28	SE	2	rr	49	92	6	6	2	-	7-8	10	800
8	Manchester ...	998.3	-30	SSE	0	rr	48	92	5	6	2	-	7-8	10	1400
10	Spurn Head ...	1001.8	-20	SE'S	6	c	47	85	7	5	-	-	10	10	4000
	Catterick ...	999.6	-20	S	3	roro	46	97	4	5	2	-	10	10	500
	Tynemouth ...	1000.5	-20	SSE	4	o/ro	49	86	6	-	2	-	10	10	1800
11	St. Abbs Head	996.8	-26	S	4	c	46	92	6	5	2	-	7-8	10	2500
	Leuchars ...	996.4	-14	SSE	3	c	47	92	7	5	2	-	7-8	10	900
12	Renfrew (Abbots I.)	995.6	-2	SSW	2	c	50	85	8	8	7	-	7-8	10	1600
	Eskdalemuir ...	996.2	-14	S'W	3	roro	45	92	6	-	2	-	10	10	800
	Point of Ayre ...	996.0	-6	WSW	2	c	50	92	8	2	7	-	2-3	9+	2500
13A	Tiree ...	991.1	0	SSW	4	c/pr	49	85	7	8	-	-	9	9	1500
13B	Stornoway ...	991.6	-12	SE	4	c/pr	50	85	8	5	7	-	7-8	9+	2300
15	Dalwhinnie ...	995.6	-6	SE	6	c	43	92	6	5	1	-	9+	10	1500
	Aberdeen ...	997.2	-26	S'W	4	roro	48	97	6	6	2	-	9+	10	800
	Wick ...	995.8	-22	SSE	6	ir	49	97	6	6	2	-	7-8	10	800
16	Lerwick...	1002.3	-38	ESE	7	ir	42	97	6	6	2	-	4-6	10	800
17	Blacksod Point...	995.5	+4	W	3	c	52	75	8	3	6	-	4-6	9	1500
18	Malin Head ...	992.8	0	S	3	c	50	85	8	4	6	-	4-6	7-8	2500
	Aldergrove ...	995.5	-2	S	2	c	45	92	8	8	-	1	7-8	9	2500
19	Birr Castle ...	996.3	-6	SSW	1	c	52	75	8	2	-	5	2-3	7-8	1500
20	Valentia Obsy. †	996.7	-6	SW'W	1	c/pr	50	92	9	3	-	3	7-8	7-8	2500
	Roches Point ...	996.6	-6	NW	2	zo	49	92	6	3	4	5	2-3	7-8	1500

OBSERVATIONS at 18h. G.M.T. 9th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)...	997.0	-24	SSE	4	roro	46	85	6	6	2	-	7-8	10	1500	1	*
	Croydon ...	997.8	-22	SE	3	roro	45	97	5	6	-	-	10	10	600	1	*
	S. Farnborough	995.9	-26	SE	4	rr	47	97	6	6	2	-	9	10	800	1	*
	Boscombe Down	995.8		WSW	2	c/r	45	97	6	-	7	-	0	10	-		*
	Calshot (Soton.)																
	Lympne ...	1001.3	-30	S	5	roro	45	85	6	6	2	-	7-8	10	800	1	§4
	Manston ...	1000.3	-30	S	7	rr	46	85	5	6	-	-	10	10	700		*
2	Shoeburyness ...	1000.1	-22	S	6	iro	47	85	7	5	-	-	10	10	2500	1	*
	Felixstowe ...	999.9	-28	S'E	6	roro	47	85	6	5	2	-	9	10	3500	1	3
	Gorleston ...	1001.2	-20	S	7	c	48	85	6	5	-	-	10	10	2500	1	5
	Mildenhall ...	998.3	-22	SE'S	5	iro	47	75	7	5	7	-	7-8	10	4000	1	*
	Cranwell ...	997.2	-26	SSE	5	rr	48	92	6	6	-	-	10	10	600	1	*
3	Birmingham	994.6	-20	SE	3	iro	45	92	6	6	-	-	10	10	800	1	*
	Upper Heyford	995.4	-24	SE'E	4	dodo	44	97	6	6	2	-	7-8	10	600	1	*
4	Ross-on-Wye ...	994.1	-6	W	3	c	44	85	8	5	1	-	4-6	9+	1500	1	*
5	Hartland Point	996.1	+2	WNW	3	rr	49	92	8	8	2	-	9	10	1500	1	2
	Bristol ...	995.9	+6	W	2	c	45	85	7	5	7	-	4-6	9+	2800	1	*
	Portland Bill ...	997.5	+4	W	3	o	52	92	7	5	-	-	10	10	2500	1	5
	Plymouth ...	997.7	+8	W'N	3	pp	49	92	6	9	2	-	7-8	9+	800	1	2
	The Lizard ...	998.2	+6	W	5	c	51	85	8	8	6	-	7-8	7-8	2500	1	3
	Scilly (St. Mary's)	998.1	+8	WSW	4	cjp	51	75	8	8	7	-	4-6	9+	1000	1	3
	Guernsey ...																
6	Pembroke ...	996.0	-4	N'W	1	c	47	97	7	8	2	-	7-8	9+	2500	1	2
7	Holyhead ...	994.9	+2	NWW	3	c	50	85	8	2	7	-	4-6	9+	2500	1	1
	Chester (Sealand)	994.8	-8	N	2	roro	46	92	5	6	2	-	9	10	800	1	*
8	Manchester ...	995.5	-14	ENE	3	rr	46	97	4	6	2	-	7-8	10	1200	2	*
10	Spurn Head ...	997.1	-16	SE	6	rr	46	85	6	5	-	-	10	10	2500	1	4
	Catterick ...	997.2	-2	S	3	roro	48	97	4	5	2	-	9	10	500	1	
	Tynemouth ...	998.0	-8	S	5	ir	45	92	6	6	-	-	10	10	1000	1	3
11	St. Abbs Head	995.8	0	S	3	roro	46	97	6	5	2	-	9	10	2000	1	2
	Leuchars ...	994.6	0	S	2	zo	47	92	6	5	1	-	4-6	10	2500	2	*
12	Renfrew (Abbots I.)	995.1	-4	E	1	z	44	92	5	5	7	-	4-6	10	2500	1	*
	Eskdalemuir ...	994.0	-4	SSW	1	rr	45	97	4	-	2	-	10	10	<150	1	*
	Point of Ayre ...	994.8	-2	W'N	2	c	45	97	8	5	7	-	2-3	9+	2500	1	2
13A	Tiree ...	991.2	0	SWW	3	bc	48	85	8	8	-	-	4-6	4-6	1800	1	3
13B	Stornoway ...	989.8	-4	S	5	c/pr	47	92	6	8	7	-	7-8	9+	2000	1	3
15	Dalwhinnie ...	993.3	0	SSE	2	c	43	85	7	5	1	-	4-6	10	2500	1	*
	Aberdeen ...	994.9	-8	SSW	3	iro	49	92	9	6	2	-	9+	10	800	1	2
	Wick ...	992.3	-8	S	5	c	49	92	6	5	3	-	9	10	1500	1	3
16	Lerwick...	996.5	-26	ESE	7	rr	45	92	6	6	2	-	4-6	10	800	1	*
17	Blacksod Point...	996.7	+20	W'N	2	bc	46	85	8	3	-	5	4-6	7-8	1500	1	2
18	Malin Head ...	993.4	+6	W	2	pr	48	92	7	3	-	-	7-8	7-8	1500	1	2
	Aldergrove ...	995.8	+6	S	1	c	48	97	7	5	-	8	4-6	9	3500	1	*
19	Birr Castle ...	997.0	+6	W	1	b	40	92	8	-	-	-	0	0	-	1	*
20	Valentia Obsy. †	997.9	+14	-	0	bc	45	80	9	2	-	1	1	2-3	2500	1	2
	Roches Point ...	997.1	+8	NW	2	bc	48	85	8	3	-	5	1	2-3	2500	1	3

PAST 24 HOURS. WEATHER.

District	Stations	7h.—13h. 9th (37)	13h.—18h. 9th (38)	18h. 9th to 1h. 10th (39)	1h.—7h. 10th (40)
1	London (Kew)...	emocir	cirocror	crorcbcw	bcmow
	Croydon ...	cmorr	roroom	rororrcmo	cmb
	S. Farnborough	morodorc	rorrrmoc	rorocmobc	bmow
	Boscombe Down	crrm		cpromoc	cmocbc
	Calshot (Soton.)	crrrorom		cmobcmow	cbcbw
	Lympne ...	c	crorom	croro	cpro
	Manston ...	cm	cmirrr	crorobc	bccmo
2	Shoeburyness ...	c	ceiroc	cirocbc	bcb
	Felixstowe ...	cmoc	c,roro	roroirbc	bcmob,mo
	Gorleston ...	cq	cq	corocq	cqbc
	Mildenhall ...	ceiroe	ceiro	iro,roromo	bcbw
	Cranwell ...	iroroom	ror rrm	roro,iromo	roromo,bmo
3	Birmingham	oror	or iro	oiro	obc
	Upper Heyford	crocirododm	mcrodo	cdodoc	bmbcmo
4	Ross-on-Wye ...	dcrr	rrec	c	cbcb
5	Hartland Point	rrcir	rrc	crpbc	bcep
	Bristol ...		ecroRroe	ciromoc	cprobcb
	Portland Bill ...	orr	orrc	c	bc
	Plymouth ...	cmrrcs	cmlpopr	cmoPRcb	bbcb,cprob
	The Lizard ...	proco	cpsc	cbcpr	pc
	Scilly (St. Mary's)	cpc	c poqc	cpro	
	Guernsey ...				
6	Pembroke ...	proc	rrc	bcc	cprq
7	Holyhead ...	ciromc	cmoc	cbcb	cRmoqc
	Chester (Sealand)	iror	crrmoc	cromomoc	bcprorrc
8	Manchester ...	cmororr	cmorr	orfrf	ffromo
10	Spurn Head ...	iroc	oiro	orro	irc
	Catterick ...		ororom	ororom	rorombcmoc
	Tynemouth ...	cpr	oir	oir	pirpc
11	St. Abbs Head	rrcm	cmorr	morrc	bcbq
	Leuchars ...	rrRRrrmc		cmow	cmoiroRroror
12	Renfrew (Abbots I.)	cirorc	ccm	cmobceff	fproRroro
	Eskdalemuir ...	corrroro	orr	oiro	oirc
	Point of Ayre ...	c	c	bcc	rrR
13A	Tiree ...	cpr		bcc	cpr
13B	Stornoway ...	cprpro		cpr	cPR
15	Dalwhinnie ...	iroo	iroco	*	ciroo
	Aberdeen ...	croro	roroiro	circ	cciro
	Wick ...	irrrq		cbc	bcrrc
16	Lerwick...	crr	cirrr	crr	crrir
17	Blacksod Point...	c	prbc	cq	prxq
18	Malin Head ...	ciroc proc	bcejpc	circirepr	ccprcPHRyc
	Aldergrove ...		ctv	cvprororo	roror PR
19	Birr Castle ...	bcc	bcb	corr	cx
20	Valentia Obsy. †	igbcvpc	bcvbw	bwbcwpro	cwcwcprbcq
	Roches Point ...	cz	bc	bcw	prbc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.

With present weather is combined, whenever possible, the general character of the weather.

A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6: similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

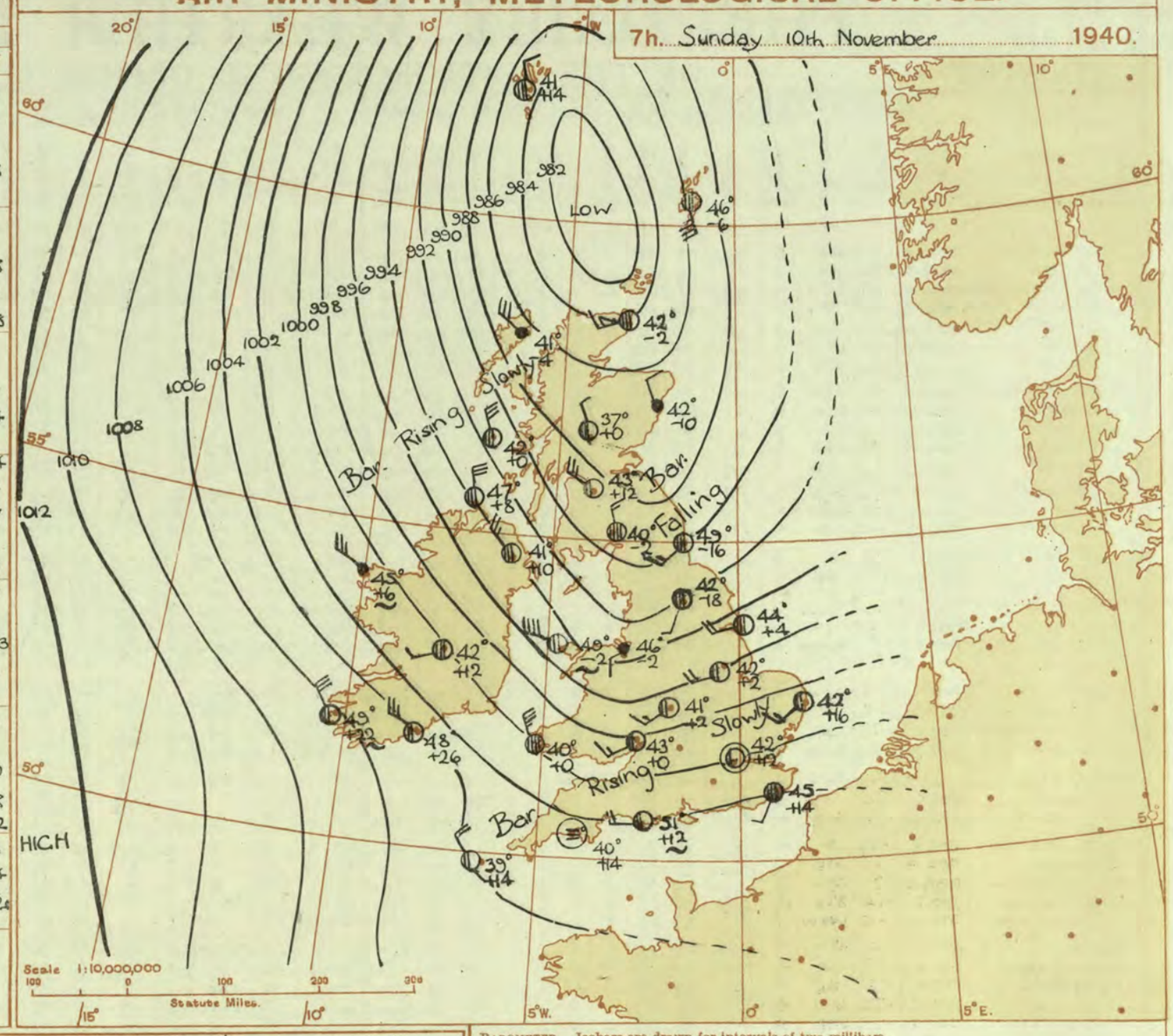
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 9th November			18h. G.M.T.			01h. G.M.T. 10th November			7h. G.M.T.		
III	$C_L C_M$	$wwVhN_h$	DDFWN	$C_L C_M$	$wwVhN_h$	DDFWN	$C_L C_M$	$wwVhN_h$	DDFWN	$C_L C_M$	$wwVhN_h$	DDFWN
109	52	62645	45768				50	00772	16412	52	61665	18466
115	87	62834	45667	87	02734	16465	52	62844	20485	52	62745	61568
203												
206	67	02747	12268	57	02965	20327	54	01963	20214	52	02855	23268
210	52	02854	47568	57	02863	18227	54	01858	16214	5-	22857	24567
220												
230	82	22845	16367	97	10746	14388	8-	25748	20388	80	10848	61783
245	62	22846	49668	62	22447	16468	51	05562	24124	5-	66488	00068
260	57	02855	14467	50	00842	00025	57	64438	16168	72	62746	26268
277	21	20367	----	41	02841	25127	5-	02867	22327	52	22646	62668
279												
285	--	67109	12569	--	67109	12569						
288	02	61428	14468	02	62648	14368	02	64548	16168	57	01754	17365
273										37	08452	28504
301	52	22855	14468	02	64548	15268	57	05555	24267	62	64644	26488
321	62	62-35	14468	62	64636	13468	5-	52448	24158	57	05563	24414
299				5-	61638	16668	62	62635	20368	57	05644	24214
292	62	62526	14368	62	64426	12268	52	64537	22268	86	81745	22367
310	--	63528	16668									
316	62	63436	48468	62	62436	45368	62	64435	24268	54	02655	20365
333	52	02757	18888	20	02744	26126	23	02745	24387	21	22754	24667
334	--	64758	04168									
340	62	64636	12468	62	64426	14268	5-	05666	20266	5-	51747	20463
136	57	02764	15568	57	62766	14468	52	05646	50568	53	05653	20313
336				--	61748	16468						
350	67	22648	12468							50	05636	18366
368												
379	62	64626	16368	62	62625	12368	53	05663	24314	--	46109	28249
390	52	05644	13428	62	62545	14368	5-	05655	20365	5-	05548	20318
382	62	58655	15458				57	01763	22314	53	01761	20202
438	3-	62748	20668							80	02748	24368
430				52	61525	14668	23	05560	00066	33	47263	32144
409	52	02845	26268	32	81845	24388	5-	81746	24187	23	02844	25415

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Sunday 10th November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Sunday 10th November
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate southwest to west wind, veering west to northwest and freshening. Bright periods and occasional showers; cool.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Strong to gale west to northwest wind; bright periods and occasional showers; rather cold.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Fresh or strong southwest to west wind, veering west to northwest. Bright periods and occasional showers; cold.
12 S.W. Scotland & Isle of Man.	As 5-8.
13 A. W. Scotld. B.N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Wind west to northwest veering northwest to north, strong to gale but southerly gale at first in Shetlands. Frequent heavy showers of rain at first, of sleet or snow later; cold.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Strong to gale northwest wind; bright periods and occasional showers, rather cold.

GENERAL INFERENCE.

A deep depression centred between Shetlands and Faeroes is moving northeast and a ridge of high pressure in the Atlantic is spreading eastwards.
There will be bright intervals and occasional showers generally, but in the North the showers will be heavier and more frequent and in the form of snow later in Scotland. Temperatures will be about average in the South, becoming cold in the North.

FURTHER OUTLOOK.

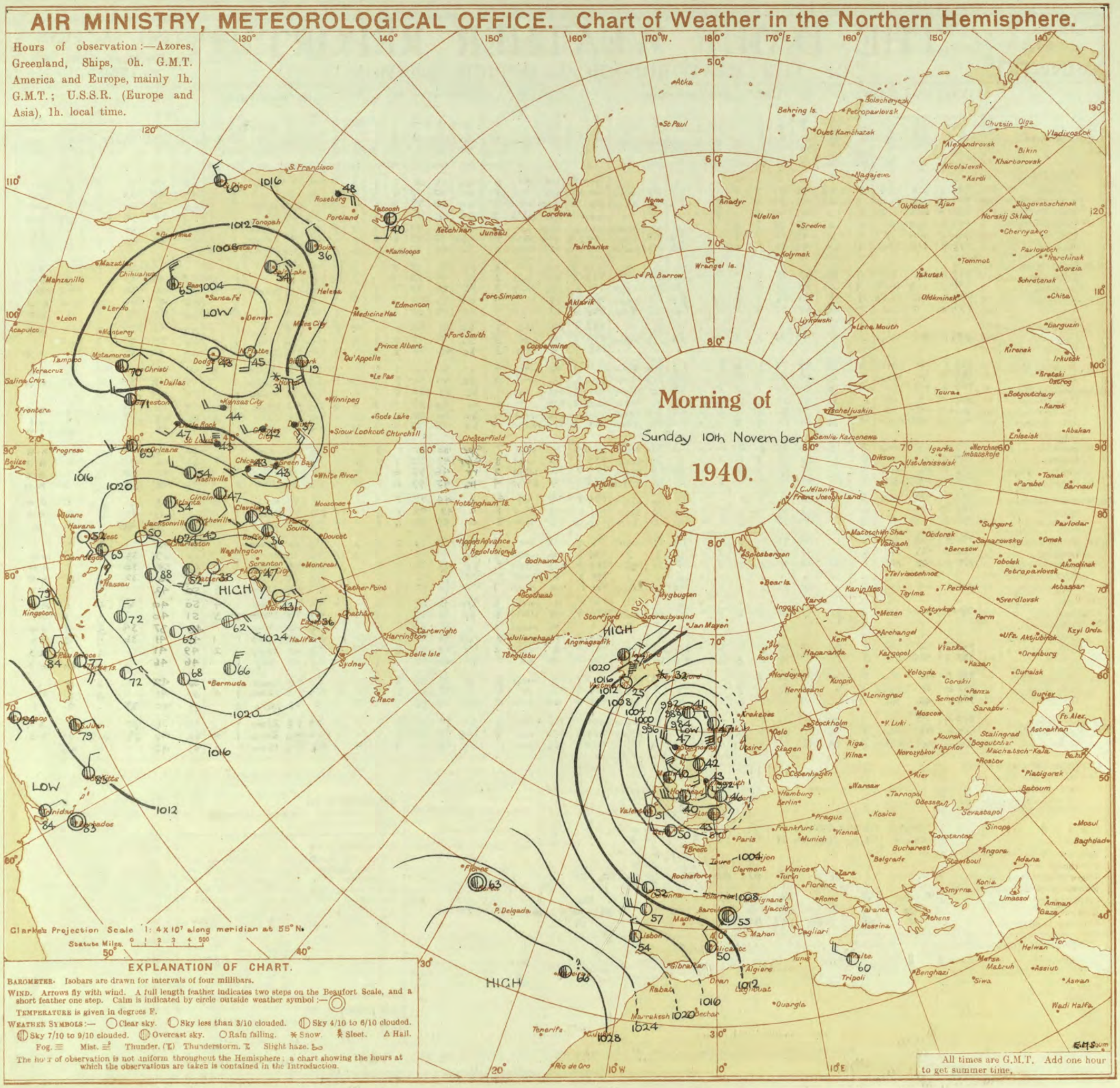
Northwesterly winds, bright intervals and showers mainly in the North; cold.
Warning of Northerly gale in operation in districts 5, 8, 12, 13 (a & b), 17, 18, 19 & 20. Warning of Southerly gale in operation in district 16.

Forecasts issued at 1030 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 10th November 1940.

No. 28843

OBSERVATIONS at 1 hr. G.M.T. 10th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Cloud. Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	998·1	+12	SSE	2	bc	43	97	7	5	-	-	2-3	2-3	3000
	S. Farnborough	226	998·5	+12	SW'W	3	bc	42	97	7	5	3	-	2-3	4-6	2500
	Boscombe Down	417	998·4	+12	W'S	2	c	43	97	7	-	7	-	0	9	-
	Calshot (Sthmtn.)	8	998·8	+10	W	2	c	47	85	7	5	-	-	10	10	3000
	Lympne ...	346	1000·1	+14	S	1	c	45	92	7	8	-	-	7-8	7-8	3500
	Manston ...	154	998·8	+10	SSW	2	bc	44	92	7	2	-	-	2-3	2-3	3000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	997·6	+2	SW	4	bc	47	85	7	-	7	-	0	4-6	-
	Gorleston ...	5	996·4	-14	SW'S	4	c	48	92	6	8	-	-	9+	9+	1500
	Mildenhall ...	19	998·8	+10	SW'S	4	c	45	85	7	5	3	-	4-6	7-8	2000
	Cranwell ...	240	993·6	-4	W	4	ir.	45	97	5	5	-	-	10	10	800
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	996·7	+10	WSW	3	c	44	85	7	5	3	-	4-6	7-8	3000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	998·7	+8	WNW	3	bc	49	75	8	2	4	-	2-3	4-6	1500
	Bristol ...	209	998·3	+10	WSW	1	c	48	92	7	8	7	-	7-8	7-8	2200
	Portland Bill ...	32	998·6	+12	W	4	c	50	92	7	5	7	-	7-8	10	2500
	Plymouth ...	82	1000·1	+8	W	1	b	46	92	7	2	6	-	Tr	1	2000
	The Lizard ...	240	1001·0	+8	W	5	c	51	85	8	8	3	-	4-6	7-8	1500
	Scilly (St. Mary's)	163	1000·8	+14	WNW	4	bc	50	85	8	8	6	-	4-6	4-6	1500
	Guernsey ...	175														
6	Pembroke ...	142	998·0	+12	WNW	3	c	50	75	8	8	-	-	7-8	7-8	2000
7	Holyhead ...	26	995·2	0	W	5	c	50	85	8	8	3	-	9	9+	4000
	Chester (Sealand)	16	995·0	+2	W'S	3	c	47	85	7	5	-	-	7-8	7-8	2800
8	Manchester ...	70	994·5	+4	WSW	1	rf	43	97	3	-	2	-	10	10	1000
10	Spurn Head ...	29	992·1	-18	SE'S	3	o	46	92	6	5	-	-	10	10	2500
	Catterick ...	175	993·8	-14	-	0	fo	42	97	4	6	2	-	4-6	10	800
	Tynemouth ...	108	994·2	-22	S	3	fr	43	97	6	6	-	-	10	10	1200
11	St. Abbs Head	280	991·9	-22	SW	3	c	44	97	7	5	2	-	7-8	10	2000
	Leuchars ...	36	990·4	-22	SW	2	zo	41	97	5	5	7	-	1	9	9
12	Renfrew (Abbots I.)	19	991·6	-22	NE	1	fo	42	97	8	5	3	-	9	9+	1400
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	993·8	-8	WNW	4	c	48	92	8	8	1	-	7-8	10	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	984·9	-10	WNW	6	pr	47	85	7	8	7	-	7-8	10	1700
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	987·3	-22	S	5	bc	48	85	8	4	6	-	2-3	2-3	2500
16	Lerwick ...	156	988·2	-34	S'E	8	c/r	47	92	6	6	2	-	4-6	10	800
17	Blacksod Point	18	999·8	+18	NW	7	cq	50	85	8	3	-	-	7-8	7-8	1500
18	Malin Head ...	84	992·6	0	NW'N	6	c	49	85	6	9	-	-	9	9	1500
	Aldergrove ...	268	994·0	-12	SW	4	fo	45	92	7	6	-	-	10	10	800
19	Birr Castle ...	173	999·2	+4	W	1	rr	44	97	7	5	-	-	10	10	1500
20	Valentia Obsy.	30	1002·6	+18	NNW	4	c	51	85	9	8	-	-	9	9	2500
	Roches Point	22	1001·2	+14	NW'W	3	bc	43	97	8	5	-	5	2-3	4-6	1500

OBSERVATIONS at 7 hr. G.M.T. 10th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount. Low 0–10 (26)	Cloud. Amount. Total 0–10 (27)	Cloud. Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1000·5	+10	SW	3	zo	43	92	6	5	2	-	Tr	1	1500	1	*
	Croydon ...	1000·5	+12	-	0	b	42	97	7	-	4	1	0	1	-	1	*
	S. Farnborough	1001·0	+10	WSW	3	bc	40	97	8	3	-	3	1	2-3	2000	1	*
	Boscombe Down	1001·	+10	SW'S	2	bc	40	97	6	5	-	-	2-3	2-3	3000	1	*
	Calshot (Sthmtn.)	1001·2	+10	W	2	b	43	97	7	8	7	1	Tr	1	2000	1	1
	Lympne ...	1002·3	+14	SSW	1	c/pr	45	97	8	2	7	-	2-3	9	2500	1	§2
	Manston ...	1001·0	+12	SSW	2	zo	44	97	6	3	3	3	4-6	7-8	2500		*
2	Shoeburyness ...	1000·9	+10	SW	2	bc	45	97	8	-	5	-	0	2-3	-	1	*
	Felixstowe ...	999·5	+8	SW'S	3	zo	44	92	6	-	7	8	0	1	-	1	2
	Gorleston ...	999·2	+16	SW'S	3	bc	42	92	7	5	-	-	2-3	2-3	2500	1	2
	Mildenhall ...	998·1	+8	SW'S	4	bc	43	92	7	-	5	-	0	2-3	-	1	*
	Cranwell ...	996·0	+2	WSW	4	zo	42	92	6	-	7	1	0	2-3	-	1	*
3	Birmingham ...	997·8	+2	SW	3	bc	41	92	8	-	4	5	0	2-3	-	1	*
	Upper Heyford	999·2	+8	WSW	3	zo	41	97	5	5	4	-	4-6	4-6	200	1	*
4	Ross-on-Wye	998·4	0	SW	3	bc	43	85	8	8	-	3	Tr	2-3	2500	1	*
5	Hartland Point	1000·1	+2	WNW	4	r	50	85	8	8	-	-	7-8	7-8	2000	1	3
	Bristol ...	1000·2	+6	SW	3	bc	44	92	8	8	6	-	4-6	4-6	2000	1	*
	Portland Bill ...	1001·2	+12	W	4	bc	51	92	8	5	-	-	4-6	4-6	4000	1	4
	Plymouth ...	1002·7	+14	-	0	m	40	97	4	8	-	2	2-3	4-6	1900	1	0
	The Lizard ...	1004·1	+20	NW	4	bc	50	85	8	8	6	-	4-6	4-6	2500	0	2
	Scilly (St. Mary's)	1003·9	+14	NW'W	4	bc	49	85	8	8	4	-	4-6	4-6	1500	1	3
	Guernsey ...																
6	Pembroke ...	1000·6	0	NW	7	c/pr	50	85	7	8	-	-	10	10	1500	1	3
7	Holyhead ...	994·7	-2	W'N	8	c/pr	49	75	7	9	3	-	7-8	9	2500	1	4
	Chester (Sealand)	994·7	-2	WSW	2	rr	46	92	6	6	2	-	9	10	1800	1	*
8	Manchester ...	994·0	-6	SW'W	4	ir.	45	92	6	5	7	-	7-8	10	1900	2	*
10	Spurn Head ...	994·2	+4	W'S	4	c	44	97	7	4	-	-	9	9	4000	1	3
	Catterick ...	991·1	-18	SSW	1	c	42	92	8	5	-	-	7-8	9	2000	1	*
	Tynemouth ...	990·0	-16	SW	3	c	49	92	6	8	-	-	7-8	7-8	1500	1	2
11	St. Abbs Head	986·4	-28	SW	5	cq	43	92	8	5	2	-	7-8	10	2500	1	2
	Leuchars ...	986·6	-16	WNW	4	rr	42	92	5	5	2	-	7-8	10	1200	2	*
12	Renfrew (Abbots I.)	989·5	+12	WNW	5	bc	43	75	8	5	3	-	2-3	4-6	4000	1	*
	Eskdalemuir ...	988·3	-2	NNW	3	c/r	40	85	7	5	-	-	10	10	800	1	*
	Point of Ayre ...	991·9	-4	NW'N	7	bc/r	47	85	8	9	-	-	4-6	4-6	2500	1	4
13A	Tiree ...	991·5	0	NNW	6	c/pr	42	85	7	8	-	-	7-8	7-8	1500	1	4
13B	Stornoway ...	986·8	-4	WNW	6	pr	41	92	7	8	4	-	4-6	7-8	1200	1	3
15	Dalwhinnie ...	*	0	NNW	1	o	37	85	7	5	1	-	4-6	10	1500	1	*
	Aberdeen ...	987·2	-10	NNW	2	fofo	42	97	7	6	2	-	4-6	10	1500	1	1
	Wick ...	985·0	-2	WSW	3	c/r	42	92	8	5	7	-	7-8	10	1500	1	2
16	Lerwick ...	986·6	-6	S'E	7	c/r	46	92	7	8	2	-	7-8	10	800	1	*
17	Blacksod Point	1002·1	+6	WNW	5	pr	45	85	8	3	-	-	7-8	7-8	1500	1	4
18	Malin Head ...	994·4	+8	N	6	c	47	55	7	2	-	8	4-6	7-8	2500	1	5
	Aldergrove ...	995·2	+10	NW'W	5	c/pr	41	85	7	8	3	-	9	9+	1500	2	*
19	Birr Castle ...	1001·7	+12	WSW	1	c	42	75	8	5	-	-	7-8	7-8	2500	1	*
20	Valentia Obsy.	1006·8	+22	NW	6	bcq	49	65	9	5	-	-	4-6	4-6	2500	1	4
	Roches Point	1004·3	+26	WNW	5	bc	48	75	8	3	4	-	4-6	4-6	1500	1	3

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h.–18h. °F. (31)	Temperature. Min. Night 18h–7h. °F (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 9th. Hrs. (36)
London (Kew)	49	43	31	*	1	0·0
Croydon ...	49	41	39	4	3	0·0
S. Farnborough	50	39	30	6	1	0·0
Boscombe Down		39	34		0·3	0·0
Calshot (Sthmtn.)	51	41	37		-	0·0
Lympne ...	47	49	36	1	5	0·3
Manston ...						
Shoeburyness ...			38	Tr	1	0·1
Felixstowe ...	49	43	39	1	2	0·0
Gorleston ...	48	42	36	-	0·5	0·0
Mildenhall ...	48	41	35	0·1	0·4	0·0
Cranwell ...	46	41	38	3	4	0·0
Birmingham ...	48	41	38	8	0·1	0·0
Upper Heyford	48	39	30	2	0·1	*
Ross-on-Wye	49	42	37	10	-	0·0
Hartland Point	51	47	43	13	3	0·0
Bristol ...	50	42	34	9	Tr	0·0
Portland Bill ...	54	49	*	19	-	*
Plymouth ...	54	39	32	-	6	0·0
The Lizard ...	52	48	*	4	2	0·1
Scilly (St. Mary's)	53	48	*	1	0·1	1·0
Guernsey ...						
Pembroke ...	52	45	*	10	1	0·0
Holyhead ...	52	46	45	0·1	3	0·0
Chester (Sealand)	49	47	38	12	1	0·0
Manchester ...	50	42	38	16	7	0·0
Spurn Head ...	48	43	*	0·2	6	0·0
Catterick ...	46	41	37	+	9	0·0
Tynemouth ...	49	43	40	2	7	*
St. Abbs Head	46	42	*	4	1	*
Leuchars ...	49	39	33	6	2	0·0
Renfrew (Abbots I.)	50	38	30	1	1	0·0
Eskdalemuir ...	46	36	32	13	5	0·0
Point of Ayre ...	50	42	*	3	7	0·0
Tiree ...	50	40	*	4	1	0·3
Stornoway ...	51	40	*	3	1	0·2
Dalwhinnie ...	45	37	34	3	4	0·0
Aberdeen ...	49	41	36	5	2	0·0
Wick ...	49	41	*	4	2	2·2
Lerwick ...	46	46	*	10	10	0·0
Blacksod Point	52	42	*	2	8	*
Malin Head ...	51	41	*	4	3	3·6
Aldergrove ...	47	40	37	-	4	1·6
Birr Castle ...	53	36	30	-	1	5·2
Valentia Obsy.	52	40	33	0·2	1	5·3
Roches Point	51	43	*	-	0·5	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather. Morning. (24 hrs. ended 9h.)	Weather. Afternoon. (24 hrs. ended 9h.)	Weather. Night. (24 hrs. ended 9h.)	Temperature. Day Max. °F.	Temperature. Night Min. °F.	Temperature. Min. on Grass °F.	Rainfall. Day. mm.	Rainfall. Night. mm.	Sunshine. to Sunset. hrs. (Yesterday.)	Humidity. 15h. G.M.T. % (To-day.)	Humidity. 9h. G.M.T. % (To-day.)	Visibility 9h.
Kew ...	18	cmocir.	civcfor	crorcmow	49	48	31	*	1	0·0	*	*	6
Croydon ...	217	cmorr	forom.	forfrcmb	49	41	39	4	3	0·0	*	*	5
Greenwich (Royal Observatory) ...	149												
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	0·0	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	49	41	36	2		0·0	84	95	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*									*
Camden Square ...	110	c	c	*	50	42	35	1	1	*	*	92	*
Kensington ...	80	cpc	cp	*	49	41	28	0·2	2		84	95	*
Hampstead Observatory ...	450	od	od	orbc	47	40	38	0·1	2	0·0	*	98	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 10th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
<0.1 whole period			

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...														

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

		Objects not visible at
0	Dense fog	55 yards.
1	Thick fog	220 ,,
2	Fog	550 ,,
3	Moderate fog	1,100 ,,
4	Mist or haze	1¼ miles.
5	Poor visibility	2½ ,,
6	Moderate ,,	6½ ,,
7	Good ,,	12½ ,,
8	Very good ,,	31 ,,
9	Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0	Calm.	5	Very rough.
1	Smooth.	6	High.
2	Slight.	7	Very high.
3	Moderate.	8	Preciptious.
4	Rough.	9	Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 11th November 1940.

No. 28844

OBSERVATIONS at 13h. G.M.T. 10th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	999.4	-10	WSW	4	ir	47	85	6	5	2	-	7-8	10	1500
	Croydon	999.2	-18	SW	3	roro	47	85	5	5	2	-	7-8	10	1000
	S. Farnborough	1000.1	-10	SWW	4	[illegible]	47	92	8	5	2	-	4-6	10	1500
	Boscombe Down	1000.4	0	W'S	5	bc	47	75	8	8	-	-	4-6	4-6	3000
	Calshot (Soton.)	1001.3	-2	WNW	4	c/pr	49	75	8	8	3	-	9+	9+	4000
	Lympne	1001.6	-14	SW	2	pr	49	92	8	9	-	-	9+	9+	1200
	Manston	999.7	-20	SW	3	c/phr	49	92	7	9	6	3	4-6	7-8	500
2	Shoeburyness	1000.0	-18	SSW	3	c	53	75	8	8	-	-	9+	9+	2500
	Felixstowe	998.0	-20	SW'S	4	c	50	75	7	3	7	-	2-3	9+	2000
	Gorleston	997.9	-14	SSW	6	c	51	85	6	5	-	-	7-8	7-8	2500
	Mildenhall	997.3	-8	SWW	3	rr	44	97	6	6	2	-	4-6	10	800
	Cranwell	996.0	+2	W'N	5	c/pr	44	85	7	8	-	-	9+	9+	1500
3	Birmingham	998.1	+2	W	3	bc	43	75	7	8	3	-	2-3	4-6	2500
	Upper Heyford	999.9	+10	W'N	3	c/pr	43	85	8	9	4	3	9	9	800
4	Ross-on-Wye	999.3	0	W	4	c	47	65	9	5	6	3	4-6	7-8	2500
5	Hartland Point	1002.5	+4	WNW	4	cjp	49	75	8	8	6	-	4-6	7-8	1500
	Bristol	1000.9	+4	W'N	4	c/pr	49	75	8	2	6	-	4-6	7-8	2400
	Portland Bill	1002.0	+6	WNW	4	c	51	92	8	2	-	-	9	9	4000
	Plymouth	1004.4	+6	WNW	5	bc	51	65	8	2	6	-	2-3	2-3	2500
	The Lizard	1006.4	+16	NW	6	bc	51	65	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1007.2	+12	NW	5	bc	53	65	8	8	4	-	2-3	4-6	1800
	Guernsey														
6	Pembroke	1002.0	+3	WNW	6	cq	48	75	8	8	6	-	4-6	7-8	2500
7	Holyhead	997.5	+6	W'N	7	c/phr	47	85	8	9	-	-	9+	9+	2500
	Chester (Sealand)	996.7	+10	W	4	pr	42	75	7	8	-	-	9+	9+	1600
8	Manchester	1006.1	+18	WN	4	c	43	55	7	8	3	-	7-8	10	1800
10	Spurn Head	993.2	0	SW'S	4	c/r	45	92	7	4	5	1	4-6	9	4000
	Catterick	992.7	+10	W'N	2	c	44	65	6	5	6	-	7-8	7-8	4000
	Tynemouth	991.5	+12	W	4	bc	45	75	6	2	3	-	2-3	4-6	3200
11	St. Abbs Head	988.8	+2	WNW	4	bc	40	65	8	4	4	1	4-6	4-6	2500
	Leuchars	988.3	+2	WSW	3	bc	44	65	8	8	3	-	1	4-6	3500
12	Renfrew (Abbots I.)	991.2	+2	W'S	4	pr	46	79	8	9	4	3	9	9	1500
	Eskdalemuir	990.9	+8	NW	6	bc	40	65	8	5	7	-	2-3	4-6	2500
	Point of Ayre	995.1	+8	NW'W	6	PR	40	97	8	9	-	-	9+	9+	1500
13A	Tiree														
13B	Stornoway	980.4	-32	NW	5	c/pr	45	92	7	8	7	-	7-8	9+	1500
15	Dalwhinnie	988.1	-10	W	8	bc	39	75	7	2	-	-	4-6	4-6	1500
	Aberdeen	986.4	0	WNW	8	bc	44	75	8	7	7	-	Tr	2-3	2500
	Wick	984.1	-4	SW	2	bc	44	75	8	1	4	5	1	4-6	2500
16	Lerwick	984.5	-18	SE	7	rr	45	92	7	6	2	-	4-6	10	800
17	Blacksod Point	1004.2	+6	WNW	5	bc	47	75	8	3	5	-	2-3	4-6	1500
18	Malin Head	995.4	+2	NNW	7	c/phr	46	75	7	3	-	-	9	9	800
	Aldergrove	997.2	+6	WNW	5	pr	44	65	8	3	-	-	9	9	1600
19	Birr Castle	1003.5	+4	N	3	c	47	65	8	8	-	-	7-8	7-8	1500
20	Valentia Obsy. †	1009.0	+6	NW	6	c/pr	50	75	8	9	-	-	7-8	7-8	2500
	Roches Point	1006.0	+8	NW'N	5	bc/pr	48	75	8	3	-	-	4-6	4-6	1500

OBSERVATIONS at 18h. G.M.T. 10th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1001.5	+16	WSW	3	bc	44	75	7	5	-	-	4-6	4-6	2500	1	*
	Croydon	1000.9	+20	WNW	1	bc/pr	43	75	6	4	-	-	2-3	2-3	3000	1	*
	S. Farnborough	1002.9	+20	WSW	3	bc	41	92	8	5	3	-	2-3	2-3	3500	1	*
	Boscombe Down	1002.2	+18	W	3	bc	39	88	8	4	-	-	2-3	2-3	4000	1	*
	Calshot (Soton.)	1002.6	+14	W'N	3	b	42	85	7	5	-	-	2-3	2-3	3500		
	Lympne	1002.0	+12	SW	1	bc	43	88	7	8	6	-	2-3	7-8	2500	1	§
	Manston	1000.7	+18	W	2	zo	43	88	6	-	6	-	0	2-3	-		*
2	Shoeburyness	1001.3	+18	WNW	2	c/pr	40	85	7	8	-	-	7-8	7-8	4000	1	*
	Felixstowe	999.5	+16	W'S	4	zo	41	85	6	-	6	3	0	7-8	-	1	1
	Gorleston	998.3	+20	W'S	3	bc	41	85	6	2	-	-	2-3	2-3	2500	1	2
	Mildenhall	998.7	+14	SW'W	3	c	38	92	7	8	6	-	4-6	7-8	2500	1	*
	Cranwell	997.5	+14	W	5	zo	37	92	6	-	6	-	0	Tr	-	1	*
3	Birmingham	1000.3	+10	WSW	3	b	38	85	6	4	-	-	1	1	2500	1	*
	Upper Heyford	1000.7	+10	W'N	3	b	39	85	9	-	6	-	0	1	-	1	*
4	Ross-on-Wye	1001.6	+12	W'S	2	bjp	41	75	8	8	-	3	1	1	2500	1	*
5	Hartland Point	1004.1	+14	WNW	5	bc	48	65	8	8	6	-	4-6	4-6	1500	1	4
	Bristol	1003.2	+14	W	4	bc	41	75	8	4	6	-	2-3	4-6	2500	1	*
	Portland Bill	1003.8	+16	W	4	o	51	92	8	5	-	-	10	10	2500	1	4
	Plymouth	1006.0	+14	NW'N	5	pr	46	92	7	8	-	-	7-8	7-8	2500	1	4
	The Lizard	1007.2	+4	NW	6	bc	49	76	8	8	6	-	4-6	4-6	2500	1	3
	Scilly (St. Mary's)	1007.9	+12	NW'W	6	bc/pr	49	65	8	8	6	4	2-3	4-6	1500	1	3
	Guernsey																
6	Pembroke	1002.8	+10	WNW	7	bcq	48	55	8	5	7	-	2-3	4-6	3500	1	4
7	Holyhead	998.6	+6	W'N	7	c	47	75	8	2	-	3	9	9+	2400	1	5
	Chester (Sealand)	998.1	+10	W	4	c	44	75	8	2	3	-	2-3	9	1500	1	*
8	Manchester	997.6	+16	SW	2	bc/pr	37	85	6	8	6	-	4-6	4-6	1200	2	*
10	Spurn Head	994.7	+2	SW'W	5	bc	40	85	7	-	1	-	0	2-3	-	1	2
	Catterick	993.7	0	WSW	1	c	40	75	8	4	7	-	2-3	7-8	2500	1	
	Tynemouth	992.2	+4	W	3	bc	41	75	6	2	3	-	2-3	2-3	3200	1	2
11	St. Abbs Head	988.0	-10	W	5	roro	40	85	8	5	2	-	7-8	9	2000	1	2
	Leuchars	986.3	-14	SW	5	ido	40	92	5	6	2	-	7-8	10	1800	2	*
12	Renfrew (Abbots I.)	987.3	-30	WNW	5	c/r	45	85	8	8	3	-	4-6	7-8	1800	1	*
	Eskdalemuir	989.3	-24	W'S	6	rr	36	92	6	-	2	-	10	10	800	1	*
	Point of Ayre	994.6	-6	WNW	7	pr	45	85	8	6	2	-	4-6	10	1500	1	4
13A	Tiree																
13B	Stornoway	988.3	+28	NW	4	pr	45	92	6	5	6	-	9	10	1000	1	2
15	Dalwhinnie	986.0	-10	SW	2	iso	35	92	7	5	-	-	10	10	1500	1	*
	Aberdeen	987.4	+6	SW'W	2	bc	40	86	7	7	-	-	Tr	Tr	2500	1	2
	Wick	986.9	+30	W	2	bc	44	97	6	9	6	-	2-3	2-3	2500	1	1
16	Lerwick	985.3	+16	SSW	5	roro	46	92	7	3	2	-	4-6	10	800	1	*
17	Blacksod Point	1005.3	+8	NW	4	pr	47	65	7	3	-	-	9+	9+	1800	1	3
18	Malin Head	996.0	+10	N'W	7	c	46	75	6	9	-	-	7-8	7-8	800	1	5
	Aldergrove	997.6	+6	WNW	5	c	43	75	8	9	6	-	7-8	7-8	1200	2	*
19	Birr Castle	1004.6	+14	NNW	2	c/pr	42	85	8	8	-	-	9	9	1500	1	*
20	Valentia Obsy. †	1009.5	+6	NW'N	5	c	49	85	8	8	-	-	9	9	2500	1	4
	Roches Point	1007.3	+14	NW	4	bc	46	75	8	3	-	5	2-3	4-6	1500	1	3

PAST 24 HOURS. — WEATHER.

District	Stations	7h.—13h. 10th. (37)	13h.—18h. 10th. (38)	18h. 10th. to 1h. 11th. (39)	1h.—7h. 11th. (40)
1	London (Kew)	bcclgrm	cirobc	bcbw	bbccmox
	Croydon	bcmomogo	roropro	bmow	bbcmow
	S. Farnborough	bcmrrog	croprqbc	cb	bbccx
	Boscombe Down	cgoc	bcpro	bwb	bbxc
	Calshot (Soton.)	bc,prm	crorom	bw	bwc
	Lympne	bccpro	proPRbc	bcprobw	pwx
	Manston	cbccPHR	cprcmo	bccbmo	bmob
2	Shoeburyness	bcc	oRRbc	cb	bbcb
	Felixstowe	bmbcc		cmobmoW	bmdwcm
	Gorleston	bccq	corbc	bcbbc	c
	Mildenhall	bwbccRoro		cbmoczm	cbc
	Cranwell	crrprorc	proc,bmo	bm,cmo	cmo
3	Birmingham	corprh	bcprh	bbc	bcc
	Upper Heyford	bccmcrr		b	bbc
4	Ross-on-Wye	bccrocc	cpobccb	b	bcc
5	Hartland Point	cp	cpbc	bccp	cp
	Bristol	bccPR	cprqprobc	bcbw	bbcwc
	Portland Bill	oirc	cPR	c	c
	Plymouth	bcfgmcmpr	cpro	cpro	cproc
	The Lizard	cbco	cprbc	bcprc	bcprc
	Scilly (St. Mary's)	cpocbc	bcpro	cpoc	cproq,cx
	Guernsey				
6	Pembroke	cq	cprbcq y	bcqy	bcqc
7	Holyhead	probc	bcproc	cbc	bcb,c
	Chester (Sealand)	rr Rprhpo	prprhqc	cprqc	cprocmo
8	Manchester	cqPR	cqbcPR	q,PRpr	prpro
10	Spurn Head	cir	cbc	cir	cqpr
	Catterick	ccproc	cprobcc	roroPRbc	probcc
	Tynemouth	coirc	bc	coirc	bcpoc
11	St. Abbs Head	cbc	cror	cror	bccrr
	Leuchars	crrigcbc	crridomo	cidoirgmobcb	*
12	Renfrew (Abbots I.)	bccpro	cprorroR	bcbbcc	cbc
	Eskdalemuir	cbc	bccorr	orrcbc	bcc
	Point of Ayre	cPRq	cq	prc	c
13A	Tiree				
13B	Stornoway	cPR	cpro	*	cprq
15	Dalwhinnie	cbc	ciso o	*	cprbc
	Aberdeen	cob	bbcb	b	ircmo
	Wick	probc	bcmo	bccro	rorbc
16	Lerwick	cigrr	crrro	c	c
17	Blacksod Point	cbc	proc	rr	rr
18	Malin Head	cPHcphrc	cqphrc	cphrprcphrc	c
	Aldergrove	PRqpr	prproc	cprobcc	probcc
19	Birr Castle	c	cpr	c	roro
20	Valentia Obsy. †	bccprqpr	bccproPRqc	c	crororrro
	Roches Point	probc	bc	proc	irrr

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/so, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
so/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. ro, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

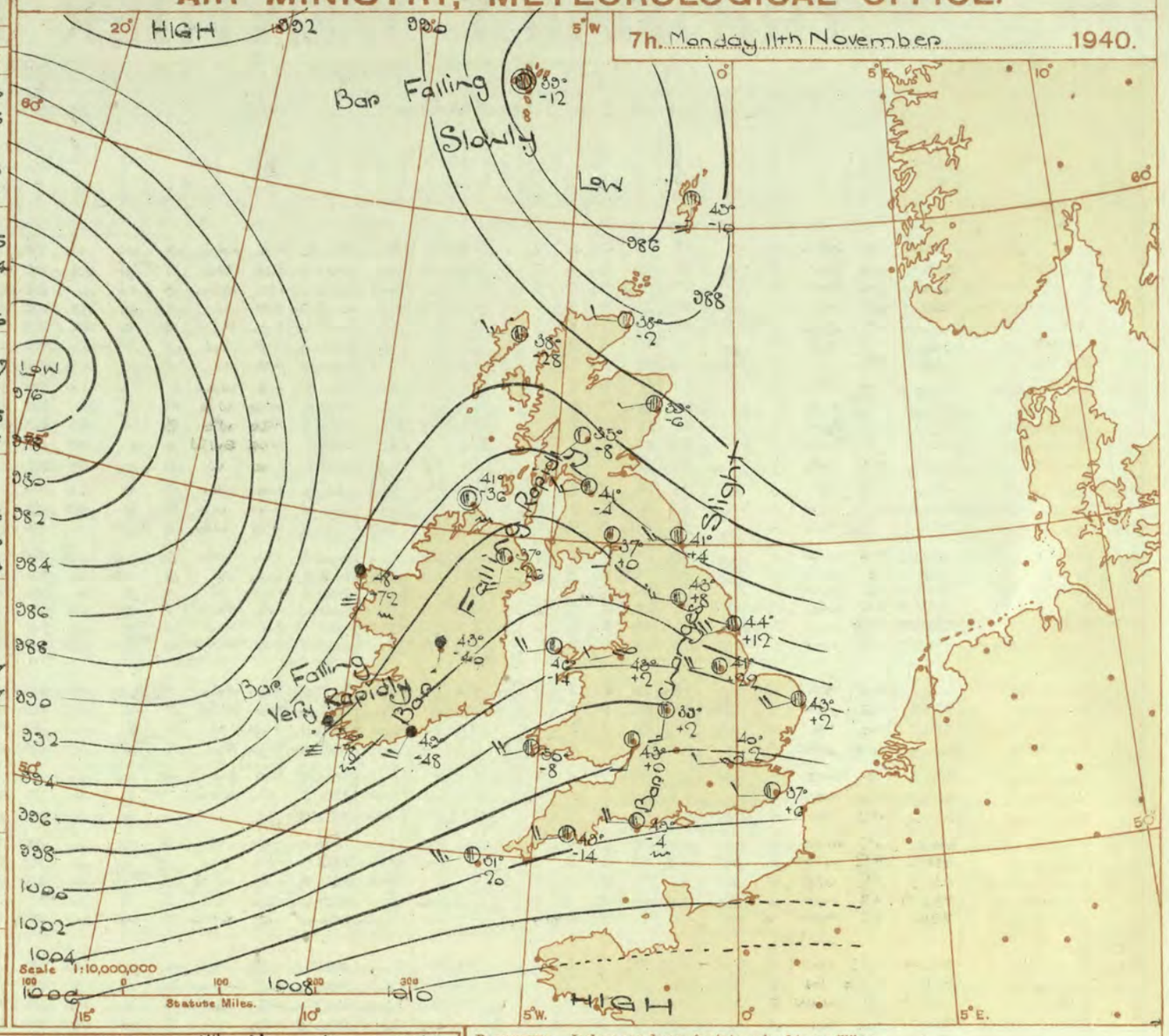
Abridged observations of additional stations in the
AVIATION WEATHER CODE

13h. G.M.T. 10th November				18h. G.M.T.			01h. G.M.T. 11th November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109				80	01752	21115	57	02774	21425	8-	02856	26266
115	52	08 44	20387	52	02944	32225	52	62738	61668	52	81844	28585
203				8-	01854	32964						
206	77	01864	23424	5-	00863	00013	8-	25877	24287	53	02865	00085
210	24	00952	53513				52	54747	20258	5-	02855	20325
220				32	22635	27768						
230	9-	25748	57788	90	25844	55784	93	25745	63586	86	02843	24135
245	87	01952	23464	5-	01755	00015	70	00951	25211	50	01864	26264
260	83	01868	22264	9-	81747	20587	80	01864	00014	50	00762	22312
277	9-	27847	29587	62	64746	57788	87	01844	62684	57	22853	22436
279							--	05664	26515			
285										23	02744	32487
288	87	02855	23267	47	02863	20215	86	25755	27486	83	02856	23217
273										11	01853	14415
301	9-	81637	28587	2-	25744	27585	8-	81648	61588	83	03655	23385
321	83	25655	25487	27	05652	57313	57	62655	24468	07	05630	23313
299	52	05543	18328	50	00742	22262	5-	05636	22426			
292	87	25856	26387	06	01890	22414	8-	81847	24387	86	02855	22386
310										--	63428	16468
316	9-	25645	24448	53	05562	22283	8-	02655	57567	96	82644	23388
333	83	25755	27587	2-	02856	28626	26	01754	26614	27	02853	20217
334										--	02554	16225
340	8-	10845	24485	8-	25746	24386	5-	02866	21316	50	01862	22315
136	57	62653	20368	46	00752	24413	5-	61767	20627	53	02765	20667
336										--	02754	24427
350	87	22644	18464							07	01790	18313
368												
379	30	01745	24485	40	01753	24313	00	00690	24300			
390	9-	82427	22487							05	05890	20315
382	8-	05645	22425	80	25653	20283	04	00790	22401	57	02763	23320
438	80	27746	24586							51	01754	24514
430	8-	81746	22487	83	25763	24385	00	00790	26200	57	05662	28216
409	37	81746	26587	86	81746	28587	26	25844	08247	5-	22757	21647

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Monday 11th November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 11th November 1940
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Freshening southwest wind, becoming strong to gale; cloudy; continuous rain spreading quickly east afternoon and evening; occasional rain tomorrow; milder.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Wind south to southwest, reaching gale at times on coast, veering west tomorrow; considerable rain; showery tomorrow with local hail and thunder but some bright intervals; mild.
9 N. Midlands ... 10 N.E. England	As 1-4.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland	Wind backing south and freshening, strong later, probably a gale locally, veering southwest tomorrow; cloudy, rain spreading northeast this evening; showers tomorrow; milder
16 Orkneys and Shetlands	Wind backing southeast becoming strong tomorrow; showery today with bright intervals; rainy tomorrow: average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 5-8.

GENERAL INFERENCE.

A deep depression off Northwest Ireland is moving eastward. Wind will become strong in most districts and reach gale force on many parts of the coast especially the Southwest. Rain will spread quickly eastward followed later by showery conditions. There are indications of a secondary about 600 miles west-southwest of Valentia which will prolong the rain and gale in the South.

FURTHER OUTLOOK.

Strong southwest to west wind, veering northwest in the West; showery weather but some bright intervals.

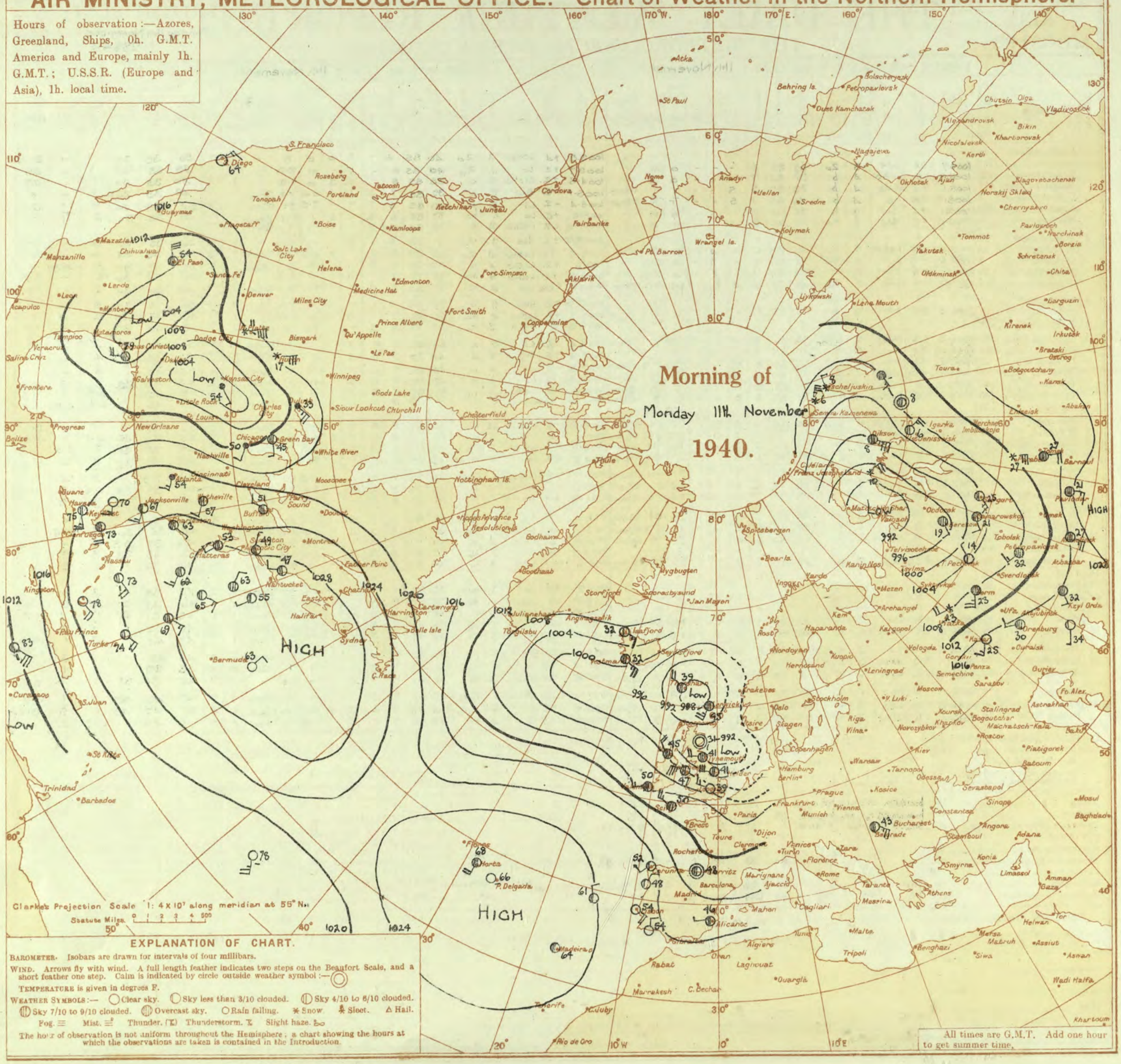
▼ Gale Warning issued at 0545 11/11/40 in districts 6,7,8,12,17, 18,19,20 and part of district 5, and at 0900 in remainder of 5 and part of district 1.

Forecasts issued at 10.30h.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 11th November 1940.

No 28844

OBSERVATIONS at 1 hr. G.M.T. 11th November — OBSERVATIONS at 7 hr. G.M.T. 11th November — PAST 24 HOURS.

Observations at 1 hr. G.M.T. 11th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1003·7	+4	W'N	3	z0	39	85	6	-	-	-	0	0	-
	S. Farnborough	226	1004·9	+6	WSW	4	b	37	85	7	-	-	-	0	0	-
	Boscombe Down	417	1005·1	+6	W'S	4	b	38	85	7	5	-	-	1	1	2500
	Calshot (Sthmtn.)	8	1005·7	+8	W	4	b	40	85	7	5	-	-	Tr	Tr	5700
	Lympne	346	1005·1	+6	SW	3	b	36	92	7	-	-	-	0	0	-
	Manston	154	1003·2	-2	SW	2	z0	37	92	6	-	-	-	0	0	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1002·0	+2	WSW	2	z0	40	92	6	-	4	-	0	Tr	-
	Gorleston	5	1000·2	-2	SW	4	bc	39	85	7	-	5	-	0	2-3	-
	Mildenhall	19	1000·1	-2	SW	5	c	39	65	7	-	7	-	0	7-8	-
	Cranwell	240	997·6	-6	W'S	6	z0	40	75	6	5	7	-	4-6	7-8	3500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1002·6	+4	SW'W	3	b	36	85	7	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1006·2	+8	NW	5	c/pr	45	92	8	8	6	-	7-8	9	2000
	Bristol	209	1005·0	+4	W	3	b	41	85	7	-	3	-	0	1	-
	Portland Bill	32	1006·2	+10	NW	4	c	48	85	8	5	-	-	7-8	7-8	4000
	Plymouth	82	1008·1	+10	WNW	4	pr	45	85	6	6	3	-	9+	9+	1200
	The Lizard	240	1009·2	0	NW'W	6	c	49	75	8	8	2	-	9	10	1500
	Scilly (St. Mary's)	163	1009·0	-2	NW'W	5	c/pr	50	85	8	8	6	-	9	9	1300
	Guernsey	175														
6	Pembroke	142	1005·4	+2	NW'W	6	bcq	48	55	8	8	2	-	2-3	4-6	2500
7	Holyhead	26	1000·6	+6	W'N	7	bc	47	75	8	2	3	-	2-3	4-6	2500
	Chester (Sealand)	16	998·9	+8	W'S	5	pr	46	65	7	8	-	-	9+	9+	2000
8	Manchester	70	997·3	+2	W	6	c/pr	45	75	6	8	-	-	9+	9+	1000
10	Spurn Head	29	993·0	-16	SW	6	c	41	85	7	5	-	-	9+	9+	2500
	Catterick	175	992·8	+14	NW'N	3	bc/pr	45	75	8	8	-	-	4-6	4-6	2200
	Tynemouth	108	991·1	+20	W	4		41	85	7	8	-	-	7-8	7-8	2000
11	St. Abbs Head	280	991·7	+28	N	3	c/r	42	92	7	5	2	-	7-8	9+	2000
	Leuchars	36	992·8	+28	W	2	bc	37	85	8	8	4	-	1	2-3	3500
12	Renfrew (Abbots I.)	19	993·7	+18	NW'W	5	c	45	85	8	8	-	-	9+	9+	2000
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	996·1	+20	NW	7	pr	47	85	7	9	-	-	9+	9+	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80														
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	989·5	+2	SW	3	r0r0	40	85	7	5	6	-	7-8	9+	1500
16	Lerwick	156	988·2	+4	SSW	5	c	45	85	7	8	7	-	7-8	9+	800
17	Blacksod Point	18	1003·6	+10	W	3	r0r0	46	85	8	6	-	-	10	10	1500
18	Malin Head	84	999·1	+10	NNW	5	c/pr	45	75	7	8	-	-	7-8	7-8	1500
	Aldergrove	268	1000·3	+10	W'N	4	c	42	75	8	8	3	-	7-8	9	2000
19	Birr Castle	173	1005·0	-2	NW	1	c	41	92	8	8	1	-	7-8	10	1500
20	Valentia Obsy.	30	1006·9	-22	W'S	3	c	50	85	8	5	-	7	9	10	2500
	Roches Point	22	1007·4	-8	WNW	3	c	47	85	8	8	1	-	4-6	9	1500

Observations at 7 hr. G.M.T. 11th November, and Past 24 Hours

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Max. Day 7h–18h °F. (31)	Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 10th Hrs. (36)
London (Kew)	1003·8	+4	WSW	3	z0	40	85	6	-	5	6	0	8	-	1	*	50	39	29	1	-	3·2
Croydon	1005·7	+2	W	2	z0	40	85	6	-	7	-	0	2-3	-	1	*	53	38	35	1	-	2·8
S. Farnborough	1004·8	+2	SW'W	3	c	38	85	8	-	4	5	0	7-8	-	1	*	50	35	30	1	-	2·7
Boscombe Down	1005·1	-2	SW	3	c	39	85	7	5	1	-	4-6	7-8	3000	1	*	48	35	26	1	-	*
Calshot (Sthmtn.)	1006·4	-2	W	3	c	43	85	8	7	7	-	7-8	9+	5700	1	2	54	39	36	*	-	3·4
Lympne	1005·6	+6	W	2	bc	37	85	8	2	-	6	1	4-6	2500	1	§	51	35	30	2	Tr	1·0
Manston	1004·2	+8	WSW	2	b	38	92	7	2	-	1	Tr	1	3000		*						
Shoeburyness	1003·7	+2	SW	3	z0	41	75	6	-	5	-	0	2-3	-	1	*	54	35	31	3	-	2·6
Felixstowe	1002·0	+2	WSW	4	z0	39	85	6	5	-	2	4-6	7-8	7200	1	3	51	38	34	·4	-	3·3
Gorleston	999·5	+2	WSW	4	c	43	75	6	5	-	-	9	9	2500	1	2	51	37	32	5	0·5	*
Mildenhall	1000·5	+10	WSW	5	bc	39	75	7	-	3	1	0	2-3	-	1	*	51	36	30	12	-	3·7
Cranwell	1000·1	+22	W	4	c	41	85	7	5	7	-	7-8	9	2000	1	*	46	36	34	2	-	1·8
Birmingham	1002·0	+2	SSW	3	c	39	85	7	-	-	6	0	7-8	-	1	*	46	36	33	5	-	1·1
Upper Heyford	1002·7	+2	WSW	4	bc	39	85	7	-	5	-	0	4-6	-	1	*	46	35	29	4	-	*
Ross-on-Wye	1002·8	0	SSW	2	c	43	75	8	5	7	1	7-8	9+	2500	1	*	49	39	35	1	-	1·7
Hartland Point	1003·4	-20	W	5	c	50	85	8	8	2	-	7-8	9+	2000	1	4	50	43	41	2	1	2·9
Bristol	1004·3	-6	SW'W	2	c	43	75	7	5	7	-	4-6	9+	3500	1	*	50	38	*	4	-	2·7
Portland Bill	1005·8	-4	W	4	c	49	92	8	5	-	-	10	10	2500	1	4	52	49	*	2	-	*
Plymouth	1005·9	-14	W	4	c	49	92	6	5	2	-	4-6	9+	2000	1	2	53	43	38	1	2	4·4
The Lizard	1006·5	-16	W'S	5	c	51	85	8	8	2	-	9	10	1500	0	3	52	45		0·5	1	4·8
Scilly (St. Mary's)	1005·0	-20	WSW	5	c	51	75	8	5	2	2	9+	10	1200	1	3	53	48	*	0·2	0·2	4·5
Guernsey																						
Pembroke	1002·2	-8	WSW	4	c	50	75	8	8	2	-	7-8	10	2500	1	2	50	47	*	Tr	-	3·3
Holyhead	999·2	-14	WSW	4	c	46	75	8	5	7	5	4-6	9	2200	1	3	50	45	42	0·1	-	2·5
Chester (Sealand)	999·5	+2	WSW	2	z0	43	75	6	5	7	-	2-3	9+	2500	1	*	47	37	31	7	0·2	1·3
Manchester	998·5	+2	W	4	c/pr	43	85	6	8	-	-	9+	9+	1200	2	*	46	36	32	8	4	0·5
Spurn Head	995·7	+12	WSW	6	c/pr	44	92	7	5	-	-	4-6	9+	4000	1	3	46	39	*	2	4	1·4
Catterick	995·8	+8	WNW	3	c	43	75	8	8	6	-	4-6	7-8	2500	1	*	46	39	35	0·6	2	1·9
Tynemouth	994·3	+4	W	3	c	41	85	6	8	-	-	7-8	7-8	2800	1	2	46	38	35	3	3	*
St. Abbs Head	992·0	-6	W	4	r0r0	42	85	8	5	5	-	7-8	10	2000	1	2	44	37	*	1	4	*
Leuchars	992·0	0	W	1	bc	39	92	8	5	4	-	4-6	4-6	3500	1	*	46	34	30	3	0·6	2·6
Renfrew (Abbots I.)	994·0	-4	W'S	3	c	41	75	8	5	-	6	Tr	7-8	3500	1	*	46	37	32	3	-	2·2
Eskdalemuir	994·7	0	S'E	2	c	37	85	8	5	7	-	4-6	7-8	2500	1		43	35	33	3	5	3·1
Point of Ayre	996·6	-10	W'N	5	c	44	85	8	8	7	-	1	7-8	4000	1	3	47	44	*	6	2	*
Tiree																			*			
Stornoway	991·3	-28	W	3	c/pr	38	92	7	5	7	-	4-6	9+	2000	1	2	46	38	*	3	3	0·5
Dalwhinnie	993·0	-8	SW	1	bc	35	85	8	5	-	-	4-6	4-6	2500	1	*	40	33	29	2	3	2·6
Aberdeen	990·9	-6	WSW	1	c	39	92	6	5	-	-	9+	9+	1500	1	1	45	31	23	1	2	1·7
Wick	989·1	-2	W	2	bc	38	97	7	5	-	-	4-6	4-6	7200	1	1	(45)	34	*	Tr	2	*
Lerwick	987·3	-10	S	5	c	45	75	8	5	7	-	7-8	9	1500	1	*	49	44	*	5	1	0·0
Blacksod Point	992·8	-72	S'E	5	rr	48	85	7	6	-	-	10	10	<150	1	4	48	43	*	1	3	*
Malin Head	994·0	-36	-	0	c	41	85	7	9	-	-	9	9	1500	0	5	48	39	*	1	1	1·4
Aldergrove	996·8	-26	SSW	3	c	37	92	7	-	7	-	0	9+	-	1	*	44	36	33	1	Tr	2·7
Birr Castle	997·0	-40	SSW	1	r0r0	43	97	7	5	-	-	10	10	2500	1	*	47	40	35	1	1	3·4
Valentia Obsy.	994·7	-78	S	6	r0r0	50	97	7	6	2	-	9+	10	1500	1	4	51	47	43	1	5	3·4
Roches Point	999·2	-48	SW	4	rr	49	92	7	6	2	-	7-8	10	800	1	3	49	45	*	0·3	2	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine, to Sunset, hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew	18	bccir0rm	cir0cbc	bcbwm0x	50	39	29	1	-	3·2	*	*	5
Croydon	217	bcmcm0r0	r0r0pr0	bm0bbc	53	38	35	1	-	2·8	*	*	6
Greenwich (Royal Observatory)	149	bm0cr0	r0rcr0c	cbxc ⊕	51	37	29	2	-	2·7	72	76	5
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*									*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	52	38	29	2	-	53	82		*
Camden Square	110			*						*	*		*
Kensington	80	bcp	bc	*	52	38	29	Tr	2	76	81		*
Hampstead Observatory	450	bc	or	bc	49	35	32	2	-	24	*		*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 11th

	Max.	Time.	Min.	Time.
South Kensington				
Kew Observatory	0·1	16·20h 10th	<0·1	0-6h 11th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome														

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22.—Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30.—Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

TERMS OF SUBSCRIPTION. { Single Copies, 1d. each: by post 1½d. 2/6 per month; 6/6 per quarter; 25/- per year.

METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 12th November 1940.

No. 28,845

OBSERVATIONS at 13h. G.M.T. 11th November,

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	998.5	-42	SSW	4	ir_o	46	92	6	5	-	-	10	10	1500
	Croydon	1000.1	-46	SSW	1	r_or_o	46	92	5	5	-	-	10	10	2000
	S. Farnborough	998.4	-46	S	3	r_or_o	47	97	6	5	2	-	4-6	10	1000
	Boscombe Down														
	Calshot (Soton.)	999.1	-46	SW'W	6	r_or_o	51	92	6	5	2	-	4-6	10	900
	Lympne ...	1002.6	-30	W	2	c	49	85	7	5	-	-	10	10	3500
	Manston ...	1000.9	-38	SW	3	c	48	85	6	5	7	-	7-8	10	2500
2	Shoeburyness ...	1000.9	-30	SSW	3	c	47	65	8	5	-	-	10	10	4000
	Felixstowe ...	996.6	-24	SW	5	z_o	47	75	6	-	7	-	0	10	-
	Gorleston ...	999.3	-14	SW	4	c	45	85	6	-	1	-	0	9	-
	Mildenhall ...	997.4	-30	SSW	3	c	45	75	7	5	7	-	2-3	10	6000
	Cranwell ...	995.5	-38	SSW	4	r_or_o	43	85	6	-	2	-	10	10	2500
3	Birmingham	995.4	-46	SSW	4	rr	42	97	6	6	-	-	10	10	800
	Upper Heyford	996.5	-50	S	4	rr	45	97	6	6	2	-	7-8	10	600
4	Ross-on-Wye ...	992.5	-68	S	4	RR	47	92	6	6	-	-	10	10	1500
5	Hartland Point	990.5	-82	SW	6	rr	51	97	6	6	2	-	7-8	10	800
	Bristol	995.4	-66	S'W	4	r_or_o	48	92	7	6	2	-	4-6	10	700
	Portland Bill ...	998.2	-52	SW	5	rr	53	92	7	5	-	-	10	10	2500
	Plymouth ...	996.6	-62	SW	6	rr	52	97	6	6	2	-	9+	10	700
	The Lizard ...	993.1	-60	SW	8	rr	52	97	6	5	-	-	10	10	1500
	Scilly (St. Mary's)	994.0	-74	SW'S	7	rr	53	97	5	6	-	-	10	10	800
	Guernsey ...														
6	Pembroke ...	986.1	-92	SW	8	rr	52	97	6	8	-	-	10	10	800
7	Holyhead ...	984.3	-104	S'E	6	RR	49	97	5	6	2	-	7-8	10	600
	Chester (Sealand)	989.9	-72	SE'S	3	r_or_o	44	92	6	6	2	-	9	10	800
8	Manchester ...	990.7	-66	SSE	4	rr	43	97	5	-	2	-	10	10	2200
10	Spurn Head ...	992.8	-16	S	4	c	45	85	6	5	3	-	9	9	4000
	Catterick ...	990.7	-46	SSW	3	z_o	43	75	5	-	2	-	10	10	1500
	Tynemouth ...	990.8	-36	SW	2	o	43	85	6	-	2	-	10	10	1800
11	St. Abbs Head	988.0	-34	SW	3	c	41	85	8	8	2	-	4-6	10	2500
	Leuchars ...	986.1	-26	SSW	2	z_o	41	85	6	8	7	-	7-8	10	2500
12	Renfrew (Abbots I.)	984.4	-68	S'W	3	ir_o	41	85	6	5	-	-	10	10	1100
	Eskdalemuir ...	986.7	-54	S'W	3	ir	38	85	6	-	2	-	10	10	1500
	Point of Ayre ...	983.0	-108	S	6	rr	46	97	7	6	2	-	4-6	10	1500
13A	Tiree	975.2	-86	SE'S	6	RR	42	92	6	-	2	-	10	10	800
13B	Stornoway ...	981.2	-56	SSE	4	c	42	75	8	5	7	7	7-8	10	1800
15	Dalwhinnie ...	*	-50	SSE	3	o	35	85	8	5	1	-	4-6	10	1500
	Aberdeen ...	985.6	-38	S	3	c	43	75	6	7	7	-	Tr	10	2500
	Wick	984.7	-26	SW	3	c	41	85	8	5	7	8	4-6	9	1500
16	Lerwick... ...	984.5	-16	SSE	4	c	46	75	8	5	7	-	4-6	7-8	1500
17	Blacksod Point..	974.9	-56	SW	6	r_or_o	55	97	6	6	-	-	10	10	<150
18	Malin Head ...	972.7	-120	SSE	6	rr	42	97	6	6	-	-	9+	9+	800
	Aldergrove ...	977.5	-130	SE'S	5	rr	45	92	5	6	2	-	7-8	10	500
19	Birr Castle ...	977.5	-90	S	5	rr	55	97	7	5	-	-	10	10	1500
20	Valentia Obsy. †	981.9	-44	SW'W	6	dd	57	97	6	5	-	-	10	10	450
	Roches Point ...	982.6	-70	S	6	dr	55	97	5	5	-	-	10	10	450

OBSERVATIONS at 18h. G.M.T. 11th November,

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°F. Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	984.7	-86	SSW	5	rr	51	97	5	6	2	-	7-8	10	800	1	*
Croydon	985.5	-86	S	5	rr	52	97	6	6	2	-	9	10	800	1	*
S. Farnborough	985.8	-80	SSW	6	rr	53	92	6	6	2	-	9	10	900	2	*
Boscombe Down	983.8	-74	SW'S	6	RR	54	97	5	6	2	-	9+	10	300	1	*
Calshot (Soton.)	986.2	-84	SW	8	rr	54	97	4	5	-	-	10	10	500	2	5
Lympne	991.6	-74	SW	6	rr	50	97	6	6	2	-	9	10	800	1	§
Manston	987.9	-80	S'W	8	rr	49	97	5	6	-	-	10	10	400		*
Shoeburyness	1007.9	-88	S	5	rr	51	92	6	-	2	-	10	10	800	1	*
Felixstowe	986.9	-84	S'W	7	r_or_o	49	92	6	6	2	-	9+	10	1000	1	3
Gorleston	986.4	-70	SSW	7	r_or_o	47	92	6	6	-	-	10	10	1500	1	3
Mildenhall	982.9	*	S'W	5	rr	50	*	6	6	2	-	7-8	10	500	1	*
Cranwell	978.0	-114	SSW	6	RR	49	97	5	6	-	-	10	10	500	2	*
Birmingham	978.8	-80	SSW	4	rr	50	97	6	6	-	-	10	10	450	1	*
Upper Heyford	982.0	-74	S	6	rr	52	97	5	6	2	-	7-8	10	600	1	*
Ross-on-Wye	979.0	-74	SW	6	r_or_o	55	92	7	6	-	-	10	10	800	1	*
Hartland Point	981.2	-30	SW	8	rr	55	97	6	-	2	-	10	10	600	1	5
Bristol	982.0	-60	SSW	6	rr	53	97	5	-	2	-	10	10	400	1	*
Portland Bill	985.8	-40	SW	7	RR	55	92	7	5	-	-	10	10	1500	1	5
Plymouth	986.5	-54	SW'W	9	rr	55	97	5	-	2	-	10	10	300		
The Lizard	986.6	-20	SW'W	8	dd	56	97	4	5	-	-	10	10	600	1	5
Scilly (St. Mary's)	986.1	-30	SW'W	7	rr	56	97	5	5	-	-	10	10	300	1	4
Guernsey																
Pembroke	978.3	-24	WSW	8	c/r	56	97	6	8	-	-	10	10	800	1	5
Holyhead	973.1	-26	SW'W	5	ir_o	55	97	5	5	2	-	9	10	800	1	4
Chester (Sealand)	974.0	-70	WSW	3	c/r	55	92	6	5	2	-	4-6	10	2800	1	*
Manchester	974.0	-86	S'W	4	rr	50	97	5	6	2	-	7-8	10	400	2	*
Spurn Head	975.9	-100	SSE	7	RR	47	92	6	6	-	-	10	10	<150	1	4
Catterick	973.3	-114	S'W	3	rr	43	97	4	6	2	-	9	10	400	1	
Tynemouth	973.7	-84	S	6	rr	44	97	6	6	-	-	10	10	1500	1	3
St. Abbs Head	971.4	-72	SSE	8	r_or_o	41	97	7	6	2	-	4-6	10	1500	1	4
Leuchars	971.7	-96	SSE	6	rr	40	97	6	-	2	-	10	10	900	2	*
Renfrew (Abbots I.)	968.8	-84	ENE	3	r_or_o	38	97	4	6	-	-	10	10	800	1	*
Eskdalemuir	969.8	*	S'E	2	rr	41	97	5	-	2	*	10	10	220	1	*
Point of Ayre	968.9	-54	W'S	6	c	53	97	7	9	-	-	9	9	1500	1	4
Tiree	962.4	-40	WSW	5	c/r	50	92	6	5	-	-	9+	9+	1500	1	5
Stornoway	970.0	-40	ENE	6	r_or_o	40	92	7	5	2	-	9	10	1000	1	3
Dalwhinnie	*	-84	SE	5	ss	33	92	5	5	-	-	10	10	1500	4	*
Aberdeen	974.5	-70	S'E	4	r_or_o	41	92	6	6	2	-	7-8	10	1500	1	2
Wick	974.7	-38	SSE	5	pr	42	75	7	5	2	-	7-8	10	800	1	2
Lerwick	978.9	-16	S	4	c/pr	42	92	8	8	7	-	7-8	9	1500	1	*
Blacksod Point	972.1	-22	W	7	PR	51	75	7	9	-	-	9+	9+	<150	2	4
Malin Head	966.5	-18	W	5	c/pr	48	92	8	6	2	-	4-6	7-8	1500	1	4
Aldergrove	969.7	-14	WSW	4	c	48	92	8	5	-	-	9	9	1800	2	*
Birr Castle	976.1	-2	WSW	3	bc	50	85	8	-	3	-	0	2-3	-	1	*
Valentia Obsy. †	981.8	+6	W	6	bc	52	75	8	8	-	-	4-6	4-6	2500	1	5
Roches Point	980.1	-2	WNW	5	bc	55	85	8	8	-	-	4-6	4-6	1500	1	4

PAST 24 HOURS.

Stations	Weather 7h.—13h. 11th (37)	13h.—18h. 11th (38)	18h. 11th 1h. 12th (39)	1h.—7h. 12th (40)
London (Kew)	$cm_ocr_om_o$	cr_orr	$crrr_ocrr_oc$	$cm_or_om_o$
Croydon	*	r_or_orr	*	$bcpr_o$
S. Farnborough	$cd_or_or_om_o$	$cr_or_orrm_o$	RRr_or_opRc	cpR_obr_oc
Boscombe Down		$crrm_ocRR$	bcq	cir_olq
Calshot (Soton.)	cid_or_o	cRR	dod_oprb	b,cpr_o
Lympne	c	r_orm_o	$cmorr_or_o$	$om_or_or_orr$
Manston	c	$r_or_orrm_o$	$crridoir_om_o$	$cirm_obcc$
Shoeburyness	bcz_oc	cr_orrm_oo	orrc	cb,cr_o,c
Felixstowe	bcm_ocz_o	or_or_oir	or_or_ocPR	bcc
Gorleston	cbbc	cor_or_o	orrcq	cprbc
Mildenhall	$bcccm_oc$	$cr_or_orrm_o$	$rrd_od_ob,pRkq$	pRkq,bbc
Cranwell	$ccz_or_or_o$⊕	$cr_or_oRRm_o$	RRcmo,b	$bcpr_om_o$
Birmingham	cor_o	orr_o	$orir_o$	oir_o
Upper Heyford		$crrr_or_orrm$	$crrr_obcpr$	$bccprcr_or_om_o$
Ross-on-Wye	ccd_oor_o	$rqdqr_oq$	$r_oqbcqcp$	cq,r_oqd
Hartland Point	rrc	rrp	orrcr	cp
Bristol	$cid_or_or_o$	cr_or_orr		cprlrrq
Portland Bill	orr	oR	oPR	orr
Plymouth	$cm_or_or_orr$	crrm	cir_ocpr_o	cp6,bccopr
The Lizard	prrrq	orr	prbcq	cq
Scilly (St. Mary's)	cr_oorr	orr	crbcpo	bc
Guernsey				
Pembroke	crrifqo	rrifqo	prcq	pqrcc
Holyhead	$cRRm_oc$	$RRir_oc$	bccqc	rrprc
Chester (Sealand)	$cz_or_or_om_o$	r_orrm_oc	$cm_opr_ob,pRlbc$	pm_oirrm_oq
Manchester	$cm_or_or_orr$	m_orrRrr	$prbcpr_oq$	pr_oRR
Spurn Head	c	qRr	bcq	cqr
Catterick	$cbccm_o$	$cm_or_or_orr$	rrmprbc	$prob=ir_o$
Tynemouth	co	orr	orrcbc	bccp
St. Abbs Head	c	rrmmq	cqr_o	cr_o
Leuchars	$bccir_ocm_o$	cm_ooRRr	$orrr_or_ocm_or_o$	$cirr_or_om_oc$
Renfrew (Abbots I.)	$comir_o$	$om_orRr_om_o$	$cm_or_or_oomrcm_o$	cr_ocbc
Eskdalemuir	bccoir	rrRRr	orrcm	circc
Point of Ayre	crr	rrc	bcc	rrprc
Tiree	orrR	oRrc	cir	cir
Stornoway	cophr	cr_or_o	crr	crr
Dalwhinnie	co	sso	*	is_oo
Aberdeen	$bccz_o$	ccr_or_o	cr_om	cr_or
Wick	cbc	cpr	r_orrq	rrirq
Lerwick	c	cpr	cphpr	cpr
Blacksod Point	r_o	PRcq	rrq	cbcq
Malin Head	cr_orrrc	cDrcirdc	circprcprc	proc
Aldergrove	$r_or_o rrm_o$	rrr_or_oidq	$prob,cir_o$	ir_oproc
Birr Castle	orr	cprbc	cir	cir
Valentia Obsy. †	$rrcirr_or_odd$	$ddir_ocpr$	bcPRcprc	cpr_obc
Roches Point	rrdr	idbc	prq	bcprq

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog „ less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
⊕ Solar halo. ⦶ lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4–6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. „ wet.
2 .. „ flooded.
3 .. „ frozen hard and dry.
4 .. „ partly covered with snow or hail.
5 .. „ covered with ice or glazed frost.
6 .. „ covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. „ covered with snow, less than 6 ins., but ground frozen.
9 .. „ covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

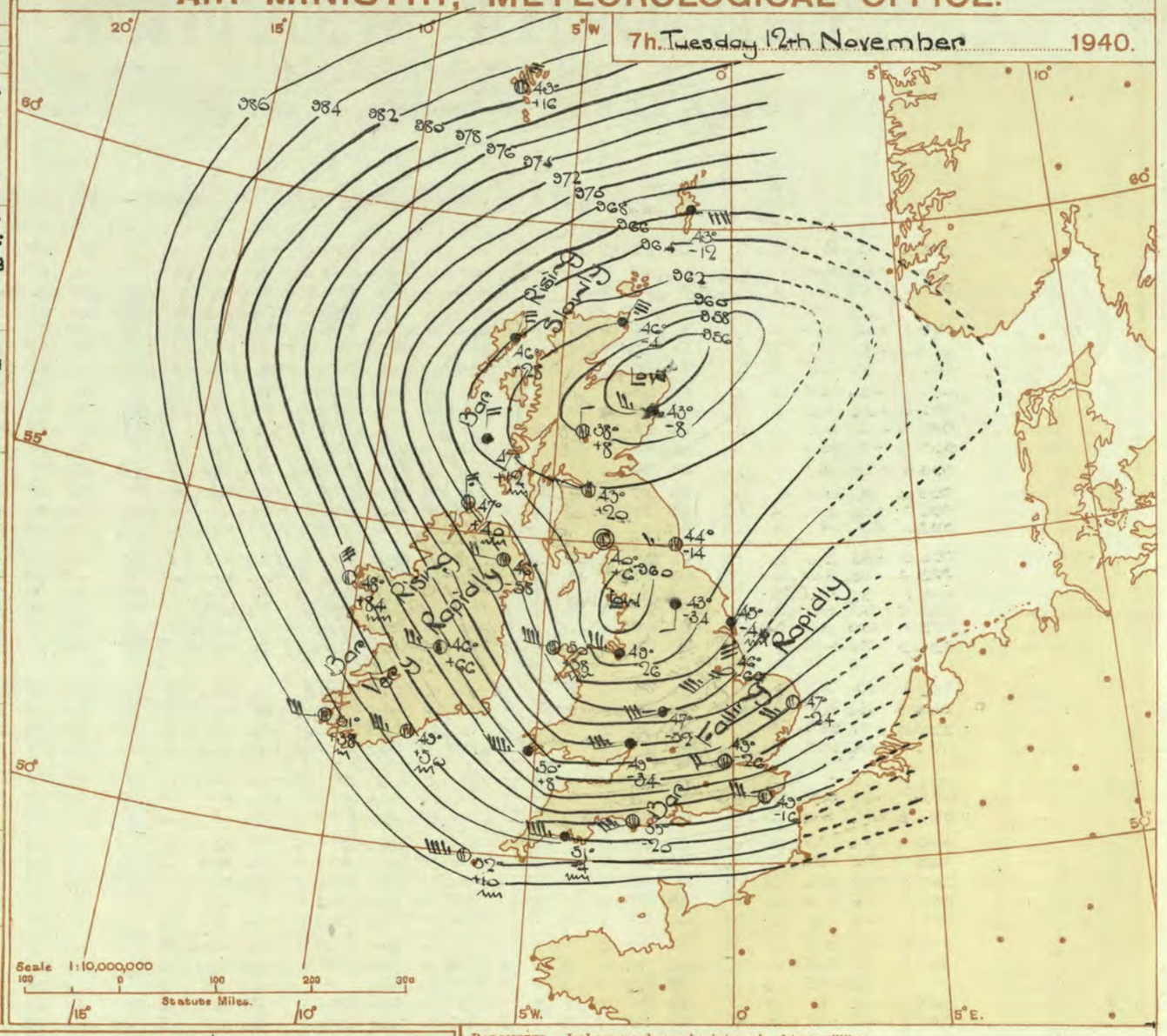
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 11th November			18h. G.M.T.			01h. G.M.T. 12th November			7h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	81	01854	22315	82	81745	12328	62	64645	44668	62	64545	35868
115	52	81944	18487	52	81735	12688	52	81734	41787	52	62735	35888
203							5-	62858	08468			
206	52	02862	07127	02	62758	08468	52	62743	04168	52	62743	26168
210	52	02952	12227	02	62648	10468	52	64635	08168			
220										62	64626	27468
230	62	62745	10168	57	52645	10468	5-	64648	00068	8-	25745	00085
245	51	05662	22228	62	64646	48568	6-	05538	22568	5-	22858	55468
260	42	02861	16128	62	62636	12368	52	64644	22368	53	08663	22214
277	62	64636	15568	50	21854	21464	51	61854	20568	8-	02757	28467
279							--	81645	25686	03	01730	24124
285	6-	63638	20428	--	67109	10469				6-	22638	26368
288	02	81658	17828	62	64635	82668	80	81835	55485	52	02763	15287
273	46	65544	16468							34	65643	28784
301	62	64545	14468	52	22645	20568	80	25744	57684	62	64644	28468
321	02	64548	16428	62	62636	50668	03	05630	26213	8-	62558	23568
299	5-	08446	22316	62	64435	16768	00	00730	23410	52	02744	25518
292	02	61558	18228	62	64427	16468	3-	01734	53584	52	64647	08258
310	--	67209	20469							--	63438	20768
316	62	64443	18368	62	64425	49568	56	01653	55514	52	63545	57668
333	62	64636	17668	52	22636	57768	23	14853	53714	5-	63637	52867
334	--	64558	16268							--	51544	24767
340	52	62545	14568	62	64637	16468	51	01854	20727	8-	81748	53888
136	07	08690	18428	62	64537	47668				57	61755	53768
336	--	82758	28468	--	64434	20668				--	66534	24768
350	62	62648	16528							5-	62628	51668
368												
379				62	64616	18668	80	05645	22615	6-	61538	22768
390	57	08465	19418				52	05634	20565	62	62647	20528
382	52	62744	17468	62	64635	20568	8-	01754	55514	62	62626	21668
438	52	64728	57768							90	14737	53827
430	58	62644	20468	62	64527	51668	83	00752	57563	57	61744	57818
409	62	62627	28768				23	01843	56783	5-	61647	56967

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Tuesday 12th November
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	West to northwest gale, severe today on the coasts, moderating by tomorrow; mainly cloudy today, bright periods later: a few slight showers. Average temperature.
7 North Wales ... 8 N.W. England 9 N. Midlands ...	Northwest gale, severe on coasts at first, moderating slowly; variable cloud, squally showers of rain and hail: average temperature, becoming colder.
10 N.E. England 11 S.E. Scotland	Wind westerly, strong to gale locally; cloudy, rather frequent showers at first then local showers, perhaps with hail locally: average temperature.
12 S.W. Scotland & Isle of Man. A. W. Scotld.	As 7-9.
13 B.N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Wind northeast, strong to gale at times, backing north to northwest; cloudy, rainy at times at first, rain and hail showers later: rather cold.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind northwest, strong to gale on coasts, veering north, moderating slowly; variable skies, some rain or hail showers; becoming colder.

GENERAL INFERENCE.

A complex, unusually deep depression covering the British Isles is expected to become centred over South Norway. Weather will be generally stormy but the severe gales in the West and South will begin to moderate tonight. Squally rain and hail showers will occur in the northwestern half of the country but in the South, rainfall will be confined to a few slight showers.

FURTHER OUTLOOK.

Rather unsettled and probably rather cold; considerable fair periods in many districts.

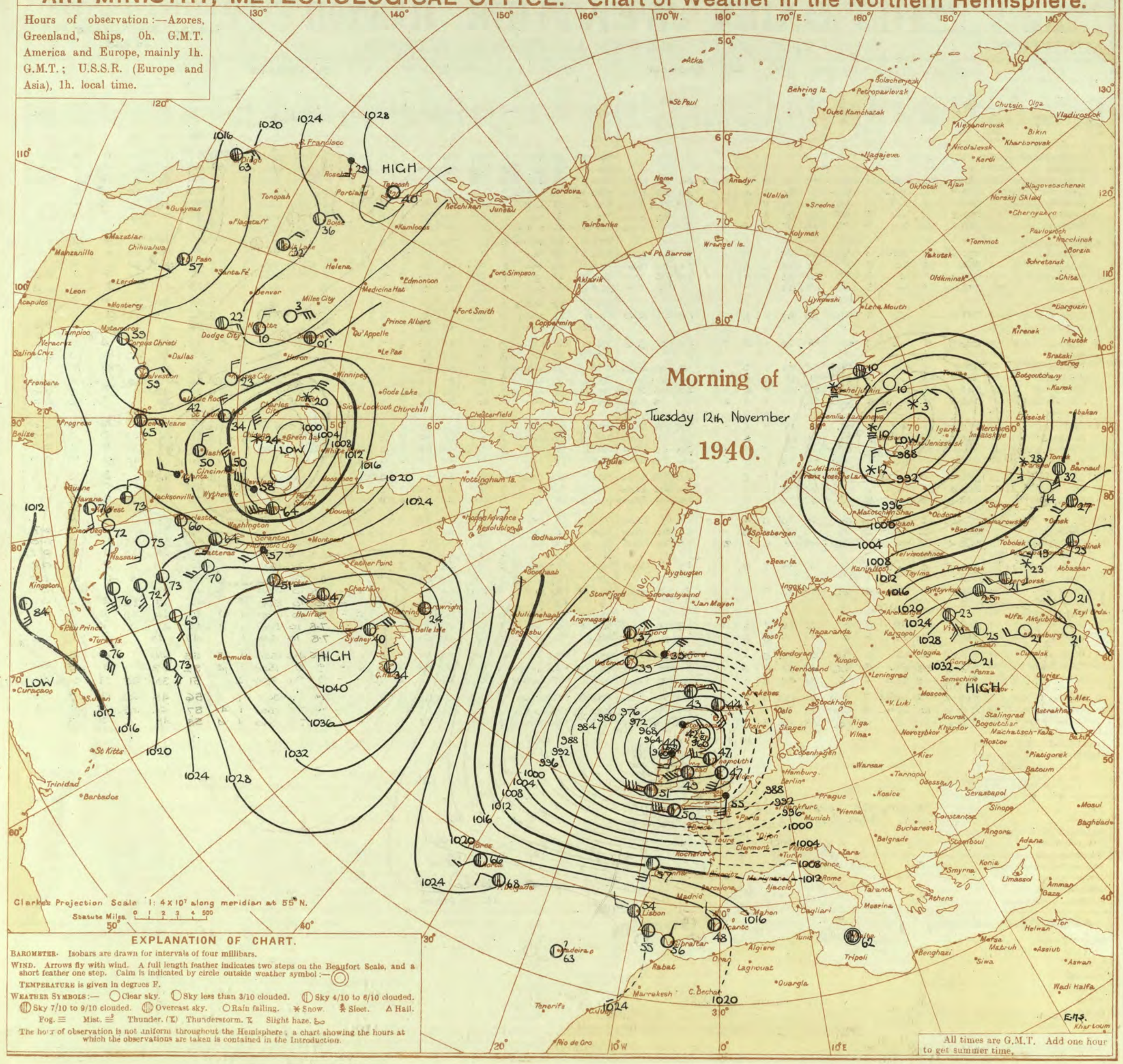
Gale warnings issued for all districts 11.11.40. Warning of severe gale in districts, 1, 2, 5, 6, 7, 8, 12, and 17-20, issued at 0500 12.11.40.

Forecasts issued at 1030 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 12th November, 1940.

No 28,845.

OBSERVATIONS at 1 hr. G.M.T. 12th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217														
	S. Farnborough	226	979·4	-8	WSW	6	c/pr	52	85	7	8	6	3	4-6	7-8	1200
	Boscombe Down	417	979·5	-2	WSW	5	bc/p	51	85	7	8	-	-	4-6	4-6	2000
	Calshot (Sthmtn.)	8	981·0	-2	W'S	5	bc	52	75	8	8	-	-	2-3	2-3	2000
	Lympne ...	346	979·8	-46	SSW	5	roro	55	97	5	-	2	·	10	10	600
	Manston ...	154	997·7	-30	SW	6	iro	55	97	6	6	2	·	9	10	400
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	976·0	-24	SbW	4	c/pr	54	85	8	8	-	-	9	9	2000
	Gorleston ...	5	974·1	-16	SW	4	c	55	92	6	8	-	-	9+	9+	1500
	Mildenhall ...	19	975·0	-6	W	5	PR	54	85	7	9	3	-	4-6	7-8	500
	Cranwell ...	240	973·1	+4	W	5	b	48	85	7	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	977·5	0	W'S	5	c/pr	50	85	7	8	-	-	7-8	7-8	1200
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	980·7	-8	NW	7	c	51	75	8	5	7	-	4-6	9	1500
	Bristol ...	209														
	Portland Bill ...	32	981·9	-6	SW	6	PR	56	92	7	5	-	-	10	10	2500
	Plymouth ...	82	984·4	-4	W	6	pr	51	85	6	8	-	-	10	10	1000
	The Lizard ...	240	985·2	-10	W	8	bcq	51	85	7	8	-	-	4-6	4-6	2000
	Scilly (St.Mary's)	163	985·4	+4	W	8	bc/pr	50	75	7	4	4	-	2-3	4-6	2200
	Guernsey ...	175														
6	Pembroke ...	142	975·5	-20	W'S	9	cq	51	75	7	8	-	-	7-8	7-8	2500
7	Holyhead ...	26	969·7	-30	SW'W	7	og	49	75	7	5	-	-	10	10	2500
	Chester(Sealand)	16	971·4	-16	SW	4	bc/pr	48	75	7	9	4	3	2-3	4-6	1500
8	Manchester ...	70	971·3	-10	SW	*	c/pr	47	85	7	8	6	-	4-6	7-8	2000
10	Spurn Head ...	29	970·9	-10	SW'W	6	bcq	47	85	7	2	-	-	2-3	2-3	5700
	Catterick ...	175	968·4	-6	W'N	4	bc/pr	45	75	8	8	-	-	4-6	4-6	2200
	Tynemouth ...	108	965·5	-12	W	5	bc	47	75	7	2	-	-	4-6	4-6	3200
11	St. Abbs Head	280	961·4	-12	W	6	cq	44	85	8	4	2	-	4-6	9	2500
	Leuchars ...	36	960·7	-24	WSW	3	iro	40	97	6	5	-	-	9+	9+	1200
12	Renfrew (Abbots I.)	19	962·4	-24	NW	2	roro	43	97	6	5	2	-	7-8	10	1700
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	966·3	-18	W'S	6	pr	47	85	7	8	1	-	4-6	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	962·5	-10	ENE	4	roro	42	92	7	5	2	-	9	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	962·5	-36	SE	8	rr	45	92	7	5	2	-	7-8	10	1500
16	Lerwick ...	156	971·2	-30	SE	6	c	44	75	8	5	7	-	7-8	9	1500
17	Blacksod Point	18	961·2	-36	W	8	RR	51	92	6	6	-	-	10	10	<150
18	Malin Head ...	84	960·2	-38	S'W	3	roro	44	97	6	6	-	-	9+	9+	800
	Aldergrove ...	268	962·4	-48	S'W	4	iro	44	85	8	6	-	-	10	10	1400
19	Birr Castle ...	173	966·2	-72	WSW	7	o/r	47	85	7	5	-	-	10	10	2500
20	Valentia Obsy.	30	978·4	-10	WNW	8	c/pr	51	75	6	9	-	-	9+	9+	1500
	Roches Point	22	976·6	-34	W	6	cq	48	85	8	3	-	-	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 12th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)
London (Kew)	974·5	-34	SW	6	roro	48	75	6	5	-	-	10	10	1500
Croydon	975·5	-26	W	4	c/pr	49	75	6	6	2	·	7-8	10	900
S. Farnborough	975·7	-30	SW	7	roro	48	75	6	6	2	·	7-8	10	1200
Boscombe Down	975·5	-30	WSW	7	iro	48	75	7	6	2	-	7-8	10	1000
Calshot (Sthmtn.)	978·6	-14	W'S	7	c/pr	51	75	7	8	7	-	4-6	9+	2500
Lympne	978·8	-6	W	6	c	49	75	8	3	2	-	2-3	9	2200
Manston	975·8	-18	WSW	6	c	49	65	7	3	-	-	1	9	3000
Shoeburyness	975·8	-24	SW'W	5	c	49	65	8	5	7	-	4-6	9+	5700
Felixstowe	973·6	-22	SW	6	c	48	75	8	-	7	-	0	9+	-
Gorleston	972·1	-24	SW	5	bc	47	85	7	8	-	-	4-6	4-6	1500
Mildenhall	969·9	-42	SW	6	iro	48	75	7	5	7	-	4-6	10	3000
Cranwell	964·0	-66	SW	7	zo	46	85	6	8	-	-	10	10	1500
Birmingham	965·9	-52	WSW	6	iro	47	85	7	6	-	-	10	10	450
Upper Heyford	971·3	-42	SW'S	7	roro	47	85	6	6	2	-	7-8	10	700
Ross-on-Wye	970·5	-34	W'S	7	id	49	85	7	6	-	-	10	10	1500
Hartland Point	976·3	+6	WSW	9	c	51	85	7	9	2	-	4-6	9+	1500
Bristol	974·2	-22	W	8	ir	49	85	6	-	2	-	10	10	900
Portland Bill	978·8	-20	WSW	7	o	55	92	7	5	-	-	10	10	2500
Plymouth	983·0	-4	W	9	pr	51	75	6	2	-	-	10	10	600
The Lizard	984·7	+8	W	9	c	52	85	6	8	2	-	9	10	800
Scilly (St.Mary's)	985·0	+10	W	9	bc	52	75	7	8	-	-	2-3	2-3	1500
Guernsey														
Pembroke	971·6	-8	W	11	roro	50	97	6	8	-	-	9+	9+	1000
Holyhead	965·3	+58	WNW	8	c	50	85	7	9	-	-	7-8	10	1500
Chester(Sealand)	961·9	-26	W'N	7	dodo	49	85	5	6	2	-	7-8	10	1100
Manchester	958·7	-70	W'S	7	RR	48	97	6	5	2	-	9	10	700
Spurn Head	964·1	-40	SSE	6	r	45	85	6	5	-	-	10	10	2500
Catterick	960·9	-34	S	2	ir	43	92	7	5	2	-	4-6	10	1800
Tynemouth	961·3	-14	W	3	c/pr	44	85	6	8	-	-	9	9	3000
St. Abbs Head	959·3	-4	W	4	roro	43	92	8	5	2	-	7-8	10	2500
Leuchars	958·6	-6	WNW	4	c/r	43	92	7	5	2	-	7-8	10	1800
Renfrew (Abbots I.)	961·5	+10	SW	1	c	44	92	7	5	3	-	2-3	7-8	4000
Eskdalemuir	961·0	+6	-	0	bc	40	92	7	5	-	1	2-3	4-6	1500
Point of Ayre	963·1	+20	NW'N	6	bc	48	85	8	8	-	-	2-3	2-3	1500
Tiree	961·2	+12	NNW	4	iro	47	97	7	5	-	-	9+	9+	1500
Stornoway	964·8	+28	NNE	6	roro	46	92	7	5	2	-	7-8	10	1500
Dalwhinnie	*	+8	N	2	o	38	92	7	5	-	-	10	10	1500
Aberdeen	954·9	-8	WNW	5	rr	43	97	6	6	2	-	9	10	1500
Wick	960·0	-4	NE	7	ir	46	85	7	9	2	-	7-8	10	800
Lerwick	966·6	-12	E	8	pr	43	85	7	8	2	-	7-8	10	800
Blacksod Point	978·1	+84	NW	6	bcq	48	75	7	9	-	-	4-6	4-6	1500
Malin Head	965·3	+40	NNW	5	c	47	85	7	9	-	-	9	9	1500
Aldergrove	966·1	+58	WNW	4	c/pr	46	85	8	8	-	-	9+	9+	1000
Birr Castle	975·8	+66	WNW	5	c/pr	46	85	8	8	-	-	7-8	7-8	1500
Valentia Obsy.	985·2	+38	WNW	6	c	51	65	7	3	-	-	7-8	7-8	2500
Roches Point	981·1	+50	WNW	7	c/pr	49	85	8	8	-	-	7-8	7-8	1500

PAST 24 HOURS.

Stations	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 11th Hrs. (36)
London (Kew)	1	*	51	47	41	11	14	0·0
Croydon	1	*	52	45	42	10	16	0·0
S. Farnborough	2	*	54	46	41	12	9	0·0
Boscombe Down	1	*	54	46	42	15	6	0·0
Calshot (Sthmtn.)	1	§3	55	48	45	16	11	0·0
Lympne	1	5	50	47	42	7	15	0·7
Manston								
Shoeburyness	0	*	51	47	41	5	12	0·1
Felixstowe	1	3	49	47	43	4	10	1·3
Gorleston	1	3	48	46	44	2	14	*
Mildenhall	1	*	50	45	39	Tr	11	0·6
Cranwell	1	*	49	43	41	9	3	0·3
Birmingham	1	*	50	44	40	7	7	0·0
Upper Heyford	1	*	52	43	40	12	6	*
Ross-on-Wye	1	*	55	44	42	8	4	0·0
Hartland Point	1	5	55	48	45	14	2	0·0
Bristol	2	*	53	45	43	14	13	0·0
Portland Bill	1	5	55	52	*	15	5	*
Plymouth	1	5	56	49	45	·	5	0·0
The Lizard	1	5	56	46	*	17	2	0·0
Scilly (St.Mary's)	1	5	56	50		7	2	0·0
Guernsey								
Pembroke	1	5	56	49	*	16	10	0·0
Holyhead	1	6	55	46	44	19	4	0·0
Chester(Sealand)	1	*	55	47	40	8	4	0·0
Manchester	2	*	50	44	40	12	13	0·0
Spurn Head	1	4	47	44	*	3	3	0·5
Catterick	1	*	43	42	39	7	2	0·1
Tynemouth	1	2	45	43	39	6	2	*
St. Abbs Head	1	2	42	40	*	7	2	*
Leuchars	2	*	42	39	38	6	5	0·7
Renfrew (Abbots I.)	1	*	42	38	35	11	9	0·0
Eskdalemuir	1		41	40	35	11	6	0·2
Point of Ayre	1	4	54	44	*	9	3	0·0
Tiree	1	4	50	45	*	11	4	0·0
Stornoway	1	3	43	39	*	2	5	0·0
Dalwhinnie	4	*	40	33	32	2	4	0·0
Aberdeen	1	3	43	40	39	2	5	0·5
Wick	1	3	44	41	*	Tr	9	*
Lerwick	1	*	47	40	*	1	1	0·6
Blacksod Point	1	5	55	46	*	10	5	*
Malin Head	1	4	52	42	*	8	5	0·0
Aldergrove	2	*	51	39	35	12	0·3	0·0
Birr Castle	1	*	56	45	42	12	7	0·0
Valentia Obsy.	1	4	57	46	45	15	1	3
Roches Point	1	4	58	48	*	11	3	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. Yesterday	Humidity 15h. G.M.T. % Yesterday	Humidity 9h. G.M.T. % To-day	Visibility 9h. To-day
		24 hrs. ended 9h.											
KEW	18	cmocromo	crorr	crrocmo	51	47	41	11	14	0·0	*	*	7
CROYDON	217	*	rororr	bcpro	52	45	42	16	16	0·0	*	*	
GREENWICH (Royal Observatory)	149												
CITY (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
WESTMINSTER (St. James' Park)	27	*	*	*									*
REGENTS PK. (Botanic Gardens)‡	168	*	*	*									*
CAMDEN SQUARE	110			*						*	*		*
KENSINGTON	80			*									*
HAMPSTEAD OBSERVATORY	450									*			*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 12th

	Max.	Time.	Min.	Time.
SOUTH KENSINGTON.				
KEW OBSERVATORY.	0·1	7-14h 11h	<0·1	rest of period.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
PARIS														
BRUSSELS														
BERLIN														
ZÜRICH														
ROME											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
THE BEAUFORT SCALE OF WIND is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22.—Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30.—Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

TERMS OF SUBSCRIPTION. {Single Copies, 1d. each: by post 1½d. 2/6 per month; 6/6 per quarter; 25/- per year.

METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

Page 1.

AIR MINISTRY.

BRITISH SECTION

Wednesday 13th November, 1940.

No. 28,846

OBSERVATIONS at 13h. G.M.T. 12th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	979.3	+38	W'S	5	c	52	65	8	5	7	–	7-8	9+	1500
	Croydon ...	979.0	+42	W'N	4	c	51	75	7	8	3	–	7-8	9+	1600
	S. Farnborough	979.9	+38	W'S	7	c	51	65	8	7	7	–	7-8	9+	1700
	Boscombe Down	980.9	+30	W'N	7	c/pr	50	75	9	8	3	–	7-8	9	1000
	Calshot (Soton.)	981.9	+30	W'N	7	c/pr	54	65	8	8	3	–	7-8	9	2500
	Lympne ...	979.4	+20	SW	6	c	51	65	7	2	–	–	9+	9+	2000
	Manston ...	977.1	+26	SW'W	5	ir₀	52	65	7	5	7	–	9+	10	1000
2	Shoeburyness ...	976.5	+22	W	6	c/r	52	65	7	5	3	9	9	9+	1500
	Felixstowe ...	974.7	+34	W	7	o/r	50	75	8	5	–	–	10	10	2500
	Gorleston ...	971.1	+20	W	5	c	51	85	6	8	–	–	7-8	7-8	1500
	Mildenhall ...	972.7	+50	W'S	6	pr	50	75	8	8	2	–	7-8	10	1800
	Cranwell ...	971.6	+52	W'N	7	pr	48	75	7	9	–	–	10	10	800
3	Birmingham	975.9	+48	WNW	5	c	47	75	8	8	7	–	9	9+	1500
	Upper Heyford	977.5	+48	W	7	ir₀	49	75	8	5	7	–	7-8	9+	800
4	Ross-on-Wye ...	980.1	+34	W	7	cq	49	65	8	8	–	1	4-6	7-8	2500
5	Hartland Point	985.0	+30	NW	7	c	50	75	8	8	4	–	7-8	9	1500
	Bristol ...	981.4	+36	W	8	e	51	75	8	2	3	9	4-6	7-8	1500
	Portland Bill ...														
	Plymouth ...	987.9	+66	WNW	8	pr	52	75	7	9	–	3	9	9	900
	The Lizard ...	989.9	+8	W	8	cq	53	85	7	8	6	–	7-8	7-8	2000
	Scilly (St. Mary's)	990.8	+22	W'N	8	bc	53	75	7	8	–	–	4-6	4-6	1200
	Guernsey ...														
6	Pembroke ...	983.6	+16	W'N	7	cq	51	85	7	8	7	1	4-6	9+	1400
7	Holyhead ...	975.5	+34	W'N	9	c	50	75	7	8	–	9	9	9+	2200
	Chester (Sealand)	973.4	+34	W'N	7	c/r	50	65	7	8	–	–	7-8	7-8	1800
8	Manchester ...	971.2	+34	W	7	pr	48	75	7	8	–	–	10	10	1200
10	Spurn Head ...	967.9	+70	WSW	7	cq	49	75	6	6	–	–	9+	9+	2500
	Catterick ...	966.3	+14	WNW	3	c	49	73	8	8	–	–	9	9	2000
	Tynemouth ...	964.0	+8	W	4	c	49	73	7	8	–	–	9	9	2000
11	St. Abbs Head	959.4	-4	WNW	7	bcq	47	75	8	8	4	–	4-6	4-6	2500
	Leuchars ...	961.1	+8	WNW	7	c	47	75	9	8	7	–	7-8	9	2800
12	Renfrew (Abbots I.)	967.2	+34	WNW	4	c	47	75	9	7	3	–	4-6	7-8	1800
	Eskdalemuir ...	964.5	+10	NW	4	bc	45	85	8	5	4	–	4-6	4-6	1500
	Point of Ayre ...	969.8	+22	NW'W	8	ir	49	92	7	6	2	–	7-8	10	1500
13A	Tiree ...	971.9	+46	N	6	pr	47	92	7	7	3	–	9	9	500
13B	Stornoway ...	973.5	+40	NNE	6	ir	44	97	7	5	2	–	9	10	1000
15	Dalwhinnie ...	967.0	+22	NNW	4	ir₀	40	92	7	5	3	–	7-8	10	1500
	Aberdeen ...	959.7	+34	N	3	c	46	92	7	8	–	–	10	10	2500
	Wick ...	964.3	+38	NE	8	ir	45	85	6	9	2	–	7-8	10	800
16	Lerwick...	968.7	+14	ENE	8	c/pr	46	97	8	8	7	–	7-8	10	800
17	Blacksod Point..	984.9	+26	NW'W	6	cq	50	75	8	3	–	7	2-3	7-8	1500
18	Malin Head ...	978.8	+40	NNW	8	c/pr	48	85	7	9	–	4	4-6	7-8	1500
	Aldergrove ...	973.9	+38	WNW	5	c/pr	47	85	8	2	7	–	7-8	9	1200
19	Birr Castle ...	984.0	+32	NNW	4	c	50	65	8	3	7	–	2-3	7-8	1500
20	Valentia Obsy. †	991.6	+30	NW'W	6	c/pr	51	85	8	9	–	–	7-8	7-8	2500
	Roches Point ...	987.8	+32	WNW	6	bc	50	75	8	3	4	–	4-6	4-6	1500

OBSERVATIONS at 18h. G.M.T. 12th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	984.5	+36	W'S	5	bc	47	65	7	5	–	–	4-6	4-6	2500	1	*
Croydon	983.7	+24	WNW	4	z₀	45	75	6	4	4	–	Tr	1	2500	1	*
S. Farnborough	985.5	+34	W'S	5	bc	46	75	8	4	6	–	2-3	4-6	2000	1	*
Boscombe Down	986.8	+58	W'N	6	bc	47	65	8	2	–	–	2-3	2-3	1500	1	*
Calshot (Soton.)	987.5	+40	W'N	4	c	50	65	8	4	–	–	7-8	7-8	2500	1	4
Lympne	985.2	+30	NW	4	e	46	75	7	4	7	–	4-6	9	4000	1	§
Manston			WNW	5	c			7	–	–		0		–		*
Shoeburyness	982.6	+28	W'S	5	c	48	65	6	–	–	2	0	7-8	–	1	*
Felixstowe	980.1	+32	W'S	6	bc	48	65	8	4	4	–	1	2-3	2500	1	4
Gorleston	976.8	+24	W'S	5	e	49	85	6	8	–	–	7-8	7-8	1500	1	3
Mildenhall	978.0	+34	WSW	6	bc	46	65	8	4	6	–	2-3	4-6	3000	1	*
Cranwell	976.2	+32	W	8	z₀	47	75	6	5	–	–	9+	9+	1500	1	*
Birmingham	980.4	+30	W	5	bc	46	65	8	5	–	–	4-6	4-6	1500	1	*
Upper Heyford	983.0	+30	WNW	6	c	46	65	8	4	4	–	7-8	7-8	3000	1	*
Ross-on-Wye	984.9	+30	W	6	cq	49	65	8	8	–	–	9+	9+	2500	1	*
Hartland Point	989.4	+20	WNW	6	c/pr	51	75	8	3	–	–	7-8	7-8	2000	1	5
Bristol	987.0	+34	W	7	bc	48	75	8	2	6	–	2-3	4-6	2000	1	*
Portland Bill																
Plymouth	992.8	+26	W'N	7	bc	51	75	6	2	6	–	4-6	4-6	1400	1	5
The Lizard	995.3	+12	W	8	cq	52	75	8	8	6	–	7-8	7-8	1500	0	5
Scilly (St. Mary's)	995.5	+22	W'N	7	bc	52	75	7	8	4	3	4-6	4-6	1200	1	5
Guernsey																
Pembroke	988.4	+20	W'N	7	cq	51	97	7	8	–	–	7-8	7-8	2000	1	4
Holyhead	980.9	+28	W	8	c	50	75	7	5	7	–	9	9+	2200	1	6
Chester (Sealand)	978.6	+36	W	6	cq	50	65	7	5	–	–	9+	9+	1800	1	*
Manchester	976.8	+38	W'N	6	dr	49	75	7	8	–	–	7-8	10	1200	2	*
Spurn Head	970.7	+20	WSW	8	pr	48	85	6	6	8	–	4-6	9+	2500	1	6
Catterick	971.3	+50	WNW	5	pr	47	75	8	5	9	–	4-6	7-8	1800	1	*
Tynemouth	968.4	+36	WNW	5	e	47	75	7	8	–	–	9	9	2500	1	2
St. Abbs Head	966.0	+26	WNW	7	cq	45	75	8	5	2	–	7-8	10	2000	1	4
Leuchars	968.9	+50	WNW	6	c	46	75	8	5	–	–	9	9	2200	1	*
Renfrew (Abbots I.)	973.9	+46	WNW	4	c	46	75	8	5	4	–	7-8	9	2500	1	*
Eskdalemuir	972.0	+46	NW'N	6	pr	43	75	8	5	–	–	4-6	4-6	1500	1	*
Point of Ayre	976.4	+42	NW'W	8	ir	48	92	7	9	–	–	7-8	7-8	1500	1	4
Tiree	977.9	+32	N	5	bc	47	75	8	8	–	–	4-6	7-8	1800	0	5
Stornoway	977.8	+30	N	5	c	43	85	7	8	7	6	2-3	9	1200	1	3
Dalwhinnie	974.0	+40	N	4	ir₀	36	85	7	5	–	–	9	9	1500	1	*
Aberdeen	967.6	+54	N	4	ir	45	97	7	9	–	–	9+	9+	1500	1	2
Wick	970.5	+34	N	7	iR	45	85	6	9	2	–	7-8	10	800	1	3
Lerwick	971.2	+8	NE'E	5	rr	43	97	7	6	2	–	7-8	10	800	1	*
Blacksod Point	987.1	+14	WNW	5	c	49	75	7	3	–	–	7-8	7-8	1500	0	4
Malin Head	980.0	+38	NNW	5	c	47	92	8	2	2	2	4-6	7-8	1500	1	4
Aldergrove	980.3	+34	W	4	bc/pr	45	85	8	3	–	1	4-6	4-6	1000	1	*
Birr Castle	988.1	+20	WNW	2	pr	46	85	8	8	–	–	7-8	7-8	1500	1	*
Valentia Obsy. †	994.6	+6	NW	6	c/pr	49	75	8	8	3	–	7-8	7-8	2500	1	5
Roches Point	991.9	+22	WNW	6	bc	50	85	8	3	–	5	2-3	4-6	1500	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 12th. (37)	13h.—18h. 12th. (38)	18h. 12th to 1h. 13th. (39)	1h.—7h. 13th. (40)
London (Kew)	cr₀r₀c	becpr₀bc	bcb	bbcc
Croydon	cir₀c	cbcpr₀	bbc	c
S. Farnborough	r₀r₀rr₀c	cprqc	bcb.cbc	bcb.c ⊕
Boscombe Down	cr₀r₀qpr₀	cprbcjpbc	bcq	
Calshot (Soton.)	cpr₀	prbcpr₀	bcpr₀bc	b.c
Lympne	cr₀r₀c	cFRc		
Manston	cm₀cir₀			
Shoeburyness	ccir	cbcc	cb	bcir₀c
Felixstowe	cird₀r	cid₀r₀b	bccb	b.c
Gorleston	bcpr₀c	cpr₀cq	cq	cbcq
Mildenhall	cir₀cvcpr₀	cpr₀cbc	c.bc.b	bbcc
Cranwell	rrm₀pr₀	ccm₀	cd₀d₀bcm₀	bcm₀
Birmingham	dcir	cbcpr₀	bc	bc
Upper Heyford	cr₀r₀ccir₀	ccprc	bc.c	bc
Ross-on-Wye	r₀qcp₀q	bcqp₀cq	cqbcq	cqc
Hartland Point	cqp	cqp	bccP	pc
Bristol	oirm₀r₀r₀q	cpr₀bcq	bcpr₀pr	bcpr₀cpr
Portland Bill				
Plymouth	cm₀vrcpr₀	cPRHbc	bcm₀cpr₀cm₀	cm₀
The Lizard	cq	cq	cq	cpr₀
Scilly (St. Mary's)	bccpbc	bc	cpqc	c
Guernsey				
Pembroke	r₀r₀qm₀c	pr₀cq	cq	
Holyhead	bcm₀prc	c	cbcc	c
Chester (Sealand)	rrir₀m₀c	cpr₀cq	cpr₀	bcm₀pr₀
Manchester	m₀RRcpr	cpr₀q	cpr₀	cpr₀
Spurn Head	qc	cqpr	cq bc	bcq
Catterick	ir₀m₀bc	ccpr₀	pr₀bbc	bccbcb
Tynemouth	cmc	cbcc	cbc	bc
St. Abbs Head	ir₀cq	rcq	cqrr	crbcq
Leuchars	cir₀c	c	cid₀cir₀	cir₀bcc
Renfrew (Abbots I.)	bcc	c	c	bccbcbw
Eskdalemuir	bccr₀r₀	bcpr₀		
Point of Ayre	cir	cir	cbc	c
Tiree	cir		bc	bccpr
Stornoway	cr₀r₀ir	cir	cpr₀	cPRc
Dalwhinnie	cir₀o	oir₀c	*	cir₀
Aberdeen	rr₀c	r₀cir	r₀r₀c	cr₀r₀
Wick	irq	iRq	iRqc	cpr₀c
Lerwick	cr₀pr₀	cpr₀r	cr₀pr	cpr
Blacksod Point	bccq	c	c	pr₀cq
Malin Head	cpr₀cqprc	cprprprc	cphrcbcc	c
Aldergrove	pr₀cpr₀	cjpcpr	pr₀bcpr₀	prcpr₀
Birr Castle	c	cpr₀	c	bc
Valentia Obsy. †	bccpr₀prc	cprpr₀c	cpr₀qcpr₀c	cpr₀qc
Roches Point	prbc	prbc	c	cp₀bcc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ. line squall. l, lightning.
o, overcast sky. p, passing showers.

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. • r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). ↗gale.
⊕ Solar halo. Ⓛ lunar halo. ⌂Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29 —STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

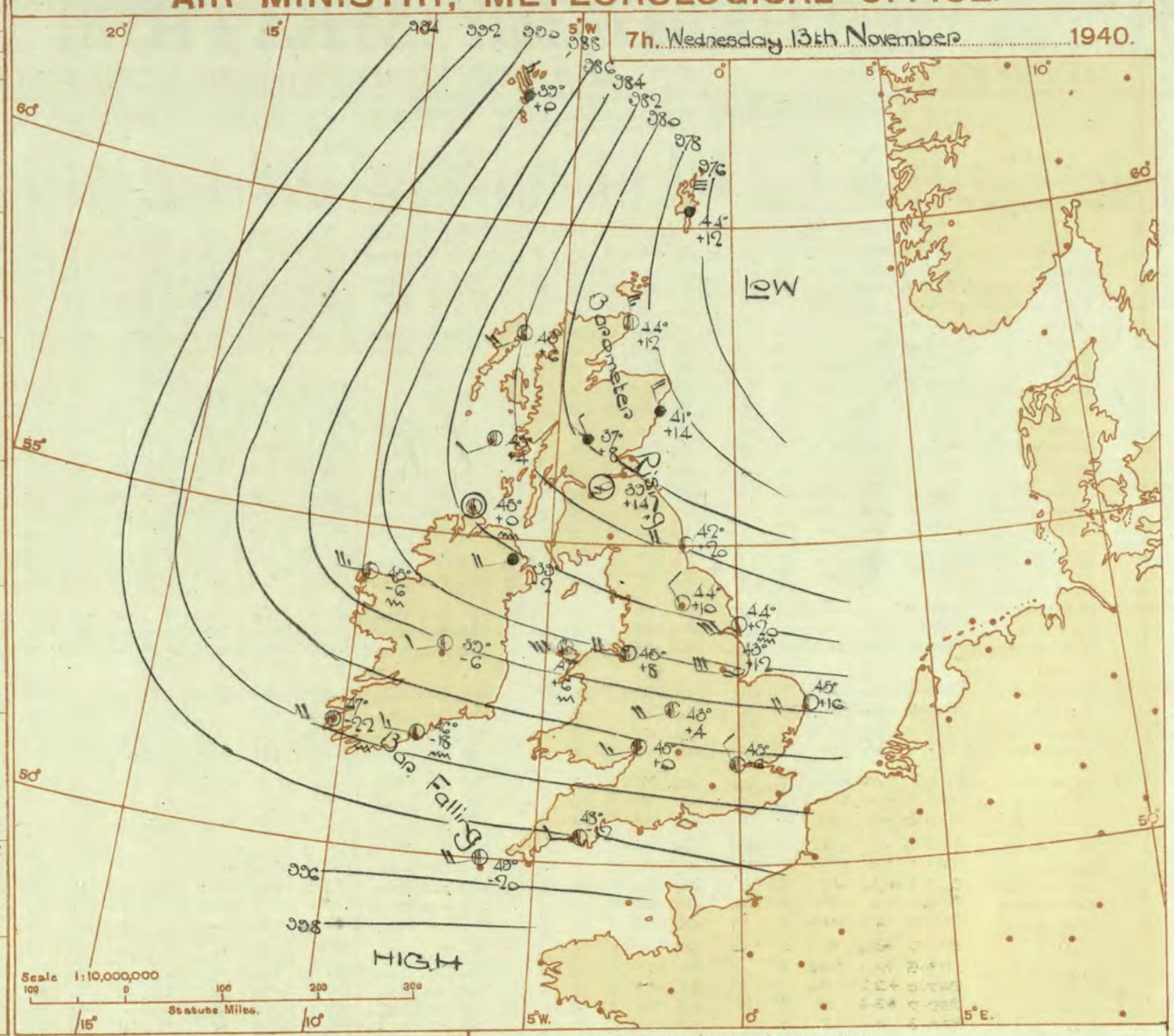
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Wednesday 13th November 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 12th November			18h. G.M.T.			01h. G.M.T. 13th November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	82	61744	37868	52	02755	02768	51	81555	35668	8-	25744	32584
115	52	62635	37868	87	81734	65787				52	81844	65687
203				5-	24748	25768	8-	02857	32567	8-	81857	32617
206	52	63746	30468	52	62845	31368	52	62845	28268			
210	62	63646	34868	62	64636	65868	61	62745	63568	53	02755	28568
220				73	02754	28415				52	02743	28227
230	57	02855	61428	87	02845	30625	8-	02857	30387	53	02856	28317
245	53	14956	65687				52	61966	28567			
260	20	02853	28315	57	02864	59487	73	01864	26384	53	01764	24215
277	72	62746	28788	36	25844	63685	83	24585	83545	8-	01764	23484
279				--	01754	59414				--	01764	24414
285	6-	61638	24668	6-	02637	24767				20	01745	30515
288	86	81745	23415	87	01852	24424	04	01790	22513	03	00890	21212
273	32	25653	27786							47	67254	24268
301	8-	81748	68788	2-	02746	59786	8-	02755	61625			
321	8-	81647	25627	87	81646	58688	86	01653	57584	46	05654	23384
299	57	01743	26414				50	01752	24402	50	00752	24302
292	5-	02857	57667	86	02854	57525	44	01954	26484	84	00843	22313
310	--	02648	20668	--	65438	20768						
316	5-	25646	54687	9-	81645	57688	8-	81647	59687	84	81644	66585
333	8-	02756	61766	27	14754	60827	23	81755	23717			
334	--	63545	24568								01761	22302
340	83	26944	57685				50	01854	59514			
136	87	02844	57767	5-	02858	57788	86	25865	24687	53	02765	21415
336	--	02644	04667		02754	28716					25742	24585
350	53	25945	55867							53	02873	22517
368												
379	27	81745	57786	8-	02756	57526	5-	02856	23426	00	01790	57503
390	5-	22748	24688	55	01753	54414	5-	02755	21415	51	05651	22428
382	74	02844	23628	86	81844	56526	5-	02856	23426	00	02890	21325
438	9-	14737	55827							82	02744	23628
430	87	25744	24785	80	25753	26583	50	00753	57613	57	02751	24428
409	2-	02746	58887	24	02745	58825	26	02744	58688	21	02745	24488

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. ~~ Rough. ≈≈ High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Wednesday 13th November
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind backing southwest or south becoming variable to northwest later, mainly moderate or light. Fair at first, occasional rain tonight, probably becoming fair tomorrow. Risk of local morning fog; average temperature.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Wind southwest to variable, finally northwest; fresh at times locally. Cloudy, occasional rain, bright intervals and showers to-morrow. Average temperature.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Wind west to northwest, moderate or light. Bright intervals, some showers; average temperature.
13 A. W. Scotld. / B. N.W. Scotland.	Fresh or strong northerly wind; cloudy, some showers, rather cool.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 4-8

GENERAL INFERENCE.

A large depression centred near South Norway is filling up. A trough of low pressure off Northwest Ireland is moving southeast and a depression off Northwest Spain is moving east. The passage of the more northerly disturbance, which may develop a separate centre in the English Channel, will cause rain tonight in the South, but in the North there will only be local showers.

FURTHER OUTLOOK.

Rather unsettled, but some bright intervals.

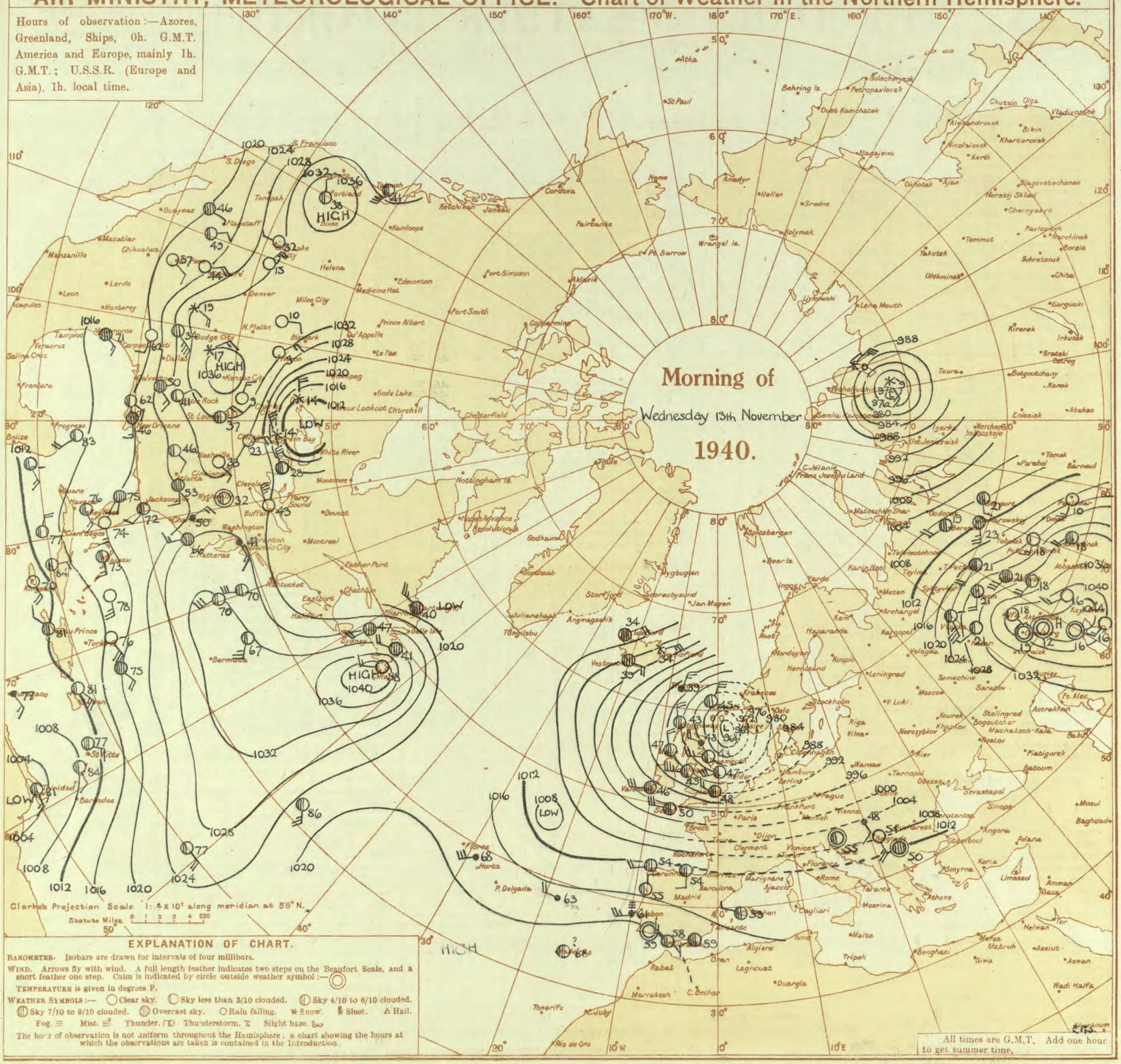
Forecasts issued at 1030 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

All times are G.M.T. Add one hour to get summer time.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Wednesday 13th November 1940.
No 28,346

OBSERVATIONS at 1 hr. G.M.T. 13th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	989·6	+22	WNW	3	c	48	85	8	5	-	-	10	10	1500
	S. Farnborough	226	991·1	+22	W'S	5	bc	48	75	8	7	-	-	2-3	2-3	2500
	Boscombe Down	417	991·8	+20	W	6	bc	46	75	7	5	-	-	4-6	4-6	1600
	Calshot (Sthmtn.)	8	993·0	+22	W	4	b	49	75	7	5	-	1	Tr	1	3500
	Lympne ...	346	991·1	+26	SSW	3	c	46	85	8	5	-	-	7-8	7-8	3500
	Manston ...	154	989·5	+30	SW	5	bc	47	85	7	5	-	-	2-3	2-3	4000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	985·7	+26	W'S	6	b	47	65	8	-	-	-	0	0	-
	Gorleston ...	5	982·7	+30	W'S	5	c	48	85	7	8	-	-	9+	9+	1500
	Mildenhall ...	19	985·0	+34	WSW	6	b	47	75	8	5	7	-	Tr	1	4000
	Cranwell ...	240	983·6	+42	WNW	6	Zo	44	85	6	5	-	-	4-6	4-6	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	989·2	+26	W	6	c	46	75	8	5	-	-	7-8	7-8	2000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	993·7	+14	WNW	6	pr	50	75	8	8	-	8	7-8	9	1500
	Bristol ...	209	991·9	+18	WNW	6	pr	47	85	8	8	-	-	4-6	4-6	2000
	Portland Bill ...	32														
	Plymouth ...	82	997·0	+10	W'N	5	c/pr	49	85	6	2	7	-	4-6	10	1200
	The Lizard ...	240	997·9	+6	W	8	c	51	75	7	8	1	-	7-8	10	1500
	Scilly (St.Mary's)	163	997·8	0	W	6	c	50	75	7	8	2	6	4-6	9+	1500
	Guernsey ...	175														
6	Pembroke ...	142	991·5	+4	W	8	cq	55	55	7	8	-	-	9+	9+	1500
7	Holyhead ...	26	986·1	+16	W	7	c	49	85	8	8	-	-	9	9	2600
	Chester(Sealand)	16	985·6	+20	W	5	bc	48	75	7	2	-	-	4-6	4-6	2500
8	Manchester ...	70	984·1	+30	W	5	cjp	47	85	7	8	6	-	7-8	9	2800
10	Spurn Head ...	29	980·1	+40	W'S	6	bc	47	85	7	-	6	1	0	4-6	-
	Catterick ...	175	980·6	+34	WNW	4	bc	46	75	8	5	4	-	4-6	4-6	2500
	Tynemouth ...	108	977·9	+40	W	5	bc	43	75	7	2	3	-	2-3	4-6	3000
11	St. Abbs Head	280	976·1	+36	WNW	7	roro	44	85	7	5	2	-	7-8	9+	2000
	Leuchars ...	36	976·9	+26	W	6	iro	45	75	8	5	4	-	7-8	10	1500
12	Renfrew (Abbots I.)	19	980·5	+18	W'N	4	c	43	75	8	8	3	-	4-6	7-8	3500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	982·9	+32	NW'W	6	bc	47	85	8	8	-	-	4-6	4-6	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	981·5	+14	NNW	4	c	43	85	7	5	1	-	4-6	10	1800
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	975·8	+18	N	5	c/r	44	85	6	5	1	-	4-6	10	1500
16	Lerwick ...	156	974·2	+16	NE'N	6	c/pr	45	75	8	8	7	-	4-6	9	800
17	Blacksod Point	18	988·3	+2	W	6	cq	45	85	7	9	-	-	10	10	<150
18	Malin Head ...	84	982·3	+6	NNW	4	c	47	85	8	8	-	-	7-8	7-8	2500
	Aldergrove ...	268	985·3	+14	WSW	3	c/pr	43	85	8	8	-	-	9+	9+	5500
19	Birr Castle ...	173	990·2	+4	W	1	c	44	75	8	-	-	5	0	7-8	-
20	Valentia Obsy.	30	995·1	-6	W'S	6	c/pr	46	75	8	9	-	-	9+	9+	2500
	Roches Point	22	994·4	+6	W'N	3	c	46	85	8	3	-	6	2-3	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 13th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	991·5	+6	WSW	4	c	46	85	7	5	7	-	Tr	10	1500	1	*
Croydon	991·3	+6	NW	2	c	45	85	8	5	-	7	Tr	10	2000	1	*
S. Farnborough	991·2	+4	SW'W	4	c	45	85	8	5	3	-	7-8	9	500	1	*
Boscombe Down																*
Calshot (Sthmtn.)	993·1	0	W	4	c	48	75	7	-	7	7	0	10	-	1	§2
Lympne																
Manston																*
Shoeburyness	992·0	+10	WSW	3	c	47	75	8	-	7	-	0	9	-	1	*
Felixstowe	989·7	+18	WSW	5	c	46	75	7	5	-	-	9+	9+	3500	1	2
Gorleston	987·6	+16	W'S	4	bc	45	85	7	4	4	-	1	2-3	2500	0	2
Mildenhall	988·5	+18	SW'W	5	c	46	75	8	5	4	8	4-6	7-8	3500	0	*
Cranwell	987·0	+12	W'N	6	Zo	43	85	6	5	-	-	4-6	4-6	2000	1	*
Birmingham	989·0	+4	WSW	4	c	43	75	8	-	-	6	0	7-8	-	1	*
Upper Heyford	990·8	+12	WSW	5	c	43	75	8	-	-	6	0	7-8	-	1	*
Ross-on-Wye	991·0	0	WSW	3	c	45	75	8	1	1	7	Tr	9+	2500	1	*
Hartland Point	992·3	-10	WNW	6	c	49	75	8	5	1	7	2-3	10	1500	1	4
Bristol	992·4	-2	W	4	c	46	75	7	5	2	6	4-6	10	2500	1	*
Portland Bill																
Plymouth	995·0	-12	W	2	c	48	75	8	2	1	-	4-6	10	1000	1	3
The Lizard	995·4	-16	W	4	c	49	75	8	8	2	-	9	10	1500	0	3
Scilly (St.Mary's)	994·7	-20	W'S	4	c	49	65	7	5	2	-					
Guernsey																
Pembroke																
Holyhead	987·0	+6	W'S	6	c	47	75	8	8	-	-	7-8	7-8	2400	1	5
Chester(Sealand)	987·3	+8	W'N	4	c/pr	45	75	6	8	1	-	7-8	9	1500	1	*
Manchester	986·3	+8	SW'W	4	pr	45	85	7	8	-	-	9+	9+	1500	2	*
Spurn Head	984·1	+20	SW'W	6	bc	44	85	7	4	8	-	4-6	4-6	4000	0	4
Catterick	983·1	+10	NW	2	b	44	75	8	8	-	-	1	1	3000	1	*
Tynemouth	981·7	+20	WNW	4	bc	42	85	7	-	4	-	0	2-3	-	1	2
St. Abbs Head	979·1	+14	WNW	6	bcq	43	75	8	4	4	-	2-3	4-6	2500	0	3
Leuchars	979·8	+14	W	3	c	44	75	8	5	7	-	4-6	9	2500	1	*
Renfrew (Abbots I.)	982·9	+14	-	0	Zo	39	85	6	5	3	-	2-3	4-6	2500	1	*
Eskdalemuir																*
Point of Ayre	984·4	+4	WNW	5	c	45	85	8	8	1	-	7-8	10	2500	1	3
Tiree	982·6	+4	SW'W	2	c/pr	45	85	8	8	-	-	7-8	7-8	1800	1	3
Stornoway	983·6	+6	SW'W	4	c/pr	43	85	7	8	7	-	9	10	1000	1	2
Dalwhinnie	981·4	+8	NW	1	ido	37	85	7	5	-	-	9+	9+	1500	1	*
Aberdeen	978·7	+14	NW'N	4	roro	41	97	7	9	-	-	9+	9+	1500	1	2
Wick	978·2	+12	NNW	5	cq	44	85	8	8	7	8	4-6	9	1500	1	2
Lerwick	976·2	+12	N'E	6	pr	44	85	7	8	7	-	7-8	9	1500	1	*
Blacksod Point	987·7	-6	W	5	bcq	45	85	7	3	-	-	4-6	4-6	<150	1	4
Malin Head	983·0	0	-	0	c	45	85	7	8	-	-	9	9	2500	0	4
Aldergrove	985·2	-2	W'S	4	pr	39	85	7	8	7	-	9	9+	2800	2	*
Birr Castle	989·0	-6	WSW	2	bc	39	85	8	5	-	-	2-3	2-3	2500	1	*
Valentia Obsy.	990·6	-22	W'S	4	c/pr	47	65	8	3	-	-	7-8	7-8	2500	1	4
Roches Point	990·7	-18	W'N	3	c	46	85	8	5	-	5	4-6	7-8	1500	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 12th Hrs. (36)
London (Kew)	52	46	40	0·2	-	0·7
Croydon	52	45	41	0·5	-	0·1
S. Farnborough	53	45	40	1	-	0·8
Boscombe Down	51			4		
Calshot (Sthmtn.)	54	47	44		Tr	3·2
Lympne	52			1		
Manston						
Shoeburyness	52	46	41	Tr	Tr	0·9
Felixstowe	51	46	42	0·5	-	0·5
Gorleston	52	45	39	0·2	-	0·6
Mildenhall	53	45	39	0·1	-	0·8
Cranwell	49	43	40	1	0·4	0·0
Birmingham	49	43	38	1	—	1·3
Upper Heyford	51	43	38	1	-	*
Ross-on-Wye	51	45	41	0·2	-	0·6
Hartland Point	52	48	46	1	1	0·6
Bristol	52	45	40	4	6	2·9
Portland Bill			*			*
Plymouth	53	47	43	7	0·3	1·7
The Lizard	53	47	*	-	1	2·1
Scilly (St.Mary's)				2		
Guernsey						
Pembroke			*	1		
Holyhead	51	45	44	0·4	-	0·5
Chester(Sealand)	50	45	40	5	0·5	1·4
Manchester	49	42	40	3	7	0·1
Spurn Head	49	43	*	3	—	0·8
Catterick	50	42	38	Tr	Tr	3·1
Tynemouth	50	42	36	-	—	*
St. Abbs Head	47	43	*	1	1	*
Leuchars	47	41	37	0·2	Tr	0·3
Renfrew (Abbots I.)		38	29	-	—	1·0
Eskdalemuir	47			1		
Point of Ayre	49	44	*	4	1	0·1
Tiree	48	43	*	2	1	0·1
Stornoway	46	40	*	5	3	0·0
Dalwhinnie	41	37	33	3	2	0·0
Aberdeen	47	40	39	5	4	0·0
Wick	46	42	*	10	2	*
Lerwick	49	43	*	0·6	2	0·0
Blacksod Point	51	43	*	0·3	2	*
Malin Head	49	43	*	1	0·2	0·4
Aldergrove	48	39	37	1	1	0·2
Birr Castle	51	39	34	0·1	2	4·9
Valentia Obsy.	52	43	39	2	1	0·0
Roches Point	52	45	*	1	0·4	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
		24 hrs. ended 9h.											
Kew ...	18	crorc	bccprobc	bcbbcc	52	46	40	0·2	-	0·7	*	*	6
Croydon ...	217	ciroc	cbcpro	bbcc	52	45	41	0·5	-	0·1	*	*	6
Greenwich (Royal Observatory)...	149	croq	cqb	bcq	52	45	39	Tr	-	0·8	61	74	6
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	53	46	40	Tr			75	83	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	52	46	41	Tr	—		86	76	*
Camden Square ...	110	c	bc	*	51	45	40	0·5	—	*	*	77	*
Kensington ...	80	bc	bc	*	56	49	42	Tr	0·0		85	81	*
Hampstead Observatory ...	450	or	or	odbc	50	43	39	0·3	Tr		*	89	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 13th

South Kensington.			
Max.	Time.	Min.	Time.

Kew Observatory.			
Max.	Time.	Min.	Time.
<0·1 whole period			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...														

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22.—Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30.—Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Precipitous.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Thursday 14th November 1940.
No. 28847

OBSERVATIONS at 13h. G.M.T. 13th November

District	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	991·3	-10	SW	3	z₀	49	75	6	-	1	-	0	10	-
	Croydon	991·3	-14	WNW	2	c	49	75	6	-	1	7	0	10	-
	S. Farnborough	991·4	-18	SW'S	3	c	49	75	8	-	7	7	0	10	-
	Boscombe Down	990·8	-22	SW'S	3	c	47	75	7	-	2	-	0	10	-
	Calshot (Soton.)	991·7	-22	SW'S	4	ir₀	51	75	7	5	2	-	4-6	10	1800
	Lympne	993·5	+10	SSW	2	c	50	75	8	-	2	-	0	10	-
	Manston	992·2	-8	W'S	3	c	50	75	8	-	2	6	0	10	-
2	Shoeburyness	992·4	-12	SW	3	c	50	75	8	-	2	-	0	10	-
	Felixstowe	991·1	+2	WSW	4	z₀	49	65	6	-	1	7	0	10	-
	Gorleston	990·7	+10	WSW	4	c	48	75	7	5	7	-	4-6	9+	2500
	Mildenhall	989·9	-2	SW'W	4	c	48	65	7	-	7	-	0	10	-
	Cranwell	988·2	-2	W	5	z₀	46	65	6	-	7	7	0	10	-
3	Birmingham	989·5	0	WSW	2	c	46	65	8	5	-	7	2-3	10	4000
	Upper Heyford	991·0	-4	SW	3	o	46	85	7	-	2	-	0	10	-
4	Ross-on-Wye	989·7	-12	SW	3	z₀	48	75	6	-	2	-	0	10	-
5	Hartland Point	989·4	-28	SSE	3	rr	45	85	8	5	2	-	4-6	9+	1500
	Bristol	990·6	-22	SSW	3	c	47	85	7	4	2	-	Tr	10	2000
	Portland Bill														
	Plymouth	990·8	-26	SE	2	r₀r₀	46	85	7	-	2	-	10	10	4500
	The Lizard	988·5	-40	E	2	rr	45	97	6	5	-	-	10	10	1000
	Scilly (St. Mary's)	988·0	-42	E'S	3	r₀r₀	45	92	6	8	2	-	7-8	10	800
	Guernsey														
6	Pembroke	989·2	-12	NW	3	c	47	85	7	8	2	-	7-8	10	2000
7	Holyhead	987·0	-10	WSW	4	c	48	75	8	8	-	6	4-6	9+	2500
	Chester (Sealand)	987·3	-6	W'S	3	c	49	55	7	2	7	6	2-3	9	2200
8	Manchester	987·4	-2	SW'W	4	z₀	46	65	6	2	4	6	1	9+	2500
10	Spurn Head	986·8	+12	SW'W	5	c	46	75	7	5	1	1	4-6	9	4000
	Catterick	985·9	+10	W	3	c	46	65	9	8	7	-	4-6	7-8	2200
	Tynemouth	984·2	+12	W	3	bc	47	75	7	7	-	-	4-6	4-6	3600
11	St. Abbs Head	983·2	+24	NW	4	c	45	75	8	5	3	-	4-6	9+	2500
	Leuchars	983·3	+16	WNW	3	c	46	75	8	5	3	-	2-3	9	3500
12	Renfrew (Abbots I.)	984·5	+10	NW'W	2	c	48	75	8	8	7	-	7-8	7-8	3000
	Eskdalemuir	984·1	+4	NW'N	4	pr	41	85	8	5	4	-	7-8	9	1500
	Point of Ayre	985·4	0	WNW	4	c	45	85	8	8	-	-	9+	9+	2500
13A	Tiree	985·6	+8	N'E	5	bc	46	85	8	8	-	-	4-6	4-6	1800
13B	Stornoway	986·7	+14	NNW	4	c	44	75	8	8	7	7	7-8	10	2500
15	Dalwhinnie	985·6	+14	N	3	id₀	39	92	7	5	1	-	9	10	1500
	Aberdeen	981·8	+18	NW'N	3	pr	44	85	8	3	9	-	2-3	4-6	2500
	Wick	981·5	+12	WNW	4	c/pr	44	75	8	8	7	2	4-6	9	1500
16	Lerwick	977·3	+6	N	6	c/pr	43	85	7	8	7	-	7-8	9+	800
17	Blacksod Point	988·3	+10	NW	2	bc	49	85	8	3	-	-	2-3	4-6	1500
18	Malin Head	985·6	+8	N'W	3	bc	47	75	8	2	-	4	2-3	4-6	5700
	Aldergrove	986·1	0	SW'W	2	bc	46	75	9	8	3	-	2-3	4-6	700
19	Birr Castle	988·3	-6	SW	2	c	44	75	8	5	-	4	7-8	7-8	2500
20	Valentia Obsy. †	988·2	-18	WSW	1	c	48	55	9	2	7	2	2-3	7-8	2500
	Roches Point	988·2	-18	NW	2	c	45	85	8	5	1	5	2-3	9	1500

OBSERVATIONS at 18h. G.M.T. 13th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	982·5	-42	ESE	2	rr	45	85	5	6	2	-	7-8	10	1500	1	*
Croydon	985·6	-42	E	3	r₀r₀	44	97	5	6	2	-	7-8	10	1200	1	*
S. Farnborough	984·6	-50	NE'E	3	RR	43	92	5	5	-	-	10	10	2500	1	*
Boscombe Down	983·5	-50	E'N	4	rr	43	92	5	6	2	-	7-8	10	2400	1	*
Calshot (Soton.)	982·4	-66	E'N	5	rr	46	97	5	5	-	-	10	10	700	1	3
Lympne	987·7	-32	SSW	3	rr	46	97	6	6	2	-	9+	10	700	1	§3
Manston	986·9	-40	-	0	r₀r₀	44	97	4	5	2	-	9	10	1200	*	*
Shoeburyness	988·0	-34	SE	2	rr	46	92	6	5	-	-	10	10	2500	1	*
Felixstowe	987·6	-12	SE'S	3	ir₀	47	85	6	5	2	-	9+	10	5000	1	2
Gorleston	988·2	-16	S'W	2	c	45	85	6	5	-	-	10	10	1500	0	2
Mildenhall	986·5	-30	SE'S	2	z₀	45	85	6	-	2	-	0	10	-	0	*
Cranwell	986·1	-20	SW	2	z₀	41	85	6	5	-	-	10	10	800	1	*
Birmingham	985·7	-26	-	0	cf	43	75	3	5	2	-	7-8	10	800	1	*
Upper Heyford	985·7	-26	SE	2	ir₀	43	92	6	5	2	-	4-6	10	2500	1	*
Ross-on-Wye	985·0	-30	NE	2	ir₀	45	85	5	6	2	-	7-8	10	1500	1	*
Hartland Point	982·1	-48	NE	3	rr	44	85	7	-	2	-	10	10	1500	1	3 *
Bristol	984·3	-26	E	2	rr	42	92	6	-	2	-	10	10	1500	1	
Portland Bill																
Plymouth	978·8	-68	E'N	4	rr	41	92	5	-	2	-	10	10	1500	1	2
The Lizard	978·4	-24	NNE	6	rr	41	97	6	5	-	-	10	10	800	1	3
Scilly (St. Mary's)	981·0	-20	NE'N	5	rr	44	92	7	8	2	-	7-8	10	800	1	4
Guernsey																
Pembroke	984·7	-10	NE	3	c	45	97	7	8	2	-	7-8	9+	2500	1	2
Holyhead	984·4	-22	NW	4	ir₀	46	85	8	6	2	-	4-6	10	1400	1	2
Chester (Sealand)	985·4	-10	-	0	c	41	85	5	5	2	-	7-8	10	3500	1	*
Manchester	985·6	-8	ESE	1	cf	42	92	3	5	7	-	7-8	9+	2500	2	*
Spurn Head	985·5	-4	S'W	3	c	43	85	7	5	1	-	4-6	9	4000	0	2
Catterick	985·1	-4	-	0	c	40	85	7	4	7	-	1	9	3500	1	4
Tynemouth	984·5	+4	W	3	bc/pr	43	75	6	2	-	-	4-6	4-6	3200	1	2
St. Abbs Head	984·2	+6	NW	3	bc	43	85	8	4	5	-	2-3	4-6	2500	0	2
Leuchars	984·4	+10	NW	3	bc	41	85	8	5	3	-	4-6	4-6	3500	1	*
Renfrew (Abbots I.)	985·5	+10	W	2	b	37	92	8	5	3	1	Tr	1	5000	1	*
Eskdalemuir	985·0	+10	NE'N	2	z₀	36	92	7	5	4	-	Tr	1	2500	1	*
Point of Ayre	984·8	0	-	0	bc	43	85	8	8	-	-	2-3	2-3	1500	1	1
Tiree	987·1	+8	N'E	4	bc	46	75	8	8	-	-	4-6	4-6	1500	0	4
Stornoway	988·3	+8	N	4	c/pr	41	85	7	8	7	-	7-8	9+	2000	1	2
Dalwhinnie	*	+6	NNE	1	bc	37	85	8	8	-	-	4-6	4-6	2500	0	*
Aberdeen	983·0	+6	NW	3	b	41	92	8	2	-	3	1	1	2500	1	2
Wick	982·2	+6	NNW	5	c/pr	43	85	8	8	7	1	4-6	9+	1500	1	2
Lerwick	976·9	0	N'W	5	c/pr	44	92	7	8	7	-	7-8	9	800	1	*
Blacksod Point	989·1	+16	NNE	4	bc	47	85	8	3	-	-	4-6	4-6	1500	1	3
Malin Head	987·0	+14	N'E	5	c	47	85	8	2	-	2	4-6	7-8	4000	0	4
Aldergrove	986·3	+6	-	0	bc	39	92	8	8	-	-	2-3	2-3	2000	1	*
Birr Castle	986·9	0	N	1	c/pr	42	92	8	8	-	-	7-8	7-8	1500	1	*
Valentia Obsy. †	987·2	0	NW'W	4	bc/pr	45	85	8	3	-	-	4-6	4-6	2500	1	2
Roches Point	986·5	-2	N	3	z₀	44	85	6	5	1	5	2-3	9	2500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 13th (37)	13h.—18h. 13th (38)	18h. 13th to 1h. 14th (39)	1h.—7h. 14th (40)
London (Kew)	ccm₀	oid₀ cr₀r	crrr₀r	rr₀cbc
Croydon	cz₀ ⊕	cz₀r₀rrz₀	rrr₀r	ccrbm₀
S. Farnborough	c⊕	m₀d₀rrd	RRRS	rrr₀c, bbc
Boscombe Down	bcc	cir₀cr₀r₀	SSrS	
Calshot (Soton.)	ocir₀	cr₀r₀rr	oRRm	or₀r₀mbcb
Lympne	c⊕	cr₀r₀rr	RRcmr₀	r₀r₀mb
Manston	c⊕	r	rrRr₀cm₀	r₀crir₀
Shoeburyness	c⊕	corro	R-cr₀r₀	cr₀r₀cm₀
Felixstowe	cz₀	cz₀cir₀	r₀crrir	r₀r₀prr₀r₀
Gorleston	bcc	coz₀	orrq	orrq
Mildenhall	c	ccz₀om₀	omcrrm₀	cr₀r₀mbcm
Cranwell	bccm₀	cz₀cm₀	cm	cmbcm₀q
Birmingham	c	c	fc	cb
Upper Heyford	bcco	ocm₀ir₀m	cr₀crrm	cir₀
Ross-on-Wye	c	cz₀	r₀orm₀d₀	cbc
Hartland Point	crrr	crro	rr₀c	bcc
Bristol	cpr₀c	cir₀r₀r₀rr	r	cbcm₀
Portland Bill				
Plymouth	cm₀cr₀r₀rr	cr₀r₀ orr	ccepr₀c Ф	cpr₀cbcc
The Lizard	rr	rr	rrcpr	bcprc
Scilly (St. Mary's)	cr₀r₀	cr₀rr	crr	cpr₀c
Guernsey				
Pembroke	pr₀qc	c	c	bc
Holyhead	cbcc	cir₀c	cpr₀c T	cbc
Chester (Sealand)	bcc	cym₀c	cm₀ Ф	cbcbm
Manchester	cprq cz₀	cm₀mf	cfcm₀	cm₀bcm₀
Spurn Head	c	c	ozcq	cq
Catterick	bcpr₀c	c	cmwm₀w	wm₀bcc
Tynemouth	bc	bcpr₀	bc	bcoir
St. Abbs Head	bcc	bc	bc	bccr
Leuchars	c	cbc	bcc	c
Renfrew (Abbots I.)	bcwc	cbcprob	bbccfg	cfgxc
Eskdalemuir	cpr₀	pr₀bcfg	bcbx	bxbcc
Point of Ayre	rrc	cprc	b	bcc
Tiree	ccpr₀	bc		
Stornoway	cphrpr₀	cpr₀	cPRq	cpr
Dalwhinnie	cir₀o	obcc		cid₀o
Aberdeen	pr₀c	prbcb	bpr₀	cpr
Wick	cqprc	cpr₀c	cqpr	cprq
Lerwick	cpr	cpr	cpr	cpr
Blacksod Point	bc	pr₀bc	pr₀c	cbc
Malin Head	cqpcpr₀bc	c	cpr₀cphrc	cprcPHRc
Aldergrove	cpr₀bc	phr₀ pr	cpr₀bcw	bcpr₀PR
Birr Castle	c	cpr	bcp	cpr₀bc
Valentia Obsy. †	cvy	bcphr₀bc	bccprqcpc	cPRqcprbc
Roches Point	c	c z₀	b	bc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). ⚑gale.
⊕ Solar halo. Ф lunar halo. ⌂Aurora.

With present weather is combined, whenever possible, the general character of the weather.

A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4–6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,-Ci: Cirrocumulus,-Cc: Cirrostratus,-Cs: Altocumulus,-Ac: Altostratus,-As: Stratocumulus,-Sc: Stratus,-St: Nimbostratus,-Ns: Cumulus,-Cu: Cumulonimbus,-Cb.

COLUMN 29.—STATE OF GROUND.

0 . . Ground dry.
1 . . ,, wet.
2 . . ,, flooded.
3 . . ,, frozen hard and dry.
4 . . ,, partly covered with snow or hail.
5 . . ,, covered with ice or glazed frost.
6 . . ,, covered with thawing snow.
7 . . Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 . . ,, covered with snow, less than 6 ins., but ground frozen.
9 . . ,, covered with snow greater than 6 ins. deep.
– . . Fresh snow has fallen in the mountains.

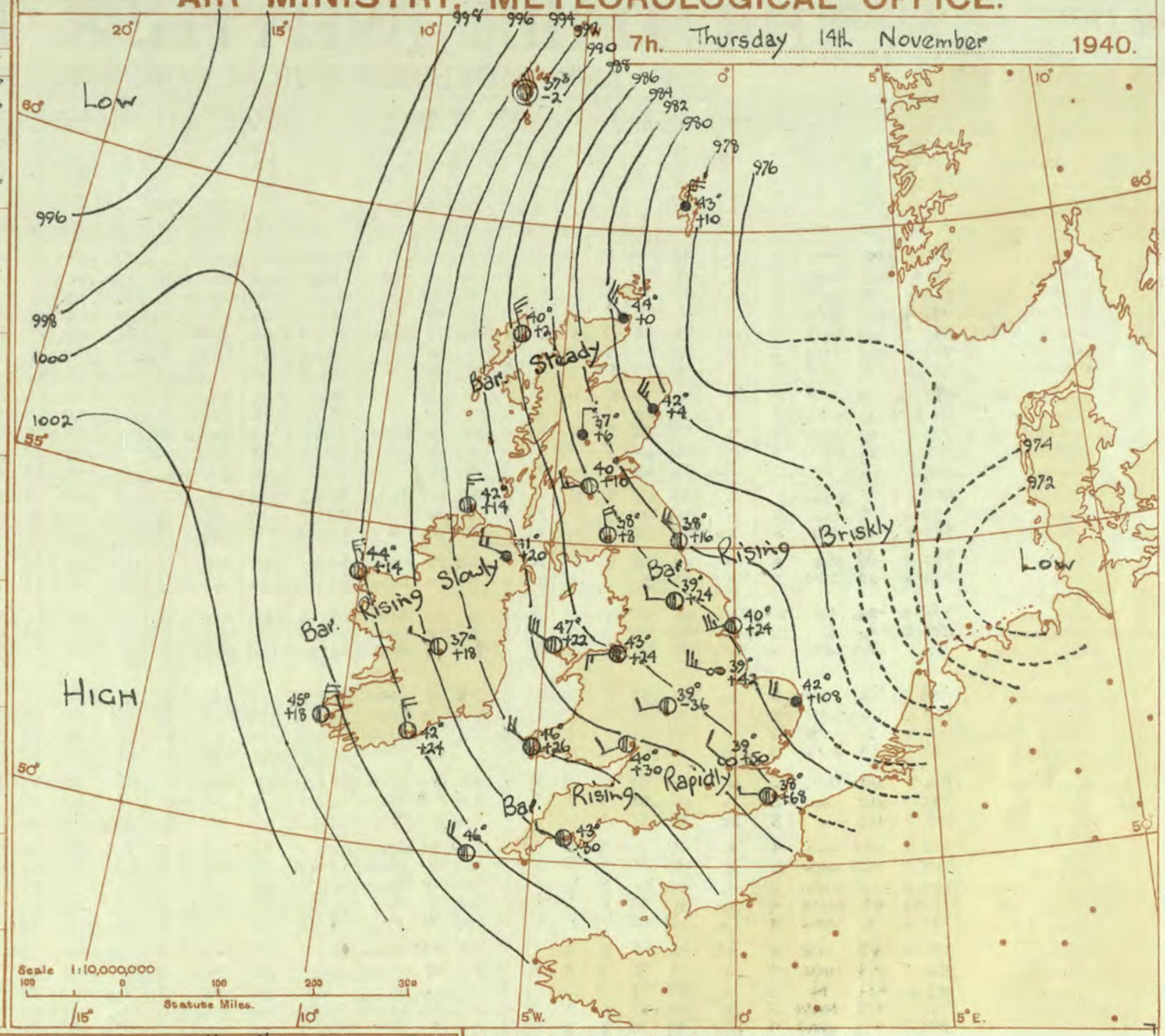
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 13th November			18h. G.M.T.			01h. G.M.T. 14th November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	87	25755	30585	8-	14755	63685	87	81755	63788	87	25646	64787
115				87	88844	65586	87	88835	65686	87	88834	65686
203										8-	81847	63667
206	74	01854	28155	84	01754	30284	8-	82856	28186	96	81844	28285
210	86	02846	28485	86	02844	28486				8-	81747	63687
220										90	25645	28485
230	87	02954	32217	83	02853	32417	57	02855	32518	87	10844	63625
245	53	01953	30324	53	01863	28224	8-	81966	27226	97	02946	29587
260	57	05664	24227	53	01862	30184	53	02864	26116			
277	56	10844	24384	30	00842	28182	20	02841	26325	83	01854	28525
279												
285	3-	81737	24587	23	01734	28314				6-	61638	26668
288	9-	81847	20287	57	01863	18184	01	05590	30228	5-	61658	24268
273	16	01752	24104									
301	97	81749	08486	87	25654	00088	00	05690	30246	37	02754	29315
321	57	23426	-----	07	05590	17128	02	08490	30348	03	05550	23225
299	57	01744	25414	57	05643	23315	51	05644	30528	50	01743	28313
292	87	81854	22387	04	05690	22184	01	05590	29348	57	01764	22114
310	--	01634	24314	--	02428	24328				--	08426	24326
316				02	08490	00028	02	45590	04348	00	02590	24225
333	21	02853	24427	27	02765	25228	20	02753	04385	20	25855	30586
334	--	01854	22204							--	03645	00068
340	27	02853	22325				01	41590	30348	20	01752	24314
136				02	05690	18228	5-	66648	03268	57	22652	24567
336	48	81742	24588	43	03752	20428				13	02754	28415
350	57	05665	20428							07	05690	18324
368												
379	52	05662	20228	--	04764	28214	02	22648	32368	03	01790	30112
390	57	05551	20227	52	57336	12158	02	76538	65768	57	05544	23428
382	57	02873	21328	02	62658	12268	02	62648	30468	07	01790	23208
438	3-	62748	24468							80	01744	26414
430	52	63655	22328	62	64538	08368	02	68538	61768	30	05642	28203
409	0	26266	8 13268	62	64625	02468	20	02845	30528	30	10844	28284

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 14th November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light or moderate west or northwest wind, backing southwest tomorrow, freshening during day; mainly fine; local fog night and morning; rather cold, night frost.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Moderate to light northwest wind, backing west to southwest and freshening tomorrow; bright intervals, local showers of rain or hail; Cloud increasing tomorrow with risk of rain by noon; local fog night and morning; rather cold, night frost.
13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland	Fresh northwest wind, falling light backing southwest and freshening again; Bright intervals, local showers, rain tomorrow; rather cold.
15 N. E. Scotland 16 Orkneys and Shetlands	Fresh or strong north wind, moderating; much cloud, some showers; rather cold.
17 N. W. Ireland	As 13 - 14
18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 4-12.

GENERAL INFERENCE.

A depression over the North Sea is moving north east and another depression south of Iceland is moving southeast. After a short fair quiet interval with local fog, rain will spread south east across the country with freshening winds.

FURTHER OUTLOOK.

Rain spreading to southeast districts, rather cold for a few days with snow locally in the north and on high ground generally.

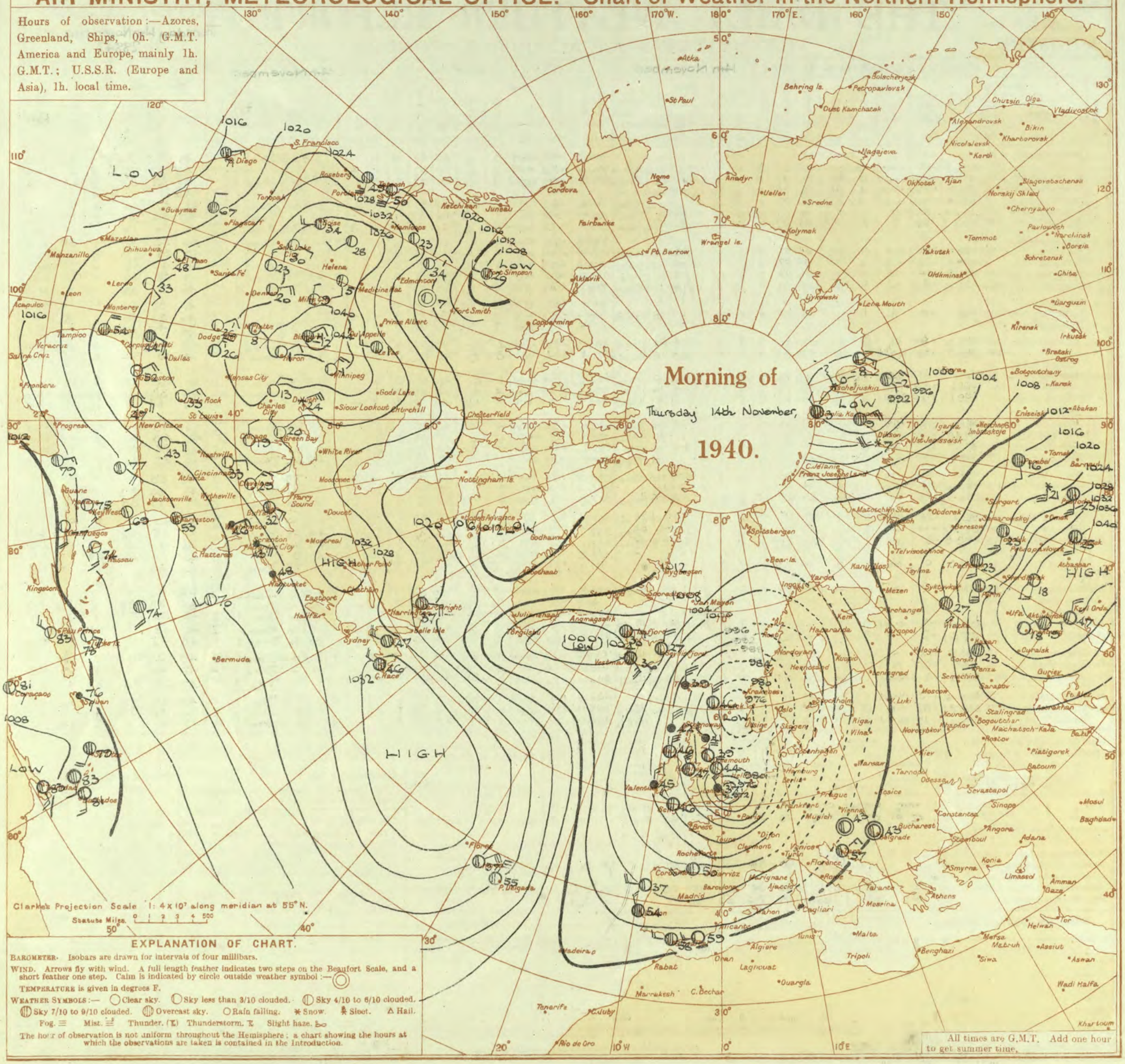
Forecasts issued at 10.30 GMT.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation:—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 14th November 1940.

No. 28847

OBSERVATIONS at 1 hr. G.M.T. 14th November

District.	Stations.	Height above M.S.L. in feet.	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low. (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	972.3	-14	NNW	6	rr	37	97	5	6	2	-	9+	10	1000
	S. Farnborough	226	977.8	+42	NNW	6	Rs	34	92	5	6	2	-	9	10	1200
	Boscombe Down	417	981.7	+72	NWN	4	rs	38	92	6	6	7	-	7-8	10	1000
	Calshot (Sthmtn.)	8	981.4	-114	NWW	6	rr	39	92	6	5	-	-	10	10	600
	Lympne ...	346	964.8	-94	S	8	rrr	48	92	4	6	2	-	9+	10	200
	Manston ...	154	964.7	-88	S	7	rr	48	92	6	6	2	-	9	10	400
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	968.7	-88	SSW	4	rr	47	97	5	6	2	-	7-8	10	1000
	Gorleston ...	5	973.4	-70	NE	6	rr	45	97	6	6	-	-	10	10	800
	Mildenhall ...	19	974.3	-54	N'E	5	rr	39	92	6	6	2	-	7-8	10	1100
	Cranwell ...	240	979.0	-30	N	4	m	37	92	4	5	-	-	10	10	800
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	979.6	+6	N	3	rr	38	92	6	5	2	-	9	10	1100
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	986.0	+36	N	3	c	47	85	8	8	2	-	7-8	9+	1500
	Bristol ...	209	983.2	+48	NWN	3	c	42	85	7	5	1	-	2-3	10	2000
	Portland Bill ...	32														
	Plymouth ...	82	987.9	+52	NW	2	c/pr	44	85	7	8	-	7	4-6	10	1400
	The Lizard ...	240	989.8	+40	NW	5	c/pr	46	75	7	8	1	-	7-8	10	1600
	Scilly (St. Mary's)	163	990.1	+40	NWW	4	c	46	70	8	8	2	-	4-6	9+	1800
	Guernsey ...	175														
6	Pembroke ...	142	984.6	+18	NW	4	c	46	92	7	8	-	-	7-8	7-8	2000
7	Holyhead ...	26	988.9	+10	N'W	5	c	47	85	7	3	-	7	1	9+	3000
	Chester (Sealand)	16	982.7	0	NNW	3	c	41	85	6	3	-	7	2-3	10	4000
8	Manchester ...	70	982.1	-8	NW	3	c/f	39	92	5	5	1	-	1	10	3200
10	Spurn Head ...	29	978.1	-44	N	4	c	44	80	6	6	2	-	4-6	10	2500
	Catterick ...	175	982.0	-16	NWW	2	z	39	85	6	-	1	7	0	10	-
	Tynemouth ...	108	983.3	-16	N	4	bc	39	85	6	2	3	-	2-3	4-6	3000
11	St. Abbs Head	280	981.1	-24	NW	4	bc	41	85	8	4	4	-	2-3	2-3	2500
	Leuchars ...	36	982.3	-14	W	3	c	41	75	8	5	7	-	2-3	9+	3500
12	Renfrew (Abbots I.)	19	985.3	-6	W	2	cf	36	92	7	5	-	-	7-8	7-8	4500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	984.5	0	N'E	4	h	44	75	8	-	4	-	0	Tr	-
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	988.0	-2	N	6	pr	42	85	7	8	-	3	9	9+	1000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	991.0	-8	NNW	5	pr	44	85	8	8	7	8	4-6	9	1500
16	Lerwick ...	156	977.6	+2	N	5	c/pr	48	85	8	8	7	-	4-6	7-8	1500
17	Blacksod Point	18	993.6	+18	N	5	c	45	85	7	3	-	-	9	9	1500
18	Malin Head ...	84	988.2	+6	N	6	c	46	75	8	2	7	-	2-3	7-8	4000
	Aldergrove ...	268	987.5	+6	NNW	2	bc	38	85	8	3	6	3	2-3	4-6	2500
19	Birr Castle ...	173	990.6	+16	NNE	1	b	37	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	993.8	+82	N'E	3	pr	45	85	8	3	-	-	9+	9+	2500
	Roches Point	22	991.0	+28	NNW	3	b	48	92	8	6	-	-	1	1	2500

OBSERVATIONS at 7 hr. G.M.T. 14th November

Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low. (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	990.6	+48	WSW	3	z	39	92	6	5	-	1	2-3	2-3	2500	1	*
Croydon	990.6	+50	NW	2	z	39	92	6	-	4	2	0	2-3	-	1	*
S. Farnborough	991.2	+38	WSW	2	bc	36	92	8	5	-	2	1	2-3	3500	2	*
Boscombe Down																*
Calshot (Sthmtn.)	991.8	+36	W	3	bc	40	92	7	5	4	-	2-3	4-6	2500	1	
Lympne	991.7	+68	W	1	b/p	38	92	7	8	-	-	1	1	3000	1	§2
Manston	990.1	+70	WSW	4	z	40	92	6	5	3	-	4-6	7-8	900	*	*
Shoeburyness	989.8	+66	WSW	4	c	41	92	6	5	-	8	1	7-8	2500	1	*
Felixstowe	988.4	+104	W'S	4	c/p	41	85	5	-	7	-	0	9*	-	1	1
Gorleston	985.3	+108	W'N	4	rr	42	97	6	6	-	-	10	10	1000	1	3
Mildenhall	987.6	+66	W'S	4	z	39	92	5	5	1	8	2-3	7-8	2500	1	*
Cranwell	986.7	+42	W'N	3	z	39	92	5	5	-	-	7-8	7-8	1800	1	*
Birmingham	990.1	+36	WSW	2	bc	39	85	6	-	-	1	0	2-3	-	1	*
Upper Heyford	990.0	+42	W'S	2	b	38	92	8	-	4	-	0	1	-	1	*
Ross-on-Wye	991.0	+30	SW	2	bc	40	85	7	-	1	2	0	2-3	-	1	*
Hartland Point	992.0	+28	NW	4	cjp	46	92	8	3	--	-	7-8	7-8	2000	1	3
Bristol	991.4	+34	W	3	z	40	92	6	5	-	2	4-6	7-8	4000	1	*
Portland Bill																
Plymouth	993.8	+80	WNW	1	c	43	85	5	8	-	1	7-8	7-8	1600	1	2
The Lizard	994.5	+20	NW	4	c	46	85	8	8	6	-	7-8	7-8	1500	1	3
Scilly (St. Mary's)	994.3	*	NW	4	cjp	46	*	8	8	4	-	4-6	7-8	1000	1	5
Guernsey																
Pembroke	992.6	+26	NWW	4	c	46	85	7	8	-	-	7-8	7-8	2500	1	2
Holyhead	988.7	+22	NWW	6	c	47	85	8	2	-	1	9	9	2200	1	3
Chester (Sealand)	988.2	+24	W'S	3	au	43	75	6	3	-	-	9	9	1500	1	*
Manchester	987.8	+26	SW	1	m	35	92	4	2	6	1	4-6	4-6	2800	1	*
Spurn Head	984.5	+24	W'S	5	c	40	75	7	-	3	-	0	7-8	-	1	3
Catterick	985.4	+24	W	2	c	39	75	7	5	-	-	9+	9+	3500	1	*
Tynemouth	983.3	+16	NW	4	o/p	38	92	6	-	2	-	10	10	2500	1	2
St. Abbs Head	981.1	+6	W	6	c/p	42	85	8	5	2	-	7-8	10	2500	1	3
Leuchars	982.7	+12	WNW	3	c	42	75	8	8	7	-	4-6	7-8	3500	1	*
Renfrew (Abbots I.)	986.1	+10	W'S	3	c	40	85	8	5	7	-	2-3	9+	5500	1	*
Eskdalemuir	984.8	+8	N'W	4	e	38	75	7	5	-	-	9	9	1500	1	
Point of Ayre	987.0	+12	N'W	3	e	46	85	8	8	7	6	1	7-8	2500	1	3
Tiree																
Stornoway	988.5	+2	NNW	5	c	40	85	7	8	7	2	4-6	9	1200	1	3
Dalwhinnie	*	+6	N	2	id	37	85	7	5	-	-	10	10	1500	1	*
Aberdeen	980.3	+4	NWN	5	pr	42	92	7	9	-	-	9+	9+	1500	1	2
Wick	980.6	0	NW	5	pr	44	85	8	5	7	-	7-8	10	1500	1	2
Lerwick	978.5	+10	N'E	5	pr	43	92	7	8	7	-	7-8	9+	800	1	*
Blacksod Point	996.4	+14	NNW	5	bc	44	75	8	3	-	2	2-3	4-6	2500	1	4
Malin Head	1000.5	+14	N	5	c/pr	42	97	7	9	-	-	9	9	2500	1	4
Aldergrove	990.7	+20	WNW	3	PR	41	85	8	8	7	-	9	9+	1200	1	*
Birr Castle	994.9	+18	WNW	1	bc	37	92	8	5	-	-	2-3	2-3	2500	1	*
Valentia Obsy.	998.3	+18	N'E	4	bc/pr	45	75	8	8	-	-	4-6	4-6	2500	1	2
Roches Point	995.9	+24	N'W	4	bc	42	85	8	5	-	5	1	2-3	2500	1	3

PAST 24 HOURS.

Stations.	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 13th. Hrs. (36)
London (Kew)	49	33	30	1	20	0.0
Croydon	49	33	32	2	27	0.0
S. Farnborough	49	33	30	3	25	0.0
Boscombe Down	48			4		
Calshot (Sthmtn.)	52	37	36	9	21	0.0
Lympne	50	36	34	7	15	0.0
Manston	*	*	*	*	*	*
Shoeburyness	50	36	35	1	26	0.0
Felixstowe	49	38	37	Tr	23	0.0
Gorleston	48	42	38	-	23	0.0
Mildenhall	49	38	36	-	24	0.0
Cranwell	46	37	35	-	-	0.6
Birmingham	47	38	34	-	-	0.2
Upper Heyford	46	37	31	-	18	*
Ross-on-Wye	48	40	34	Tr	1	0.1
Hartland Point	49	40	41	4	3	0.0
Bristol	48	39	34	2	14	0.0
Portland Bill			*			*
Plymouth	51	38	35	9	12	0.0
The Lizard	49	39	*	23	12	0.0
Scilly (St. Mary's)	49	43	*	13	7	0.0
Guernsey						
Pembroke	50	43	*	Tr	0.2	0.0
Holyhead	48	43	41	Tr	0.1	0.0
Chester (Sealand)	49	38	31	-	-	0.8
Manchester	47	33	26	1	0.1	0.5
Spurn Head	46	39	*	-	Tr	1.4
Catterick	46	36	33	Tr	-	2.8
Tynemouth	47	35	38	0.2	0.4	
St. Abbs Head	45	41	*	Tr	0.2	*
Leuchars	47	38	32	-	-	0.1
Renfrew (Abbots I.)	48	31	27	-	0.1	2.5
Eskdalemuir	46	32	25	0.4	-	3.9
Point of Ayre	46	40	*	4	-	0.4
Tiree			*	0.2		
Stornoway	44	36	*	2	3	0.0
Dalwhinnie	39	33	28	1	0.6	0.3
Aberdeen	45	39	37	1	6	0.7
Wick	46	42	*	0.1	3	*
Lerwick	45	42	*	6	1	0.0
Blacksod Point	49	42	*	1	2	*
Malin Head	48	41	*	1	5	3.4
Aldergrove	47	35	30	0.2	1	3.6
Birr Castle	45	35	32	1	0.2	1.8
Valentia Obsy.	50	40	39	1	4	0.0
Roches Point	47	41	*	-	0.2	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet.	Weather Morning.	Weather Afternoon.	Weather Night.	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day. mm.	Rainfall Night. mm.	Sunshine to Sunset. hrs.	Humidity 15h. G.M.T. % Yesterday.	Humidity 9h. G.M.T. % To-day.	Visibility 9h.
		24 hrs. ended 9h.											
Kew	18	scm	oidcgr	crrcr	49	33	30	1	20	0.0	*	*	5
Croydon	217	cz ⊕	czrrrz	rrrr	49	33	32	2	27	0.0	*	*	6
Greenwich (Royal Observatory)	149												
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*									*
Regents Pk. (Botanic Gardens)†	168	*	*	*	49	34	30	0.2	25		77	91	*
Camden Square	110			*						*	*		*
Kensington	80	c	cpr	*	50	34	32	Tr	25		73	93	*
Hampstead Observatory	450	bc	prs•	bcm	48	34	32	16	7		*	96	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 14th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
Lo.	whole period		

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22—Code for surface visibility.

Code		Objects not visible at
0	Dense fog	55 yards.
1	Thick fog	220 ,,
2	Fog	550 ,,
3	Moderate fog	1,100 ,,
4	Mist or haze	1¼ miles.
5	Poor visibility	2½ ,,
6	Moderate ,,	6¼ ,,
7	Good ,,	12½ ,,
8	Very good ,,	31 ,,
9	Excellent ,,	beyond 31m.

COLUMN 30—Code for State of Sea.
0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

DUP2

SECRET

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Friday 15th November 1940.
No. 28848

OBSERVATIONS at 13h. G.M.T. 14th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	993·2	0	SW'S	3	z₀	46	85	5	1	–	1	1	2-3	2500
	Croydon	993·2	+6	SW	2	z₀	48	75	6	–	4	–	0	4-6	–
	S. Farnborough	994·1	+10	W'S	3	bc	47	75	7	1	–	2	Tr	2-3	2500
	Boscombe Down	993·9	+6	W'N	4	bc	47	75	7	2	–	–	2-3	2-3	3000
	Calshot (Soton.)	994·2	+10	WNW	3	bc	48	75	8	1	–	8	1	4-6	2500
	Lympne														
	Manston	993·5	+8	SW	3	c	47	75	8	–	–	6	0	7-8	–
2	Shoeburyness	993·3	+6	WSW	2	bc	49	75	6	–	–	4	0	4-6	–
	Felixstowe	992·0	-2	W	3	z₀	47	75	6	–	–	1	0	2-3	–
	Gorleston	992·9	0	WSW	3	bc	45	85	7	1	–	–	2-3	2-3	3000
	Mildenhall	991·2	8	W'S	4	b	49	65	8	1	–	1	Tr	1	3000
	Cranwell	990·2	10	W	5	z₀	45	75	6	5	–	2	2-3	7-8	2500
3	Birmingham	991·9	+8	W	3	c	47	65	7	8	–	–	4-6	7-8	2500
	Upper Heyford	992·7	+4	W'S	3	bc	49	65	7	2	–	9	2-3	2-3	2500
4	Ross-on-Wye	993·2	+6	W	3	bc	50	65	8	2	–	3	4-6	4-6	4000
5	Hartland Point	995·3	+6	NW	4	c	47	85	9	3	–	–	7-8	7-8	2000
	Bristol	994·4	+10	W	3	bc	48	75	8	3	–	3	4-6	4-6	2800
	Portland Bill	994·5	+6	NW	4	c	50	85	8	2	–	–	7-8	7-8	4000
	Plymouth	996·0	+2	WNW	4	bcjp	49	75	8	3	–	–	4-6	4-6	2500
	The Lizard	997·0	0	WNW	5	bJE	48	75	8	8	6	–	4-6	4-6	3300
	Scilly (St. Mary's)	997·9	+10	NW	4	bc	48	75	8	8	6	–	4-6	4-6	1800
	Guernsey														
6	Pembroke	995·7	+10	NW'W	4	c	46	85	8	2	–	–	7-8	7-8	2500
7	Holyhead	992·0	+12	NW'W	6	bc·	47	85	8	8	–	2	2-3	4-6	2500
	Chester (Sealand)	991·7	+14	W'S	3	pr	44	85	6	8	7	–	7-8	9	1000
8	Manchester	990·1	+6	SW'W	3	z₀	44	85	5	8	6	6	7-8	9+	2300
10	Spurn Head	988·9	+14	WSW	4	c	46	75	6	4	2	–	4-6	9+	4000
	Catterick	988·4	+14	W	3	c	45	65	8	–	9	8	0	9	–
	Tynemouth	986·6	+8	W	4	z₀	45	75	6	2	3	1	2-3	7-8	3400
11	St. Abbs Head	984·3	+14	WNW	6	cq	43	75	8	4	5	4	2-3	9	2500
	Leuchars	985·5	+12	W	c	c	46	75	9	8	7	–	7-8	9	3200
12	Renfrew (Abbots I.)	988·4	+4	NW'W	3	c	46	65	9	2	7	2	1	9	3000
	Eskdalemuir	987·8	+14	WNW	2	bc	42	75	8	5	4	1	1	4-6	2500
	Point of Ayre	990·4	+10	NNW	5	bc	48	75	8	9	–	–	2-3	2-3	2500
13A	Tiree	990·9	+2	N'W	5	bc	46	75	8	8	6	–	4-6	4-6	1500
13B	Stornoway	990·0	+6	NW	4	c/pr	42	75	8	8	7	–	7-8	9+	2000
15	Dalwhinnie	988·1	+6	NNW	3	ir₀	38	85	7	5	5	–	7-8	9+	1500
	Aberdeen	982·7	+6	NW	5	rr	42	92	7	9	–	–	10	10	1500
	Wick	983·1	+10	NNW	6	c/pr	44	75	7	8	7	–	7-8	10	1500
16	Lerwick	980·4	+16	NNE	5	pr	44	85	7	8	7	–	7-8	9+	800
17	Blacksod Point	996·7	-4	NW	3	bc	49	75	8	3	–	–	4-6	4-6	2500
18	Malin Head	992·1	+4	N'W	2	bc/pr	45	85	8	9	–	1	2-3	4-6	4000
	Aldergrove	992·5	0	W	2	cjp	45	75	9	9	–	–	7-8	7-8	2000
19	Birr Castle	996·6	+4	NW	2	bc	45	75	8	8	–	–	4-6	4-6	2500
20	Valentia Obsy. †	999·2	+4	N	2	phr	47	75	9	8	–	–	4-6	4-6	4000
	Roches Point	997·5	-2	N	4	bc	48	75	8	2	–	–	2-3	2-3	2500

OBSERVATIONS at 18h. G.M.T. 14th November — PAST 24 HOURS

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Weather 7h.–13h. 14th (37)	Weather 13h.–18h. 14th (38)	Weather 18h. 14th to 1h. 15th (39)	Weather 1h.–7h. 15th (40)
London (Kew)	994·6	+10	SW	3	z₀	43	85	5	–	–	–	0	0	–	1	*	bcbm₀	bbcbm₀	bm₀wx	bfFx
Croydon	994·8	+14	S	1	z₀	41	85	5	1	–	–	Tr	Tr	2500	1	*	bbcm₀	bcm₀	bm₀	bm
S. Farnborough	995·1	+10	WSW	3	b	39	85	7	4	–	–	Tr	Tr	2500	1	*	bc	b	bm₀x	bxfm
Boscombe Down	995·2	+10	W'S	4	b	40	85	8	2	6	–	Tr	1	4000	1	*	bc	bc	b	bcm₀
Calshot (Soton.)	995·5	+12	W'N	2	b	42	85	7	2	4	–	Tr	Tr	3000	1	2	bc	bcb	bbm₀	bwm₀xfg
Lympne	995·1	+8	W	2	z₀	41	92	5	–	2	3	0	2-3	–	1	§		cbcm₀	bcbm₀w	b
Manston	*	*	SW	3	z₀	*	*	6	–	3	*	0	Tr	–	*	*	cm₀bcc		bm₀w	
Shoeburyness	994·5	+6	SW'W	2	b	44	85	6	–	–	–	0	0	–	1	*	bbcm₀	bcm₀bm₀	bm₀wb	bxbm
Felixstowe	993·6	+12	WSW	3	z₀	43	85	5	–	–	1	0	Tr	–	1	2	bcm₀bm₀	bz₀bz	bm₀bmw	bmwx
Gorleston	992·4	+4	SW'W	2	z₀	44	85	6	5	–	–	2-3	2-3	2500	1	2	or₀cbcq	bc	bcb	bbcx
Mildenhall	992·6	+8	WSW	3	bc	42	85	7	–	6	–	0	4-6	–	1	*	bcm₀bm₀b	bbc	bcbm₀	bm₀wbm₀x
Cranwell	991·5	+10	W	5	z₀	41	85	5	5	1	–	2-3	7-8	2500	1	*	bcm₀z₀	bc	bcbm₀	bffm
Birmingham	993·1	+4	WSW	2	z₀	41	85	6	4	–	–	Tr	Tr	2500	1	*	bbc	bcprhcbc	b	bx
Upper Heyford	994·3	+10	W	2	b	39	97	7	–	4	–	0	Tr	–	1	*	bbc	bbcpr₀bc	bbcm₀	bm₀mfFFx
Ross-on-Wye	994·7	+6	SW	2	b	40	85	8	5	–	–	Tr	Tr	2500	1	*	bccbbc	bc	b	bm₀w
Hartland Point	995·8	+2	WNW	3	c	46	75	8	8	–	–	7-8	7-8	1500	1	3	cpbcc	cp	cbcph	bcphc
Bristol	995·4	+10	W	1	b	41	85	7	–	6	–	0·	1	–	1	*	bcm₀b	bcb	bxbcb	bxw,c
Portland Bill	995·8	+12	NW	3	c	48	85	8	5	4	–	4-6	7-8	2500	1	3	c	cbc	bcbc	pcc
Plymouth	997·3	+6	W	2	bc	44	85	8	3	–	–	4-6	4-6	2500	1	1	cm₀,pr₀cjp	bccpr₀bc	bcpr₀bcm₀	bm₀bcm₀pr
The Lizard	998·0	+6	WNW	4	bc	46	75	8	8	6	–	4-6	4-6	3000	1	2	bc	bc	bccbc	cbc
Scilly (St. Mary's)	997·9	+2	NW'W	3	bc	46	75	8	8	–	–	4-6	4-6	1800	1	3	bcp₀q	bcpbc	bcc	c
Guernsey																				
Pembroke	994·9	0	NW'W	4	c	46	85	8	8	6	–	4-6	7-8	3500	1	2	c	cv	bcppcm₀	pr₀c
Holyhead	992·7	+4	NW'N	5	c	46	85	8	8	–	–	9	9	2000	1	3	cbc	phrqc	cbc	bcc
Chester (Sealand)	992·4	+2	WNW	2	c/phr	43	85	6	3	–	–	7-8	7-8	1800	1	*	cm₀pr₀pr	prhm₀c	PRbc	bxbm₀
Manchester	992·1	+10	SW'W	2	z₀	39	85	6	4	6	–	2-3	4-6	2600	1	*	cfmprm₀	cm₀pr	bcffm₀pr₀	pr₀m₀bmm₀
Spurn Head	989·7	+4	SW	4	bc	43	85	7	–	1	–	0	4-6	–	0	3	c	cm₀bc	b	bcw
Catterick	989·7	+8	WSW	1	b	39	75	8	5	9	–	Tr	Tr	4000	1	4	ccir₀c	cbcb	bbwbx	bx
Tynemouth	988·4	+10	W	3	z₀	40	85	6	–	4	–	0	2-3	–	1	2	obcc	cbc	bc	bcm
St. Abbs Head	986·6	+14	NW	6	cq	43	75	8	4	5	4	4-6	7-8	2500	0	3	bcqc	bcq	c	bc
Leuchars	987·3	+10	WNW	4	c	42	75	9	5	–	–	9+	9+	3200	1	*	cbcc	cbcc	cbc	bcb
Renfrew (Abbots I.)	989·7	+8	WNW	3	c	41	75	8	8	1	1	4-6	9	2500	1	*	cbc	c	cbcbx	bxfgf
Eskdalemuir	988·9	+6	NW	4	bc	37	85	8	5	4	2	Tr	2-3	2500	1	*	cbc	bc	bcbcx	bcxbx
Point of Ayre	991·3	+6	NW	5	pr	44	85	8	8	–	–	7-8	7-8	2500	1	3	bc	bcpr	bcbc	bcb
Tiree	990·6	+2	N'W	4	pr	43	75	8	8	3	–	2-3	2-3	2100	0	4	bc	prbc	bc	bc
Stornoway	990·4	+6	NNW	3	pr	40	85	7	8	8	–	7-8	9	2500	1	2	cprq	cpr	cpr	bc
Dalwhinnie	989·8	+10	NW	1	c	35	85	7	8	5	–	4-6	7-8	2500	1	*	cir₀	prbcc	*	cbc
Aberdeen	985·6	+16	NW'N	4	bc/r	41	92	8	9	7	–	1	4-6	1500	1	2	prcrr	r₀,bc	bcb	b
Wick	985·3	+12	NW	5	c/pr	41	85	7	5	7	6	4-6	7-8	1500	1	2	pr irc	cprc	ppcbc	pr₀bc
Lerwick	982·6	+6	N'W	4	c/pr	41	85	7	8	7	–	4-6	7-8	800	1	*	cprr₀pr	cpr	cpp	cpr
Blacksod Point	995·8	-6	W	1	bc	41	85	8	4	–	–	2-3	2-3	2500	0	1	bc	bc	c	cq
Malin Head	991·9	+4	N'W	4	c	45	75	8	2	6	–	4-6	7-8	4000	0	4	bcprbcjp	c	bcbcphrc	bc
Aldergrove	992·6	+2	WSW	2	b	38	85	8	2	–	–	1	1	2500	1	*	pr	ph₀r₀prb	bxcbx	bxm₀cx
Birr Castle	995·9	0	NW	1	c	38	92	8	5	–	–	7-8	7-8	2500	1	4	bc	bcc	bbcc	cx
Valentia Obsy. †	996·6	-14	S	2	bc	41	85	9	2	6	6	1	4-6	4000	1	1	bcpr,vphr	bcbcvphr,v	bcvc	ciRrr₀fcir
Roches Point	997·0	-2	NW	3	bc	44	85	8	5	–	–	2-3	2-3	2500	1	3	bbc	bc	cw	ir

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). ⸙ gale.
⊕ Solar halo. Ⓘ lunar halo. ⌂ Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus :—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

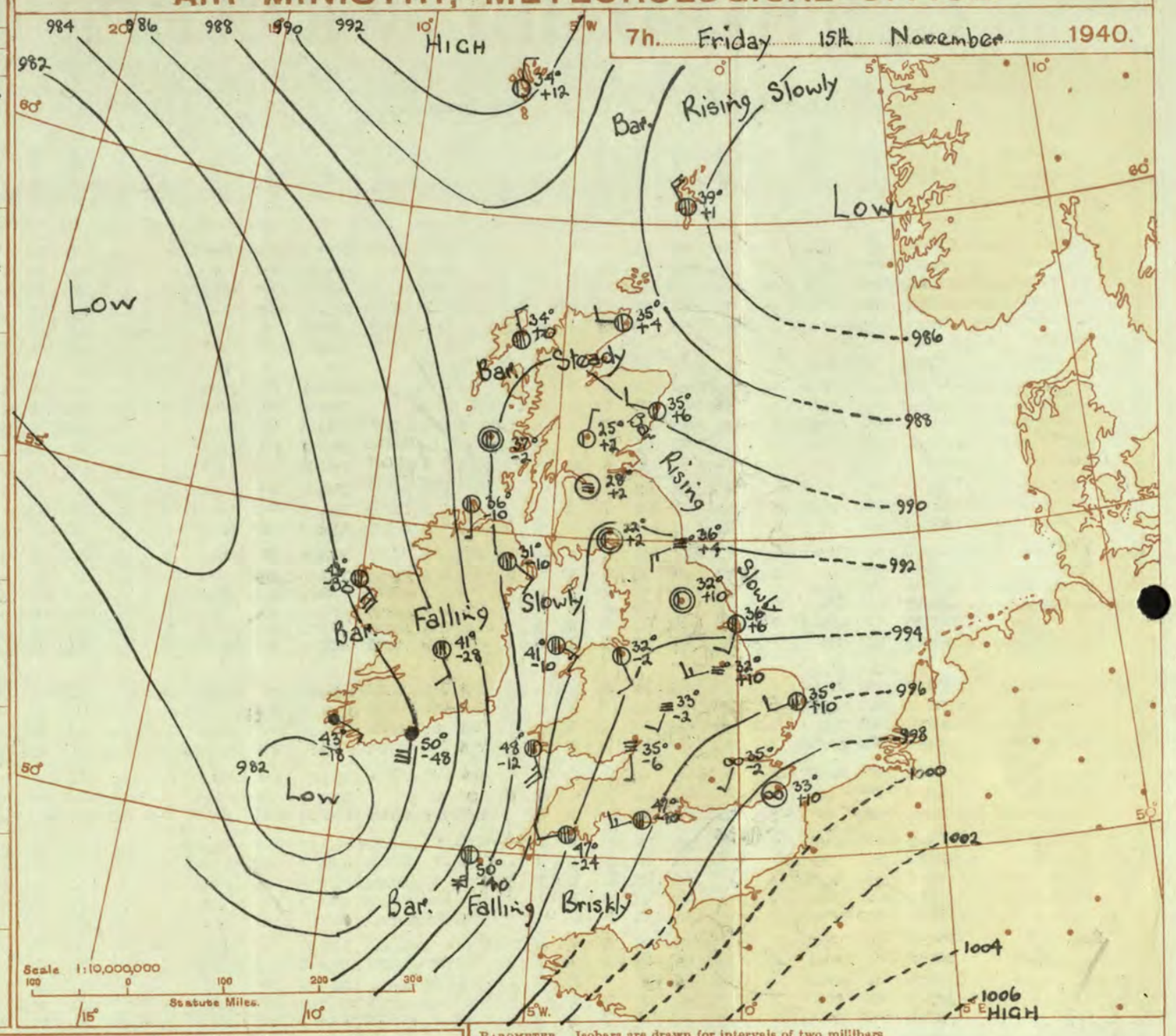
COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

Note.—The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Friday 15th November 1940.



Abridged observations of additional stations in the AVIATION WEATHER CODE

13h. G.M.T. 14th November				18h. G.M.T.		01h. G.M.T. 15th November			07h. G.M.T.		
IIIC$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN
109 62	62745	64668	8-	02745	63585	8-	01844	22384	8-	25846	25486
115 52	81834	65687	52	81734	65687	51	01844	32485	87	01954	32385
203						8-	81846	28486			
206 84	02855	23126	87	01854	28226	53	00851	28222	8-	01964	25124
210 87	81846	61687	86	25845	60687	57	02853	22228	8-	01853	23323
220 83	25964	27384							24	01763	09103
230 87	10955	28416	8-	25854	29485	50	00862	26102	50	00841	28101
245 93	02946	63527	47	25954	61485	07	02990	24225	87	01963	24324
260 53	01864	24314	59	02862	24216	03	03690	22116	00	00890	00000
277 36	10953	29483	20	01844	28314	86	02845	06226	20	01953	29185
279 10	01873	24414	00	00890	30400	**	01863	24313			
285 8-	02747	26627	2-	01746	30616				20	01745	28115
288 87	02752	25366	04	00890	20212	04	00890	18102	04	00890	20202
273											
301 30	25754	29485	8-	05654	28384	9-	81646	24216	80	05544	08184
321 07	05590	23327	07	05590	26223	50	05561	20301	03	08490	15111
299 57	02744	24386	50	05642	22212	50	05641	22201	50	04442	23202
292 27	02851	24366	04	00790	24212	04	00890	00003	54	05563	00004
310 --	61528	24468							--	01633	24513
316 77	05654	24317	56	01662	24314	00	08490	22200	00	47390	00040
333 2-	02755	28455	96	88847	28487	20	01853	26113	20	25853	32285
334	01743	24114							--	03558	28128
340 8-	25757	22387	80	81845	22385	23	00851	16202	03	01890	16303
136 13	05661	21414	03	05690	21313	04	05690	19211	54	05641	19203
336 26	02753	24515	62	02754	24416				14	01753	04414
350 10	01764	22415									
368											
379 13	01753	24313	40	01761	24301	00	05690	24100	04	08490	20102
390 00	05690	22314	00	47390	22210	00	45290	00040	00	43190	16140
382 19	05652	24303	40	05661	22101	00	05590	24110	04	04390	00002
438 80	02745	24315							80	01755	00015
430 10	05651	23314	03	08490	28101	20	05551	26201	86	10852	08183
409 3-	88747	26327	2-	01955	27385	14	00853	15283	45	01852	14313

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
C$_L$C$_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. ~~ Rough. ≈ High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 15th November, 1940.
1 S.E. England	Wind freshening from southeast finally northwest, Inland; Southeast increasing strong on coast veering with south west gale; becoming dull and rainy; improving tomorrow; rather cold inland, milder on south coast.
2 E. England ...	
3 E. Midlands ...	Freshening southeast to east winds, strong locally on the coast later, finally becoming northerly decreasing; Fair early; then dull rainy, with some sleet in places and chance of snow on the hills; Improving tomorrow; rather cold.
4 W. Midlands ...	
5 S.W. England	Wind southerly strong to gale on coast, veering northwest squally; dull rain at first; bright periods, local showers; average temperature.
6 South Wales ...	
7 North Wales ...	Wind variable, light to moderate; fair today; becoming cloudy with occasional rain or sleet, with snow on hills; rather cold.
8 N.W. England	
9 N. Midlands ...	
10 N.E. England	Wind light variable becoming easterly moderate; mainly fine today, a few wintry showers later near the coast; some local fog tonight and tomorrow.
11 S.E. Scotland	
12 S.W. Scotland & Isle of Man.	Winds rather light and variable; mainly fair, apart from a few showers later; some local fog; cold with frost locally at night.
13 A. W. Scotld. / B.N.W. Scotland.	Winds rather light and variable; variable sky with bright periods; some wintry showers with snow on hills; cold with frost at night.
14 Mid Scotland	
15 N. E. Scotland	
16 Orkneys and Shetlands	
17 N. W. Ireland	As 6-9.
18 N. E. Ireland	
19 S. E. Ireland	Winds veering westerly fresh to strong and squally, some rain at first, then bright periods and showers of rain or hail with a chance of thunder; average temperature.
20 S. W. Ireland	

GENERAL INFERENCE.

A depression just south of Ireland will now move eastwards in the neighbourhood of the English Channel and cause further rain over the southern half of the British Isles today, followed by brighter conditions with some showers tomorrow. In the northern half of the country weather will be fair and cold today but there will be some occasional wintry showers later.

FURTHER OUTLOOK.

Continuing unsettled generally.

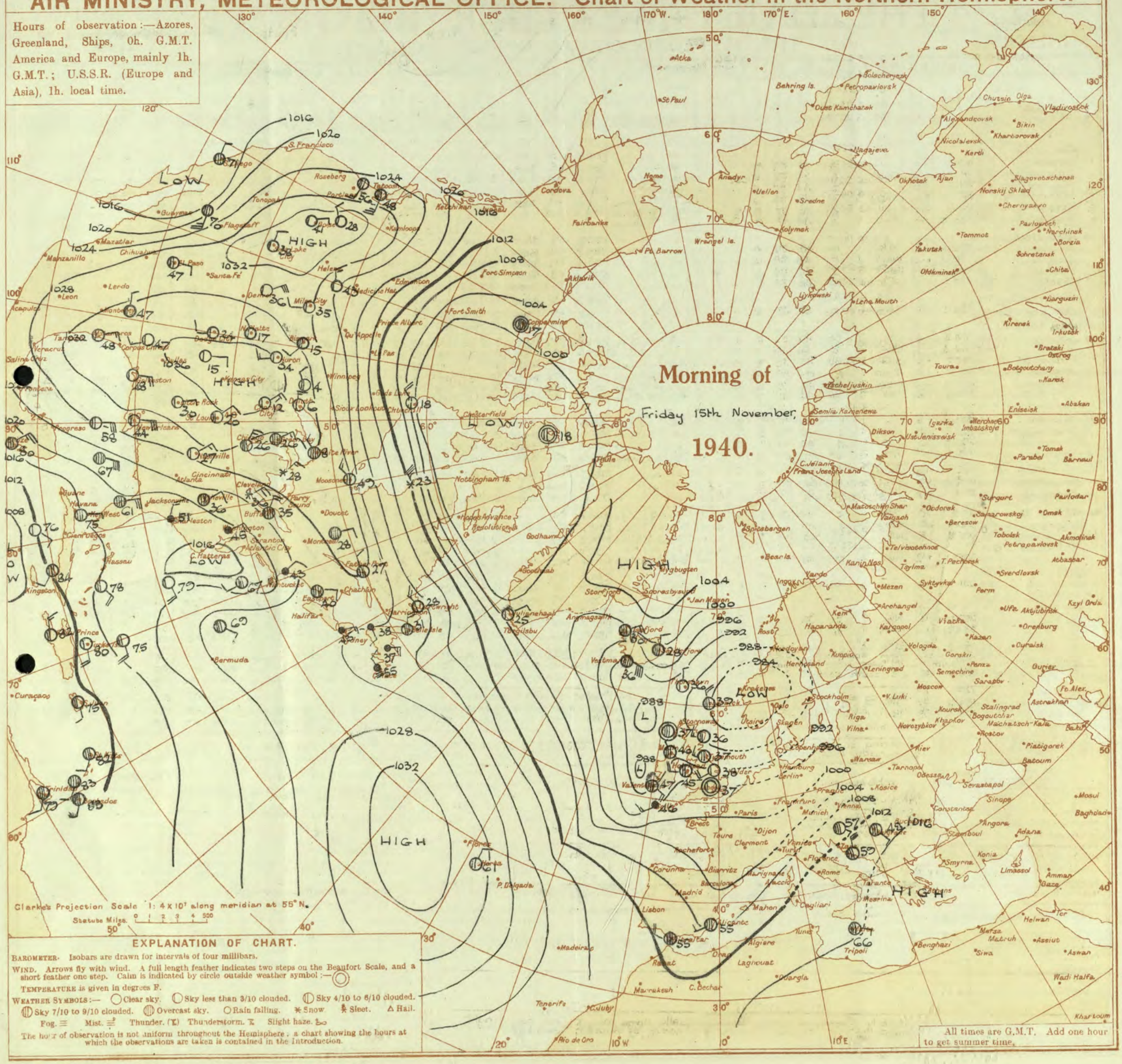
Forecasts issued at 10·30 GMT.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation:—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol:—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS:— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 15th November 1940.

No. 28848

OBSERVATIONS at 1 hr. G.M.T. 15th November

District	Stations	Height above M.S.L. in feet.	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Cloud. Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	996.8	+4	-	0	2	37	92	5	-	-	-	0	0	-
	S. Farnborough	226	997.2	+2	SWW	1	3	34	92	6	-	-	-	0	0	-
	Boscombe Down	417	997.1	+2	-	0	2	34	97	6	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	997.5	+4	NNW	2	2	40	85	6	1	-	-	Tr	Tr	2500
	Lympne ...	346	997.9	+6	W	1	3	36	97	5	2	-	-	Tr	Tr	3500
	Manston ...	154	996.6	+4	SW'S	2	2	36	97	5	2	-	-	Tr	Tr	3000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	996.0	+8	W'S	3	m	38	92	4	-	-	-	0	0	-
	Gorleston ...	5	995.0	+10	WSW	3	b	40	85	6	-	-	-	0	0	-
	Mildenhall ...	19	996.0	+4	SW'S	3	2	36	92	5	-	4	-	0	Tr	-
	Cranwell ...	240	994.4	+10	W'S	4	2	36	85	5	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	996.2	+6	SW'S	1	2	38	97	6	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	995.8	-8	W	3	bc	42	92	8	3	4	-	4-6	4-6	1500
	Bristol ...	209	996.8	-2	SSW	2	b	40	85	7	5	-	-	1	1	2500
	Portland Bill ...	32	997.7	+10	NW	3	bc	47	85	8	8	-	-	4-6	4-6	4000
	Plymouth ...	82	997.9	-6	ENE	1	2	34	92	6	2	-	-	2-3	2-3	2500
	The Lizard ...	240	997.4	-10	WSW	5	bc	46	75	8	8	-	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	996.8	-10	SW	3	pr	46	65	8	8	4	3	4-6	7-8	1500
	Guernsey ...	175														
6	Pembroke ...	142	995.3	-2	W	1	c	44	85	8	8	-	-	7-8	7-8	2500
7	Holyhead ...	26	993.2	-4	W	4	c	48	85	8	2	-	-	7-8	7-8	3500
	Chester (Sealand)	16	993.8	0	S'E	1	b	36	85	7	3	-	-	1	1	1200
8	Manchester ...	70	993.7	+4	SW	3	pr	39	92	5	8	6	-	7-8	9	2000
10	Spurn Head ...	29	992.2	+10	SW'W	4	b	38	75	6	-	-	-	0	0	-
	Catterick ...	175	992.5	+8	-	0	b	35	85	7	-	-	-	0	0	-
	Tynemouth ...	108	990.9	+10	NNW	3	c	37	85	7	-	4	-	0	9	-
11	St. Abbs Head	280	989.3	+8	NW	4	c	40	76	8	7	3	2	4-6	7-8	2500
	Leuchars ...	36	989.4	+6	WSW	2	c	39	75	9	7	3	-	2-3	7-8	3500
12	Renfrew (Abbots I.)	19	991.2	+2	W'S	2	bc	39	85	8	5	-	-	2-3	2-3	5000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	992.1	+2	NW	4	bc	43	85	8	2	-	-	2-3	2-3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	991.1	0	-	0	c/pr	37	85	7	8	7	-	7-8	9+	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	987.9	+6	NW	3	bc	38	85	8	2	4	5	4-6	4-6	2500
16	Lerwick ...	156	984.8	+10	NNW	4	c/pr	39	85	7	8	7	-	7-8	9+	800
17	Blacksod Point	18	991.9	-26	SE'S	3	c	48	85	8	-	1	-	0	10	-
18	Malin Head ...	84	991.1	-6	NW	1	c	40	92	8	2	6	1	2-3	7-8	4000
	Aldergrove ...	268	993.0	-6	0	2	2	39	97	6	5	-	-	1	1	2500
19	Birr Castle ...	173	998.1	-20	S	1	c	34	97	8	-	-	5	0	9	-
20	Valentia Obsy.	30	989.6	-40	SE	4	c	47	75	9	5	-	-	9+	9+	2500
	Roches Point	22	993.4	-28	W	1	c	39	97	8	5	-	6	1	7-8	2500

OBSERVATIONS at 7 hr. G.M.T. 15th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount. Low 0–10 (26)	Cloud. Amount. Total 0–10 (27)	Cloud. Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	996.5	0	-	0	F	31	92	1	-	-	-	0	0	-	3	*
	Croydon ...	997.6	-2	SSW	1	2	35	97	5	-	-	-	0	0	-	1	*
	S. Farnborough	996.6	-4	SSE	2	bc/f	38	97	6	3	6	2	1	2-3	2000	1	*
	Boscombe Down	996.1	-6	SE	3	2	42	97	5	5	7	1	2-3	4-6	2500	1	*
	Calshot (Sthmtn.)	996.8	-2	ESE	2	fs	40	92	6	8	8	6	2-3	4-6	2500	1	1
	Lympne ...	998.6	+10	-	0	2	38	97	6	2	6	-	1	2-3	3500	1	§3
	Manston ...																*
2	Shoeburyness ...	997.6	+2	SSW	1	m	37	97	4	-	4	-	0	Tr	-	1	*
	Felixstowe ...	996.6	+6	WSW	2	m	35	97	4	-	-	-	0	0	-	1	0
	Gorleston ...	996.3	+10	SW'W	2	bc	35	92	6	-	7	-	0	4-6	-	1	2
	Mildenhall ...	996.0	+8	SSW	2	2	34	92	6	-	4	-	0	Tr	-	0	*
	Cranwell ...	995.2	+10	WSW	3	m/f	32	92	4	-	-	-	0	0	-		*
3	Birmingham ...	995.4	-2	SSW	2	bef+	33	97	3	-	-	1	0	2-3	-	1	*
	Upper Heyford	995.8	-2	SW	1	bf-	30	97	3	-	-	4	0	1	-	3	*
4	Ross-on-Wye	994.8	-6	S	1	fg	35	97	6	-	-	1	0	2-3	-	1	*
5	Hartland Point	992.5	-22	SSE	3	bc	40	92	8	2	4	1	2-3	4-6	2500	1	3
	Bristol ...	995.4	-8	S	3	2	38	85	6	5	-	6	Tr	7-8	2500	1	*
	Portland Bill ...	995.7	-10	WSW	3	c	47	92	8	5	7	-	7-8	10	2500	1	3
	Plymouth ...	994.1	-24	WSW	2	c	47	75	8	2	6	1	4-6	7-8	2500	1	1
	The Lizard ...	991.8	-36	S	5	bc	48	75	8	8	6	-	4-6	4-6	2500	0	3
	Scilly (St. Mary's)	990.7	-40	S	5	c	50	75	7	8	7	-	7-8	9+	1200	1	3
6	Pembroke ...	993.3	-12	S'E	3	c	48	85	8	8	6	-	*	7-8	2500	1	2
7	Holyhead ...	991.1	-10	ESE	3	c	41	92	8	8	4	6	7-8	7-8	3000	1	1
	Chester (Sealand)	993.3	-2	SSE	2	bc	32	92	6	4	-	3	2-3	2-3	2500	1	*
8	Manchester ...	990.7	0	SE'E	1	2	33	92	5	5	-	-	Tr	Tr	3000	1	*
10	Spurn Head ...	993.7	+6	SSW	2	bc	36	92	6	-	4	-	0	4-6	-	1	3
	Catterick ...	993.4	+10	-	0	b	32	92	8	-	3	-	0	1	-	0	*
	Tynemouth ...	991.7	+4	WSW	3	m	36	92	4	-	4	-	0	2-3	-	1	2
11	St. Abbs Head	990.5	+8	W	2	bc	39	75	8	4	4	-	2-3	2-3	2500	0	2
	Leuchars ...	990.0	+2	SW	2	b	33	85	8	2	-	-	Tr	Tr	3500	1	*
12	Renfrew (Abbots I.)	991.2	+2	-	0	bf+	28	97	3	5	-	-	1	1	5000	1	*
	Eskdalemuir ...	992.6	+2	-	0	b	22	92	7	5	3	-	Tr	1	2200	3	*
	Point of Ayre...	991.5	-2	SSW	2	b	34	97	8	2	-	-	1	1	2500	1	1
13A	Tiree	989.4	-2	-	0	bc	37	92	8	8	3	-	2-3	4-6	2500	0	2
13B	Stornoway ...	990.7	0	NNW	2	c	34	92	7	5	7	-	7-8	9+	2000	1	1
15	Dalwhinnie ...	*	+2	NNE	1	b	25	85	8	0	-	-	Tr	Tr	2500	3	*
	Aberdeen ...	989.9	+6	W'N	2	bc	35	85	7	8	-	-	2-3	2-3	4000	3	2
	Wick ...	988.3	+4	W	2	bc/pr	35	85	8	8	6	-	2-3	2-3	2500	1	1
16	Lerwick ...	986.8	+14	NW	4	c	39	75	8	8	7	-	4-6	7-8	1500	1	*
17	Blacksod Point	985.1	-30	S'E	6	cg	43	85	7	9	-	-	9	9	1500	0	4
18	Malin Head ...	988.7	-10	S	1	bc	36	85	8	2	+	1	2-3	4-6	3500	0	3
	Aldergrove ...	990.7	-10	SE'E	2	c	31	97	8	5	1	6	2-3	9	2500	3	*
19	Birr Castle ...	986.6	-28	SSE	2	c	41	85	8	5	-	-	9	9	2500	1	*
20	Valentia Obsy.	982.6	-18	SE'E	1	ir	43	92	8	6	2	-	7-8	10	1500	1	2
	Roches Point	988.7	-48	S	6	ir	30	85	7	6	2	-	7-8	9+	800	1	4

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h–18h °F. (31)	Temperature. Min. Night 18h–7h °F (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 14th Hrs. (36)
London (Kew)	47	30	19	-	Tr	6.6
Croydon ...	49	33	31	-	-	6.2
S. Farnborough	49	30	21	-	Tr	8.9
Boscombe Down	48	31	24	-	-	5.1
Calshot (Sthmtn.)	49	38	27	-	-	4.9
Lympne ...	47	31	20	-	-	3.6
Manston ...	*	*	*	*	*	*
Shoeburyness ...	49	37	26	-	-	5.8
Felixstowe ...	48	34	30	-	-	6.3
Gorleston ...	48	34	28	0.2	-	6.7
Mildenhall ...	49	34	26	-	Tr	5.9
Cranwell ...	48	32	28	-	-	6.1
Birmingham ...	47	33	30	1	-	4.7
Upper Heyford	50	29	22	0.1	-	*
Ross-on-Wye	50	34	26	-	-	6.4
Hartland Point	49	39	36	1	3	3.0
Bristol ...	49	34	24	-	Tr	6.9
Portland Bill ...	50	46	*	-	-	*
Plymouth ...	51	33	30	Tr	1	4.2
The Lizard ...	48	45	*	0.5	-	4.6
Scilly (St. Mary's)	50	40	*	0.5	-	7.0
Pembroke ...	41	41	*	-	1	5.1
Holyhead ...	48	40	33	0.4	-	3.6
Chester (Sealand)	47	32	25	2	1	1.3
Manchester ...	45	33	26	2	1	0.1
Spurn Head ...	49	36	*	-	-	1.6
Catterick ...	46	31	25	Tr	-	1.3
Tynemouth ...	46	30	31	-	-	
St. Abbs Head	45	37	*	-	-	*
Leuchars ...	46	32	27	-	-	0.8
Renfrew (Abbots I.)	46	27	20	-	Tr	3.7
Eskdalemuir ...	44	21	15	-	-	5.4
Point of Ayre...	48	33	*	1	3	3.8
Tiree	47	32	*	0.3	0.2	4.4
Stornoway ...	(45)	31	*	2	1	7.2
Dalwhinnie ...	38	24	15	1	Tr	0.0
Aberdeen ...	42	35	30	4	-	0.0
Wick ...	45	34	*	3	0.6	*
Lerwick ...	46	38	*	4	2	0.1
Blacksod Point	50	38	*	0.4	-	*
Malin Head ...	47	33	*	0.2	Tr	2.[illegible]
Aldergrove ...	45	28	25	2	Tr	2.9
Birr Castle ...	47	31	25	-	-	3.7
Valentia Obsy.	48	37	32	2	9	4.9
Roches Point	49	38	*	-	2	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h. other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather. Morning. (24 hrs. ended 9h.)	Weather. Afternoon. (24 hrs. ended 9h.)	Weather. Night. (24 hrs. ended 9h.)	Temperature. Day Max. °F.	Temperature. Night Min. °F.	Temperature. Min. on Grass °F.	Rainfall. Day. mm.	Rainfall. Night. mm.	Sunshine. to Sunset. hrs. (Yesterday.)	Humidity. 15h. G.M.T. % (Yesterday.)	Humidity. 9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew...	18	bcbm	bbcbm	bmwx	47	30	19	-	Tr	6.6	*	*	6
Croydon ...	217	bbcm	bcm	bm	40	33	31	-	-	6.2	*	*	
Greenwich (Royal Observatory)...	149	bm	bmm	bmxm	48	30	23	-	Tr	5.8	76	91	4
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	49	31	29		Tr		80	98	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*									*
Camden Square ...	110	b	bc	*	48	31	29	-	-	*	*	96	*
Kensington ...	80	bcz	bc	*	49	31	24	-	-		83	98	*
Hampstead Observatory ...	450	bc	bcm	of	47	33	29	-	-		*	95	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 15th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
40.1	rest of period		

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...														

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

		Objects not visible at
0	Dense fog	55 yards.
1	Thick fog	220 ,,
2	Fog	550 ,,
3	Moderate fog	1,100 ,,
4	Mist or haze	1¼ miles.
5	Poor visibility	2½ ,,
6	Moderate ,,	6½ ,,
7	Good ,,	12½ ,,
8	Very good ,,	31 ,,
9	Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0	Calm.	5	Very rough.
1	Smooth.	6	High.
2	Slight.	7	Very high.
3	Moderate.	8	Preciptious.
4	Rough.	9	Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 16th November 1940.

No. 28849

OBSERVATIONS at 13h. G.M.T. 15th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	993.5	-24	SSE	4	z₀	48	75	6	2	3	1	2-3	7-8	2500
	Croydon ...	993.6	-26	SSE	3	bc/pr	50	65	7	4	4	2	2-3	4-6	1800
	S. Farnborough	993.3	-28	SSE	3	bc/pr	47	75	6	8	6	2	4-6	4-6	2500
	Boscombe Down														
	Calshot (Soton.)	992.5	-30	S	5	bc	51	75	8	1	-	2	2-3	4-6	2900
	Lympne ...	996.4	-20	S	1	c/pr	45	92	8	3	-	3	9	9+	1200
	Manston ...	995.8	-12	SSW	3	c	46	85	8	8	4	1	7-8	9	2500
2	Shoeburyness ...	996.4	-18	S	3	c	48	75	8	8	5	-	4-6	7-8	4000
	Felixstowe ...	995.1	-22	S'W	3	bc	50	75	7	8	-	6	Tr	2-3	2000
	Gorleston ...	996.6	-10	SSW	3	bc	46	75	6	-	2	-	2-3	2-3	2500
	Mildenhall ...	994.2	-18	S'E	3	z₀	47	65	6	-	-	5	0	1	-
	Cranwell ...	993.5	-14	S'E	3	z₀	44	85	5	-	-	5	0	2-3	-
3	Birmingham	992.1	-20	SSE	3	bc	45	75	7	1	-	1	1	2-3	2500
	Upper Heyford	992.9	-26	SSE	3	z₀	47	75	6	-	5	9	0	4-6	-
4	Ross-on-Wye ...	990.4	-34	SE	3	c	46	75	7	7	7	6	1	7-8	2500
5	Hartland Point	984.4	-48	SSE	4	c	48	92	8	5	2	-	7-8	10	1200
	Bristol ...	990.5	-34	SE	3	c	48	75	7	2	7	-	1	9+	2500
	Portland Bill ...	990.1	-32	S	4	c	51	92	8	5	-	-	10	10	4000
	Plymouth ...	986.2	-54	S'E	5	r₀r₀	50	85	8	6	2	-	9	10	2000
	The Lizard ...	984.1	-40	S	6	Q	48	97	8	3	2	-	7-8	9+	1500
	Scilly (St. Mary's)	982.9	-28	WSW	3	c/pr	49	85	8	9	7	-	4-6	7-8	1000
	Guernsey ...														
6	Pembroke ...	982.5	-32	SE	8	r₀r₀	49	92	7	6	-	-	9+	9+	1000
7	Holyhead ...	996.6	-26	SE	5	c	47	75	9	5	4	5	9	9+	4000
	Chester (Sealand)	990.3	-20	SE	3	z₀	45	75	6	1	5	-	Tr	7-8	4000
8	Manchester ...	991.2	-22	SE'S	3	z₀	45	75	6	-	4	6	0	1	-
10	Spurn Head ...	993.2	0	SE	3	c	45	75	7	-	1	4	0	7-8	-
	Catterick ...	992.1	-14	SE	1	c	44	75	6	-	7	4	0	9+	-
	Tynemouth ...	993.3	0	SW	2	m	42	75	4	-	3	1	0	2-3	-
11	St. Abbs Head	991.6	+4	SW	2	bc	40	85	8	2	4	-	1	4-6	2500
	Leuchars ...														
12	Renfrew (Abbots I.)	990.7	-10	-	0	cf	31	92	2	5	3	-	4-6	10	2000
	Eskdalemuir ...	991.2	-6	N	1	o	34	92	6	5	-	-	10	10	220
	Point of Ayre ...	988.7	-16	SSE	5	c	47	85	8	8	6	-	7-8	7-8	2500
13A	Tiree ...														
13B	Stornoway ...	990.5	-4	-	0	bc	40	85	8	5	6	-	4-6	4-6	2500
15	Dalwhinnie ...	990.3	-4	NNE	1	b	37	65	8	1	·	·	1	1	2500
	Aberdeen ...	990.5	-2	NWW	2	b	42	75	6	8	-	-	1	1	2500
	Wick ...	989.7	+2	W	3	bc	41	85	8	8	6	3	2-3	4-6	2500
16	Lerwick...	989.3	+10	NNW	3	c	42	85	8	5	7	1	4-6	7-8	1500
17	Blacksod Point..	981.7	-20	SE	4	RR	43	92	7	6	-	-	10	10	<150
18	Malin Head ...	985.7	-14	SE'E	3	c	43	85	8	1	-	5	2-3	7-8	5700
	Aldergrove ...	986.4	-22	E	4	ir₀	44	85	7	5	7	7	4-6	9+	800
19	Birr Castle ...	981.1	-24	S	2	rr	43	92	7	5	-	-	10	10	2500
20	Valentia Obsy. †	979.8	-14	S'W	2	bc	47	85	9	3	6	3	4-6	4-6	2500
	Roches Point ...	980.2	-14	W	3	bc	49	75	8	3	3	-	2-3	4-6	1500

OBSERVATIONS at 18h. G.M.T. 15th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°F. Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	988.8	-30	SSW	4	z₀	47	85	6	5	-	3	7-8	9+	2500	1	*
Croydon	989.5	-26	S	3	z₀	41	75	6	5	-	-	4-6	4-6	2000	1	*
S. Farnborough	988.0	-32	SE	4	z₀	47	85	6	4	7	6	4-8	10	2500	1	*
Boscombe Down																*
Calshot (Soton.)	985.9	-44	SSE	7	rr	49	85	6	5	-	-	10	10	700	1	5
Lympne	993.1	-22	S	4	c	47	85	8	8	-	-	9+	9+	1500	1	§3
Manston	992.3	-22	SE	5	c	47	85	7	8	-	-	7-8	7-8	2000		*
Shoeburyness	992.4	-20	E'N	3	c	47	85	7	5	-	2	7-8	9	4000	1	*
Felixstowe	992.7	-18	S'E	5	c	47	75	7	4	7	6	Tr	9	3000	1	3
Gorleston	993.5	-10	S	3	bc	46	75	6	2	4	-	2-3	4-6	2500	0	2
Mildenhall	990.9	-18	SE	3	z₀	42	85	6	5	4	1	2-3	7-8	4000	0	*
Cranwell	990.1	-18	SE'S	4	z₀	40	92	5	5	-	5	7-8	9	3000	1	*
Birmingham	987.0	-28	SE	3	z₀	42	85	5	5	-	-	10	10	2500	1	*
Upper Heyford	987.3	-32	ESE	4	z₀	44	85	6	5	7	8	4-6	9+	4000	0	*
Ross-on-Wye	983.9	-40	SE	4	rr	46	85	6	6	2	-	7-8	10	1500	1	*
Hartland Point	980.4	-16	SW	4	c/pr	49	85	8	8	-	-	9+	9+	1500	1	3
Bristol	983.1	-34	SE	6	rr	46	92	6	6	2	-	9	10	800	1	*
Portland Bill	984.0	-32	S	5	rr	50	92	7	5	-	-	10	10	2500	1	5
Plymouth	982.9	-2	SW	5	c/pr	48	85	6	3	-	-	7-8	7-8	1000	1	3
The Lizard	982.2	-4	SW'S	5	c/pr	48	85	8	8	-	-	7-8	7-8	1500	1	3
Scilly (St. Mary's)	981.2	-10	SW'S	4	c/r	47	85	8	9	7	-	7-8	9+	1200	1	2
Guernsey																
Pembroke	979.2	-12	SW'W	5	c	48	97	7	8	7	-	4-6	7-8	1900	1	4
Holyhead	980.5	-34	ESE	5	r₀r₀	47	85	7	6	2	-	4-6	10	1900	1	3
Chester (Sealand)	994.6	-30	ESE	4	c	44	85	6	5	2	-	4-6	10	4000	1	*
Manchester	986.5	-30	E	4	m	43	85	4	5	7	-	4-6	7-8	4500	1	*
Spurn Head	990.1	-10	SE'S	5	bc	46	85	7	5	1	1	0	2-3	-	0	3
Catterick	989.8	-6	-	0	bf	35	92	3	-	-	-	0	0	-	0	*
Tynemouth	991.3	-10	SSW	3	bc	44	75	6	2	-	-	2-3	2-3	2800	1	2
St. Abbs Head	990.0	-4	ESE	2	bc	37	85	8	4	4	-	2-3	4-6	2500	0	1
Leuchars	989.5	-2	-	0	z₀	32	97	6	5	-	-	1	2-3	4000	1	*
Renfrew (Abbots I.)	988.3	-12	E	3	cf	35	92	3	-	-	6	0	9	-	1	*
Eskdalemuir	988.7	-12	NNE	1	bc	32	92	7	-	4	6	0	4-6	-	3	*
Point of Ayre	983.7	-24	SE'S	6	c	46	85	6	5	1	6	4-6	10	2500	0	3
Tiree	985.1	-12	SSW	4	c	42	75	8	5	-	-	9	9	2100		
Stornoway	987.9	-10	ENE	3	b	41	75	8	2	·	-	1	1	2500		
Dalwhinnie																*
Aberdeen	990.3	+4	NNW	1	bf	32	97	3	8	-	3	Tr	Tr	2500	1	1
Wick	989.2	-2	W	2	bc	35	92	8	8	6	1	2-3	2-3	2500	1	1
Lerwick	990.4	+4	NE	3	bc	41	85	8	5	7	1	4-6	4-6	1500	1	*
Blacksod Point	978.4	-14	S'E	3	c	44	85	8	-	4	-	0	7-8	-	2	2
Malin Head	980.9	-36	SE'E	6	c	46	85	8	9	-	-	9	9	4000	0	4
Aldergrove	981.8	-24	ESE	4	z₀	44	85	6	5	7	7	7-8	10	2000	1	*
Birr Castle	978.8	-6	S	1	bc	39	97	8	5	4	-	2-3	2-3	2500	1	
Valentia Obsy. †	977.7	-8	SSE	3	bc	44	85	8	3	-	3	4-6	4-6	2500	1	1
Roches Point	978.5	-6	W	2	bc	46	85	8	5	-	5	2-3	4-6	1500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 15th (37)	Weather 13h.—18h. 15th (38)	Weather 18h. 15th to 1h. 16th (39)	Weather 1h.—7h. 16th (40)
London (Kew)	bFFxcz₀	cbcz₀cm₀	cmddc	ceqirdc
Croydon	bbc pr₀	bcm₀	ddcm	
S. Farnborough	bbcpr₀m₀	bcm₀c	cmprpd	cprdm
Boscombe Down			cldprq	
Calshot (Soton.)	bcfcpr₀bc	bccir₀rrm	crrPRm	cRRiRePR
Lympne	bpr₀pr	cbcc	pdddm	cddpd
Manston	bm₀bcc	bcc	cmicdd	cddrrmc
Shoeburyness	bmbcc	bcbbc	bcbbc	ir₀prc
Felixstowe	bmb	bc	cddm	ddpriR
Gorleston	bcxbz₀bc	bc	bccopdq	cpdq
Mildenhall	bm₀xbm₀	bz₀b, cm₀	cm₀ccddm	ccpdm
Cranwell	bm₀,bcm₀	bccm₀	bcmdddm	cdddm
Birmingham	Fb	b,c	clr	cdbc
Upper Heyford	bfifbcm₀	cz₀cm₀	cirm₀	corrmcbc
Ross-on-Wye	bc	ccr	rcc	cbc
Hartland Point	bcc	crrop	cpbc	bccpr
Bristol	cxwc	cr₀rriR	ctfdpd	cpd,bcpd
Portland Bill	c	or	c	cPR
Plymouth	cpcr₀r₀	cm₀rrcpr₀	cpdcmcc	cprc
The Lizard	cqrrc	cprc	prbcc	cprbc
Scilly (St. Mary's)	orrcp₀	crcr	cbcc	cpcirq
Guernsey				
Pembroke	r₀r₀cq (gale)	rrqc	prc	cpr
Holyhead	bcc	ir₀r₀r₀c	ddirc	RRqbc
Chester (Sealand)	bxbcm₀	bbcm₀c	rridm	rdcm₀
Manchester	ffmm₀	bz₀bcm	mddrrm	cm₀
Spurn Head	bcc	cb	cqrr	cpr
Catterick	xbccz₀	bcm bf	fmcrr	crddcm
Tynemouth	bcm	bcm	bcpr	orr₀
St. Abbs Head	bc	bc	bccq	rcqc
Leuchars		bbcb	bcbcwm	bciRrrm
Renfrew (Abbots I.)	bxff	cxcff	cffmm	cmddm
Eskdalemuir	bxFo	ocbcx	bccxor	orro
Point of Ayre	c	cz	rrrr	cbcc
Tiree		bcc		
Stornoway	cbc	bcb		bbccr
Dalwhinnie	bc		*	cir₀
Aberdeen	bbz₀	bbf	bfxbc	bccr₀
Wick		bc	pdbc	bcc
Lerwick	c	cbc	cprbc	bccprc
Blacksod Point	rr	bc	bc	c
Malin Head	c	c	cpdcipc	cbcbc
Aldergrove	cxbczc	cir₀m₀c	r,rsddc	cmbwfdc
Birr Castle	orr	cbc	bbc	cbcx
Valentia Obsy. †	cir₀cpr₀cbc	cbcvcbc	bccprpdtc	bccprcpd
Roches Point	irbc	bc	prbc	bcc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

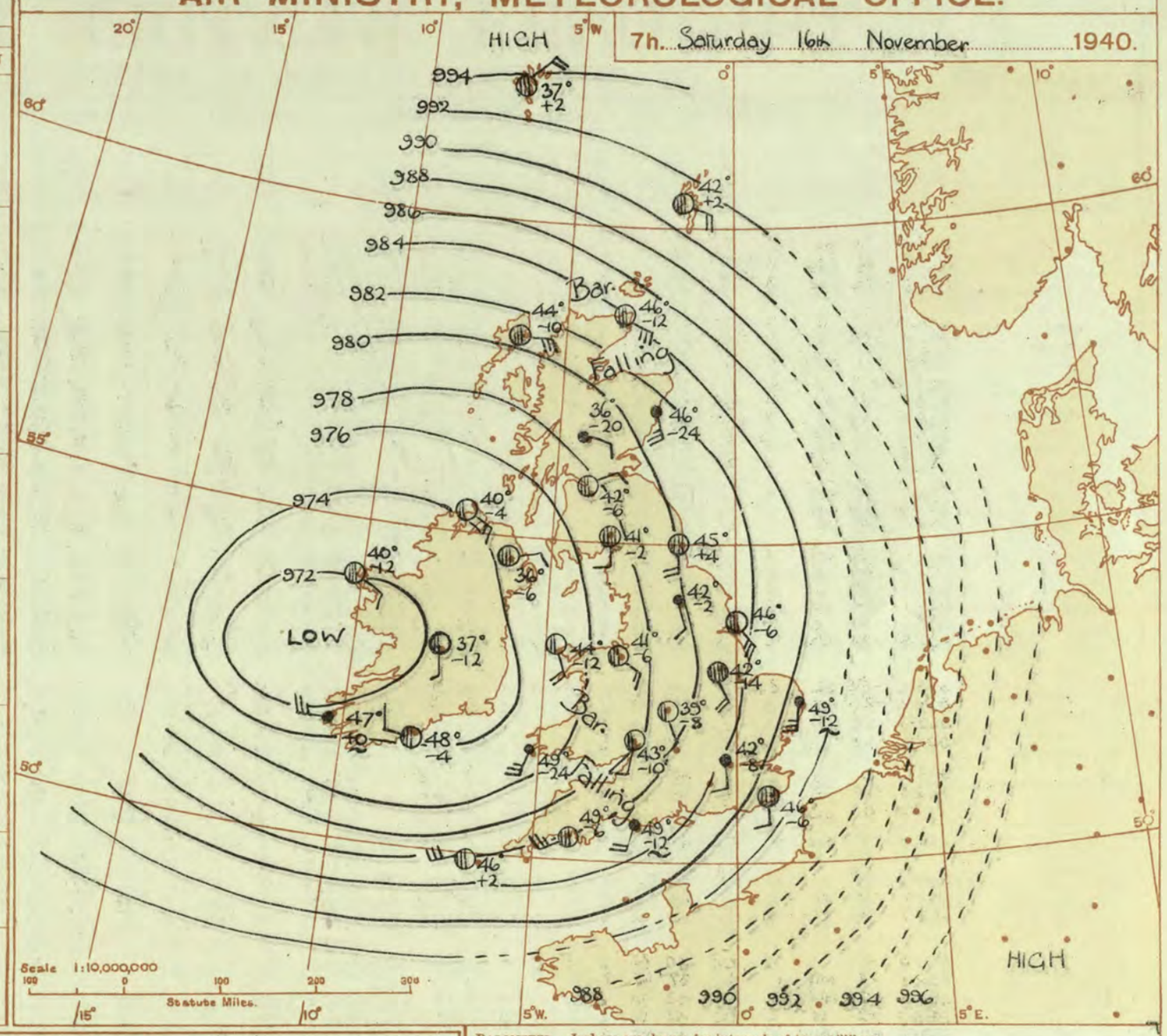
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Saturday 16th November 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

13h. G.M.T. 15th November			18h. G.M.T.			01h. G.M.T. 16th November			07h. G.M.T.		
III $C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109 80	10963	32283	80	00963	22183	30	81955	16185	67	81747	08488
115 53	10854	02485	87	81954	12324	51	01851	12582	55	14854	41625
203 8-	01953	08213									
206 2-	00962	26112	83	00963	32103	57	01851	12314	57	02857	02855
210						13	01862	10205	51	02865	08527
220			20	01754	14204				52	03645	10428
230 70	00951	06103	50	01851	08214	57	02756	40518	57	02747	06168
245 20	00961	22102	10	05662	00013	2-	02765	43525	52	62735	41868
260 00	05690	04104	00	05590	00044	50	05663	12328	5-	05666	10216
277 8-	02847	10427	57	05654	08487	62	21647	45668	87	02846	14487
279 --	01774	06314	53	01763	06314	5-	02658	04628	--	05656	12326
285 23	02734	08316	--	48209	06429				9-	25637	14487
288 57	02761	17216	07	05590	12214	02	62768	43528	8-	02757	14267
273 73	01753	08405									
301 03	05590	12314	57	05564	10428	50	05563	13328	53	05564	12325
321 00	05590	14100	00	08490	10426	62	22696	48468	57	62654	15367
299 51	05542	16103	5-	05644	16414	6-	66648	12668	87	02744	18626
292 03	08490	10215	00	05590	10201	5-	62638	08368	57	61644	12265
310 --	48109	16449	--	02328	16528						
316 00	41490	16241	00	08490	14225	52	02655	16468	57	22564	16367
333 57	02863	16526	62	64644	46568	36	25844	53685	26	81844	49686
334	02753	12215								01653	12214
340 70	05662	14313	52	05665	45628	53	02763	14468	5-	05647	16417
136 10	01761	16302	00	05690	12304	52	62646	12568	87	81646	15427
336			62	64644	16428				63	61754	20467
350 00	05690	14315							03	02790	18366
368											
379 53	05663	14314	6-	61648	12328	02	61658	16268	50	43363	16243
390 03	05590	12114	57	05554	12318				02	61648	14368
382 54	05663	12414	57	02754	11428	57	02754	15227	57	01753	12213
438 86	02855	53587							9-	14857	53687
430 26	01854	16414	52	64636	16568	8-	02757	18427			
409 62	66526	13668	37	00742	16363	36	02854	16326	33	02754	53685

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 16th November 1940.
1 S.E. England	Moderate south to southwest wind decreasing temporarily freshening tomorrow. Bright intervals. Thundery showers. Perhaps more general rain near southeast coasts this evening. Average dry temperature, frost locally at night.
2 E. England ...	
3 E. Midlands ...	
4 W. Midlands ...	Moderate southwest wind. Bright intervals. Thundery showers. Average day temperature. Frost locally at night.
5 S.W. England	
6 South Wales ...	Moderate southwest to west wind strong on coasts later. Bright intervals. Thundery showers. Average temperature.
7 North Wales ...	
8 N.W. England	Light or moderate south to southeast wind. Bright intervals. Local thundery showers. Local morning fog. Rather cold, frost at night.
9 N. Midlands ...	
10 N.E. England	
11 S.E. Scotland	
12 S.W. Scotland & Isle of Man.	
13 A. W. Scotld. B.N.W.Scotland.	Moderate east wind. Bright intervals. Local showers. Fine tonight. Rather cold, frost at night.
14 Mid Scotland	Moderate east wind strong on coasts. Occasional rain at first. Bright intervals and thundery showers later. Rather cold.
15 N. E. Scotland	
16 Orkneys and Shetlands	
17 N. W. Ireland	Variable winds finally north west fresh, strong on coasts. Bright intervals. Thundery showers. Rather cold, frost locally at night.
18 N. E. Ireland	
19 S. E. Ireland	
20 S. W. Ireland	

GENERAL INFERENCE.

A depression over Ireland is moving slowly east, and a vigorous secondary off north west Spain will move east and then north east. There will be showers in most districts, with local hail and thunder but also bright intervals. More general rain may occur in the extreme southeast this evening.

FURTHER OUTLOOK.

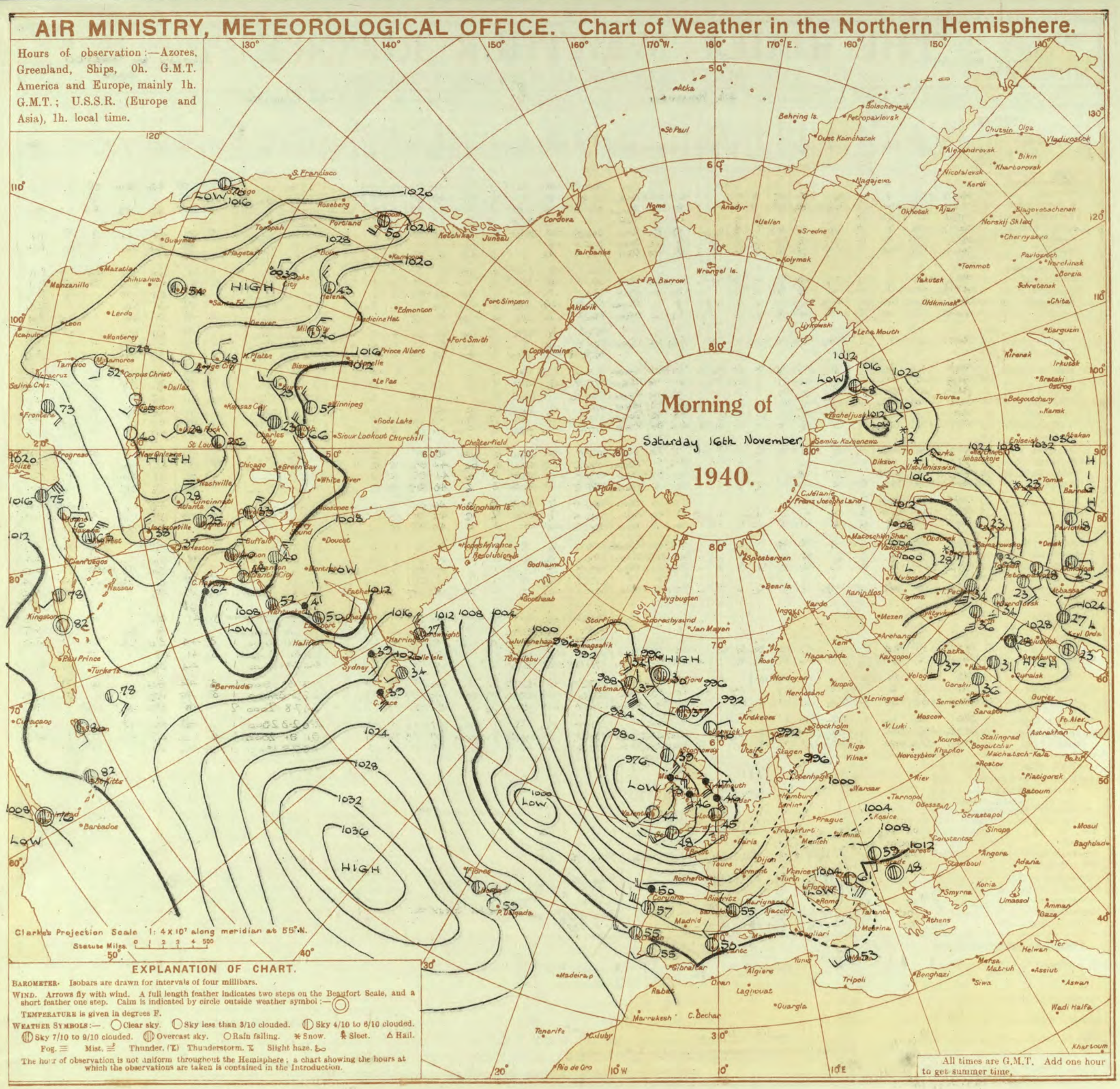
Bright intervals and showers.

Forecasts issued at 10·30 GMT.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Saturday 16th November 1940.
No 28849

OBSERVATIONS at 1 hr. G.M.T. 16th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	984·5	-12	S	1	z	45	92	6	5	-	-	4-6	4-6	3000
	S. Farnborough	226	983·3	-14	SSW	2	c/pr	43	97	7	8	-	-	9+	9+	1400
	Boscombe Down	417	982·1		SE'S	3	c			8	8	7	-	4-6	9+	2500
	Calshot (Sthmtn.)	8	993·2	-18	S	3	c/pr	47	85	7	8	6	-	9+	9+	900
	Lympne	346	987·0	-22	S	5	rr	48	85	6	6	2	-	9	10	900
	Manston	154	986·4	-22	SSE	5	rr	47	92	5	6	2	-	9	10	800
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	986·5	-26	S	6	rr	48	85	6	5	2	-	4-6	10	2500
	Gorleston	5	987·4	-40	S	6	c	48	85	6	6	-	-	10	10	1400
	Mildenhall	19	984·7	-20	S'E	4	c/p	47	85	6	5	1	-	1	10	2500
	Cranwell	240	1007·8	-16	SE	6	ir	47	97	4	6	-	-	10	10	800
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	984·1	0	S	3	c/p	43	97	6	5	2	-	7-8	10	1200
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	979·8	-6	S	3	bc	42	85	8	3	4	-	2-3	4-6	2000
	Bristol	209	981·2	-10	S'W	2	p	44	92	7	9	7	-	9+	10	1200
	Portland Bill	32	981·9	-10	SSW	5	c	50	92	7	5	-	-	10	10	4000
	Plymouth	82	981·2	-8	WSW	4	pr	46	85	7	3	-	3	7-8	7-8	1400
	The Lizard	240	980·0	-10	SSW	5	c	48	85	8	8	6	-	7-8	7-8	2000
	Scilly (St. Mary's)	163	979·1	-14	SW	5	c	48	75	8	8	8	8	4-6	9+	1500
	Guernsey	175														
6	Pembroke	142	977·8	-6	SWS	4	c	48	92	8	8	-	-	7-8	7-8	2000
7	Holyhead	26	976·9	-6	S'E	4	ir	46	92	8	8	7	-	7-8	9+	2500
	Chester (Sealand)	16	979·4	-10	SE'S	2	c/p	44	92	6	5	-	2	4-6	7-8	1500
8	Manchester	70	980·2	-14	SSE	3	z	46	85	6	5	-	-	10	10	2000
10	Spurn Head	29	982·6	-40	SE'E	7	rr	46	92	6	5	-	-	10	10	1500
	Catterick	175	981·8	-44	SE'E	3	rr	42	92	6	5	2	-	7-8	10	700
	Tynemouth	108	983·5	-40	SE	6	ir	47	85	6	6	-	-	10	10	1500
11	St. Abbs Head	280	983·9	-34	SE	6	eq	45	85	7	5	2	-	4-6	10	2000
	Leuchars	36	984·5	-6	E	3	z	43	75	6	8	-	-	4-6	4-6	3500
12	Renfrew (Abbots I.)	19	981·8	-34	E	4	ir	40	85	5	5	2	-	4-6	10	1800
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	977·6	-10	SE'S	6	rr	46	97	6	6	2	-	7-8	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80														
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	987·5	-12	SSE	3	c	42	75	8	8	6	-	7-8	7-8	1500
16	Lerwick	156	990·5	-2	ENE	2	bc	40	85	8	8	-	-	4-6	4-6	1500
17	Blacksod Point	18	975·1	-14	SE	1	bc	41	92	8	-	4	-	0	2-3	-
18	Malin Head	84	975·2	-32	E	5	rr	43	92	6	9	-	-	9+	9+	800
	Aldergrove	268	974·7	-30	SSE	3	c/p	45	97	6	5	-	-	9+	9+	3000
19	Birr Castle	173	975·1	-10	N	1	bc	36	97	8	-	-	5	0	4-6	-
20	Valentia Obsy.	30	973·8	-12	SSW	3	bc/pr	44	92	8	3	-	1	4-6	4-6	1500
	Roches Point	22	974·9	-20	WSW	2	bc/pr	45	92	8	3	-	5	4-6	4-6	1500

OBSERVATIONS at 7 hr. G.M.T. 16th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	981·5	-6	S	3	c/p	43	92	6	5	1	-	1	9+	1500	1	*
Croydon	981·8	-8	S	2	rr	42	92	6	5	-	-	10	10	1800		*
S. Farnborough	981·3	-6	SSW	3	c/p	43	92	6	8	6	3	4-6	7-8	2000	2	*
Boscombe Down	[illegible]	-10	SSE	3	c	39	97	8	3	3	3	4-6	7-8	2000	1	*
Calshot (Sthmtn.)	981·3	-4	SSW	3	pr	48	85	6	9	1	-	7-8	10	1100	1	§2
Lympne	984·4	-6			pr	46	92	7	9	-	-	9+	9+	1100	1	
Manston	983·4	-10	S	3	c/p	45	92	8	8	-	-	9+	9+	1200		*
Shoeburyness	983·7	-8	S'W	4	pr	45	92	5	9	2	-	7-8	10	1500	1	*
Felixstowe	982·9	-16	S'W	5	pr	44	97	6	5	2	-	9+	10	3500	1	2
Gorleston	984·1	-12	S'W	5	pr	49	85	6	6	-	-	10	10	1400	1	4
Mildenhall	981·6	-12	S'E	4	rr	45	85	6	8	7	-	7-8	10	1500	1	*
Cranwell	980·7	-14	S'E	4	p/d	42	97	5	5	-	-	10	10	1000	1	*
Birmingham	979·5	-8	SSE	2	bc	39	97	6	5	-	-	4-6	4-6	1500	1	*
Upper Heyford	980·7	-16	S	2	bc	39	97	7	3	4	-	2-3	4-6	1200	1	*
Ross-on-Wye	978·6	-10	S'W	2	bc	43	85	7	8	1	2	Tr	4-6	2500	1	*
Hartland Point	975·0	-26	SW	5	rr	46	92	8	3	2	-	9	9	1500	1	3
Bristol	979·3	-6	SSE	2	c	42	92	7	9	7	1	9	9+	800	1	*
Portland Bill	980·6	-12	SSW	4	rr	49	92	7	5	-	-	10	10	2500	1	4
Plymouth	978·7	-6	WSW	5	c	49	75	7	9	-	3	7-8	9	1800	1	3
The Lizard	978·7	+2	W'S	7	bc/pr	47	85	8	8	-	-	4-6	4-6	1500	1	4
Scilly (St. Mary's)	977·4	+2	W'S	6	c/p	46	85	8	9	7	-	9	10	1000		
Guernsey																
Pembroke	973·7	-24	SSW	5	pr	49	97	7	8	-	-	9+	9+	1000	1	3
Holyhead	974·6	-12	SSE	4	bc	44	92	8	5	1	6	1	4-6	3000	1	2
Chester (Sealand)	977·5	-6	SE'E	3	c	41	92	6	5	-	-	7-8	7-8	1000	1	*
Manchester	978·2	-10	SE'S	3	z	43	92	5	5	3	-	7-8	7-8	2500	1	*
Spurn Head	980·7	-6	SE'E	5	c	46	92	7	6	3	-	4-6	9	4000	1	3
Catterick	980·0	-2	SSE	2	ir	42	97	5	5	2	-	9	10	700	1	*
Tynemouth	980·6	+4	S	4	c	45	92	6	6	-	-	10	10	1500	1	3
St. Abbs Head	978·1	-16	S	5	c	43	97	7	5	4	-	4-6	7-8	2000	1	3
Leuchars	978·0	-28	SE	4	c/p	45	92	6	5	2	-	7-8	10	1800	1	*
Renfrew (Abbots I.)	977·5	-6	ENE	2	z	42	92	5	5	3	-	9	10	2000	1	*
Eskdalemuir	977·7	-2	S	2	o	41	92	6	5	-	-	10	10	800	1	
Point of Ayre	975·4	-4	S	4	bc	44	97	8	8	-	-	4-6	4-6	1500	1	3
Tiree																
Stornoway	982·3	-10	E	6	c	44	75	7	5	7	-	7-8	9	2000	1	3
Dalwhinnie	*	-20	ESE	2	ir	36	92	6	5	-	-	10	10	800	1	*
Aberdeen	981·0	-24	SSE	5	rr	46	85	6	6	2	-	4-6	10	1500	1	3
Wick	984·1	-12	ESE	6	c	46	65	8	5	7	8	7-8	9+	1500	1	3
Lerwick	990·5	+2	ESE	4	c	42	75	8	5	7	-	4-6	7-8	1500	1	*
Blacksod Point	972·1	-12	ESE	2	c	40	97	8	4	7	-	4-6	9	1500	1	3
Malin Head	973·1	-4	ESE	3	bc	40	92	8	2	-	-	2-3	2-3	4000	1	3
Aldergrove	974·5	-6	E'N	2	c	36	97	8	2	3	5	2-3	7-8	2000	2	*
Birr Castle	971·9	-12	S	1	bc	37	92	8	5	4	-	2-3	2-3	2500	1	*
Valentia Obsy.	971·8	0	W'S	5	pr	47	75	8	9	-	-	9+	9+	2500	1	4
Roches Point	972·4	-4	W	2	c	48	97	8	5	-	-	7-8	7-8	1500	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 15th Hrs. (36)
London (Kew)	49	43	34	Tr	6	5·0
Croydon	51			Tr		
S. Farnborough	49	42	38	0·1	14	5·5
Boscombe Down						
Calshot (Sthmtn.)	51	44	43	1	23	3·7
Lympne	49	44	43	2	10	3·4
Manston						
Shoeburyness	50	44	42	0·2	5	5·8
Felixstowe	50	44	43	Tr	5	6·1
Gorleston	48	43	37	-	2	7·3
Mildenhall	48	41	35	-	1	6·6
Cranwell	41	39	36	-	0·6	6·6
Birmingham	47	39	34	-	3	4·3
Upper Heyford	48	39	38	-	9	*
Ross-on-Wye	47	42	33	0·5	2	2·6
Hartland Point	49	41	28	7	2	1·3
Bristol	49	38	33	3	2	2·0
Portland Bill	51	48	*	4	0·5	*
Plymouth	51	45	42	11	4	0·6
The Lizard	51	45	*	11	3	1·2
Scilly (St. Mary's)	51	45	*	12		1·0
Guernsey						
Pembroke	50	44	*	10	5	0·4
Holyhead	48	43	40	0·1	7	2·3
Chester (Sealand)	46	41	35	-	1	4·4
Manchester	46	42	38	-	2	3·7
Spurn Head	46	43	*	-	0·6	6·3
Catterick	44	32	27	-	3	2·7
Tynemouth	45	41	38	-	5	
St. Abbs Head	42	38	*	-	6	*
Leuchars	47	30	20	-	5	6·4
Renfrew (Abbots I.)	37	35	29	0·2	1	0·0
Eskdalemuir	37	31	28	0·1	6	1·4
Point of Ayre	47	43	*	-	11	0·3
Tiree	38		*	-		
Stornoway	41	39	*	-	-	1·3
Dalwhinnie		31	26		3	4·7
Aberdeen	44	30	25	-	1	6·0
Wick	41	33	*	-	0·1	*
Lerwick	44	38	*	-	5	2·5
Blacksod Point	44	39	*	10	Tr	*
Malin Head	46	38	*	-	6	2·2
Aldergrove	45	34	28	0·2	7	1·2
Birr Castle	46	33	27	10	-	0·0
Valentia Obsy.	50	42	35	1	3	4·3
Roches Point	51	41	*	5	5	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass ‡ °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
		24 hrs. ended 9h.											
Kew	18	bFFxcz	cbczcm	cmzcc	49	43	34	Tr	6	5·0	*	*	6
Croydon	217	bbcpf	bcm	frcm	51			Tr			*	*	6
Greenwich (Royal Observatory)	149	bc●	bc	cfrcrc	49	42	35	-	7	6·0	80	88	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	51	35	(38)		5.		83	90	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*									*
Camden Square	110	o	bc	*	50	33	30	-	5	*	*		*
Kensington	80	bc	bc	*	50	43	39	-	5		79	86	*
Hampstead Observatory	450	bc	or *	bc	48	37	31	-	7		*	93	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 16th

South Kensington.

Max.	Time.	Min.	Time.

Kew Observatory.

Max.	Time.	Min.	Time.
Defective Record			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 17th November 1940.

No. 28803

OBSERVATIONS at 13h. G.M.T. 16th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	981·0	-12	SSW	4	zo	46	92	6	8	-	3	4-6	9	2500
	Croydon	981·4	-8	S	2	c/pr	46	92	6	9	6	3	4-6	9	1500
	S. Farnborough	981·2	-4	SSW	3	PR	46	85	6	8	6	-	9+	10	1000
	Boscombe Down	979·0	-10	S	3	bc	48	75	8	8	6	1	1	2-3	2000
	Calshot (Soton.)	980·3	-6	SW	3	pr	48	85	7	8	-	3	7-8	7-8	1000
	Lympne	983·7	-20	SSW	2	pr	46	92	6	9	-	-	10	10	600
	Manston	982·7	-10	S	4	pr	49	85	7	8	6	-	7-8	9	1400
2	Shoeburyness	982·9	-8	S	4	pr	50	85	6	9	-	3	7-8	9+	1500
	Felixstowe	982·1	-10	SW	5	bc	51	75	8	3	6	3	1	2-3	1800
	Gorleston	982·8	-4	S	4	zo	48	75	6	8	-	-	7-8	7-8	1500
	Mildenhall	980·7	-8	S	3	c/pr	47	75	7	8	7	-	7-8	9	3000
	Cranwell	979·4	-8	S	4	c	47	85	7	5	-	-	9+	9+	2500
3	Birmingham	977·8	-10	SSE	3	c	45	85	6	5	7	-	9	9+	1500
	Upper Heyford	979·5	-14	SW	3	c	47	85	8	8	6	-	4-6	9	1800
4	Ross-on-Wye	977·5	-8	S	3	bc	49	75	8	8	-	-	4-6	4-6	2500
5	Hartland Point	975·7	+2	WSW	4	c	48	85	8	8	-	-	9	9	1500
	Bristol	977·7	-8	SSW	4	bc	50	75	8	3	6	3	2-3	4-6	2000
	Portland Bill	980·2	-10	S	4	o	51	92	7	5	-	-	10	10	2500
	Plymouth	977·7	-14	S'W	3	iro	48	75	8	3	1	-	4-6	9+	2000
	The Lizard	976·9	-20	SSW	5	o	49	65	8	8	2	-	9	10	1500
	Scilly (St. Mary's)	976·2	-20	SW	4	c	48	65	8	8	2	-	4-6	9+	1000
	Guernsey														
6	Pembroke	974·1	+2	SW	5	bc	49	75	8	8	6	-	4-6	4-6	1400
7	Holyhead	972·0	-10	SSW	4	c	47	85	8	8	-	-	9+	9+	2200
	Chester (Sealand)	975·5	-12	SSE	4	zo	47	75	6	5	9	-	2-3	4-6	2500
8	Manchester	976·8	-14	SE	4	zo	47	75	6	7	-	-	9+	9+	2500
10	Spurn Head	979·6	-4	SSE	4	bc	48	85	7	4	-	1	4-6	4-6	4000
	Catterick	978·5	-12	SSE	2	c	45	85	8	8	-	2	2-3	9	1500
	Tynemouth	979·5	-8	S	3	zo	46	85	6	8	-	-	7-8	7-8	1500
11	St. Abbs Head	978·0	-2	SE	4	c	45	85	7	5	7	-	4-6	7-8	2500
	Leuchars	978·2	-6	ESE	2	zo	46	85	6	5	7	-	7-8	9+	3500
12	Renfrew (Abbots I.)	976·5	-10	ESE	3	bc/f	46	75	6	5	3	-	4-6	4-6	3500
	Eskdalemuir	976·6	-8	SE	4	c	43	85	8	5	-	-	9	9	1500
	Point of Ayre	973·6	-14	SE'S	6	c	46	92	7	5	2	-	7-8	10	1500
13A	Tiree	975·1	0	E'S	4	c	46	85	8	5	-	-	9+	9+	1500
13B	Stornoway	972·5	-16	ENE	6	c/r	45	85	8	5	7	-	7-8	9+	1500
15	Dalwhinnie	979·9	-4	SSE	2	c	43	85	7	8	5	-	7-8	9+	1500
	Aberdeen	979·8	-6	SSE	3	c	48	85	6	9	7	-	4-6	9	1500
	Wick	980·6	-22	ESE	8	rr	47	85	7	5	2	-	7-8	10	800
16	Lerwick	990·2	-2	E'S	5	c	45	65	8	8	7	-	4-6	7-8	1500
17	Blacksod Point	971·6	-4	SE	2	bc	42	92	8	4	-	7	2-3	4-6	1500
18	Malin Head	972·7	-6	SE	2	c/pr	45	92	8	6	7	-	4-6	9	1500
	Aldergrove	972·4	-12	ESE	2	pro	44	85	8	8	7	2	7-8	9+	2500
19	Birr Castle	971·2	-2	SW	1	c/pr	43	92	8	8	1	-	7-8	10	1500
20	Valentia Obsy. †	971·5	-2	SW'W	4	pr	45	75	8	9	7	1	7-8	7-8	2500
	Roches Point	972·6	-4	W	3	c	48	85	8	3	-	-	4-6	7-8	1500

OBSERVATIONS at 18h. G.M.T. 16th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°F. Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	978·4	-14	E	2	iro	41	92	4	5	2	-	7-8	10	1500	1	*
	Croydon	978·7	-20	S	1	zo	45	85	5	8	-	-	10	10	1800	1	*
	S. Farnborough	977·5	-30	E'N	3	c/pr	44	92	5	8	2	-	7-8	10	1200	2	*
	Boscombe Down	976·1	-26	SE'E	4	rr	43	97	6	6	2	-	7-8	10	3000	1	*
	Calshot (Soton.)	975·8	-36	SE	6	pr	48	85	6	8	2	-	9	10	800	1	2
	Lympne	980·9	-26	S	4	c	48	85	8	2	7	-	2-3	9	1500	1	§
	Manston	980·7	-20	SE'S	5	bc	48	75	7	-	6	5	0	4-6	-		*
2	Shoeburyness	980·4	-24	S'W	2	bc	47	85	6	8	9	-	4-6	4-6	1500	1	*
	Felixstowe	981·5	0	SSE	3	c	46	85	7	2	6	3	2-3	7-8	3000	1	2
	Gorleston	982·4	-2	S'W	4	zo	47	85	6	5	-	-	2-3	4-6	1500	1	3
	Mildenhall	979·9	-2	SE	2	zo	42	85	6	5	7	-	Tr	1	3000	1	*
	Cranwell	979·7	+6	S	3	zo	41	92	6	-	-	1	0	Tr	-	0	*
3	Birmingham	977·8	0	SE	2	zo	43	85	6	5	1	-	4-6	10	2500	1	*
	Upper Heyford	978·5	-10	SSE	3	c/r	42	92	7	4	1	7	2-3	10	3000	1	*
4	Ross-on-Wye	976·7	-6	SE	2	c	45	75	6	5	-	-	2-3	9+	2500	1	*
5	Hartland Point	975·1	-4	W	3	rr	44	92	8	8	2	-	7-8	9+	1500	1	
	Bristol	976·3	-16	SE'S	1	rr	43	97	6	6	2	-	4-6	10	1000	1	*
	Portland Bill	975·0	-30	S	3	rr	50	92	7	5	-	-	10	10	1500	2	4
	Plymouth	975·1	-18	E	1	zo	42	97	5	2	7	-	4-6	9+	2000	1	1
	The Lizard	975·0	-8	SSW	4	c	47	85	8	8	6	-	7-8	7-8	2500	0	3
	Scilly (St. Mary's)	964·6	-6	W	4	bc	46	65	8	4	4	-	4-6	4-6	1200	1	3
	Guernsey																
6	Pembroke	974·4	0	SW	3	pr	47	75	1	8	-	-	9	9	1400	1	3
7	Holyhead	973·7	+14	SE'S	2	bc	43	92	8	2	3	4	2-3	4-6	2500	1	1
	Chester (Sealand)	976·4	+10	SE'S	2	mo	42	85	6	5	-	-	2-3	2-3	2800	1	*
8	Manchester	976·9	+10	SE	2	m	43	85	4	5	4	-	1	2-3	3000	1	*
10	Spurn Head	979·5	+2	SE	4	c	46	92	7	5	4	-	4-6	4-6	4000		
	Catterick	978·6	+6	SE'S	2	zo	44	92	6	5	-	-	10	10	3600	1	*
	Tynemouth	979·6	+4	S	4	zo	47	85	6	9	-	-	9	9	2200	1	3
11	St. Abbs Head	978·0	+6	S	3	bc	41	92	7	4	4	-	2-3	2-3	2500	0	2
	Leuchars	978·3	+6	-	0	zo	42	92	6	8	-	-	2-3	2-3	1400	1	*
12	Renfrew (Abbots I.)	976·6	+6	E	3	zo	43	85	5	5	-	2	7-8	9	3000	1	*
	Eskdalemuir	976·8	+4	SE	3	c	42	85	4	5	-	-	10	10	450	1	*
	Point of Ayre	974·3	+8	SSW	4	e	45	92	8	9	-	6	4-6	7-8	1500	1	3
13A	Tiree	974·8	+2	ENE	4	c	46	85	8	5	-	-	9	9	2100	0	3
13B	Stornoway	979·7	+6	E	4	c	48	75	7	5	7	-	7-8	9+	2000	1	2
15	Dalwhinnie	*	+6	-	0	iro	39	92	6	5	1	-	7-8	10	800	1	*
	Aberdeen	980·5	+8	SSE	2	roro	45	92	4	5	-	-	10	10	4000	1	2
	Wick	980·9	+4	SSE	5	rr	47	92	7	5	2	-	9	10	800	1	3
16	Lerwick	988·9	-4	E	6	c	45	75	7	8	7	-	7-8	9+	800	1	*
17	Blacksod Point	972·1	+12	E	3	b	42	97	7	4	-	-	1	1	1500	0	3
18	Malin Head	972·3	+2	E	4	PHR	48	85	7	9	-	-	9	9	800	1	4
	Aldergrove	972·6	+8	S	1	rr	40	92	4	6	-	-	10	10	2400	2	*
19	Birr Castle	972·3	+6	SSW	1	c	42	85	7	5	-	-	9	9	2500	1	*
20	Valentia Obsy. †	971·2	+4	S	2	c	43	85	8	9	-	-	9	9	2500	1	2
	Roches Point	972·8	+4	W'S	3	c	44	85	8	8	-	5	4-6	7-8	1500	1	3

PAST 24 HOURS. WEATHER.

District	Stations	7h.—13h. 16th (37)	13h.—18h. 16th (38)	18h. 16th to 1h. 17th (39)	1h.—7h. 17th (40)
1	London (Kew)	crmotcmo	cprmoiro m	cgrrm	crgmc
	Croydon	crorpromo	procmo	rrmrrR	momc
	S. Farnborough	cpRmoc	PRbcPRc	prRRrrc	rroΦc
	Boscombe Down	bcpr	bccpr	crgrrm	cbc
	Calshot (Soton.)	cpRPrb	cproprmo	crrmoc	ccmgr
	Lympne	prhPRmo	prprhc	mogr	
	Manston	cPRpro	cPRprobcc	cmgrrcbc	
2	Shoeburyness	cprmo	cprmobc	bccrr	RRc
	Felixstowe	roroPrbc	cprqbc	crorormo	roroiRc
	Gorleston	ororoc	cprobe	bccorrq	coroq
	Mildenhall	crorompro c	cbcbmo	ccroromo	crrmocror
	Cranwell	cmocbcc	crobmo	cmcroromo	crororrcm
3	Birmingham	bcc	c	cor	orrro
	Upper Heyford	bcmoproc	cmocirc	crrmo	rrrorocmo
4	Ross-on-Wye	cpobc	bcc	crr	cbcc
5	Hartland Point	cirph	crr	rrcbc	bc
	Bristol	cprobc	bccrororr	crrorrmm	
	Portland Bill	o	oR	c	c
	Plymouth	eprobcc	irorrrororoc	crobcmb	bmbccpro
	The Lizard	bcco	c	bcc	c
	Scilly (St. Mary's)	cpqc	cpcbc	cpqbc	bcpqc
	Guernsey				
6	Pembroke	cprbc	cpro	c	cprbc
7	Holyhead	cPrc	PRcbc	bcroroc⊕	RRroroc
	Chester (Sealand)	cbcmo	bcebczomo	bmroroc⊕	rrRRc
8	Manchester	cmozo	cmoprobcmo	bcf fcfm	cmrrro
10	Spurn Head	cbcc	c	c	qrrir
	Catterick	mrrcmo	ccmo	cmom	cmrorocmo
	Tynemouth	oc	bc	c	cpr
11	St. Abbs Head	bcc	bc	iroc	iroc
	Leuchars	ccmo	cPRbcbmo	bccprcpr	cPRcpromoc
12	Renfrew (Abbots I.)	cmoff		zmomm	bccmof
	Eskdalemuir	omo	cz	cmo	cbccpro
	Point of Ayre	c	prPR	c	c
13A	Tiree	bc	c	cbcc	*cbc
13B	Stornoway	crc	c		c
15	Dalwhinnie	c	ciroo	*	cpro
	Aberdeen	roprc	fcmro	rocpr	cproc
	Wick	prrrq	prcrr	ircpr	cprq
16	Lerwick	cpr	cpro	cpr	cir
17	Blacksod Point	bc	bc	bc	c
18	Malin Head	c	cprocc	cprcprc	bc
	Aldergrove	iromopro	procrrmv	rrmccmo	cmopro
19	Birr Castle	cpr	c	bcb	cx
20	Valentia Obsy. †	pr, Fhrqpro	cprocjpc	cbcw	bcwcprbc
	Roches Point	iroc	bcc	bcz	bcwbc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze; the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
< less than (for cloud height). gale.
⊕ Solar halo. Φ lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus :—bc/r, fair weather after rain ; —, has decreased ; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4–6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing : sparse.
2 Fine Ci not increasing : abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing : usually in tufts.
5 Ci or Cs increasing : still below 45° altitude : often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude : often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations :—
Cirrus,–Ci : Cirrocumulus,–Cc : Cirrostratus,–Cs : Altocumulus,–Ac : Altostratus,–As : Stratocumulus,–Sc : Stratus,–St : Nimbostratus,–Ns : Cumulus,–Cu : Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

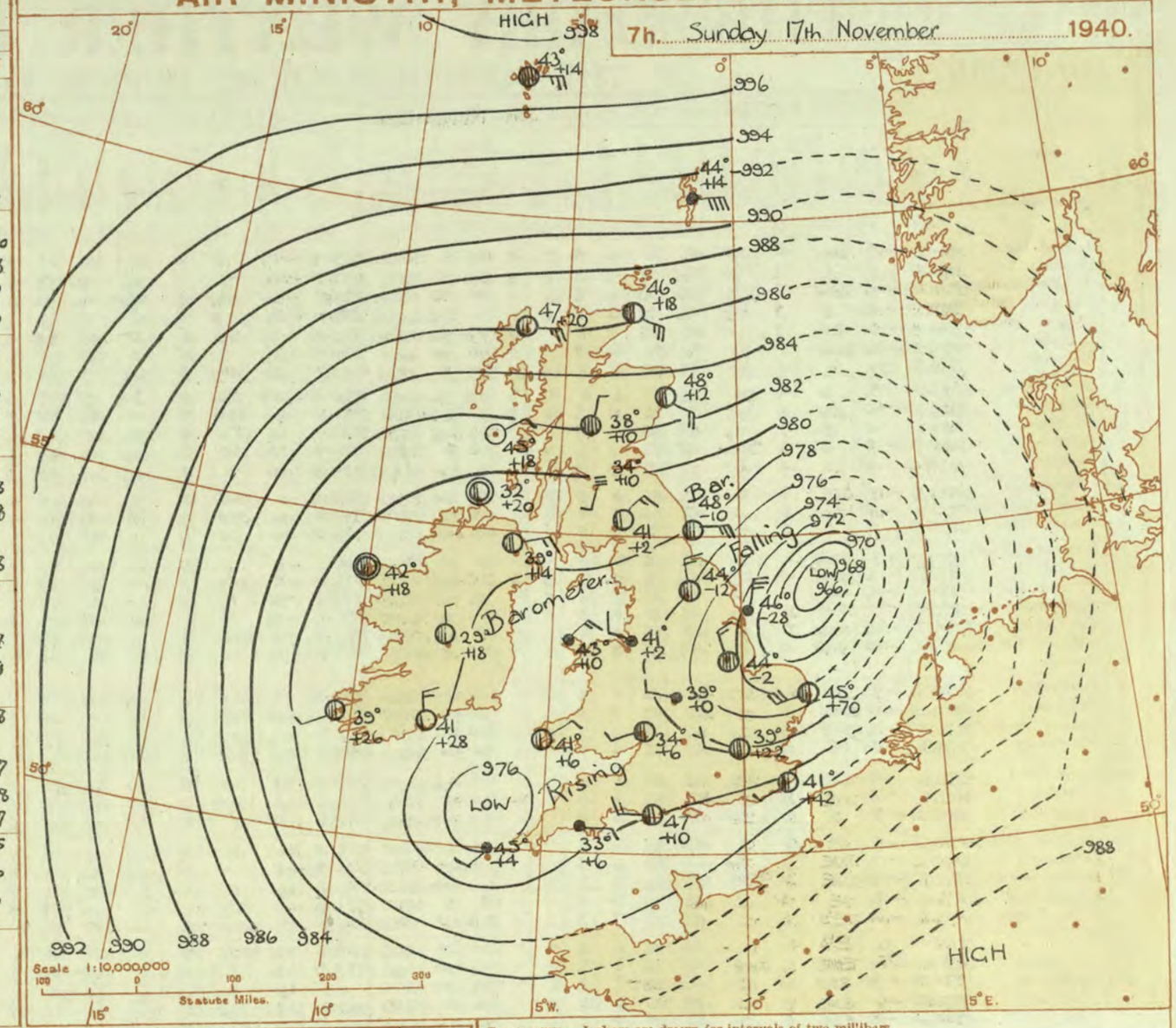
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Sunday 17th November 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 16th November			18h. G.M.T.			01h. G.M.T. 17th November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	80	10963	32283	6-	62648	10668	6-	61648	07668	8-	25647	42587
115	53	10854	02485	52	14844	41766	52	81844	41687	52	81844	41687
203	8-	01553	08213									
206	2-	00962	26112	57	12266	79645	83	25845	08285			
210				5-	22857	08187	57	81965	14387	8-	25856	06386
220	80	01854	12304							82	03755	08128
230	70	00851	06103				53	05665	12227	57	05763	00026
245	20	00961	22102	87	81755	10587	53	02756	08487	9-	58648	08468
260	00	05690	04104	50	05664	00024	53	05565	08116	87	81445	00087
277	8-	02847	10427	8-	02845	16388	40	02754	08487	50	05663	03326
279	--	01774	06314							--	05656	08216
285	23	02734	08316	6-	08428	10528						
288	57	02761	17216	5-	05657	11327	01	05590	32128	67	08434	03466
273	73	01753	08405							--	46209	09149
301	03	05590	12314	50	05662	14462	01	08490	08128	52	61542	32168
321	00	05590	14100	5-	05664	14324	51	05563	03298	62	64647	30368
299	51	05542	16103	5-	05644	16414	80	81744	16384	62	62645	04668
292	03	08490	10215	5-	05658	14128	50	47344	04218	5-	64628	36448
310	--	48109	16449									
316	00	44490	16241	50	08463	14213	52	62565	08328	52	66545	30168
333	57	02863	16526	8-	02855	16185	62	62644	06160	62	64645	22168
334	--	02753	12215									
340	70	05662	14313	84	01743	15214	52	62456	00068	62	64425	26268
136	10	01761	16302	86	01751	14312	52	62645	06468	62	64536	24268
336	14	02752	12417	63	63754	16417						
350	00	05690	14315							62	62638	22468
368												
379	53	05663	14314	02	61690	16228	62	64527	00068	57	05634	24327
390	03	05590	12114				62	52535	01468	57	05635	22368
382	54	05663	12414	86	25655	08186	02	64438	24268	57	02733	20267
438	86	02855	535 87							8-	25745	20565
430	26	01854	16414	82	25644	14388	57	22635	24468	57	05653	00016
409	62	66526	13668	27	02753	16227	20	01854	16284	83	81844	00086

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Sunday 17th November
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Light or moderate southwest wind becoming north to northwest tomorrow. Bright intervals, showers, local thunder. Local morning mist; average temperature.
7 North Wales ... 8 N.W. England 9 N. Midlands ...	Light variable winds becoming northeast to north moderate, fresh on coasts. Cloudy, local rain, some bright intervals later; rather cold.
10 N.E. England 11 S.E. Scotland	Moderate or fresh northeast wind, strong on coasts, backing north. Mainly cloudy, occasional rain, local thunder; rather cold.
12 S.W. Scotland & Isle of Man.	Moderate or fresh northeast wind, strong locally on coasts, backing slowly to north. Bright intervals, local showers, rather cold.
13 A. W. Scotld. / B.N.W. Scotland.	As 10–11
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light variable winds, becoming northwest moderate or fresh, strong on coasts. Bright intervals, showers, local thunder; rather cold.

GENERAL INFERENCE.

An intense depression northeast of the Wash is moving north and will begin to fill up soon. In small centre in Polar air near Scilly will move eastnortheast. There will be bright intervals and showers in the South with local thunder. In the North there will be considerable cloud with rain locally.

FURTHER OUTLOOK.

Bright intervals and showers.

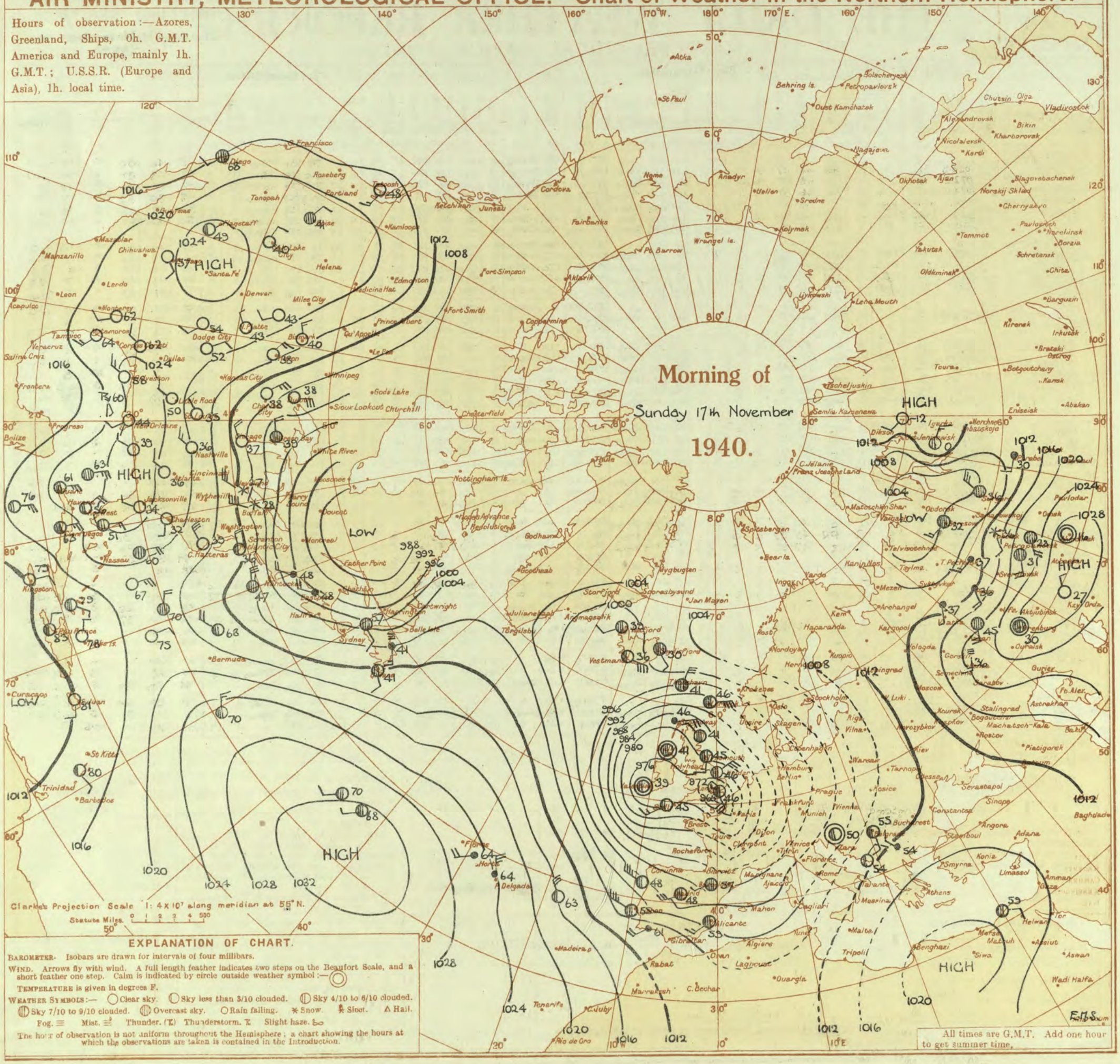
Warning of gales in operation in districts, 1, 2, 10, 11, 15 and 16.

Forecasts issued at 1030 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 17th November 1940.

No 28,850

OBSERVATIONS at 1 hr. G.M.T. 17th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	968.8	-30	E	1	RR	44	97	5	5	-	-	10	10	900
	S. Farnborough	226	972.2	0	W	4	rr	48	97	8	6	2	-	9	10	600
	Boscombe Down	417	974.6	+6	WNW	3	o/p	40	97	7	5	-	-	10	10	1600
	Calshot (Sthmtn.)	8	974.1	+4	WN	4	c	48	92	7	5	-	-	7-8	10	1800
	Lympne	346	967.1	-46	SSE	4	rr	46	97	6	-	2	-	10	10	700
	Manston	154	965.1	-74	S	6	c/d	46	92	7	5	3	8	2-3	7-8	600
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	968.7	-74	ESE	7	rr	48	92	6	6	2	-	9	10	1000
	Gorleston	5	974.3	-52	ESE	6	rr	47	85	6	6	-	-	10	10	1000
	Mildenhall	19	971.1	-50	NE'E	5	rr	45	92	6	5	2	-	9	10	2000
	Cranwell	240	975.1	-30	NNE	4	rr	43	97	4	5	-	-	10	10	800
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	973.8	-12	W	3	pp	42	97	6	6	2	-	7-8	10	1000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	975.3	+2	WNW	3	bc	46	85	8	3	-	-	2-3	2-3	2500
	Bristol	209	975.2	+2	NW	1	c	39	92	7	5	1	-	2-3	10	2500
	Portland Bill	32	975.8	+12	SW	3	c	46	92	8	5	-	-	7-8	7-8	4000
	Plymouth	82	976.5	+8	SE	1	m	34	97	4	2	-	1	1	2-3	1500
	The Lizard	240	976.2	+4	W	5	c	46	75	8	8	-	-	7-8	7-8	2000
	Scilly (St. Mary's)	163	976.0	+8	SWW	3	bcjp	45	75	8	9	-	-	4-6	4-6	1500
	Guernsey	175														
6	Pembroke	142	975.4	+10	NE'E	3	c	42	97	7	8	-	-	7-8	7-8	2000
7	Holyhead	26	975.7	+10	S	2	rr	48	97	7	-	2	-	0	10	1700
	Chester (Sealand)	16	975.8	-2	NWW	2	rr	39	97	5	-	2	-	10	10	4500
8	Manchester	70	976.3	-6	NNE	3	m/f	42	85	4	5	2	-	4-6	10	4500
10	Spurn Head	29	976.2	-26	NE'E	5	c	46	92	7	4	6	-	4-6	9	4000
	Catterick	175	979.0	-2	-	0	m	39	97	4	5	1	8	4-6	10	1500
	Tynemouth	108	980.2	+6	S	3	:	45	92	6	8	-	-	7-8	7-8	2800
11	St. Abbs Head	280	979.5	+8	SSE	2	c	44	92	7	5	4	-	4-6	7-8	2500
	Leuchars	36	999.0	+2	E	2	PR	43	92	6	3	2	-	9	10	800
12	Renfrew (Abbots I.)	19	979.0	+14	E	2	z	42	92	6	5	-	-	2-3	2-3	4000
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	976.4	+6	SE	4	c	46	92	7	5	3	-	1	9	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	980.9	+18	E	4	pp	46	75	7	8	7	7	4-6	10	1200
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	982.4	+4	SE	6	cq	48	85	7	9	7	-	7-8	10	800
16	Lerwick	156	989.7	+6	E	7	c	46	75	7	8	7	-	4-6	10	800
17	Blacksod Point	18	976.0	+16	-	0	bc	36	97	8	-	4	-	0	4-6	-
18	Malin Head	84	976.6	+22	-	0	c	41	92	8	5	7	-	4-6	7-8	4000
	Aldergrove	268	976.7	+14	-	0	z	37	97	6	5	-	7	4-6	10	3000
19	Birr Castle	173	976.1	+16	N	1	b	29	97	8	-	-	-	0	0	-
20	Valentia Obsy.	30	974.5	+22	-	0	c	39	92	9	5	-	-	7-8	7-8	2500
	Roches Point	22	974.9	+10	NW	2	bc	39	97	8	5	-	5	Tr	2-3	4000

OBSERVATIONS at 7 hr. G.M.T. 17th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	977.7	+28	SW'W	3	c	40	92	7	5	1	-	7-8	9+	1500	1	*
Croydon	976.3	+22	WNW	1	z	39	97	6	5	1	-	4-6	7-8	2500	1	*
S. Farnborough	977.8	+22	SW'S	3	c	37	92	7	3	-	3	2-3	7-8	1000	2	*
Boscombe Down	977.7	+14	SWW	2	c	37	92	8	3	-	3	2-3	7-8	2000	1	*
Calshot (Sthmtn.)	977.7	+12	W	2	c	40	92	7	8	1	8	2-3	7-8	1800	1	1
Lympne	972.4	+42	SW	1	c	41	85	8	9	6	3	4-6	9	1100	1	§3
Manston	978.0	+46	SW'S	4	c	42	85	7	3	6	2	4-6	7-8	1800		*
Shoeburyness	977.3	+36	SW'S	4	c	41	92	8	8	6	3	1	7-8	2500	1	*
Felixstowe	975.2	+70	WSW	5	c	42	85	8	5	-	-	9+	9+	1600	1	2
Gorleston	971.2	+70	SW'W	6	c/p	45	92	6	6	-	-	9+	9+	1500	1	4
Mildenhall	972.5	+42	SW'W	5	c/p	42	92	6	5	7	-	7-8	9	1500	1	*
Cranwell	972.1	-2	NNW	3	m/p	44	97	4	5	-	-	10	10	800	1	*
Birmingham	975.8	0	WNW	2	rr	39	97	4	6	-	-	10	10	450	1	*
Upper Heyford	976.5	+20	SW'W	3	z	38	97	6	5	7	-	9	9+	800	1	*
Ross-on-Wye	977.2	+6	SW	1	c	34	97	8	5	1	7	Tr	9	2500	1	*
Hartland Point	976.9	+10	S	3	bc	41	92	8	8	4	-	4-6	4-6	1500	1	2
Bristol	977.3	+12	WSW	1	c	38	92	7	1	9	6	Tr	7-8	2500	1	*
Portland Bill	978.6	+10	W	3	c	47	92	8	5	-	-	9	9	2500	1	3
Plymouth	977.9	+6	E	1	pp	33	97	8	9	3	3	4-6	7-8	2000	1	1
The Lizard	976.5	+2	S	3	c	47	75	8	8	6	-	7-8	7-8	2000	0	2
Scilly (St. Mary's)	975.9	+4	SSW	2	cjp	45	85	8	8	6	-	7-8	9+	1200	1	3
Guernsey																
Pembroke	977.2	+6	NE'E	2	bc	41	97	7	8	6	-	4-6	4-6	1600	1	2
Holyhead	976.4	+10	NE	3	rr	43	97	6	6	2	-	7-8	10	800	1	2
Chester (Sealand)	976.0	+2	WN	2	RR	41	97	4	6	2	-	9	10	1000	1	*
Manchester	975.4	-6	NNW	3	rr	43	97	4	-	2	-	10	10	2200	1	*
Spurn Head	970.0	-28	NNE	5	ir	46	97	7	6	9	-	7-8	10	1500	1	4
Catterick	964.4	-12	N	3	z	44	92	5	5	2	-	7-8	10	1000	1	*
Tynemouth	978.3	-10	E	5	c/pp	48	85	6	9	-	-	9+	9+	1500	1	3
St. Abbs Head	979.3	0	E	3	c/p	47	92	7	8	1	-	4-6	9	2500	1	2
Leuchars	980.7	+6	ENE	2	c	46	92	8	8	-	-	9.	9+	2200	1	*
Renfrew (Abbots I.)	980.8	+10	S'W	1	of+	34	97	2	5	-	-	10	10	5000	1	*
Eskdalemuir	978.9	+2	NE	3	c	41	92	6	6	-	-	7-8	7-8	800	1	*
Point of Ayre	977.8	+10	ENE	4	c	45	92	7	5	-	7	4-6	10	2500	1	3
Tiree	981.1	+18	NE'E	2	bc	45	85	8	5	3	-	2-3	4-6	2800	0	2
Stornoway	984.3	+20	E	5	c	47	85	7	5	5	-	4-6	9	2000	1	2
Dalwhinnie	982.9	+10	NNE	2	c	38	92	7	5	1	-	7-8	10	800	1	*
Aberdeen	983.1	+12	E'S	4	c	48	85	7	9	7	-	9	9+	2500	1	3
Wick	985.6	+18	ESE	5	c/pp	46	85	8	5	7	8	7-8	9	1500	1	2
Lerwick	991.8	+14	E	8	ir	44	92	7	8	2	-	7-8	10	800	1	*
Blacksod Point	979.2	+18	-	0	c	42	92	8	4	7	-	2-3	7-8	1500	1	1
Malin Head	979.4	+26	-	0	bc	38	97	8	5	7	-	2-3	4-6	5700	0	3
Aldergrove	979.1	+14	ENE	3	c/pp	39	97	6	2	7	7	2-3	10	2000	2	*
Birr Castle	979.0	+18	N	1	c	29	97	7	5	-	-	10	10	2500	1	*
Valentia Obsy.	978.9	+26	SWW	1	c/pp	39	97	9	5	-	1	7-8	7-8	2500	1	3
Roches Point	978.1	+28	N	3	bc	41	92	8	-	-	5	0	2-3	-	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 16th Hrs. (36)
London (Kew)	47	40	35	6	15	0.4
Croydon	47	38	37	7	14	0.2
S. Farnborough	48	37	31	5	16	1.1
Boscombe Down	48	36	32	2	17	2.1
Calshot (Sthmtn.)	50	38	35	9	19	0.5
Lympne	50	40	39	6	10	1.5
Manston						
Shoeburyness	52	41	36	3	13	1.9
Felixstowe	51	42	40	2	7	8.0
Gorleston	50	45	39	4	6	3.5
Mildenhall	50	41	38	2	7	2.9
Cranwell	47	37	33	-	7	2.4
Birmingham	47	39	36	*	16	2.5
Upper Heyford	49	38	37	0.2	16	*
Ross-on-Wye	50	34	29	Tr	16	2.8
Hartland Point	49	40	36	4	2	0.4
Bristol	50	35	26	1	11	3.3
Portland Bill	51	46	*	22	5	*
Plymouth	50	32	39	3	0.3	0.7
The Lizard	49	45	*	1	Tr	0.1
Scilly (St. Mary's)	41	42	*	1	1	0.6
Guernsey						
Pembroke	50	41	*	2	2	1.9
Holyhead	48	41	35	5	10	1.0
Chester (Sealand)	48	38	33	-	9	2.4
Manchester	48	39	33	Tr	2	2.0
Spurn Head	48	44	*		2	3.4
Catterick	46	39	34	1	1	1.5
Tynemouth	47	44	39	-	0.4	
St. Abbs Head	47	40	*	-	1	*
Leuchars	47	35	30	1	5	0.2
Renfrew (Abbots I.)	47	33	28	0.1	-	0.4
Eskdalemuir	44	35	32	-	0.1	0.2
Point of Ayre	48	41	*	3	-	0.5
Tiree	48		*	-	-	0.0
Stornoway	48	46	*	9	0.6	0.1
Dalwhinnie	43	31	26	3	0.5	0.7
Aberdeen	48	42	37	6	8	0.0
Wick	46	44	*	3	5	*
Lerwick	46	44	*	Tr	5	0.6
Blacksod Point	45	34	*	-	1	*
Malin Head	48	37	*	3	0.6	0.2
Aldergrove	45	35	28	5	0.4	0.2
Birr Castle	45	28	24	0.4	2	0.3
Valentia Obsy.	49	35	31	5	0.2	2.1
Roches Point	51	38	*	0.6	Tr	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs.	Humidity 15h. G.M.T. %	Humidity 9h. G.M.T. %	Visibility 9h.
		24 hrs. ended 9h.								Yesterday.		To-day.	
Kew	18	crmtcm	cprmirm	cgrrm		40	35		15	0.4	*	*	5
Croydon	217	cgrpgm	pgcm	rrmrrR		38	37		14	0.2	*	*	5
Greenwich (Royal Observatory)	149	crrk	circr	rrcRbcm	47	38	38	2	12	0.4	88	87	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	49	40	37	15			86	96	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*									*
Camden Square	110	bc	c	*	47	39	37	5	14	*	*	93	*
Kensington	80	cpbcr	ctlo	*	48	40	36	4	16		92	93	*
Hampstead Observatory	450										*		

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 17th.

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
Defective Record			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
THE BEAUFORT SCALE OF WIND is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 18th November 1940.

No. 28851

OBSERVATIONS at 13h. G.M.T. 17th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	979.6	+4	SW	4	bc	47	65	7	8	-	1	2-3	2-3	1500
	Croydon	979.6	+6	SW	2	bc	49	65	7	2	4	-	4-6	4-6	2500
	S. Farnborough	979.6	+2	SW	3	bc	49	65	8	2	6	6	2-3	4-6	3500
	Boscombe Down		+4	SSW	4	c		85	7	2	7	8	2-3	7-8	3000
	Calshot (Soton.)	979.6	+2	SSW	3	c/pr	46	92	7	8	4	-	7-8	9+	1200
	Lympne ...	981.5	+8	SW	2	bc	51	65	8	3	-	3	4-6	4-6	2500
	Manston ...	980.4	+6	SSW	4	c	50	75	8	8	6	-	4-6	7-8	2500
2	Shoeburyness ...	980.4	+6	SW'S	3	bc	51	75	8	2	•	-	2-3	2-3	4000
	Felixstowe ...	979.7	+10	SW'S	4	b	47	75	7	1	-	3	Tr	Tr	2000
	Gorleston ...	979.7	-22	SSW	5	bc	47	75	7	4	7	+	2-3	4-6	1500
	Mildenhall ...	977.9	+16	SW'W	4	c	48	75	7	8	-	2	4-6	7-8	2500
	Cranwell ...	975.7	+14	W	6	zo	41	85	6	5	-	-	10	10	1500
3	Birmingham	977.9	+8	WSW	3	c	40	85	6	6	-	-	10	10	800
	Upper Heyford	978.9	+6	SW	3	bc	45	85	7	2	-	1	4-6	4-6	1000
4	Ross-on-Wye ...	978.7	0	WSW	2	zo	46	75	6	2	-	6	2-3	7-8	2500
5	Hartland Point	978.7	+6	S	1	c	45	85	8	3	4	3	4-6	9	2300
	Bristol	979.1	+6	S'W	2	bc	48	75	8	3	1	6	1	4-6	2500
	Portland Bill ...	979.5	+8	SW	3	rr	45	92	7	5	-	-	10	10	2500
	Plymouth ...	978.6	-2	E'S	1	roro	42	92	8	3	7	-	1	9+	1500
	The Lizard ...	978.2	+8	NNE	2	bc	46	85	8	8	6	-	4-6	4-6	2500
	Scilly (St.Mary's)	979.2	+16	N	4	bc	48	75	8	8	4	3	4-6	4-6	1200
	Guernsey ...														
6	Pembroke ...	979.0	+4	NW	4	c	47	85	8	8	6	-	4-6	7-8	2000
7	Holyhead ...	977.4	+2	WSW	3	c/r	45	97	6	6	2	-	7-8	10	1100
	Chester (Sealand)	976.8	+4	WNW	3	iR	44	92	6	6	2	-	9	10	600
8	Manchester ...	975.4	0	NW'W	3	rr	43	92	5	5	2	-	4-6	10	1500
10	Spurn Head ...	973.2	+6	SSW	4	rr	43	97	6	6	-	-	10	10	1500
	Catterick ...	973.9	-14	NNW	2	c/r	47	92	6	5	7	-	4-6	7-8	1500
	Tynemouth ...	973.9	-28	NE	6	c/pr	48	92	6	9	-	-	9	9	1500
11	St. Abbs Head	977.9	-16	NE	7	rr	45	92	8	6	2	-	7-8	10	1500
	Leuchars ...	980.9	-4	NNE	4	c	48	85	7	8	6	6	4-6	9	1800
12	Renfrew (Abbots I.)	981.6	0	N	3	c/pr	45	85	9	8	7	6	4-6	10	1800
	Eskdalemuir ...	977.5	-12	NE	4	c	45	75	8	5	7	-	4-6	9+	1500
	Point of Ayre ...	978.5	+2	N'E	4	c	48	85	8	8	4	7	Tr	10	2500
13A	Tiree	983.5	+6	NE'N	4	bc	48	85	8	7	4	-	4-6	4-6	2800
13B	Stornoway ...	986.8	+10	NE	4	c/pr	48	85	8	5	5	-	7-8	7-8	2500
15	Dalwhinnie ...	*	+4	ENE	2	ro	41	92	7	8	-	-	9+	9+	800
	Aberdeen ...	983.4	-4	E	4	c/pr	48	85	7	9	-	-	9+	9+	1500
	Wick	986.9	+6	ESE	5	cq	48	85	7	8	7	-	7-8	9+	1500
16	Lerwick... ...	999.1	+10	E	7	c	44	85	7	8	2	-	7-8	10	1500
17	Blacksod Point...	984.2	+24	NNW	1	c	45	75	8	-	-	9	0	7-8	-
18	Malin Head ...	982.4	+8	ENE	3	c	49	85	8	8	-	-	7-8	7-8	4000
	Aldergrove ...	981.0	+6	N'W	2	e	46	85	7	5	7	8	4-6	9+	2500
19	Birr Castle ...	982.7	+10	N	1	f-	34	97	3	5	-	-	10	10	2500
20	Valentia Obsy. †	982.3	+12	NNW	1	e	48	85	9	8	-	1	9	9	2500
	Roches Point ...	981.4	+10	N'W	3	bc	45	85	8	5	4	5	2-3	4-6	2500

OBSERVATIONS at 18h. G.M.T. 17th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°F. Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	981.1	+6	SE'E	1	ir	44	92	5	6	2	-	7-8	10	1500	1	*
Croydon	980.6	+10	—	0	cf+	44	97	3	5	-	-	7-8	7-8	2500	1	*
S. Farnborough	980.4	+4	E	1	c/pr	43	92	5	8	3	-	9	10	600	2	*
Boscombe Down	979.3	+2	NE'E	2	roro	42	97	5	6	2	-	7-8	10	1000	1	*
Calshot (Soton.)	978.5	-14	E'N	3	idom	45	97	4	6	-	-	10	10	1600	1	2
Lympne	982.6	+4	SSW	3	c	48	85	8	2	-	-	9+	9+	2500	1	§ 3
Manston	982.5	+10	SSE	2	zo	44	75	6	2	6	-	1	2-3	2000		*
Shoeburyness	981.0	+6	SW	3	bc	46	85	7	7	-	-	2-3	4-6	4000	1	*
Felixstowe	982.0	+14	SSW	3	zo	47	85	6	4	4	3	1	4-6	3000	1	2
Gorleston	981.4	+16	SSW	3	bc	45	75	6	5	-	-	4-6	4-6	2300	1	3
Mildenhall	980.3	+14	S'E	3	zo	43	75	6	-	4	-	0	2-3	-	1	*
Cranwell	978.7	+20	WNW	6	roro	41	85	5	5	-	-	10	10	1000	1	*
Birmingham	979.5	+8	SW	1	c	41	85	6	5	-	-	9	9	1500	1	*
Upper Heyford	980.6	+8	SSW	1	bc	39	92	7	-	5	3	0	4-6	-	1	*
Ross-on-Wye	980.0	+6	—	0	bc	41	85	8	5	-	1	1	2-3	2500	1	*
Hartland Point	980.3	+10	N	3	c	46	85	8	8	6	-	4-6	9	1500	1	3
Bristol	980.2	+10	S	2	mjf	36	92	4	-	1	8	0	1	-	1	
Portland Bill	978.6	-10	NE	3	rr	43	92	7	5	-	-	10	10	2500	1	3
Plymouth	981.1	+22	NW	2	zo	42	85	6	3	6	-	4-6	7-8	1500	1	1
The Lizard	982.0	+28	NW	4	c	43	85	8	8	-	-	7-8	7-8	2500	1	2
Scilly (St.Mary's)	982.5	0	NW'W	4	c/pr	46	75	8	8	7	-	7-8	10	1200	1	3
Guernsey																
Pembroke	980.9	+10	N'E	3	c	44	92	7	8	6	-	7-8	9+	1500	1	2
Holyhead	979.0	+12	NNW	4	c	49	75	7	2	7	-	1	9+	2700	1	2
Chester (Sealand)	977.7	+6	WNW	4	rr	45	92	5	-	2	-	10	10	1200	1	*
Manchester	977.1	+14	WSW	2	roro	44	97	4	5	7	-	9	10	2100	2	*
Spurn Head	977.0	+12	S	5	o	42	92	7	5	-	-	10	10	1500	1	4
Catterick	974.1	+2	W	2	rr	45	85	7	5	-	-	9+	9+	1500	1	x
Tynemouth	971.3	-8	NW	3	zo	46	92	6	6	-	-	10	10	1500	1	4
St. Abbs Head	974.9	-6	W	7	c/r	47	92	7	5	2	-	9	10	1500	1	4
Leuchars	979.3	-8	NE	6	ir	47	92	5	6	-	-	10	10	400	1	*
Renfrew (Abbots I.)	981.4	+2	N'E	4	bc	45	75	8	5	-	2	4-6	4-6	2000	1	*
Eskdalemuir	975.5	-14	NE'N	5	c/r	43	97	7	5	-	-	4-6	4-6	1500	1	*
Point of Ayre	979.1	+4	N	5	c	48	85	7	5	-	-	7-8	7-8	2500	1	3
Tiree	985.4	+10	NNE	4	b	48	85	8	1	-	-	Tr	1	3500	0	3
Stornoway	988.9	+14	NE	4	c	46	85	7	5	7	-	7-8	9	2500	1	2
Dalwhinnie	985.2	+4	ENE	2	c	40	92	7	5	1	-	4-6	10	1500	1	*
Aberdeen	983.4	+4	E	5	c/pr	48	85	6	9	-	-	9+	9+	1500	1	3
Wick	988.4	+8	E	7	cq	46	85	7	5	2	-	7-8	10	1500	1	3
Lerwick	994.0	+4	E'N	7	c	46	75	7	8	7	-	7-8	10	1500	1	*
Blacksod Point	987.3	+20	NNW	2	c	48	92	7	5	-	-	10	10	2500	0	1
Malin Head	983.9	+16	N	3	c	48	85	8	2	-	4	4-6	7-8	4000	0	3
Aldergrove	982.7	+10	NW'N	2	c	44	85	7	5	-	7	2-3	10	2000	1	*
Birr Castle	985.0	+12	N	1	bcf-	35	97	3	5	-	-	2-3	2-3	2500	1	*
Valentia Obsy. †	987.8	+60	NNE	4	bc	44	75	8	4	4	-	2-3	2-3	2500	1	1
Roches Point	984.7	+22	N'W	4	bc	44	85	8	5	-	1	2-3	2-3	2500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 17th (37)	Weather 13h.—18h. 17th (38)	Weather 18h 17th to 1h. 18th (39)	Weather 1h.—7h. 18th (40)
London (Kew)	cbcmobc	bcmgrmo	crrtforomo	croromocmo
Croydon	bcmob	procf	frrmroro	crorocmo
S. Farnborough	cbbc	bcmopR	crRroprf	froromoc
Boscombe Down	bcifpromoc	bccirocroro	crorobp	bcmocmo
Calshot (Soton.)	cbcmocpro	prorcR	cmo	cmo
Lympne	cprobc	bcprbc	cpro	cmoprc
Manston	bc	cprobc	bcmocido	cprobc
Shoeburyness	cbcb	bbccbc	cprobc	cprmoc
Felixstowe	cbmo	bcmo	bcmocmoc	cmoPRc
Gorleston	cbc	bc	bccl	croro
Mildenhall	cmocbbc	cbcbczo	bczo ciroc	ccmo
Cranwell	rrm, cmo	*	crorobccmo	cmoof
Birmingham	oroc	c	cbcproc	conf
Upper Heyford	cmobc	bccbc	ccrobc	bccmo
Ross-on-Wye	cbc	cbc	bbccif	c
Hartland Point	bcc	cp	cbcpc	cpbcc
Bristol	bcbbc	bccbjf	bfx, cmo	cmowpro
Portland Bill	orr	orr	orrc	c
Plymouth	cproroto	crorocmobcmo	cbcmopro,	tbcmoltcprocmo
The Lizard	rrcbc	bcprc	cprlq	cprbc
Scilly (St.Mary's)	cprobc	bccpro	cpc	cpocxc
Guernsey				
Pembroke	bcc	proc	irlc	cq
Holyhead	rcfroc	cmoproc	c	c
Chester (Sealand)	rriRmmo	crorom oc	prodomoc	crrodoc
Manchester	cmrrmo	cmorrrorom	cmorrpro	cmoprrr
Spurn Head	orr	co	c	cpro
Catterick	cmocRc	iroprcrr	rrroromo	rrrorom
Tynemouth	cpr	cpo	orr	oir
St. Abbs Head	cqr	cqir	cqr	irocq
Leuchars	cRproc	ciRiriRm	cRciro cmo	bccpro
Renfrew (Abbots I.)	cuffgcpro	ciro	cmoiroro	cbcbbc
Eskdalemuir	bccprc	rorrg	bccro	roroRbc
Point of Ayre	proc	c	bcc	c
Tiree	cbc	bcb	b	b
Stornoway	cpro	c	cpr	c
Dalwhinnie	ciro	cprq	*	ciroo
Aberdeen	cphrc	cprc	cphr	prcrr
Wick	cprcq	cprcq	circq	cprq
Lerwick	cirrr	ciro	c	cbc
Blacksod Point	cbc	c	c	bcq
Malin Head	c	c	bc	c
Aldergrove	ccmo	c	ccmobc	bcprocbc
Birr Castle	off	ff	cb	bccx
Valentia Obsy. †	bccprc	cPRirprcb	bcctproclc	cbccproqb
Roches Point	cbc	bc	cbc	bcc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.

With present weather is combined, whenever possible, the general character of the weather.

A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.

Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.

An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.

"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.

"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

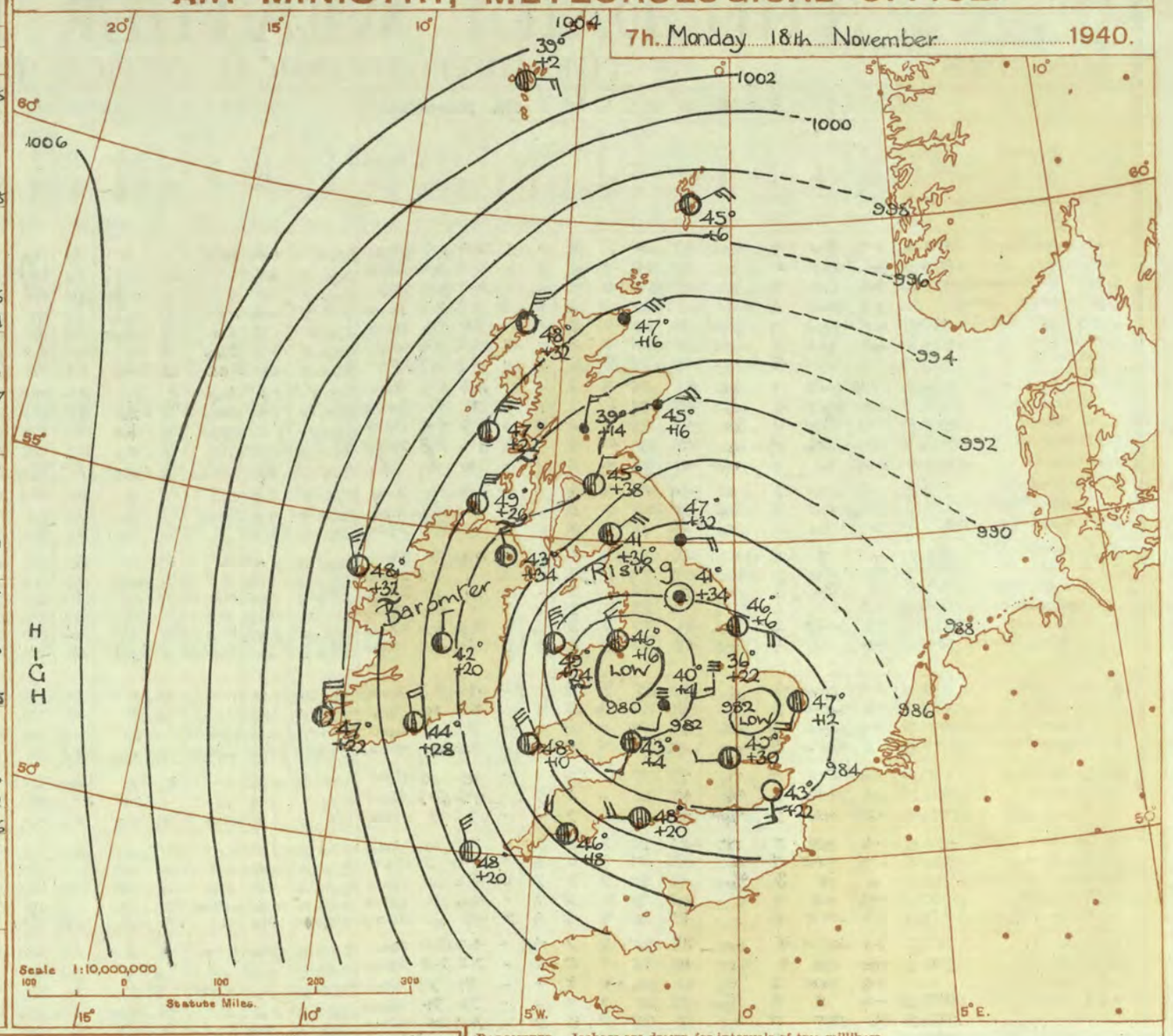
COLUMN 29—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Monday 18th November 1940.



Abridged observations of additional stations in the AVIATION WEATHER CODE

III	C_L C_M	wwVhN$_h$	DDFWN	C_L C_M	wwVhN$_h$	DDFWN	C_L C_M	wwVhN$_h$	DDFWN	C_L C_M	wwVhN$_h$	DDFWN
	13h. G.M.T. 17th November			18h. G.M.T.			01h. G.M.T. 18th November			07h. G.M.T.		
109	97	82647	08588	32	82646	41688	82	62545	40768	62	22746	03568
115	52	81844	41586	52	82734	41686	52	82724	41687	32	81834	37686
203												
206	87	27745	07287	87	81745	04588	8-	02846	02386	8-	81648	04188
210	86	25855	06386	8-	25848	37688				8-	62645	04488
220	23	01962	64303	24	01753	06413				80	01744	05414
230	53	01963	02715	54	02762	04416	50	02754	04415	50	02854	02315
245	97	25744	37687	6-	25648	37888	9-	27646	41786			
260	57	02745	02488	62	64646	32468	52	62645	37368	8-	81756	04316
277	57	02755	30327	57	02756	31428	57	02854	32526	53	01863	32524
279												
285										6-	64738	04468
288	87	81545	32467	5-	62548	20368	51	62546	13368	5-	22447	02267
273												
301	52	64544	32268	54	05564	30364	5-	02748	28468	52	61655	04168
321	6-	64348	29168	02	22548	18468	57	08462	17427	--	48209	08129
299	8-	02746	28386	5-	51438	20458	52	05635	18428	8-	63637	16387
292	53	05664	30465	57	61645	22286	52	64426	14268	5-	05637	00067
310										--	67209	24449
316	51	64534	20268	52	62445	22468	5-	22558	6168			
333	62	52654	10158	52	05644	00068	8-	25757	32587	27	05655	65587
334										--	03654	24128
340	62	64637	22168	62	62536	22268	62	51646	20168	62	64636	28268
136	8-	02746	77442	03	01790	18314	57	05661	12368			
336										51	25743	28525
350	20	02854	20415									
368												
379	20	01755	22315	00	61790	20102	07	05500	30113	57	61655	22268
390	00	08490	20340				53	05555	10166	5-	08437	00027
382	[illegible]			63	62655	00018	5-	04585	28215	53	05665	00026
438	00	01854	22414							3-	64638	24468
430	30	02863	18385	9-	82527	16288	5-	05657	32227	53	05564	00027
409	37	6864	28186	9-	81848	28188	23	02745	36498	5-	02845	30528

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
C_L C_M = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 18th November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light or moderate southwesterly or variable wind. Bright intervals and occasional showers. Local fog inland at night. Average temperature.
▲ 5 S.W. England ▲ 6 South Wales ...	Fresh or strong northwesterly wind, gale temporarily on coast. Bright intervals and occasional thundery showers. Cool.
▲ 7 North Wales ... 8 N.W. England	Strong north to northeast wind, moderating. Bright intervals and occasional showers. Cool.
9 N. Midlands ... ▲ 10 N.E. England ▲ 11 S.E. Scotland	Moderate easterly wind. Bright intervals and occasional showers. Cool.
12 S.W. Scotland & Isle of Man. 13 { A. W. Scotld. B.N.W.Scotland. ▲ 14 Mid Scotland	Fresh or strong northeasterly wind, moderating. Bright intervals. Occasional showers and local thunder. Cool.
▲ 15 N. E. Scotland ▲ 16 Orkneys and Shetlands	Fresh or strong easterly wind, moderating. Bright intervals. Occasional showers and local thunder. Cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Fresh or strong north to northwest wind. Bright intervals, occasional showers with local thunder. Cool.

GENERAL INFERENCE.

A depression over Eastern Wales is moving south and filling up and is likely to turn eastward later. Another centre over eastern England is moving north and disappearing as a separate system.
Weather will be generally showery and thunder may occur locally in the northwest and extreme southwest.

FURTHER OUTLOOK.

Bright intervals and showers. Local inland fog night and morning.

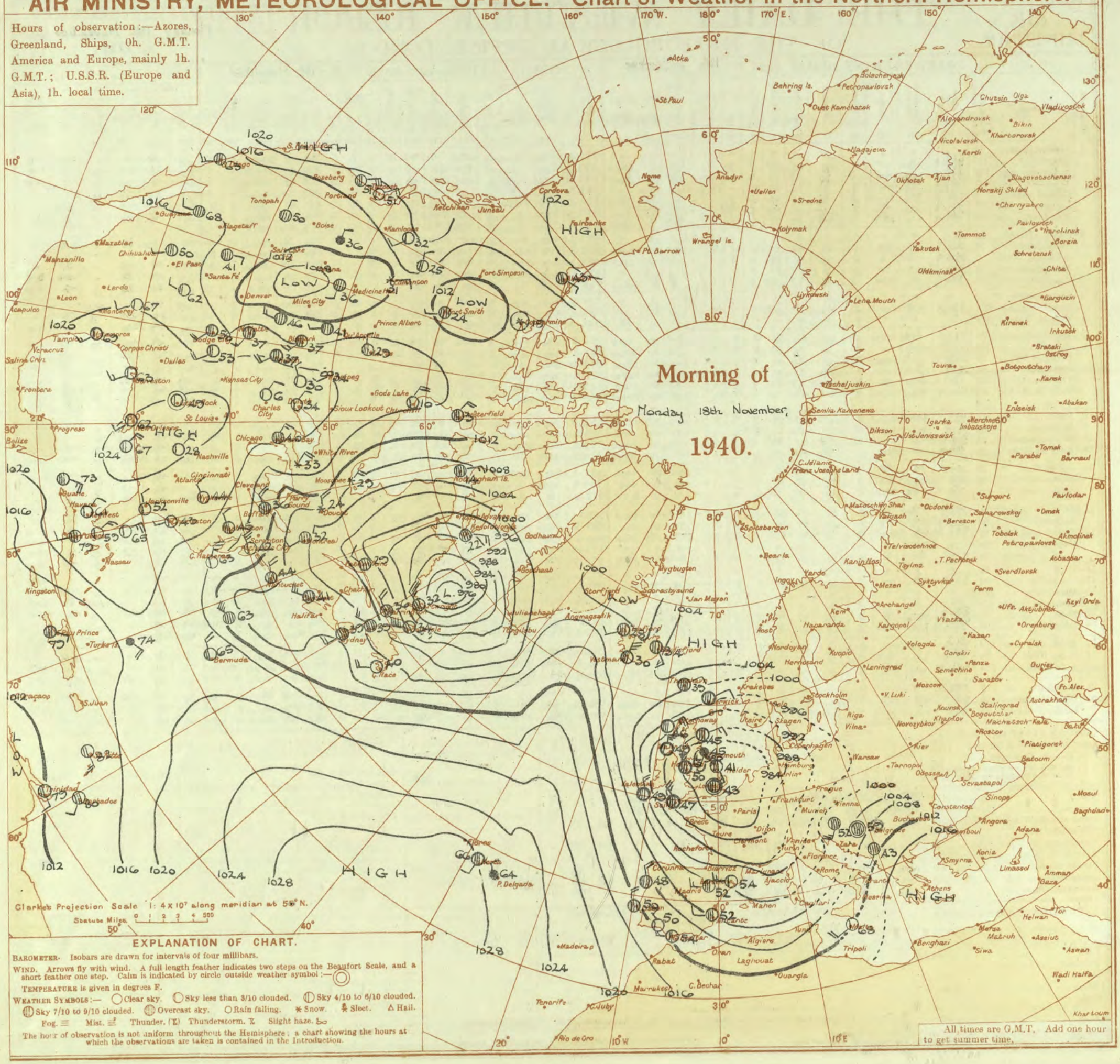
▲ Gale warnings issued for Dogger Bank area 0255 on 17th for districts 10, 11, 14, 15, 16 at 0840 on 17th and districts 6, 7 & part of 5 at 0830 on 18th.

Forecasts issued at 10.30 GMT.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Monday 18th November 1940.
No. 2885

OBSERVATIONS at 1 hr. G.M.T. 18th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	979.8	-2	-	0	c	43	97	7	5	-	-	9	9	2500
	S. Farnborough	226	979.9	+10	NW'W	3	f-	42	97	3	5	-	-	10	10	800
	Boscombe Down	417	981.4	+18	NW'W	2	bc	37	92	6	-	3	-	0	4-6	-
	Calshot (Sthmtn.)	8	980.3	+22	NW'N	4	z0	45	92	5	5	-	-	10	10	1800
	Lympne	346	981.8	-6	SW	3	pr	46	92	6	8	-	-	10	10	900
	Manston	154	981.4	-6	SE'S	6	c/d	46	85	7	8	6	-	7-8	9	2500
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	981.8	-4	S'E	5	z0	47	85	6	5	3	-	7-8	9	3000
	Gorleston	5	982.2	-4	S	5	c	46	85	6	5	-	-	9+	9+	2500
	Mildenhall	19	980.7	-4	SE	2	c	45	85	7	-	3	-	0	9	-
	Cranwell	240	980.7	0	SSE	3	z0	39	92	5	5	-	-	9	9	2500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	981.4	+4	WNW	2	bc	37	92	7	-	5	-	0	2-3	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	983.6	+14	NNW	4	pr	47	85	8	8	2	-	7-8	10	1500
	Bristol	209	981.9	+6	W	1	z0	39	97	5	5	7	-	7-8	10	3000
	Portland Bill	32	982.1	+14	WNW	4	c	44	92	7	5	-	-	10	10	2500
	Plymouth	82	984.6	+14	WNW	2	bc/pr	42	92	6	9	3	3	4-6	4-6	2000
	The Lizard	240	985.4	+16	NW	5	c	47	85	8	8	2	-	7-8	9+	1500
	Scilly (St.Mary's)	163	986.4	+20	NW'N	5	c	47	75	8	8	2	-	Tr	9+	1500
	Guernsey	175														
6	Pembroke	142	983.1	+10	NW'W	5	c	47	92	7	8	7	-	4-6	7-8	2000
7	Holyhead	26	980.1	+2	NW	7	c	50	85	8	5	-	-	10	10	4000
	Chester(Sealand)	16	978.8	0	WNW	2	c/d	47	85	6	5	2	-	9+	10	2000
8	Manchester	70	978.3	0	SSW	3	c/pr	45	92	6	8	-	-	9	10	2500
10	Spurn Head	29	980.7	+8	SE	3	c	43	92	7	4	-	2	4-6	7-8	4000
	Catterick	175	978.1	+26	SE	3	r0r0	42	97	5	5	-	-	10	10	500
	Tynemouth	108	979.9	+44	SSW	5	rr	45	97	6	6	-	-	10	10	1200
11	St. Abbs Head	280	981.8	+36	E	7	r0	46	85	7	5	2	-	7-8	10	1500
	Leuchars	36	984.3	+26	NE	6	z0	48	75	6	6	3	-	7-8	10	900
12	Renfrew (Abbots I.)	19	983.9	+16	NNE	3	c/r	45	85	7	5	7	-	9	9+	1800
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	978.7	0	N	6	c	47	92	7	5	4	-	2-3	7-8	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	992.2	+8	NE	5	c	46	85	7	5	7	-	7-8	9+	2000
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	990.7	+12	E	8	cq	47	85	7	5	2	-	7-8	10	800
16	Lerwick	156	995.7	+10	ENE	6	c	45	75	8	5	7	-	7-8	9+	1500
17	Blacksod Point	18	991.3	+14	NNW	3	c	49	75	8	3	-	-	9	9	1500
18	Malin Head	84	987.1	+8	N'E	5	b	49	85	8	-	-	1	0	1	-
	Aldergrove	268	984.8	+10	NNW	3	c	43	85	7	5	3	-	2-3	7-8	2500
19	Birr Castle	173	988.3	+10	NNW	1	b	41	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	991.9	+14	N'W	4	c	49	85	8	5	-	-	9+	9+	2500
	Roches Point	22	988.7	+12	N'W	5	bc	43	92	8	5	-	5	2-3	4-6	2500

OBSERVATIONS at 7 hr. G.M.T. 18th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	983.6	+26	WSW	2	z0	41	92	5	5	3	-	4-6	9	2500	1	*
Croydon	983.3	+30	W	1	c/r	40	97	5	5	9	-	4-6	9+	2800	1	*
S. Farnborough	983.4	+20	SW'W	2	z0	39	92	6	5	7	-	7-8	9	3500	2	*
Boscombe Down	982.5	+10	W'S	3	pr	43	92	6	8	7	-	7-8	9+	4000	1	*
Calshot (Sthmtn.)	984.1	+14	SW'W	1	z0	42	92	6	5	7	-	5	9+	3500	1	2
Lympne	984.2	+22	S	3	bc	43	97	8	9	-	-	4-6	4-6	1800	1	§
Manston	983.5	+16	S	4	bc/pr	44	75	8	3	6	3	4-6	4-6	2500		*
Shoeburyness	983.1	+12	SW	2	c	45	92	5	5	-	-	10	10	1500	1	*
Felixstowe	982.3	+8	SSW	4	c	47	85	7	8	-	-	9+	9+	2000	1	2
Gorleston	983.2	+12	SSW	4	c/r	47	85	6	8	-	-	7-8	7-8	2000	1	3
Mildenhall	981.8	+10	SE'S	1	z0	44	97	6	5	-	-	9+	9+	3000	1	*
Cranwell	983.5	+22	S	3	F	36	97	1	-	-	-	10	10	<150	1	*
Birmingham	981.7	+4	SSW	2	rf	40	97	3	6	-	-	10	10	800	1	*
Upper Heyford	983.0	+8	SW	2	z0	36	97	6	5	7	-	7-8	9	3000	1	*
Ross-on-Wye	982.2	+4	SSW	2	c	43	92	8	5	1	-	9	9+	2500	1	*
Hartland Point	986.5	+16	NNW	5	c	48	85	8	8	-	-	7-8	7-8	1500	1	4
Bristol	983.8	+10	W'N	3	pr	45	92	6	8	-	-	9+	9+	2200	1	*
Portland Bill	984.6	+20	W	4	c	48	92	7	5	-	-	10	10	4000	1	3
Plymouth	987.8	+18	NW'W	4	c	48	75	6	8	-	-	9+	9+	2500	1	2
The Lizard	989.1	+10	NW	5	bc	47	85	8	8	6	-	4-6	4-6	2500	1	4
Scilly (St.Mary's)	990.4	+20	NW'N	5	c	48	75	8	8	6	-	4-6	7-8	1200	1	3
Guernsey																
Pembroke	986.7	+10	NW	6	cq	48	85	7	8	-	-	9	9	2000	1	2
Holyhead	983.2	+24	N'W	7	z0	49	85	6	8	3	-	9	10	2500	1	4
Chester(Sealand)	979.8	+16	NNW	3	c	46	92	6	5	2	-	9	10	2500	1	*
Manchester	980.9	+28	E'N	3	c/r	44	92	3	6	2	-	4-6	10	1000	2	*
Spurn Head	982.2	+6	ESE	4	c/pr	46	92	7	3	3	-	2-3	9	4000	1	2
Catterick	984.8	+34	-	0	r0r0	41	97	4	5	7	-	9	10	1200	1	*
Tynemouth	985.2	+32	E	4	ir	47	92	7	6	-	-	10	10	1200	1	2
St. Abbs Head	987.2	+26	NE	3	c	47	85	8	3	4	4	4-6	7-8	2000	0	3
Leuchars	988.8	+22	NNW	3	pr	43	92	7	8	-	-	9+	9+	1200	1	*
Renfrew (Abbots I.)	990.1	+38	N'E	2	c	45	75	8	5	-	-	7-8	7-8	4500	1	*
Eskdalemuir	987.0	+36	NE	5	bc	41	85	6	5	3	-	2-3	4-6	1500	1	*
Point of Ayre	985.5	+34	NE	6	c	48	85	7	5	1	-	7-8	9+	2500	1	4
Tiree	993.0	+32	N'E	5	b	48	85	8	1	4	-	Tr	1	3500	1	4
Stornoway	996.2	+22	NNE	5	z0	47	85	7	5	7	-	7-8	9+	2000	1	3
Dalwhinnie	992.6	+14	NNE	3	ir0	39	97	5	5	-	2	10	10	800	1	*
Aberdeen	990.0	+16	ENE	4	rr	45	92	6	6	2	-	7-8	10	1500	1	3
Wick	993.6	+16	NE	6	pr	47	85	8	8	2	-	7-8	10	1500	1	3
Lerwick	996.3	+6	ENE	5	bc	45	75	8	5	7	-	4-6	4-6	1500	1	*
Blacksod Point	996.0	+32	N'W	5	bcq	48	75	7	3	-	-	4-6	4-6	800	1	4
Malin Head	991.9	+26	N'E	6	c	49	85	7	9	-	2	4-6	7-8	2500	0	5
Aldergrove	989.8	+34	N'W	3	bc	43	85	8	8	-	-	4-6	4-6	4000	1	*
Birr Castle	992.9	+20	N	1	c	42	92	8	5	7	-	4-6	7-8	2500	1	*
Valentia Obsy.	996.4	+22	N	4	bc/pr	47	85	8	3	-	-	2-3	2-3	2500	1	3
Roches Point	993.0	+28	N'W	4	c	44	85	8	5	-	-	7-8	7-8	2500	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine Hrs. (36)
London (Kew)	48	40	31	1	15	5.2
Croydon	52	38	38	Tr	13	5.4
S. Farnborough	49	37	34	3	9	4.8
Boscombe Down	47	36	33	2	1	4.1
Calshot (Sthmtn.)	51	40	39	5	0.2	2.5
Lympne	51	41	39	1	3	3.7
Manston						
Shoeburyness	51	45	*	1	0.2	*
Felixstowe				-		
Gorleston	49	44	37	-	3	*
Mildenhall	48	44	*	-	0.1	3.4
Cranwell	45	35	30	9	Tr	0.0
Birmingham	43	38		0.5		
Upper Heyford	49	39	27	Tr	Tr	*
Ross-on-Wye	48	34	26	-	-	4.6
Hartland Point	47	43	42	Tr	Tr	0.3
Bristol	50	35	25	-	0.1	4.9
Portland Bill	50	41	*	6	4	*
Plymouth	45	39	32	5	1	0.7
The Lizard	49	42	*	5	1	
Scilly (St.Mary's)	49	44	*	0.1	1	3.8
Guernsey						
Pembroke	49	42	*	1	3	4.7
Holyhead	49	48	46	6	-	0.0
Chester(Sealand)	45	47	41	19	3	0.0
Manchester	44	41	38	10	6	0.0
Spurn Head	47	41	*	9	Tr	0.0
Catterick	47	40	39	5	2	0.1
Tynemouth	49	45	39	4	13	*
St. Abbs Head	48	43	*	3	3	*
Leuchars	49	42	39	5	6	0.0
Renfrew (Abbots I.)	47	43	34	0.3	1	0.0
Eskdalemuir	45	41	39	8	8	0.0
Point of Ayre	49	46	*	Tr	Tr	0.0
Tiree	49	47	*	-	-	0.1
Stornoway	48	45	*	Tr	Tr	2.4
Dalwhinnie	41	36		0.4	3	0.3
Aberdeen	48	43	41	3	13	0.0
Wick	49	46	*	0.6	1	*
Lerwick	48	43	*	0.6	-	0.0
Blacksod Point	49	47	*	-	0.5	*
Malin Head	49	46	*	0.5	-	0.9
Aldergrove	47	41	35	-	Tr	0.5
Birr Castle	37	34	29	-	-	0.0
Valentia Obsy.	49	43	35	4	1	1.7
Roches Point	46	42	*	-	-	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h. other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew	18	cbcm0 bc	bccm0crm	crrtlr0m	48	40	31	1	15	5.2	*	*	4
Croydon	217	bcm0b	pr0cf	frr0cm0	52	38	38	Tr	13	5.4	*	*	5
Greenwich (Royal Observatory)	149	mb	bcpe	crfrcm	50	40	36	0.5	8	5.1	70	93	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	51	40	38	11			84	98	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*									*
Camden Square	110	bc	c	*	50	40	32	-	12	*	*	93	*
Kensington	80	bc	bcc	*	51	40	33	-	13		85	98	*
Hampstead Observatory	450	bc	bcor	o	48	37	35				*	99	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 18th

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
defective		record	

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 17th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 18th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 19th November, 1940.

No. 28,852.

OBSERVATIONS at 13h. G.M.T. 18th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	985·5	+10	SSE	2	ir₀	46	85	5	5	–	-	10	10	1500
	Croydon	984·6	+2	SSE	1	c/d	44	97	5	5	7	-	4-6	10	2500
	S. Farnborough	985·3	+8	W'S	3	r₀r₀	46	92	6	5	7	-	4-6	10	1400
	Boscombe Down	985·2	+10	W	4	ir₀	46	85	6	6	2	-	4-6	10	2000
	Calshot (Soton.)	985·2	+2	WNW	4	c	49	85	7	7	7	–	7-8	9	3500
	Lympne ...	986·8	+10	SSW	1	c	47	85	7	8	-	-	9+	9+	2000
	Manston ...	986·0	+8			bc	49	75	7	3	6	3	1		3000
2	Shoeburyness ...	986·1	+6	S'W	2	c	46	85	6	5	3	-	4-6	9	4000
	Felixstowe ...	986·0	+18	SW'W	3	ir₀	45	92	4	5	-	-	10	10	800
	Gorleston ...	985·5	+10	SE'E	4	pr	48	75	6	8	-	-	7-8	7-8	1500
	Mildenhall ...	985·5	+18	—	0	r₀r₀	45	97	5	5	-	-	9	8	800
	Cranwell ...	986·6	+20	NNW	3	f	43	97	2	5	—	-	10	10	<150
3	Birmingham	987·2	+38	NNE	3	cf	42	92	3	6	-	-	10	10	800
	Upper Heyford	985·4	+14	—	0	r₀r₀	43	97	4	6	2	-	9	10	400
4	Ross-on-Wye ...	986·8	+32	N	4	m/r	44	97	4	5	-	-	10	10	800
5	Hartland Point	989·3	+14	NW	6	c/r	49	92	7	8	2	-	4-6	9	1500
	Bristol	986·7	+22	NW'W	4	r₀r₀	46	85	6	5	2	-	9	10	1300
	Portland Bill ...	986·7	+2	NW	4	c	50	92	7	5	-	-	10	10	4000
	Plymouth ...	990·6	+6	NW'W	5	pr	51	85	7	8	-	-	9	9	2000
	The Lizard ...	992·2	+12	NW	7	cq	51	75	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	994·4	+14	NW	5	c	50	75	8	8	6	–	4-6	7-8	1500
	Guernsey ...														
6	Pembroke ...	996·1	+12	NNW	6	pr	49	85	7	8	6	-	7-8	9+	2000
7	Holyhead ...	990·3	+38	N'W	7	bc	50	85	7	8	6	-	4-6	4-6	2400
	Chester (Sealand)	988·4	+32	NNW	4	ir₀	47	85	5	5	2	-	7-8	9+	2700
8	Manchester ...	987·8	+30	N	3	z₀	48	75	6	5	3	1	4-6	7-8	1800
10	Spurn Head ...	986·4	+8	NE	2	c	49	85	7	4	6	-	4-6	7-8	4000
	Catterick ...	989·2	+22	N	3	r₀r₀	45	92	5	5	2	-	4-6	10	800
	Tynemouth ...	993·2	+16	NNE	4	c/pr	46	92	7	2	—	·	9	9	2400
11	St. Abbs Head	990·3	+6	NNE	3	ir₀	45	85	8	5	5	-	7-8	10	1500
	Leuchars ...	992·5	+14	NNW	2	c/r	45	85	8	5	2	-	7-8	10	2200
12	Renfrew (Abbots I.)	994·6	+18	N'W	3	c	48	75	9	8	7	-	4-6	9+	1500
	Eskdalemuir ...	991·8	+18	NE'N	4	pr	42	85	7	5	-	-	10	10	800
	Point of Ayre ...	991·7	+20	NE'N	6	bc	48	85	8	5	4	-	2-3	4-6	2500
13A	Tiree	997·3	+12	N'E	5	bc	50	85	8	7	6	-	2-3	2-3	3500
13B	Stornoway ...	999·4	+12	N	4	c	47	75	8	5	-	-	9+	9+	2600
15	Dalwhinnie ...	993·0	+12	NNE	4	c	40	85	7	5	-	-	9+	9+	1500
	Aberdeen ...	991·3	0	N	4	c/pr	45	97	7	9	-	-	10	10	1500
	Wick	996·3	+18	NE	6	ir	46	75	8	5	7	-	7-8	10	1500
16	Lerwick... ...	998·1	+6	NE	5	c	46	85	8	8	7	-	7-8	9	1500
17	Blacksod Point..	1000·7	+20	N'W	5	bc	50	85	8	3	-	-	4-6	4-6	1500
18	Malin Head ...	997·0	+22	N	5	c	50	85	8	2	6	-	4-5	7-8	4000
	Aldergrove ...	995·2	+22	N'W	4	c	49	75	8	7	-	3	7-8	9+	1200
19	Birr Castle ...	997·4	+20	NNE	2	c	50	75	8	8		-	7-5	7-8	1500
20	Valentia Obsy. †	1001·3	+22	N	4	c	51	75	8	3	-	-	7-3	7-8	2500
	Roches Point ...	996·6	+20	N	6	bc	50	85	8	8	-	-	4-6	4-6	2500

OBSERVATIONS at 18h. G.M.T. 18th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	990·2	+32	NNW	2	of+	44	92	2	5	–	–	10	10	1500	1	*
Croydon	989·1	+40	—	0	rf	43	97	2	6	-	-	10	10	1000	2	*
S. Farnborough	990·6	+40	NNW	3	rf	44	92	3	5	-	-	10	10	800	2	*
Boscombe Down	991·4	+44	NNW	4	c/r	43	85	5	6	2	-	7-8	10	800	1	*
Calshot (Soton.)	990·5	+40	N'W	5	z₀	45	85	5	5	-	-	10	10	3000	1	3
Lympne																§
Manston	989·3	+12	SSE	2	pr	45	92	5	8	-	-	9+	9+	2600		*
Shoeburyness	990·1	+24	SE	1	c	44	97	5	5	-	-	10	10	4000	1	*
Felixstowe	989·7	+22	N	1	m	44	92	4	8	3	-	4-6	9	2300	1	1
Gorleston	990·0	+12	SW'S	1	c	45	85	5	8	-	-	7-8	7-8	1500	1	2
Mildenhall	989·5	+26	NW	2	ir₀	44	97	5	5	2	-	9	10	1000	1	*
Cranwell	991·1	+30	N	3	m	43	97	4	5	-	-	2-3	2-3	2500	1	*
Birmingham	992·3	+26	NNW	3	ir₀	44	92	5	6	-	-	10	10	450	1	*
Upper Heyford	991·1	+32	NNW	1	id₀	42	97	4	-	2	-	10	10	800	1	*
Ross-on-Wye	992·5	+26	NNW	3	ir₀	45	85	5	5	-	-	10	10	800	1	*
Hartland Point	995·5	+36	N	5	bc	49	92	7	3	6	-	2-3	2-3	1500	1	4
Bristol	993·0	+30	NNW	3	c/d	45	85	4	5	2	-	9-	10	1400	1	
Portland Bill	994·3	+46	NW	4	c	47	85	7	5	-	-	10	10	2500	1	4
Plymouth	995·4	+36	NNW	4	z₀	48	85	5	3	-	-	2-3	2-3	1500	1	3
The Lizard	995·9	+12	NW	7	c	49	75	8	8	-	-	7-8	7-8	2000	1	3
Scilly (St. Mary's)	998·9	+26	NNW	5	c	50	75	8	8	6	-	4-6	7-8	1500	1	4
Guernsey																
Pembroke	995·3	+28	N'W	5	bcq	48	85	7	8	-	-	4-6	4-6	2050	1	3
Holyhead	995·5	+28	N	6	c	50	75	7	8	-	-	9	9	1600	1	4
Chester (Sealand)	993·8	+30	NNW	4	c	47	85	6	5	-	-	9+	9+	2500	1	*
Manchester	993·1	+30	NW'N	2	z₀	46	85	5	5	-	-	9	9	2500	1	*
Spurn Head	991·6	+18	NE	4	c	47	85	7	5	–	-	10	10	4000	1	2
Catterick	994·0	+30	N	3	pr	44	92	5	8	-	-	7-8	7-8	2200	1	*
Tynemouth	994·0	+24	N	4	c/pr	46	92	7	6	-	-	10	10	1200	1	2
St. Abbs Head	995·1	+18	E	3	c	45	92	8	5	2	-	7-8	9	1500	1	3
Leuchars	997·0	+42	NNE	3	ir	44	97	7	5	-	-	10	10	1200	1	*
Renfrew (Abbots I.)	997·8	+2	N'W	4	c	47	75	9	5	-	-	7-8	7-8	4000	1	*
Eskdalemuir																*
Point of Ayre	996·6	+24	N'E	5	c	49	85	8	4	7	–	4-6	9	2500	0	3
Tiree	1001·1	+26	N	5	b	48	75	8	1	4	-	Tr	1	3500	0	4
Stornoway	1001·9	0	N	3	c	44	75	8	5	-	-	9+	9+	2600	1	2
Dalwhinnie	998·0	+26	NE	4	ir₀	39	92	7	5	1	-	4-6	10	1500	7	*
Aberdeen	998·2	+28	N'E	3	c/pr	44	97	7	9	2	-	7-8	10	1500	1	4
Wick	999·0	+18	NNW	3	pr	46	85	7	8	7	-	7-8	9	800	1	2
Lerwick	1000·2	+8	NNE	3	ir₀	48	92	7	5	2	-	7-8	10	800	1	*
Blacksod Point	1004·5	+24	N	3	b	48	85	7	4	4	-	1	1	1500	0	4
Malin Head	1001·3	+30	N	5	bc	49	85	8	5	6	-	2-3	4-6	5700	0	4
Aldergrove	999·1	+18	NNW	3	bc	44	85	8	5	4	3	1	2-3	4000	1	*
Birr Castle	1002·2	+24	N	2	bc	45	85	7	-	4	-	0	2-3	-	1	*
Valentia Obsy. †	1005·4	+30	N'E	6	bc	50	75	8	3	4	-	4-6	4-6	1500	1	4
Roches Point	1002·0	+38	N	6	bc	49	85	8	5	-	-	2-3	2-3	2500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 18th (37)	Weather 13h.—18h. 18th (38)	Weather 18h. 18th to 1h. 19th (39)	Weather 1h.—7h. 19th (40)
London (Kew)	cm₀mid₀rm₀	crrr₀ffc	cffcm	cm₀
Croydon		crrfo	offcf	offcm
S. Farnborough	r₀pr₀r₀c	crrr₀r₀fo	ofmfr₀c	fromoc
Boscombe Down	cprcm₀	cr₀r₀m₀	cid₀bcm₀	cm₀
Calshot (Soton.)	cm₀r₀r₀c	r₀r₀id₀cm₀	cffcm₀	cm₀, bm₀w
Lympne	cm₀r₀r₀mc		ltpr₀fm	cmfmoir₀
Manston	cpr₀m₀bc	cpr₀m₀	pr₀l₀f	ofr₀r₀d₀d₀
Shoeburyness	bmr₀m₀c	.	cm₀	id₀cm₀
Felixstowe	cpr₀cm₀	bir₀cm	cmlcf	cfrrcm₀
Gorleston	cpr₀bc		cpr₀or₀c	cpr₀c
Mildenhall	cmofr₀r₀m₀	r₀r₀m₀ir₀	cir₀m₀m₀fcm	cmbcm₀w
Cranwell	offid₀	off, bm	cm₀bcm₀	cmof
Birmingham	ofr₀r₀	foir₀	oir₀c	cbcf
Upper Heyford	cr₀r₀fr₀m	mcr₀r₀coid₀	cd₀d₀m₀rm	cm₀m
Ross-on-Wye	cor₀	omcm₀m₀	cir₀c	cb
Hartland Point	cbcir	cpbc	bcc	cpbc
Bristol	cm₀ir₀r₀r₀	cr₀m₀md₀	cmir₀m₀	c, bm₀w
Portland Bill	c	oc	c	bc
Plymouth	ccpr₀	cm₀prtlabc	bbc	bcq, bccpr₀bc
The Lizard	bccq	cw	cprbc	bcc
Scilly (St. Mary's)	c	c	cbcc	cbcc
Guernsey				
Pembroke	cpr₀q	cprbcq	cbc	cbc
Holyhead	m₀qprbc	bcc	cprc	cbcc
Chester (Sealand)	cmr₀m₀c	ir₀cm₀	cm₀c	cm₀bc
Manchester	cm₀	cz₀	cm₀	cm₀mff
Spurn Head	cpr₀c	c	cbc	pr₀bc
Catterick	cr₀mm₀	r₀r₀pr₀m₀	bcm₀pr₀cm₀	bccpr₀m₀
Tynemouth	rrcpr	bcpr	cbcc	cbcc
St. Abbs Head	cir	rc	cir₀	c
Leuchars	cpr₀irr₀r₀c	cir₀ir	rr₀bccw	cwbwcx
Renfrew (Abbots I.)	c	cpr₀	bc	beccm₀
Eskdalemuir	bccpr₀		bcc	cwc
Point of Ayre	bccbc	c	c	c
Tiree	bc		b	bcc
Stornoway	pr₀	c	c	c
Dalwhinnie	cir₀	cir₀o	*	prc
Aberdeen	rrpr₀c	pRr₀	pr₀bc	pr₀bc
Wick	cprir	ircpr	cbc	bcc
Lerwick	bcc	cr₀r₀	cr₀r₀c	c
Blacksod Point	bc	bc	bc	irr
Malin Head	bccbc	bc	bcc	c
Aldergrove	bbcc	cbcb	bbcwbx	bxc*
Birr Castle	bcc	cbc	bcc	cx
Valentia Obsy. †	bbccPHRKq	cbcpr₀bc	bcc bbccw	cwpr₀c
Roches Point	cbc	bc	bcc	c

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m, mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.

With present weather is combined, whenever possible, the general character of the weather.

A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.

Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.

An entry "4-6" means that the cloud amount may be 4, 5 or 6: similarly for other grouped entries.

"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.

"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

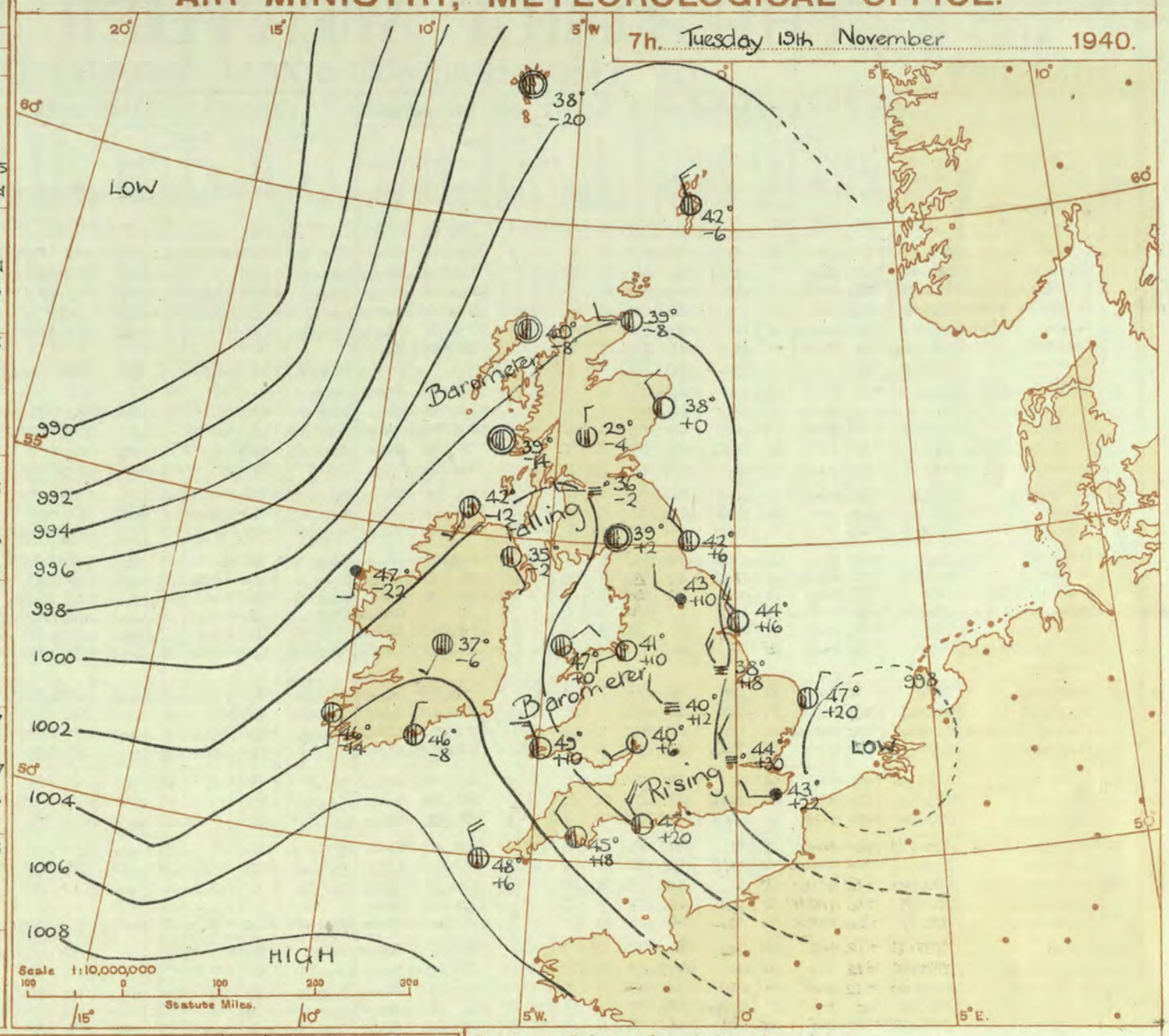
COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Tuesday 19th November 1940.



Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 18th November			18h. G.M.T.			01h. G.M.T. 19th November			07h. G.M.T.		
III	$C_L C_M$	$ww V h N_h$	DDFWN	$C_L C_M$	$ww V h N_h$	DDFWN	$C_L C_M$	$ww V h N_h$	DDFWN	$C_L C_M$	$ww V h N_h$	DDFWN
109	87	02855	03526	40	01753	01413	5-	01064	20214	50	01865	18115
115							52	02854	32227	53	02854	16227
203												
206	87	25855	28287	53	25854	30183	5-	02865	00025	57	02863	26225
210	52	62746	35588	52	62747	02168				53	01863	00024
220				53	01753	04103				51	02763	00128
230	87	02855	02416	46	00862	02313	00	00900	32100			
245	5-	52848	02468	5-	22658	37568	54	02865	28165	55	01862	25224
260	52	61856	32368	52	61746	30368	53	02865	00027	5-	05557	00027
277	87	02854	32527	04	01800	32584	50	00751	30221	50	02764	26128
279										5-	02756	00026
285	3-	02736	30466	6-	63638	32468				23	31634	28385
288	57	64546	02367	5-	63436	28268	5-	81447	30187	5-	08447	20187
273	16	01761	30303									
301	57	61553	04367	5-	05567	30227	5-	02776	32116	00	08490	00013
321	57	02764	30356	5-	05658	31428	00	05500	30310	03	45200	27146
299	8-	02746	10316	50	01743	07313	57	01743	32214	5-	02746	00086
292	86	02845	32486	8-	81656	30386	07	08490	30184	57	05564	28215
310	--	53428	04328							--	01535	26325
316	5-	45138	32368	5-	08448	32358	50	05554	32214	03	47300	30142
333	26	25747	02588	5-	02755	02525	23	02766	02217	47	02061	30127
334	--	08645	32168							--	02544	00026
340	5-	08438	30368	87	25446	30336	50	05665	32415	53	08453	30315
136				86	05564	05115	53	05663	04216	86	25755	31286
336	51	61645	32568	42	03755	04428				10	01753	32813
350	02	22448	04268							50	08357	28267
368												
379	6-	67318	04268	6-	45328	32348	5-	05537	30427	5-	05537	28327
390	5-	67315	00048	--	48100	24169				5-	05548	20328
382	52	62536	00068	5-	05548	26128	5-	45348	28348	5-	08447	28427
438	8-	10748	28228							80	25755	32385
430	5-	05648	24228	5-	51658	28258	5-	08447	30328	53	05545	28327
409				9-	81747	31387	50	00852	30532			

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 19th November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind backing southwest or south, light at first, then freshening; cloudy, rain spreading east tonight, reaching extreme southeast early tomorrow; local fog at first; rather cold today, milder tomorrow.
5 S.W. England 6 South Wales ... 7 North Wales ...	Freshening south to southwest wind, strong locally later; dull rain at times; becoming milder.
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Wind becoming south, light to moderate; cloudy, rain spreading east; local fog at first; rather cold today, milder tomorrow.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland	As 5-7.
15 N. E. Scotland 16 Orkneys and Shetlands	Light south wind freshening, mainly fair at first; rain spreading east later; Average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 5-7.

GENERAL INFERENCE.

A depression over West Iceland will move slightly north and a trough of low pressure now off West Ireland will cross the British Isles, with rain generally. Vigorous secondaries far out in the Atlantic will move east and produce a mild stormy southwest type in our area.

FURTHER OUTLOOK.

Very unsettled, with strong southwest winds or gales in most areas. Milder than of late.

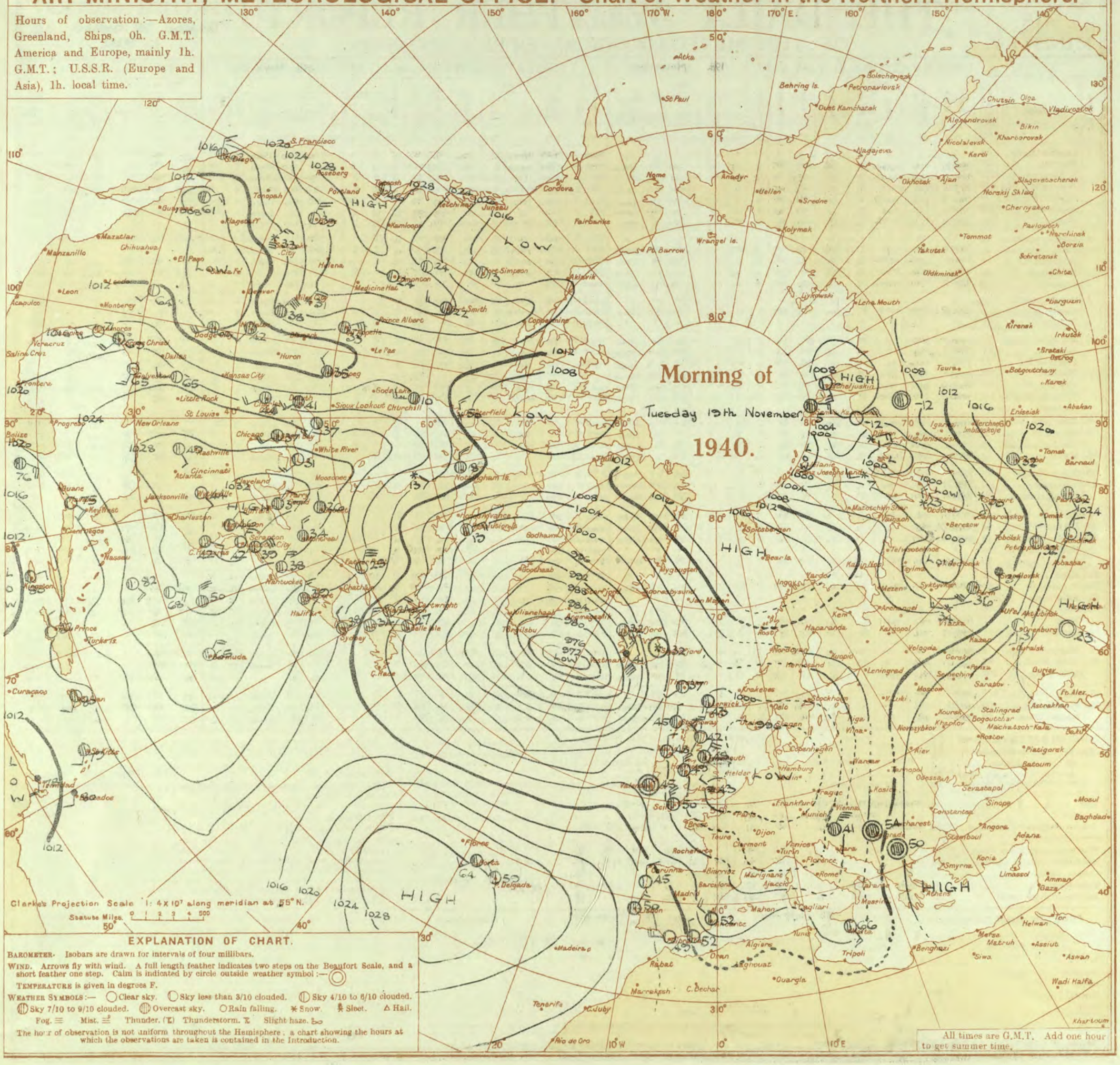
Forecasts issued at 10-30 GMT.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 19th November 1940.

No. 28852.

OBSERVATIONS at 1 hr. G.M.T. 19th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	994.3	+14	WNW	1	f	43	97	3	5	-	-	9+	9+	1900
	S. Farnborough	226	996.2	+22	NW/W	3	ir	44	92	3	5	-	-	10	10	1000
	Boscombe Down	417	997.3	+22	NW'N	3	zo	43	92	6	5	-	-	4-6	4-6	4000
	Calshot (Sthmtn.)	8	996.8	+22	NW'W	3	zo	46	85	6	5	-	-	9+	9+	4000
	Lympne	346	994.4	+22	SW	2	m	44	85	4	5	-	-	9+	9+	2500
	Manston	154	994.0	+22	W/N	3	of	44	92	3	5	-	-	10	10	500
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	993.8	+18	N	3	cf+	43	97	3	5	-	-	9+	9+	3500
	Gorleston	5	994.8	+20	ENE	3	c/r	46	85	6	5	-	-	9+	9+	1500
	Mildenhall	19	994.6	+20	N'W	2	m/f	41	97	4	5	-	-	10	10	1000
	Cranwell	240	996.8	+22	NNW	4	m	41	97	4	5	-	-	9+	9+	2500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	996.8	+28	NNE	3	m	43	92	4	5	-	-	9+	9+	1200
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1000.1	+12	N	4	c	48	92	8	5	1	-	4-6	7-8	1500
	Bristol	209	998.8	+18	N	3	zo	44	85	6	5	-	-	7-8	7-8	1800
	Portland Bill	32	998.1	+20	W	4	c	46	85	8	5	-	-	7-8	7-8	4000
	Plymouth	82	1000.9	+16	NW	3	bc	46	85	8	7	4	-	2-3	4-6	2000
	The Lizard	240	1002.0	+14	NW	5	bc	47	85	8	8	-	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	1003.4	+18	NW'N	5	c	50	85	7	8	-	-	7-8	7-8	1500
	Guernsey	175														
6	Pembroke	142	1001.2	+16	NW'N	5	bcq	49	85	7	5	-	-	4-6	4-6	2500
7	Holyhead	26	999.5	+12	N	5	c	49	85	7	8	-	-	10	10	1800
	Chester (Sealand)	16	999.0	+18	NW'W	3	c	44	85	6	5	-	-	9+	9+	4000
8	Manchester	70	989.0	+22	WNW	2	zo	41	92	6	5	3	-	4-6	9	4000
10	Spurn Head	29	996.6	+14	N'E	3	bc	47	92	7	8	-	-	2-3	2-3	4000
	Catterick	175	998.7	+14	NW	1	°/or	42	97	5	8	-	-	7-8	7-8	2500
	Tynemouth	108	999.5	+16	NE	4		48	85	7	8	-	-	7-8	7-8	2000
11	St. Abbs Head	280	999.4	+8	N	3	iro	45	85	7	5	4	-	7-8	10	2000
	Leuchars	36	1000.7	+8	N	1	c	41	92	8	5	-	-	7-8	7-8	2500
12	Renfrew (Abbots I.)	19	1001.6	+10	-	0	bc	39	92	8	5	3	-	4-6	4-6	3500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1000.2	+16	NE	4	c	47	85	8	5	-	-	9+	9+	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1002.7	-4	NNW	2	c	43	75	7	5	7	-	4-6	7-8	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1000.4	+2	NW	3	bc	42	75	7	5	7	-	4-6	4-6	2500
16	Lerwick	156	999.9	-6	S	3	c	43	97	7	8	7	-	7-8	10	800
17	Blacksod Point	18	1004.6	-6	-	0	b	44	85	8	-	4	-	0	1	-
18	Malin Head	84	1002.7	+4	N	3	c	48	75	8	7	-	2	4-6	7-8	5700
	Aldergrove	268	1002.1	+6	NNW	1	b	37	97	7	5	-	-	Tr	Tr	2000
19	Birr Castle	173	1004.5	+6	WNW	1	c	36	97	8	-	3	-	0	7-8	-
20	Valentia Obsy.	30	1007.1	-2	-	0	c	46	92	8	5	-	-	9+	9+	2500
	Roches Point	22	1005.3	+8	N	3	c	46	85	8	5	-	-	7-8	7-8	2500

OBSERVATIONS at 7 hr. G.M.T. 19th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1000.2	+24	NNW	2	zo	45	85	5	5	-	-	10	10	1500	1	*
Croydon	999.7	+30	NNW	2	m	44	92	4	5	2	-	1	10	800	1	*
S. Farnborough	1001.0	+26	NW	3	zo	43	92	5	5	7	-	9+	10	900	1	*
Boscombe Down	1001.8	+22	NW'W	1	zo	40	92	6	5	3	-	2-3	4-6	2000	1	*
Calshot (Sthmtn.)	1001.3	+22	NW	2	zo	43	92	6	5	4	-	2-3	4-6	4500	1	0
Lympne	998.9	+22	W	2	iro	43	97	5	6	2	-	9	10	900	1	§
Manston	998.4	+22	WNW	4	dodo	44	92	5	5	2	-	9+	10	500		*
Shoeburyness	999.4	+22	NW	3	c	43	97	6	5	-	-	9+	9+	4000	1	*
Felixstowe	998.1	+26	NW'N	3	ido	43	97	6	5	3	-	2-3	9+	4000	1	2
Gorleston	998.4	+20	NE'N	1	c	47	92	6	5	-	-	9+	9+	1600	1	2
Mildenhall	999.1	+22	NNW	3	zo	41	97	6	-	3	-	0	7-8	-	1	*
Cranwell	1001.0	+18	NNW	3	F	38	97	1	-	-	-	10	10	<150	1	*
Birmingham	1002.0	+12	NW	2	bcf	40	97	3	5	-	-	4-6	4-6	4000	1	*
Upper Heyford	1001.3	+20	NNW	2	m	41	97	4	5	-	-	10	10	600	1	*
Ross-on-Wye	1002.1	+6	SW	1	b	40	92	7	5	-	1	1	1	2500	1	*
Hartland Point	1002.9	+10	NNW	4	bc	48	85	8	8	-	-	4-6	4-6	2000	1	4
Bristol	1002.8	+20	WNW	1	zo	53	92	6	5	3	-	1	2-3	3000	1	*
Portland Bill	1003.0	+20	NW	4	bc	47	85	8	5	-	-	4-6	4-6	4000	1	3
Plymouth		+18	NW'W	2	c		92	6	4	4	1	2-3	7-8	4500	1	2
The Lizard	1004.7	+10	NW	4	c	47	75	8	8	6	-	7-8	7-8	2000	1	2
Scilly (St. Mary's)	1005.3	+6	NW'N	4	c	48	75	8	8	6	-	4-6	7-8	1500	1	3
Guernsey																
Pembroke	1003.4		NW	3	bc	49		7	8	4		2-3	4-6	2500	1	2
Holyhead	1001.4	0	NE	2	c	47	85	8	5	7	1	2-3	9	2500	1	2
Chester (Sealand)	1001.7	+10	WSW	1	fg	41	92	5	-	3	-	0	2-3	-	1	*
Manchester	1001.7	+10	-	0	cF+	36	97	2	5	-	-	9	9	4500	1	*
Spurn Head	999.9	+16	NW	3	bc	44	92	7	-	4	-	0	4-6	-	0	2
Catterick	1001.5	+10	WNW	2	pr	43	92	6	8	6	-	7-8	9+	2500	1	*
Tynemouth	1000.4	+6	NW	3	c	42	85	6	2	-	-	7-8	7-8	2800	1	2
St. Abbs Head	1000.7	+6	NW	2	c	44	85	7	5	2	-	7-8	10	2000	0	2
Leuchars	1000.7	-2	WSW	2	c	38	92	8	5	3	-	4-6	7-8	4000	1	*
Renfrew (Abbots I.)	1002.0	-2	W	1	fg	36	97	6	5	3	6	4-6	10	3500	1	*
Eskdalemuir	1001.6	+2	-	0	c	39	92	8	5	-	-	9+	9+	1500	1	*
Point of Ayre	1001.4	0	SE	1	c	42	92	8	-	4	6	0	9+	-	0	1
Tiree	999.5	-14	-	0	c	39	92	8	5	-	-	9+	9+	2800	0	2
Stornoway	1001.2	-8	-	0	c	40	85	7	5	7	-	7-8	9+	2500	1	0
Dalwhinnie	1001.6	-4	N	1	c	29	92	8	5	1	-	1	9+	2500	3	*
Aberdeen	1000.2	0	NW	2	bc	38	92	6	5	-	9	1	2-3	4000	1	3
Wick	999.6	-8	W	2	c	39	85	8	5	6	6	4-6	7-8	2500	1	2
Lerwick	998.6	+6	NNW	3	c	42	75	7	5	7	-	7-8	9	1500	1	*
Blacksod Point	1001.2	-22	S	2	roro	47	92	7	6	-	-	10	10	800	1	3
Malin Head	1000.6	-12	S'W	1	c	42	85	7	5	7	-	4-6	9	4000	0	3
Aldergrove	1002.1	-2	SE'S	1	cjf	35	97	7	-	3	7	0	9+	-	1	*
Birr Castle	1003.8	-6	SSW	1	c	38	97	7	5	-	-	10	10	2500	1	*
Valentia Obsy.	1004.3	-14	S	2	c/pr	46	92	7	5	1	-	9	10	1500	1	3
Roches Point	1004.5	-8	N'E	1	c	46	85	7	5	-	-	9	9	1500	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 18th Hrs. (36)
London (Kew)	45	42	33	8	-	0.0
Croydon	44	41	39	7	0.3	0.0
S. Farnborough	47	42	37	3	0.4	0.0
Boscombe Down	46	39	35	2	0.1	0.0
Calshot (Sthmtn.)	(49)	42	39	0.5	-	0.3
Lympne		40	35		Tr	0.7
Manston						
Shoeburyness	48	42	39	1	Tr	0.7
Felixstowe						
Gorleston	50	43	34	0.6	2	1.1
Mildenhall	46	39	30	0.2	2	0.0
Cranwell	45	37	36	0.2	Tr	0.0
Birmingham	44	39	33	4	1	0.0
Upper Heyford	43	41	38	5	1	*
Ross-on-Wye	47	40	31	1	0.5	0.0
Hartland Point	49	45	45	0.4	3	0.0
Bristol	49	38	29	0.1	Tr	0.8
Portland Bill	50	46	*	-	-	*
Plymouth	51	44	37	1	1	1.3
The Lizard	51	45	*	-	0.5	3.8
Scilly (St. Mary's)	51	48	*	-	-	5.4
Guernsey						
Pembroke			*	3	1	0.6
Holyhead	50	45	41	0.1	1	0.7
Chester (Sealand)	47	41	33	0.1	-	0.0
Manchester	48	35	28	Tr	Tr	0.1
Spurn Head	49	43	*	0.2	Tr	0.5
Catterick		42	38	3	6	0.0
Tynemouth	48	40	37	11	-	*
St. Abbs Head	47	44	*	2	0.3	*
Leuchars	47	37	30	3	1	0.0
Renfrew (Abbots I.)	49	35	30	0.1	-	0.5
Eskdalemuir		37	32		-	0.3
Point of Ayre	49	42	*	-	-	2.3
Tiree			*	-	-	6.0
Stornoway	48	37	*	-	-	2.4
Dalwhinnie	41	28	20	3	1	0.0
Aberdeen	47	38	33	12	1	0.0
Wick	48	38	*	1	-	*
Lerwick	48	41	*	Tr	1	0.8
Blacksod Point	52	40	*	0.4	0.4	*
Malin Head	50	39	*	-	-	6.2
Aldergrove	50	33	27	-	-	5.0
Birr Castle	51	34	30	-	-	9.4
Valentia Obsy.	52	43	34	2	0.2	3.8
Roches Point	51	45	*	-	-	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew	18	cmomid,rmo	crrroffc	cffcmo	45	42	33	8	-	0.0	*	*	5
Croydon	217		crrfo	offcm	44	41	39	7	0.3	0.0	*	*	4
Greenwich (Royal Observatory)	149	crorm	rRcm	cm	45	41	34	10	-	0.0	97	91	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	46	41		10		0.0	98	95	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	45	40	34	13	0.4	0.0	96	85	*
Camden Square	110	e	o	*	45	41	35	11	-	*	*	92	*
Kensington	80	cmtr	orcbc	*	45	42	35	9	2		96	92	*
Hampstead Observatory	450	orf	orf	o	45	39	34	9	2	0.0	*	99	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 19th

SOUTH KENSINGTON.

Max.	Time.	Min.	Time.

KEW OBSERVATORY.

Max.	Time.	Min.	Time.
defective record.			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 18th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 19th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											•	•		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
THE BEAUFORT SCALE OF WIND is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22—Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6¼ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30—Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Precipitous.
4 Rough.	9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Wednesday 20th November, 1940.
No. 28,853.

OBSERVATIONS at 13h. G.M.T. 19th November.

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Med. (10)	High (11)	Amount Low 0–10 (12)	Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1003.9	+10	W'S	2	zo	45	85	5	8	-	-	9+	10	1500
	Croydon	1003.5	+10	WNW	1	zo	44	92	5	5	3	-	9	9+	1600
	S. Farnborough	1004.4	+10	WNW	2	zo	44	85	6	5	-	-	9+	9+	800
	Boscombe Down	1004.1	+2	NW	1	zo	44	85	6	1	-	6	Tr	7-8	1000
	Calshot (Soton.)	1004.4	+6	NNW	2	zo	46	85	6	-	4	6	3	4-6	-
	Lympne	1003.5	+18	N	3	zo	45	92	6	5	-	-	10	10	800
	Manston	1002.9	+16	W'N	4	zo	45	92	6	5	3	-	7-8	9	400
2	Shoeburyness	1003.2	+14	WNW	3	c	48	85	6	5	-	-	9	9	2500
	Felixstowe	1002.3	+18	NW'N	3	zo	48	85	5	1	4	-	Tr	Tr	2000
	Gorleston	1001.9	+14	NNW	2	c	50	85	7	8	3	-	4-6	7-8	2500
	Mildenhall	1002.8	+10	W	2	f	42	97	3	-	-	-	10	10	<150
	Cranwell	1003.0	+2	W	1	zo	45	92	6	-	7	8	0	7-8	-
3	Birmingham	1003.5	0	WSW	2	bc	46	85	5	1	-	4	Tr	4-6	4000
	Upper Heyford	1004.1	+10	SW	1	zo	43	92	5	5	-	-	9+	9+	800
4	Ross-on-Wye	1003.8	0	SW	2	c	47	75	7	-	-	2	0	7-8	-
5	Hartland Point	1004.3	0	W	4	c	48	85	8	8	9	3	2-3	9+	2000
	Bristol	1004.4	0	—	0	c	48	75	7	-	3	6	0	9+	-
	Portland Bill	1004.8	+6	W	3	c	50	92	8	5	-	-	10	10	4000
	Plymouth	1005.4	+2	WNW	3	c	50	75	7	8	7	6	2-3	9+	4000
	The Lizard	1005.2	-4	W	3	c	50	75	8	8	2	-	9	10	2700
	Scilly (St. Mary's)	1005.3	-10	SW'W	3	c	51	85	8	8	7	-	7-8	10	2000
	Guernsey														
6	Pembroke	1003.4	+2	W'S	3	c	49	85	8	8	7	-	7-8	9+	3000
7	Holyhead	1001.6	-6	SW'S	3	c	49	85	7	8	7	2	4-6	9+	2800
	Chester (Sealand)	1002.5	-2	S'E	1	zo	46	85	5	-	7	2	0	9+	-
8	Manchester	1002.5	-2	S'W	1	m/f	43	85	4	-	3	-	0	7-8	-
10	Spurn Head	1002.2	+4	W	3	c	47	85	6	-	1	1	0	9	-
	Catterick	1001.8	-4	—	0	zo	48	75	6	1	7	-	1	7-8	2800
	Tynemouth	1001.7	-4	SW	2	zo	46	85	5	8	-	-	7-8	7-8	3000
11	St. Abbs Head	988.5	-6	SW	2	c	44	85	8	8	7	-	7-8	9+	2500
	Leuchars	991.4	-12	S	1	zo	44	85	5	5	7	-	7-8	9+	3200
12	Renfrew (Abbots I.)	999.5	-24	ENE	1	cf	44	85	3	5	3	-	4-6	9+	7000
	Eskdalemuir	1000.1	-12	SSW	3	c	42	92	7	5	-	-	10	10	450
	Point of Ayre	1000.7	-6	SW	2	c	49	85	8	8	3	-	7-8	9+	2500
13A	Tiree	995.3	-24	S	4	roro	46	97	7	-	2	-	10	10	1500
13B	Stornoway	995.7	-22	S	5	c	46	85	8	5	2	-	4-6	9+	2500
15	Dalwhinnie	998.0	-16	S	3	c	39	85	8	5	3	-	7-8	9+	1500
	Aberdeen	998.8	-8	S	2	bc	44	75	5	-	9	-	0	4-6	-
	Wick	997.0	-16	SSW	2	c	43	75	8	5	7	9	4-6	9	2500
16	Lerwick	996.9	-12	WSW	3	c	43	75	8	5	7	-	4-6	7-8	1500
17	Blacksod Point	995.9	-30	S	6	RR	46	97	6	6	-	-	10	10	<150
18	Malin Head	996.5	-28	SSW	3	c	46	75	8	5	2	-	4-6	7-8	2500
	Aldergrove	999.4	-24	SSW	2	c	44	85	7	5	7	2	1	9+	2500
19	Birr Castle	1001.0	-18	S	2	c/r	46	92	7	6	1	-	4-6	10	1500
20	Valentia Obsy. †	999.6	-30	S	5	iro	49	85	8	6	2	-	9+	10	1500
	Roches Point	1001.7	-24	WSW	2	c/r	49	85	8	6	2	-	7-8	9+	1500

OBSERVATIONS at 18h. G.M.T. 19th November.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Med. (24)	High (25)	Amount Low 0–10 (26)	Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1005.6	+10	S	6	zo	42	92	6	5	-	-	4-6	4-6	2500	1	*
Croydon	1005.0	+10	SW	1	m	42	92	4	5	-	-	4-6	4-6	1500	1	*
S. Farnborough	1005.7	+4	S'W	2	zo	41	97	5	-	7	-	0	9+	-	1	*
Boscombe Down	1004.8	+4	S	2	zo	44	92	5	5	-	-	9	9	1600	0	*
Calshot (Soton.)	1005.5	+8	SW'S	2	zo	47	92	5	5	-	-	10	10	4500	1	1
Lympne	1006.3	+16	W'N	2	m	41	97	4	5	3	-	9	10	700	1	§4
Manston	1005.7	+20	SSW	1	zo	42	92	5	5	-	-	10	10	400		*
Shoeburyness	1005.4	+14	WNW	2	c	43	97	6	5	-	-	10	10	1500	1	*
Felixstowe	1004.8	+18	WNW	3	of	43	97	3	5	-	-	10	10	300	1	2
Gorleston	1004.0	+10	W	2	F-	45	92	1	-	-	-	10	10	<150	1	2
Mildenhall	1004.5	+8	SW	2	zo	43	92	5	5	-	-	9+	9+	1000	1	*
Cranwell	1003.7	+2	SW'W	3	bcf	40	97	3	-	3	-	0	2-3	-		*
Birmingham	1003.6	0	SSW	2	c	43	97	6	-	7	-	0	9+	-	1	*
Upper Heyford	1004.3	+4	-	0	zo	42	92	5	5	-	-	2-3	4-6	4000	1	*
Ross-on-Wye	1003.9	0	SW	3	zo	45	85	5	5	-	-	9+	9+	2500	1	*
Hartland Point	1003.1	-6	WSW	3	c/r	49	92	8	5	7	-	7-8	10	1500	1	3
Bristol	1004.7	+4	SSW	3	zo	47	85	6	5	-	-	9+	9+	3000	1	*
Portland Bill	1005.3	+12	W	3	c	50	92	7	5	-	-	10	10	4000	1	3
Plymouth	1005.4	+2	SSW	4	zo	49	85	6	5	7	7	4-6	9+	2000	1	2
The Lizard	1004.6	-4	SSW	5	c/pr	50	92	8	8	2	-	9	10	2000	1	2
Scilly (St. Mary's)	1003.5	-12	SSW	4	c/r	50	85	7	8	7	-	7-8	10	1500	1	2
Guernsey																
Pembroke	1002.0	-8	SW'W	5	c/r	49	97	7	8	2	-	7-8	10	1600	1	2
Holyhead	999.4	-10	S	4	iro	49	97	6	5	7	-	7-8	10	2200	1	2
Chester (Sealand)	1001.5	-4	SSE	2	zo	44	85	5	5	7	-	1	7-8	4000	1	*
Manchester	1001.5	-10	S'E	2	zo	44	85	5	5	-	-	7-8	7-8	4500	1	*
Spurn Head	1002.6	+2	S'E	3	bc	44	92	6	-	4	-	0	2-3	-	0	1
Catterick	1001.0	-2	S'E	2	bcf+	44	85	3	5	-	-	4-6	4-6	5000	1	*
Tynemouth	1001.0	-8	SW	3	c	45	85	6	8	-	-	9	9	3200	1	2
St. Abbs Head	998.1	-6	SSE	2	c	42	92	6	5	4	-	4-6	7-8	2500	0	2
Leuchars	996.4	-16	S	2	zo	44	85	5	5	7	-	7-8	10	3200	1	*
Renfrew (Abbots I.)	996.2	-22	S'E	3	iro	45	85	5	5	2	-	4-6	10	2000	1	*
Eskdalemuir	998.0	-14	SW'S	3	c	41	97	6	5	-	-	10	10	450	1	*
Point of Ayre	998.0	-14	SSW	4	c	47	85	8	4	7	-	2-3	9+	1500	0	2
Tiree	989.2	-28	SSE	6	rr	46	97	6	-	2	-	10	10	1500	-	
Stornoway	988.5	-28	SSE	7	rr	46	92	6	5	2	-	9	10	1500	1	4
Dalwhinnie	993.7	-26	SSW	3	bc	39	85	8	5	-	-	4-6	4-6	1500	1	*
Aberdeen	996.0	-16	SW	2	c	42	92	5	-	7	-	0	7-8	-	1	2
Wick	993.2	-18	SSW	4	c	45	75	8	5	7	-	7-8	10	1000	1	2
Lerwick	993.9	-14	S'E	4	c/pr	43	85	7	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	990.3	-26	S	7	dr	51	97	6	6	-	-	10	10	<150	2	4
Malin Head	989.6	-46	SW'S	5	c	45	85	7	6	-	-	9	9	1500	0	5
Aldergrove	995.1	-28	S	3	c	44	85	7	5	2	-	9	10	1600	1	*
Birr Castle	995.5	-24	S	2	c/r	46	92	7	6	1	-	4-6	10	1500	1	*
Valentia Obsy. †	993.2	-34	S	5	dd	52	97	5	5	-	-	10	10	800	1	4
Roches Point	997.6	-24	SW'S	6	dd	49	97	6	5	-	-	9+	9+	800	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 19th (37)	13h.—18h. 19th (38)	18h 19th to 1h. 20th (39)	1h.—7h. 20th (40)
London (Kew)	cmo	cbcmo	bcbmow	bcwrromoc
Croydon	cmomcm	cmo bcm	bm	cmomor
S. Farnborough	cmo	cmo	bcmfcromo	cdroro
Boscombe Down	bccmo ⊕	cmo	bcmoc	cproCrr
Calshot (Soton.)	bccbcmo	cmo⊕cmo	cmow	cdorrRRmo
Lympne	cmocdo	cmocm	bmxmow	cmowb
Manston		cmo	bcmbmwcmw	cmowbc
Shoeburyness	moc	cmo	cmobw	bwc
Felixstowe	cmobmo	bmomof	pffbcmmo	b,cmo
Gorleston	cbcc	bcoff	ofczozo	czobc
Mildenhall	bmoof	ofcmo	cmobmfmo	bmocmocir
Cranwell	oFF,cmo	cm,bcff	bcfmbfcff	omciromo
Birmingham	fbc	bcc	cbc	bccrq
Upper Heyford	omcmo	cmobcmo	bcfcmo	cmodorrRR
Ross-on-Wye	bbcc	czo	c	orrdo
Hartland Point	bcc	cp	cpiro	ciroc
Bristol	bmoxcmmoc	cmo	ciromo	crrmo
Portland Bill	bcc	c	c	orr
Plymouth	bcmcmoc	ccmo	irocroro cir	dodoRRdodo
The Lizard	c	cprc	cidc	ddrrc gale
Scilly (St. Mary's)	c	cr	creido	bidomc
Guernsey				
Pembroke		Rc	cqrororomo	pqrrc gale
Holyhead	cjfmoc	ciromoc	iroroc	rrRmoc
Chester (Sealand)	bccmoffmc	cmo	crmoc	moiRrrc
Manchester	bcfcm	cm,mo	cmororo	proroorr
Spurn Head	cfc	cbc	cfcmw	cqpr gale
Catterick	procczo	ccmocf	bcfrom	rr roromo
Tynemouth	c	c	coiro	oirorr
St. Abbs Head	c	cmo	cqpr	crr
Leuchars	c	cmo	cirorrmo	crridoRir
Renfrew (Abbots I.)	cmomff	cfzmoiro	airodoRR	crdrorrRR
Eskdalemuir	c	cdomo	orr	roRR
Point of Ayre	c	c	roro	rrc
Tiree	coro		p	oRro
Stornoway	c	crr	crr gale	crr
Dalwhinnie	c	cpr	*	ciro
Aberdeen	bbczo	bcczo	ciroc	ciro
Wick	c	c	prr	prrrr
Lerwick	c	cpro	cpr	cir gale
Blacksod Point	rr	dr	rr	RRbcq
Malin Head	c	cprocproc	cprocirooc	cjpcprc
Aldergrove	jfbcc	ccirodoc	rorodromoo	iRir mo
Birr Castle	cir	cjr	cir	cprbc
Valentia Obsy. †	ciro	cirodd	odddodoidido	oidbcprocbc
Roches Point	idoirc	irdd	ddrr	rrbcb

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ. line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
⊕ Solar halo. Ⓛ lunar halo. Aurora.

With present weather is combined, whenever possible, the general character of the weather.

A "solidus" divides actual existing weather from preceding conditions thus :—bc/r, fair weather after rain ; —, has decreased ; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6: similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations :—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 . . Ground dry.
1 . . ,, wet.
2 . . ,, flooded.
3 . . ,, frozen hard and dry.
4 . . ,, partly covered with snow or hail.
5 . . ,, covered with ice or glazed frost.
6 . . ,, covered with thawing snow.
7 . . Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 . . ,, covered with snow, less than 6 ins., but ground frozen.
9 . . ,, covered with snow greater than 6 ins. deep.
– . . Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

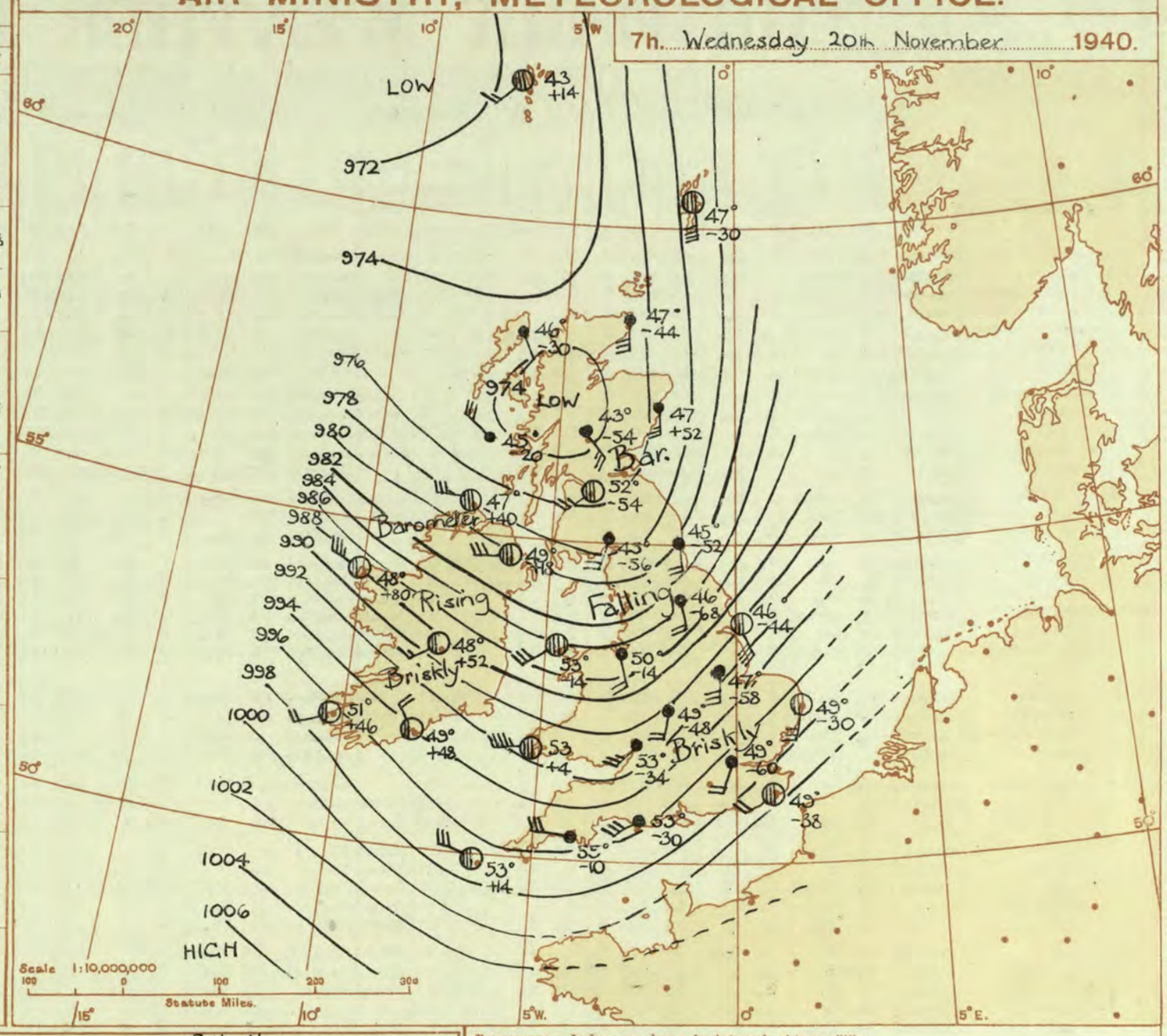
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Wednesday 20th November 1940.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 19th November			18h. G.M.T.			01h. G.M.T. 20th November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109				52	02757	16527	82	22748	13678	62	64644	49568
115	52	02854	16327	52	02944	16327	52	81734	16487	52	62735	20488
203												
206	57	02864	28226	52	22865	22268	57	02853	00084	52	62745	16228
210	07	02890	12126	57	02864	6127	5-	61875	18365	5-	22847	12367
220	63	64735	14468	6-	66528	16668						
230	57	02844	12128	62	61745	16368	6-	62538	16268	5-	22648	53568
245	57	02866	24227	51	05462	16328	02	62648	80568	62	64536	49768
260	57	02865	16228	57	05665	18327	57	22754	18363	57	64758	50668
277	87	02853	18227	5-	22768	16368	62	62638	10568	62	64636	18668
279	52	08465	24228									
285	8-	02746	18426	5-	02637	24527				6-	64738	18668
288	53	05663	17226	07	05590	17224	51	61455	17428	02	64438	50468
273	33	10654	19456							33	65543	26755
301	57	05564	20146	57	45256	16348	02	05548	15568	6-	62638	16568
321	00	05690	27115	03	43390	17243	07	05550	16315	6-	6468	49668
299	87	02644	00015	5-	08444	22314	53	08475	20428	5-	64538	18668
292	53	05683	00025	50	47352	14122	07	53400	14248	52	62548	49468
310	--	01634	24314	--	48209	24320				--	67209	16649
316	03	45330	20145	03	45390	22246	53	62556	16368	5-	64648	51568
333	82	05747	00027	57	05754	20425	62	62644	18858	2-	22647	55667
334	--	02785	20105							--	51654	18754
340	07	05690	18116	53	05673	18225	5-	22647	16567	52	61746	49668
136	86	05653	26315	--	46109	20249	03	03490	18342	52	61646	45668
336	53	02744	32317	52	02731	20418				61	82754	24687
350	5-	05538	24228	5-	47337	00027						
368												
379	27	05654	30117	03	05690	20114	67	61544	18428	6-	64413	16553
390	5-	08437	28127				64	45390	17242	6-	61646	18563
382	5-	05647	23227	03	05590	00013	57	05563	14327	62	84536	15565
438	51	02744	30315							9-	64548	18728
430	50	05643	30214	07	47390	00445	53	01752	16315	6-	64538	51668
409	57	02845	24327	52	02743	16368	5-	61748	16628	5-	21638	57568

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 20th November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Strong to gale west to northwest wind, moderating later. Bright periods and occasional showers. Average temperature.
5 S.W. England 6 South Wales ...	Strong to gale northwest wind, moderating later and backing southerly. Bright periods and occasional showers today, rain tomorrow.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	As 1-4.
13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland	Strong to gale westerly wind, decreasing to moderate or fresh later. Bright intervals and occasional heavy showers. Average temperature.
15 N. E. Scotland 16 Orkneys and Shetlands	Strong to gale southwesterly wind, increasing to moderate or fresh later. Bright intervals and occasional showers. Average temperature.
17 N. W. Ireland 18 N. E. Ireland	Strong to gale west to northwest wind, falling light tomorrow. Bright periods and local showers. Average temperature.
19 S. E. Ireland 20 S. W. Ireland	As 3-6.

GENERAL INFERENCE.

A deep depression over Iceland is moving northeast and a trough extending to Scotland and southwest England is moving quickly east. Bright periods and occasional showers will occur generally at first, but showers will be heavier in west and north Scotland. A disturbance north of the Azores will move east-northeast and bring rain to southwest districts tomorrow. Gales will occur in most districts today.

FURTHER OUTLOOK.

Continuing Unsettled.

Gale warnings issued in all districts including Dogger Bank area. Time of issue 1855 and 2300 19/11/40. and 0240 and 0800 20/11/40.

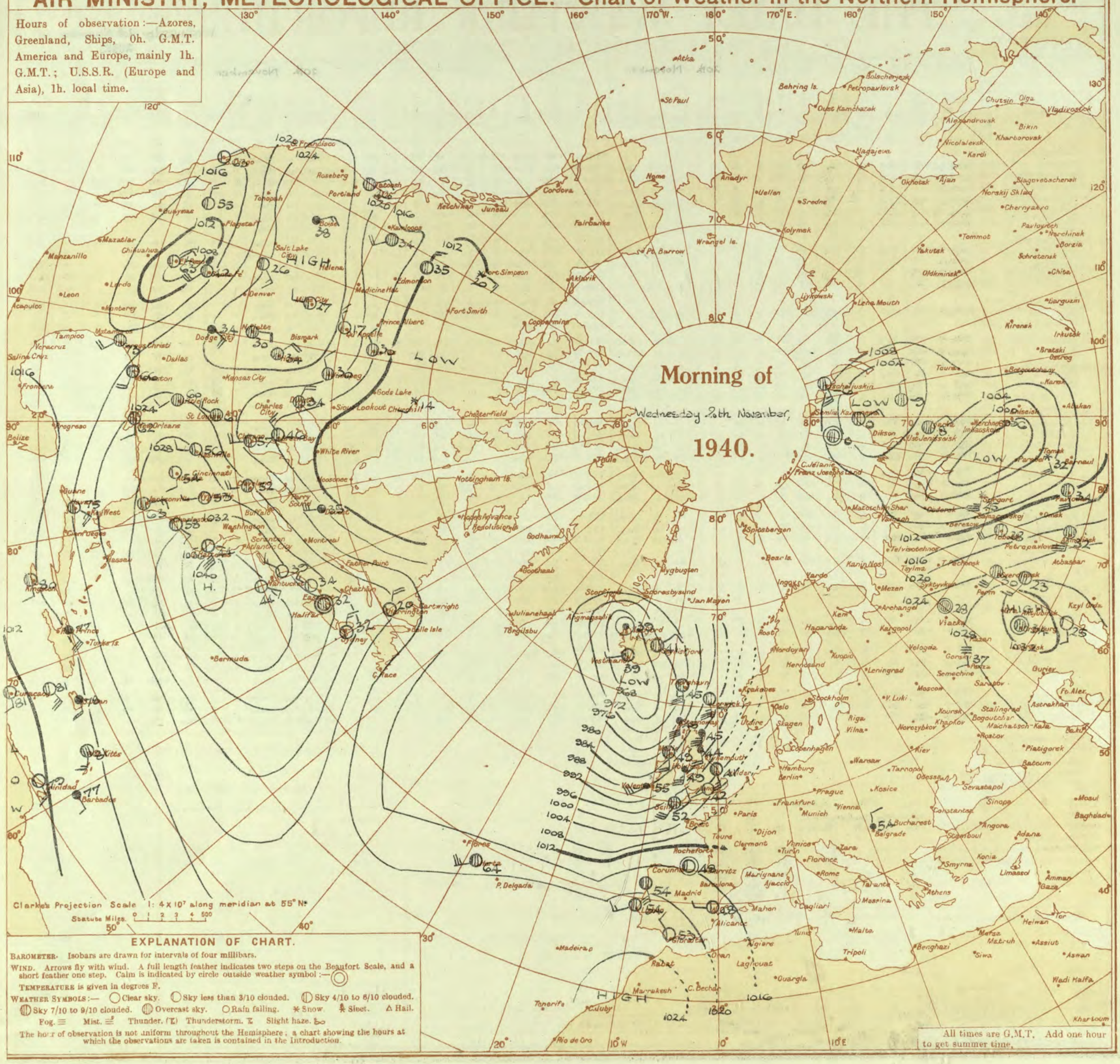
Forecasts issued at 10.30 GMT

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.
268/3935 (W.8045) 9705 9000 6.940

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 20th November 1940.

No. 28853.

OBSERVATIONS at 1 hr. G.M.T. 20th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1004·6	−12	SW	2	m	42	97	4	5	-	-	Tr	Tr	2500
	S. Farnborough	226	1003·7	−18	S'E	3	c/r	42	92	5	5	3	-	7-8	7-8	4000
	Boscombe Down	417	1002·2		S'E	4	pr	47	92	7	5	7	-	4-6	9	4000
	Calshot (Sthmtn.)	8	1003·6	−18	SSW	5	c/pr	51	85	6	8	7	-	4-6	10	2000
	Lympne ...	346	1006·4	−6	WSW	1	zo	43	97	6	2	-	-	1	1	3000
	Manston ...	154	1005·9	−10	SSE	2	zo	42	97	5	5	-	-	9	9	3000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1004·7	−10	SSW	3	zo	45	92	6	-	3	-	0	2-3	-
	Gorleston ...	5	1005·2	−8	SSW	3	c	41	92	5	5	-	-	9+	9+	800
	Mildenhall ...	19	1002·8	−18	S	4	zo	40	92	5	-	-	-	0	0	-
	Cranwell ...	240	1001·2	−20	S	4	cf	38	97	3	-	3	-	0	7-8	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1002·3	−18	SSE	3	zo	42	92	5	-	7	-	0	7-8	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	996·4	−42	SSW	6	c/r	50	97	7	5	2	-	7-8	10	1500
	Bristol ...	209	1000·8	−32	S	4	zo	49	75	6	5	7	-	7-8	9	2500
	Portland Bill ...	32	1002·6	−28	SW	5	c	52	92	7	5	-	-	10	10	4000
	Plymouth ...	82	1001·0	−30	SSW	5	ir	51	97	6	6	2	-	4-6	10	1000
	The Lizard ...	240	997·6	−36	S	7	c	52	97	6	5	-	-	10	10	1000
	Scilly (St. Mary's)	163	996·7	−36	SSW	6	c/d	52	97	5	5	2	-	7-8	10	800
	Guernsey ...	175														
6	Pembroke ...	142	994·2	−26	S'W	8	ro ro	50	97	5	5	-	-	10	10	1000
7	Holyhead ...	26	989·7	−54	S	6	ro ro	49	97	6	6	2	-	7-8	10	700
	Chester (Sealand)	16	994·6	−42	SE'S	4	zo	46	85	6	5	2	-	9	10	1000
8	Manchester ...	70	995·9	−40	SSE	4	c/r	45	85	6	5	7	-	7-8	10	1500
10	Spurn Head ...	29	999·2	−20	SSE	5	c	41	97	5	5	-	-	7-8	7-8	1500
	Catterick ...	175	996·0	−30	S	4	ir o	44	85	4	5	2	-	4-6	10	1500
	Tynemouth ...	108	994·7	−36	S	4	o	44	92	6	-	2	-	10	10	2200
11	St. Abbs Head	280	990·1	−42	S	6	pr	44	85	7	5	2	-	7-8	9+	2000
	Leuchars ...	36	989·0	−36	S	2	rr	44	97	6	5	-	-	10	10	900
12	Renfrew (Abbots I.)	19	986·7	−50	SSE	4	ro ro	46	92	4	5	-	-	10	10	1300
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	989·7	−44	SSW	5	ro ro	49	97	8	8	2	-	4-6	10	800
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	978·4	−26	S	8	ro ro	48	97	7	5	2	-	9+	10	1000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	983·4	−40	S	6	c	46	85	7	5	6	-	4-6	9	1500
16	Lerwick ...	156	984·8	−46	S	7	c/pr	47	85	7	8	2	-	7-8	10	800
17	Blacksod Point	18	981·1	−50	S	5	RR	50	97	6	6	-	-	10	10	2150
18	Malin Head ...	84	981·3	−26	S	4	c	49	85	7	5	-	-	7-8	7-8	2500
	Aldergrove ..	268	984·6	−58	S'E	4	id o	48	97	6	6	-	-	10	10	600
19	Birr Castle ...	173	984·3	−40	SSW	3	ir	53	97	7	6	2	-	4-6	10	1500
20	Valentia Obsy.	30	997·4	−30	SW'S	6	id o	55	97	6	5	-	-	10	10	800
	Roches Point	22	989·3	−32	S'W	5	rr	51	97	6	6	2	-	7-8	10	800

OBSERVATIONS at 7 hr. G.M.T. 20th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	995·6	−48	SSW	5	c	49	92	7	5	-	-	10	10	800	1	*
	Croydon ...	995·4	−60	S'W	4	rr	49	92	6	5	-	-	10	10	1500	1	*
	S. Farnborough	995·7	−46	S	5	ro	49	92	6	5	2	-	9	10	1000	2	*
	Boscombe Down	994·2	−40	S'W	6	rr	50	97	5	6	2	-	10	10	1000	1	*
	Calshot (Sthmtn.)	996·6	−38	SSW	7	RR	51	97	6	6	-	-	10	10	400	1	4
	Lympne ...	1001·2	−38	SW	4	c	49	85	7	5	7	-	9+	9+	1500	1	§
	Manston ...	1000·0	−34	S	6	zo	49	85	6	5	3	-	4-6	4-6	800		*
2	Shoeburyness ...	998·4	−42	S'W	4	c	50	85	7	5	-	-	9+	9+	1500	1	*
	Felixstowe ...	998·7	−34	S'W	6	zo	49	85	6	5	3	-	2-3	9+	3000	1	4
	Gorleston ...	997·2	−30	S'W	6	bc	49	85	7	-	5	-	0	4-6	*	1	3
	Mildenhall ...	995·2	−46	S	5	ir o	48	85	7	5	2	-	4-6	10	2000	1	*
	Cranwell ...	990·6	−58	S	6	ir o	47	85	5	6	-	-	10	10	800	1	*
3	Birmingham ...	989·0	−48	SSW	4	ir	49	97	6	6	-	-	10	10	800	1	*
	Upper Heyford	993·4	−46	SSW	4	RR	49	97	5	6	2	-	7-8	10	500	1	*
4	Ross-on-Wye	990·1	−34	SW'S	5	id o	53	92	6	6	-	-	0	10	1500	1	*
5	Hartland Point	992·5	+6	WSW	6	c	53	97	8	8	2	-	7-8	10	1500	1	4
	Bristol ...	992·3	−30	SSW	5	ir o	52	97	7	6	7	-	9+	9+	900	1	*
	Portland Bill ...	995·6	−30	SW	6	rr	53	92	7	5	-	-	10	10	2500	1	4
	Plymouth ...	995·8	−10	W	6	id o	55	97	8	5	1	-	9	10	1600	1	5
	The Lizard ...	996·1	−20	W	7	c	54	97	8	8	2	-	9	10	1000	1	4
	Scilly (St. Mary's)	995·9	+14	W'N	6	c	53	97	7	5	7	-	7-8	9+	1000	1	3
	Guernsey ...																
6	Pembroke ...	989·0	+4	W'S	9	cq	53	85	7	6	-	-	9	9	1000	1	4
7	Holyhead ...	985·0	−14	SW	6	c/r	53	97	7	5	-	-	10	10	2500	1	3
	Chester (Sealand)	985·3	−14	S'E	4	ro ro	50	92	6	6	2	-	4-6	9+	1500	1	*
8	Manchester ...	985·3	−50	S'E	5	c/r	50	92	6	6	2	-	7-8	10	700	1	*
10	Spurn Head ...	988·0	−44	SSE	8	cq	46	92	6	6	1	-	9-6	10	4000	0	3
	Catterick ...	984·0	−68	S'E	4	ro ro	46	97	5	5	2	-	9-6	10	400	1	*
	Tynemouth ...	982·8	−52	S	6	rr	45	97	6	-	2	-	10	10	2000	1	3
11	St. Abbs Head	978·1	−54	S	5	rr	45	92	7	5	2	-	7-8	10	2000	1	3
	Leuchars ...	975·4	−76	SE	4	ir	47	92	7	5	2	-	9	10	900	1	*
12	Renfrew (Abbots I.)	974·7	−54	SW'S	5	c/r	52	92	5	5	-	-	9+	10	1200	2	*
	Eskdalemuir ...	977·3	−56	SSW	4	RR	45	97	5	-	2	-	10	10	220	2	*
	Point of Ayre...	978·7	−34	WSW	6	ro ro	53	92	7	8	-	-	9+	9+	1500	1	3
13A	Tiree	974·6	−20	NW	6	rr	45	97	7	-	2	-	10	10	1500	1	5
13B	Stornoway ...	974·6	−30	SSE	2	rr	46	97	6	5	2	-	9	10	1000	1	1
15	Dalwhinnie ...	973·3	−54	SE	5	ir	43	92	6	5	2	-	4-6	4-6	1500	1	*
	Aberdeen ...	977·2	−52	S	5	ir o	47	97	6	6	2	-	7-8	10	1500	1	2
	Wick ...	975·6	−44	S	6	rr	47	92	6	5	2	-	7-8	10	800	1	2
16	Lerwick ...	978·2	−30	S	8	c	47	92	6	8	2	-	7-8	10	800	1	*
17	Blacksod Point	987·9	+80	WNW	7	cq	48	75	7	3	-	-	4-6	4-6	1500	2	5
18	Malin Head ...	978·3	+40	W	6	c/pr	47	85	6	6	-	-	9+	9+	800	1	4
	Aldergrove ..	980·0	+48	W	6	c/r	49	75	8	5	-	-	9+	9+	1600	2	*
19	Birr Castle ...	990·1	+52	SW	3	bc	48	75	8	5	-	-	2-3	2-3	2500	1	*
20	Valentia Obsy.	995·4	+46	SW'W	4	bc	51	75	8	5	-	-	2-3	2-3	4000	1	4
	Roches Point	993·9	+48	NW	4	bc	49	85	8	8	-	5	4-6	4-6	2500	1	4

PAST 24 HOURS.

District	Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F. (32)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 19th Hrs. (36)
1	London (Kew)	45	39	26	—	0·6	0·1
	Croydon ...	45	39	37	-	0·5	0·0
	S. Farnborough	45	40	34	Tr	1	0·2
	Boscombe Down	45	38	37	-	4	0·6
	Calshot (Sthmtn.)	47	46	42	-	5	3·5
	Lympne ...	47	38	28	Tr	-	0·5
	Manston ...						
2	Shoeburyness ...	48	40	30	-	-	3·4
	Felixstowe ...					-	
	Gorleston ...	51	40	36	-	-	4·9
	Mildenhall ...	44	39	33	Tr	Tr	0·0
	Cranwell ...	46	36	33	0·2	0·5	1·4
3	Birmingham ...	47	40	35	*	5	1·6
	Upper Heyford	46	38	29	-	5	*
4	Ross-on-Wye	47	45	39	-	3	2·5
5	Hartland Point	50	48	46	Tr	4	1·9
	Bristol ...	49	45	41	-	5	0·9
	Portland Bill ...	51	48	*	-	1	*
	Plymouth ...	51	49	47	-	10	2·1
	The Lizard ...	51	48	*	1	6	0·7
	Scilly (St. Mary's)	51	50	*	0·3	2	0·4
	Guernsey ...						
6	Pembroke ...	52	48	*	2	12	0·4
7	Holyhead ...	49	47	46	Tr	9	0·1
	Chester (Sealand)	47	43	38	-	3	0·6
8	Manchester ...	48	44	38	-	3	0·4
10	Spurn Head ...	48	40	*	-	Tr	4·4
	Catterick ...	49	41	40	0·1	4	2·1
	Tynemouth ...	47	43	39	-	4	*
11	St. Abbs Head	45	42	*	-	2	*
	Leuchars ...	45	43	41	-	5	0·1
12	Renfrew (Abbots I.)	47	44		Tr	24	
	Eskdalemuir ...	42	41	41	Tr	19	0·0
	Point of Ayre...	51	46	*	-	9	1·3
13A	Tiree	47	44	*		25	0·0
13B	Stornoway ...	47	44	*	1	8	0·0
15	Dalwhinnie ...	47	38	35	0·1	7	0·0
	Aberdeen ...	45	41	36	-	2	1·3
	Wick ...	45	43	*	-	2	*
16	Lerwick ...	45	43	*	Tr	2	1·0
17	Blacksod Point	52	45	*	7	15	*
18	Malin Head ...	46	43	*	Tr	13	0·0
	Aldergrove ..	45	44	41	Tr	12	0·6
19	Birr Castle ...	47	46	46	2	5	0·0
20	Valentia Obsy.	52	51	46	8	5	0·0
	Roches Point	50	47	*	2	7	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h. other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon (24 hrs. ended 9h.)	Weather Night (24 hrs. ended 9h.)	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew ...	18	cmo	cbcmo	bowrroc	45	39	26	-	0·6	0·1	*	*	6
Croydon ...	217	cmomcmo	cmobcm	bmcmor	45	39	37	-	0·5	0·0	*	*	6
Greenwich (Royal Observatory) ...	149	cm	cmb	bbcodro	45	37	27	-	3	0·0	85	92	6
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	48	40	33	3			91	92	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	51	41	30	-	3		84	93	*
Camden Square ...	110	o	c	*	45	41	33	-	3	*	*	91	*
Kensington ...	80	bc	c	*	45	39	32	-	3		92	95	*
Hampstead Observatory ...	450	o	o	or	44	39		-	3		*	98	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 20th

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
defective		record.	

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 19th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 20th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...														

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1½ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6½ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 21st November, 1940.

No. 28,854

OBSERVATIONS at 13h. G.M.T. 20th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	998·3	+26	W	4	bc	53	65	7	2	7	6	2-3	4-6	2500
	Croydon	997·9	+34	W	3	c	54	75	7	2	4	-	4-6	7-8	1800
	S. Farnborough	999·2	+36	W	5	bc	52	65	8	1	-	4	Tr	4-6	2000
	Boscombe Down	999·8	+34	W'N	6	bc	52	65	8	1	-	8	2-3	4-6	2500
	Calshot (Soton.)	1000·7	+40	NW'W	4	c	55	75	7	1	4	2	4-6	7-8	2500
	Lympne	999·1	+8	WNW	4	bc	55	75	8	2	7	-	4-6	4-6	1500
	Manston	997·4	+6	WSW	5	c	56	65	7	8	6	-	7-8	9	2500
2	Shoeburyness	997·9	+18	W	3	c	55	75	6	8	3	-	7-8	7-8	1500
	Felixstowe	995·6	+6	W	6	bcq	54	75	7	3	-	-	2-3	2-3	2500
	Gorleston	992·8	·4	W	5	c/r	52	92	6	8	-	-	7-8	7-8	1500
	Mildenhall	994·2	+30	W	5	bc	55	65	8	8	-	-	4-6	4-6	2500
	Cranwell	993·4	+46	NW	6	c	49	65	7	8	-	-	9	9	2000
3	Birmingham	996·4	+44	W	5	bc	51	55	8	8	-	-	4-6	4-6	1500
	Upper Heyford	996·9	+44	WSW	5	bc	53	55	8	8	4	5	2-3	4-6	2500
4	Ross-on-Wye	998·6	+34	W	6	bcq	53	55	8	1	-	3	1	2-3	2500
5	Hartland Point	1002·1	+36	WNW	4	c	52	85	8	5	6	-	4-6	7-8	1500
	Bristol	999·6	+42	W'N	6	bc	52	75	8	2	-	6	1	4-6	2000
	Portland Bill	1001·9	+30	W	6	c	53	92	7	2	4	-	4-6	7-8	4000
	Plymouth	1003·4	+30	W'N	5	c	55	75	8	2	3	-	4-6	9+	2500
	The Lizard	1004·6	+20	W'S	5	c	53	92	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	1004·2	+44	W'S	4	c	53	85	7	5	7	-	2-3	10	1500
	Guernsey														
6	Pembroke	1000·1	+16	W	7	bcq	53	65	7	5	7	-	1	4-6	2000
7	Holyhead	994·5	+20	W'S	7	bc	51	75	8	7	3	1	1	2-3	2000
	Chester (Sealand)	994·7	+44	W	5	cq	53	55	8	1	-	-	7-8	7-8	1500
8	Manchester	993·2	+46	W	7	bc/pr	50	65	7	3	-	-	4-6	4-6	2200
10	Spurn Head	989·3	-24	WSW	8	bcq	49	75	6	8	8	-	4-6	4-6	2500
	Catterick	988·1	+68	W	6	bc/pr	49	65	8	3	4	-	2-3	2-3	2200
	Tynemouth	984·1	+48	W'N	9	bc	48	65	8	2	4	-	2-3	4-6	2000
11	St. Abbs Head	977·8	+30	W	8	bcq	48	65	8	2	7	-	2-3	4-6	2500
	Leuchars	979·7	+70	WNW	6	ir$_0$	48	75	8	5	7	-	7-8	9	1200
12	Renfrew (Abbots I.)	985·4	+74	W'N	5	pr	45	85	8	8	3	-	9	9+	2000
	Eskdalemuir	985·8	+66	W'N	6	pr	44	75	8	5	-	-	9	9	1500
	Point of Ayre	990·6	+52	WNW	7	bc	49	85	8	8	-	-	2-3	2-3	2500
13A	Tiree	984·7	+36	NW	6	bc	49	85	8	8	-	-	4-6	4-6	1800
13B	Stornoway	979·1	+30	W	6	c	47	75	8	8	7	-	4-6	9	2500
15	Dalwhinnie	*	+46	SW	5	ir$_0$	40	85	6	8	-	-	9+	9+	1500
	Aberdeen	975·6	+30	NNW	5	ir$_0$	45	85	7	6	2	-	Tr	10	4000
	Wick	971·9	+10	WNW	5	r$_0$r$_0$	45	92	7	5	7	8	4-6	9+	1500
16	Lerwick	972·2	-32	SE	7	rr	47	92	7	6	2	-	4-6	10	800
17	Blacksod Point	995·1	+36	W	6	bcq	51	75	8	3	-	9	2-3	4-6	2500
18	Malin Head	988·2	+46	NW'N	6	c/pr	49	75	8	6	6	-	4-6	7-8	1500
	Aldergrove	991·7	+48	W	5	bc	46	75	9	3	-	-	2-3	2-3	2500
19	Birr Castle	998·3	+34	SW	3	pr	51	75	8	8	7	-	7-8	9	1500
20	Valentia Obsy. †	1001·0	+22	W'S	5	c	52	75	8	5	1	-	4-6	10	4000
	Roches Point	1000·8	+26	WNW	3	bc	51	75	8	3	-	5	2-3	4-6	2500

OBSERVATIONS at 18h. G.M.T. 20th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°F Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1005·6	+38	WSW	4	b	49	75	7	-	-	-	0	0	-	1	*
Croydon	1005·0	+44	W	3	z$_0$	49	75	6	-	-	-	0	0	-	1	*
S. Farnborough	1006·4	+40	WSW	5	bc	48	75	7	-	3	-	0	Tr	-	1	*
Boscombe Down	1006·4	+30	WSW	4	bc	47	75	7	5	3	-	2-3	2-3	4000	1	*
Calshot (Soton.)	1007·0	+34	W	4	z$_0$	50	75	6	-	4	-	0	1	-	*	*
Lympne	1007·1	+48	W	3	b	46	85	7	-	-	-	0	0	-	1	§
Manston	1006·3	+40	SW'S	2	z$_0$	44	85	6	-	-	-	0	0	-		*
Shoeburyness	1006·1	+48	W	2	b	48	85	6	-	-	-	0	0	-	1	*
Felixstowe	1004·2	+56	W'S	3	z$_0$	49	65	6	-	-	-	0	0	-	1	1
Gorleston	1002·2	+36	WSW	4	bc	50	85	7	-	4	-	0	2-3	-	1	3
Mildenhall	1003·1	+50	SW'W	4	bc	47	65	8	5	-	-	1	1	2500	1	*
Cranwell	1001·8	+50	W	4	b	45	75	7	-	-	-	0	0	-	1	*
Birmingham	1003·5	+30	WSW	3	bc	47	75	8	-	-	6	0	2-3	-	1	*
Upper Heyford	1004·2	+38	W	4	b	45	75	8	-	4	-	0	Tr	-	1	*
Ross-on-Wye																*
Hartland Point	1003·8	+16	W	5	c	52	85	8	5	6	-	4-6	9	1500	1	3
Bristol	1006·5	+32	WSW	4	z$_0$	49	85	6	4	-	-	1-	1	4500	1	*
Portland Bill	1007·5	+34	W	5	c	52	85	7	5	4	-	4-6	7-8	4000	1	4
Plymouth	1008·4	+24	W	5	z$_0$	53	85	6	-	3	-	0	9+	-	1	3
The Lizard	1008·0	+10	W'S	4	c	52	97	7	8	2	-	9	10	1500	1	4
Scilly (St. Mary's)	1007·4	+14	SW	3	c	53	92	6	5	7	-	4-6	10	1500	1	3
Guernsey																
Pembroke	1004·4	+24	WSW	6	cq	53	75	7	8	7	-	4-6	7-8	2000	1	4
Holyhead	1000·7	+38	W'S	5	bc	50	75	7	1	7	6	2-3	4-6	3000	1	3
Chester (Sealand)	1001·3	+38	SW'W	2	z$_0$	47	65	6	4	7	-	Tr	1	2500	1	*
Manchester	1000·8	+42	SW'W	4	c	47	75	7	4	4	-	7-8	7-8	2000	1	*
Spurn Head	997·8	+26	SW	6	bcq	46	75	7	-	8	-	0	2-3	-	0	4
Catterick	997·6	+56	W'S	3	bc/pr	46	75	8	4	-	-	2-3	2-3	3100	1	
Tynemouth	995·2	+76	W	5	bc	47	75	7	2	-	-	2-3	2-3	3400	1	3
St. Abbs Head	990·2	+44	W	8	bq	46	65	8	-	-	-	0	0	-	0	4
Leuchars	989·7	+60	WSW	4	b	45	75	8	4	-	-	2-3	2-3	2500	1	*
Renfrew (Abbots I.)	993·1	+48	WSW	4	b	45	85	7	8	-	-	Tr	Tr	3000	1	*
Eskdalemuir	994·2	+42	W'N	5	bc/pr	42	75	7	5	-	-	4-6	4-6	1500	1	*
Point of Ayre	997·8	+38	W'N	6	b	49	85	8	8	-	-	1	1	2500	1	4
Tiree																
Stornoway																
Dalwhinnie	982·0	+46	W	4	bc	39	85	8	5	-	-	2-3	2-3	2500	1	*
Aberdeen	987·4	+68	W	4	bc	45	75	8	-	7	-	0	Tr	-	1	3
Wick	980·3	+50	W	4	bc	44	85	7	5	4	-	4-6	4-6	1500	1	2
Lerwick	972·7	+16	W	6	rr	45	97	7	6	2	-	7-8	10	800	1	*
Blacksod Point	996·5	+8	W	3	pr	49	85	7	9	-	-	10	10	<150	1	3
Malin Head	994·0	+28	WNW	4	c	48	75	8	5	6	-	4-6	7-8	4000	0	4
Aldergrove	997·8	+42	SW	4	bc	43	85	8	4	-	-	4-6	4-6	2500	2	*
Birr Castle	1000·2	+12	SW	1	c	47	85	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	999·7	-16	S'W	4	ir$_0$	52	85	7	6	2	-	9+	10	2500	1	3
Roches Point	1002·2	+0	WSW	4	ir$_0$	50	85	8	6	7	-	7-8	9+	1500	1	4

PAST 24 HOURS.

Stations	Weather 7h.–13h. 20th (37)	Weather 13h.–18h. 20th (38)	Weather 18h 20th to 1h. 21st (39)	Weather 1h.–7h. 21st (40)
London (Kew)	rdrm$_0$bc	bcbz$_0$b	bbcc	c
Croydon	rr$_0$dcbc	bm$_0$	bm$_0$irm$_0$c	prd$_0$r$_0$cdd
S. Farnborough	crDRbc	bcb	cm$_0$ir$_0$	cir$_0$cr$_0$r$_0$
Boscombe Down	crrddcbc	bc	bcm$_0$,irc	r$_0$d$_0$d$_0$c
Calshot (Soton.)	cRRoddcbc	cbbm$_0$	bm$_0$cm$_0$ir$_0$	od$_0$d$_0$id$_0$m$_0$
Lympne	crrmrf	bcb	bbccm$_0$	cir$_0$m$_0$
Manston	rrm$_0$c	bcbm$_0$	bwcm$_0$r$_0$	cm$_0$cir$_0$
Shoeburyness	crrm$_0$r$_0$	cm$_0$ bm$_0$	bm$_0$bcc	cr$_0$c
Felixstowe	crriRbq	b	cm$_0$ir$_0$o	cm$_0$ir$_0$o
Gorleston	bcorrc	cbc	bcc	or$_0$cq
Mildenhall	crrmprcbc	bcb	cr$_0$r$_0$m$_0$c	ccr$_0$r$_0$m$_0$c
Cranwell	b,pr,c	c,b	b,cr$_0$r$_0$m$_0$	crrbcm$_0$
Birmingham	cr$_0$bc	bcb	bcc	cbc
Upper Heyford	cRRrcm$_0$cbc	bcb	bbccidm$_0$c	cir$_0$r$_0$r$_0$dd$_0$
Ross-on-Wye	docpbcq		bbcc	r$_0$cc
Hartland Point	c	cbcc	cpirc	ciroc
Bristol	cr$_0$bcbbcq	bcbqm$_0$	bc,c	cr$_0$d$_0$dm$_0$
Portland Bill	oc	cc	c	odd
Plymouth	cm$_0$c	ccm$_0$	cm$_0$ir$_0$cm$_0$	cm$_0$r$_0$r$_0$h dd$_0$
The Lizard	c	c	oid	rrc
Scilly (St. Mary's)	c	c	cir$_0$c	cofdbc
Guernsey				
Pembroke	*	bccq	crrq	id$_0$qc
Holyhead	cbbc	bc	ir$_0$rm$_0$c	r$_0$r$_0$rm$_0$c
Chester (Sealand)	r$_0$r$_0$pr$_0$	bcq,bm$_0$	ir$_0$rm$_0$c	cir$_0$m$_0$cbc
Manchester	cpr$_0$	cpr$_0$	bccm$_0$r$_0$r$_0$	cm$_0$r$_0$z$_0$
Spurn Head	qpr	qcbc,	bqcqc	qpr
Catterick	rprbc	bcpr$_0$b	pr$_0$cir$_0$c	ir$_0$orrb
Tynemouth	oirc	bcq	bcc	cpbcq
St. Abbs Head	cbcq	bcq,bq	c	m$_0$cqr
Leuchars	crrm$_0$cir$_0$	ir$_0$bcb	bbcc	cr$_0$r$_0$Rrrm$_0$
Renfrew (Abbots I.)	ir$_0$pr$_0$prPR	cPRb	bc Prpr	r
Eskdalemuir	RqRr$_0$bc	cprbcpr		
Point of Ayre	cbcq	bcb	cr$_0$r$_0$	
Tiree	cprbc		bccir	pRR
Stornoway	*		cpr	cpr r$_0$r$_0$
Dalwhinnie	cir$_0$	cprbc	*	ciro
Aberdeen	cir$_0$	ir$_0$,b	bbc	crrm$_0$
Wick	rrcir	qprbc	bcc	crrm$_0$
Lerwick	cir$_0$rr	cr$_0$r	crrpr	pr
Blacksod Point	bcq	pr$_0$	rq	cq
Malin Head	ccprc	c	cpr$_0$gc	cir,rrirc
Aldergrove	cprb	vpr pr$_0$bc	r$_0$r$_0$irm$_0$	ir$_0$m$_0$pr$_0$
Birr Castle	bccpr	c	circ	c
Valentia Obsy. †	bcc	cir$_0$	cd$_0$d$_0$cbcc	cpr$_0$c
Roches Point	bcp$_0$bc	cir$_0$	rrddc	c

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog „ less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s$_0$, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s$_0$/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r$_0$, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus :—bc/r, fair weather after rain ; —, has decreased ; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6 ; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing : sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing : usually in tufts.
5 Ci or Cs increasing : still below 45° altitude : often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude : often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations :—
Cirrus,–Ci : Cirrocumulus,–Cc : Cirrostratus,–Cs : Altocumulus,–Ac : Altostratus,–As : Stratocumulus,–Sc : Stratus,–St : Nimbostratus,–Ns : Cumulus,–Cu : Cumulonimbus,–Cb.

COLUMN 29 —STATE OF GROUND.

0 . . Ground dry.
1 . . „ wet.
2 . . „ flooded.
3 . . „ frozen hard and dry.
4 . . „ partly covered with snow or hail.
5 . . „ covered with ice or glazed frost.
6 . . „ covered with thawing snow.
7 . . Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 . . „ covered with snow, less than 6 ins., but ground frozen.
9 . . „ covered with snow greater than 6 ins. deep.
– . . Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

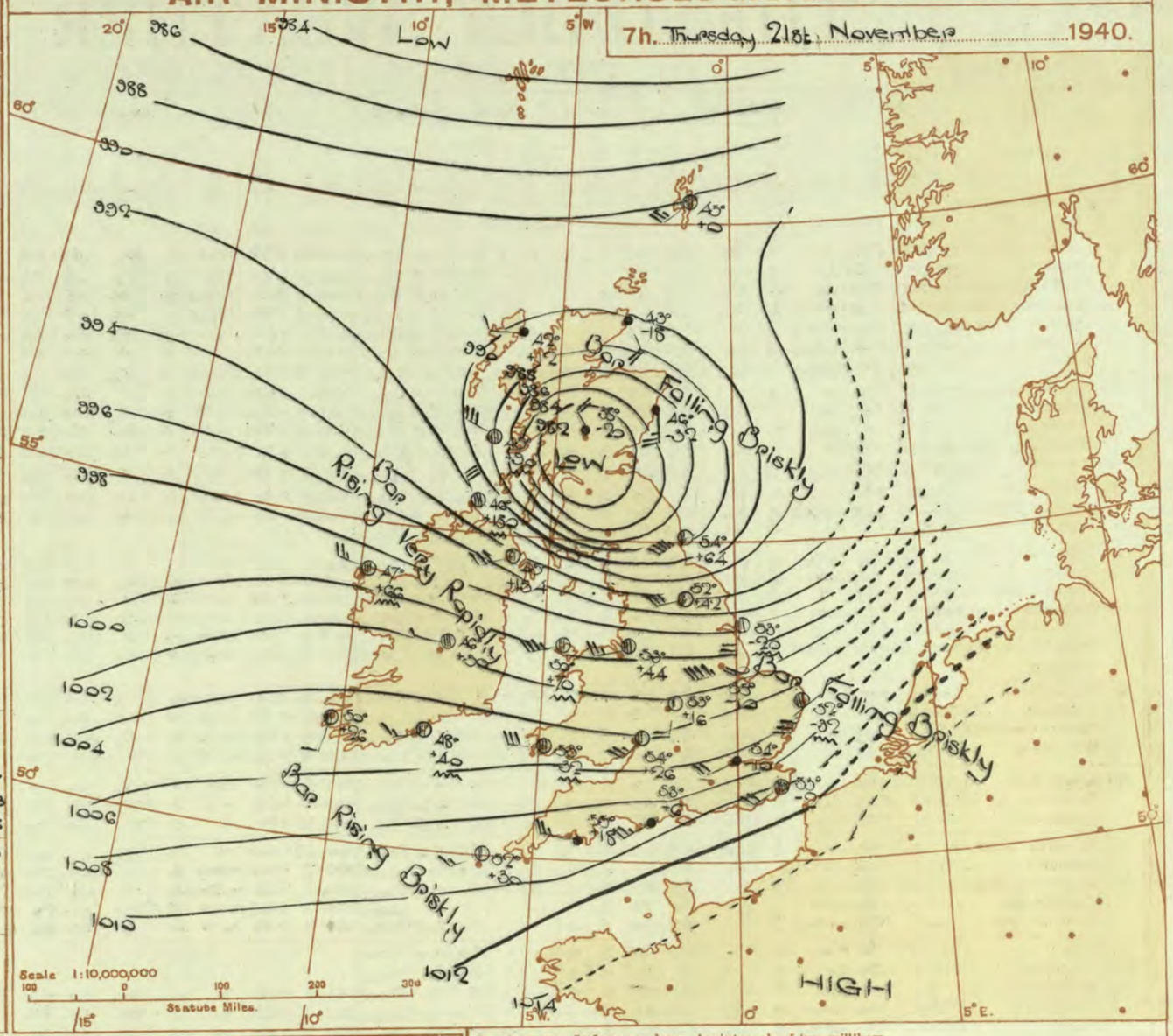
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Thursday 21st. November 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 20th November			18h. G.M.T.			01h. G.M.T. 21st November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	52	62744	24468	92	81634	58565	20	02843	20388	52	64643	18228
115	52	66735	28568	52	81844	61785	52	14844	57680	52	62735	28388
203	8-	61837	24567									
206	82	25955	25686	50	00852	26382	83	02863	24285	02	64731	32268
210	52	22844	57867				51	02968	18427	52	62746	08468
220	83	01844	26514									
230	8-	10856	56716	80	25852	57482	52	62744	16368	52	62645	65662
245	78	14965	59767	50	00951	57621	07	02755	20316	62	62635	49768
260	83	25854	22685	80	81745	24385	53	02764	20488	62	62744	16468
277	26	02844	56684	04	00890	23402	02	62768	11668	8-	15748	24868
279	--	05654	55614	00	00790	20500						
285	30	25735	24685	20	01844	28684				2-	02746	26786
288	8-	81855	56765	26	00852	23483	52	05654	19318	53	01853	53764
273	38	10754	27786									
301	80	01854	59614	50	03754	57414	52	62654	18368	53	05654	57667
321	83	01734	57684	00	05690	23300	5-	05657	15327	03	05690	55525
299	57	01743	24663	50	00742	24512	52	02745	24318	5-	05644	22614
292	8-	01845	54665	80	01844	24514	52	51757	20228	53	14733	22764
310	--	02735	26715	--	01525	24515						
316	80	01754	59668	06	01790	22412	82	64555	17368	84	05644	53525
333	26	02855	24665	12	02753	55527	52	61644	18768	53	02753	58667
334	--	02854	24585							--	02653	22815
340	25	01853	58583	03	00890	57503	52	61746	50668	80	14855	53715
136				64	01790	20511	02	05690	19418			
336	24	02753	28615	24	02753	24515				24	02753	24616
350										--	61628	19568
368												
379	10	01754	57515	40	05651	22301	53	05654	08328	63	22733	20664
390	80	00753	23463	00	05690	24310	57	05563	22428	52	62546	53568
382	14	01852	23514	40	00751	22401	53	61644	15328	83	22844	53565
438	50	02754	24715							82	10545	22528
430	23	02754	57426				57	22655	18368	5-	52538	20588
409	53	02743	57426				5-	61648	16668	53	05653	19463

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Thursday 21st. November, 1940

DISTRICTS.	
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ...	Fresh S.W. to W. wind, decreasing light or moderate later today, freshening again from S.W. tomorrow; mainly fair today, rain spreading from the west tomorrow; rather mild.
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Strong W. to N.W. wind, moderating and backing S.W. later; bright intervals and occasional showers today; rain spreading from west tomorrow; cool, becoming milder.
13 A. W. Scotld. B.N.W.Scotland.	Northwesterly gale, moderating later, & backing S.W. to S. tomorrow; occasional squally showers at first with bright intervals, especially tonight; rain spreading from S.W. tomorrow; cool, becoming milder.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Fresh W. to N.W. wind, moderating, backing S. to S.W. temporarily and freshening again; occasional showers and bright intervals today, cloudy with rain or showers tomorrow; average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light or moderate W. to S.W. wind, backing S.W. to S. and later freshening; fair at first, cloudy with rain tonight, showers and bright intervals tomorrow; average temperature.

GENERAL INFERENCE.

A deep depression over Scotland is moving rapidly N.E. & further disturbances to the W. & S.W. of the British Isles will move E. & N.E. respectively; weather will be mainly fair today in the South, but in the North there will be bright intervals and showers with northwesterly gales in N.E. Scotland at first; further rain will spread from west to all districts during tonight and tomorrow.

FURTHER OUTLOOK.

Continuing unsettled.

Warning of gales in operation, in districts 10, 11, 13, 15 16 & 18.

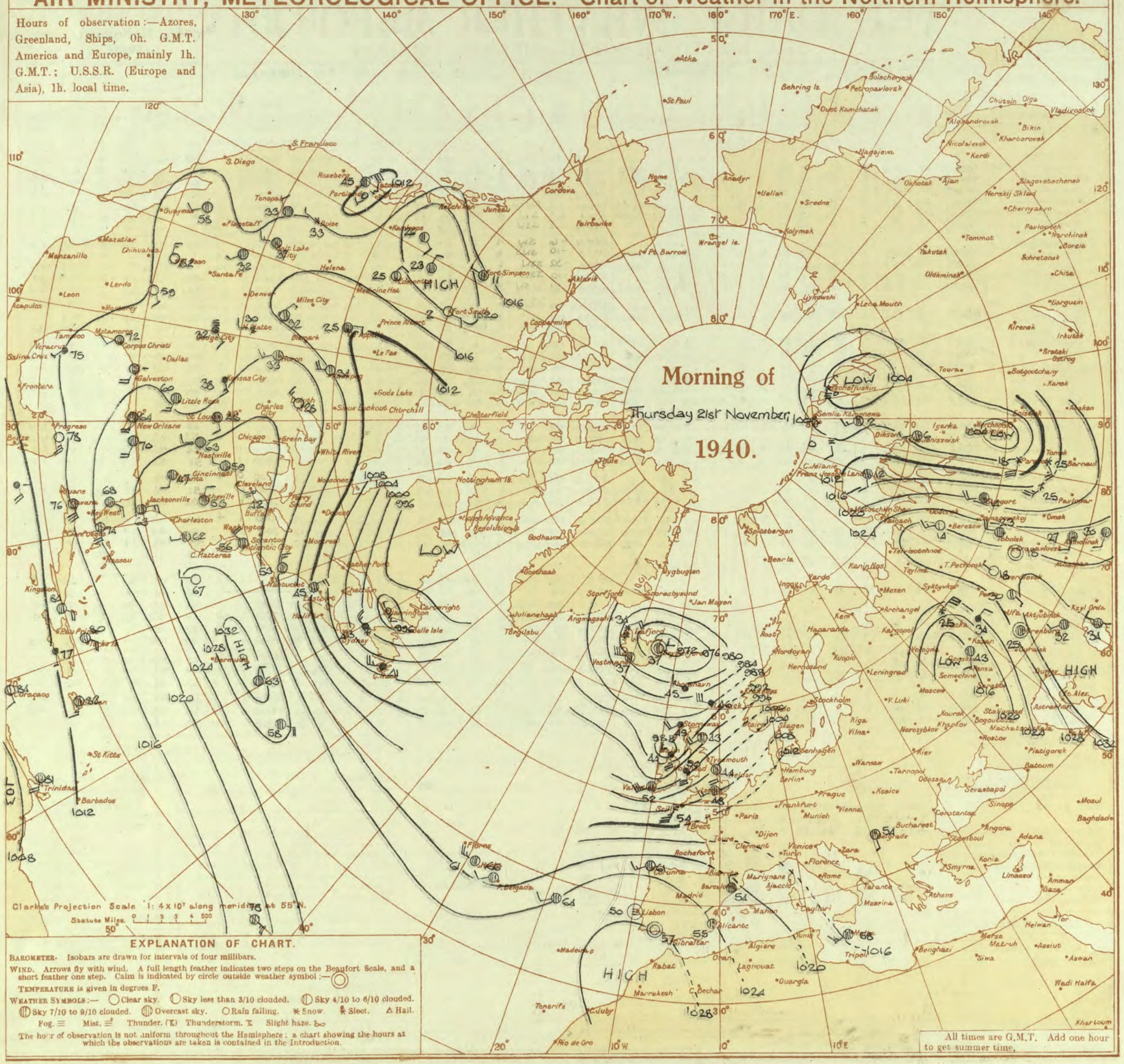
Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

All times are G.M.T. Add one hour to get summer time.

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 21st November 1940.

No 28854

OBSERVATIONS at 1 hr. G.M.T. 21st November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud. Form. Low. (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1009·7	+2	WSW	3	zo	48	92	6	5	2	–	7-8	10	2500
	S. Farnborough	226	1009·5	–4	SW	4	iro	50	97	6	–	2	–	10	10	5500
	Boscombe Down	417	1008·5	–2	SW	4	c	50	92	7	5	–	–	10	10	1600
	Calshot (Sthmtn.)	8	1009·7	+2	SW'S	5	ido	53	92	6	5	–	–	10	10	2500
	Lympne ...	346	1011·7	+4	SW	2	iro	49	92	6	–	2	–	10	10	2500
	Manston ...	154	1010·7	+2	SW	3	zo	48	85	6	–	7	–	0	9+	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1008·9	+2	SW'S	3	zo	47	85	6	5	7	–	4-6	9+	7000
	Gorleston ...	5	1008·2	+16	SW'S	3	c	46	85	6	5	–	–	9	9	2500
	Mildenhall ...	19	1007·6	+2	SW	4	c	48	85	7	–	7	–	0	10	–
	Cranwell ...	240	1005·5	–2	SW	5	iro	45	85	6	5	–	–	9+	9+	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1006·9	–6	SSW	4	ido	48	85	6	5	7	–	7-8	10	3000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1003·1	–24	SSW	7	c	54	85	8	5	2	–	4-6	10	2500
	Bristol ...	209	1006·8	–12	S	6	c	53	85	7	5	2	–	7-8	10	1600
	Portland Bill ...	32	1008·8	+8	W	5	o	50	92	7	5	–	–	10	10	2500
	Plymouth ...	82	1008·2	–10	WSW	5	zo	54	92	6	5	–	–	10	10	2000
	The Lizard ...	240	1007·8	–4	SSW	7	m	54	97	4	5	–	–	10	10	800
	Scilly (St. Mary's)	163	1005·4	–10	SW'S	6	c	54	97	6	5	2	–	9	10	1500
	Guernsey ...	175														
6	Pembroke ...	142	998·6	–20	SW	8	rr	54	92	6	8	2	–	7-8	10	1500
7	Holyhead ...	26	996·5	–46	SE	6	roro	50	97	6	6	2	–	4-6	10	900
	Chester (Sealand)	16	999·9	–32	SSE	4	iro	48	85	6	5	2	–	7-8	9+	1800
8	Manchester ...	70	1001·2	–16	SSE	3	roro	47	85	6	5	2	–	9	10	1200
10	Spurn Head ...	29	1004·4	+14	SSE	4	c	44	85	7	–	2	–	0	9+	–
	Catterick ...	175	1000·7	–6	SSE	2	c/r	47	85	7	5	7	–	9	10	5500
	Tynemouth ...	108	1000·4	+8	WSW	3	c	46	85	6	8	–	–	7-8	7-8	2800
11	St. Abbs Head	280	997·0	–8	SW	4	c	44	75	8	5	2	–	7-8	10	2500
	Leuchars ...	36	995·1	+2	SW	4	c	45	85	8	5	7	–	4-6	10	3500
12	Renfrew (Abbotsl.)	19	994·2	–22	SSW	3	pr	46	85	7	8	–	–	10	10	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	996·5	–20	S	3	roro	45	97	7	8	2	–	7-8	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	988·7	–4	SW	4	pr.	45	75	7	8	7	–	7-8	9+	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	990·7	+18	SW	3	c	42	85	7	5	1	8	7-8	9	2500
16	Lerwick ...	156	986·5	+48	W	6	pr	46	85	8	8	7	–	4-6	7-8	1500
17	Blacksod Point	18	*	–10	SE	7	RR	*	97	6	6	–	–	10	10	<150
18	Malin Head ...	84	985·6	–76	SSE	5	ir	44	85	5	3	–	–	9+	9+	450
	Aldergrove ...	268	989·2	–80	SE'S	4	iro	46	92	6	5	2	–	7-8	10	700
19	Birr Castle ...	173	989·0	–46	SSW	6	c	58	75	8	3	7	–	2-3	7-8	1500
20	Valentia Obsy.	30	995·8	+38	SW'W	7	c	52	75	6	5	5	–	1	7-8	2500
	Roches Point	22	996·2	–8	NW'N	4	c/d	52	97	7	5	–	–	7-8	7-8	800

OBSERVATIONS at 7 hr. G.M.T. 21st November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Form. Med. (24)	Form. High (25)	Amount. Low 0–10 (26)	Amount. Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1007·8	+6	SW	5	c	54	85	7	5	–	–	10	10	1500	1	*
	Croydon ...	1008·0	–10	SW	4	dd	54	97	6	6	–	–	10	10	600	1	*
	S. Farnborough	1008·3	+6	SW	6	do.do.	55	92	6	5	–	–	10	10	700	1	*
	Boscombe Down	1007·7	+6	SW	4	iro	55	92	6	6	2	–	7-8	10	1000	1	*
	Calshot (Sthmtn.)	1009·1	+2	SW'W	5	ido	55	97	6	5	–	–	10	10	500	1	4
	Lympne ...	1011·1	–2	SW	4	a/r	53	92	6	5	–	–	10	10	500	1	§
	Manston ...	1009·3	–2	SSW	6	iro	53	92	7	5	–	–	10	10	700	*	*
2	Shoeburyness ...	1008·6	–6	SW	4	c	54	92	7	5	–	–	10	10	800	1	*
	Felixstowe ...	1007·3	–10	SW'S	6	zo	51	92	6	5	–	–	10	10	2000	1	3
	Gorleston ...	1005·6	–32	SSW	6	c	52	85	6	5	–	–	9+	9+	1500	1	4
	Mildenhall ...	1004·2	–10	SSW	5	c	55	85	7	6	7	–	9	9+	2000	1	*
	Cranwell ...	1000·9	–10	WSW	9	zo	55	85	6	5	–	–	7-8	7-8	2500	1	*
3	Birmingham ...	1003·5	+16	SSW	4	bc	53	75	8	5	3	–	4-6	4-6	1500	1	*
	Upper Heyford	1005·6	+6	SW'S	6	c/d	54	92	9	5	3	–	7-8	7-8	700	1	*
4	Ross-on-Wye	1005·7	+26	SW	5	bcq	54	75	7	5	4	–	1	4-6	1500	1	*
5	Hartland Point	1007·6	+46	W	5	c	53	85	8	5	6	–	2-3	7-8	2000	1	4
	Bristol ...	1007·4	+18	WSW	5	c	54	85	7	5	3	–	4-6	7-8	1200	1	*
	Portland Bill ...	1008·8	+6	SW	5	dd	53	92	7	5	–	–	10	10	2500	1	4
	Plymouth ...	1009·4	+18	WNW	5	ido	55	97	6	5	–	–	9+	9+	1500	1	3
	The Lizard ...	1009·9	+30	W'S	5	c	54	97	6	8	2	–	9	10	1500	1	4
	Scilly (St. Mary's)	1008·9	+30	SW'W	3	bc	52	92	7	5	3	–	1	4-6	1500	1	3
	Guernsey ...																
6	Pembroke ...	1005·8	+32	W	6	cq	53	75	7	8	2	–	2-3	9+	1600	1	4
7	Holyhead ...	1000·3	+70	WSW	7	c	50	85	8	8	–	–	9+	9+	3500	1	5
	Chester (Sealand)	1000·4	+44	W'S	5	c	53	65	7	5	3	–	4-6	7-8	1500	1	*
8	Manchester ...	1000·1	+30	WSW	7	c	53	65	7	8	3	–	7-8	9+	1800	1	*
10	Spurn Head ...	997·6	–20	SW	6	cq	53	85	7	9	5	–	4-6	7-8	1500	0	4
	Catterick ...	993·3	–22	W'S	6	bc	52	65	7	5	3	–	2-3	2-3	4000	1	*
	Tynemouth ...	987·3	–64	SW	9	bcq	54	65	6	2	–	–	4-6	4-6	2600	1	3
11	St. Abbs Head	978·4	–120	SSE	8	c/r	51	65	7	5	2	–	7-8	10	2000	1	4
	Leuchars ...	978·4	–114	S	6	rr	48	92	6	6	2	–	9	10	700	1	*
12	Renfrew (Abbotsl.)	980·3	–26	WSW	6	do.do.	51	97	6	5	2	–	7-8	10	1000	2	*
	Eskdalemuir ...																
	Point of Ayre ...																
13A	Tiree	991·8	+90	NW	6	c/r	45	92	7	8	–	–	7-8	7-8	1500	1	4
13B	Stornoway ...	988·7	+12	W	2	roro	42	92	7	5	2	–	9	9	1500	1	1
15	Dalwhinnie ...	*	–20	NW	4	rr	38	92	5	5	–	–	10	10	800	1	*
	Aberdeen ...	980·3	–92	SSE	5	rr	46	97	6	6	2	–	4-6	10	1500	1	3
	Wick ...	987·6	–18	SE	4	rr	43	85	6	5	2	–	7-8	10	800	1	2
16	Lerwick ...	988·1	0	SW	5	c	45	92	7	8	7	–	7-8	10	800	1	*
17	Blacksod Point	1000·4	+66	WNW	5	c	47	85	8	9	–	–	9	9	1500	1	4
18	Malin Head ...	994·3	+180	NW	6	cjp	46	85	6	3	–	4	4-6	7-8	1500	1	4
	Aldergrove ...	996·1	–154	W'S	6	c	45	85	8	5	–	–	9	9	1900	2	*
19	Birr Castle ...	1003·1	+50	WNW	1	c	46	85	8	5	1	–	2-3	9	2500	1	*
20	Valentia Obsy.	1005·0	+26	SSW	2	c	50	85	8	5	–	–	9	9	2500	1	2
	Roches Point	1005·7	+40	WSW	3	c	48	85	8	5	–	–	9	9	1500	1	4

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h–18h °F. (31)	Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 20th Hrs. (36)
London (Kew)	55	46	36	3	–	3·0
Croydon ...	56	46	42	5	0·2	3·1
S. Farnborough	55	45	37	3	0·1	3·7
Boscombe Down	54	45	40	2	1	4·2
Calshot (Sthmtn.)	55	49	46		0·2	3·5
Lympne ...	*	45	38	9	Tr	1·7
Manston ...	*	*	*	*	*	*
Shoeburyness ...	57	45	36	3	Tr	2·4
Felixstowe ...	*	*	*	*	*	*
Gorleston ...	55	45	41	6	0·2	1·3
Mildenhall ...	55	45	36	3	0·5	3·1
Cranwell ...	54	42	39	2	1	3·4
Birmingham ...	52	45	42	1*	–	4·5
Upper Heyford	54	44	33	3	0·3	*
Ross-on-Wye		47	41		0·4	3·5
Hartland Point	53	51	50	–	6	2·2
Bristol ...	54	47	41	0·1	1	4·8
Portland Bill ...	54	49	*	–	0·1	*
Plymouth ...	(53)	51	46	Tr	1	2·2
The Lizard ...	54	52	*	–	1	0·9
Scilly (St. Mary's)	53	51	*	–	0·4	0·2
Pembroke ...	55	52	*	–	2	5·4
Holyhead ...	52	48	46	0·2	5	6·2
Chester (Sealand)	54	47	33	1	0·5	5·1
Manchester ...	51	43	37	2	0·3	2·4
Spurn Head ...	50	43	*	2	0·4	1·9
Catterick ...	51	42	42	0·4	1	4·6
Tynemouth ...	52	45	40	1	0·3	*
St. Abbs Head	50	43	*	5	1	*
Leuchars ...	50	42	37	2	3	1·9
Renfrew (Abbotsl.)	53	43	38	3	7	1·6
Eskdalemuir ...	49			7		
Point of Ayre ...			*	Tr		
Tiree	50	40	*		20	2·7
Stornoway ...	47	41	*		2	1·4
Dalwhinnie ...	45	37	34	12	7	0·1
Aberdeen ...	50	42	37	2	8	0·4
Wick ...	47	40	*	12	2	*
Lerwick ...	50	44	*	8	3	0·0
Blacksod Point	52	44	*	1	8	*
Malin Head ...	49	42	*	4	5	2·4
Aldergrove ...	49	42	41	1	3	3·7
Birr Castle ...	52	45	42	1	1	3·6
Valentia Obsy.	53	49	45	Tr	10	1·0
Roches Point	53	48	*	0·3	6	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h. other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather. Morning.	Afternoon.	Night. (24 hrs. ended 9h.)	Temperature. Day Max. °F.	Night Min. °F.	Min. on Grass °F.	Rainfall. Day. mm.	Night. mm.	Sunshine. to Sunset. hrs. (Yesterday.)	Humidity. 15h. G.M.T. % (Yesterday.)	9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew...	18	rdrm.	bcbz.b	bbcc	55	46	36	3	–	3·0	*	*	7
Croydon	217	rr,dcbc	bm.	bm.prcdd	56	46	42	5	0·2	3·1	*	*	6
Greenwich (Royal Observatory)...	149	d.ircbc	cbc	bbccdp.	56	46	38	0·5	0·3	2·5	67	94	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	57	47	38		1		77	95	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	56	47	37	1	0·5		86	94	*
Camden Square	110	c	bc	*	54	47	38	1	0·3	*	*	94	*
Kensington	80	cpbc	bc	*	57	47	40	1	0·4		76	95	*
Hampstead Observatory	450	or	bc.	oro	54	45	39	1	0·3		*	99	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 21st

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
Defective	Record.		

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome														

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1½ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6½ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Friday 22nd November 1940.
No. 28,855.

OBSERVATIONS at 13h. G.M.T. 21st November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1011·4	+8	W	3	c	58	75	7	5	3	-	7-8	9+	1500
	Croydon	1011·1	+6	SW	2	bc	60	75	7	2	3	-	2-3	7-8	2000
	S. Farnborough	1011·2	+2	SW	3	c	57	75	8	7	7	-	2-3	2-3	2000
	Boscombe Down	1010·9	0	SSW	2	c/r	55	75	7	5	3	-	7-8	9+	6000
	Calshot (Soton.)	1012·0	+6	SW	3	ido	53	97	6	5	7	-	4-6	10	800
	Lympne ...	1013·7	+10	SW	3	df	54	97	2	-	-	-	10	10	<150
	Manston ...	1012·5	+10	SSW	4	dodo	56	97	5	6	-	-	9+	9+	100
2	Shoeburyness ...	1012·0	+16	SW	3	bc	59	85	7	8	3	-	4-6	4-6	2500
	Felixstowe ...	1011·1	+22	SSW	3	zo	53	92	6	2	3	-	2-3	7-8	2500
	Gorleston ...	1010·5	+36	W'S	4	c	58	75	7	5	5	-	4-6	7-8	1500
	Mildenhall ...	1010·0	+22	WSW	4	c	55	75	7	5	7	-	4-6	9+	5000
	Cranwell ...	1010·7	+42	W'N	5	c	51	75	7	5	7	-	4-6	10	4000
3	Birmingham	1009·8	+14	SW	2	c	50	75	7	-	2	-	0	10	-
	Upper Heyford	1009·7	+16	SW	4	iro	52	75	7	5	2	-	4-6	10	3000
4	Ross-on-Wye ...	1009·9	+4	S	2	iro	52	75	6	-	2	-	10	10	1500
5	Hartland Point	1009·3	-6	S	2	ir	52	92	7	5	2	-	4-6	10	1500
	Bristol	1011·1	+10	SW	2	roro	54	85	7	5	1	-	9+	9+	2500
	Portland Bill ...	1011·0	-12	SW	3	rr	53	92	7	5	-	-	10	10	1500
	Plymouth ...	1010·3	-10	-	0	dodo	52	97	5	-	2	-	10	10	1500
	The Lizard ...	1009·5	-20	-	0	df	53	97	3	*	-	-	10	10	200
	Scilly (St. Mary's)	1008·0	-22	SE	3	iro	52	97	6	5	2	-	7-8	10	1200
	Guernsey ...														
6	Pembroke ...	1009·3	+14	S'E	3	roro	56	97	7	5	2	-	7-8	10	2000
7	Holyhead ...	1007·8	+10	SW'W	3	c	50	85	8	7	2	-	2-3	10	2500
	Chester (Sealand)	1008·5	+24	SW'W	2	c	51	75	7	5	2	-	4-6	10	3000
8	Manchester ...	1008·9	+26	WSW	3	zo	50	75	6	8	7	-	4-6	10	2100
10	Spurn Head ...	1007·0	+28	SW'W	6	cq	50	75	7	5	-	-	9+	9+	2500
	Catterick ...	1005·9	+42	WNW	4	c	49	75	8	5	2	-	2-3	10	3500
	Tynemouth ...	1004·4	+60	W	6	bc	50	65	7	8	3	-	2-3	4-6	3400
11	St. Abbs Head	1000·6	+90	W	8	bcq	43	75	8	4	5	7	2-3	4-6	2500
	Leuchars ...	1000·2	+78	W	6	bc	50	65	9	2	7	4	1	4-6	3500
12	Renfrew (Abbots L.)	1003·2	+50	W'N	2	bc	50	85	8	3	-	3	2-3	4-6	2000
	Eskdalemuir ...	1004·7	+50	W	4	c	45	75	8	5	3	-	2-3	9	1500
	Point of Ayre ...	1006·4	+28	W	4	c	49	85	8	8	1	-	2-3	9+	2500
13A	Tiree	1000·7	+40	W'N	5	bc	50	75	8	8	-	-	4-6	4-6	1500
13B	Stornoway ...	996·8	+26	W	4	c	46	85	8	8	-	3	2-3	2-3	1500
15	Dalwhinnie ...	1001·1	+56	SW	4	bc	40	92	8	2	-	-	4-6	4-6	2500
	Aberdeen ...	998·3	+70	WNW	5	bc	47	75	8	8	-	3	2-3	2-3	2500
	Wick	994·5	+44	WNW	3	bc	45	85	8	5	4	9	4-6	4-6	2500
16	Lerwick... ...	990·6	+18	W'S	4	pr	48	97	7	8	7	-	7-8	10	800
17	Blacksod Point...	1005·5	+14	W	2	c	51	75	8	5	-	-	9+	9+	2500
18	Malin Head ...	1004·0	+48	NW'W	4	bc	50	65	8	2	-	2	2-3	4-6	2500
	Aldergrove ...	1006·0	+26	SW'S	3	c	46	85	8	1	7	-	Tr	9	1800
19	Birr Castle ...	1006·9	+10	S	1	c	47	92	8	5	1	-	7-8	9	2500
20	Valentia Obsy. †	1004·5	-18	E	2	c	51	85	8	5	2	1	7-8	7-8	4000
	Roches Point ...	1006·5	-8	S	2	c	50	92	8	5	-	-	9	9	1500

OBSERVATIONS at 18h. G.M.T. 21st November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1009·3	-20	SSW	4	c/f	54	97	6	6	2	-	9	10	1500	1	*
Croydon	1009·7	-12	SSW	2	c	56	85	5	6	-	-	10	10	400	1	*
S. Farnborough	1009·4	-16	SSW	5	dodo	56	97	5	6	2	-	9	10	600	1	*
Boscombe Down	1007·8	-24	S'W	6	oiD	55	97	4	6	2	-	9	10	400	1	*
Calshot (Soton.)	1009·6	-14	SSW	6	o/r	55	97	6	5	-	-	10	10	800	1	4
Lympne	1012·9	-10	SSW	4	zo	54	97	6	5	-	-	9+	9+	500	1	4
Manston	1011·9	-6	S'W	4	dodo	55	97	5	6	-	-	10	10	200		*
Shoeburyness	1011·4	-8	SSW	3	iro	54	97	6	5	-	-	10	10	2500	1	*
Felixstowe	1010·8	-4	S	3	iD	51	97	4	5	-	-	10	10	1000	1	1
Gorleston	1011·9	+4	S	2	o	53	75	4	5	-	-	10	10	800	1	2
Mildenhall	1010·1	-10	SE	2	iro	51	85	6	5	-	-	10	10	2400	1	*
Cranwell	1010·1	-2	SSW	2	roro	47	92	6	5	-	-	10	10	1500	1	*
Birmingham	1008·4	-14	ENE	2	rr	46	92	4	6	-	-	10	10	800	1	*
Upper Heyford	1008·7	-20	SE	2	dd	50	97	6	-	2	-	10	10	1200	1	*
Ross-on-Wye	1007·0	-26	E'N	2	RR	48	97	5	6	-	-	10	10	800	1	*
Hartland Point	1000·4	-62	SSW	5	RR	54	97	6	8	2	-	4-6	10	1500	1	4
Bristol	1006·6	-26	S	4	rr	51	97	4	6	2	-	9	10	400	1	*
Portland Bill																
Plymouth	1005·1	-42	S	9	ir	55	97	4	-	2	-	10	10	200	2	5
The Lizard	1002·5	-42	S'W	8	oq	55	97	4	5	-	-	10	10	800	1	4
Scilly (St. Mary's)	1001·0	-22	SSW	6	Dr	55	97	5	5	-	-	10	10	500	1	4
Guernsey																
Pembroke	1003·6	-20	ENE	4	rr	49	97	6	5	-	-	10	10	1500	1	2
Holyhead	1006·3	-12	E'N	3	zo	48	97	6	5	-	-	10	10	3000	1	2
Chester (Sealand)	1007·8	-12	SE'S	1	iro	47	85	5	-	2	-	10	10	4500	1	*
Manchester	1008·4	-4	E	1	f+	47	85	3	-	2	-	10	10	2200	0	*
Spurn Head	1010·0	+4	SE	3	roro	47	92	6	5	-	-	10	10	1500	0	2
Catterick	1008·9	+8	S	2	zo	47	75	6	5	7	-	2-3	10	3000	1	
Tynemouth	1008·4	+8	SW	2	zo	48	75	5	8	-	-	9+	9+	2800	1	2
St. Abbs Head	1006·0	+10	W	4	cq	45	65	7	4	2	-	4-6	9	2500	1	3
Leuchars	1004·8	+18	WSW	4	b	42	85	8	-	-	4	0	2-3	-	1	*
Renfrew (Abbots L.)	1007·2	+22	SW'S	2	fg	40	85	6	5	-	-	1	1	2000	1	*
Eskdalemuir	1007·4	+12	S	1	c	40	92	7	8	-	-	10	10	1500	1	*
Point of Ayre																
Tiree	1005·4	+20	WNW	3	bc	47	85	8	8	-	-	4-6	4-6	1800	0	3
Stornoway	1001·9	+30	WSW	4	bc/pr	42	85	8	8	-	3	4-6	4-6	1500	1	2
Dalwhinnie	1005·0	+16	W	4	bc	37	85	8	6	-	-	2-3	2-3	2500	1	*
Aberdeen	1004·6	+32	WNW	2	b	43	75	7	5	-	3	Tr	Tr	2500	1	2
Wick	1001·0	+14	SSW	1	b	39	85	8	8	-	-	Tr	Tr	1500	1	1
Lerwick	995·6	+20	W	5	c/pr	45	85	7	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1006·6	+16	W	2	c	45	85	7	5	-	-	10	10	1400	0	1
Malin Head	1006·7	+14	NW	2	c	46	65	8	5	6	-	4-6	7-8	4000	1	3
Aldergrove	1007·9	+8	SE	2	e	41	92	7	-	7	-	0	10	-	1	*
Birr Castle	995·2	-6	W	1	c	45	92	7	5	-	*	10	10	2500	1	*
Valentia Obsy. †	1001·9	-10	NE	4	c	49	85	8	6	2	-	9	10	2500	1	2
Roches Point	1000·9	-28	SE	3	rr	48	97	7	6	2	-	7-8	10	800	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 21st (37)	13h.—18h. 21st (38)	18h. 21st to 1h. 22nd (39)	1h.—7h. 22nd (40)
London (Kew)	cdoroc	iro Dddm,	cidodocro	cro croro
Croydon	ddd pro bc	ororo	proroc	cmo ropro
S. Farnborough	do bcc	droirdoc	doddroroc	pr bccdr
Boscombe Down	cido, bcc	cddmup	crrmcir	crrocmo
Calshot (Soton.)	oddrorom	dddodom	cmoidomo	oidprq
Lympne	mddsdo	offdoromp	cmoc	crorom o
Manston		cmoidodod	bbc idomo	ciroidomo
Shoeburyness	crocmobc	bcmodo	irobpoc	prmoc
Felixstowe	omobc	bcciroоiD	oiD idocmo	ododoiro
Gorleston	cq	cqom	ororo	orociro
Mildenhall	cbcc	cczoiromo	oirododor	cirprqro
Cranwell	bcmoc	crorom o	crr rorom	crorocrrmo
Birmingham	bcc	coror	or RR	oRro
Upper Heyford	cbcc	croodd	croododorr	croroidomo
Ross-on-Wye	bcc	irodromrR	RR morrc	irqc
Hartland Point	cir	cRR	Rirc	cr Pc
Bristol	cbccro	crorododf	ciro, cbc	bccmorro
Portland Bill	orr		o,d	
Plymouth	cmororomo	ododoodd	cmoiro,d	docido,bc
The Lizard	rrdf	dfrid	bccrr	cbc
Scilly (St. Mary's)	bcciro	odrdr	odrcirc	cpr bc
Pembroke	irororo	crrmo	cirq	irbcq
Holyhead	cqc	cmoo	rrRRc	moRc,b
Chester (Sealand)	bcc	ccmo	crr Rm	rromocbc
Manchester	c	cmof	ffmrr	rrcmo
Spurn Head	cq	coro	orrir	q oiR
Catterick	cpro bcc	ccmo	orrm	rrmcmo
Tynemouth	bcq	bcc	com	omirc
St. Abbs Head	crbcq	cq	cmo	cbcmo
Leuchars	crrmobc	bcb	bbcwbcx	bcxbx
Renfrew (Abbots L.)	cmodrocpro	*	f	cm,bxfg
Eskdalemuir	iroproc c	cpro	c	cbcbw cbcb
Tiree	bcpr	bc	bcpr	bc
Stornoway	crorprq	cprbbcq	bcphrqtl	bbcpr
Dalwhinnie	cprbc	cbc	*	cbc
Aberdeen	iro,b	b	b	bxzo
Wick	rrcbc	bcb	bbc	bc
Lerwick	cpr	cpr	cphrpr	cphr
Blacksod Point	c	c	bc	bc
Malin Head	bc	c	cbchprobc	c prbc
Aldergrove	cbcc	c	ccw	bcwbx
Birr Castle	c	c	cirb	bx
Valentia Obsy. †	c	c	crorocpro	bcphrqbc
Roches Point	c	rr	irc	cbcb

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/so, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
so/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. ro, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

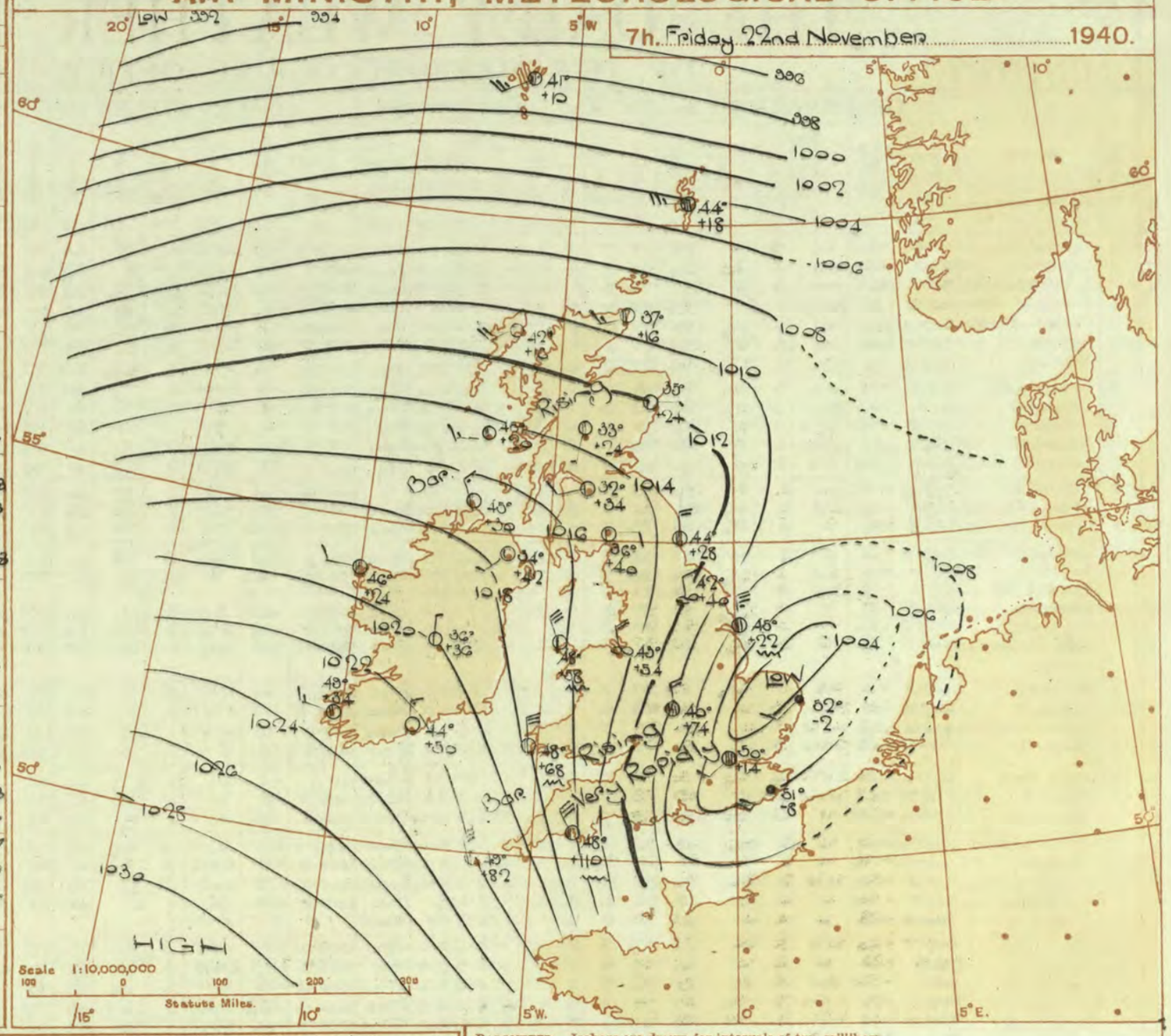
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Friday 22nd November 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 21st Nov.			18h. G.M.T.			01h. G.M.T. 22nd Nov.			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	33	82746	58587	80	01853	22583	30	00753	22503	80	25853	23583
115	85	81844	24585	52	88844	26587	86	88834	59685	87	81854	26585
203				8-	01953	24413				8-	01954	17514
206	3-	25964	28384	40	00862	22412	50	00852	22302	50	00861	25201
210	86	25954	22484	00	00990	22310	5-	01962	22314	54	00961	24300
220				30	01753	26303						
230	3-	81837	26487	8-	01853	16283	50	00861	00002	8-	25745	12185
245	20	14068	24713	00	00990	55312	00	01990	24214	00	00890	21312
260	80	01763	01762	00	05690	22213	07	08490	00024	05	08490	28113
277				01	02790	19127	07	02790	28228	24	00951	32101
279				--	05548	18228				50	05653	28413
285												
288	27	02862	22428	02	02790	20228	5-	62448	04268	51	61444	31268
273										10	01662	15102
301	27	05654	26428	52	03454	00028	02	64548	06368	53	05653	32364
321	51	05653	56427	52	62565	00028	02	64558	02368	02	62658	32368
299	5-	22648	22668	52	05545	20227	5-	64548	04468	5-	62638	02668
292	77	02953	22517	5-	02768	10128	62	64644	02368	51	22643	30468
310	--	02836	24426	--	03428	24428				--	22428	32568
316	57	02763	20427	02	62448	20168	62	66426	08368	51	62544	65568
333	52	02961	22828	52	64645	00068	62	64645	04468	20	01853	32463
334	--	03856	20128							--	02654	30315
340	5-	02887	20317	02	64568	00068	02	64538	04268	84	01744	32564
136				5-	05678	14268	62	22737	52568	62	62637	30488
336	53	03745	24428	62	64645	20468				14	01752	28464
350	57	05652	29428							6-	63638	61468
368												
379	57	61654	22467	5-	67208	06368	53	05653	20428	6-	62528	63668
390	5-	05656	24816	5-	57338	16258	83	51645	50557	52	52447	00058
382	57	02854	22327	62	52525	10358	80	81744	17484	5-	22748	63568
438	--	57209	22558							8-	14787	23567
430	6-	64527	22368				53	61644	49566	53	61745	28466
409	52	61638	16368	5-	62508	50768	57	51635	21467	5-	02844	63784

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Friday 22nd November, 1940.
1 S.E. England 2 E. England ...	Strong N. wind, gale on East Coast, moderating and backing W.; cloudy, rain near East Coast at first, becoming fine; rather cold.
3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Fresh or strong N.W. wind, moderating and backing W.; fair or fine, cloud increasing tomorrow; rather cold, becoming milder tomorrow.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands 17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate W. wind, backing S.W. and becoming strong, probably a gale during the night on N. and N.W. coasts; fair at first apart from scattered showers in the West and North, rain spreading east later; becoming milder.

GENERAL INFERENCE.

A depression over Eastern England is moving E.N.E. + filling up, & a pronounced wedge of high pressure is following, giving a fine interval. A trough of low pressure is expected to reach our N.W. coasts early tomorrow with rain and renewed gales in that area. A large anti-cyclone is developing off N.W. Spain and depressions will follow a more northerly track than of late, giving less rain in the South.

FURTHER OUTLOOK.

A pronounced westerly type, stormy at times in the North; unsettled, but less rain than of late in the South; mild generally.

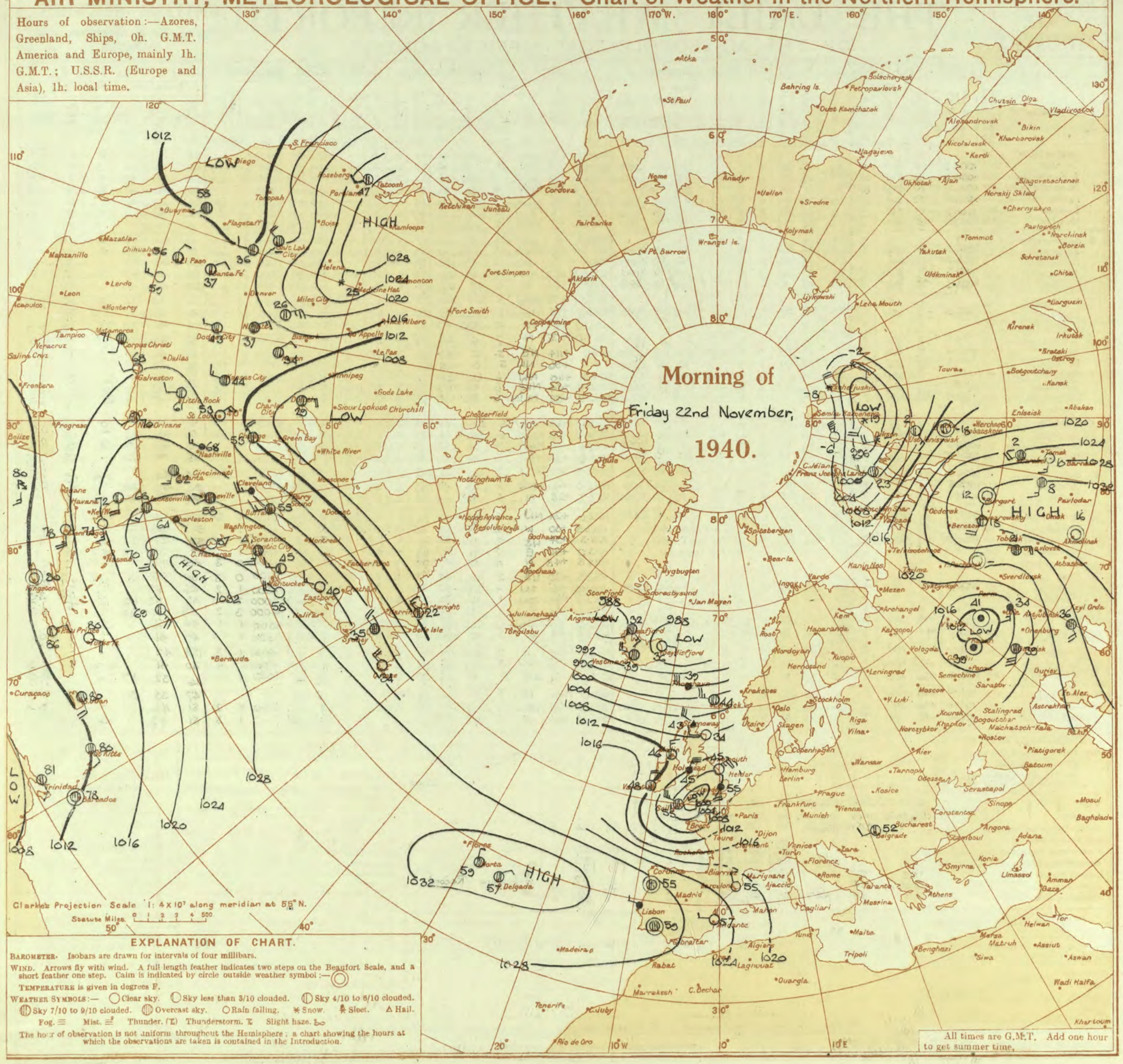
Warning of gales in operation in districts 1, 2, 5, 6, 7, 8, 12, 13, 16, 18 and 19. Times of issue 1420 and 1950 on 21/11 and 0215, 0900 and 1010 on 22/11.

Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 22nd November 1940.

No 28,855.

OBSERVATIONS at 1 hr. G.M.T. 22nd November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1004·9	-14	SSW	4	ir₀	55	85	5	5	-	-	9+	9+	800
	S. Farnborough	226	1004·3	-16	S'W	5	c/r	54	92	6	5	3	-	7-8	10	2000
	Boscombe Down	417	1002·8	-20	SSW	6	ir	51	92	7	9	-	-	7-8	7-8	1200
	Calshot (Sthmtn.)	8	1003·9	-22	SW	6	pr	55	92	6	2	2	-	4-6	10	2000
	Lympne	346	1008·7	-22	SW	5	o	55	92	7	5	-	-	10	10	800
	Manston	154	1007·5	-12	SSW	6	id₀	55	92	5	5	-	-	9+	9+	800
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1006·3	-12	SSW	5	d₀d₀	52	97	5	5	-	-	10	10	800
	Gorleston	5	1005·8	-12	S'W	5	r₀r₀	53	85	6	6	-	-	10	10	1500
	Mildenhall	19	1003·6	-6	SW'S	5	ir	57	85	7	5	2	-	7-8	10	2100
	Cranwell	240	1003·6	-22	ENE	3	r₀r₀	44	97	4	5	-	-	10	10	800
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1002·9	-2	SSW	4	ir₀	52	92	7	5	-	-	7-8	7-8	1800
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	998·5	-8	SW	4	c/r	51	85	8	5	-	-	9	9	1500
	Bristol	209	1001·4	-18	SSW	4	c	53	75	7	5	3	-	4-6	7-8	3000
	Portland Bill	32	1001·1	-32	SW	5	o	53	92	7	5	-	-	10	10	2500
	Plymouth	82	999·0	-40	SSW	5	id₀	52	97	5	6	-	1	9	9	200
	The Lizard	240	1000·5	-4	W	7	c	52	97	8	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	163	1000·7	+28	NW	7	c	51	97	7	5	2	-	7-8	9+	1200
	Guernsey	175														
6	Pembroke	142	998·2	0	N	7	ir	48	97	7	8	-	-	9+	9+	2000
7	Holyhead	26	1005·5	+32	NNE	7	rr	45	97	6	6	2	-	7-8	10	1200
	Chester (Sealand)	16	1004·3	+2	N	3	rr	43	92	5	6	2	-	9	10	1000
8	Manchester	70	1004·8	-4	NE	4	rr	42	85	6	6	2	-	4-6	10	1000
10	Spurn Head	29	1002·2	-24	NEN	5	o/r	45	92	7	5	-	-	10	10	1500
	Catterick	175	1006·5	-10	-	0	rr	42	97	4	-	2	-	10	10	900
	Tynemouth	108	1008·8	-8	NW	2	m	45	85	4	5	-	-	10	10	2000
11	St. Abbs Head	280	1007·5	0	WNW	3	c	43	85	6	5	2	-	7-8	10	2500
	Leuchars	36	1008·5	+14	SW	2	bc	39	85	7	-	7	-	0	4-6	-
12	Renfrew (Abbots I.)	19	1009·3	+14	WSW	2	m/f	36	97	4	-	1	-	0	10	-
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30														
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1005·7	+16	W	4	pr	41	85	7	3	-	-	4-6	4-6	2000
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1005·8	+18	SW	3	bc	40	85	8	5	4	8	1	2-3	2500
16	Lerwick	156	1001·7	+14	W	5	c/pr	44	75	8	8	7	-	4-6	7-8	1500
17	Blacksod Point	18	1013·2	+28	NW	2	bc	45	85	8	*	5	-	2-3	4-6	2500
18	Malin Head	84	1010·3	+22	NNW	3	bc	46	75	8	2	-	1	4-6	4-6	4000
	Aldergrove	268	1010·5	+26	N'W	2	c	39	92	7	-	7	-	0	9	-
19	Birr Castle	173	1011·4	+44	NNW	1	b	39	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1013·4	+66	N	4	bc	48	75	8	3	-	-	4-6	4-6	2500
	Roches Point	22	1010·8	+82	N	5	c	45	85	8	5	-	-	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 22nd November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1004·9	+24	NW	3	r₀r₀	51	92	6	5	-	-	9+	9+	1500	1	*
Croydon	1004·4	+14	SW	2	o/pr	50	97	6	5	-	-	10	10	600	1	*
S. Farnborough	1006·3	+38	WNW	2	r₀r₀	49	92	7	5	-	-	9+	9+	900	1	*
Boscombe Down	1009·4	+88	NNW	6	cq	43	85	6	6	-	-	10	10	800	1	*
Calshot (Sthmtn.)	1007·2	+56	NW'N	7	o/pr	48	85	6	5	-	-	10	10	1800	1	3
Lympne	1005·9	-8	SW	4	r₀r₀	51	97	6	6	2	-	9+	10	500	1	§
Manston	1005·1	+2	SW'S	5	id₀	51	92	5	6	7	-	7-8	10	400	*	*
Shoeburyness	1005·3	0	SW	2	c	50	97	6	5	-	-	9	9	1500	1	*
Felixstowe	1005·0	+6	SW'S	3	id₀	49	92	6	5	-	-	9+	9+	2500	1	2
Gorleston	1004·7	-2	SW'S	2	ir₀	52	85	6	6	-	-	9+	9+	1500	1	3
Mildenhall	1004·8	+22	NW	4	ir₀	50	97	6	6	2	-	4-6	10	800	1	*
Cranwell	1009·5	+54	N	6	rr	42	97	5	5	-	-	10	10	800	2	*
Birmingham	1012·5	+74	NNW	4	o/r	40	92	6	5	-	-	10	10	800	1	*
Upper Heyford	1009·2	+70	NE	6	id₀	42	85	6	6	2	-	9	10	900	1	*
Ross-on-Wye	1013·7	+92	N	4	bc	43	75	8	5	-	-	4-6	4-6	2500	1	*
Hartland Point	1017·0	+132	N	7	c	49	75	8	5	-	-	9	9	2000	1	4
Bristol	1013·1	+114	N'E	5	c	43	85	7	5	2	-	9	10	2000	1	*
Portland Bill	*	+96	NW	5	c	45	92	7	5	-	-	10	10	4000	1	4
Plymouth	1016·5	+110	NW	6	bc	48	75	7	5	-	-	2-3	2-3	1000	1	4
The Lizard	1020·4	+44	NW	6	bc	48	75	8	8	6	-	4-6	4-6	2500	1	4
Scilly (St. Mary's)	1021·2	+82	NW'N	6	bc	49	85	7	8	-	-	4-6	4-6	1500	1	3
Guernsey																
Pembroke	1018·1	+68	NNW	6	bcq	48	75	7	5	-	-	4-6	4-6	2500	1	4
Holyhead	1016·2	+58	NW'N	6	bc	48	85	8	2	3	-	2-3	2-3	2600	1	4
Chester (Sealand)	1014·1	+54	NW'N	4	z₀	43	85	6	5	3	-	4-6	7-8	4000	1	*
Manchester	1013·8	+58	NW	3	z₀	41	85	6	5	-	-	7-8	7-8	3000	2	*
Spurn Head	1005·8	+22	N'W	7	oq	45	92	7	6	-	-	10	10	1500	0	4
Catterick	1012·9	+40	NNW	2	z₀	42	85	6	5	7	-	7-8	9+	1500	1	*
Tynemouth	1012·7	+28	N	4	c	44	85	6	8	-	-	7-8	7-8	2000	1	2
St. Abbs Head	1012·0	+24	NW	3	bc	43	75	8	4	4	2	2-3	4-6	2500	0	2
Leuchars	1013·3	+30	W	2	b	38	85	8	-	3	-	0	1	-	1	*
Renfrew (Abbots I.)	1015·3	+34	W'S	2	z₀	32	92	6	5	-	-	Tr	Tr	3000	1	*
Eskdalemuir	1015·0	+40	E	2	b	36	85	7	5	-	-	1	1	4000	1	*
Point of Ayre	1015·8	+48	N	4	b	47	85	8	5	-	-	1	1	2500	0	3
Tiree	1013·5	+20	W'S	3	bc	45	85	8	8	-	-	2-3	2-3	2500	0	3
Stornoway	1009·9	+16	SW	4	bc/pr	42	85	7	3	-	-	4-6	4-6	2500	1	2
Dalwhinnie	1013·2	+24	SSW	1	bc	33	97	8	1	-	-	2-3	2-3	4000	3	*
Aberdeen	1012·6	+24	E	1	b	35	97	5	5	-	3	1	1	4000	3	2
Wick	1009·9	+16	WSW	3	bc	37	85	8	5	-	8	2-3	2-3	2500	1	1
Lerwick	1005·5	+18	W	5	c	44	65	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1018·9	+24	W	2	bc	46	65	8	3	6	-	1	2-3	4000	1	2
Malin Head	1016·0	+30	NW	3	bc	45	75	8	9	-	-	2-3	4-6	4000	1	4
Aldergrove	1018·0	+42	SW	1	b	34	97	8	2	-	-	Tr	Tr	2000	1	*
Birr Castle	1020·9	+36	N	1	b	36	92	8	-	-	-	0	0	-	1	*
Valentia Obsy.	1023·6	+34	WNW	3	bc	49	75	8	2	-	-	2-3	2-3	2500	1	2
Roches Point	1022·4	+50	N	3	b	44	85	8	-	-	-	0	0	-	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 21st Hrs. (36)
London (Kew)	59	50	48	5	4	2·4
Croydon	61	49	48	3	7	1·5
S. Farnborough	59	49	47	3	7	2·6
Boscombe Down	56	42	41	3	14	0·0
Calshot (Sthmtn.)	56	47	47	3	3	0·0
Lympne	55	50	48	2	5	0·0
Manston	*	*	*	*	*	*
Shoeburyness	60	50	43	2	0·5	3·1
Felixstowe	*	*	46	*	*	*
Gorleston	58	50	48	-	2	3·0
Mildenhall	58	50	47	Tr	7	2·5
Cranwell	55	42	42	1	28	1·3
Birmingham	54	38	36	5	32	0·0
Upper Heyford	55	41	41	0·5	14	*
Ross-on-Wye	54	41	39	9	12	0·2
Hartland Point	55	50	44	19	10	0·0
Bristol	55	42	40	3	11	1·0
Portland Bill	56	43	*		6	*
Plymouth	56	46	41	6	5	0·0
The Lizard	55	47	*	9	1	0·0
Scilly (St. Mary's)	55	47	*	10	4	0·0
Guernsey						
Pembroke	*	*	*	19	12	0·0
Holyhead	52	43	42	-	17	0·0
Chester (Sealand)	53	41	39	Tr	21	0·2
Manchester	53	*	36	-	18	0·0
Spurn Head	54	43	*	0·4	16	0·7
Catterick	51	41	39	Tr	12	2·6
Tynemouth	(50)	43	40	-	1	*
St. Abbs Head	54	43	*	1	-	*
Leuchars	51	35	29	0·1	-	5·3
Renfrew (Abbots I.)	52	31	25	2	0·1	3·2
Eskdalemuir	47	35	29	0·2	Tr	*
Point of Ayre	49	42	*		-	0·0
Tiree	50	42	*	0·3	0·1	4·5
Stornoway	48	39	*	1	0·4	3·5
Dalwhinnie	42	27	18	7	Tr	1·2
Aberdeen	48	31	24	1	-	5·0
Wick	46	36	*	3	-	*
Lerwick	47	41	*	1	1	0·1
Blacksod Point	(51)	42	*	-	-	*
Malin Head	50	41	*	0·4	2	4·9
Aldergrove	46	32	27	-	-	0·0
Birr Castle	47	35	30		3	0·0
Valentia Obsy.	51	46	37	-	1	0·0
Roches Point	51	43	*	6	12	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
		24 hrs. ended 9h.											
Kew	18	cd₀r₀c	ir₀Ddd	cid₀,rr₀	59	50	48	5	4	2·4	*	*	7
Croydon	217	dd,pr₀bc	or₀r₀	cm₀r₀pr₀	61	49	48	3	7	1·5	*	*	6
Greenwich (Royal Observatory)	149	c	cr₀rm	cid₀rr	61	44	43	4	5	2·0	91	86	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	60	46	45	7			91	90	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	59	46	42	4	2		91	92	*
Camden Square	110	bc	c	*	60	45	44	4	2	*	*	82	*
Kensington	80	bcpc	cr	*	60	46	44	3	4		97	91	*
Hampstead Observatory	450	bc	or	oro	58	41	40	1	7		*	98	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 22nd

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
Defective		Record.	

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

Objects not visible at
0 Dense fog 55 yards.
1 Thick fog 220 „
2 Fog 550 „
3 Moderate fog 1,100 „
4 Mist or haze 1¼ miles.
5 Poor visibility 2½ „
6 Moderate „ 6¼ „
7 Good „ 12½ „
8 Very good „ 31 „
9 Excellent „ beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

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AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION.
Saturday 23rd November, 1940.
No. 28,856.

OBSERVATIONS at 13h. G.M.T. 22nd November.

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1022.0	+40	NW'N	4	b	49	65	7	1	–	1	1	2-3	2500
	Croydon	1020.5	+54	NW	4	z_0	49	65	6	1	–	–	2-3	2-3	2000
	S. Farnborough	1022.7	+58	WNW	4	b	50	65	7	–	–	–	0	0	–
	Boscombe Down	1024.1	+50	NW'N	5	b	49	65	8	1	–	–	Tr	Tr	2000
	Calshot (Soton.)	1023.1	+54	NNW	5	b	51	65	8	1	–	–	Tr	Tr	3000
	Lympne	1018.5	+70	NNW	6	c/pr	46	85	8	5	–	–	9	9	900
	Manston	1018.9	+82	NW'W	6	c/pr	47	85	7	8	–	–	9+	9+	700
2	Shoeburyness	1019.8	+80	NW'N	4	bc	48	85	8	5	–	–	7-8	7-8	1500
	Felixstowe	1018.0	+82	NNW	4	c	48	75	7	5	2	–	9+	9+	2000
	Gorleston	1016.6	+76	NNW	6	bc	47	85	7	2	–	–	4-6	4-6	2200
	Mildenhall	1019.2	+60	NW'N	5	bc	48	85	7	8	–	–	2-3	2-3	2500
	Cranwell	1021.3	+54	NNW	5	z_0	49	65	6	–	–	–	0	0	–
3	Birmingham	1023.3	+40	NW	4	b	47	65	6	–	–	–	0	0	–
	Upper Heyford	1022.5	+46	NW	4	z_0	47	75	6	–	–	–	0	0	–
4	Ross-on-Wye	1024.3	+34	NW	4	bc	50	65	8	1	–	–	1	1	4000
5	Hartland Point	1026.8	+32	NNW	3	bc	49	75	8	1	–	–	2-3	2-3	2500
	Bristol	1025.2	+42	NW	4	b	50	75	8	1	–	–	Tr	Tr	2200
	Portland Bill														
	Plymouth	1027.5	+34	NNW	4	bc	52	55	8	2	–	–	4-6	4-6	2200
	The Lizard	1028.5	+30	NW	4	bc	51	75	8	2	–	–	4-6	4-6	3000
	Scilly (St. Mary's)	1028.9	+20	WNW	3	bc	54	75	8	1	–	–	2-3	2-3	2500
	Guernsey														
6	Pembroke	1027.0	+30	NW'W	4	bc	50	75	8	2	–	–	2-3	2-3	3000
7	Holyhead	1024.3	+30	W'N	4	bc	51	75	8	2	–	–	Tr	Tr	2800
	Chester (Sealand)	1023.6	+38	WNW	4	bc	50	75	8	1	–	–	2-3	2-3	2500
8	Manchester	1023.0	+38	WNW	4	bc	48	65	7	–	–	–	0	0	–
10	Spurn Head	1018.7	+38	NE	6	bc	47	85	7	–	3	1	0	4-6	–
	Catterick	1021.1	+34	NNW	3	b	48	55	8	–	–	–	0	0	–
	Tynemouth	1020.3	+20	WNW	3	bc	47	65	6	–	4	–	0	2-3	–
11	St. Abbs Head	1018.6	+26	NW	4	bc	46	88	8	4	4	–	1	2-3	2500
	Leuchars	1018.0	+12	WSW	3	z_0	46	75	6	–	–	1	0	Tr	–
12	Renfrew (Abbots I.)	1019.5	+10	SW'W	3	bc	49	75	8	2	3	–	7-8	7-8	2500
	Eskdalemuir	1020.7	+26	WNW	2	b	44	75	8	1	–	–	2-3	2-3	4000
	Point of Ayre	1022.4	+22	W'N	5	b	50	75	8	1	–	–	Tr	Tr	2500
13A	Tiree	1015.8	+2	SW	6	c	49	85	7	5	–	–	9	9	2100
13B	Stornoway	1009.7	-16	SW'S	7	c/pr	49	75	8	8	7	–	7-8	9+	2000
15	Dalwhinnie	1018.2	+16	SSW	3	bc	42	75	8	1	–	–	2-3	2-3	2500
	Aberdeen	1016.8	+12	S'E	2	b	46	75	6	–	–	1	0	Tr	–
	Wick	1013.0	+6	SW	4	bc	49	75	8	4	5	–	1	2-3	2500
16	Lerwick	1009.3	+12	SW	5	c	47	65	8	8	7	–	4-6	7-8	800
17	Blacksod Point	1020.1	+4	SW	5	bc	51	75	8	3	6	–	2-3	7-8	2500
18	Malin Head	1018.5	+8	SW'S	4	c	49	75	8	5	–	4	4-6	7-8	5700
	Aldergrove	1022.1	+14	SSW	3	b	46	75	7	–	4	–	0	Tr	–
19	Birr Castle	1025.1	+16	SW	2	b	50	75	8	–	–	–	0	0	–
20	Valentia Obsy. †	1026.4	+6	SW	5	bc	52	75	9	2	–	1	4-6	4-6	2500
	Roches Point	1026.8	+10	WNW	3	bc	50	75	8	3	–	1	2-3	2-3	2500

OBSERVATIONS at 18h. G.M.T. 22nd November.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1028.7	+34	SW	2	z_0	45	75	5	–	–	–	0	0	–	1	*
Croydon	1028.0	+34	–	0	bf_0+	44	85	3	–	–	–	0	0	–	1	*
S. Farnborough	1028.9	+26	W'N	3	z_0	42	75	6	–	–	–	0	0	–	1	*
Boscombe Down	1029.1	+22	NW'W	3	z_0	43	75	6	–	–	–	0	0	–	0	*
Calshot (Soton.)	1029.2	+32	WNW	2	z_0	45	85	6	–	–	–	0	0	–	1	1
Lympne	1027.3	+64	NNW	3	z_0	41	92	5	–	–	–	0	0	–	1	§
Manston	1027.2	+42	NW'W	4	z_0	46	85	6	–	–	–	0	0	–	*	*
Shoeburyness	1027.7	+42	NW	2	b	44	85	6	–	–	–	0	0	–	1	*
Felixstowe	1026.5	+48	NW	4	z_0	46	85	5	–	–	–	0	0	–	1	2
Gorleston	1025.0	+44	NW'N	3	b	46	75	6	–	–	–	0	0	–	1	3
Mildenhall	1026.7	+36	SW'W	2	z_0	42	85	6	–	–	–	0	0	–	1	*
Cranwell	1027.2	+34	WNW	3	z_0	39	85	5	–	–	–	0	0	–	1	*
Birmingham	1027.9	+24	WNW	2	m	43	75	8	–	–	–	0	0	–	1	*
Upper Heyford	1028.3	+32	W'N	2	b	43	75	7	–	–	–	0	0	–	1	*
Ross-on-Wye	1028.3	+20	SW	2	bc	43	75	8	5	–	–	Tr	Tr	2500	1	*
Hartland Point	1029.6	+14	NW	3	bc	49	75	8	7	–	–	2-3	2-3	2500	1	3
Bristol	1030.1	+14	WSW	2	z_0	42	85	6	–	–	–	0	0	–	1	*
Portland Bill	1029.8	+30	NW	4	bc	52	85	8	5	–	–	4-6	4-6	4000	1	4
Plymouth	1031.1	+22	W	1	m	45	85	4	1	–	1	Tr	Tr	2500	0	2
The Lizard	1030.6	+10	W'N	4	bc	49	85	8	8	6	–	4-6	4-6	2500	1	2
Scilly (St. Mary's)	1030.5	+8	SW'W	3	b	49	85	8	8	–	–	1	1	2500	1	2
Guernsey																
Pembroke	1027.8	+8	WSW	4	bc	51	75	8	5	5	–	4-6	4-6	3000	1	3
Holyhead	1025.8	+4	SW'W	4	bc	48	75	8	2	–	–	1	1	2600	1	2
Chester (Sealand)	1026.9	+16	SW'S	2	b	42	75	5	–	–	–	0	0	–	1	*
Manchester	1026.8	+22	SSW	2	m	40	85	4	–	–	–	0	0	–	1	*
Spurn Head	1025.1	+20	W'S	4	b	44	75	7	–	–	–	0	0	–	1	3
Catterick	1024.9	+24	S	1	b	41	85	7	–	–	–	0	0	–	1	
Tynemouth	1024.3	+10	SW	3	z_0	44	75	5	–	4	–	0	2-3	–	1	2
St. Abbs Head	1020.0	0	WSW	4	bc	43	65	8	4	5	–	2-3	4-6	2500	0	2
Leuchars	1019.1	+4	WSW	4	z_0	43	85	6	–	4	5	0	4-6	–	1	*
Renfrew (Abbots I.)	1020.8	+2	SW'S	3	z_0	46	85	6	5	–	–	4-6	4-6	3000	1	*
Eskdalemuir	1022.9	+6	SW'S	2	bc	37	88	8	5	4	–	Tr	2-3	2500	1	*
Point of Ayre	1023.9	+8	W'S	4	bc	44	92	8	4	–	–	2-3	2-3	2500	0	2
Tiree	1014.5	-2	SW'S	7	o	50	92	7	5	–	–	10	10	1500	0	5
Stornoway	1008.7	-4	SSW	8	rr	51	85	6	5	2	–	9	10	1000	1	3
Dalwhinnie	1017.4	-4	SE	4	o	41	85	7	5	2	–	9	10	1500	0	*
Aberdeen	1017.0	-4	S	2	bc	42	85	4	–	7	3	0	4-6	–	1	2
Wick	1011.4	-8	SW	6	cq	46	75	7	5	2	–	7-8	10	1500	1	2
Lerwick	1007.1	-12	SSW	6	ir_0	46	75	6	5	2	–	7-8	10	2500	1	*
Blacksod Point	1018.7	-14	SSW	6	cq	52	85	7	9	–	–	10	10	800	1	4
Malin Head	1017.6	-8	SW'S	5	c	48	75	8	9	–	–	7-8	7-8	4000	0	4
Aldergrove	1022.1	-2	S	4	bc	44	85	7	5	–	1	4-6	4-6	4500	1	*
Birr Castle	1025.1	+2	SW	1	bc	46	85	8	–	4	–	0	2-3	–	1	
Valentia Obsy. †	1025.6	-2	SW'S	5	c	51	85	8	5	1	3	1	7-8	1500	0	3
Roches Point	1027.0	+2	WSW	3	bc	49	85	8	5	7	5	2-3	4-6	2500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 22nd. (37)	13h.—18h. 22nd (38)	18h. 22nd to 1h. 23rd (39)	1h.—7h. 23rd. (40)
London (Kew)	$r_0rm_0d_0bcb$	bz_0	bmwx	bbcrrx
Croydon	ir_0bcz_0	bm_0bf	$bfbm_0x$	bcm_0x⊕
S. Farnborough	cr_0b	bz_0	bz_0wmx	$bmxcm_0$
Boscombe Down	cm_0bcb	bbz_0		bm_0cm_0jf
Calshot (Soton.)	bc	bbm_0	bm_0w	
Lympne	$r_0r_0cpr_0$	bz_0	bm_0m	bmwxw
Manston	$d_0r_0r_0pr_0q$	cqc,bm_0	bm_0	$bmwm_0$
Shoeburyness	m_0ir_0bc	$bccbm_0$	bm_0w	bxm_0
Felixstowe	cir_0id_0c	$cbbm_0$	bm_0w	bm_0wbcm
Gorleston	cir_0bcq	$bcpr_0qb$	bz_0	bxbc
Mildenhall	cr_0r_0cbc	$bcbm_0$	bm_0	bm_0cm_0w
Cranwell	rrm_0,bm_0	bz_0	bm_0	$bbccm_0$
Birmingham	cb	bm	b	bwc
Upper Heyford	cd_0bcbm_0	bm_0b	bbm_0	$bccm_0$
Ross-on-Wye	bcbb	bb	b	bbcc
Hartland Point	cbc	bc	bc	bcp_0c
Bristol	b	bbm_0	bm_0bxw	bbccw
Portland Bill		bcbc	bbc	bcc
Plymouth	b,cbcy	bcybm	$bmbcm_0$	bcm_0pr_0,c
The Lizard	bc	bc	bc	bcc
Scilly (St. Mary's)	bcb	b	bccw	$bccpr_0$
Guernsey				
Pembroke	qbc	bcv	bcc	c
Holyhead	bbcb	b	bbcc	c
Chester (Sealand)	*	$bbcbz_0$	$bbcm_0$	$bccm_0$
Manchester	bcm_0b	bz_0m_0m	mbm_0	bcm_0cm_0
Spurn Head	cbc	bcb	b	c
Catterick	bcby	byb	$bwbm_0w$	$bcwcm_0$
Tynemouth	cbc	bc	bc	bcc
St. Abbs Head	bc	bc	bccq	cq
Leuchars	$bxbcbm_0$	$bbcm_0$	bcm_0c	$cqcir_0$
Renfrew (Abbots I.)	bm_0f_0gb	bcz_0	$bccm_0$	$crmrr Rir_0$
Eskdalemuir	bxw	b	c	$coir_0$
Point of Ayre	b	bbc	bcc	c
Tiree	bcc	c		cir
Stornoway	$bccpr_0$	crr	cRR [gale]	cRRbc
Dalwhinnie	bc	bcco	*	qirbc [gale]
Aberdeen	bf_0b	bbcz	bczbc	bc
Wick	bc	bccq	cbccq	rrcbc
Lerwick	cphrc	$cprir_0$	cir_0rr [gale]	
Blacksod Point	bc	cq	pgcq [gale]	bcc
Malin Head	bc	c		c
Aldergrove	bxb	bbc	bcc	$ir_0ir r_0r_0$
Birr Castle	bcb	bc	c	orr
Valentia Obsy. †	$bcpr_0bc$	bcc	$bccir_0c$	$cRr_0r_0rr_0c$
Roches Point	bbc	bc	bcc	cir_0

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain.
rr, continuous rain.
<, less than (for cloud height). gale.
⊕ Solar halo. ⊕ lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

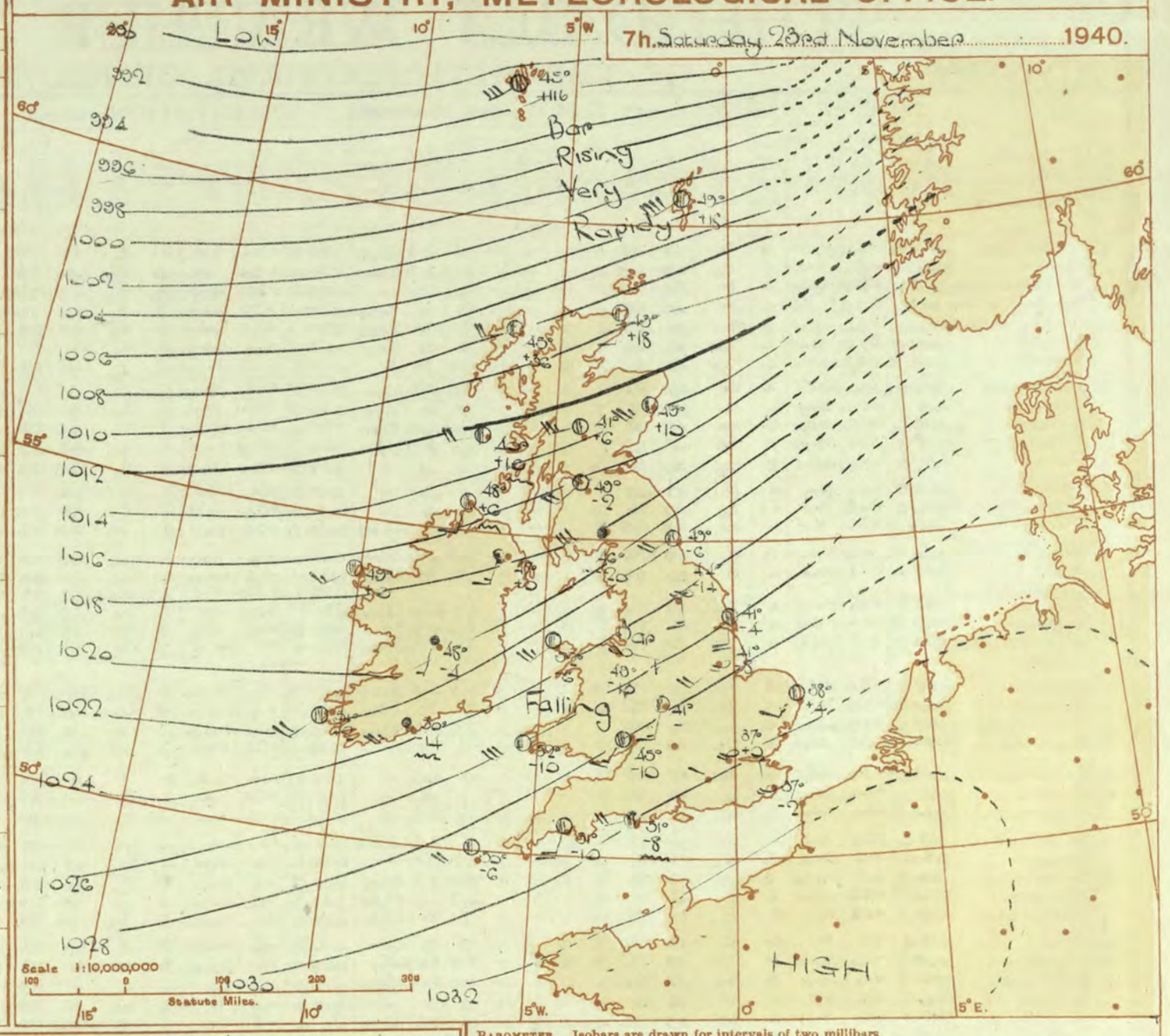
Note.—The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

13h. G.M.T. 22nd Nov.			18h. G.M.T.			01h. G.M.T. 23rd Nov.			07h. G.M.T.		
IIIC$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN
10985	01803	-----	52	02754	51525	5-	02857	18627	5-	01764	22564
115						52	51734	53987	52	31744	57785
203						5-	64738	51868			
2067+	01861	22141	5-	01864	51524	5-	01755	53525	52	01852	22463
21004	00890	21403	57	01864	19625	5-	01955	53715	51	01863	51614
220			62	03645	21528						
2308-	01850	53515	57	02754	53827	52	22747	18668	5-	65647	19567
24510	00961	20302	01	05590	51526	51	01763	55714	51	01754	53525
26000	00790	22300	03	00890	20412	50	01864	53514	52	65656	20468
277			54	01862	19513	02	01790	17628	52	62657	18668
279			--	05690	20303	--	01765	20515			
28570	00852	30552	40	00851	32401				9-	02747	18487
28800	00790	26311	00	00790	19200	54	05663	20403	57	05664	18428
273									30	01662	16482
30126	00752	28203	20	00751	25201	51	05663	18314	52	05653	14328
32100	17590	28360	00	17590	25200						
29950	05543	28+13	00	00790	24300				57	05555	22327
29900	00830	20301	00	00790	00000	00	05690	18203	07	05690	18226
310											
31600	05590	30310	00	08490	22100	00	00590	22202	07	01590	22314
33320	00861	28401	40	00863	24203	51	02754	19415	51	02754	20568
334--	01861	30101							--	03558	22328
34020	01853	28+18	00	00890	00000	00	00790	14302	57	05653	16327
136			00	01690	26200				04	05690	18315
33614	01852	32+14	10	01862	04502						
35000	05690	2+310							02	02790	18327
368											
37910	00751	28401	00	05690	26100	00	05690	24202	03	05690	22304
39046	05654	61524				00	08490	24200	01	45290	22348
38200	00790	28400	00	05690	00000	00	05590	00000	04	01790	00015
4388-	02757	32227							51	01763	24115
43010	00851	28501	00	05690	28100	00	05590	00000	53	08442	30116
40910	01844	61314	10	01743	24113	00	00790	17302	57	02854	16327

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
C$_L$C$_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Saturday 23rd November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Moderate S.W. wind; mainly cloudy, occasional slight rain; milder.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Moderate or fresh S.W. wind, strong locally on coast; cloudy, occasional rain; mild
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. / B.N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland	Moderate or fresh S.W. wind, strong later, with gale in places; fair at first apart from scattered showers, some rain later; mild
16 Orkneys and Shetlands	Strong S.W. wind, gale at times; cloudy, occasional rain; mild.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 11-15.

GENERAL INFERENCE.

Pressure is high from the Azores to Central Europe and low over Iceland. Further disturbances will move northeastward off our N.W. Coasts. Weather will be mild and unsettled, but rainfall will be slight in the Southeast.

FURTHER OUTLOOK.

Mild and unsettled, but little rain in the Southeast.

▼ Gale warning in operation in district 16. Time of issue 1010 22/11

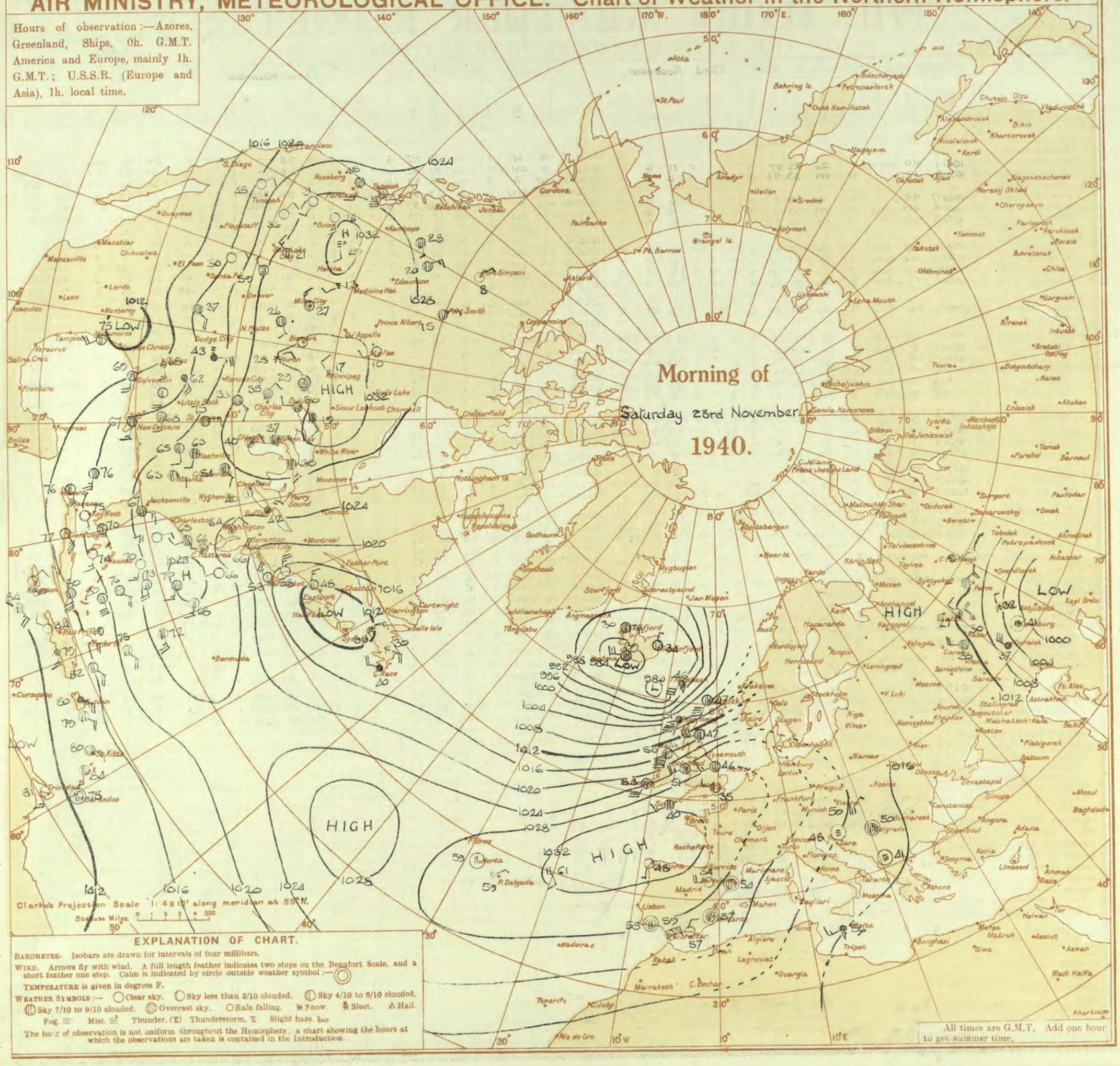
Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 23rd November 1940.

No 28,856.

OBSERVATIONS at 1 hr. G.M.T. 23rd November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1031·1	+10	WNW	1	zo	35	97	6	–	–	–	0	Tr	–
	S. Farnborough	226	1031·9	+2	–	0	m	33	92	4	–	–	–	0	0	–
	Boscombe Down	417														
	Calshot (Sthmtn.)	8	1030·7	+4	–	0	zo	38	97	6	–	–	–	0	0	–
	Lympne ...	346	1031·4	+4	WSW	1	m	35	97	4	–	–	–	0	0	–
	Manston ...	154	1031·2	+10	W	2	m	38	92	4	–	–	–	0	0	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1030·6	+10	WSW	1	zo	40	92	5	–	–	–	0	0	–
	Gorleston ...	5	1029·3	+12	WSW	2	b	39	85	6	–	–	–	0	0	–
	Mildenhall ...	19	1029·9	+6	SSW	3	zo	37	85	6	–	–	–	0	0	–
	Cranwell ...	240	1028·8	+2	SW	3	zo	39	85	5	–	–	–	0	0	–
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1031·1	+6	SW'S	2	zo	34	97	6	–	–	1	0	Tr	–
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1029·2	–8	WSW	4	bc	49	85	8	2	4	–	2-3	2-3	2000
	Bristol ...	209	1030·6	0	SSW	3	b	43	85	7	–	4	–	0	Tr	–
	Portland Bill ...	32	1031·7	+4	W	3	bc	50	92	8	5	–	–	4-6	4-6	4000
	Plymouth ...	82	1031·6	–2	SW	2	zo	38	92	5	5	–	–	4-6	4-6	2500
	The Lizard ...	240	1030·8	–4	SW	5	bc	50	85	8	8	–	–	4-6	4-6	2500
	Scilly (St. Mary's)	163	1030·0	–8	SW'S	3	bc	50	92	8	5	–	3	Tr	2-3	1800
	Guernsey ...	175														
6	Pembroke ...	142	1028·4	0	SW	6	c	52	97	8	8	2	–	4-6	7-8	2500
7	Holyhead ...	26	1025·0	–6	SW	5	c	51	85	8	5	1	–	2-3	9	2500
	Chester (Sealand)	16	1026·8	–8	SE	3	zo	41	85	6	5	7	–	2-3	7-8	2500
8	Manchester ...	70	1027·1	–6	S'W	3	zo	38	85	6	–	4	5	0	2-3	–
10	Spurn Head ...	29	1027·8	+2	S'W	3	b	38	92	7	–	–	–	0	0	–
	Catterick ...	175	1024·9	–6	S	3	zo	44	85	6	5	–	–	2-3	2-3	4000
	Tynemouth ...	108	1023·3	–10	SW	3	bc	46	75	6	–	4	–	0	2-3	–
11	St. Abbs Head	280	1017·7	–16	W	5	cq	47	65	8	5	4	–	4-6	9	2500
	Leuchars ...	36	1017·6	–8	SW	6	c	47	85	7	5	7	–	7-8	9+	1600
12	Renfrew (Abbots I.)	19	1018·8	–10	SW'S	5	zo	49	85	6	5	–	–	10	10	2300
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1022·6	–10	WSW	5	c	49	85	8	5	1	–	4-6	9+	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1002·6	–36	SSW	9	RR	51	85	6	5	2	–	7-8	10	1200
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1008·3	–8	SW	5	cq	49	85	7	5	7	–	7-8	9+	1500
16	Lerwick ...	156	1004·0	–4	SSW	8	c	47	85	6	5	2	–	7-8	10	800
17	Blacksod Point	18	1015·3	–6	SW	8	Pr	52	85	7	9	–	–	10	10	800
18	Malin Head ...	84	1013·5	–26	SSW	8	c	50	85	6	8	–	–	7-8	7-8	2500
	Aldergrove ...	268	1020·0	–8	SSW	4	c	46	85	8	5	–	–	10	10	2000
19	Birr Castle ...	173	1022·4	–10	SSW	3	c	48	85	8	5	–	–	10	10	1500
20	Valentia Obsy.	30	1022·8	–14	SW'S	6	c/r	53	85	8	5	2	–	4-6	10	2500
	Roches Point	22	1023·4	–10	SW	5	c	51	92	8	5	–	–	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 23rd November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1030·7	–4	W	1	zo	35	97	5	–	7	6	0	7-8	–	1	*
Croydon ...	1030·7	0	SW	2	zo	37	92	6	–	4	6	0	7-8	–	1	*
S. Farnborough	1030·6	–10	S	3	zo	38	97	6	–	3	6	0	9	–	1	*
Boscombe Down	1030·0	–12	SSW	3	cjf	37	97	6	2	–	2	1	9+	3000	1	*
Calshot (Sthmtn.)	1030·4	–6	S	2	zo	46	97	5	2	3	6	1	9+	2500	1	1
Lympne ...	1031·1	–2	SW	2	zo	37	85	6	*	–	8	0	7-8	–	1	2
Manston ...	1031·1	–2	SW'S	3	zo	36	92	5	–	3	1	0	Tr	–	*	*
Shoeburyness ...	1030·8	–2	SW	2	bc	39	92	5	–	–	1	0	2-3	–	1	*
Felixstowe ...	1030·5	+2	WSW	2	m	39	92	4	–	4	1	0	2-3	–	1	2
Gorleston ...	1029·6	+4	SW	2	bc	38	85	6	–	–	8	0	2-3	–	1	2
Mildenhall ...	1029·3	–6	SSW	3	zo	40	85	6	–	3	7	0	9+	–	1	*
Cranwell ...	1027·3	–8	SW	4	zo	41	85	5	5	7	–	4-6	9+	2000	1	*
Birmingham ...	1027·2	*	SSW	3	c	41	97	6	5	–	7	2-3	10	1500	1	*
Upper Heyford	1029·5	–8	SSW	1	zo	35	97	5	–	7	6	0	9+	–	1	*
Ross-on-Wye	1027·9	–10	SW	3	c	45	92	7	5	–	7	4-6	9	1500	1	*
Hartland Point	1026·5	–14	WSW	5	c	50	92		8	2	–	4-6	9	1500	1	3
Bristol ...	1029·1	–6	S'W	4	c	43	92	7	–	1	8	0	9+	–	1	*
Portland Bill ...	1030·2	–8	WSW	4	o	51	92	8	5	–	–	10	10	4000	1	4
Plymouth ...	1029·8	–10	S'W	4	c	51	85	6	2	4	6	2-3	9	2500	1	2
The Lizard ...	1028·9	–10	SW	4	c	50	92	7	8	–	–	7-8	7-8	2000	1	3
Scilly (St. Mary's)	1028·1	–6	SW	4	c	50	85	8	8	7	3	2-3	7-8	1500	1	2
Pembroke ...	1026·0	–10	SW	6	c	52	97	8	8	2	–	4-6	7-8	2500	1	3
Holyhead ...	1022·9	–6	SW'S	5	c	52	85	8	5	2	–	9	10	2000	1	3
Chester (Sealand)	1024·6	–10	ESE	2	zo	49	75	6	5	2	–	7-8	10	3000	1	*
Manchester ...	1025·3	–10	SSE	3	zo	43	85	5	5	1	–	4-6	9+	2200	1	*
Spurn Head ...	1025·5	–4	S'E	4	c	41	92	7	4	1	–	4-6	9	4000	0	3
Catterick ...	1022·6	–14	SSE	3	zo	44	85	6	5	7	6	4-6	7-8	3000	1	*
Tynemouth ...	1021·6	–6	SW	4	c	49	85	6	5	–	–	7-8	7-8	2500	1	2
St. Abbs Head	1016·8	+2	SW	6	cq	48	85	7	5	2	–	7-8	10	2500	0	3
Leuchars ...	1014·9	+2	WSW	5	iro	48	92	8	5	7	–	7-8	9	1800	1	*
Renfrew (Abbots I.)	1016·0	–2	SW'S	4	c/r	49	92	6	5	2	–	4-6	10	1600	1	*
Eskdalemuir ...	1018·1	–20	WSW	6	iro	46	92	6	–	2	–	10	10	450	1	*
Point of Ayre ...	1019·9	–12	SW'W	5	c	51	85	8	5	1	–	4-6	10	2500	0	3
Tiree ...	1012·0	+10	WSW	4	c	48	85	7	5	–	–	9+	9+	1800	0	4
Stornoway ...	1008·5	+36	WSW	4	c	45	85	7	5	–	6	2-3	2-3	1500	1	2
Dalwhinnie ...	1013·5	+6	WSW	5	bc	41	85	7	5	–	–	4-6	4-6	2500	1	*
Aberdeen ...	1013·1	+10	SW	5	bc	49	85	8	5	7	–	4-6	4-6	4000	1	2
Wick ...	1008·7	+18	SSW	2	bc	43	85	8	5	4	1	1	2-3	2500	1	1
Lerwick ...	1003·5	+18	SW	8	c	49	75	7	8	7	–	4-6	7-8	800	1	*
Blacksod Point	1016·1	0	SW	3	c	49	85	8	5	5	–	4-6	9	1500	1	3
Malin Head ...	1014·6	+6	SSW	2	c	48	85	6	6	2	–	2-3	9	1500	1	5
Aldergrove ...	1017·9	0	SSW	3	ir	47	92	6	–	2	–	10	10	4500	1	*
Birr Castle ...	1019·8	–4	SSW	1	rr	48	85	7	5	2	–	10	10	1500	1	*
Valentia Obsy.	1020·6	+2	SW'S	4	c/r	51	97	8	6	1	–	9	9+	800	1	2
Roches Point	1022·5	–14	SW	5	iro	50	97	7	6	2	–	7-8	9+	1500	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 22nd Hrs. (36)
London (Kew)	51	34	19	0·6	Tr	3·4
Croydon ...	51	34	32	0·1	–	2·0
S. Farnborough	50	31	23	0·1	Tr	4·4
Boscombe Down	49	32	27	–	0·1	6·7
Calshot (Sthmtn.)	51	36	29	–	–	6·1
Lympne ...	52	33	24	1	–	1·8
Manston ...	*	*	*	*	*	*
Shoeburyness ...	51	37	23	Tr	–	1·5
Felixstowe ...	*	*	*	*	–	*
Gorleston ...	52	36	30	2	–	1·2
Mildenhall ...	51	35	27	2	Tr	2·5
Cranwell ...	49	37	35	2	–	5·3
Birmingham ...	48	37	32	–	–	5·4
Upper Heyford	49	33	22	0·1	–	*
Ross-on-Wye	50	36	28	–	–	7·3
Hartland Point	51	47	43	–	Tr	6·5
Bristol ...	51	39	26	–	–	7·5
Portland Bill ...	52	48	*	–	–	*
Plymouth ...	53	36	36	–	0·3	6·4
The Lizard ...	55	48	*	–	–	7·3
Scilly (St. Mary's)	54	48	*	–	0·1	7·4
Pembroke ...	52	50	*	–	–	6·8
Holyhead ...	51	47	44	–	–	6·6
Chester (Sealand)	50	38	27	–	–	7·1
Manchester ...	48	36	30	–	–	6·4
Spurn Head ...	47	38	*	1	Tr	3·9
Catterick ...	48	40	23	–	–	6·3
Tynemouth ...	48	40	36	–	–	*
St. Abbs Head	47	42	*	–	–	*
Leuchars ...	46	42	38	–	Tr	5·3
Renfrew (Abbots I.)	50	45	41	0·1	7	4·5
Eskdalemuir ...	46	35	30	–	–	5·6
Point of Ayre ...	50	43	*	–	–	6·5
Tiree ...	50	48	*	–	1	2·7
Stornoway ...	51	38	*	1	6	1·7
Dalwhinnie ...	43	38	37	–	5	4·4
Aberdeen ...	46	41	39	–	–	5·6
Wick ...	47	42	*	–	1	*
Lerwick ...	*	*	*	1	2	2·6
Blacksod Point	55	49	*	–	0·5	*
Malin Head ...	49	45	*	–	1	4·3
Aldergrove ...	47	42	37	–	3	6·2
Birr Castle ...	51	44	40	–	2	5·2
Valentia Obsy.	53	49	47	Tr	7	4·5
Roches Point	52	48	*	–	0·4	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h. other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather Morning. (24 hrs. ended 9h.)	Weather Afternoon.	Weather Night.	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day. mm.	Rainfall Night. mm.	Sunshine to Sunset. hrs. (Yesterday.)	Humidity 15h. G.M.T. % (Yesterday.)	Humidity 9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew ...	18	ro mdo	bzo	bbcmx	51	34	19	0·6	Tr	3·4	*	*	5
Croydon ...	217	iro bczo	bmo bf	bcmox⊕	51	34	32	0·1	–	2·0	*	*	6
Greenwich (Royal Observatory) ...	149	c	cbmo	bxm⊕c⊕	49	32	22	–	Tr	2·3	65	93	4
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	50	34	31	Tr			75	93	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	50	35	22	–	–		79	91	*
Camden Square ...	110	c	b	*	50	34	32	–	–	*	*	91	*
Kensington ...	80	cbc	bc	*	51	34	25	–	–		79	98	*
Hampstead Observatory ...	450	o	bc.	bc	49	35	29	–	–		*	97	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 23rd

South Kensington.

Max.	Time.	Min.	Time.

Kew Observatory.

Max.	Time.	Min.	Time.
Defective Record			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...											*	*		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is given in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6½ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 24th November 1940.

No. 28857

OBSERVATIONS at 13h. G.M.T. 23rd November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1029.1	-12	SW	4	zo	49	85	6	5	3	8	2-3	9+	4000
	Croydon	1029.4	-14	S'W	2	zo	48	85	6	-	7	-	0	9+	-
	S. Farnborough	1029.6	-12	SSW	5	c	49	88	8	5	7	8	1	9+	1600
	Boscombe Down	1028.6	-18	SSW	4	bc	50	92	7	5	-	9	2-3	4-6	2000
	Calshot (Soton.)	1029.6	-10	SW'W	5	ido	51	85	6	5	7	-	9+	10	2000
	Lympne	1030.1	-14	S	1	e	50	88	8	8	7	7	2-3	10	3500
	Manston	1030.1	-18	S'W	4	e	51	75	7	2	-	6	1	9	3000
2	Shoeburyness	1029.8	-12	S'W	2	c	50	88	6	-	1	7	0	10	-
	Felixstowe	1029.6	-12	SW'S	3	zo	48	85	6	-	7	7	0	10	2700
	Gorleston	1028.4	-14	SW'S	3	c	46	85	6	5	7	-	2-3	9	2500
	Mildenhall	1027.8	-14	SSW	4	zo	48	75	5	-	7	7	0	10	-
	Cranwell	1025.6	-18	SW	5	c	48	85	7	-	9	-	0	9	-
3	Birmingham	1025.3	*	SW	4	bc	48	85	7	1	5	1	2-3	4-6	1500
	Upper Heyford			SW	3	c			7	5	3		7-8	9+	800
4	Ross-on-Wye	1026.1	-14	SW	4	bc	52	75	7	7	-	1	4-6	4-6	2500
5	Hartland Point	1025.9	-12	SW	5	c	51	92	8	8	4	-	4-6	9	1500
	Bristol	1027.9	-14	SW	4	bc	52	75	8	2	4	6	1	4-6	3000
	Portland Bill	1028.8	-10	SW	4	c	53	92	8	5	4	-	4-6	7-8	4000
	Plymouth	1029.2	-8	SW	4	c	54	85	8	2	-	-	9	9	1600
	The Lizard	1029.2	0	SW	5	bc	54	85	8	8	6	-	4-6	4-6	3500
	Scilly (St. Mary's)	1028.3	-6	SW	4	c	53	85	8	5	4	-	7-8	9+	2500
	Guernsey														
6	Pembroke	1024.3	-4	SW	7	ido	53	92	7	8	-	-	9+	9+	2000
7	Holyhead	1020.4	-10	SW	5	c/p	53	92	7	5	-	-	9+	9+	1200
	Chester (Sealand)	1022.4	-12	SSW	4	c	54	65	8	5	3	-	9	9+	1600
8	Manchester	1022.7	-20	WNW	4	zo	52	75	6	5	3	-	7-8	9	3100
10	Spurn Head	1023.7	-4	S	4	c	47	85	6	4	4	5	2-3	7-8	4000
	Catterick	1020.3	-20	SW	4	pe	50	75	6	2	7	-	4-6	4-6	2000
	Tynemouth	1020.1	-8	WSW	4	pe	50	75	6	8	-	-	9+	9+	3200
11	St. Abbs Head	1016.0	-4	W	5	c	46	85	9	5	4	-	4-6	7-8	2000
	Leuchars	1014.7	-2	SW	4	c	48	85	7	8	7	5	4-6	7-8	1800
12	Renfrew (Abbots I.)	1015.1	-10	SW'S	4	c	50	85	8	8	7	-	9	9+	2000
	Eskdalemuir	1017.8	0	WSW	4	c/pr	45	92	8	5	7	-	7-8	9	1500
	Point of Ayre	1018.4	-12	WSW	6	bc	53	85	8	8	-	-	4-6	4-6	2500
13A	Tiree	1010.0	-14	SW'S	6	PR	48	85	6	9	-	-	9+	9+	800
13B	Stornoway	1008.5	-16	SSW	5	c	46	85	8	8	7	-	7-8	9+	2500
15	Dalwhinnie	1012.9	-10	SSW	4	bc	44	75	7	2	6	-	2-3	4-6	1500
	Aberdeen	1013.4	-4	SSW	3	c	49	85	6	5	9	-	4-6	9	1500
	Wick	1010.3	-6	SSW	3	c	48	75	8	5	3	2	4-6	7-8	2500
16	Lerwick	1008.1	+10	SW'W	6	c	48	75	7	8	7	-	7-8	9	1500
17	Blacksod Point	1015.8	+2	SW	6	cq	52	85	7	-	6	4	0	7-8	-
18	Malin Head	1012.6	-16	S	5	c	51	75	8	8	-	-	7-8	7-8	2500
	Aldergrove	1016.7	-10	SSW	4	c	49	85	8	5	-	-	9+	9+	1600
19	Birr Castle	1020.2	0	W	2	c	52	85	8	8	-	-	7-8	7-8	1500
20	Valentia Obsy. †	1022.4	+6	SW'W	4	c	55	85	7	2	-	2	1	9+	1500
	Roches Point	1022.8	+8	W'S	4	bc	54	85	8	3	-	5	2-3	4-6	1500

OBSERVATIONS at 18h. G.M.T. 23rd November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°F Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1028.4	0	SW'S	3	zo	47	92	6	5	-	-	1	1	2500	1	*
Croydon	1028.6	-6	SW	2	zo	47	92	5	-	4	2	0	1	-	0	*
S. Farnborough	1028.8	-2	SSW	4	bc	48	92	7	5	3	-	2-3	4-6	1800	1	*
Boscombe Down	1028.1	0	SSW	4	bc	48	92	8	5	-	-	4-6	4-6	3000	0	*
Calshot (Soton.)	1028.9	-2	WSW	4	c	51	85	7	5	3	-	2-3	9+	1800	1	2
Lympne	1029.5	0	SW	2	c	47	92	7	5	-	-	7-8	7-8	3500	1	§
Manston	1029.3	-4	SSW	3	zo	46	85	6	5	4	-	2-3	2-3	2500		*
Shoeburyness	1028.9	0	S'W	2	b	47	92	8	-	-	-	0	0	-	1	*
Felixstowe	1028.3	-4	SW'W	3	zo	47	92	6	-	4	1	0	1	2600	1	2
Gorleston	1026.9	-4	SW'S	3	bc	47	85	6	-	3	-	0	2-3	-	1	2
Mildenhall	1026.6	-4	SSW	4	zo	47	85	6	-	7	-	0	4-6	-	1	*
Cranwell	1024.3	-2	SW'W	6	bc	49	75	7	5	7	-	2-3	4-6	2500	0	*
Birmingham	1025.0	-6	SSW	3	c	48	85	7	5	-	-	7-8	7-8	1500	1	*
Upper Heyford	1026.8	-4	SW'S	3	c	46	85	7	5	4	-	7-8	7-8	2000	1	*
Ross-on-Wye	1025.7	0	SW	4	bc	50	85	7	6	-	-	4-6	4-6	1500	1	*
Hartland Point	1026.1	+2	SW	6	e/p	51	97	6	-	2	-	10	10	1000	1	4
Bristol	1028.5	+12	SW	4	bc/d	49	85	7	5	-	-	4-6	4-6	4000	1	*
Portland Bill	1028.2	+2	SW	4	bc	53	92	8	5	-	-	4-6	4-6	4000	1	4
Plymouth	1029.1	+2	WSW	5	c	53	85	6	5	3	-	4-6	9+	1500	1	2
The Lizard	1028.7	0	WSW	5	c	52	97	8	8	6	-	7-8	9	2500	1	2
Scilly (St. Mary's)	1027.7	-2	SW	4	c	52	92	7	5	7	-	2-3	7-8	2000	1	3
Guernsey																
Pembroke	1025.2	*	WSW	5	c	52	*	7	5	2	-	4-6	9	2000	1	3
Holyhead	1021.8	+18	SW'W	4	bc	52	85	7	8	4	1	2-3	4-6	2500	1	2
Chester (Sealand)	1022.4	+4	SW	3	b	52	85	7	5	-	-	Tr	Tr	3000	1	*
Manchester	1022.3	+4	SSW	3	c/p	49	92	6	5	-	-	7-8	10	2500	1	*
Spurn Head	1022.7	0	S'E	4	c	47	85	6	5	4	-	2-3	7-8	4000	1	3
Catterick	1020.3	+10	SW'W	2	c	50	85	7	5	-	-	7-8	7-8	2000	1	
Tynemouth	1019.4	-6	SW	3	bc	44	85	6	2	-	-	2-3	2-3	2000	1	2
St. Abbs Head	1014.8	-2	SW	5	bc	46	75	8	4	4	-	2-3	2-3	3000	1	2
Leuchars	1013.6	+4	SW	5	b/p	45	85	7	5	-	-	1	1	2500	1	*
Renfrew (Abbots I.)	1015.0	+14	SW'S	4	bc	49	85	8	8	-	-	2-3	2-3	2000	1	*
Eskdalemuir	1016.5	+2	W'S	6	e	45	92	8	5	-	-	7-8	7-8	800	1	*
Point of Ayre	1018.9	+10	W'S	6	b	50	85	8	-	4	-	0	1	-	1	3
Tiree	1010.6	+12	W	6	bc	48	85	8	8	-	-	2-3	2-3	1800	1	5
Stornoway	1005.5	+8	WSW	5	c	45	85	7	8	-	-	7-8	7-8	1500	1	3
Dalwhinnie	*	+6	SW	4	bc	41	85	7	5	-	-	4-6	4-6	1500	1	*
Aberdeen	1011.8	-6	SW	4	bc	46	85	6	5	9	-	2-3	2-3	1500	1	2
Wick	1006.9	-14	SW	6	bc	45	85	8	5	7	-	2-3	2-3	1500	1	3
Lerwick	1005.0	-14	SW'S	5	c	47	85	7	8	7	-	7-8	9	1500	1	*
Blacksod Point	1017.4	+6	SW	4	bc	51	85	7	-	4	-	0	4-6	-	0	3
Malin Head	1014.4	+20	WNW	6	bc	49	75	8	4	-	-	4-6	4-6	2500	0	4
Aldergrove	1018.0	+14	SSW	4	bc	46	85	7	-	4	2	0	2-3	-	1	*
Birr Castle	1021.3	+10	WSW	2	bc	49	85	8	-	4	-	0	2-3	-	1	*
Valentia Obsy. †	1024.0	+12	SW'W	3	bc	51	85	8	5	-	1	1	2-3	2500	0	3
Roches Point	1024.2	+12	W	3	bc	51	85	8	5	7	5	4-6	7-8	1500	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 23rd (37)	13h.—18h. 23rd (38)	18h 23rd to 1h. 24th (39)	1h.—7h. 24th (40)
London (Kew)	cmxcmz	cbcmzw⊕	bbcamow	cprocmow
Croydon			bmoccidodb	cdomoprobc
S. Farnborough	cmzc	cbc	bcmodoc	rdobcc
Boscombe Down	cidomzbc	cbc	bccidoc	cidobcmo
Calshot (Soton.)	cmzc	cpobc	bccido	ddodomoc
Lympne	bcmzc⊕	c	cbccmo	cmo
Manston	bmzcmzc	cbcm	b,cmido	idoirocmo
Shoeburyness	bxmzcmz	cmzcbcb	bbc	bccpc
Felixstowe	bcmzcmz	cmzcbc	bmow	bmowoid
Gorleston	bccz	cbcz	bcbzo	bczocw
Mildenhall	cmzxcmz	czbcmz	bcmobmo	bmocmow
Cranwell	cmzc	bc	bcbmo	bbcbmo
Birmingham	cbc	bccpc	crob	bbc
Upper Heyford	cmzc	cbc	bccdodomo	cdodomodm
Ross-on-Wye	ccbc	bccdc	bbccpo	cb
Hartland Point	cpobc	pco	ocoid	bcc
Bristol	cbc	bccido	bccdodrmo	cdrmocbc
Portland Bill	c	cbc	c	cbc
Plymouth	cjpcpocbc	cidc	ccdodobc	bccbwc
The Lizard	bc	bcc	rrido	bc
Scilly (St. Mary's)	cbcc	c	cpbcc	bc
Guernsey				
Pembroke	cqid	cqoccc	bc	c
Holyhead	mzcrc	bccbc	bco	pbcb
Chester (Sealand)	c	crRmzb	bmocm	cbmo
Manchester	cmz	mzccq	bmo	bmo
Spurn Head	c	c	bcc	cbcw
Catterick	cmzbcpc	pcccc	cbprobc	bcprob
Tynemouth	cp	cpbc	bc	bc
St. Abbs Head	cqrc	cbqc	bc	bcq
Leuchars	circ	cbcrrb	bmcirobc	*
Renfrew (Abbots I.)		cprPRbc	b,cPRbc	bccpro
Eskdalemuir	orrcpc	cprbc		bbcprc
Point of Ayre	rrcbc	bcb	ciro	bcb
Tiree	bccpl	prqbc	bccpr	cprbc
Stornoway	bccpr	cPRq	cpr	cpr
Dalwhinnie	cbc	cprbc	*	ciro
Aberdeen	bccz	cbcb	b	b
Wick	bcc		bclrr	*
Lerwick	cpr	cpro	cprl	cirl
Blacksod Point	bcq	cbc	c	bccq
Malin Head	bcbcc	bcc	bccprobcc	bcclc
Aldergrove	imzpz	cbc	bccbc	bcbw
Birr Castle	c	cbc	cb	bbc
Valentia Obsy. †	circbc	cbcb	bbc	bcbbc
Roches Point	irebc	bc	bc	bcb

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s$_0$, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s$_0$/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ. line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_0, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
⊕ Solar halo. lunar halo. Aurora.

With present weather is combined, whenever possible, the general character of the weather.

A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

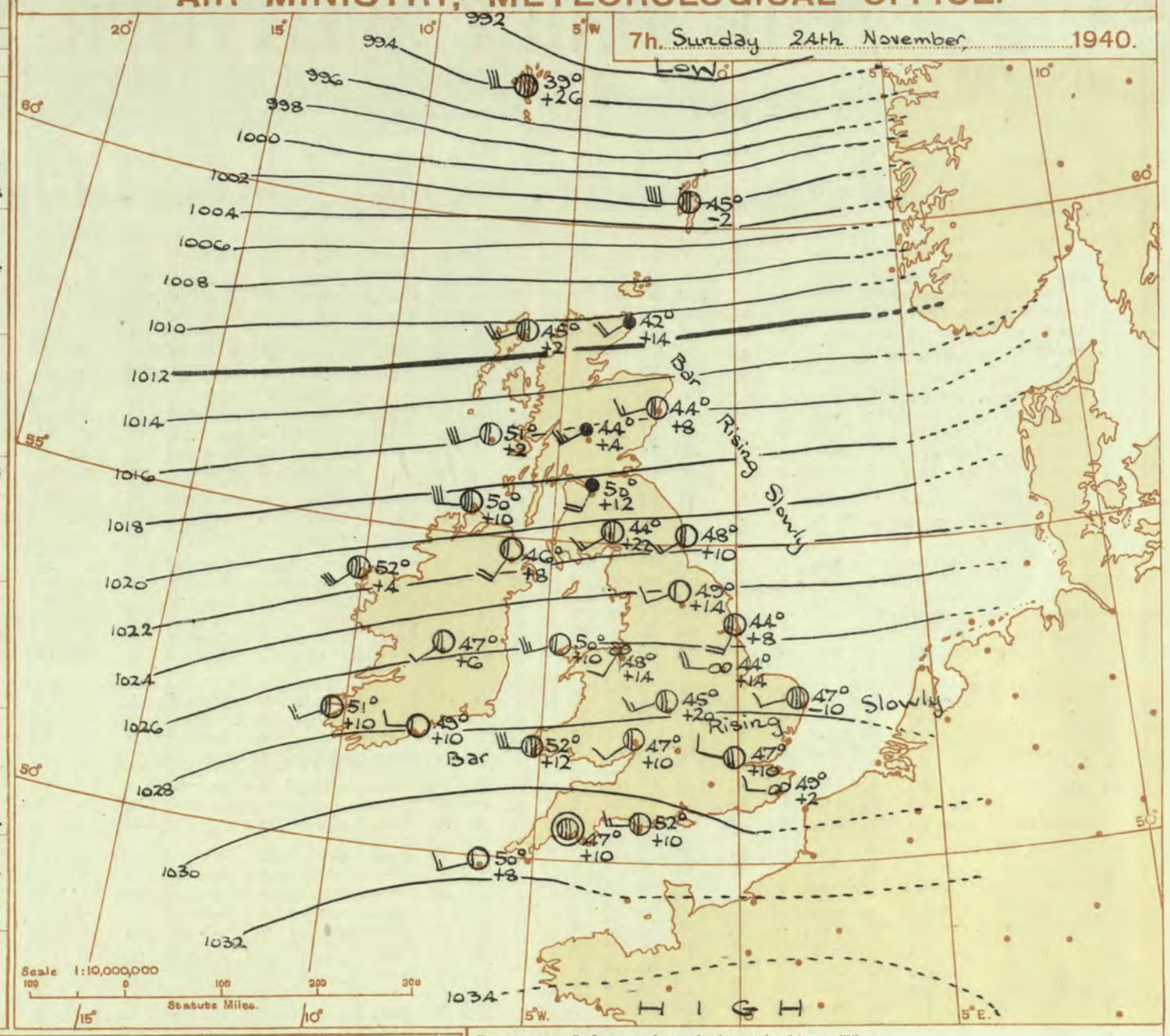
COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Sunday 24th November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

Abridged observations of additional stations in the AVIATION WEATHER CODE

III	13h. G.M.T. 23rd November $C_L C_M$	wwVhN$_h$	DDFWN	18h. G.M.T. $C_L C_M$	wwVhN$_h$	DDFWN	01h. G.M.T. 24th November $C_L C_M$	wwVhN$_h$	DDFWN	07h. G.M.T. $C_L C_M$	wwVhN$_h$	DDFWN
109	50	02853	19425	62	64745	51627	6-	64638	21768	52	61755	22688
115	87	10844	20585	82	82834	55566	52	82735	56888	52	82784	57887
203												
206	83	01963	26324	8-	01854	24884	30	25853	55683	62	61845	22888
210	27	01853	16224	50	00853	53413	50	14863	54783	57	61864	54586
220												
230	87	02744	20426				8-	07748	53588	3-	25646	83686
245	74	05652	20525	5-	25655	53485	50	00763	19483	57	01863	20384
260	80	01853	20464	40	00862	53882	50	00862	53612	00	00890	22403
277	83	02846	19467	47	01851	20523	07	12790	20525	04	00890	21411
279												
285	6-	64638	24668	90	81635	24485						
288	57	05654	18427	50	05653	18463	50	00763	18303	04	01890	18815
273	38	01763	20615									
301	5-	63648	20468	00	05690	23462	01	05690	22418			
321	53	05690	13425	5-	54456	19368	00	05590	21800	57	05654	20326
299				5-	05544	22314	5-	05548	22318	54	05642	22214
292				5-	05656	18366	00	01790	20824	50	01744	18214
310	-	01634	20425									
316	77	02652	18428	52	51535	20368	00	05590	18200	50	05651	20101
333	62	64645	20568	17	02641	22427	52	05656	22318			
334	--	03658	22358									
340	53	02855	1856	50	00862	18462	50	01753	18413			
136	54	05641	18417				77	05662	21416			
336	62	02754	20517	26	01753	20515						
350												
368												
379	3	05623	22315				6-	62438	20368	53	05632	20113
390	67	43390	18147				53	08455	18246	57	05554	20266
382	57	02745	18427	57	01763	18314	5-	21648	19258	54	01743	22314
438	8-	02867	23417							8-	02767	22417
430	57	02756	20732				50	51644	24356	03	47290	00044
409	17	02842	16526	5-	02748	53568	5-	53-8	24328	5-	05637	23817

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 24th November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ...	Light or moderate southwesterly wind, fresh at times on coast. Fair or fine, Local inland fog at night and in forenoon. Mild.
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Moderate southwesterly wind, freshening tomorrow. Bright periods, occasional showers. Mild.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands 17 N. W. Ireland	Fresh southwesterly wind, strong at times on coast, increasing to gale tomorrow. Bright intervals and showers today with hail locally, cloudy with some rain tomorrow. Mild.
18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate southwesterly wind, freshening tomorrow. Mainly fair today, cloudy with occasional rain tomorrow. Mild.

GENERAL INFERENCE.

An anticyclone is centred to south and southwest of the British Isles, while a depression near the Faeroes is moving east and a complex depression in mid-Atlantic is moving northeast.
Weather will be fair or fine in the south today, while in the north there will be bright intervals and showers. Further rain will affect the northwest tomorrow. Temperatures will be mild generally.

FURTHER OUTLOOK.

Mainly fair in the south, unsettled in the north.

Gale warning issued at 0930 on 24/11/40. in districts 13B and 16.

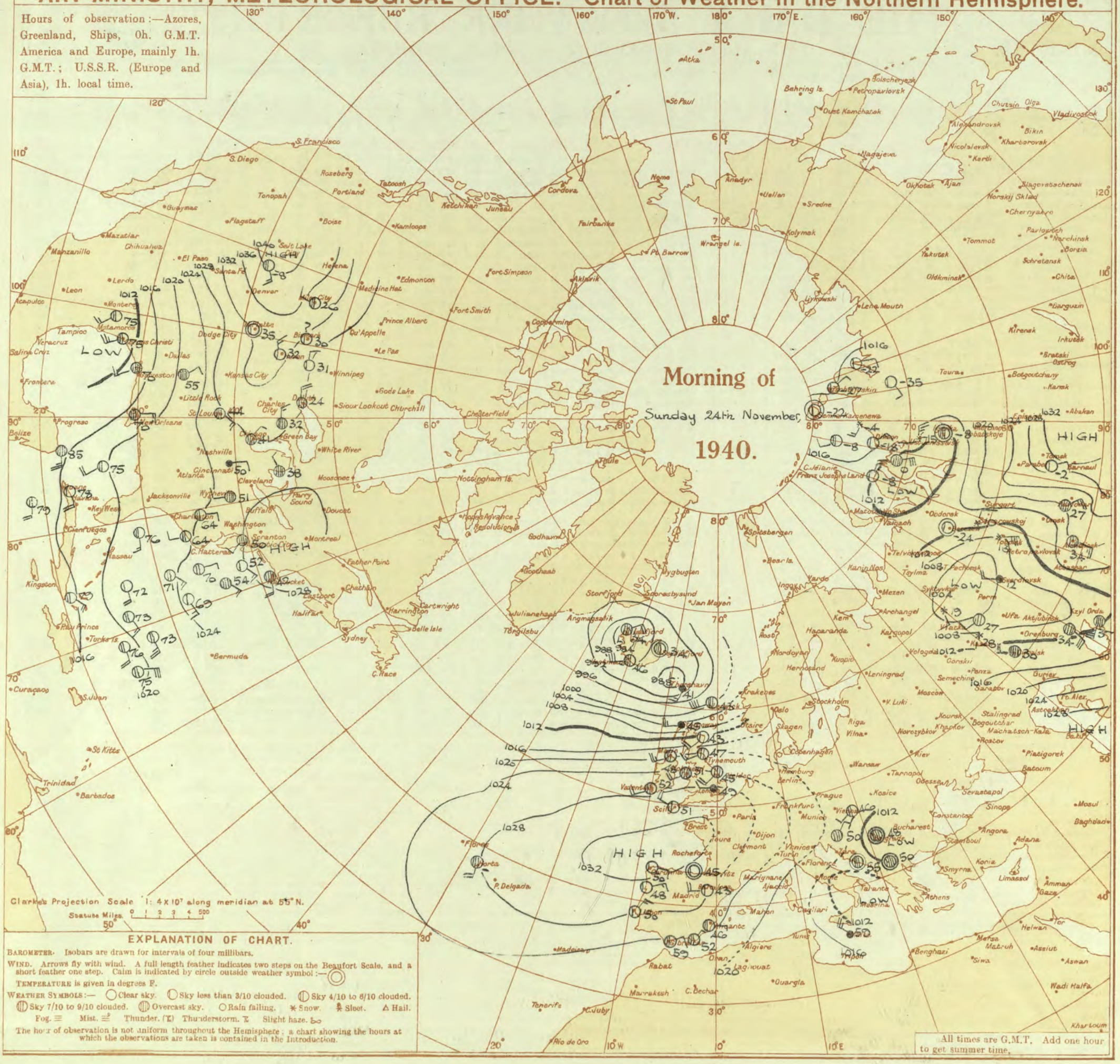
Forecasts issued at 10·30h. G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 24th November 1940.

No. 28,857

OBSERVATIONS at 1 hr. G.M.T. 24th November

District.	Stations.	Height above M.S.L. in feet.	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind Direc. (3)	Wind Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud Form Low. (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1028.5	-2	W	2	ido	49	92	5	5	-	-	10	10	1400
	S. Farnborough	226	1028.6	+2	SW	4	ido	50	92	6	5	-	-	10	10	1500
	Boscombe Down	417	1028.1	0	SW	3	ido	50	97	7	5	-	-	9+	9+	1000
	Calshot (Sthmtn.)	8	1028.6	-2	WSW	3	ido	52	92	6	5	7	-	4-6	10	1400
	Lympne ...	346	1029.1	-2	WSW	2	Zo	47	92	6	5	-	-	7-8	7-8	4000
	Manston ...	154	1028.8	-2	SW	3	ido	47	92	6	5	-	-	9	9	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1027.6	-2	SW	3	Zo	45	97	6	-	-	-	0	0	-
	Gorleston ...	5	1026.3	0	SW	3	b	46	92	6	-	-	-	0	0	-
	Mildenhall ...	19	1026.5	+2	SW	4	Zo	45	92	6	-	7	-	0	2.3	-
	Cranwell ...	240	1025.6	+6	WSW	4	Zo	45	85	6	-	4	-	0	1	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1027.3	+2	SSW	3	dodo	47	97	5	-	2	-	10	10	300
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1027.7	+14	W	5	bc	51	97	7	5	-	-	4-6	4-6	1500
	Bristol ...	209	1027.9	+2	WSW	4	dr	50	97	5	5	-	-	10	10	900
	Portland Bill ...	32	1028.5	+2	SW	4	c	52	85	8	5	-	-	7-8	7-8	4000
	Plymouth ...	82	1029.5	+4	W	4	c	52	97	7	5	-	8	0	7-8	-
	The Lizard ...	240	1029.3	+4	W'N	4	q	51	97	6	5	-	-	10	10	1500
	Scilly (St. Mary's)	163	1029.5	+10	W'N	4	b	51	97	7	-	-	-	0	0	-
	Guernsey ...	175														
6	Pembroke ...	142	1026.8	+6	W'S	5	bc	52	92	7	5	-	-	4-6	4-6	2500
7	Holyhead ...	26	1023.6	+6	SW'W	4	c	51	92	7	5	-	-	10	10	2500
	Chester (Sealand)	16	1024.2	+8	SW'W	1	Zo	49	85	6	5	7	-	1	10	4000
8	Manchester ...	70	1024.0	+8	SSW	3	Zo	46	85	5	5	-	-	1	1	3000
10	Spurn Head ...	29	1024.1	+4	SW'S	4	c	45	92	7	-	2	-	0	7-8	-
	Catterick ...	175	1022.2	+6	SW	2	bc	49	75	7	5	-	-	4-6	4-6	4900
	Tynemouth ...	108	1020.3	+10	SW	3	c	47	75	6	8	-	-	4-6	4-6	2500
11	St. Abbs Head	280	1015.4	+4	WSW	5	bc	45	75	8	4	4	-	2.3	2.3	3000
	Leuchars ...	36	1013.6	-8	WSW	6	bc/r	48	92	7	5	-	-	4-6	4-6	1600
12	Renfrew (Abbots I.)	19	1016.7	+2	WSW	4	c/pr	48	92	7	8	-	-	7-8	7-8	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1021.1	+10	W'S	5	ir	50	92	7	8	2	-	4-6	10	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1006.8	+20	WSW	5	pr	45	92	7	8	7	-	7-8	9+	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1007.3	0	SW	5	rr	44	85	7	5	-	-	10	10	1500
16	Lerwick ...	156	1001.3	-12	SW	8	c	46	85	7	8	7	-	7-8	9	800
17	Blacksod Point	18	1019.8	+14	SW	6	c	52	92	7	5	-	-	10	10	<150
18	Malin Head ...	84	1016.5	+18	WSW	5	c	48	92	6	8	-	-	7-8	7-8	1500
	Aldergrove ...	268	1019.9	+6	SW	5	bc	47	92	8	-	1	-	0	4-6	-
19	Birr Castle ...	173	1023.4	+6	SW	2	b	48	85	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1025.8	+6	SW'W	4	bc	52	85	8	5	-	-	4-6	4-6	2500
	Roches Point	22	1026.5	+8	W'S	3	bc	49	92	8	5	-	-	2.3	2.3	2500

OBSERVATIONS at 7 hr. G.M.T. 24th November

Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low. (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)
London (Kew)	1029.6	+14	SW'W	3	Zo	47	92	6	5	4	8	Tr	9	4000
Croydon	1029.7	+10	WNW	2	bc	47	97	7	-	4	2	0	4-6	-
S. Farnborough	1030.1	+18	SW'W	3	c	45	85	7	-	7	6	0	7-8	-
Boscombe Down	1029.7	+16	WSW	2	Zo	44	97	7	5	4	1	Tr	4-6	4000
Calshot (Sthmtn.)	1029.9	+14	W	2	c	48	92	7	-	7	8	0	9	-
Lympne	1029.1	+2	W	2	Zo	49	97	6	5	7	-	9	9+	200
Manston	1029.3	+6	SSW	2	Zo	48	97	6	5	7	-	7-8	9	2300
Shoeburyness	1029.1	+8	WSW	3	c	50	92	7	8	-	-	9+	9+	2500
Felixstowe	1028.3	+6	WSW	3	c/r	48	97	5	5	7	-	4-6	9+	3000
Gorleston	1027.5	+10	WSW	2	c	47	92	6	5	-	-	9+	9+	1500
Mildenhall	1027.5	+8	SW	3	Zo	47	97	6	-	7	8	0	9	-
Cranwell	1027.1	+14	W	4	Zo	44	92	6	-	7	-	0	2.3	-
Birmingham	1028.0	+20	WSW	3	bc	45	92	8	-	-	6	0	4-6	-
Upper Heyford	1028.6	+14	SSW	3	Zo	44	97	6	5	4	6	2.3	10	200
Ross-on-Wye	1028.2	+10	SW	2	bc	47	85	7	-	-	2	0	2.3	-
Hartland Point	1029.0	+8	W	4	c	51	97	7	5	-	-	7-8	7-8	1500
Bristol	1029.6	+10	SW'W	3	bc	47	92	7	8	-	1	2.3	2.3	2000
Portland Bill	1029.9	+10	W	3	bc	52	92	8	5	-	-	4-6	4-6	4000
Plymouth	1031.0	+10	-	0	c	47	97	6	5	-	-	9	9	1800
The Lizard	1031.0	+20	W	2	bc	50	97	8	8	-	-	4-6	4-6	2000
Scilly (St. Mary's)	1030.8	+8	WSW	3	b	50	97	7	-	-	-	0	0	-
Guernsey														
Pembroke	1027.8	+12	W	6	c	52	92	7	8	-	-	7-8	7-8	2000
Holyhead	1025.1	+10	WSW	5	bc	50	92	7	5	4	5	1	2.3	3500
Chester (Sealand)	1025.7	+14	SW'S	2	Zo	48	85	6	-	7	-	0	Tr	-
Manchester	1025.7	+14	S'W	3	Zo	46	85	6	5	-	-	4-6	4-6	2500
Spurn Head	1024.4	+8	SSW	4	bc	44	92	6	-	4	-	0	4-6	-
Catterick	1023.6	+14	WSW	2	b	49	75	7	5	-	-	1	1	4000
Tynemouth	1021.6	+10	SW	3	bc	48	85	6	2	-	-	4-6	4-6	2500
St. Abbs Head	1017.8	+22	W	6	bcq	47	65	8	4	4	-	4-6	4-6	2500
Leuchars	1015.4	+14	SW	5	c	48	85	8	-	7	6	0	7-8	-
Renfrew (Abbots I.)	1019.2	+12	SSW	2	pr	50	85	7	8	7	-	9	9+	3000
Eskdalemuir	1020.2	+22	SW'W	3	c	44	85	7	5	1	-	2.3	7-8	1500
Point of Ayre	1023.0	+12	W	4	bc	48	97	8	8	-	-	4-6	4-6	1600
Tiree	1010.4	+2	WSW	6	bc	51	92	7	5	-	-	4-6	4-6	1800
Stornoway	1008.4	+2	WSW	5	c/pr	45	85	7	8	7	-	7-8	9+	1500
Dalwhinnie	1015.1	+4	SW	5	ir	44	85	7	5	1	-	9	10	1500
Aberdeen	1014.3	+8	WSW	3	bc	44	85	8	-	7	1	0	2.3	-
Wick	1009.5	+14	SW	4	ir	42	85	8	5	2	-	9	10	1500
Lerwick	1001.3	-2	W	8	c/r	45	92	7	8	7	-	7-8	9+	800
Blacksod Point	1021.1	+4	SW	6	cq	52	85	8	-	7	-	0	9+	-
Malin Head	1018.2	+10	W	6	c	50	85	7	6	-	7	4-6	9	1500
Aldergrove	1021.9	+8	SW'S	4	bc	46	92	8	5	7	-	1	4-6	2500
Birr Castle	1025.8	+6	SW	1	bc	47	92	8	5	3	-	2.3	4-6	2500
Valentia Obsy.	1027.8	+10	SW'W	4	bc	51	92	8	5	-	-	4-6	4-6	2500
Roches Point	1028.0	+10	W	2	b	49	92	8	-	-	1	0	Tr	-

PAST 24 HOURS.

Stations.	State of Ground. 0–9 (29)	Sea. 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 23rd Hrs. (36)
London (Kew)	1	*	49	47	40	Tr	Tr	0.0
Croydon	1	*	51	45	43	-	0.6	0.1
S. Farnborough	1	*	50	45	35	.7	Tr	0.0
Boscombe Down	1	*	51	43	37	0.3	Tr	2.0
Calshot (Sthmtn.)	1		53	47	45	Tr	6.3	1.2
Lympne	1	§3	50	45	40	-	-	1.8
Manston		*						
Shoeburyness	1	*	51	46	41	-	0.1	0.7
Felixstowe	1	2	*	*	*	*	*	*
Gorleston	1	1	48	43	38	-	-	*
Mildenhall	0	*	50	44	37	-	Tr	0.4
Cranwell	1	*	50	43	40	-	-	2.0
Birmingham	1	*	50	44	40	Tr	Tr	1.6
Upper Heyford	1	*	51	44	35	-	2	*
Ross-on-Wye	1	*		47	37	0.1	0.1	1.6
Hartland Point	1	4	51	50	48	1	1	1.8
Bristol	1	*	53	47	41	Tr	1	2.7
Portland Bill	1	3	53	49		0.4	-	
Plymouth	1	2	55	47	41	0.4	1	3.0
The Lizard	1	2	55	49	*	-	4	3.9
Scilly (St. Mary's)	1	2	54	49	*	-	1	2.4
Guernsey								
Pembroke	1	2	55	49	*	0.6	4	3.9
Holyhead	1	2	53	49	46	1	-	0.3
Chester (Sealand)	1	*	55	46	35	1	-	0.6
Manchester	2	*	53	44	39	2	-	0.5
Spurn Head	0	2	48	43	*	-	0.2	0.7
Catterick	1	*	50	47	41	1	0.1	0.1
Tynemouth	1	2	50	45	35	1	-	*
St. Abbs Head	0	3	49	42	*	3	-	*
Leuchars	1	*	53	44	41	2	Tr	0.0
Renfrew (Abbots I.)	1	*	50	47	40	0.4	2	0.5
Eskdalemuir	1		48	43	41	13	0.2	0.2
Point of Ayre	1	3	54	47	*	3	Tr	3.3
Tiree	0	5	50	45	*	3	1	1.8
Stornoway	1	3	48	42	*	3	3	0.7
Dalwhinnie	1	*	44	39	34	5	6	1.1
Aberdeen	1	2	50	42	38	-	-	0.3
Wick	1	2	48	41	*	Tr	1	*
Lerwick	1	*	50	44	*	Tr	3	0.0
Blacksod Point	0	4	52	49	*	0.2	Tr	*
Malin Head	0	5	51	45	*	Tr	0.6	3.1
Aldergrove		*	51	45	38	0.3	-	1.3
Birr Castle	1	*	54	46	43	2	-	3.0
Valentia Obsy.	0	3	55	50		Tr	-	3.9
Roches Point	1	3	55	48	*	2	-	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet.	Weather Morning.	Weather Afternoon.	Weather Night.	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day. mm.	Rainfall Night. mm.	Sunshine to Sunset. hrs.	Humidity 15h. G.M.T. %	Humidity 9h. G.M.T. %	Visibility 9h.
		24 hrs. ended 9h.								Yesterday.		To-day.	
Kew ...	18	cm xcmo	cbcmowo	bbcmopro	49	47	40	Tr	Tr	0.0	*	*	5
Croydon ...	217	*	*	bmcdodpro	51	45	43	-	6.6	0.1	*	*	6
Greenwich (Royal Observatory) ...	149	c ⊕	cbcb	bcrorcm	50	46	32	-	0.3	0.6	83	89	4
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	51	40	39	Tr			87	97	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*									*
Camden Square ...	110	o	bc	*	50	43	37	-	-	*	*	94	*
Kensington ...	80	bc	bc	*	51	46	38	-	6.2		94	95	*
Hampstead Observatory ...	450												

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 24th.

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
Record Defective			

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...														

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22.—Code for surface visibility.

Objects not visible at
0 Dense fog 55 yards.
1 Thick fog 220 ,,
2 Fog 550 ,,
3 Moderate fog 1,100 ,,
4 Mist or haze 1¼ miles.
5 Poor visibility 2½ ,,
6 Moderate ,, 6¼ ,,
7 Good ,, 12½ ,,
8 Very good ,, 31 ,,
9 Excellent ,, beyond 31m.

COLUMN 30.—Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Precipitous.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 25th November 1940.

No. 28858

OBSERVATIONS at 13h. G.M.T. 24th November.

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1031.0	-2	W'S	2	zo	52	85	6	1	-	6	1	7-8	1500
	Croydon	1030.6	0	W	1	zo	55	75	6	7	-	-	2-3	2-3	3500
	S. Farnborough	1031.5	0	W	4	bc	52	75	8	1	-	2	2-3	4-6	2500
	Boscombe Down	1031.4	-4	W	3	bc	53	75	7	1	-	1	2-3	2-3	2000
	Calshot (Soton.)	1031.7	+2	W	3	c	54	75	7	1	-	2	4-6	7-8	1700
	Lympne	1030.7	-2	SSW	2	b	53	85	7	1	-	1	Tr	1	2000
	Manston	1030.6	-2	W'S	3	bc	54	75	8	1	-	2	Tr	2-3	3000
2	Shoeburyness	1030.4	0	W'S	3	b	53	75	5	-	-	1	0	1	-
	Felixstowe	1030.0	+2	W'N	4	zo	52	85	6	-	-	6	0	4-6	2600
	Gorleston	1029.4	+8	W	2	zo	55	75	6	-	5	-	0	4-6	-
	Mildenhall	1029.4	0	WSW	4	c	54	75	7	-	-	6	0	7-8	-
	Cranwell	1028.4	+6	W	4	zo	50	85	6	-	7	8	0	9+	-
3	Birmingham	1029.4	-2	WSW	2	c	52	75	6	1	-	6	2-3	7-8	4000
	Upper Heyford	1030.3	0	SSW	3	zo	51	85	6	5	.	2	4-6	7-8	500
4	Ross-on-Wye	1029.9	+4	WSW	3	bc	54	75	8	7	-	8	2-3	4-6	2500
5	Hartland Point	1031.3	+2	SW	4	c	52	97	7	8	-	7	2-3	10	1500
	Bristol	1031.7	+6	WSW	4	c	52	85	7	2	-	1	2-3	7-8	1200
	Portland Bill	1031.9	+6	W	4	c	53	85	8	5	-	8	4-6	9	4000
	Plymouth	1032.8	0	W	2	zo	54	92	6	2	-	-	2-3	4-6	1600
	The Lizard	1032.8	+4	W	3	bc	55	85	8	4	-	8	4-6	4-6	2500
	Scilly (St. Mary's)	1033.0	+4	SW'W	3	bc	55	85	7	5	4	6	Tr	4-6	4000
	Guernsey														
6	Pembroke	1030.6	+4	W'S	5	c	53	85	7	8	-	2	4-6	7-8	1600
7	Holyhead	1027.3	+6	SW	4	c	53	85	7	-	7	2	0	9	-
	Chester (Sealand)	1027.8	-2	WSW	3	c	54	65	8	5	4	6	1	9+	3500
8	Manchester	1027.9	+2	SW	3	zo	52	75	6	5	4	6	4-6	9+	3200
10	Spurn Head	1027.1	+4	SW	4	c	49	85	7	5	5	-	4-6	9+	4000
	Catterick	1025.7	+2	W'S	3	c/pe	51	75	7	8	6	2	7-8	9+	2800
	Tynemouth	1023.8	+8	SW	3	zo	51	75	6	8	-	-	9+	9+	1700
11	St. Abbs Head	1018.2	+2	SW	6	cq	52	65	8	8	4	9	2-3	7-8	2500
	Leuchars	1016.7	0	WSW	5	c	52	75	7	2	7	-	2-3	9	2500
12	Renfrew (Abbots I.)	1020.4	+6	SW	4	pe	49	97	7	6	2	-	7-8	10	1400
	Eskdalemuir	1020.7	-2	W'S	6	c	48	85	7	5	-	-	9	9	2500
	Point of Ayre	1024.6	+6	W	5	c	51	92	8	5	7	-	Tr	10	1500
13A	Tiree	1016.0	+6	W	6	bc	51	92	7	5	3	-	2-3	2-3	2100
13B	Stornoway	1012.1	+20	W	5	pe	45	92	7	8	7	-	9	9+	800
15	Dalwhinnie	1016.3	0	SW	4	rr	45	85	6	5	-	-	10	10	1500
	Aberdeen	1013.5	-8	WSW	4	c	53	75	8	7	9	-	1	7-8	2500
	Wick	1011.0	+12	WSW	3	pe	44	92	7	5	2	-	9	10	800
16	Lerwick	1005.4	+4	SW	7	c	45	65	7	8	7	-	7-8	9+	800
17	Blacksod Point	1023.5	+10	SW	4	c	53	97	7	5	-	-	9+	9+	<150
18	Malin Head	1019.5	+4	WSW	6	c	52	85	7	8	-	-	9	9	1500
	Aldergrove	1023.6	+6	SWS	4	c	50	85	7	5	7	-	7-8	9+	1000
19	Birr Castle	1027.3	+4	WSW	3	c	52	85	8	5	7	-	4-6	9	1500
20	Valentia Obsy. †	1029.4	+2	SW	4	zo	55	85	6	5	3	2	7-8	9+	1500
	Roches Point	1023.2	0	WS	2	c	52	92	8	5	-	5	2-3	7-8	1500

OBSERVATIONS at 18h. G.M.T. 24th November.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1031.2	+10	SW	3	m	43	92	4	5	-	-	2-3	2-3	2500	1	*
Croydon	1031.9	+10	-	0	m	43	85	4	-	4	2	0	4-6	-	1	*
S. Farnborough	1032.8	+8	SW'W	3	zo	45	92	6	5	-	6	4-6	7-8	2500	1	*
Boscombe Down	1032.8	+10	SW	3	Zo	41	92	6	5	-	-	7-8	7-8	2500	1	*
Calshot (Soton.)	1032.7	+10	WSW	2	Zo	45	92	6	-	4	2	0	4-6	-	1	1
Lympne	1032.0	+10	W	2	bc	46	92	7	-	-	1	0	2-3	-	1	§2
Manston	1032.2	+6	SW'W	2	zo	45	92	6	-	-	6	0	2-3	-		*
Shoeburyness	1031.7	+14	WSW	1	m	48	92	4	-	5	2	0	7-8	-	0	*
Felixstowe	1031.4	+12	W'S	2	Zo	47	92	5	-	7	8	0	4-6	-	1	2
Gorleston	1030.0	+8	SW	2	c	49	85	6	-	5	-	0	7-8	-	1	1
Mildenhall	1030.7	+12	SW'S	3	Zo	48	97	6	-	7	6	0	7-8	-	0	*
Cranwell	1029.9	+14	SW'W	3	Zo	48	85	5	5	7	-	4-6	7-8	3000	1	*
Birmingham	1030.6	+10	SW	3	bc	49	85	7	5	1	-	1	4-6	1500	1	*
Upper Heyford	1031.3	+8	SW'W	2	zo	47	92	6	5	-	6	2-3	7-8	3500	1	*
Ross-on-Wye	1031.0	+6	SW	3	c	50	85	7	5	1	8	1	7-8	2500	1	*
Hartland Point	1032.2	+4	W	3	c	51	97	7	3	4	1	2-3	7-8	1500	1	3
Bristol																*
Portland Bill	1033.2	+6	W	4	bc	52	85	8	5	-	-	4-6	4-6	4000	0	3
Plymouth	1033.6	+6	W	1	Zo	49	97	5	-	-	1	0	Tr	-	0	1
The Lizard	1033.3	+4	W	3	c	51	92	8	8	6	-	7-8	7-8	2000	1	2
Scilly (St. Mary's)	1033.0	+2	WSW	2	bc	50	97	7	5	4	4	1	4-6	2500	0	2
Guernsey																
Pembroke	1031.5	+6	WSW	4	bc	52	85	7	2	-	-	4-6	4-6	2500	1	2
Holyhead																
Chester (Sealand)																*
Manchester																*
Spurn Head	1028.9	+6	S'W	3	c	47	85	7	2	4	-	2-3	7-8	2500	0	2
Catterick	1026.7	+10	SW'W	3	bc	51	85	7	4	-	-	4-6	4-6	2500	1	*
Tynemouth	1024.7	+12	S	3	Zo	51	75	6	2	-	-	4-6	4-6	2500	1	2
St. Abbs Head	1019.6	+8	W	6	bcq	52	75	8	4	4	-	2-3	4-6	2500	0	3
Leuchars	1019.5	+28	WSW	4	Zo	50	92	6	8	-	-	4-6	4-6	1800	1	*
Renfrew (Abbots I.)	1021.9	+16	WSW	4	c/pr	52	85	7	8	-	-	7-8	7-8	1000	1	*
Eskdalemuir	1023.0	+14	W'S	5	iro	48	85	6	6	-	-	10	10	450	1	*
Point of Ayre	1025.7	+6	W'S	5	b	50	97	8	-	-	-	0	0	-	1	3
Tiree	1019.6	+20	WSW	4	c	52	92	7	5	-	-	7-8	7-8	1800	0	4
Stornoway	1016.7	+30	SSW	3	c	44	85	8	5	5	6	2-3	7-8	2000	1	2
Dalwhinnie	*	+22	SW	4	bc	45	85	7	8	-	-	2-3	2-3	1500	1	*
Aberdeen	1018.3	+22	W'S	2	bc	49	75	7	5	3	-	Tr	2-3	4000	1	2
Wick	1016.4	+8	W	3	bc	40	85	8	5	7	-	4-6	4-6	1500	1	2
Lerwick	1011.2	+28	W	7	c	43	55	7	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1024.7	+6	SW	4	c	52	92	6	5	-	-	10	10	800	0	3
Malin Head	1022.6	+26	W	5	c	52	85	7	2	-	4	2-3	7-8	2500	0	4
Aldergrove	1025.6	+20	S'E	3	bc/pr	50	92	6	5	-	-	4-6	4-6	3600	1	*
Birr Castle	1028.4	+14	W	1	c	51	85	8	5	-	-	7-8	7-8	2500	1	*
Valentia Obsy. †	1030.2	+8	SSW	4	bc	52	92	8	5	-	2	2-3	2-3	1500	1	2
Roches Point	1030.4	+6	W'S	3	bc	49	92	8	5	-	5	1	2-3	2500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 24th. (37)	13h.—18h. 24th. (38)	18h. 24th to 1h. 25th (39)	1h.—7h. 25th. (40)
London (Kew)	cwbecm	cmobcm	bcbmw	bfoFeFew
Croydon	cbem	bcmobcm	bcbmw	bm bcm
S. Farnborough	cbc	bccbc		bwofe
Boscombe Down	bcmbc	occmo	bmjf	bmjfbf
Calshot (Soton.)	cbcmbc	bccmo	bcbwm	bwmFF
Lympne	cbcmb	bbc	bmfgfw	bmfgfw
Manston	cmcbc	bccbcmo	bcmbmw	bmwbcf
Shoeburyness	bcmbz	bzocm	cmbwm	bwmof
Felixstowe	cmbm	bcmo	bcmbmw	bmwoF
Gorleston	bc	bcc	cbzzw	bzbcw
Mildenhall	cm wbm	bcccmobcm	bcmbmw	bmwofeo
Cranwell	bccm	cmo	c bm m	bmm cm
Birmingham	bcc	cbc	cbc	bcc
Upper Heyford	cmofcm	cmo	cmbcbfFF	Fcmm
Ross-on-Wye	bbc	bcc	bcbw	bcpc
Hartland Point	c	c	bcbbc	bcc
Bristol	c		b	b
Portland Bill	bcc	cbc	bcbc	bcc
Plymouth	cmbmbcm	bcmobmow	bm	bc
The Lizard	bc	bcc	bcw	bc
Scilly (St. Mary's)	cbc	bcw	bbcw	bccbc
Guernsey				
Pembroke	cbcc	cbc	c	
Holyhead	c		bbcc	owc
Chester (Sealand)	bmc		bbccm	cmw
Manchester	bcmcmz		bm	bmw
Spurn Head	c	c	bbw	bcc
Catterick	bcprc	cprobc	pcmcz	c
Tynemouth	bcc	cbc	bc	c
St. Abbs Head	bccq	bcq	bcq	c
Leuchars	bcc	cbcprobc	bcmwbc	
Renfrew (Abbots I.)	cpcp	crorop rpro	cpcbcc	ccmbc
Eskdalemuir	c	cpriro		cmc
Point of Ayre	c	cbcb	bbcbc	bbcc
Tiree	odrc	bcc		
Stornoway	crrpr	cpr	cpp	cprrr
Dalwhinnie	rro	irebc	*	cpro
Aberdeen	bbcc	bcb	bbcc	circ
Wick	irc pr	rrcbc	bcprc	cprc
Lerwick	cphrq	cphrqy	cpp	cprrr
Blacksod Point	c	cq	cq	cq
Malin Head	cidcidc	c	ccbc	c
Aldergrove	bcwcmc	bcprobc	cbbcc	c
Birr Castle	c	c	bbcc	c
Valentia Obsy. †	bccm	cbcb	bbccw	cwc
Roches Point	bcc	bc	bcwcw	cwc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain.
rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus :—bc/r, fair weather after rain ; —, has decreased ; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6 : similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

† Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing : sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing : usually in tufts.
5 Ci or Cs increasing : still below 45° altitude : often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude : often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations :—
Cirrus,–Ci : Cirrocumulus,–Cc : Cirrostratus,–Cs : Altocumulus,–Ac : Altostratus,–As : Stratocumulus,–Sc : Stratus,–St : Nimbostratus,–Ns : Cumulus,–Cu : Cumulonimbus,–Cb.

COLUMN 29 —STATE OF GROUND.

0 . . Ground dry.
1 . . ,, wet.
2 . . ,, flooded.
3 . . ,, frozen hard and dry.
4 . . ,, partly covered with snow or hail.
5 . . ,, covered with ice or glazed frost.
6 . . ,, covered with thawing snow.
7 . . Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 . . ,, covered with snow, less than 6 ins., but ground frozen.
9 . . ,, covered with snow greater than 6 ins. deep.
– . . Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

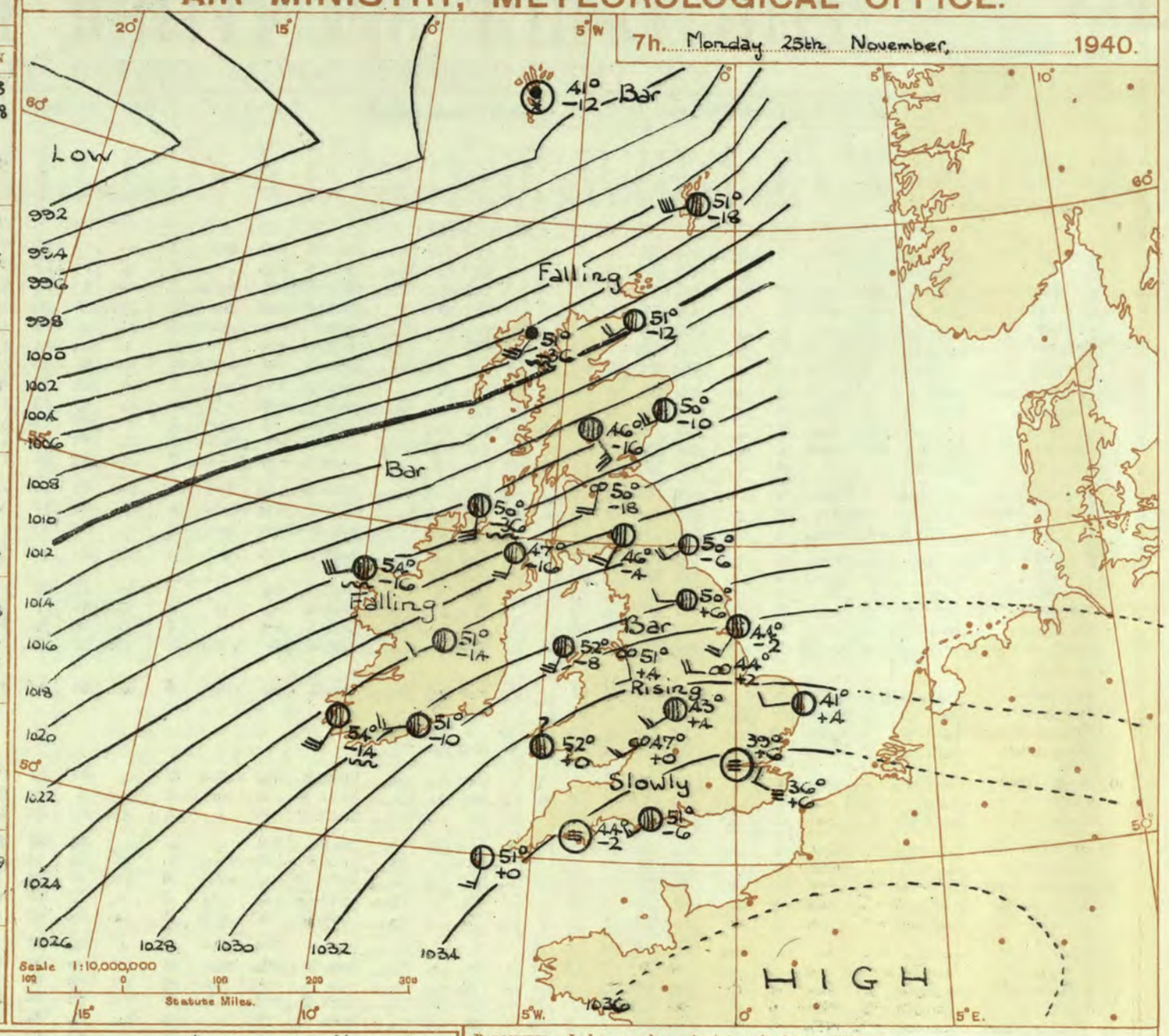
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Monday 25th November, 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 24th November.			18h. G.M.T.			01h. G.M.T. 25th November.			07h. G.M.T.		
III	$C_L C_M$	$wwVhN_h$	DDFWN	$C_L C_M$	$wwVhN_h$	DDFWN	$C_L C_M$	$wwVhN_h$	DDFWN	$C_L C_M$	$wwVhN_h$	DDFWN
109	52	62853	26467	50	01763	25483	02	03658	51568	52	03753	20528
115				52	82854	24587	52	81735	49688	52	81735	49688
203				5-	61938	05668	5-	64838	53768			
206	52	64746	24388	50	01953	24383	80	81754	2224-	81	02854	16488
210	87	02844	53625	53	02855	20587	5-	02858	20288	51	61854	53567
220				34	25744	24384				62	66428	24768
230	9-	81638	54688	8-	25748	57583	5-	02748	55468	52	02754	20428
245	74	02842	21527	00	00990	16220	61	02745	51528	57	05652	53628
260	50	02743	22517	5-	53667	55657	50	00762	53412	50	01862	51514
277	12	02741	20428	50	05654	21424	50	02764	21525	62	02752	18428
279							5-	05548	20528	57	05553	53525
285										23	02734	28527
288	57	02754	21427	50	00762	20482	52	05656	22328	5-	02758	20228
273										41	01543	19616
301	50	05753	21326				57	05655	20328	07	05690	20318
321	69	05672	22227	07	05690	21324	00	05590	24200	01	05590	20327
299	51	05644	22217	50	05543	22313	50	05542	23302	5-	05546	22416
292	5-	05556	20217	5-	02748	20488	5-	02665	20315	52	05654	20228
310												
316	04	05590	20116	07	05590	20223	00	08490	00000	01	08490	20217
333	15	01764	22414				54	05662	20503	52	02753	20528
334											03658	22428
340	70	02763	22316				03	05690	12301	07	05690	16314
136				07	05690	21218	04	05590	20311	--	46109	20349
336												
350	50	05633	20328							5-	05538	20328
368												
379	13	05644	20325	03	05690	20313	5-	08418	20318	--	41309	20349
390	00	05630	23314	00	-5390	22310	00	45390	28314	5-	47255	20145
382	53	05654	22424	47	05663	20124	50	08434	00014	5-	05648	19128
438	50	00751	26301							55	02524	24315
430	10	05651	24314	03	08490	28224	00	47190	26140	--	46109	00049
409	5-	05737	19327	5-	05627	20227	50	01633	15223	54	05622	14246

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Monday 25th November
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light southwest wind freshening; mainly fair; local fog at first, soon clearing: mild.
4 W. Midlands ... 5 S.W. England 6 South Wales ...	Light or moderate southwest wind becoming fresh or strong; mainly cloudy, local drizzle: very mild.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands 17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Strong southwest wind, gale at times at exposed places; cloudy or dull, occasional rain or drizzle: very mild.

GENERAL INFERENCE.

An anticyclone centred over France is moving slowly eastsoutheast and a series of depressions are moving eastnortheast off our northwest coasts. There will be strong southwest winds in the North, gale locally, with mainly cloudy weather and occasional rain. In the South weather will be fair but there will be rather wide-spread mist and fog or low cloud this morning, clearing during the afternoon in most places. It will be mild generally.

FURTHER OUTLOOK.

Stormy and changeable in the Northwest, mainly dry in the Southeast, but considerable cloud; mild generally.

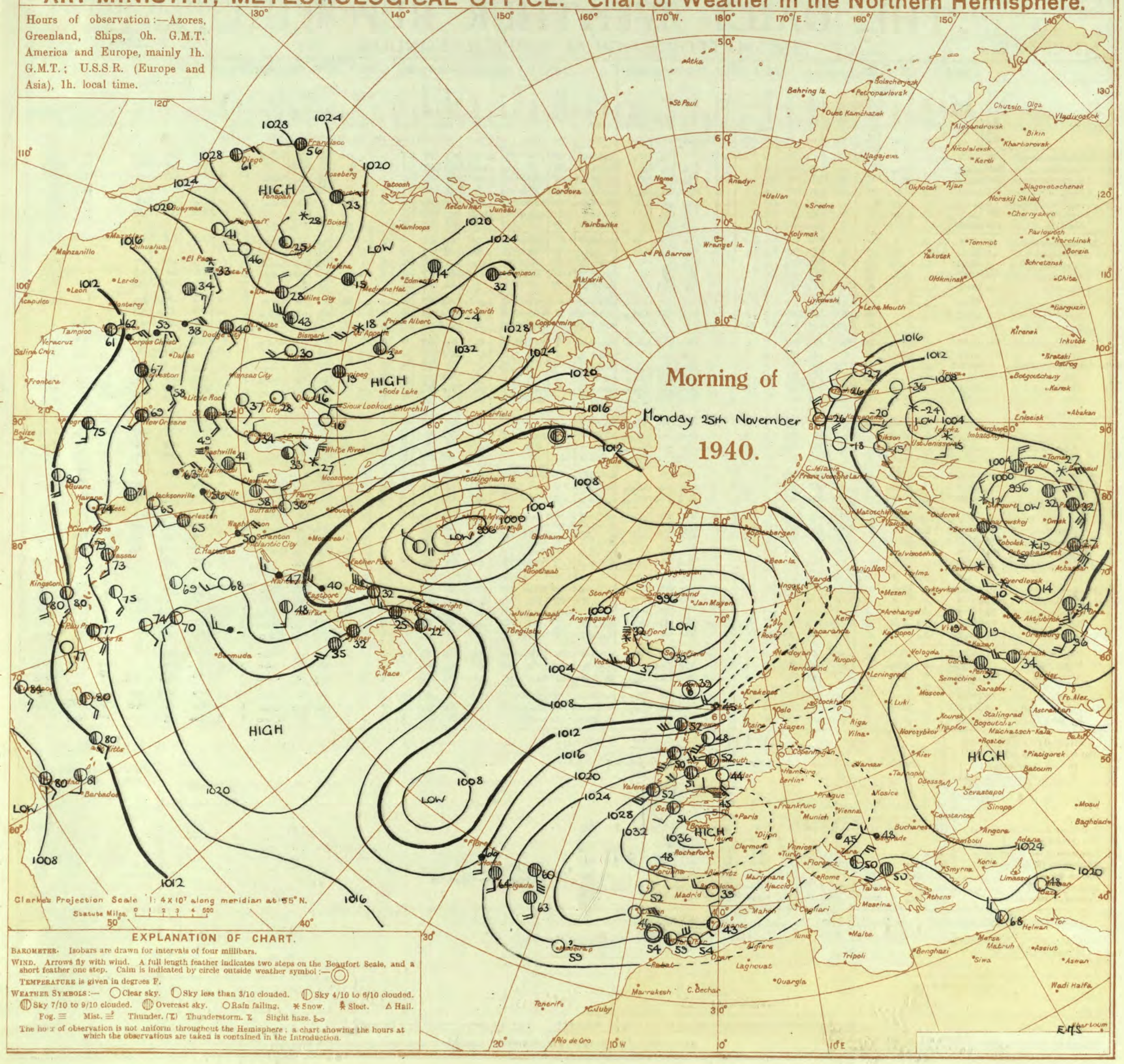
Gale warnings issued at 0540 and 0800 25.11.40 in districts 7, 8, 11, 12, 13, 15, 16, 17, 18 and 20.

Forecasts issued at 1030 G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 25th November 1940.

No. 28858

OBSERVATIONS at 1 hr. G.M.T. 25th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud. Form. Low. (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1033.8	+2	WNW	2		45	87	4	-	-	-	0	0	-
	S. Farnborough	226	1034.6	+2	SWW	2		42	87	5	-	-	1	0	1	-
	Boscombe Down	417	1034.7	+2	S	1		42	87	4	5	-	-	2-3	2-3	4000
	Calshot (Sthmtn.)	8	1034.4	+2	W'S	1		43	87	5	-	-	-	0	0	-
	Lympne ...	346	1034.0	+2	NE'N	1		39	87	4	-	-	-	0	0	-
	Manston ...	154	1034.2	+4	SW	2		40	87	5	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1033.0	+4	W'S	3		44	87	5	-	-	-	0	0	-
	Gorleston ...	5	1031.8	+8	SW	2		44	88	5	-	-	-	0	0	-
	Mildenhall ...	19	1032.6	+6	SW	3		48	87	5	-	-	-	0	0	-
	Cranwell ...	240	1031.4	+6	W'S	4		44	92	4	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1033.3	+2	-	0		48	87	1	-	-	-	10	10	<150
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1033.2	0	WSW	3		50	87	7	5	-	-	4-6	4-6	1500
	Bristol ...	209	1034.2	-4	SW	3		46	92	6	-	-	-	0	0	-
	Portland Bill ...	32	1034.0	+4	W	3		51	92	8	5	-	-	4-6	4-6	4000
	Plymouth ...	82	1035.4	-4	-	0		48	87	5	5	-	-	7-8	7-8	1800
	The Lizard ...	240	1034.7	-2	SW	3		50	87	7	8	-	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	1034.2	0	SW'S	2		51	87	7	5	-	-	2-3	2-3	2500
	Guernsey ...	175														
6	Pembroke ...	142	1033.0	+10	SW'W	4		51	85	7	8	1	-	4-6	7-8	2500
7	Holyhead ...	26	1029.9	+6	SW'S	4		51	85	6	5	1	-	4-6	10	2500
	Chester (Sealand)	16	1030.4	0	WSW	1		51	85	6	5	-	-	9+	9+	5000
8	Manchester ...	70	1029.5	-4	WNW	1		42	87	5	5	-	-	2-3	2-3	3500
10	Spurn Head ...	29	1030.6	+6	S'W	3		44	92	6	-	-	-	0	0	-
	Catterick ...	175	1028.4	+2	WSW	2		51	85	7	5	-	-	10	10	3000
	Tynemouth ...	108	1026.7	+10	W	3		52	85	6	8	-	-	4-6	4-6	2500
11	St. Abbs Head	280	1021.0	-12	W	6		48	85	8	4	1	-	4-6	7-8	2500
	Leuchars ...	36	1021.3	-8	SW	5		50	92	7	5	-	-	4-6	4-6	2500
12	Renfrew (Abbots I.)	19	1023.6	+2	SSW	4		51	92	7	5	-	-	7-8	8	1200
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1027.6	+8	WS	3		50	87	8	5	-	-	2-3	2-3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1014.2	-10	SW	6		52	85	6	5	-	-	7-8	7-8	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1014.7	-26	SW	4		48	92	7	5	2	-	9	10	1500
16	Lerwick ...	156	1012.1	-20	W	4		46	75	7	8	7	-	4-6	10	800
17	Blacksod Point	18	1028.7	-4	SW	6		52	87	6	5	-	-	10	10	<150
18	Malin Head ...	84	1022.3	0	SSW	5		50	85	7	8	-	-	7-8	7-8	2500
	Aldergrove ...	268	1026.4	-2	SSW	4		48	85	7	5	-	7	4-6	10	1000
19	Birr Castle ...	173	1028.0	-2	W	2		46	92	8	5	-	-	7-8	7-8	2500
20	Valentia Obsy.	30	1029.0	-8	SSW	5		52	92	7	5	-	7	4-6	10	800
	Roches Point	22	1030.8	-4	WSW	3		48	87	8	5	-	-	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 25th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Form. Med. (24)	Form. High (25)	Amount. Low 0–10 (26)	Amount. Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1035.0	+10	W	2	F	41	97	1	-	-	-	10	10	<150	1	*
	Croydon ...	1034.4	+6	-	0	bcf+	39	97	3	-	4	-	0	2-3	-	1	*
	S. Farnborough	1035.0	+4	S'W	1	F	38	97	1	-	-	-	10	10	<150	1	*
	Boscombe Down	1034.7	+6	S'W	2	F	38	97	1	-	-	-	0	0	-	1	*
	Calshot (Sthmtn.)	1034.6	+6	ESE	1	bf-	44	97	3	5	1	-	1	4-6	800	1	0
	Lympne ...	1034.5	+6	WNW	2	bcf	36	97	3	-	7	-	0	2-3	-	1	*
	Manston ...	1034.8	+8	SW	1	if	37	97	3	-	3	1	0	4-6	-		*
2	Shoeburyness ...	1034.7	+8	W'S	1	of	45	97	3	5	-	-	10	10	450	1	*
	Felixstowe ...	1034.0	+8	WSW	3	f-	48	97	2	-	-	-	10	10	2200	1	2
	Gorleston ...	1032.8	+4	W'S	2	bc	41	92	6	5	-	-	4-6	4-6	2000	1	1
	Mildenhall ...	1032.7	+4	SW	3	m/f	44	97	4	5	-	-	10	10	400	0	*
	Cranwell ...	1031.6	+2	W	4	z	44	92	5	-	1	8	0	9+	-	1	*
3	Birmingham ...	1032.5	+4	SW	3	c	48	97	5	5	-	6	1	7-8	800	1	*
	Upper Heyford	1033.6	+6	SSW	3	m	44	97	4	5	-	-	10	10	200	1	*
4	Ross-on-Wye	1032.6	0	SW'W	3	z	47	92	6	5	1	7	2-3	9+	2500	1	*
5	Hartland Point	1032.4	-2	WSW	3	c	50	97	7	5	2	-	7-8	9+	1500	1	3
	Bristol ...	1034.3	+4	-	0	z	42	97	6	-	7	-	0	2-3	-	1	*
	Portland Bill ...	1034.3	-6	SW	3	c	51	85	8	5	7	-	7-8	10	4000	1	3
	Plymouth ...	1034.5	-2	-	0	fg	44	97	8	2	-	7	2-3	10	2000	0	1
	The Lizard ...	1034.0	+4	WSW	4	bc	50	92	7	4	-	-	4-6	4-6	2500	1	2
	Scilly (St. Mary's)	1033.2	0	SSW	3	bc	51	97	7	5	-	-	4-6	4-6	2500	0	2
	Guernsey ...																
6	Pembroke ...	1032.1	0			c	52	92	7	8	2	-	4-6		2500	1	2
7	Holyhead ...	1028.4	-8	SSW	5	c	52	92	6	5	1	-	1	10	3000	1	3
	Chester (Sealand)	1030.4	+4	S'E	2	z	51	75	6	5	1	-	1	10	2600	1	*
8	Manchester ...	1030.4	0	S	3	z	45	92	5	5	-	-	2-3	2-3	3500	1	*
10	Spurn Head ...	1029.8	-2	SW'S	4	bc	44	92	7	-	5	-	0	4-6	-	0	2
	Catterick ...	1027.8	+6	W	2	c	50	85	7	8	7	-	Tr	9+	3000	1	*
	Tynemouth ...	1026.0	-6	SW	4	c	50	85	5	8	-	-	9+	9+	2300	1	2
11	St. Abbs Head	1021.5	-10	SW	6	cq	48	75	8	4	1	-	4-6	9	2500	0	3
	Leuchars ...	1020.6	-8	SW	6	c	49	85	7	5	1	7	4-6	10	1100	1	*
12	Renfrew (Abbots I.)	1021.8	-18	SSW	4	z	50	85	6	6	7	-	7-8	9+	2500	1	*
	Eskdalemuir ...	1028.5	-4	SW'S	4	c	46	92	7	5	-	-	10	10	800	1	
	Point of Ayre...	1026.0	-12	WSW	5	c	51	85	8	-	1	-	0	10	-	1	3
13A	Tiree																
13B	Stornoway ...	1009.8	-36	SSW	7	m	51	92	6	5	2	-	9	10	1000	1	4
15	Dalwhinnie ...	1017.7	-16	SE	5	c	46	92	6	5	1	-	9	10	800	1	*
	Aberdeen ...	1017.1	-10	SWW	4	c	50	85	7	-	7	-	0	10	5700	1	2
	Wick ...	1012.0	-12	SW	4	c	51	85	7	5	7	-	7-8	10	1500	1	2
16	Lerwick ...	1006.1	-18	WSW	8	c	51	92	6	8	2	-	7-8	10	800	1	*
17	Blacksod Point	1018.8	-16	WSW	6	cq	54	92	6	8	-	-	10	10	<150	1	5
18	Malin Head ...	1017.8	-36	S	6	c	50	92	7	6	-	-	9	9	1500	0	4
	Aldergrove ...	1023.6	-16	SSW	4	c	47	85	7	5	2	-	4-6	10	1000	1	*
19	Birr Castle ...	1026.0	-14	SW	2	c	51	85	8	5	-	-	9	9	2500	1	*
20	Valentia Obsy.	1026.5	-14	SW'S	5	c	54	85	8	5	-	-	10	10	1500	1	4
	Roches Point	1029.0	-10	WSW	3	c	51	92	8	5	-	-	9	9	1500	1	3

PAST 24 HOURS.

District	Stations	Temperature. Max. Day 7h.–18h. °F. (31)	Min. Night 18h–7h. °F. (32)	Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Night 18h–7h mm. (35)	Sunshine 24th Hrs. (36)
1	London (Kew)	53	38	27	-	0.1	4.7
	Croydon ...	55	38	35	-	-	4.8
	S. Farnborough	54	37	31	-	Tr	4.9
	Boscombe Down	53	37	32	-	0.2	5.3
	Calshot (Sthmtn.)	53	39	35	-	0.1	5.8
	Lympne ...	53	34	29	-	0.1	5.6
	Manston ...						
2	Shoeburyness ...	54	44	41	-	Tr	4.9
	Felixstowe ...						
	Gorleston ...	55	41	37	-	-	4.5
	Mildenhall ...	55	41	33	Tr	0.2	5.6
	Cranwell ...	51	42	40	-	-	2.7
3	Birmingham ...	53	42	35	*	-	4.0
	Upper Heyford	52	42	33	-	-	*
4	Ross-on-Wye	55	43	34	-	0.1	4.5
5	Hartland Point	52	46	44	-	-	2.4
	Bristol ...		41	31		-	5.1
	Portland Bill ...	53	48	*	-	-	*
	Plymouth ...	55	41	34	-	-	3.7
	The Lizard ...	55	49	*	-	-	5.1
	Scilly (St. Mary's)	55	48	*	0.1	-	6.3
	Guernsey ...						
6	Pembroke ...	53	51	*	-	-	0.4
7	Holyhead ...	53	49	47		-	1.1
	Chester (Sealand)		49	39		-	3.4
8	Manchester ...		38	32		-	0.9
10	Spurn Head ...	50	42	*	-	Tr	2.6
	Catterick ...	52	49	47	Tr	Tr	0.7
	Tynemouth ...	52	50	47	-	-	
11	St. Abbs Head	52	48	*	-	-	*
	Leuchars ...	53	47	47	Tr	-	0.3
12	Renfrew (Abbots I.)	53	48	45	3	Tr	0.0
	Eskdalemuir ...	49	46	45	0.3	0.1	0.7
	Point of Ayre...	51	48	*	-	-	0.0
13A	Tiree			*	Tr		
13B	Stornoway ...	49	43	*	7	2	1.0
15	Dalwhinnie ...	47	44	40	7	0.6	0.0
	Aberdeen ...	54	46	41	-	Tr	0.4
	Wick ...	46	38	*	10	0.1	*
16	Lerwick ...	49	48	*	1	3	0.0
17	Blacksod Point	54	51	*	-	0.4	*
18	Malin Head ...	52	46	*	0.6	-	0.0
	Aldergrove ...	52	46	42	Tr	-	0.2
19	Birr Castle ...	53	45	43	-	-	1.6
20	Valentia Obsy.	56	51	49	Tr	Tr	1.1
	Roches Point	54	48	*	-	0.1	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather. Morning. (24 hrs. ended 9h.)	Afternoon.	Night.	Temperature. Day Max. °F.	Night Min. °F.	Min. on Grass °F.	Rainfall. Day. mm.	Night. mm.	Sunshine to Sunset. hrs. (Yesterday.)	Humidity. 15h. G.M.T. % (Yesterday.)	9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew...	18	cwbcrg	cmbcm	bfbfefe	53	38	27	-	0.1	4.7	*	*	1
Croydon	217	cbcm	bcrgbcm	bcbmw	55	38	35	-	-	4.8	*	*	3
Greenwich (Royal Observatory)...	149	bcbm	bbcbm	bmwff	53	39	28	-	Tr	3.7	80	98	1
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	55	38	34	Tr			88	99	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	53	40	31	-	-		87	95	*
Camden Square	110	bc	bc	*	53	40	34	-	-	*	*	98	*
Kensington	80	bc	bcz	*	55	40	30	-	0.1		90	99	*
Hampstead Observatory	450	bc	bc	bcof	52	38	37	-	-		*	99	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 25th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
Defective Record			

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											*	*		

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying teble the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

		Objects not visible at
0	Dense fog	55 yards.
1	Thick fog	220 ,,
2	Fog	550 ,,
3	Moderate fog	1,100 ,,
4	Mist or haze	1¼ miles.
5	Poor visibility	2½ ,,
6	Moderate ,,	6¼ ,,
7	Good ,,	12½ ,,
8	Very good ,,	31 ,,
9	Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0	Calm.	5	Very rough.
1	Smooth.	6	High.
2	Slight.	7	Very high.
3	Moderate.	8	Preciptious.
4	Rough.	9	Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 26th November 1940.

No. 28859

OBSERVATIONS at 13h. G.M.T. 25th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1033·7	-12	SW	4	zo	49	92	6	5	3	-	7-8	9+	2500
	Croydon	1033·8	-10	SSW	2	zo	49	97	6	5	-	-	10	10	1800
	S. Farnborough	1033·6	-16	SSW	3	zo	50	92	6	5	7	7	1	9+	1000
	Boscombe Down	1033·6	-12	SSW	3	zo	48	97	6	-	7	-	0	10	-
	Calshot (Soton.)	1033·9	-12	SW'W	2	c	52	92	7	5	7	-	7-8	10	2500
	Lympne ...	1034·4	-10	SSW	3	zo	47	97	5	5	7	-	4-6	10	5500
	Manston ...	1034·0	-14	SSW	3	zo	48	92	6	5	7	1	7-8	10	4500
2	Shoeburyness ...	1033·9	-10	SW	3	c	48	92	5	5	2	-	7-8	10	800
	Felixstowe ...	1033·3	-12	WSW	4	m	46	97	4	-	7	-	0	10	-
	Gorleston ...	1031·8	-10	SW	2	c	46	92	6	5	-	-	9+	9+	1500
	Mildenhall ...	1032·1	-12	SW'S	4	zo	46	92	6	5	1	-	4-6	10	800
	Cranwell ...	1030·0	-14	WSW	4	zo	48	85	6	5	7	-	4-6	10	2500
3	Birmingham	1030·3	0	SW	3	c	47	92	6	5	-	-	10	10	-
	Upper Heyford	1032·4	-14	SW	2	zo	46	97	6	5	7	-	4-6	10	5700
4	Ross-on-Wye ...	1031·5	-10	SW'S	4	c	50	85	7	5	7	-	1	10	1500
5	Hartland Point	1031·7	-8	WSW	4	c	52	92	8	5	6	-	7-8	9+	1500
	Bristol	1032·7	-10	SW'S	3	c	50	85	7	-	7	-	0	9+	-
	Portland Bill ...	1033·8	-6	SW	3	c	53	85	8	5	-	-	10	10	4000
	Plymouth ...	1034·0	-8	SW'W	4	c	53	85	7	8	7	-	9	9+	1500
	The Lizard ...	1033·6	-8	SW	4	c	54	85	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	1032·9	-6	SW'S	4	c	53	85	8	5	3	3	4-6	9	2200
	Guernsey ...														
6	Pembroke ...	1030·9	-2	SW	6	c	53	85	7	8	-	-	10	10	2500
7	Holyhead ...	1027·1	-6	SSW	6	iro	53	97	7	5	-	-	10	10	1400
	Chester (Sealand)	1029·0	-2	SW'S	3	c	53	75	8	5	2	-	7-8	9+	4200
8	Manchester ...	1028·5	-10	SSW	4	zo	50	75	6	5	7	-	4-6	9+	6500
10	Spurn Head ...	1028·2	-8	SSW	4	c	48	85	7	5	5	-	4-6	9+	4000
	Catterick ...	1025·4	-16	SW'W	4	c	52	75	7	5	7	-	4-6	9+	3000
	Tynemouth ...	1023·2	-24	SW	5	c	50	85	6	8	4	-	7-8	7-8	2800
11	St. Abbs Head	1016·0	-34	SW	8	cq	52	85	8	4	4	4	4-6	9	2500
	Leuchars ...	1016·5	-22	SW	6	dodo	51	85	7	5	-	-	10	10	1500
12	Renfrew (Abbots I.)	1018·1	-2	SW	6	o/r	51	92	6	6	2	-	9	9+	1600
	Eskdalemuir ...	1022·0	-12	SW'S	2	c	47	92	6	5	-	-	10	10	800
	Point of Ayre ...	1024·0	-8	SW'W	6	c	55	85	8	8	1	-	7-8	9+	1500
13A	Tiree	1012·3	0	SW'W	8	dod	53	97	6	5	-	-	10	10	1200
13B	Stornoway ...	1004·5	-10	SSW	8	rro	54	92	6	5	2	-	9+	10	1000
15	Dalwhinnie ...	*	-18	SW	5	iro	50	85	7	5	8	-	7-8	9+	1500
	Aberdeen ...	1012·4	-28	SW	6	bc	51	85	6	5	9	-	2-3	4-6	1500
	Wick	1005·4	-34	SW	6	pr	51	92	7	5	1	-	7-8	10	2500
16	Lerwick... ...	999·2	-62	SW	8	rr	49	92	6	6	2	-	4-6	10	800
17	Blacksod Point..	1019·1	0	SW	7	cq	54	92	6	9	-	-	9+	9+	<150
18	Malin Head ...	1016·3	-8	SW	8	c	53	85	7	6	-	-	9	9	1500
	Aldergrove ...	1021·8	-10	SW	6	c	52	85	8	5	7	-	9	10	1600
19	Birr Castle ...	1025·0	-6	WSW	3	c	55	75	8	8	7	-	7-8	9	1500
20	Valentia Obsy. †	1026·0	-6	SW'S	6	c/d	55	85	8	5	1	-	9+	9+	1500
	Roches Point ...	1028·0	-8	SW	4	c/r	52	92	8	5	-	-	9+	9+	1500

OBSERVATIONS at 18h. G.M.T. 25th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)...	1032·9	+2	SW	3	zo	48	92	6	5	-	-	9+	9+	2500	1	*
	Croydon	1032·5	-4	S'E	1	mo	48	92	4	5	7	-	2-3	9	5700	1	*
	S. Farnborough	1033·0	0	S'W	4	e/r	49	85	6	5	7	-	2-3	9	2000		*
	Boscombe Down	1032·7	-2	SSW	3	zo	48	92	6	-	3	-	0	9+	-		*
	Calshot (Soton.)	1033·2	0	WSW	2	zo	50	85	6	5	7	-	4-6	9	5700	1	1
	Lympne ...	1033·1	-2	SW	2	ido	49	97	6	5	-	-	10	10	500	1	§
	Manston ...	1033·5	+4	SW'S	3	zo	49	97	6	5	7	-	7-8	10	900		*
2	Shoeburyness ...	1032·9	-2	SW	2	bc	49	92	5	5	7	-	4-6	4-6	4000	1	*
	Felixstowe ...	1032·1	-6	SW	3	m	48	97	4	-	7	-	0	9+	-	1	2
	Gorleston ...	1030·4	-4	SW	3	o	48	92	5	5	-	-	10	10	1000	1	2
	Mildenhall ...	1030·6	-6	SW'S	4	zo	49	85	6	5	7	-	4-6	4-6	4000	0	*
	Cranwell ...	1028·9	+2	SW'W	5	zo	49	85	6	5	-	-	10	10	3000	1	*
3	Birmingham	1029·0	-4	SW	2	zo	48	85	5	5	-	-	10	10	1500	1	*
	Upper Heyford	1031·2	-6	SW	2	zo	47	85	6	5	7	-	2-3	9	2000	1	*
4	Ross-on-Wye ...																*
5	Hartland Point	1030·8	+4	WSW	4	c	51	92	8	8	-	-	7-8	7-8	1500	1	3
	Bristol	1031·9	-2	SSW	2	bc	50	85	7	5	3	-	1	4-6	4000	1	*
	Portland Bill ...	1032·7	-8	SW	4	c	53	85	7	5	-	-	10	10	4000	1	3
	Plymouth ...	1033·5	+4	SW	2	ido	51	97	6	5	7	-	10	10	800	1	2
	The Lizard ...	1033·0	+4	SW'S	5	c	51	85	8	8	2	-	9	10	2000	0	3
	Scilly (St. Mary's)	1031·7	-2	SW'S	4	c	51	75	7	5	7	-	7-8	9+	1800	1	2
	Guernsey ...																
6	Pembroke ...	1030·7	-10	SW	6	c	53	85	7	8	-	-	7-8	7-8	2500	1	3
7	Holyhead ...	1025·9	-2	SW'S	5	c/r	52	97	6	9	-	-	7-8	7-8	1200	1	3
	Chester (Sealand)	1027·3	-4	SW	3	c	54	75	7	5	-	-	9+	9+	2500	1	*
8	Manchester ...	1027·4	0	NW	3	zo	52	85	6	5	-	-	9	10	2800	0	*
10	Spurn Head ...	1026·3	0	SW'S	5	c	48	85	7	5	1	-	2-3	9	4000	0	3
	Catterick ...	1023·3	-6	SW	3	c	53	85	7	5	7	-	7-8	9	1600	1	*
	Tynemouth ...	1020·6	-10	WSW	6	cq	54	65	6	5	-	-	7-8	7-8	2000	1	2
11	St. Abbs Head	1016·7	0	SW	7	cq	53	85	8	5	4	-	4-6	7-8	2500	0	3
	Leuchars ...	1014·9	-2	SW	7	ido	54	85	6	5	2	-	7-8	10	800	1	*
12	Renfrew (Abbots I.)	1016·7	-6	WSW	6	c	53	85	8	5	1	-	4-6	9	1600	1	*
	Eskdalemuir ...	1020·5	+2	SW'W	5	ido	50	85	6	6	-	-	10	10	450	1	*
	Point of Ayre ...	1022·0	-10	WSW	6	bc	54	85	8	5	-	-	4-6	4-6	2500	1	4
13A	Tiree	1012·3	0	SW'W	7	o	52	97	6	5	-	-	10	10	1500	1	5
13B	Stornoway ...	1004·8	0	SSW	7	rr	52	92	6	5	2	-	7-8	10	1000	1	4
15	Dalwhinnie ...	*	+2	SW	5	o	49	85	6	5	-	-	10	10	1500	1	*
	Aberdeen ...	1011·0	-2	SW	4	c	53	85	7	5	9	-	2-3	9	1500	1	2
	Wick	1005·8	+6	SSW	4	c	54	85	8	5	7	-	4-6	7-8	1500	1	2
16	Lerwick... ...	998·4	+10	SW	8	c/r	51	92	6	6	2	-	4-6	10	450	1	*
17	Blacksod Point..	1018·2	+2	SW	8	cQ	54	85	5	9	-	-	10	10	<150	1	5
18	Malin Head ...	1016·9	+8	SSW	5	c	53	85	7	8	-	-	9	9	1500	0	4
	Aldergrove ...	1020·3	-10	SW'S	6	c	52	75	8	5	7	-	4-6	9+	1500		*
19	Birr Castle ...	1024·3	-2	SW	3	c	53	85	8	8	1	-	7-8	10	1500	1	*
20	Valentia Obsy. †	1024·7	-6	SSW	5	ido	52	92	8	5	-	-	10	10	1500	1	3
	Roches Point ...	1027·1	-4	SSW	5	id	51	97	6	5	-	-	9+	9+	800	1	4

PAST 24 HOURS.

District	Stations	Weather 7h.—13h. 25th (37)	Weather 13h.—18h. 25th (38)	Weather 18h. 25th to 1h. 26th (39)	Weather 1h.—7h. 26th (40)
1	London (Kew)...	FeFecmo	cmo	cmo	cmo
	Croydon	bcfbmo	cmocm	cmcmoidoc	c
	S. Farnborough	ofecmo	moro	cbcmo	moc
	Boscombe Down	bfcm	cmo	cmcidmoc	c
	Calshot (Soton.)	ffiFmoc	ccmo	ciDidc	c
	Lympne ...	fcmcmo	cmoomod	pmdocm	cmo
	Manston ...	ifmcmo	cmo	bcm bmo	cmo
2	Shoeburyness ...	fcfmc	cmobcmo	bcmobw	bwc
	Felixstowe ...	ofcm	cm	cmbmocmo	cmo
	Gorleston ...	offczo	cozozo	czo	bcczo
	Mildenhall ...	omwcmo	cmobcmo	cmobmocm	cmo
	Cranwell ...	cmo	cmo	cbcmo	bcmo
3	Birmingham	cmdoc	cz	bc	cbc
	Upper Heyford	omcmo	cmo	cmobcmocmo	cmo
4	Ross-on-Wye ...	c		ccq	cqc
5	Hartland Point	c	c	c	c
	Bristol		c	bcc	
	Portland Bill ...	c	c	c	c
	Plymouth ...	cmfscmoc	cmoiro	cidocoid	omocmoc
	The Lizard ...	c	c	oc	co
	Scilly (St. Mary's)	bcc	c	cbc	bcc
	Guernsey ...				
6	Pembroke ...	c	c	cq	cq
7	Holyhead ...	cmobcc	rodrbc	pomoc	cmoc
	Chester (Sealand)	c	c	cmobc	cmobc
8	Manchester ...	bcmocmo	czo	bcz	bcmo
10	Spurn Head ...	c	c	cbcw	cwbc
	Catterick ...	c	c	ct	c
	Tynemouth ...	c	cq	cq	c
11	St. Abbs Head	cq	cq	cbcq	cbcq
	Leuchars ...	cirocidodod	cdodomo	cidcmo	cmoc
12	Renfrew (Abbots I.)	cmoRrc	c	bcebc	cbcc
	Eskdalemuir ...	cmorr	croro	cirorom	cmoc
	Point of Ayre ...	prc	cbc	bcc	c
13A	Tiree	oRd			
13B	Stornoway ...	crr (gale symbol)	crr (gale symbol)	crr (gale symbol)	
15	Dalwhinnie ...	ciro	ciroo	*	c
	Aberdeen ...	cbczo	bcc	c	c
	Wick	cproq	proqc	crocq (gale symbol)	prqd (gale symbol)
16	Lerwick... ...	crorr (gale symbol)	crrro (gale symbol)	crorr	crr
17	Blacksod Point..	cq	cq (gale symbol)	cq (gale symbol)	cq
18	Malin Head ...	c	c (gale symbol)	c	c
	Aldergrove ...	criroc	c	c	c
19	Birr Castle ...	c	c	cbc	bcc
20	Valentia Obsy. †	cirocidoc	cido	cidc	c
	Roches Point ...	idoc	id	c	c

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). ⚐ gale.
⊕ Solar halo. ⊕ lunar halo. ⌂ Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4–6" means that the cloud amount may be 4, 5 or 6: similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9+" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

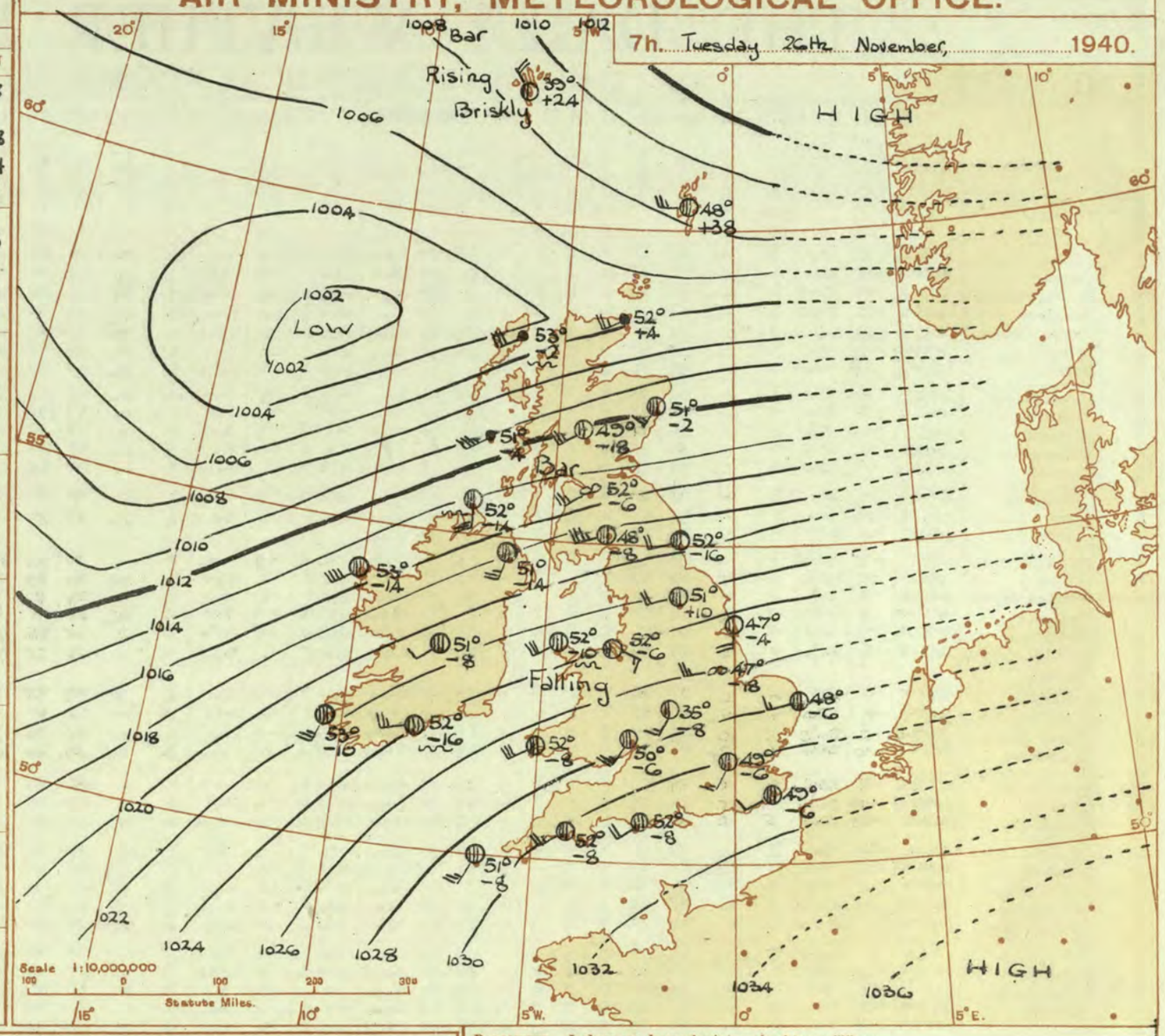
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 25th November			18h. G.M.T.			01h. G.M.T. 26th November			07h. G.M.T.		
IIIC$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN
109 52	63746	15568	52	61646	55868	57	02655	54868	52	63656	55768
115 52	62635	53088									
203 5-	66718	29868	5-	66728	18868	5-	66728	49868	5-	64728	49868
206 57	51855	20468	57	02854	53657	5-	01855	53725	1-	81854	49684
210 57	02855	53625	5-	01855	53815	5-	01854	54854	5-	02855	53525
220			6-	56418	24758						
230 62	51736	53568	5-	51648	53768	5-	22748	53568	5-	58638	53668
245 57	22747	53768	5-	21668	53758	5-	14658	53828	5-	14658	53628
260 52	22866	20668	5-	02858	20528	5-	02757	53528	50	14865	53725
277 62	22847	18568	52	02757	18427	5-	02758	20428	5-	02855	17425
279											
285 23	02736	24727	23	61753	26627				9-	02636	26686
288 57	22653	20467	57	02757	53528	57	02765	53627	5-	02757	53527
273 38	05663	23615									
301 57	51648	20528	5-	61648	22468	5-	05656	22526	5-	05656	22526
321 07	05590	18428	57	05564	20325	57	05664	20127	57	05663	57513
299 5-	08444	22428				5-	05644	22414	50	01742	22412
292 07	17590	18328	5-	05638	18228	5-	02758	20328	5-	02757	20427
310 --	02428	24528	--	02628	24528				--	01636	24416
316 57	05532	20448	57	02556	20328	5-	05557	20427	5-	05557	18427
333 51	51648	20528	50	22644	20664	50	14755	53765	51	51755	53528
334 --	02855	22627								03655	20628
340 57	02754	15227	57	02755	20417	50	01754	53424	5-	02857	20317
136 5-	05638	16448	57	05674	20425				57	02755	18617
336 43	03754	12428	52	03754	20528	50	05662	20512	62	03754	20528
350 07	05690	18328	57	05665	16327				57	02753	51426
368											
379 07	05690	20328	07	05690	20325	5-	05627	20527	5-	05638	20428
390 5-	45328	2014-	53	47355	00028	5-	08455	18315	5-	05647	20327
382 57	05673	10328	07	05690	18325	5-	05658	21428	5-	02857	20427
438 -	03748	23428									
430 57	41566	22258	5-	05665	22217	5-	05658	22258	5-	02758	22428
409			57	51744	18327	5-	02648	18358	5-	02847	19427

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
C$_L$C$_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Tuesday 26th November, 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Tuesday 26th November, 1940
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Moderate S.W. wind, fresh, strong locally on coasts; mainly cloudy but some bright intervals; mild.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Fresh S.W. wind, strong on coasts; cloudy; mild.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Fresh or strong S.W. wind, gale locally on coasts; cloudy, occasional rain or drizzle; mild.
13 {A. W. Scotld. B.N.W.Scotland.} 14 Mid Scotland	Fresh or strong S.W. wind, gale locally on coast, veering N.W. & moderating; cloudy, some rain at first, bright intervals and showers later; mild, becoming rather cold.
15 N. E. Scotland 16 Orkneys and Shetlands	Fresh W. to N.W. wind; bright intervals, showers; rather cold.
17 N. W. Ireland	As 13 - 14.
18 N. E. Ireland	As 11 - 12.
19 S. E. Ireland 20 S. W. Ireland	As 7 - 10

GENERAL INFERENCE.

Pressure is high on the Continent, and a complex series of low pressure systems to Northwards of the British Isles is moving east. Weather will continue mainly cloudy and mild, but there will be bright intervals in the Southeast. In the extreme Northwest it will become rather cold, with showers and bright intervals.

FURTHER OUTLOOK.

Mainly fair; strong winds moderating; continuing mild in the South.

▼ Gale warning issued in districts 1, 2, 3, 14, 15 & 16 at 0540h 25/11 and in districts 4, 13, 18 at 0800h 25/11.

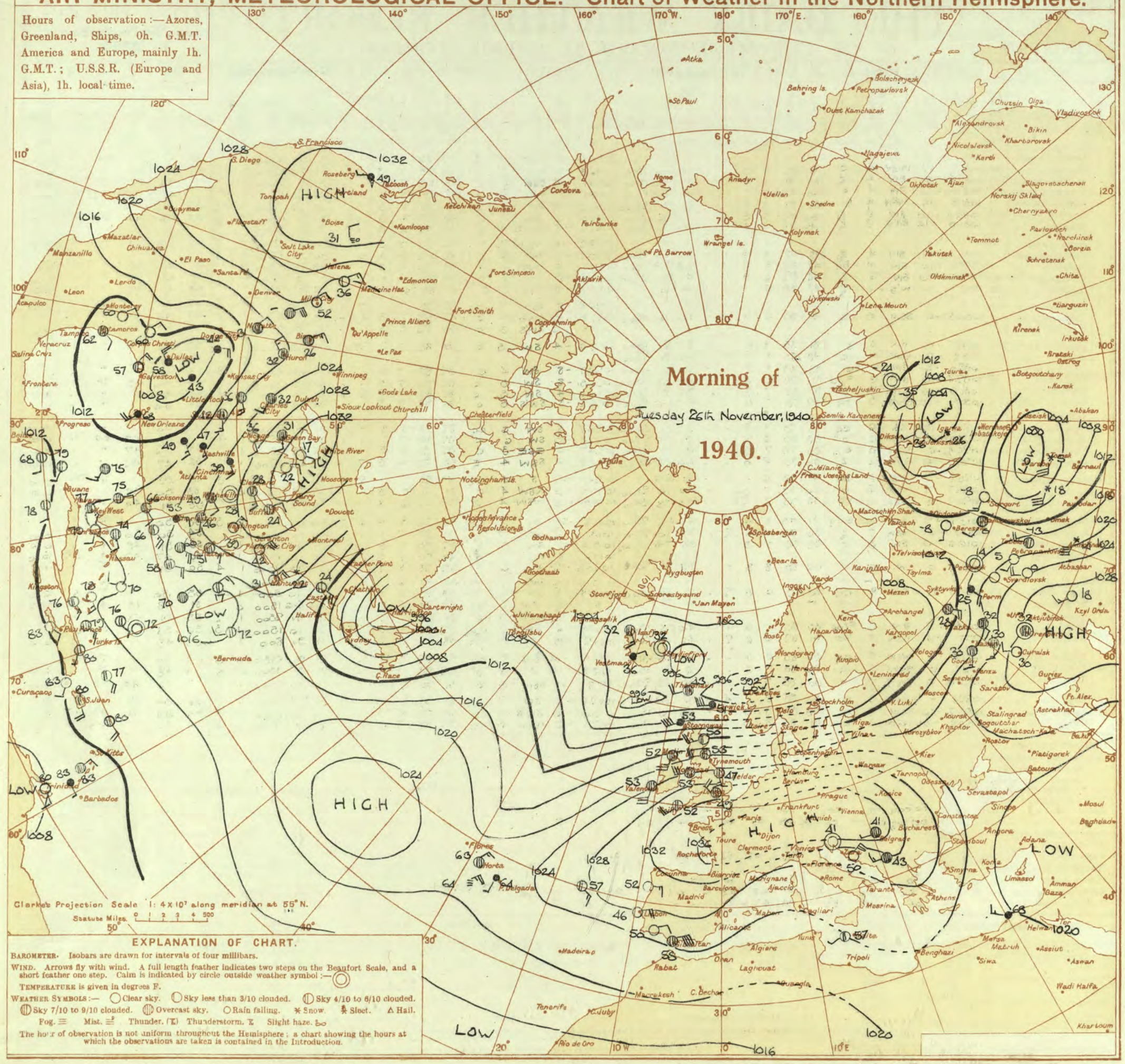
Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.

Hours of observation :—Azores, Greenland, Ships, 0h. G.M.T. America and Europe, mainly 1h. G.M.T.; U.S.S.R. (Europe and Asia), 1h. local time.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 26th November 1940.

No. 28859

OBSERVATIONS at 1 hr. G.M.T. 26th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Cloud. Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1031.5	-12	WNW	4	c	49	85	7	5	-	-	10	10	2500
	S. Farnborough	226	1032.3	-8	SW	4	7	48	85	6	5	2	-	9	10	1500
	Boscombe Down	417	1032.0	-10	SW	4	c	49	85	7	5	-	-	10	10	1200
	Calshot (Sthmtn.)	8	1031.9	-14	WSW	4	c	51	75	8	5	-	-	9+	9+	2000
	Lympne ...	346	1032.0	-10	SW	3	7	50	92	6	5	-	-	10	10	900
	Manston ...	154	1031.0	-14	SW'S	3	7	49	92	6	5	-	-	9+	9+	900
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1030.3	-12	SW	4	7	46	97	6	5	-	-	10	10	1900
	Gorleston ...	5	1029.4	-10	SW	4	bc	47	92	6	5	-	-	2-3	2-3	2500
	Mildenhall ...	19	1029.4	-10	SW	4	7	48	92	6	5	-	-	9+	9+	2200
	Cranwell ...	240	1027.5	-6	W'S	6	7	47	85	6	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1030.3	-6	SSW	5	7	48	85	6	5	-	-	10	10	1800
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1029.2	-14	SW	6	c	51	85	8	8	-	-	9	9	1500
	Bristol ...	209	1031.8	-6	SSW	4	c	49	85	7	5	7	-	4-6	9+	2300
	Portland Bill ...	32	1032.0	-6	SW	4	c	53	85	7	5	-	-	10	10	4000
	Plymouth ...	82	1032.4	-10	SW	5	c/d	52	85	6	5	-	-	10	10	1000
	The Lizard ...	240	1031.9	-10	SW	5	c	51	92	7	8	2	-	7-8	9	1800
	Scilly (St. Mary's)	163	1030.2	-10	SW'S	5	bc	52	75	7	5	-	-	4-6	4-6	1800
	Guernsey ...	175														
6	Pembroke ...	142	1027.9	-12	SW	6	cq	52	75	7	8	-	-	9+	9+	3000
7	Holyhead ...	26	1024.5	-10	SW'W	6	c	53	85	6	8	-	-	9+	9+	2200
	Chester (Sealand)	16	1026.4	-6	SSW	3	c	53	75	7	5	-	-	9	9	2700
8	Manchester ...	70	1026.2	-10	SW'S	4	7	50	75	6	5	-	-	4-6	4-6	3500
10	Spurn Head ...	29	1028.5	-2	S'E	3	bc	47	85	6	-	4	-	0	4-6	-
	Catterick ...	175	1029.7	-6	WSW	3	c	50	75	7	5	-	-	10	10	2500
	Tynemouth ...	108	1029.2	-4	WSW	6	cq	53	75	7	2	-	-	7-8	7-8	2000
11	St. Abbs Head	280	1016.1	+2	SW	6	bcq	51	75	8	4	4	-	4-6	4-6	2500
	Leuchars ...	36	1014.7	-6	WSW	7	7	53	85	6	5	2	-	7-8	10	2500
12	Renfrew (Abbots I.)	19	1016.6	0	SW	5	c	53	85	7	5	-	-	7-8	7-8	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1029.5	0	W	6	c	52	85	8	8	-	-	7-8	7-8	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1030	0	SW	8	r.r.	53	92	6	5	2	-		10	1000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1005.7	-2	SW	6	c/pp	55	85	7	9	1	-	4-6	7-8	1500
16	Lerwick ...	156	997.7	-6	WSW	8	pp	51	92	6	6	2	-	4-6	10	800
17	Blacksod Point	18	1017.6	-4	WSW	7	cq	54	85	6	9	-	-	10	10	<150
18	Malin Head ...	84	1016.2	0	SSW	5	c	52	85	7	9	-	-	9	9	1500
	Aldergrove ...	268	1020.3	0	SW'S	5	c	50	85	8	5	-	-	10	10	2200
19	Birr Castle ...	173	1022.8	-4	SW	3	bc	50	85	8	-	4	-	0	2-3	-
20	Valentia Obsy.	30	1028.2	-10	SSW	6	c	53	85	8	5	-	-	10	10	1500
	Roches Point	22	1025.8	-8	WSW	5	c	51	85	8	5	-	-	9	9	1500

OBSERVATIONS at 7 hr. G.M.T. 26th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount Low 0–10 (26)	Cloud. Amount Total 0–10 (27)	Cloud. Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
London (Kew)	1030.0	-8	WSW	4	7	49	85	6	5	-	-	9+	9+	1500	1	*
Croydon ...	1030.3	-6	SSW	3	c	49	85	7	5	-	-	7-8	7-8	2500	1	*
S. Farnborough	1030.1	-14	SSW	4	c	48	85	7	5	-	-	9+	9+	2200	1	*
Boscombe Down	1030.1	-8	SW'S	2	c	48	85	7	5	-	-	10	10	1200	1	*
Calshot (Sthmtn.)	1030.5	-10	SW'W	3	c	57	75	8	5	-	-	10	10	2000	1	2
Lympne ...	1030.6	-6	SW	2	c	49	85	8	5	-	-	9+	9+	1000	1	§3
Manston ...	1030.2	-8	SW'S	4	7	49	85	6	5	-	-	9+	9+	1500		*
Shoeburyness ...	1029.9	-10	WSW	3	c	50	75	7	5	-	-	9+	9+	2500	1	*
Felixstowe ...	1029.2	-8	W'S	4	7	48	92	6	5	-	-	9+	9+	1800	1	3
Gorleston ...	1027.5	-6	WSW	3	c	48	75	6	5	-	-	7-8	7-8	2500	1	2
Mildenhall ...	1027.9	-8	SW	4	7	48	85	6	5	-	-	9	9	2500	0	*
Cranwell ...	1025.3	-18	W'S	3	c	47	85	6	5	7	-	4-6	9	2500	1	*
Birmingham ...	1026.8	-8	SSW	3	bc	45	35	7	-	7	-	0	4-6	-	1	*
Upper Heyford	1028.8	-10	SW'S	4	c	47	85	7	5	4	-	7-8	9	1800	1	*
Ross-on-Wye	1027.5	-6	SW'S	5	c	50	75	8	5	-	-	9+	9+	2500	1	*
Hartland Point	1027.6	-4	SW	5	c	51	85	8	5	6	-	4-6	7-8	2000	1	4
Bristol ...																*
Portland Bill ...	1029.9	-8	SW	4	c	52	85	7	5	-	-	10	10	4000	1	3
Plymouth ...	1030.5	-8	SW	5	c	52	75	7	5	-	-	10	10	2000	1	3
The Lizard ...	1030.0	-4	SW	5	c	51	85	7	8	2	-	9	10	1500	1	3
Scilly (St. Mary's)	1028.2	-8	SW'S	5	c	51	85	8	8	-	-	7-8	7-8	1500	1	3
Guernsey ...																
Pembroke ...	1026.7	-8	SW	6	cq	52	75	7	8	-	-	9+	9+	2000	1	3
Holyhead ...	1027.9	-10	SW	6	c	52	85	7	9	-	-	9+	9+	2200	1	4
Chester (Sealand)	1024.7	-6	ESE	3	c	52	75	8	5	-	-	7-8	7-8	2500	1	*
Manchester ...	1024.8	-6	SSW	4	7	49	75	6	5	7	-	2-3	4-6	3200	1	*
Spurn Head ...	1024.1	-4	S	4	bc	47	85	7	-	2	1	0	4-6	-	2	3
Catterick ...	1021.2	+10	WSW	4	c	51	75	7	5	-	-	7-8	7-8	2500	0	*
Tynemouth ...	1018.9	-16	WSW	4	c	52	65	6	8	-	-	7-8	7-8	2000	1	2
St. Abbs Head	1014.4	-14	W	6	bcq	50	75	8	4	4	7	4-6	4-6	2500	0	3
Leuchars ...	1013.1	-2	WSW	7	7	51	85	6	6	1	-	4-6	9+	1100	1	*
Renfrew (Abbots I.)	1015.4	-6	SW	5	7	52	85	6	5	-	-	9+	9+	2600	1	*
Eskdalemuir ...	1017.4	-8	WSW	7	c	48	85	7	5	-	-	10	10	1500	1	*
Point of Ayre ...	1020.0	-12	W'S	6	c	52	85	8	8	-	-	7-8	7-8	2500	1	4
Tiree	1010.0	-4	SW'W	7	dr	51	97	6	-	2	-	10	10	1200		
Stornoway ...	1003.8	-2	SW	6	pp	53	97	6	5	2	-	9	10	900	1	4
Dalwhinnie ...	*	-18	SW	5	bc	49	75	7	5	4	-	4-6	4-6	1500	0	*
Aberdeen ...	1010.8	-2	SW'S	3	c	51	85	7	5	-	-	9+	9+	2500	1	2
Wick ...	1005.9	+4	SW	5	d.d.	52	85	7	5	2	-	9	10	1500	1	3
Lerwick ...	1001.2	+38	W	5	c/p	48	92	7	6	2	-	7-8	9+	800	1	*
Blacksod Point	1014.2	-14	SW	8	cq	53	92	7	9	-	-	9+	9+	<150	0	5
Malin Head ...	1013.8	-14	S	5	c	52	85	7	8	-	-	9	9	1500	0	4
Aldergrove ...	1017.8	-14	SSW	5	c	51	75	8	5	-	-	10	10	2000	1	*
Birr Castle ...	1002.6	-8	SW	2	c	51	85	8	5	-	-	7-8	7-8	2500	1	*
Valentia Obsy.	1021.0	-10	SW'S	5	c	53	75	8	5	-	-	10	10	1500	1	3
Roches Point	1023.1	-16	WSW	5	c	52	85	8	5	-	-	9	9	1500	1	4

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h.–18h. °F. (31)	Temperature. Min. Night 18h–7h. °F. (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h. mm. (34)	Rainfall. Night 18h–7h. mm. (35)	Sunshine 25th Hrs. (36)
London (Kew)	50	47	43	0.1	-	0.0
Croydon ...	49	47	45	-	0.1	0.1
S. Farnborough		49	42		-	0.0
Boscombe Down		47	44		Tr	0.0
Calshot (Sthmtn.)	52	50	46	-	0.2	0.0
Lympne ...	50	48	44	0.1	Tr	0.0
Manston ...						
Shoeburyness ...	50	48	41	-	-	0.0
Felixstowe ...						
Gorleston ...	48	48	42	-	-	0.0
Mildenhall ...	49	47	44	Tr	-	0.0
Cranwell ...	50	45	42	-	-	0.0
Birmingham ...	48	48	41	0.3	-	0.0
Upper Heyford	49	48	37	-	-	*
Ross-on-Wye		49	47		-	0.0
Hartland Point	52	50	49	-	-	0.1
Bristol ...	51			-		
Portland Bill ...	53	49	*	-	-	*
Plymouth ...	53	50	49	Tr	Tr	0.0
The Lizard ...	54	49	*	-	-	1.8
Scilly (St. Mary's)	54	50	*	-	-	
Guernsey ...						
Pembroke ...	53	50	*	-	-	0.0
Holyhead ...	54	51	49	0.2	Tr	0.0
Chester (Sealand)	54	52	47	-	-	0.0
Manchester ...	52	47	42	-	-	0.0
Spurn Head ...	49	42	*	Tr	Tr	0.0
Catterick ...	53	50	48	-	-	0.0
Tynemouth ...	55	51	44	-	-	
St. Abbs Head	53	50	*	Tr	-	*
Leuchars ...	54	50	50	Tr	Tr	0.0
Renfrew (Abbots I.)	53	51	48	6	-	0.0
Eskdalemuir ...	50	47	48	1	0.2	0.0
Point of Ayre ...	56	51	*	Tr	-	0.2
Tiree			*	6		
Stornoway ...	55	50	*	7	8	0.0
Dalwhinnie ...	51	48	45	6	Tr	0.0
Aberdeen ...	53	51	48	-	-	0.1
Wick ...	56	51	*	0.1	0.1	*
Lerwick ...	53	48	*	3	1	0.0
Blacksod Point	55	50	*	Tr	1	*
Malin Head ...	54	48	*	Tr	-	0.0
Aldergrove ...		50	47	0.5	-	0.0
Birr Castle ...	56	50	47	-	-	0.3
Valentia Obsy.	55	52	51	0.2	Tr	0.1
Roches Point	53	50	*	0.2	Tr	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather. Morning. (24 hrs. ended 9h.)	Weather. Afternoon. (24 hrs. ended 9h.)	Weather. Night. (24 hrs. ended 9h.)	Temperature. Day Max. °F.	Temperature. Night Min. °F.	Temperature. Min. on Grass °F.	Rainfall. Day. mm.	Rainfall. Night. mm.	Sunshine. to Sunset. hrs. (Yesterday.)	Humidity. 15h. G.M.T. % (Yesterday.)	Humidity. 9h. G.M.T. % (To-day.)	Visibility 9h.
Kew ...	18	fefecm	cm	cm	50	47	43	0.1	-	0.0	*	*	7
Croydon ...	217	bcfbm	cmcm	cmcmd	49	47	45	-	0.1	0.1	*	*	7
Greenwich (Royal Observatory) ...	149												
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	52	42	42		-		91	84	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*									*
Camden Square ...	110	o	c	*	50	47	41	-	-	*	*	76	*
Kensington ...	80	bc	bc	*	51	48	42	-	0.1		89	80	*
Hampstead Observatory ...	450	of	of	bc	49	43	41	-	-		*	89	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 26th.

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
Defective Record.			

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris ...														
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...											*	*		

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 — Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6½ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 — Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

TERMS OF SUBSCRIPTION. { Single Copies, 1d. each: by post 1½d. 2/6 per month; 6/6 per quarter; 25/- per year.

METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 27th November 1940.

No. 28860

OBSERVATIONS at 13h. G.M.T. 26th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1028·3	-16	SW	4	c	50	75	7	5	3	-	7-8	9+	2500
	Croydon	1028·2	-12	WSW	2	z0	52	75	6	5	-	-	9+	9+	3500
	S. Farnborough	1021·9	-14	SSW	6	c	49	75	8	5	3	-	9	9+	2000
	Boscombe Down	1028·6	-14	SSW	5	c	50	75	8	5	-	-	7-8	9	1600
	Calshot (Soton.)	1029·5	-14	SW	5	c	50	75	8	5	-	-	10	10	2500
	Lympne	1029·3	-14	SW	4	c	49	85	8	5	-	-	9+	9+	1800
	Manston	1028·4	-18	SW'S	5	c	51	85	7	5	-	-	9	9	1800
2	Shoeburyness	1028·2	-20	SW	4	c	52	75	8	5	-	7	1	9+	2500
	Felixstowe	1027·3	-18	SW'W	4	c	50	85	7	5	7	8	1	9+	2000
	Gorleston	1026·1	-20	SW	4	bc	51	75	7	-	4	8	0	4-6	-
	Mildenhall	1025·7	-22	SW'S	5	c	53	75	7	7	7	6	2-3	7-8	2500
	Cranwell	1024·0	-14	WSW	7	bc	51	75	7	5	9	-	2-3	4-6	2500
3	Birmingham	1024·9	-10	SW	4	bc	51	75	7	1	-	3	2-3	4-6	4000
	Upper Heyford	1027·4	-10	WSW	5	c	51	75	8	5	-	-	7-8	7-8	2200
4	Ross-on-Wye	1025·8	-14	SW'W	4	bc/d	51	75	8	5	-	0	2-3	4-6	2500
5	Hartland Point	1025·8	-16	SW	5	c	51	85	8	5	4	-	7-8	7-8	2000
	Bristol														
	Portland Bill	1029·5	-14	S	4	c	50	85	7	5	-	-	10	10	4000
	Plymouth	1029·0	-14	SW	4	c	53	85	8	5	-	-	9+	9+	2000
	The Lizard	1028·5	-12	SSW	5	c	51	85	8	8	2	-	7-8	9+	2000
	Scilly (St. Mary's)	1027·0	-12	SSW	5	c	52	85	8	5	-	-	10	10	1800
	Guernsey														
6	Pembroke	1025·1	-6	SW	6	cq	53	75	7	8	2	-	7-8	9+	2500
7	Holyhead	1020·8	-18	SW	6	c	53	85	7	5	-	-	10	10	2200
	Chester (Sealand)	1023·0	-14	ESE	3	bc	57	65	8	1	4	-	2-3	4-6	2500
8	Manchester	1023·0	-14	SSW	4	bc	53	65	7	5	4	-	1	2-3	2800
10	Spurn Head	1021·7	-8	SSW	5	bc	51	85	6	-	-	4	0	4-6	-
	Catterick	1018·4	-28	WSW	5	bc	53	75	8	5	3	1	2-3	4-6	4000
	Tynemouth	1018·3	-14	WSW	6	bcq	54	65	6	2	3	-	4-6	4-6	3200
11	St. Abbs Head	1012·3	-10	W	7	bcq	52	65	8	4	4	1	2-3	4-6	2500
	Leuchars	1011·2	-26	WSW	7	c	52	75	7	5	7	-	7-8	9	900
12	Renfrew (Abbots I.)	1014·1	-12	SW'S	4	c	53	85	8	5	7	-	7-8	9+	2500
	Eskdalemuir	1016·1	-10	W'S	6	c	48	75	7	5	-	-	9+	9+	1500
	Point of Ayre	1019·2	-6	WSW	4	c	53	85	8	8	-	-	9	9	2500
13A	Tiree	1007·7	-16	SW	7	r0r0	51	97	6	-	2	-	10	10	800
13B	Stornoway	1003·0	-18	SSW	7	rr	52	92	6	5	2	-	9	10	1000
15	Dalwhinnie	1010·4	-16	SW	5	c	47	92	8	8	-	-	9+	9+	800
	Aberdeen	1009·1	-26	SW'W	5	bc	52	85	7	5	3	-	2-3	2-3	4000
	Wick	1004·8	-16	SW	4	c	53	85	9	5	7	8	4-6	9+	1500
16	Lerwick	1004·1	+2	NW	4	r0r0	46	92	6	5	2	-	7-8	10	800
17	Blacksod Point	1011·4	-18	S	7	DR	52	97	5	6	-	-	10	10	<150
18	Malin Head	1010·1	-20	S'W	6	c	52	85	7	6	-	-	9	9	2500
	Aldergrove	1015·6	-26	SW'S	5	c	52	75	7	5	-	-	9+	9+	3000
19	Birr Castle	1017·[illegible]	-20	SW	4	bc	55	75	8	5	-	4	2-3	2-3	2500
20	Valentia Obsy. †	1017·8	-22	S'W	6	id0	53	92	6	5	-	-	10	10	1500
	Roches Point	1021·3	-14	SW'S	4	c	52	85	8	5	-	-	9	9	1500

OBSERVATIONS at 18h. G.M.T. 26th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1026·1	-10	SW'S	4	c	47	85	7	5	-	-	9+	9+	1500	1	*
Croydon	1026·7	-6	SW	3	z0	46	85	6	5	-	-	4-6	4-6	3000	1	*
S. Farnborough	1026·6	-12	SSW	4	c	47	85	7	6	-	-	9+	9+	1300	1	*
Boscombe Down	1026·3	-8	SSW	5	c	46	85	7	5	-	-	7-8	7-8	1100	0	*
Calshot (Soton.)	1027·2	-10	SW'W	4	c	48	85	7	5	-	-	9+	9+	1600	1	2
Lympne	1027·3	-14	SW	3	c	46	92	8	5	-	-	9+	9+	800	1	§ 3
Manston	1026·8	-6	SSW	4	bc	46	92	7	5	-	-	2-3	2-3	1500		*
Shoeburyness	1026·6	-10	SW	4	c	46	85	8	5	-	-	7-8	7-8	4000	1	*
Felixstowe	1026·1	-6	SW	5	z0	46	85	6	-	-	2	0	4-6	-	1	3
Gorleston	1023·9	-12	SW'S	4	bc	47	85	6	5	-	-	2-3	2-3	2500	0	2
Mildenhall	1024·0	-10	SW'S	4	z0	46	85	6	-	4	-	0	Tr	-	0	*
Cranwell	1021·9	-12	WSW	5	z0	47	85	6	-	-	-	0	0	-	1	*
Birmingham	1022·7	-20	SSW	4	bc	47	85	7	5	-	1	Tr	2-3	2500	1	*
Upper Heyford	1025·1	-8	SSW	4	c	46	85	8	5	-	6	7-8	9+	1800	1	*
Ross-on-Wye	1023·5	-12	SW	4	bc	49	85	7	5	-	-	2-3	2-3	2500	1	*
Hartland Point	1023·6	-8	SW	4	c	50	85	8	5	-	-	7-8	7-8	1500	1	3
Bristol																*
Portland Bill	1026·6	-10	S	4	c	48	85	7	5	-	-	10	10	4000	1	3
Plymouth	1026·6	-14	SW'S	5	c	51	85	7	5	-	-	10	10	1800	0	3
The Lizard	1026·1	-10	SSW	5	c	51	92	8	8	2	-	7-8	9+	2500	1	3
Scilly (St. Mary's)	1024·5	-8	SSW	5	c	52	85	7	5	-	-	10	10	1800	1	3
Guernsey																
Pembroke	1021·2	-12	SW'S	7	cq	52	75	7	8	2	-	7-8	9+	2000	1	4
Holyhead	1018·1	-14	SW'S	6	c	53	85	6	5	-	-	10	10	1800	1	4
Chester (Sealand)	1020·1	-16	S	3	c	52	65	8	5	4	-	7-8	7-8	2800	1	*
Manchester	1020·1	-16	SSE	3	z0	47	85	6	5	-	-	2-3	2-3	2800	0	*
Spurn Head	1020·3	-2	S'W	4	bc	47	85	7	-	-	8	0	4-6	-	0	3
Catterick	1017·6	-2	SW'W	3	c	51	75	7	5	-	-	7-8	7-8	2000	0	*
Tynemouth	1015·5	-16	WSW	6	bcq	52	65	6	2	-	-	4-6	4-6	3200	1	2
St. Abbs Head	1008·2	-18	W	8	cq	49	85	7	4	5	-	4-6	7-8	2500	0	4
Leuchars	1008·3	-16	SW	7	z0	52	75	6	5	7	-	4-6	7-8	2200	1	*
Renfrew (Abbots I.)	1010·1	-20	SW'S	5	ir	51	97	5	-	2	-	10	10	1200	1	*
Eskdalemuir	1012·7	-8	SW'W	6	c	48	85	7	5	-	-	10	10	1500	1	*
Point of Ayre	1015·2	-20	SW'W	6	c	52	85	8	5	2	-	4-6	10	1500	0	4
Tiree	1004·9	-8	SW'W	6	bc/r	51	97	7	5	-	-	4-6	4-6	1500	1	5
Stornoway	999·5	-12	SSW	7	c	53	75	7	5	7	-	7-8	9+	1000	1	4
Dalwhinnie	*	-16	SSW	5	ir0	47	92	7	5	2	-	7-8	10	800	1	*
Aberdeen	1006·3	-6	SW	4	bc	52	75	7	5	-	-	2-3	2-3	1500	1	2
Wick	1001·2	-14	SW	3	c	52	85	7	5	1	-	7-8	9	2500	1	2
Lerwick	998·3	-22	E	3	rr	44	97	5	6	2	-	4-6	10	450	1	*
Blacksod Point	1009·8	0	SW	7	bcq	52	85	7	9	-	-	4-6	4-6	800	1	5
Malin Head	1007·9	-8	SSW	5	c	52	85	7	6	-	-	4-6	4-6	1500	0	4
Aldergrove	1012·0	-16	S'W	4	id0	51	85	7	5	-	-	10	10	1400	1	*
Birr Castle	1014·7	-10	SW	4	c/r	52	85	7	6	2	-	7-8	10	1500	1	*
Valentia Obsy. †	1016·6	+2	SW'W	5	c	53	92	7	5	3	-	9	9+	1500	1	3
Roches Point	1018·3	-14	SSW	5	dd	51	97	5	5	-	-	10	10	450	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 26th (37)	13h.—18h. 26th (38)	18h. 26th to 1h. 27th (39)	1h.—7h. 27th (40)
London (Kew)	cm0c	c	c	c
Croydon	cm0	cm0	bcm0	cpd0cm0
S. Farnborough		c	cbcc	c
Boscombe Down	c	c	c	c
Calshot (Soton.)	c	c	c	ccm0
Lympne	c	c	cbc	bbc
Manston	cm0c	cbc	cbcb	bcb
Shoeburyness	c	c	cbbc	bcc
Felixstowe	cm0	cbcm0	bcm0bm0w	cm0
Gorleston		bccbc	bcc	bcc
Mildenhall	cm0cbcc	c,bc,bm0	bm0cm	cm0bcm0
Cranwell		bm0	bm0,bcm	cbccm0
Birmingham	bc	bc	bc	bcop
Upper Heyford	c	c	ccm	dd
Ross-on-Wye	bccbc	bc	bccq	cp0c
Hartland Point	c	c	cd	r0r0p
Bristol				p
Portland Bill	c	c	c	c
Plymouth	c	c	c	cpd0d0cbc
The Lizard	c	c	co	cprc
Scilly (St. Mary's)	c	c	c	cp0qc
Guernsey				
Pembroke	cq	cq	dd	cdcq
Holyhead	cm0pr0c	cr0m0c	qcr0m0c	prbbc
Chester (Sealand)	bc	bc	bcc,ir0	r0cbcKqPR
Manchester	bcz0bc	bcbm0	bm0cz0	ir0zir0
Spurn Head	cq	bc	bbcw	cwqp
Catterick	cbc	cbcqbc	bcc	bcqir0bc
Tynemouth	cbcq	bcq	bcq	oir0bc
St. Abbs Head	bcq	bccq	bcc	cbcq
Leuchars	c	cbccm0	r0r0d0d0cbc	id0qbbc
Renfrew (Abbots I.)	c	cm0d0r0ir	om0ircm0id	cpr0bbc
Eskdalemuir	c	cir0c	crr	crrbcb
Point of Ayre	cq	cq	cbcbc	prcbc
Tiree	prrdr	oprc	cirbc	bcprq
Stornoway	crr	crr	PR	cbcrhp
Dalwhinnie	bcc	cir0o	*	cirbc
Aberdeen	cbcb	bcb	Kqir0b	bbcc
Wick	d0dc	cpr0c	bprbc	r0r0Psnc
Lerwick	c	cr0rr	crrpr	cpr
Blacksod Point	drq	cbcq	prcq	prbcq
Malin Head	c	cpr0cprc	idc	ccphrc
Aldergrove			r0r0d0d0R	cr0cb
Birr Castle	cbc	cir0	cir0	bbc
Valentia Obsy. †	coid0	od0d0id0c	cidid0cpr	bbc
Roches Point	c	dd	pr0q	pqbcb

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4-6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

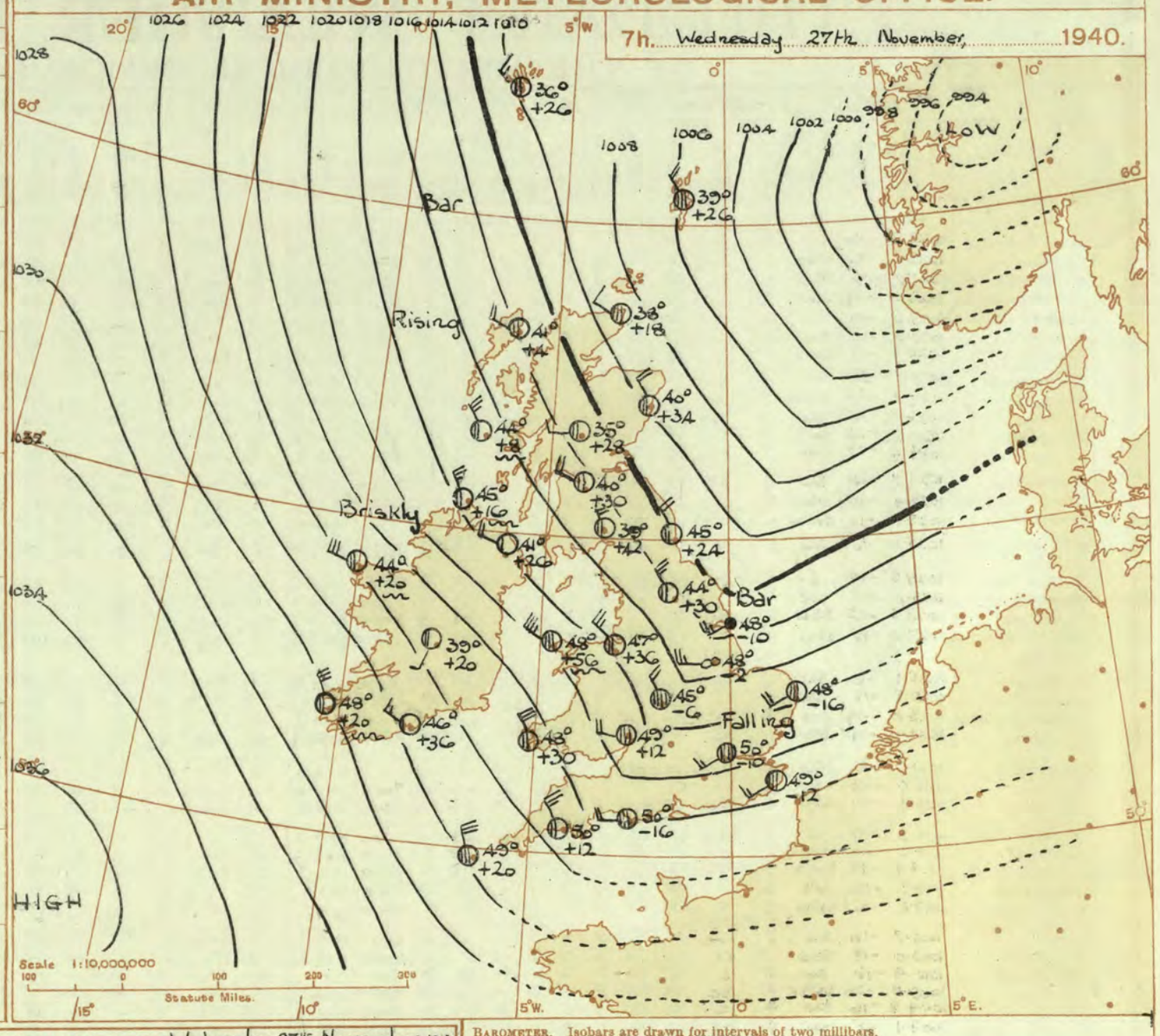
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Wednesday 27th November, 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 26th November			18h. G.M.T.			01h. G.M.T. 27th November			07h. G.M.T.		
IIIC$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN	C$_L$C$_M$	wwVhN$_h$	DDFWN
109			52	14744	20665				20	25853	26383
115											
203 5-	64628	49868	8-	81736	17666	5-	81948	30488			
206 84	22855	57585	81	62854	23568	52	02855	26388	5-	01855	24185
210 54	02966	54626	5-	61854	53764	51	61845	60666	8-	02855	26485
220 52	58516	22758							52	25855	26688
230 62	55534	51558	62	59636	50568	8-	02755	63465	80	81847	28387
245 5-	14647	53727	5-	14657	20727	50	14753	53813	50	02762	26322
260 5-	02856	20516	50	61853	55613	50	01855	55465	50	00862	26302
277 53	02846	18627	5-	02758	51658	5-	02748	20528	26	25883	17643
279 --	05658	20428									
285 9-	51636	22656	6-	61637	24767				20	01744	28684
288 54	02854	54525	5-	02756	53426	5-	61757	53527	5-	02865	22365
273									30	01852	28282
30 54	0745	20315	50	05653	20313				83	01753	61464
321 54	00761	54513	07	05690	22404	50	05663	23413	50	21655	23355
298 54	05643	18514	00	05690	20400	50	05643	20403	5-	61548	22368
292 54	05654	20414	04	05690	20411	57	02755	19518	50	22863	57623
310 --	01634	20514	--	05524	24514				--	05528	26528
316 14	05651	20413	50	05552	18302	5-	05557	51428	87	81644	59468
333 5-	02757	20557	5-	02747	20557	20	22745	55665	20	01753	61713
334 --	01753	20614								01653	24213
340 74	01854	20514	50	01854	18514	5-	21758	20458	83	05853	61383
136 54	01743	53614				5-	02748	52528			
336									20	01753	28513
350 54	02755	51525	50	01754	51414				53	05646	51428
368											
379 5-	02757	20427				5-	05638	20528	5-	05645	20425
390 53	01764	20425	50	68443	18313				5-	05545	18328
382 54	02855	19425	54	05644	18425	5-	05658	21428	69	21733	22424
438 8-	03858	24428							8-	03748	24528
436 6-	02748	20328	5-	05546	20326	5-	05648	22428	5-	52648	22458
409			5-	02747	18527	5-	52738	19558	2-	02845	63658

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
C$_L$ C$_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Wednesday 27th November, 1940
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Fresh northwest winds, decreasing moderate to light; fine, rather cold, sharp ground frost at night.
7 North Wales ... 8 N.W. England 9 N. Midlands ...	Fresh squally northwest winds, decreasing to light; bright periods, local rain and hail showers at first, then fine; rather cold, frost locally at night.
10 N.E. England 11 S.E. Scotland	As 1-6
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Fresh squally, northwest winds, moderating slowly; squally showers of rain and hail with snow on hills: bright periods, less general showers tomorrow; cold, night frost in places.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate northwest winds, falling light. Mainly fine apart from local coastal showers; rather cold, sharp frost inland at night.

GENERAL INFERENCE.

A depression over South Norway and an associated trough over East Anglia and Brittany are moving away eastwards and a ridge of high pressure will move in over the British Isles. Colder, northwesterly winds will soon be general over the whole country. There will be some wintry showers in North and Northwest districts but weather will be fair to fine over most of England, although there will be some light rain or showers in East Anglia and extreme Southeast England this morning.

FURTHER OUTLOOK.

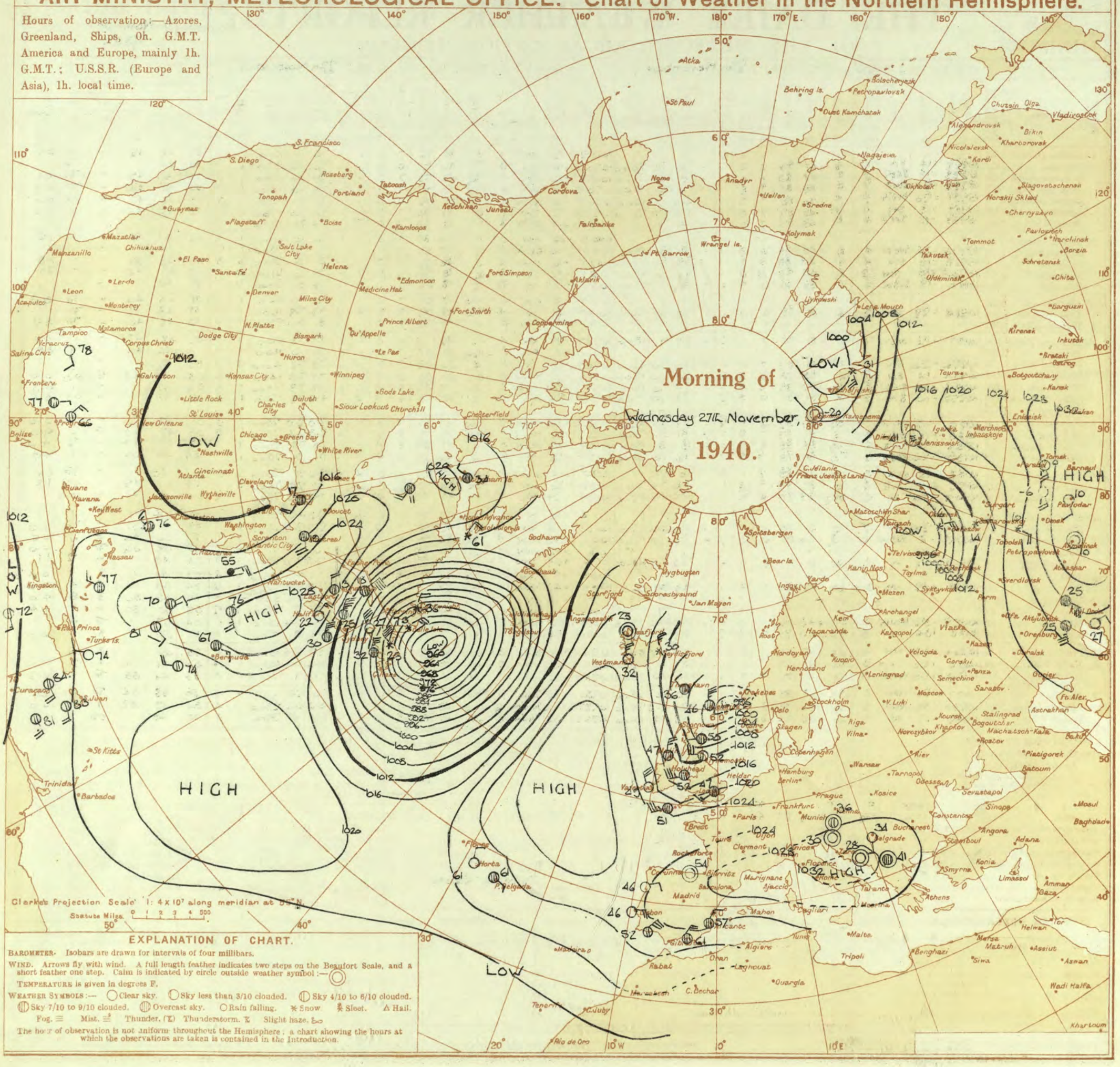
Fair quiet weather. Some fog in England.

Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 27th November 1940.

No. 28860

OBSERVATIONS at 1 hr. G.M.T. 27th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	% Humid. (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Cloud. Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1022.8	-14	SW	3	z_0	47	85	6	5	-	-	10	10	2000
	S. Farnborough	226	1022.8	-18	SSW	4	c	47	85	7	5	-	-	9	9	2000
	Boscombe Down	417	1022.8	-20	SW'S	2	c	48	85	7	5	-	-	10	10	1000
	Calshot (Sthmtn.)	8	1023.1	-20	SW'W	4	c	50	85	7	5	7	-	4-6	9+	1600
	Lympne ...	346	1023.7	-18	SW	3	bc	46	92	7	5	-	-	4-6	4-6	2000
	Manston ...	154	1022.9	-18	SW'S	4	b	45	92	7	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1022.0	-14	SW'W	4	z_0	45	85	6	5	-	-	9+	9+	1300
	Gorleston ...	5	1021.0	-16	SW	4	c	44	85	6	5	-	-	7-8	7-8	2500
	Mildenhall ...	19	1020.4	-16	SW	5	z_0	45	85	5	5	-	-	10	10	1500
	Cranwell ...	240	1018.0	-18	WSW	6	z_0	46	85	6	5	-	-	9+	9+	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1021.4	-22	SW	5	z_0	47	85	6	5	-	-	10	10	2000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1019.7	-12	WSW	6	d	51	87	7	6	2	-	7-8	9+	1500
	Bristol ...	209														
	Portland Bill ...	32	1022.6	-20	SW	4	c	48	92	7	5	-	-	10	10	4000
	Plymouth ...	82	1023.4	-14	SW	5	c	53	75	7	5	2	-	7-8	10	1400
	The Lizard ...	240	1023.4	-10	SWW	5	c	52	85	6	5	-	-	10	10	1500
	Scilly (St. Mary's)	163	1022.7	-10	SW	5	c	51	87	6	5	2	-	7-8	10	1200
	Guernsey ...	175														
6	Pembroke ...	142	1018.6	-10	SW'W	7	cq	52	92	6	8	2	-	7-8	10	1600
7	Holyhead ...	26	1014.5	-10	SW	5	c	52	92	7	5	-	-	9+	9+	2800
	Chester (Sealand)	16	1015.4	-26	SW'S	4	ir_0	53	85	6	5	-	-	9	9	1800
8	Manchester ...	70	1015.7	-20	SW'S	5	z_0	51	75	6	5	-	-	10	10	2500
10	Spurn Head ...	29	1015.7	-18	SSW	5	bc	46	85	7	-	5	-	0	2-3	-
	Catterick ...	175	1012.8	-18	W'S	3	c	51	85	7	5	7	-	4-6	7-8	2100
	Tynemouth ...	108	1016.9	-20	W	6	bcq	52	85	6	2	-	-	4-6	4-6	3200
11	St. Abbs Head	280														
	Leuchars ...	36	1004.1	-20	W	7	z	51	85	6	5	-	-	4-6	4-6	2200
12	Renfrew (Abbots I.)	19	1007.3	-8	WSW	5	id_0	50	87	6	5	7	-	7-8	10	1200
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1011.3	-12	W	6	bc	51	92	8	5	-	-	2-3	2-3	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1007.7	+42	NW	5	pr	42	85	7	8	-	-	7-8	7-8	800
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1009.2	+32	WNW	5	bc/pr	43	92	7	5	1	-	4-6	4-6	2500
16	Lerwick ...	156	997.6	+34	N	8	c/pr	40	85	7	8	2	-	7-8	10	800
17	Blacksod Point	18	1020.4	+52	NW	5	pr	47	75	7	9	-	-	7-8	7-8	800
18	Malin Head ...	84	1013.6	+60	N	5	c/pr	47	85	7	9	-	-	9	9	1500
	Aldergrove ...	268	1012.8	+20	WNW	5	ir_0	46	92	7	5	-	-	10	10	1000
19	Birr Castle ...	173	1017.7	+26	WNW	4	o/p	47	85	7	5	-	-	10	10	2500
20	Valentia Obsy.	30	1023.5	+58	NW'N	6	bc	49	75	8	2	-	-	2-3	2-3	2500
	Roches Point	22	1018.9	+12	W	7	cq	50	85	8	3	-	-	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 27th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount. Low 0–10 (26)	Cloud. Amount. Total 0–10 (27)	Cloud. Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1019.2	-12	SW	4	c	48	92	7	5	-	-	10	10	1500	1	*
	Croydon ...	1020.0	-10	SW	3	o/d	50	97	6	5	-	-	10	10	1800	1	*
	S. Farnborough	1019.8	-10	SW	5	id_0	49	85	7	5	-	-	9+	10	1300	1	*
	Boscombe Down	1020.2	-2	W'S	4	id_0	49	92	7	5	-	-	7-8	10	1000	1	*
	Calshot (Sthmtn.)	1020.7	-6	WSW	4	id_0	51	92	6	5	-	-	9+	9+	1200	1	3
	Lympne ...	1021.0	-12	SW	3	c	48	85	7	5	-	-	10	10	1200		*
	Manston ...	1020.0	-14	SW'S	4	c	48	85	7	5	7	-	7-8	9+	1800		*
2	Shoeburyness ...	1019.9	-10	SW	3	c	50	85	8	5	-	-	10	10	1500	1	*
	Felixstowe ...	1018.8	-10	SW'W	4	z_0	47	85	6	5	-	-	9+	9+	2500	1	2
	Gorleston ...	1017.4	-16	SW	4	c	48	85	6	5	-	-	9+	9+	2800	0	3
	Mildenhall ...	1016.6	-12	SW	4	z_0	48	85	6	5	7	-	9+	10	2100	0	*
	Cranwell ...	1015.2	-2	W	5	z_0	48	92	6	5	7	-	7-8	9+	2000	2	*
3	Birmingham ...	1019.3	-6	NW	4	c/p	45	85	7	6	-	-	10	10	800	1	*
	Upper Heyford	1018.7	-6	W	4	c/d	48	92	8	8	4	3	7-8	7-8	1500	1	*
4	Ross-on-Wye	1018.6	+12	W'N	4	c	49	75	8	5	-	-	9	9	2500	1	*
5	Hartland Point	1022.7	+28	NW	4	c	48	75	8	3	-	-	7-8	7-8	1500	1	3
	Bristol ...	1020.3	+6	W'S	5	d_0d_0	49	87	7	5	-	-	9+	10	1100	1	*
	Portland Bill ...	1020.8	-16	W	4	c	50	92	7	5	-	-	7-8	7-8	4000	1	3
	Plymouth ...	1023.2	+12	NW'N	5	c	50	85	6	8	-	-	7-8	7-8	1400	1	3
	The Lizard ...	1024.7	+20	NNW	5	c	48	92	8	8	6	-	7-8	7-8	2000	1	3
	Scilly (St. Mary's)	1024.0	+20	N'W	6	c	49	85	8	8	6	-	4-6	7-8	1500	1	3
	Guernsey ...																
6	Pembroke ...	1023.2	+30	NW'N	6	bcq	48	75	7	8	-	-	2-3	2-3	2500	1	3
7	Holyhead ...	1020.3	+56	NNW	7	bc	48	75	8	2	-	-	2-3	2-3	2700	1	5
	Chester (Sealand)	1018.3	+36	NNW	5	c	47	85	8	4	-	-	7-8	7-8	1500	1	*
8	Manchester ...	1017.1	-28	NW	4	z_0	45	75	6	5	-	-	9	9	2500	1	*
10	Spurn Head ...	1012.7	-10	SW'W	5	p	48	92	6	5	4	-	4-6	9	2500	0	3
	Catterick ...	1013.8	+30	NW	5	bc	44	75	8	5	-	-	1	2-3	3000	0	*
	Tynemouth ...	1012.4	+24	NW	4	bc	45	85	7	2	-	-	4-6	4-6	2800	1	2
11	St. Abbs Head	1011.4	+46	N	4	bcq	44	65	7	4	4	1	2-3	4-6	2500	1	2
	Leuchars ...	1012.1	+40	NW	4	bc	42	75	8	5	4	-	2-3	2-3	2500	1	*
12	Renfrew (Abbots I.)	1015.1	+30	WNW	4	bc/pr	40	85	8	3	4	-	2-3	2-3	2000	1	*
	Eskdalemuir ...	1014.0	+42	NW'N	4	b	39	75	8	-	4	-	0	1	-	1	*
	Point of Ayre ...	1017.6	+34	NW	6	bc	47	85	8	8	-	-	2-3	2-3	2500	1	3
13A	Tiree ...	1014.9	+8	NW	5	bc	44	75	8	8	-	9	4-6	4-6	1500	0	4
13B	Stornoway ...	1011.0	+4	WNW	4	bc/pr	41	75	7	8	-	-	2-3	2-3	1000	1	2
15	Dalwhinnie ...	*	+28	W	2	bc	35	92	7	8	-	-	4-6	4-6	800	1	*
	Aberdeen ...	1010.5	+34	NW'N	4	b	40	85	7	8	-	-	Tr	Tr	2500	1	2
	Wick ...	1008.7	+18	WNW	2	c/pr	38	92	8	8	7	-	4-6	7-8	1500	1	1
16	Lerwick ...	1005.8	+26	NW	4	c	39	85	8	8	7	-	7-8	9	1500	1	*
17	Blacksod Point	1024.4	+20	WNW	6	bcq	44	88	8	3	-	-	2-3	2-3	1500	1	4
18	Malin Head ...	1017.8	+16	NW'N	5	bc	45	60	7	2	-	-	4-6	4-6	1500	1	4
	Aldergrove ...	1020.0	+26	WNW	4	b	41	75	8	2	-	-	1	1	2500	1	*
19	Birr Castle ...	1025.1	+20	SSW	1	bc	38	85	8	-	4	-	0	2-3	-	1	*
20	Valentia Obsy.	1028.7	+20	NW'N	6	bc	48	65	9	5	-	-	4-6	4-6	2500	1	4
	Roches Point	1026.8	+36	NW'W	3	b	46	85	8	3	-	-	1	1	2500	1	3

PAST 24 HOURS.

District	Stations	Temperature. Max. Day 7h.–18h. °F. (31)	Temperature. Min. Night 18h–7h. °F. (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h. mm. (34)	Rainfall. Night 18h–7h. mm. (35)	Sunshine 26th Hrs. (36)
1	London (Kew)	51	46	42	-	-	0.2
	Croydon ...	53	44		-	Tr	
	S. Farnborough	50	45	45	-	Tr	0.1
	Boscombe Down	50	45	44	-	Tr	0.3
	Calshot (Sthmtn.)	52	48	47	-	Tr	0.0
	Lympne ...	50	44	41	-	-	0.0
	Manston ...						
2	Shoeburyness ...	52	44	38	-	-	1.2
	Felixstowe ...				-		
	Gorleston ...	51	43	39	-	-	1.5
	Mildenhall ...	53	43	43	-	-	2.1
	Cranwell ...	51	40		-	5	
3	Birmingham ...	51	44	40	-	Tr	5.3
	Upper Heyford	51	44	39	-	Tr	*
4	Ross-on-Wye	52	48	45	-	Tr	3.2
5	Hartland Point	52	48	47	-	1	0.7
	Bristol ...		46	40		1	3.8
	Portland Bill ...	53	47	*	-	-	*
	Plymouth ...	53	43	43	Tr	0.5	0.0
	The Lizard ...	50	48	*	-	1	0.3
	Scilly (St. Mary's)	52	49	*	-	0.1	0.4
	Guernsey ...						
6	Pembroke ...	53	47	*	-	2	0.0
7	Holyhead ...	53	47	43	Tr	2	0.0
	Chester (Sealand)	58	46	44	-	2	4.0
8	Manchester ...	54	45	39	-	1	4.9
10	Spurn Head ...	51	45	*	-	Tr	3.6
	Catterick ...	54	44	42	-	0.2	1.8
	Tynemouth ...	54	45	41	-	0.3	
11	St. Abbs Head	53	44	*	-	1	*
	Leuchars ...	52	41	37	-	Tr	0.0
12	Renfrew (Abbots I.)	53	40	36	3	3	0.6
	Eskdalemuir ...	49	38	36	Tr	6	0.0
	Point of Ayre ...	54	45	*	-	2	1.1
13A	Tiree ...	52	41	*	8	1	0.0
13B	Stornoway ...	54	39	*	9	4	0.0
15	Dalwhinnie ...	50	35	30	3	8	0.0
	Aberdeen ...	53	39	36	-	1	1.4
	Wick ...	54	37	*	Tr	4	*
16	Lerwick ...	53	37	*	8	7	0.0
17	Blacksod Point	55	43	*	3	1	*
18	Malin Head ...	53	41	*	1	3	0.0
	Aldergrove ...	53	41	35	Tr	1	0.2
19	Birr Castle ...	56	38	34	Tr	4.1	3.8
20	Valentia Obsy.	54	47	42	1		0.0
	Roches Point	53	45	*	0.6	1	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather. Morning. (24 hrs. ended 9h.)	Weather. Afternoon. (24 hrs. ended 9h.)	Weather. Night. (24 hrs. ended 9h.)	Temperature. Day Max. °F.	Temperature. Night Min. °F.	Temperature. Min. on Grass °F.	Rainfall. Day. mm.	Rainfall. Night. mm.	Sunshine. to Sunset. hrs. (Yesterday.)	Humidity. 15h. G.M.T. % (Yesterday.)	Humidity. 9h. G.M.T. % (To-day.)	Visibility 9h.
KEW ...	18	cmc	c	c	51	46	42	-	-	0.2	*	*	6
CROYDON ...	217	cm	cm	bccm	53	44		-	Tr		*	*	6
GREENWICH (Royal Observatory) ...	149												
CITY (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*									*
REGENTS PK. (Botanic Gardens)‡ ...	168	*	*	*									*
CAMDEN SQUARE ...	110			*						*	*		*
KENSINGTON ...	80			*									*
HAMPSTEAD OBSERVATORY ...	450										*		*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 27th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
Defective	Record		

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
PARIS ...														
BRUSSELS ...														
BERLIN ...														
ZÜRICH ...														
ROME ...											*	*		

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
THE BEAUFORT SCALE OF WIND is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6½ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1. AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Thursday 28th November 1940.
No. 28861

OBSERVATIONS at 13h. G.M.T. 27th November

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1022.5	+20	NW'W	4	b	49	55	7	1	-	-	1	1	4000
	Croydon	1022.0	+18	W	6	z₀	49	65	6	1	-	-	Tr	Tr	4000
	S. Farnborough	1023.4	+22	NW'W	4	bc	50	55	8	1	-	1	2-3	2-3	2500
	Boscombe Down	1024.0	+32	NW'W	5	bc	48	55	8	1	-	8	2-3	4-6	2500
	Calshot (Soton.)	1023.6	+18	NNW	5	bc	50	55	8	1	-	1	2-3	2-3	2500
	Lympne	1021.1	+6	NW	5	bc	49	75	7	8	-	-	4-6	4-6	3300
	Manston	1020.8	+10	W'N	4	bc/pr	49	75	7	5	3	-	2-3	4-6	5000
2	Shoeburyness	1021.1	+14	WNW	4	bc	50	65	8	2	-	-	2-3	2-3	2500
	Felixstowe	1019.6	+10	NW	5	b	49	65	7	1	-	-	Tr	Tr	2500
	Gorleston	1018.3	+16	NW'W	4	z₀	49	65	6	1	-	-	2-3	2-3	2500
	Mildenhall	1020.1	+18	WNW	5	b	48	75	7	1	4	-	Tr	1	2500
	Cranwell	1020.2	+10	NW'W	4	b	46	75	7	-	-	-	0	0	-
3	Birmingham	1022.0	-8	NW	4	bc	46	55	7	8	-	-	4-6	4-6	2500
	Upper Heyford	1022.9	+14	WNW	4	bc	47	65	9	2	-	-	2-3	2-3	2500
4	Ross-on-Wye	1023.9	+8	WNW	4	b	48	65	8	2	-	3	1	1	4000
5	Hartland Point	1026.9	+8	NNW	4	bc	47	75	8	2	-	1	4-6	4-6	2500
	Bristol	1025.1	+10	WNW	4	b	48	65	8	2	-	1	1	1	2500
	Portland Bill	1024.9	+20	NW	4	c	50	92	7	5	-	-	7-8	7-8	4000
	Plymouth	1027.7	+18	NNW	4	bc	49	65	8	2	-	2	2-3	4-6	2500
	The Lizard	1028.4	+20	NNW	6	bc	49	75	8	8	6	-	4-6	4-6	3000
	Scilly (St. Mary's)	1030.0	+16	N'W	5	bc	50	65	8	8	-	8	4-6	4-6	2500
	Guernsey														
6	Pembroke	1027.5	+6	WNW	7	bcq	49	97	8	8	-	-	4-6	4-6	3000
7	Holyhead	1023.4	+14	WNW	7	c	47	85	8	8	-	-	7-8	7-8	2800
	Chester (Sealand)	1021.2	+2	W	4	pr	47	65	8	8	-	-	7-8	7-8	1200
8	Manchester	1020.7	+6	W	4	bc	44	75	7	8	6	-	4-6	4-6	2200
10	Spurn Head	1017.7	+16	W	6	bcq	47	65	8	8	-	-	4-6	4-6	4000
	Catterick	1018.0	+10	NW	4	bc	45	75	8	8	6	-	2-3	4-6	3500
	Tynemouth	1017.8	+8	W	3	bc	44	75	7	2	3	-	2-3	2-3	3000
11	St. Abbs Head	1015.5	+18	WNW	4	cq	42	65	7	4	7	-	2-3	7-8	2500
	Leuchars	1016.0	+14	W	3	c	43	75	9	5	9	-	4-6	7-8	3500
12	Renfrew (Abbots L.)	1018.7	+18	WNW	4	c	42	85	8	3	6	3	4-6	4-6	2000
	Eskdalemuir	1016.8	+8	WNW	4	bc	41	75	7	5	7	-	4-6	4-6	2500
	Point of Ayre	1020.9	+12	NW'N	5	c	43	92	8	8	-	-	7-8	7-8	2500
13A	Tiree	1021.8	+40	N	7	bc/pr	45	75	8	8	-	-	4-6	4-6	1500
13B	Stornoway	1020.5	+44	NNW	7	phr	41	65	8	8	-	-	7-8	7-8	1000
15	Dalwhinnie	*	+38	NW	3	c	35	85	7	5	-	-	9+	9+	1500
	Aberdeen	1014.6	+22	NW	5	bc	41	65	8	3	6	3	4-6	4-6	2500
	Wick	1014.1	+30	NNW	5	phr	41	75	8	9	7	8	4-6	9+	800
16	Lerwick	1010.9	+28	NNW	5	rs	35	92	6	6	2	-	7-8	10	450
17	Blacksod Point	1029.4	+30	NW	6	bcq	47	75	8	3	-	-	2-3	2-3	1500
18	Malin Head	1024.1	+46	N	6	c/phr	42	92	7	9	-	-	9	9	2500
	Aldergrove	1022.8	+14	W'N	3	pr	41	85	8	9	-	-	9+	9+	1600
19	Birr Castle	1028.5	+8	NW	3	c	47	65	8	5	7	-	4-6	7-8	2500
20	Valentia Obsy. †	1032.4	+12	N'W	5	bc	50	65	8	3	-	4	2-3	2-3	2500
	Roches Point	1030.1	+8	NW	4	bc	48	75	8	2	-	-	4-6	4-6	2500

OBSERVATIONS at 18h. G.M.T. 27th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1024.4	+18	WNW	4	b	44	65	7	-	-	-	0	0	-	1	*
Croydon	1024.1	+22	WNW	3	z₀	43	75	5	-	-	-	0	0	-	1	*
S. Farnborough	1025.2	+20	WNW	4	b	43	75	8	4	-	5	Tr	1	3000	1	*
Boscombe Down	1026.1	+18	NW'W	3	b	40	85	7	-	-	-	0	0	-	0	*
Calshot (Soton.)	1025.4	+14	NW'W	4	b	44	65	7	-	-	-	0	0	-	1	2
Lympne	1023.5	+14	WNW	2	z₀	40	75	6	5	-	-	4-6	4-6	2000	1	§
Manston	1023.0	+14	W'S	3	z₀	41	85	6	5	-	-	1	1	3000		*
Shoeburyness	1023.5	+12	WNW	4	bc	44	75	8	-	4	-	0	4-6	-	1	*
Felixstowe	1022.1	+18	WNW	5	z₀	44	75	6	4	-	-	Tr	Tr	4000	1	3
Gorleston	1026.3	+12	WNW	3	z₀	44	75	6	5	-	-	2-3	2-3	2500	1	2
Mildenhall	1022.4	+18	W	4	bc	39	85	7	5	-	-	4-6	4-6	2500	0	*
Cranwell	1022.3	+16	WNW	5	z₀	41	85	6	5	-	-	2-3	2-3	2500	1	*
Birmingham	1024.9	0	NW	4	bc	38	85	7	8	-	-	4-6	4-6	1500	1	*
Upper Heyford	1024.1	+18	WNW	4	b	40	75	8	4	-	-	Tr	Tr	2500	1	*
Ross-on-Wye	1025.6	+12	W'S	3	bc	40	85	8	8	-	-	2-3	2-3	2500	1	*
Hartland Point	1028.4	+12	NNW	5	c	47	65	8	3	-	-	7-8	7-8	2500	1	3
Bristol	1026.8	+18	W	3	bc	41	85	7	4	6	-	2-3	4-6	2000	1	*
Portland Bill	1026.5	+8	NW	4	bc	47	92	8	5	-	-	4-6	4-6	4000	1	3
Plymouth	1029.5	+18	NNW	3	bc/pr	45	75	7	2	-	6	2-3	2-3	2000	0	2
The Lizard	1030.7	+8	NW'N	5	bc	46	75	8	8	-	-	4-6	4-6	2500	1	3
Scilly (St. Mary's)	1031.4	+14	NNW	5	bc	46	75	8	8	6	-	4-6	4-6	2500	1	3
Guernsey																
Pembroke	1021.9	+16	N'W	7	bcq	46	65	8	2	-	-	4-6	4-6	2500	1	3
Holyhead	1027.0	+38	N'W	7	bc	47	75	8	2	-	-	4-6	4-6	2500	1	4
Chester (Sealand)	1024.8	+26	NW'N	4	pr	42	85	6	9	-	-	9+	9+	1000	1	*
Manchester	1024.1	+22	WNW	2	z₀	37	97	6	4	6	-	1	1	2500	1	*
Spurn Head	1020.1	+16	W	6	bcq	42	85	7	-	4	-	0	4-6	-	0	3
Catterick	1022.8	+40	N'W	3	bc	40	75	8	4	-	-	2-3	2-3	3500	0	
Tynemouth	1022.2	+32	NW	4	z₀	41	75	6	2	-	-	2-3	2-3	3000	1	2
St. Abbs Head	1021.0	+20	WNW	6	bcq	42	65	8	4	4	-	2-3	4-6	2500	0	3
Leuchars	1023.1	+42	NW	4	b	39	75	8	-	-	-	0	0	-	1	*
Renfrew (Abbots L.)	1026.4	+46	NW'W	4	b	39	85	8	-	-	-	0	0	-	1	*
Eskdalemuir	1025.4	+54	NNW	5	b	36	75	8	-	-	-	0	0	-	1	*
Point of Ayre	1026.3	+40	N	7	b	45	85	8	8	-	-	Tr	Tr	2500	1	4
Tiree	1029.0	+34	N'W	6	bc	43	85	8	8	-	-	4-6	4-6	1800	0	5
Stornoway	1028.0	+28	NNW	5	bc	40	65	7	8	-	-	7-8	7-8	1800	1	3
Dalwhinnie	*	+36	N	1	c	33	85	6	5	2	-	7-8	6	1500	4	*
Aberdeen	1021.7	+42	NW	4	pr	36	85	7	3	6	-	4-6	4-6	2500	1	2
Wick	1020.6	+36	NW	5	c/phr	40	75	7	8	7	8	4-6	7-8	800	1	3
Lerwick	1014.6	+26	N	7	c/pr	40	92	7	8	7	-	4-6	7-8	800	1	*
Blacksod Point	1034.3	+36	N	4	bc	46	85	8	3	-	-	2-3	2-3	1500	0	3
Malin Head	1030.4	+44	N	6	bc	46	55	7	8	-	-	4-6	4-6	4000	1	5
Aldergrove	1030.0	+60	NNW	3	bc	40	65	8	2	-	-	2-3	2-3	2500	1	*
Birr Castle	1032.6	+34	N	2	b	40	85	8	-	-	-	0	0	-	1	*
Valentia Obsy. †	1025.3	+24	N	3	b	47	75	8	2	-	1	1	1	2500	1	3
Roches Point	1033.2	+28	NW	3	bc	36	75	8	5	-	-	2-3	2-3	2500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 27th (37)	Weather 13h.—18h. 27th (38)	Weather 18h. 27th to 1h. 28th (39)	Weather 1h.—7h. 28th (40)
London (Kew)	cid₀m₀by	byb	bbcm₀x	bcbm₀x
Croydon	cid₀bz₀	bcz₀bz₀	bz bcm₀	bm₀x
S. Farnborough	cm₀dprbcy	bcyb	bbcb	bxm₀
Boscombe Down	cpr₀bc	bcqb	bcb	bbx
Calshot (Soton.)	cby	byb	b	bbm₀
Lympne	cm₀id₀c	bcbm₀		bc
Manston	cm₀id₀pr₀	bcbm₀		bcm₀bm₀
Shoeburyness	cp₀pbc	bbc	cp₀bw	bwx
Felixstowe	id₀dpr₀	bbz₀	b	bm₀b
Gorleston	cid₀bc	bcz₀	cpr₀hq	cpr₀h
Mildenhall	cm₀cid₀c,b	bbcbcz₀	b	bm₀bcwbx
Cranwell	cm₀dprbcy	bcpr₀bm₀	bm₀	bm₀
Birmingham	r₀bc	bcpr₀	bcpr	bc
Upper Heyford	cd₀pr₀bc	bc,b	b	b
Ross-on-Wye	cbb	bcpbcb	bbcb	bbx
Hartland Point	cbc	bcc	cbcp₀	bc
Bristol	cd₀bcb	bbc	bxm₀	bxm₀
Portland Bill	c	bc	b	bbc
Plymouth	cbc	*	bcprbbm₀	bm₀zb
The Lizard	bc	bcq	pr₀bc	bc
Scilly (St. Mary's)	cbc	bbc	bc	bcbbc
Guernsey				
Pembroke	bcq	bcq	bcq	bc
Holyhead	cbcc	cprbc ≡	bc,c	cpr₀bc
Chester (Sealand)	bcprph	tlhqc	cprm₀b	bbc
Manchester	cm₀pr₀bc	bccm₀prq	bm₀z₀q	bz₀m₀x
Spurn Head	bcq	bcq	bcq	bcq
Catterick	bcbbc	bcb	b	bbx
Tynemouth	bc	bcprt	bcc	cbc
St. Abbs Head	cbcq	cbcq	bcq	bcq
Leuchars	bcc	cbcb	bm₀bw	bwbbxbcx
Renfrew (Abbots L.)	bccpr₀	bcb	b	bbccx
Eskdalemuir	bcpr₀	bcb	b	bx
Point of Ayre	cphrc	bcb	b	bbc
Tiree	phrbc	bcprq	bc	bcc
Stornoway	cphr	cphrq	cpr₀	cpr₀
Dalwhinnie	cis₀	cis₀c	*	cis₀
Aberdeen	bbc	bcpr₀	rspr₀bc	prbjp
Wick	phrqc	cphrq	hrir₀	cprbc
Lerwick	crs	crspr	cpr	cphr
Blacksod Point	bcq	bc	bc	b
Malin Head	cphrcpr₀cphc	cphrbcybc	cpr₀bcbc	cyc
Aldergrove	prqPR	prqphorsb	pr₀bcpr₀	bcbxc
Birr Castle	bcc	bcb	qb	bbccx
Valentia Obsy. †	bcpr₀bc	bccpr₀bcb	bbx	bx
Roches Point	bc	bc	b	bwb

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog „ less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). ⸗gale.
⊕ Solar halo. ⊕ lunar halo. ⌂Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4–6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. „ wet.
2 .. „ flooded.
3 .. „ frozen hard and dry.
4 .. „ partly covered with snow or hail.
5 .. „ covered with ice or glazed frost.
6 .. „ covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. „ covered with snow, less than 6 ins., but ground frozen.
9 .. „ covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

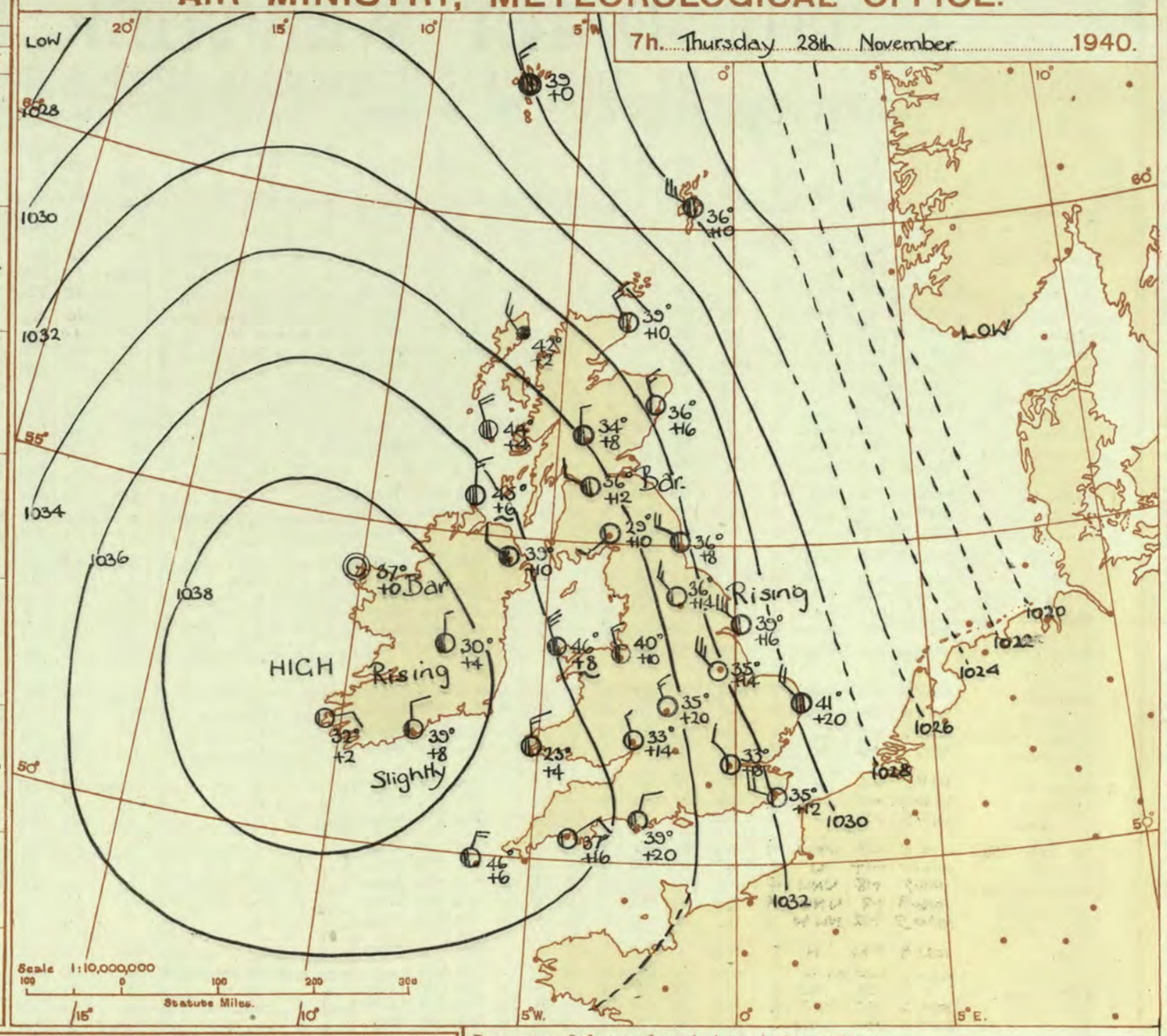
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 27th November.			18h. G.M.T.			01h. G.M.T. 28th November.			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	96	14845	61686	9-	15640	61786	8-	02756	59586	80	01844	26584
115	87	81844	28685	87	81744	61785	87	81744	61785	52	81744	28585
203	8-	81945	28585				8-	02947	28427			
206	84	01964	28285	94	25952	29382	8-	02855	61385	8-	81856	28286
210	86	25855	28586	8-	27943	61683	8-	81858	61628	81	82747	61687
220	30	01854	29514									
230				50	01953	61413	40	00853	32413			
245	83	81944	28426	06	25990	61582	50	14961	65801	80	00852	24402
260	53	05663	22315	00	00890	28200	20	01863	24113	50	01754	26114
277	90	02843	24586	20	00951	30681	50	00841	32301	5-	02867	30417
279	20	01774	20514				00	00790	28200			
285	23	02745	28616	20	01843	32513				40	01743	32413
288	97	01853	24315	47	01764	28214	50	05664	28414	5-	02866	24226
273	38	63763	30584							30	01862	16102
301	3-	01754	27584	30	25642	32492	00	05690	65300	50	05651	00001
321	83	01754	59514	06	05690	26413				00	05651	28400
299	80	00742	26302	50	01743	26413	50	05644	26514	80	01744	28684
292	80	10965	24416	40	00852	24412	50	00742	29402	40	00852	26402
310				--	73428	26488				--	01633	26413
316	20	01753	28283	36	01652	25484	00	05690	30300	00	05690	30300
333	26	02865	28625	8-	01853	32583	20	00853	32313	2-	02957	32387
334	--	02754	22355								02664	00015
340	86	81954	26485	9-	81646	26486	00	05690	28380	70	01753	26203
136	00	05690	28510	40	05662	24322						
336	A6	81853	28586	24	02763	28485				10	01752	32412
350										00	00790	27200
368												
379	20	01754	28414	20	01751	26301	00	00790	28400	00	05690	28400
390	10	05654	57514	50	05654	26414	00	05690	26500	00	05690	26500
382	10	08854	59454	40	00851	26401	00	00790	29200	04	05690	29401
438	50	02763	30313							50	01853	02313
430	24	01753	30414	00	00790	28200	00	05690	28300	00	05690	32200
409	2-	02855	62515	2-	01855	28615				54	01844	32414

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Thursday 28th November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Thursday 28th November, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Winds N to N.W. fresh at times on the coast, moderate to light inland; mainly fine and bright apart from a few local rain and hail showers on parts of the coast; some local mist or fog in the morning; rather cold; frost at night.
13 A. W. Scotld. / B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Fresh N.W. winds, moderating; bright periods; some wintry showers with snow on the hills; cold; frost at night.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light northerly to variable wind; fine; some fog by morning; rather cold with sharp frost inland at night.

GENERAL INFERENCE.

An intense anticyclone centred just west of Ireland will maintain fine, rather cold weather in most districts, with some frost at night. A small secondary disturbance moving southeast near the Shetlands will cause some wintry showers in northern and central Scotland with snow showers on the hills. Some local fog is probable in the morning.

FURTHER OUTLOOK.

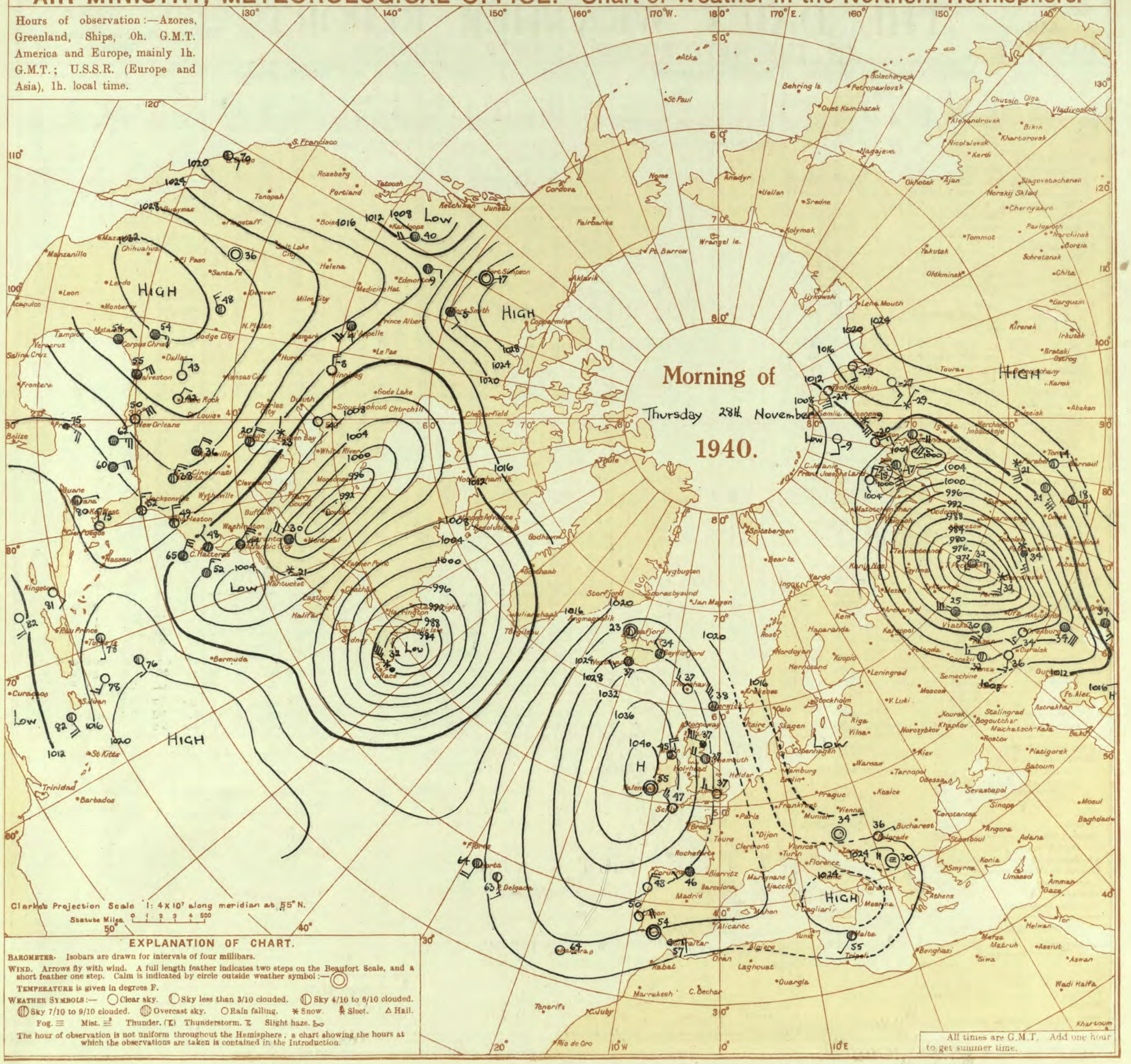
A period of quiet, fair weather in England, Wales and South Scotland, with local fog probably tending to increase by the weekend.

Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 28th November 1940.

No. 28861

OBSERVATIONS at 1 hr. G.M.T. 28th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Med. (10)	High (11)	Amount Low 0–10 (12)	Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1029.4	+24	WNW	3	z	37	85	6	-	-	-	0	0	-
	S. Farnborough	226	1030.4	+26	NW	2	b	37	85	7	-	-	-	0	0	-
	Boscombe Down	417	1031.0	+24	N'W	3	b	36	85	7	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1030.0	+26	NW'N	4	b	40	85	7	-	-	-	0	0	-
	Lympne	346														
	Manston	154														
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1027.0	+22	NW'N	4	z	38	85	6	3	-	-	Tr	Tr	2000
	Gorleston	5	1025.4	+20	NNW	5	php	40	92	6	8	-	-	7-8	7-8	800
	Mildenhall	19	1027.8	+26	NW	4	z	36	76	6	-	-	-	0	0	-
	Cranwell	240	1029.0	+22	NW	5	z	35	85	6	-	-	-	0	0	-
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1030.7	+30	NNW	3	b	35	85	7	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1033.1	+18	NNE	6	bc	45	75	8	5	-	-	2-3	2-3	2500
	Bristol	209	1032.7	+30	NNW	2	z	36	85	6	-	-	-	0	0	-
	Portland Bill	32	1031.8	+34	NW	4	b	45	85	8	-	-	-	0	0	-
	Plymouth	82	1034.1	+22	N	1	z	41	85	6	-	-	-	0	0	-
	The Lizard	240	1034.5	+16	N	4	bc/pp	42	85	8	8	-	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	1035.0	+16	N'W	5	bc	47	65	8	8	-	-	4-6	4-6	2800
	Guernsey	175														
6	Pembroke	142	1034.8	+20	N'E	3	bc	44	65	7	2	-	-	2-3	2-3	4000
7	Holyhead	26	1032.7	+22	N'W	5	c	46	75	8	8	-	-	7-8	7-8	2200
	Chester (Sealand)	16	1032.6	+28	N'W	2	b	39	75	8	-	-	-	0	0	-
8	Manchester	70	1031.3	+22	NWW	3	z	36	75	5	-	-	-	0	0	-
10	Spurn Head	29	1026.7	+22	WNW	6	bcq	39	75	7	-	2	-	0	2-3	-
	Catterick	175	1030.4	+28	NNW	3	bc	39	65	7	5	3	-	1	2-3	5500
	Tynemouth	108	1028.9	+24	WNW	4	c	37	75	7	2	-	-	7-8	7-8	2800
11	St. Abbs Head	280	1028.5	+22	NW	5	bcq	41	65	8	4	4	-	2-3	4-6	2500
	Leuchars	36	1030.2	+26	NW	3	b	40	65	7	-	4	-	0	1	-
12	Renfrew (Abbots I.)	19	1032.7	+24	W'N	4	b	38	85	8	5	-	-	Tr	Tr	2500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1033.1	+26	N	6	b	44	85	8	-	-	-	0	0	-
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1033.6	+12	N	4	pp	40	75	7	8	7	-	7-8	9+	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1028.6	+24	NW	6	c/pp	40	75	7	5	7	-	4-6	9-	1500
16	Lerwick	156	1023.3	+32	NNW	7	c	38	65	7	8	7	-	4-6	7-8	1500
17	Blacksod Point	18	1039.0	+14	-	0	bc	39	97	8	3	-	-	4-6	4-6	800
18	Malin Head	84	1035.8	+14	N	4	bc	45	65	7	4	-	-	4-6	4-6	4000
	Aldergrove	268	1035.9	+18	NW'N	4	bc/pp	39	85	8	8	-	-	4-6	4-6	2000
19	Birr Castle	173	1038.4	+20	N	1	b	29	97	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1039.1	+10	-	0	b	55	85	8	-	-	-	0	0	-
	Roches Point	22	1038.7	+18	NNW	2	b	42	85	8	-	-	-	0	0	-

OBSERVATIONS at 7 hr. G.M.T. 28th November — PAST 24 HOURS.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Med. (24)	High (25)	Amount Low 0–10 (26)	Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Night 18h–7h mm. (35)	Sunshine 27th. Hrs. (36)
London (Kew)	1033.3	+22	NW	2	z	36	75	6	5	-	-	Tr	Tr	2500	1	*	51	35	20	Tr	Tr	4.7
Croydon	1033.1	+18	NW	2	z	33	80	5	-	4	-	0	Tr	-	1	*	50	32	28	Tr	-	3.3
S. Farnborough	1034.3	+18	WNW	3	z	33	85	6	1	-	1	0	Tr	-	1	*	51	33	24	0.2	-	4.4
Boscombe Down	1035.4	+22	NW	3	b	34	75	7	-	-	-	0	0	-	3	*	50	32	26	Tr	-	5.4
Calshot (Sthmtn.)	1034.0	+18	NW'N	3	z	35	85	6	5	-	-	Tr	Tr	2600	1	§2	48	35	30	Tr	-	6.9
Lympne	1030.2	+12	WNW	4	z	35	85	6	5	-	-	1	1	3000	1		52	34	29	0.1		2.7
Manston	1030.9	+18	WNW	4	z	38	85	6	5	-	-	1	1	1800		*						
Shoeburyness	1031.8	+18	NW	3	bc	35	85	6	3	4	-	1	2-3	2500	1	*	52	34	29	0.2	Tr	3.5
Felixstowe	1030.4	+18	NW'N	5	b	38	70	7	3	-	-	Tr	Tr	4500	1	3				*		
Gorleston	1028.6	+20	NW	4	c/pp	41	75	6	8	-	-	7-8	7-8	800	1	2	50	34	34	Tr	6	4.1
Mildenhall	1031.8	+18	NW	3	bc	34	85	6	5	-	-	2-3	2-3	5500	0	*	49	34	27	Tr	Tr	3.8
Cranwell	1032.5	+14	NW	5	z	35	75	6	-	-	-	0	0	-	1	*	49	35	31	0.6	-	5.0
Birmingham	1035.4	+20	NNW	3	b	35	85	6	-	-	-	0	0	-	1	*	46	34	28	0.1	0.3	5.6
Upper Heyford	1034.2	+16	WSW	2	b	32	85	8	-	-	-	0	0	-	1	*	48	32	26	Tr	-	*
Ross-on-Wye	1035.5	+14	N'W	1	b	33	92	8	-	-	1	0	1	-	1	*	49	33	28	0.3	-	5.5
Hartland Point	1034.4	+16	N	4	bc	45	85	8	2	-	-	4-6	4-6	2500	1	3	49	38	42	-	Tr	4.5
Bristol	1036.1	+18	NW	1	fg	33	92	7	5	-	-	Tr	Tr	2000	3	*	49	33	21	Tr	-	6.3
Portland Bill	1035.3	+20	NNE	2	bc	39	92	8	5	-	-	2-3	2-3	4000	1	2	50	38	*	-	-	*
Plymouth	1036.8	+16	ENE	2	b	37	85	7	-	-	1	0	Tr	-	0	1	51	37	31	0.5	-	6.3
The Lizard	1036.4	+10	NNE	3	bc	41	70	8	4	-	-	2-3	2-3	2500	1	2	50	38	*	-	-	7.0
Scilly (St. Mary's)	1036.7	+6	N'E	4	bc	46	70	8	4	-	-	4-6	4-6	2500	1	3	50	45	*	-	-	7.8
Guernsey																						
Pembroke	1036.4	+4	N	3	bc	48	75	7	5	7	8	2-3	4-6	3000	1	2	50	41	*	-	-	4.7
Holyhead	1035.6	+8	NW'N	6	c	46	75	8	8	3	-	7-8	7-8	2700	1	3	48	43	41	Tr	Tr	4.4
Chester (Sealand)	1034.9	+10	NW'N	3	bc	40	75	8	4	-	-	4-6	4-6	2500	1	*	48	37	36	5	Tr	3.3
Manchester	1034.3	+10	NW'W	1	z	34	85	5	-	-	-	0	0	-	3	*	46	30	29	2	-	2.3
Spurn Head	1030.6	+16	WNW	6	bcq	39	75	7	-	2	-	0	4-6	-	1	4	48	39	*	-	-	5.6
Catterick	1033.7	+14	NW	3	b	36	75	7	5	-	-	1	1	5500	0	*	46	35	29	-	-	6.0
Tynemouth	1031.6	+8	WNW	4	bc	36	65	6	2	-	-	4-6	4-6	3000	1		46	35	31	1	-	
St. Abbs Head	1031.5	+14	NW	5	bcq	41	65	8	4	4	-	1	2-3	2500	0	3	45	40	*	-	-	*
Leuchars	1033.2	+24	W	2	bc	40	65	8	8	7	-	2-3	4-6	3500	1	*	45	37	29	Tr	-	1.9
Renfrew (Abbots I.)	1035.2	+12	W'N	2	c	36	85	7	5	-	-	9	9	2500	1	*	49	34	27	0.4	-	1.5
Eskdalemuir	1035.1	+10	SW	1	b	29	75	8	-	4	-	0	1	-	3		42	28	20	0.2	-	3.5
Point of Ayre	1035.4	+12	N	5	bc	45	85	8	4	-	-	4-6	4-6	2500	1	3	47	43	*	4	-	2.5
Tiree	1035.1	+4	NNW	4	c	44	85	8	5	-	-	7-8	7-8	2000	0	4	48	45	*	2	-	1.1
Stornoway	1033.6	+2	WNW	3	pp	42	75	7	5	7	-	7-8	9+	1500	1	2	42	35	*	1	1	2.0
Dalwhinnie	1034.5	+8	N	1	c	34	85	7	5	5	-	4-6	7-8	2500	4	*	38	33	27	2	0.6	0.1
Aberdeen	1031.3	+16	NNW	3	b'p	36	85	7	8	-	3	Tr	Tr	2500	1	2	41	35	32	1	1	2.7
Wick	1030.6	+10	NW	3	bc	39	75	8	7	3	-	2-3	2-3	1500	1	2	42	37	*	2	2	*
Lerwick	1026.2	+10	WNW	5	c	36	85	7	8	7	-	4-6	7-8	3400	1	*	41	35	*	2	1	1.2
Blacksod Point	1039.1	0	-	0	b	37	97	8	-	-	-	0	0	-	3	2	49	45	*	0.5	0.2	*
Malin Head	1036.8	+6	N	3	c	45	55	8	5	-	-	7-8	7-8	5700	0	4	47	39	*	2	0.1	0.2
Aldergrove	1037.7	+10	WNW	2	c	39	85	8	5	3	-	4-6	9	4000	1	*	43	34	26	0.3	0.1	1.5
Birr Castle	1039.3	+4	N	1	c	30	92	8	5	-	-	7-8	7-8	2500	1	*	47	27	22	-	-	4.2
Valentia Obsy.	1039.8	+2	NE'E	2	b	32	92	8	5	-	1	Tr	Tr	2500	3	1	50	32	24	0.2	Tr	4.2
Roches Point	1039.6	+8	N	2	b	39	92	8	5	-	-	1	1	4000	1	2	49	33	*	-	Tr	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Afternoon	Night	Temperature Day Max. °F.	Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew	18	cldmby	byb	bbcmz	51	35	20	Tr	Tr	4.7	•	•	5
Croydon	217	cldbz	bczbz	bzbcm	50	32	28	Tr	-	3.3	•	•	4
Greenwich (Royal Observatory)	149												
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park)	27	•	•	•	52	34	29	-			65	79	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	51	34	22	-	-		53	70	•
Camden Square	110	bc	b	•	51	34	30	-	-	•	•	72	•
Kensington	80	bc	bc	•	51	34	24	-	-		65	78	•
Hampstead Observatory	450		•								•		•

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 28th.

South Kensington.			
Max.	Time.	Min.	Time.

Kew Observatory.			
Max.	Time.	Min.	Time.
Defective Record			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											•	•		

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

		Objects not visible at
0	Dense fog	55 yards.
1	Thick fog	220 ,,
2	Fog	550 ,,
3	Moderate fog	1,100 ,,
4	Mist or haze	1¼ miles.
5	Poor visibility	2½ ,,
6	Moderate ,,	6¼ ,,
7	Good ,,	12½ ,,
8	Very good ,,	31 ,,
9	Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 29th November, 1940.

No. 28,862.

OBSERVATIONS at 13h. G.M.T. 28th November

District	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	1038·3	−10	NNW	0	Z_0	43	45	6	-	-	6	0	2·3	-
	Croydon	1033·3	−4	NNW	3	Z_0	43	55	5	-	-	6	0	2·3	-
	S. Farnborough	1034·7	−10	NW	3	Z_0	44	55	7	-	-	2	0	4·6	-
	Boscombe Down	1035·9	−6	NNW	4	Z_0	41	75	7	1	-	2	1	2·3	3000
	Calshot (Soton.)	1034·7	−2	N'W	4	bc	44	65	7	1	-	8	Tr	2·3	4000
	Lympne	1032·0	−2	NNW	3	b	42	75	7	-	3	-	0	1	-
	Manston	1032·1	−8	NW	4	Z_0	41	85	6	5	3	9	Tr	4·6	4000
2	Shoeburyness	1032·0	0	N'W	3	bc	43	85	6	-	4	4	1	4·6	-
	Felixstowe	1031·8	0	NW'N	4	b	43	65	6	-	-	1	0	1	-
	Gorleston	1030·5	−2	N'W	4	c/pr	42	85	6	8	-	-	7·8	7·8	1500
	Mildenhall	1032·7	−8	NW'N	4	Z_0	42	65	6	-	3	-	0	1	-
	Cranwell	1033·0	−2	NNW	4	Z_0	42	55	5	5	-	9	4·6	4·6	6000
3	Birmingham	1035·3	−2	NNW	4	Z_0	40	65	6	-	-	1	0	2·3	b
	Upper Heyford	1034·8	−18	NW'W	3	c/rs	40	85	5	-	-	2	0	7·8	-
4	Ross-on-Wye	1035·9	−6	N'W	2	c	43	65	8	7	-	6	4·6	7·8	1500
5	Hartland Point	1037·0	−4	NE	3	c	46	92	8	8	-	-	7·8	7·8	2000
	Bristol														
	Portland Bill	1036·1	+4	N	3	bcjp	43	85	8	2	-	-	2·3	2·3	4000
	Plymouth	1037·4	−2	NNW	1	c	45	65	8	2	6	1	2·3	7·8	3000
	The Lizard	1037·8	+4	—	0	bc	49	75	8	8	6	-	4·6	4·6	2500
	Scilly (St. Mary's)	1037·7	−4	NNE	2	bc	49	65	8	8	6	-	2·3	2·3	2500
	Guernsey														
6	Pembroke	1037·8	0	NNW	3	c	48	55	8	8	7	1	4·6	7·8	2500
7	Holyhead	1037·0	−6	N'E	4	pr	44	92	8	9	3	-	7·8	9	2500
	Chester (Sealand)	1036·5	0	NNW	3	c	43	55	7	5	-	2	2·3	7·8	5000
8	Manchester	1035·8	−4	NW'W	3	Z_0	42	65	6	-	3	2	0	4·6	-
10	Spurn Head	1032·1	0	W'N	6	c	41	75	7	5	4	-	2·3	7·8	4000
	Catterick	1034·0	−2	NW'N	3	bc	43	65	8	5	4	2	1	4·6	6500
	Tynemouth	1033·5	+4	NW	4	bc	42	65	6	2	3	-	2·3	4·6	2800
11	St. Abbs Head	1032·0	−6	WNW	5	c	42	55	8	8	7	-	4·6	7·8	2500
	Leuchars	1033·5	−6	W	3	c	43	65	8	5	3	-	7·8	9	3500
12	Renfrew (Abbots I.)	1035·7	−6	W'N	2	c	43	85	8	5	3	1	2·3	9+	4000
	Eskdalemuir	1034·8	−2	NW'W	4	c	39	55	8	-	7	6	0	7·8	-
	Point of Ayre	1036·6	0	N'W	2	c	46	75	8	4	3	-	4·6	9+	4000
13A	Tiree														
13B	Stornoway	1033·6	+2	WNW	5	c/pr	43	75	8	8	7	9	7·8	9+	1200
15	Dalwhinnie	1034·0	+8	NNW	2	c	37	85	8	8	4	-	7·8	9+	1500
	Aberdeen	1031·1	−14	NW'W	3	bc	40	75	6	8	3	1	1	2·3	2500
	Wick	1029·8	−10	NW	3	bc/pr	42	65	8	8	7	6	2·3	4·6	1500
16	Lerwick	1025·7	+4	NW'N	5	c/phr	38	65	7	8	7	-	7·8	9+	800
17	Blacksod Point	1039·0	−4	S	1	c	46	85	8	-	6	5	0	7·8	-
18	Malin Head	1037·2	+4	WNW	2	c	46	65	8	4	6	-	2·3	7·8	5700
	Aldergrove	1037·7	−10	W	2	c	44	75	8	5	3	-	4·6	7·8	4500
19	Birr Castle	1039·7	−2	NE	1	c	42	85	8	4	-	-	7·8	7·8	2500
20	Valentia Obsy. †	1038·7	−4	S	2	bc	47	75	9	5	-	9	1	2·3	4000
	Roches Point	1039·7	−2	N	3	Z_0	44	75	6	-	-	5	0	2·3	-

OBSERVATIONS at 18h. G.M.T. 28th November

District	Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility. 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount. Low 0–10 (26)	Cloud. Amount. Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1034·9	+8	NNW	2	Z_0	38	65	5	5	-	6	2·3	2·3	2500	1	*
	Croydon	1034·3	+12	NW	1	m/f	34	85	4	-	4	-	0	1	-		*
	S. Farnborough	1035·2	+6	WNW	2	Z_0	35	85	5	-	-	2	0	2·3	-	1	*
	Boscombe Down	1036·2	+10	NW	2	Z_0	35	75	6	-	-	1	0	2·3	-	0	*
	Calshot (Soton.)	1025·0	+14	NW'N	3	Z_0	38	75	6	-	3	8	0	2·3	-	1	2
	Lympne	1032·7	+4	NW	2	Z_0	35	85	6	-	-	-	0	0	-	1	§
	Manston	1032·9	+6	NW'N	4	Z_0	40	75	5	5	-	-	Tr	Tr	3000		*
2	Shoeburyness	1033·4	+6	NNW	2	b	36	85	6	-	-	-	0	0	-	1	*
	Felixstowe	1032·5	+6	NW	3	Z_0	39	75	6	5	-	-	2·3	2·3	5000	1	2
	Gorleston	1031·1	+8	NNW	2	c/pr	40	85	6	8	-	-	7·8	7·8	1500	1	2
	Mildenhall	1033·3	+6	NW'W	3	Z_0	37	85	6	-	3	-	0	2·3	-	0	*
	Cranwell	1034·2	+6	NW	4	Z_0	37	75	5	-	-	-	0	0	-	1	*
3	Birmingham	1035·3	0	NW	2	bf+	38	65	3	-	7	-	0	Tr	-	1	*
	Upper Heyford	1035·5	+6	—	0	Z_0	34	85	5	-	4	1	0	2·3	-	1	*
4	Ross-on-Wye	1036·1	+4	N'W	2	b	37	75	7	5	-	1	1	1	2500	1	*
5	Hartland Point	1037·2	+6	N	3	c/pr	44	75	8	8	6	-	4·6	9	2000	0	2
	Bristol																*
	Portland Bill																
	Plymouth	1037·7	+8	—	0	m	42	85	4	5	3	-	2·3	2·3	4500	0	1
	The Lizard	1037·1	+4	N	2	c	44	75	8	8	6	-	7·8	7·8	2000	1	2
	Scilly (St. Mary's)	1037·7	+6	N'E	2	bc	44	85	8	8	4	3	2·3	4·6	2500	1	2
	Guernsey																
6	Pembroke	1037·9	0	NE'N	2	c	44	75	7	8	-	-	7·8	7·8	2500	1	2
7	Holyhead	1036·6	0	NW	5	c	47	85	8	8	-	-	9+	9+	2200	1	3
	Chester (Sealand)	1036·0	+2	WNW	2	bc	39	85	6	5	-	-	2·3	2·3	4500	1	*
8	Manchester	1035·4	+2	SW'S	1	m	36	75	4	-	4	-	0	2·3	-	1	*
10	Spurn Head	1032·3	+140	W	3	bc	41	75	7	-	1	-	0	2·3	-	1	
	Catterick	1034·1	+2	NW	3	c	40	65	7	-	3	-	0	7·8	-	0	
	Tynemouth	1033·5	0	WSW	4	Z_0	39	65	6	8	3	-	2·3	4·6	2800	1	2
11	St. Abbs Head	1031·7	−2	WNW	6	bcq	42	65	8	4	7	-	4·6	4·6	2500	0	3
	Leuchars	1032·9	0	W	2	bc	40	75	8	5	4	-	2·3	4·6	4500	1	*
12	Renfrew (Abbots I.)	1035·6	+6	W	1	bc	38	92	7	5	7	-	1	4·6	2500	1	*
	Eskdalemuir	1035·1	+4	W'N	1	b	35	85	8	5	4	-	Tr	1	2500	1	*
	Point of Ayre	1036·1	0	NW	5	pr	45	92	7	8	1	-	7·8	9+	1500	1	3
13A	Tiree	1035·6	0	NW'N	3	c	45	75	8	5	-	-	7·8	7·8	2100	0	3
13B	Stornoway	1034·2	+6	NW	4	bc	42	75	7	8	7	-	2·3	4·6	1200	1	2
15	Dalwhinnie	1034·8	+4	NW	2	bc	35	75	8	5	-	-	4·6	4·6	1500	4	*
	Aberdeen	1031·3	+6	NW'N	4	ir	41	85	6	6	-	-	10	10	2500	1	2
	Wick	1030·7	+10	NW	5	cq	42	75	7	8	7	-	4·6	7·8	1500	1	2
16	Lerwick	1028·5	+10	NW'N	5	c/pr	35	85	7	8	7	-	4·6	10	800	1	*
17	Blacksod Point	1038·7	0	—	0	c	45	75	8	-	7	-	0	10	-	0	1
18	Malin Head	1037·3	+6	W	2	bc/pr	44	65	8	4	7	-	2·3	4·6	4000	0	3
	Aldergrove	1038·1	+4	WNW	2	c	42	75	9	5	-	-	9+	9+	4000	1	*
19	Birr Castle	1039·8	+2	SSW	1	b	32	97	8	-	-	-	0	0	-	1	*
20	Valentia Obsy. †	1040·1	+10	ENE	1	b	34	92	9	7	-	1	Tr	1	4000	0	2
	Roches Point	1039·8	+6	NNE	2	bc	40	85	8	5	-	5	1	2·3	2500	1	2

PAST 24 HOURS.

District	Stations.	Weather. 7h.—13h. 28th. (37)	Weather. 13h.—18h. 28th. (38)	Weather. 18h. 28th. to 1h. 29th. (39)	Weather. 1h.—7h. 29th. (40)
1	London (Kew)	bm$_0$x bm$_0$y	bz$_0$y bz$_0$	bcb m$_0$x	bbc m$_0$x
	Croydon	bfbz$_0$	bz$_0$bf	bm$_0$x$_0$v	bbcmx
	S. Farnborough	bm$_0$bcy	bcyz$_0$	bmbcbm$_0$	bm$_0$x
	Boscombe Down	bxm. bm$_0$	bcbm$_0$	bm$_0$	bm$_0$
	Calshot (Soton.)	bm$_0$bcb	bbcbz$_0$	bz$_0$w	bm$_0$w
	Lympne	b	bbcm$_0$	bm$_0$zv	
	Manston	bcm$_0$	bcbm$_0$	bm$_0$v	bbcm$_0$pr$_0$
2	Shoeburyness	bxm$_0$bm$_0$	bcbm$_0$	bm$_0$w	bbcm$_0$x
	Felixstowe	bz$_0$	bz$_0$bc, m$_0$	cm$_0$bm$_0$	bm$_0$cpr$_0$m$_0$
	Gorleston	cpr$_0$	cpr$_0$	cpr$_0$bc	bcc ir$_0$x
	Mildenhall	xbm$_0$bz$_0$	bz$_0$bcm$_0$	bcm$_0$bwbx	bm$_0$xcm$_0$x
	Cranwell	bbcz$_0$	bcbm$_0$	bm$_0$	b,cm$_0$
3	Birmingham	bz	bz	bcpr$_0$	bcb
	Upper Heyford	bm$_0$bz$_0$	cbcz$_0$	bm$_0$	bm$_0$mx
4	Ross-on-Wye	bbc	cbcb	bbccb	bbcc
5	Hartland Point	bcc	cbcp$_0$	bccc	c
	Bristol				cxm$_0$
	Portland Bill			bcbc	bcc
	Plymouth	bbcm$_0$bc	bccm$_0$bcm		bcmcm
	The Lizard	bc	bcc	cpr$_0$c	cprc
	Scilly (St. Mary's)	bc	bc	bc	cbcc
	Guernsey				
6	Pembroke	*	c		c
7	Holyhead	bcPRqc	cprc		
	Chester (Sealand)	bcc	cbc		
8	Manchester	bcm bm$_0$	cz$_0$bcz fg		
10	Spurn Head	cq	cbc	bcb	copr
	Catterick	bxcbc	bcc	cbm$_0$bc	bcbbcc
	Tynemouth	bc	cbc	bc	bcp
11	St. Abbs Head	cbqcy	cbcq	bccq	cqrc
	Leuchars	bcc	cbc		cxbcx
12	Renfrew (Abbots I.)	*	cbc	bcwcxc	cbc, m$_0$
	Eskdalemuir	cy	cycbcb	bbx	bx
	Point of Ayre	c	cpr	bbcbc	bob
13A	Tiree	pr	c	c	c
13B	Stornoway	cpr$_0$	cprbc	cpr$_0$	cpr$_0$
15	Dalwhinnie	cpr	cbc		c bcc
	Aberdeen	bcb	bccir	irz$_0$c	cz$_0$
	Wick	bcpr$_0$	preq		cbc
16	Lerwick	crhr	crs	cps	c
17	Blacksod Point	c	c	bcc	
18	Malin Head	c	cpr$_0$c	cpr$_0$pr$_0$c	c
	Aldergrove	c	cbcc	cpr$_0$cbx	bxcpr$_0$
19	Birr Castle	bbc	bcb	c	cx
20	Valentia Obsy. †	bv	bbcbcvbw	bwbx	bcxc
	Roches Point	bcz$_0$	bc	bcw	bcx

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s$_0$, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s$_0$/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r$_0$, slight rain. rr, continuous rain.
<, less than (for cloud height). ⚡gale.
⊕ Solar halo. ◐ lunar halo. ⌓ Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.
Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.
An entry "4–6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.
"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.
"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29—STATE OF GROUND.

0 . . Ground dry.
1 . . ,, wet.
2 . . ,, flooded.
3 . . ,, frozen hard and dry.
4 . . ,, partly covered with snow or hail.
5 . . ,, covered with ice or glazed frost.
6 . . ,, covered with thawing snow.
7 . . Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 . . ,, covered with snow, less than 6 ins., but ground frozen.
9 . . ,, covered with snow greater than 6 ins. deep.
– . . Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

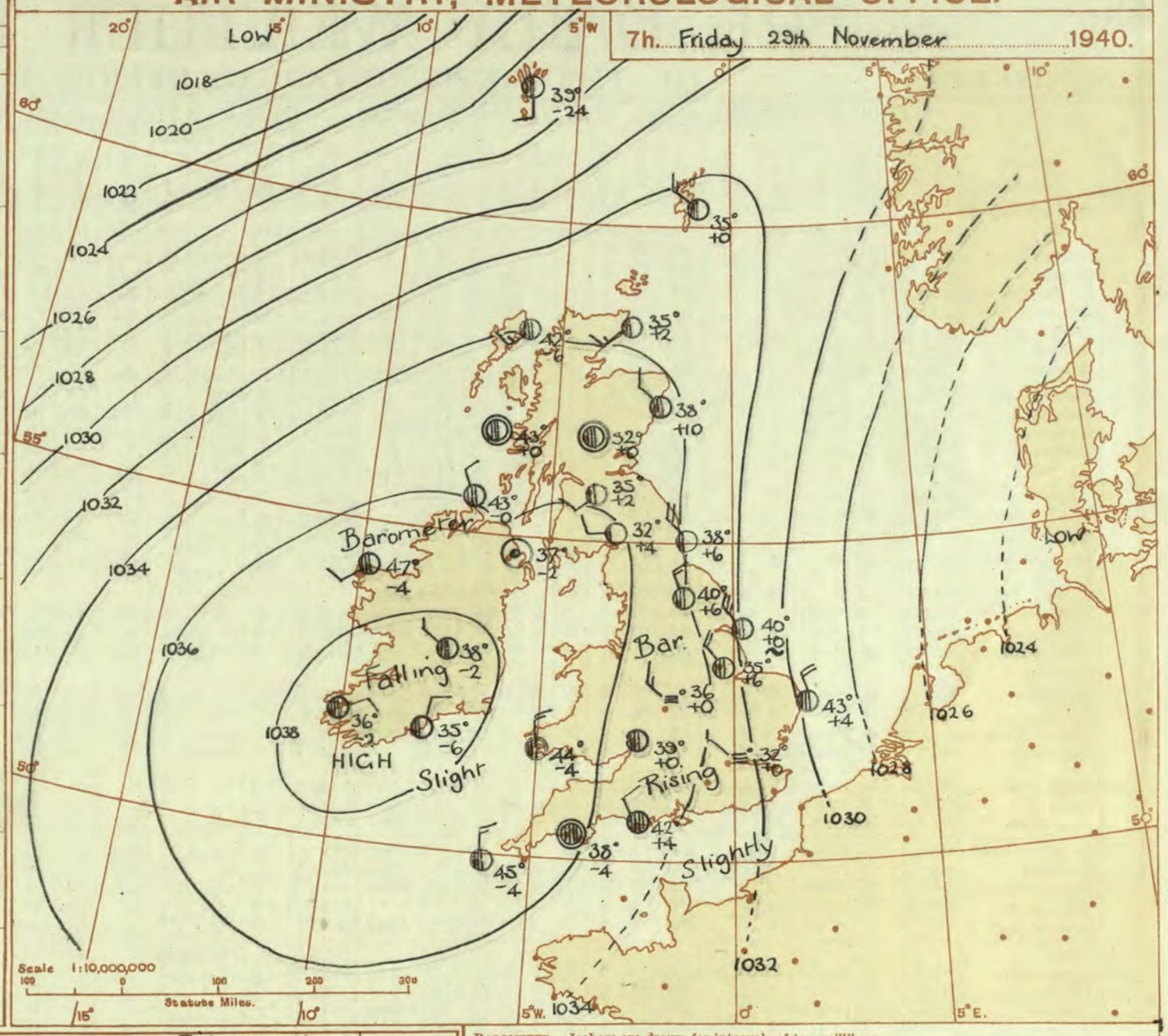
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 28th November			18h. G.M.T.			01h. G.M.T. 29th November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	36	25844	28486	8-	81745	31585	50	01853	31413	50	00871	18101
115	87	81844	28585	87	81844	28685	52	81844	28387	52	62744	24387
203				8-	02955	24415						
206	83	02955	28285	5-	00853	28183	52	02855	30288	8-	25855	24185
210	53	02964	24626	5-	61857	61667				8-	25848	20288
220	53	02856	28417	52	81646	26228				5-	25754	14284
230	83	10845	22186	8-	02856	30316	57	22855	28167	57	01864	00014
245	83	02964	24326	43	01963	28425	5-	02866	65486	5-	21757	28387
260	53	05673	22227	50	01773	26113	57	05664	26117	50	05662	00012
277	87	02954	28287	33	25842	25382	50	01863	00003	50	22263	28263
279	**	01765	28215				00	00790	24200	50	01773	28113
285	13	01852	28514	70	01744	28414				50	01844	32314
288	60	05661	28313	07	05690	26224	07	05590	28302	5-	05667	28327
273												
301	54	05661	31215	54	05573	30314	50	05663	30313			
321	03	05630	27413	07	17590	26213	07	05590	28302	67	05574	26314
299	8-	02745	28515	57	05643	26314	50	05642	24402	80	01744	28684
292	04	00930	28413	07	01890	26324	04	00890	26302	50	01763	26304
310	--	05425	26415	--	01523	26913						
316	04	05630	32213	00	91490	28242	00	08490	26200	60	05562	28302
333	23	02964	03486	5-	02756	00086	20	81754	32314			
334	--	51854	04128								05653	00013
340	55	05661	28315	00	05690	30210	00	05690	24200	05	05690	28215
136	86	81753	25516									
336	43	02753	04426	14	01752	04314				14	01752	32413
350	04	05630	27313									
368												
379	00	05630	28214	04	05690	28114	00	05590	26310	50	05662	28312
390				00	08490	28310	00	08490	24340	5-	08457	26317
382	04	05630	28414	50	08461	29101	50	05562	25202	04	05690	28202
438	00	00730	32400							50	05533	04313
430	00	00780	32313	00	05590	28114	00	08490	32300	00	05690	30300
409	2-	03956	01316	50	01864	31214	5-	02758	06128	5-	02767	31227

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N$_h$ = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Friday 29th November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Friday 29th November, 1940.
1 S.E. England 2 E. England ...	Light northerly wind; mainly fine; some local fog or mist by morning; rather cold, frost at night.
3 E. Midlands ... 4 W. Midlands ...	Fresh to moderate northerly wind; considerable fine periods but a few local coastal showers, chiefly today; rather cold, frost inland at night.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ...	As 1.
10 N.E. England 11 S.E. Scotland	Wind north, moderate, falling light westerly; fair; average temperature
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Freshening Southwesterly wind; mainly cloudy; some light occasional rain or drizzle chiefly near the north and northwest coasts; becoming milder.
17 N. W. Ireland 18 N. E. Ireland	Light to moderate westerly wind; mainly fair; average temperature.
19 S. E. Ireland 20 S. W. Ireland	Light variable breeze; fair or fine; local fog in morning; local frost inland at night.

GENERAL INFERENCE.

A large anticyclone with its centre near SouthErn Ireland is likely to drift slowly S. or S.E. Weather will be fair or fine in most districts but there will be some slight rain or drizzle occasionally in the extreme N.W. and N. of the country, and a few local showers on the East Coast. Frost will occur at night, and some local fog is expected to develop by tomorrow morning

FURTHER OUTLOOK.

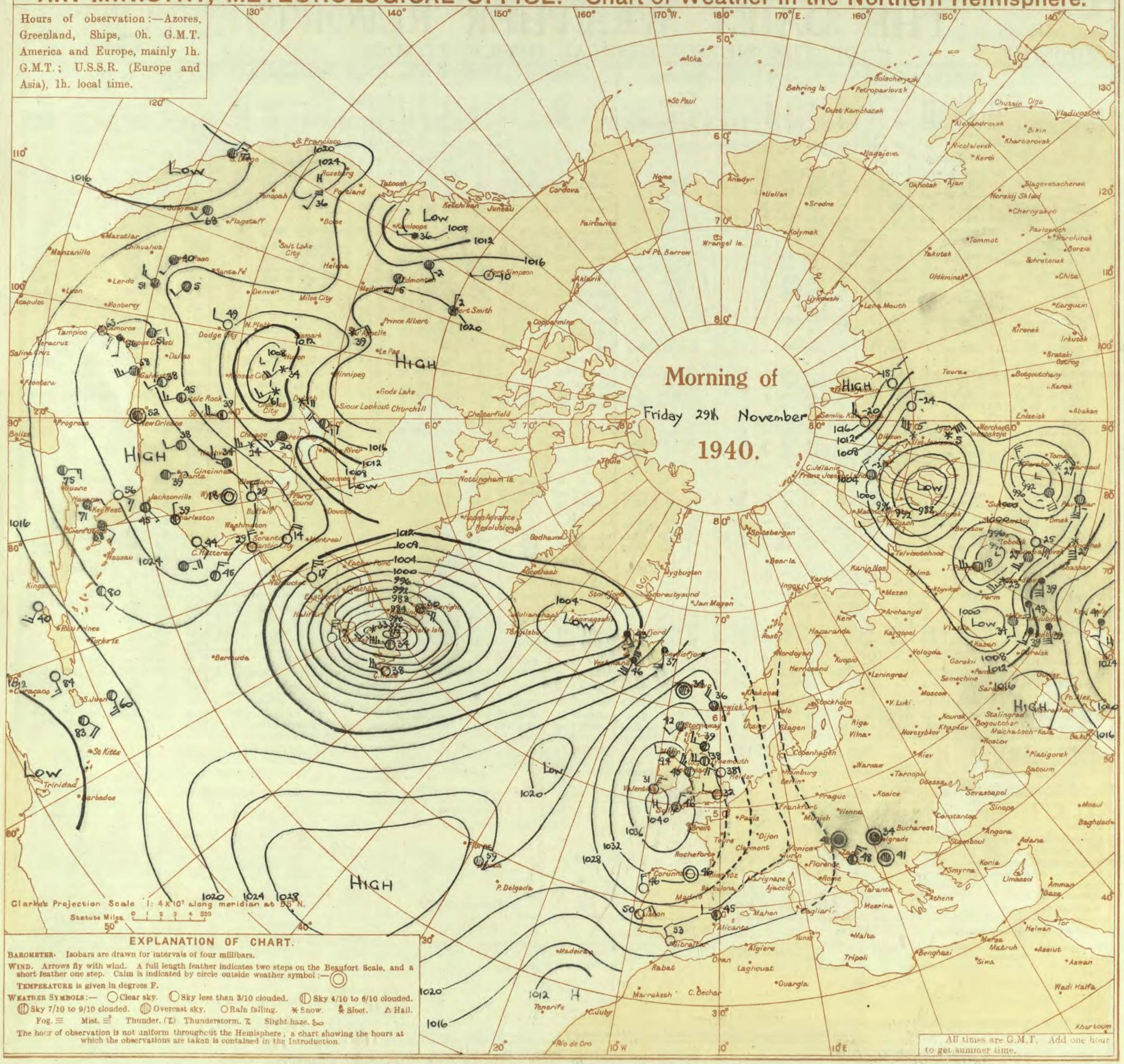
Continuing fair and quiet over England and Wales; risk of fog in places; tending to become cloudy with higher night temperature.

Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press Cornwall House S.E.1.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 29th November, 1940.

No. 28,862.

OBSERVATIONS at 1 hr. G.M.T. 29th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1033·6	-10	NW	2	z_0	32	85	5	-	-	-	0	0	-
	S. Farnborough	226	1034·5	-12	W'N	2	z_0	30	92	5	-	3	-	0	1	-
	Boscombe Down	417	1036·5	-6	NW'W	2	z_0	33	85	6	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1034·6	-6	NW'N	3	z_0	36	75	5	-	4	-	0	0	-
	Lympne ...	346	1031·7	-10	W	4	z_0	32	85	5	-	-	-	0	0	-
	Manston ...	154	1031·4	-10	NW'N	4	z_0	38	75	6	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1030·8	-10	NW	4	z_0	38	75	5	-	-	1	0	Tr	-
	Gorleston ...	5	1029·4	-16	NW'W	3	bc	36	85	6	5	-	-	2-3	2-3	1500
	Mildenhall ...	19	1031·9	-10	WNW	3	z_0	32	85	5	-	-	-	0	0	-
	Cranwell ...	240	1033·0	-6	NW'W	4	z_0	34	85	5	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1034·1	-12	NNW	2	z_0	34	85	5	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1036·8	-2	NNE	3	c	46	75	8	5	2	-	4-6	10	1500
	Bristol ...	209														
	Portland Bill ...	32	1035·3	-4	N	2	bc	40	92	8	5	-	-	4-6	4-6	4000
	Plymouth ...	82	1037·5	+2	-	0	m	35	97	4	-	3	-	0	2-3	-
	The Lizard ...	240	1027·5	0	NNE	3	c	43	75	7	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	163	1038·1	0	N'E	3	c	46	65	8	5	-	-	9+	9+	1800
	Guernsey ...	175														
6	Pembroke ...	142	1038·2	-2	NNW	3	c	45	65	7	8	2	-	7-8	10	2500
7	Holyhead ...	26	1036·4	-2	NNW	5	bc	45	85	8	8	-	-	4-6	4-6	2500
	Chester (Sealand)	16	1035·0	-4	NW'W	3	bc	41	75	7	5	-	-	1	1	3500
8	Manchester ...	70	1034·9	-6	NW	1	m	*	*	4	-	-	-	0	0	-
10	Spurn Head ...	29	1030·4	-4	WNW	5	b	38	85	7	-	-	-	0	0	-
	Catterick ...	175	1033·1	-2	NW	3	bc	38	75	7	5	-	1	1	2-3	4000
	Tynemouth ...	108	1032·7	+4	W	5	bc	38	75	7	2	-	-	2-3	2-3	3200
11	St. Abbs Head	280	1032·5	+12	NW	4	cq	41	75	7	4	7	-	4-6	7-8	2500
	Leuchars ...	36	1034·0	+10	W	2	c	39	75	7	5	3	-	4-6	9	3500
12	Renfrew (Abbotsl.)	19	1035·7	+2	W	2	c	39	85	7	5	-	-	10	10	5000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1036·2	0	N	4	bc	46	75	8	4	-	-	2-3	2-3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1034·3	-4	WSW	2	c	42	85	7	5	7	-	7-8	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1032·6	+6	NW	3	c	41	75	7	5	1	-	7-8	9	
16	Lerwick ...	156	1031·4	+12	NNW	4	c	36	75	7	8	7	-	4-6	10	1500
17	Blacksod Point	18	1037·7	-6	-	0	c	45	85	8	-	6	-	0	7-8	-
18	Malin Head ...	84	1036·6	0	W	2	c/pr	44	85	7	8	-	-	7-8	7-8	1500
	Aldergrove ...	268	1038·1	+2	-	0	b	35	92	7	5	-	-	1	1	4500
19	Birr Castle ...	173	1039·0	-2	SSE	1	c	37	92	7	5	-	-	10	10	2500
20	Valentia Obsy.	30	1039·6	-2	NE'E	2	b	31	85	9	5	-	1	1	1	4000
	Roches Point	22	1039·9	0	NNE	2	bc	37	92	8	5	-	-	4-6	4-6	2500

OBSERVATIONS at 7 hr. G.M.T. 29th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount. Low 0–10 (26)	Cloud. Amount. Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
London (Kew)	1033·7	+2	NNW	2	z_0	35	85	6	5	-	-	4-6	4-6	2500	1	*
Croydon ...	1033·1	0	NW	1	m	32	92	4	-	3	-	0	4-6	-	3	*
S. Farnborough	1034·2	+6	WNW	2	z_0	32	92	6	-	4	-	0	Tr	-	3	*
Boscombe Down	1034·7	+2	NW	3	z_0	36	85	6	5	-	9	2-3	4-6	4000	3	*
Calshot (Sthmtn.)	1033·9	+2	NW'N	3	z_0	36	85	6	-	4	1	0	1	-	1	2 §
Manston ...	1030·4	-2	NW'N	5	c/pr	39	85	6	5	3	-	4-6	9	2500	*	*
Shoeburyness ...	1031·8	+2	N'W	3	c	37	85	6	5	7	-	4-6	9	2500	3	*
Felixstowe ...	1030·6	+2	NNW	5	c/pr	37	85	6	8	-	-	9	9	3000	1	3
Gorleston ...	1029·5	+4	N'W	4	c	43	65	6	8	-	-	7-8	7-8	1200	1	3
Mildenhall ...	1031·9	+2	NW	3	z_0	34	85	6	5	-	-	7-8	7-8	3000	0	*
Cranwell ...	1033·5	+6	NNW	4	z_0	35	85	5	5	-	-	7-8	7-8	2000	1	*
Birmingham ...	1035·1	0	NNW	3	m	36	85	4	-	-	1	0	1	-	1	*
Upper Heyford	1034·3	+2	NW'N	1	m	33	92	4	-	4	-	0	Tr	-	1	*
Ross-on-Wye	1035·3	0	-	0	c	39	85	8	5	3	-	1	9	2500	1	*
Hartland Point	1036·1	0	N	3	c	45	75	8	5	2	-	7-8	9+	2000	0	2
Bristol ...	1035·8	+4	W	2	fg	38	85	7	5	3	-	2-3	9+	3000	1	*
Portland Bill ...	1034·8	+4	NW	2	c	42	85	8	5	-	-	10	10	4000	1	2
Plymouth ...	1036·5	-4	-	0	0	38	92	4	5	-	-	10	10	3000	0	0
The Lizard ...	1036·8	-2	N	2	c	43	75	8	8	2	-	9	10	2000	0	2
Scilly (St. Mary's)	1037·1	-4	N	3	c	45	65	8	5	2	-	7-8	9+	1200	1	2
Pembroke ...	1037·1	-4	N	3	c	44	65	8	5	-	-	9+	9+	2500	1	1
Holyhead ...																*
Chester (Sealand)																*
Manchester ...																*
Spurn Head ...	1031·4	0	NW'W	5	c/pr	40	85	7	3	2	-	2-3	7-8	4000	0	4
Catterick ...	1034·7	+6	NNW	3	c	40	75	7	5	-	-	7-8	7-8	4000	0	*
Tynemouth ...	1033·9	+6	NW	4	bc/pr	38	85	6	2	-	-	4-6	4-6	3200	3	3
St. Abbs Head	1033·9	+4	N	4	c	41	75	7	8	2	-	4-6	9+	2500	1	3
Leuchars ...	1034·8	+6	W	1	bc	37	85	7	8	3	-	2-3	7-8	2500	1	*
Renfrew (Abbotsl.)	1035·8	+2	SW	2	z_0	35	97	6	5	3	-	2-3	4-6	4000	1	*
Eskdalemuir ...	1035·9	+4	W	2	bc	32	85	8	-	3	-	0	1	-	3	
Point of Ayre ...	1035·9	0	N	3	b	44	85	8	4	-	-	1	1	4000	1	2
Tiree	1034·5	0	-	0	c	43	85	8	5	-	-	7-8	7-8	2500	0	2
Stornoway ...	1034·1	-6	SW	3	c	42	85	7	5	-	-	7-8	7-8	2000	1	2
Dalwhinnie ...	*	0	-	0	c	32	85	8	8	1	-	2-3	7-8	2500	3	*
Aberdeen ...	1034·5	+10	NW	2	c	38	92	6	5	-	-	9+	9+	4000	1	2
Wick ...	1033·3	+2	SW	3	bc	35	92	7	5	4	-	2-3	2-3	1500	1	2
Lerwick ...	1031·9	0	WNW	3	c	35	75	8	5	7	-	7-8	9	1500	1	*
Blacksod Point	1036·7	-4	SW	2	c	47	75	8	-	7	-	0	9+	-	0	1
Malin Head ...	1036·1	0	NNW	2	c	43	85	7	4	6	-	4-6	7-8	2500	0	3
Aldergrove ...	1037·4	-2	-	0	pr	37	92	8	8	-	-	9+	9+	2300	1	*
Birr Castle ...	1038·4	-2	WNW	1	c	38	85	7	5	1	-	7-8	10	2500	1	*
Valentia Obsy.	1038·5	-2	NE'E	2	c	36	85	9	5	-	-	9+	9+	4000	3	1
Roches Point	1038·8	-6	NNE	2	bc	35	92	8	5	-	-	2-3	2-3	2500	1	2

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h–18h °F. (31)	Temperature. Min. Night 18h–7h °F (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 28th Hrs. (36)
London (Kew)	44	32	18	-	Tr	6·2
Croydon ...		30	27		-	5·8
S. Farnborough	45	28	21	-	-	6·3
Boscombe Down	42	30	25	-	-	6·0
Calshot (Sthmtn.)	45	35	31	-	-	7·0
Lympne ...				-		
Manston ...	*	*	*	*	*	*
Shoeburyness ...	43	33	27	-	-	6·6
Felixstowe ...	44	35	32	*	0·1	*
Gorleston ...	42	36	31	3	2	1·2
Mildenhall ...	42	*	*	-	Tr	5·5
Cranwell ...	43	32	30	-	-	5·9
Birmingham ...	40	35	29	*	Tr	3·0
Upper Heyford	41	32	24	-	-	*
Ross-on-Wye	43	34	26	-	-	4·1
Hartland Point	47	43	40	Tr	-	0·1
Bristol ...		34	23		-	4·4
Portland Bill ...	46	41	*		-	*
Plymouth ...	47	35	31	-	-	2·4
The Lizard ...	50	39	*	0·5	Tr	4·8
Scilly (St. Mary's)	49	43	*	-	-	5·8
Pembroke ...	49	43	*	-	-	3·4
Holyhead ...				1		
Chester (Sealand)	44			-		
Manchester ...	42			-		
Spurn Head ...	42	38	*	-	0·2	2·1
Catterick ...	43	37	35	-	-	4·4
Tynemouth ...	43	37	32	-	1	*
St. Abbs Head	43	39	*	-	3	*
Leuchars ...	44	36	27	-	-	0·5
Renfrew (Abbotsl.)	43	35	30	1	-	0·2
Eskdalemuir ...	40	32	26	-	-	2·3
Point of Ayre ...	46	43	*	0·4	0·1	0·2
Tiree	45	37	*	-	-	0·1
Stornoway ...	44	40	*	0·2	Tr	0·2
Dalwhinnie ...	38	31	25	0·1	Tr	0·2
Aberdeen ...	41	37	33	1	5	3·0
Wick ...	43	35	*	0·6	0·1	*
Lerwick ...	44	34	*	2	Tr	0·4
Blacksod Point	47	41	*	Tr	-	*
Malin Head ...	48	39	*	0·1	0·6	2·5
Aldergrove ...	46	30	26	-	Tr	2·0
Birr Castle ...	44	31	28	-	-	1·8
Valentia Obsy.	48	30	24	Tr	Tr	6·4
Roches Point	47	34	*	-	Tr	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h. other stations except for rainfall which is 9h—18h.

	Height above M.S.L. in feet.	Weather 24 hrs. ended 9h. Morning.	Afternoon.	Night.	Temperature. Day Max. °F.	Night Min. °F.	Min. on Grass °F.	Rainfall. Day. mm.	Night. mm.	Sunshine to Sunset. hrs. Yesterday.	Humidity. 15h. G.M.T. %	9h. G.M.T. % To-day.	Visibility 9h.
Kew...	18	bm₀xbm₀y	bz₀ybcz₀	bcbm₀x	44	32	18	-	Tr	6·2	*	*	5
Croydon	217	bf'bz₀	bz₀bf	bm₀x₀cv		30	27		-	5·8	*	*	4
Greenwich (Royal Observatory)...	149												
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	45	32	27	-			70	88	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*									*
Camden Square	110	b	b	*	44	33	29	-	-	*	*	79	*
Kensington	80	bc	bcz	*	45	32	23	-	-		67	81	*
Hampstead Observatory	450	b	b	bx	43	31	27	-	-		*	97	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 29th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
Defective Record.			

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome														

‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22 —Code for surface visibility.

	Objects not visible at
0 Dense fog	55 yards.
1 Thick fog	220 ,,
2 Fog	550 ,,
3 Moderate fog	1,100 ,,
4 Mist or haze	1¼ miles.
5 Poor visibility	2½ ,,
6 Moderate ,,	6½ ,,
7 Good ,,	12½ ,,
8 Very good ,,	31 ,,
9 Excellent ,,	beyond 31m.

COLUMN 30 —Code for State of Sea.

0 Calm.	5 Very rough.
1 Smooth.	6 High.
2 Slight.	7 Very high.
3 Moderate.	8 Preciptious.
4 Rough.	9 Confused.

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METEOROLOGICAL OFFICE, AIR MINISTRY, KINGSWAY, LONDON W.C.2

N. K. JOHNSON, D.Sc., A.R.C.S., Director.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 30th November, 1940.

No. 28,863.

OBSERVATIONS at 13h. G.M.T. 29th November

District	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1033·6	-2	N	4	zo	43	65	6	5	3	-	Tr	1	2500
	Croydon	1032·9	-6	NW	3	m	41	75	4	-	3	-	0	2-3	-
	S. Farnborough	1034·2	-6	NNW	3	zo	43	65	6	-	4	-	0	1	-
	Boscombe Down	1035·2	0	N	4	zo	42	75	6	-	-	1	0	Tr	-
	Calshot (Soton.)	1034·0	-2	N	4	bzo	44	75	6	-	4	-	0	Tr	-
	Lympne	1031·3	-2	NW'N	4	b–	41	85	6	5	-	1	Tr	2-3	4000
	Manston	1031·3	0	NNW	5	zo	42	75	6	2	-	1	1	2-3	2000
2	Shoeburyness	1032·3	-2	N	3	bc	43	85	6	-	4	2	0	4-6	-
	Felixstowe	1031·7	-4	N'W	4	zo	45	65	6	5	-	2	4-6	4-6	4500
	Gorleston	1031·2	0	N'W	4	c/rs	45	75	7	8	-	-	7-8	7-8	1200
	Mildenhall	1033·0	0	NW'N	4	zo	40	85	6	8	6	-	2-3	4-6	4000
	Cranwell	1034·7	+4	NNW	4	zo	41	85	6	5	-	-	9+	9+	2500
3	Birmingham	1035·4	+6	NNW	2	zo	41	65	5	-	-	1	0	1	-
	Upper Heyford	1034·9	+2	NNW	2	bzo	41	75	5	-	4	-	0	Tr	-
4	Ross-on-Wye	1035·4	-4	N'W	2	bc	44	65	8	1	-	1	2-3	2-3	2500
5	Hartland Point	1036·3	-4	NNW	3	bc	45	85	9	8	6	1	4-6	4-6	2500
	Bristol	1036·1	+2	NNE	2	zo	43	75	6	1	4	1	7-8	7-8	3000
	Portland Bill	1035·6	-6	NNE	2	bc	45	85	8	5	-	-	4-6	4-6	4000
	Plymouth	1036·6	-2	N'W	2	zo	46	65	6	5	-	4	4-6	7-8	3500
	The Lizard	1037·1	-4	N	3	c	44	85	8	8	2	-	9	10	1500
	Scilly (St. Mary's)	1037·7	-2	N'W	3	c	45	65	9	5	7	-	7-8	10	1200
	Guernsey														
6	Pembroke	1037·5	0	N	3	c	45	75	9	8	6	-	4-6	7-8	3000
7	Holyhead	1036·4	-2	N	3	c	47	85	9	8	-	-	9+	9+	5000
	Chester (Sealand)	1036·1	-4	NNW	3	bczo	45	85	7	-	-	6	0	4-6	-
8	Manchester	1036·1	-4	NW'W	2	m/f	35	65	4	-	3	-	0	Tr	-
10	Spurn Head	1033·6	+2	NNW	5	c	44	65	7	5	-	-	7-8	7-8	6000
	Catterick	1035·8	-2	N	2	c	43	75	7	5	-	-	7-8	7-8	5500
	Tynemouth	1036·1	0	NW	3	c	40	85	6	8	-	-	7-8	7-8	2700
11	St. Abbs Head	1035·3	+6	WNW	2	bc	41	85	8	4	4	4	2-3	2-3	2500
	Leuchars	1034·9	-10	SW	2	bc	43	75	7	-	4	6	0	4-6	-
12	Renfrew (Abbots I.)	1035·5	-8	WSW	1	czo	46	75	5	5	3	5	Tr	9+	5000
	Eskdalemuir	1035·6	-4	SSW	2	bc	40	65	8	-	4	2	0	4-6	-
	Point of Ayre	1036·3	-2	N	2	bc	47	85	8	1	-	5	2-3	4-6	2500
13A	Tiree	1033·1	-8	SW	3	c	46	92	8	5	3	-	4-6	7-8	2100
13B	Stornoway	1030·8	-20	SSW	3	c	48	85	8	3	7	-	7-8	9+	1000
15	Dalwhinnie	1034·1	-8	S	2	c	40	75	8	1	-	2	1	9	4000
	Aberdeen	1033·9	-6	WSW	2	bc	43	75	6	5	3	6	Tr	2-3	4000
	Wick	1031·9	-14	SW	2	c	42	85	8	5	5	8	4-6	7-8	2500
16	Lerwick	1031·3	-12	SW'S	3	c	40	75	8	5	7	-	4-6	9+	450
17	Blacksod Point	1035·3	-8	S	2	iro	47	65	7	6	-	-	10	10	2500
18	Malin Head	1035·0	-10	S	3	c	47	85	8	2	6	-	2-3	7-8	4000
	Aldergrove	1037·0	-10	SSW	3	c	42	85	7	5	-	-	9+	9+	4500
19	Birr Castle	1037·8	-8	S	1	c	43	75	8	5	-	-	7-8	7-8	4000
20	Valentia Obsy. †	1037·3	-10	SE'S	3	c	45	75	9	5	-	-	10	10	4000
	Roches Point	1038·8	-6	N	2	c	41	85	7	5	-	-	9	9	2500

OBSERVATIONS at 18h. G.M.T. 29th November

Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather. (19)	°F. Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1035·4	+12	N	3	zo	39	75	6	-	-	1	0	2-3	-	1	*
Croydon	1034·8	+18	NW	1	bf	32	92	3	-	-	-	0	0	-	1	*
S. Farnborough	1035·7	+14	WNW	2	m	33	92	4	-	-	-	0	0	-	1	*
Boscombe Down	1036·2	+8	N'E	1	zo	35	85	5	-	-	-	0	0	-	1	*
Calshot (Soton.)	1035·0	+8	N	3	zo	40	75	6	-	-	-	0	0	-	1	1
Lympne	1033·0	+12	NNW	3	zo	37	85	6	4	-	-	Tr	Tr	4000	1	§
Manston	1033·0	+8	N	5	bc/pr	41	85	6	8	-	-	4-6	4-6	2500		*
Shoeburyness	1034·1	+10	N'W	2	b	37	97	6	-	-	-	0	0	-	1	*
Felixstowe	1033·7	+16	NNW	3	bc	38	85	7	2	-	-	2-3	2-3	4500	1	2
Gorleston	1033·1	+20	NE'N	3	bc	44	65	7	8	-	-	4-6	4-6	1500	1	2
Mildenhall	1034·9	+14	N'W	2	pr	38	92	5	8	-	-	7-8	7-8	1200	1	*
Cranwell	1036·0	+10	NNW	2	zo	37	85	5	5	-	-	1	1	3500	1	*
Birmingham	1035·9	+2	NW	2	bF+	37	75	1	-	-	-	0	0	-	1	*
Upper Heyford	1035·9	+6	NNE	1	zo	35	85	5	-	-	-	0	0	-	1	*
Ross-on-Wye	1036·1	+4	W	1	zo	37	85	5	5	-	-	4-6	4-6	2500	1	*
Hartland Point	1036·3	+2	N	3	c	44	85	8	8	2	-	7-8	9+	1500	0	2
Bristol	1036·4	+2	–	0	bf+	38	85	3	-	-	-	0	0	-	1	*
Portland Bill	1035·7	+6	NNE	2	b	41	92	7	-	-	-	0	0	-	1	2
Plymouth	1036·6	+2	NNE	2	zo	43	75	5	5	-	-	4-6	4-6	4000	0	1
The Lizard	1036·7	+4	N'W	2	c	43	85	7	8	2	-	7-8	9+	2000	0	2
Scilly (St. Mary's)	1037·2	+2	N	2	c	45	75	8	5	-	-	10	10	1800	1	2
Guernsey																
Pembroke	1036·9	-2	NE	2	c	43	75	8	8	-	-	9+	9+	2500	1	2
Holyhead	1036·4	+4	W'S	3	c	44	92	7	8	-	-	9+	9+	2600	1	1
Chester (Sealand)	1036·6	+6	–	0	zo	34	92	5	5	-	-	Tr	Tr	5700	1	*
Manchester	1036·2	+4	S	1	F	31	92	1	-	-	-	10	10	<150	3	*
Spurn Head	1035·2	+6	WNW	3	c	42	85	7	5	-	-	7-8	7-8	4000	0	3
Catterick	1036·5	+4	–	0	fg	34	85	5	-	4	-	0	2-3	-	0	
Tynemouth	1036·1	+4	W	2	bcf	40	75	3	2	-	-	4-6	4-6	2800	1	3
St. Abbs Head	1034·6	0	W	3	bc	37	85	8	4	4	-	2-3	4-6	2500	0	2
Leuchars	1034·3	0	W	2	m	37	85	4	-	7	-	0	4-6	-	1	*
Renfrew (Abbots I.)	1035·3	-2	–	0	bcf+	39	97	3	5	-	-	4-6	4-6	3800	1	*
Eskdalemuir	1036·4	+2	–	0	bc	29	92	7	-	4	2	0	2-3	-	3	*
Point of Ayre	1035·9	+4	WSW	2	c	42	92	8	5	-	-	9+	9+	2500	0	2
Tiree	1031·9	-2	SW'S	4	bc	45	92	8	8	-	-	4-6	4-6	1500	-	
Stornoway	1029·6	-4	SSW	4	c	45	85	8	8	-	-	7-8	7-8	2000	1	2
Dalwhinnie	*	-2	S	2	c	36	92	7	5	-	-	7-8	7-8	2500	0	*
Aberdeen	1033·5	-2	–	0	bcf	37	92	2	-	3	-	2-3	2-3	5700	1	1
Wick	1036·6	-4	SSW	4	c	43	85	8	5	7	8	4-6	9+	2500	1	2
Lerwick	1028·2	-14	SW	4	pr	43	92	7	8	7	-	7-8	10	800	1	*
Blacksod Point	1033·6	-4	S	5	c	46	85	7	-	6	-	0	9+	-	0	2
Malin Head	1034·4	-2	S	3	bc	43	85	7	4	-	-	4-6	4-6	4000	0	3
Aldergrove	1036·5	+2	SW'S	2	bc/pr	41	85	7	5	-	1	4-6	4-6	5000	1	*
Birr Castle	1037·2	-2	W	1	c	46	75	7	5	1	-	7-8	10	2500	1	*
Valentia Obsy. †	1035·6	-6	SSE	5	c	44	75	9	5	-	-	9+	9+	2500	1	3
Roches Point	1038·1	0	SE	1	c	40	85	8	5	-	-	9	9	2500	1	2

PAST 24 HOURS.

Stations.	Weather 7h.—13h. 29th (37)	13h.—18h. 29th (38)	18h 29th to 1h. 30th (39)	1h.—7h. 30th (40)
London (Kew)	bcmox bzo	bzomo	bcbmox	bmofFFx
Croydon	bmbcm	bczbf	bfw	bfwx
S. Farnborough	bxmozo	bzomo	bmfx bcb	bfx
Boscombe Down	bcbmo	bmo	bm	bm
Calshot (Soton.)	bmobzo	bzo	bmow	bmwx
Lympne	cidrobcmo	bcbmo	bcdomo	bccmo
Manston	cbcmo	cprobcmo	bcbmo	bccmo
Shoeburyness	cmobcmo	bcbbcbmo	bmow	bmobmx
Felixstowe	bcpromo	bccprobc	bmo, wbcm	bcmowbmox
Gorleston	cprobccpro	cprosrobc	bcc	bcx
Mildenhall	cmoxbcmo	bcmocpromo	cprobcmo	bffx
Cranwell	bcmoczo	bczobmo	bmff	bff
Birmingham	bmz	bzf	bFf	bffx
Upper Heyford	bmozo		bmobm	bmfx
Ross-on-Wye	bcbbc	bbcbmo	bmo	bmox
Hartland Point	ciro	bcc	c	c
Bristol	bmcmo	bcmomb bf	bfx	bfFx
Portland Bill	cbc	cbc	bbc	bcbc
Plymouth	cmcfmmo	czcbczo	bm	
The Lizard	c	c	c	c
Scilly (St. Mary's)	c	c	c	cbcc
Guernsey				
Pembroke	irocv	proc	proc	roro iroc
Holyhead		cbcc	cirom c	cmobc
Chester (Sealand)		bczobmox	bff xb	bmoxmc
Manchester		bfFF	bFFx	oFffx
Spurn Head	c	c	bc	bcmw
Catterick	cbc	cbxfgmo	fgmobm	bfxcm
Tynemouth	cpo	cbcff	bcff	bcoff
St. Abbs Head	irobc	cbc	bc	cbc
Leuchars	bcxcmobc	bccbcmom	bcmcwx	bcbbcx
Renfrew (Abbots I.)	bcmoxc	cmomff	cffirofc	ccmo
Eskdalemuir	bxbc	bcbx	bbcx	bcxoFe
Point of Ayre	bc	bcc	crorc	c
Tiree	cprc	cpro	cbcc	cro
Stornoway	cpr	cpr	cpr	cdodo
Dalwhinnie	cbc	bcc		cbc
Aberdeen	cbczo	bccbf	bf,cf	bcfcf
Wick	bcc	c	clbcc	cprc
Lerwick	c	cpr	crrir	cprir
Blacksod Point	ir	c	dr	rr
Malin Head	c	c	c	c
Aldergrove	cproc	ccproc	bcwc	c
Birr Castle	c	c	c	c
Valentia Obsy. †	c	arc	cprobccrc	cirorrcrc
Roches Point	c	czoc	bc	bcpoc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

COLUMNS 5, 19, 37, 38, 39, 40—BEAUFORT NOTATION AND SYMBOLS FOR WEATHER.

b, blue sky (not more than a quarter covered with cloud).
bc, sky partly cloudy (one half covered). c, generally cloudy.
d, drizzle. e, wet air. g, gloom.
f, fog, visibility 220–1100 yds.
F, thick fog ,, less than 220 yds.
fs, low fog over sea (coast station).
fg, low fog over land (inland station).
m. mist, visibility 1100–2200 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s₀, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s₀/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r₀, slight rain. rr, continuous rain.
<, less than (for cloud height). ⸗gale.
Ⓗ Solar halo. Ⓣ lunar halo. ⌂Aurora.

With present weather is combined, whenever possible, the general character of the weather.

A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

0 No low clouds.
1 Fair weather Cu.
2 Large Cu without anvil.
3 Cb.
4 Sc formed by the spreading out of Cu.
5 Layer of St or Sc.
6 Ragged low clouds of bad weather (or fractonimbus).
7 Fair weather Cu and Sc.
8 Large-Cu (or Cb) and Sc.
9 Large-Cu (or Cb) and ragged low clouds of bad weather.

COLUMNS 12, 13, 26, 27.

Columns 12, 26. The figures in these columns indicate the amount of cloud at the height given in Column 14.

Columns 13, 27. The figures in these columns indicate the total amount of all forms of cloud.

An entry "4–6" means that the cloud amount may be 4, 5 or 6; similarly for other grouped entries.

"tr" signifies a small amount of cloud (trace) covering less than 1/20 of the sky.

"9 +" signifies an overcast sky with a few small openings.

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

0 No medium clouds.
1 Typical As (thin).
2 Typical As (thick) (sun or moon invisible), or Nimbostratus (Ns).
3 Single layer of Ac or high Sc.
4 Ac in isolated patches. Individually decreasing (often lenticular).
5 Ac in bands (increasing).
6 Ac formed from the spreading out of Cu.
7 Ac associated with As or As with parts resembling Ac.
8 Ac Castellatus (or Ac in ragged fragments).
9 Ac in several layers generally associated with fibrous veils and a chaotic appearance of the sky.

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

0 No cirriform cloud.
1 Fine Ci not increasing: sparse.
2 Fine Ci not increasing: abundant but not a continuous layer.
3 Anvil Ci (usually dense).
4 Fine Ci increasing: usually in tufts.
5 Ci or Cs increasing: still below 45° altitude: often in polar bands.
6 Ci or Cs increasing and reaching above 45° altitude: often in polar bands.
7 Veil of Cs covering whole sky.
8 Cs not increasing and not covering whole sky.
9 Cc predominating, and a little cirrus.
(Cc may occur with any of the types 1 to 8).

Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

COLUMN 29.—STATE OF GROUND.

0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less than 6 ins., but ground frozen.
9 .. ,, covered with snow greater than 6 ins. deep.
– .. Fresh snow has fallen in the mountains.

NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

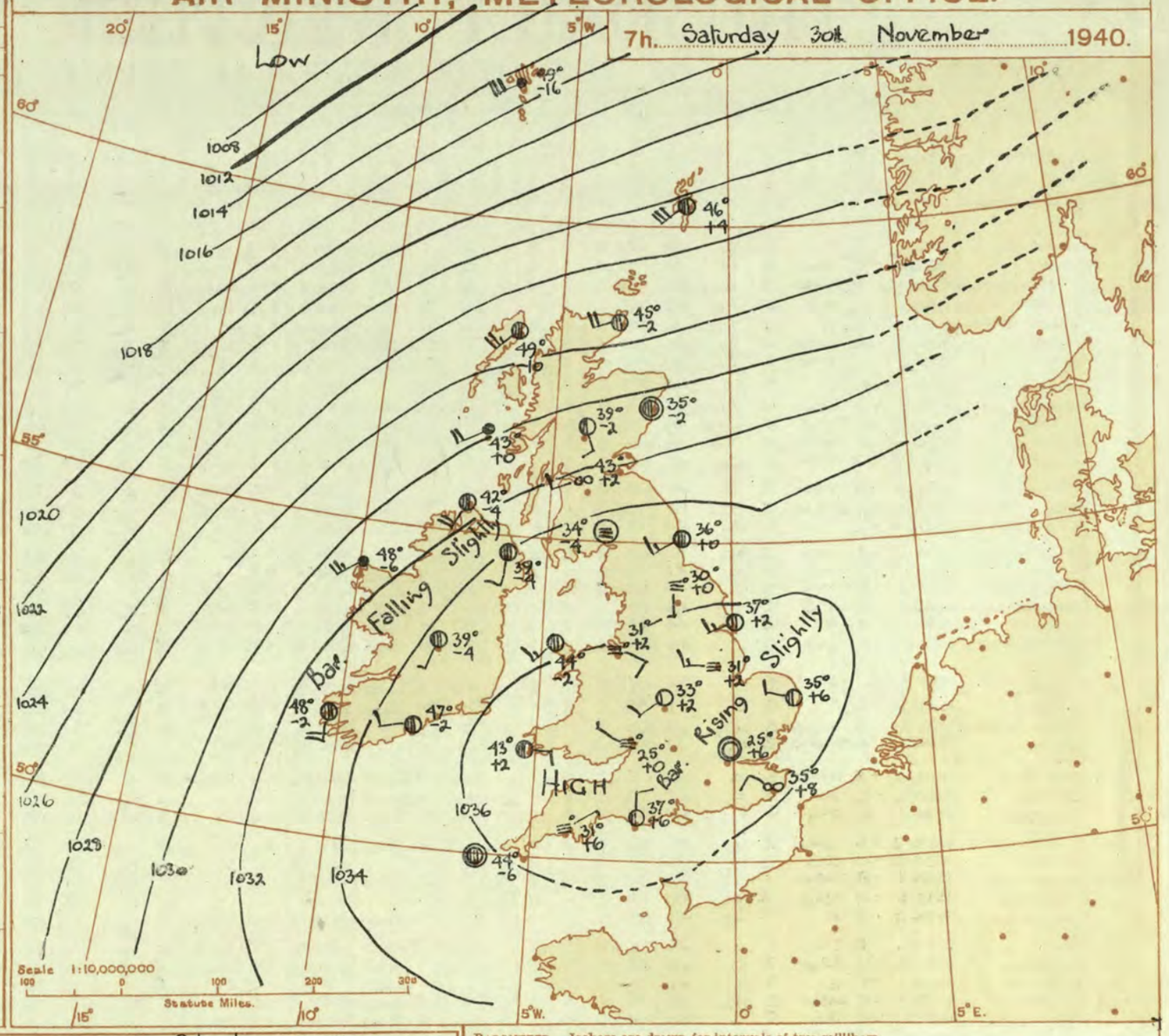
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 29th November			18h. G.M.T.			01h. G.M.T. 30th November			07h. G.M.T.		
III	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN	$C_L C_M$	wwVhN$_h$	DDFWN
109	57	02865	18417	57	01762	18463	07	01790	18414	52	22754	19468
115	52	81734	20486	52	81734	20487	52	81734	53587	52	62635	53688
203												
206	54	02964	24225	50	00963	20223	5-	02855	00065	50	21863	28253
210	57	02961	20225				51	02965	18315	57	02965	18326
220										52	03645	22528
230	83	25855	20226	5-	62748	00068	5-	02766	18266	5-	22748	12188
245	53	01861	22184	03	00790	22222	07	02790	20127	51	05662	24324
260	00	08490	00015	50	08490	24113	5-	05678	22228	5-	02775	20225
277	8-	02855	22225	5-	05667	00027	5-	02767	21327	5-	02777	03127
279	00	05690	00013									
285	70	01853	32303	50	00852	32302				--	51309	123**
288	5-	05567	30347	07	45390	00042	00	47330	20100	03	05690	20148
273	43	01763	27106							43	01853	12205
301	03	05690	01145	50	45322	00042	--	48109	08149	6-	67238	00068
321	50	05676	31326	53	05562	28214	00	45290	26100	00	47290	28140
299				50	01743	02213	5-	05645	24215	50	05543	25213
292				50	05661	00011	50	45362	00002	50	47263	00043
310				--	01533	32313				--	01643	32413
316	03	08490	30316	00	08490	32110	00	45390	00040	00	45390	18140
333				5-	01754	00084	5-	05655	00025	8-	62658	00088
334	**	81855	32186							**	03658	00028
340	00	05690	32203	00	08490	02113	00	45390	00040	50	45343	00043
136	80	02964	31485				46	01752	00083	04	47330	25182
336	46	61753	32455	43	01853	32414				53	03755	32428
350	07	05690	29313	00	05590	28210				00	45090	00040
368												
379	50	05663	32303	00	05590	32200	00	47390	00000	03	05590	00014
390	50	01674	30424				00	47290	24140	54	43372	24143
382	04	05690	30401	04	05590	30201	00	45390	28140	03	47290	00043
438	50	01543	04413							50	01753	02313
430	00	05690	30301	00	08490	32200	00	08490	00040	54	05565	32315
409	5-	02968	32328	53	02855	00087	5-	02756	00026	5-	02756	10126

III = Index Number of Station—See M.O. 252 or list issued on 1st of each month.
ww, W = Present and past weather—See M.O. 252.
h, N_h = Height and amount of low cloud—See M.O. 252.
N = Total amount of cloud—See M.O. 252.
$C_L C_M$ = Form of low and medium cloud—See page 1.
V = Visibility. F = Force of wind—See page 4.
DD = Direction of wind (8 = E, 16 = S, 24 = W, 32 = N).

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Saturday 30th November 1940.



BAROMETER. Isobars are drawn for intervals of two millibars.
WIND, WEATHER SYMBOLS. For explanation see opposite page.
SEA DISTURBANCE. Rough. High.
BAROMETRIC CHANGE from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. Saturday 30th Nov: 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Light variable wind or calms; fog or mist persisting in many places today; becoming widespread again after dusk and persisting tomorrow; weather fine apart from fog; cold, with frost at night
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Light variable wind becoming mainly southwest; fog persisting locally today; becoming mainly cloudy with slight rain locally; cold, becoming milder.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Southwesterly wind, moderate inland, fresh or strong on west and north coasts; cloudy, occasional local rain or drizzle; rather mild.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate or fresh S.-S.W. wind; cloudy, occasional slight rain or drizzle locally; rather mild.

GENERAL INFERENCE.

An anticyclone over England is tending to move slowly S.E. while troughs of low pressure are moving eastwards across northern districts. Fog will persist locally today inland in S. and E. England & Midlands, and will become general again in these areas after dusk. In other districts weather will be cloudy with occasional rain or drizzle locally. It will be cold in the South and East with slight frost at night, & rather mild in the West & North.

FURTHER OUTLOOK.

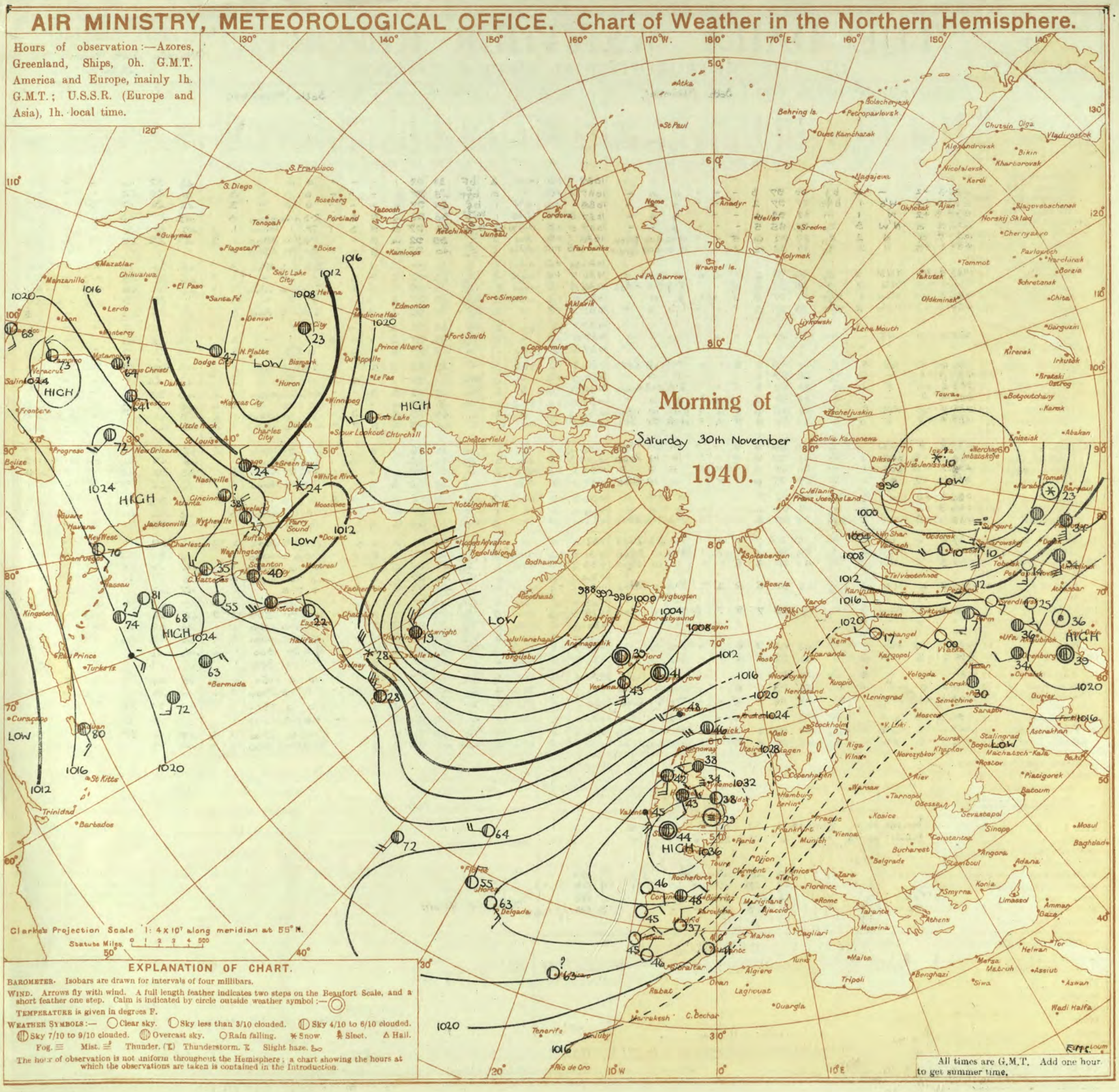
Milder cloudy weather with some rain will spread slowly S.E. to all districts, but some further fog is likely in the extreme S.E. at first; rainfall amounts will however be small in the Southeast.

Forecasts issued at 1030h G.M.T.

N. K. JOHNSON. D.Sc., A.R.C.S.
Director.

H.M.S.O. Press, Cornwall House, S.E.1.
359/3952 m.8045 D.3705 9000 6/44 11/40.

AIR MINISTRY, METEOROLOGICAL OFFICE. Chart of Weather in the Northern Hemisphere.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

WIND. Arrows fly with wind. A full length feather indicates two steps on the Beaufort Scale, and a short feather one step. Calm is indicated by circle outside weather symbol :—

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

The hour of observation is not uniform throughout the Hemisphere; a chart showing the hours at which the observations are taken is contained in the Introduction.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 30th November 1940.

No. 28,863.

OBSERVATIONS at 1 hr. G.M.T. 30th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1036·3	+2	—	0	bf	29	97	3	-	-	-	0	0	-
	S. Farnborough	226	1037·3	+4	W'S	1	bf+	27	97	2	-	-	-	0	0	-
	Boscombe Down	417	1037·3	+2	N	1	m	32	92	4	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1036·2	0	N'W	3	z0	37	85	5	-	-	-	0	0	-
	Lympne	346	1034·7	0	N	2	z0	35	92	6	5	-	-	4-6	4-6	3500
	Manston	154	1033·1	+6	N	2	z0	42	85	6	2	-	-	4-6	4-6	3000
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1035·5	+6	NW'N	3	z0	36	92	6	-	4	8	0	4-6	-
	Gorleston	5	1033·2	+4	NW	2	c	38	85	6	5	-	-	7-8	7-8	2500
	Mildenhall	19	1036·3	+6	WNW	1	bf+	31	97	3	-	-	-	0	0	-
	Cranwell	240	1037·0	+2	NW'W	2	bf+	33	97	3	-	-	-	0	0	-
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1036·9	0	NE	1	m	32	97	4	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1036·6	0	SE	3	c	40	85	8	5	-	-	7-8	7-8	2000
	Bristol	209	1037·5	+2	—	0	bf	29	97	3	-	-	-	0	0	-
	Portland Bill	32	1036·5	+4	N	2	bc	38	92	8	5	-	-	2-3	2-3	4000
	Plymouth	82	1037·5	0	—	0	m	33	97	4	-	-	-	0	0	-
	The Lizard	240	1036·7	-4	NNE	2	c	42	85	6	5	2	-	7-8	10	1500
	Scilly (St. Mary's)	163	1037·2	-2	—	0	c	44	75	8	5	2	-	4-6	9+	1300
	Guernsey	175														
6	Pembroke	142	1037·0	0	NW'W	1	c	43	85	8	8	-	-	9+	9+	1500
7	Holyhead	26	1035·4	-6	SSE	2	o/r	43	97	6	5	-	-	10	10	2000
	Chester (Sealand)	16	1036·4	-4	ESE	1	m	30	97	4	-	-	-	0	0	-
8	Manchester	70	1036·9	-2	E	1	F	27	97	0	-	-	-	10	10	<150
10	Spurn Head	29	1036·9	+2	W	3	bc	39	92	7	-	1	-	0	2-3	-
	Catterick	175	1036·3	-2	—	0	m	28	97	4	-	-	-	0	0	-
	Tynemouth	108	1035·3	-6	SW	2	bcf	34	85	3	2	-	-	2-3	2-3	2800
11	St. Abbs Head	280	1033·5	-6	W	4	bc	39	85	7	4	4	-	2-3	2-3	2500
	Leuchars	36	1033·2	-2	WSW	2	z0	38	85	6	5	7	-	4-6	10	3500
12	Renfrew (Abbots I.)	19	1034·3	-2	SW	2	o/f	41	92	4	5	-	-	10	10	4500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1035·5	0	W'S	2	r0r0	42	97	8	8	2	-	7-8	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1026·9	-10	SSW	5	c	48	85	7	5	7	5	7-8	10	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1028·9	-6	SSW	4	c	42	92	7	8	7	-	7-8	10	1500
16	Lerwick	156	1025·2	-8	SW	6	c/r	46	92	7	8	7	-	4-6	7-8	1500
17	Blacksod Point	18	1031·1	-10	S	5	Dr	47	97	7	6	-	-	10	10	<150
18	Malin Head	84	1032·4	0	S	4	c	42	73	7	8	-	-	7-8	7-8	4000
	Aldergrove	268	1033·5	-4	SSE	1	c	37	86	7	5	-	-	9+	9+	6100
19	Birr Castle	173	1035·3	-10	SSW	1	c	37	75	8	5	-	-	7-8	7-8	1500
20	Valentia Obsy.	30	1035·0	-4	SE'S	6	r0r0	45	85	8	5	-	-	9+	9+	2500
	Roches Point	22	1036·7	-6	S'W	1	bc	44	85	8	5	-	-	4-6	4-6	2500

OBSERVATIONS at 7 hr. G.M.T. 30th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)
London (Kew)	1037·8	+6	SW'S	2	bF	33	92	1	-	-	-	0	0	-
Croydon	1037·2	+6	—	0	bf+	25	97	2	-	-	-	0	0	-
S. Farnborough	1038·1	+6	W'N	1	bf	24	97	2	-	-	-	0	0	-
Boscombe Down	1037·6	+2	NNE	1	bf	30	92	4	5	3	1	2-3	4-6	4000
Calshot (Sthmtn.)	1037·0	+8	NW'N	2	bf+	32	97	3	5	3	1	Tr	1	6000
Lympne	1036·2	+8	NW	2	z0	35	92	6	5	-	-	7-8	7-8	3500
Manston	1036·5	+10	WNW	2	z0	40	92	6	5	-	-	9+	9+	2500
Shoeburyness	1036·6	+6	NNW	2	b	31	97	4	4	-	-	2-3	2-3	5700
Felixstowe	1036·7	+8	NW'N	2	z0	33	92	5	-	3	1	0	7-8	-
Gorleston	1036·4	+6	WNW	2	bc	35	85	6	5	4	-	2-3	4-6	2500
Mildenhall	1036·8	+2	WSW	2	bf+	28	97	2	-	-	-	0	0	-
Cranwell	1037·2	+2	W	3	bf-	31	92	3	5	-	-	2-3	2-3	1500
Birmingham	1037·1	+2	SW	2	bf	33	97	3	-	-	1	0	1	-
Upper Heyford	1037·5	+2	—	0	bf	28	97	2	-	-	5	0	1	-
Ross-on-Wye	1037·5	0	NW	1	m	25	97	4	-	4	1	0	2-3	-
Hartland Point	1036·3	+2	SSE	3	c	39	85	8	5	-	-	7-8	7-8	1500
Bristol	1037·9	+4	—	0	bf+	24	97	1	-	4	2	0	Tr	-
Portland Bill	1036·5	+6	N	2	bc	37	92	8	5	-	-	4-6	4-6	4000
Plymouth	1037·3	+4	ENE	1	m	31	97	4	-	-	-	0	0	-
The Lizard	1036·2	+2	N	2	c	43	75	8	8	2	-	9	10	3000
Scilly (St. Mary's)	1035·7	-6	—	0	c	44	65	8	5	7	-	4-6	10	1800
Guernsey														
Pembroke	1036·4	+2	E	2	c/r	43	85	7	8	-	-	9+	9+	1500
Holyhead	1033·3	-2	SW	3	bc	44	85	7	5	3	1	4-6	7-8	3000
Chester (Sealand)	1036·4	+2	SE'E	2	m	31	92	4	5	-	-	9+	9+	4500
Manchester	1037·2	0	E'S	1	cf	32	92	3	5	-	-	7-8	10	4000
Spurn Head	1036·4	+2	SW'W	3	bc	37	92	4	-	-	8	0	4-6	-
Catterick	1035·9	0	S	1	m	30	97	4	5	-	-	10	10	4500
Tynemouth	1034·4	0	SW	3	of	36	85	3	5	-	-	10	10	2800
St. Abbs Head	1032·6	-4	W	4	bc	38	85	7	4	4	-	2-3	2-3	2500
Leuchars	1031·9	-6	WSW	3	z0	37	92	6	5	7	-	2-3	4-6	4000
Renfrew (Abbots I.)	1033·2	-4	WSW	2	z0	43	85	6	5	-	-	10	10	4000
Eskdalemuir	1034·2	-4	—	0	F	34	97	1	-	-	-	10	10	<150
Point of Ayre	1034·4	-2	WSW	2	c	40	92	8	-	3	-	0	7-8	-
Tiree	1029·4	0	SW	4	r0r0	43	97	7	-	2	-	10	10	1500
Stornoway	1025·9	-10	SSW	5	c/d	49	85	7	5	7	-	4-6	9	1500
Dalwhinnie	1030·8	-2	SSE	2	bc	39	85	8	5	-	-	4-6	4-6	4000
Aberdeen	1030·7	-2	—	0	cf	35	97	2	5	-	-	7-8	7-8	4000
Wick	1027·7	-2	WSW	4	c/pr	45	92	8	5	7	8	7-8	9+	1500
Lerwick	1024·9	+4	SW	6	c/r	46	97	7	8	2	-	7-8	10	800
Blacksod Point	1030·4	-6	SW	5	r0r0	48	97	6	6	-	-	10	10	<150
Malin Head	1031·3	-4	SSW	4	c	42	85	7	5	-	-	7-8	7-8	2500
Aldergrove	1034·2	-4	S'W	2	c	39	75	8	5	-	-	10	10	5500
Birr Castle	1034·6	-4	SSW	1	c	39	85	8	5	-	-	7-8	7-8	2500
Valentia Obsy.	1033·4	-2	S	4	o/r	48	92	8	5	-	-	10	10	2500
Roches Point	1035·4	-2	W'S	2	c/pr	47	85	8	8	-	-	7-8	7-8	1500

PAST 24 HOURS.

Stations	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 29th Hrs. (36)
London (Kew)	1	*	43	32	16	-	Tr	5·8
Croydon	3	*	41	25	24	-	-	3·7
S. Farnborough	3	*	44	24	17	Tr	-	5·9
Boscombe Down	3	*	42	27	23	-	-	6·2
Calshot (Sthmtn.)	1	1	45	31	28	-	-	7·0
Lympne	1	§2	43	32	27	Tr	Tr	5·2
Manston	*	*	*	*	*	*	*	*
Shoeburyness	3	*	44	30	23	-	-	4·8
Felixstowe	1	1	46	31	28	0·2	-	4·2
Gorleston	1	1	46	34	28	0·5	-	*
Mildenhall	3	*		28	19	0·4	0·2	2·7
Cranwell	3	*	41	30	24	-	-	1·5
Birmingham	1	*	41	31	15	*	-	4·4
Upper Heyford	3	*	42	28	20	-	-	*
Ross-on-Wye	3	*	45	24	19	-	-	6·6
Hartland Point	0	2	46	39	38	Tr	-	0·9
Bristol	2	*	44	24	17	-	-	5·2
Portland Bill	1	2	45	35	*	-	-	*
Plymouth	0	0	44	31	29	-	-	6·9
The Lizard	1	2	43	41	*	-	0·5	0·0
Scilly (St. Mary's)	1	2	45	42	*	-	-	0·0
Guernsey								
Pembroke	1	2	47	42	*	Tr	1	0·8
Holyhead	1	1	48	42	40	0·1	0·1	1·5
Chester (Sealand)	3	*	45	29	23	-	-	6·5
Manchester	3	*	38	24	19	-	-	1·4
Spurn Head	0	2	44	36	*	1	Tr	0·5
Catterick	3	*	43	26	20	-	-	3·3
Tynemouth	1	2	43	33	31	1	-	*
St. Abbs Head	0	2	42	38	*	Tr	-	*
Leuchars	1	*	44	33	26	-	-	1·4
Renfrew (Abbots I.)	1	*	46	38	34	-	0·1	5·1
Eskdalemuir	5		41	27	21	-	Tr	6·6
Point of Ayre	1	2	47	36	*	-	0·5	5·1
Tiree	1	3	47	45	*	*	0·3	0·3
Stornoway	1	2	48	45	*	0·3	0·1	1·0
Dalwhinnie	1	*	40	35	31	-	Tr	4·6
Aberdeen	1	1	44	34	26	-	-	2·5
Wick	1	2	43	40	*	-	0·2	*
Lerwick	1	*	44	43	*	0·1	1	0·3
Blacksod Point	2	4	49	44	*	Tr	7	*
Malin Head	0	4	46	38	*	0·2	-	1·3
Aldergrove	1	*	43	35	29	Tr	-	0·0
Birr Castle	1	*	44	37	35	-	-	0·0
Valentia Obsy.	1	2	45	44	39	Tr	3	0·0
Roches Point	1	3	43	39	*	-	Tr	*

LONDON OBSERVATIONS

Day 7h—18h, Kew & Croydon.
9h—18h, Kensington.
9h—21h, other stations except for rainfall which is 9h—18h.

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew	18	bcm0xbz0	bz0m0	bcbm0xFF	43	32	16	-	Tr	5·8	*	*	1
Croydon	217	bcbcm	bczbf	bfwx	41	25	24	-	-	3·7	*	*	1
Greenwich (Royal Observatory)	149												
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	45	28	27	-		5·5	77	84	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	44	29	17	-	-		75	93	*
Camden Square	110	bc	b	*	44	29	25	-	-	*	*	98	*
Kensington	80	bc	bz	*	44	29	21	-	-		79	95	*
Hampstead Observatory	450		*								*		*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 30th

South Kensington.

Max.	Time.	Min.	Time.

Kew Observatory.

Max.	Time.	Min.	Time.
Defective Record			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome														

EXPLANATION OF FIGURES, LETTERS, etc.

COLUMNS 2, 16.
The barometric tendency is expressed in tenths of a millibar.

COLUMNS 4, 18.
The Beaufort Scale of Wind is used only for surface observations. In the accompanying table the speed of the wind corresponding with the different numbers is the speed at about 30 feet above the ground.

Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.	Beaufort No.	Statute m/h.
0	1	4	13–18	9	47–54
1	1–3	5	19–24	10	55–63
2	4–7	6	25–31	11	64–75
3	8–12	7	32–38	12	75
		8	39–46		

COLUMNS 34, 35.
Tr. = rain has fallen, but amount less than 0·1 mm.

COLUMNS 8, 22.—Code for surface visibility.

Code		Objects not visible at
0	Dense fog	55 yards.
1	Thick fog	220 ,,
2	Fog	550 ,,
3	Moderate fog	1,100 ,,
4	Mist or haze	1½ miles.
5	Poor visibility	2½ ,,
6	Moderate ,,	6¼ ,,
7	Good ,,	12½ ,,
8	Very good ,,	31 ,,
9	Excellent ,,	beyond 31m.

COLUMN 30.—Code for State of Sea.

0 Calm. 5 Very rough.
1 Smooth. 6 High.
2 Slight. 7 Very high.
3 Moderate. 8 Preciptious.
4 Rough. 9 Confused.

‡ Maximum and Minimum Temperatures are for the 24 hours ending 9 h. § Sea disturbance reported from Dungeness.

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