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.

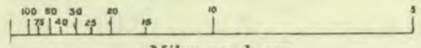
The wind at a height of 1,500–2,000 feet above ground usually blows *along* the isobars and, for the same temperature, pressure and latitude, the speed of the wind is inversely proportional to the distance between the isobars, *e.g.*, for isobars 1 inch apart for the chart on Page 2 the speed of the 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).

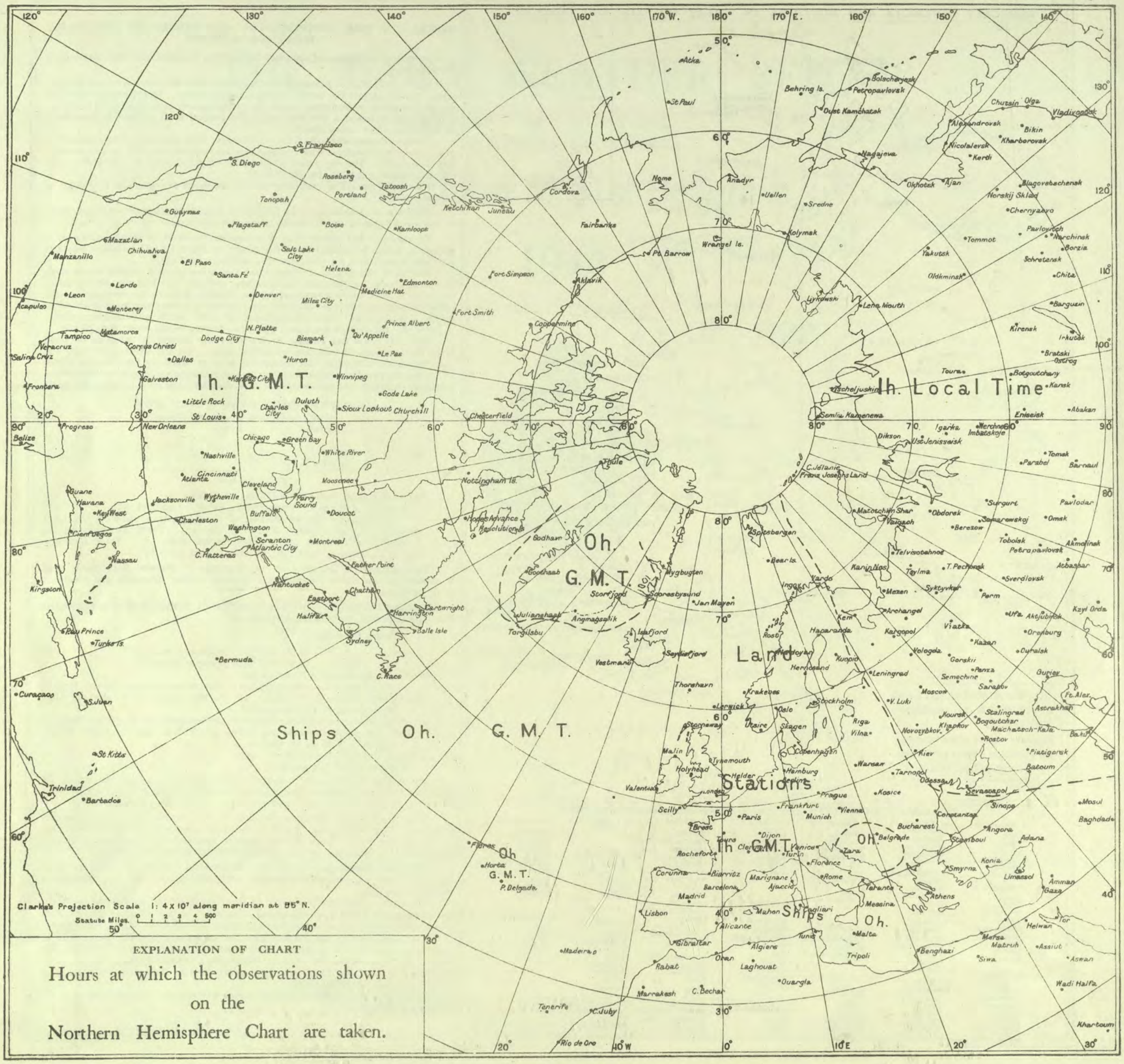
The entries in the British Section of the Report for the stations in the main tables on pages 1 and 4 are compared with those in the returns received from the stations at the end of the month and errors in the Report so found are noted.

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,
December, 1940 No. 288

Unsettled and stormy becoming cold and dull.

The month opened with most of the British Isles continuing under the influence of an anticyclone moving South; conditions were generally dull and rather unsettled in the North. From the 3rd to the 16th a succession of low pressure systems moved east across the country, giving very unsettled, stormy and rather mild conditions. On the 17th an anticyclone moved north to become established to the northeast of the British Isles until the 23rd, then drifting slowly west and south until the 29th when further disturbances moved in from the Atlantic. Dull, showery conditions of an easterly type persisted throughout this period, with low temperatures particularly in the Midlands and the Southeast, but becoming milder and generally unsettled from the 29th.

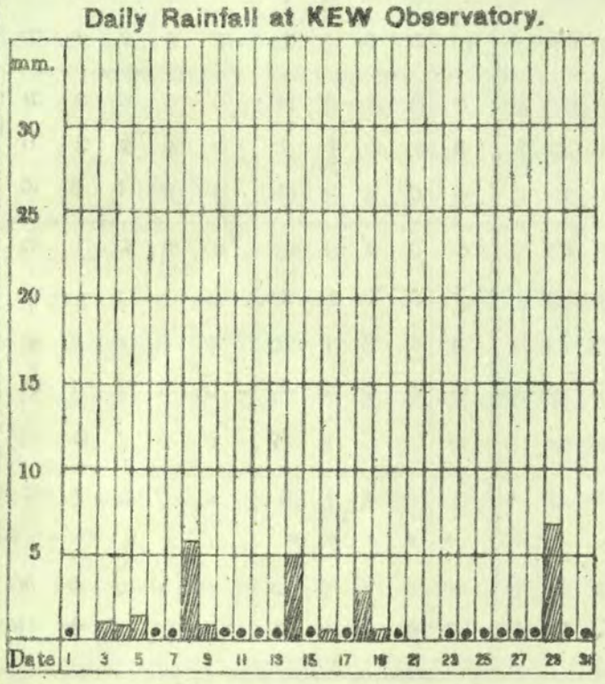
Strong, squally west to northwest winds were prevalent from the 4th to 16th and gales were experienced in many places in the West and North. Thunderstorms and local hail were also reported in these districts on most days until the 16th.

Sunshine totals were generally about average for the month although marked deficiencies occurred in Southwest England and in Ireland. Temperatures for the month were also about average, due to the early mild spell, though screen minima of less than 32°F were reported from most districts on several days, mainly in the second half of the month.

Snow occurred locally in Scotland frequently during the month and was also reported from East Anglia on the 8th and 11th, North Ireland on the 22nd and from many places in East and Southeast England from the 23rd to 25th.

Rainfall was in most areas, however, less than the average, especially in Central and Southeast England, Ross-on-Wye Croydon and Kew recording less than half the normal fall.

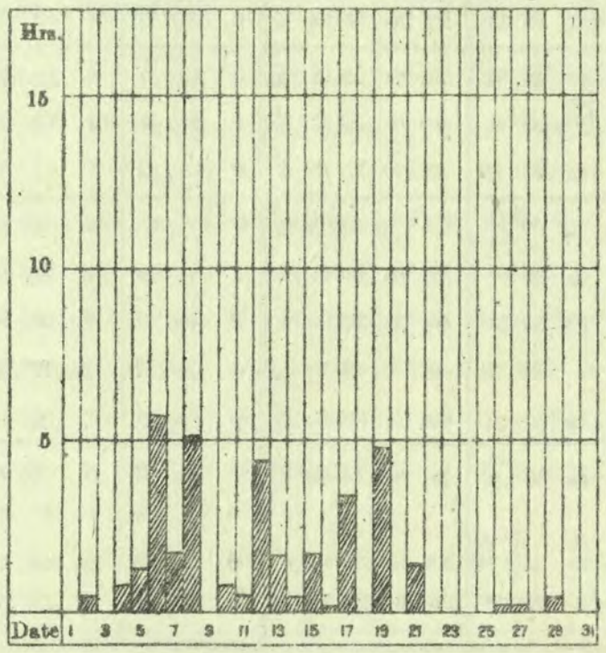
Daily Rainfall at KEW Observatory.



● = Less than 0·5 mm.

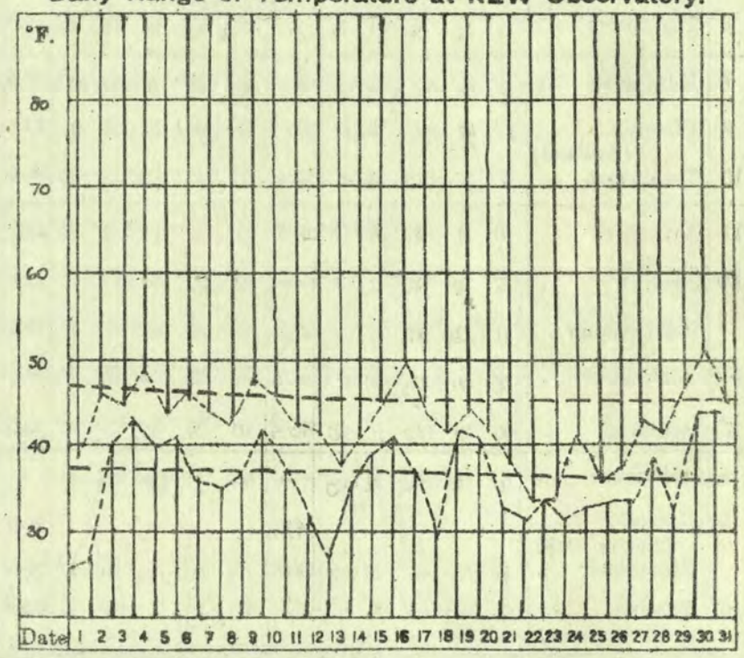
RAINFALL. Total for Month. 28 mm.

Daily Sunshine at KEW Observatory



SUNSHINE. Total for Month. 37 hrs.

Daily Range of Temperature at KEW Observatory.



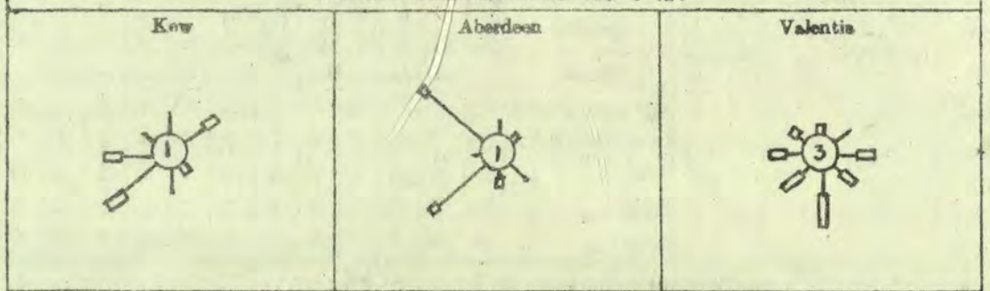
TEMPERATURE. The pecked curves indicate the maximum temperature recorded each day, and the minimum temperature each night throughout the month. The chain lines show normal values.

MEAN VALUES FOR THE MONTH.*

Stations.	Pressure: Mean	Pressure: Difference from average	Temperature: Mean	Temperature: Difference from average
	mb.	mb.	°F.	°F.
Kew	1020·8	+ 7·1	39·5	−1·3
Aberdeen	1016·0	+ 3·1	39·0	−1·1
Valentia	1020·5	+ 3·8	46·2	+0·1

*Pressure—The mean is for the 24 hours. It is derived from values at 7 h. and 19 h. daily 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 ...	7,204 *
Aberdeen ...	6,415
Lerwick ...	13,791
Valentia ...	

* Defective for 30 hours.

SUMMARY OF RECORDS OF TEMPERATURE, LOW CLOUD, VISIBILITY,

District.	Stations.	† Temperature. Number of daily readings within fixed limits. Maximum. 32° or below.	33° – 41°	42° – 50°	51° – 59°	60° – 68°	Average Maximum.	Minimum. 23° or below	24° – 32°	33° – 41°	42° – 50°	51° – 55°	Average Minimum.	Extremes—Warmest and Coldest. Days. Highest Max.	Date.	Lowest Max.	Date.	Nights. Highest Min.	Date.	Lowest Min.	Date.	Number of Ground Frosts.
							°F.						°F.	°F.		°F.		°F.		°F.		
1	London ... (Kew Obsy).	0	9	21	1	0	44·8	0	6	21	4	0	38·0	51	30	34	23	44	30, 31	26	1	16
	Croydon ...	0	11	19	1	0	44·4	1	9	18	3	0	37·5	52	4	33	22, 23, 25	44	30	23	1	12
	Calshot** ... (Southampton)	0	6	21	4	0	46·2	0	8	17	6	0	38·9	53	4	33	22	45	4, 16, 13, 30 & 31	29	18	12
	Lympne ...	2	11	17	1	0	43·4	0	10	18	3	0	36·3	52	4	32	22, 23	45	31	25	1	20
2	Shoeburyness ...	0	11	17	3	0	44·7	0	7	21	3	0	36·1	51	4, 30 & 31	35	22, 23	44	30	25	13	16
	Gorleston ...	0	12	19	0	0	44·1	0	5	24	2	0	37·6	50	4, 30	36	23	45	30	29	13	5
	Cranwell ...	0	13	16	2	0	42·7	0	6	24	1	0	35·2	52	16	34	22	44	30	25	13	9
3	Birmingham ... (Edgbaston)	1	14	14	2	0	42·6	0	6	22	3	0	36·3	53	16	31	22	45	16, 30	25	13	10
4	Ross-on-Wye ...	1	6	21	3	0	44·7	0	7	19	5	0	37·3	55	16	32	22	49	16	24	18	13
5	The Lizard ...	0	5	15	11	0	*	0	2	14	15	0	*	53	5, 15, 16	36	23	50	16	30	24	*
7	Holyhead ...	0	4	21	6	0	46·9	0	0	19	12	0	42·5	53	16	37	22	50	16	33	23	3
8	Chester ... (Sealand)	1	10	15	5	0	45·2	0	7	20	4	0	37·1	53	4, 18	32	13	49	16	28	22	16
10	Tynemouth ...	0	7	22	2	0	44·4	0	1	25	5	0	35·4	56	16	38	14	45	2, 30	32	13	2
11	Leuchars ...	0	11	18	2	0	43·5	0	6	22	3	0	35·6	55	16	34	31	48	16	27	13	13
12	Renfrew ...	2	9	18	2	0	43·6	0	10	16	4	1	35·8	55	16	32	12, 19	52	16	24	13	16
	Eskdalemuir ...	1	20	10	0	0	40·7	0	14	13	4	0	33·5	49	16	32	31	46	16	24	13	14
13E	Stornoway	0	9	21	1	0	44·9	0	3	20	8	0	38·5	51	1	35	31	48	1	28	31	*
15	Aberdeen ...	0	11	19	1	0	43·4	0	3	27	1	0	36·9	52	16	32	31	46	16	27	31	13
18	Aldergrove ...	0	13	16	2	0	*	0	7	19	4	1	*	54	16	36	28, 31	51	16	24	20	11
19	Dublin ... (Phœnix Park)						47·1						36·0									
	Birr Castle ...	0	12	11	8	0	45·8	1	10	15	4	1	37·8	55	15, 16	36	22, 23 & 24	53	16	23	20	12
20	Valentia ... (Cahirciveen)	0	2	14	15	0	49·1	0	3	7	19	2	43·0	55	16	40	24	54	16	27	25	5

District.	Stations.	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.
1	London ... (Kew Obsy).	2	27	0	1	26	0	1	23	0	0	2	2	3	1	0	0	4	2	1
	Croydon ...	0	26	0	3	25	0	3	10	12	0	1	3	6	4	0	0	4	4	2
	Calshot** ... (Southampton)	1	22	3	4	18	2	3	18	5	0	0	4	0	7	0	0	1	1	13
	Lympne ...	14	15	0	11	17	0	7	19	0	0	2	3	1	6	0	0	2	1	14
2	Shoeburyness ...	4	25	0	1	23	2	4	15	1	2	1	2	5	8	0	0	3	5	5
	Gorleston ...	5	25	0	2	27	0	2	26	0	0	0	1	2	1	0	0	0	5	6
	Cranwell ...	8	14	0	6	20	0	7	14	1	1	2	2	3	3	0	0	1	6	8
3	Birmingham ... (Edgbaston)	6	19	0	7	18	0	10	13	0	0	0	10	8	2	0	1	4	4	3
4	Ross-on-Wye ...	2	26	0	2	26	0	3	24	0	0	0	2	3	12	0	0	1	2	17
5	The Lizard ...	0	30	0	1	30	0	2	29	0	0	0	0	1	22	0	0	0	1	29
7	Holyhead ...	5	23	0	4	23	1	4	20	1	0	0	0	0	18	0	0	0	0	21
8	Chester ... (Sealand)	1	25	0	1	26	0	0	23	3	0	0	2	1	7	0	0	2	2	11
10	Tynemouth ...	0	29	0	1	27	0	2	27	0	0	0	2	3	14	0	0	1	3	10
11	Leuchars ...	0	27	2	2	26	2	3	23	0	0	0	0	1	19	0	0	0	1	19
12	Renfrew ...	2	26	0	5	23	1	3	22	0	0	0	3	2	8	0	0	2	2	17
	Eskdalemuir ...	11	16	0	13	16	0	12	14	1	0	0	0	1	20	0	0	0	1	19
13E	Stornoway	0	30	0	3	27	1	1	29	0	0	0	0	0	27	0	0	0	0	24
15	Aberdeen ...	2	29	0	3	25	1	3	22	0	0	0	1	3	12	0	0	1	0	11
18	Aldergrove ...	4	24	0	11	17	0	4	20	1	1	1	0	1	21	0	0	2	1	15
19	Dublin ... (Phœnix Park)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Birr Castle ...	0	26	0	0	28	0	0	26	0	0	0	2	0	29	0	0	1	0	30
20	Valentia ... (Cahirciveen)	6	22	0	7	23	0	6	24	0	0	0	1	0	23	0	0	0	0	26

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	1730	37·6	36·9	62	39·2	62		
850	4640	31·1	29·8	62	32·3	62		
750	7870	22·7	22·6	62	24·7	62		
650	11430	11·3	11·8	62	13·9	62		
550	15620	-3·2	-1·4	62	0·3	62		

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.	45	7	13	16	6	2	31	13	11	4	3	0	36	11	19	5	0	0	41	10	29	2	0	0	500 above ground.
1000 above M.S.L.	33	5	14	7	4	3	20	11	4	2	2	1	21	7	11	3	0	0	28	2	20	6	0	0	1000 above M.S.L.
2000 " "	11	4	5	2	0	0	6	1	3	2	0	0	9	3	2	4	0	0	11	4	5	2	0	0	2000 " "
3000 " "	6	2	2	2	0	0	3	2	1	0	0	0	5	1	2	2	0	0	3	1	2	0	0	0	3000 " "
4000 " "	4	0	3	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2	1	0	1	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 December 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).	12	14	5	0	0	5·9	6	1637	+168	37	0	1880	72	1886	0	1890	19	5	5	2	0	0	7	29	657	+51	28	−30	1856	162	1914	6	1926	0	2
	Croydon ...	12	14	5	0	0	5·5	6	1628	+103	38	0	1922	58	1929 1936	19	1930 1934	16	9	4	2	0	0	7	29	676	−3	34	−35	1921	174	1929	8	1926	0	2
	Calshot** ... (Southampton)	9	13	6	3	0	7·1	12	1915	+169	64	+6	1881	86	1886	21	1890	17	4	4	6	0	0	12	3	737	+91	59	−15	1871	251	1914	10	1926	1	1
	Lympne ...	13	9	8	1	0	6·7	6	1736	+31	57	+3	1921	85	1926	19	1934	11	9	6	5	0	0	11	14	670	−54	61	−21	1920	181	1929	14	1932	0	2
2	Shoeburyness ...	10	15	6	0	0	5·9	17	1630	−26	43	−6	1919	77	1936	20	1934	16	7	7	1	0	0	5	14	548	+45	32	−15	1920	94	1937	5	1932	0	4
	Gorleston ...	9 (6 days not available)	12	4	0	0	5·6	17	*	*	37	−4	1908	67	1936	20	1934	10	7	11	3	0	0	9	30	599	−23	63	+1	1871	151	1914	12	1932	0	2
	Cranwell ...	13	13	5	0	0	5·7	17	1575	+37	46	−1	1921	62	1929	30	1934	12	8	8	3	0	0	9	14	577	−13	46	−10	1917	105	1938	9	1933	0	1
3	Birmingham ... (Edgbaston)	15	12	4	0	0	4·1	28	1429	+125	29	−6	1887	90	1891	5	1890	12	9	7	3	0	0	9	14	835	+161	53	−15	1893	155	1914	11	1926	0	1
4	Ross-on-Wye ...	8	17	6	0	0	6·0	19	1575	+90	48	0	1915	73	1929	30	1915 1917	19	3	8	1	0	0	13	14	735	+18	33	−43	1859	196	1929	11	1926	0	0
5	Falmouth ... (Observatory)	14	12	5	0	0	5·1	27	1821	+111	31	−22	1881	82	1886	19	1890	11	3	5	10	1	1	26	13	1062	−45	144	−15	1871	280	1915	21	1926	1	0
7	Holyhead ...	14	11	6	0	0	5·8	21	1589	+39	41	0	1914	71	1916	15	1931	10	6	10	5	0	0	10	8	899	+12	72	−34	1871	241	1934	21	1926	0	1
8	Chester ... (Sealand)	15	10	6	0	0	5·5	17	1510	+134	38	−3	1928	76	1929	23	1927	12	4	12	3	0	0	7	10	793	+155	54	−9	1922	114	1929	13	1933	0	2
10	Tynemouth ...	*	*	*	*	*	*	*	*	*	*	*	1935	*	*	*	*	11	7	11	1	1	0	20	30	725	+104	69	+14	1915	136	1937	15	1932	1	1
11	Leuchars ...	16	9	5	1	0	6·3	2	1366	−104	37	−7	1922	66	1929	16	1934	18	5	5	3	0	0	11	14	715	+62	35	−28	1922	95	1929	8	1926	0	3
12	Renfrew ...	21	4	6	0	0	5·0	2	1195	+2	29	+2	1921	46	1933	9	1939	13	0	6	11	0	1	29	5	950	+11	131	+18	1921	230	1929	15	1933	1	3
	Eskdalemuir ...	13	12	6	0	0	5·7	12	1295	+94	39	+7	1910	60	1935	3	1912	10	2	9	6	2	2	33	6	1388	−41	187	+9	1910	339	1932	37	1933	0	8
13B	Stornoway	15	12	4	0	0	5·3	22	1070	−145	34	+12	1881	54	1935	6	1884	7	6	8	9	1	0	19	5	1021	−245	119	−40	1870	378	1898	30	1927	1	7
15	Aberdeen ...	17	10	4	0	0	5·6	2	1306	−23	27	−10	1881	68	1891	7	1903	14	3	9	5	0	0	14	14	889	+141	73	−9	1871	227	1876	20	1905	0	5
18	Aldergrove ...	17	11	3	0	0	4·7	17	1201	*	28	*	1927	70	1935	21	1931	9	4	10	8	0	0	15	29	943	+105	101	+14	1926	145	1929	28	1926	0	4
19	Dublin ... (Phœnix Park)												1881	79	1897	20	1910													1865	166	1914	19	1885		
	Birr Castle ...	13	15	3	0	0	5·1	21	1303	−3	27	−16	1881	68	1881	22	1884 1939	12	3	10	5	1	0	17	13	835	+8	89	+5	1862	165	1929	24	1885	0	1
20	Valentia ... (Cahirciveen)	17	9	4	1	0	6·2	26	1615	+247	37	−2	1880	76	1938	14	1931	7	5	6	12	1	0	25	13	1330	−84	151	−18	1866	345	1934	37	1926	1	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	0	8	9	10	3	1	0	0	0
Ross-on-Wye ...	0	0	6	17	7	1	0	0	0	0
Falmouth (Obsy.)	2	2	12	13	2	0	0	0	0	0
Renfrew ...	0	2	12	12	5	0	0	0	0	0
Eskdalemuir ...	0	1	10	10	8	2	0	0	0	0
Aberdeen ...	0	1	7	11	10	2	0	0	0	0
Valentia ...	4	6	11	7	3	0	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	1	0	0	0	0	0	0
Ross-on-Wye	0	30	0	1	0	0	0	0	0	0
Renfrew ...	0	26	2	3	0	0	0	0	0	0
Eskdalemuir	2	20	1	0	6	0	0	2	0	0
Aberdeen ...	0	27	0	1	2	1	0	0	0	0
Valentia ...	2	27	0	2	0	0	0	0	0	0

CODE for State of Ground.

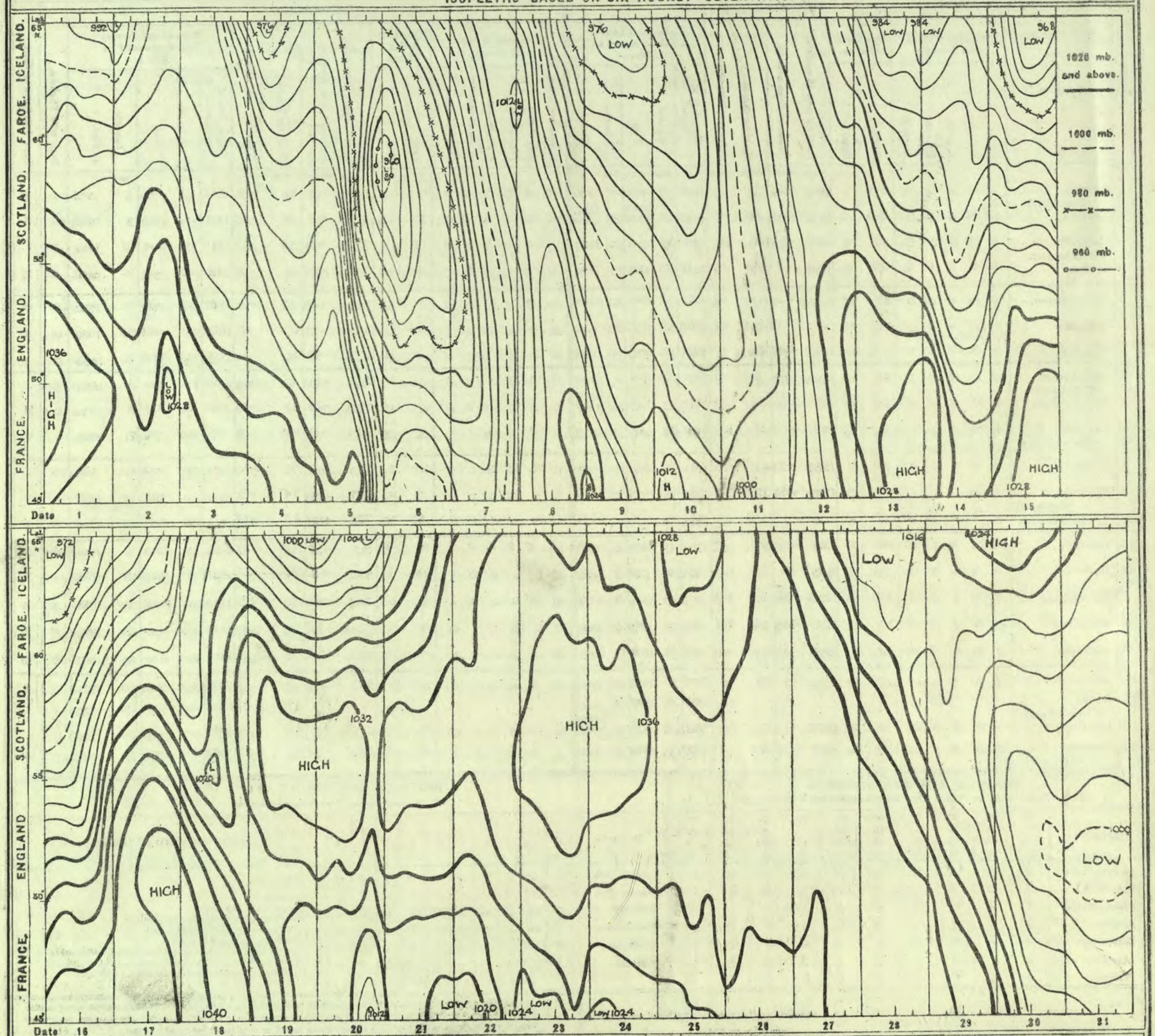
0 Dry.
1 Wet.
2 Flooded.
3 Frozen hard and dry.
4 Partly covered with snow or hail.
5 Covered with ice or glazed frost.
6 Covered with thawing snow.
7 Covered with snow, less than 6 ins., but ground not frozen.
8 Covered with snow, less than 6 ins., and ground frozen.
9 Covered with snow, greater than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

* 6.33/3995. Wt. 8048. 03702. Op. 948. 300. 1/41

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 1st December 1940.

No. 28864

OBSERVATIONS at 13h. G.M.T. 30th 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)	1037·8	-4	SW'W	2	f-	39	85	3	-	7	4	0	2-3	-
	Croydon	1038·1	+2	-	0	cf-	39	85	2	-	-	2	0	7-8	-
	S. Farnborough	1038·6	-2	NW'W	1	m/f	40	85	4	-	-	9	0	4-6	-
	Boscombe Down	1038·0	-4	N	1	bc/f	38	85	5	-	-	1	0	4-6	-
	Calshot (Soton.)	1037·7	-2	N'E	1	bcf	41	75	3	-	-	2	0	4-6	-
	Lympne	1037·0	+2	NE	1	Zo	42	85	5	8	-	6	2-3	9+	5000
	Manston	1037·4	-2	WNW	2	zo	43	85	5	8	3	4	2-3	9+	3000
2	Shoeburyness	1037·7	0	NW	1	c	43	75	8	-	-	6	0	7-8	-
	Felixstowe	1037·5	+2	NNW	1	Zo	44	75	5	-	3	3	0	4-6	-
	Gorleston	1037·4	+6	W'N	1	m	42	85	4	5	-	1	2-3	4-6	800
	Mildenhall	1037·5	-2	-	0	m	39	85	4	-	3	-	0	4-6	-
	Cranwell	1037·1	-6	WSW	3	m	39	85	4	-	3	2	0	7-8	-
3	Birmingham	1037·3	+0	WSW	2	bc	41	65	6	-	-	1	0	2-3	-
	Upper Heyford	1037·7	-6	SE	1	bcf	39	75	3	-	3	1	0	2-3	-
4	Ross-on-Wye	1037·3	-4	NW	1	f-	34	92	4	5	-	-	9	9	2500
5	Hartland Point	1037·1	-4	SSE	3	c	44	85	7	5	6	·	4-6	9	2500
	Bristol	1037·9	-6	-	0	f-	39	85	3	-	-	-	0	0	-
	Portland Bill	1037·5	+6	ENE	2	bc	43	85	8	5	-	-	4-6	4-6	4000
	Plymouth	1037·9	-4	E	1	Zo	42	85	6	5	3	8	2-3	7-8	6000
	The Lizard	1036·9	-4	S'E	2	c	47	65	8	8	2	-	9	10	3000
	Scilly (St. Mary's)	1036·9	-6	-	0	c	48	65	8	8	7	·	4-6	9+	1800
	Guernsey														
6	Pembroke	1037·4	+4	ENE	2	c	45	92	7	8	-	-	10	10	1500
7	Holyhead	1035·6	-2	WSW	3	c	48	75	9	5	-	-	9+	9+	4000
	Chester (Sealand)	1036·7	0	SE	2	m	36	85	4	5	-	-	10	10	4800
8	Manchester	1036·8	-2	-	0	f-	35	85	4	5	-	-	10	10	3400
10	Spurn Head	1036·3	-2	SSW	3	c	43	75	5	4	3	-	2-3	9	4000
	Catterick	1035·8	-10	S	1	cf	36	92	3	5	-	-	9+	9+	5200
	Tynemouth	1034·5	-8	WSW	2	cf	42	85	3	5	-	-	9+	9+	3000
11	St. Abbs Head	1032·2	+4	SW	4	c	41	75	8	5	7	2	4-6	7-8	2500
	Leuchars	1031·9	0	WSW	3	Zo	43	85	6	5	7	-	7-8	9	4000
12	Renfrew (Abbots I.)	1032·9	-6	SW'S	3	c	46	85	7	5	3	-	4-6	9+	3900
	Eskdalemuir	1034·1	-4	WSW	3	pr	40	85	6	5	1	-	7-8	9+	800
	Point of Ayre	1034·9	+2	W	4	c	47	85	8	5	-	-	9+	9+	4000
13A	Tiree	1029·3	-2	SW'S	4	ir	47	97	7	5	-	·	10	10	1500
13B	Stornoway	1026·1	-6	SSW	5	c/pr	50	92	7	8	7	-	7-8	9+	1500
15	Dalwhinnie	1031·9	-6	SW	2	c	41	85	8	8	4	2	7-8	9+	1500
	Aberdeen	1030·0	-2	WNW	1	bc/f	43	75	6	-	-	6	0	2-3	-
	Wick	1027·5	-4	SW	3	c	46	85	8	5	2	-	1	10	4000
16	Lerwick	1023·1	-14	SW	8	c	49	85	7	5	7	-	7-8	9+	800
17	Blacksod Point	1030·4	-4	S	4	dodo	50	97	7	6	-	-	10	10	<150
18	Malin Head	1030·9	-6	S	5	c	44	85	8	6	-	-	9	9	2500
	Aldergrove	1034·4	-6	S	2	c	43	75	7	5	-	-	9+	9+	4500
19	Birr Castle	1034·9	-2	S'W	1	c	46	85	6	5	-	-	9	9	2500
20	Valentia Obsy. †	1033·9	+2	S	4	dodo	49	92	6	5	-	-	9+	10	800
	Roches Point	1036·2	+2	SSW	4	c/pr	48	85	8	8	-	-	7-8	7-8	1500

OBSERVATIONS at 18h. 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)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1037·7	0	-	0	bf+	33	92	2	-	-	-	0	0	-	1	*
Croydon	1037·3	+4	-	0	bF+	31	97	1	-	-	-	0	0	-	1	*
S. Farnborough	1038·3	+2	-	0	bf+	31	92	3	-	-	1	0	1	-	1	*
Boscombe Down	1037·9	-2	-	0	m	35	92	4	-	-	-	0	2-3	-	1	*
Calshot (Soton.)	1037·4	0	NW	2	m	35	92	4	-	4	-	0	1	-	1	0
Lympne	1036·8	0	-	0	bcf	34	97	3	-	3	-	0	2-3	-	1	§
Manston	1037·7	+2	-	0	zo	34	92	5	-	4	-	0	1	-	*	*
Shoeburyness	1037·4	0	-	0	m	35	85	4	-	-	-	0	0	-	1	*
Felixstowe	1037·3	+2	NNW	1	m	36	85	4	-	3	-	0	2-3	-	1	1
Gorleston	1037·2	0	WNW	2	m	37	85	4	5	-	-	2-3	2-3	800	1	1
Mildenhall	1037·3	-2	SSW	2	bf	35	92	3	-	-	1	0	F	-	1	4
Cranwell	1036·7	0	W	3	bf	36	85	3	-	-	-	0	0	-	1	*
Birmingham	1036·8	0	WSW	2	m	39	85	4	5	-	-	10	0	2500	1	*
Upper Heyford	1037·5	-2	-	0	m/f	32	92	4	-	3	1	0	4-6	-	3	*
Ross-on-Wye	1037·1	0	WNW	1	of	35	92	3	5	-	-	10	10	1500	1	*
Hartland Point	1036·5	0	WSW	2	c	45	85	8	8	2	-	7-8	9+	1500	0	2
Bristol	1038·0	0	-	0	Zo	36	75	5	5	-	-	9+	9+	7200	1	*
Portland Bill	1037·3	+4	NE	2	bc	39	92	8	5	-	-	2-3	2-3	4000	1	2
Plymouth	1037·6	+4	-	0	m	38	75	4	5	-	-	4-6	4-6	6000	0	1
The Lizard	1036·6	0	-	0	c	45	65	8	8	2	-	9	10	2000	1	2
Scilly (St. Mary's)	1036·8	0	-	0	c	45	75	8	5	-	-	9+	9+	2400	1	2
Guernsey																
Pembroke	1036·1	-4	SW	2	c	46	65	8	8	-	-	9+	9+	3500	1	2
Holyhead	1035·4	-6	SW	3	c	47	85	8	8	3	-	9	10	2600	1	1
Chester (Sealand)	1036·3	+2	SE'E	1	m	39	85	4	5	-	-	10	10	4500	1	*
Manchester	1036·6	+2	-	0	of	37	85	2	5	-	-	10	10	3000	1	*
Spurn Head	1036·5	0	SW	2	of	40	75	3	5	-	-	10	10	2500	0	2
Catterick	1035·7	+4	S'W	1	of	37	92	3	5	-	-	9	9	4900	0	
Tynemouth	1034·2	+4	SW	2	of	43	75	3	5	-	-	9+	9+	3000	1	2
St. Abbs Head	1031·5	-4	W	4	bc	42	75	8	4	4	-	2-3	2-3	2500	0	2
Leuchars	1031·3	0	WSW	3	zo	45	85	5	5	-	-	9+	9+	2100	1	*
Renfrew (Abbots I.)	1032·1	-4	SW'S	4	ido	45	97	5	5	2	-	9	10	1800	1	*
Eskdalemuir	1033·8	+4	SW	2	m	37	97	4	-	-	-	0	0	-	1	*
Point of Ayre	1034·5	+4	SWW	2	c	44	92	8	5	1	-	4-6	9+	2500	1	2
Tiree	1028·1	-2	SW'S	4	c	49	92	7	5	-	-	10	10	1500	0	4
Stornoway	1025·0	-4	SSW	5	c/r	49	92	6	5	2	-	7-8	7-8	1000	1	3
Dalwhinnie	1029·5	-4	SW	2	c	42	92	7	5	2	-	9	10	1500	0	*
Aberdeen	1029·8	-2	WSW	1	bf+	38	92	3	5	-	6	tr	tr	2500	1	1
Wick	1026·4	-8	SW	3	bc	46	92	7	5	7	-	2-3	4-6	2500	1	2
Lerwick	1021·6	-4	SW	8	c	48	92	6	8	2	-	4-6	10	800	1	*
Blacksod Point	1029·8	0	S	5	ido	51	97	7	6	-	-	10	10	<150	1	3
Malin Head	1030·2	-2	S	5	bc	45	85	7	4	-	-	4-6	4-6	2500	0	3
Aldergrove	1033·9	+2	S	2	ido	43	85	7	3	7	-	7-8	9+	2400	1	*
Birr Castle	1034·2	+4	SSW	1	c	44	85	8	5	-	-	0	7-8	2500	1	*
Valentia Obsy. †	1033·6	+2	S	4	c	50	92	8	5	-	-	10	10	1500	1	4
Roches Point	1035·2	-4	SSW	4	bc	48	85	8	5	4	-	2-3	2-3	2500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 30th (37)	13h.—18h. 30th (38)	18h 30th to 1h. 1st (39)	1h.—7h. 1st (40)
London (Kew)	bFxbcf	bcfbf	bfcFbFFx	bbccFFx
Croydon	bFxbcf	bcfbF	bfx	bfxbc
S. Farnborough	bFbcm	cmobcbfx	bfxFFo	*
Boscombe Down	bcfcf	bcmobm	bF	cFcm
Calshot (Soton.)	bcxf ⊕	bcfcmbm	bmffx	bfpFcfx
Lympne	cbccmo ⊕	bcmffx	bffmmox	
Manston	cpromcmo	cbcmo	bffx	
Shoeburyness	bcmxbcmo	bcmocbm	bmbfFx	Fx
Felixstowe	biFbm	bmobcmom	bmffx	bffxmx
Gorleston	bcm	bccbcm	bcbmx	bbcmx
Mildenhall	bffxbcm	bcmbfx	bfx	bfxoFxcfx
Cranwell	bf,bcm	bcmobf	b,oFF,bcff	bccff
Birmingham	fb	bcc		
Upper Heyford	Fbcf	bcfmcfbc	oFF	oFfcm
Ross-on-Wye	bcmcfbf	cmfof		
Hartland Point	c	cido	cr	
Bristol	bc,bFf	bf, cmo	cmoof	offw
Portland Bill	bc	cbc	bcc	c
Plymouth	cmobcmo	bcmozofg	bcmbmcfg	cmcmozcm
The Lizard	c	c	c	
Scilly (St. Mary's)	c	c	c	
Guernsey				
Pembroke	proc	c	c	bc
Holyhead	bcmoc	c	cbcc	cbcb
Chester (Sealand)	cmom	cm	cfmoc	bcbmoc
Manchester	cffFF	cff	cffiro	cffirodo
Spurn Head	cm	cmf	bccm	*
Catterick	cfxcf	cfcfe	bcfirocmo	bcmocm
Tynemouth	cff	cff	cffbc	bco
St. Abbs Head	c	cbc	bcq	cq
Leuchars	bcmoxcmo	cmo	cbcmobcw	idocbc
Renfrew (Abbots I.)	cbcc	cmoido	cmoido	idoiroidocmo
Eskdalemuir	Fccpro	probcbm	bbccodd	oddc
Point of Ayre	c	c	bc	
Tiree	co	o	oidr	oiD
Stornoway	cpro	crr	c	crr
Dalwhinnie	bcc	co	*	cpro
Aberdeen	ffifb	ifbf		
Wick	c	cbc	cbcc	prolc
Lerwick	cirtrr (gale)	c (gale)	ciro (gale)	
Blacksod Point	dd	id	c	
Malin Head	c	cbc	bcc	ccproc
Aldergrove	cciroc	ccido	doriroc	c
Birr Castle	c	c	bbcc	c
Valentia Obsy. †	cdododododo	dodoc	cidododoc	cido
Roches Point	cproc	bc	c	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.

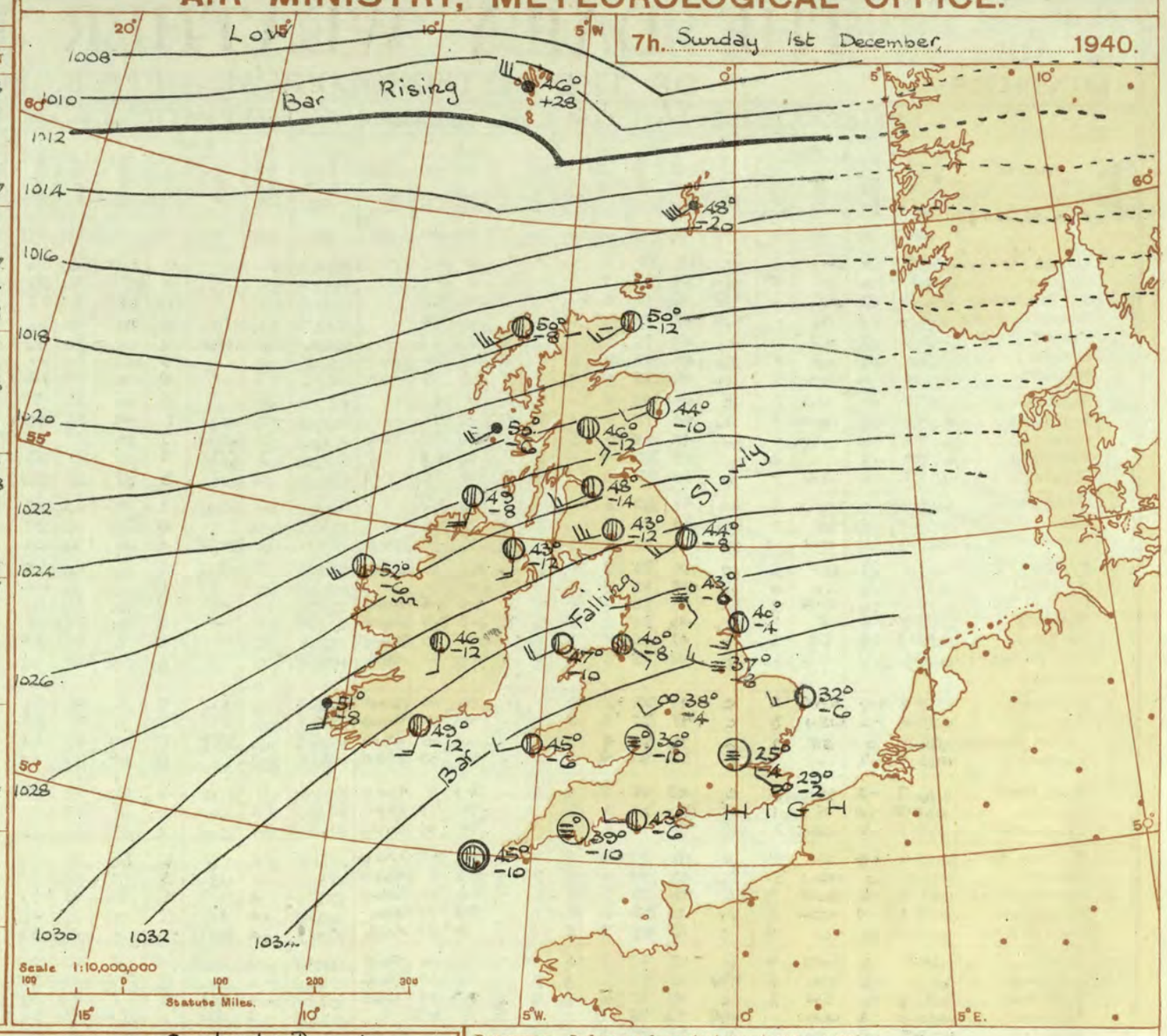
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 30th November			18h. G.M.T.			01h. G.M.T. 1st December			07h. G.M.T.		
III	$C_L C_M$	ww $V h_h N_h$	DDFWN	$C_L C_M$	ww $V h_h N_h$	DDFWN	$C_L C_M$	ww $V h_h N_h$	DDFWN	$C_L C_M$	ww $V h_h N_h$	DDFWN
109	57	03865	20427				52	02755	20227	52	21747	20428
115				52	81736	53788	52	14744	53685	52	81624	53687
203							6-	81848	49688			
206	57	02963	22427	57	02964	22225	5-	02856	26156	52	02955	26228
210	14	02952	20327	54	01951	20313	51	02965	18327	5-	02967	53527
220	62	53726	22558	54	25738	21584				6-	68528	21558
230	5-	21848	18158	5-	53648	18158	5-	56538	20258	5-	51648	20451
245	70	02861	24328	50	00772	20522	57	05647	20328	5-	05647	53627
260	57	02864	22326	50	01764	18314	5-	02746	53416	57	02745	53427
277	5-	02977	19327	5-	52757	13357	5-	02767	19457	57	02747	20428
279	--	08448	20328	5-	05664	20414	--	05647	20427	--	02758	53528
285	8-	02537	26427	8-	02537	28527						
288	5-	47367	20147	52	57357	20158	00	45290	20243	5-	05558	20248
273	46	01753	15313									
301	5-	45368	12148	5-	47268	14248	5-	45257	14167	53	05554	17167
321	52	43364	24148	5-	45277	00047	5-	45368	19148	5-	62457	19268
299	5-	08448	23228	5-	08448	23228	5-	45248	00048	5-	08448	23248
292	5-	45268	00048	5-	45258	00048	00	47290	16240	5-	43358	12148
310	--	04536	26326									
316	53	45374	20145	5-	45365	18145	5-	45368	18148	5-	67358	20168
333	5-	02767	04227	5-	63667	00087	5-	62647	00067	57	02855	00067
334		51655	00028									
340	5-	08478	18128	5-	47358	18128	5-	08468	00028	50	05564	16214
136	03	05590	24244	00	08490	19210	50	08474	20244			
336				51	03754	04428						
350	03	08490	12246									
368												
379	00	05690	18113	5-	08467	20127	5-	05558	22128	5-	05548	22128
390	03	05590	00045	00	47390	00040	00	45290	00040	50	45276	00046
382	--	46009	00049	--	46009	00049	--	46109	32149			
438	56	01763	04114							50	01664	02114
430	00	01690	04114	07	08490	00013	00	45290	30143	03	45390	00044
409	53	05664	00028	53	05675	12128	5-	05658	00028	5-	05648	12128

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 1st December
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light variable wind becoming light, southwesterly. Fair, local fog; becoming less cold.
5 S.W. England 6 South Wales ... 7 North Wales ...	Light or moderate southwest wind. Mainly fair, becoming mild.
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Moderate southwest wind. Partly cloudy, occasional slight rain locally; becoming 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	Moderate or fresh southwest wind, strong at times on coast. Cloudy, occasional rain or drizzle; mild.
18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 8-11

GENERAL INFERENCE.

An anticyclone extending from southwest of the British Isles to Germany is receding slowly east or southeast, while shallow troughs of low pressure are moving westwards across northern districts. Widespread fog in South and East England and Midlands will disperse slowly during the day and will be succeeded by mainly fair weather, but there will be further local fog in extreme South England to-night. Elsewhere, weather will be mainly cloudy with occasional rain more especially in Scotland.

FURTHER OUTLOOK.

Mainly fair in the Southeast, unsettled in the North and West.

Gale warning in operation in districts 13 (b) and 16.

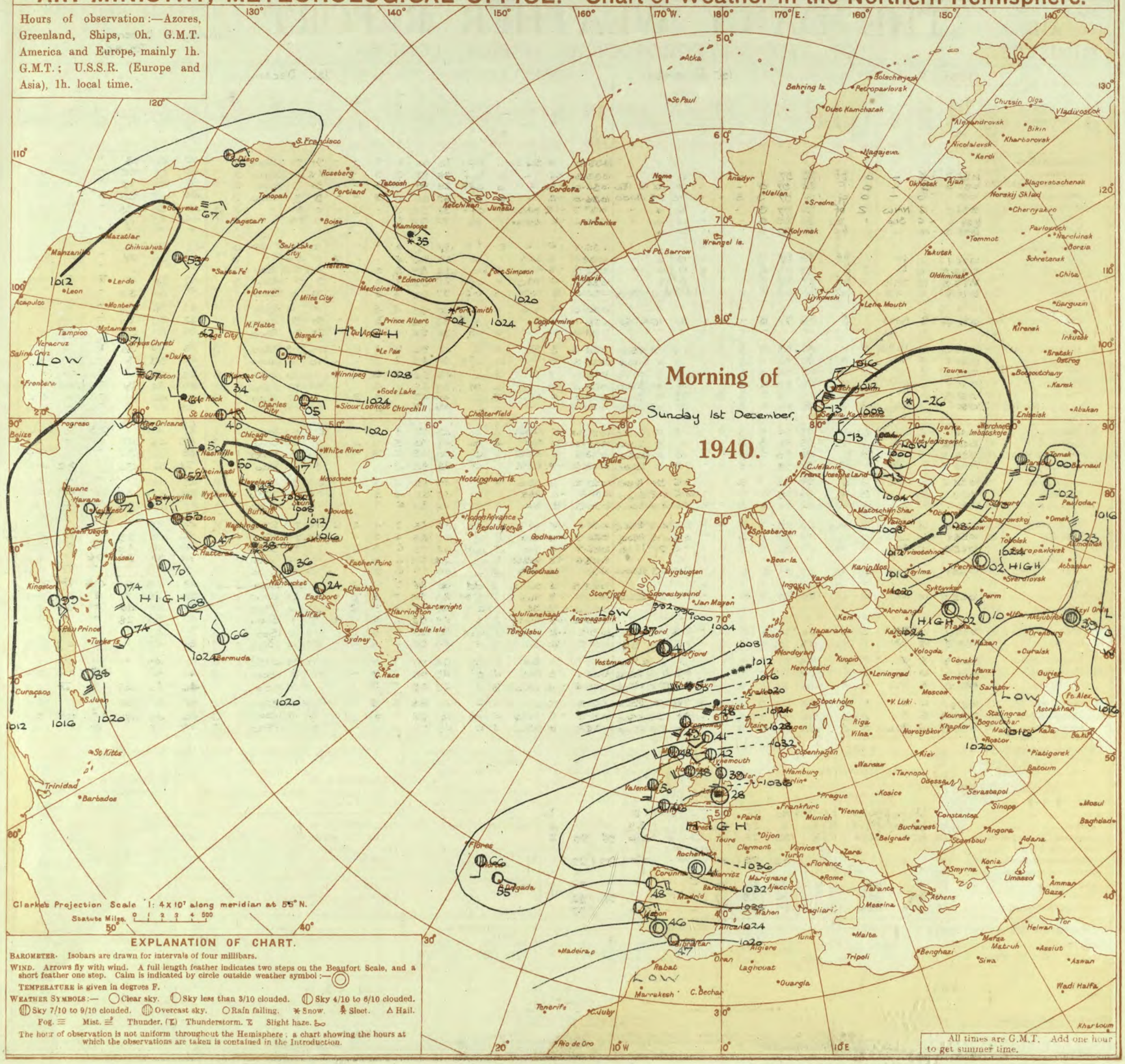
Forecasts issued at 1030 G.M.T.

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.

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

Sunday 1st December 1940.

No. 28,864

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

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	1036·7	-6	–	0	bF	28	97	1	–	–	–	0	0	–
	S. Farnborough	226	1037·4	-6	–	0	F	24	97	0	–	–	–	10	10	< 150
	Boscombe Down	417	1037·1	-10	–	0	cf-	31	97	3	5	–	–	7·8	7·8	4000
	Calshot (Sthmtn.)	8	1036·9	-6	NNW	2	bf	36	97	3	–	–	–	0	0	–
	Lympne ...	346	1036·4	-6	SW	1	Zo	33	85	6	–	–	–	0	0	–
	Manston ...	154	1036·3	-10	–	0	bf	31	92	2	–	–	–	0	0	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1036·1	-10	W	1	bf	35	97	3	–	–	–	0	0	–
	Gorleston ...	5	1035·5	-10	W	3	b	33	85	5	–	–	–	0	0	–
	Mildenhall ...	19	1035·9	-12	SSW	2	bf	27	92	2	–	–	–	0	0	–
	Cranwell ...	240	1035·5	-6	W'S	3	bcf-	37	85	3	5	–	–	4·6	4·6	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1036·5	-6	SSW	1	F	32	97	0	–	–	–	10	10	< 150
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1035·9	-8	WSW	3	r	44	85	8	5	2	–	4·6	7·8	2500
	Bristol ...	209	1036·6	-10	SW	1	o/f	36	85	3	5	–	–	10	10	6400
	Portland Bill ...	32	1036·5	-6	NE	2	c	40	92	8	5	–	–	10	10	4000
	Plymouth ...	82	1037·1	-4	ENE	1	m	38	85	4	5	–	–	10	10	3500
	The Lizard ...	240	1036·8	0	E	2	c	45	75	7	5	2	–	7·8	10	2000
	Scilly (St. Mary's)	163	1036·1	-2	WSW	2	c	46	65	8	5	–	–	10	10	2400
	Guernsey ...	175														
6	Pembroke ...	142	1036·1	-2	WSW	3	c	46	65	8	5	2	–	7·8	10	3000
7	Holyhead ...	26	1034·4	-6	SW	4	c	48	85	8	5	–	–	9	9	3000
	Chester (Sealand)	16	1035·2	-6	–	0	c	39	85	9	5	–	–	10	10	3900
8	Manchester ...	70	1035·4	-6	ESE	1	rf	36	92	2	5	–	–	7·8	10	2500
10	Spurn Head ...	29	1034·6	-4	SSW	3	c	39	85	5	5	1	–	4·6	9+	1500
	Catterick ...	175	1033·1	-10	W	3	ro	43	75	5	5	–	–	4·6	4·6	4000
	Tynemouth ...	108	1031·9	-6	SW	2	bc	42	75	6	2	–	–	4·6	4·6	3000
11	St. Abbs Head	280	1028·5	-14	W	3	bcq	43	92	7	4	–	–	2·3	2·3	2500
	Leuchars ...	36	1028·1	-22	WSW	4	Zo	45	92	6	5	–	–	4·6	4·6	1800
12	Renfrew (Abbots I.)	19	1029·2	-12	SW	4	ido	47	92	6	5	1	–	7·8	9+	1200
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1033·1	-4	W'S	3	bc	45	97	8	5	–	–	2·3	2·3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1022·0	-12	SSW	4	c	49	85	7	5	–	–	9+	9+	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1022·7	-16	SSW	3	c	48	92	7	5	7	–	7·8	10	1500
16	Lerwick ...	156	1019·3	-18	SSW	8	ro	48	92	6	3	2	–	7·8	10	800
17	Blacksod Point	18	1028·8	-8	SW	5	c	52	97	7	9	–	–	9	9	< 150
18	Malin Head ...	84	1028·0	-10	SW'S	4	c	48	85	7	5	–	–	7·8	7·8	2500
	Aldergrove ...	268	1031·9	-8	S'W	4	c	44	85	7	5	–	–	9+	9+	4500
19	Birr Castle ...	173	1023·1	-6	S	1	c	44	92	7	5	1	–	7·8	10	2500
20	Valentia Obsy.	30	1033·2	-6	S	4	c	50	92	8	5	–	–	9+	9+	1500
	Roches Point	22	1034·9	-4	SSW	3	c	48	92	8	5	–	–	9+	9+	1500

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

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)	1035·9	-6	SW'S	1	cf-	31	92	2	5	–	–	9+	9+	2500	3	*
	Croydon ...	1035·5	-4	–	0	bcf	25	97	3	5	–	–	4·6	4·6	3500	3	*
	S. Farnborough	1036·0	-2	–	0	cf+	28	97	2	5	–	–	9+	9+	5000	3	*
	Boscombe Down	1036·0	-2	–	0	Zo	33	85	6	5	–	–	9	9	2500	3	*
	Calshot (Sthmtn.)	1037·7	-12	NNW	1	cf-	34	92	3	–	3	–	0	9+	–	3	0
	Lympne ...	1035·3	-2	WNW	1	Zo	29	92	6	–	–	8	0	7·8	–	1	1
	Manston ...															*	*
2	Shoeburyness ...	1035·7	-6	–	0	F+	30	97	0	–	–	–	10	10	< 150	3	*
	Felixstowe ...	1035·1	-6	W'N	1	m	32	92	4	–	–	2	0	4·6	–	3	1
	Gorleston ...	1034·9	-6	WSW	3	bc	32	85	5	5	–	–	2·3	2·3	800	3	1
	Mildenhall ...	1034·6	-10	SSW	2	cf-	29	92	3	5	–	–	9	9	4500	3	*
	Cranwell ...	1034·0	-8	W'N	3	of-	37	92	3	5	–	–	10	10	2000	1	*
3	Birmingham ...	1034·0	-4	SW	2	m	38	92	4	5	–	–	10	10	2500	1	*
	Upper Heyford	1035·1	-6	S	1	m/f	33	92	4	5	–	–	9+	9+	4000	3	*
4	Ross-on-Wye	1034·4	-10	–	0	m	36	92	4	5	–	–	9+	9+	2500	1	*
5	Hartland Point	1034·4	-8	SE	2	c	40	92	8	8	6	–	4·6	7·8	2500	1	3
	Bristol ...	1035·3	-10	–	0	cf+	36	85	3	5	–	–	10	10	6000	1	*
	Portland Bill ...	1035·0	-6	W	2	c	43	92	7	5	–	–	10	10	4000	1	2
	Plymouth ...	1035·4	-10	–	0	m	39	85	4	5	–	–	9+	9+	3500	0	0
	The Lizard ...	1035·0	-10	SE	3	c	46	65	7	8	2	–	9	10	2000	1	2
	Scilly (St. Mary's)	1034·3	-10	–	0	c	45	75	8	8	7	–	4·6	7·8	1800	1	1
6	Pembroke ...	1034·4	-6	WSW	2	bc	45	75	8	2	–	–	2·3	2·3	3000	0	1
7	Holyhead ...	1032·4	-10	SW	4	bc	47	92	8	5	4	–	1	2·3	3000	1	2
	Chester (Sealand)	1033·3	-8	ESE	1	c	40	85	5	5	–	–	10	10	3400	1	*
8	Manchester ...	1033·5	-10	SE'E	1	cf	38	92	3	5	–	–	9+	10	2100	1	*
10	Spurn Head ...	1033·2	-4	SSW	3	c	40	85	4	5	4	–	4·6	9+	1500	0	2
	Catterick ...	1031·6	-6	SSE	1	m	43	85	4	5	–	–	7·8	7·8	3500	0	*
	Tynemouth ...	1030·3	-8	SW	3	o	44	85	6	5	–	–	10	10	2200	1	1
11	St. Abbs Head	1036·1	-14	W	5	cq	45	85	7	4	4	2	4·6	7·8	2500	0	2
	Leuchars ...	1024·9	-14	SW	4	Zo	47	85	6	5	–	–	7·8	7·8	1500	1	*
12	Renfrew (Abbots I.)	1026·7	-14	SW	3	c/d	48	97	6	5	7	–	7·8	9+	2500	1	*
	Eskdalemuir ...	1028·6	-12	WSW	5	c	41	92	6	5	–	–	10	10	450	1	
	Point of Ayre ...	1030·1	-14	W'S	4	c	48	85	8	5	1	–	7·8	10	2500	1	3
13A	Tiree	1023·3	-6	SW'W	4	dd	50	97	7	–	2	–	10	10	1500	1	0
13B	Stornoway ...	1019·5	-8	SW	5	c/pr	50	92	7	5	7	–	9	9+	2000	1	2
15	Dalwhinnie ...	1023·0	-12	SE	3	c	46	75	7	5	2	–	4·6	10	2500	0	*
	Aberdeen ...	1023·4	-10	SW'W	2	b	44	92	6	5	–	8	Tr	1	4000	1	1
	Wick ...	1019·5	-12	SW	3	c/pr	50	85	8	5	2	–	4·6	10	1500	1	2
16	Lerwick ...	1014·9	-20	SW	8	ir	48	97	6	8	2	–	7·8	10	800	1	*
17	Blacksod Point	1027·3	-6	SW	5	cq	52	97	7	9	–	–	9+	9+	< 150	1	4
18	Malin Head ...	1026·1	-8	SW	4	c	49	92	7	9	–	–	9	9	1500	0	3
	Aldergrove ...	1025·6	-12	S'W	3	c	43	85	7	5	–	–	10	10	1100	1	*
19	Birr Castle ...	1031·5	-12	S	1	c	46	85	8	5	1	–	7·8	10	2500	1	*
20	Valentia Obsy.	1031·5	-8	SSW	4	ido	51	92	7	5	–	–	10	10	1500	1	3
	Roches Point	1032·9	-12	SSW	3	c	49	92	8	5	–	–	9	9	1500	1	3

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 Both Hrs. (36)
1	London (Kew)	40	26	18	–	0·1	1·8
	Croydon ...	41	23	22	–	–	2·2
	S. Farnborough	42	24	10	–	–	2·6
	Boscombe Down	44	25	23	Tr	–	4·4
	Calshot (Sthmtn.)	43	31	25	–	Tr	3·5
	Lympne ...	44	25	17	–	–	0·7
	Manston ...	*	*	*	*	*	*
2	Shoeburyness ...	43	27	12	–	–	4·4
	Felixstowe ...	45	30	24	–	–	4·8
	Gorleston ...				–	–	*
	Mildenhall ...	43	26	17	Tr	Tr	2·8
	Cranwell ...	41	30	32	–	–	1·9
3	Birmingham ...	43	36	32	*	–	3·2
	Upper Heyford	42	30	20	–	–	*
4	Ross-on-Wye	36	35	32	–	–	1·3
5	Hartland Point	45	40	36	Tr	1	0·0
	Bristol ...	42	33	31	–	–	4·1
	Portland Bill ...	43	37	*	–	–	*
	Plymouth ...	45	34	31	–	–	1·9
	The Lizard ...	47	44	*	–	–	0·0
	Scilly (St. Mary's)	48	44		–	–	0·3
6	Pembroke ...	47	43	*	0·3	–	0·0
7	Holyhead ...	48	46	43	–	–	0·1
	Chester (Sealand)	45	39	32	–	–	0·0
8	Manchester ...	37	34	30	–	0·2	0·0
10	Spurn Head ...	43	39	*	–	–	1·4
	Catterick ...	40	37	35	–	0·1	0·0
	Tynemouth ...	45	40	35	–	–	*
11	St. Abbs Head	44	39	*	–	–	*
	Leuchars ...	45	42	39	–	Tr	0·0
12	Renfrew (Abbots I.)	46	45	42	Tr	0·1	0·0
	Eskdalemuir ...	41	37	36	0·6	1	0·2
	Point of Ayre ...	47	43	*	–	Tr	0·0
13A	Tiree	49	48	*	0·5	Tr	0·1
13B	Stornoway ...	50	48	*	1	0·4	0·0
15	Dalwhinnie ...	43	41	40	–	0·1	0·0
	Aberdeen ...	44	36	28	–	–	0·0
	Wick ...	47	44	*	–	Tr	*
16	Lerwick ...	51	47	*	1	0·3	0·0
17	Blacksod Point	51	49	*	–	2	*
18	Malin Head ...	46	43	*	–	0·1	0·2
	Aldergrove ...	44	42	39	1	Tr	0·0
19	Birr Castle ...	47	40	37	–	–	0·1
20	Valentia Obsy.	50	49	47	2	0·1	0·0
	Roches Point	49	47	*	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.)	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	bFx bcf	bcf bf	bfo FbFFx	40	26	18	–	0·1	1·9	*	*	3
Croydon ...	217	bFx bcf	bcf bF	bfx bc	41	23	22	–	–	2·2	*	*	4
Greenwich (Royal Observatory) ...	149	bffx	bcffx	cffx	33	23	14	Tr	Tr	0·0	96	99	2
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	33	25	*	–		0·0	99	99	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*									*
Camden Square ...	110	of	of	*	34	28	25	–	–	*	*	96	*
Kensington ...	80	bcf	bcf	*	36	28	17	–	–		98	92	*
Hampstead Observatory ...	450	bcm	bcx	bcx	39	28	25	–	–	0·0	*	97	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

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

South Kensington. Max.	Time.	Min.	Time.

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.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 2nd December 1940.

No. 28865

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

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)	1034.4	-8	SW	2	o	37	85	3	5	-	-	10	10	4000
	Croydon	1034.0	-10	-	0	m	42	65	4	5	-	-	9+	9+	5000
	S. Farnborough	1034.6	-8	-	0	cf+	40	85	3	5	-	-	9+	9+	4000
	Boscombe Down	1034.4	-10	-	0	zo	36	85	5	5	-	-	9+	9+	4000
	Calshot (Soton.)														
	Lympne	1033.8	-10	NW	1	zo	38	97	5	-	-	2	0	9	-
	Manston	1033.9	-8	W'N	2	zo	42	75	5	-	-	5	0	7-8	-
2	Shoeburyness	1034.1	-10	WSW	1	m	38	97	4	-	-	6	0	4-6	-
	Felixstowe	1033.7	-14	W	3	m	39	65	4	-	-	2	0	4-6	-
	Gorleston	1033.6	-10	WSW	2	m	38	85	4	5	5	-	2-3	4-6	1000
	Mildenhall	1033.1	-10	SW'S	2	m	37	85	4	-	3	-	0	9+	-
	Cranwell	1032.8	-8	W'N	4	zo	41	85	5	5	-	-	10	10	2000
3	Birmingham	1032.3	-8	SW	2	zo	44	75	5	-	-	2	0	4-6	-
	Upper Heyford	1034.0	-10	SW	2	zo	39	85	6	5	-	-	10	10	4000
4	Ross-on-Wye	1033.0	-14	SW	2	zo	43	75	5	5	-	8	7-8	9	2500
5	Hartland Point	1033.2	-12	S	2	c	45	85	8	5	6	-	4-6	9	2500
	Bristol	1034.2	-10	-	0	zo	44	85	5	5	-	-	9+	9+	4500
	Portland Bill	1033.6	-10	SW	1	c	46	92	8	5	-	-	10	10	4000
	Plymouth	1034.4	-10	E	1	m	42	85	4	5	-	-	10	10	4000
	The Lizard	1034.2	-10	SW	3	c	49	65	8	5	2	-	9	10	2500
	Scilly (St. Mary's)	1033.9	-6	-	0	bc	53	55	8	8	4	3	2-3	2-3	2200
	Guernsey														
6	Pembroke	1033.4	-14	SW'W	2	c	48	75	8	8	2	-	7-8	9+	3500
7	Holyhead	1030.4	-16	SW'S	5	c	50	92	8	8	-	-	10	10	2500
	Chester (Sealand)	1031.0	-18	SW'S	3	c	51	65	7	5	-	6	2-3	7-8	4700
8	Manchester	1032.9	-4	SSE	2	m	44	85	4	5	3	-	4-6	9	5000
10	Spurn Head	1031.0	-4	SSW	3	bc	45	85	6	-	1	1	0	4-6	-
	Catterick	1029.8	-18	W	2	c	47	75	7	5	7	-	4-6	9	2500
	Tynemouth	1028.2	-20	SW	4	zo	50	65	5	2	3	2	4-6	7-8	2800
11	St. Abbs Head	1024.1	-18	W	5	c/r	48	85	8	4	5	8	4-6	9+	2500
	Leuchars	1023.6	-12	SW	4	zo	49	85	6	5	7	-	7-8	9+	1500
12	Renfrew (Abbots I.)	1025.2	-14	SW	4	c/d	49	92	6	5	7	-	9	10	1200
	Eskdalemuir	1026.8	-14	WSW	6	dd	45	92	5	-	2	-	10	10	220
	Point of Ayre	1028.6	-12	W'S	5	c	50	92	8	5	1	-	7-8	10	2500
13A	Tiree	1021.9	-4	SW'W	5	oc/r	50	97	7	5	-	-	10	10	1200
13B	Stornoway	1019.8	-2	SW	3	c/pr	49	92	8	5	7	7	4-6	10	1800
15	Dalwhinnie	1021.2	-12	SW	3	iro	46	92	6	8	4	-	9	10	800
	Aberdeen	1021.3	-14	SW'W	2	c	49	85	6	5	7	-	2-3	9+	4000
	Wick	1019.1	0	SSW	2	c/d	50	97	8	5	2	8	7-8	9+	2500
16	Lerwick	1015.4	+12	W'S	5	c	48	85	7	5	7	-	4-6	7-8	1500
17	Blacksod Point	1025.7	-10	SSW	4	c	53	97	7	5	-	-	10	10	800
18	Malin Head	1024.4	-14	SSW	4	c	51	85	7	5	-	-	9+	9+	1500
	Aldergrove	1027.4	-18	SW'S	4	roro	47	92	6	6	2	-	7-8	10	600
19	Birr Castle	1029.6	-14	SSW	2	c	52	75	8	5	1	-	7-8	10	2500
20	Valentia Obsy. †	1030.4	-10	SSW	5	c	52	85	8	5	2	-	7-8	10	1500
	Roches Point	1032.0	-10	SW'W	3	c	50	85	8	6	2	-	7-8	9	1500

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

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)																*
Croydon	1032.0	-12	SW	1	bf+	35	85	3	-	-	-	0	0	-	1	*
S. Farnborough	1032.4	-14	SSW	1	bcf+	34	85	3	5	-	4	tr	2-3	4000	1	*
Boscombe Down	1032.6	-4	-	0	z	36	85	6	5	-	-	9	9+	4000	1	*
Calshot (Soton.)																
Lympne	1032.3	-12	NNW	1	z	32	97	5	-	-	-	0	0	-	1	§1
Manston	1032.2	-10	SW	2	m	33	85	4	5	-	-	2-3	2-3	3000		*
Shoeburyness																*
Felixstowe	1031.6	-10	W	1	f	35	85	3	-	-	-	0	0	-	1	1
Gorleston	1030.7	-20	W'S	2	m	34	85	4	5	-	-	2-3	2-3	1000	1	3
Mildenhall	1030.9	-12	SW'W	2	m	37	85	4	5	7	-	2-3	9	3800	1	*
Cranwell	1030.4	-6	WSW	3	cf	41	85	3	5	-	-	7-8	7-8	2500	1	*
Birmingham	1030.9	-10	WSW	2	z	39	85	5	-	7	1	0	4-6	-	1	*
Upper Heyford	1031.9	-14	-	0	cf+	33	97	3	-	-	8	0	7-8	-	1	*
Ross-on-Wye	1031.5	-8	SW	2	m	39	85	4	-	-	1	0	1	-	1	*
Hartland Point	1031.5	-6	S	2	bc	45	75	8	5	-	1	4-6	4-6	2500	1	3
Bristol	1032.2	-8	S'E	2	z	40	92	6	5	3	-	4-6	9	6000	1	*
Portland Bill	1031.5	-10	N	1	bc	44	92	7	5	-	-	4-6	4-6	2500	1	2
Plymouth	1032.5	-10	E	1	z	43	75	5	5	-	-	9+	9+	4000	0	1
The Lizard																
Scilly (St. Mary's)	1032.0	-6	WNW	1	bc	43	75	8	8	4	-	4-6	4-6	2200	1	1
Guernsey																
Pembroke	1031.0	-6	SW	3	ido	46	85	6	5	-	-	9+	9+	1000	1	1
Holyhead	1028.1	-12	SW'S	4	c	50	92	8	8	-	-	10	10	2200	1	2
Chester (Sealand)	1028.7	-12	-	0	z	46	75	6	5	-	-	9	9	5400	1	*
Manchester	1029.2	-10	S	3	z	42	75	5	5	-	-	9+	9+	4000	1	*
Spurn Head	1028.8	-4	S'W	4	c	42	85	5	5	2	-	4-6	9	1500	1	2
Catterick	1027.0	-10	WSW	3	z	47	85	6	5	-	-	10	10	1500	0	
Tynemouth	1026.1	-10	SW	3	z	48	85	5	5	-	-	9+	9+	2900	1	1
St. Abbs Head	1021.8	-16	W	3	iro	48	97	8	5	2	-	7-8	10	2500	1	2
Leuchars	1021.0	-18	WSW	4	zo	49	85	6	5	-	-	9+	9+	1500	1	*
Renfrew (Abbots I.)	1022.1	-18	SW	4	id	49	97	6	5	-	-	10	10	900	1	*
Eskdalemuir	1023.6	-16	WSW	4	dodo	45	92	5	-	2	-	10	10	220	1	*
Point of Ayre	1025.4	-16	W'S	4	c	49	97	7	8	1	-	7-8	10	1500	1	3
Tiree	1020.1	0	WNW	2	roro	46	92	7	-	2	-	10	10	1500	3	3
Stornoway	1017.2	+4	N	4	rr	45	92	7	5	2	-	7-8	10	1500	1	3
Dalwhinnie	1020.0	-12	SW	4	c	45	97	6	5	4	-	4-6	9	800	1	*
Aberdeen	1019.1	-16	SW'W	2	c	49	85	6	5	7	-	1	10	4000	1	1
Wick	1017.9	-8	SW	3	c	47	85	7	8	7	-	4-6	7-8	1500	1	2
Lerwick	1015.3	-2	W'S	4	c	46	85	7	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1023.4	-6	SW	5	dr	50	97	6	6	-	-	10	10	<150	2	4
Malin Head	1021.6	-18	SSW	3	id	50	97	6	6	-	-	10	10	800	0	3
Aldergrove	1024.5	-18	SW'S	4	o/r	48	92	6	5	-	-	10	10	900	1	*
Birr Castle	1026.9	-10	SSW	3	o/r	49	92	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	1028.2	-10	SW'S	4	o/d	51	85	8	5	-	-	10	10	1500	1	3
Roches Point	1030.0	-8	SW'W	4	c	49	85	8	6	2	-	7-8	9+	1500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 1st (37)	Weather 13h.—18h. 1st (38)	Weather 18h 1st to 1h. 2nd (39)	Weather 1h.—7h. 2nd (40)
London (Kew)	cffxcff		bcbffx	bbcmxcm
Croydon	cmf	czbf	bfbmx	bmzbcm
S. Farnborough	cfxmf	f	bcfbxc	cfxmobcm
Boscombe Down	cmifcmo	cmmo	cm	cmo
Calshot (Soton.)			cmofcc	cfbmcfw
Lympne	cmox	cbcmoc	bmoc	bcmoc
Manston	bffx bcmo	bc cmofg bc		bbcxmo
Shoeburyness	Fxbcm		bmbmo	bmcx
Felixstowe	bcifcm	f	bffxcff	cffxbm
Gorleston	bcmx	bcm	bccmxbz	bccmo
Mildenhall	cfxcm	f	bmwbmx	bmxcmow
Cranwell	cmo	f	cfbmo	b,cmo
Birmingham	cmbc	bcz	bcb,c	cm
Upper Heyford	cmcmo	cmocmf	bcfbFbcm	bcmcm
Ross-on-Wye	cmfcm	bcz	bmccfcm	cmobcc
Hartland Point	c	cpbc	bc	bcc
Bristol	ofcjfmo	cmocmo	cbccmo	cbccmofg
Portland Bill	c	cbc	bcc	c
Plymouth	cmo	c	czmoidcmo	cmobmocm
The Lizard	c		bcc	c
Scilly (St. Mary's)	cbcy	bc	bcc	c
Guernsey				
Pembroke	bccv	dd	cido	idoc
Holyhead	b,c	cpdoc	cdomoo	omorrbc
Chester (Sealand)	cmoc	c	cbcmo	bccirorom
Manchester	cffm	cm	bccmpz	rorodro
Spurn Head	bc	cz	bczbc	c
Catterick	cmc	ccmo	cmobcmo	morrbc
Tynemouth	ocmc	c	col	obc
St. Abbs Head	cqro	cqiro	ciro	crbc
Leuchars	ciromo	cmo	morrroro	crorobcb
Renfrew (Abbots I.)	cmorodd	dd	dodRdodo	omorocmobc
Eskdalemuir	coddmo	cddodo	dddr	rrrobcb
Point of Ayre	cddc	idc	croro	rrc
Tiree	odod	rr	cpro	cirbc
Stornoway	cddo	crr	crr	
Dalwhinnie	ciro	oiroc		cir
Aberdeen	rofczo	cz	ccrr	rro,b
Wick	cddc	c	clroro	ropr
Lerwick	cirroro	rr	cpr	cprph
Blacksod Point	c	dr	bc	bc
Malin Head	c	cidoidoc	cRrcrrc	bc
Aldergrove	cidororomo	roroocmo	orrirоro	roroirprob
Birr Castle	c	ciro	cir	boff
Valentia Obsy. †	cidoc	cidoc	ododiRiro	oirocidobcc
Roches Point	iroc	c	bcc	circ

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.*

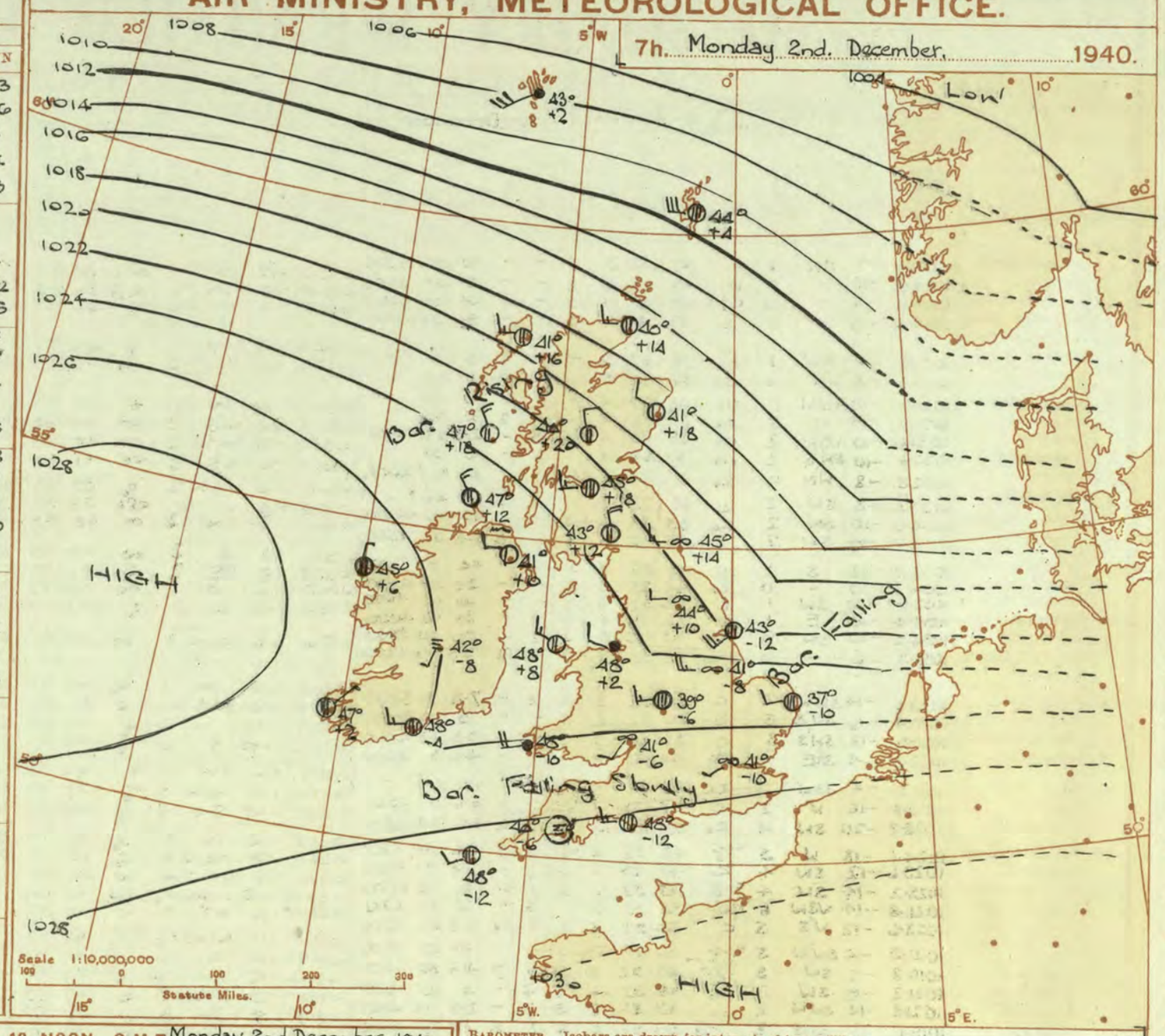
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 1st December			18h. G.M.T.			01h. G.M.T. 2nd December			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	02744	23455	52	61754	24368	5-	61648	21468	90	10853	58583
115	52	10734	20586	52	81744	24485	52	62765	24588	52	81744	28586
203	8-	02838	18468				5-	64838	24468	8-	61855	24415
206	57	51851	20261	52	22855	22268	5-	51748	24158	80	25854	28284
210	57	02955	20568	62	64637	24168	62	64637	22368	8-	01853	24583
220	53	21616	23258									
230	5-	52528	53458	5-	54428	54458	6-	62738	26268			
245	57	02744	22467	57	02763	22427	5-	62668	24268	80	00862	24312
260				5-	22655	20365	5-	62648	24368	50	00772	24162
277	5-	02748	19468	52	62646	18468	6-	64648	27468	23	25862	26385
279	5-	61548	20568				--	05548	20528	--	05545	20425
285										2-	02747	28587
288	57	05664	18327	5-	05558	18328	5-	05558	16328	00	05690	26224
273												
301	53	22665	22467	5-	05657	22367	02	52648	22468	5-	05662	26165
321	5-	08467	14127	53	05566	23227	50	05664	20114	52	61665	23428
299	57	05544	21215				50	05543	22413	5-	05548	22328
292	57	05556	21247	00	45390	19340	57	05555	20348	57	22835	24268
310										--	57109	20349
316	53	45326	20155	50	45263	20143	00	08490	20310	5-	08458	18128
333	5-	02367	20467	61	62645	19568	5-	02757	25577			
334										--	54548	20258
340	5-	02866	16326	50	05663	18313	50	05654	16214	52	22646	22468
136	03	47390	17317	52	41465	20348	50	05661	20311	57	61565	20468
336										64	02754	28426
350	5-	05578	18228									
368												
379	5-	05568	24128	50	47362	20142	00	08490	22202	07	05590	22315
390	--	46109	00049	00	47290	22140	00	45190	20140	53	46365	22147
382	5-	41467	00047	00	45390	00040	03	47190	00043	53	05576	28117
438	51	01764	36315							80	01754	28314
430	00	05590	00015	5-	47266	00046	5-	47168	00048	03	47290	00045
409	53	05663	00028	54	05564	00024	50	05653	13113	5-	05648	14118

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 2nd. December, 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. Monday 2nd December, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light or moderate S.W. wind, veering W. to N.W. later; mainly cloudy, some slight rain locally; fog locally at night; average temperature.
4 W. Midlands ... 5 S.W. England	Light northwesterly or variable wind; fair today, fog in many places tonight and tomorrow; cooler, with slight frost at night.
6 South Wales ... 7 North Wales ...	As 1-3
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	As 4.
13 A. W. Scotld. / B.N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Moderate northwesterly wind; bright periods; occasional showers; cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light variable wind; fair; fog in many places inland tonight and tomorrow; average temperature by day, frost inland at night.

GENERAL INFERENCE.

Pressure continues high over the Continent. A shallow trough is moving slowly S.E. across Central and Southern England, and behind it a feeble ridge of high pressure is spreading eastwards. Other troughs are moving eastwards across Scotland. Apart from some slight rain locally, weather will be fair to cloudy in the South. Fog will develop in many places in England tonight, but it will be local in the extreme E. & S.E. In North Scotland there will be bright intervals and showers.

FURTHER OUTLOOK.

Further Outlook.

Mainly fair and quiet, but much fog in the South.

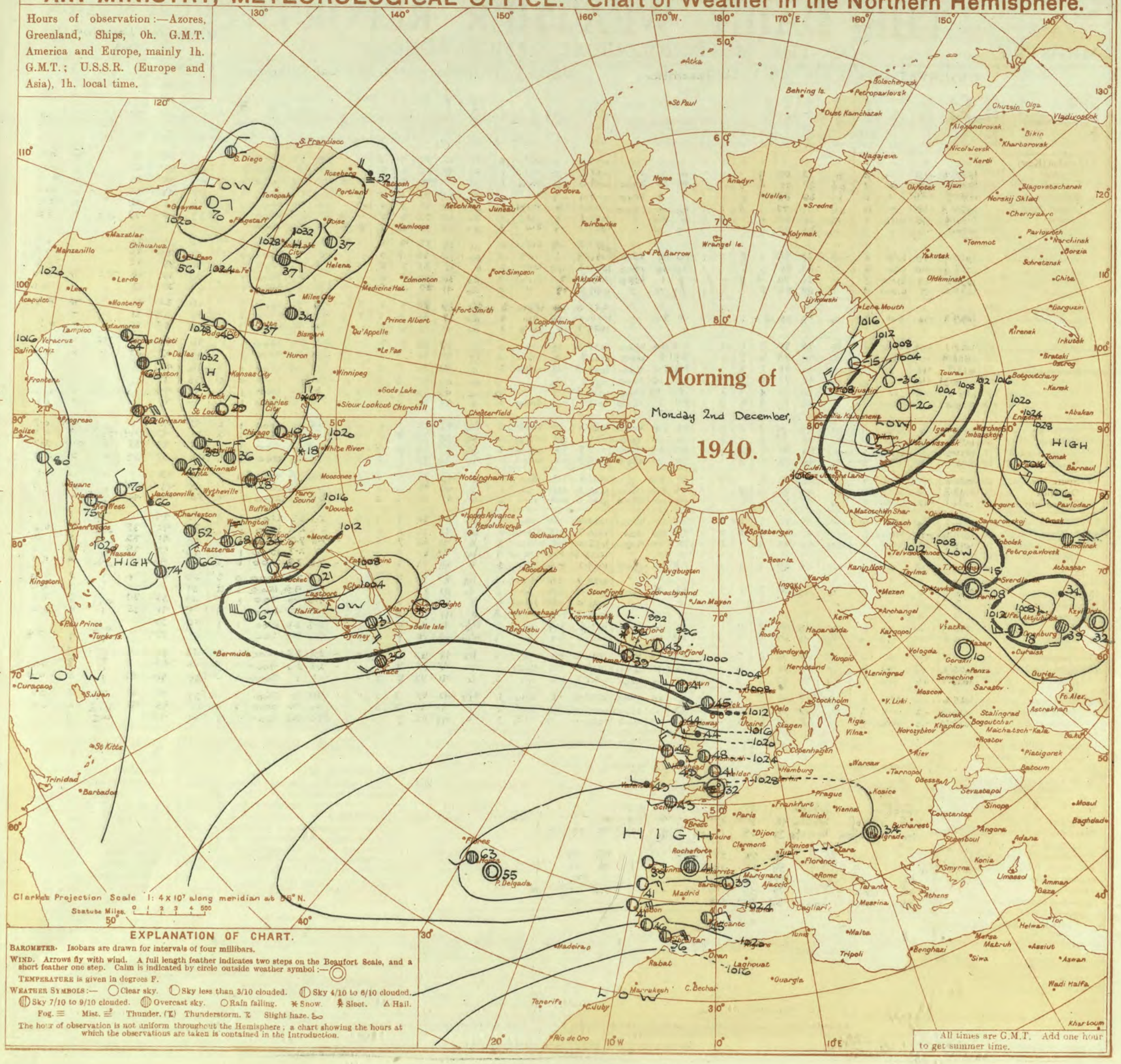
Forecasts issued at 1030h. G.M.T.

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.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 2nd December 1940.

No. 28865

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

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	1030·3	−10	-	0	m	32	92	4	-	-	-	0	0	-
	S. Farnborough	226	1030·2	−14	S	1	cf	27	97	2	5	-	-	9+	9+	3000
	Boscombe Down	417	1030.5	−20	-	0	zo	36	85	5	5	-	-	9	9	3000
	Calshot (Sthmtn.)	8	1030·4	−10	-	0	cf	40	92	2	5	-	-	10	10	3500
	Lympne	346	1030·4	+10	WNW	1	zo	31	85	6	-	7	5	0	2-3	-
	Manston	154	1030·2	−12	SW	2	zo	32	85	6	-	-	-	0	0	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1029·4	−10	W'S	2	cf	37	85	3	5	-	-	10	10	3700
	Gorleston	5	1028·4	−10	WSW	2	c	38	75	6	5	-	-	10	10	1500
	Mildenhall	19	1028·5	−14	SW'S	3	m	36	92	4	5	-	-	1	1	3500
	Cranwell	240	1027·2	−18	WSW	4	zo	38	85	5	-	-	-	0	0	-
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1029·8	−12	SW	2	zo	32	92	5	-	7	-	0	4-6	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1029·1	−16	SSW	3	bc	42	85	8	5	4	-	2-3	4-6	2500
	Bristol	209	1029·4	−14	SSW	3	zo	42	75	6	5	1	-	7-8	9	3500
	Portland Bill	32	1029·7	−12	S	2	c	46	85	7	5	-	-	7-8	7-8	2500
	Plymouth	82	1030·3	−10	-	0	m	42	92	4	5	-	-	10	10	2000
	The Lizard	240	1030·3	−12	W	3	c	46	75	8	8	2	-	9	10	2000
	Scilly (St. Mary's)	163	1030·5	−10	WSW	2	c	43	75	8	8	7	-	7-8	9	1800
	Guernsey	175														
6	Pembroke	142	1028·5	−6	SW	4	id	48	75	7	5	2	-	4-6	7-8	2000
7	Holyhead	26	1025·1	−16	SW	5	iv	49	97	6	-	2	-	10	10	800
	Chester (Sealand)	16	1025·6	−18	SW'W	1	zo	48	85	6	5	-	-	4-6	4-6	4500
8	Manchester	70	1025·8	−22	S'E	3	c/d	40	92	5	5	-	-	9+	9+	2500
10	Spurn Head	29	1025·2	−20	SW'S	4	bc	41	85	6	-	4	-	0	4-6	-
	Catterick	175	1022·7	−26	SW'S	3	zo	46	85	6	5	-	-	4-6	4-6	1500
	Tynemouth	108	1021·1	−12	WSW	2	c	48	85	6	5	-	-	10	10	2700
11	St. Abbs Head	280	1016·9	−20	SW	5	ro	48	92	7	5	2	-	7-8	10	2500
	Leuchars	36	1017·3	−12	WNW	3	ro	47	85	6	5	2	-	7-8	10	900
12	Renfrew (Abbots I.)	19	1019·9	+2	W'N	3	ro	46	92	6	-	2	-	10	10	4000
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1022·1	−18	W	6	ro	49	97	7	8	2	-	7-8	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1019·2	0	WSW	3	c/r	44	92	7	5	7	-	4-6	9+	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1016·4	−2	W	2	ro	43	92	7	5	-	-	10	10	800
16	Lerwick	156	1011·4	−24	W'S	6	c/pr	45	97	7	8	7	-	7-8	9	800
17	Blacksod Point	18	1025·5	+10	W	2	bc	47	92	8	4	-	-	4-6	4-6	800
18	Malin Head	84	1022·6	+8	NW	3	c/pr	46	92	7	6	-	-	10	10	1500
	Aldergrove	268	1023·1	+6	NW	2	ro	44	97	6	5	-	-	10	10	2800
19	Birr Castle	173	1025·6	−4	SSW	1	c/r	47	97	7	5	-	-	10	10	2500
20	Valentia Obsy.	30	1026·8	−2	W'S	2	iv	49	97	7	5	-	-	10	10	1500
	Roches Point	22	1027·7	−10	SW'W	4	c	48	85	8	5	-	-	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 2nd December

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)	1027·8	−6	SW'W	2	m	35	92	4	5	-	-	9+	9+	2500	3	*
Croydon	1027·6	−10	SW	1	zo	41	85	5	5	-	-	9	9	3000	1	*
S. Farnborough	1028·0	−6	SW'W	1	m		92	4	5	3	8	2-3	7-8	4000	2	*
Boscombe Down	1028·4	−4	-	0	zo	35	92	6	5	3	1	2-3	4-6	4000	1	*
Calshot (Sthmtn.)	1028·1	−6	NW'N	1	oft	38	97	3	5	-	-	10	10	3500	1	§ 0
Lympne	1028·2	−8	W	1	zo	32	92	6	5	-	8	1	7-8	3500	3	
Manston	1027·5	−8	SW	3	zo	33	85	6	5	3	2	1	4-6	3000		*
Shoeburyness	1027·5	−8	SW'W	2	m	38	85	4	8	-	-	9+	9+	4000	3	*
Felixstowe	1026·8	−6	W'S	3	m	35	85	4	5	-	-	9	9	3500	1	1
Gorleston	1025·3	−10	WSW	2	c	37	85	5	5	-	-	7-8	7-8	1500	3	2
Mildenhall	1025·9	−8	SW'W	3	zo	36	92	5	5	-	-	7-8	7-8	3500	1	*
Cranwell	1024·7	−8	W	5	zo	41	92	5	5	-	-	9	9	2000	1	*
Birmingham	1025·6	−6	WSW	3	c/r	39	97	4	5	7	-	4-6	9+	1500	1	*
Upper Heyford	1028·0	−10	SW	2	zo	37	92	6	5	7	7	4-6	10	2600	1	*
Ross-on-Wye	1026·7	−6	SW'S	2	zo	41	92	6	5	-	-	9+	9+	2500	1	*
Hartland Point	1027·3	−12	W	3	c	47	85	8	5	-	-	7-8	7-8	2500	1	2
Bristol	1027·8	−8	WSW	2	fg	40	85	6	5	7	8	2-3	9	4000	1	*
Portland Bill	1028·0	−12	WSW	3	c	48	85	7	5	-	-	7-8	7-8	2500	1	3
Plymouth	1028·8	−6	-	0	m	40	97	4	5	-	-	10	10	2500	0	0
The Lizard	1029·0	−4	-	0	c	45	75	8	8	2	-	9	10	1500	1	2
Scilly (St. Mary's)	1028·1	−12	SW'W	2	c	48	85	8	8	7	-	7-8	9+	1800	1	1
Pembroke	1026·2	−10	WSW	4	id	48	85	7	8	2	-	7-8	10	2000	1	2
Holyhead	1025·1	+8	NW'W	3	bc	48	92	8	5	7	5	1	4-6	2500	1	2
Chester (Sealand)	1024·8	+2	WNW	2	iv	48	92	6	6	2	-	7-8	10	1200	1	*
Manchester	1023·9	−2	WSW	2	c/r	46	97	5	5	7	-	7-8	10	1800	1	*
Spurn Head	1021·5	−12	SW	5	c	43	85	7	5	1	-	4-6	9+	4000	1	3
Catterick	1022·8	+10	W	1	zo	44	85	6	5	7	-	1	4-6	3500	1	*
Tynemouth	1021·3	+14	W	3	zo	45	85	6	2	-	-	2-3	2-3	2900	1	!
St. Abbs Head	1019·9	+12	NW	5	bc	45	89	8	4	4	-	2-3	2-3	2500	1	3
Leuchars	1020·7	+18	WNW	2	bc	43	85	7	5	-	-	2-3	2-3	3200	1	*
Renfrew (Abbots I.)	1023·0	+18	WSW	3	c	45	85	7	5	-	-	7-8	7-8	2500	1	*
Eskdalemuir	1022·3	+12	NNW	4	bc	43	85	8	5	4	-	1	2-3	1500	1	
Point of Ayre	1024·2	+14	NW	4	c	48	92	8	8	-	-	7-8	7-8	2500	1	3
Tiree	1022·9	+18	NW'N	3	bc	47	75	8	8	-	-	2-3	2-3	2100	0	3
Stornoway	1020·8	+16	W	3	c	41	85	7	5	-	-	4-6	4-6	1500	1	2
Dalwhinnie	1021·0	+20	NNW	2	c	40	85	6	5	-	-	4-6	4-6	1500	1	*
Aberdeen	1019·2	+18	NW'W	2	b	41	85	6	5	3	-	Tr	Tr	4000	1	1
Wick	1017·4	+14	W	3	bc/pr	40	92	8	8	-	-	2-3	2-3	1500	1	1
Lerwick	1011·3	+4	W	6	c/ph	44	75	7	8	7	-	4-6	7-8	800	1	*
Blacksod Point	1026·6	+6	N	1	bc	45	97	8	4	-	-	2-3	2-3	1500	1	3
Malin Head	1024·4	+12	NW'N	3	bc	47	85	8	5	-	-	2-3	2-3	4000	1	4
Aldergrove	1025·3	+10	W'S	2	b	41	92	8	5	-	-	1	1	2000	2	*
Birr Castle	1027·0	−8	SSW	1	oft	42	97	3	5	-	-	10	10	2500	1	*
Valentia Obsy.	1026·9	+2	NE	2	c	47	85	8	5	-	-	9+	9+	2500	1	1
Roches Point	1026·0	−4	W'S	3	c	48	92	8	8	-	-	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)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine ..1st.. Hrs. (36)
London (Kew)		27	16		Tr	0·0
Croydon	42	31	29	-	-	0·5
S. Farnborough	41	25	18	-	-	0·0
Boscombe Down	27	33	26	-	-	0·0
Calshot (Sthmtn.)	43	35	28		Tr	2·2
Lympne	39	29	19	0·2	-	5·6
Manston						
Shoeburyness	40	30	20		-	0·6
Felixstowe	40	33	26	-	-	3·7
Gorleston	39	33	25	-	-	3·4
Mildenhall	39	35	26	Tr	Tr	0·0
Cranwell	43	35	33	-	-	0·0
Birmingham	45	35	32	-	Tr	2·2
Upper Heyford	40	28	21	-	-	*
Ross-on-Wye	46	34	26	-	-	0·8
Hartland Point	46	40	36	Tr	-	0·1
Bristol	45	37	29	-	-	0·0
Portland Bill	46	42	*	-	-	*
Plymouth	43	37	*	-	-	0·0
The Lizard	49	44	*	-	-	0·3
Scilly (St. Mary's)	53	42				6·2
Pembroke	49	45	*	0·1	0·1	0·7
Holyhead	51	47	44	Tr	4	0·1
Chester (Sealand)	52	44	38	-	0·4	2·7
Manchester	46	37	34	-	2	0·5
Spurn Head	45	39	*	-	-	1·5
Catterick	48	43	37	-	0·6	1·3
Tynemouth	50	45	40	-	-	*
St. Abbs Head	49	44	*	Tr	1	*
Leuchars	50	42	37	0·1	3	0·0
Renfrew (Abbots I.)	49	41	32	0·3	5	0·0
Eskdalemuir	46	42	39	2	5	0·0
Point of Ayre	51	46	*	0·4	4	0·1
Tiree	50	45	*	2	3	0·0
Stornoway	51		*	1	2	0·0
Dalwhinnie	47	39	34	0·5	8	0·0
Aberdeen	49	41	35	1	8	0·0
Wick	52	39	*	0·2	1	*
Lerwick	51	39	*	1	4	0·4
Blacksod Point	53	42	*	2	4	*
Malin Head	52	44	*	1	8	0·0
Aldergrove	48	40	33	1	8	0·0
Birr Castle	52	41	37	Tr	5	0·1
Valentia Obsy.	52	46	41	0·2	2	0·0
Roches Point	51	47	*	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. (To-day)
Kew	18	cffxcff		bcbffxcm		27	16		Tr	0·0	*	*	
Croydon	217	cmf	czbf	bfx bcm	42	31	29		-	0·5	*	*	
Greenwich (Royal Observatory)	149	cfx	bcbfxm	bxmcfg	38	29	19	Tr	Tr	0·0	73	83	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	38	28	27	—			87	98	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	38	31	18	-	-		95	91	*
Camden Square	110	bc	o	*	37	30	25	-	-	*	*	92	*
Kensington	80	cfc	bc	*	39	29	19	Tr	-		92	91	*
Hampstead Observatory	450	bcm	bcm	bcmx	38	31	28	-	-		*	95	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

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

South Kensington Max.	Time.	Min.	Time.

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.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 3rd December 1940.

No. 28866

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

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)	°F. Temp. (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)...	1027.4	-2	WSW	3	zo	45	75	5	5	1	-	7-8	9+	2500
	Croydon ...	1028.0	+4	SSW	1	zo	47	75	5	5	-	-	9+	9+	3000
	S. Farnborough	1027.9	-4	W	3	c	47	75	7	5	7	8	0	10	3400
	Boscombe Down	1027.7	-8	W'N	2	zo	47	75	6	5	7	-	4-6	9+	3000
	Calshot (Soton.)	1027.9	-6	-	0	bcf-	46	75	2	-	3	1	0	4-6	3000
	Lympne ...	1027.3	-6	WNW	1	z	44	75	6	5	-	-	9+	9+	4000
	Manston ...	1027.0	-4	WSW	2	c9d	45	85	6	-	7	-	0	10	-
2	Shoeburyness ...	1027.0	-2	WSW	2	o/d	46	75	5	5	-	-	10	10	4000
	Felixstowe ...	1026.4	-4	W'N	2	m	44	75	4	5	7	-	9	9+	2500
	Gorleston ...	1025.9	+6	NW'W	2	bc	44	85	6	5	3	-	2-3	4-6	2500
	Mildenhall ...	1026.2	+2	W	3	zo	46	85	6	5	3	1	4-6	7-8	4000
	Cranwell ...	1027.1	+12	NW	3	m	46	85	4	5	7	2	4-6	9+	2000
3	Birmingham	1027.2	+6	WNW	1	cf+	45	92	3	5	7	-	9	9	450
	Upper Heyford	1027.4	-0	WNW	3	c	46	85	8	5	7	-	7-8	10	1600
4	Ross-on-Wye ...	1027.1	-4	W'N	1	c	49	85	8	5	-	-	10	10	1500
5	Hartland Point	1027.4	-4	SW	3	c	46	97	7	5	6	-	4-6	7-8	800
	Bristol ...	1028.0	-2	W	2	ido	47	85	7	5	-	-	10	10	6000
	Portland Bill ...	1027.8	-6	NW	2	co	50	85	8	2	4	-	4-6	9	4000
	Plymouth ...	1028.5	-6	-	0	m	49	85	4	5	-	-	9+	9+	2500
	The Lizard ...	1028.5	-6	W'N	2	c	50	85	8	8	2	-	9	10	3800
	Scilly (St. Mary's)	1028.0	-6	SW'W	2	c	53	75	8	8	7	3	4-6	9	1800
	Guernsey ...														
6	Pembroke ...	1026.5	-4	SW'W	3	c	51	97	7	5	7	-	7-8	9+	600
7	Holyhead ...	1026.7	0	W'N	2	bc	49	97	8	8	7	8	4-6	4-6	2500
	Chester (Sealand)	1027.1	-6	WNW	2	c	47	92	6	5	7	-	2-3	7-8	1100
8	Manchester ...	1026.9	+4	NNW	2	z	47	85	5	2	-	2	4-6	7-8	2200
10	Spurn Head ...	1026.0	+6	W'N	3	c	45	92	6	-	1	4	0	7-8	-
	Catterick ...	1026.0	+10	NNW	3	b	49	65	8	8	4	1	Tr	Tr	4000
	Tynemouth ...	1026.3	+20	NW	3	bc	47	75	6	-	4	-	0	2-3	-
11	St. Abbs Head	1024.5	+10	WNW	5	bc	46	65	7	4	4	-	1	2-3	2500
	Leuchars ...	1024.9	+14	W	3	b	48	65	8	-	-	9	0	1	-
12	Renfrew (Abbots I.)	1025.8	+6	W	2	bc	50	75	8	1	-	5	Tr	2-3	2500
	Eskdalemuir ...	1025.7	+6	N	2	b	45	65	8	7	4	-	Tr	1	2500
	Point of Ayre ...	1026.6	*	N'E	2	b	50	85	8	1	4	1	1	2-3	2500
13A	Tiree ...														
13B	Stornoway ...	1022.9	+2	WSW	3	b	46	75	8	5	-	1	Tr	1	2000
15	Dalwhinnie ...	*	+8	SSW	2	bc	42	65	8	1	4	-	2-3	4-6	2500
	Aberdeen ...	1023.8	+12	WSW	2	b	47	65	7	-	3	-	0	Tr	-
	Wick ...	1021.1	+4	WNW	4	bc	44	85	8	8	6	-	2-3	2-3	1500
16	Lerwick...	1015.5	+24	W	6	c/phr	42	75	7	8	7	-	4-6	7-8	800
17	Blacksod Point..	1026.6	-4	SE	1	bc	50	92	8	2	-	4	2-3	2-3	1500
18	Malin Head ...	1026.3	+4	S	1	c	48	75	8	9	-	4	4-6	7-8	4000
	Aldergrove ...	1027.7	+4	-	0	cf-	42	97	2	5	-	-	9+	9+	300
19	Birr Castle ...	1027.2	-2	SSE	1	c	44	97	7	5	-	-	10	10	2500
20	Valentia Obsy. †	1025.8	-14	SSE	2	bc	52	75	9	5	-	1	2-3	4-6	4000
	Roches Point ...	1026.5	-2	E	2	c/d	49	85	8	5	-	-	7-8	7-8	1500

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

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)	1027.9	+6	-	0	m	43	85	4	5	-	-	10	10	2500	1	*
Croydon	1027.8	+4	-	0	m	43	92	4	5	-	-	10	10	2000	1	*
S. Farnborough	1028.2		W	1	cf+	42		3	5	-	-	9+	9+	2000	1	*
Boscombe Down	1028.0	+2	-	0	c	43	92	6	5	-	-	10	10	2500	1	*
Calshot (Soton.)	1027.8	+2	-	0	zo	43	85	5	5	-	-	10	10	3000	1	0
Lympne	1027.8	+6	NW	1	mo	41	85	4	5	-	-	10	10	1500	1	§
Manston	1027.9	+6	-	0	cf	48	92	3	5	-	-	10	0	1200		*
Shoeburyness	1027.8	+14	WNW	1	f	43	85	3	-	-	-	10	10	<150	1	*
Felixstowe	1027.7	+10	NW	1	m	41	92	4	-	-	8	0	1	1400	1	1
Gorleston	1027.6	+10	NW	2	f+	44	85	3	-	-	-	0	0	-	3	2
Mildenhall	1027.8	+12	-	0	F+	32	97	1	-	-	-	0	0	-	1	*
Cranwell	1028.1	+6	-	0	bf	34	97	3	-	-	-	0	0	-	1	*
Birmingham	1028.4	+4	-	0	F+	41	97	1	-	-	-	10	10	<150	1	*
Upper Heyford	1028.1	+6	-	0	m	41	97	4	5	-	8	1	7-8	2500	1	*
Ross-on-Wye	1027.5	+4	-	0	m	45	92	4	5	-	-	9	9	1500	1	*
Hartland Point	1026.5	0	SW	3	dodo	47	97	6	5	-	-	10	10	800	1	2
Bristol	1028.0	+2	S	1	id	45	92	6	5	-	-	10	10	1200	1	*
Portland Bill	1027.6	+4	W	2	co	48	85	8	5	-	-	10	10	4000	1	2
Plymouth	1028.1	+2	WSW	1	zo	47	92	6	5	-	-	10	10	1800	0	0
The Lizard	1028.0	0	SSW	2	ido	47	97	6	5	-	-	10	10	1500	1	2
Scilly (St. Mary's)	1027.3	0	SW'S	1	c	50	85	8	5	7	-	7-8	9+	1800	1	1
Guernsey																
Pembroke	1026.2	0	S'W	2	ido	50	97	7	5	-	-	9+	9+	1500	1	2
Holyhead	1026.3	-2	E'S	3	b	44	97	7	-	-	1	0	Tr	-	1	1
Chester (Sealand)	1027.1	+4	SE'S	1	bcf+	42	97	2	5	-	-	4-6	4-6	2000	1	*
Manchester	1027.7	+6	-	0	F+	32	97	0	-	-	-	10	10	<150		*
Spurn Head	1027.4	+4	S'W	3	b	41	92	6	-	-	-	0	0	-	0	2
Catterick	1027.5	+8	-	0	zo	37	92	5	-	-	-	0	0	-	0	
Tynemouth	1027.2	+6	W	2	bcf	48	85	3	-	4	-	0	2-3	-	1	1
St. Abbs Head	1025.6	+4	WNW	2	b	41	75	7	4	-	-	Tr	Tr	2500	0	2
Leuchars	1025.3	+2	WSW	2	zo	38	85	6	-	7	-	0	Tr	-	1	*
Renfrew (Abbots I.)	1025.8	0	-	0	m	36	97	4	-	-	2	0	2-3	-	1	*
Eskdalemuir	1027.3	+6	-	0	b	31	92	8	-	-	-	0	0	-	1	*
Point of Ayre	1026.2	-2	SSW	1	b	37	97	8	-	4	-	0	Tr	-	1	1
Tiree	1023.7	-2	SSW	2	c	40	85	8	5	-	-	7-8	7-8	2100		
Stornoway	1022.0	-6	SW	3	c	45	75	7	5	7	-	4-6	7-8	2000		
Dalwhinnie	*	+4	-	0	bc	32	85	8	4	-	-	2-3	2-3	2500	0	*
Aberdeen	1024.7	+12	WSW	2	b	40	75	6	-	4	4	0	1	-	1	1
Wick	1021.9	+6	WSW	3	bc	39	85	7	5	4	-	4-6	4-6	1500	1	1
Lerwick	1017.3	+12	WNW	5	c/pr	45	75	7	8	7	-	4-6	7-8	800	1	*
Blacksod Point	1023.0	-16	SSE	3	b	46	92	8	4	-	-	1	1	1500	0	2
Malin Head	1024.6	-10	SSE	2	bc	41	85	8	5	-	-	4-6	4-6	4000	0	4
Aldergrove	1026.5	-2	SE'E	2	m/f	35	97	4	-	-	1	0	1	-	1	*
Birr Castle	1025.4	-6	SSE	1	c	41	97	7	5	-	-	7-8	7-8	2500	1	
Valentia Obsy. †	1023.7	-6	SE'S	4	dd	40	97	6	5	-	-	10	10	800	1	2
Roches Point	1024.6	-6	E	3	c	48	92	8	5	-	-	9	9	1500	1	3

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)	cmeffcm	cmocm	cm	cmeff
Croydon	cm	cmocmc	cm	cm
S. Farnborough	bcmfmoc	cirmf	cfmbc	bemirof
Boscombe Down	bcmfcm	cidomocm	cmobmcm	cmcmoido
Calshot (Soton.)	bcff	ffcm		cfrorodomo
Lympne	bccm	cmm	bffFF	Frfrf
Manston	bccidm	cidoff	offcff	cff
Shoeburyness	cmxcid	cmocf	fbF	bFbfecido
Felixstowe	cm	cmmmb	bmFF	cfmof
Gorleston	cbcz	bccbf	bffc	offeczo
Mildenhall	cmwcm	cm bfFx	bFxoFew	oFebfwcfw
Cranwell	rcmm	bcmbf	bf, bmo	cfcm
Birmingham	cmf	fcbcf	Ffc	fco
Upper Heyford	cmoc	cmcm	cmofcm	cmccm
Ross-on-Wye	cmc	ccm	cmo	cmo
Hartland Point	cd	cdd	dodoc	bccl
Bristol	jf cid	cdm	cidomo	cidomocm
Portland Bill	c	c	bc	cirr
Plymouth	cm	cmidcm	cido,mbc,m	cdocprcidm
The Lizard	c	coid	cprc	cprc
Scilly (St. Mary's)	c	c	c	clro
Guernsey				
Pembroke	odgifo	idoc	orrmo	irc
Holyhead	bccbc	bcwb	bdromoc	dorrro
Chester (Sealand)	rocm	cmf	bFfmb	mmororo
Manchester	cm ffmm	bcfgfFF	offcFf	ffrmroro
Spurn Head	c	bcbw	bcwmo	cmfw
Catterick	mcbcb	bbm	mfgxbf	xoFrf
Tynemouth	bc	bcff	bcbff	bfforr
St. Abbs Head	bc	bc	bcmo	cmor
Leuchars	b	bbcbmo	bmox	bcmoxmdd
Renfrew (Abbots I.)	bcb	bcm	bxmffFF	bxFoidoror
Eskdalemuir	b	bbcb		
Point of Ayre	cbc	bcbw	bbcc	Rcro
Tiree		cbcc		corr
Stornoway	bcb	bc	cprq	cpr
Dalwhinnie	cbc	bc	*	cpro
Aberdeen	bzb	bbzo	b,czo	cbczx
Wick	bcpr	bc	bc	bcc
Lerwick	cphr	cphrpr	cpr	c
Blacksod Point	bc	bc	rr	rrq
Malin Head	c	cbcc	bcc	
Aldergrove	bFcf	cfbFF	bmcido,iro	idororoc
Birr Castle	ffc	offc	cir	cir
Valentia Obsy. †	cbcr	bcvoidd	oddcircir	cidcirdrdd
Roches Point	cidoc	idoc	ddc	cidrr

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.

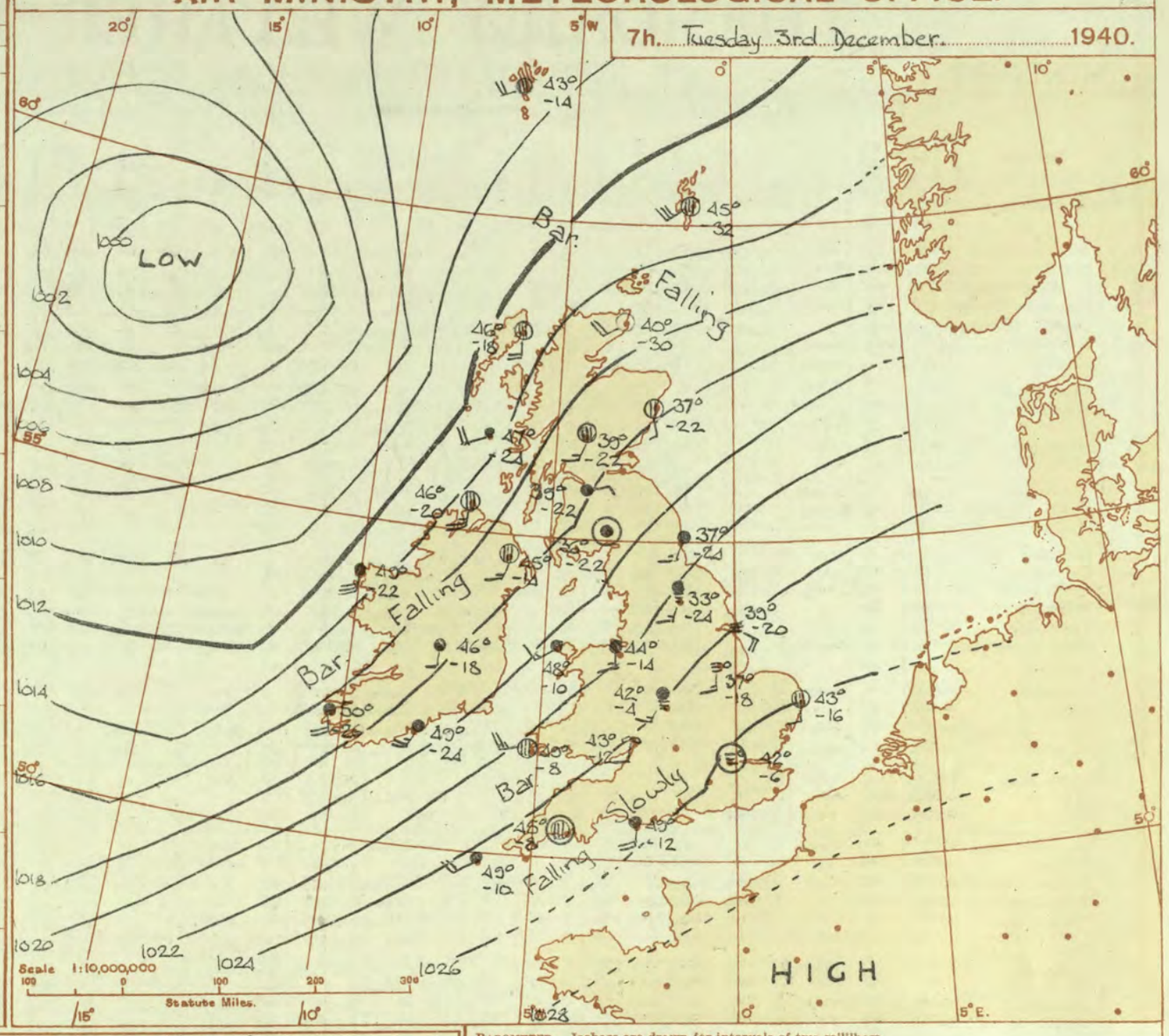
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 2nd December			18h. G.M.T.			01h. G.M.T. 3rd December			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	25854	58584	80	01853	23483	50	00852	20282	52	02765	20318
115	87	01844	24685				52	02844	20486	52	20844	20486
203							8-	81858	16588	8-	81956	16486
206				51	01962	26224	01	02890	00025	5-	02855	00025
210	70	00852	22402	50	01853	24213				5-	01864	18224
220												
230							5-	02767	00017	52	64538	16268
245	50	00961	24303	00	05690	25113	00	05690	00000	02	62548	00068
260	00	05590	22201	00	08490	00000	50	05562	24104	52	61655	00068
277				50	04751	32111	5-	51758	12458	02	62668	17368
279												
285	13	01842	28413	50	01853	32263				6-	64538	22368
288	20	05651	27213	00	08490	00040	00	47190	00040	5-	62448	18348
273	10	01863	16114									
301	80	05652	28214	00	45290	00040	50	43352	12342	62	62545	18468
321	07	05890	26327	00	47290	00040	--	44109	16149	6-	64448	17348
299	57	05643	26214	50	00742	00002				5-	05648	22428
292	10	01781	26113	00	05590	00010	--	46009	14149	5-	67338	16368
310	--	02528	24328	--	08434	24214				--	57209	20349
316	07	08490	22126	00	47190	00040	--	44103	00049	62	62544	16268
333	00	01890	00025	53	01863	04103	62	62647	16568	62	62644	18268
334										--	62356	18268
340	50	05634	30227	00	47290	00040	00	45390	14340	6-	62538	16368
136	57	05562	26317	00	04490	30211	--	48109	18149	5-	08468	15348
336	52	03754	20428							62	62755	20368
350	57	02754	22226							--	44209	26149
368												
379	52	05655	24228	00	08490	00010				5-	05548	20128
390	53	08456	24228	00	45390	00040	--	48109	00049	5-	43157	18247
382	5-	05667	26227	5-	08448	00028				52	08467	00028
438	5-	03758	28218							52	02544	00028
430	50	43363	00044	5-	47358	00028	50	45365	00045	5-	21458	00058
409	57	52527	20258	5-	05618	18258	5-	05648	12258	5-	05648	16258

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 3rd December
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light to moderate southwesterly wind. Dull and misty at first with local fog. Slight local rain at first, more general rain later. Becoming rather mild.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Moderate to fresh southwest wind, veering west later. Dull and rainy at first, some bright intervals later. Mild.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	As 1-4
12 S.W. Scotland & Isle of Man.	Moderate to fresh southwest wind veering west later. Cloudy with occasional rain at first; showers and bright intervals later. Mild.
13 A. W. Scotld. / B.N.W.Scotland.	Fresh or strong southerly winds, veering southwest to west later. Dull and rainy at first, bright intervals and showers later. Mild.
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	

GENERAL INFERENCE.

A depression off Northwest Scotland is deepening and moving northeastwards. It will be cloudy with periods of rain in all districts, with mild conditions in the North and West quickly spreading to eastern districts also.

FURTHER OUTLOOK.

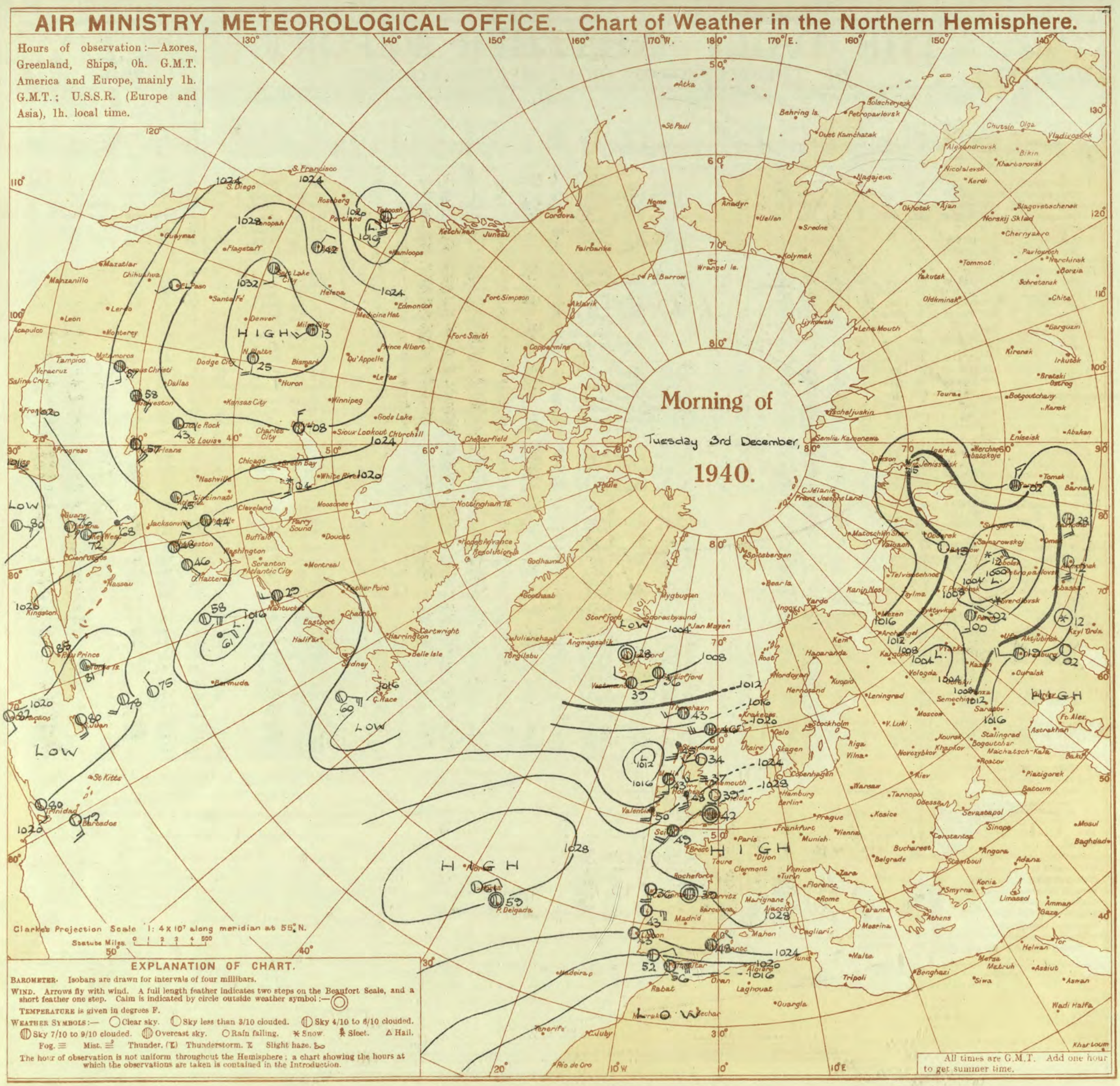
Rather unsettled southwesterly type, with occasional rain or showers, but some bright intervals.

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.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 3rd December 1940.

No. 288 GG

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

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	1028·2	-6	-	0	m	42	97	4	5	-	-	10	10	2000
	S. Farnborough	226	1028·2	-8	-	0	m	41	92	4	5	-	-	9-6	9-6	3500
	Boscombe Down	417	1028·0	-6	SE'E	2	m	40	97	4	5	-	-	10	10	2500
	Calshot (Sthmtn.)	8														
	Lympne ...	346	1028·3	-2	-	0	F	39	97	1	-	-	-	10	10	4150
	Manston ...	154	1028·7	-2	-	0	cf	41	97	3	5	-	-	9+	9+	1800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1028·8	-6	-	0	cf-	38	97	2	5	-	-	9+	9+	4000
	Gorleston ...	5	1028·5	-4	WNW	1	bf	33	92	2	-	-	-	0	0	-
	Mildenhall ...	19	1028·9	-2	SE	2	F-	32	97	1	-	-	-	10	10	4150
	Cranwell ...	240	1028·3	-6	WSW	3	m	34	97	4	5	-	-	2-3	2-3	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1027·9	-4	-	0	m	40	97	4	5	-	-	10	10	1800
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1025·9	-8	SSW	3	bc	46	97	8	5	1	-	4-6	4-6	1500
	Bristol ...	209	1027·6	-2	SSE	1	id.	43	92	6	5	-	-	10	10	4000
	Portland Bill ...	32	1027·0	+10	SW	1	bc	49	92	8	5	-	-	4-6	4-6	4000
	Plymouth ...	82	1027·6	-6	NE	2	id.	43	97	6	5	7	-	7-8	9+	1500
	The Lizard ...	240	1027·4	-4	SW	2	c	48	85	8	8	2	-	7-8	10	2000
	Scilly (St. Mary's)	163	1026·5	-6	SSW	3	c	49	85	8	5	-	-	7-8	7-8	1800
	Guernsey ...	175														
6	Pembroke ...	142	1025·3	-6	SW	5	rr	50	92	7	5	-	-	10	10	1500
7	Holyhead ...	26	1022·6	-18	S'E	5	dr	48	97	5	5	-	-	10	10	500
	Chester (Sealand)	16	1025·5	-14	SE'S	2	m	41	85	4	-	-	-	0	0	-
8	Manchester ...	70	1026·1	-18	SE'E	2	f-	41	92	3	5	2	-	9+	10	2500
10	Spurn Head ...	29	1027·8	0	S	2	bc	39	97	5	-	4	-	0	2-3	-
	Catterick ...	175	1026·1	-14	S'W	2	bf+	30	97	3	-	-	-	0	0	-
	Tynemouth ...	108	1025·1	-14	SW	3	bf	37	85	3	-	-	-	0	0	-
11	St. Abbs Head	280	1023·6	-18	WSW	3	bc	37	92	6	4	4	-	2-3	2-3	2500
	Leuchars ...	36	1023·2	-16	WSW	2	zo	34	92	5	5	-	-	2-3	2-3	3500
12	Renfrew (Abbots I.)	19	1023·3	-22	E'N	1	F	32	97	1	-	-	-	0	0	-
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1023·1	-20	S'E	4	c	47	92	8	5	1	-	7-8	10	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1019·0	-26	S	5	pr	45	85	7	5	7	-	7-8	10	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1020·2	-16	SW	4	bc	42	85	7	5	1	-	4-6	4-6	1500
16	Lerwick ...	156	1017·3	-4	WSW	5	c	46	75	7	8	7	-	4-6	7-8	800
17	Blacksod Point	18	1017·3	-20	S	5	ro	50	97	6	6	-	-	10	10	4150
18	Malin Head ...	84	1019·0	-32	S	3	c	43	92	8	5	6	-	4-6	7-8	4000
	Aldergrove ...	268	1021·7	-26	SSE	3	ir.	44	92	6	5	2	-	7-8	10	1100
19	Birr Castle ...	173	1022·1	-10	S	1	c/r	46	97	7	5	-	-	10	10	1500
20	Valentia Obsy.	30	1020·8	-16	S'W	4	ir.	50	85	8	6	2	-	9	10	1500
	Roches Point	22	1023·1	-10	S	3	c	48	92	8	5	-	-	9+	9+	1500

OBSERVATIONS at 7 hr. G.M.T. 3rd December

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)	1025·9	-6	SSW	1	of	41	92	2	5	-	-	10	10	1500	1	*
Croydon ...	1026·4	-6	-	0	m	42	97	4	5	-	-	10	10	2000	1	*
S. Farnborough	1026·2	-10	SSE	2	of+	41	92	3	5	-	-	10	10	3100		*
Boscombe Down	1025·7	-10	SE	2	of+	39	97	2	5	-	-	9+	9+	1500	1	*
Calshot (Sthmtn.)	1025·9	-10	-	0	id.	45	92	6	5	7	-	7-8	10	1500	1	0
Lympne ...	1026·5	-10	-	0	rF	42	97	1	-	-	-	10	10	4150	1	2
Manston ...	1026·3	-14	-	0	cf	42	97	3	5	-	-	10	10	1400		*
Shoeburyness ...	1024·6	-10	S'E	1	c/d	38	97	3	6	2	-	10	10	1500	1	*
Felixstowe ...	1026·3	-10	W	1	F+	38	85	1	-	-	-	10	10	4150	1	1
Gorleston ...	1025·7	-16	S	2	c	43	97	5	5	-	-	9+	9+	1500	1	*
Mildenhall ...	1025·5	-12	SSE	2	of+	36	97	2	5	-	-	10	10	2800	1	*
Cranwell ...	1024·9	-18	S	3	m	37	97	4	5	-	-	10	10	1500	1	*
Birmingham ...	1024·8	-4	SSW	3	rf	42	97	3	5	-	-	10	10	800	1	*
Upper Heyford	1025·5	-14	S	2	zo	40	97	5	5	-	-	10	10	4000	1	*
Ross-on-Wye	1024·0	-12	S	2	zo	43	85	6	5	-	-	10	10	2500	1	*
Hartland Point	1023·3	-12	SW	3	c	46	85	8	5	2	-	7-8	10	2000	1	2
Bristol ...	1025·2	-14	SSE	3	zo	44	85	6	5	7	-	9-6	10	3500	1	*
Portland Bill ...	1024·6	-12	S	4	ir	49	92	8	5	-	-	10	10	2500	1	3
Plymouth ...	1025·2	-8	-	0	c/d	45	97	5	7	7	-	7-8	10	1200	1	0
The Lizard ...	1025·4	-4	W	3	c	47	92	8	8	2	-	9	10	2000	1	2
Scilly (St. Mary's)	1024·0	-10	SW'W	4	ir.	49	75	7	5	-	-	10	10	1500	1	2
Guernsey ...																
Pembroke ...	1022·0	-8	WSW	5	c/r	49	85	7	8	2	-	9-6	10	1600	1	2
Holyhead ...	1020·2	-10	SW	3	rr	48	97	6	6	2	-	7-8	10	600	1	2
Chester (Sealand)	1022·0	-14	S'E	3	rr	44	97	5	[illegible]	2	-	10	10	1800	1	*
Manchester ...	1021·8	-22	S'E	4	ro	44	92	4	6	2	-	9	10	600	1	*
Spurn Head ...	1023·4	-20	SE'E	4	f+	39	97	3	5	-	-	10	10	450	0	3
Catterick ...	1021·2	-24	S'W	3	rF	33	97	1	-	-	-	10	10	4150	1	*
Tynemouth ...	1020·7	-24	SSW	3	rr	37	92	4	-	2	-	10	10	1800	1	2
St. Abbs Head	1018·7	-24	S	3	ro	37	97	5	5	2	-	9-6	10	2000	1	2
Leuchars ...	1017·8	-26	-	0	m/d	35	92	4	-	2	-	10	10	1900	1	*
Renfrew (Abbots I.)	1017·2	-22	ENE	1	ro	39	97	4	-	2	-	10	10	800	1	*
Eskdalemuir ...	1018·5	-22	-	0	ro	36	97	4	-	2	-	10	10	4150	1	
Point of Ayre ...	1019·1	-6	W'S	3	ro	47	97	7	8	2	-	2-3	10	2500	1	2
Tiree ...	1013·0	-24	SW'W	4	ro	47	97	6	-	2	-	10	10	1500	1	3
Stornoway ...	1014·5	-18	S	4	c/pr	46	92	7	5	7	-	7-8	9+	1500	1	4
Dalwhinnie ...	1016·5	-22	SSW	3	o	39	85	7	5	2	-	7-8	10	1500	1	*
Aberdeen ...	1017·4	-22	SSE	1	m	37	85	4	5	-	-	9-6	9-6	4000	1	1
Wick ...	1015·0	-30	SW	4	c	40	92	7	5	7	-	9-6	7-8	1500	1	2
Lerwick ...	1013·5	-32	SW	6	c	45	75	7	8	7	-	7-8	9	1500	1	*
Blacksod Point	1013·2	-22	S	6	ro	49	97	6	6	-	-	10	10	4150	1	3
Malin Head ...	1014·2	-20	S	5	c/pr	46	97	6	6	-	-	9+	9+	800	1	4
Aldergrove ...	1017·8	-14	S'W	3	c	45	97	7	5	-	-	10	10	600	1	*
Birr Castle ...	1017·8	-18	S	1	ir	46	92	7	5	-	-	10	10	2500	1	*
Valentia Obsy.	1015·9	-26	S'E	4	do	50	97	7	5	-	-	10	10	1500	1	2
Roches Point	1018·9	-24	SSW	5	rr	49	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)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 2nd Hrs. (36)
London (Kew)	46	40	31	-	-	0·6
Croydon ...	47	40	39	-	-	1·5
S. Farnborough	49			Tr		
Boscombe Down	47	38	35	Tr	Tr	1·4
Calshot (Sthmtn.)	48	41	35	-	0·6	3·0
Lympne ...	45	37	29	Tr	1	1·8
Manston ...						
Shoeburyness ...	46	32	26	Tr	Tr	0·5
Felixstowe ...	45	32	30	-	-	0·5
Gorleston ...	47	31	29	-	-	0·8
Mildenhall ...	47	31	27	Tr	0·1	0·5
Cranwell ...	47	31		-	-	
Birmingham ...	46	41	36	-	0·5	0·0
Upper Heyford	46	38	28	-	-	*
Ross-on-Wye	49	43	40	-	-	0·1
Hartland Point	50	44	43	0·4	1	0·0
Bristol ...	49	42	39	Tr	Tr	0·3
Portland Bill ...	51	47	*	-	0·2	*
Plymouth ...	50	41	*	Tr	1	0·0
The Lizard ...	51	41	*	0·5	2	0·0
Scilly (St. Mary's)	53	46		-	1	0·2
Guernsey ...						
Pembroke ...	51	48	*	3	4	0·0
Holyhead ...	50	39	31	-	7	2·2
Chester (Sealand)	49	34	29	Tr	1	0·0
Manchester ...		31	28		4	0·1
Spurn Head ...	45	38	*	Tr	Tr	0·0
Catterick ...	50	28	23	-	0·4	8·2
Tynemouth ...	47	37	33	-	1	*
St. Abbs Head	46	34	*	-	0·5	*
Leuchars ...	48	40	25	-	0·2	6·3
Renfrew (Abbots I.)	50	30	23	-	1	7·0
Eskdalemuir ...	46	36	19	-	2	5·6
Point of Ayre ...	50	35	*		7	5·0
Tiree ...			*		6	5·0
Stornoway ...	47	44	*		0·6	2·7
Dalwhinnie ...	43	30	20	0·1	Tr	3·0
Aberdeen ...	47	34	26	-	-	5·6
Wick ...	45	37	*	0·1	-	*
Lerwick ...	48	44	*	2	0·5	0·8
Blacksod Point	51	*	*	-	7	*
Malin Head ...	49	38	*	-	2	1·5
Aldergrove ...	46	34	28	-	1	3·0
Birr Castle ...	44	40	38	-	3	0·0
Valentia Obsy.	53	48	45	1	8	4·9
Roches Point	50	47	*	Tr	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	cmcf cmo	cmo cm	cmcf	46	40	31	-	-	0·6	*	*	2
Croydon ...	217	cmo	cmo cmc	cm	47	40	39	-	-	1·5	*	*	3
Greenwich (Royal Observatory) ...	149	⊕cf	do cm	cmfdo	46	38	27	Tr	Tr	0·3	76	97	3
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	46	35	35	Tr			87	99	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	46	37	27	-	-		81	92	*
Camden Square ...	110	bc	o	*	45	37	31	-	-	*	*	95	*
Kensington ...	80	bcof	cf	*	46	40	36	Tr	-		86	95	*
Hampstead Observatory ...	450										*		*

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.
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

Wednesday 4th December 1940.

No. 28867

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

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)	1023.7	-16	SSW	2	z_o	44	92	5	5	-	-	10	10	2500
	Croydon	1024.0	-16	SSW	2	m	45	92	4	5	-	-	10	10	3500
	S. Farnborough	1024.0	-14	SW	4	z_o	45	85	5	7	7	-	7-8	10	3000
	Boscombe Down	1023.4	-16	SSW	4	r_o r_o	43	97	6	6	2	-	7-8	10	800
	Calshot (Soton.)	1024.4	-12	WSW	4	c/r	46	85	7	5	7	-	9	10	3000
	Lympne	1025.0	-8	SSW	1	o/d	44	97	7	5	-	-	10	10	1600
	Manston	1024.7	-8	SW'S	3	id_o	44	92	6	5	7	-	4-6	10	1200
2	Shoeburyness	1024.4	-12	S'E	1	f/p	44	97	3	5	2	-	7-8	10	2500
	Felixstowe	1024.1	-16	SW'S	3	z_o	45	92	3	5	7	-	7-8	10	5000
	Gorleston	1023.4	-16	SW'S	3	m	44	92	4	5	1	-	4-6	10	1500
	Mildenhall	1022.9	-20	SW'S	3	m	45	85	4	5	2	-	7-8	10	3000
	Cranwell	1022.0	-18	SW'W	4	r_o r_o	44	92	5	-	2	-	10	10	1000
3	Birmingham	1021.6	-6	SSW	2	r_o r_o	43	92	4	6	-	-	10	10	800
	Upper Heyford	1022.9	-20	SSW	2	c/p	44	92	6	5	7	-	7-8	10	1000
4	Ross-on-Wye	1021.5	-14	SSW	2	c	46	92	7	6	2	-	4-6	10	1500
5	Hartland Point	1021.0	-18	WSW	4	c	47	85	7	8	2	-	4-6	9+	1400
	Bristol	1022.6	-14	S'W	3	ir_o	46	92	7	5	7	-	2-3	10	3000
	Portland Bill	1023.6	-14	SW	4	rr	48	92	7	5	-	-	10	10	2500
	Plymouth	1023.7	-10	SW	3	r_o r_o	49	85	6	5	2	-	4-6	10	1500
	The Lizard	1023.4	-8	WSW	5	e	50	75	8	8	2	-	9	10	2000
	Scilly (St. Mary's)	1021.9	-18	SW	5	c	50	85	7	8	1	-	7-8	10	1200
	Guernsey														
6	Pembroke	1019.5	-14	SW	6	c/p	48	97	6	5	2	-	7-8	10	1400
7	Holyhead	1017.8	-16	SSW	5	r_o r_o	49	97	7	6	2	-	9	10	800
	Chester (Sealand)	1019.9	-16	SE'S	3	z_o	46	92	6	5	7	-	7-8	10	3000
8	Manchester	1020.1	-14	S'W	4	z_o	45	92	5	5	7	-	7-8	10	1800
10	Spurn Head	1020.7	-10	S'W	4	rr	43	97	4	5	-	-	10	10	800
	Catterick	1018.7	-14	SSW	2	z_o	44	97	5	5	7	-	7-8	10	2000
	Tynemouth	1019.6	-6	SW	3	of	42	92	3	5	-	-	10	10	1200
11	St. Abbs Head	1015.7	-4	SW	3	c	41	75	7	5	7	-	4-6	9+	2000
	Leuchars	1015.4	-6	-	0	m	39	97	4	-	2	-	10	10	1800
12	Renfrew (Abbots I.)	1015.6	-10	SW'W	6	c/d	47	85	6	5	2	-	9+	10	900
	Eskdalemuir	1016.3	-8	SW'W	4	c	44	92	6	5	-	-	10	10	800
	Point of Ayre	1016.8	-12	WSW	2	ejp	49	92	7	8	1	-	7-8	7-8	1500
13A	Tiree	1012.2	0	SW'W	4	c	49	92	7	5	-	-	9	9	1500
13B	Stornoway	1013.3	-8	SE	3	c	46	85	5	8	7	-	7-8	9+	1500
15	Dalwhinnie	1014.6	-6	SW	2	c	42	85	7	5	4	-	7-8	9	1500
	Aberdeen	1014.7	-8	WSW	1	r_o r_o	41	97	6	6	7	-	4-6	9+	1500
	Wick	1013.4	-6	WSW	2	c	42	85	8	5	7	8	4-6	7-8	1500
16	Lerwick	1012.2	-4	WSW	4	c	45	85	8	5	7	-	4-6	7-8	1500
17	Blacksod Point	1010.8	+10	W	3	c	52	97	7	4	5	-	4-6	7-8	1500
18	Malin Head	1014.1	0	SSW	4	c	47	92	7	8	-	-	9	9	800
	Aldergrove	1016.3	-6	SSW	2	e/d	47	92	6	5	-	-	10	10	600
19	Birr Castle	1016.7	-2	S'W	1	c	50	92	8	5	1	-	7-8	10	2500
20	Valentia Obsy. †	1018.7	+10	W	4	bc	51	92	8	8	-	-	4-6	4-6	1500
	Roches Point	1017.5	+4	W'N	3	bc	53	85	8	8	-	-	4-6	4-6	1500

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

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)	1022.7	-2	SSW	3	r_o r_o	43	92	5	5	-	-	9	9+	1500	1	*
Croydon	1023.3	+2	S	1	d_o d_o	43	97	5	5	-	-	10	10	1800	1	*
S. Farnborough	1022.8	-2	SSW	3	c/r	44	92	6	5	2	-	7-8	10	1400	1	*
Boscombe Down	1022.9	-4	S	3	ir_o	43	97	5	5	2	-	7-8	10	1600	1	*
Calshot (Soton.)	1022.9	-6	SWW	3	r_o r_o	46	92	6	5	-	-	10	10	900		
Lympne	1024.0	0	SW	2	e	43	92	7	5	7	-	9	10	2000	1	§
Manston	1023.4	-6	SW'S	2	z_o	43	92	6	5	7	-	4-6	10	3000		*
Shoeburyness	1022.9	-4	SSW	1	ir_o	44	92	4	6	2	-	10	10	800	1	*
Felixstowe	1022.4	-10	SW	3	ir_o	44	92	4	5	2	-	7-8	10	2000	1	2
Gorleston	1022.0	0	SW'S	3	r_o r_o	44	92	4	6	-	-	10	10	800	1	2
Mildenhall	1021.4	-4	SSW	3	rf	43	97	3	-	2	-	10	10	1700	1	*
Cranwell	1020.1	-12	SW'W	3	z_o	42	97	5	-	7	-	0	4-6	-	1	*
Birmingham	1021.0	-4	SSW	3	r_o r_o	43	92	5	6	-	-	10	10	4000	1	*
Upper Heyford	1021.6	-8	SSW	2	z_o	43	92	5	5	7	-	4-6	7-8	1800	1	*
Ross-on-Wye	1020.1	-4	S'W	3	c	45	85	6	5	1	-	9	9+	1500	1	*
Hartland Point	1019.0	-8	SW	4	rr	47	97	6	6	2	-	9+	10	1000	1	3 *
Bristol	1021.4	-4	S'E	3	r_o r_o	45	97	6	6	2	-	9+	10	800	1	
Portland Bill	1021.9	-6	SW	4	rr	49	92	7	5	-	-	10	10	2500	1	3
Plymouth	1022.1	-2	WSW	6	rr	48	97	5	6	2	-	9	10	100	1	4
The Lizard	1021.6	-12	SW	6	c/pr	48	97	6	5	2	-	9	10	1500	1	4
Scilly (St. Mary's)	1020.6	-2	WSW	5	c/r	50	97	7	5	2	-	4-6	10	1000	1	3
Guernsey																
Pembroke	1017.8	-4	WSW	4	bc	51	97	7	8	6	-	2-3	4-6	1500	1	3
Holyhead	1016.7	+2	SSE	3	r_o r_o	49	97	5	5	-	-	4-6	4-6	1200	1	1
Chester (Sealand)	1017.9	-6	SE'S	2	z_o	45	92	5	5	-	-	9	9	3000	1	*
Manchester	1018.6	-6	S'E	3	m/r	45	92	4	5	-	-	7-8	10	2200	1	*
Spurn Head	1018.7	-4	S'W	4	bc	43	97	6	5	1	-	2-3	4-6	1500	0	3
Catterick	1016.3	-14	S	3	m	43	97	4	5	7	-	4-6	9+	2000	1	
Tynemouth	1018.5	0	S	3	of	45	92	3	-	2	-	10	10	1200	1	2
St. Abbs Head	1015.0	-4	SW	3	c	45	92	7	5	2	-	7-8	10	2500	0	1
Leuchars	1014.5	0	-	0	m	40	92	4	-	2	-	10	10	1500	1	*
Renfrew (Abbots I.)	1014.9	+2	WSW	1	z_o	46	97	5	5	7	-	7-8	9	1800	1	*
Eskdalemuir	1015.9	+6	W'S	2	d_o d_o	44	97	5	-	2	-	10	10	220	1	*
Point of Ayre	1016.1	0	W'S	2	id	48	97	7	8	2	-	7-8	10	1500	1	2
Tiree	1013.5	+6	SW	2	c	48	97	7	5	-	-	7-8	7-8	1500	1	3
Stornoway	1013.6	+2	-	0	bc	45	92	8	5	-	-	2-3	2-3	2500	1	0
Dalwhinnie	*	+2	SW	2	id_o	42	97	7	8	-	-	4-6	4-6	1500	1	*
Aberdeen	1014.1	-4	WSW	1	m	42	97	4	6	7	-	1	9+	1500	1	1
Wick	1013.0	-2	SW	1	b	43	92	7	5	-	-	1	1	1500	1	1
Lerwick	1022.5	+2	SW	2	bc	42	92	8	5	7	-	4-6	4-6	1500	1	*
Blacksod Point	1016.9	+16	W	2	bc	48	97	8	4	-	-	2-3	2-3	800	0	2
Malin Head	1015.2	+16	W	2	c/d	48	97	6	9	-	-	9	9	800	1	3
Aldergrove																*
Birr Castle	1018.0	+16	W	1	c/pr	49	92	8	8	7	-	7-8	9	1500	1	*
Valentia Obsy. †	1019.9	+12	W'S	3	bc	50	97	8	5	1	-	2-3	4-6	1500	1	2
Roches Point	1019.2	+18	WNW	3	bc	50	85	8	5	3	5	2-3	4-6	2500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—18h. 3rd (37)	Weather 13h.—18h. 3rd (38)	Weather 18h. 3rd to 1h. 4th (39)	Weather 1h.—7h. 4th (40)
London (Kew)	cfzemm	cr_o r_o m	cr_o bccir_o m	cm_o
Croydon	cfdm	mr_o d_o d_o	cm_o id_o v	cm_o m_o
S. Farnborough	fcdmc	cr_o r_o mc	cm_o d_o r_o r_o c	cr_o bm_o c
Boscombe Down	cifidir_o m	cir_o m	cir_o cddid	cid_o cbcm_o
Calshot (Soton.)	cir_o mc	cr_o r_o m		cd_o irm_o
Lympne	Frrddm	cmc	cir_o m_o	cm_o r_o d_o
Manston	cFfddm	id cidcm	cbcir_o cm_o	cid_o cm_o
Shoeburyness	Fecmidc	cfeomir_o	cir_o mc	bm_o cmid
Felixstowe	oFcidir_o m	fcmir_o m	cr_o r_o mbcm_o	cm_o od_o d_o f_o
Gorleston	cpfz_o m	cmoifr	bccm	cmor_o
Mildenhall	cfwidcm	cmr_o r_o f	ofr_o cmbm_o	bm_o or_o r_o cm_o
Cranwell	cr_o r_o m	r_o r_o m_o, bcm	bcm_o, bcm	cm
Birmingham	for_o r_o	or_o r_o	oir_o c	cbcz
Upper Heyford	cfemcir_o	cmr_o r_o id_o m	ccmd_o d_o id	cd_o d_o m_o of
Ross-on-Wye	dcdoc	cd_o oc	ccd_o	cbcc
Hartland Point	circ	crrc	rrirc	cbcc
Bristol	cd cr_o r_o	cirrrr_o	cr_o r_o id_o bcm	bcm_o cid_o
Portland Bill	orr	ofr		cc
Plymouth	cr_o r_o m	cmr_o r_o crr	cr_o r_o id_o mbcb	ccm_o bcm_o
The Lizard	rrcbz	idprc	bc	bcprc
Scilly (St. Mary's)	cir_o c	cir_o	cbc	bcwc
Guernsey				
Pembroke	rrmcq	zoiFlrqc	bc	bcc
Holyhead	cmrr	mr_o r_o bc	bcr_o pr_o c	b,c
Chester (Sealand)	rrr_o r_o mc	ir_o cm	cmir_o m_o c	cbcm_o
Manchester	cmr_o r_o m	cmr_o r_o	cm	d_o d_o id_o
Spurn Head	orrm	c	cw	cw
Catterick	oir_o fm	cmc	cmm_o m	cmfcm_o
Tynemouth	oirff	oifff	off	o
St. Abbs Head	cm_o	c	c	c
Leuchars	cir_o mfm	om	fmcm	cm_o
Renfrew (Abbots I.)	or_o fidm	cm	cm_o m_o ff	cm_o id_o m_o
Eskdalemuir	r_o d_o d_o rfc	coddd_o d_o	oid_o c	cir_o
Point of Ayre	cidc	id	occ	c
Tiree	ordc	c		
Stornoway	cpr	cbc	bcc	cpr_o
Dalwhinnie	cir_o	cid_o	*	cpr
Aberdeen	cr_o r_o	rr	cm_o bc	ir_o bc
Wick	c	cbcb	bbc	bcc
Lerwick	c	cprbc	cpr_o bc	bcc
Blacksod Point	c	cbc	c	rrq
Malin Head	c	cid_o c	cid_o c pr_o c	cpr_o c
Aldergrove	cr_o cd_o m		cm_o om_o	om m_o o
Birr Castle	c	cpr_o	cir_o	c
Valentia Obsy. †	d_o d_o cbc	bccbc	cwid_o c	cwid_o cdd
Roches Point	drcbc	bc	bcq	cw

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.

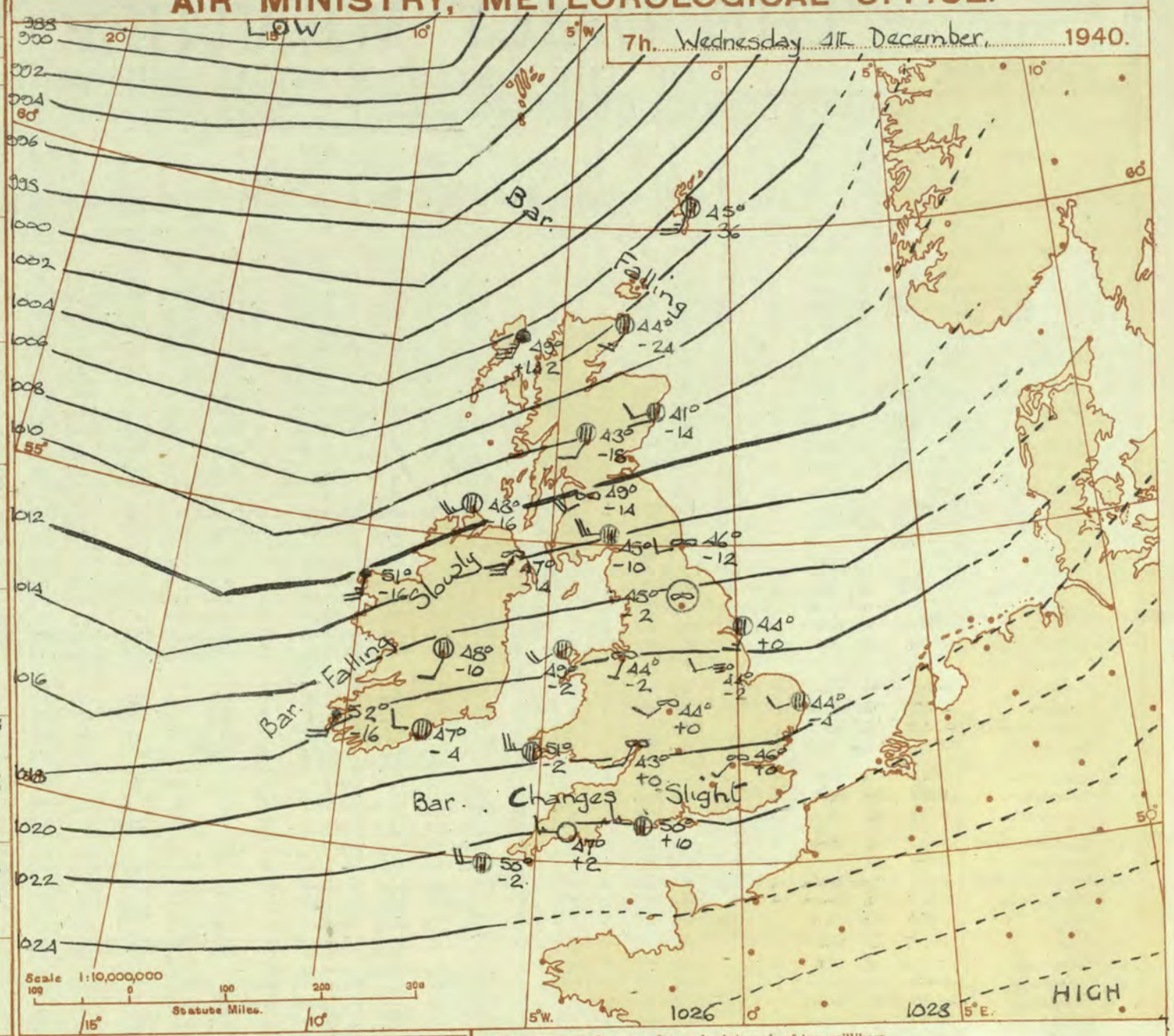
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 3rd December			18h. G.M.T.			01h. G.M.T. 4th December			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	01864	17214	00	00790	16110	02	00690	16101	52	02755	18227
115	52	01884	20328	51	01851	20113	52	02844	20327	52	02844	20427
203												
206				86	25654	00085	5-	21448	00058	62	61855	20367
210	82	62845	20268	54	00862	20162	5-	47353	00013	5-	21647	18157
220												
230	5-	2-052	22741	5-	51748	18358	5-	23548	20258	5-	05648	20458
245	02	61848	24268	53	08445	28166	5-	05656	24227	5-	08447	20147
260	52	02766	18266	5-	05658	20268	5-	05658	18228	53	05644	18268
277	67	82645	18465	52	51645	21258	5-	02758	21368	8-	02848	19428
279				--	51548	24258	5-	05548	24328			
285	6-	63638	24568	6-	61537	24667				5-	03638	26368
288	52	64568	18368	5-	08468	16268	5-	45258	18148	52	41455	20245
273	43	02644	21357							43	02734	18528
301	57	47347	15168	02	51448	16258	5-	22548	26168	5-	05557	20267
321	02	62438	02368	57	45363	18467	00	47390	00040	5-	08457	21357
299	5-	62448	23368	5-	08438	22358	--	48009	22349			
292	52	67346	17168				5-	08447	00047	57	08455	19257
310				--	57109	20449						
316	62	52438	16268	57	41454	20245	5-	52448	20158	5-	08458	20128
333	62	64645	20368	02	52528	16358	5-	02757	22187	53	02752	24317
334											02655	18228
340	67	05643	16428	50	51554	14364	5-	51648	00058	5-	02767	20217
136	01	62480	18368	02	67328	19368	5-	05547	20367	5-	41418	20258
336				62	02754	16467				24	03755	20428
350	52	62645	16858							57	05546	20258
368												
379	6-	51628	18358	5-	05528	20328	--	48209	20359	5-	47226	22146
390	5-	47268	16258	62	62446	20268	5-	45338	20258	5-	47346	22168
382	57	02766	18368	57	02665	18267	5-	05548	19228			
438	8-	02748	24427							8-	02747	24457
430	57	02666	20228	5-	62548	20268	5-	51438	20258	5-	22557	24367
409	62	62634	17468	62	52617	18468	50	05643	24253	52	61637	21358

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 4th December
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light or moderate southwest wind, freshening. Fair at first, but with some mist patches in extreme east. Rain this evening, followed by bright intervals tomorrow morning. Rather mild.
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	Fresh southwesterly wind, becoming strong. Rain this afternoon bright intervals and showers later. Rather 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	South or southwest wind, strong to gale. Dull and rainy at first, showery later, but with some bright intervals. Mild.
17 N. W. Ireland 18 N. E. Ireland	Fresh or strong southwest or west wind. Occasional showers, some bright intervals. Rather mild.
19 S. E. Ireland	As 4-11
20 S. W. Ireland	As 17

GENERAL INFERENCE.

A very deep depression is centred near Iceland, and a trough of low pressure is approaching Ireland. Rain associated with this trough will spread across the British Isles, to be followed by showery conditions. Southwesterly winds will become strong to gale in the North and stormy conditions will gradually spread to other parts of the British Isles. It will be mild in all districts.

FURTHER OUTLOOK.

Unsettled with rain at times in all districts. Stormy in many places, especially the North.
Gale warning issued at 05.30 on 4.12.40 in districts 13B. and 16.

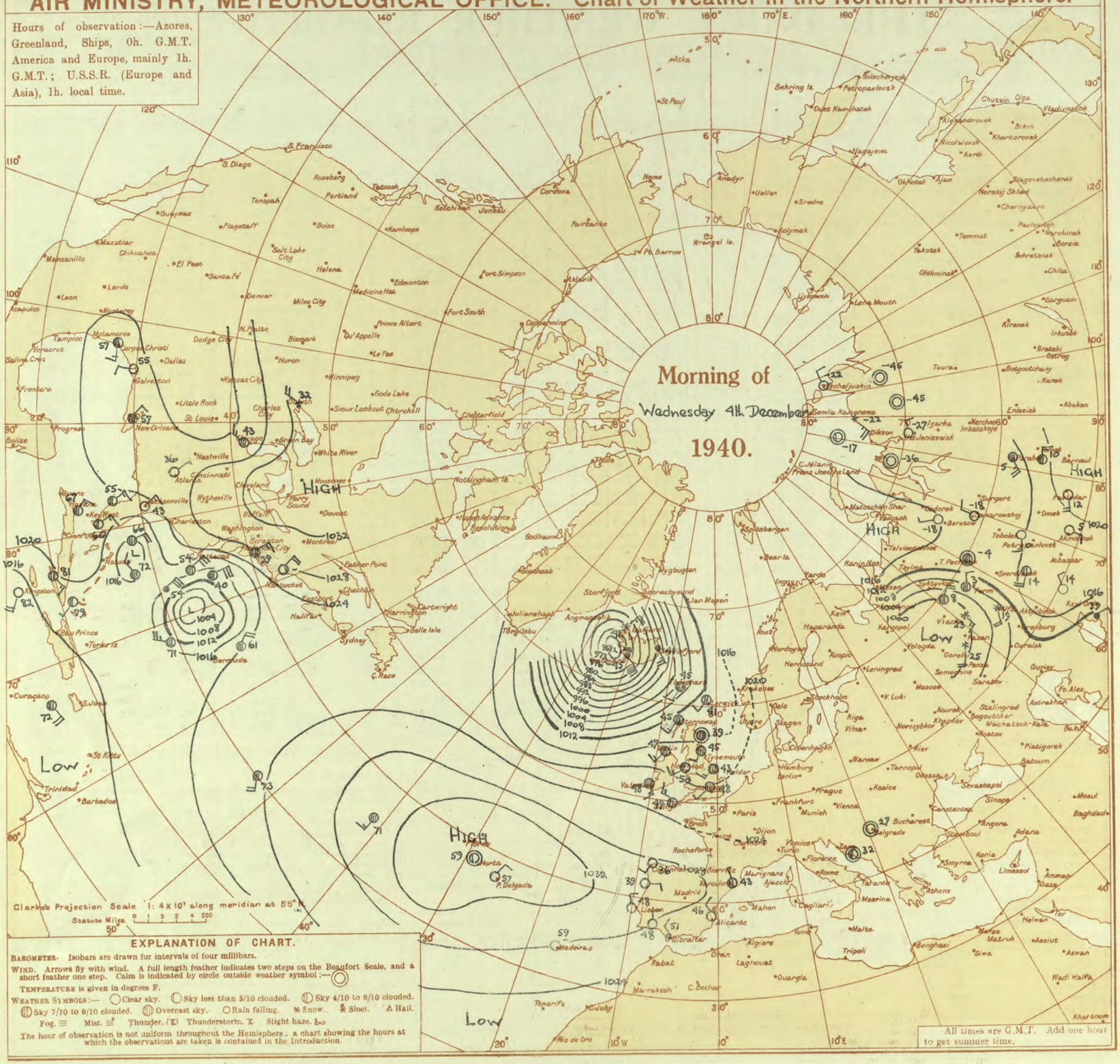
Forecasts issued at 10 30. G.M.T.

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.

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 4th December 1940.

No. 28867.

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

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	1020·9	-14	SW	1	Z_0	48	97	5	5	-	-	4-6	4-6	2000
	S. Farnborough	226	1020·7	-10	SW	4	r_0r_0	46	97	5	5	-	-	10	10	600
	Boscombe Down	417	1020·8	-4	SW'S	2	id_0	46	97	6	5	-	-	10	10	1000
	Calshot (Sthmtn.)	8														
	Lympne ...	346	1022·6	-4	SW	2	o/r	44	97	5	5	-	-	10	10	1200
	Manston ...	154	1021·4	-10	SW'S	3	Z_0	43	92	6	5	7	6	2-3	9	1200
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1020·5	-10	SW	2	Z_0	43	97	5	5	7	-	1	4-6	2000
	Gorleston ...	5	1020·4	-4	SW	2	c	43	92	4	5	-	-	7-8	7-8	1000
	Mildenhall ...	19	1019·3	-14	SSW	3	Z_0	43	92	5	5	-	-	2-3	2-3	4000
	Cranwell ...	240	1019·5	-4	WSW	3	m	41	92	4	6	-	-	7-8	7-8	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1020·7	-4	SW	2	id_0	44	97	5	5	-	-	10	10	700
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1020·1	+4	WNW	2	c	50	97	8	8	-	-	7-8	7-8	1200
	Bristol ...	209	1020·4	-2	SSW	3	Z_0	47	92	6	5	-	-	2-3	2-3	2000
	Portland Bill ...	32	1020·6	-6	SW	4	o	48	92	3	5	-	-	10	10	2500
	Plymouth ...	82	1021·7	+8	W	1	bc	47	97	6	5	-	-	2-3	2-3	1000
	The Lizard ...	240	1022·4	+8	WNW	4	bc	49	97	8	8	-	-	4-6	4-6	2000
	Scilly (St. Mary's)	163	1022·5	+8	WNW	3	bc	49	97	7	5	-	-	2-3	2-3	1500
	Guernsey ...	175														
6	Pembroke ...	142	1020·1	+10	WNW	3	bc	50	92	7	5	-	-	4-6	4-6	2500
7	Holyhead ...	26	1018·0	+8	W'S	3	o/pr	50	97	7	5	-	-	10	10	2000
	Chester (Sealand)	16	1018·0	+2	-	0	Z_0	46	97	6	5	-	-	10	10	2800
8	Manchester ...	70	1018·1	+2	S	1	d_0d_0	44	97	4	5	-	-	10	10	1500
10	Spurn Head ...	29	1017·9	-2	S'W	3	c	43	97	6	5	1	-	4-6	7-8	2500
	Catterick ...	175	1017·3	0	S	1	m	43	97	4	5	-	-	10	10	2500
	Tynemouth ...	108	1017·7	-4	SSW	2	o/f	45	92	5	5	-	-	10	10	1200
11	St. Abbs Head	280	1015·0	0	W	3	c	46	85	7	5	2	-	4-6	10	2000
	Leuchars ...	36	1014·3	-2	W	2	Z_0	45	92	5	5	-	-	10	10	2400
12	Renfrew (Abbots I.)	19	1015·1	0	SW	1	f	48	97	5	8	7	-	9	9+	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1017·0	+6	NW'W	3	c	49	92	8	5	2	-	2-3	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1011·0	-16	SSW	3	c	45	92	7	5	7	-	4-6	9	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1011·9	-4	SSW	3	bc	42	92	7	5	1	-	2-3	4-6	1500
16	Lerwick ...	156	1011·4	-6	SW'W	2	bc	41	92	8	5	7	-	4-6	4-6	1500
17	Blacksod Point	18	1015·6	-10	S	4	c	50	92	7	5	-	-	10	10	800
18	Malin Head ...	84	1014·6	-6	SW	3	c	47	92	7	5	-	-	9	9	1500
	Aldergrove ...	268	1017·0	+2	SW'S	2	m	46	97	4	5	-	-	10	10	200
19	Birr Castle ...	173	1018·9	+4	WSW	1	o/r	45	97	7	5	-	-	10	10	2500
20	Valentia Obsy.	30	1020·5	+6	S	3	c	48	97	8	5	-	-	9+	9+	1500
	Roches Point	22	1020·9	+6	S	2	bc	40	97	8	5	-	-	4-6	4-6	2500

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

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)	1020·7	+4	WSW	2	Z_0	46	97	6	5	-	-	10	10	1500	1	*
	Croydon ...	1020·7	0	SW	1	Z_0	46	97	5	5	2	-	9+	10	1800	1	*
	S. Farnborough	1020·9	+2	SW'W	3	Z_0	46	97	6	5	-	-	10	10	600	1	*
	Boscombe Down	1020·7	-2	SW'W	2	Z_0	45	97	6	8	3	-	4-6	4-6	3000	1	*
	Calshot (Sthmtn.)	1021·1	-2	WSW	2	Z_0	48	97	6	5	7	1	4-6	9	2500	1	1
	Lympne ...	1021·8	-2	SW	2	df	46	97	3	5	-	-	10	10	<150	1	2
	Manston ...	1020·7	-4	SW	2	Z_0	45	97	5	5	-	-	10	10	1400	*	*
2	Shoeburyness ...	1020·4	-2	SW	2	m	47	92	4	5	-	-	10	10	1500	1	*
	Felixstowe ...	1020·0	-6	SW	3	m	45	97	4	5	-	-	10	10	2000	1	2
	Gorleston ...	1019·4	-4	SW'W	2	o/r	44	92	4	6	-	-	10	10	1000	1	1
	Mildenhall ...	1019·1	0	SW'W	3	Z_0	45	97	5	5	7	-	7-8	10	1800	1	*
	Cranwell ...	1019·2	-2	WSW	2	m	44	97	4	5	-	-	10	10	1500	1	*
3	Birmingham ...	1017·8	0	SW	2	Z_0	44	92	5	5	-	-	4-6	4-6	1500	1	*
	Upper Heyford	1019·9	-10	SW	2	f	44	97	2	-	-	-	10	10	<150	1	*
4	Ross-on-Wye	1019·6	0	SW'S	2	Z_0	43	92	6	5	4	1	7-8	9	2500	1	*
5	Hartland Point	1020·1	-4	WNW	3	c	49	92	8	8	6	-	4-6	7-8	1500	1	3
	Bristol ...	1020·9	+2	SW	2	pr	46	97	6	8	7	-	7-8	9	1800	1	*
	Portland Bill ...	1021·4	+10	W	3	c	50	92	8	5	-	-	7-8	7-8	4000	1	3
	Plymouth ...	1022·5	+2	W	3	c	47	92	6	5	7	-	Tr	9+	1200	1	1
	The Lizard ...	1022·7	+2	W'N	4	c/pr	49	97	7	8	2	-	9	10	2000	1	3
	Scilly (St. Mary's)	1022·6	-2	W'S	4	c	50	92	8	5	4	-	4-6	9+	1500	1	2
	Guernsey ...																
6	Pembroke ...	1019·9	-2	W'S	5	c	51	85	7	8	-	-	7-8	7-8	2000	1	2
7	Holyhead ...	1017·2	-2	SW	4	c	49	97	8	5	-	-	10	10	3200	1	2
	Chester (Sealand)	1018·0	-2	S'W	1	Z_0	44	92	6	5	3	-	2-3	4-6	4000	1	*
8	Manchester ...	1017·8	-2	S'W	2	of+	45	97	3	5	-	-	10	10	1500	1	*
10	Spurn Head ...	1017·5	0	SSW	3	c	44	97	6	5	-	-	9+	9+	1500	0	2
	Catterick ...	1016·4	-2	-	0	Z_0	45	92	5	5	7	-	9	10	2500	1	*
	Tynemouth ...	1016·0	-12	WSW	2	Z_0	46	85	5	5	-	-	10	10	1200	1	2
11	St. Abbs Head	1013·1	-8	W	3	c	45	92	8	5	2	-	7-8	10	2500	0	2
	Leuchars ...	1011·3	-14	SW	2	Z_0	46	85	6	5	-	-	9+	9+	2500	1	*
12	Renfrew (Abbots I.)	1012·4	-14	SW	4	Z_0	49	92	5	5	7	-	9	10	1400	1	*
	Eskdalemuir ...	1013·6	-10	W'S	5	o/r	45	97	6	5	-	-	10	10	450	1	
	Point of Ayre ...	1015·3	-6	W'S	3	c	47	97	8	5	2	-	4-6	10	2500	1	2
13A	Tiree	1003·0	-42	SSW	6	pr	49	85	7	5	7	-	7-8	10	1500	1	3
13B	Stornoway ...	1010·5	-18	SSW	2	c	43	97	7	5	-	-	9+	9+	1500	1	*
15	Dalwhinnie ...	1009·4	-14	SW'W	2	bc	41	92	5	5	7	-	2-3	7-8	4000	1	1
	Aberdeen ...	1006·9	-24	SSW	3	c	44	97	7	5	7	-	7-8	10	1500	1	2
	Wick ...	1003·9	-36	SW'S	5	c	45	75	8	8	7	-	4-6	7-8	1500	1	*
16	Lerwick ...																
17	Blacksod Point	1012·2	-16	S	5	r_0r_0	51	97	6	6	-	-	10	10	<150	1	3
18	Malin Head ...	1010·6	-16	SW	5	c	48	92	7	9	-	-	9	9	2500	0	4
	Aldergrove ...	1014·0	-14	SSW	4	Z_0	47	92	6	5	-	-	10	10	1100	1	*
19	Birr Castle ...	1016·6	-10	SSW	2	c	48	92	7	5	-	-	10	10	2500	1	*
20	Valentia Obsy.	1018·1	-16	SSW	4	dd	52	97	7	5	-	-	10	10	800	1	3
	Roches Point	1019·6	-4	W	2	c	47	97	8	5	-	-	9	9	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 3rd Hrs. (36)
London (Kew)	45	43	40	1	0.2	0.0
Croydon ...	45	42	41	1	1	0.0
S. Farnborough	46	43	42	1	0.1	0.0
Boscombe Down	44	42	40	2	2	0.0
Calshot (Sthmtn.)	48	45	44		9	0.0
Lympne ...	45	42	39	5	0.6	0.0
Manston ...	*	*	*	*	*	*
Shoeburyness ...	45	43	36	0.6	0.3	0.0
Felixstowe ...	45	42	38	Tr	0.5	0.0
Gorleston ...	45	42	36	0.3	1	0.0
Mildenhall ...	46	43	36	1	0.4	0.0
Cranwell ...	45	39	37	1	-	0.0
Birmingham ...	43	43	41	2	0.1	0.0
Upper Heyford	44	42	38	1	0.3	*
Ross-on-Wye	46	42	34	Tr	Tr	0.0
Hartland Point	48	47	44	8	2	0.1
Bristol ...	47	44	38	2	0.1	0.0
Portland Bill ...	49	46	*	4	4	*
Plymouth ...	51	43	35	7	1	0.0
The Lizard ...	50	48	*	3	3	0.0
Scilly (St. Mary's)	50	49	*	-	0.1	0.0
Guernsey ...						
Pembroke ...	51	49	*	5	3	0.0
Holyhead ...	50	47	44	4	0.1	0.0
Chester (Sealand)	47	43	36	2	Tr	0.0
Manchester ...	45	43	38	3	0.3	0.0
Spurn Head ...	43	42	*	3	Tr	0.0
Catterick ...	45	42	41	Tr	-	0.0
Tynemouth ...	45	44	41	1	-	*
St. Abbs Head	47	45	*	Tr	-	*
Leuchars ...	*	*	40	0.1	-	0.0
Renfrew (Abbots I.)	48	45	41	1	0.1	0.3
Eskdalemuir ...	45	43	41	3	0.5	0.0
Point of Ayre ...	49	43	*	1	0.2	0.0
Tiree			*	2		
Stornoway ...	47	40	*		Tr	0.2
Dalwhinnie ...	43	41	35	0.3	0.1	0.0
Aberdeen ...	42	38	33	4	0.1	0.0
Wick ...	43	40	*	-	-	*
Lerwick ...	46	40	*	Tr	Tr	0.7
Blacksod Point	53	43	*	0.2	0.2	*
Malin Head ...	48	45	*	0.6	1	0.2
Aldergrove ...		45	44		-	0.0
Birr Castle ...	51	42	38	4	0.1	0.2
Valentia Obsy.	52	48	43	0.1	1	2.4
Roches Point	54	44	*	5	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. (To-day)
Kew ...	18	cf,cmm	cr,r,m	cr,bcm	45	43	40	1	0.2	0.0	*	*	5
Croydon ...	217	cf,dm	m,r,d,d	cm,id,vm	45	42	41	1	1	0.0	*	*	5
Greenwich (Royal Observatory) ...	149	cm	cr,rm	cm	46	43	38	1	-	0.0	82	93	4
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	48	43	39				85	95	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	48	43	37	-	2		77	96	*
Camden Square ...	110	o	o	*	45	43	37	1	0.5	*	*	94	*
Kensington ...	80	bcf	cf	*	46	44	39	Tr	1		86	97	*
Hampstead Observatory ...	450	or	or	of	45	42	39	1	2		*	95	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

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

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.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 5th December 1940.

No. 28,868

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

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)...	1018.6	-14	SW'W	4	z_0	49	85	6	5	3	-	7-8	9+	2500
	Croydon ...	1019.7	-14	SSW	2	c	50	85	6	2	-	1	7-8	7-8	2500
	S. Farnborough	1020.3	-14	SW	4	c	49	85	7	5	-	-	9+	9+	2000
	Boscombe Down	1020.3	-14	W'S	4	c	49	97	8	5	-	-	9	9	1800
	Calshot (Soton.)	1020.7	-12	WSW	2	c	52	85	7	4	3	1	2-3	7-8	2000
	Lympne ...	1020.1	-20	WSW	3	c	50	97	7	2	6	-	9	9+	800
	Manston ...	1019.5	-20	SW'W	3	c	50	92	7	8	5	-	4-6	9	1600
2	Shoeburyness ...	1019.4	-10	SW'W	2	c	49	92	5	8	4	-	7-8	7-8	2500
	Felixstowe ...	1018.7	-16	SW'S	3	z	49	92	5	.	4	-	9	Tr	2500
	Gorleston ...	1017.8	-10	SW'S	3	bc	47	92	6	5	3	-	4-6	4-6	1800
	Mildenhall ...	1017.8	-18	SW	4	z_0	48	85	6	5	3	-	2-3	7-8	3000
	Cranwell ...	1016.4	-26	WSW	5	z_0	49	85	6	5	7	-	4-6	9+	2500
3	Birmingham	1016.6	-12	S	2	c	47	85	6	6	7	-	4-6	10	800
	Upper Heyford	1019.5	-10	SW	5	id_0	47	92	6	5	2	-	9	10	500
4	Ross-on-Wye ...	1017.5	-20	SSW	3	c	50	85	7	5	4	1	7-8	9	2500
5	Hartland Point	1019.0	-20	WSW	4	id	50	97	5	5	-	-	10	10	800
	Bristol ...	1019.8	-14	SW'W	3	d_0d_0	49	92	6	6	2	-	9	10	600
	Portland Bill ...	1021.2	-8	W	4	c	51	92	8	3	4	-	7-8	9	2500
	Plymouth ...	1022.1	-10	W	4	c	51	92	7	8	-	1	9+	9+	1200
	The Lizard ...	1022.6	-10	W'S	5	c	52	92	8	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	1022.3	-10	SW'W	4	c	52	97	8	5	7	-	4-6	10	2200
.	Guernsey ...														
6	Pembroke ...	1018.3	-10	SW'W	6	r_0r_0	51	92	7	8	2	-	7-8	10	2000
7	Holyhead ...	1014.1	-22	SSW	5	rr	50	45	5	6	2	-	7-8	10	450
	Chester (Sealand)	1015.0	-24	SW	3	c	52	75	8	5	7	-	7-8	9+	2000
8	Manchester ...	1014.7	-26	SSW	3	ir_0	50	85	6	5	3	-	7-8	9	3200
10	Spurn Head ...	1013.8	-16	SSW	3	c	47	92	6	5	3	-	4-6	9+	2400
	Catterick ...	1011.1	-34	WSW	4	c	50	75	7	5	-	-	9	9	2000
	Tynemouth ...	1012.0	-28	SW	4	c	50	75	6	8	3	-	4-6	7-8	2800
11	St. Abbs Head	1005.2	-58	WSW	6	cq	49	75	8	4	5	4	4-6	7-8	2800
	Leuchars ...	1004.5	-40	SW	4	c/r	48	92	7	5	-	-	9+	9+	1200
12	Renfrew (Abbots I.)	1006.8	-34	SW	4	d_0d_0	50	97	5	5	-	-	10	10	1000
	Eskdalemuir ...	1007.5	-40	WSW	7	r_0r_0	46	92	4	-	2	-	10	10	220
	Point of Ayre ...	1010.5	-32	W'S	5	id_0	50	97	7	6	2	-	4-6	10	1500
13A	Tiree ...	1008.7	-4	WNW	4	c	48	75	7	5	-	-	9+	9+	1800
13B	Stornoway ...	1002.5	0	NW'W	5	pr	48	85	7	5	7	-	7-8	9+	1500
15	Dalwhinnie ...	*	-28	WSW	2	c	48	85	8	5	4	-	7-8	9	1500
	Aberdeen ...	1003.2	-4	SW	4	c	47	85	6	6	7	-	2-3	9+	1500
	Wick ...	1000.0	-30	SW	4	c/pr	47	92	8	5	2	-	7-8	10	2500
16	Lerwick...	996.4	-52	S	6	r_0r_0	46	97	6	6	2	-	7-8	10	800
17	Blacksod Point..	1013.6	0	W	6	oq	49	85	7	5	-	-	10	10	<150
18	Malin Head ...	1008.5	-4	NW	4	c	47	75	7	4	1	-	4-6	9	1500
	Aldergrove ...	1010.2	-24	SW	3	d_0d_0	48	97	6	6	2	-	2-3	10	400
19	Birr Castle ...	1014.0	-10	WSW	2	c	51	86	7	6	1	-	4-6	10	1500
20	Valentia Obsy. †	1018.4	+2	W'S	3	c	52	92	8	5	2	-	7-8	10	2500
	Roches Point ...	1016.8	-16	WSW	3	c/d	53	97	8	5	-	-	9+	9+	800

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

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)	1016.0	-18	SW'S	4	z_0	49	85	6	5	-	-	10	10	1500	1	*
Croydon	1016.1	-22	SW	3	z_0	48	92	5	5	-	-	9	9	2000	0	*
S. Farnborough	1016.7	-2	SW	5	z_0	49	85	6	5	7	-	7-8	10	2000	1	*
Boscombe Down	1016.3	-20	SW	3	ir_0	49	92	7	5	7	-	7-8	10	1800	1	*
Calshot (Soton.)	1017.6	-20	W'S	5	c	51	92	6	5	-	-	10	10	2000	1	3
Lympne	1017.3	-28	SW	3	z_0	48	92	6	5	-	-	9+	9+	800	1	§4
Manston	1015.9	-34	SW'S	4	z_0	47	92	6	5	3	-	7-8	9+	2000		*
Shoeburyness	1015.7	-24	SW'S	3	c	48	85	5	5	-	-	9+	9+	2500	1	*
Felixstowe	1014.8	-30	SW'S	4	z_0	47	85	5	5	7	-	4-6	9+	3000	1	3
Gorleston	1012.7	-32	SW	4	c	47	85	6	5	-	-	9+	9	1800	1	2
Mildenhall	1013.0	-28	SW	4	z_0	48	92	6	5	2	-	9	10	2100	1	*
Cranwell	1010.6	-30	WSW	5	id_0	49	85	6	5	7	-	7-8	9+	2500	0	*
Birmingham	1012.3	+14	SW	3	r_0r_0	48	92	6	6	2	-	7-8	10	1800	1	*
Upper Heyford	1014.7	-20	SSW	5	c/d	47	85	6	5	2	-	9	10	1200	1	*
Ross-on-Wye	1013.5	-20	SSW	4	id_0	51	92	6	6	2	-	9+	10	1500	1	*
Hartland Point	1015.8	0	W	5	d	51	97	5	5	-	-	10	10	600	1	4
Bristol	1015.5	+14	SW'W	5	dd	49	92	5	6	-	-	10	10	400	1	*
Portland Bill	1017.2	-18	WSW	6	ir	50	92	7	5	-	-	10	10	2500	1	4
Plymouth	1019.0	-16	W'S	6	df	51	97	2	6	-	-	10	10	<150	1	3
The Lizard	1019.5	-16	WSW	6	r_0r_0	52	97	7	5	-	-	10	10	1500	1	4
Scilly (St. Mary's)	1019.9	-10	WSW	5	r_0r_0	52	97	4	5	-	-	10	10	500	1	3
Guernsey																
Pembroke	1015.9	-4	WNW	5	c	51	92	7	8	-	-	7-8	7-8	2000	1	3
Holyhead	1012.1	-6	W'N	7	c/pr	50	85	7	8	-	-	10	10	1800	1	4
Chester (Sealand)	1010.9	-10	W	6	oq	51	75	7	5	-	-	10	10	1800	1	*
Manchester	1010.5	-20	W'S	5	c/r	50	85	5	5	-	-	4-6	10	1500	1	*
Spurn Head	1008.8	-16	S'W	4	c	47	92	6	5	2	-	2-3	9+	2500	0	3
Catterick	1006.1	-28	NW	2	c/d	51	85	6	5	1	-	7-8	10	1800	1	*
Tynemouth	1006.3	-16	NW	4	rr	47	92	6	-	2	-	10	10	2000	1	2
St. Abbs Head	1002.0	-22	WNW	6	cq	45	65	7	5	5	-	4-6	7-8	2500	1	2
Leuchars	1002.4	0	W	3	c	45	75	8	5	3	-	2-3	7-8	2500	1	*
Renfrew (Abbots I.)	1005.4	-2	WSW	3	c/pr	41	92	7	8	1	-	7-8	9+	800	1	*
Eskdalemuir	1004.6	-6	WNW	5	c	43	75	7	5	-	-	7-8	7-8	1500	1	*
Point of Ayre	1008.4	-2	NW'W	6	c	47	92	7	9	-	-	7-8	7-8	1500	1	4
Tiree	1005.0	-2	NW'N	6	bc	42	75	8	8	3	-	4-6	4-6	1800	0	5
Stornoway	1002.7	+4	WNW	4	c/rs	42	92	7	8	7	-	7-8	9+	1500	1	2
Dalwhinnie	*	-6	WSW	3	c	36	85	7	5	4	-	2-3	7-8	1500	1	*
Aberdeen	1001.2	-6	WNW	3	bc	44	85	7	5	7	-	4-6	4-6	2500	1	1
Wick	999.4	-2	WNW	4	rr	40	85	7	5	1	-	7-8	9+	800	1	2
Lerwick	995.9	-2	W	5	c/pr	44	75	7	8	7	-	7-8	10	800	1	*
Blacksod Point	1015.1	+16	W	7	cq	42	85	7	9	-	-	4-6	4-6	800	1	4
Malin Head	1008.6	+6	W'N	6	ir	39	92	6	6	-	-	9+	9+	800	1	4
Aldergrove	1010.5	+2	W	5	c/pr	41	85	8	2	-	-	7-8	7-8	1800	1	*
Birr Castle	1016.4	+8	WSW	1	bc	44	75	8	-	4	-	0	2-3	-	1	*
Valentia Obsy. †	1021.4	+18	WNW	4	c	49	65	8	5	2	-	4-6	10	4000	1	4
Roches Point	1018.9	+18	NW	5	c	49	85	8	6	7	-	7-8	9+	1500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 4th (37)	13h.—18h. 4th (38)	18h. 4th to 1h. 5th (39)	1h.—7h. 5th (40)
London (Kew)	cm_0	cm_0	$cir_0r_0cm_0$	$cbcm_0$
Croydon	cm_0bcm_0	cm_0	cm_0r_0bc	$cbcz_0v$
S. Farnborough	cm_0bcc	cm_0r_0c	$cdr_0r_0m_0bc$	bcb, c
Boscombe Down	cm_0	cid_0c	cir_0q bc	
Calshot (Soton.)	$cbcm_0$	c	cir_0c	bcc
Lympne	of_0dcm_0	cm_0	$rrpr_0bc$	bc
Manston	cm_0c	ccm_0	$r_0r_0bcm_0q$	$qbcm_0bm_0$
Shoeburyness	$cmid_0d_0$	$cbccm_0$	cir_0cRbcc_0b	bbc
Felixstowe	ommcmbm	bm_0cm_0	or_0r_0prqb	bbc
Gorleston	cmcbc	bcc	ocbcmcprq	bbcq
Mildenhall	$cidmcm_0$	$bccbccm_0$	$r_0r_0cPRHbq$	bbpr bcb
Cranwell	cmm_0	$cm_0id_0m_0$	r_0r_0,pr_0,b	bz_0bcb
Birmingham	bcc	cor_0	or_0r_0bc	bcb
Upper Heyford	$ofccmcr_0$	$cd_0m_0id_0m_0$	$cddm_0bcb$	bcb
Ross-on-Wye	cbcc	c	$cPcd_0c$	cbcc
Hartland Point	pr_0bo	r_0r_0o	odpc	cbcd
Bristol	cpr_0cd_0d	cm_0d_0dddd	cpr_0b	bc
Portland Bill	cpr_0	oir	c	oc
Plymouth	$cbccpr_0m$	cm_0idddd_0	cm_0ddid_0cm	cm_0bcbcm_0
The Lizard	c	cprrr	c	bc
Scilly (St. Mary's)	cd_0c	r_0r_0m	odomc	c
Guernsey				
Pembroke	$cprm_0$	$or_0r_0m_0qc$	irqc	cbcqy
Holyhead	mrrc	mrrPRc	cpr_0bc	bcb, c
Chester (Sealand)	bcm_0c	cir_0	bcprxq	qprhbc
Manchester	cm_0ir_0	$ir_0r_0r_0rr$	pr PR	PRprhpr
Spurn Head	c	cz_0w	cqpr	bbq
Catterick	cm_0c	cid_0cm_0	cpr_0m_0bq	bq
Tynemouth	oc	cp_0orr	oirobc	bc
St. Abbs Head	cq	rcq	bcq	bcq
Leuchars	cm_0cicc	c	bcbbc	bcbx
Renfrew (Abbots I.)	rr	*	cPRq	$cPRqpr_0sbx$
Eskdalemuir	id_0cr_0	or_0r_0c	$orrrsr_0bcb$	$bb cps_0b$
Point of Ayre	cicle	rrc	cbc	rrbc
Tiree	orrc	*	cphrq	cphq
Stornoway	cddprs	irprs	cPRslq	
Dalwhinnie	cir_0	cir_0	*	cis_0
Aberdeen	cir_0	cirbc	bcb	bbx
Wick	cpr_0c	prcrr	crslq	Rhrq
Lerwick	cpr_0rr	cr_0rpr	cpr	cprphr
Blacksod Point	cq	PRbcq	bcq	rr
Malin Head	cid_0Drid	$ccprtlr_0$	cphrcphrbc	bbcc
Aldergrove	iqmidm	d_0domc_0pr	pr_0b,pr_0q	$b,prpr_0c$
Birr Castle	cir_0c	cbc	bbcc	c
Valentia Obsy. †	cddqddd	cir_0cpr_0qc	$cPRcpr_0qcbcc$	$cir_0rrr_0r_0$
Roches Point	id_0c	ir_0c	bc	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.*

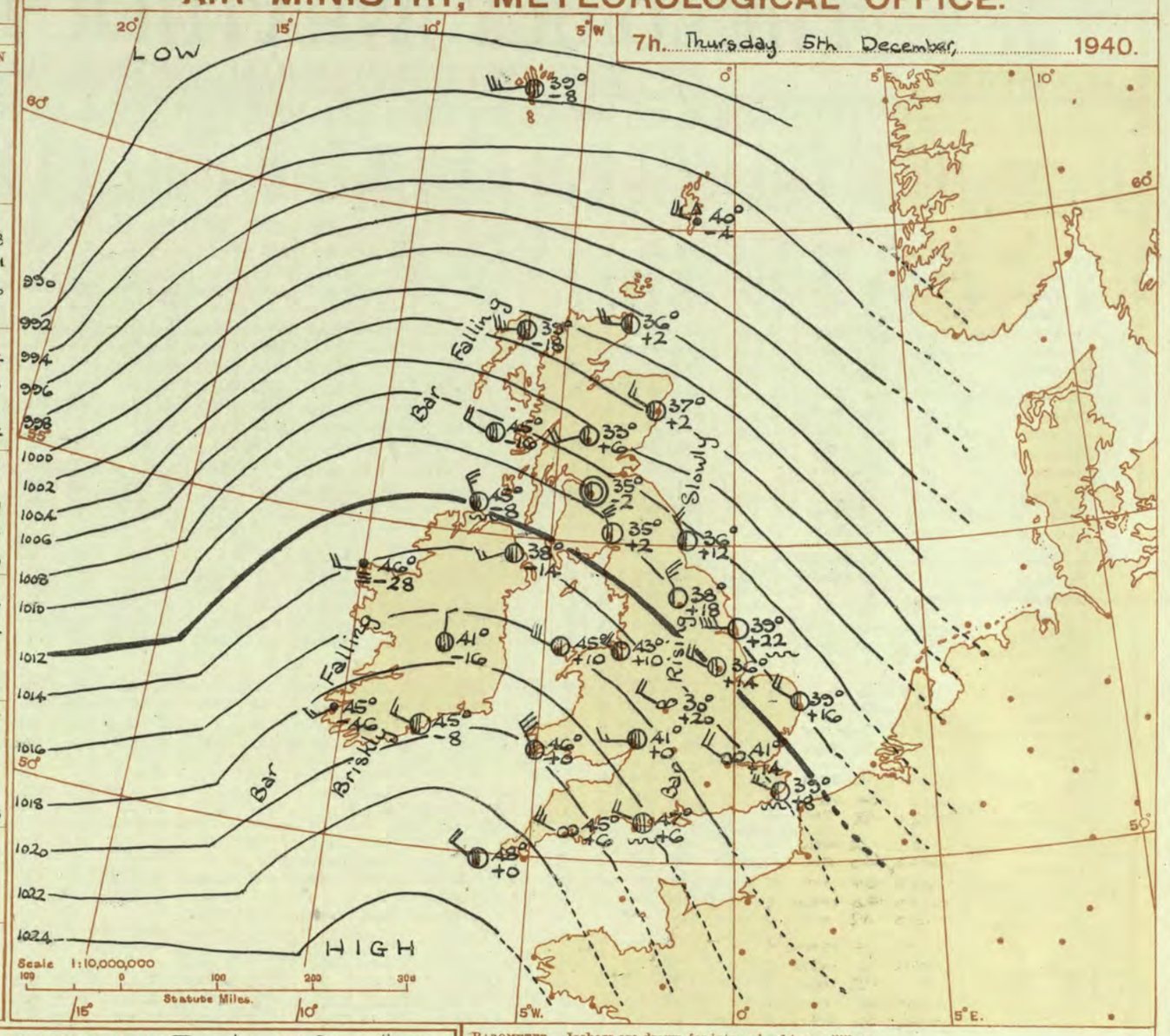
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Thursday 5th December, 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 4th December			18h. G.M.T.			01h. G.M.T. 5th December			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	61744	22466				30	27844	26484	8-	81755	57585
115	52	81734	61687	87	89734	61687	87	88844	61685	87	88734	97685
203												
206	57	10855	25367	81	81755	25267	8-	81854	24484	80	26853	51383
210	5-	62847	22467	5-	25855	22465	8-	01853	22583	8-	81846	26516
220												
230	57	22746	21358	8-	25748	91488	30	85743	93683	80	25743	24383
245	53	02746	21427	5-	02866	28266	50	00963	24223	20	00951	59401
260	5-	82637	18467	54	01764	24314	50	00761	22311	00	00850	24400
277				8-	81748	24688	8-	88846	59786	8-	02857	26587
279												
285	2-	61637	24527	23	61635	24667				20	26744	24684
288	57	02744	19428	52	21556	18228	54	05651	55562	00	00750	58400
273	53	63544	28288									
301	57	62664	20268				80	05655	55585	80	-5754	59484
321	57	05564	20327	52	21656	20468	03	25690	58682	04	00690	60481
299				5-	05548	20328	50	01743	25613			
292	57	05547	19157	52	21645	19358	86	02754	58415	04	00890	26301
310	--	02636	24426							--	01534	04574
316	57	02564	19247	5-	61548	22368	80	01653	26483	84	01652	26483
333	5-	64628	20568				20	00858	60682			
334	--	03745	20327							--	02555	20227
340	53	02966	18327				50	01853	00583	86	25853	26084
136				52	61647	20468	8-	01865	57785	86	01752	57612
336	43	02753	24515							34	02753	28415
350	53	05565	18326							50	01764	24314
368												
379	5-	41538	22348	5-	21638	22458	50	01743	61503	50	01753	28303
390				53	47534	20247	50	00751	24501			
382	53	21755	22457	5-	61746	22268	50	01762	58-12	56	01868	25403
438	8-	02755	24415									
430				5-	02648	22328	50	25654	26586	5-	02755	28425
409	63	21726	20557	6-	57208	23668	50	05645	63565	5-	05645	62515

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. Thursday 5th December, 1940
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Fresh, squally NW. wind, strong in exposed places, backing W.-S.W. later; fair at first, cloudy, with rain later today, becoming fair again during night; rather cold at first, temperature rising a little.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Fresh or strong W.-S.W. wind, gale on coast and in exposed places; cloudy, some rain today; fair apart from local showers tonight; average temperatures.
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.	Fresh or strong W.-S.W. wind, gale on coast and in exposed places; mainly cloudy, rain at times; average temperature.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Fresh or strong W.S.W. wind; mainly cloudy, rain at times; average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 5-8.

GENERAL INFERENCE.

A wedge of high pressure is crossing the British Isles, followed by a vigorous trough of low pressure to west of Ireland, and another disturbance to S.W. of Iceland. Weather will be fair and cold at first in Great Britain, with local rain and hail showers in the North. More general rain accompanied by rising temperatures will spread from the west to all districts by evening, & will be followed by a brief mainly fair interval.

FURTHER OUTLOOK.

Unsettled; rain & strong winds in most districts

Warning of S.W.-W. gale issued at 0530h 4th Dec. in district 16; at 2235h 4th Dec. in districts 6 (part) 7, 8, 12, 13, 17, 18, 19 (part), 20 (part); at 0220h 5th Dec. in districts 2, 10; at 0845h 5th Dec. in districts 1, 5, 6 (part), 19 (part), 20 (part)

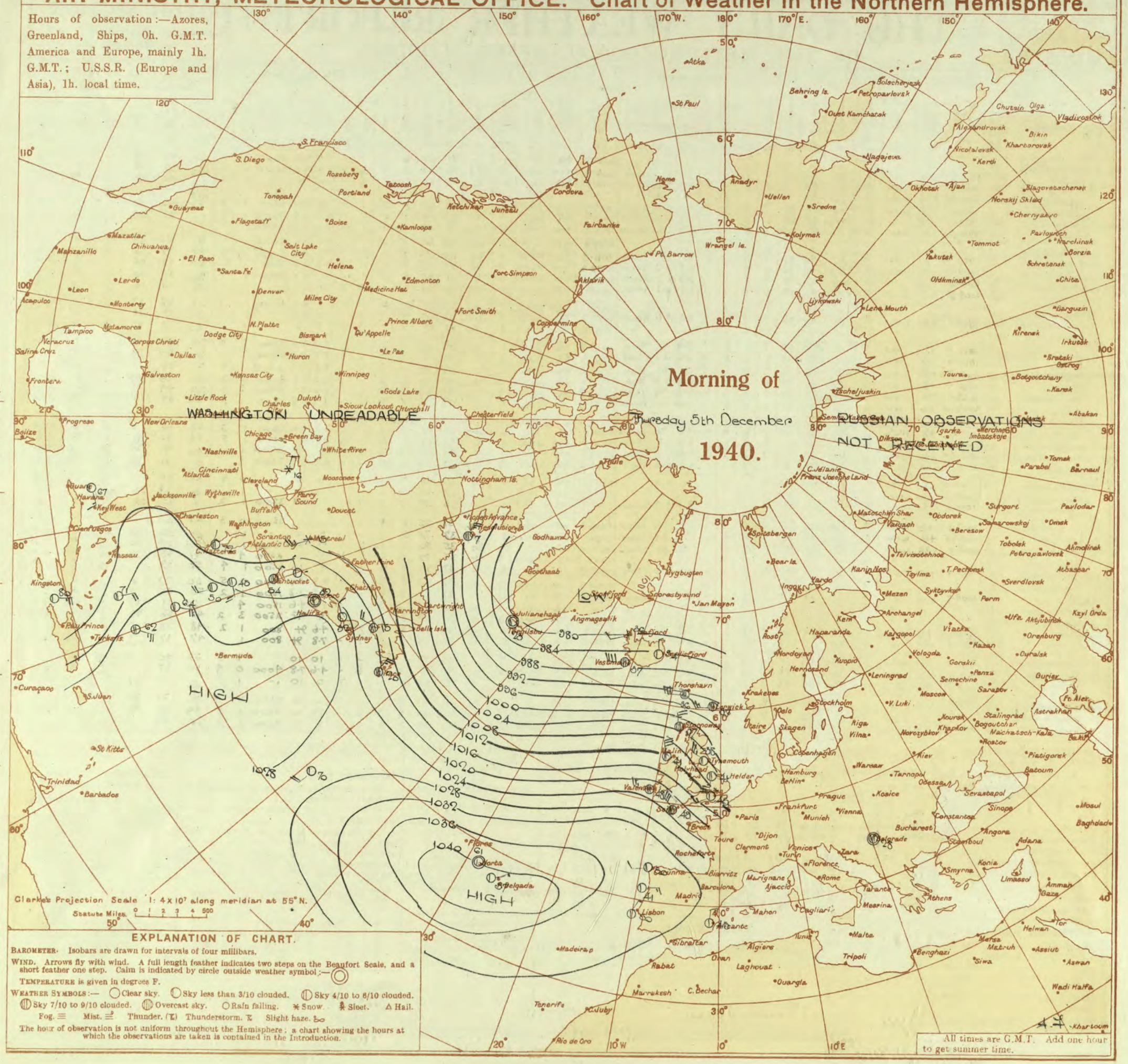
Forecasts issued at 1030h G.M.T.

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

Thursday 5th December 1940.

No. 28.8.68

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

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	1013·1	+16	W	3	Zo	45	65	5	5	-	-	1	1	2000
	S. Farnborough	226	1014·8	-14	W'N	5	c	45	75	7	5	-	8	4-6	7-8	2000
	Boscombe Down	417	1015·6	+14	WNW	4	bc	43	75	8	-	3	-	0	2-3	-
	Calshot (Sthmtn.)	8	1016·0	+18	WNW	4	bc	46	65	7	5	3	-	2-3	4-6	2500
	Lympne ...	346	1012·9	-10	W	5	bc/pr	45	85	7	8	-	-	4-6	4-6	2500
	Manston ...	154	1010·3	-6	WNW	7	Zo	46	65	6	5	-	-	2-3	2-3	2000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1009·9	-2	WNW	6	b	46	65	7	2	-	-	Tr	Tr	2000
	Gorleston ...	5	1007·3	-8	WNW	5	bcq	43	75	6	4	-	-	2-3	2-3	2500
	Mildenhall ...	19	1009·6	+10	W'N	6	bcq	42	75	7	5	-	-	2-3	2-3	2500
	Cranwell ...	240	1009·9	+8	NW'W	5	Zo	41	65	6	5	-	-	2-3	2-3	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1013·7	+10	WNW	5	bc	42	65	7	3	6	-	2-3	4-6	2000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1019·4	+12	NW	5	c	47	65	7	5	2	-	7-8	10	1500
	Bristol ...	209	1016·6	+2	W'N	4	bc	43	75	8	2	6	-	2-3	2-3	2600
	Portland Bill ...	32	1017·5	+16	WSW	5	c	50	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1020·4	+8	W	6	Zo	48	75	6	5	1	-	4-6	7-8	800
	The Lizard ...	240	1022·1	+12	NW	6	c	49	75	7	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	163	1023·0	+6	NW	6	c/r	49	75	7	5	2	-	4-6	10	1500
	Guernsey ...	175														
6	Pembroke ...	142	1019·4	+8	NW'W	7	cq	46	65	7	8	2	-	4-6	9+	2000
7	Holyhead ...	26	1014·0		WNW	8	c	44	92	8	2	-	-	7-8	7-8	2200
	Chester (Sealand)	16	1012·5	+10	W'N	6	bc	43	75	7	3	-	-	4-6	4-6	2500
8	Manchester ...	70	1011·1	+10	W'N	5	bc/pr	41	75	6	8	-	-	4-6	4-6	1800
10	Spurn Head ...	29	1005·0	-2	S'W	7	bcq	41	85	7	-	4	-	0	4-6	-
	Catterick ...	175	1007·3	+10	WNW	5	bq	39	75	7	-	-	-	0	0	-
	Tynemouth ...	108	1005·5	+8	NW	6	bc	38	85	7	2	4	-	2-3	2-3	2000
11	St. Abbs Head	280	1003·1	+6	WNW	7	bcq	39	65	7	4	4	-	2-3	4-6	2500
	Leuchars ...	36	1004·1	+12	WNW	5	bc	38	75	7	5	4	-	2-3	4-6	3200
12	Renfrew (Abbots I.)	19	1008·5	+22	WNW	4	PR	36	97	7	8	4	-	9+	9+	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1010·4	+12	NW	8	bc	42	85	8	8	-	-	4-6	4-6	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1004·2	+12	NW	5	c	37	85	7	9	-	-	9	9	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1000·6	+8	WNW	5	c/rs	36	92	7	8	1	-	7-8	9+	800
16	Lerwick ...	156	995·2	+6	W	5	c/pr	37	85	7	5	7	-	4-6	7-8	1500
17	Blacksod Point	18	1019·0	+16	WNW	7	bcq	44	75	8	9	-	-	4-6	4-6	800
18	Malin Head ...	84	1011·8	+18	NNW	6	bc	41	75	8	2	-	-	2-3	2-3	2500
	Aldergrove ...	268	1013·7	+18	W'N	4	bc/pr	37	85	8	3	-	-	4-6	4-6	1600
19	Birr Castle ...	173	1020·1	+12	N	2	c	40	85	8	5	-	-	7-8	7-8	2500
20	Valentia Obsy.	30	1023·9	0	WNW	5	c	48	65	8	2	-	7	1	10	2500
	Roches Point	22	1022·3	+6	NW'W	4	bc	45	85	8	5	-	-	4-6	4-6	2500

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

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)	1015·8	+12	W	4	Zo	41	65	6	5	-	-	4-6	4-6	2500	1	*
	Croydon ...	1015·9	+14	WNW	4	Zo	41	65	6	5	3	-	2-3	4-6	2000	1	*
	S. Farnborough	1016·9	+12	W	5	c	41	65	7	-	5	-	0	9	-	1	*
	Boscombe Down																*
	Calshot (Sthmtn.)	1017·7	+6	NW	5	c	43	65	7	5	-	-	9+	9+	3500	1	2
	Lympne ...	1015·1	+8	WNW	4	c	39	75	7	5	3	-	4-6	7-8	4000	1	§4
	Manston ...	1013·4	+10	W'N	6	Zo	41	65	6	5	7	2	2-3	7-8	2500		*
2	Shoeburyness ...	1014·2	+10	W'N	5	bc	40	65	7	5	-	-	2-3	2-3	4000	1	*
	Felixstowe ...	1011·4	+6	WNW	6	bc	40	75	8	5	7	-	Tr	4-6	5000	1	3
	Gorleston ...	1009·6	+16	NW'W	4	bc	39	75	7	1	-	-	2-3	2-3	1500	1	3
	Mildenhall ...	1012·0	+14	W'N	5	b	37	85	8	5	-	-	1	1	3000	1	*
	Cranwell ...	1012·7	+14	WNW	4	bc	36	85	7	-	4	2	0	2-3	-	1	*
3	Birmingham ...	1015·1	+20	WNW	4	Zo	30	65	5	5	-	1	1	4-6	4000	1	*
	Upper Heyford	1015·8	+16	W'N	5	bc	38	65	8	-	5	-	0	2-3	-	1	*
4	Ross-on-Wye	1016·8	0	W	3	c	41	65	8	-	1	7	0	9	-	1	*
5	Hartland Point	1019·8	-6	NW	5	bc	46	65	8	5	-	-	4-6	4-6	2500	1	4
	Bristol ...	1018·3	+2	W'N	3	c	41	75	8	8	-	-	7-8	7-8	2800	1	*
	Portland Bill ...	1019·0	+6	WNW	4	c	47	92	8	5	7	-	4-6	7-8	2500	1	4
	Plymouth ...	1021·2	+6	WNW	5	Zo	45	75	6	5	-	-	2-3	2-3	2000	0	3
	The Lizard ...	1022·9	+6	NW	4	bc	47	65	8	8	-	-	4-6	4-6	2500	1	3
	Scilly (St. Mary's)	1023·3	0	NW'W	4	c	48	75	8	8	4	-	2-3	7-8	1800	1	3
	Guernsey ...																
6	Pembroke ...	1020·2	0	NW	6	bcq	46	55	7	5	7	-	2-3	4-6	2500	1	3
7	Holyhead ...	1015·7	+10	WNW	6	c	45	85	8	8	1	9	7-8	10	2700	1	5
	Chester (Sealand)	1014·9	+10	W'N	4	c	43	68	7	1	1	-	1	9+	3500	1	*
8	Manchester ...	1014·2	+14	WNW	3	bc/pr	38	85	6	8	-	-	2-3	2-3	2500	2	*
10	Spurn Head ...	1008·3	+22	W	8	bq	39	75	7	-	-	-	0	0	-	0	4
	Catterick ...	1009·9	+18	NW	5	b	38	75	8	-	-	-	0	0	-	1	*
	Tynemouth ...	1008·7	+12	NW	4	bc	36	85	7	2	4	-	2-3	2-3	3200	1	2
11	St. Abbs Head	1006·3	+10	WNW	7	bq	37	75	8	4	-	-	1	1	2500	0	3
	Leuchars ...	1006·5	+6	W	5	b	37	75	8	-	-	-	0	0	-	1	*
12	Renfrew (Abbots I.)	1010·0	-2	-	0	bc	35	92	7	2	7	-	Tr	4-6	2000	1	*
	Eskdalemuir ...	1009·3	+2	NW'N	5	b	35	75	8	5	4	1	Tr	1	2500	4	
	Point of Ayre ...	1012·9	+6	NW	6	c	43	92	8	4	2	-	1	10	2500	1	4
13A	Tiree ...	1008·2	-16	WNW	4	c	45	65	7	8	-	-	2-3	7-8	1500	0	5
13B	Stornoway ...	1004·8	-18	W	5	c	39	75	8	8	-	-	7-8	7-8	1500	1	2
15	Dalwhinnie ...	*	+6	WSW	4	bc	33	85	7	5	-	-	4-6	4-6	1500	4	*
	Aberdeen ...	1004·0	+2	NW'W	3	b	37	75	8	8	-	-	Tr	Tr	2500	3	2
	Wick ...	1001·6	+2	W	5	c/phr	36	92	8	8	7	-	4-6	9+	800	1	2
16	Lerwick ...	995·5	-4	W'N	5	phr	40	75	8	8	7	-	7-8	9+	800	1	*
17	Blacksod Point	1013·9	-28	W	4		46	75		6	-	-	10	10		1	3
18	Malin Head ...	1011·1	-8	NW'N	5	c	45	75	8	5	6	-	4-6	7-8	4000	0	4
	Aldergrove ...	1013·5	-14	WSW	3	c	38	85	8	-	1	7	0	10	-	1	*
19	Birr Castle ...	1017·1	-16	N	1	c	41	85	8	5	-	-	10	10	2500	1	*
20	Valentia Obsy.	1018·6	-46	SW'W	3	ro	45	85	8	3	2	-	4-6	10	2500	1	2
	Roches Point	1020·0	-8	WNW	3	c	45	85	8	5	-	-	9	9	2500	1	2

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 4th Hrs. (36)
1	London (Kew)	49	40	33	-	1	1·0
	Croydon ...	52	39	34	-		1·7
	S. Farnborough	50	40	39	Tr	0·3	0·6
	Boscombe Down	49			Tr		
	Calshot (Sthmtn.)	53	42	40	-	2	1·0
	Lympne ...	52	39	34	0·2	3	1·5
	Manston ...						
2	Shoeburyness ...	51	40	34	Tr	2	1·6
	Felixstowe ...	49	39	36	-	1	0·6
	Gorleston ...	50	38	35	-	4	0·5
	Mildenhall ...	50	37	30	Tr	2	0·9
	Cranwell ...	51	35	33	Tr	2	0·9
3	Birmingham ...	49	38	33	Tr	1	6·0
	Upper Heyford	49	37	31	0·1	1	*
4	Ross-on-Wye	52	39	35	Tr	2	0·6
5	Hartland Point	52	45	42	1	1	0·0
	Bristol ...	51	40	36	0·4	2	0·1
	Portland Bill ...	51	46	*	0·2	0·4	*
	Plymouth ...	52	44	40	-	1	0·2
	The Lizard ...	52	44	*	1	0·5	0·6
	Scilly (St. Mary's)	52	47	*	0·0	Tr	0·0
	Guernsey ...						
6	Pembroke ...	52	45	*	-	1	0·0
7	Holyhead ...	52	42	41	1	Tr	0·3
	Chester (Sealand)	53	41	36	Tr	3	0·3
8	Manchester ...	51	36	33	2	5	0·8
10	Spurn Head ...	48	39	*	Tr	0·1	0·8
	Catterick ...	51	38	33	0·2	1	0·1
	Tynemouth ...	51	35	32	3	1	*
11	St. Abbs Head	49	37	*	1	-	*
	Leuchars ...	49	36	32	0·3	0·3	0·0
12	Renfrew (Abbots I.)	(50)	34	30	2	4	0·0
	Eskdalemuir ...	47	33	31	5	6	0·0
	Point of Ayre ...	50	39	*	3	3	0·0
13A	Tiree ...	50	37	*	2	1	0·0
13B	Stornoway ...	50	35	*	4	8	0·0
15	Dalwhinnie ...	46	31	27	1	0·3	0·0
	Aberdeen ...	48	36	33	2	-	0·0
	Wick ...	48	33	*	1	4	*
16	Lerwick ...	47	37	*	2	0·3	0·0
17	Blacksod Point	52	40	*	3	1	*
18	Malin Head ...	50	37	*	6	2	0·0
	Aldergrove ...	49	35	34	3	0·6	0·0
19	Birr Castle ...	51	38	34	1	0·1	0·0
20	Valentia Obsy.	54	45	41	1	1	0·0
	Roches Point	55	44	*	0·3	-	*

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	cmo	cmo	cir,ro,cmo	49	40	33	-	1	1·0	*	*	6
CROYDON ...	217	cmo,bcmo	cmo	cmo,fg,2o	52	39	34	-		1·7	*	*	5
GREENWICH (Royal Observatory) ...	149	cbcmo	bcc	ocodr,bc	50	39	31	-	1	0·7	81	63	5
CITY (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*	51	39	33	1			84	73	*
REGENTS PK. (Botanic Gardens)‡ ...	168	*	*	*	50	39	33	0·6	-	0·6	79	57	*
CAMDEN SQUARE ...	110	o	c	*	50	39	33	-	0·5	*	*	66	*
KENSINGTON ...	80	cbc	bc	*	51	40	33	-	1		66	71	*
HAMPSTEAD OBSERVATORY ...	450	cor	bc	bc	48	36	33	-	0·6		*	83	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 5th

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 ,,	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.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Friday 6th December, 1940.
No. 28,869.

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

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)	1014·3	-16	WSW	3	zo	43	65	6	5	1	-	2-3	9+	800
	Croydon	1015·2	-14	W	2	zo	43	75	6	-	7	-	0	9+	—
	S. Farnborough	1014·8	-22	WSW	4	c	44	65	7	-	5	7	0	10	-
	Boscombe Down	1014·0	-34	WSW	4	c	43	75	8	-	7	-	0	9	-
	Calshot (Soton.)	1015·8	-28	W'N	2	c	45	65	8	-	7	8	0	9+	—
	Lympne	1015·6	-10	NW'W	3	c	42	65	7	5	-	7	Tr	10	2500
	Manston	1013·5	-14	W	4	zo	43	65	6	-	-	6	0	9	-
2	Shoeburyness	1013·7	-10	W	3	bc	46	55	7	-	3	-	0	2-3	-
	Felixstowe	1012·5	-6	W'N	4	bc	44	65	7	1	-	1	1	2-3	3000
	Gorleston	1010·9	-8	WNW	3	bc	43	75	6	5	-	-	4-6	4-6	2500
	Mildenhall	1011·5	-22	W	5	zo	43	75	6	-	3	8	0	7-8	-
	Cranwell	1011·2	-2	W	3	zo	41	75	6	-	3	-	0	7-8	-
3	Birmingham	1011·1	-34	SW	3	c	41	75	7	-	7	2	0	10	-
	Upper Heyford	1013·7	-24	WSW	4	c	42	75	7	-	7	-	0	10	—
4	Ross-on-Wye	1012·4	-40	SW	4	c	44	65	7	5	1	8	Tr	9+	2500
5	Hartland Point	1013·1	-56	SW	5	c/pr	48	75	8	8	2	-	4-6	9+	1200
	Bristol	1014·2	-34	W'S	4	c	44	75	7	5	2	-	4-6	10	1800
	Portland Bill	1018·3	-28	WSW	4	c.	48	92	8	5	-	-	10	10	4000
	Plymouth	1016·5	-44	WSW	5	zo	49	75	7	6	7	-	2-3	10	2000
	The Lizard	1016·8	-50	SW	6	roro	47	92	8	5	2	-	9	9	1500
	Scilly (St. Mary's)	1016·0	-52	S	6	c/r	46	92	7	6	2	-	9	10	1500
	Guernsey														
6	Pembroke	1011·4	-44	SW	7	ir	48	75	7	8	2	-	7-8	10	2000
7	Holyhead	1007·7	-70	SW'S	5	rr	45	92	7	5	2	-	7-8	10	1800
	Chester (Sealand)	1008·7	-56	SSW	2	c	45	65	7	5	2	-	Tr	10	1000
8	Manchester	1008·5	-50	SSW	4	zo	43	65	6	-	7	-	0	10	-
10	Spurn Head	1008·0	-12	WSW	5	c	42	85	6	-	2	-	0	9+	-
	Catterick	1005·7	-48	SW	3	c	42	85	8	5	7	-	1	10	2500
	Tynemouth	1005·4	-44	WSW	3	c	41	85	6	5	-	-	9+	9+	3200
11	St. Abbs Head	1001·5	-42	W	5	c	38	75	8	4	7	-	2-3	9+	2500
	Leuchars	1000·8	-46	SSW	4	zo	39	85	5	5	7	-	2-3	10	3500
12	Renfrew (Abbots I.)	1002·1	-54	SW	3	iro	43	85	7	5	2	-	Tr	10	2500
	Eskdalemuir	1003·1	-52	S'W	3	c	37	85	8	5	-	2	10	10	*
	Point of Ayre	1004·7	-58	SW'W	4	roro	44	85	8	8	2	-	4-6	10	2500
13A	Tiree	990·1	-100	SSW	7	rr	42	97	7	·	2	-	10	10	1500
13B	Stornoway	991·5	-80	SW	6	pr	44	85	6	5	-	-	10	10	1000
15	Dalwhinnie	*	-76	WSW	4	c	37	85	7	5	2	-	4-6	10	1500
	Aberdeen	997·0	-44	SW'W	3	c	39	75	6	5	7	-	1	9+	2500
	Wick	994·5	-52	SW	3	c	38	85	8	5	1	8	4-6	9+	2500
16	Lerwick	990·7	-34	W'S	5	c	39	85	8	8	7	-	4-6	7-8	1500
17	Blacksod Point	996·0	-116	S	8	rr	47	97	6	6	-	-	10	10	<150
18	Malin Head	995·3	-114	SSW	6	c/pr	41	92	6	6	-	-	9+	9+	450
	Aldergrove	1001·8	-86	S	4	roro	39	92	6	6	2	-	9+	10	900
19	Birr Castle	1002·8	-96	SSW	3	roro	43	92	7	6	1	-	4-6	10	1500
20	Valentia Obsy. †	1003·6	-90	S'W	6	iro	51	97	6	6	2	-	7-8	10	800
	Roches Point	1007·5	-80	S	6	dd	46	97	5	5	-	-	10	10	450

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

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)	1002·5	-88	S'W	4	roro	43	85	6	5	-	-	10	10	1500	1	*
Croydon	1004·2	-74	W	2	roro	41	92	5	5	-	-	10	10	3000	1	*
S. Farnborough	1003·7	-82	SSW	4	roro	43	85	6	5	-	-	10	10	2500	1	*
Boscombe Down	1003·0	-56	SSW	6	roro	43	97	6	6	2	-	4-6	10	1800	1	*
Calshot (Soton.)	1004·5	-78	SW	7	roro	47	85	7	5	7	-	7-8	10	800	1	3
Lympne	1007·5	-60	SW'S	2	iro	40	85	6	-	2	-	10	10	3000	1	§
Manston	1005·3	-60	SSW	3	zo	40	85	6	5	7	-	7-8	10	3600	*	*
Shoeburyness	1006·0	-54	SW	3	iro	42	85	6	6	2	-	9+	10	2500	1	*
Felixstowe	1004·1	-60	SW'S	5	zo	42	75	6	-	7	-	0	10	—	1	3
Gorleston	1003·1	-60	SW'S	4	c	41	75	6	5	-	-	9+	9+	2500	1	2
Mildenhall	1001·3	-78	SSW	5	iro	42	75	6	-	2	-	10	10	2500	1	*
Cranwell	998·0	-98	SSW	4	roro	43	85	6	5	-	-	10	10	2500	1	*
Birmingham	997·8	-78	SSW	5	roro	41	92	6	6	-	-	10	10	800	1	*
Upper Heyford	1001·0	-84	SW'S	4	dodo	41	92	6	6	2	-	7-8	10	1000	1	*
Ross-on-Wye	997·8	-94	SSW	5	ido	43	85	6	6	-	-	10	10	1500	1	*
Hartland Point	998·1	-88	SW	8	d	49	97	6	-	2	-	10	10	800	1	4
Bristol	999·7	-100	SSW	6	roro	45	92	6	-	2	-	10	10	1000	1	*
Portland Bill	1003·1	-70	SW	5	o	48	92	7	5	-	-	10	10	2500	1	4
Plymouth	1003·5	-90	S'W	8	dd	50	97	4	6	-	-	10	10	300	1	4
The Lizard	1003·8	-40	W'S	7	o	53	97	6	5	-	-	10	10	1000	1	4
Scilly (St. Mary's)	1004·3	-54	W'S	6	c/d	53	97	6	8	2	-	7-8	9+	800	1	3
Guernsey																
Pembroke	996·8	-84	W'S	8	id	52	97	6	6	-	-	9+	9+	1000	1	4
Holyhead	990·9	-82	SW	6	c/r	49	97	5	5	2	-	7-8	10	900	1	4
Chester (Sealand)	991·9	-122	SSE	4	c	44	85	7	5	7	-	7-8	9+	2500	1	*
Manchester	993·2	-110	S'E	4	dr	42	92	5	6	2	-	7-8	10	1200	1	*
Spurn Head	996·0	-48	SSE	6	r	40	85	6	5	-	-	10	10	800	0	4
Catterick	990·6	-88	S	4	roro	39	92	4	6	2	-	9+	10	1400	1	·
Tynemouth	989·4	-80	SSW	6	o/r	40	85	6	6	-	-	10	10	2800	1	2
St. Abbs Head	983·3	-86	S	7	roro	38	92	7	5	2	-	7-8	10	2000	1	4
Leuchars	981·4	-130	S	5	rr	40	92	5	5	2	-	7-8	10	1600	1	*
Renfrew (Abbots I.)	979·7	-130	SW	4	IR	46	92	4	6	2	-	9+	10	800	2	*
Eskdalemuir	984·0	-104	SW'S	6	rr	41	97	6	-	2	-	10	10	450	1	*
Point of Ayre	985·0	-120	WSW	7	c	48	97	7	8	2	-	7-8	10	1500	1	4
Tiree	979·1	0	WNW	8	pr	45	75	8	8	-	-	7-8	7-8	1500	1	5
Stornoway	972·4	-40	W	6	bc/r	42	92	7	8	7	-	4-6	4-6	1500	1	3
Dalwhinnie	*	-116	SW	4	ss	34	92	5	5	-	-	10	10	800	4	*
Aberdeen	981·1	-118	S'W	5	ir	40	85	6	6	2	-	7-8	10	1500	1	2
Wick	976·3	-136	S	7	rr	40	92	7	8	2	-	7-8	10	1500	1	3
Lerwick	979·2	-60	S	6	c	41	85	8	5	7	-	7-8	9	1500	1	*
Blacksod Point	992·6	-4	W	8	bc	45	85	7	9	-	-	4-6	4-6	800	1	6
Malin Head	983·4	-60	SW	8	c	46	65	6	9	-	-	7-8	7-8	1500	0	6
Aldergrove	986·2	-54	W	5	pr	47	85	6	9	-	-	9+	9+	5000	0	*
Birr Castle	994·2	-12	W	6	c/pr	50	75	8	9	-	-	7-8	7-8	1500	1	*
Valentia Obsy. †	1000·8	-10	W'N	6	c/pr	53	85	7	9	-	-	9+	9+	2500	1	4
Roches Point	999·2	-12	W'N	4	c	52	85	8	8	-	5	4-6	7-8	1500	1	4

PAST 24 HOURS.

Stations	Weather 7h.—18h. 5th (37)	Weather 13h.—18h. 5th (38)	Weather 18h. 5th to 1h. 6th (39)	Weather 1h.—7h. 6th (40)
London (Kew)	bccmo	cmocromo	crorocroc	crocbcmo
Croydon	bczoczo	cmoro	cmororo	cmocrb
S. Farnborough	cbcc	crooromo	orocqrmob	bmocrob
Boscombe Down	c	ccroromo	croromoiro	cprobcq
Calshot (Soton.)	cbcc ⊕	croro	rorocRq	crcphqt
Lympne	bcc	c	rodoiRbc	mrrmobc
Manston	bccmo	cmo	cmoirododo	ciRrobzo
Shoeburyness	bcby	bybccmoiro	irocmo	cmopqbbc
Felixstowe	*	bcccmo	cmoircq	coroqb
Gorleston	bcq	cmo	coroprbcq	bclprq
Mildenhall	b,c,bcc	fmooiromo	irororoiroKq	PRuqcKqb
Cranwell	b,cmo	czororomo	rrmobc,roroq	pcq,b,rr
Birmingham	bcc	coro	oir	orobc
Upper Heyford	bcc	ccroromocdodo	oddmocprR	mopRbcprq
Ross-on-Wye	cbcc	cororoq	doqcqro	cqbcq
Hartland Point	bccp	orro	oddpc	obco
Bristol	bcc	cororomo		
Portland Bill	c	orr	cprc	c
Plymouth	bcmocmo	cmororo	croroidopR	bcproy,pro
The Lizard	cprrr	rrqph		bcprqh
Scilly (St. Mary's)	cirrr	oiddc	cpbc	
Guernsey				
Pembroke	bcqirc	cirodq	cirq	cprq
Holyhead	irorrc	rrororoc	bcb	bmoprbc
Chester (Sealand)	c	ciroc	cprhq	prhqbprobc
Manchester	cmozo	irodddr	cqPR	cqPRpro
Spurn Head	cqc	cqr	cq	cqpr
Catterick	bqbcc	ccrorom	rrprmo	PSmopr
Tynemouth	bcc	coiro	bcpr	bcpr
St. Abbs Head	bcqc	cqr	bcq	bcqro
Leuchars	bxbccmo	crorom rrR	pro prmo bc	moprsoprsbcmo
Renfrew (Abbots I.)	bz	crorRR	iRbcqph	cmophqPHth
Eskdalemuir	*	corr	ciro	osoy
Point of Ayre	ororo	rorrc	cbcbc	rrc
Tiree	cpr			
Stornoway	opr	cRRbc	bccphr	rrqr
Dalwhinnie	bchco	sso	*	ois
Aberdeen	bbvc	ciroir	crobc	ccisof
Wick	lphrc	crrq	rrprb	bbclc
Lerwick	cphw	c	crr	hcrr
Blacksod Point	rrq	Pqcdcq	phrbcq	PRcq
Malin Head	cirscprcc	cproprope	cphrlcprc	cphrcphrc
Aldergrove	ccrororomo		phrqPRS	PHRprsl
Birr Castle	croro	cpr	bcpr	bcpr
Valentia Obsy. †	rorodr iro	irocproc	PRPHlphl	bcbccphrlbc
Roches Point	irddh	iroc	prqbc	poqpbc

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.*

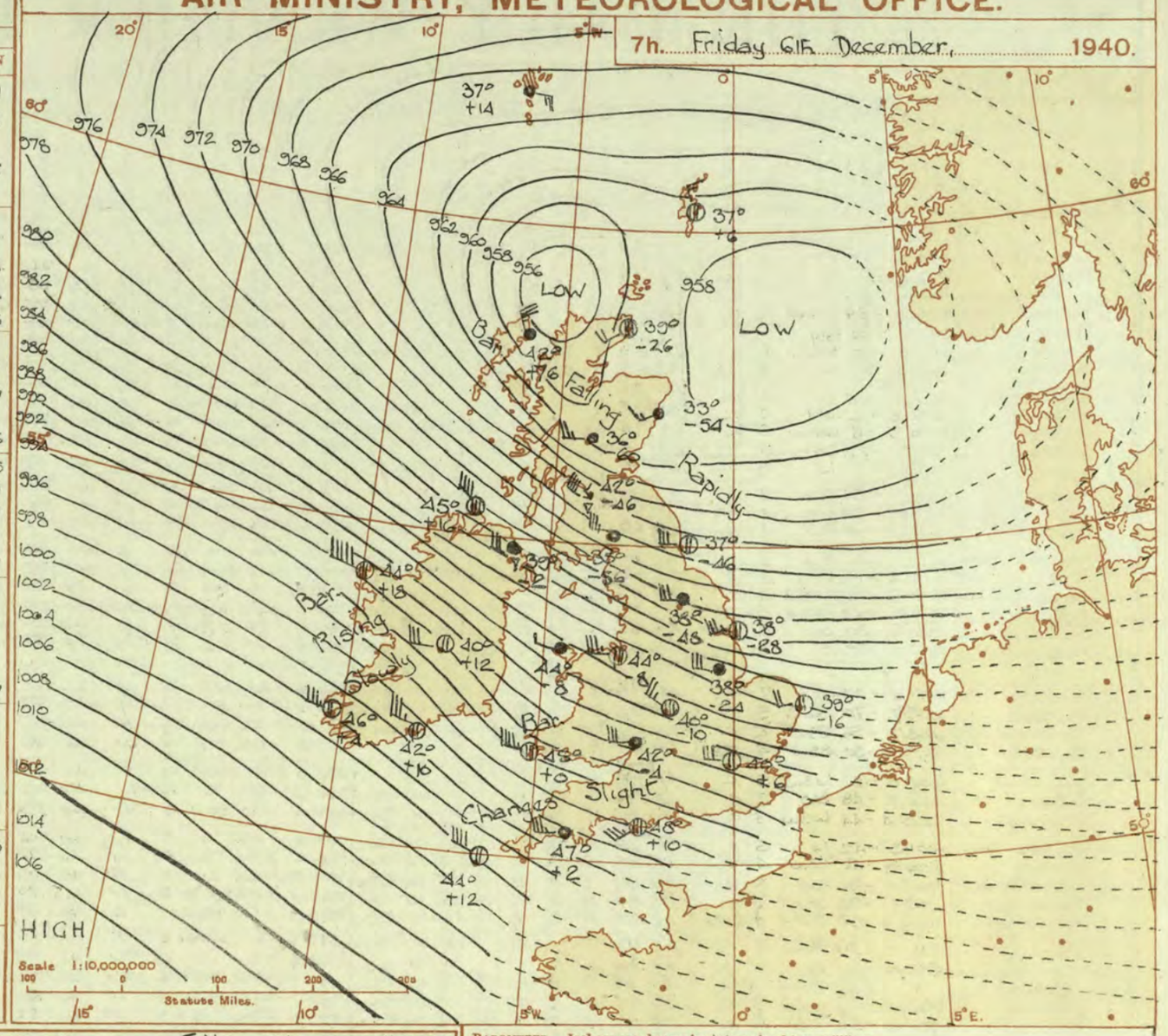
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 5th December			18h. G.M.T.			01h. G.M.T. 6th December			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	25744	19488	6-	66638	15668	8-	01743	56683	53	05651	20101
115	52	88744	53987	52	62735	16488	87	88744	57785	52	88785	08488
203												
206	57	02953	26387	62	64745	53468	80	26853	56483	9-	81748	24288
210	57	02964	20426	02	61888	16568	8-	01854	55564	81	26955	14385
220												
230	52	64642	20568	5-	02745	54715	80	25746	57786			
245	02	02790	21427	02	66448	49668	50	01744	05485	5-	81666	19486
260	57	02763	18428	62	64644	18668	80	26754	24485	80	25644	57784
277	62	61747	13668	67	22745	54667	80	25784	57884	8-	27746	58086
279	5-	05658	53628									
285	8-	05748	26628	6-	63636	22766				6-	72638	28678
288	02	02890	26328	52	61644	52428	8-	81647	24487	07	01890	56485
273	42	64434	16768									
301	52	02795	23428	62	62685	16568	2-	25745	61785	87	25755	61886
321	57	05551	21328	62	62648	50568	80	81644	59584	8-	81648	58585
299	54	02745	24217	5-	62548	22668	5-	14648	57718	50	14645	57615
292	57	02842	20428	02	62548	53468	8-	25744	57684	86	81746	57687
310	--	02636	24426	--	57209	20668				--	02428	24778
316	07	05690	18328	62	64435	49668	9-	81644	57785	8-	25645	57687
333	62	64944	20568	62	64526	53668	20	25884	59884			
334	--	03754	20428							--	25857	20888
340	12	02872	20428	6-	52648	16468	8-	81785	57668	8-	81755	56685
136	03	05690	22528	5-	61668	18468	86	01864	24615	86	25855	57787
336	15	02753	28425	62	63644	20668				92	02754	28727
350	51	02874	19328									
368												
379	57	05664	22428				6-	62648	61768	50	05653	59713
390	07	05690	26445	02	61558	20368	50	05642	53712	80	05653	55318
382	07	02790	22328	02	61648	18568	50	01753	57403	80	81854	57584
438	54	02763	26515							90	14745	57825
430	07	02890	26427	5-	62648	20468	83	25647	93584	80	01744	57614
409	52	62744	18468	6-	54618	19768	50	58868	98348	5-	05640	58863

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 6th December, 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 6th December, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Westerly gale, veering north, severe in exposed places at first, decreasing slowly later, fine periods, occasional showers, hail and thunder locally; cold.
4 W. Midlands ... 5 S.W. England 6 South Wales ...	West to northwest gale, severe in exposed places at first, decreasing slowly later; fine periods, showers hail and thunder locally; rather cold.
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	WNW gale veering N.W to north, severe at first, decreasing slowly later, frequent showers, hail and thunder at times, snow on high ground; cold.
15 N. E. Scotland 16 Orkneys and Shetlands	Wind variable becoming N-NE strong or gale; cloudy, rain or sleet at times, snow on high ground; cold.
17 N. W. Ireland 18 N. E. Ireland	As 7-14.
19 S. E. Ireland 20 S. W. Ireland	As 4-6

GENERAL INFERENCE.

An intense and complex depression centred over NE. Scotland is moving southeast. The northwest gales will continue and will be severe in many areas. Bright periods and showers will occur generally, with local hail and thunder, especially in the northwest. Snow will occur on the higher ground in the north.

FURTHER OUTLOOK.

Gales slowly subsiding; fair in the west, showers in the east and north.

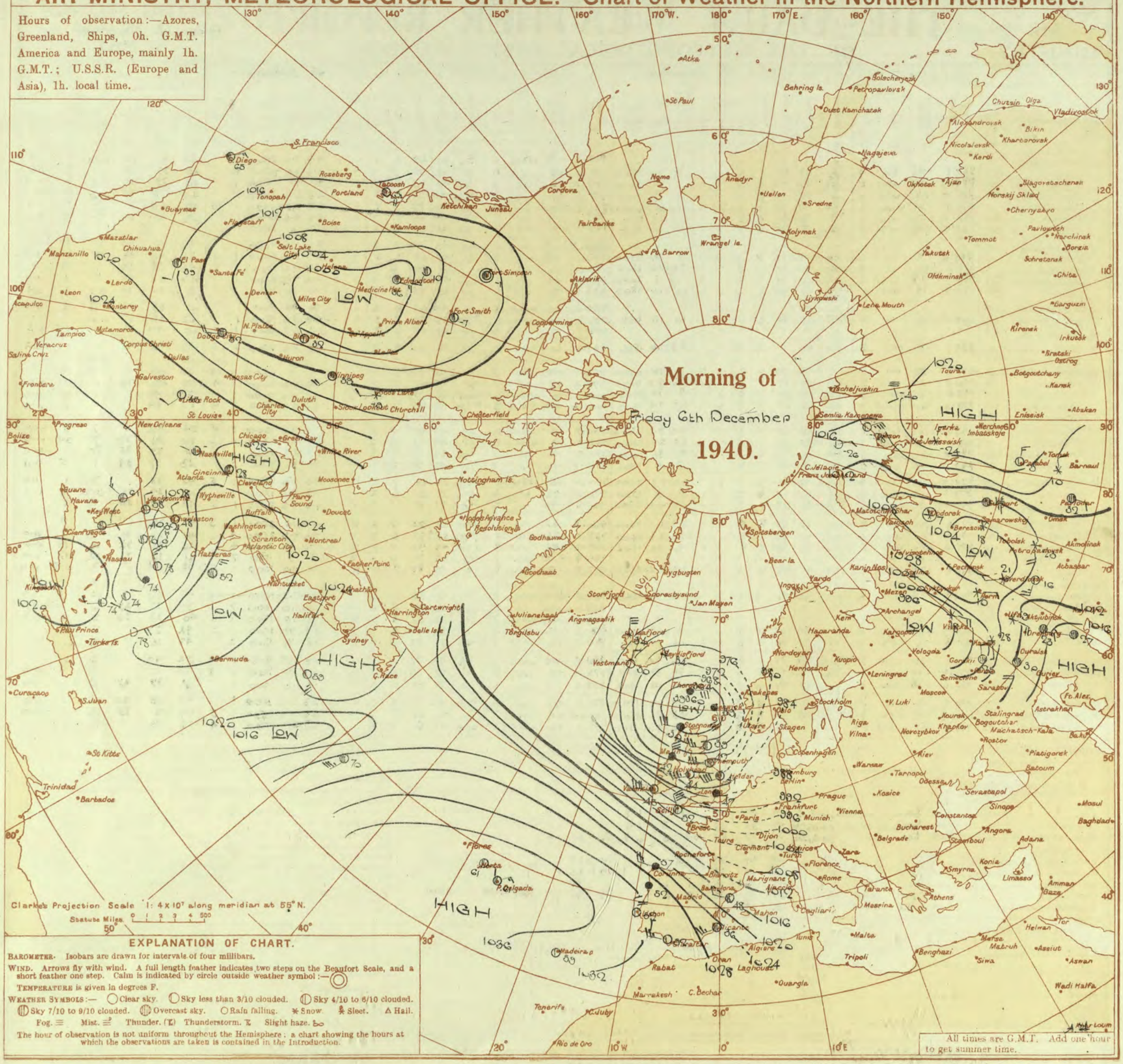
Warning of W. to NW gale in operation all areas.

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.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 6th December 1940.

No. 28869

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

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	987.1	-44	SW	4	iro	47	85	5	5	-	-	9+	9+	1500
	S. Farnborough	226	989.4	-22	WSW	5	bq	46	75	7	5	-	-	1	1	5000
	Boscombe Down	417	990.0	-22	W'N	6	pr	46	75	6	8	-	-	10	10	1000
	Calshot (Sthmtn.)	8	990.5	-34	WNW	5	c/r	47	75	7	5	3	-	4-6	9+	1500
	Lympne	346	988.4	-50	WNW	6	c/r	46	85	5	5	-	-	7-8	7-8	1500
	Manston	154	985.8	-46	W'S	5	zo	49	85	6	5	2	-	7-8	10	800
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	984.6	-92	W	6	cq	47	75	7	5	7	-	9	9+	3300
	Gorleston	5	983.1	-60	W	4	bc	45	85	6	8	-	-	4-6	4-6	1500
	Mildenhall	19	983.1	-38	W'N	6	b/r	45	75	7	5	-	-	1	1	3000
	Cranwell	240	982.7	-14	NW	6	roro	39	85	6	6	-	-	10	10	1500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	988.0	-12	W	6	PR	42	85	6	5	-	-	10	10	600
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	994.1	-8	NW	6	c/pr	45		8	8	-	-	7-8	10	1500
	Bristol	209														
	Portland Bill	32	991.8	-38	SW	6	o	49	92	7	5	-	-	10	10	2500
	Plymouth	82	996.9	-22	W'N	8	pr	49	75	7	2	-	-	4-6	4-6	1000
	The Lizard	240	999.0	-8	WNW	8	cQ	48	85	7	8	2	-	9	10	1500
	Scilly (St. Mary's)	163	999.0	-20	NW'W	8	bc	52	85	7	8	6	-	2-3	4-6	1500
	Guernsey	175														
6	Pembroke	142	993.0	-2	W'N	8	iro	46	65	7	8	-	-	7-8	7-8	1800
7	Holyhead	26	986.0	-12	W'N	9	bc	44	65	7	2	-	-	2-3	2-3	2500
	Chester (Sealand)	16	984.5	-20	W'N	7	phr	41	75	6	9	-	-	9+	9+	1200
8	Manchester	70	983.0	-28	W'N	6	c/r	38	85	7	8	-	-	9	9	1500
10	Spurn Head	29	975.8	-18	W	8	cq	41	85	7	5	1	-	4-6	7-8	2500
	Catterick	175	979.5	-14	WNW	3	pr	37	92	6	2	-	-	9	9	1300
	Tynemouth	108	976.0	-20	WNW	6	bc/pr	42	85	7	2	-	-	4-6	4-6	2500
11	St. Abbs Head	280	971.3	-22	W	8	bcq	36	85	8	4	4	-	2-3	2-3	2500
	Leuchars	36	971.2	-20	W'S	6	prs	37	85	6	8	-	-	4-6	4-6	2500
12	Renfrew (Abbots I.)	19	975.0	-30	W'N	5	phr	39	75	6	8	-	-	9+	9+	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	981.4	-24	WNW	8	bc	41	85	8	5	-	-	2-3	2-3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	964.3	-54	W	6	phr	40	75	7	8	7	-	7-8	9+	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	964.8	-26	SW	2	b	34	85	8	5	-	-	Tr	Tr	1500
16	Lerwick	156	961.3	-60	SE'S	6	rr	39	92	6	6	2	-	4-6	10	800
17	Blacksod Point	18	987.9	-26	W'N	9	bcQ	44	75	7	9	-	-	4-6	4-6	800
18	Malin Head	84	975.8	-40	NW	6	PR	42	75	5	6	-	-	9+	9+	800
	Aldergrove	268	980.6	-38	WSW	6	pr	37	85	6	9	-	-	10	10	400
19	Birr Castle	173	990.8	-16	W	7	bc/pr	41	75	8	5	-	-	2-3	2-3	1500
20	Valentia Obsy.	30	1000.4	-4	WNW	8	bc/pr	45	75	8	3	-	-	4-6	4-6	2500
	Roches Point	22	997.2	+2	W'N	5	bc	44	85	8	3	-	-	4-6	4-6	1500

OBSERVATIONS at 7 hr. G.M.T. 6th December

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)	987.2	-4	WSW	5	zo	41	65	6	5	-	-	4-6	4-6	2500	1	*
Croydon	988.0	+6	W	6	bc	40	75	7	5	-	-	4-6	4-6	3000	0	*
S. Farnborough	989.0	-2	W'S	6	b	41	65	8	7	-	-	Tr	Tr	2000	1	*
Boscombe Down	991.2	+2	W'N	7	bcq	41	75	8	3	-	-	2-3	2-3	2000	1	*
Calshot (Sthmtn.)	991.7	+6	W'N	5	pr	41	75	7	9	-	-	7-8	7-8	1000	1	3
Lympne	988.1	+4	W	5	bc	40	65	7	7	-	-	4-6	4-6	2000	1	§
Manston	985.3	-2	W'S	6	zo	40	65	6	5	3	-	Tr	1	2500		*
Shoeburyness	986.2	-4	W	5	bc	43	65	7	5	-	-	4-6	4-6	4000	1	*
Felixstowe	983.0	-10	W'S	6	bc	41	65	8	5	4	-	2-3	2-3	3000	1	4
Gorleston	979.6	-16	W'S	4	c	39	65	6	4	-	-	4-6	4-6	1500	1	2
Mildenhall	981.4	-14	W'S	7	cq	40	75	7	8	-	8	4-6	7-8	2500	1	*
Cranwell	979.1	-24	W'N	6	rr	38	85	6	6	-	-	10	10	1400	2	*
Birmingham	984.6		WNW	5	c	40	65	6	6	-	-	9+	9+	800	1	*
Upper Heyford	986.7	-6	W'N	6	bc/pr	38	75	8	3	4	-	4-6	4-6	1800	1	*
Ross-on-Wye	988.7	-4	W	6	pr	42	65	8	9	-	-	2-3	2-3	2500	1	*
Hartland Point	994.3	0	NW	6	bc	46	65	8	8	-	-	4-6	4-6	1500	1	4
Bristol																*
Portland Bill	992.5	+10	SW	7	c	48	92	7	5	-	-	9	9	2500	1	5
Plymouth	997.3	+2	W	7	pr	47	65	7	2	-	-	4-6	4-6	2000	1	4
The Lizard	1000.1	0	WNW	8	bcQ	47	75	7	-	6	-	4-6	4-6	2000	1	5
Scilly (St. Mary's)	1001.6	+12	NW'W	8	bc/pr	46	85	7	8	-	-	4-6	4-6	1500	1	4
Guernsey																
Pembroke	990.9	0	WNW	9	cq	45	75	7	8	-	-	7-8	7-8	1500	1	4
Holyhead	982.2	-8	W'N	10	pr	44	75	6	2	-	-	4-6	4-6	2800	1	6
Chester (Sealand)	981.0	-8	W	7	cq	44	65	7	8	-	-	7-8	7-8	2500	1	*
Manchester	978.7	-16	W	7	c/pr	42	75	6	8	-	-	9+	9+	800	2	*
Spurn Head	974.0	-28	WSW	7	bcq	38	85	7	8	-	-	4-6	4-6	2500	0	5
Catterick	970.5	-48	W	6	pr	38	85	6	2	-	-	7-8	7-8	1500	1	*
Tynemouth	967.6	-46	W	6	bc/pr	37	85	7	2	-	-	4-6	4-6	2500	1	3
St. Abbs Head	960.8	-82	W	7	c/d	35	92	7	5	2	-	4-6	10	2500	1	3
Leuchars	959.1	-84	SW	5	bc/ps	34	92	6	5	-	-	4-6	4-6	2500	2	*
Renfrew (Abbots I.)	965.2	-46	NW	8	LTH	42	92	5	9	2	-	9+	10	1000	4	*
Eskdalemuir	966.8	-56	W'N	7	rs	35	92	6	-	2	-	9	9	450	7	
Point of Ayre	982.9	-20	WNW	8	c	44	85	7	8	2	-	4-6	10	1500	1	5
Tiree																
Stornoway	959.5	+72	NNW	7	ir	42	85	7	6	-	-	7-8	7-8	1000	1	4
Dalwhinnie	959.0	-60	W	5	roro	36	92	5	5	-	-	10	10	800	7	*
Aberdeen	958.9	-54	SW'W	3	bo	33	97	3	5	-	-	10	10	1500	4	2
Wick	958.2	-26	SW	2	c	39	85	8	5	7	-	7-8	9+	1500	1	2
Lerwick	960.5	+6	N'W	3	c/r	37	92	6	5	2	-	7-8	9+	800	2	*
Blacksod Point	990.0	+18	WNW	9	cQ	44	75	7	9	-	-	7-8	7-8	800	1	7
Malin Head	975.4	+16	NW	8	cl	45	65	5	9	-	-	9+	9+	800	0	5
Aldergrove	978.4	-2	WNW	6	phr	39	85	7	9	-	-	10	10	1400	1	*
Birr Castle	991.5	+12	W	6	bc/pr	40	75	8	3	-	-	2-3	2-3	1500	1	*
Valentia Obsy.	1000.5	+4	WNW	7	bc	46	65	8	3	-	-	4-6	4-6	2500	1	5
Roches Point	997.6	+10	WNW	7	bcq	42	85	8	3	-	-	2-3	2-3	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 5th Hrs. (36)
London (Kew)	44	41	35	0.6	1	1.4
Croydon	45	39	35	1	3	1.6
S. Farnborough	45	39	36	0.2	3	0.4
Boscombe Down	44	39	35	0.2	4	0.1
Calshot (Sthmtn.)	48	40	37	22	5	1.4
Lympne	43	39	34	Tr	6	2.6
Manston						
Shoeburyness	46	41	34	Tr	Tr	3.0
Felixstowe	44	40	36	-	1	3.7
Gorleston	44	38	33	-	6	*
Mildenhall	43	38	32	Tr	1	0.9
Cranwell	41	35	34	0.2	3	0.1
Birmingham	41	37	33	0.5	4	0.0
Upper Heyford	42	36	32	0.4	·	*
Ross-on-Wye	45	40	36	1	0.5	0.3
Hartland Point	49	43	42	1	1	0.2
Bristol	45			0.4		
Portland Bill	50	46	*	0.5	4	*
Plymouth	50	43	39	4	2	0.2
The Lizard	53	43	*	1	3	0.0
Scilly (St. Mary's)	53	44	*	1	1	0.0
Guernsey						
Pembroke	54	42	*	2	3	0.0
Holyhead	50	41	39	7	0.1	0.0
Chester (Sealand)	*	39	35	Tr		0.0
Manchester	43	37	34	1	5	0.0
Spurn Head	43	38	*	Tr	1	1.0
Catterick	42	34	32	0.3	6	0.0
Tynemouth	42	34	32	Tr	3	*
St. Abbs Head	41	26	*	1	4	*
Leuchars	41	33	31	3	3	0.0
Renfrew (Abbots I.)	46	33	32	10	19	0.0
Eskdalemuir	41	32	31	12	17	0.0
Point of Ayre	48	34	*	3	0.5	0.0
Tiree			*	8		
Stornoway	43	36	*	14	5	0.0
Dalwhinnie	37	31	29	6	6	0.2
Aberdeen	40	33	30	2	2	0.3
Wick	42	33	*	2	2	*
Lerwick	43	36	*	Tr	21	0.5
Blacksod Point	52	40	*	6	5	*
Malin Head	47	38	*	3	4	0.0
Aldergrove	47	37	37	2	3	0.0
Birr Castle	52	38	35	1	2	0.0
Valentia Obsy.	54	41	39	6	2	0.0
Roches Point	53	42	*	4	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.
Kew	18	bccmo	cmocromo	crorom	44	41	35	0.6	1	1.4	•	•	8
Croydon	217	bczoczo	cmoro	cmororob	45	39	35	1	3	1.6	•	•	7
Greenwich (Royal Observatory)	149	bce	cro	rordocbq	46	39	35	0.3	3	0.9	66	61	6
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park)	27	•	•	•	50	40	34	2			70	69	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	50	40	34	-	1		79	66	•
Camden Square	110	c	o	•	45	40	35	1	1	•	•	65	•
Kensington	80	bcc	cmr	•	44	41	35	Tr	2		75	67	•
Hampstead Observatory	450	bc	cor	bc	42	38	34	-	2		•	80	•

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

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	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

Saturday 7th December, 1940.

No. 28,870.

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

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)	985.9	-4	W	6	c/r	45	45	8	2	4	–	7-8	9	2500
	Croydon	986.1	-6	W'N	4	bc	45	55	8	7	–	–	7-8	7-8	2500
	S. Farnborough	987.8	-6	W'S	7	bc	45	45	8	1	–	–	2-3	2-3	3000
	Boscombe Down	990.1	-2	W'N	7	bcq	44	65	8	9	–	–	4-6	4-6	2000
	Calshot (Soton.)	990.8	-6	WNW	7	Hr	44	55	8	9	–	–	4-6	4-6	1500
	Lympne	986.6	-8	WNW	6	bc	44	55	8	1	–	–	4-6	4-6	1800
	Manston	983.7	-4	W	8	bc	44	65	8	8	6	–	4-6	4-6	2500
2	Shoeburyness	984.6	-2	WNW	6	bc	46	55	7	5	–	–	2-3	2-3	4000
	Felixstowe	990.9	-6	W	7	bc	46	55	8	1	4	–	4-6	4-6	3000
	Gorleston	976.3	-20	W	7	c	45	75	6	8	3	–	4-6	7-8	1500
	Mildenhall	979.4	-2	W	8	bc	44	65	8	5	–	–	4-6	4-6	2500
	Cranwell	977.8	+2	WNW	9	c	43	55	8	8	–	3	7-8	7-8	1500
3	Birmingham														
	Upper Heyford	986.1	-2	W	7	bc	44	55	8	7	–	–	4-6	4-6	1800
4	Ross-on-Wye	988.3	0	W	7	bcq	43	55	7	8	–	–	2-3	2-3	2500
5	Hartland Point														
	Bristol	990.5	-2	WNW	7	c	43	65	8	2	6	–	4-6	7-8	2000
	Portland Bill	992.8	-6	W	7	c	47	92	7	2	–	–	7-8	10	4000
	Plymouth	996.6	-10	WNW	7	bc	47	75	8	3	–	–	7-8	7-8	2000
	The Lizard	999.0	-10	WNW	8	bc	45	85	7	8	6	–	4-6	4-6	2500
	Scilly (St. Mary's)	999.7	-14	WNW	7	bc/pr	45	85	7	8	6	–	4-6	4-6	1500
	Guernsey														
6	Pembroke	992.2	-4	W'N	8	cq	44	75	7	8	7	–	7-8	9	1000
7	Holyhead	984.6	+10	W'N	9	bc	44	75	7	7	3	–	2-3	2-3	2800
	Chester (Sealand)	982.0	+10	W	7	c	44	55	8	8	–	–	7-8	7-8	1500
8	Manchester	980.4	+18	W	7	c	43	65	7	8	–	–	7-8	10	1600
10	Spurn Head	969.3	-2	W'S	9	cq	44	65	6	9	2	–	4-6	7-8	2500
	Catterick	972.1	+30	NW'W	7	PR	41	85	6	3	–	–	9+	9+	2200
	Tynemouth	968.1	+40	W	8	c/pr	34	85	7	9	–	–	9	9	1000
11	St. Abbs Head	966.3	+78	W	8	cq	41	65	8	8	7	–	4-6	9	2500
	Leuchars	967.5	+70	WNW	5	c	41	75	8	8	7	–	7-8	9	1500
12	Renfrew (Abbots I.)	972.1	+26	WNW	7	pr	42	85	7	9	–	–	9	9	1200
	Eskdalemuir														
	Point of Ayre	979.8	+22	NW'W	9	c	45	85	8	8	1	–	4-6	7-8	1500
13A	Tiree														
13B	Stornoway		+22	NW	5	c/phr	42	85	7	8	7	–	9	10	800
15	Dalwhinnie	*	+34	W'N	4	rs	33	92	3	–	–	–	10	10	<150
	Aberdeen	965.7	+48	NW'N	4	bc/pr	38	85	7	8	–	–	4-6	4-6	1500
	Wick	965.0	+20	WNW	3	c	38	85	8	5	7	8	4-6	9+	2500
16	Lerwick	964.7	+28	E	5	c/pr	41	85	8	8	7	–	4-6	9	800
17	Blacksod Point	991.0	-12	WNW	9	PR	41	85	7	9	–	–	9	9	800
18	Malin Head	979.5	+12	NW	8	c	44	55	7	9	–	2	4-6	7-8	1500
	Aldergrove	981.7	+12	W'N	6	bc	41	65	8	2	6	3	1	4-6	2000
19	Birr Castle	991.6	-6	NW	4	bc/rs	38	85	8	3	–	4	2-3	2-3	1500
20	Valentia Obsy. †	997.9	-18	NW'W	7	pr	43	75	8	3	6	–	7-8	7-8	2500
	Roches Point	996.4	-14	W'N	6	q	40	92	8	3	–	3	4-6	4-6	1500

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

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. (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)
1	London (Kew)	985.4	0	W'S	5	b	41	55	8	2	–	–	Tr	Tr	1500	1	*
	Croydon	985.7	+6	W	5	zo	40	75	6	1	–	–	1	1	3000	0	*
	S. Farnborough	987.0	-2	WSW	5	b	39	65	7	4	–	–	1	1	3000	1	*
	Boscombe Down	988.1	-6	W'N	6	bc	38	75	7	3	–	–	2-3	2-3	2000		*
	Calshot (Soton.)	989.0	-10	W'N	5	bc/pr	40	85	8	9	–	–	2-3	2-3	1500	1	3
	Lympne	986.3	0	W	5	b	39	75	8	1	–	–	Tr	Tr	2500	1	§
	Manston	983.7	+2	W'S	6	b	40	65	7	–	–	–	0	0	•		*
2	Shoeburyness	984.1	-4	W'S	6	b	42	55	7	–	–	–	0	0	–	1	*
	Felixstowe	981.2	+6	W	6	b	42	65	8	1	–	–	Tr	Tr	3000	1	4
	Gorleston	977.2	+8	W'N	6	bc	41	65	6	5	–	–	2-3	2-3	2500	1	4
	Mildenhall	980.3	+6	W'S	6	bc	40	65	7	4	–	–	2-3	2-3	4000	0	*
	Cranwell	978.2	-4	WNW	7	c	41	65	7	8	–	–	7-8	7-8	1500	1	*
3	Birmingham	983.3	-12	W	5	b	39	65	8	1	–	–	1	1	1500	1	*
	Upper Heyford	984.9	-10	WSW	7	b	37	75	8	4	–	–	Tr	Tr	1200	1	*
4	Ross-on-Wye	987.0	-6	W	6	pr	40	65	8	1	–	3	1	7-8	2500	1	*
5	Hartland Point	990.8	-16	NW	6	c	44	65	8	8	4	–	4-6	7-8	2000	1	5
	Bristol	988.7	-16	W	6	bc	39	75	8	3	6	3	2-3	4-6	2500	1	*
	Portland Bill	991.3	-8	W	6	c	44	92	7	5	–	•	10	10	2500	1	5
	Plymouth	993.7	-16	WNW	5	pr	41	92	6	3	–	–	10	10	800	1	4
	The Lizard	995.2	-20	WNW	8	bcq	43	75	7	8	–	–	4-6	4-6	2000	1	5
	Scilly (St. Mary's)	996.2	-8	WNW	7	bc/pr	43	85	7	8	4	3	4-6	4-6	1200	1	5
	Guernsey																
6	Pembroke	990.2	-2	WNW	7	iro	41	85	7	8	–	–	7-8	7-8	1000	1	4
7	Holyhead	982.5	-6	W'N	9	c	42	85	8	8	–	–	9	9	2800	1	6
	Chester (Sealand)	981.9	-6	W	6	cq	41	65	7	2	–	3	4-6	7-8	1500	1	*
8	Manchester	979.4	-2	W	6	zo	40	65	6	2	–	–	4-6	7-8	1800	1	*
10	Spurn Head	972.7	+6	W'S	8	cq	43	65	7	4	1	–	4-6	7-8	4000	1	5
	Catterick	973.9	+10	NW'W	6	c/pr	41	65	6	8	–	–	10	10	2500	1	
	Tynemouth	971.8	+8	NW	6	rr	40	85	6	6	–	–	10	10	1000	1	3
11	St. Abbs Head	968.4	+4	W	7	cq	39	85	8	5	6	4	4-6	7-8	2500	0	4
	Leuchars	969.0	+6	W	5	c	40	85	8	5	3	–	2-3	7-8	1800	2	*
12	Renfrew (Abbots I.)	974.2	+16	WNW	6	pr	40	85	7	9	–	–	10	10	1200	2	*
	Eskdalemuir																*
	Point of Ayre	978.5	+12	NW'W	8	bc	42	85	8	5	4	5	2-3	2-3	1500	1	5
13A	Tiree																
13B	Stornoway	971.7	+20	NW	5	c/pr	42	75	8	8	5	–	4-6	7-8	1500	1	3
15	Dalwhinnie	971.9	+6	WSW	3	iso	35	85	5	5	–	–	10	10	800	7	*
	Aberdeen	967.6	+8	NW	3	bc	38	85	7	5	7	–	1	2-3	4000	1	2
	Wick	967.2	+14	W	3	c	35	97	7	8	7	2	4-6	9+	1500	1	2
16	Lerwick	969.0	+12	E	5	c	42	55	8	8	3	–	4-6	7-8	1500	1	*
17	Blacksod Point	987.9	-8	WNW	9	PR	41	75	6	9	–	–	10	10	<150	1	7
18	Malin Head	979.0	0	NW	8	c/pr	40	75	7	9	–	–	7-8	7-8	1500	0	5
	Aldergrove	980.7	-6	W'S	4	pr	37	75	7	3	–	–	2-3	2-3	1800	1	*
19	Birr Castle	989.2	-18	W	2	prs	34	97	7	9	7	–	7-8	9	1500	1	*
20	Valentia Obsy. †	994.5	-12	NW	7	phr	41	75	8	3	2	–	9+	9-	2500	1	5
	Roches Point	993.5	-14	W'N	6	cq	39	92	7	3	–	3	4-6	7-8	1500	1	3

PAST 24 HOURS.

District	Stations	Weather 7h.–13h. 6th (37)	Weather 13h.–18h. 6th (38)	Weather 18h 6th to 1h. 7th (39)	Weather 1h.–7h. 7th (40)
1	London (Kew)	bbccirocy	cbcby	byb	bcmo
	Croydon	bbc	bcmob	bmo	cmo
	S. Farnborough	bbcproy	bcyb	*	bcc,b,c.
	Boscombe Down	bcproq	bcq,b	bbcb	bcb
	Calshot (Soton.)	cprb TLRq	bcqycprb		bcprob
	Lympne	bcbbcy	bcy	b	bbcx
	Manston	bzobbcy	bccb (gale)	b	b
2	Shoeburyness	bcbbcy	bcyby	bmo	bbcmo
	Felixstowe	bcbbcy	bcyby	byb	bbccpro
	Gorleston	bccq	cbcq	bccq	cproq
	Mildenhall	cbc (gale)	bccbcyb	bbcb	c
	Cranwell	rr,procy (gale)	c	cbcc	c,rorocmo
3	Birmingham		bcb	cbc	cm
	Upper Heyford	cprprocy	cprobcyqbq	bcb	bbc
4	Ross-on-Wye	bcqpocqy	bcqycpobcq	bcqir	cbbc
5	Hartland Point		bcphc (gale)	cph	cprrc
	Bristol	bcpro	c,bBc	bcprobc	bcbc
	Portland Bill	circ	c	CPR	bcc
	Plymouth	bcpro	cprocprhc	cprotlhmo	ctlhpRrrm
	The Lizard	prbcq (gale)	prbcq (gale)	prbcl	prbcq (gale)
	Scilly (St. Mary's)	bcpq		bc	cpql (gale)
	Guernsey				
6	Pembroke	phrq (gale)	phric (gale)	cprcprhq	prqc
7	Holyhead	cmoprbc (gale)	bcc (gale)	c	cbc
	Chester (Sealand)	cproqy (gale)	cprhqb	bcqprhmo	bcprobjromo
8	Manchester	czoprpro	cczo	cqprobc	cmororo
10	Spurn Head	cq	cq	cqpro	cq
	Catterick	cprmopR	pRpromo	cmoproc	ccirоc
	Tynemouth	cpr (gale)	cporr	orrir	oir
11	St. Abbs Head	irocq (gale)	phrcq	cqiro	ciroq
	Leuchars	bcmocPRc	bcc	proirocmo	cmorobc
12	Renfrew (Abbots I.)	cTLHPRsPRq	cprpro	cmoproc	cbccbc
	Eskdalemuir				
	Point of Ayre	c (gale)	bc (gale)		c
13A	Tiree				
13B	Stornoway	crrphr	cpr	crrq*	cprq
15	Dalwhinnie	r,s	shso		ciso
	Aberdeen	cpro	bcb	bcpro	cpro
	Wick	cbcc ⊕	abcc	Psr bc	bcprq
16	Lerwick	cpr	cy	cph	cpr
17	Blacksod Point	PRcq	PRcq	rr	cbcq
18	Malin Head	cjpcizsyc	cqcproc	cproc	c
	Aldergrove	proholpros	bbcpro	probcx	prsoprobc
19	Birr Castle	bcprs	cprs	*	cprbcx
20	Valentia Obsy. †	bcphrqbcp	cphrcycphr	cphrbccPRpr	PHRtlphr
	Roches Point	PRq	cpq	bcpr–	prqprbc

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.*

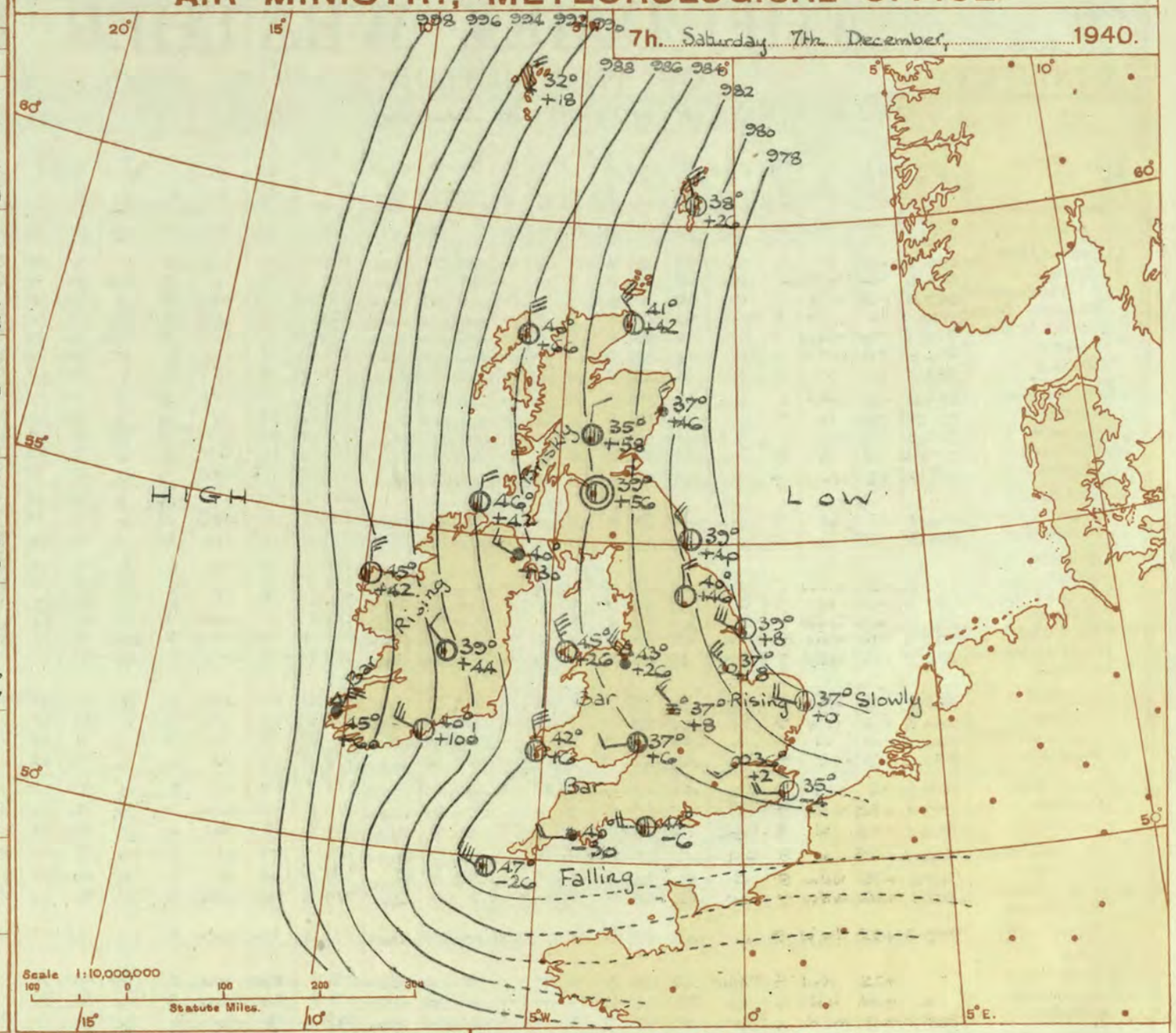
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Saturday 7th December 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 6th Dec.			18h. G.M.T.			01h. G.M.T. 7th Dec.			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	89	02752	26417	86	25744	32285	10	00752	02512	30	01854	63584
115	52	81844	24486	57	81744	61687	87	02844	08585	52	88844	32586
203				8-	01844	23514	8-	81848	32588			
206	57	01854	25384	62	64745	24388	5-	22855	26165	80	81854	00084
210	54	02954	25485	5-	02858	57528	8-	25757	26387	8-	25954	63584
220	9-	88748	28788	62	81648	28688				84	01754	27214
230	96	88636	60997	9-	81748	59888	8-	81848	28228	86	25843	06434
245	94	01954	63624	5-	02854	24226				8-	02954	30285
260	9-	83538	26488	82	25745	59487	57	02755	25386	50	00772	28222
277	9-	15734	25987	27	02842	58788	8-	81747	25687	8-	02748	62688
279	5-	25548	57888				02	64548	24768	5-	05544	24614
285				6-	68738	32778				30	27644	30584
288	5-	25757	58887	8-	05657	59787	5-	02768	24488	51	61655	28268
273												
301	26	14654	57086	20	14754	59818	2-	01755	59715	8-	05655	61465
321	86	14864	59915	57	05662	58615	52	02661	58528	52	61665	58468
299	87	25735	57786	5-	25746	24686	50	05646	24668	8-	64637	28567
292	87	25744	57785	57	02754	59688	5-	02756	57626	81	82754	31486
310	--	02638	24688	--	25535	24625				--	02528	26488
316	8-	25747	50787	8-	02756	56686	51	23754	23476	57	02653	24257
333				2-	14757	28817	20	81744	59684	2-	02855	30585
334	--	02744	24827							**	02654	20215
340	29	14854	58815	43	01852	59613	5-	25865	22385	8-	25847	28387
136				46	01864	24714	07	02790	22617	5-	22766	24586
336	65	02753	20725	62	02754	24727				62	02754	28427
350												
368	30	25844	56684									
379				50	00751	24611	50	01752	24502	5-	05645	24315
390	70	01854	24814							57	01752	22502
382	60	01854	58714	00	00890	23500	50	00852	23402	56	01762	24303
438	80	01743	24813							55	02753	26514
430	20	02745	24615	46	00751	59503	03	00790	26502	23	02752	26315
409	26	01744	58884	36	25745	57886	30	03644	57884	8-	82637	58687

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. 7th December 1940
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate or fresh northwest wind strong on coasts decreasing later; cloudy at first with showers, fine later; cold; sharp frost tonight.
5 S.W. England 6 South Wales ... ↑ 7 North Wales ... ↑	Fresh squally north to northwest wind strong on coasts decreasing later; bright intervals; wintry showers; local thunder; cold; frost tonight.
8 N.W. England ↑ 9 N. Midlands ... ↑ 10 N.E. England ↑ 11 S.E. Scotland ↑ 12 S.W. Scotland & Isle of Man. ↑	Fresh squally north to northwest wind strong on coasts decreasing later; bright periods; local wintry showers; cold; sharp frost tonight.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Fresh squally north wind strong on coasts backing northwest and decreasing; cloudy; wintry showers; cold; frost tonight.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland ↑ 20 S. W. Ireland	Fresh squally northwind strong on coasts decreasing and backing west tomorrow; bright intervals; wintry showers at first; fine later; cold; sharp frost tonight.

GENERAL INFERENCE.

Pressure is low to east of the British Isles and a small depression over Southeast England is moving south east. A ridge of high presure west of Ireland is moving east. There will be wintry showers in the North and West but also some bright intervals. Weather will be cloudy at first in the east with showers but will become fine later.

FURTHER OUTLOOK.

A short fair interval in the South, unsettled in the North.

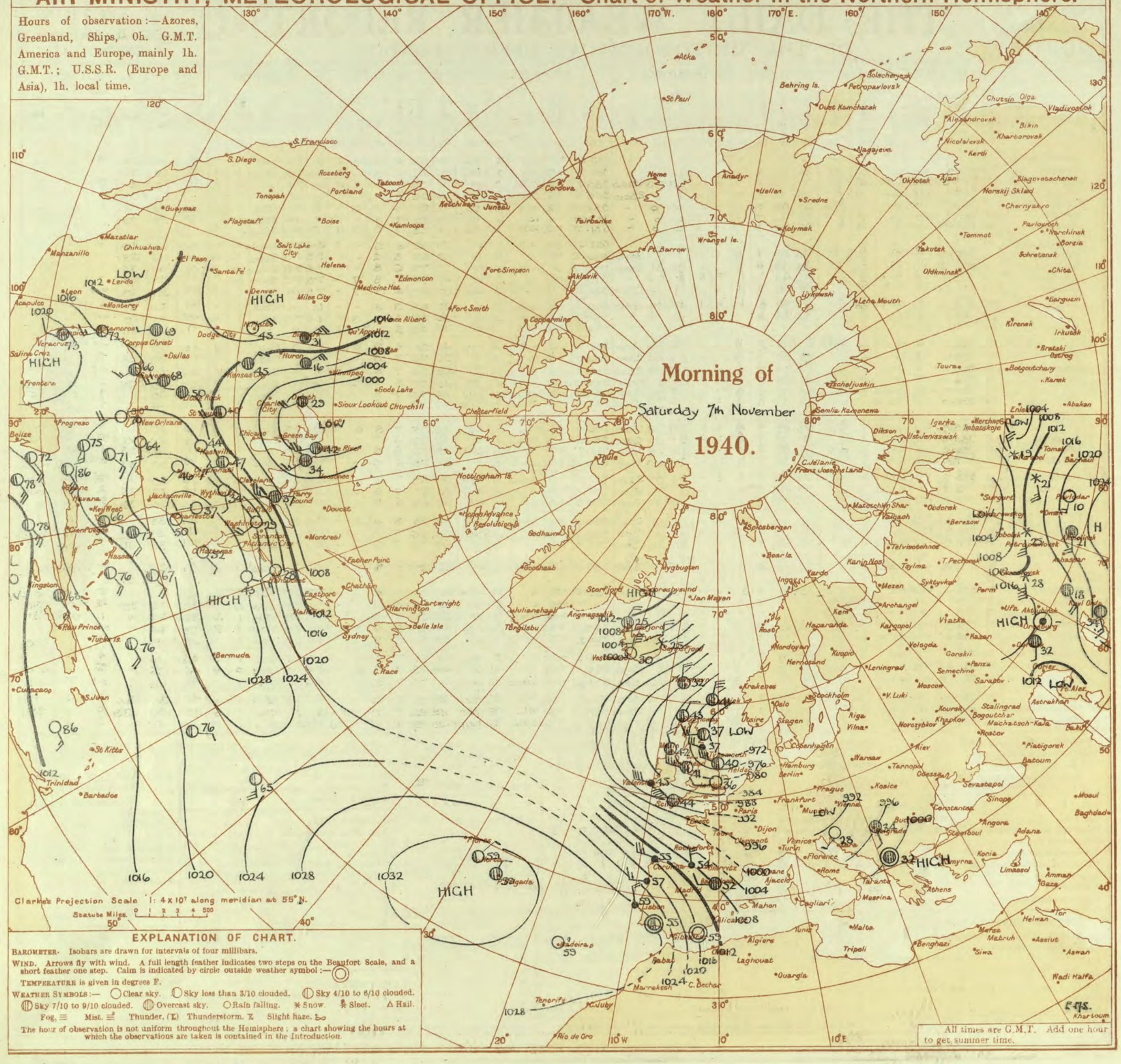
Gale warnings are issued in districts 6, 7, 8, 9, 10, 11, 12, 19 at 0330 on 7/12/40.

Forecasts issued at 10.30

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 7th December. 1940.

No. 28,870.

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

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	983.3	-10	W	3	z0	36	75	6	-	-	-	0	0	-
	S. Farnborough	226	984.3	-12	WSW	5	bc	37	75	7	5	3	-	2-3	2-3	3500
	Boscombe Down	417	985.1	-14	W'N	5	b	37	75	8	5	-	-	1	1	2500
	Calshot (Sthmtn.)	8	985.7	-18	W	4	b/pr	37	85	7	-	-	-	0	0	-
	Lympne	346	984.3	-8	W	4	b	35	85	7	-	-	-	0	0	-
	Manston	154	981.9	-10	W	5	b	36	75	7	-	-	-	0	0	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	980.3	-2	W	5	b	38	85	7	5	-	-	1	1	3000
	Gorleston	5	977.4	0	W	5	c	38	65	6	5	-	-	9+	9+	2500
	Mildenhall	19	979.1	-6	W'S	5	c	36	85	7	-	7	6	0	7-8	-
	Cranwell	240	977.8	-6	W'N	6	c	35	75	7	5	-	-	10	10	2500
3	Birmingham	535	984.3	+2	WNW	6	c*	33	95	6	*	*	*	4-6	7-8	1500
	Upper Heyford	408	982.9	-12	W	5	b	34	85	8	-	4	-	0	Tr	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	986.8	-16	NW	6	c/phr	43	65	8	3	-	-	7-8	7-8	1500
	Bristol	209	985.1	-4	W	4	bc	38	85	7	5	-	-	4-6	4-6	2000
	Portland Bill	32	990.0	-16	W	6	c	43	92	7	5	-	-	7-8	7-8	2500
	Plymouth	82	990.0	-18	W	5	tlh0	41	92	6	3	-	-	9	9	800
	The Lizard	240	991.7	-12	WNW	7	bc	43	85	8	8	-	-	4-6	4-6	1500
	Scilly (St. Mary's)	163	992.0	-12	NW'W	7	c/pr	44	65	8	8	-	-	7-8	7-8	1200
	Guernsey	175														
6	Pembroke	142	985.8	-10	WNW	7	cq	43	85	7	8	-	-	7-8	7-8	1500
7	Holyhead	26	980.9	-8	W'N	7	c	41	85	7	8	-	-	9+	9+	2200
	Chester (Sealand)	16	980.2	-6	W	4	phr	39	85	6	9	-	-	7-8	7-8	1400
8	Manchester	70	978.9	-2	W'N	5	bc	39	75	7	8	-	-	2-3	2-3	1800
10	Spurn Head	29	973.6	+4	W'S	8	cq	40	75	7	5	2	-	4-6	9+	2500
	Catterick	175	974.7	0	NW'W	4	c	37	85	7	8	-	-	9+	9+	2800
	Tynemouth	108	973.2	+10	NW	6	ir	37	92	7	6	-	-	10	10	1200
11	St. Abbs Head	280	971.8	+20	NW	7	ir0	40	85	7	5	2	-	7-8	10	2500
	Leuchars	36	973.8	+30	NW	2	z0	40	85	6	5	-	-	10	10	3500
12	Renfrew (Abbots I.)	19	975.9	+14	WNW	4	c	40	85	7	8	-	-	9+	9+	2500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	977.8	-4	NW'W	7	c	41	92	8	8	1	-	2-3	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	976.6	+40	NE	6	c	43	75	7	8	-	-	7-8	7-8	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	974.3	+30	WNW	3	bc	43	65	7	3	1	-	2-3	2-3	1500
16	Lerwick	156	976.0	+46	NE'N	6	c/phr	41	92	7	8	7	-	4-6	7-8	800
17	Blacksod Point	18	982.1	-2	NE	5	roro	42	97	7	6	-	-	10	10	<150
18	Malin Head	84	979.8	+18	NNW	3	c/pr	42	85	7	3	-	-	9	9	1500
	Aldergrove	268	980.5	+4	WSW	3	prs	36	92	7	3	-	-	2-3	2-3	1800
19	Birr Castle	173	983.4	-26	WNW	2	bc/pr	38	92	8	3	-	-	2-3	2-3	1500
20	Valentia Obsy.	30	987.2	-48	WNW	8	pr	45	85	7	3	-	-	10	10	2500
	Roches Point	22	987.6	-34	W'N	5	c/pr	38	92	8	3	-	-	4-6	7-8	1500

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

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)	983.2	+4	W	3	z0	37	85	6	5	8	6	1	7-8	4000	1	*
Croydon	982.8	+2	SW	3	z0	36	85	6	5	-	-	7-8	7-8	3000	1	*
S. Farnborough	983.7	+4	W'S	3	c	37	75	7	·	7	4	0	7-8	-	0	*
Boscombe Down	985.0	+6	SW'W	1	bc	34	92	8	-	-	-	0	0	-	1	*
Calshot (Sthmtn.)	984.7	+2	W'S	4	bc	37	85	8	4	3	-	Tr	1	3500	1	§2
Lympne	983.4	-4	W	4	bc	35	85	7	5	-	6	1	4-6	3500	1	
Manston	981.5	+2	W'S	5	bc	36	85	7	5	3	1	Tr	2-3	3500		*
Shoeburyness	982.6	+4	W'S	4	c	37	85	6	5	-	2	4-6	7-8	4000	1	*
Felixstowe	980.2	+6	W	5	pr	37	85	8	2	-	-	7-8	7-8	3000	1	3
Gorleston	978.2	0	W'N	4	c	37	75	6	8	-	-	7-8	7-8	2200	0	3
Mildenhall	979.7	+10	W	5	c	37	85	7	8	7	-	7-8	7-8	3000	0	*
Cranwell	980.2	+18	NW'W	5	z0	37	85	6	5	7	-	7-8	10	2500	1	*
Birmingham	983.2	+8	NW	3	f	37	85	3	5	-	-	10	10	1500	1	*
Upper Heyford	983.1	+4	W	4	c	36	85	8	5	3	-	4-6	7-8	3000	1	*
Ross-on-Wye	984.7	+6	W'S	2	c	37	85	8	-	1	6	0	9	-	1	*
Hartland Point	985.2	-4	NE	4	c/r	40	97	8	5	2	-	4-6	9	1500	1	4
Bristol	984.7	-2	W	1	b	36	75	7	5	-	-	1	1	3000	1	*
Portland Bill	985.7	-6	W	4	c	44	92	7	8	-	-	9	9	2500	1	4
Plymouth	985.4	-30	W	4	rr	40	97	5	-	2	-	10	10	600	1	2
The Lizard	985.5	-30	WNW	8	bcQ	46	75	7	8	-	-	4-6	4-6	1500	1	5
Scilly (St. Mary's)	985.7	-26	NW'W	8	c/pr	47	75	7	8	-	·	7-8	7-8	1200	1	5
Guernsey																
Pembroke	986.0	+6	N'W	6	cq	42	85	7	8	6	-	4-6	7-8	1400	0	3
Holyhead	984.4	+26	NW	7	c	45	85	8	7	-	-	10	10	2200	1	4
Chester (Sealand)	982.9	+26	NW'W	5	phr	43	85	6	8	-	-	9+	9+	2900	1	*
Manchester	982.2	+34	WNW	4	c	44	75	6	8	-	-	7-8	7-8	1800	1	*
Spurn Head	977.3	+8	WNW	6	bcq	39	85	7	4	1	-	4-6	4-6	4000	0	5
Catterick	981.4	+46	N'W	4	bc/r	40	75	7	5	2	-	4-6	4-6	2800	1	*
Tynemouth	979.9	+40	NW	4	c/r	39	85	6	8	-	-	9	9	1500	1	3
St. Abbs Head	980.0	+40	NNW	6	bcq	42	75	8	4	4	-	2-3	4-6	2500	1	3
Leuchars	982.2	+42	NW	3	bc	39	75	7	5	-	-	4-6	4-6	2500	1	*
Renfrew (Abbots I.)	984.9	+56	–	0	c	39	92	7	8	3	-	4-6	7-8	2500		*
Eskdalemuir																*
Point of Ayre	983.5	+38	N'W	6	c	46	85	8	8	1	-	4-6	10	2500	1	4
Tiree																
Stornoway	988.6	+66	N	6	c/pr	40	92	7	8	-	-	7-8	7-8	1400	1	3
Dalwhinnie	*	+58	N	2	o	35	85	5	5	-	-	10	10	800	8	*
Aberdeen	982.6	+46	N'W	3	pr	37	92	7	2	-	-	7-8	7-8	2500	1	2
Wick	983.1	+42	NW	5	cq	41	85	8	6	7	6	4-6	7-8	1500	1	2
Lerwick	980.9	+26	NNW	6	c·	38	85	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	994.2	+42	N	5	bcq	45	75	7	9	-	-	4-6	4-6	800	1	5
Malin Head	988.1	+42	N	4	c	46	75	7	4	6	-	4-6	7-8	2500	0	5
Aldergrove	983.6	+30	WNW	3	pr	40	75	7	8	-	-	4-6	4-6	3000	1	*
Birr Castle	992.7	+44	NW	2	bc	39	92	8	5	-	-	2-3	2-3	2500	1	*
Valentia Obsy.	997.3	+60	N'E	5	phr	45	85	7	9	-	-	9	9	2500	1	5
Roches Point	993.0	+100	WNW	5	bc/pr	40	85	8	3	-	3	2-3	4-6	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 6th Hrs. (36)
London (Kew)	46	36	30	Tr	–	5.9
Croydon	45	35	31	–	–	5.5
S. Farnborough	46	35	31	Tr	–	6.2
Boscombe Down		34	28		–	4.2
Calshot (Sthmtn.)	46	35	33	1	0.2	3.4
Lympne	45	34	29	·	–	6.8
Manston						
Shoeburyness	46	36	30	–	–	5.9
Felixstowe	46	36	33	–	Tr	5.2
Gorleston	46	36	34	1	0.1	4.0
Mildenhall	45	35	29	–	–	1.8
Cranwell	44	35	33	0.4	0.1	2.0
Birmingham	43	33	31	*	–	2.6
Upper Heyford	44	33	29	0.1	–	*
Ross-on-Wye	44	35	32	Tr	2	2.7
Hartland Point	48	39	37	0.3	5	1.2
Bristol	44	35	28	Tr	*	*
Portland Bill	50	41	*	0.5	2	*
Plymouth	48	39	35	2	5	3.5
The Lizard	48	39	*	3	5	3.6
Scilly (St. Mary's)	48	41	*	4	2	2.3
Guernsey						
Pembroke	46	39	*	2	3	2.1
Holyhead	45	39	38	Tr	–	1.0
Chester (Sealand)	45	37	33	1	3	–
Manchester	49	38	34	0.2	0.2	0.0
Spurn Head	44	39	*	Tr	Tr	0.0
Catterick	44	37	36	2	0.1	0.0
Tynemouth	42	36	33	9	3	*
St. Abbs Head	4[illegible]	38	*	Tr	1	*
Leuchars	43	37	32	1	Tr	0.2
Renfrew (Abbots I.)	43	37	31	9	0.4	0.0
Eskdalemuir						
Point of Ayre	4[illegible]	39	*	0.2	0.3	0.0
Tiree			*			
Stornoway			*	5	3	0.0
Dalwhinnie	37	32	29	25	6	0.0
Aberdeen	38	35	*	1	0.6	3.1
Wick	39	34	*	0.1	1	*
Lerwick	43	38	*	1	1	0.0
Blacksod Point	45	36	*	4	4	*
Malin Head	46	36	*	Tr	1	0.0
Aldergrove	43	33	31	0.3	Tr	1.4
Birr Castle	41	36	30	5	4	1.8
Valentia Obsy.	47	39	35	2	5	2.4
Roches Point	43	37	*	3	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.	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	bbccirscy	cbcby	bybbcm	46	36	30	Tr	–	5.9	*	*	
Croydon	217	bbc	bcmob	bmocmo	45	35	31	–	–	5.5	*	*	
Greenwich (Royal Observatory)	149	bcqy	cbybq	bybcmo	45	35	30	–	–	4.1	46	77	5
City (Bunhill Row)	—	*	*	*	*	*	*	*	*	*	*	*	*
Westminster (St. James' Park)	27	*	*	*	47	36	31	–		0.0	53	87	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	47	36	28	–	–	0.0	46	67	*
Camden Square	110	b	bc	*	45	35	31	–	–	*	*	81	*
Kensington	80	b	bc	*	47	36	30	–	–	0.0	63	99	*
Hampstead Observatory	450	bc	bc	bc	44	37	29	–	–	0.0	*	84	*

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.
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	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 8th December 1940.

No. 28,871.

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

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)	990.3	+36	NNW	4	z_o	44	75	6	9	7	6	4-6	9+	2500
	Croydon	989.5	+20	W	3	z_o	43	75	5	5	-	-	7-8	7-8	2000
	S. Farnborough	991.2	+42	NW	4	e	44	65	7	7	4	8	2-3	7-8	2500
	Boscombe Down	992.0	+34	NW	5	bc	43	75	7	5	-	2	4-6	7-8	3000
	Calshot (Soton.)	991.1	+34	NW	5	c	44	75	7	1	4	6	Tr	9	4000
	Lympne	989.4	+38	W	4	z_o	40	85	6	5	7	-	4-6	7-8	2000
	Manston	988.4	+38	WNW	4	z_o	41	85	6	4	6	4	2-3	7-8	1000
2	Shoeburyness	988.9	+32	NW'N	3	c	43	75	6	5	-	2	4-6	7-8	7200
	Felixstowe	986.9	+36	NW	4	c	43	75	7	1	3	6	Tr	7-8	2500
	Gorleston	985.7	+48	NW'N	4	c/pr	43	75	6	8	-	-	7-8	7-8	1500
	Mildenhall	987.8	+42	NW'N	4	bc	43	75	7	2	3	-	2-3	2-3	2500
	Cranwell	989.4	+46	NNW	5	z_o	43	65	6	5	-	7	2-3	10	3500
3	Birmingham	992.0	+34	NNW	3	bc	43	75	6	1	4	1	Tr	4-6	1500
	Upper Heyford	991.4	+42	NW'W	4	c	42	75	6	-	-	6	0	7-8	-
4	Ross-on-Wye	993.4	+40	NW	3	c	44	75	8	5	-	8	9	9+	2500
5	Hartland Point	996.6	+46	NNW	5	c	46	75	8	8	6	-	7-8	9+	1500
	Bristol	993.4	+44	NW'W	4	c	45	75	7	7	7	-	4-6	9+	3200
	Portland Bill	993.1	+40	NW	4	c	47	92	8	5	-	-	9	9	4000
	Plymouth	996.3	+46	NNW	6	c	46	75	8	8	4	3	2-3	9+	1600
	The Lizard	998.1	+50	NNW	7	bc	47	75	8	8	-	-	4-6	4-6	2000
	Scilly (St. Mary's)	1000.1	+50	NW'N	6	bc	48	75	8	8	4	3	4-6	4-6	1500
	Guernsey														
6	Pembroke	996.3	+28	NW	7	cq	46	75	7	8	6	-	4-6	7-8	2000
7	Holyhead	994.3	+56	N	6	bc	46	85	8	2	3	1	2-3	2-3	2600
	Chester (Sealand)	993.0	+52	NW'N	4	bc	45	75	7	4	-	-	2-3	2-3	4000
8	Manchester	992.4	+50	NW	3	bc	45	65	7	-	3	-	0	4-6	-
10	Spurn Head	987.3	+40	WNW	5	c/pr	42	85	7	3	3	1	2-3	7-8	4000
	Catterick	991.4	+50	N'W	3	bc	43	75	8	1	9	-	2-3	7-8	2500
	Tynemouth	990.0	+44	NW	5	bc	43	25	7	2	3	-	4-6	4-6	2500
11	St. Abbs Head	989.7	+32	N	5	cq	42	75	8	4	4	9	4-6	7-8	2500
	Leuchars	991.9	+36	NW	4	bc	42	65	8	8	3	-	2-3	4-6	3500
12	Renfrew (Abbots I.)	994.9	+40	NW'W	5	b	43	75	9	2	7	-	1	1	3000
	Eskdalemuir	992.7	+46	N	3	bc	40	65	8	5	-	-	2-3	2-3	2500
	Point of Ayre	995.4	+62	N	5	b	46	85	8	4	-	2	1	1	2500
13A	Tiree														
13B	Stornoway	992.5	+40	N	6	c/phr	38	92	9	8	7	-	7-8	9+	2000
15	Dalwhinnie	*	+40	N	3	c	33	92	7	8	-	-	4-6	9+	2500
	Aberdeen	990.9	+38	NNW	4	ps	34	97	8	9	-	-	9+	9+	1500
	Wick	991.0	+38	NNW	6	c prs	36	92	8	9	7	-	7-8	9+	800
16	Lerwick	986.7	+30	N'W	7	c/phr	39	85	8	8	7	-	4-6	7-8	800
17	Blacksod Point	1006.4	+68	N	7	cq	46	85	7	9	-	-	7-8	7-8	1500
18	Malin Head	1001.4	+50	N	6	c/pr	45	85	8	9	-	2	4-6	7-8	2500
	Aldergrove	998.4	+54	NNW	4	pr	44	75	7	9	-	-	9	9	1400
19	Birr Castle	1002.4	+44	N	2	bc	45	75	8	-	4	-	0	2-3	-
20	Valentia Obsy. †	1006.9	+46	N'E	4	bc/pr	44	85	9	2	-	3	4-6	4-6	2500
	Roches Point	1002.3	+42	NW	5	bc	46	75	8	5	4	5	1	4-6	2500

OBSERVATIONS at 18h. G.M.T. 7th December. — 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)	Weather 7h.–13h. 7th (37)	Weather 13h.–18h. 7th (38)	Weather 18h. 7th to 1h. 8th (39)	Weather 1h.–7h. 8th (40)
London (Kew)	997.6	+46	NW	4	z_o	41	75	6	-	-	6	0	4-6	-	1	*	bccm$_o$	cm$_o$bcz$_o$	bccir$_o$m$_o$b	b
Croydon	996.4	+44	NW	2	m	40	85	4	-	4	-	0	Tr	+	1	*	cm$_o$	bcm$_o$bm	bbcr$_o$m$_o$b	bmr
S. Farnborough	998.3	+46	NW'W	3	bc	40	85	7	-	4	-	0	2-3	+	1	*	bc	cb	bm$_o$cpr$_o$qb	b
Boscombe Down	999.8	+52	NW'W	3	z_o	39	85	7	-	-	-	0	0	-	1	*	bc	bcm$_o$	bcprqb	b
Calshot (Soton.)	998.5	+46	NW'N	4	b.	42	75	7	-	-	-	0	0	-	1	2	bbcc ⊕	cbcb	bcpr$_o$q b	b
Lympne	995.7	+38	WNW	2	z_o	41	75	5	5	-	-	9+	9+	2000	1	§	bcbm$_o$	bcm$_o$wcm$_o$	cpr$_o$bm$_o$	b
Manston	994.7	+38	NW	5	z_o	42	85	6	5	7	-	2-3	7-8	2500	*	*	bccm$_o$	bccm$_o$	cbm$_o$cpr$_o$	bz$_o$
Shoeburyness	995.6	+40	NNW	3	b	41	75	6	-	-	-	0	0	<150	1	*	bcm$_o$cz$_o$	bcz$_o$cz$_o$	cpbcm$_o$	bxbm$_o$
Felixstowe	994.0	+46	NW	2	bc	42	85	7	-	-	8	0	Tr	-	1	3	cpr$_o$bc	cpr$_o$c;b	bbcpr$_o$b	bm$_o$b
Gorleston		+40	NNW	5	pr	42	85	6	6	-	-	9	9	1000	1	3	cpr$_o$	cpr$_o$q	bccpr	cprslq
Mildenhall	995.0	+38	WNW	4	z_o	39	85	6	-	3	-	0	4-6	-	0	*	cpr$_o$bc	bccm$_o$bcm$_o$	bcm$_o$bcb	bbx
Cranwell	995.9	+34	NW	5	z_o	41	75	6	-	-	-	0	0	-	0	*	ir$_o$cm$_o$z$_o$	cz$_o$bcbm$_o$	cr$_o$r$_o$, bz$_o$	bz$_o$
Birmingham	998.3	+40	NW	3	z_o	40	85	5	-	4	-	0	1	-	1	*	cr$_o$bc	bcbz	pr$_o$b	b
Upper Heyford	998.2	+42	NW'W	3	b	38	85	6	-	-	-	0	0	-	1	*	bcr$_o$cm$_o$	bcz$_o$bm$_o$	bbcpr$_o$pr$_o$	b
Ross-on-Wye	1000.4	+34	W	2	bc	40	75	8	9	-	-	2-3	2-3	4000	1	*	cc	cbcb	cpbcb	bccb
Hartland Point	1004.0	+50	NNW	6	c	47	75	8	8	-	-	4-6	4-6	2000	1	4	c	cbc	bc	bcpr$_o$c
Bristol	1000.7	+42	NW	2	z_o	39	85	6	4	3	-	Tr	2-3	4500	1	*	b,c	cpr$_o$bcb	bmbcb	bbcc
Portland Bill	1000.4	+4	NW	4	bc	44	92	8	5	-	-	2-3	2-3	4000	1	4	bc	bcbc	bcb	bcc
Plymouth	1003.2	+42	NNW	6	b	46	75	6	5	-	-	Tr	Tr	2500	1	3	cm$_o$r$_o$r$_o$ir$_o$	cpr$_o$c,b	bz bcpr$_o$b	bcpr$_o$bbc
The Lizard	1005.6	+50	NNW	7	c	46	75	8	8	6	-	7-8	7-8	2500	1	4	cbc	bcqc	bcq	bcprc
Scilly (St. Mary's)	1006.8	+42	NNW	6	c	48	65	8	8	-	-	7-8	7-8	1500	1	5	cpqbc	bcc	cpr$_o$bc	cbpbc
Guernsey																				
Pembroke	1004.9	+32	NNW	7	cq	46	75	7	8	6	-	4-6	7-8	2500	1	3	cq	cbccq	bcq	bcq
Holyhead	1002.3	+38	NW	8	c/pr	44	75	7	8	3	-	9	9+	2500	1	6		phrm$_o$c (gale)	prcbcc	qPRbc
Chester (Sealand)	1000.3	+38	NNW	7	bc	45	55	7	8	-	-	7-8	7-8	2500	1	*		bphbc (gale)	bcycbcb	pr$_o$bc
Manchester	998.5	+26	WNW	5	c/Hr	40	65	6	4	3	-	4-6	9	3200	1	*		cbz$_o$cqmlr$_o$	bcz$_o$b	bx
Spurn Head	993.5	+20	WNW	5	c	40	75	7	3	5	-	2-3	7-8	4000	0	4	cprq	cq	bcqpr	bbq
Catterick	997.3	+32	N'W	3	bc/pr	37	85	7	8	-	-	4-6	4-6	2500	1			bcpr$_o$bc	bcb	bby
Tynemouth	996.7	+20	NNW	5	bc/phr	37	85	6	2	-	-	4-6	4-6	2000	1	3		bccphr	bc	bc
St. Abbs Head	996.7	+30	NW	5	cq	38	65	8	4	5	-	4-6	9	2500	1	4		bccq	cqpr$_o$	bcq
Leuchars	998.2	+34	NW	5	b/pr	37	85	8	5	-	-	1	1	2800	1	*		bbcpr$_o$b	bz	bx
Renfrew (Abbots I.)	1003.0	+34	W	2	b	34	85	9	4	-	-	2-3	2-3	4000	1	*	cpr$_o$cbc	bbcvbx	bx	bx
Eskdalemuir	999.4	+40	N'E	6	b	33	65	8	-	-	-	0	0	-	1	*	bbcxbc	bcprspsbcb	b	b
Point of Ayre	1002.7	+40	N'E	6	b	42	75	8	2	-	-	Tr	Tr	2500	0	4	cbc	b (gale)	b	b
Tiree																				
Stornoway	1004.5	+42	N	6	bc	40	65	8	8	-	-	4-6	4-6	1800	1	3	cphr	cphrbc	cphrb	bbcpr
Dalwhinnie	*	+44	N	4	c	33	92	7	8	-	-	4-6	9+	1500	8	*	cps	cps	*	cbc
Aberdeen	996.2	+34	N'W	5	prs	36	92	8	9	-	-	9+	9+	1500	1	2	prsps	phprs	cpr$_o$c	ccpr
Wick	997.0	+24	NNW	7	c/rs	38	85	8	5	7	-	4-6	7-8	1500	1	3		prscq	PHRq	PRsl
Lerwick	992.1	+20	N'W	7	c/phr	38	75	7	8	7	-	4-6	7-8	800	1	*	cphr	cprsphr	bccprphr	bccrr
Blacksod Point	1014.7	+40	N	4	bc	43	85	8	3	-	-	2-3	2-3	1500	1	4	pr$_o$cq	bc	pr$_o$bc	c
Malin Head	1008.0	+40	N	7	phr	44	85	7	2	6	-	4-6	7-8	1500	0	4	cprcjpprc	cphrcjpc	phrc	cpr$_o$c
Aldergrove	1006.1	+46	NW'N	4	b/pr	38	85	8	2	-	-	1	1	2000	1	*	pr$_o$bcpr	prpr$_o$h$_o$	bcpr$_o$pr	pr$_o$bcpr
Birr Castle	1011.6	+42	N	2	bc	41	85	8	5	-	-	4-6	4-6	2500	1	*	cbc	bc	bcb	bbcc
Valentia Obsy. †	1015.6	+44	N'E	6	pr	45	75	8	8	-	-	9	9	2500	1	5	cphrPHpr$_o$	bcbcqcpr$_o$bc	pr$_o$qbccpr$_o$	bccpr$_o$bbc
Roches Point	1011.0	+48	N	5	b	45	75	8	5	-	-	1	1	2500	1	3	bc	pr$_o$bcb	bc	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/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.*

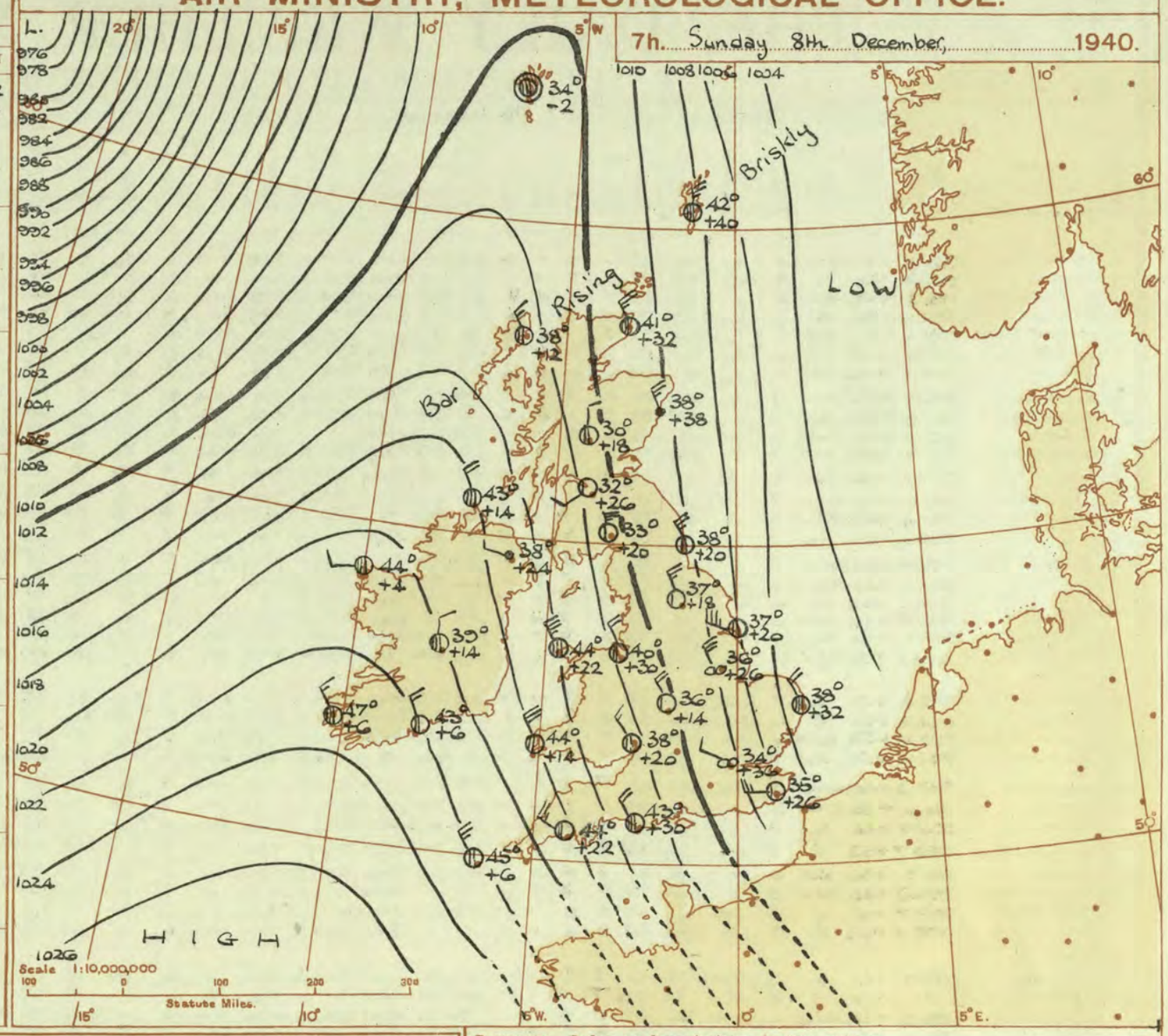
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 7th December			18h. G.M.T.			01h. G.M.T. 8th December			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	9-	15747	63687	9-	15746	63786	8-	14754	63784	8-	02852	64582
115	52	88844	65685	87	88744	65685	52	88834	65687	52	81844	32587
203										1-	02846	28486
206	84	25953	32284	9-	25844	30384	30	83744	28484	3-	01854	28384
210	80	25854	63784	5-	81745	63685	5-	25856	63686	5-	02857	62587
220	93	27855	28686									
230	86	81955	62516	96	25944	30540	50	00851	32781	50	01853	62403
245	9-	81737	64787	90	26843	63683	50	00841	65781	80	00852	65702
260	20	01854	32314	40	00861	28381	50	00861	24301	50	00861	25401
277	80	00952	29682	40	00842	64782	80	00852	62682	00	00890	62510
279	--	01790	28311				00	00790	28400	00	00790	28200
285	80	01744	30614	--	26746	28686						
288	80	05553	28325	4-	05564	29324	00	00790	16600	50	00863	61503
273	41	63753	29286									
301	33	05652	30214	8-	05856	63516				10	00753	90403
321	57	01765	28515	8-	81646	60526	00	05690	60600	00	00790	25400
299	8-	01745	26585	5-	22647	59467	8-	89648	59788	50	05643	59713
292	87	05653	30585	56	02744	29517	00	00790	28600	04	00890	28501
310	--	01534	26414				20	01753	30313			
316	07	05590	30325	04	01590	28113	00	05690	63400	00	05690	63400
333	37	25944	02585	10	14753	32783	2-	01755	63785	20	01754	
334	--	25636	00086									
340	80	01854	30314	33	25745	63526	20	00852	28402	70	00851	28301
136				83	02751	28585	8-	85756	60686	86	01751	27582
336	53	02754	32926	64	25754	28415						
350	10	02753	26486							00	05690	26300
368												
379	50	05653	26314	00	05690	26200	00	05690	28400	00	00790	28400
390	04	01790	30454	04	05590	28511	00	05590	26480	00	05690	28500
382	00	02790	27325	00	05690	27300	00	00790	28380	04	00890	24201
438	52	01744	26415							50	01753	30413
430	03	02790	28415	00	00790	28300	00	05690	30510	20	00752	28502
409	26	02845	64687	20	01844	63684	3-	88745	61685	8-	81746	63586

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 8th December 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. 8th December 1940
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Moderate or fresh northwest wind strong locally on coasts decreasing and backing south, freshening later; fine at first apart from local wintry showers chiefly near the East Coast: rain spreading from west later; cold becoming milder temporarily.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Moderate northwest wind backing south and freshening, becoming strong to gale on coasts veering southwest later; fair at first, rain later: cold becoming milder temporarily.
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 ↓	Freshening south wind becoming strong to gale veering southwest to west later: gale severe at exposed places; fair at first; rain spreading from west followed by squally wintry showers with local thunder: cold.
18 N. E. Ireland ↓ 19 S. E. Ireland 20 S. W. Ireland	Freshening south wind strong on coasts veering southwest to west; rain spreading from west followed by squally wintry showers with thunder: cold.

GENERAL INFERENCE.

A ridge of high pressure over Ireland is moving East and an intense depression is approaching Southwest Iceland. An associated trough west of Ireland will move east across the British Isles. Weather will be fair or fine at first apart from wintry showers chiefly near the East Coast, but rain will spread from the west later to all districts. Southwest gales will develop in northern districts later.

FURTHER OUTLOOK.

Unsettled. Stormy in the North and perhaps the West. Cold with squally wintry showers.

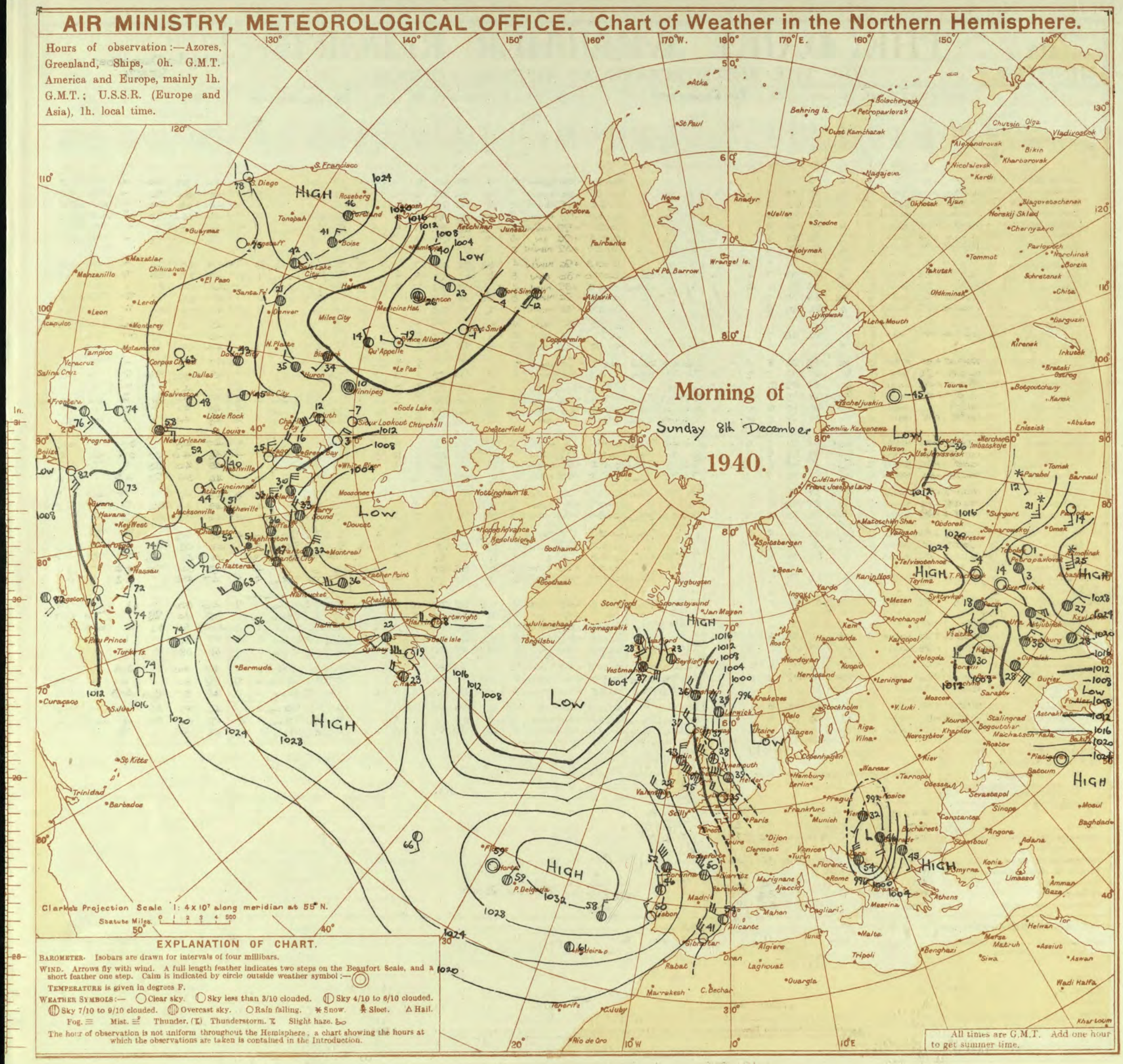
↓ Warning of southerly gale in operation in districts 13, 15, 16, 17 & 18. Times of issue 0745 and 0900 8/12/40

Forecasts issued at 10·30

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 8th December 1940.
No. 28,871

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

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	1005.5	+44	NW	3	z	35	75	5	-	-	-	0	0	-
	S. Farnborough	226	1007.4	+42	WNW	4	b	36	65	7	-	-	-	0	0	-
	Boscombe Down	417	1008.1	+46	NWW	4	b	36	75	8	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1008.1	+46	NNW	4	b	37	75	8	-	-	-	0	0	-
	Lympne ...	346	1003.6	+34	WNW	5	z	35	85	6	-	-	-	0	0	-
	Manston ...	154	1002.9	+34	NW'W	6	z	37	85	6	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1001.4	+30	NW	5	b	37	75	7	4	-	-	Tr	Tr	3000
	Gorleston ...	5	1001.1	+50	NNW	8	pr	36	85	6	6	-	-	9	9	1000
	Mildenhall ...	19	1002.6	+26	NWW	5	bc	35	75	7	-	7	-	0	2-3	-
	Cranwell ...	240	1004.5	+32	NW'N	6	z	36	65	6	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1007.4	+42	NW	4	b	36	65	7	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1014.0	+38	NNW	6	bc	45	75	8	3	-	-	4-6	4-6	2500
	Bristol ...	209	1010.5	+38	NW	3	b	37	75	7	5	-	-	Tr	Tr	2800
	Portland Bill ...	32	1010.0	+48	WNW	4	b	42	92	8	-	-	-	0	0	-
	Plymouth ...	82	1013.7	+42	NNW	5	bc/pr	43	75	8	2	-	-	2-3	2-3	1800
	The Lizard ...	240	1015.2	+40	NNW	7	bc	43	75	8	8	-	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	1017.5	+36	NNW	6	bc	46	65	8	6	-	-	4-6	4-6	2500
	Guernsey ...	175														
6	Pembroke ...	142	1014.4	+40	NNW	6	bcq	44	75	7	8	-	-	4-6	4-6	2500
7	Holyhead ...	26	1011.9	+32	NW	7	c/pr	46	85	8	8	-	-	9+	9+	2200
	Chester (Sealand)	16	1009.1	+22	NW'N	6	cq	42	65	8	2	-	-	2-3	10	2500
8	Manchester ...	70	1007.9	+34	NWW	4	b	37	65	7	1	-	-	Tr	Tr	2500
10	Spurn Head ...	29	1000.2	+32	WNW	7	c/pr	38	75	7	6	-	-	7-8	7-8	2800
	Catterick ...	175	1005.8	+34	NNW	5	b	37	65	8	-	-	-	0	0	-
	Tynemouth ...	108	1004.6	+36	NNW	5	bc	38	65	6	2	-	-	4-6	4-6	2200
11	St. Abbs Head	280	1004.2	+30	NW	6	bc/pr	39	65	8	4	4	-	4-6	4-6	2500
	Leuchars ...	36	1005.7	+22	WNW	4	b	38	65	7	-	-	-	0	0	-
12	Renfrew (Abbots I.)	19	1010.0	+32	WNW	3	b	35	85	8	5	-	-	Tr	Tr	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1009.7	+16	N'E	7	b	44	75	8	2	-	-	Tr	Tr	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1011.8	+32	NNW	4	b	37	85	7	8	-	-	1	1	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1008.8	+26	NNW	7	PR8	40	75	5	5	2	-	9	10	800
16	Lerwick ...	156	998.5	+28	NNW	7	phr	39	92	6	8	7	-	7-8	9+	800
17	Blacksod Point	18	1018.0	+16	NW	4	pr	44	92	8	9	-	-	4-6	4-6	1500
18	Malin Head ...	84	1014.0	+20	N	6	c/pr	43	92	7	3	-	-	7-8	7-8	1500
	Aldergrove ...	268	1014.2	+34	NW'W	3	pr	37	92	8	3	-	-	7-8	7-8	1700
19	Birr Castle ...	173	1018.3	+14	N	2	b	39	85	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1022.0	+18	NNW	4	bc	46	75	8	8	-	-	4-6	4-6	2500
	Roches Point	22	1019.7	+26	N'W	3	bc	43	85	8	5	-	-	4-6	4-6	2500

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

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)	1011.8	+26	NW'W	3	b	37	65	8	-	-	-	0	0	-	1	*
Croydon	1011.3	+36	WNW	2	z	34	85	5	-	-	-	0	0	-	3	*
S. Farnborough	1012.6	+22	WNW	3	b	36	75	8	-	-	-	0	0	-	1	*
Boscombe Down	1014.5	+26	WNW	3	bc	36	85	8	5	-	-	4-6	4-6	3000	1	*
Calshot (Sthmtn.)	1013.1	+22	NW'W	4	bc	38	75	5	4	3	-	2-3	2-3	4000	1	2
Lympne	1009.4	+26	W	5	b	35	65	7	-	-	-	0	0	-	1	§3
Manston	1008.7	+32	NW'W	6	z	37	65	6	5	-	-	1	1	2000		*
Shoeburyness	1009.3	+26	NW'W	4	bc	36	65	7	5	-	2	2-3	4-6	4000	3	*
Felixstowe	1007.0	+30	NW	5	b	37	65	8	4	-	-	Tr	Tr	4000	1	4
Gorleston	1004.8	+32	NW	4	c/pr	38	85	6	8	-	-	7-8	7-8	1000	1	3
Mildenhall	1008.2	+26	NWW	5	bc	35	75	7	-	7	1	0	2-3	-	0	*
Cranwell	1009.8	+26	NW'N	6	z	36	65	6	-	-	-	0	0	-	0	*
Birmingham	1013.8	+14	NW	4	bc	36	75	7	-	-	-	0	0	-	1	*
Upper Heyford	1012.2	+24	NW	4	b	35	75	8	-	-	-	0	0	-	1	*
Ross-on-Wye	1014.9	+20	NW	3	bc	38	75	8	5	-	-	2-3	2-3	2500	1	*
Hartland Point	1018.2	+20	NNW	6	c	45	75	8	3	-	-	9	9	2000	1	4
Bristol	1018.5	+24	NWW	4	c	40	75	7	5	3	-	7-8	7-8	3500	1	*
Portland Bill	1015.0	+30	NW	4	c	43	92	8	5	-	-	10	10	4000	1	4
Plymouth	1018.6	+22	NWW	5	bc	44	65	7	2	-	-	2-3	2-3	2000	0	2
The Lizard	1019.9	+20	NNW	6	c	46	65	8	8	6	-	7-8	7-8	2000	1	4
Scilly (St. Mary's)	1020.7	+6	NW	5	bc	45	75	8	8	-	-	4-6	4-6	1500	1	4
Guernsey																
Pembroke	1018.5	+14	NNW	6	bcq	44	75	7	8	-	-	2-3	2-3	2500	1	3
Holyhead	1015.9	+22	NW'N	7	c	44	85	8	8	3	-	7-8	7-8	3000	1	4
Chester (Sealand)	1014.4	+30	NW'N	4	b	40	65	8	1	-	-	1	1	2500	1	*
Manchester	1012.8	+26	NWW	4	z	36	75	6	-	-	-	0	0	-	0	*
Spurn Head	1005.8	+20	W'N	7	bcq	37	85	7	-	2	-	0	2-3	-	0	5
Catterick	1010.2	+18	NNW	5	b	37	55	8	-	3	-	0	Tr	-	0	*
Tynemouth	1008.5	+20	NW	5	bc	38	55	7	2	-	-	2-3	2-3	2200	1	4
St. Abbs Head	1008.3	+18	NNW	7	bcq	39	65	8	4	4	-	2-3	2-3	2500	0	4
Leuchars	1010.4	+22	NW	5	bc	39	65	8	5	-	-	2-3	2-3	2500	3	*
Renfrew (Abbots I.)	1014.5	+26	SW	2	b	32	85	8	5	-	-	Tr	Tr	3500	3	*
Eskdalemuir	1010.7	+20	N'W	5	b	33	65	8	-	-	-	0	0	-	4	*
Point of Ayre	1014.7	+18	N'E	6	b	43	75	8	4	-	-	Tr	Tr	2500	0	4
Tiree																
Stornoway	1015.4	+12	NW	3	bc	38	75	8	8	-	-	2-3	2-3	1000	1	2
Dalwhinnie	*	+18	N	1	b	30	92	8	1	-	-	1	1	2500	0	*
Aberdeen	1010.0	+38	NNW	5	pr	38	92	7	3	-	-	10	10	1500	1	3
Wick	1010.5	+32	NW	5	bcq	41	85	7	5	-	-	2-3	2-3	2500	1	3
Lerwick	1007.9	+40	N	5	c/pr	42	75	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1020.2	+4	W	2	c	44	85	7	5	-	-	10	10	<150	1	*
Malin Head	1018.8	+14	NNW	4	c	43	85	8	8	-	-	7-8	7-8	2500	0	5
Aldergrove	1018.3	+24	W'N	1	pr	38	85	8	3	6	-	7-8	7-8	3600	1	*
Birr Castle	1020.7	+14	N	2	c	39	92	8	5	-	-	7-8	7-8	2500	1	*
Valentia Obsy.	1023.4	+6	NW'N	3	c	47	85	8	8	-	-	9+	9+	2500	1	3
Roches Point	1022.1	+6	NNW	3	bc	43	92	8	3	-	-	4-6	4-6	1500	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 7th Hrs. (36)
London (Kew)	44	35	26	-	0.1	1.9
Croydon	43	33	30	-	Tr	0.9
S. Farnborough	43	35	30	-	0.4	2.6
Boscombe Down	43	34	29	-	0.4	3.2
Calshot (Sthmtn.)	46	36	33	-	Tr	4.7
Lympne	42	34	29	-	Tr	3.4
Manston						
Shoeburyness	44	35	30	-	0.4	1.8
Felixstowe	44	35	33	Tr	Tr	1.5
Gorleston	44	34	31	1	7	
Mildenhall	45	34	25	Tr	Tr	3.3
Cranwell	44	34	31	Tr	0.6	2.1
Birmingham	43	35	35	0.4	0.4	2.5
Upper Heyford	43	34	27	0.1	Tr	*
Ross-on-Wye	44	37	30	-	0.3	1.0
Hartland Point	47	42	41	-	Tr	0.0
Bristol	45	36	29	Tr	-	1.0
Portland Bill	47	40	*	-	-	*
Plymouth	47	41	37	2	0.1	1.6
The Lizard	48	41	*	2	-	4.2
Scilly (St. Mary's)	48	44	*	1	0.1	5.2
Guernsey						
Pembroke	47	43	*	0.1	-	0.2
Holyhead	48	40	39	0.5	0.1	1.8
Chester (Sealand)	45	40	35	1	Tr	3.2
Manchester	46	34	29	0.2	-	0.0
Spurn Head	43	36	*	Tr	0.1	0.5
Catterick	43	36	32	Tr	-	2.8
Tynemouth	44	35	31	2	-	
St. Abbs Head	45	38	*	Tr	Tr	*
Leuchars	42	35	31	Tr	-	3.2
Renfrew (Abbots I.)	43	31	20	Tr	Tr	4.3
Eskdalemuir	47	31	26	0.2	-	2.9
Point of Ayre	47	42	*	0.2	-	3.7
Tiree			*			
Stornoway	40	35	*	1	1	2.1
Dalwhinnie	37	30	28	1	Tr	0.8
Aberdeen	40	35	32	4	0.5	2.2
Wick	42	35	*	1	5	*
Lerwick	41	38	*	1	3	0.7
Blacksod Point	47	40	*	0.4	1	*
Malin Head	47	40	*	2	1	0.8
Aldergrove	45	36	30	0.3	1	1.2
Birr Castle	46	37	34	-	-	4.0
Valentia Obsy.	48	44	38	4	0.5	0.0
Roches Point	48	42	*	Tr	1	*

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	Temp. Day Max. °F.	Temp. 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	bcem	embcz	bccicm	44	35	26	-	0.1	1.9	*	*	6
Croydon	217	cm	bcmbm	bbcgmb	43	33	30	-	Tr	0.9	*	*	5
Greenwich (Royal Observatory)	149	bcc	bcb	bcrbcb	43	36	27	-	Tr	0.1	71	61	5
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	45	37	30		-		80	71	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*									*
Camden Square	110	bc	bc	*	44	36	30	-	Tr	*	*	64	*
Kensington	80	bc	bc	*	44	36	29	-	-		79	72	*
Hampstead Observatory	450	bcp	bc	b	43	34	21	Tr	-		*	83	*

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.
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 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 9th December, 1940.

No. 28,872.

OBSERVATIONS at 13h. G.M.T. 8th December,

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)	1017.2	+22	NW'W	5	z_0	43	55	6	-	7	7	0	9+	-
	Croydon	1016.3	+22	W	2	z_0	42	55	5	-	3	-	0	4-6	-
	S. Farnborough	1017.9	+20	NW	5	bc	43	55	8	-	-	6	0	7-8	-
	Boscombe Down	1018.6	+12	NW	4	b	43	65	7	-	-	6	0	4-6	-
	Calshot (Soton.)	1018.3	+20	NW'N	5	bc	44	65	8	-	4	6	0	4-6	-
	Lympne	1014.4	+14	NW	6	b	41	55	8	5	-	-	1	1	5700
	Manston	1014.0	+20	WNW	5	z_0	41	65	6	4	6	3	4-6	4-6	5000
2	Shoeburyness	1015.0	+24	NW	4	bc	43	65	8	1	-	5	Tr	2-3	2500
	Felixstowe	1012.2	+18	NW'N	5	bc	42	55	8	8	4	-	Tr	1	2500
	Gorleston	1011.1	+34	NW'N	5	bc/pr	38	85	6	3	-	-	4-6	4-6	1600
	Mildenhall	1013.8	+22	NW	5	bc	41	75	7	5	-	-	2-3	2-3	5000
	Cranwell	1015.6	+26	NNW	6	z_0	41	65	6	5	-	-	4-6	4-6	2500
3	Birmingham	1018.3	+14	NW	4	bc	41	65	6	1	-	6	Tr	4-6	2500
	Upper Heyford	1018.2	+26	NW	4	c	41	55	6	-	-	6	0	9	-
4	Ross-on-Wye	1019.0	+14	NW'W	3	bc	44	65	8	1	-	8	Tr	4-6	2500
5	Hartland Point	1021.9	+12	NNW	5	c	45	75	8	8	-	6	2-3	7-8	2000
	Bristol	1019.5	+10	NW	4	bc	44	65	7	1	-	5	Tr	4-6	3000
	Portland Bill	1019.4	+14	NW	4	bc	46	85	8	2	-	-	4-6	4-6	4000
	Plymouth	1022.8	+18	NNW	4	c	47	65	8	4	-	8	9	9+	3000
	The Lizard	1023.8	+10	NW'W	4	bc	48	75	8	8	6	-	4-6	4-6	2600
	Scilly (St. Mary's)	1024.3	+10	NW	4	bc	50	65	8	8	6	5	4-6	4-6	1800
	Guernsey														
6	Pembroke	1022.5	+10	NW	3	bc	46	85	8	2	4	1	2-3	4-6	3000
7	Holyhead	1019.2	+10	NW'W	4	c	45	85	8	8	1	1	7-8	7-8	2800
	Chester (Sealand)	1018.7	+18	NW'W	4	b	44	65	8	1	6	-	1	2-3	2500
8	Manchester	1018.0	+10	NW'W	3	bc	42	65	7	5	4	-	Tr	2-3	4000
10	Spurn Head	1012.5	+32	W'N	6	cq	41	75	7	6	9	-	7-8	9+	2500
	Catterick	1016.4	+18	NW	3	bc	41	65	8	5	-	-	2-3	7-8	4000
	Tynemouth	1015.5	+16	NW	3	c	40	65	6	2	-	-	7-8	7-8	2800
11	St. Abbs Head	1014.4	+22	NW	6	cq	40	65	8	4	5	8	2-3	9+	2500
	Leuchars	1014.9	+6	W	3	c	41	65	8	5	7	-	Tr	9	4500
12	Renfrew (Abbots I.)	1017.0	+4	WSW	1	c	38	75	7	5	1	7	Tr	10	1400
	Eskdalemuir	1016.0	+4	N	2	c	37	55	8	-	7	-	0	7-8	-
	Point of Ayre	1018.0	+10	NNW	4	c	44	75	8	8	-	6	Tr	9+	2500
13A	Tiree														
13B	Stornoway	1014.5	-18	SW	3	c	46	65	8	5	2	4	4-6	10	2500
15	Dalwhinnie	*	+2	WSW	1	o	31	85	8	4	2	•	1	10	2500
	Aberdeen	1014.2	+14	NW	4	c/pr	39	75	7	8	7	-	Tr	9+	2500
	Wick	1012.9	-4	WNW	3	c	38	92	8	3	2	-	2-3	10	1500
16	Lerwick	1011.4	+4	NNW	3	c	41	85	7	8	7	9	4-6	9	1500
17	Blacksod Point	1016.8	-30	S	3	r_0r_0	48	92	6	6	-	-	10	10	<150
18	Malin Head	1015.8	-22	S	2	c	41	92	8	8	-	-	9	9	2500
	Aldergrove	1019.1	-4	SW'S	2	c	39	92	8	5	7	-	2-3	10	4500
19	Birr Castle	1021.0	-8	SW	1	c	43	85	7	5	-	-	10	10	2500
20	Valentia Obsy. †	1022.6	+14	SSW	3	ir_0	49	85	8	6	2	-	7-8	10	2500
	Roches Point	1023.3	-4	SW'W	2	c	46	85	8	5	7	-	4-6	9+	1500

OBSERVATIONS at 18h. G.M.T. 8th December,

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)	1019.9	+16	WNW	2	z_0	38	75	5	-	-	1	0	2-3	-	1	*
Croydon	1019.8	+14	W	2	m	37	85	4	5	-	-	Tr	Tr	4000	1	*
S. Farnborough	1020.9	+14	W	3	z_0	36	75	6	-	-	6	0	4-6	-	1	*
Boscombe Down	1021.5	+20	W'N	2	e	36	85	7	-	-	7	0	10	-	1	*
Calshot (Soton.)	1021.2	+18	SW'W	3	z_0	39	75	6	-	-	2	0	4-6	-	0	2
Lympne	1019.0	+26	NW	3	m	37	75	4	5	-	-	7-8	7-8	4000	1	§
Manston	1018.1	+20	WNW	4	z_0	39	75	6	-	1	-	0	10	-		*
Shoeburyness	1018.6	+16	NW	2	c	38	75	6	-	6	7	0	10	-	1	*
Felixstowe	1017.4	+28	NW'N	4	z_0	40	65	6	-	-	1	0	Tr	-	1	3
Gorleston	1016.2	+32	NW	4	c/pr	40	85	6	8	-	-	9+	9+	1200	1	3
Mildenhall	1017.8	+18	W'N	3	z_0	36	85	5	-	-	8	0	4-6	-	0	*
Cranwell	1018.4	+14	WNW	4	m	36	85	4	-	-	7	0	10	-	0	*
Birmingham	1020.1	+8	WSW	2	m	38	75	4	5	-	6	4-6	9+	2500	1	*
Upper Heyford	1020.0	+10	WNW	3	c	35	85	7	-	-	6	0	7-8	-		*
Ross-on-Wye	1020.6	+6	SW	1	c	41	65	7	-	1	-	0	10	-	1	*
Hartland Point	1021.8	-4	W'N	3	c	46	85	8	5	2	-	7-8	10	2000	0	3
Bristol	1021.6	+4	W	2	c	40	85	7	5	7	7	Tr	10	4000	0	*
Portland Bill	1021.5	+12	WNW	4	c	45	85	8	5	4	-	4-6	7-8	4000	1	4
Plymouth	1023.2	+2	W	3	m	46	85	4	5	2	-	2-3	10	2500	0	2
The Lizard	1024.4	0	WNW	4	c	47	85	8	8	2	-	9	10	2000	1	3
Scilly (St. Mary's)	1023.9	-6	WSW	3	c	48	85	8	8	7	-	4-6	10	1500	1	3
Guernsey																
Pembroke	1020.4	-2	WSW	4	c	48	85	8	5	2	-	7-8	9+	2500	1	2
Holyhead	1017.8	-10	SW'S	4	c/pr	45	85	8	7	2	-	4-6	10	2800	1	2
Chester (Sealand)	1018.7	-6	SSW	1	z_0	42	75	6	5	2	-	7-8	10	2500	1	*
Manchester	1018.5	-4	S'W	1	m_0	36	85	4	-	2	-	0	10	-	0	*
Spurn Head	1015.9	+16	W	5	c	39	75	6	-	1	-	0	10	-	1	4
Catterick	1017.0	0	W	2	c	37	69	7	-	1	-	0	10	-	0	x
Tynemouth	1012.6	0	W	3	c	37	75	5	5	-	-	9	9	2600	1	3
St. Abbs Head	1014.1	-4	W	3	c	37	65	7	5	2	-	4-6	10	2500	0	3
Leuchars	1013.0	-18	SW	3	m	36	75	4	-	2	-	10	10	3500	1	*
Renfrew (Abbots I.)	1018.6	-22	SSE	1	rf	37	85	3	5	2	-	9	10	3000	1	*
Eskdalemuir	1015.4	-14	SSW	2	c	32	85	7	5	-	-	10	10	2500	4	*
Point of Ayre																
Tiree																
Stornoway	1005.0	-40	S	8	rr	42	92	6	5	2	-	9	10	1500	3	4
Dalwhinnie	1018.3	-32	SW	3	o	33	92	8	-	2	-	10	10	7200	8	*
Aberdeen	1011.7	-18	SW'W	1	cf+	37	75	3	-	7	-	0	10	-	1	2
Wick	1009.0	-20	SW	3	c	39	75	8	5	1	-	4-6	10	1500	1	1
Lerwick	1008.5	-18	S	4	c	42	85	7	8	7	9	4-6	9+	1500	1	*
Blacksod Point	1010.2	-28	SSW	4	rr	51	97	6	6	-	-	10	10	<150	2	3
Malin Head	1007.0	-46	S	5	r_0r_0	48	97	6	5	-	-	9+	9+	800	1	4
Aldergrove	1012.9	-46	S'E	3	rr	40	97	6	5	2	-	4-6	10	1100	1	*
Birr Castle	1015.1	-36	SSW	1	ir_0	45	92	7	6	1	-	7-8	10	1500	1	*
Valentia Obsy. †	1017.4	-34	SW'W	5	ir	51	97	5	6	2	-	7-8	10	800	1	4
Roches Point	1019.4	-28	SW	2	ir_0	48	92	8	6	2	-	7-8	9+	1500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 8th. (37)	13h.—18h. 8th. (38)	18h. 8th. to 1h. 9th. (39)	1h.—7h. 9th. (40)
London (Kew)	bz_0bczy	czybcz	bcm_0	$crr_0m_0cm_0$
Croydon	bm_0bcz_0	bczbcm	$bmcz_0$	$crrr_0r_0$
S. Farnborough	bxbcy	bcyz Ⓣ	bcr_0m_0	$crrr_0r_0c$
Boscombe Down	b	bcbcz	cir_0m_0	
Calshot (Soton.)	bbcy	bcbcz	$bcir_0cm_0$	cm_0rrr_0
Lympne	bcm_0by	bczcz	$cm⊕om_0$	m_0rrpg
Manston	$bbcbcz_0$	czbcz	cz_0mom_0	cr_0r_0rr
Shoeburyness	bcby	bybcc	comx	omrrc
Felixstowe	bbybcy	bybcz	bz_0om_0	or_0r_0d
Gorleston	cpr_0s_0q	$bccpr_0$	cz_0	pr_0r_0q
Mildenhall	bxbc	cz_0bpm_0Ⓣ	bcm_0om_0w	$om_0rrr_0r_0cm_0$
Cranwell	bcz_0	bczcmⓉ	$cmcr_0r_0m$	$rrd_0d_0om_0$
Birmingham	bbc	bccm	corr	orr_0c
Upper Heyford	$bbcz_0cz_0$	czc	$ccir_0m_0orrm$	$orrddm_0cm_0$
Ross-on-Wye	bbc	bcc	cc	crc
Hartland Point	c	c	od_0rr	prrcr
Bristol	bc	bcc	$cm_0cr_0r_0$	$crrr_0d_0m_0$
Portland Bill	cbc	c	cc	orr
Plymouth	bcjpcbcc	cbcc	$cid_0ir_0r_0r_0m_0$	$cr_0r_0RRddm_0$
The Lizard	cbc	bcc	coid	irror
Scilly (St. Mary's)	cpr_0bc	bcc	coid	oid_0r
Guernsey				
Pembroke	cqbc	c	cmrro	c
Holyhead	bcc	cpgc	$mrRm_0d_0c$	PRm_0qc
Chester (Sealand)	bbcc	bmc	cz_0rr	r_0r_0cbccc
Manchester	bxbc	cmzm	mr_0r_0rr	$r_0r_0d_0d_0pr$
Spurn Head	cq	$cqpr_0$	orr	oir_0
Catterick	bcbcv	bcvc	cr_0orrm_0	$orrd_0d_0cm$
Tynemouth	bcc	c	coir	bco
St. Abbs Head	cq	cqc	ir_0cq	cq
Leuchars	bxbcc	ccmzcm	$mr_0Rrd_0m_0$	d_0bccm_0
Renfrew (Abbots I.)	bbccxc⊕	$cffir_0$	$cfRr_0c$	$cbcpr_0m_0c$
Eskdalemuir	bbccy c	c	$cois_0rsrr$ r_0cbc	$orrr_0r_0c$ c
Point of Ayre				
Tiree				
Stornoway	bcb	rr	crrprbc	kthrq
Dalwhinnie	bcco	o	*	cpr
Aberdeen	$bcpr_0c$	czcf	fir_0c	cz
Wick	cqbcc	c	ir_0cq	cqbcc
Lerwick	cbcc	c	cir	cirrr
Blacksod Point	rr	rr	c	c
Malin Head	c	cpr_0cr_0rc	$cfrcid_0bc$	cprcprc
Aldergrove	pr_0bcc	$r_0r_0rrm_0$	$rrirpr_0$	$bccwir_0$
Birr Castle	c	cir_0	cpr_0	cprc
Valentia Obsy. †	cpr_0cir_0 c	$r_0r_0cdr_0ir$ cir_0	$cird_0d_0cpr_0c$ rrcbc	$id_0ir_0ir_0bc$ circ
Roches Point				

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.*

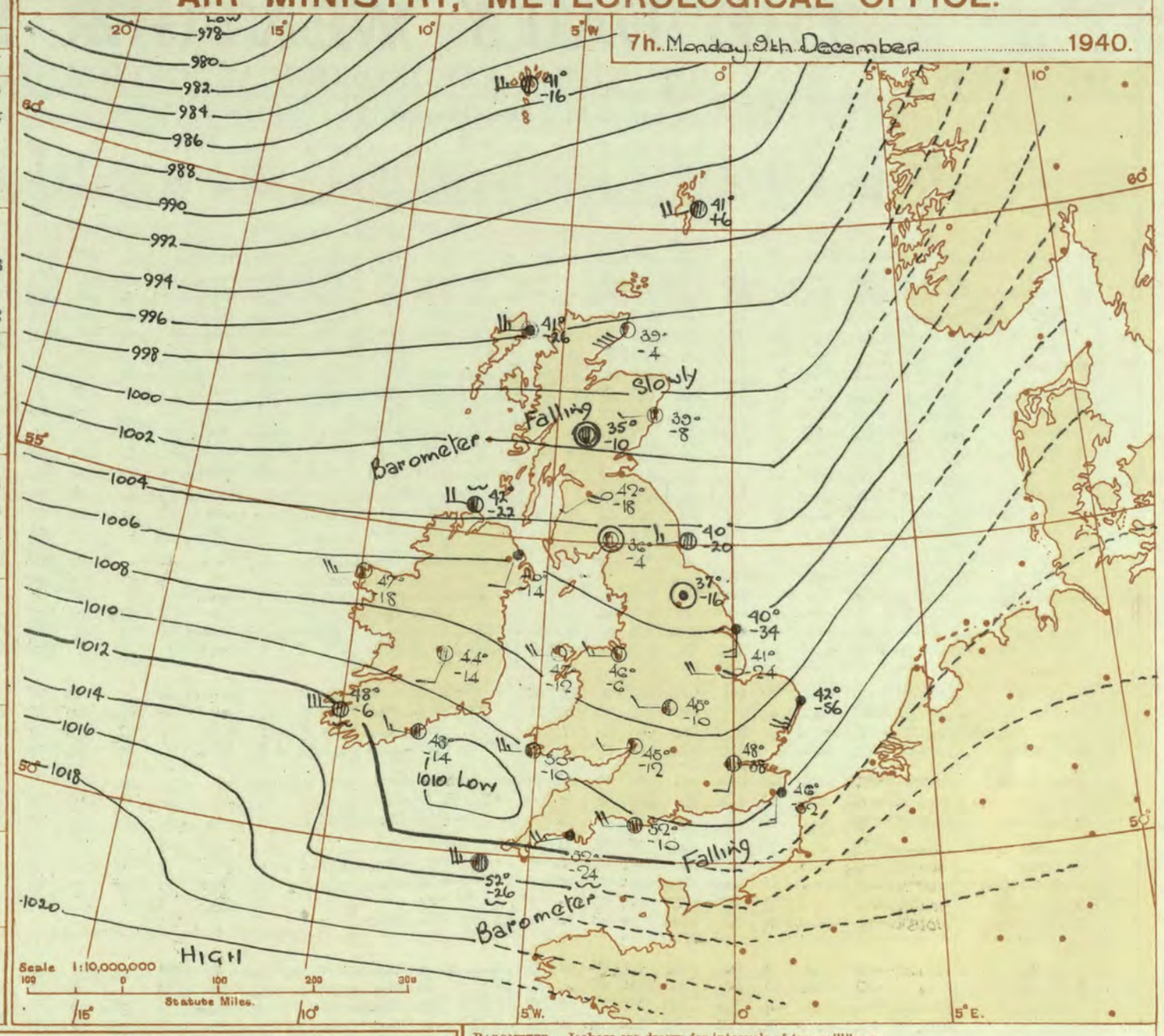
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 8th December			18h. G.M.T.			01h. G.M.T. 9th December			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	02853	23228	01	03690	17328	8-	02757	53567	90	01753	20383
115	52	02844	20387	52	03855	16328	52	81854	57685	51	14854	55685
203				5-	81848	16688	8-	81845	20685	8-	22848	20588
206	87	02855	30128	02	02990	20328	51	01853	20174	50	00853	00013
210	50	02863	22427	07	02890	18228	57	02845	19467			
220	52	02963	16328	62	66536	21668				52	25644	21388
230				6-	64638	12268	87	25754	18465	5-	61648	23268
245	Ao	02952	26228	02	02990	24328	02	52458	20368	51	05655	24228
260	00	17590	22116	52	05662	20228	50	02851	18425	51	05663	18388
277	41	02961	22218	02	62858	17368				02	02790	22328
279	04	02890	28527				5-	22548	20568	5-	63648	22468
285										23	02635	28463
288	5-	05656	27316	01	05590	23228	52	61553	18468	5-	21448	18168
273												
301	20	05681	29401	52	05554	24328	02	58548	14468	5-	22648	27468
321	5-	17661	26415	01	05590	24228	5-	62558	18268	03	05590	17116
299	8-	81648	59788	51	05644	27214	02	62438	24368	5-	52438	20368
292	45	02963	28416	51	05652	00028	02	64548	17268	52	08456	00068
310										--	53428	20458
316	00	05690	25405	00	08490	25228	62	64438	18368	5-	52418	18468
333	54	02855	22387	52	02754	20328				8-	25758	26388
334										**	03554	18328
340	10	01861	28514	03	02790	20228	62	62636	13368	40	02755	00065
136							02	61568	21268	5-	52418	18468
336										62	03754	24428
350	00	00790	26414							02	22548	22468
368												
379	00	02890	28325	01	02790	26218	62	64546	24368	52	42755	24447
390	55	01861	28513	03	05590	24316	52	51564	18328	02	22438	20268
382	00	01890	29414	00	05690	25316	02	64658	19368	52	05646	22328
438	50	01763	32303							3-	67308	24568
430	00	01890	28514	00	05690	28214	52	61556	22128			
409	53	02964	29488	52	61745	20278	5-	62648	20668	5-	62638	21568

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 9th December 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. Monday 9th December
1 S.E. England 2 E. England ... 3 E. Midlands ...	Moderate southwest to west winds; dull, occasional rain or drizzle at first; bright periods with a few local showers tomorrow; rather mild today then colder.
4 W. Midlands ... 5 S.W. England 6 South Wales ...	Fresh westerly winds, strong locally on the coast; dull early with local rain; then variable sky with occasional showers; temperature rather below average.
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	Moderate to fresh westerly winds, strong and squally at times on the Northwest coasts; variable sky; showers in most districts; hail and possibly thunder locally; sleet or snow on high ground in the North; becoming rather cold.
19 S. E. Ireland 20 S. W. Ireland	Fresh to strong west to northwest winds, bright periods; some showers; average to rather low temperature.

GENERAL INFERENCE.

A very deep depression over Iceland will move eastwards and a small secondary over the Bristol Channel will cross Southern England. A ridge of high pressure will slowly approach on the Atlantic. There will be some further rain or drizzle at first in Southeast England, but elsewhere weather will be rather showery with brighter intervals and these conditions will spread to the Southeast. Hail will occur locally in the northern half of the country.

FURTHER OUTLOOK.

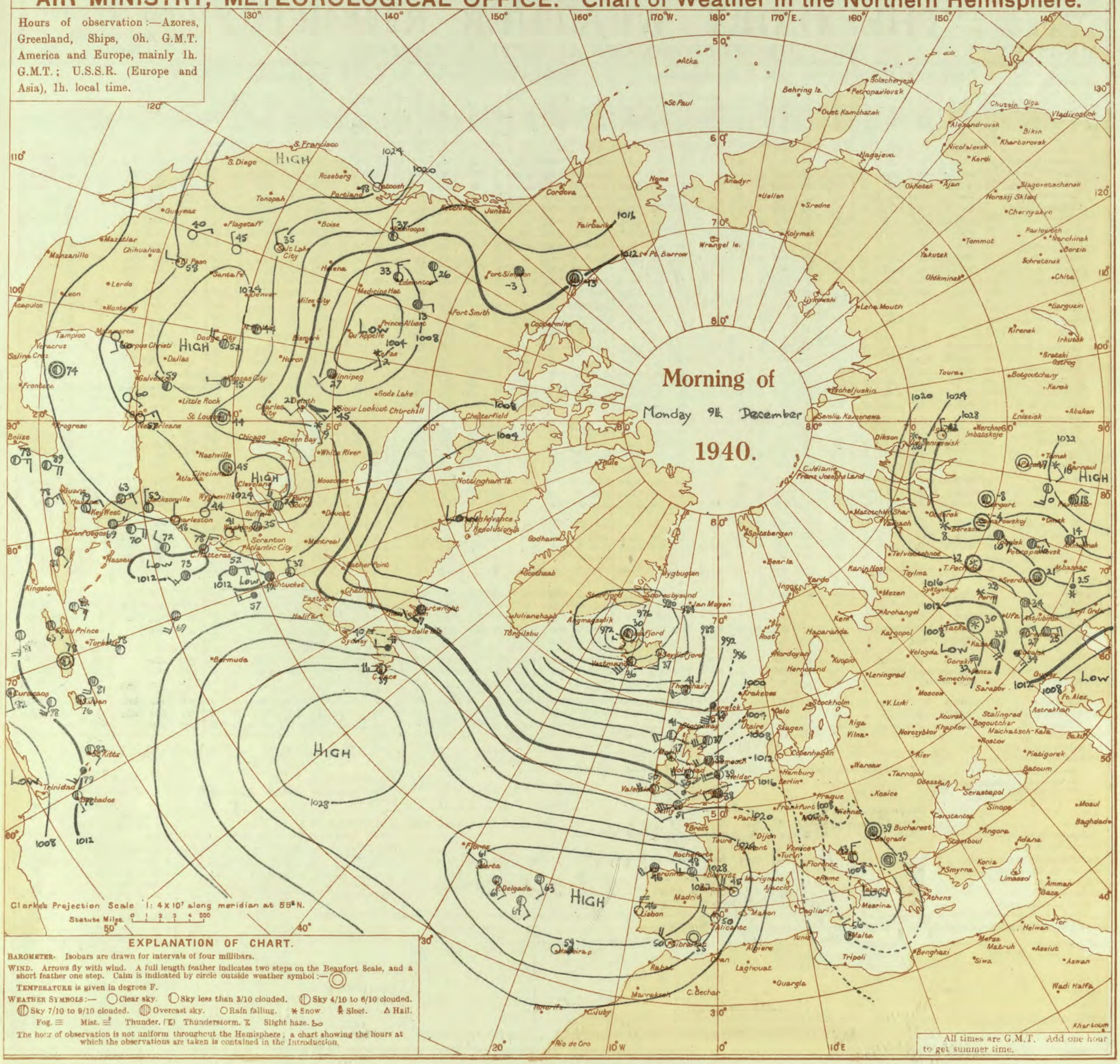
Rather cold with showers in most districts.

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

Monday 9th December, 1940.

No. 28,872

OBSERVATIONS at 1 hr. G.M.T. 9th December,

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	1017·9	-22	SW	2	z_0	38	85	6	-	2	-	0	10	-
	S. Farnborough	226	1017·1	-34	S'W	3	z_0	40	85	6	5	7	-	4-6	10	3500
	Boscombe Down	417	1016·6	-38	S'W	3	ir_0	40	92	6	5	2	-	7-8	10	2700
	Calshot (Sthmtn.)	8	1017·7	-30	SW'W	3	z_0	46	85	6	5	2	-	9+	10	3500
	Lympne ...	346	1019·2	-10	SW	3	z_0	36	75	6	-	2	-	10	10	6000
	Manston ...	154	1018·3	-10	SW'S	2	z_0	36	92	6	-	2	-	10	10	5300
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1017·5	-10	WSW	2	z_0	37	85	5	-	2	-	10	10	6000
	Gorleston ...	5	1016·5	-6	W'S	2	c	36	85	6	-	2	-	0	10	-
	Mildenhall ...	19	1016·2	-18	SW	3	z_0	37	85	5	-	2	-	10	10	3000
	Cranwell ...	240	1014·7	-26	SSW	3	r_0r_0	37	92	4	-	2	-	10	10	3000
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408			SSW		rr			6	-	2		10		4000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1012·3	-50	WSW	6	rr	49	97	6	-	2	-	10	10	600
	Bristol ...	209	1015·5	-38	SW'S	5	r_0r_0	44	92	6	5	2	-	4-6	10	1100
	Portland Bill ...	32	1016·4	-40	SW	4	c	50	92	7	5	-	-	10	10	4000
	Plymouth ...	82	1017·5	-42	SW	6	r_0r_0	49	97	6	5	2	-	7-8	10	1500
	The Lizard ...	240	1019·4	-28	W'S	7	id_0	49	97	6	5	-	2	10	10	1000
	Scilly (St. Mary's)	163	1018·4	-16	WSW	5	o/d	51	97	6	5	-	-	10	10	800
	Guernsey ...	175														
6	Pembroke ...	142	1012·3	-24	W'S	7	rr	51	97	6	5	-	-	10	10	1000
7	Holyhead ...	26	1009·5	-16	W'S	4	c	50	92	7	5	-	-	9	9	1500
	Chester (Sealand)	16	1009·7	-46	SE'S	3	r_0r_0	42	92	6	-	2	-	10	10	1700
8	Manchester ...	70	1010·7	-40	SSE	3	r_0r_0	40	92	5	-	2	-	10	10	1500
10	Spurn Head ...	29	1013·8	-12	W'N	3	rr	39	92	6	6	-	-	10	10	1500
	Catterick ...	175	1009·9	-38	S	4	rr	37	97	6	-	2	-	10	10	3000
	Tynemouth ...	108	1009·8	-32	SSW	4	o/r	38	92	6	5	-	-	10	10	2600
11	St. Abbs Head	280	1005·8	-44	SW	6	ir_0	37	92	7	5	2	-	9	10	2000
	Leuchars ...	36	1005·1	-34	-	0	d_0d_0	37	97	5	5	-	-	10	10	1200
12	Renfrew (Abbots I.)	19	1005·6	-20	WSW	2	bc	45	85	7	8	3	5	4-6	7-8	2000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1007·9	-32	WNW	5	bc	47	97	8	2	-	5	2-3	2-3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1000·9	0	SE	1	bc	41	85	7	8	-	-	2-3	2-3	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1000·8	-28	SW	5	cq	41	85	7	5	7	-	7-8	10	1500
16	Lerwick ...	156	998·0	-66	S	8	ir	43	75	7	3	2	-	7-8	10	800
17	Blacksod Point	18	1010·6	-12	WNW	3	c	47	85	7	5	-	-	7-8	7-8	4150
18	Malin Head ...	84	1006·6	+4	NW	3	bc	47	85	7	4	-	1	2-3	4-6	2500
	Aldergrove ...	268	1008·5	+2	W	3	c/pr	44	92	7	8	1	-	7-8	9	5300
19	Birr Castle ...	173	1012·1	0	WSW	2	c/pr	47	92	8	8	-	-	7-8	7-8	1500
20	Valentia Obsy.	30	1015·2	-10	W'S	4	c	50	92	7	5	-	-	10	10	1500
	Roches Point.	22	1014·1	-6	WNW	4	bc	50	92	8	3	3	-	2-3	4-6	1500

OBSERVATIONS at 7 hr. G.M.T. 9th December,

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)	1008·5	-36	SW'S	2	z_0	44	97	6	5	-	-	10	10	1500	1	*
Croydon ...	1009·3	-38	SSW	2	o/r	48	97	6	5	-	-	10	10	1500	1	*
S. Farnborough	1008·9	-30	WSW	3	c	48	92	7	5	2	-	9	10	800	1	*
Boscombe Down	1009·5	-22	WSW	4	c	48	97	7	5	-	-	9	9	3000	1	*
Calshot (Sthmtn.)	1009·9	-32	W'S	3	c/r	50	92	6	5	7	-	4-6	9+	2500	1	§2
Lympne ...	1011·4	-52	S	3	dz	46	97	2	-	-	-	10	10	4150	1	*
Manston ...	1010·2	-56	S	3	rr	44	97	5	5	2	-	9+	10	6000		*
Shoeburyness ...	1009·6	-52	S'W	3	c/r	43	97	6	6	2	-	7-8	10	1500	1	*
Felixstowe ...	1008·9	-66	S	5	d_0d_0	43	97	5	5	-	-	10	10	700	1	2
Gorleston ...	1009·5	-56	SSW	5	r_0r_0	42	92	5	6	-	-	10	10	800	1	3
Mildenhall ...	1007·4	-40	S'W	3	c/d	41	97	6	5	2	-	4-6	10	1500	1	*
Cranwell ...	1007·4	-24	W'N	4	z_0	41	97	5	6	2	-	9	10	1000	1	*
Birmingham ...	1007·2	-10	W	2	c	45	97	5	5	7	-	4-6	10	2500	1	*
Upper Heyford	1008·6	-20	SW'W	3	z_0	45	97	5	5	-	-	10	10	300	1	*
Ross-on-Wye	1008·8	-12	W'S	2	c	45	85	7	5	1	-	7-8	10	2500	1	*
Hartland Point	1010·7	-18	W	3	r	47	92	7	5	2	-	7-8	10	1200	1	4
Bristol ...	1010·1	-14	W	3	z_0	47	97	6	5	7	-	10	10	1000	1	*
Portland Bill ...	1010·6	-10	W	4	o/r	52	92	7	5	-	-	10	10	2500	1	4
Plymouth ...	1011·0	-24	WSW	5	dr	52	97	6	6	2	-	7-8	10	800	1	3
The Lizard ...	1012·8	-24	W	7	rr	52	97	6	5	-	-	10	10	1000	1	4
Scilly (St. Mary's)	1012·7	-26	WSW	5	o/r	52	97	5	5	-	-	10	10	800	1	4
Pembroke ...	1009·7	-10	W	5	c	50	85	7	8	2	-	7-8	10	1500	1	3
Holyhead ...	1007·2	-12	W	4	cq	47	85	7	5	2	-	9	10	2500	1	3
Chester (Sealand)	1006·9	-6	W	3	c	46	75	6	5	7	-	4-6	9+	3500	1	*
Manchester ...	1006·5	-10	W'S	3	c/pr	44	92	5	8	2	-	4-6	10	1200	2	*
Spurn Head ...	1005·6	-34	S	4	ir	40	92	6	5	-	-	10	10	800	0	3
Catterick ...	1005·3	-16	-	0	rr	37	97	4	5	2	-	2-3	10	800	1	*
Tynemouth ...	1004·5	-20	W	3	o	40	92	6	5	-	-	10	10	1500	1	2
St. Abbs Head	1001·9	-8	W	5	cq	45	65	7	5	2	-	4-6	9	2500	1	3
Leuchars ...	1002·0	-32	W	3	z_0	36	92	6	5	-	-	10	10	4300	2	*
Renfrew (Abbots I.)	1002·9	-18	SW	1	z_0	42	92	6	5	7	-	1	10	2500	1	*
Eskdalemuir ...	1004·2	-4	-	0	c	36	97	7	5	-	-	10	10	1500	1	
Point of Ayre ...	1005·5	-4	NW'W	5	c	43	92	8	5	2	-	7-8	10	4000	1	3
Tiree	997·6	-26	WSW	5	pr	41	85	7	8	7	-	9	10	1500	1	2
Stornoway ...	1000·3	-10	-	0	c	35	92	6	5	-	-	4-6	4-6	2500	7	*
Dalwhinnie ...	1000·6	-8	W	1	c	39	85	4	5	-	-	10	10	2500	1	2
Aberdeen ...	998·5	-4	SW	3	c	39	85	8	5	2	-	2-3	10	2500	1	2
Wick ...	995·5	+6	WSW	4	c	41	85	7	8	7	-	4-6	7-8	800	1	*
Lerwick ...	1007·1	-18	WSW	5	c	47	75	7	9	-	-	7-8	7-8	4150	1	3
Blacksod Point	1003·5	-22	WNW	4	c/pr	42	92	6	3	-	-	9+	9+	800	1	4
Malin Head ...	1006·0	-14	SSW	2	ir	40	92	7	-	2	-	10	10	3600	2	*
Aldergrove ...	1009·0	-14	SSW	2	c	44	85	8	3	7	-	2-3	7-8	1500	1	*
Birr Castle ...	1013·0	-6	WNW	6	bc/r	48	75	8	6	-	-	2-3	2-3	1500	1	4
Valentia Obsy.	1011·0	-14	W	3	c/r	48	97	8	6	2	-	4-6	7-8	1500	1	3
Roches Point.																

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 8th Hrs. (36)
London (Kew)	43	37	30	-	6	5·1
Croydon ...	42	36	32	-	6	4·2
S. Farnborough	44	35	30	-	6	6·4
Boscombe Down	43	39	30	-	4	6·1
Calshot (Sthmtn.)	47	37	33	-	5	6·5
Lympne ...	42	33	29	-	8	6·0
Manston ...						
Shoeburyness ...	43	36	29	-	5	3·7
Felixstowe ...	43	36	34	-	2	5·7
Gorleston ...	41	36	33	1	2	*
Mildenhall ...	42	34	27	-	4	2·3
Cranwell ...	42	33	33	-	5	5·0
Birmingham ...	41	37	34	*	5	3·8
Upper Heyford	*	33	27	*	5	*
Ross-on-Wye	44	39	35	-	2	5·7
Hartland Point	46	46	43	-	6	1·8
Bristol ...	44	39	35	-	2	5·5
Portland Bill ...	48	43	*	-	4	*
Plymouth ...	48	44	42	-	7	4·5
The Lizard ...	48	47		1	3	2·6
Scilly (St. Mary's)	50	48	*	0·6	1	3·1
Pembroke ...	48	47	*	-	8	0·9
Holyhead ...	46	44	43	Tr	10	0·1
Chester (Sealand)	44	40	37	-	5	4·5
Manchester ...	43	35	33	-	7	0·0
Spurn Head ...	41	38	*	Tr	2	0·6
Catterick ...	41	37	33	-	2	2·6
Tynemouth ...	42	36	33	-	1	*
St. Abbs Head	41	35	*	-	1	*
Leuchars ...	42	34	32	-	2	1·2
Renfrew (Abbots I.)	38	36	34	Tr	4	0·0
Eskdalemuir ...		31	30	*	8	2·1
Point of Ayre ...	44	41	*		6	0·6
Tiree			*			
Stornoway ...			*	0·6	5	
Dalwhinnie ...	34	30	29	-	2	0·0
Aberdeen ...	39	34	30	2	0·6	0·5
Wick ...	41	35	*	-	0·4	*
Lerwick ...	45	40	*	-	1	1·8
Blacksod Point	52	43	*	4	6	*
Malin Head ...	44	41	*	-	3	0·0
Aldergrove ...	41	39	36	2	5	0·0
Birr Castle ...	45	42	38	0·2	5	0·0
Valentia Obsy.	51	47	43	·3	5	0·0
Roches Point.	49	48	*	0·3	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. (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	bz_0bcz_0y	cz_0ybcz_0	$bccm_0r_0$	43	37	30	-	6	5·1	*	*	5
Croydon	217	bm_0bcz_0	bcz_0bcm_0	$bmcz_0r_0$	42	36	32	-	6	4·2	*	*	5
Greenwich (Royal Observatory)...	149	$bbcm_0$	cb	bc Wind m	42	36	29	-	6	2·0	59	92	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	44	36	30	6			63	97	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*									*
Camden Square	110	b	bc	*	43	37	30	-	7	*	*	97	*
Kensington	80	bbc	bc	*	44	37	29	-	6·5		60	98	*
Hampstead Observatory	450	b	bc	orf	41	35	29	-	6·5		*	99	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 9th

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

Tuesday 10th December 1940.

No 28873

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

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)	1004.9	-24	WN	4	zo	48	85	6	5	3	-	4-6	7-8	2500
	Croydon	1004.8	-26	WSW	2	zo	48	97	5	6	3	-	7-8	9+	1200
	S. Farnborough	1005.6	-22	W	4	c	48	85	7	5	7	-	7-8	9+	6000
	Boscombe Down	1007.3	-10	NWW	4	c	45	85	7	5	7	-	7-8	10	2000
	Calshot (Soton.)	1007.0	-14	WNW	4	c	48	85	7	5	7	-	7-8	9+	4000
	Lympne	1005.3	-32	WSW	2	c/r	47	97	6	5	7	-	2-3	9+	4500
	Manston	1003.6	-36	WS	3	c/r	47	97	6	5	7	-	4-6	10	3000
2	Shoeburyness	1004.9	-24	W	2	roro	48	92	5	6	2	-	7-8	10	4000
	Felixstowe	1002.9	-30	WN	4	zo	45	97	5	5	7	-	4-6	9+	3500
	Gorleston	1002.9	-24	W	2	zo	45	92	6	5	-	-	10	10	1500
	Mildenhall	1002.9	-26	WS	3	c/r	45	97	6	5	1	-	7-8	10	2500
	Cranwell	1003.7	-18	WN	5	iro	43	85	4	5	-	-	10	10	900
3	Birmingham	1004.9	-12	NW	2	c/r	43	92	5	5	7	-	9+	10	1500
	Upper Heyford	1005.5	-20	WS	3	c	45	85	7	5	3	-	9	9+	1200
4	Ross-on-Wye	1006.3	-10	W	3	bc	47	75	8	8	4	3	4-6	4-6	2500
5	Hartland Point	1009.4	+4	WNW	6	bc	48	75	8	9	6	-	4-6	4-6	1500
	Bristol	1008.0	-6	WN	3	c/r	46	92	8	5	3	-	7-8	10	3500
	Portland Bill	1008.1	-12	W	4	c	49	92	8	5	-	-	7-8	7-8	4000
	Plymouth	1011.4	+4	NW	4	bc/pr	48	85	8	2	-	-	4-6	4-6	1200
	The Lizard	1013.0	+4	NW	7	c	50	75	8	8	3	-	7-8	7-8	2500
	Scilly (St. Mary's)	1013.8	+4	WNW	6	bc/pr	51	75	7	8	-	-	2-3	2-3	1500
	Guernsey														
6	Pembroke	1008.0	0	WNW	6	cq	48	85	7	8	-	-	7-8	7-8	300<
7	Holyhead	1004.7	-10	W	7	c	46	75	8	8	3	-	7-8	9	2800
	Chester (Sealand)	1004.1	-14	W	5	c/r	47	75	7	7	7	2	7-8	10	2500
8	Manchester	1003.7	-14	WN	3	pr	42	92	5	8	-	-	10	10	900
10	Spurn Head	1001.0	-12	W	4	iro	43	92	4	5	2	-	7-8	10	150<
	Catterick	1001.5	-18	W	1	c	43	85	7	5	7	-	2-3	10	220<
	Tynemouth	1002.8	-20	WSW	3	m	42	85	4	5	-	-	10	10	160<
11	St. Abbs Head	999.3	-12	W	4	c	41	85	8	4	2	-	7-8	9+	250<
	Leuchars	997.3	-30	SW	3	bc	39	85	7	5	7	-	tr	4-6	400<
12	Renfrew (Abbots I.)	1000.3	-18	WS	3	c	42	92	9	9	6	3	7-8	9	140<
	Eskdalemuir	1000.1	-20	W	3	pr	39	85	6	5	-	-	9+	9+	150<
	Point of Ayre	1002.8	-12	NWW	5	c	45	92	8	8	4	5	4-6	7-8	250<
13A	Tiree														
13B	Stornoway	995.0	-12	SW	4	c	42	75	8	8	7	9	4-6	10	1500
15	Dalwhinnie	998.5	-12	SW	2	c	36	85	7	8	3	-	2-3	9+	2500
	Aberdeen	997.1	-22	W	1	c	41	75	6	5	7	-	7-8	9+	4000
	Wick	995.1	-16	SSW	3	c	40	85	8	5	7	8	4-6	9+	2500
16	Lerwick	992.9	-20	SW	4	c	41	92	8	8	2	-	7-8	9	1500
17	Blacksod Point	1007.0	-2	WNW	5	bc	49	85	8	3	-	-	4-6	4-6	1500
18	Malin Head	1001.4	-6	WNW	5	c	43	92	8	5	-	3	2-3	7-8	2500
	Aldergrove	1003.7	-8	WSW	4	bc	41	92	8	3	3	9	2-3	4-6	2000
19	Birr Castle	1009.1	-2	NW	2	c	45	75	8	3	7	-	2-3	9	1500
20	Valentia Obsy. †	1013.9	+6	NWW	5	c/pr	48	75	8	9	-	3	9	9+	2500
	Roches Point	1012.0	0	WNW	5	bc/pr	47	75	8	3	-	3	4-6	4-6	1500

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

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)	1006.0	+14	WNW	4	zo	44	75	6	5	-	-	4-6	4-6	2500	1	*
Croydon	1005.5	+2	W	2	zo	43	75	6	-	3	-	0	tr	-	1	*
S. Farnborough	1006.9	+14	W	4	c	42	85	7	7	3	-	2-3	7-8	4000	1	*
Boscombe Down	1007.9	+14	NWW	4	b	42	85	8	4	-	-	1	1	3000	1	*
Calshot (Soton.)	1007.8	+10	NWW	5	b	44	75	9	4	4	-	1	1	3500	1	3
Lympne	1005.5	+6	W	3	bc	43	92	7	5	-	-	4-6	4-6	2500	1	§
Manston	1004.3	+10	W	4	zo	43	92	6	4	6	-	2-3	4-6	2500	*	*
Shoeburyness	1004.9	+6	W	4	bf-	44	85	2	-	-	-	0	0	-	1	*
Felixstowe	1002.8	+4	WNW	5	pr	43	85	6	8	-	-	10	10	2500	1	3*
Gorleston	1001.7	-6	WNW	4	c	43	92	6	5	-	-	9	9	2500	1	2
Mildenhall	1002.6	+2	WN	5	c/r	43	92	6	5	7	-	7-8	9+	2500	*	*
Cranwell	1003.1	-4	WNW	5	zo	45	85	6	5	-	-	4-6	4-6	1500	1	*
Birmingham	1004.3	+2	WNW	3	bc/pr	42	85	5	5	-	-	4-6	4-6	1500	1	*
Upper Heyford	1005.9	+20	WNW	4	bc	40	85	8	5	4	1	2-3	4-6	3000	1	*
Ross-on-Wye	1007.3	+6	W	4	bq	43	75	8	2	-	-	1	1	2500	1	*
Hartland Point	1010.8	+8	NNW	6	c/pr	47	65	8	8	6	-	7-8	9+	1500	1	4
Bristol	1009.0	+10	WN	3	bc	43	85	8	4	6	-	4-6	4-6	3000	1	*
Portland Bill	1009.2	+14	SW	4	bc	48	92	8	5	-	-	4-6	4-6	4000	1	4
Plymouth	1012.6	+10	WN	4	c/pr	46	85	5	8	3	-	4-6	9	400	1	2
The Lizard	1014.7	+6	NWW	6	bc	48	75	8	8	6	-	4-6	4-6	2000	1	4
Scilly (St. Mary's)	1014.9	+10	WNW	6	bc/pr	48	85	7	8	-	-	4-6	4-6	1400	1	4
Guernsey																
Pembroke	1009.7	-2	WNW	6	cq	48	75	7	8	7	-	7-8	9+	2500	1	3
Holyhead	1005.3	+4	W	7	c	46	75	8	8	7	-	4-6	9+	2500	1	4
Chester (Sealand)	1004.5	+6	W	4	bc/pr	43	85	7	2	-	-	4-6	4-6	1800	1	*
Manchester	1003.9	+8	WS	3	c/pr	42	85	6	8	3	6	7-8	9+	2100	2	*
Spurn Head	1000.3	-2	W	3	c	41	92	6	5	1	-	4-6	7-8	1500	0	3
Catterick	1001.3	0	NW	2	c	40	85	7	5	7	-	2-3	7-8	4500	1	4
Tynemouth	1001.3	-4	WNW	3	c	41	85	6	8	-	-	7-8	7-8	2000	1	2
St. Abbs Head	997.8	+2	WNW	4	c	41	75	8	4	1	-	2-3	7-8	2500	0	3
Leuchars	997.0	-6	WSW	3	c	39	85	7	5	7	8	2-3	9+	2800	1	*
Renfrew (Abbots I.)	999.9	-2	WS	2	c/pr	39	92	6	8	-	-	9+	9+	1800	1	*
Eskdalemuir	999.7	+4	WN	4	o	38	85	8	5	-	-	10	10	800	1	*
Point of Ayre	1002.7	+2	WNW	6	c	44	92	8	4	-	7	2-3	10	2500	1	3*
Tiree																
Stornoway																
Dalwhinnie	998.0	-4	SSW	2	bc	34	92	8	2	5	-	4-6	4-6	2500	7	*
Aberdeen	995.8	-8	W	2	c	39	75	6	-	7	-	0	9	-	1	2
Wick	993.2	-8	SW	3	c	36	85	7	5	1	8	2-3	7-8	1500	1	2
Lerwick	991.1	-6	SW	5	c/pr	40	85	7	8	7	-	7-8	9	1500	1	*
Blacksod Point	1006.0	-10	WN	5	cq	45	85	7	9	5	-	4-6	7-8	1500	1	3
Malin Head	1000.9	-8	NW	5	c/pr	44	92	7	6	-	-	9	9	1500	0	5
Aldergrove	1003.8	+6	WSW	4	c/pr	40	85	8	8	-	-	9+	9+	2300	1	*
Birr Castle	1009.0	+2	NW	1	c	41	92	8	3	7	-	2-3	9	1500	1	
Valentia Obsy. †	1013.6	-2	WNW	6	c/pr	48	85	8	9	7	-	7-8	9+	2500	1	4*
Roches Point	1012.3	+2	WNW	4	c	45	85	8	3	7	5	4-6	7-8	1500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 9th (37)	13h.—18h. 9th (38)	18h. 9th to 1h. 10th (39)	1h.—7h. 10th (40)
London (Kew)	cmo	cmobcmo	bccmo	crorocmo
Croydon	rrororcm	cmororobmo	zobcmb	cirobc
S. Farnborough	crirc	croprobcc	bcb, ob	b, cRbc
Boscombe Down	crcgc	cidobc	b	bcq
Calshot (Soton.)	bdrrmc	cbbcb		bRR mobc
Lympne	Dfcdgcm	cmocbc	bcb	bccmororo
Manston	cirororo	cprogmobc	bcmoc, b	bciro rrmo
Shoeburyness	fmrrc	cmpcbf	bsbcmo	cmo rro
Felixstowe	bdgidd	cidmocprq	cproqbcmobc	bororo
Gorleston	brgqz	czo	cbczob	bbcc
Mildenhall	rmgdgcm	bcmdirocmo	cbcmobw	bwbcxocrofo
Cranwell	omirom	oiro, bcmo	bccmo ⊕	cmororomo
Birmingham	ciro	cprobc	bc	bccRro
Upper Heyford	cmoc	cprobc	bcb	bbccrorom
Ross-on-Wye	c	cPbcp.bq	bbcb	bccpbo
Hartland Point	rrirc	bccp	cp	cprlq
Bristol	cmorofoc	cbc	bcbbc	crrRR
Portland Bill	orrc	bc		orrbc
Plymouth	bddrdcpr	bccprc	cprm	cprtlRRbcmo
The Lizard	cprc	cpr bc	prrrc	bcprc
Scilly (St. Mary's)	cfq bc	bcpr	bccpq	cplc
Guernsey				
Pembroke	cprq	prqc	ccPR	
Holyhead	qc	c⊕	bcmoirc	moRRbc
Chester (Sealand)	rpro	prqbc	prqbcc	orrRRbcmo
Manchester	czro	cmoproq	procmoc	cmororoc
Spurn Head	oirom	circ	cqbc	bcc
Catterick	cmc	cmoc	cidobc	bcbcw
Tynemouth	om	ominoc	cbc	bcc
St. Abbs Head	cqc	ccmoc	bc	bc
Leuchars	cmzcbc	bcc	bcwcbcmow	bcmowbc mx
Renfrew (Abbots I.)	cmcrPRq	cpr Prz	bcprq PR	proJpb
Eskdalemuir	crorо pro	cproc	bccpr	bcprs
Point of Ayre	rorоc	c	cc	cbc
Tiree				
Stornoway	cpr		cphr	cphr
Dalwhinnie	cpr	c		cps
Aberdeen	cfczo	cczo	cbcz*	bcxc
Wick	c	c	cbcb	bbcc
Lerwick	cphr	cpr	cphr	cpr
Blacksod Point	bc	prcq	PRcbc	PRcq
Malin Head	sprcc	c	cphrctloc	cprprcjf
Aldergrove	rorоmcbc	bcc, pro	prob, cr	rRRpri
Birr Castle	cprc	cprc	cprb	cpr
Valentia Obsy. †	bcpbcprc	cPrcpr, Pr	cpredrPRbc	bccproc
Roches Point	probc	proc	PRqprc	prqrr

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.*

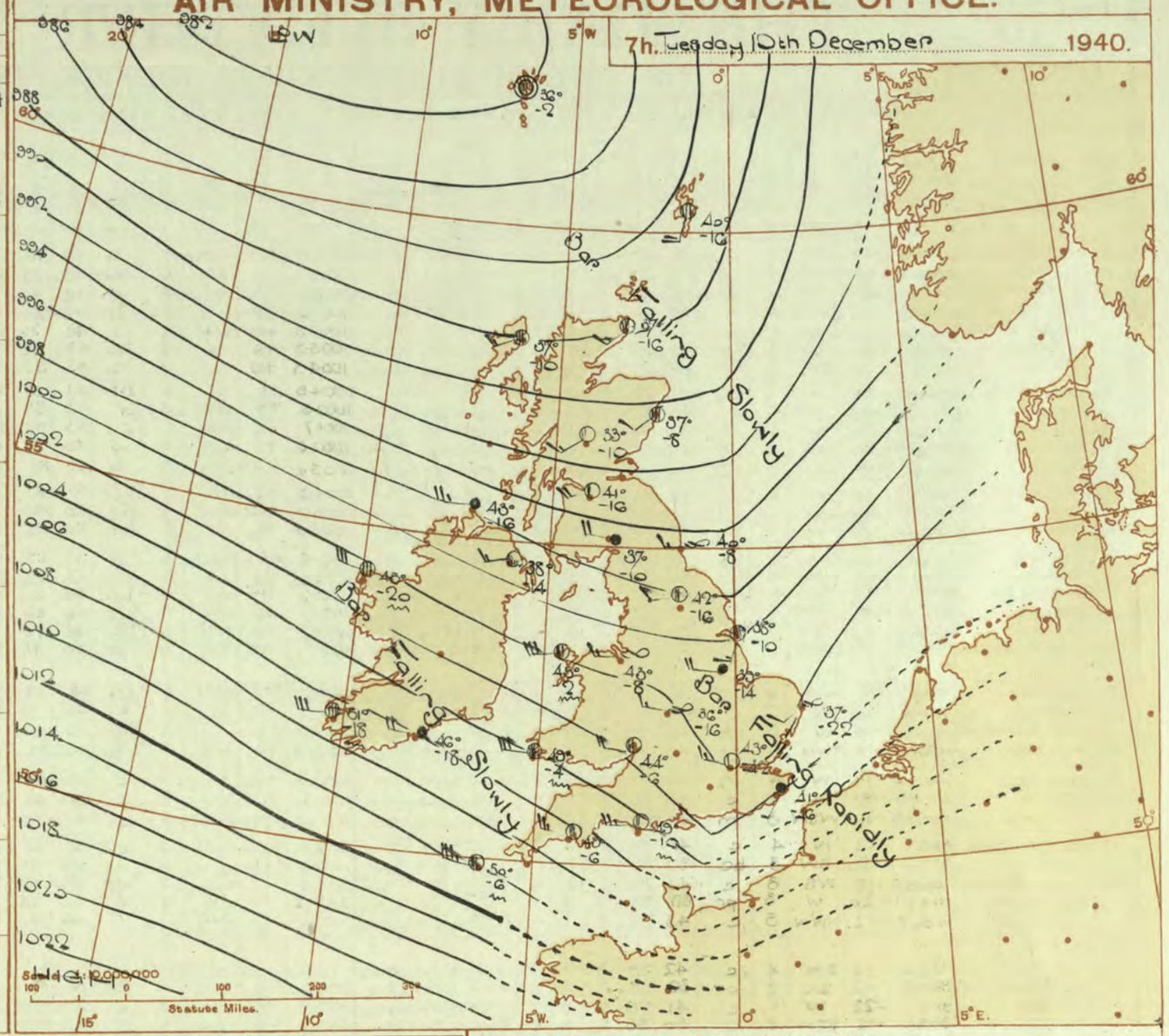
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Tuesday 10th December 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. on December 18h. G.M.T.						01h. G.M.T. 19th December 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	81	02853	20487				8-	81744	53484	80	02854	20484
115	87	81834	20587	85	81844	22585	52	88734	57586	51	88844	57485
203				8-	25846	16486	8-	10846	18516	8-	10845	18585
206	83	02854	25286	87	02855	24586	8-	00862	24222	80	00953	00083
210	57	02853	22325	57	02963	20426	53	01962	19414	5-	01853	20383
220												
230	9-	82637	55487	87	10844	51487	83	02854	22315	8-	01744	22384
245	51	02763	22327	57	02861	22327	07	02990	23126	5-	05647	20127
260	87	02744	24366	57	05673	24328	17	01861	20314-	87	25765	18285
277	36	02843	23566	87	02855	24586	52	02856	22528	87	02854	57486
279	57	02745	24327	--	05655	24426						
285	6-	64738	28568	23	02735	28667				6-	64538	24568
288	02	64548	20268	07	01790	22264	07	01790	22125	51	02755	02755
273	34	10753	25364							43	63653	23365
301	57	25645	25487	37	05643	27486	22	02754	59428	80	81646	57486
321	57	05575	28328	07	05690	25283	03	05690	22314	6-	64558	23168
299	52	05545	20328	57	01744	24315	00	00790	24314	5-	05644	24214
292	62	62646	22168	5-	02654	22264	87	01852	24315	5-	02855	22365
310	--	48209	24589	--	02628	24528				--	46209	24340
316	57	22564	24268	8-	02647	26327	13	05662	24413	51	22654	24268
333	27	02955	28586	23	02754	57625	52	64749	20928	20	01854	59564
334	**	03635	22327								61656	22568
340	8-	10856	24386	4-	02855	26315	5-	02876	55316	50	01753	24313
136	5-	05548	25368				04	05690	24323	07	05690	19328
336	62	62754	24568	62	02754	28516				60	81754	28586
350	87	01754	24324							5-	22637	53567
368												
379	9-	05658	24328							50	01741	26501
390	53	05654	22325	5-	05657	24417	04	05690	22511	8-	25557	20287
382	53	61666	24467	46	25852	25384	00	05690	22213	50	01764	26514
438	02	57003	24469							80	02754	24464
430	53	02675	26367	50	05663	26303	04	00790	24001	26	01752	30363
409	83	22845	59465	83	25845	26587	8-	2574-	20587	83	02755	57728

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 10th December
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Fresh, rather squally, westerly winds, squally showers of rain or hail; bright periods especially at night: rather cold.
5 S.W. England 6 South Wales ...	Fresh to strong, squally west to northwest winds; showers of rain or hail, bright periods; rather cold.
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 ♠	Squally westerly winds, strong locally at times on the West coast; variable sky, showers of rain and hail with thunder probable locally: some sleet or snow on high ground; rather cold, frost locally at night.
19 S. E. Ireland ♠ 20 S. W. Ireland ♠	As 5-6

GENERAL INFERENCE.

A deep depression centred between Iceland and Faeroes is moving slowly southeast. Rather cold, changeable weather will prevail with squally showers of rain and hail in most districts. Thunder will occur locally in the West and North and snow and sleet may be expected on high ground in the North. There will however be bright intervals.

FURTHER OUTLOOK.

Rather cold, changeable weather.

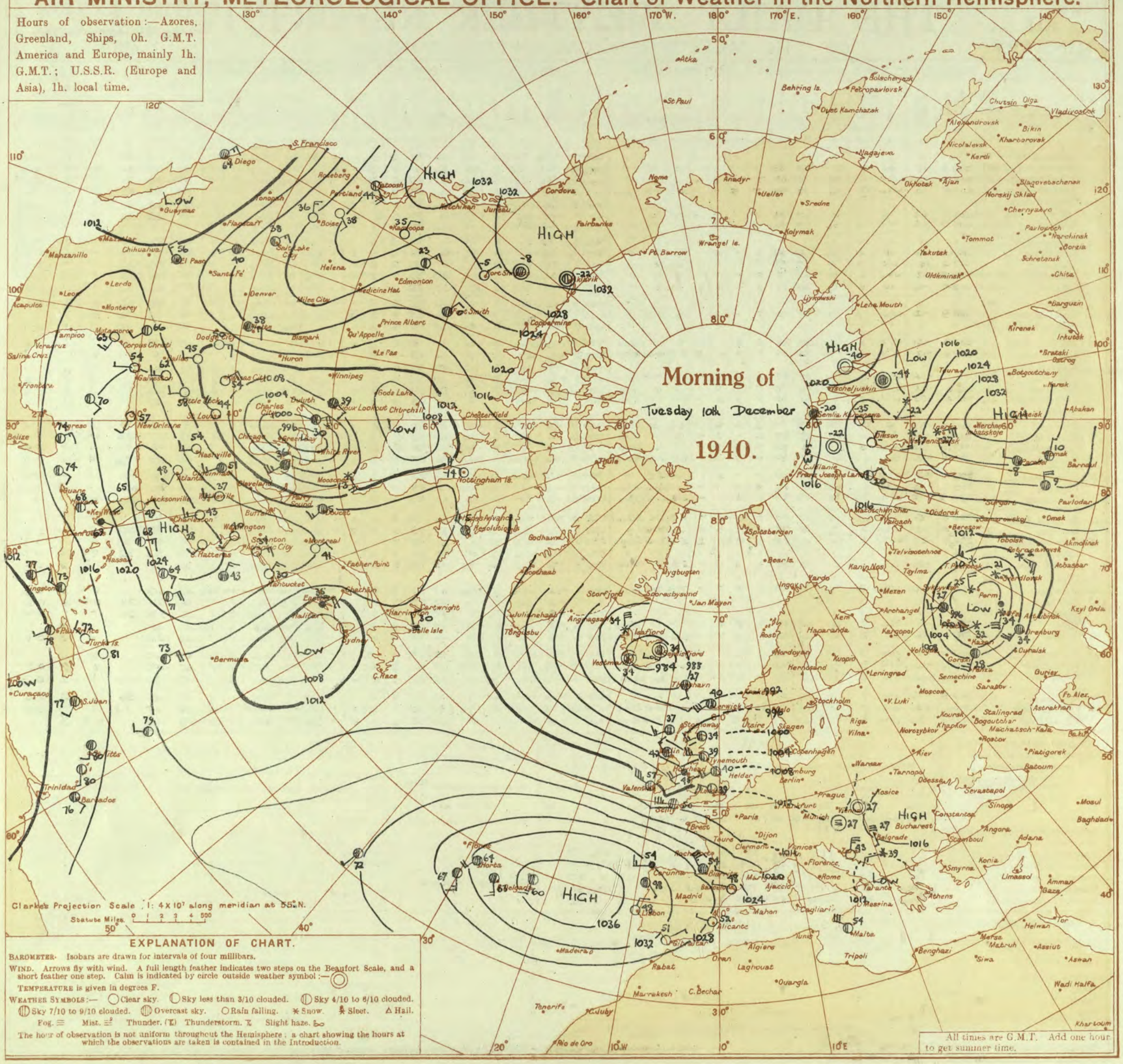
Gale warnings issued in districts 12, 13a, 13b, 17, 18, 19 and 20 at 1620 9.12.40.

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.



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

Tuesday 10th December 1940.

No. 28873

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

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	1006.9	-2	NW	3	b	39	85	7	-	4	-	0	Tr	-
	S. Farnborough	226	1007.6	-2	WSW	4	bc	39	85	7	-	4	-	0	1	-
	Boscombe Down	417	1007.9	-10	WSW	3	bc	39	92	7	5	-	-	2-3	2-3	1200
	Calshot (Sthmtn.)	8														
	Lympne ...	346	1007.1	+2	SW	1	b	37	92	8	-	-	-	0	0	-
	Manston ...	154	1005.9	+8	W'S	4	bc	39	85	7	-	4	-	0	Tr	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1004.1	+6	W	4	bc	40	85	8	-	4	-	0	Tr	-
	Gorleston ...	5	1002.6	+4	W'N	3	b	39	85	7	-	-	-	0	0	-
	Mildenhall ...	19	1003.5	+2	WSW	4	b	37	92	7	-	7	-	0	Tr	-
	Cranwell ...	240	1002.9	-6	W	5	z_0	38	92	6	-	4	6	0	9	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1005.9	-2	WSW	3	bc	37	85	7	-	4	1	0	2-3	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1007.8	-24	NE'N	5	c/pr	48	85	8	8	-	-	9+	9+	1500
	Bristol ...	209	1007.9	-12	W'S	3	bc	43	85	7	8	4	5	2-3	4-6	2500
	Portland Bill ...	32														
	Plymouth ...	82	1011.1	-14	WSW	4	o/pr	47	92	6	2	7	-	4-6	7-8	1500
	The Lizard ...	240	1012.0	-14	WNW	7	c/pr	49	97	7	5	2	-	9	10	1500
	Scilly (St. Mary's)	163	1012.4	-20	W'N	7	c	50	85	7	8	6	-	7-8	7-8	1500
	Guernsey ...	175														
6	Pembroke ...	142	1006.7	-32	W	6	PR	49	85	6	8	2	-	4-6	10	1200
7	Holyhead ...	26	1001.6	-34	SW	4	ir	45	85	6	-	2	-	10	10	1200
	Chester (Sealand)	16	1002.0	-22	SW'W	3	c	42	83	7	5	7	-	Tr	10	3500
8	Manchester ...	70	1002.4	-14	SW	3	c	41	85	7	5	3	-	2-3	7-8	3000
10	Spurn Head ...	29	999.7	+2	WSW	4	bc	40	92	7	-	6	1	0	2-3	-
	Catterick ...	175	999.3	-10	W'N	4	bc	41	75	8	5	7	-	1	4-6	2500
	Tynemouth ...	108	998.8	-12	WNW	5	bc	39	85	7	2	4	-	2-3	4-6	3200
11	St. Abbs Head	280	996.1	-6	W	4	bc	37	85	8	4	3	-	2-3	4-6	2500
	Leuchars ...	36	995.0	-12	WSW	3	z_0	35	92	6	-	3	8	0	7-8	-
12	Renfrew (Abbots I.)	19	996.5	-22	SW'W	3	bc/pr	40	92	8	3	6	2	2-3	4-6	2000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1000.0	-20	W'S	4	c	42	97	8	8	2	-	2-3	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	990.3	-16	WSW	3	c/phr	37	92	7	8	7	-	7-8	9+	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	990.6	-8	SW	3	b	35	85	8	8	6	1	Tr	Tr	2500
16	Lerwick ...	156	988.1	-16	SW	6	c	40	92	8	8	7	-	4-6	7-8	800
17	Blacksod Point	18	1002.0	+6	WNW	5	bc	46	85	8	9	-	-	4-6	4-6	800
18	Malin Head ...	84	997.4	-10	NW'N	3	c/phr	42	92	6	3	-	4	4-6	7-8	1500
	Aldergrove ...	268	1000.0	-14	SW	4	ir	40	92	7	6	-	-	10	10	1000
19	Birr Castle ...	173	1003.5	-16	WSW	1	b	43	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1010.0	+4	WNW	7	bc	51	75	8	3	-	-	4-6	4-6	2500
	Roches Point	22	1007.2	-30	WNW	5	c/pr	47	92	8	3	-	-	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 10th December — 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 9th. Hrs. (36)
London (Kew)	999.7	-36	WSW	4	z_0	42	85	6	5	-	-	9+	9+	1500	1	*	48	42	29	-	1	0.0
Croydon	999.8	-42	WNW	3	b	43	85	7	5	-	-	1	1	3000	1	*	48	38	34	0.6	1	0.2
S. Farnborough	1000.9	-30	W'S	6	bc	42	85	8	5	-	-	4-6	4-6	2500	1	*	48	36	31	1	2	0.0
Boscombe Down	1002.3	-22	WNW	6	bc	43	89	7	-	7	-	0	7-8	-	1	*	49	39	32	0.5	4	1.3
Calshot (Sthmtn.)	1002.9	-20	WNW	5	c	46	89	7	8	3	-	4-6	7-8	1800	1	2 §	51	40	36	2	5	1.0
Lympne	1001.7	-46	SW	1	r_0r_0	41	97	6	6	2	-	7-8	10	1200	1	§	48	36	30	3	0.6	0.1
Manston	1000.4	-42	SW'S	2	rr	40	97	5	5	-	-	10	10	1200		*	*	*	*	*	*	*
Shoeburyness	1000.5	-38	SW	3	o/r	41	92	5	6	-	-	10	10	1500	1	*	49	39	32	1	2	0.0
Felixstowe	999.6	-36	SW	4	r_0r_0	40	85	6	5	2	-	4-6	10	2500	1	2	46	37	31	1	0.1	0.0
Gorleston	1000.1	-22	SW	2	z_0	37	92	6	8	-	-	9	9	2200	1	1	45	36	32	1	-	0.0
Mildenhall	998.8	-34	SSW	2	r_0r_0	39	92	7	5	2	-	4-6	10	3100	1	*	*	36	28	*	0.2	0.0
Cranwell	999.0	-14	W'N	4	r_0r_0	39	85	6	-	2	-	10	10	2000	1	*	44	42	32	1	0.1	0.0
Birmingham	1000.5	-16	WNW	3	z_0	36	92	5	5	-	-	Tr	Tr	1500	1	*	45	35	33	4	8	0.1
Upper Heyford	1000.1	-20	WSW	5	bc	40	85	8	5	4	-	2-3	2-3	2500	1	*	48	35	30	0.1	1	*
Ross-on-Wye	1001.8	+6	W	4	bc	44	75	8	8	-	6	1	7-8	2500	1	*	48	41	36	2	1	0.9
Hartland Point	1005.5	+6	WNW	5	c	49	75	8	8	-	-	9	9	1500	1	4	49	45	42	3	2	1.6
Bristol	1003.7	+8	W'S	4	c	44	85	7	5	1	-	2-3	9+	3000	1	*	48	41	35	0.2	7	1.3
Portland Bill	1004.2	-10	W	5	bc	49	92	8	5	-	-	4-6	4-6	4000	1	4	52	44	*	0.5	4	*
Plymouth	1007.8	+6	WNW	5	c/pr	49	85	6	8	-	-	9	9	1000	1	2	52	43	41	5	7	2.0
The Lizard	1009.4	-4	WNW	7	c	50	92	8	8	-	-	7-8	7-8	1500	1	6	52	46	*	1	3	4.4
Scilly (St. Mary's)	1010.1	-6	WNW	7	c	50	85	7	8	-	-	10	10	1500	1	4	52	47	*	2	3	3.6
Guernsey																						
Pembroke	1003.5	-4	WNW	6	cq	49	85	7	8	-	-	9	9	2000	1	4	51	47	*	2	4	1.0
Holyhead	999.6	-2	W	6	bc	46	85	8	5	3	-	7-8	9	3600	1	4	48	41	38	0.6	8	1.1
Chester (Sealand)	999.3	-8	W	3	z_0	43	75	6	8	-	-	7-8	7-8	2500	1	*	47	38	30	1	5	0.0
Manchester	998.5	-6	WSW	3	bc/pr	38	92	5	8	-	-	4-6	4-6	1500	1	*	45	37	34	4	1	0.3
Spurn Head	997.5	-10	SSW	3	c	38	92	7	5	2	-	7-8	9+	1500	0	3	43	38	*	2	-	0.0
Catterick	995.8	-16	W	2	bc	42	85	7	5	-	-	4-6	4-6	1800	0	*	43	38	32	-	Tr	0.0
Tynemouth	995.9	-8	W	3	z_0	40	85	6	2	-	-	7-8	7-8	3000	1	2	43	39	33	0.4	-	*
St. Abbs Head	992.0	-18	WNW	5	bc	40	75	8	4	4	-	2-3	4-6	2500	0	2	44	37	*	-	-	*
Leuchars	991.4	-20	SW	3	z_0	37	92	6	5	7	*	4-6	4-6	2800	1	*	41	32	26	-	-	0.2
Renfrew (Abbots I.)	993.1	-16	W'S	4	b	41	85	7	4	-	-	2-3	2-3	3000	1	*	43	37	31	4	1	0.3
Eskdalemuir	994.4	-10	W'N	4	pr	37	92	7	5	-	*	9+	9+	1500	1	*	40	34	32	0.5	2	0.3
Point of Ayre	996.5	-8	W'N	6	bc	43	92	8	8	-	-	4-6	4-6	2500	1	3	46	41	*	12	2	0.4
Tiree																			*			
Stornoway	988.2	-10	WSW	3	c/phr	37	92	7	8	-	-	7-8	7-8	2000	1	2	42	36	*	0	3	0.6
Dalwhinnie	*	-10	SW	3	bc	33	97	7	5	-	-	2-3	2-3	2500	7	*	36	33	28	0.3	3	0.2
Aberdeen	990.2	-8	SW	2	c	37	75	5	5	-	-	9	9	4000	3	2	42	33	29	-	-	0.0
Wick	987.8	-12	SW	3	c	37	85	8	5	7	-	4-6	7-8	1500	1	1	41	31	*	-	*	*
Lerwick	985.8	-16	S'W	4	c	40	75	8	8	7	-	4-6	7-8	800	1	*	44	36	*	4	3	0.9
Blacksod Point	1001.1	-20	W'N	6	cq	45	92	7	9	-	-	9	9	800	2	4	47	42	*	3	10	*
Malin Head	994.3	-16	W	5	PHR	43	92	5	3	-	-	9+	9+	800	1	5	47	39	*	2	7	0.7
Aldergrove	997.4	-14	WSW	3	c/pr	38	92	8	8	-	-	7-8	7-8	1000	1	*	43	37	33	1	2	0.9
Birr Castle	1002.5	-16	WNW	2	c/pr	43	92	8	3	1	-	2-3	10	1500	1	*	47	41	38	2	9	2.2
Valentia Obsy.	1007.6	-18	W	6	o/pr	51	92	8	5	-	-	10	10	2500	1	4	49	47	44	1	3	0.0
Roches Point	1006.1	-18	WNW	4	rr	46	92	8	6	2	-	7-8	9+	1500	1	3	49	46	*	0.3	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.	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	cm_0	cm_0bcm_0	$bccm_0r_0r_0$	48	42	29	-	1	0.0	•	•	6
Croydon	217	$rrr_0r_0cm_0$	$cm_0r_0r_0bm_0$	cz_0bcmbr_0	48	38	34	0.6	1	0.2	•	•	6
Greenwich (Royal Observatory)	149												
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park)	27	•	•	•	50	37	31		1		84	79	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	49	39	29	0.2	1		87	74	•
Camden Square	110	o	bc	•	48	38	30	-	1	•	•	79	•
Kensington	80	bcp	bc	•	49	37	28	0.2	0.7		79	81	•
Hampstead Observatory	450	bcp	bc..	orbc	47	36	30	Tr	1		•	92	•

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.
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	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.

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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

Wednesday 11th December 1940.

No. No. 28874.

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

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)	998·1	-28	WSW	4	iro	46	75	6	5	3	-	9	9+	1500
	Croydon	997·8	-30	W'N	4	c	46	75	6	5	7	3	2-3	9+	5000
	S. Farnborough	999·0	-26	WSW	5	c/pr	45	75	8	8	6	3	4-6	7-8	4500
	Boscombe Down	999·2	-36	WSW	4	bc	43	85	8	6	7	-	4-6	4-6	4000
	Calshot (Soton.)	1004·4	-28	W	4	c/pr	44	85	8	7	7	5	4-6	9+	3500
	Lympne	999·8	-14	WNW	2	c	46	75	8	1	7	8	Tr	7-8	1200
	Manston	997·9	-10	W'S	3	zo	44	85	6	-	7	-	0	9+	-
2	Shoeburyness	998·4	-24	WSW	2	c	45	85	5	8	7	-	4-6	9+	4000
	Felixstowe	996·7	+22	W'S	3	zo	42	85	6	-	1	-	0	9+	-
	Gorleston	996·5	-24	W	3	c	41	85	6	5	-	-	7-8	7-8	2300
	Mildenhall	996·0	-26	WSW	4	c	42	85	8	5	7	-	2-3	9+	4500
	Cranwell	994·9	-28	W	5	c	43	75	7	8	-	-	9+	9+	1500
3	Birmingham	996·8	-54	W	3	ir	42	85	6	5	7	-	7-8	10	1500
	Upper Heyford	997·5	-30	W'S	3	c/r	43	85	7	8	6	-	4-6	7-8	1800
4	Ross-on-Wye	997·9	-28	W'S	4	c	45	75	8	9	-	3	2-3	9+	2500
5	Hartland Point	1000·4	-36	WNW	5	c/pr	49	85	8	5	2	-	7-8	10	1000
	Bristol	999·3	-38	W	3	c	45	85	8	8	9	-	2-3	9+	3000
	Portland Bill	1000·6	-40	WNW	5	c/pr	48	92	5	3	2	-	4-6	10	2500
	Plymouth	1003·3	-18	NW'W	5	Pr	47	92	6	9	-	-	10	10	800
	The Lizard	1004·4	-30	WNW	8	c	51	92	7	8	2	-	9	10	1200
	Scilly (St. Mary's)	1005·5	-30	W'N	8	c/r	51	92	6	9	2	-	7-8	10	1200
	Guernsey														
6	Pembroke	1000·7	-8	NW	6	c/pr	42	97	7	8	-	-	9	9	1600
7	Holyhead	996·4	-14	W'N	6	cq	45	85	8	8	7	6	4-6	9+	2000
	Chester (Sealand)	996·1	-20	W'N	4	pr	42	85	6	8	3	-	9+	10	2500
8	Manchester	994·6	-10	W'S	4	c	42	85	7	8	6	-	4-6	9	2200
10	Spurn Head	993·0	-18	S'W	3	c	41	92	7	5	4	-	7-8	9+	2500
	Catterick	991·8	-26	WNW	3	bc	44	75	8	3	6	-	4-6	4-6	2500
	Tynemouth	991·9	-20	W	3	c	42	75	7	2	3	-	4-6	7-8	2000
11	St. Abbs Head	989·1	-8	WSW	5	bc	40	85	8	4	4	9	2-3	4-6	2500
	Leuchars	988·6	-12	WSW	3	zo	39	85	6	8	7	-	1	2-3	4000
12	Renfrew (Abbots I.)	990·4	-14	SW'S	3	c	42	85	8	8	3	3	4-6	7-8	2500
	Eskdalemuir	991·5	-14	W'S	3	bc	38	85	8	5	-	-	4-6	4-6	1500
	Point of Ayre	993·5	-16	WNW	6	bc	43	92	8	8	-	-	4-6	4-6	1500
13A	Tiree	989·9	0	NW	6	phr	42	85	7	8	-	-	7-8	7-8	1500
13B	Stornoway	987·2	-14	SW	3	c/pr	37	92	8	8	-	3	7-8	7-8	1500
15	Dalwhinnie	989·3	-8	SW	3	bc	33	85	8	2	4	-	2-3	4-6	1500
	Aberdeen	987·6	-10	W'N	3	bc	40	65	7	8	-	3	1	2-3	2500
	Wick	985·9	-8	SW	3	bc	37	85	8	3	4	8	2-3	4-6	1500
16	Lerwick	985·8	0	S	4	c	40	85	8	8	7	-	4-6	7-8	800
17	Blacksod Point	1000·1	+2	WNW	7	cq	45	75	7	9	-	-	7-8	7-8	800
18	Malin Head	992·8	-8	NW	6	c	43	92	7	8	-	-	4-6	7-8	1500
	Aldergrove	995·0	-14	NW'W	4	phr	38	85	9	9	-	-	9+	9+	1000
19	Birr Castle	1001·0	-6	NW	2	bc	44	75	8	5	-	-	2-3	2-3	2500
20	Valentia Obsy. †	1007·2	+6	NW	7	c/pr	48	75	8	9	7	-	4-6	9+	2500
	Roches Point	1003·2	-8	NW	7	rr	47	92	8	6	2	-	7-8	9+	1500

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

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)	996·7	+6	W	3	zo	41	85	6	-	-	-	0	0	-	1	*
Croydon	996·5	-2	W	3	zo	41	85	6	5	-	-	Tr	Tr	2000	1	*
S. Farnborough	997·6	+6	W	4	b	42	75	7	5	-	-	Tr	Tr	2500	1	*
Boscombe Down	998·8	+12	W'N	5	b	40	85	7	-	4	-	0	Tr	-	1	*
Calshot (Soton.)	998·5	+2	WNW	4	b	42	85	7	5	-	-	Tr	Tr	7200	1	2
Lympne	996·3	-14	W	3	pr	42	85	7	8	-	-	10	10	1800	1	§
Manston	994·8	-10	WNW	3	pr/pr	41	92	6	5	3	-	4-6	7-8	2000	*	*
Shoeburyness	995·7	-10	W'N	3	bc	40	92	6	8	-	-	4-6	4-6	2500	1	*
Felixstowe	994·2	-10	WNW	5	bc	40	85	7	5	4	-	Tr	2-3	3000	1	3
Gorleston	993·0	-10	W	3	bc	41	85	6	5	3	-	4-6	4-6	2300	1	2
Mildenhall	994·0	-2	SW	3	c	38	92	7	5	3	-	7-8	9	3400	1	*
Cranwell	993·6	0	W'S	4	zo	38	85	6	5	-	-	4-6	4-6	2000	1	*
Birmingham	995·9	-6	WNW	3	zo	39	85	5	5	-	-	Tr	Tr	500	1	*
Upper Heyford	996·5	+2	W	3	b	36	92	8	-	-	-	0	0	-	1	*
Ross-on-Wye	998·0	+6	W	3	bc/pr	40	85	8	8	-	-	2-3	2-3	2500	1	*
Hartland Point	1002·2	+14	NNW	5	c	46	65	8	8	4	-	7-8	7-8	[illegible]	1	4
Bristol	999·8	+6	W	4	c	41	85	8	5	-	-	7-8	7-8	2000	1	*
Portland Bill	1000·5	-6	W	5	c	44	92	8	5	-	-	10	10	2500	1	4
Plymouth	1004·1	+14	NW'W	5	zo	47	75	6	5	7	-	2-3	9+	2000	1	3
The Lizard	1005·6	+10	NW	7	cq	49	75	8	8	6	-	7-8	7-8	2000	1	4
Scilly (St. Mary's)	1007·0	+18	NW'W	7	c	49	75	7	5	3	-	4-6	7-8	1500	1	5
Pembroke	1001·5	+12	NW'W	6	bcq	46	75	7	8	-	1	4-6	4-6	2500	1	3
Holyhead	996·7	+10	WNW	8	bcq	45	75	8	8	3	-	2-3	2-3	2800	1	5
Chester (Sealand)	995·4	+6	W'N	5	bc/phr	41	85	7	2	-	-	4-6	4-6	1200	1	*
Manchester	994·3	+4	WNW	3	bc/pr	37	85	7	8	-	-	4-6	4-6	1800	1	*
Spurn Head	990·6	-2	W'S	4	c	40	97	7	5	4	-	7-8	7-8	2500	0	3
Catterick	991·9	+6	NW	3	c	38	85	7	5	7	-	4-6	7-8	2000	0	
Tynemouth	991·2	0	WNW	3	c	38	85	6	8	-	-	7-8	7-8	2500	1	2
St. Abbs Head	988·6	-4	WNW	4	b	37	85	8	4	-	-	1	1	2500	0	3
Leuchars	988·6	+10	WNW	2	zo	35	85	6	8	6	-	Tr	4-6	3200	1	*
Renfrew (Abbots I.)	991·2	+2	W	1	c/pr	36	97	6	9	-	•	9	9	1200	1	*
Eskdalemuir	990·3	-4	WNW	5	bc	34	85	8	5	-	6	2-3	4-6	1500	7	*
Point of Ayre	993·8	+6	NW	6	c	42	92	8	8	1	-	7-8	9+	1500	1	4
Tiree	990·6	+8	NW	5	bc/pr	42	75	7	8	-	-	4-6	4-6	1500	0	5
Stornoway	988·0	+18	WNW	3	bc/phr	37	97	8	8	-	8	2-3	2-3	1800	1	2
Dalwhinnie	988·6	+8	SW	2	c	31	85	8	2	4	-	4-6	7-8	1500	8	*
Aberdeen	988·0	+6	WNW	2	b	34	75	6	-	9	-	0	Tr	-	3	2
Wick	986·7	+8	W	2	c	33	92	8	5	7	8	4-6	7-8	1500	1	1
Lerwick	986·0	0	SW	3	c	36	97	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1002·2	+18	WNW	7	PR	44	85	7	9	-	-	9	9	800	1	5
Malin Head	993·7	+18	NNW	6	phr	42	92	7	6	-	-	9	9	1500	1	5
Aldergrove	995·8	+10	WSW	4	pr	36	92	8	9	-	-	9+	9+	1200	1	*
Birr Castle	1002·4	+8	N	3	bc	39	85	8	5	-	5	2-3	4-6	2500	1	4 *
Valentia Obsy. †	1008·6	+14	NW'W	6	c/phr	46	85	8	9	7	-	7-8	9+	2500	1	4
Roches Point	1006·1	+18	NW	6	cq	43	85	8	3	-	-	7-8	7-8	1500	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 10th (37)	13h.—18h. 10th (38)	18h 10th to 1h. 11th (39)	1h.—7h. 11th (40)
London (Kew)	cmocirom	ocirobcbm	obmobcbw	bbcmow
Croydon	cmo	czopro	bbcm	bc
S. Farnborough	cpr	cjp b	b, cpRqb	b,c
Boscombe Down	cbccrr	bcprcjpbc	b	bq
Calshot (Soton.)	ciropr	cproqcb	b	b,bclc
Lympne	bcc	cpr	cpro bcb	bbc
Manston	cprocmo	crororo mo	cprobcmo	bmobcmo
Shoeburyness	cmo iroc	cmpoPbc	bcmox	mopc
Felixstowe	orrc	cmoiro	bmocpromc	bccpr
Gorleston	c	cprobc	bclc	bcx
Mildenhall	crorom oc	c	cproqbc	bcproRqmo
Cranwell	bcbmoc	bccprobc	bc,prcmo	cpromo
Birmingham	b, ciro	cirs bc	bbc	bcpro
Upper Heyford	bccr	cirocPrh,bc	bc	bcb
Ross-on-Wye	cbccrc	cpo bccp	bccq,ir	irc
Hartland Point	cphtl	cp	cphlc	cbc
Bristol	cproiro	crororoiRbc	bcbbc	bcbbc
Portland Bill	oPr	oc	cbc	bcc
Plymouth	cproiroPr	cPrtlrcroro,	bbc	bccpb
The Lizard	cprcq (gale)	cprcq (gale)	prbcq	c
Scilly (St. Mary's)	cprr (gale)	ciroc (gale)	cpqbc	bccpr
Pembroke	prqc	cpro bcq	cbcq (gale)	bcq (gale)
Holyhead	cprqc	cqbc (gale)	bcqc (gale)	cprobc (gale)
Chester (Sealand)	czoc Prhmo	proprhq	prhqc	cphlc
Manchester	proc	cqphpro	cpro PRq	cmoqPRphr
Spurn Head	c	c	cbc	c
Catterick	wprobc	bcc	cbcbbc	bccb
Tynemouth	cbc	bcc	cbc	bc
St. Abbs Head	bc	cbcb	bcb	cbc
Leuchars	xcbbcmo	bcmobcw	bcmobx	bxbcx
Renfrew (Abbots I.)	Prphqc	pr	cmocx	c,bx
Eskdalemuir	cbcpr	prscpsbc	bcb	bcb
Point of Ayre	cbc	c	cprpr	PHR
Tiree	cPhq	cprq	cpr	ccpr
Stornoway	cphr	cprsphrbc	cphrl	cprsphr
Dalwhinnie	cpsbc	bcp	*	cpsbc
Aberdeen	bczob	bbcbx	bx	bx
Wick	cbcc	bbc	clprs	bbc
Lerwick	cpr	c	cbc	bcc
Blacksod Point	Prbcq	Prcq	PRbcq	phrbcq
Malin Head	cphrcphr	ccprcprc	cphrcprc	cphrPHRc
Aldergrove	lcproPR	phrprpro	proprl	PRLPHR
Birr Castle	cprbc	cbc		cprbc
Valentia Obsy. †	cprcPR	cprcPhrq	ccPHRq	cproprqbc ps
Roches Point	rr	cprq	pqbcc	pqbcc

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.

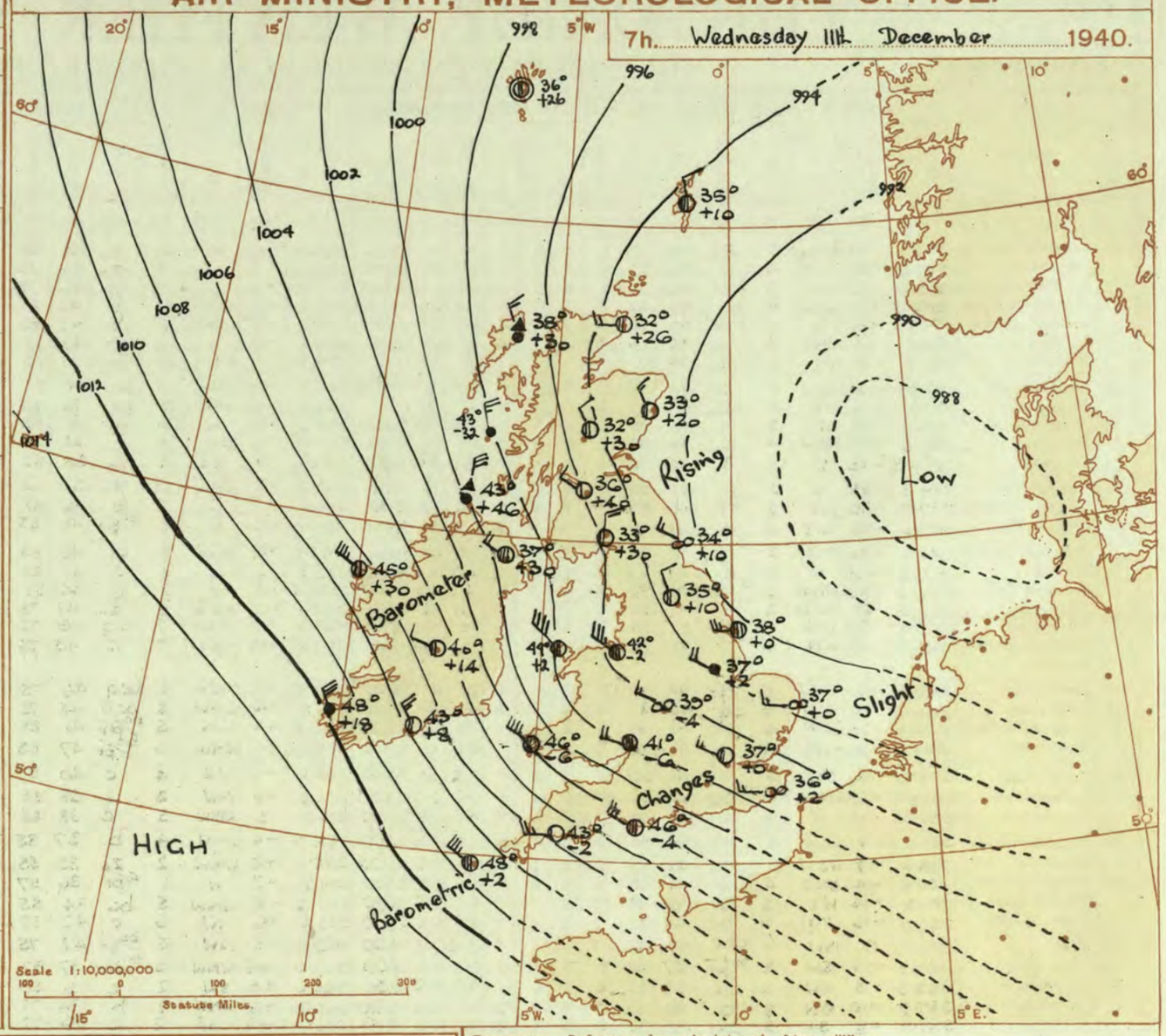
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Wednesday 11th December 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. (10th December)			18h. G.M.T.			01h. G.M.T. (11th December)			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	81946	23386	96	01853	20383	30	00942	20182	30	00852	24202
115	52	88844	57485	52	88844	24387	87	88844	28285	87	81844	20285
203				8-	81845	22486	8-	02945	24385			
206	83	01964	24385	86	01964	22385	81	25853	24185	30	02855	23115
210	84	01853	22314							5-	25857	22387
220				90	27745	24485				90	88745	27485
230	86	25953	24386	90	27744	16184	86	02865	28386	30	26843	26383
245	83	01853	22325	04	01890	29124	04	00990	26312	84	00851	28212
260	20	27743	22383	13	05563	22284	03	05690	22103	54	05573	22103
277	96	81846	25687	96	27846	24597	82	64647	60628			
279												
285	9-	86745	26685	90	26744	26684				5-	03748	32578
288	87	02854	18225	47	02853	22228	50	00861	22213	04	08490	26112
273										30	01752	28282
301	87	02744	25485	26	19655	61685	83	81646	60627	80	81645	60585
321	53	05652	24467	86	25645	24387	00	05690	24300	57	05654	24228
299	57	01744	22314	50	01743	22203	50	01751	22201	57	01743	26313
292	37	02854	22325	46	02753	23426	44	00981	24311	8-	02857	00087
310	--	02628	24428	--	85428	24528				--	86528	24588
316	57	61644	24328	8-	81547	26987	97	02645	60588	8-	81546	25388
333	27	02853	57586	23	14855	60626	20	14855	57725	2-	02857	57887
334	--	03644	25227								89555	22668
340	8-	81846	24386	80	81745	25485	3-	81746	61686	9-	81748	59688
136	57	05664	21467	4-	05669	20384	56	25754	24485	50	05654	29414
336	52	61751	24465	62	89759	28587				62	82754	28686
350	83	25755	22485							57	05654	22385
368												
379	5-	25657	24887	--	05690	24301	04	00790	26401	5-	01745	26415
390	58	05656	26418	04	05690	25382	53	05653	24414	5-	05656	24566
382	57	62645	24467	--	00790	24300	03	00790	24301	56	01864	24314
438	5-	10747	25617							8-	02755	26515
430	57	81765	24486	03	00890	24411	00	00890	28500	53	01763	26514
409	62	64623	56828	23	02843	60766	20	01854	59624	23	25745	61685

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 11th December
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate to fresh northwest winds, decreasing slowly, squally rain and hail showers today but some bright periods; mainly fair or fine tomorrow: cold with some frost at night.
5 S.W. England ↑ 6 South Wales ... ↑ 7 North Wales ... ↑ 8 N.W. England ↑	Fresh, squally northwest winds, strong to gale at first on coasts, moderating; squally showers of rain and hail with a chance of local thunder to-day: considerable bright periods to-morrow: cold.
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	Moderate northwest to north winds, bright periods; occasional wintry showers of hail, sleet or snow; cold, frost at night.
17 N. W. Ireland ↑ 18 N. E. Ireland ↑ 19 S. E. Ireland ↑ 20 S. W. Ireland ↑	As 5-8

GENERAL INFERENCE.

A depression centred over the North Sea will drift away southeastwards and become less deep, and a ridge of high pressure will move in from the Atlantic. There will be some further squally rain and hail showers to-day but with considerable bright periods. In the North the showers will be of sleet and snow. Fairer conditions with more localised wintry showers will prevail tomorrow. It will be cold generally with frost at night.

FURTHER OUTLOOK.

A depression on the Atlantic will move east causing a renewal of unsettled weather.

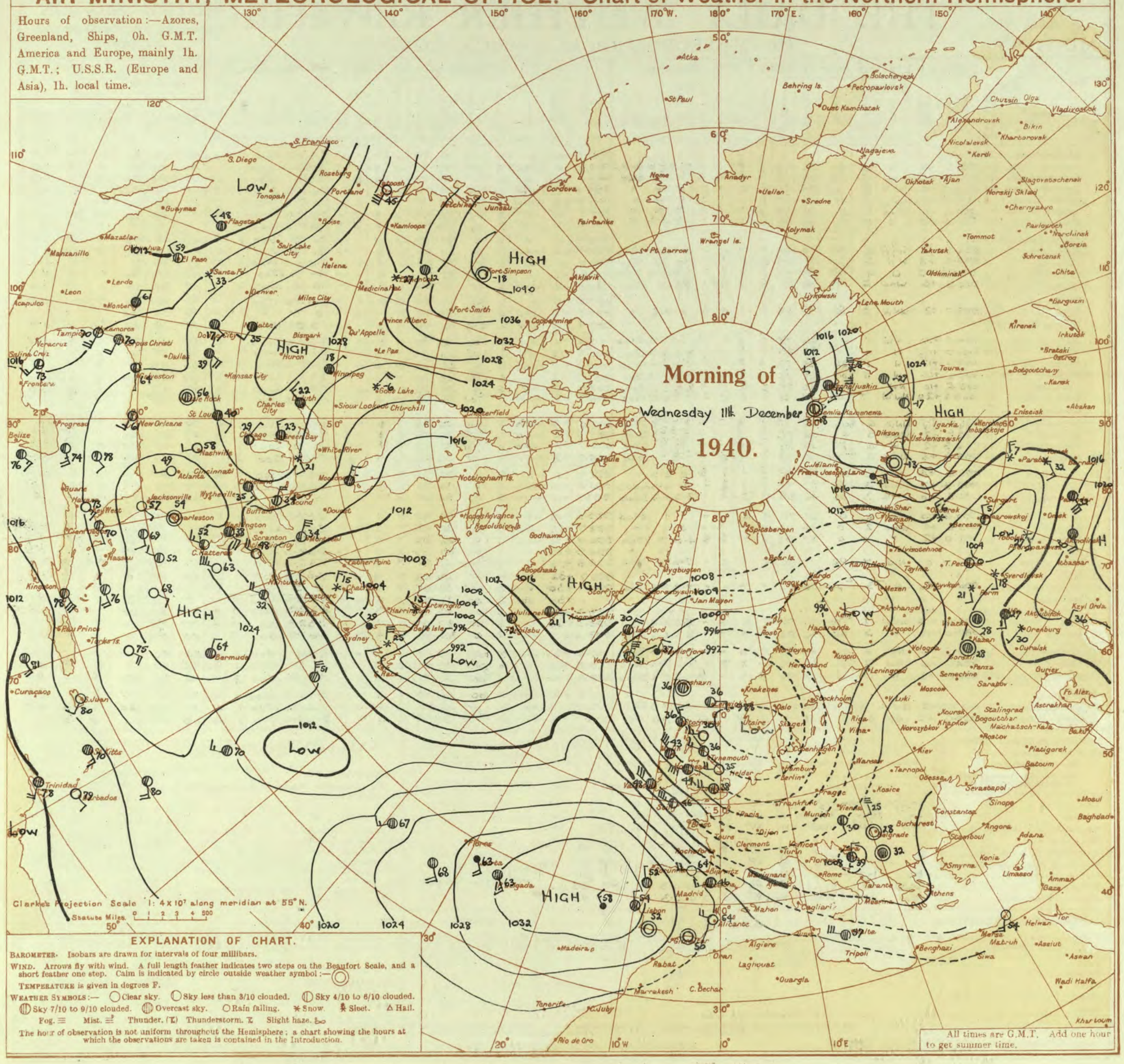
Gale warnings in operation in districts 5, 6, 7, 8, 12, 13a, 13b, 17, 18, 19, and 20, 1620h on 9.12.40

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.



Page 4. AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 11th December, 1940.

No. 28374.

OBSERVATIONS at 1 hr. G.M.T. 11th December

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	998·2	+4	W	4	bc	38	85	7	5	-	-	4-6	4-6	3000
	S. Farnborough	226	999·2	+6	W	5	bc	38	75	7	5	-	-	Tr	Tr	4000
	Boscombe Down	417	1000·3	+4	W'N	5	b	38	85	7	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1000·2	+6	WNW	5	b	41	75	8	-	-	-	0	0	-
	Lympne	346	997·7	+2	WNW	3	b	37	83	7	-	-	-	0	0	-
	Manston	154	996·3	+6	W	5	z0	36	85	6	-	-	1	0	2-3	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	994·5	+2	WNW	6	bc	39	85	7	5	4	-	2-3	4-6	3500
	Gorleston	5	993·3	+8	W'N	3	c	37	75	6	5	-	-	10	10	1500
	Mildenhall	19	994·8	+6	W	4	bc/pr	37	92	7	8	3	-	2-3	4-6	2500
	Cranwell	240	994·5	+6	WNW	4	z0	36	92	6	8	6	-	2-3	9	2500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	997·7	+2	WNW	4	bc	37	85	7	-	4	2	0	4-6	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1004·2	+10	NW	7	c	46	75	8	8	-	3	7-8	7-8	2000
	Bristol	209	1001·9	+12	W	4	bc	38	85	7	5	-	-	4-6	4-6	4500
	Portland Bill	32	1002·6	+12	W	5	bc	45	92	8	5	-	-	4-6	4-6	4000
	Plymouth	82	1006·2	+14	W	5	bc	45	75	7	3	3	8	4-6	7-8	1800
	The Lizard	240	1008·4	+10	NW	7	bc	46	75	8	8	7	-	4-6	4-6	2000
	Scilly (St. Mary's)	163	1009·2	+20	NW'W	7	bc	46	85	7	8	6	-	2-3	4-6	1500
	Guernsey	175														
6	Pembroke	142	1003·7	+6	WNW	6	bcq	45	85	7	2	-	-	4-6	4-6	2500
7	Holyhead	26	997·7	+2	WNW	8	c	44	85	8	8	1	-	7-8	9+	2800
	Chester (Sealand)	16	996·3	+2	W	4	pr	42	85	7	8	-	-	9+	9+	1600
8	Manchester	70	995·3	+4	WNW	4	c/pr	41	85	7	8	6	-	7-8	9	2000
10	Spurn Head	29	992·0	+4	W	6	bc	38	86	7	-	-	5	0	2-3	-
	Catterick	175	992·8	+6	WNW	3	bc	37	85	8	5	4	-	Tr	4-6	4000
	Tynemouth	108	991·8	+6	WNW	3	bc	36	85	7	2	3	-	2-3	4-6	3200
11	St. Abbs Head	280	990·6	+10	NW	4	b	37	75	8	4	-	-	1	1	2500
	Leuchars	36	990·5	+8	WSW	2	b	35	85	7	-	4	-	0	1	-
12	Renfrew (Abbots I.)	19	992·0	+2	-	0	c	37	92	8	5	3	8	4-6	9	2500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	994·7	0	NW	7	PR	42	92	8	8	2	-	7-8	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	990·4	+20	N	3	c/phr	36	92	7	3	-	-	7-8	7-8	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	988·6	+14	WNW	2	bc/ps	33	97	8	8	6	-	4-6	4-6	1500
16	Lerwick	156	989·0	+12	E	2	bc	36	92	8	5	-	-	4-6	4-6	1500
17	Blacksod Point	18	1003·8	+6	NW	6	cq	44	85	8	3	-	-	7-8	7-8	800
18	Malin Head	84	994·2	+4	NW	7	c/phr	43	85	6	3	7	-	4-6	7-8	1500
	Aldergrove	268	996·5	+2	W	5	cl	40	85	8	3	-	3	4-6	7-8	2500
19	Birr Castle	173														
20	Valentia Obsy.	30	1010·4	+2	NW'W	6	c/pr	48	65	8	8	7	-	7-8	7-8	2900
	Roches Point	22	1007·6	+6	NW	5	c	43	85	8	3	-	6	4-6	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 11th December — 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 10th Hrs. (36)
London (Kew)	998·1	0	W	4	z0	39	75	6	5	-	1	2-3	2-3	2500	1	*	46	38	30	0·1	-	1·0
Croydon	998·2	0	WNW	3	bc	37	85	6	5	4	3	2-3	4-6	4000	1	*	46	36	33	Tr	-	1·2
S. Farnborough	999·1	-2	W	4	c	38	75	7	5	3	1	7-8	9	3400	1	*	47	36	32	Tr	1	1·2
Boscombe Down	999·8	-4	WNW	6	bc	39	75	7	5	-	-	4-6	4-6	3000	1	*	45	37	33	2	-	0·6
Calshot (Sthmtn.)	1000·5	+2	WNW	5	c	42	75	8	5	3	6	2-3	7-8	3500	1	2	47	40	36	0·6	-	0·7
Lympne	997·7	+2	W	3	z0	36	85	6	5	3	-	2-3	7-8	3000	1	3	47	65	30	0·3	0·2	1·2
Manston	996·4	0	W'N	4	z0	38	85	6	5	3	3	4-6	7-8	4000	*	*	*	*	*	*	*	*
Shoeburyness	996·9	0	W	3	c	38	85	6	5	-	-	9+	9+	2500	1	*	46	37	30	1	Tr	0·7
Felixstowe	995·1	+2	WNW	5	pr	38	85	6	9	-	-	9+	9+	1200	1	2	43	38	34	5	0·5	0·9
Gorleston	993·7	0	W	3	z0	37	85	6	5	-	-	4-6	4-6	1500	1	2	42	35	31	1	-	1·0
Mildenhall	995·1	+2	W	4	c/pr	37	97	6	8	-	-	9+	9+	2200	1	*	43	35	30	1	4	0·8
Cranwell	994·5	+2	WNW	4	pr	37	92	6	9	-	-	10	10	1000	1	*	44	36	33	1	2	1·2
Birmingham	997·2	-4	WNW	3	z0	39	85	5	6	-	-	4-6	4-6	1500	1	*	43	36	31	7	0·3	0·9
Upper Heyford	997·2	-4	WNW	4	b	38	85	8	-	4	1	0	Tr	-	1	*	45	34	30	1	-	*
Ross-on-Wye	999·1	-6	W'N	4	cq	41	75	8	6	1	-	9	9+	1500	1	*	45	38	34	12	3	0·8
Hartland Point	1003·4	-4	NW	6	bc	46	75	8	3	-	-	4-6	4-6	2000	1	4	49	42	39	4	1	0·0
Bristol	1000·2	-12	W'N	6	bc	40	85	7	5	-	-	2-3	2-3	3000	1	*	46	37	31	2	-	0·0
Portland Bill	1002·2	-4	WNW	5	c	46	85	8	5	-	-	7-8	7-8	2500	1	4	50	43	*	2	-	*
Plymouth	1006·0	-2	W	5	b	43	85	7	3	-	-	2-3	2-3	1600	1	3	52	42	38	13	1	0·0
The Lizard	1007·7	-2	NW	6	c	47	75	8	8	6	-	7-8	7-8	2000	1	3	51	42	*	3	3	0·0
Scilly (St. Mary's)	1008·3	+2	NW'W	7	c/pr	48	75	7	8	6	-	4-6	7-8	1500	1	5	51	45	*	3	1	0·0
Guernsey																						
Pembroke	1002·4	-6	NW'W	8	bcq	46	85	7	5	-	-	4-6	4-6	2500	1	4	50	44	*	2	-	0·2
Holyhead	997·2	+2	WNW	8	c/pr	44	85	8	8	-	-	7-8	7-8	2500	1	6	47	42	40	1	Tr	2·1
Chester (Sealand)	995·7	-2	WNW	6	c/phr	42	85	7	3	-	1	9	9	2000	1	*	45	40	34	4	3	0·9
Manchester	995·3	+2	NW'W	4	pr	35	92	6	8	-	-	7-8	9	1200	2	*	44	34	32	0·6	7	0·0
Spurn Head	992·0	0	W	5	c	38	92	7	4	-	-	7-8	7-8	2500	0	3	42	37	*	2	-	0·5
Catterick	993·8	+10	NNW	2	bc	35	92	8	5	3	-	4-6	7-8	4000	0	*	45	34	29	Tr	-	4·0
Tynemouth	993·3	+10	WNW	3	z0	34	85	6	-	4	-	0	2-3	-	3	2	42	33	29	-	-	*
St. Abbs Head	993·0	+18	WNW	4	bc	37	85	7	4	4	-	2-3	2-3	2500	0	2	40	37	*	-	-	*
Leuchars	993·7	+22	NW	3	bc	35	85	7	5	7	-	2-3	4-6	4000	3	*	41	31	24	-	-	3·9
Renfrew (Abbots I.)	996·8	+40	WNW	2	b	36	92	7	5	-	-	1	1	2500	1	*	43	33	28	6	0·1	2·3
Eskdalemuir	994·9	+30	N	4	bc	33	85	7	5	-	-	2-3	2-3	1500	7		38	32	28	4	-	1·3
Point of Ayre	995·8	+18	N	6	bc/phr	42	97	8	8	-	-	2-3	2-3	1500	1	4	45	36	*	0·4	15	2·3
Tiree	998·2	+32	NNW	5	pr	43	85	7	3	-	-	7-8	7-8	1500	1	4	44	39	*	6	2	1·0
Stornoway	996·1	+30	NNW	3	phr	38	85	7	3	-	-	9	9	1500	1	2			*	2	5	
Dalwhinnie	*	+30	NW	2	bc	32	92	8	5	4	-	2-3	4-6	2500	8	*	35	23	19	1	1	0·1
Aberdeen	993·3	+26	NW	3	bc	33	85	8	3	-	-	2-3	2-3	2500	3	2	41	31	22	-	-	1·9
Wick	993·0	+26	W	3	bc	32	97	8	3	4	-	2-3	2-3	1500	3	2	37	30	*	-	Tr	*
Lerwick	993·4	+10	NW	2	c	35	92	8	8	7	-	4-6	7-8	1500	5	*	44	34	*	1	-	1·0
Blacksod Point	1007·4	+30	WNW	7	bcq	45	75	8	3	-	-	4-6	4-6	800	1	4	46	40	*	2	1	*
Malin Head	1000·5	+46	N	6	phr	43	92	6	9	-	-	9	9	1500	1	5	44	37	*	5	5	0·0
Aldergrove	999·8	+30	NW'W	4	c/phr	37	92	8	9	-	-	9+	9+	1600	2	*	42	36	33	3	8	1·7
Birr Castle	1006·2	+14	WNW	2	bc	40	85	8	5	-	-	2-3	2-3	2500	1	*	45	37	34	2	1	2·8
Valentia Obsy.	1012·8	+18	NW	6	pr	48	75	8	3	-	-	4-6	4-6	2500	1	4	51	43	40	2	3	0·0
Roches Point	1008·7	+8	NW	5	bc/pr	43	85	8	3	-	-	4-6	4-6	1000	1	4	49	42	*	6	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	cm0ci0m0	ci0bcbm0	bm0bcbwm	46	38	30	0·1	-	1·0	•	•	6
Croydon	217	cm0	cz0pr0	bbcmbc	46	36	33	Tr	-	1·2	•	•	6
Greenwich (Royal Observatory)	149	bcc	crcb	bbcbbcm	46	37	30	0·5	-	0·6	83		4
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park)	27	•	•	•	47	37	31	0·5			87	75	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	46	37	30	0·6	Tr		75	81	•
Camden Square	110	bc	bc	•	46	37	31	1	-	•	•	80	•
Kensington	80	bccp	bc	•	47	38	31	0·3	0·3		87	83	•
Hampstead Observatory	450	bcor	o	obbc	44	35	31	0·4	0·3		•	89	•

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

SOUTH KENSINGTON.

Max.	Time.	Min.	Time.

KEW OBSERVATORY.

Max.	Time.	Min.	Time.
Defective Record.			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. Barom. mb.	18h. Wind Direc.	18h. Wind Force.	18h. Weather.	18h. Temp. °F.	7h. G.M.T. Barom. mb.	7h. Wind Direc.	7h. Wind Force.	7h. Weather.	7h. Temp. °F.	Past 24 Hours Max. Day °F.	Past 24 Hours 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 Precipitous.
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

Thursday 12th December 1940.

No. 28875

OBSERVATIONS at 13h. G.M.T. 11th December

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)...	1000·0	+12	NW	5	c/r	42	75	6	8	–	–	9	9	2500
	Croydon	999·2	+10	NW	5	c/pr	40	85	6	9	–	–	10	10	1800
	S. Farnborough	1000·6	+12	NW'W	4	c/pr	41	85	8	8	–	–	9+	9+	2000
	Boscombe Down	1001·7	+10	NW'N	6	c	44	75	8	8	–	–	9	9	3000
	Calshot (Soton.)	1001·3	+10	NW	6	c	45	65	8	7	–	–	9	9	3500
	Lympne ...	998·5	+10	WNW	4	pr	39	85	6	9	–	–	9+	9+	900
	Manston ...	997·7	+12	NW'W	5	c/pr	39	92	6	8	6	–	9	9+	600
2	Shoeburyness ...	999·2	+18	NW'N	3	c	38	92	6	5	–	–	10	10	2500
	Felixstowe ...	997·2	+14	NW'N	5	c/pr	38	92	6	9	–	–	9	9	800
	Gorleston ...	997·0	+14	NW	3	c	40	85	6	8	7	–	4-6	7-8	2000
	Mildenhall ...	997·8	+18	N'E	4	zo	40	85	6	8	–	4	4-6	4-6	2000
	Cranwell ...	999·6	+30	NNW	4	bc	41	75	6	5	–	–	2-3	2-3	2500
3	Birmingham	1002·8	+14	NW	4	bc	41	75	6	8	–	2	4-6	4-6	1500
	Upper Heyford	1001·0	+30	NW	4	zo	40	85	6	8	–	–	7-8	7-8	2000
4	Ross-on-Wye ...	1003·5	+26	NW	4	c	43	75	8	8	–	1	4-6	7-8	2500
5	Hartland Point	1007·9	+28	NW	7	c	45	75	8	8	–	–	7-8	7-8	2000
	Bristol	1003·9	+26	NW'N	5	c	44	75	8	2	6	–	7-8	7-8	1800
	Portland Bill ...	1003·7	+12	NW	5	bc	46	85	8	5	–	–	4-6	4-6	4000
	Plymouth ...	1008·6	+22	NW'N	5	bc	47	65	8	8	–	–	4-6	4-6	2000
	The Lizard ...	1010·6	+16	NW	7	bcq	47	75	8	8	6	–	4-6	4-6	2500
	Scilly (St. Mary's)	1012·6	+24	NW	7	bc	49	65	7	8	4	4	4-6	4-6	1500
	Guernsey ...														
6	Pembroke ...	1007·8	+20	NW	6	bcq	46	75	7	2	–	–	4-6	4-6	2500
7	Holyhead ...	1004·7	+26	NW'W	7	c	45	85	8	8	7	2	4-6	7-8	2200
	Chester (Sealand)	1002·0	+28	NNW	3	c/pr	43	75	7	3	–	–	9+	9+	1200
8	Manchester ...	1001·8	+34	NW	3	c	41	75	7	4	3	6	2-3	7-8	2800
10	Spurn Head ...	997·5	+18	W'N	5	c	40	85	6	8	–	1	4-6	7-8	4000
	Catterick ...	1000·2	+22	NW	3	bc	40	75	8	1	3	–	4-6	4-6	3000
	Tynemouth ...	999·7	+22	NW	3	bc	39	75	7	2	4	–	2-3	2-3	3600
11	St. Abbs Head	998·3	+16	NW	4	bc	40	75	8	5	4	–	2-3	4-6	2500
	Leuchars ...	999·5	+26	WNW	3	bc	40	75	8	8	4	–	2-3	2-3	4000
12	Renfrew (Abbots I.)	1002·3	+26	W	2	bc	43	75	9	8	3	3	4-6	4-6	2500
	Eskdalemuir ...	1000·8	+24	N'W	3	bc	36	75	7	5	7	–	1	2-3	2500
	Point of Ayre ...	1002·7	+22	NNW	6	c	45	85	8	8	–	9	7-8	9	2500
13A	Tiree	1004·4	+26	N'W	5	bc	44	75	8	8	–	–	4-6	4-6	1800
13B	Stornoway ...	1003·3	+26	NNW	3	c	41	75	8	8	–	–	7-8	7-8	1500
15	Dalwhinnie ...	1001·5	+26	N	3	bc	35	92	8	2	4	–	4-6	4-6	2500
	Aberdeen ...	999·4	+26	NW'N	4	c	37	85	7	3	–	3	2-3	7-8	2500
	Wick	999·5	+30	W	3	bc	37	85	8	3	4	1	4-6	4-6	1500
16	Lerwick... ...	999·4	+22	E	3	c/r	39	92	8	8	2	–	7-8	9+	800
17	Blacksod Point..	1012·4	+16	NW	5	bc	47	75	8	3	–	–	2-3	2-3	1500
18	Malin Head ...	1005·7	+30	N	6	phr	44	97	7	3	–	–	7-8	7-8	1500
	Aldergrove ...	1005·6	+22	NW'W	5	pr	40	85	8	9	–	3	4-6	4-6	1600
19	Birr Castle ...	1011·1	+16	WNW	2	bc	46	75	8	5	–	–	2-3	2-3	2500
20	Valentia Obsy. †	1016·1	+10	NW'N	5	c/pr	49	75	8	3	4	–	7-8	7-8	4000
	Roches Point ...	1013·0	+20	NNW	4	bc	47	85	8	3	–	–	2-3	2-3	1500

OBSERVATIONS at 18h. G.M.T. 11th December

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)	1004·9	+26	NW	3	zo	40	75	6	5	–	1	2-3	2-3	2500	1	*
	Croydon	1004·8	+30	NW	3	mo	39	85	4	5	–	–	4-6	4-6	2000	1	*
	S. Farnborough	1005·9	+30	WNW	3	c	40	70	8	8	6	3	7-8	9+	2500	1	*
	Boscombe Down	1006·8	+30	NW'W	4	bc	41	75	7	8	–	–	4-6	4-6	3000	1	*
	Calshot (Soton.)	1005·9	+26	NW'W	4	bc	41	70	7	5	1	–	4-6	4-6	2500	1	2
	Lympne	1008·8	+24	N'W	4	z	37	85	5	–	–	–	0	0	–	1	§2
	Manston	1002·4	+26	WNW	5	zo	38	85	5	–	–	–	0	0	–		*
2	Shoeburyness	1003·4	+26	WNW	3	b	37	92	7	–	–	–	0	0	–	1	*
	Felixstowe	1002·1	+30	NW'W	4	z	38	85	5	–	–	–	0	0	–	1	3
	Gorleston	1001·9	+24	NW	3	c/pr	40	85	5	8	–	–	9+	9+	1500	1	2
	Mildenhall	1002·5	+18	WNW	3	zo	34	92	5	4	6	–	2-3	4-6	500	1	*
	Cranwell	1004·1	+26	NW	4	zo	36	85	5	–	4	–	0	Tr	–	1	*
3	Birmingham	1005·8	+22	NW	4	bc/p	38	85	6	8	–	–	2-3	2-3	1500	1	*
	Upper Heyford	1005·3	+26	NW'W	5	c	39	85	7	8	6	–	4-6	9	2000	1	*
4	Ross-on-Wye	1007·2	+20	W'N	3	b	39	75	8	4	–	–	1	1	2500	1	*
5	Hartland Point	1010·6	+14	NW	7	c	47	65	8	8	–	–	7-8	7-8	2500	1	4
	Bristol	1008·0	+20	NNW	3	c	40	85	8	4	6	–	4-6	7-8	2500	1	*
	Portland Bill	1007·5	+24	WNW	5	bc	44	85	8	5	–	–	4-6	4-6	4000	1	4
	Plymouth	1011·7	+22	NW'N	5	z	46	75	6	2	–	–	4-6	4-6	2000	0	3
	The Lizard	1013·6	+20	NW	6	bc	47	75	8	8	–	–	4-6	4-6	2500	1	3
	Scilly (St. Mary's)	1014·9	+12	WNW	5	bc	47	65	8	8	4	4	4-6	4-6	1500	1	4
	Guernsey																
6	Pembroke	1010·4	+10	NW	6	bcq	46	75	7	2	–	–	4-6	4-6	2500	1	3
7	Holyhead	1008·3	+26	NW	7	bcq	46	85	8	8	4	–	2-3	2-3	2500	1	4
	Chester (Sealand)	1006·3	+28	WNW	5	phr	42	85	6	8	–	–	10	10	1000	1	*
8	Manchester	1005·3	+26	WNW	1	z	38	85	5	2	–	–	1	1	2500	1	*
10	Spurn Head	1001·1	+12	NW'W	6	PR	37	92	6	6	2	–	7-8	10	1500	0	4
	Catterick	1004·6	+28	NNW	3	bc	37	75	8	4	6	–	1	2-3	3500	1	
	Tynemouth	1003·3	+20	NW	4	bc	38	75	6	2	3	–	4-6	4-6	3400	1	2
11	St. Abbs Head	1008·6	+20	NW	4	bc	40	75	8	4	4	–	2-3	4-6	2500	0	3
	Leuchars	1004·9	+34	W	1	b	36	75	8	8	–	–	Tr	Tr	3500	3	*
12	Renfrew (Abbots I.)	1007·3	+22	WNW	2	bc	36	85	7	2	3	–	Tr	2-3	2600	1	*
	Eskdalemuir	1005·7	+30	N	4	b	35	75	8	–	4	–	0	1	–	4	*
	Point of Ayre	1006·7	+28	N	6	bc	44	85	8	2	–	–	2-3	2-3	2500	1	4
13A	Tiree	1009·0	+24	N'W	5	bc	44	75	8	8	–	–	4-6	4-6	1800	0	3
13B	Stornoway	1007·3	+22	NNW	3	c	40	85	8	8	–	3	4-6	7-8	1500	1	2
15	Dalwhinnie	*	+30	NNW	2	bc	34	85	8	2	–	–	2-3	2-3	1500	8	*
	Aberdeen	1003·9	+30	NNW	4	bc/pr	37	92	8	9	–	–	2-3	2-3	2500	1	2
	Wick	1003·6	+30	NW	3	bc/pr	38	85	8	8	7	1	2-3	4-6	1500	3	1
16	Lerwick	1004·8	+24	N'W	3	c	38	85	8	6	7	–	4-6	7-8	1500	1	*
17	Blacksod Point	1015·2	+18	NW'N	4	c	46	70	8	3	–	–	7-8	7-8	1500	0	2
18	Malin Head	1010·0	+38	N	6	bc	46	85	8	2	–	4	2-3	4-6	2500	1	5
	Aldergrove	1010·0	+16	WNW	3	bc	37	92	8	3	–	–	2-3	2-3	2000	2	*
19	Birr Castle	1014·2	+22	N	2	bc/pr	40	85	8	5	4	–	2-3	2-3	2500	1	*
20	Valentia Obsy. †	1018·2	+14	NNW	4	c	48	70	8	8	7	–	7-8	10	2500	1	2
	Roches Point	1015·8	+22	NW	3	bc	46	85	8	5	–	–	2-3	2-3	2500	1	3

PAST 24 HOURS.

District	Stations	Weather 7h.—13h. 11th (37)	13h.—18h. 11th (38)	18h. 11th to 1h. 12th (39)	1h.—7h. 12th (40)
1	London (Kew)	bcciror cmo	cmobcm	bcmobx	bmox
	Croydon	cmopro	cmbcm	bcc bmw	bxcm
	S. Farnborough	bccprq	cbcc	c,bbcb	bxmo
	Boscombe Down	bcqprbc	bcprbc	b	b
	Calshot (Soton.)	cb cc	ccrobc	probcb	bbw
	Lympne	bccpro	cprobm		bobcmo
	Manston	cpro moc	cb cbmo	bmobcmo	cmobcmo
2	Shoeburyness	cmoiro	cmzcb	bbwxb	bx
	Felixstowe	cpr pro	cmzbm	bmo	bcmobmo
	Gorleston	bcc bz	cpcc	cprobc	bcc
	Mildenhall	q prosomo	bcbbcmzm	bcmowxcmo	cbcbbcmox
	Cranwell	cmobczo	b cbzm	bmo,cmo,bmo	bmox
3	Birmingham	crbc	bccir	bcb	bmx
	Upper Heyford	bcpRq	cmzbccpr	bcb	bmox
4	Ross-on-Wye	pcrbcpo	bcb cb	bbcb	bx
5	Hartland Point	bcc	cro	cpobc	bc
	Bristol	bccproc	cbcprobc	cb,cbc	bx
	Portland Bill	cbc	bcbc	bc	bc
	Plymouth	bcc ph.pro	bc	cprm hbcpro	bw
	The Lizard	pr bcq	pr	prbc	bc
	Scilly (St. Mary's)	cbc	bc	bc	bcc
	Guernsey				
6	Pembroke	bcq	bcq	cbcq	
7	Holyhead	pro bcc	PH Rb	bbcb	bbc
	Chester (Sealand)	pr prhq	prhq	cprhb	bxb
8	Manchester	cmo probc	bcbczm	bmx mo	bmox m
10	Spurn Head	c	cqpr	c	cw
	Catterick	bccbc	bc	bcb	b
	Tynemouth	bc	bc	bcprtbc	bc
11	St. Abbs Head	bccbc	bc	bc	irobc
	Leuchars	bcx	bcxbx		bxbcx
12	Renfrew (Abbots I.)	bxbc	bbcmobbc	bcbx	bx
	Eskdalemuir	bbc	bcb	b	b
	Point of Ayre	cprc	bc	bbcbc	bcb
13A	Tiree	cph bc	bc	bc	bc
13B	Stornoway	cpr phr	cphrq	cprbc	bcb
15	Dalwhinnie	cps	cbc	*	cps
	Aberdeen	prso b	bcpro	PRbc	robmo
	Wick	bc	probc		cbcpr
16	Lerwick	eroro	cpro	cbc	cbcc
17	Blacksod Point	bc	bc	bc	c
18	Malin Head	cpr phrc	cprocphrc	bcphrcbo	cbccbc
	Aldergrove	pr	phr prob	bcpro bx	bbcbx
19	Birr Castle	bc	bcpr	b	bccx
20	Valentia Obsy. †	bcc prqbc	cproqc	cw	cwciroc
	Roches Point	rorbc	bc	bcw	bcwcw

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.*

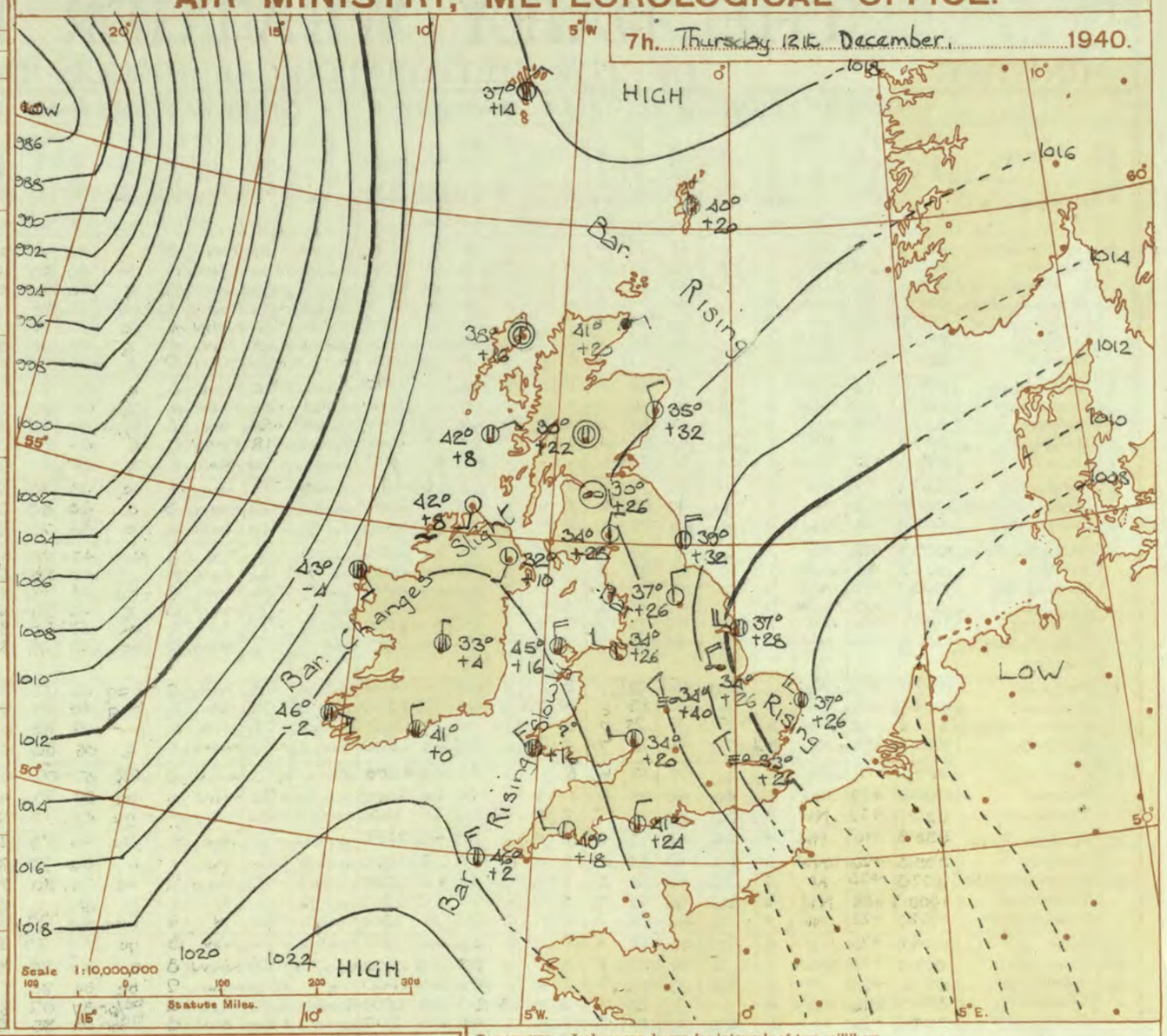
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 11th December			18h. G.M.T.			01h. G.M.T. 12th December			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	3-	01954	26384	80	22953	32263	53	00862	03283	50	00863	00013
115	87	81944	32485	87	81844	32385	87	01944	08385	51	01853	12384
203							2-	01944	32414			
206	86	01964	25214	44	00962	28213	50	01963	00013	30	00962	04202
210	84	02855	25485	80	00962	26382	83	25954	28185	40	00853	20183
220				83	01854	00014				24	01753	14113
230	86	25945	61586	86	26853	30384	40	01954	30214	00	00850	00002
245	84	00962	32513	30	00961	30101	86	81853	30424	84	00951	30281
260	53	01852	28114	40	05661	00011	04	05690	24101	00	05690	00000
277				30	27154	61684	80	00952	30302	40	00851	23281
279	83	01853	26215							50	01753	31203
285	20	01844	30414	50	01744	32514				20	01744	30514
288	34	05553	28344	20	08452	28312	20	05552	26212	4-	08455	26215
273												
301	8-	05643	30385	30	05644	30414	00	00790	31300	00	05550	32100
321	37	17552	26384	00	17490	26410	00	05590	26300	04	05550	28301
299	87	05644	26415	5-	66538	25468	5-	22644	53564	50	01744	26614
292	36	01853	25314	04	00790	25201	24	00861	28311	40	00862	28202
310	--	01634	26414	--	01635	26415				--	01633	24413
316	04	01690	30215	00	08490	28210	04	05590	28301	00	05550	26300
333	26	02845	61727	20	02855	63725	20	01854	04524	20	01855	26185
334	**	25655	30327							**	64556	00063
340	9-	25747	30287	30	25745	26385	00	05690	28300	50	00763	28213
136	36	05652	27564	8-	81665	28415	5-	05638	28488	50	01761	28401
336	62	82754	28486	44	02753	28514				10	01752	04412
350	87	00643	26483							04	05690	28301
368												
379	20	01744	26514	8-	25737	28387	00	05690	26400	00	05690	28300
390	5-	02657	28487	00	08490	28510	00	05590	27400	04	08490	26511
382	86	01844	28415	83	02754	28425	00	00830	27200	00	05630	28200
438	8-	02856	26516							50	01754	30214
430	9-	81846	61686	36	81545	63615	00	00790	30400	00	05690	28100
409	2-	02755	63725	20	01854	61614	20	01855	63615	13	02854	28216

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 12th December 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 12th December
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light or moderate northwest wind backing south. Fine at first. Rain spreading from west later. Local fog early part of night. Cold, becoming milder tomorrow.
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	Light south wind freshening later and veering southwest. Fair at first. Rain spreading from west later, with snow locally on high ground. Cold becoming milder.
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 south wind, strong to gale locally on coasts veering southwest and decreasing. Fair at first. Rain later with snow locally on high ground. Cold becoming milder.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Freshening south wind veering southwest. Rain at times. Becoming milder.

GENERAL INFERENCE.

A ridge of high pressure over Ireland is moving east. A deep depression southwest of Iceland will probably move east and an associated trough will cross the British Isles. Weather will be fair at first apart from local wintry showers near the east coast but rain will commence soon in Ireland and extend eastwards. There may be snow on high ground.

FURTHER OUTLOOK.

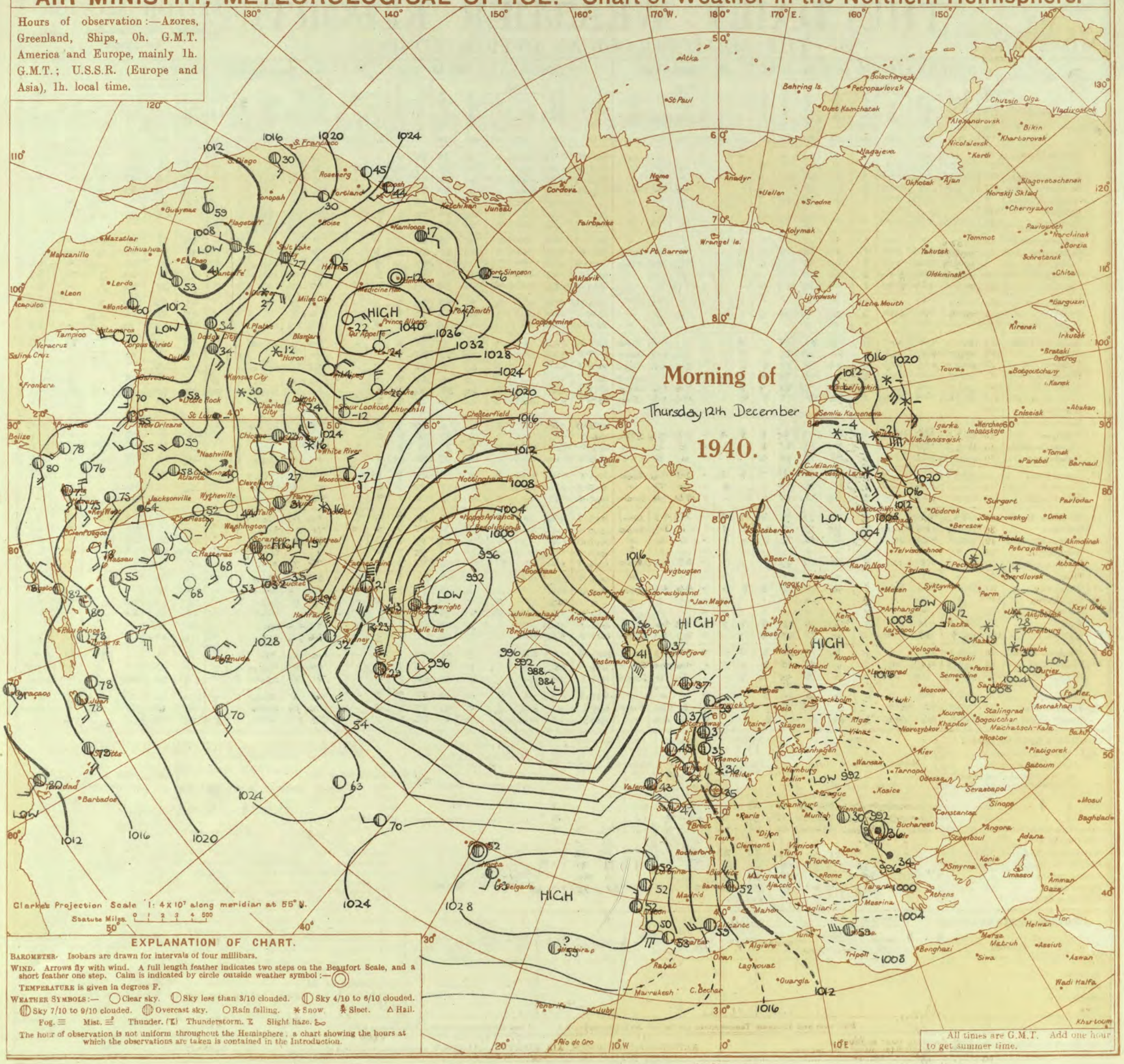
Unsettled and mild in the South.

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

Thursday 12th December 1940.

No. 28875.

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

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	1009·7	+22	NW	3	m	35	97	4	-	-	-	0	0	-
	S. Farnborough	226	1010·9	+26	WNW	2	b	36	85	8	-	4	-	0	Tr	-
	Boscombe Down	417	1011·4	0	NW'W	3	bc	37	85	7	5	-	-	2-3	2-3	2500
	Calshot (Sthmtn.)	8	1010·5	+18	NW	5	b	39	85	7	-	3	-	0	Tr	-
	Lympne ...	346														
	Manston ...	154	1007·3	+24	NW'N	4	zo	37	85	6	-	3	-	0	4-6	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1007·6	+24	NW	4	zo	36	85	6	5	-	-	9+	9+	1400
	Gorleston ...	5	1005·9	+20	NW	3	bc	38	92	6	8	-	-	4-6	4-6	1500
	Mildenhall ...	19	1008·3	+26	NW'W	3	zo	34	85	6	-	7	-	0	9+	-
	Cranwell ...	240	1009·5	+26	NNW	5	zo	35	85	6	-	4	1	0	1	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1010·6	+24	WNW	3	zo	35	92	6	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1014·6	+16	NW	5	bc	45	75	8	4	-	-	4-6	4-6	2500
	Bristol ...	209	1013·0	+18	NW	2	bc	39	85	9	5	-	-	2-3	2-3	4500
	Portland Bill ...	32	1012·0	+22	W	4	bc	44	85	8	2	-	-	4-6	4-6	4000
	Plymouth ...	82	1014·9	+12	NNW	3	b	43	85	8	2	-	-	1	1	2000
	The Lizard ...	240	1016·3	+10	NNW	5	bc	43	85	8	8	-	-	4-6	4-6	2000
	Scilly (St. Mary's)	163	1017·6	+14	NW'N	5	bc	47	75	5	8	-	-	4-6	4-6	1500
	Guernsey ...	175														
6	Pembroke ...	142														
7	Holyhead ...	26	1013·3	+22	NW'W	5	bc	44	85	8	2	4	-	2-3	4-6	2700
	Chester (Sealand)	16	1012·2	+20	NW'N	2	b	37	85	8	-	-	-	0	0	-
8	Manchester ...	70	1011·9	+26	NW	1	zo	33	85	6	-	-	-	0	0	-
10	Spurn Head ...	29	1007·8	+24	W'N	5	bc	36	97	7	8	6	-	2-3	4-6	4000
	Catterick ...	175	1010·7	+26	NW	2	b	36	75	7	-	4	-	0	Tr	-
	Tynemouth ...	108	1009·1	+22	NNW	4	bc	35	85	6	2	-	-	4-6	4-6	3000
11	St. Abbs Head	280	1009·3	+20	W	5	bc	39	85	8	9	4	-	2-3	4-6	2500
	Leuchars ...	36	1010·6	+24	WNW	3	bc	37	75	8	5	4	-	1	2-3	4000
12	Renfrew (Abbots I.)	19	1012·7	+20	WSW	1	b	35	92	8	-	-	-	0	0	-
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1012·4	+18	N	3	bc	43	97	8	1	-	-	2-3	2-3	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1013·2	+30	NNW	3	bc	37	97	8	8	-	-	4-6	4-6	1800
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1011·3	+34	W	3	bc/phr	36	92	8	8	7	8	2-3	4-6	1500
16	Lerwick ...	156	1012·4	+34	ENE	3	bc	39	65	8	5	-	-	2-3	2-3	2500
17	Blacksod Point	18	1017·7	+8	-	0	bc	41	85	8	2	-	5	2-3	2-3	2500
18	Malin Head ...	84	1014·4	+14	N	3	bc	45	85	8	2	-	-	4-6	9-6	5700
	Aldergrove ...	268	1014·9	+14	W'N	2	b	38	85	8	3	-	-	Tr	Tr	2500
19	Birr Castle ...	173	1017·7	+12	N	1	b	35	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1019·1	+2	NE'E	1	c	43	97	8	5	-	-	9	9	4000
	Roches Point	22	1018·6	+6	NNW	3	bc	41	92	8	-	-	5	0	4-6	-

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

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)	1015·0	+24	WNW	2	zo	34	85	5	-	-	1	0	1	-	1	*
	Croydon ...	1015·0	+26	NW	2	m	33	92	4	-	4	1	0	2-3	-	1	*
	S. Farnborough	1015·8	+30	NW'N	2	zo	33	92	6	-	-	-	0	0	-	3	*
	Boscombe Down	1016·3	+24	NNW	3	b	35	85	7	-	-	-	0	0	-	1	*
	Calshot (Sthmtn.)	1015·9	+30	NW	3	b	35	85	7	-	-	-	0	0	-	1	1
	Lympne ...	1013·5	+26	NW	4	zo	34	85	5	5	-	-	7-8	7-8	2500	1	§2
	Manston ...	1012·5	+26	NW	4	zo	35	97	6	5	-	-	7-8	7-8	2500		*
2	Shoeburyness ...	1013·4	+26	NNW	2	b	34	85	7	-	-	-	0	0	-	3	*
	Felixstowe ...	1011·9	+22	NW	4	zo	35	85	5	5	-	-	Tr	Tr	1500	1	2
	Gorleston ...	1011·4	+26	NW	3	c	37	97	6	8	-	-	9+	9+	1500	1	2
	Mildenhall ...	1013·2	+26	NW'W	3	zo	31	92	6	3	3	3	Tr	4-6	2000	1	*
	Cranwell ...	1014·2	+26	NW'N	4	zo	34	85	5	-	4	-	0	Tr	-	3	*
3	Birmingham ...	1016·6	+40	NW	2	m	34	92	4	-	-	-	0	0	-	1	*
	Upper Heyford	1015·5	+22	WNW	3	zo	32	92	6	-	-	-	0	0	-	3	*
4	Ross-on-Wye	1017·0	+20	W	1	b	34	85	8	5	-	-	2-3	2-3	2500	1	*
5	Hartland Point	1018·2	+22	N	4	bc	45	75	8	4	-	-	4-6	4-6	2500	1	3
	Bristol ...	1017·5	+22	NW	1	bjf	33	85	7	-	4	-	0	Tr	-	1	*
	Portland Bill ...	1016·4	+24	N	2	bc	41	92	8	5	-	-	2-3	2-3	4000	1	2
	Plymouth ...	1018·7	+18	W	2	b	*	85	8	-	-	*	0	1	-	1	2
	The Lizard ...	1019·3	+16	NNW	3	bc	39	92	8	8	-	-	4-6	4-6	2000	1	2
	Scilly (St. Mary's)	1019·1	+2	NW'N	3	bc	46	75	8	8	4	9	4-6	4-6	1500	1	3
	Guernsey ...																
6	Pembroke ...	1018·0	+16	NW	3	c	*	85	8	8	-	-	7-8	7-8	2500	1	2
7	Holyhead ...	1016·3	+16	NNW	4	c	45	85	8	2	-	5	4-6	7-8	2700	1	3
	Chester (Sealand)	1016·8	+26	W'N	2	b	34	92	8	-	3	-	0	Tr	-	1	*
8	Manchester ...	1016·1	+22	W'N	1	m	27	85	4	5	-	-	1	1	3200	3	*
10	Spurn Head ...	1011·1	+28	W'N	4	c	37	85	7	8	-	-	7-8	7-8	2500	0	3
	Catterick ...	1015·4	+26	NNW	2	b	37	85	7	5	-	-	Tr	Tr	3500	0	*
	Tynemouth ...	1014·4	+32	N	4	bc	39	85	7	8	-	-	4-6	4-6	3000	5	2
11	St. Abbs Head	1014·9	+28	W	4	c	42	75	8	4	4	-	4-6	7-8	2500	0	3
	Leuchars ...	1015·2	+18	NW	2	bc	35	85	7	5	4	-	Tr	2-3	4000	3	*
12	Renfrew (Abbots I.)	1017·0	+26	-	0	zo	30	97	5	5	-	-	Tr	Tr	4000	3	*
	Eskdalemuir ...	1016·4	+28	N'E	2	b	34	85	7	5	-	-	1	1	2500	4	*
	Point of Ayre ...	1016·7	+20	N	4	b	43	92	8	2	-	-	Tr	Tr	2500	1	2
13A	Tiree ...	1016·0	+8	NE	1	bc	42	85	8	1	4	-	2-3	2-3	2800	0	2
13B	Stornoway ...	1016·5	+16	-	0	b	38	92	8	5	-	-	Tr	Tr	3000	1	1
15	Dalwhinnie ...	*	+22	-	0	c	30	92	7	5	-	-	9	9	1500	8	*
	Aberdeen ...	1016·9	+32	NW'N	2	b	35	97	6	8	-	-	1	1	2500	3	2
	Wick ...	1016·7	+20	NE	2	pr	41	85	7	8	7	-	4-6	4-6	1500	1	2
16	Lerwick ...	1017·0	+20	NNW	1	c	40	65	8	8	7	-	4-6	7-8	1500	1	*
17	Blacksod Point	1016·8	-4	SE	2	c	43	92	8	5	-	-	10	10	800	0	2
18	Malin Head ...	1016·4	+8	S	1	bc	42	75	7	8	-	-	4-6	4-6	4000	1	4
	Aldergrove ...	1017·3	+10	SSW	1	b	32	97	8	4	-	-	Tr	Tr	2500	5	*
19	Birr Castle ...	1018·8	+4	N	1	o	33	97	7	5	-	-	10	10	2500	1	*
20	Valentia Obsy.	1018·1	-2	ESE	3	c	46	85	8	5	-	-	10	10	4000	1	2
	Roches Point	1019·5	0	NNW	2	c	41	92	8	5	-	-	7-8	7-8	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 Hrs. (36)
1	London (Kew)	43	33	21	Tr	Tr	0·6
	Croydon ...	42	33	30	0·2	-	1·1
	S. Farnborough	44	33	27	0·3	-	2·0
	Boscombe Down	44	32	29	Tr	-	3·9
	Calshot (Sthmtn.)	45	34	30	Tr	Tr	4·1
	Lympne ...		33	29	0·4	-	2·1
	Manston ...						
2	Shoeburyness ...	42	33	26	0·4	-	1·1
	Felixstowe ...	40	35	31	2	-	1·0
	Gorleston ...	42	36	32	0·4	6	2·6
	Mildenhall ...	40	31	22	3	Tr	2·3
	Cranwell ...	41	33	30	3	-	3·0
3	Birmingham ...	41	32	25	8	-	1·7
	Upper Heyford	42	32	26	0·6	-	*
4	Ross-on-Wye	45	34	26	0·6	-	3·8
5	Hartland Point	47	41	40	Tr	Tr	1·3
	Bristol ...	45	33	19	Tr	-	*
	Portland Bill ...	46	39	*	0·4	-	*
	Plymouth ...			34	1	0·2	4·3
	The Lizard ...	48	37	*	0·2	0·5	4·1
	Scilly (St. Mary's)	49	45	*	-	-	4·8
	Guernsey ...						
6	Pembroke ...			*	-	-	3·8
7	Holyhead ...	46	41	38		-	1·1
	Chester (Sealand)	43	32	25	3	1	2·3
8	Manchester ...	42	26	17	0·5	-	3·3
10	Spurn Head ...	40	36	*	1	2	5·3
	Catterick ...	40	35	30	-	-	6·1
	Tynemouth ...	40	35	31	-	2	*
11	St. Abbs Head	42	39	*	-	Tr	*
	Leuchars ...		32	29	-	-	5·5
12	Renfrew (Abbots I.)	43	29	21	Tr	-	4·1
	Eskdalemuir ...	37	30	29	-	-	4·6
	Point of Ayre ...	45	42	*	0·2	-	0·9
13A	Tiree ...	45	41	*	2	-	1·3
13B	Stornoway ...	41	35	*	2	1	0·6
15	Dalwhinnie ...	35	28	25	0·3	0·2	0·6
	Aberdeen ...	39	33	29	0·1	5	4·0
	Wick ...	40	33	*	Tr	2	*
16	Lerwick ...	42	38	*	0·5	-	0·0
17	Blacksod Point	48	40	*	Tr	Tr	*
18	Malin Head ...	47	38	*	3	0·2	0·8
	Aldergrove ...	42	31	26	2	0·1	1·0
19	Birr Castle ...	47	30	25	1	-	4·4
20	Valentia Obsy.	50	42	37	0·4	Tr	0·0
	Roches Point	49	40	*	0·5	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. (To-day.)
KEW ...	18	bccirscm	cmobcmo	bcmobx	43	33	21	Tr	Tr	0·6	*	*	4
CROYDON ...	217	cmopr	cmobcm	bcexcm	42	33	30	0·2	-	1·1	*	*	4
GREENWICH (Royal Observatory) ...	149	cmo	cbcbmo	bebxm	42	34	26	-	Tr	0·7	73	75	4
CITY (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*	43	33	28	Tr	*		70	92	*
REGENTS PK. (Botanic Gardens)† ...	168	*	*	*	42	33	25	Tr	-		73	85	*
CAMDEN SQUARE ...	110	bc	bc	*	42	34	29	-	-	*	*	81	*
KENSINGTON ...	80	bc	bcp	*	43	34	29	Tr	0·1		87	85	*
HAMPSTEAD OBSERVATORY ...	450										*		*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

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

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.	Statufe 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

Friday 13th December 1940.

No. 28876

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

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)	1018.5	+10	NNW	3	z_o	41	75	6	-	-	-	0	0	-
	Croydon	1017.9	+10	WNW	2	z_o	40	75	5	5	-	-	1	1	300
	S. Farnborough	1019.2	+14	NW	3	z_o	42	65	6	2	-	-	Tr	Tr	2500
	Boscombe Down	1019.7	+10	NW'N	3	z	42	75	6	-	-	1	0	2-3	-
	Calshot (Soton.)	1018.8	+8	NW'N	4	b	44	65	7	1	-	1	Tr	1	3500
	Lympne	1017.7	+18	NW	2	z_o	38	89	5	-	4	-	0	Tr	-
	Manston	1016.6	-12	NNW	4	z_o	39	85	6	-	4	-	0	1	-
2	Shoeburyness	1017.1	+10	NW'N	3	bc	40	85	6	-	3	-	0	2-3	-
	Felixstowe	1016.8	+18	NNW	4	c/pr	37	85	6	5	-	-	7-8	7-8	3000
	Gorleston	1017.0	+26	NE	2	bc/pr	41	92	7	8	-	-	2-3	2-3	2500
	Mildenhall	1017.3	+22	N'W	2	z_o	36	92	5	4	6	-	2-3	2-3	3000
	Cranwell	1019.3	+28	N	3	z_o	39	86	5	8	-	-	4-6	4-6	2500
3	Birmingham	1019.9	+10	NNW	2	z_o	39	79	5	-	-	-	0	0	-
	Upper Heyford	1018.9	+10	NW	3	b	40	88	5	-	-	-	0	0	-
4	Ross-on-Wye	1019.8	+8	NNW	2	b	43	75	8	7	-	1	1	1	2500
5	Hartland Point	1020.5	+8	N	2	c	46	75	8	2	7	-	2-3	9	2500
	Bristol	1020.4	+10	NW	1	b	42	85	6	1	-	1	Tr	1	2800
	Portland Bill	1019.7	+12	NW	2	bc	46	85	8	1	4	-	4-6	4-6	4000
	Plymouth	1021.0	+6	NNW	1	z_o	44	89	5	-	7	-	0	10	-
	The Lizard	1021.1	+4	N	2	c	47	75	8	8	2	-	7-8	10	4000
	Scilly (St. Mary's)	1021.0	+2	-	0	c	48	75	8	5	7	-	4-6	10	2200
	Guernsey														
6	Pembroke	1020.7	+4	N'W	1	c	46	85	8	8	6	-	7-8	9+	5000
7	Holyhead	1019.6	+10	-	0	bc	47	85	8	5	3	9	2-3	4-6	5100
	Chester (Sealand)	1020.1	+12	NW'W	1	z_o	41	75	5	-	-	6	0	4-6	-
8	Manchester	1020.3	+12	SE	2	bF+	33	85	1	-	-	-	0	0	-
10	Spurn Head	1018.5	+24	NNE	3	bc	45	75	7	8	6	-	2-3	4-6	4000
	Catterick	1020.4	+20	-	0	z_o	40	85	6	8	-	-	2-3	2-3	3500
	Tynemouth	1020.5	+20	WSW	2	m	41	85	4	2	3	-	4-6	4-6	3200
11	St. Abbs Head	1020.4	+20	NW	2	c	41	92	8	4	4	1	4-6	7-8	2500
	Leuchars	1020.5	+16	WNW	1	z_o	39	79	5	8	-	-	4-6	4-6	3000
12	Renfrew (Abbots I.)	1020.7	+10	E	1	bcf+	29	97	2	-	3	-	0	2-3	-
	Eskdalemuir	1020.3	+20	E	3	b	37	85	8	-	7	-	0	1	-
	Point of Ayre	1020.2	+8	SE	2	b	45	85	8	-	4	5	0	1	-
13A	Tiree	1017.5	+2	SSE	4	bc	43	85	9	7	3	2	2-3	4-6	3000
13B	Stornoway	1018.2	+4	SW'W	4	bc	44	55	8	7	5	3	1	4-6	3500
15	Dalwhinnie	1020.0	+14	S	2	c	31	85	8	8	-	-	7-8	7-8	1500
	Aberdeen	1021.3	+16	NW	1	bcf	35	97	3	8	-	-	4-6	4-6	2500
	Wick	1019.9	+14	WSW	2	bc	36	92	8	4	6	-	2-3	2-3	2500
16	Lerwick	1020.6	+16	S'W	2	bc	42	75	8	5	3	-	4-6	4-6	1500
17	Blacksod Point	1015.4	-8	SE	3	$r_o r_o$	43	92	7	6	-	-	10	10	<150
18	Malin Head	1017.5	+6	SE'S	2	c	42	85	8	5	7	-	4-6	7-8	4000
	Aldergrove	1019.4	+6	-	0	c	37	92	7	5	7	2	2-3	9+	4500
19	Birr Castle	1018.7	-2	S	1	c	40	85	7	5	-	-	10	10	2500
20	Valentia Obsy. †	1015.9	-14	SE'S	5	$r_o r_o$	47	92	8	6	2	-	7-8	10	2500
	Roches Point	1019.3	-6	SSE	3	c	47	78	8	6	1	-	4-6	9	1500

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

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)	1022.1	+26	N	1	bf+	36	92	3	-	-	-	0	0	-	1	*
Croydon	1021.3	+22	N'W	1	bf+	38	85	3	-	-	-	0	0	-	1	*
S. Farnborough	1022.0	+26	N'E	2	z_o	39	85	5	-	7	-	0	7-8	-	1	*
Boscombe Down	1022.2	+24	NNW	1	cjf	36	85	6	5	-	-	9+	9+	4000	1	*
Calshot (Soton.)	1020.8	+22	NW	1	z_o	36	85	6	5	-	-	10	10	1600	1	1
Lympne	1021.1	+32	NNW	2	m	33	97	4	5	-	-	1	1	700	1	§
Manston	1020.2	+14	N	2	m	36	97	4	5	-	-	4-6	4-6	2000		*
Shoeburyness	1021.2	+26	NW	3	m	33	97	4	-	-	-	0	0	-	3	*
Felixstowe	1021.0	+30	NNE	3	z_o	37	92	5	-	-	-	0	0	-	1	2
Gorleston	1021.2	+20	NE	3	c	42	85	7	5	-	-	7-8	7-8	2500	1	2
Mildenhall	1021.7	+26	N	2	m	32	97	4	-	6	-	0	Tr	-	3	*
Cranwell	1022.8	+26	NE	2	m	37	85	4	5	-	-	1	1	2500	1	*
Birmingham	1022.3	+20	NNE	1	bF+	37	85	1	-	-	-	0	0	-	1	*
Upper Heyford	1022.1	+24	-	0	m	35	92	4	-	-	-	0	0	-	1	*
Ross-on-Wye	1022.2	+14	-	0	fg	37	85	5	5	-	-	9+	9+	2500	1	*
Hartland Point	1021.2	+6	SE	2	c	44	75	8	-	1	-	9	9	4000	1	1
Bristol	1022.9	+18	-	0	bf+	35	92	3	-	-	-	0	0	-	1	*
Portland Bill	1021.5	+12	N	2	b	40	85	8	-	-	-	0	0	-	1	2
Plymouth	1022.1	+8	-	0	cf+	43	80	2	-	7	-	0	10	200	0	0
The Lizard	1021.2	0	SE	3	o	46	75	8	5	-	-	10	10	2000	1	2
Scilly (St. Mary's)	1020.7	+4	SSE	3	ir_o	46	85	7	5	2	-	4-6	10	1500	1	2
Guernsey																
Pembroke	1020.5	+2	SE	2	c	47	75	8	5	-	-	9+	9+	4000	1	2
Holyhead	1020.6	+10	SE'E	3	c	41	92	7	5	5	-	2-3	9	1700	1	1
Chester (Sealand)	1022.6	+18	-	0	bf	32	92	3	-	-	-	0	0	-	1	*
Manchester	1022.8	+18	E	1	F+	28	97	0	-	-	-	10	10	<150	3	*
Spurn Head	1022.6	+20	NE	3	bc	41	75	7	-	4	-	0	2-3	-	0	3
Catterick	1023.6	+20	-	0	bf+	31	97	3	-	-	-	0	0	.	3	
Tynemouth	1023.2	+12	SW	1	bcf+	39	85	2	2	-	-	4-6	4-6	3400	1	2
St. Abbs Head	1022.2	+10	S	1	bc	36	97	8	4	-	-	2-3	2-3	2500	0	2
Leuchars	1022.4	+8	-	0	z_o	32	85	5	-	-	-	0	0	-	3	*
Renfrew (Abbots I.)	1021.8	+6	-	0	bf	27	97	2	-	-	-	0	0	.	3	*
Eskdalemuir	1023.1	+12	-	0	c	28	87	7	5	-	-	7-8	7-8	2500	4	*
Point of Ayre	1021.0	+4	S'E	4	b	42	97	8	-	4	1	0	1	-	1	3
Tiree	1017.0	+2	SE	5	c	44	85	8	5	3	-	7-8	9	2100	0	4
Stornoway	1017.9	-2	S	5	c	43	75	7	5	7	-	4-6	9+	2500	1	3
Dalwhinnie	1021.6	+6	SE	4	b	34	85	8	8	-	-	2-3	2-3	800	8	*
Aberdeen	1022.4	+12	NW'W	1	bcf	31	97	3	2	-	-	2-3	2-3	2500	5	2
Wick	1020.2	+4	SSW	4	b	42	85	8	7	-	-	1	1	1500	1	2
Lerwick	1021.9	+4	S	1	c	41	85	6	5	3	-	4-6	9	800	1	*
Blacksod Point	1012.7	-10	SE	5	$r_o r_o$	43	97	7	6	-	-	10	10	<150	1	3
Malin Head	1016.9	0	S'E	2	c	42	85	8	8	-	-	7-8	7-8	4000	0	3
Aldergrove	1018.7	+4	SE'S	3	z_o	41	85	6	5	7	-	1	9+	3500	1	*
Birr Castle	1017.5	-6	S	2	ir_o	41	85	7	5	-	-	10	10	2500	1	4
Valentia Obsy. †	1013.8	-6	SE	5	e/r	52	97	8	5	-	-	9+	9+	1500	1	3
Roches Point	1017.9	-6	S'E	5	rr	47	92	7	6	2	-	7-8	10	800	1	4

PAST 24 HOURS.

Stations	Weather 7h.—13h. 12th (37)	Weather 13h.—18h. 12th (38)	Weather 18h. 12th to 1h. 13th (39)	Weather 1h.—7h. 13th (40)
London (Kew)	$bmxz_o$	$cmz_o bf$	bffx	oFFx
Croydon	bm	bcm bf	bfoFFx	bFx
S. Farnborough	bmz_o	bzcm	cbxF	FFxo
Boscombe Down	bbz_o	$bzbcz_o$	bjfbf	bFx
Calshot (Soton.)	bxmb	bbmcfg	cbwmxmo	bcmobmfx
Lympne	bcmxbm	bcmbm	bbcmx	$bcbm_ox$
Manston	-	bcmm	cpr_om_o	bm_ofg
Shoeburyness	bcmbm	bmbmx	bmxbc	cbxFx
Felixstowe	bmcpcm	bmw	$bmwbcpr_o$	bm_oxcpr_o
Gorleston	$cbcpr_o$	bcc	cbc	c
Mildenhall	bcmxcm	bcm bm	bmx	bmxbcbmx
Cranwell	cpgbcm	bcm bm	bm mox	bmox
Birmingham	bmz	bzf	bF	bFfF
Upper Heyford	bmz_o	$bzbcz_om$	bmfFx	$bFbm_oF$
Ross-on-Wye	bccbbcb	bbcc	cmbfx	bfxc
Hartland Point	bcc	c	c	c
Bristol	bx,cm	bccbmmf	c	cxmf
Portland Bill	bcbc	bcb	c	c
Plymouth	obccfgcm	cmcmcf	$cfem_o$	cm_o, ir_oc
The Lizard	bcc	co	c	cpr
Scilly (St. Mary's)	c	cir_o	$ir_o r_or_o$	crrid
Guernsey				
Pembroke	cbcc	c	c	
Holyhead	crbc	cmbc	bcm_oc	cm_oc
Chester (Sealand)	bxmbc	bcbzm	bffxb	FF
Manchester	f	oxFF	pFFxbFf	bfmxfbcf
Spurn Head	cbc	bc	c	bcc
Catterick	cprbm	fgmxbf	bx	bfxFx
Tynemouth	bcm	bcm ff	bccef	bbcff
St. Abbs Head	bcc	cbc	bmo	bc
Leuchars	bcxmbcm	$bcbm_o$	bmxbmox	bmobcxcx
Renfrew (Abbots I.)	bxmff	f	bxfFff	cmffx
Eskdalemuir	b	bbccx	cbcbx	bxbcx
Point of Ayre	bcb	bcb	c	c
Tiree	bc	bc	c	c
Stornoway	bbc	bcc	c	cpr gale
Dalwhinnie	bcc	cbc	*	bcc
Aberdeen	bbcff	bbcff	bcfb	bcz_o
Wick	pcbc	bcb	bbc	cqbc
Lerwick	cbc	$bccm_o$	cpr	cpr
Blacksod Point	rr	rr	c	ir
Malin Head	c	c	$ccpr_oc$	$ccpr_oc$
Aldergrove	bxcx	$cxccm_o$	$cm_od_od_oc$	$ccd_od_om_o$
Birr Castle	c	cir_o	cir_oc	cir_o
Valentia Obsy. †	$cd_od_ocr_oc$	ccrrirdir	$circid_oc$	$d_od_oir_om_ocid$
Roches Point	c	rr	rdo	drdd

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.

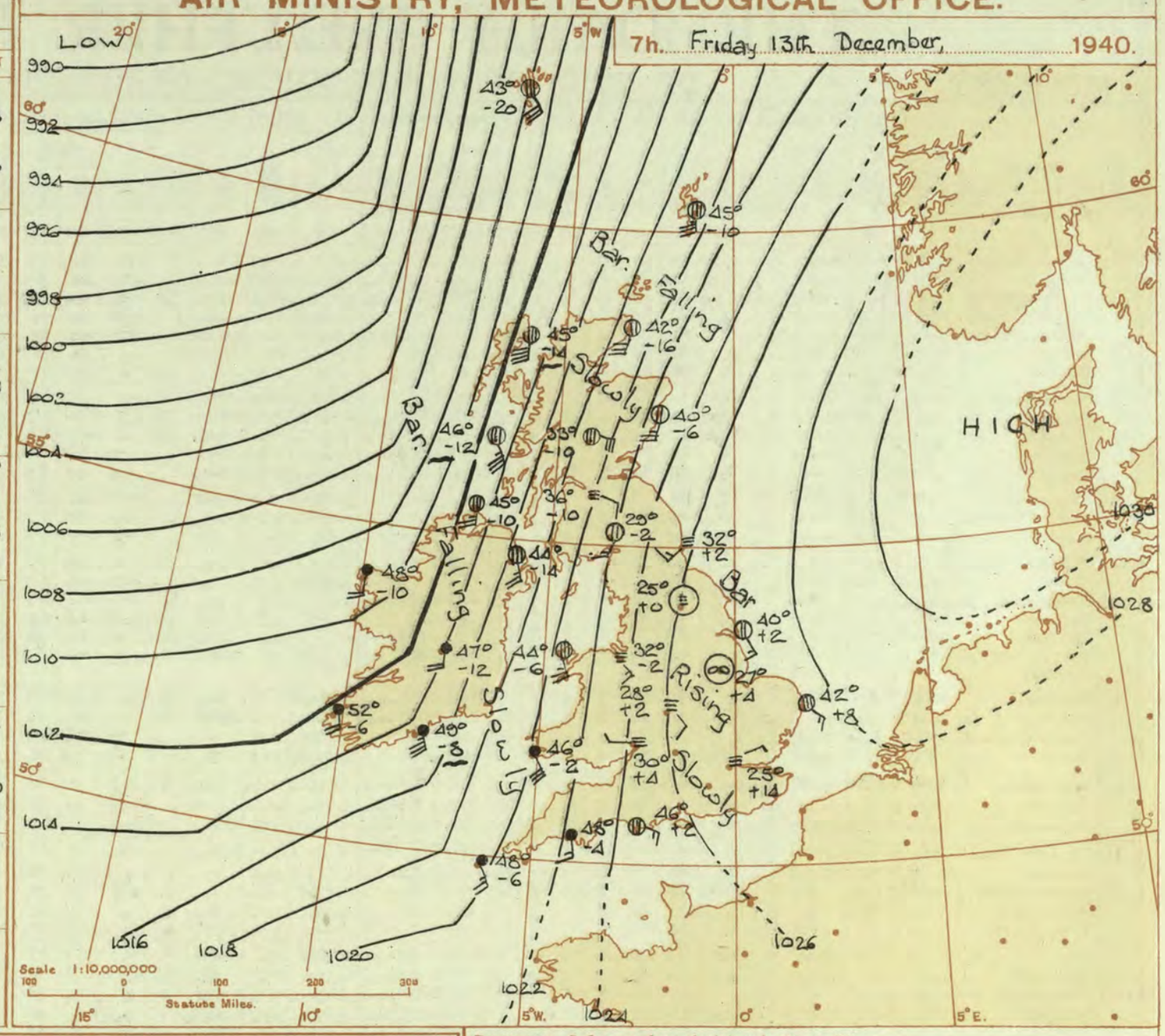
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 12th December			18h. G.M.T.			01h. G.M.T. 13th December			07h. G.M.T.		
III	$C_L C_M$	wwVhNh	DDFWN	$C_L C_M$	wwVhNh	DDFWN	$C_L C_M$	wwVhNh	DDFWN	$C_L C_M$	wwVhNh	DDFWN
109	8-	05663	12143	00	00690	16300	50	01751	17514	5-	01764	51615
115	73	01953	16314	51	01954	16315	53	02854	16326	52	03855	16328
203										8-	02838	16628
206	03	01890	00014	00	00790	00013	00	05690	00015	87	02855	00026
210	50	00562	12112	00	00790	12100	00	01890	16315	07	02890	17425
220				52	03745	16525				62	58536	18758
230	04	00900	12103	04	05690	12102	07	05690	14227	5-	05658	14428
245	8-	02857	28187	53	47361	24284	00	05590	18342	53	02751	17617
260	04	05590	00012	00	45390	00040	00	05690	12143			
277				17	01761	10313	57	05665	12628	5-	05668	13628
279	00	05590	00002	00	08490	08100	00	43390	04340	03	01790	14314
285	20	01744	06414	20	01655	08315				50	01745	04303
288	20	05553	12183	00	45390	20110	04	47190	00041	00	47190	00040
273	53	02653	1421									
301	00	05590	32140	00	45390	12140	00	45390	08140	03	08490	10344
321	80	05653	30213	04	47390	30101	51	43141	00044	--	46009	00049
299	80	01743	08283	57	01744	10215	50	00752	10202	5-	05648	20228
292	80	05652	26312	00	47390	00040	00	45190	00040	--	46109	00049
310	--	04533	26413	--	08434	32414				--	01533	26413
316	50	05461	28211	00	47290	01240	00	08490	00040	00	45390	32140
333	47	01951	00014				07	05690	14627	52	05654	44628
334	34	08154	00014							--	03655	16628
340	00	05690	30202	00	47390	00040	00	47190	14340	--	48309	14449
136	86	10645	30286	40	01761	04201	00	00790	06100	06	01790	10214
336	54	01752	08414	54	01753	32414				51	03754	32418
350	50	05564	26314							00	43390	24140
368	86	05652	25213									
379	05	05690	26303	00	00890	32100	00	47090	08140	--	46109	12249
390	00	05590	28400	00	47390	28340	00	43390	00040	00	47290	00040
382	04	01790	30302	00	08490	00000	00	47190	00040	--	46009	00049
438	00	00790	30100							50	01654	12114
430	10	00852	28202	50	05566	00016	00	47290	00040	03	43390	02142
409	47	02861	32128	5-	05668	16128	52	61751	11368	5-	02668	11668

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, Nh = 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 13th December
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light or moderate southeast wind. Fair. Fog persisting locally. Rather cold. Frost at night.
4 W. Midlands ...	Light or moderate south wind. Fair at first. Slight rain later. Rather cold becoming slowly milder.
5 S.W. England 6 South Wales ... 7 North Wales ... ▼ 8 N.W. England ▼	Moderate southeast to south wind strong locally on coasts. Cloudy. Occasional rain; rather cold, becoming slowly milder.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Moderate south wind, fresh or strong on coasts. Fair at first, light rain later. Rather cold becoming slowly milder.
12 S.W. Scotland & Isle of Man. ▼ 13 A. W. Scotld. B.N.W.Scotland. ▼ 14 Mid Scotland	Moderate south wind fresh or strong on coasts, gale locally, cloudy, occasional rain; milder.
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	Moderate south to southwest winds fresh on coasts. Occasional rain. Mild.

GENERAL INFERENCE.

An anticyclone centred about Southern Scandinavia is moving slowly southeast. A depression over Iceland is moving northeast and an associated trough extending from Ireland to the Bay of Biscay is moving slowly east. Weather will be fair in the East apart from fog but there will be occasional rain in the North and West.

FURTHER OUTLOOK.

Unsettled in the North and West. Fair at first in the Southeast and less cold.

▼ Gale warning in operation in districts 7, 8, 12, 13, 15, 16 17 and 18. Times of issue 11.40 12.12.40 and 0800.13.12.40

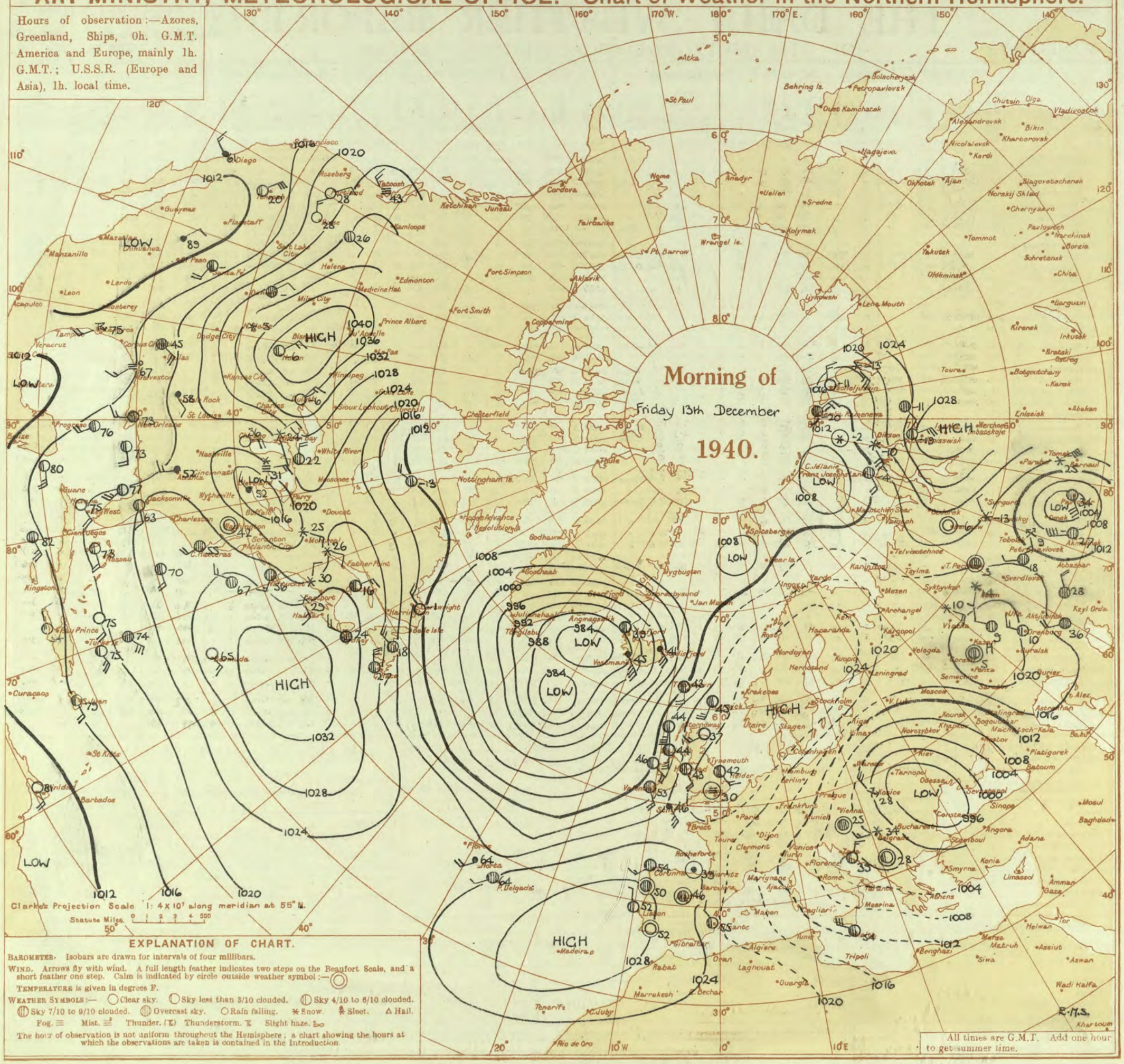
Forecasts issued at 10.30 G.M.T.

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

Friday 13th December 1940.

No. 288.76

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

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	1024·9	+8	-	0	bF	30	97	0	-	-	-	0	0	-
	S. Farnborough	226	1025·8	+10	NNW	1	F+	28	97	0	-	-	-	10	10	4150
	Boscombe Down	417	1029·9	+10	E'N	2	bf	33	97	3	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1024·6	+10	ENE	1	Zo	35	92	5	-	3	-	0	4-6	-
	Lympne ...	346	1025·3	+12	N	1	Zo	32	97	5	-	7	-	0	7-8	-
	Manston ...	154	1025·0	+16	-	0	pr	39	92	6	8	-	-	9	9	1800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1024·5	+8	NE'N	2	c/pr	36	92	8	8	-	-	7-8	7-8	3500
	Gorleston ...	5	1025·0	+12	ENE	2	bc	42	85	7	5	-	-	4-6	4-6	2500
	Mildenhall ...	19	1025·6	+12	-	0	m	27	97	4	-	-	-	0	0	-
	Cranwell ...	240	1026·0	+10	-	0	Zo	29	97	5	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1025·2	+6	-	0	df	31	97	1	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1022·0	+2	ESE	4	c	41	85	7	5	2	-	9+	10	2500
	Bristol ...	209	1025·1	+6	-	0	m	30	97	4	-	3	-	0	9+	-
	Portland Bill ...	32	1023·9	+10	N	3	c	42	92	7	5	-	-	10	10	4000
	Plymouth ...	82	1023·3	+2	ESE	3	c	43	85	6	5	2	-	1	10	4000
	The Lizard ...	240	1021·9	0	SSE	4	c	47	75	8	5	2	-	9	10	2500
	Scilly (St.Mary's)	163	1019·8	-6	SE'S	5	ro	46	97	6	6	2	-	7-8	10	800
	Guernsey ...	175														
6	Pembroke ...	142	1021·3	-2	SE	6	c	45	85	7	5	2	-	4-6	10	2500
7	Holyhead ...	26	1021·6	+2	SE'S	4	c	43	85	6	5	7	-	2-3	10	5700
	Chester (Sealand)	16	1024·3	+4	SE	4	bf	31	92	3	-	-	-	0	0	-
8	Manchester ...	70	1025·1	+6	E'S	3	bf	32	92	3	-	-	-	0	0	-
10	Spurn Head ...	29	1025·3	+16	ESE	3	c	42	75	7	2	-	-	7-8	7-8	4000
	Catterick ...	175	1026·5	+14	-	0	f-	25	97	3	-	-	-	0	0	-
	Tynemouth ...	108	1025·4	+6	SSW	2	f	37	85	3	8	-	-	7-8	7-8	3200
11	St. Abbs Head	280	1023·7	+6	SW	3	Zo	35	92	6	-	-	-	0	0	-
	Leuchars ...	36	1024·1	+6	-	0	Zo	32	92	5	-	-	6	0	2-3	-
12	Renfrew (Abbots I.)	19	1023·0	+2	ENE	2	f-	33	92	3	-	3	-	0	4-6	-
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1022·0	+6	S'E	6	c	43	97	5	5	-	-	9+	9+	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1016·5	-12	S	7	c	44	75	8	5	7	-	9	10	3000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1020·5	0	SW	5	bc	42	75	7	5	1	-	4-6	4-6	1500
16	Lerwick ...	156	1021·5	-4	S'W	5	c	45	75	8	5	7	-	4-6	9	1500
17	Blacksod Point	18	1011·8	0	SE	4	c	46	92	8	5	-	-	10	10	800
18	Malin Head ...	84	1014·4	-14	S	5	c	44	85	7	5	1	-	4-6	9	4000
	Aldergrove ...	268	1019·4	-6	SE'S	4	c	43	85	7	5	7	-	2-3	10	2500
19	Birr Castle ...	173	1015·7	-10	S	4	c	45	85	8	5	-	-	9	9	2500
20	Valentia Obsy.	30	1013·0	-4	SE	4	c/d	53	92	8	5	-	-	9+	9+	1500
	Roches Point	22	1016·3	-8	SSE	6	dd	47	97	5	5	-	-	10	10	450

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

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)	1027·1	+14	-	0	F	32	97	1	-	-	-	10	10	4150	3	*
Croydon ...	1027·1	+14	NE	1	f-	25	97	3	-	-	-	0	0	-	1	*
S. Farnborough	1026·9	+10	E'S	1	f-	31	97	1	-	-	-	10	10	4150	3	*
Boscombe Down	1026·0	+2	E'S	2	F	29	97	1	-	-	-	10	10	4150	3	*
Calshot (Sthmtn.)	1025·7	+6	NE	1	bf+	31	97	2	-	-	-	0	0	-	1	0
Lympne ...	1027·3	+10	E	2	Zo	35	97	6	5	-	-	7-8	7-8	500	3	§
Manston ...	1027·6	+12	SE	2	fg	35	97	5	5	-	-	1	1	800		*
Shoeburyness ...	1027·4	+12	SE	2	F+	26	*	0	-	-	-	10	10	4150	3	*
Felixstowe ...	1027·2	+10	SE'S	1	Zo	37	92	6	4	-	-	9+	9+	3500	6	0
Gorleston ...	1027·3	+8	SE	3	c	42	85	6	5	-	-	9+	9+	2200	1	2
Mildenhall ...	1027·1	+8	SSE	2	m	25	97	4	-	7	-	0	1	-	3	*
Cranwell ...	1027·0	+4	-	0	Zo	27	97	5	-	4	-	0	Tr	-	3	*
Birmingham ...	1026·1	+2	SE	2	f-	28	97	2	-	-	-	0	0	-	1	*
Upper Heyford	1026·7	+8	-	0	F	24	97	1	-	-	-	10	10	4150	3	*
Ross-on-Wye	1025·4	+4	W	1	cf	30	92	2	5	-	-	9+	9+	1500	3	*
Hartland Point	1021·2	-6	SE	4	c	43	85	7	5	2	-	7-8	10	2500	1	2
Bristol ...	1025·4	+2	ESE	3	cf+	32	97	3	5	-	-	10	10	5500	3	*
Portland Bill ...	1024·3	+2	ESE	3	c	46	92	7	5	-	-	10	10	2500	1	3
Plymouth ...	1022·9	-4	S'E	3	ir	48	75	8	5	7	-	2-3	10	2500	0	2
The Lizard ...	1021·1	-4	SE	5	PR	47	92	7	8	2	-	9	10	2000	1	3
Scilly (St.Mary's)	1018·6	-6	SE'S	5	id	48	97	5	5	-	-	10	10	800	1	3
Guernsey ...																
Pembroke ...	1020·3	-4	SE'S	6	pr	46	85	7	8	2	-	7-8	10	2500	1	3
Holyhead ...	1020·8	-6	SSE	5	c	44	85	6	5	-	-	10	10	2200	1	2
Chester (Sealand)	1024·5	-2	SE'S	2	f-	32	92	3	-	-	-	10	10	4150	3	*
Manchester ...	1025·2	-2	ESE	2	bcf+	27	92	3	-	3	-	0	4-6	-	3	*
Spurn Head ...	1026·7	+2	SE'S	3	c	40	85	7	8	4	-	4-6	4-6	4000	1	2
Catterick ...	1026·6	0	-	0	F	25	97	0	-	-	-	0	0	-	3	*
Tynemouth ...	1025·8	+2	SW	3	bcf	32	92	3	8	-	-	2-3	2-3	2800	3	2
St. Abbs Head	1022·8	-4	S	4	bc	33	92	7	4	4	-	2-3	4-6	2500	0	3
Leuchars ...	1022·7	-8	S	1	c	34	75	7	5	-	7	2-3	10	5700	3	*
Renfrew (Abbots I.)	1021·7	-10	E'S	2	cf	36	85	3	5	7	-	9	10	2500	3	*
Eskdalemuir ...	1024·0	-2	SSW	3	bc	29	92	6	-	4	2	0	4-6	-	4	*
Point of Ayre...	1021·2	-4	S	6	c	42	92	6	5	2	-	4-6	10	1500	0	3
Tiree ...	1012·4	-12	SE'S	7	c	46	85	7	5	-	-	9+	9+	1800	0	5
Stornoway ...	1012·5	-14	S	8	c	45	85	7	5	7	-	9	10	2500	1	4
Dalwhinnie ...	1020·0	-10	ESE	6	c	33	92	7	5	-	-	7-8	7-8	1500	8	*
Aberdeen ...	1022·1	-6	SSW	5	c	40	75	6	6	7	-	2-3	2-3	2500	2	2
Wick ...	1017·9	-16	SSW	6	bc	42	65	8	5	3	-	1	2-3	4000	1	3
Lerwick ...	1019·5	-10	S	7	c	45	75	7	8	7	-	4-6	7-8	800	1	*
Blacksod Point	1009·6	-10	S	4	ir	48	97	7	6	-	-	10	10	450	1	3
Malin Head ...	1012·4	-10	S	5	c/pr	45	92	6	9	-	-	9	9	2500	0	3
Aldergrove ...	1017·4	-14	SSE	5	c	44	85	7	5	-	-	10	10	1300	1	*
Birr Castle ...	1014·1	-12	S	4	ir	47	92	7	6	1	-	7-8	10	1500	1	*
Valentia Obsy.	1012·2	-6	S'E	4	id	52	97	5	5	-	-	10	10	450	1	3
Roches Point	1014·1	-8	SSE	7	dd	49	97	5	5	-	-	10	10	450	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 12th Hrs. (36)
London (Kew)	42	27	17	-	Tr	4·4
Croydon ...	40	24	24	-	-	4·6
S. Farnborough	43	27	21	Tr	-	6·0
Boscombe Down	42	28	24	-	..	7·0
Calshot (Sthmtn.)	44	31	25	-		7·1
Lympne ...	40	31	20	-	-	4·8
Manston ...						
Shoeburyness ...	41	25	17	-	-	4·8
Felixstowe ...	40	32	27	Tr	1	3·9
Gorleston ...	43	29	23	4	-	3·5
Mildenhall ...	40	22	15	Tr	Tr	2·7
Cranwell ...	41	25	18	Tr	Tr	2·8
Birmingham ...	41	25	13	*	-	3·7
Upper Heyford	45	23	18		-	*
Ross-on-Wye	43	28	20	-	-	5·5
Hartland Point	46	41	40	-	-	0·1
Bristol ...	43	28	19	-	-	4·5
Portland Bill ...	46	40	*	-	-	*
Plymouth ...	45	41	39	-	Tr	0·1
The Lizard ...	47	43	*	-	1	0·0
Scilly (St.Mary's)	48	45	*	0·3	4	0·0
Guernsey ...						
Pembroke ...	47	45	*	-	-	0·0
Holyhead ...	48	40	37	-	-	1·2
Chester (Sealand)	42	(31)	21	-	-	4·8
Manchester ...	33	23	15	-	-	0·0
Spurn Head ...	45	38	*	Tr	-	3·8
Catterick ...	41	23	17	-	-	3·2
Tynemouth ...	44	32	29	-	-	*
St. Abbs Head	43	33	*	-	-	*
Leuchars ...	41	27	17	-	-	3·0
Renfrew (Abbots I.)	32	24	18	Tr	-	0·0
Eskdalemuir ...	30	24	18	-	-	5·7
Point of Ayre...	45	41	*	-	-	5·6
Tiree ...	45	43	*	-	-	2·8
Stornoway ...	44	39	*	-	Tr	1·3
Dalwhinnie ...	34	32	29		Tr	3·0
Aberdeen ...	36	31	27	-	-	0·1
Wick ...	42	40	*	Tr	-	*
Lerwick ...	43	41	*	-	Tr	3·2
Blacksod Point	49	41	*	2	0·1	*
Malin Head ...	43	39	*	-	0·2	0·0
Aldergrove ...	41	40	37	0·1	0·1	0·3
Birr Castle ...	42	41	39	1	1	0·0
Valentia Obsy.	5[illegible]	50	48	4	1	0·0
Roches Point	49	47	*	3	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 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	bmxbZo	cmobf	bfxoFFx	42	27	17	-	Tr	4·4	*	*	1
Croydon ...	217	bm	bcmo bf	bfoFFx	40	24	24	-	-	4·6	*	*	3
Greenwich (Royal Observatory)...	149	bm	bcbm	bmfxF	41	26	20	-	Tr	1·6	76	100	1
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	42	29	28		Tr		78	99	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	41	27	16	-	-		65	99	*
Camden Square ...	110	b	bc	*	41	28	22	-	-	*	*	87	*
Kensington ...	80	bcz	bcz	*	42	29	18	-	-		91	98	*
Hampstead Observatory ...	450	bc	bc	of+	40	27	25	-	-		*	99	*

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.
0·8	22h. 12th	0·2	13h. 12th

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

Saturday 14th December 1940.

No. 28877

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

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)	1027·9	-2	SE'S	3	z	37	92	6	7	-	2	4-6	7-8	2500
	Croydon	1027·9	-2	S	3	zo	37	92	6	5	-	-	9+	9+	1600
	S. Farnborough	1027·8	-6	ESE	2	z	37	92	6	5	7	-	7-8	9+	2000
	Boscombe Down	1026·2	-6	SE'S	4	zo	37	97	5	5	3	-	2-3	4-6	2000
	Calshot (Soton.)	1026·2	-4	S'E	4	zo	46	65	6	1	3	5	Tr	1	2000
	Lympne	1029·2	+4	SE	2	zo	36	92	6	5	-	-	10	10	800
	Manston	1029·7	+4	S	2	zo	35	92	6	5	-	-	10	10	800
2	Shoeburyness	1029·4	+2	SSE	3	c	37	85	6	5	-	-	10	10	1500
	Felixstowe	1029·3	+10	S	4	z	39	85	6	8	-	-	10	10	1200
	Gorleston	1029·8	+4	S'W	3	pro	41	88	6	6	-	-	10	10	800
	Mildenhall	1028·8	+6	S	4	zo	35	97	6	5	-	-	10	10	800
	Cranwell	1027·4	-6	SSE	3	zo	36	80	5	-	-	2	0	4-6	-
3	Birmingham	1026·2	-4	SSE	3	f	32	97	2	-	-	-	10	10	<150
	Upper Heyford	1027·1	-6	SE'E	2	cf-	32	97	2	-	-	-	10	10	<150
4	Ross-on-Wye	1024·7	-6	SE	3	zo	40	75	5	5	-	-	9+	9+	2500
5	Hartland Point	1020·8	-12	S	4	c	48	75	8	8	6	-	2-3	9	2500
	Bristol	1025·2	-10	SE	3	zo	40	85	6	-	3	-	0	9+	-
	Portland Bill	1025·4	+6	SE'S	4	co	46	92	8	5	4	-	4-6	9	4000
	Plymouth	1023·4	-2	SSE	4	c	48	85	8	1	2	-	4-6	10	2500
	The Lizard	1021·4	-6	SSE	6	roro	48	97	6	5	-	-	10	10	1000
	Scilly (St. Mary's)	1018·8	-8	SSE	5	dodo	50	97	5	5	-	-	10	10	800
	Guernsey														
6	Pembroke	1019·9	-4	SSE	6	oq-	47	97	5	5	-	-	10	10	2000
7	Holyhead	1019·4	-10	S'E	6	c	47	75	7	-	7	-	0	9+	3700
	Chester (Sealand)	1023·3	-8	SE'E	4	zo	36	85	5	-	7	-	0	9+	-
8	Manchester	1024·8	-10	SSE	3	zo	39	75	5	-	7	6	0	9	-
10	Spurn Head	1026·2	-2	SE'S	3	c	40	92	7	5	4	2	4-6	7-8	4000
	Catterick	1025·8	-14	S'W	2	bF	29	97	1	-	-	-	0	0	-
	Tynemouth	1024·8	-10	SSW	4	zo	39	75	5	-	3	1	0	4-6	-
11	St. Abbs Head	1020·6	-20	S	6	cq	38	75	7	4	7	-	4-6	7-8	2500
	Leuchars	1021·5	-10	S	1	c	38	75	7	5	3	-	4-6	9+	5500
12	Renfrew (Abbots I.)	1018·9	-18	SE'E	4	ido	39	85	6	5	2	-	7-8	10	4000
	Eskdalemuir	1022·1	-6	S'W	3	c	35	75	6	5	7	-	4-6	7-8	2500
	Point of Ayre	1019·5	-14	S'E	6	c	43	92	6	5	7	-	4-6	10	1500
13A	Tiree	1010·4	-16	SE'S	7	rr	46	97	6	-	2	-	10	10	1200
13B	Stornoway	1009·7	-4	S	8	c/pr	46	85	6	5	7	-	9	10	1200
15	Dalwhinnie	1019·9	-14	ESE	6	c	35	75	7	8	6	-	7-8	10	1500
	Aberdeen	1020·9	-16	SSW	5	c	42	75	7	5	-	-	9+	9+	4000
	Wick	1015·1	-14	SSE	8	cq	41	75	7	5	7	-	7-8	10	2500
16	Lerwick	1016·3	-32	S'W	8	c	45	65	7	8	7	-	7-8	9+	1500
17	Blacksod Point	1007·3	-10	S	4	dr	52	97	6	6	-	-	10	10	<150
18	Malin Head	1010·2	-10	S	6	c	48	85	7	5	2	-	4-6	7-8	1500
	Aldergrove	1015·2	-18	SSE	6	iro	46	92	6	6	2	-	9	10	900
19	Birr Castle	1012·6	-10	S	3	c/r	51	92	7	6	1	-	4-6	10	1500
20	Valentia Obsy. †	1011·5	-2	S'E	5	o/d	53	97	6	5	-	-	10	10	450
	Roches Point	1014·1	-6	S	5	c	50	97	2	5	-	-	10	10	<150

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

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)	1028·4	+4	S'E	3	zo	37	85	6	5	-	-	9+	9+	2500	1	*
	Croydon	1028·2	0	SSE	3	zo	37	85	6	5	-	-	9+	9+	2500	1	*
	S. Farnborough	1027·9	+2	SE'E	3	m	38	85	4	5	-	-	9+	9+	3500	1	*
	Boscombe Down	1026·2	+2	SE	4	zo	36	97	5	5	-	-	Tr	Tr	2000	1	*
	Calshot (Soton.)	1026·2	-2	SE'S	5	zo	40	85	6	5	-	-	1	1	3500	1	3
	Lympne	1029·6	+4	S	2	zo	36	85	5	5	-	-	10	10	900	1	§
	Manston	1030·0	+2	SSE	2	zo	35	92	6	5	-	-	9	9	900		*
2	Shoeburyness	1029·6	+6	S'E	2	c	37	85	6	8	-	-	10	10	1500	1	*
	Felixstowe	1030·0	+2	SSE	4	zo	37	85	6	5	-	-	10	10	1400	1	2
	Gorleston	1030·2	+2	S	5	bc	39	85	6	4	-	-	4-6	4-6	1500	1	3
	Mildenhall	1028·8	+2	SSE	4	zo	35	85	6	5	-	-	10	10	1000	1	*
	Cranwell	1027·9	+2	SSE	5	f	32	97	2	-	-	-	10	10	<150	0	*
3	Birmingham	1024·9	-2	SSE	3	of-	35	97	3	5	-	-	10	10	220	1	*
	Upper Heyford	1027·0	-2	SE	3	cf	35	97	3	5	-	-	9+	9+	4000	1	*
4	Ross-on-Wye	1023·9	-4	SE	3	zo	42	75	6	5	-	-	9+	9+	2500	1	*
5	Hartland Point	1020·1	-2	SE	4	c	46	85	8	8	6	-	4-6	9+	1000	1	3
	Bristol	1024·8	+2	S'E	3	zo	42	75	6	5	7	-	2-3	9+	3500	1	*
	Portland Bill	1024·5	-6	SSE	4	co	46	92	8	5	-	-	10	10	4000	1	3
	Plymouth	1022·7	-2	SSE	5	o/r	49	92	7	5	-	-	10	10	1800	0	2
	The Lizard	1018·9	-4	SSE	6	roro	49	97	6	5	-	-	10	10	1000	1	4
	Scilly (St. Mary's)	1017·6	-2	SSE	5	ido	51	97	4	5	-	-	10	10	800	1	4
	Guernsey																
6	Pembroke	1018·9	-4	SSE	7	cq	47	97	6	5	2	-	7-8	10	1600	1	6
7	Holyhead	1017·7	-10	S'E	5	c	46	85	6	5	7	-	2-3	10	2200	1	3
	Chester (Sealand)	1021·6	-6	SE'E	4	c	38	88	5	5	2	-	9	10	3500	1	*
8	Manchester	1022·6	-4	SE'E	4	m	37	85	4	5	-	-	9	9	5000	1	*
10	Spurn Head	1026·2	0	SE'S	5	o	35	97	6	5	-	-	10	10	2500	[illegible]	3
	Catterick	1023·9	-8	S	4	cf-	38	97	3	-	-	-	10	10	<100	3	
	Tynemouth	1023·4	-6	S	6	zo	39	85	6	5	-	-	9+	9+	2900	1	2
11	St. Abbs Head	1018·7	-2	S	6	cq	37	85	5	5	2	-	7-8	10	2000	0	3
	Leuchars	1018·8	-12	ESE	2	roro	39	75	6	5	-	-	10	10	1500	1	*
12	Renfrew (Abbots I.)	1017·0	-14	ESE	3	c/d	41	92	4	5	2	-	7-8	10	1800	1	*
	Eskdalemuir	1019·6	-10	S'W	3	m	37	85	4	5	-	-	10	10	450	4	*
	Point of Ayre																
13A	Tiree	1008·1	-18	SE'S	6	dp	48	97	6	-	2	-	4-6	10	1200	1	5
13B	Stornoway	1006·3	+2	S	8	ido	46	97	6	5	2	-	9	10	1000	1	5
15	Dalwhinnie	1014·0	0	ESE	6	o	33	85	6	5	-	-	10	10	800	7	*
	Aberdeen	1018·7	-10	S'W	5	c	42	75	6	5	-	-	10	10	2500	1	3
	Wick	1012·4	-10	SSE	8	c/pr	42	75	6	5	7	8	7-8	10	1500	1	4
16	Lerwick	1013·6	-6	S	9	c	45	65	6	8	2	-	7-8	10	800	1	*
17	Blacksod Point	1006·8	-8	S	5	roro	50	97	6	6	-	-	10	10	<150	2	4
18	Malin Head	1009·2	0	S	6	c/pr	50	92	6	9	-	-	9+	9+	800	0	3
	Aldergrove	1012·8	-14	SSE	5	c	48	92	8	5	-	-	10	10	700	1	*
19	Birr Castle	1011·4	-6	SSW	3	c/p	52	92	7	6	1	-	7-8	10	1500	1	*
20	Valentia Obsy. †	1010·0	-8	S'E	4	c	53	85	8	5	-	-	9+	9+	800	1	2
	Roches Point	1012·1	-12	S'E	5	rf	50	97	3	5	-	-	10	10	220	1	4

PAST 24 HOURS. — WEATHER.

District	Stations	7h.—13h. 13th (37)	13h.—18h. 13th (38)	18h. 13th to 1h. 14th (39)	1h.—7h. 14th (40)
1	London (Kew)	oFFxcm	babbccm	cmoc	ccmo
	Croydon	bFfcm	c	cmo	cmo
	S. Farnborough	oFFxbcc	crobcm	cbccmo	cmo
	Boscombe Down	bbcFxbcm	bcm		c
	Calshot (Soton.)	bfFxcm	bcmbcm	cmbmom	bcm,cmo
	Lympne	cmxmm	cm	cmo	cmo
	Manston	cmx		cmo	cmo
2	Shoeburyness	Fxcm	cmc	cmo	cmo
	Felixstowe	cmm	cm	cmo	cmo
	Gorleston	copro	cbc	bceq	bceq
	Mildenhall	bmxbfcf	omw	pmowcmo	cmo
	Cranwell	bmxbcm	f	ff,cmo	cmo
3	Birmingham	ff	ffeo	fc	c
	Upper Heyford	oFx	ofcf		cmo
4	Ross-on-Wye	cffcm	cm	czo	c
5	Hartland Point	cr	circ	c	irro
	Bristol	cfmxm	cmccm	cmoccmo	cmo
	Portland Bill	c	c	c	c
	Plymouth	circ	circ	cdodoc,idid	cidorr
	The Lizard	oirrr	orrr	proid	rrq [gale]
	Scilly (St. Mary's)	cdd	oddm	odododr	odrdrm
	Guernsey				
6	Pembroke	irmqp	omddqc	cq	qrrmoo [gale]
7	Holyhead	cmrc	cmrc	cmoqc	qrrmoc
	Chester (Sealand)	pcffm	cmom	cmoiroc	cmo
8	Manchester	bcfxcfz	bcmm	cmmororor	cmoqzo
10	Spurn Head	c	co	ccq	
	Catterick	bFx	xbcFof	fcirmo	cromoc
	Tynemouth	bcffbc	bcc	cpoo	oq
11	St. Abbs Head	bceq	cqm	cqmo	cqmo
	Leuchars	cz	cxmroro		cmoirocmo
12	Renfrew (Abbots I.)	cffzido	cmmiddo	iromo	cmoiRRR
	Eskdalemuir	bcxc c	cm	cdodoir dodo	circ crorr
	Point of Ayre				
13A	Tiree	pdr	orpdr		
13B	Stornoway	cpr [gale]	cpr [gale]	cprrr	crr
15	Dalwhinnie	co	ciroo	*	ciro
	Aberdeen	bcr	ccr	cciro	crorr
	Wick	c [gale]	cqprc [gale]	cqzo [gale]	mocir
16	Lerwick	c [gale]	c [gale]	cir [gale]	cir [gale]
17	Blacksod Point	dr	rr	c	irc
18	Malin Head	c	cprc	c	cprcrrc
	Aldergrove	idirom	ciromc	cidocdoro	doro,rr
19	Birr Castle	ciro	cir		crr
20	Valentia Obsy. †	oidid o	oddcddc	orrdodorr	orrrorocpr
	Roches Point	ffee°	fferf	drdr	drrr

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

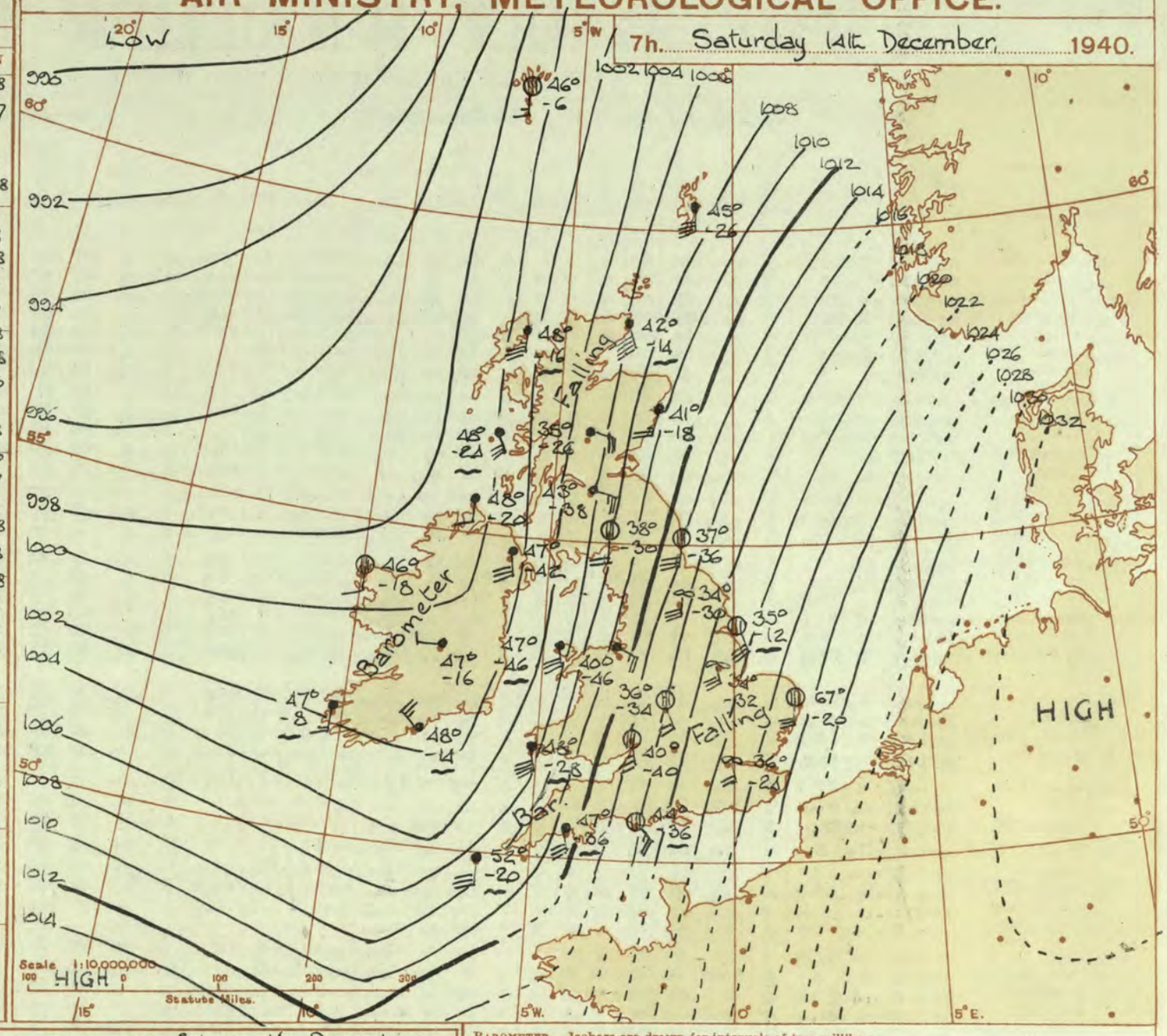
AVIATION WEATHER CODE

	13h. G.M.T. 13th December			18h. G.M.T.			01h. G.M.T. 14th December			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	53	05675	48727	52	64665	15728	52	81844	16487	62	64435	49768
115	52	81844	12387	52	02844	16387				52	02844	16427
203							5-	03848	16628			
206	87	02864	53426	57	02864	20228	57	02855	16328	52	02795	16258
210	53	02864	16427	5-	02864	14428				57	02856	50668
220				62	58416	16758				62	66535	19368
230	52	61657	12268	52	51546	12568	52	54535	45568	52	64936	16568
245	23	02761	16627	52	08446	16628	6-	41438	15668	62	61535	49768
260	57	02765	00028	57	05666	08168	53	05655	14328	52	05545	12428
277	52	51643	13668	62	52637	13658	62	64646	47568	6-	64538	45768
279	07	02790	14328	5-	05548	14428	5-	08448	16428	57	61755	46668
285	5-	02747	08317	5-	03538	06328				6-	03538	08628
288	20	08451	20144	5-	08458	16428	5-	05657	15527	57	05545	47626
273	52	54544	18358							43	66544	24168
301	07	05580	12417	02	62468	14668	62	05654	46668	02	05658	12728
321	00	05590	14343	02	05590	49528	03	05590	15527	5-	05646	50626
299	81	01762	17414	5-	05636	20616	5-	05658	49728	82	05635	49727
292	00	41580	15345	5-	08428	14248	5-	05638	14328	5-	05638	12428
310	--	04435	16545	--	46109	16449				--	02528	20628
316	00	45300	14241	5-	45328	16348	51	08477	16428	5-	02548	14528
333	62	61752	16528	5-	22658	50568	57	02844	16727	02	64638	49568
334	--	02655	15527								64556	12668
340	5-	05567	13447	5-	05567	14527	52	02765	12628	52	02755	12628
136	5-	05636	15216	5-	05637	14327	5-	02746	15416	5-	02747	14527
336	52	03644	14428	52	03755	14428				62	64754	20568
350	--	48200	17429									
368												
379				--	44209	12349	5-	05648	14228	50	05644	16314
390	5-	05548	12148	53	05545	12227	5-	05557	14327	53	05542	14324
382	5-	43327	12347	5-	08467	12327	5-	05678	14428	57	05654	12425
438	80	02757	14317							80	02755	18415
430	20	05656	12326	5-	05568	12328	5-	05647	14427	50	05643	14414
409	62	52626	13668	62	52627	47658	02	52528	48758	02	64528	47768

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 14th December 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 14th December
1 S.E. England ✝ 2 E. England ... ✝ 3 E. Midlands ...	Fresh or strong south wind, gale locally on coast, veering southwest tonight and moderating; rain spreading eastward and lasting for some hours followed by an improvement with bright intervals and local showers; becoming milder.
4 W. Midlands ... 5 S.W. England ✝ 6 South Wales ... ✝ 7 North Wales ... ✝ 8 N.W. England ✝	Strong to gale south to southwest wind veering west-southwest and moderating temporarily; rain at first, bright intervals and showers later; mild.
9 N. Midlands ... 10 N.E. England ✝ 11 S.E. Scotland ✝	Wind south strong to gale, veering southwest and moderating tonight, some rain or sleet, snow on hills, bright intervals later; becoming milder.
12 S.W. Scotland & Isle of Man. ✝	As 4-8
13 { A. W. Scotld. B.N.W.Scotland. ✝	Wind mainly southwest or south moderating temporarily but strong to gale again later; rain then showers and bright intervals; rain again tomorrow; mild.
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	Fresh or strong southwest or west wind, backing south-southwest and increasing to gale tomorrow; showers and bright intervals; general rain tomorrow; mild.

GENERAL INFERENCE.

A secondary depression over Ireland is moving north-northeast and associated troughs will cross Great Britain. Rain will spread to all districts with strong winds generally and gales at exposed places.

Another depression which crossed Newfoundland last evening will affect Ireland and Scotland tomorrow.

FURTHER OUTLOOK.

Rain spreading eastward but perhaps fair till tomorrow night in Eastern England. Renewed gale in West and North and perhaps later in Southeast also.

✝ Gale warning in operation in districts 1, 2, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18 and 19. Times of issue 11.40. 12.12.40, 0800, 1650, 2340 13.12.40, and 0530 14.12.40.

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.

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.

Morning of Saturday 14th December 1940.

Clarke's Projection Scale 1: 4 X 10⁷ along meridian at 55° N.

Statute Miles 0 1 2 3 4 500

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

Saturday 14th December 1940.

No. 28877

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

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	1026·2	-18	SE	3	c	37	85	6	5	-	-	9+	9+	2000
	S. Farnborough	226	1025·8	-14	SE'S	3	zo	38	85	6	5	-	-	9+	9+	1900
	Boscombe Down	417														
	Calshot (Sthmtn.)	8	1025·5	-10	S'W	5	zo	42	85	6	5	3	5	2-3	4-6	4000
	Lympne ...	346	1028·1	-12	S	3	zo	35	85	6	5	-	-	10	10	1200
	Manston ...	154	1028·5	-14	SSE	4	zo	35	92	5	5	-	-	10	10	1200
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1028·7	-10	SSE	5	zo	35	85	6	5	-	-	9+	9+	1400
	Gorleston ...	5	1028·7	-6	S'E	6	bc	39	75	6	2	-	-	4-6	4-6	2300
	Mildenhall ...	19	1026·8	-18	SSE	4	zo	36	85	6	5	-	-	9+	9+	1500
	Cranwell ...	240	1026·1	-14	SSE	5	zo	34	85	5	5	-	-	10	10	4000
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1024·5	-18	S'E	4	zo	37	85	6	5	-	-	10	10	4000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1015·9	-18	SE	6	c	46	85	8	8	6	-	4-6	9+	1000
	Bristol ...	209	1022·0	-14	SE	5	zo	41	85	5	5	-	-	10	10	2500
	Portland Bill ...	32	1022·8	-10	SE	5	c	44	85	8	5	4	-	7-8	10	4000
	Plymouth ...	82	1020·0	-18	SSE	5	id	46	92	6	5	2	-	9	10	1200
	The Lizard ...	240	1016·0	-30	SSE	7	dodo	49	97	6	5	-	-	10	10	1000
	Scilly (St. Mary's)	163	1012·8	-26	SSE	6	dr	51	97	4	5	-	-	10	10	800
	Guernsey ...	175														
6	Pembroke ...	142	1015·1	-12	SSE	6	cq	49	92	7	8	2	-	4-6	10	2000
7	Holyhead ...	26	1013·7	-30	S'E	6	c	47	85	8	5	7	-	9	10	4000
	Chester (Sealand)	16	1012·1	-10	SE'E	4	c	41	85	7	5	2	-	7-8	10	3000
8	Manchester ...	70	1020·9	-18	SE'S	4	zo	39	85	6	5	2	-	7-8	10	2500
10	Spurn Head ...	29	1025·2	-4	SE'S	6	cq	35	92	7	5	-	-	10	10	2500
	Catterick ...	175	1021·0	-22	S	6	ir	33	92	5	5	-	-	10	10	1200
	Tynemouth ...	108	1020·0	-12	S	6	o	37	85	6	6	-	-	10	10	1500
11	St. Abbs Head	280	1015·8	-14	S	6	cq	36	92	5	5	2	-	7-8	10	2000
	Leuchars ...	36	1015·4	-14	ESE	3	zo	41	85	5	5	-	-	10	10	1500
12	Renfrew (Abbots I.)	19	1013·4	-22	SE	3	zo	43	85	6	5	7	-	7-8	9+	1600
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1015·1	-4	S'E	6	dodo	44	97	6	5	2	-	4-6	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1005·2	-12	S	7	rr	49	92	6	5	2	-	9	10	1000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1010·1	-8	SSE	8	cq	43	85	6	5	2	-	9	10	800
16	Lerwick ...	156	1010·5	-10	S	9	c	46	85	6	8	2	-	7-8	10	800
17	Blacksod Point	18	1003·9	-16	S	7	c	47	97	7	5	-	-	10	10	4150
18	Malin Head ...	84	1004·7	-22	S	5	ido	52	92	7	5	-	-	9	9	1500
	Aldergrove ...	268	1008·7	-22	S'E	6	dr	50	92	7	5	2	-	9	10	1200
19	Birr Castle ...	173														
20	Valentia Obsy.	30	1005·3	-14	-	0	rr	50	97	6	5	-	-	10	10	450
	Roches Point	22	1006·5	-36	S'E	6	dr	51	97	5	5	-	-	10	10	450

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

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)	1020·8	-26	SSE	4	zo	37	85	6	5	-	-	9	9	1500	1	*
Croydon ...	1021·7	-24	SSE	4	zo	36	85	6	5	-	-	9+	9+	1800	1	*
S. Farnborough	1020·4	-30	SE'S	4	zo	37	85	6	5	-	-	9+	9+	1500	1	*
Boscombe Down	1017·8	-34	SE'S	6	c	36	85	7	5	-	-	7-8	7-8	2000	1	*
Calshot (Sthmtn.)	1019·7	-26	SSE	5	zo	40	85	6	5	7	6	Tr	9+	2000	1	§ 3
Lympne ...	1024·1	-24	S	4	zo	35	85	5	5	-	-	9	9	900	1	
Manston ...	*	-22	SSE	4	zo	34	85	5	5	-	-	9+	9+	900		*
Shoeburyness ...	1023·7	-28	SSE	4	c	36	85	6	8	4	-	4-6	4-6	1500	1	*
Felixstowe ...	1023·8	-26	S	6	zo	36	75	6	5	-	-	9+	9+	1300	1	3
Gorleston ...	1023·6	-20	S	6	c	37	75	6	8	-	-	7-8	7-8	1500	1	3
Mildenhall ...	1021·9	-28	SSE	5	zo	35	85	6	5	-	-	9	9	1700	0	*
Cranwell ...	1019·8	-32	SSE	6	zo	34	85	5	5	-	-	10	10	2500		*
Birmingham ...	1015·9	-34	SSE	4	c	36	85	8	5	7	-	1	9+	800	1	*
Upper Heyford	1019·0	-30	SSE	4	zo	36	85	6	5	-	-	7-8	7-8	1400	1	*
Ross-on-Wye	1014·2	-40	SSE	5	cq	40	75	6	5	7	-	9	9+	2500	1	*
Hartland Point	1007·0	-46	SE	7	rr	44	97	7	-	2	-	10	10	800	1	4
Bristol ...	1015·4	-38	SSE	6	zo	40	85	6	5	7	-	4-6	9+	3000	1	*
Portland Bill ...	1015·6	-36	SE	5	c	44	85	7	5	-	-	10	10	4000	1	4
Plymouth ...	1012·2	-36	SSE	6	rr	47	97	4	6	2	4	9+	10	500	1	4
The Lizard ...	1008·2	-24	SSE	8	rr	50	97	6	5	-	-	10	10	1000	1	5
Scilly (St. Mary's)	1006·1	-20	S	6	dr	52	97	4	6	-	-	10	10	800	1	4
Guernsey ...																
Pembroke ...	1004·9	-28	SSE	8	rr	48	97	6	5	-	-	10	10	1500	1	4
Holyhead ...	1004·5	-46	SSE	6	rr	47	92	6	6	2	-	7-8	10	800	1	4
Chester (Sealand)	1011·1	-46	SE'E	5	ir	40	85	6	5	2	-	9	10	1500	1	*
Manchester ...	1014·0	-38	SE'E	4	zo	39	75	6	5	7	-	7-8	10	2300	1	*
Spurn Head ...	1018·8	-12	SE'S	6	cq	35	97	7	5	-	-	9+	9+	1500	1	4
Catterick ...	1015·7	-30	S	6	zo	34	92	6	5	-	-	10	10	800	1	*
Tynemouth ...	1015·3	-36	S	6	cq	37	85	6	6	-	-	10	10	1500	1	3
St. Abbs Head	1010·6	-36	S	6	cq	35	92	5	5	2	-	4-6	10	2000	0	3
Leuchars ...	1009·6	-34	ESE	5	zo	38	92	5	5	-	-	10	10	1500	1	*
Renfrew (Abbots I.)	1006·8	-38	ESE	5	ir	43	92	6	5	7	-	9	10	1800	1	*
Eskdalemuir ...	1009·6	-30	S	4	c	38	85	6	6	2	-	7-8	10	450	1	*
Point of Ayre ...	1005·5	-34	S'E	7	rr	43	97	7	6	2	-	4-6	10	1500	1	4
Tiree	998·7	-21	SSE	6	rr	48	97	7	-	2	-	10	10	1500	1	5
Stornoway ...	1001·3	-16	S	7	rr	48	92	6	5	2	-	9	10	1000	1	4
Dalwhinnie ...	1005·5	-26	ESE	6	ir	35	97	6	5	-	-	10	10	800	6	*
Aberdeen ...	1010·5	-18	S'W	5	rr	41	92	4	6	2	-	9+	10	800	1	3
Wick ...	1006·1	-14	SSE	8	ir	42	97	6	5	2	-	7-8	10	800	1	4
Lerwick ...	1006·7	-26	S	8	ir	45	85	6	3	2	-	4-6	10	800	1	*
Blacksod Point	999·7	-18	S	2	c	46	97	7	5	-	-	10	10	450	2	2
Malin Head ...	998·9	-20	S	2	RR	48	92	5	3	-	-	9+	9+	450	1	2
Aldergrove ...	1001·1	-42	S'E	6	rr	47	92	7	5	-	-	10	10	1400	1	*
Birr Castle ...	1001·3	-16	W	1	rr	47	92	7	6	2	-	7-8	10	1500	1	*
Valentia Obsy.	1002·0	-8	S	3	pr	47	97	7	8	-	-	10	10	2500	1	7
Roches Point	1000·8	-14	NW	5	rr	48	97	7	6	2	-	7-8	10	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 13th Hrs. (36)
London (Kew)	38	36	32	Tr	-	1·7
Croydon ...	38	35	33	-	-	1·2
S. Farnborough	39	37	34	Tr	-	0·7
Boscombe Down	40	35	32	-	-	1·0
Calshot (Sthmtn.)	46	40	38	0·1	-	2·6
Lympne ...	36	35	33	0·3	-	0·0
Manston ...						
Shoeburyness ...	38	35	32	-	-	0·0
Felixstowe ...	40	34	34	-	-	0·0
Gorleston ...	43	37	32	0·5	-	*
Mildenhall ...	37	34		Tr	Tr	0·8
Cranwell ...	36			-		
Birmingham ...	35	34	33	Tr	-	0·0
Upper Heyford	35	35	31	-	-	*
Ross-on-Wye	42	39	36	-	-	0·2
Hartland Point	48	43	42	Tr	13	0·0
Bristol ...	44	39	36	-	-	0·4
Portland Bill ...	46	41	*	-	-	*
Plymouth ...	49	45	45	Tr	9	0·0
The Lizard ...	50	49	*	+	7	0·0
Scilly (St. Mary's)	51	50	*	1	2	0·0
Pembroke ...	48	46	*	3	11	0·0
Holyhead ...	47	45	43	0·2	3	0·0
Chester (Sealand)	38	38	36	-	0·3	0·0
Manchester ...	39	37	36	-	1	0·3
Spurn Head ...	42	35	*	-	-	*
Catterick ...	33	32	32	-	Tr	0·0
Tynemouth ...	40	35	33	-	Tr	*
St. Abbs Head	38	35	*	-	-	*
Leuchars ...	39	37	33	0·4	4	0·0
Renfrew (Abbots I.)	41	41	38	1	0·5	0·0
Eskdalemuir ...	37	35	35	-	2	1·1
Point of Ayre ...	43	42	*		4	0·0
Tiree	48	47	*	2	20	0·0
Stornoway ...	47	46	*	0·5	6	0·0
Dalwhinnie ...	37	33	32	1	13	0·1
Aberdeen ...	42	40	39	-	2	1·0
Wick ...	43	41	*	Tr	1	*
Lerwick ...	46	44	*	-	0·2	0·0
Blacksod Point	54	44	*	4	17	*
Malin Head ...	50	46	*	0·1	15	0·0
Aldergrove ...	48	46	45	0·2	9	0·0
Birr Castle ...	52	46	45	0·5	17	0·0
Valentia Obsy.	53	46	43	2	23	0·0
Roches Point	52	48	*	2	20	*

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	oFFxcm	bcbbecm	cmc	38	36	32	Tr	-	1·7	*	*	6
Croydon	217	bFfcm	c	cm	38	35	33	-	-	1·2	*	*	6
Greenwich (Royal Observatory)...	149	Ffcm	cbc	cbex	36	33	27	-	-	0·0	86	83	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	39	32	31	-			83	86	*
Regents Pk. (Botanic Gardens)†...	168	*	*	*	39	32	28	-	-		86	85	*
Camden Square	110	o	bc	*	36	31	30	-	-	*	*	85	*
Kensington	80	fbc	bcz	*	39	36	30	-	0·1		83	87	*
Hampstead Observatory	450	off	of	bc	37	33	29	-	-		*	93	*

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.
0·9	10h	<0·1	21-24h
	13th		13th

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

Sunday 15th December, 1940.

No. 28,878.

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

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)	1015·7	-32	SSE	6	pr	40	75	6	5	-	-	10	10	1500
	Croydon	1016·3	-26	SSE	4	zo	41	75	6	5	4	4	7-8	7-8	4500
	S. Farnborough	1015·8	-28	S'E	6	rso	38	85	6	6	2	-	4-6	10	800
	Boscombe Down	1013·0	-30	SSE	6	rr	37	97	5	6	2	-	7-8	10	400
	Calshot (Soton.)	1014·0	-38	S	6	dr	41	92	5	5	2	-	1	10	1200
	Lympne	1020·3	-26	SSE	4	zo	37	85	6	5	3	-	4-6	7-8	900
	Manston	1019·8	-26	S'E	5	zo	35	85	6	5	3	-	2-3	7-8	800
2	Shoeburyness	1018·8	-36	S'E	5	c	39	85	6	7	4	-	7-8	7-8	4000
	Felixstowe	1019·5	-26	S'E	6	zo	38	75	6	5	4	1	2-3	2-3	1400
	Gorleston	1019·3	-30	S'E	7	c	39	85	6	8	-	-	7-8	7-8	1500
	Mildenhall	1016·9	-36	SSE	5	c	38	75	7	5	9	-	2-3	7-8	5000
	Cranwell	1013·3	-42	SSE	6	rr	35	75	6	-	2	-	10	10	700
3	Birmingham														
	Upper Heyford	1013·8	-22	SSE	5	rr	37	92	5	5	2	-	9	10	800
4	Ross-on-Wye	1010·3	-24	S'E	4	rr	40	92	6	6	-	-	10	10	1500
5	Hartland Point	1006·9	+10	SW'W	4	ir	48	97	8	6	2	-	4-6	9+	1000
	Bristol	1011·1	-20	S'E	4	roro	41	97	6	6	2	-	7-8	10	800
	Portland Bill	1011·3	-24	S	6	o	45	92	7	5	-	-	10	10	2500
	Plymouth	1009·4	-4	SW	4	rr	49	97	6	6	2	-	4-6	10	400
	The Lizard	1008·9	+6	SW	5	bc	51	97	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1007·6	-2	SW	4	bc	52	97	7	8	4	3	4-6	4-6	1400
	Guernsey														
6	Pembroke	1005·9	+2	SW'W	5	c/r	48	92	7	8	2	-	7-8	10	1600
7	Holyhead	1003·6	+16	S'W	4	rr	48	97	6	6	2	-	7-8	10	900
	Chester (Sealand)	1006·8	-16	SE	6	c/r	41	92	6	6	2	-	2-3	10	1000
8	Manchester	1009·2	-22	S'E	4	rr	39	92	6	6	2	-	7-8	10	1100
10	Spurn Head	1012·3	-42	SE'E	8	cq	39	75	6	5	-	-	9+	9+	2500
	Catterick	1009·8	-34	S	4	roro	34	97	5	6	2	-	9+	10	700
	Tynemouth	1009·4	-28	SSE	6	c/r	37	87	5	-	2	-	10	10	1200
11	St. Abbs Head	1005·4	-30	S	8	roro	34	97	6	5	-	-	10	10	1500
	Leuchars	1004·1	-34	SE	5	rr	36	85	6	6	-	-	10	10	700
12	Renfrew (Abbots I.)	1001·3	-22	SE'S	3	rr	41	92	5	5	2	-	9	10	1000
	Eskdalemuir	1004·4	-16	SSW	5	rr	36	92	6	6	-	-	10	10	800
	Point of Ayre	1002·0	-4	SW	5	c	47	97	8	8	7	-	4-6	10	1500
13A	Tiree	998·0	+12	WSW	3	dodo	44	97	7	5	6	-	10	10	1500
13B	Stornoway	996·8	+12	S	7	rr	45	92	6	5	2	-	9+	10	800
15	Dalwhinnie	*	-22	ESE	6	ssf	32	97	3	-	-	-	10	10	< 150
	Aberdeen	1005·3	-36	S'W	7	rr	40	92	6	6	2	-	9+	10	1500
	Wick	1000·2	-32	SSE	9	ir	41	97	6	5	2	-	7-8	10	800
16	Lerwick	1004·0	-18	S	9	c	44	75	6	8	2	-	7-8	10	800
17	Blacksod Point	1001·0	+16	WSW	3	c	48	85	8	3	-	9	4-6	9	800
18	Malin Head	999·8	+14	SW	3	c	46	92	7	2	-	2	4-6	7-8	1500
	Aldergrove	1001·4	+22	WSW	3	c	44	97	8	5	7	-	7-8	9	2000
19	Birr Castle	1003·5	+8	WSW	1	c/pr	47	92	8	8	7	-	4-6	9	1500
20	Valentia Obsy. †	1005·3	+22	W'N	3	c/pr	47	85	8	8	-	3	9	9	2500
	Roches Point	1005·2	+10	W	3	ir	47	97	8	6	2	-	7-8	9+	1500

OBSERVATIONS at 18h. G.M.T. 14th December

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)	1014·4	-4	S	4	roro	40	92	5	5	-	-	10	10	1500	1	*
Croydon	1014·4	-2	S'E	5	roro	38	97	6	6	2	-	7-8	10	700	1	*
S. Farnborough	1014·2	-2	SSE	4	roro	40	92	5	6	2	-	9	10	1000	1	*
Boscombe Down	1012·0	-2	S'E	4	rr	43	97	5	6	2	-	9+	10	300	1	*
Calshot (Soton.)	1013·1	-2	S'W	5	roro	43	92	6	5	2	-	9+	10	1000	1	4
Lympne	1017·6	-6	S	4	rr	38	85	5	6	2	-	9	10	600	1	§
Manston	1017·4	-2	S'E	4	c/d	35	92	5	6	2	-	7-8	10	1200		*
Shoeburyness	1017·0	-4	S'E	5	ir	38	75	7	6	2	-	9	10	1500	1	*
Felixstowe	1017·2	-6	S'E	6	iro	37	85	6	6	2	-	4-6	10	1800	1	3
Gorleston	1017·8	+2	SE'E	6	c	39	85	6	8	-	-	10	10	1500	1	4
Mildenhall	1014·8	+2	S'E	4	iro	37	92	6	6	2	-	4-6	10	1200	1	*
Cranwell	1013·0	-6	S'E	5	rr	35	97	4	5	-	-	10	10	600	2	*
Birmingham	1010·3	-2	SSE	3	c	38	97	6	6	-	-	10	10	800	1	*
Upper Heyford	1012·8	-2	SSE	4	roro	38	97	6	6	2	-	7-8	10	400	1	*
Ross-on-Wye	1010·3	+8	S	2	zo	44	92	6	5	1	-	9	9+	800	1	*
Hartland Point	1009·8	+20	WSW	3	c	48	92	8	8	2	-	7-8	9+	1000	1	3
Bristol	1010·8	+6	SSE	3	c/r	47	97	6	5	7	-	4-6	9+	1200	1	*
Portland Bill	1010·9	+8	SSW	4	c	49	92	7	4	4	-	4-5	10	4000	1	4
Plymouth	1011·2	+18	SW'W	4	c/pr	48	92	6	8	-	-	9	9	1200	1	3
The Lizard	1011·3	+16	W'S	6	c	48	92	8	8	6	-	7-8	9+	2000	1	4
Scilly (St. Mary's)	1011·9	+30	WNW	5	c/pr	46	92	7	8	4	-	4-6	7-8	1200	1	3
Guernsey																
Pembroke	1009·4	+20	W	5	cq	49	85	7	8	2	-	7-8	9+	2000	1	2
Holyhead	1007·9	+26	SW'W	3	bc	47	92	6	8	3	-	2-3	4-6	3000	1	2
Chester (Sealand)	1009·2	+18	SSE	3	c/r	41	92	6	5	2	-	4-6	10	1800	1	*
Manchester	1010·0	+18	SSE	3	iro	39	97	5	6	2	-	7-8	10	1200	2	*
Spurn Head	1011·4	-4	SE'S	6	om	36	97	4	5	-	-	10	10	4000	1	4
Catterick	1010·3	+6	S	3	roro	36	97	4	5	-	-	10	10	300	1	
Tynemouth	1009·3	+20	S	6	c/r	37	92	6	6	-	-	10	6	1000	8	*
St. Abbs Head	1005·7	+12	S	7	cq	37	97	6	5	2	-	7-8	10	2000	1	4
Leuchars	1004·2	+8	SE	1	c/d	41	92	5	6	2	-	9	10	900	1	*
Renfrew (Abbots I.)	1006·1	+46	ESE	1	m	40	97	4	5	7	-	9	9+	3000	1	*
Eskdalemuir	1007·3	+28	SW	4	rr	40	97	5	-	2	-	10	10	220	1	*
Point of Ayre	1007·2	+32	W'S	2	bc	44	97	8	5	4	-	2-3	4-6	2500	1	2
Tiree	1002·1	+20	WSW	4	bc	47	85	8	8	-	-	2-3	2-3	2500	0	3
Stornoway	999·3	+24	SSW	3	c	46	85	7	8	7	-	7-8	9	1200	1	2
Dalwhinnie	*	+32	ESE	3	c	35	92	7	5	-	-	4-6	10	7200	7	*
Aberdeen	1005·4	+14	SSW	4	roro	40	97	6	6	2	-	9	10	800	1	4
Wick	1001·4	+10	S	7	cq	42	85	6	5	2	-	7-8	10	800	1	4
Lerwick	1000·4	-4	S	9	rr	43	85	6	6	2	-	7-8	10	800	1	*
Blacksod Point	1007·3	+42	WNW	3	bc	45	85	8	3	-	-	2-3	2-3	1500	2	3
Malin Head	1004·1	+32	S	3	c	44	92	7	4	-	4	4-6	7-8	2500	1	2
Aldergrove	1007·0	+34	S'W	2	bc	41	97	8	5	4	-	1	2-3	4000	2	*
Birr Castle	1009·1	+36	S	1	c	43	92	8	5	7	-	4-6	7-8	2500	1	*
Valentia Obsy. †	1011·1	+34	WNW	5	bc	48	65	8	2	-	-	4-6	4-6	2500	1	4
Roches Point	1011·3	+44	WNW	3	bc	45	85	8	5	-	-	4-6	4-6	2500	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 14th (37)	13h.—18h. 14th (38)	18h 14th to 1h. 15th (39)	1h.—7h. 15th (40)
London (Kew)	cmocprozo	cirorormo	crromocmo	cmo
Croydon	cmo	mrrrmo	roroiro	cmfm
S. Farnborough	crsomo	crsodrrro	crodofo	ofmowc
Boscombe Down	crrmo	cRRcrr	crorobofcF	bmo
Calshot (Soton.)	cdoroodr	orrroromo	cro rr bcmo	bcfwbmo
Lympne	cbcmo	cmodrro	omo rorrm	rrroFroF
Manston	bmobcmo	bcidomo	croromo	cdodomff
Shoeburyness	bcmocmo	moiroc	crrcro	croro odd
Felixstowe	cmobcmo	crsooir	rorsrs roro	ororoido
Gorleston	cq	cq	cor roro	oroc
Mildenhall	cmoc	cisororomo	crriromo	cirom,oFe
Cranwell	cmororor	cdodorrm	crrm,cf	c,oFF
Birmingham		orro	oroc	cb
Upper Heyford	cmocrororrmo	crrrobmo	iro dodomof	bccmoc
Ross-on-Wye	rororr	rrdoroc	pcmifc	cb
Hartland Point	ocrr	cirr	irobc	cbcc
Bristol	crororomo	crorrromo	cmocbcmo	bcmobfgx
Portland Bill	orrp	oddc	cbc	bc
Plymouth	crrrorododo	rrrcpro	cprobc	bcb
The Lizard	rbc	cprc	bc	bc
Scilly (St. Mary's)	rrcpbc	bccpq	cbc	bcbbcc
Guernsey				
Pembroke	orRmqc [gale symbol]	crq		bc
Holyhead	rrmoc [gale symbol]	*	bcmocb	bbc
Chester (Sealand)	rororq	*	cmorobc	bcbx
Manchester	cmororr	*	irocm	bFFox
Spurn Head	cq	pqrr	cro	oFf
Catterick	cmorrmo	rsrhmroro	roroofF	oF
Tynemouth	cqoiro	oir	oiroc	cbcm
St. Abbs Head	cmoqr [gale symbol]	*	mocbc	bc
Leuchars	croiRrrmo	rrrorododo	dodocmo,bmx	bmobcxbbc
Renfrew (Abbots I.)	cmoRrRR	crirocmo	bcmocb	bbciro
Eskdalemuir	crRR	crrcorr	cmbcbw	orrcm
Point of Ayre	rrc	cbc	bcbbc	bbc
Tiree	orrod	bc	bc	bccor
Stornoway	crr	crr	cprobc	bccrr [gale symbol]
Dalwhinnie	r, ssf	sso	*	iro
Aberdeen	irocrr	crrr	rocbc	bc
Wick	cirmo [symbol]	ireq [symbol]	cqmbc	b,cq ⊕
Lerwick	ciriro [symbol]	cirr [symbol]	crro [gale symbol]	c
Blacksod Point	c	probc	cq	irq
Malin Head	cirocirocc	c	cprobcbbc ⊕	c
Aldergrove	rrrorairo	cbcb	cprobbc	bcciro
Birr Castle	cpr	c	bcc	c
Valentia Obsy. †	cpsprqcpR	cprqprcbc	bcbbcc	croroc
Roches Point	ir	bc	bc	ciro

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 symbol] gale.
⊕ Solar halo. Ⓘ lunar halo. [aurora symbol] 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.

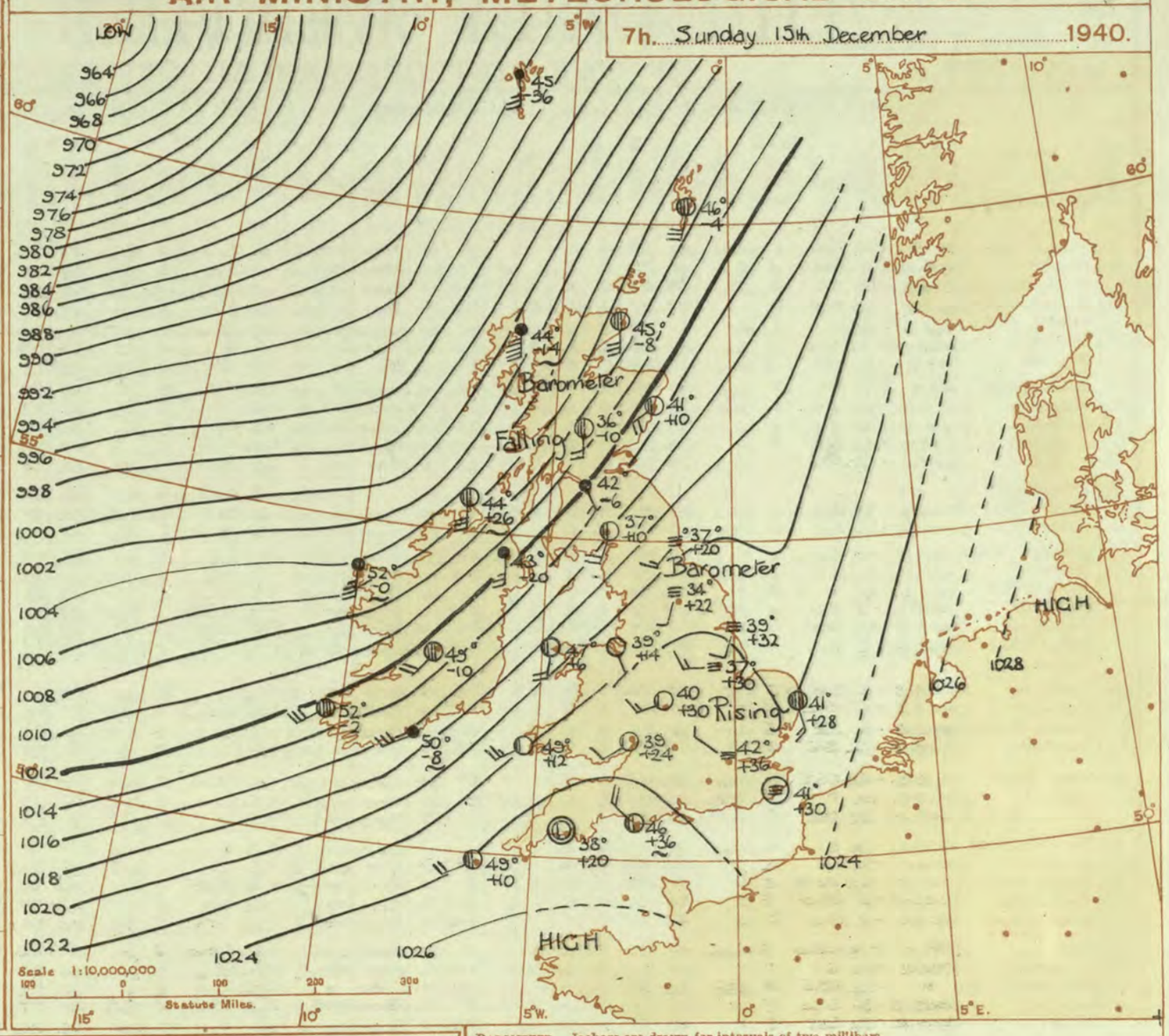
COLUMN 29—STATE OF GROUND.

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 15th December 1940.



Abridged observations of additional stations in the AVIATION WEATHER CODE

13h. G.M.T. 14th Dec.				18h. G.M.T.			01h. G.M.T. 15th Dec.				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	62	63645	47868	62	62545	50768	51	81844	53585	52	02853	49605
115	52	62735	14568	56	02844	20467	51	81844	53585	52	81844	20487
203				5-	81845	16585						
206	52	61854	51468							92	02855	20328
210	52	61744	45668	52	02864	16868	04	00890	17322	57	02853	15407
220	--	64753	23268	83	01754	20314				62	66536	22768
230	52	64645	14468	86	22746	22267	80	00852	21482	5-	62758	51568
245	6-	64538	49768	6-	52538	51668	50	05532	22152	50	01764	20424
260	62	22744	14168	57	05665	18328	04	00890	00022	47	01862	18315
277				54	00851	00062	07	00890	23023	52	02864	16528
279	52	22745	14468	62	62646	18368				04	02790	18315
285	6-	70538	12768	6-	61538	20368						
288	02	62648	47668	62	61634	17468	03	08490	18266	07	08490	20243
273	35	10863	21115							43	62754	17767
301	62	62636	47668	52	62557	14468	03	05690	00063	00	05690	18213
321	62	64625	49568	62	62535	16568	02	08438	16228	--	44109	18149
299				62	62535	53768	5-	05548	23428	--	44309	23249
292	62	62526	15368				02	47318	16168	--	48009	00049
310												
316	62	62435	15368	62	64435	15468	5-	47338	19368	--	46009	22149
333	52	62646	51768	27	02753	00056	20	01953	25263	50	00861	20423
334	--	62556	12568									
340	62	62627	15568	5-	61628	14368	53	45363	00045	00	05690	00002
136	09	05690	14616				5-	05638	14368	--	46109	15253
336	62	64644	16468	62	62544	16468						
350	52	61635	45668									
368	6-	64538	16468									
379				62	22626	16568	6-	51438	24258	54	05653	26214
390	57	25663	14466	62	64437	16468	5-	57338	00068	--	46109	00049
382	62	52635	14468	62	61636	12368	5-	41428	24248	54	05665	25226
438	5-	02756	22516	62	64635	48568				5-	49218	02348
430	52	62646	16568	6-	64428	51568	5-	05646	26266	5-	05556	00016
409	52	22747	18468	97	81636	24287	2-	01855	28315			

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 15th Dec. 1940
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light to moderate S.W. wind; dull and misty at first but some bright intervals late in the afternoon; slight rain spreading from the west during the night, becoming mainly fair again later; rather mild.
4 W. Midlands ... 5 S.W. England ↓ 6 South Wales ... ↓ 7 North Wales ... ↓ 8 N.W. England ↓	Moderate S.W. wind, freshening, becoming strong locally on coasts, veering west and moderating later; rain spreading across from the west, followed by bright intervals & showers, mainly on coast; rather mild.
9 N. Midlands ... 10 N.E. England	As 1-3
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. ↓	Moderate or fresh S.W. wind, becoming strong to gale on coasts; rain spreading from the west followed by bright intervals and showers, mainly on western coasts; rather mild.
13 {A. W. Scotld. B.N.W.Scotland. ↓	
14 Mid Scotland 15 N. E. Scotland ↓ 16 Orkneys and Shetlands ↓	Strong S.W. wind, gale on coasts; rain spreading from the west followed by showery conditions, but with some bright intervals; rather mild.
17 N. W. Ireland ↓ 18 N. E. Ireland ↓ 19 S. E. Ireland ↓ 20 S. W. Ireland ↓	Fresh or strong southerly winds, gale at times on coasts, veering S.W. or W. later + moderating; dull and rainy at first, showery but with some bright intervals later; mild.

GENERAL INFERENCE.

Pressure is high from the Azores across France to Russia and low over Iceland. A trough of low pressure over the North Sea is filling up and another trough across West Ireland is moving East. Rain will spread eastward over the country, but will be only slight in the South. Gales will occur in the Northwest.

FURTHER OUTLOOK.

Continuing unsettled, with periods of rain in most districts; Southwesterly winds, strong to gale at times in the North + West.

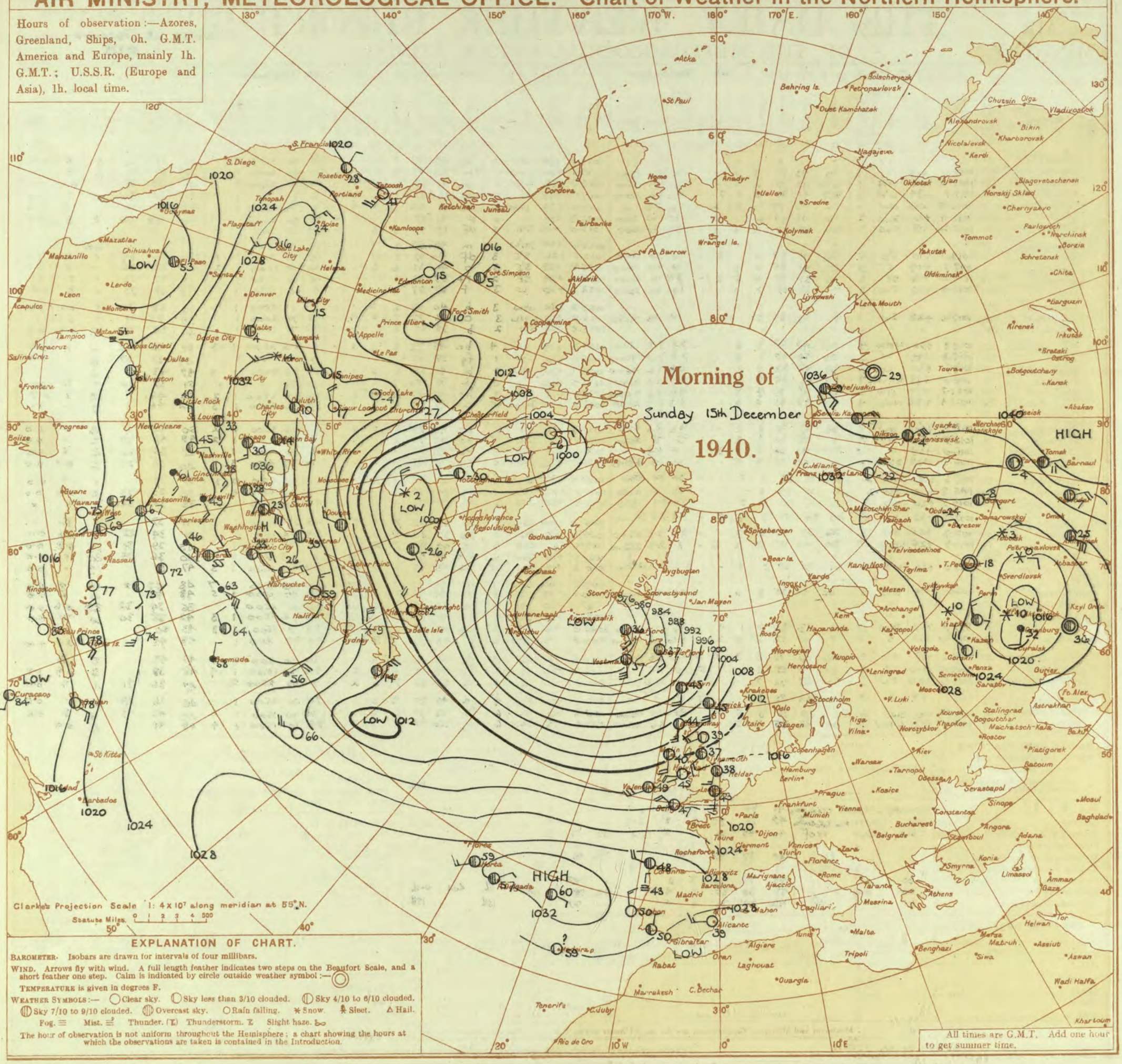
Gale Warning issued 1930h on 14/12/1940 in districts 5, 6, 7, 8, 12, 13a, 13b, 15, 16, 17, 18, 19 + 20.

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.



Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 15th December 1940.

No. 28878.

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

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	1016.6	+18	S	3	m	43	97	4	5	-	-	10	10	1700
	S. Farnborough	226	1017.0	+24	W'N	1	cf+	43	97	2	5	-	-	10	10	200
	Boscombe Down	417	1017.7	+34	W'N	3	bc/f	41	97	6	5	7	-	4-6	4-6	5000
	Calshot (Sthmtn.)	8	1016.8	+26	NW	1	*	42	97	*	5	3	-	*	7-8	*
	Lympne ...	346	1018.4	+6	SSW	2	rr	41	97	6	-	2	-	10	10	500
	Manston ...	154	1018.2	+8	SSE	3	r₀r₀	39	97	5	6	2	-	9+	10	500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1018.1	+10	S'E	4	r₀r₀	41	97	6	-	2	-	10	10	1000
	Gorleston ...	5	1018.3	+14	S	5	r₀r₀	41	85	6	6	-	-	10	10	1500
	Mildenhall ...	19	1017.0	+16	SE	2	rr₀	39	97	6	5	2	-	7-8	10	1200
	Cranwell ...	240	1016.4	+22	SW	2	cf	36	97	3	5	-	-	10	10	1000
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1017.0	+28	SW	1	f	41	97	2	-	-	-	10	10	<150
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1018.8	+32	WNW	4	c	47	75	8	8	-	-	7-8	7-8	1500
	Bristol ...	209	1017.9	+32	W	3	Z₀	43	97	5	5	-	-	7-8	7-8	4000
	Portland Bill ...	32	1018.0	+30	W	4	bc	47	92	8	5	-	-	4-6	4-6	4000
	Plymouth ...	82	1019.7	+38	WNW	4	bc	46	85	8	2	3	-	2-3	2-3	2500
	The Lizard ...	240	1021.2	+30	NW	5	bc	47	75	8	8	-	-	4-6	4-6	2000
	Scilly (St.Mary's)	163	1021.4	+36	NW'W	4	bc	47	75	8	2	-	-	2-3	2-3	2000
	Guernsey ...	175														
6	Pembroke ...	142	1018.3	+24	NW	4	bc	47	75	8	2	-	-	4-6	4-6	800
7	Holyhead ...	26	1015.9	+30	W	4	b	45	85	8	2	-	-	Tr	Tr	2500
	Chester (Sealand)	16	1016.0	+34	W	2	bc/r	43	92	7	-	3	-	0	2-3	-
8	Manchester ...	70	1016.3	+32	SSE	1	m	40	97	4	5	-	-	10	10	2500
10	Spurn Head ...	29	1017.0	+18	SSE	3	o	38	97	6	5	-	-	9+	9+	1500
	Catterick ...	175	1015.8	+22	S'W	2	F+	35	97	1	-	-	-	10	10	<150
	Tynemouth ...	108	1014.2	+20	SW	3	Z₀	37	92	5	5	-	-	7-8	7-8	1800
11	St. Abbs Head	280	1012.3	+32	W	4	bc	40	92	7	4	4	-	2-3	2-3	2500
	Leuchars ...	36	1011.3	+26	SW	3	Z₀	39	97	6	7	-	-	2-3	2-3	2500
12	Renfrew (Abbots I.)	19	1011.9	+24	WSW	2	bc	42	92	8	2	6	-	1	2-3	3500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1013.5	+30	W'S	3	bc	39	92	8	1	-	-	2-3	2-3	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1004.0	+14	SSW	5	bc	44	85	8	3	-	-	4-6	4-6	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	997.9	+22	SSW	3	b	43	85	7	1	4	-	Tr	1	2500
16	Lerwick ...	156	1007.0	+32	S	7	c	45	92	6	8	2	-	4-6	10	4000
17	Blacksod Point	18	1008.2	-18	S'W	5	cq	47	75	8	3	7	-	4-6	7-8	4000
18	Malin Head ...	84	1009.4	+10	S	4	bc	40	85	8	-	-	5	0	4-6	-
	Aldergrove ...	268	1013.6	+20	S'W	3	bc	38	92	7	-	-	6	0	4-6	-
19	Birr Castle ...	173	1015.1	+8	S	2	c	40	75	8	-	-	5	0	9	-
20	Valentia Obsy.	30	1015.5	-6	SW'S	6	c	49	85	8	5	-	-	9+	9+	4000
	Roches Point	22	1018.6	+12	WNW	3	bc	42	85	8	5	-	6	1	4-6	2500

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

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)	1023.5	+34	W'N	2	Z₀	43	97	5	5	-	-	10	10	2500	1	*
Croydon	1023.1	+36	WNW	1	m	42	97	4	5	-	-	10	10	1000	1	*
S. Farnborough	1023.5	+34	W'N	2	Z₀	41	97	6	5	-	-	10	10	5000	1	*
Boscombe Down	1024.5	+38	W	2	Z₀	36	97	7	-	7	-	0	1	-	1	*
Calshot (Sthmtn.)	1023.5	+34	NW	2	Z₀	41	92	6	5	4	-	1	9	5700	1	1
Lympne	1022.8	+30	-	0	F	41	97	1	-	-	-	10	10	<150	1	§
Manston	1023.0	+26	S'E	2	df	39	97	3	6	-	-	10	10	300		*
Shoeburyness	1023.0	+24	SW'W	1	m	42	97	4	5	-	-	10	10	800		*
Felixstowe	1022.5	+26	S'E	3	df	40	97	3	5	-	-	10	10	200	1	1
Gorleston	1022.8	+28	S'E	3	o	41	92	6	6	-	-	10	10	1500	1	2
Mildenhall	1022.1	+24	SE	2	F+	39	97	1	-	-	-	10	10	<150	1	*
Cranwell	1022.5	+30	W	3	F	37	97	1	-	-	-	10	10	<150	1	*
Birmingham	1023.2	+30	WSW	3	b	40	97	6	5	-	1	Tr	1	4000	1	*
Upper Heyford	1022.9	+22	WNW	3	c	43	92	7	5	4	-	7-8	9+	3000	1	*
Ross-on-Wye	1023.4	+24	SW	2	b	39	85	8	5	-	-	Tr	Tr	2500	1	*
Hartland Point	1023.3	+14	W	4	bc	48	75	8	2	4	-	1	4-6	2500	1	3
Bristol	1025.0	+36	W	1	fg	38	97	7	-	-	-	0	0	-	1	*
Portland Bill	1024.3	+36	NW	4	bc	46	85	8	5	-	-	4-6	4-6	4000	1	4
Plymouth	1025.5	+20	-	0	b	38	92	7	-	4	-	0	Tr	-	1	1
The Lizard	1025.0	+14	W'S	4	bc	48	85	8	8	6	-	4-6	4-6	2500	1	2
Scilly (St.Mary's)	1023.8	+10	SW'W	4	c	49	85	8	8	3	-	7-8	9+	2000	1	3
Guernsey																
Pembroke	1021.7	+12	SW	5	bc	49	85	8	5	4	1	1	4-6	3000	1	2
Holyhead	1018.7	+6	S'W	4	bc	47	75	8	-	3	-	0	4-6	-	1	2
Chester (Sealand)	1021.3	+14	SSE	2	Z₀	39	85	6	-	-	-	0	0	-	1	*
Manchester	1021.7	+26	SSE	1	F+	31	97	0	-	-	-	10	10	<150	3	*
Spurn Head	1021.4	+32	SSW	2	F	39	97	1	5	-	-	10	10	220	0	1
Catterick	1020.5	+22	S'W	1	F+	34	97	0	-	-	-	10	10	<150	1	*
Tynemouth	1018.8	+20	SW	3	m	37	92	4	5	-	-	4-6	4-6	1600	1	2
St. Abbs Head	1015.3	+10	SSW	4	bc	39	92	7	4	4	-	2-3	2-3	2500	1	3
Leuchars	1014.0	+8	SW	3	bc	39	85	8	5	3	-	2-3	4-6	3500	1	*
Renfrew (Abbots I.)	1013.2	-6	SSE	3	ir₀	42	85	7	5	7	-	2-3	9+	2500	1	*
Eskdalemuir	1016.8	+10	SSW	4	bc	37	92	7	5	4	1	1	2-3	800	1	*
Point of Ayre	1016.6	+4	SW	5	bc	43	85	8	5	4	-	2-3	4-6	2500	1	3
Tiree	1003.6	-20	SSW	7	rr	45	97	7	-	2	-	10	10	1500	1	7
Stornoway	1000.8	-14	S	9	rr	44	97	7	5	2	-	9	10	1000	1	5
Dalwhinnie	*	-10	S	4	o	36	85	7	5	2	-	4-6	10	1500	7	*
Aberdeen	1013.0	+10	SW	4	bc	41	92	7	6	7	-	4-6	4-6	1500	1	3
Wick	1007.0	-8	S	6	cq	45	75	7	5	7	8	7-8	9	1500	1	3
Lerwick	1006.9	-4	S'W	6	c	46	75	7	8	7	-	4-6	7-8	800	1	*
Blacksod Point	1005.5	0	S	7	ir₀	52	92	7	6	-	-	10	10	800	2	4
Malin Head	1005.2	-26	S	6	c/r	49	92	6	6	2	-	4-6	9+	1500	1	4
Aldergrove	1011.9	-20	S	5	ir₀	43	85	7	5	2	-	9	10	2800	2	*
Birr Castle	1013.2	-10	SSW	4	e	49	85	8	5	1	-	7-8	10	2500	1	*
Valentia Obsy.	1013.8	-2	SW	6	c/r	52	97	6	6	-	-	10	10	1500	1	4
Roches Point	1016.9	-8	SW	6	ir₀	50	92	7	6	2	-	7-8	10	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 14th Hrs. (36)
London (Kew)	41	39	36	3	2	0.4
Croydon	42	38	35	3	3	2.4
S. Farnborough	41	39	37	5	0.6	0.4
Boscombe Down	43	35	30	13	1	0.0
Calshot (Sthmtn.)	44	37	32		2	0.0
Lympne	39	38	35	2	9	2.8
Manston						
Shoeburyness				0.6		
Felixstowe	39	36	34	1	7	3.4
Gorleston	40	38	35	—	5	0.5
Mildenhall	38	37	33	1	5	1.1
Cranwell	35	34	33	6	3	0.0
Birmingham	38	38	33	9	0.1	0.0
Upper Heyford	39	38	31	7	0.4	*
Ross-on-Wye	44	38	32	13	0.3	0.0
Hartland Point	51	46	42	14	1	0.0
Bristol	47	37	27	8	-	0.0
Portland Bill	49	43	*	2	-	*
Plymouth	51	37	30	—	Tr	0.1
The Lizard	52	46	*	12	1	0.7
Scilly (St.Mary's)	52	46	*	8	-	0.6
Guernsey						
Pembroke	50	46	*	15	-	0.0
Holyhead	49	43	39	2	-	0.0
Chester (Sealand)	41	35	26	2	1	0.0
Manchester	40	30	23	6	0.1	0.0
Spurn Head	39	38	*	1	4	0.0
Catterick	36	33	33	5	0.3	0.0
Tynemouth	38	35	32	*	1	*
St. Abbs Head	41	37	*	9	Tr	*
Leuchars	41	34	28	11	0.1	0.0
Renfrew (Abbots I.)	45	39	31	12	0.2	0.0
Eskdalemuir	40	36	34	20	1	0.0
Point of Ayre	47	37	*	15	-	0.0
Tiree	48	43	*	14	2	0.0
Stornoway	48	43	*	10	1	0.0
Dalwhinnie	36	34	32	23	0.6	0.0
Aberdeen	42	38	30	14	Tr	0.0
Wick	43	40	*	1	-	*
Lerwick	48	42	*	1	2	0.0
Blacksod Point	47	43	*	5	6	*
Malin Head	48	38	*	5	0.4	1.2
Aldergrove	47	36	31	4	Tr	0.0
Birr Castle	48	36	32	4	-	0.6
Valentia Obsy.	48	43	41	6	3	0.6
Roches Point	48	41	*	3	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.	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	cm₀cpr₀Z₀	cir₀r₀m₀	cr₀m₀cm₀	41	39	36	3	2	0.4	*	*	2
Croydon ...	217	cm₀	mrrr m₀	r₀r₀cmfm	42	38	35	3	3	2.4	*	*	3
Greenwich (Royal Observatory)...	149	bec	cr₀r	rrcf	40	40	36	1	2	1.2	89	95	3
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	44	37	37	4			79	96	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*									*
Camden Square ...	110	bc	c	*	43	37	32	3	2	*	*	97	*
Kensington ...	80	cm	cm	*	43	38	35	1	4		92	98	*
Hampstead Observatory ...	450	or	or.	of	42	34	31	1	4		*	97	*

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.
0.2	7h 15th	<0.1	0-1h 15th

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 16th December 1940.

No. 28,870

OBSERVATIONS at 13h. G.M.T. 15th December

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)	1027·2	+12	SW	2	zo	44	85	6	-	4	6	0	9+	-
	Croydon	1027·2	+14	WNW	1	zo	47	85	5	5	-	7	2-3	10	2000
	S. Farnborough	1027·6	+14	WSW	2	c	48	65	7	-	-	6	0	7-8	-
	Boscombe Down	1027·1	+2	S	2	zo	45	92	6	-	4	1	0	4-6	-
	Calshot (Soton.)	1027·4	+4	SW	1	zo	47	85	6	-	7	6	0	7-8	-
	Lympne	1028·4	+28	S	1	m/f	42	97	4	5	-	-	10	10	<150
	Manston	1027·5	+10	SSW	2	o/d	42	97	5	5	-	-	10	10	200
2	Shoeburyness	1027·3	+16	NW	1	om	43	97	4	5	-	-	10	10	1500
	Felixstowe	1026·5	+10	S'W	2	F+	41	97	1	-	-	-	10	10	<150
	Gorleston	1026·9	+14	S'W	3	om	41	92	4	6	-	-	10	10	1500
	Mildenhall	1026·1	+10	S	2	zo	43	97	5	5	7	-	4-6	7-8	300
	Cranwell	1025·1	+6	SW'S	3	m	41	97	4	5	-	7	Tr	10	3000
3	Birmingham	1023·7	-2	SSW	4	c	44	85	6	5	7	-	7-8	9+	4000
	Upper Heyford	1026·0	+6	SW	2	zo	46	75	6	-	7	6	0	7-8	-
4	Ross-on-Wye	1024·2	-4	SSW	3	c	46	75	6	5	-	2	4-6	9+	2500
5	Hartland Point	1023·6	-10	SW	4	c	50	85	7	5	6	-	7-8	9+	1500
	Bristol	1026·2	-6	SSW	4	c	47	75	7	5	7	8	4-6	9+	5700
	Portland Bill	1026·5	+10	WSW	4	c	51	92	8	5	4	-	4-6	9	4000
	Plymouth	1026·7	-6	SW	4	c	51	85	7	5	7	-	9+	10	1200
	The Lizard	1026·5	0	SW	5	c	52	92	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	1024·8	-6	SW'S	5	c	54	85	7	5	7	3	4-6	7-8	1800
	Guernsey														
6	Pembroke	1021·9	0	SW	6	ido	51	92	6	5	2	-	7-8	10	2000
7	Holyhead	1017·6	-10	SSW	6	ido	50	97	6	5	-	-	10	10	500
	Chester (Sealand)	1021·6	-2	S	4	zo	47	85	6	5	7	-	7-8	9+	2800
8	Manchester	1022·2	-6	S	3	zo	44	85	6	5	-	-	9	9	4500
10	Spurn Head	1024·6	+6	S'E	3	f-	40	97	3	5	-	-	9+	9+	800
	Catterick	1021·2	-2	S	1	iro	39	92	4	5	-	-	10	10	4500
	Tynemouth	1019·1	-6	SW	4	c	43	85	5	8	-	-	7-8	7-8	1800
11	St. Abbs Head	1013·4	-16	SSW	6	iro	44	85	8	5	5	-	4-6	9+	2500
	Leuchars	1012·4	-4	SSW	5	roro	46	92	6	5	7	-	7-8	10	1500
12	Renfrew (Abbots I.)	1011·7	-6	SSW	5	ido	50	92	7	5	2	-	9	10	1000
	Eskdalemuir	1015·2	-10	SW	6	rr	43	97	6	-	2	-	10	10	220
	Point of Ayre	1015·3	-2	SW	5	dodo	51	92	7	8	1	-	7-8	10	1800
13A	Tiree	1006·2	+28	SW'S	4	id	49	97	6	-	2	-	9+	9+	1500
13B	Stornoway	1002·6	+8	SSW	7	c/r	49	85	7	5	7	-	7-8	10	1500
15	Dalwhinnie	1018·4	-2	SSW	4	iro	40	92	7	5	4	-	4-6	7-8	800
	Aberdeen	1012·5	-2	SSW	5	iro	44	85	6	6	7	-	7-8	10	1500
	Wick	1007·0	+10	S	6	cq	45	85	7	5	7	-	7-8	9	1500
16	Lerwick	1005·8	+6	SSW	8	rr	44	92	6	6	2	-	4-6	10	800
17	Blacksod Point	1008·9	+16	SSW	5	c	53	92	7	3	5	9	4-6	9	800
18	Malin Head	1007·7	+14	S	5	c	51	92	8	5	7	1	2-3	7-8	2500
	Aldergrove	1011·6	-2	S'W	4	ido	51	92	6	5	-	-	10	10	700
19	Birr Castle	1018·8	0	SW	3	c/r	54	85	7	6	2	-	4-6	10	1500
20	Valentia Obsy. †	1015·1	+6	SW	6	o/r	54	97	6	5	-	-	10	10	800
	Roches Point	1018·[illegible]	0	SW'S	5	id	52	92	6	5	-	-	10	10	450

OBSERVATIONS at 18h. G.M.T. 15th December

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)	1028·9	+20	SSW	2	m	41	85	4	5	-	-	7-8	7-8	2500	1	*
	Croydon	1028·6	+14	SSE	2	m	42	85	4	-	5	-	0	7-8	-	1	*
	S. Farnborough	1028·9	+18	S	3	m	44	85	4	5	7	8	2-3	9+	4000	1	*
	Boscombe Down	1028·7	+20	S	3	c/r	45	97	6	5	7	-	7-8	10	2000	1	*
	Calshot (Soton.)	1028·6	+14	S'E	2	zo	46	85	6	-	7	-	0	10	-	1	1
	Lympne	1030·0	+12	WSW	1	bf+	38	97	2	-	-	-	0	0	-	1	§
	Manston	1029·6	+12	-	0	fg	40	97	4	5	-	-	Tr	Tr	1200		*
2	Shoeburyness	1029·9	+20	S'W	2	m	41	92	4	-	4	-	0	1	-	1	*
	Felixstowe	1028·9	+14	SE'S	1	of	40	97	3	5	-	-	10	10	800	1	1
	Gorleston	1028·5	+16	SW'S	3	o	42	97	4	5	-	-	10	10	800	1	2
	Mildenhall	1027·8	+22	SSE	3	cf-	42	97	3	-	7	-	0	9	-	1	*
	Cranwell	1026·0	+6	S	4	iro	42	85	5	5	7	-	7-8	9+	2500		*
3	Birmingham	1024·6	+4	SSW	3	c	45	85	6	5	-	-	10	10	1500	1	*
	Upper Heyford	1027·7	+20	S	3	iro	42	97	6	5	7	7	4-6	10	4500	1	*
4	Ross-on-Wye	1025·1	+6	S'W	4	c	49	85	6	5	-	-	9+	9+	1500	1	*
5	Hartland Point	1026·1	+20	SW	5	c	51	92	7	5	2	-	7-8	10	1000	1	3
	Bristol	1027·3	+8	SSW	3	ddo	49	92	6	5	7	-	4-6	9	2500	1	*
	Portland Bill	1028·7	-12	SW	3	c	51	92	7	5	-	-	10	10	4000	1	3
	Plymouth	1028·2	+22	WSW	4	zo	51	85	6	5	-	-	10	10	1000	1	3
	The Lizard	1027·3	+14	SW'W	5	c	51	97	7	8	2	-	7-8	9+	2000	1	3
	Scilly (St. Mary's)	1025·5	+14	SW	5	zo	52	92	6	5	7	3	7-8	9+	1500	1	4
	Guernsey																
6	Pembroke	1022·9	+10	SW	6	oq	52	92	7	5	-	-	10	10	2500	1	3
7	Holyhead	1018·9	+18	SSW	5	o/r	51	97	6	5	-	-	10	10	800	1	3
	Chester (Sealand)	1021·5	+6	S'E	4	ido	50	85	5	5	1	-	9	10	5500	1	*
8	Manchester	1021·1	-4	S'E	4	zo	47	85	6	5	2	-	7-8	10	1900	1	*
10	Spurn Head	1024·3	-2	S'E	5	c	41	97	6	4	6	-	4-6	7-8	1500	0	3
	Catterick	1021·3	+8	S	3	iro	42	92	4	5	2	-	7-8	10	400	1	
	Tynemouth	1018·9	+14	SSW	5	zo	45	85	5	5	-	-	7-8	7-8	1500	1	3
11	St. Abbs Head	1014·5	+8	SSW	6	dodo	46	92	7	5	2	-	7-8	10	2500	1	3
	Leuchars	1012·6	+10	SW	4	c/r	49	97	7	5	7	-	7-8	9	800	1	*
12	Renfrew (Abbots I.)	1012·8	+18	SW'S	4	c/r	52	92	6	5	7	-	7-8	9+	1200	1	*
	Eskdalemuir	1015·5	+10	SW'W	6	roro	47	97	4	-	2	-	10	10	<150	1	*
	Point of Ayre	1015·8	+8	SW	5	c	52	92	7	5	2	-	4-6	10	2500	1	3
13A	Tiree	1006·9	0	SSW	5	bc	49	92	7	6	-	-	4-6	4-6	1800	0	4
13B	Stornoway	1003·4	+10	SSW	5	c	47	92	7	8	7	6	4-6	9	1200	1	3
15	Dalwhinnie	1010·9	+12	SW	3	o	43	97	7	5	2	-	4-6	10	1500	4	*
	Aberdeen	1012·0	+2	SSW	5	c/r	46	97	6	6	2	•	9	10	1500	1	3
	Wick	1008·4	+14	S	6	c	46	92	8	5	7	-	7-8	9+	2500	1	3
16	Lerwick	1007·5	+12	SSW	7	o	46	92	6	8	2	-	7-8	10	800	1	*
17	Blacksod Point	1007·8	-14	S'W	6	rr	51	97	7	6	-	-	10	10	800	1	4
18	Malin Head	1008·6	-4	S'W	4	bc	51	85	8	4	-	-	4-6	4-6	4000	1	4
	Aldergrove	1012·8	+10	SSW	3	ido	52	97	6	6	2	-	9+	10	700		*
19	Birr Castle	1014·8	+14	WSW	2	c/r	55	85	7	6	2	-	4-6	10	1500	1	*
20	Valentia Obsy. †	1015·1	-2	SW	6	zo	55	92	6	5	-	-	9+	9+	1500	1	4
	Roches Point	1018·7	+10	SW	5	dd	52	97	6	5	-	-	10	10	450	1	4

PAST 24 HOURS. — WEATHER.

District	Stations	7h.—13h. 15th (37)	13h.—18h. 15th (38)	18h. 15th to 1h. 16th (39)	1h.—7h. 16th (40)
1	London (Kew)	cmfmmmo	cmobcm	bcmcmo	cmorocmo
	Croydon	cfcmo	cmom	bcmoc, ido	cmododo
	S. Farnborough	cbcmoc	cmom	mromodoc	dodomoc
	Boscombe Down	bcmo	bcmo	cmo	cido ciro
	Calshot (Soton.)	cbcmo	bccmo	irocmo	cirocmo
	Lympne	pFFbff	bm	fxbcmoc	cmidoroc
	Manston	cdodoffcmo	cmbcbfg	bfg cmo	cmomomo
2	Shoeburyness	om	o mbcm	bmcbcmo	cmocpro
	Felixstowe	ododof, F	oFfmoff	pffbcmc	omocmo
	Gorleston	omom	omm	om czo	com
	Mildenhall	oFefm	cmcfw	cfcmo	cmo
	Cranwell	oFFcm	F, ciromo	iroido, c	c
3	Birmingham	bc	c	c	c
	Upper Heyford	ccmocczo	czocmocio	rocmo	cmoidomoc
4	Ross-on-Wye	bbcc	c	c	c
5	Hartland Point	bccz	c	cbcc	cbcc
	Bristol	bfgxbcc	cdf	cdoiroc	bccidoc
	Portland Bill	bcc	cc	bcc	c
	Plymouth	bzo	ccmo	cmo	d
	The Lizard	c	cbcc	cbcc	cpro
	Scilly (St. Mary's)	c	cbcc	c	cPe
	Guernsey				
6	Pembroke	bccirido q	coq	idoqc	c
7	Holyhead	iroidoc	iromoc	mododoc	mododoc
	Chester (Sealand)	bccmo	bcmoido	idomoc	oc
8	Manchester	ffmcmo	rorocmo	roro cmo	cmo
10	Spurn Head	off	cpro	c	c
	Catterick	oFmoiromo	cmiro	iroidomo	cmo
	Tynemouth	crr	cmo	c	c
11	St. Abbs Head	cqiro	rocqdodo	docq	cq
	Leuchars	bccrrfo	rodiromoc	cbcc iro	cirocbcc
12	Renfrew (Abbots I.)	ciromororrdo	iroroiRcmo	cmoiro	cmoiro
	Eskdalemuir	b, corrRR	orrroro	ororo ff (gale)	ro ffiro
	Point of Ayre	dodo	c	ccq	cq
13A	Tiree	orodoc	cbc	cy crr (gale)	orr
13B	Stornoway	crr	cPR	c	crr
15	Dalwhinnie	orrc	iro	*	rro
	Aberdeen	bcciro	ciroc	ciroc	c
	Wick	crrcq	cqo	cqro	crorq
16	Lerwick	crr (gale)	crrir	cir (gale)	cirr
17	Blacksod Point	c	rr	rrq	rrq
18	Malin Head	ciroc	ccdbc	cproc	ct proc
	Aldergrove	iroir ido	dodoiddr	cido	cidoc
19	Birr Castle	ciro	ciro	c	c
20	Valentia Obsy. †	cirocmo	coidocmo	cdodocmo	cmoidoido
	Roches Point	id	dd	idc	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.

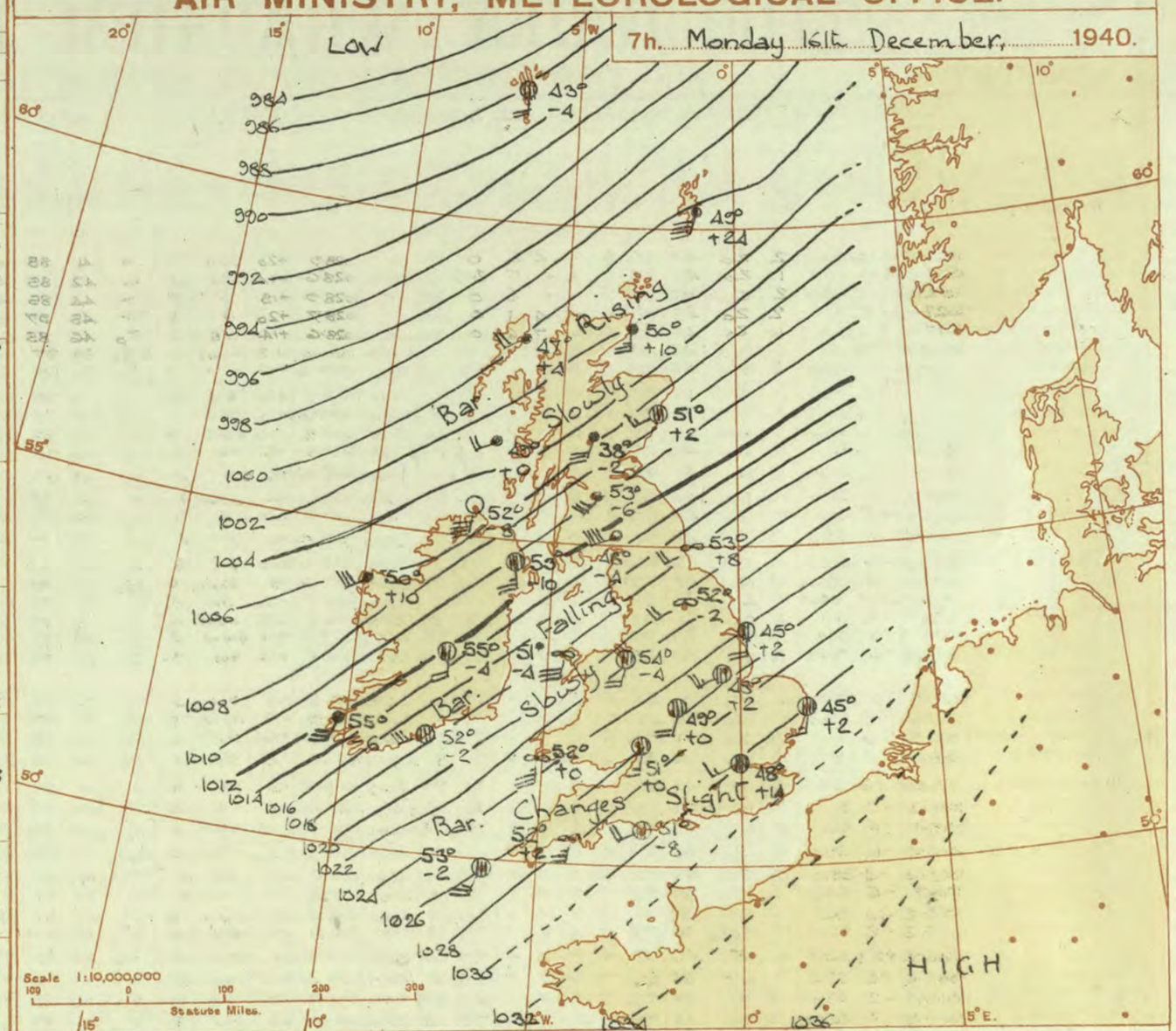
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 15th Dec.			18h. G.M.T.			01h. G.M.T. 16th Dec.			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	02764	17666	57	02761	17527	5-	62568	49628	57	51666	18357
115	52	62954	20586	52	02844	53527	52	62735	20488	52	62735	53568
203	85	02844	16667				6-	81638	49888			
206	53	02055	11268	57	02964	20226	6·	62744	53468			
210	5-	02066	17366	57	02863	16425	51	02864	16467	51	02862	52667
220												
230	52	62634	19668	57	02745	19468	62	63645	51768	62	62635	52668
245	62	62647	51668	62	21645	16568	51	22743	53868	5-	14647	53828
260	57	52756	16457	50	22744	22464	57	62753	18568	57	02745	51527
277	5-	02758	18568	62	52646	17558	57	02756	49658	52	02754	49526
279	8-	58637	15667	02	62648	53668	--	05548	16828	5-	02748	51828
285										23	02734	26667
288	57	08465	17417	5-	17458	16468	52	05654	17458	57	05645	18328
273										43	64544	17768
301	57	05566	15468	5-	62448	16458	5-	05668	18468	57	05654	18528
321	57	08465	18226	5-	05548	17428	5-	05665	18425	07	05690	18426
299	--	44209	22349	5-	05548	20418	5-	05548	23428	51	05644	22515
292	07	41490	16148	5-	45348	18258	5-	05538	14268	5-	05647	14227
310										--	02528	20628
316	07	43390	16146	52	02555	16458	5-	02646	51526	57	01662	18425
333	62	64536	16368	5-	21548	19458	5-	53648	18658	53	05644	51557
334											03654	17628
340	57	02864	14427	57	21675	19558	53	02846	17557	57	02763	15327
136	--	48109	18349				5-	22536	18466	5-	05658	18428
336										62	22754	20568
350	03	05690	18346							57	05653	18467
368	57	05654	22327									
379	52	05663	20215	5-	05648	18328	5-	05647	20427	5-	05648	20428
390	--	48309	20249	57	45166	18347	5-	43348	16248	52	21335	16158
382	53	01762	18214	52	22657	16268	53	05635	18327	53	05663	17325
438	50	01535	30245							5-	02746	24316
430	00	05590	24215	57	08464	00027	5-	05657	18317	5-	21548	20358
409	52	02764	15527	92	05647	17528	5-	05638	18958	5-	05638	18628

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 16th December,
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate or fresh S.W. wind, stronger later; cloudy, occasional local drizzle, very mild.
5 S.W. England 6 South Wales ...	Fresh or strong S.W. wind, perhaps gale locally later; cloudy or dull, occasional drizzle; heavier rain tomorrow, very mild.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Strong S.W. wind, gale at times locally; cloudy or dull, occasional drizzle, heavier rain later; very mild, becoming cooler 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	Fresh or strong S.W. wind, gale locally at first, veering W. and moderating; rain at first, bright intervals and showers later; very mild, then cooler.
18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 7-10.

GENERAL INFERENCE.

Pressure is very high on the Continent and low over Iceland. A trough of low pressure from our N.W. coasts to the Azores, will move slowly S.E. with rain, but appreciable amounts are not expected in the S.E. within 24 hours. Gales will occur locally.

FURTHER OUTLOOK.

Unsettled, but bright intervals at first in the north and West, probably some rain at first in the S.E. Less wind generally.

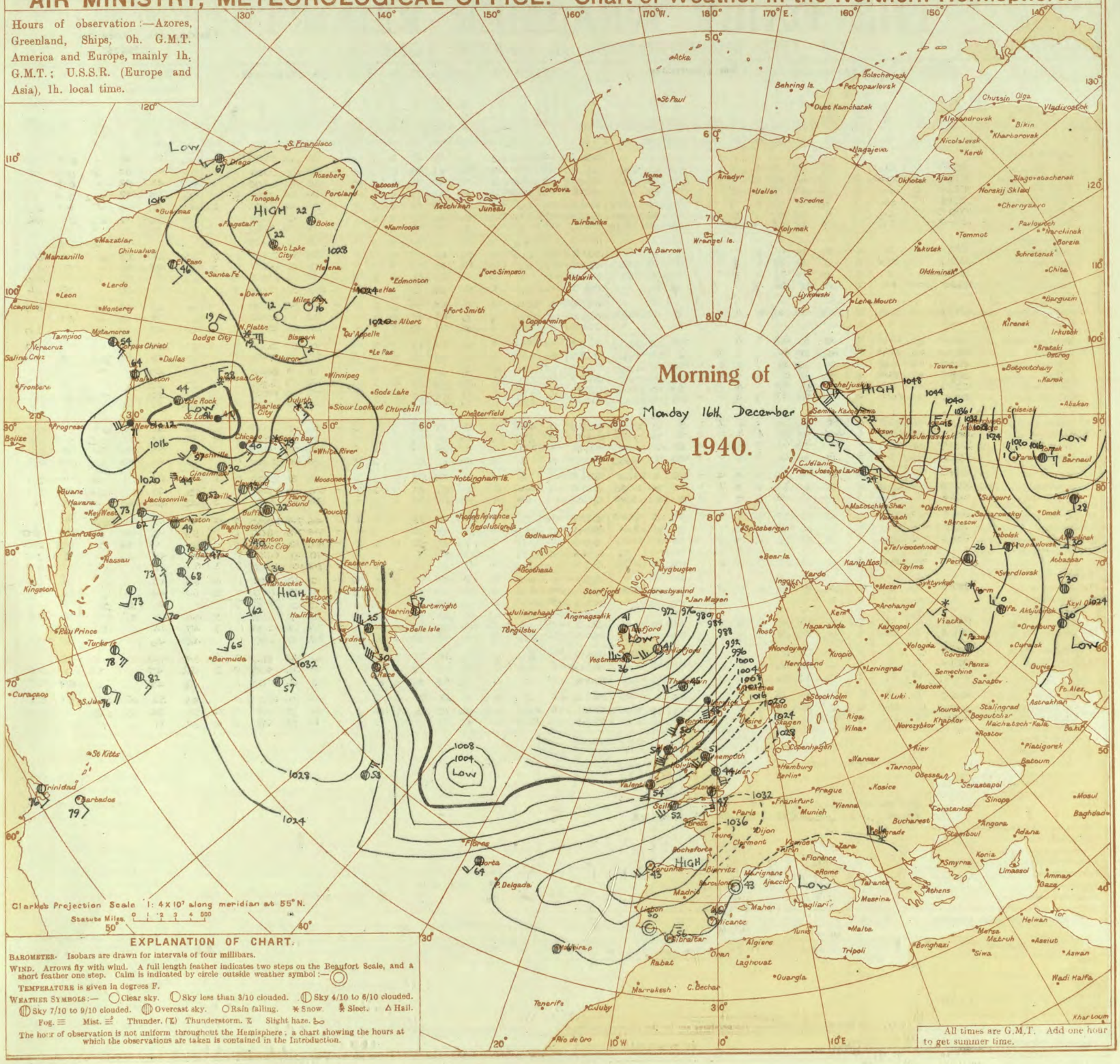
Gale warnings issued at 21.30hrs on 15th for, districts 6, 7, 8, 11, 12, 13A, 13B, 15, 16, 17, 18, 19, 20.

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.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 16th December 1940.

No. 28879

OBSERVATIONS at 1 hr. G.M.T. 16th December

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	1029·4	0	SSW	3	Zo	47	97	6	S	–	–	10	10	600
	S. Farnborough	226	1029·9	0	SSW	3	ido	49	97	5	S	–	–	10	10	1300
	Boscombe Down	417	1029·0	0	S'W	4	zo	49	97	6	S	–	–	10	10	300
	Calshot (Sthmtn.)	8	1029·8	+2	SW	3	zo	49	97	6	S	–	–	9+	9+	2000
	Lympne ...	346	1030·9	–2	SW	2	c	45	97	7	S	2	–	4-6	10	6000
	Manston ...	154	1031·0	–2	S'E	2	m	43	97	4	S	–	–	10	10	2000
2	Shoeburyness...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1029·9	–2	S	4	zo	42	97	6	–	3	–	0	7-8	–
	Gorleston ...	5	1029·2	–4	SSW	4	c	42	92	6	S	–	–	7-8	7-8	2500
	Mildenhall ...	19	1027·9	–2	S	3	zo	46	92	5	S	–	–	10	10	700
	Cranwell ...	240	1025·5	–4	SW	6	c	47	85	7	–	7	–	0	9	–
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1027·5	–2	SWS	4	zo	48	97	6	S	1	–	9	10	1800
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1025·3	0	SSW	6	c	51	97	7	S	–	–	7-8	7-8	2000
	Bristol ...	209	1027·4	+2	SSW	4	bc	50	92	7	S	9	1	Tr	2-3	2500
	Portland Bill ...	32	1029·0	+4	SW	4	c	50	85	7	S	4	–	7-8	10	4000
	Plymouth ...	82	1028·8	+2	SW'S	4	zo	51	97	6	S	–	–	10	10	900
	The Lizard ...	240	1028·2	+6	SW	5	c	51	97	7	8	2	–	7-8	10	2000
	Scilly (St. Mary's)	163	1026·3	+6	SW'S	5	c	52	97	7	S	–	–	7-8	7-8	1500
	Guernsey ...	175														
6	Pembroke ...	142	1023·5	+2	SW'S	6	cq	52	92	7	8	2	–	9	10	2000
7	Holyhead ...	26	1019·7	+6	S'W	5	do do	52	92	5	S	–	–	10	10	700
	Chester (Sealand)	16	1022·9	+8	SE	1	o	53	85	7	S	–	–	10	10	1500
8	Manchester ...	70	1022·8	+6	S	3	zo	50	85	6	5	–	–	4-6	9	3000
10	Spurn Head ...	29	1024·3	0	S'E	4	c	44	97	6	S	4	–	7-8	9	2500
	Catterick ...	175	1020·3	–6	WSW	4	zo	52	85	6	S	7	–	4-6	9+	2000
	Tynemouth ...	108	1018·8	0	SW	5	zo	51	85	6	9	–	–	9	9	1500
11	St. Abbs Head	280	1012·5	–12	SSW	7	ido	51	97	7	S	2	–	7-8	10	2000
	Leuchars ...	36	1011·0	–6	SSW	7	iro	54	85	7	S	–	–	9	9	1800
12	Renfrew (Abbots I.)	19	1010·5	–10	SSW	7	iro	54	92	6	S	7	–	7-8	9	2000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1017·0	+4	SW	6	c	53	85	7	8	2	–	4-6	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	997·9	–20	E	6	ro ro	50	92	6	5	7	–	9	10	1000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1002·0	–32	S	7	ro ro	49	85	6	5	7	–	7-8	10	1500
16	Lerwick ...	156	1002·8	–26	SSW	8	ir	48	92	6	8	2	–	7-8	10	800
17	Blacksod Point	18	1005·8	0	S	7	rr	53	97	7	6	–	–	10	10	800
18	Malin Head ...	84	1005·3	–12	S'W	8	c	54	85	6	6	6	–	4-6	7-8	1500
	Aldergrove ...	268	1011·5	–4	S'W	5	ido	53	85	8	5	7	–	9	9+	1700
19	Birr Castle ...	173	1014·2	0	S	4	c	55	85	8	8	7	–	4-6	9	1500
20	Valentia Obsy.	30	1014·6	0	SSW	6	c	54	92	6	5	–	–	10	10	1500
	Roches Point	22	1018·8	+2	SW	6	c	52	92	6	5	–	–	9+	9+	800

OBSERVATIONS at 7 hr. G.M.T. 16th December

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)	1030·8	+12	SSW	3	Zo	47	97	6	S	–	–	10	10	1500	1	*
	Croydon ...	1031·0	+14	SW	3	o/d	48	97	6	S	–	–	10	10	1000	1	*
	S. Farnborough	1030·7	+8	SSW	3	o/d	49	92	6	S	–	–	10	10	1200	1	*
	Boscombe Down	1029·8	+6	SSW	4	iro	49	97	5	6	–	–	9+	9+	500	1	*
	Calshot (Sthmtn.)	1030·5	+6	SW	3	zo	48	92	6	S	–	–	10	10	2000	1	2
	Lympne ...	1032·5	+10	SSW	2	zo	46	97	5	S	–	–	10	10	800	1	§
	Manston ...	1032·7	+14	S	3	zo	44	97	5	S	–	–	10	10	800		*
2	Shoeburyness...	1031·7	+12	S'W	2	c	46	97	5	S	–	–	10	10	2500	1	*
	Felixstowe ...	1031·3	+8	SSW	4	zo	44	97	6	S	–	–	9+	9+	3500	1	2
	Gorleston ...	1030·4	+2	S'W	3	m	45	97	4	S	–	–	10	10	800	1	2
	Mildenhall ...	1029·2	+4	S	4	zo	49	92	6	S	2	–	9	10	1900	0	*
	Cranwell ...	1026·3	+2	SW	5	c	48	85	7	S	7	–	4-6	9	2000	1	*
3	Birmingham ...	1025·4	0	SSW	4	c	49	92	6	S	7	–	1	7-8	1500	1	*
	Upper Heyford	1028·3	+6	S'W	3	c	47	97	8	S	–	–	7-8	7-8	1000	1	*
4	Ross-on-Wye	1026·2	0	SSW	3	c	51	85	7	S	–	–	9+	9+	1500	1	*
5	Hartland Point	1024·9	–4	SW	6	c	52	85	7	S	–	–	9	9	2000	1	4
	Bristol ...	1028·2	+6	SSW	3	c	50	92	7	S	3	–	4-6	9+	2400	1	*
	Portland Bill ...	1029·3	–8	SW	4	c	51	92	7	S	–	–	10	10	4000	1	3
	Plymouth ...	1028·7	+2	SSW	5	zo	52	92	6	S	–	–	10	10	600	1	3
	The Lizard ...	1027·5	0	SW	5	o	52	97	7	S	–	–	10	10	1500	1	3
	Scilly (St. Mary's)	1025·9	–2	SW'S	5	c	53	97	7	S	2	–	7-8	10	1100	1	3
	Guernsey ...																
6	Pembroke ...	1023·6	0	SSW	6	c	52	92	7	S	2	–	10	10	2000	1	4
7	Holyhead ...	1018·8	–4	S'W	6	zo	51	92	6	S	–	–	9+	9+	800	1	4
	Chester (Sealand)	1021·6	–4	SSW	4	c	54	75	7	4	3	–	4-6	9+	1500	1	*
8	Manchester ...	1022·7	0	S	4	zo	51	85	6	S	7	–	7-8	9+	2400	1	*
10	Spurn Head ...	1024·8	+2	S	4	c	45	97	7	S	7	–	4-6	9	2500	0	3
	Catterick ...	1020·8	–2	SW	4	zo	52	85	6	S	7	–	4-6	10	1500	1	*
	Tynemouth ...	1018·7	+8	SW	4	zo	53	85	6	S	–	–	9+	9+	1400	1	2
11	St. Abbs Head	1010·4	–16	SW	8	qbc	53	85	7	S	4	–	4-6	7-8	2000	0	4
	Leuchars ...	1010·0	0	SSW	8	qc	54	85	7	S	–	–	7-8	7-8	1800	1	*
12	Renfrew (Abbots I.)	1009·8	–6	SW'S	6	iro	53	92	6	S	7	–	4-6	10	2000	1	*
	Eskdalemuir ...	1014·5	–4	SW'W	8	iro	48	97	5	–	2	–	10	10	<150	1	*
	Point of Ayre...	1015·7	–2	SW	7	c	53	85	7	S	2	–	7-8	10	1500	1	3
13A	Tiree	1003·1	0	SW	5	rr	49	97	7	–	2	–	10	10	1500	1	4
13B	Stornoway ...	999·1	+4	SW	4	rr	47	92	6	S	2	–	9	10	1000	1	3
15	Dalwhinnie ...	1006·3	–2	SSW	6	ro ro	38	85	6	S	–	–	10	10	800	3	*
	Aberdeen ...	1008·0	+2	SW	3	c	51	85	7	S	–	–	10	10	1500	1	3
	Wick ...	1001·9	+10	S	5	ro ro	50	85	7	S	7	–	7-8	10	1500	1	3
16	Lerwick ...	1000·3	+24	SSW	8	rr	49	97	6	6	2	–	7-8	10	800	1	*
17	Blacksod Point	1006·3	+10	SW	6	ro ro	50	97	7	6	–	–	10	10	800	2	4
18	Malin Head ...	1004·4	–8	S'W	8	c/pr	52	92	6	6	–	–	9+	9+	800	0	3
	Aldergrove ...	1010·4	–10	S	5	o/d	53	85	8	5	–	–	10	10	1200	1	*
19	Birr Castle ...	1012·9	–4	S	4	c	55	85	8	5	1	–	7-8	10	2500	1	*
20	Valentia Obsy.	1013·1	–6	SW'S	6	ido	55	92	6	5	2	–	9+	10	1500	1	4
	Roches Point	1017·6	–2	SW'W	6	c	52	92	7	5	–	–	9+	9+	1500	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 15th. Hrs. (36)
1	London (Kew)	46	41	33	–	0·1	1·7
	Croydon ...	50	41	39	Tr	0·3	1·8
	S. Farnborough	50	43	42	–	0·3	4·1
	Boscombe Down	45	44	42	0·2	0·4	2·9
	Calshot (Sthmtn.)	48	45	44	–	0·1	4·2
	Lympne ...	43	38	29	0·2	0·1	0·0
	Manston ...	*	*	*	*	*	*
2	Shoeburyness...				–	0·2	
	Felixstowe ...	42	38	37	0·1	–	0·0
	Gorleston ...	43	40	39	–	–	0·0
	Mildenhall ...	43	41	35	Tr	–	0·0
	Cranwell ...		41	40		Tr	1·6
3	Birmingham ...	45	45	44	–	–	0·9
	Upper Heyford	46	43	40	–	0·1	*
4	Ross-on-Wye	49	49	45	–	–	2·0
5	Hartland Point	51	50	49	–	–	0·2
	Bristol ...	49	48	43	0·1	Tr	2·6
	Portland Bill ...	51	47	*	–	–	*
	Plymouth ...	52	50		–	Tr	0·3
	The Lizard ...	53	50	*	–	Tr	1·1
	Scilly (St. Mary's)	54	51	*	–	–	1·8
	Guernsey ...						
6	Pembroke ...	52	51	*	0·1		0·0
7	Holyhead ...	52	50	50	0·6	0·3	0·0
	Chester (Sealand)	50	49	46	Tr	Tr	0·5
8	Manchester ...	47	45	44	0·1	0·4	0·3
10	Spurn Head ...	41	41	*	Tr	–	0·0
	Catterick ...	43	41		0·1	0·1	0·8
	Tynemouth ...	45	44	40	–	–	*
11	St. Abbs Head	47	47	*	0·2	1	*
	Leuchars ...	50	48	44	1	0·1	0·0
12	Renfrew (Abbots I.)	52	52	48	9	0·3	0·0
	Eskdalemuir ...	47	46	46	10	2	0·0
	Point of Ayre...	53	51	*	1	–	0·0
13A	Tiree	50	49	*	4	4	0·0
13B	Stornoway ...	50	44	*	6	6	0·0
15	Dalwhinnie ...		42	39	9	19	0·0
	Aberdeen ...	46	46	45	0·1	Tr	0·0
	Wick ...	47	45	*	1	0·2	*
16	Lerwick ...	48	46	*	4	3	0·0
17	Blacksod Point	54	49	*	1	15	*
18	Malin Head ...	52	47	*	2	1	0·9
	Aldergrove ...	51	49		2	0·1	0·0
19	Birr Castle ...	55	53	52	0·4	0·1	0·0
20	Valentia Obsy.	55	54	52	0·6	0·1	0·0
	Roches Point	53	51	*	1	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	cmff mo	cmo bcm	c, ro cmo	45	41	33	–	0·1	1·7	*	*	6
Croydon	217	cfcmo	cmom	cidomdd	50	41	39	Tr	0·3	1·8	*	*	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. 16th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
0·7	9h 15th	<0·1	0–24 16th

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.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 17th December, 1940.

No. 28,880

OBSERVATIONS at 13h. G.M.T. 16th December,

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)...	1030·5	-8	SSW	4	z_o	49	92	6	5	-	-	10	10	1500
	Croydon ...	1030·5	-8	SSW	3	id_o	50	92	6	5	-	-	10	10	1000
	S. Farnborough	1030·6	-10	S'W	3	d_od_o	50	97	5	5	2	-	9	10	600
	Boscombe Down	1028·8	-6	SSW	4	ir_o	51	92	7	6	3	-	7-8	10	600
	Calshot (Soton.)	1030·6	-6	SW'S	4	z_o	50	92	6	5	-	-	10	10	800
	Lympne ...	1032·7	-10	S	3	id_o	48	97	7	5	2	-	4-6	10	500
	Manston ...	1032·4	-10	S	4	id_o	46	97	6	5	-	-	10	10	200
2	Shoeburyness ...	1031·4	-14	S'W	3	c	49	85	6	8	8	1	4-6	7-8	2500
	Felixstowe ...	1031·2	-6	S	5	z_o	45	97	5	5	7	4	Tr	9	4000
	Gorleston ...	1029·8	-8	SW'S	5	bc	47	92	6	-	3	-	0	4-6	-
	Mildenhall ...	1028·5	-10	S	5	z_o	52	85	6	5	-	-	9+	9+	1200
	Cranwell ...	1025·8	-10	SSW	5	c	51	85	7	5	-	-	4-6	10	1000
3	Birmingham	1024·9	·2	SSW	3	c	52	85	6	5	-	·	9+	9+	1500
	Upper Heyford	1027·8	-10	SSW	4	c	52	92	7	5	2	-	4-6	10	700
4	Ross-on-Wye ...	1025·0	-16	SW'S	5		55	75	7	5	7	8	2-3		2500
5	Hartland Point	1025·1	-6	SW	6	c	53	85	8	5	-	-	9+	9+	2700
	Bristol ...	1027·9	-6	SSW	4	c	55	85	8	5	-	-	9+	9+	4500
	Portland Bill ...	1029·1	-8	SSW	5	o	51	92	7	5	-	-	10	10	2500
	Plymouth ...	1029·4	-2	SSW	5	c/r	53	92	6	6	2	-	7-8	10	600
	The Lizard ...	1028·8	0	SW	6	o	53	97	7	5	2	-	9	10	1000
	Scilly (St. Mary's)	1026·8	+2	SW'S	5	c	53	92	6	5	-	-	10	10	2500
	Guernsey ...														
6	Pembroke ...	1022·6	-6	SW	7	cq	54	85	6	5	2	-	7-8	10	2000
7	Holyhead ...	1018·3	-2	SSW	6	z_o	53	85	6	5	2	-	9+	10	1000
	Chester (Sealand)	1021·6	-6	SW'S	3	c	57	65	8	5	7	-	7-8	9+	1800
8	Manchester ...	1021·8	-12	S	4	z_o	54	75	6	5	7	-	4-6	9+	4200
10	Spurn Head ...	1023·9	-10	S'E	5	c	49	92	7	5	-	-	9+	9+	1200
	Catterick ...	1018·4	-24	S'W	5	z_o	53	75	6	5	7	2	4-6	10	1500
	Tynemouth ...	1016·6	-16	SSW	5	c	54	75	6	5	-	-	9+	9+	1800
11	St. Abbs Head	1011·4	-14	SW	8	cq	54	75	8	5	2	-	7-8	10	2000
	Leuchars ...	1008·1	-18	SSW	7	id_o	55	85	7	5	2	-	4-6	10	1500
12	Renfrew (Abbots I.)	1010·1	+10	W	6	rr	50	97	7	5	2	-	7-8	10	1400
	Eskdalemuir ...	1012·2	-20	SW	8	rr	49	97	6	-	2	-	10	10	220
	Point of Ayre ...	1013·3	-24	SW'W	8	ir_o	54	85	7	6	2	-	4-6	10	800
13A	Tiree ...	1010·4	+36	W'N	4	rr	43	92	7	-	2	-	10	10	1500
13B	Stornoway ...	1005·5	+76	WSW	3	c/r	44	85	8	5	2	-	4-6	10	1500
15	Dalwhinnie ...	*	+8	SE	4	r_or_o	46	92	7	5	-	-	10	10	800
	Aberdeen ...	1007·3	-2	SSW	5	id_o	51	92	6	6	2	-	9+	10	800
	Wick ...	1005·1	+30	W	3	ir_o	45	92	7	5	-	-	10	10	800
16	Lerwick...	1002·1	+16	SW	6	r_or_o	45	92	6	6	2	-	4-6	10	800
17	Blacksod Point..	1015·5	+42	W'S	5	bc	47	75	7	3	-	-	4-6	4-6	1500
18	Malin Head ...	1012·2	+52	NW'W	4	r_or_o	43	85	6	6	-	-	9+	9+	800
	Aldergrove ...	1013·8	+38	SW'W	4	r_or_o	48	92	7	6	2	-	7-8	10	700
19	Birr Castle ...	1019·6	+60	SSW	3	c	46	92	8	6	2	-	4-6	10	1500
20	Valentia Obsy. †	1022·4	+42	W'N	5	bc	50	75	9	3	-	1	2-3	2-3	2500
	Roches Point ...	1021·9	+46	W'N	4	c	50	85	8	6	7	-	7-8	9+	1500

OBSERVATIONS at 18h. G.M.T. 16th December.

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)...	1030·6	+4	SW	4	z_o	49	92	6	5	-	-	9+	9+	2500	1	*
	Croydon ...	1030·4	+2	SW	2	z_o	49	92	6	5	-	-	10	10	1000	1	*
	S. Farnborough	1030·7	+4	SW	4	c/d	51	92	6	5	7	-	9	10	1000	1	*
	Boscombe Down	1029·5	0	SSW	5	z_o	51	92	6	6	-	-	9	9	1600	1	*
	Calshot (Soton.)	1030·8	+2	SW'W	4	z_o	50	92	6	5	-	-	10	10	800	1	2
	Lympne ...	1033·1	0	SSW	3	z_o	46	97	5	5	-	-	10	10	200	1	3§
	Manston ...	1032·9	+4	SE	3	c/d	44	97	5	5	-	-	10	10	900		*
2	Shoeburyness ...	1031·5	+2	S'W	3	c	47	97	6	5	-	-	10	10	800	1	*
	Felixstowe ...	1030·7	-6	S'W	5	z_o	45	97	5	5	-	-	9+	9+	1200	1	4
	Gorleston ...	1029·2	-4	S'W	7	z_o	48	92	5	5	-	-	10	10	1800	1	3
	Mildenhall ...	1028·2	-2	S	5	z_o	51	85	5	-	7	-	0	4-6	-	1	*
	Cranwell ...	1025·6	+4	SW	5	c	52	85	7	5	-	-	10	0	2500	0	*
3	Birmingham	1026·0	+8	WSW	4	ir_o	51	92	6	6	-	-	10	0	450	1	*
	Upper Heyford	1028·2	+4	SW	4	c	51	92	8	5	7	-	7-8	9+	1500		*
4	Ross-on-Wye ...	1026·9	+12	SW	4	id	52	92	7	5	-	-	10	0	1500	1	*
5	Hartland Point	1029·3	+40	W	3	c	49	92	8	5	-	-	9+	9+	2000	1	3
	Bristol ...	1029·5	+14	SSW	4	ir_o	52	92	6	-	2	-	10	0	1400	1	*
	Portland Bill ...	1030·4	+4	S	5	o	51	92	7	5	-	-	10	0	2500	1	4
	Plymouth ...	1030·3	+8	SW'W	5	dd	52	97	4	-	2	-	10	10	400	1	3
	The Lizard ...	1030·1	+6	NNE	4	o	50	97	7	5	-	-	10	10	1500	1	3
	Scilly (St. Mary's)	1030·3	+26	NW'W	2	c	49	92	7	5	2	-	7-8	9+	1200	1	4
	Guernsey ...																
6	Pembroke ...	1029·3	+36	WNW	5	cq	50	75	7	5	-	-	7-8	7-8	3000	1	3
7	Holyhead ...	1026·2	+54	W'S	6	bc	46	75	8	5	3	-	2-3	2-3	3000	1	3
	Chester (Sealand)	1026·7	+54	WNW	3	c/pr	48	85	7	8	2	-	9+	10	2500	1	*
8	Manchester ...	1025·4	+38	W	5	dd	48	97	5	6	-	-	10	10	1200	1	*
10	Spurn Head ...	1022·4	0	S'E	5	c	49	92	7	5	-	-	9	9+	2500	1	3
	Catterick ...	1022·7	+40	W	3	c	48	65	7	5	7	-	7-8	9	1500	1	
	Tynemouth ...	1021·4	+60	WSW	5	c/pr	51	75	6	8	-	-	9+	9+	2000	1	2
11	St. Abbs Head	1018·2	+40	WNW	5	c	45	75	8	5	2	-	4-6	7-8	2000	1	3
	Leuchars ...	1017·9	+74	WSW	4	b	43	85	8	4	-	-	2-3	2-3	1800	1	*
12	Renfrew (Abbots I.)	1020·8	+58	W'S	4	b/pr	41	92	8	5	-	-	Tr	Tr	2500	1	*
	Eskdalemuir ...	1020·3	+56	W'N	5	bc	41	75	7	5	-	-	2-3	2-3	800	1	*
	Point of Ayre ...																
13A	Tiree ...	1018·8	+40	W	5	b	44	75	8	7	-	-	1	1	2800		
13B	Stornoway ...	1014·0	+26	SW	4	c	40	75	7	5	7	-	4-6	10	2500	1	2
15	Dalwhinnie ...	1018·2	+48	SSW	5	bc	37	75	7	1	-	-	2-3	2-3	1500	2	*
	Aberdeen ...	1017·1	+70	NW	2	bc	42	85	7	6	-	-	2-3	2-3	1500	1	2
	Wick ...	1012·7	+42	SW	3	bc	38	85	7	3	-	-	2-3	2-3	1500	1	2
16	Lerwick...	1007·3	+28	W	7	c	45	65	7	8	7	-	7-8	9+	800	1	*
17	Blacksod Point..	1025·1	+54	W	4	bc	46	65	8	3	-	-	1	1	4000	1	3
18	Malin Head ...	1021·9	+56	NW	5	bc	45	65	8	8	-	-	4-6	4-6	4000	1	4
	Aldergrove ...	1024·5	+64	SW'W	3	b	41	85	8	-	-	-	0	0	-	2	*
19	Birr Castle ...	1028·1	+50	SSW	1	b	40	85	8	-	-	-	0	0	-	1	*
20	Valentia Obsy. †	1030·2	+42	W'N	4	b	47	65	9	1	-	-	Tr	Tr	2500	1	4
	Roches Point ...	1029·9	+48	WNW	4	bc	46	75	8	-	-	5	0	2-3	-	1	3

PAST 24 HOURS.

District	Stations	Weather 7h.—18h. 16th (37)	Weather 13h.—18h. 16th (38)	Weather 18h 16th to 1h. 17th (39)	Weather 1h.—7h. 17th (40)
1	London (Kew)...	cm_o	cid_ocm_o	$crorr_ocbc$	$bcbm_ox$
	Croydon ...		$cd_od_om_o$	$cd_od_or_or_om_om_o$	cmbf
	S. Farnborough	$r_od_od_om_oc$	$d_od_om_oc$	$d_od_om_oqc$	cbm_ox
	Boscombe Down	cir_o	cm_o		$bcbm_o$
	Calshot (Soton.)	$cm_oid_oom_o$	cm_o	$cm_ocd_od_om_o$	cm_ocb
	Lympne ...		cid_oFe	$omcmr_or_oF$	Fr_oirbcm_o
	Manston ...	cd_od_oidmm	$id_od_od_om_o$	$xompr_or_om_o$	$or_or_ocm_o$
2	Shoeburyness ...	cm_o	cm_o	cm_oir_oir	$cbcbm_o$
	Felixstowe ...	cm_o	cm_o	cm_oodm	ccm_obm_o
	Gorleston ...	$ocbcz_o$	bccazq	oid_oc	$cbcbz_o$
	Mildenhall ...	Nm_o	cm_oddbcm_o	cid_om_ocbc	bcm_obcm_ox
	Cranwell ...	c	c	cpr,bm_o	cmomx
3	Birmingham	c	cor_o	or_obc	bcbmx
	Upper Heyford	c	c	cd_or_ocb	bbm_o
4	Ross-on-Wye ...		$cqid_o$	cb	bx
5	Hartland Point	c	corc	bc	b
	Bristol ...	c	$coir_om_o$	oir_o,b	bm_oxfg
	Portland Bill ...	co	oo	c	
	Plymouth ...	cm_oir_o	cm_oddm	$odd\ cm_obm_o$	bm_obbm_o
	The Lizard ...	o	oddo	ocbc	bc
	Scilly (St. Mary's)	c	cide	cbc	bcb
	Guernsey ...				
6	Pembroke ...	cqm_o	cirm w	bcb	
7	Holyhead ...	cm_o	cqprb	b	bwjfe
	Chester (Sealand)	c	d_orrm_oqprc	cbcb	bx
8	Manchester ...	cm_oz_o	d_od_oiRqdd	bcm_obm_ow	cbm_oxff
10	Spurn Head ...	c	c	cbcbw	bs
	Catterick ...	cm_o	z_ocrkqc	b	bwbx
	Tynemouth ...	c	cp_o	cpbcb	bbc
11	St. Abbs Head	cq	d_oqc	b	bbc
	Leuchars ...	$bccid_o$	d_oRr_oc,b	bbw	$bbcm_ow$
12	Renfrew (Abbots I.)	cir_oid_oeR	ciRPR,b	b,cpr_o,b	
	Eskdalemuir ...	oir_or	$orrcpr_obc$	bx	bx
	Point of Ayre ...	c		b	b
13A	Tiree ...	orr	bc		bc
13B	Stornoway ...	crr	cpr	bPHRtl	bcphrb
15	Dalwhinnie ...	rr	rrc	*	cprbc
	Aberdeen ...	$ccid_o$	drPRcirbc	bcb	bcc
	Wick ...	rrm_oo	rrcbc	lbc	bcb
16	Lerwick...	crr_or_o	crrirc	cprl	cphrl
17	Blacksod Point..	bc	bc	bc	bc
18	Malin Head ...	cir_oc	cpr_obcpr_ocbc	bc	fir
	Aldergrove ...	$iRmrrm_o$	r_or_ocbcb	bbw	bwcx
19	Birr Castle ...	crrc	b	b	bcbx
20	Valentia Obsy. †	ciddddrcbc	$vbcvpr_obcb$	bcwbwbx	bxbbxb
	Roches Point ...	ddirc	bc	bc	bwbx

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.*

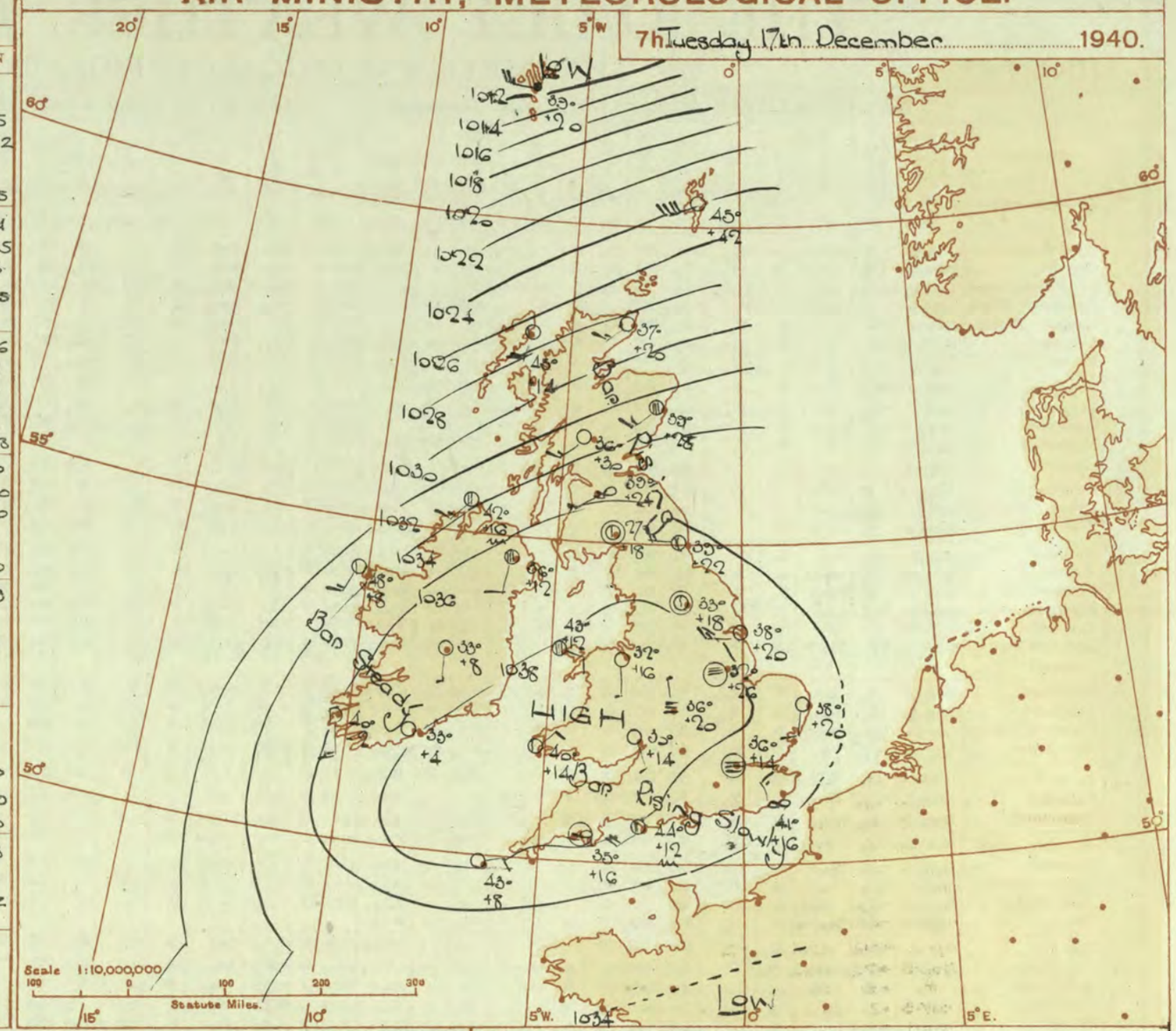
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h Tuesday 17th December 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

13h. G.M.T. 16th Dec.				18h. G.M.T.			01h. G.M.T. 17th Dec.			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	5-	62648	23568	50	01762	23562	30	10864	55684	50	00861	21581
115	52	66735	53668	51	01844	24583	87	81834	57787	87	88854	57785
203	5-	64638	22668				2-	01834	20684	5-	00842	20612
206	02	62848	25368	50	00862	22262	80	00863	22303			
210	62	64637	28468	50	01853	21363	00	00890	18580	55	01962	20315
220	62	22745	27568	40	01753	25503				80	01744	24514
230	52	62735	25568	50	01852	24262	80	25851	22381	8-	25855	20485
245	52	51746	51758	50	00862	57562	00	00890	22200	04	05690	24216
260	50	61844	18727	80	81655	24465	50	00863	20303	5-	02765	20218
277	62	63637	02658	40	00861	23581	00	00890	24201			
279	62	62638	50968	5-	02745	20465	00	05690	24300	5-	02756	00006
285	53	02745	20727	6-	61736	24666				20	01744	32414
288	57	05654	50527	57	05654	55465	00	00890	21260	00	00890	20101
273	82	02654	20568							10	01751	17301
301	57	05655	18528	50	21753	25363	00	00790	26110	00	01690	22203
321	57	05654	51628	9-	82558	56428	00	05690	26100	00	45390	26140
299	57	05644	22515	5-	05647	20527	50	00851	24301	00	00890	24300
292	57	05655	18328	57	22746	24468	00	00790	24200	00	05690	00000
310	--	02636	20626	--	63428	20428				--	01631	26311
316	5-	05545	18428	5-	51648	18568	00	00690	24210	00	00590	32100
333	52	05647	20728	5-	01754	24364				50	00752	00003
334												
340	53	02864	51627	5-	21646	22356	10	00853	26213	00	05690	00001
136	53	05674	17557	5-	05637	18527	04	05690	26363			
336	52	51755	20558	62	61645	20568						
350	57	02756	16428									
368	5-	02758	23428									
379	52	02746	18528	6-	51627	18427	03	01790	24201	00	05690	32200
390	53	05544	17325	5-	47335	18358	5-	21558	24358	00	05590	24310
382	52	51744	17458	51	05654	18425	00	00890	28203	00	05590	28100
438	02	57000	22459							50	01753	04413
430	5-	05638	18528	5-	05648	18328	61	62657	28168	03	00790	04201
409	57	02745	18728	5-	61638	25268	04	05690	00013	00	00390	06202

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. 17th December.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light variable winds. Fine, but with fog becoming widespread tonight and persisting locally tomorrow. Average day temperature, frost at night.
5 S.W. England 6 South Wales ... 7 North Wales ...	Light variable to southerly winds. Fair, but local inland fog developing tonight. Average day temperature, frost inland at night.
8 N.W. England 9 N. Midlands ... 10 N.E. England	As 1 - 4.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Moderate SW winds. Fair at first, occasional rain in west later. Average temperature.
13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Fresh W. to S.W winds, strong to gale at times in north. Fair at first apart from scattered showers in west. More general rain spreading from S.W. later. Average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate S. to S.W wind, freshening. Fair at first, occasional slight rain later. Average temperature to rather mild.

GENERAL INFERENCE.

An anticyclone which has developed over the southern half of the British Isles will move eastwards, and a depression in the vicinity of the Azores will move northeastwards to give a renewal of rain in northwestern districts during the night. In the S.E. it will be fine but with fog and frost at night.

FURTHER OUTLOOK.

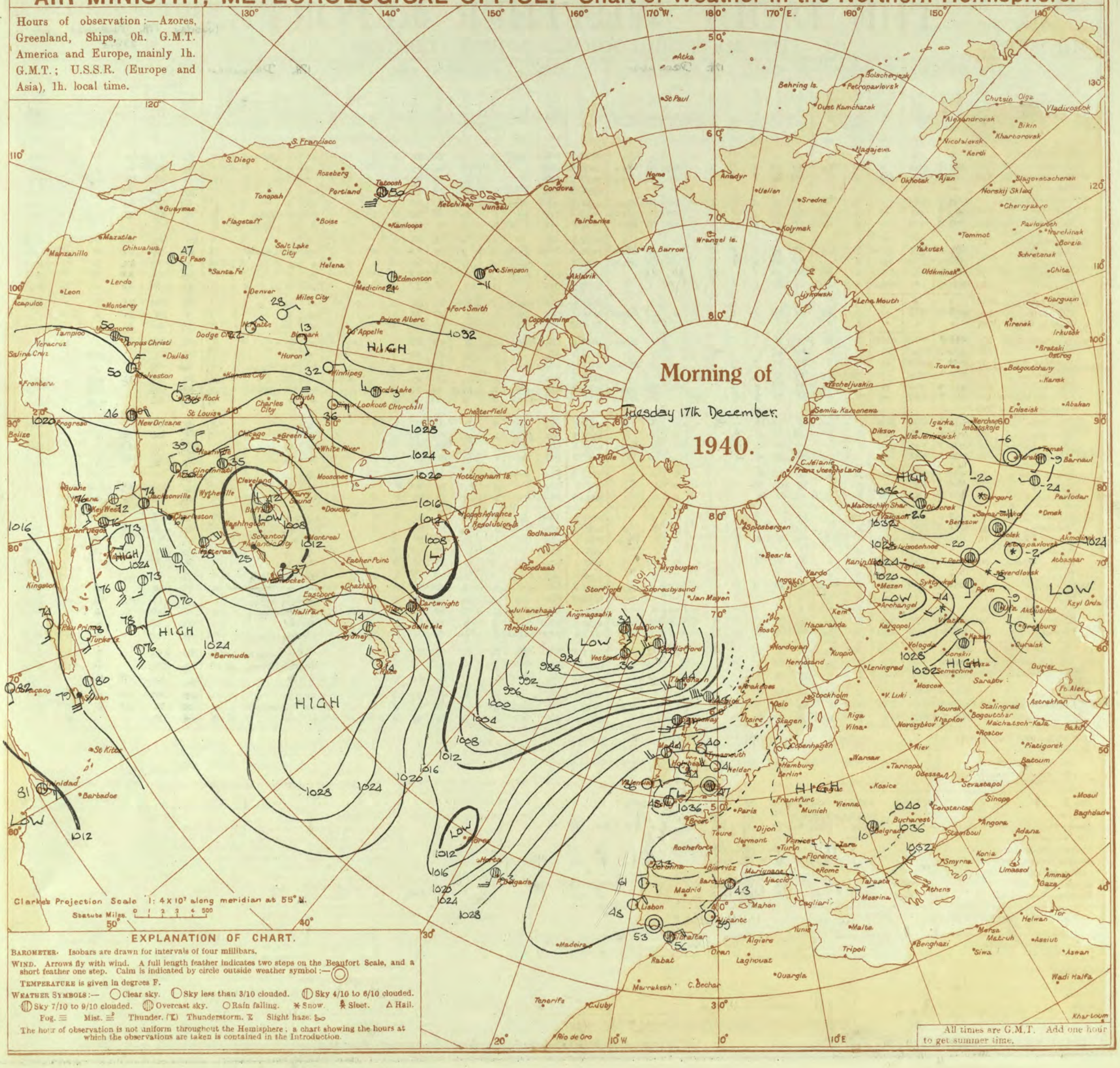
Unsettled in the N.W. Fair in S.E. apart from fog.

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.



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
Tuesday 17th December 1940.
No 28880

OBSERVATIONS at 1 hr. G.M.T. 17th December

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	1033·8	+22	–	0	c/pr	47	97	4	5	1	–	4-6	10	900
	S. Farnborough	226	1034·8	+26	NW	2	c	48	85	7	5	–	–	10	10	4000
	Boscombe Down	417														
	Calshot (Sthmtn.)	8	1034·5	+24	–	0	c/d	47	97	6	5	7	–	4-6	10	1800
	Lympne	346	1033·5	+2	W	1	rF	48	97	1	–	–	–	10	10	<150
	Manston	154	1033·4	+4	SW	3	roro	47	97	5	6	–	–	10	10	300
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1033·2	+18	NW'N	3	c/d	47	92	7	5	–	–	10	10	2500
	Gorleston	5	1033·1	+20	NW	2	c	47	92	6	8	–	–	9+	9+	1500
	Mildenhall	19	1033·8	+30	NW'W	2	bc	44	97	7	–	7	–	0	4-6	–
	Cranwell	240	1033·6	+26	WNW	4	zo	41	85	6	–	–	1	0	1	–
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1034·8	+28	W	2	bc	41	85	7	5	–	5	1	2-3	2500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1035·7	+26	NNE	3	b	45	75	8	5	–	–	1	1	3000
	Bristol	209	1036·2	+30	W	1	b	40	85	7	–	4	–	0	Tr	–
	Portland Bill	32	1034·7	+24	W	2	c	48	92	7	5	–	–	10	10	2500
	Plymouth	82	1035·7	+26	–	0	zo	44	92	6	–	–	5	0	2-3	–
	The Lizard	240	1035·4	+22	N	4	bc	42	85	8	4	–	–	4-6	4-6	2500
	Scilly (St. Mary's)	163	1035·9	+24	N	2	bc	45	75	8	8	–	3	1	4-6	2000
	Guernsey	175														
6	Pembroke	142	1036·3	+20	N'E	2	b	41	75	8	–	4	–	0	Tr	–
7	Holyhead	26	1034·9	+34	W'S	2	b	44	97	8	–	–	–	0	0	–
	Chester (Sealand)	16	1035·7	+42	W'N	1	b	39	85	7	1	–	1	Tr	Tr	2000
8	Manchester	70	1035·3	+38	W	1	zo	39	92	6	–	–	–	0	0	–
10	Spurn Head	29	1032·6	+32	W	4	b	41	92	6	–	–	–	0	0	–
	Catterick	175	1033·5	+38	–	0	b	39	85	8	–	–	–	0	0	–
	Tynemouth	108	1031·8	+36	NW	2	zo	40	85	6	–	–	–	0	0	–
11	St. Abbs Head	280	1029·9	+42	WNW	6	b	39	85	8	–	–	–	0	0	–
	Leuchars	36	1028·9	+34	W	3	b	40	75	8	–	–	–	0	0	–
12	Renfrew (Abbots I.)	19	1030·4	+28	WSW	4	b/pr	41	85	8	8	–	–	1	1	2500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1033·1	+22	W'S	3	b	43	75	8	–	–	–	0	0	–
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1022·8	+34	SW	5	bc/phr	41	85	8	8	–	–	2-3	2-3	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1023·4	+38	SW	4	bc	39	75	7	5	4	–	2-3	2-3	2500
16	Lerwick	156	1016·0	+28	WSW	9	c/pr	43	75	7	8	7	–	4-6	7-8	800
17	Blacksod Point	18	1031·6	+18	W	3	bc	47	75	8	–	5	–	0	2-3	–
18	Malin Head	84	1029·8	+26	SW	5	bc	44	75	8	5	6	–	2-3	4-6	4000
	Aldergrove	268	1032·9	+22	SW'S	3	b	38	85	8	–	–	–	0	0	–
19	Birr Castle	173	1035·0	+20	SSE	1	b	35	92	8	–	–	–	0	0	–
20	Valentia Obsy.	30	1035·1	+10	E'N	2	b	36	92	9	5	–	–	1	1	4000
	Roches Point	22	1036·5	+18	N	2	bc	37	85	8	–	–	5	0	2-3	–

OBSERVATIONS at 7 hr. G.M.T. 17th December

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)	1037·8	+20	NE	2	zo	38	85	6	5	–	–	1	1	2500	1	*
Croydon	1037·3	+14	–	0	bf	36	92	3	–	–	–	0	0	–	1	*
S. Farnborough	1038·2	+16	–	0	fg	33	97	5	–	–	1	0	Tr	–	1	*
Boscombe Down	1038·3	+18	N'W	2	zo	34	92	6	–	–	1	0	1	–	1	*
Calshot (Sthmtn.)	1037·2	+14	N'W	1	zo	38	92	6	–	–	–	0	0	–	1	1
Lympne	1036·2	+16	NW	3	zo	41	92	5	5	3	–	4-6	7-8	1200	1	§2
Manston	1036·9	+14	N'W	2	zo	41	92	5	5	–	–	1	1	3000		*
Shoeburyness	1037·2	+18	N	2	b	36	92	6	–	1	–	0	1	–	1	*
Felixstowe	1036·9	+16	NNW	3	zo	38	92	5	5	–	–	Tr	Tr	4000	1	2
Gorleston	1036·7	+20	SSW	2	b	38	92	5	–	–	–	0	0	–	1	2
Mildenhall	1037·5	+14	NW'N	2	zo	33	97	5	–	–	–	0	0	–	1	*
Cranwell	1038·3	+26	–	0	m	32	97	4	–	–	–	0	0	–	1	*
Birmingham	1038·1	+20	NNW	1	bft	36	85	3	–	–	–	0	0	–	1	*
Upper Heyford	1038·7	+24	NNW	2	zo	35	92	5	–	–	–	0	0	–	3	*
Ross-on-Wye	1039·2	+14	SE	1	fg	30	97	6	–	–	–	0	0	–	1	*
Hartland Point	1038·1	+16	NNE	2	b	43	85	8	–	–	–	0	0	–	1	2
Bristol	1039·2	+16	–	0	zo	34	92	5	–	–	–	0	0	–	1	*
Portland Bill	1037·3	+12	SW	4	bc	44	85	8	5	–	–	4-6	4-6	4000	1	4
Plymouth	1038·3	+16	–	0	zo	35	92	5	–	4	–	0	Tr	–	0	0
The Lizard	1037·7	+12	NE	2	bcjp	41	92	8	4	–	–	2-3	2-3	2500	1	2
Scilly (St. Mary's)	1037·4	+8	ENE	2	b	43	75	8	–	–	–	0	0	–	1	2
Guernsey																
Pembroke	1039·2	+14	NE	2	b	40	92	8	–	–	–	0	Tr	–	1	2
Holyhead	1037·9	+12	ESE	2	gf	43	75	6	–	–	7	0	10	–	1	1
Chester (Sealand)	1038·8	+16	S'E	1	b	32	85	5	–	–	–	0	0	–	1	*
Manchester	1038·9	+18	SE	1	bft	32	97	2	–	–	–	0	0	–	3	*
Spurn Head	1037·3	+20	W'N	3	b	38	97	7	–	–	–	0	0	–	1	2
Catterick	1037·9	+18	–	0	b	33	92	8	–	8	–	0	Tr	–	0	*
Tynemouth	1036·4	+22	WNW	3	bc	39	85	5	5	–	1	2-3		1800	1	2
St. Abbs Head	1034·3	+20	W	5	bc	38	92	8	4	5	–	2-3	4-6	2500	0	3
Leuchars	1034·0	+26	SW	3	zo	39	92	6	5	7	–	Tr	4-6	3500	1	*
Renfrew (Abbots I.)	1035·1	+24	SW	1	zo	39	97	6	–	6	–	0	2-3	–	1	*
Eskdalemuir	1038·1	+18	–	0	b	27	97	8	–	4	1	0	1	–	3	
Point of Ayre	1037·1	+20	W'S	3	b	39	92	8	–	–	1	0	1	–	0	2
Tiree	1030·4	+16	SW'W	4	bc	47	85	8	7	3	–	2-3	2-3	2800	0	4
Stornoway	1026·7	+14	SSW	4	b	45	75	8	5	–	–	1	1	3000	1	2
Dalwhinnie	1032·9	+30	SW	3	bc	36	85	8	2	–	–	2-3	2-3	1600	1	*
Aberdeen	1033·2	+28	SW'W	3	c	39	75	6	5	7	–	1	9+	4000	1	2
Wick	1028·6	+20	SW	3	b	37	85	8	–	–	1	0	Tr	–	1	2
Lerwick	1023·6	+42	WSW	8	bc	45	75	7	5	7	–	4-6	4-6	1500	1	*
Blacksod Point	1033·5	+8	S'W	3	b	48	75	8	–	1	–	1	1	2500	0	3
Malin Head	1033·2	+16	SW	3	bc	42	75	8	1	–	–	4-6	4-6	4000	0	4
Aldergrove	1036·5	+12	SSW	2	c	36	85	8	–	5	6	0	9	–	1	*
Birr Castle	1037·5	+8	S	1	b	33	92	8	–	–	–	0	0	–	1	*
Valentia Obsy.	1036·0	–2	SSE	3	b	40	85	9	5	–	–	Tr	Tr	4000	1	1
Roches Point	1038·0	+4	N	2	b	33	97	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 16th Hrs. (36)
London (Kew)	50	37	19	Tr	0·6	0·2
Croydon	50	35	30	0·1	1	0·0
S. Farnborough	51	33	29	0·2	0·1	0·0
Boscombe Down	52	33	28	0·1	0·2	0·0
Calshot (Sthmtn.)	51	37	32	–	0·3	0·0
Lympne	48	41	37	0·3	3	0·0
Manston						
Shoeburyness	49	36	26	–	1	0·7
Felixstowe	46	38	35	–	0·4	0·6
Gorleston	48	37	33	Tr	Tr	0·4
Mildenhall	53	32	22	Tr	1	0·0
Cranwell	52	32	25	–	Tr	0·2
Birmingham	53	35	25	Tr	1	0·0
Upper Heyford	*	34	25	*	0·5	*
Ross-on-Wye	55	30	21	0·1	–	0·0
Hartland Point	54	42	38	1	–	0·0
Bristol	55	32		0·3	1	0·2
Portland Bill	51	43	*	–	–	*
Plymouth	53	35	26	0·5	1	0·0
The Lizard	(53)	40		0·5	–	0·0
Scilly (St. Mary's)	53	43	*	0·4	–	0·0
Guernsey						
Pembroke	54	38	*	1	Tr	0·0
Holyhead	53	38	30	3	–	0·0
Chester (Sealand)	(58)	32	27	1	–	0·0
Manchester	55	30	21	2	–	0·0
Spurn Head	49	37	*	–	–	0·0
Catterick	54	33	24	0·4	–	0·0
Tynemouth	56	36	36	0·2	0·3	*
St. Abbs Head	54	38	*	0·3	–	*
Leuchars	55	36	28	1	–	0·0
Renfrew (Abbots I.)	55	38	31	5	Tr	*
Eskdalemuir	49	26	20	5	–	0·0
Point of Ayre	55	37	*		–	0·0
Tiree	49	42	*		0·4	0·0
Stornoway	48	40	*	4	1	0·0
Dalwhinnie	49	33	28	12	0·3	0·0
Aberdeen	52	37	31	4	–	0·0
Wick	50	35	*	11	–	*
Lerwick	50	42	*	7	0·5	0·0
Blacksod Point	50	43	*	7	1	*
Malin Head	53	38	*	13	–	0·0
Aldergrove	54	32	29	5	–	0·1
Birr Castle	55	30	25	5	–	0·5
Valentia Obsy.	55	35	27	6	Tr	2·6
Roches Point	54	33	*	1	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. Yesterday	Humidity 15h. G.M.T. %	Humidity 9h. G.M.T. % To-day	Visibility 9h.
		24 hrs. ended 9h.											
Kew	18	cmo	cido cmo	crorcbcmx	50	37	19	Tr	0·6	0·2	•	•	4
Croydon	217		cdodomo	cdoromobf	50	35	30	0·1	1	0·0	•	•	
Greenwich (Royal Observatory)	149	c	cdoc	cddocbxm	51	37	26	Tr	1	0·3	94	87	4
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park)	27	•	•	•	52	40	34	0·5			93	87	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	52	37	36	–	0·3		79	91	•
Camden Square	110			•						*	•		•
Kensington	80	cod	c	•	52	38	28	Tr	0·6		98	87	•
Hampstead Observatory	450	cor	or	b	50	35	30	0·2	0·6		•	91	•

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 17th.

	Max.	Time.	Min.	Time.
South Kensington				
Kew Observatory	0·3	7h 17th	<0·1	0-3h 17th

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

Wednesday 18th December, 1940.

No. 28,881

OBSERVATIONS at 13h. G.M.T. 17th December

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)	1040·3	0	NE	2	m	44	75	4	-	-	-	0	0	-
	Croydon	1039·8	+2	-	0	bf	42	85	3	-	-	-	0	0	-
	S. Farnborough	1040·4	-2	N'W	2	z$_0$	44	75	5	-	-	1	0	Tr	-
	Boscombe Down	1040·2	-2	E'N	3	b	44	75	7	-	-	1	0	2-3	-
	Calshot (Soton.)	1039·7	+2	NE	2	z$_0$	45	75	9	-	-	1	0	0	-
	Lympne	1038·8	+4	N'E	3	z$_0$	43	92	6	5	-	-	4-6	4-6	700
	Manston	1039·3	-2	NNE	3	z$_0$	45	92	6	5	-	-	7-8	7-8	1200
2	Shoeburyness	1039·1	-2	N'E	3	b	45	85	6	-	-	-	0	0	-
	Felixstowe	1039·8	+2	NE'N	3	z$_0$	44	85	6	-	-	-	0	0	-
	Gorleston	1040·0	+4	N'E	3	bc	45	85	7	-	4	-	0	1	-
	Mildenhall	1040·4	+2	-	0	z$_0$	41	85	5	-	-	-	0	0	-
	Cranwell	1041·4	+10	WNW	3	z$_0$	43	75	5	-	-	-	0	0	-
3	Birmingham	1041·2	+4	NNE	1	bf	40	75	3	-	-	-	0	0	-
	Upper Heyford	1041·2	+12	N'W	2	m	41	85	4	-	-	5	0	0	-
4	Ross-on-Wye	1041·0	+4	NE	1	m	39	85	4	-	-	6	0	4-6	-
5	Hartland Point	1039·5	+2	E	2	bc	42	65	8	-	-	6	0	4-6	-
	Bristol	1041·4	+4	NNE	1	z$_0$	42	85	5	-	-	5	0	2-3	-
	Portland Bill	1039·8	+12	NE	3	bc	46	85	8	5	-	-	4-6	4-6	4000
	Plymouth	1039·6	+4	E'N	3	c	45	75	8	-	-	6	0	7-8	-
	The Lizard	1038·5	0	E'S	2	bc	49	75	8	8	6	-	4-6	4-6	3500
	Scilly (St. Mary's)	1038·3	-2	E'S	3	bc	50	75	8	1	4	4	Tr	4-6	1800
	Guernsey														
6	Pembroke	1038·5	+4	SE	4	bc	46	75	7	-	7	-	0	4-6	-
7	Holyhead	1039·9	+2	S	3	bc	46	85	7	-	-	6	0	4-6	-
	Chester (Sealand)	1041·1	+8	SE	1	b	39	85	5	-	-	-	0	0	-
8	Manchester	1041·6	+14	SE	1	F	28	97	0	-	-	-	10	10	<150
10	Spurn Head	1041·1	+14	W'N	1	bc	41	92	6	-	-	8	0	2-3	-
	Catterick	1040·3	+4	S	1	z$_0$	42	85	6	-	-	-	0	0	-
	Tynemouth	1039·5	+12	SW	1	m	42	75	4	-	3	2	0	4-6	-
11	St. Abbs Head	1036·9	+6	SW	5	b	40	85	8	4	-	-	Tr	Tr	3000
	Leuchars	1037·1	+16	SW	3	z$_0$	43	85	6	2	7	-	1	2-3	3500
12	Renfrew (Abbots I.)	1037·6	+2	SW'S	3	bc	46	75	7	2	-	1	2-3	4-6	2500
	Eskdalemuir	1039·5	+4	SW'W	2	bc	38	92	6	5	-	-	7-8	7-8	450
	Point of Ayre	1039·4	0	W'S	2	b	50	75	8	4	-	1	Tr	1	4000
13A	Tiree	1032·0	0	SW	5	bc	47	85	7	8	3	-	2-3	4-6	2500
13B	Stornoway	1028·3	+6	SSW	6	c/pr	48	85	7	3	4	-	4-6	7-8	1800
15	Dalwhinnie	1035·8	+4	SSW	3	c	41	85	7	8	-	-	7-8	7-8	2500
	Aberdeen	1035·6	+4	SSW	3	b	41	85	6	-	-	9	0	Tr	-
	Wick	1031·3	+6	SW	3	c	45	85	8	-	3	2	0	7-8	-
16	Lerwick	1026·2	+4	SW	8	c	46	75	7	5	7	-	4-6	7-8	1500
17	Blacksod Point	1033·9	-6	S	4	c	47	85	8	-	-	7	0	10	-
18	Malin Head	1035·5	0	S	3	bc	43	75	8	2	-	1	2-3	4-6	5700
	Aldergrove	1038·5	-6	S	2	bc	42	75	7	-	-	6	0	7-8	-
19	Birr Castle	1038·3	-6	S	1	c	39	75	8	-	-	5	0	7-8	-
20	Valentia Obsy. †	1035·7	-12	SSE	4	c	48	75	9	5	7	-	2-3	9+	4000
	Roches Point	1038·0	-8	S	4	c	48	75	8	5	-	5	4-6	7-8	2500

OBSERVATIONS at 18h. G.M.T. 17th December

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)	1041·6	+8	N'E	2	bf+	40	85	2	-	-	-	0	0	-	1	*
	Croydon	1040·8	+2	NNE	1	bf	37	92	3	-	-	-	0	0	-	1	*
	S. Farnborough	1041·8	+10	NE'N	1	bcf	34	85	3	-	-	1	0	4-6	-	1	*
	Boscombe Down	1041·3	+8	-	0	z$_0$	36	92	5	-	-	1	0	Tr	-	1	*
	Calshot (Soton.)	1040·4	+6	-	0	m	38	92	4	-	-	1	0	1	-	1	1
	Lympne	1040·2	+6	N	1	z$_0$	39	97	6	5	-	-	1	1	1500	1	§2
	Manston	1040·7	+4	NNE	1	z$_0$	42	92	6	-	3	-	0	1	-		*
2	Shoeburyness	1041·2	+4	N	1	b	36	92	6	-	-	-	0	0	-	1	*
	Felixstowe	1040·7	+2	NNE	3	z$_0$	38	85	5	-	-	-	0	0	-	1	1
	Gorleston	1041·4	+12	N	1	z$_0$	43	92	5	-	-	-	0	0	-	1	1
	Mildenhall	1042·0	+10	WNW	1	bF+	31	97	1	-	-	-	0	0	-	3	*
	Cranwell	1042·1	+6	-	0	bf+	32	97	2	-	-	-	0	0	-	0	*
3	Birmingham	1041·9	+4	SSE	2	bf+	37	85	4	-	-	-	0	0	-	1	*
	Upper Heyford	1041·7	+8	ENE	1	bf	35	97	3	-	-	-	0	0	-	1	*
4	Ross-on-Wye	1041·3	+4	WSW	1	bf	33	92	2	-	-	1	0	1	-	1	*
5	Hartland Point	1039·6	+4	E	3	bc	37	85	8	4	-	1	Tr	1	2500	1	2
	Bristol	1042·1	+8	-	0	z$_0$	33	92	5	-	-	-	0	0	-	1	*
	Portland Bill	1040·3	+8	NE	2	bc	43	85	8	5	-	-	4-6	4-6	4000	1	3
	Plymouth	1040·1	+26	E	1	m	39	85	4	-	-	-	0	0	-	0	1
	The Lizard	1038·6	0	ESE	3	bc	47	85	8	8	-	-	4-6	4-6	2000	1	2
	Scilly (St. Mary's)	1038·0	0	SE'E	3	c	47	85	7	8	4	-	4-6	9	1500	1	2
	Guernsey																
6	Pembroke	1039·6	-2	SE	5	bc	45	75	7	5	7	1	Tr	2-3	3000	1	2
7	Holyhead	1039·1	+2	S	3	bc	42	85	7	-	3	2	0	2-3	-	1	1
	Chester (Sealand)	1040·8	+6	SSE	2	m	35	85	4	-	-	-	0	0	-	1	*
8	Manchester	1041·3	+6	E'N	2	bF+	31	97	0	-	-	-	0	0	-	3	*
10	Spurn Head	1041·6	+6	-	0	bc	39	97	4	-	-	8	0	4-6	-	0	0
	Catterick	1041·1	+6	SW'S	1	bf+	36	97	3	-	-	1	0	Tr	-	0	
	Tynemouth	1039·9	+6	SW	2	m	38	65	4	5	-	-	4-6	4-6	1600	1	2
11	St. Abbs Head	1037·5	+6	W	4	bc	38	92	8	4	4	-	2-3	4-6	2500	0	2
	Leuchars	1037·1	+2	SW	2	z$_0$	40	85	5	-	4	6	0	2-3	-	1	*
12	Renfrew (Abbots I.)	1037·6	-2	SSW	3	m	41	85	4	5	-	4	Tr	4-6	2500	1	*
	Eskdalemuir	1039·1	+4	SW'S	1	c	35	97	4	5	1	-	9	9	<150	1	*
	Point of Ayre	1038·7	-2	SSW	3	bc	43	85	8	-	4	6	0	4-6	-	0	2
13A	Tiree	1032·4	0	SSW	5	bc	43	75	7	5	-	-	4-6	4-6	2800	0	4
13B	Stornoway	1028·1	-2	SSW	7	c/pr	47	85	7	5	-	-	9	9	1200	1	4
15	Dalwhinnie	1036·0	+2	SSW	3	bc	36	85	7	5	-	-	2-3	2-3	2500	1	*
	Aberdeen	1036·1	+6	SW	3	b	40	85	6	-	4	-	0	Tr	-	1	2
	Wick	1031·6	-2	SW	4	bc	43	85	7	5	4	-	2-3	2-3	1500	1	2
16	Lerwick	1027·4	+2	SW	8	c	47	85	7	5	7	-	4-6	7-8	1500	1	*
17	Blacksod Point	1032·0	-10	S	4	c	46	85	7	-	7	-	0	10	-	0	3
18	Malin Head	1034·5	0	S	4	c	39	75	8	5	7	1	4-6	7-8	5700	0	4
	Aldergrove	1038·0	0	SSE	3	c	39	75	7	-	7	7	0	10	-	1	*
19	Birr Castle	1036·2	-6	SSW	2	c	39	85	8	5	-	-	7-8	7-8	2500	1	
20	Valentia Obsy. †	1033·6	-12	S	6	ir$_0$	49	92	7	5	1	-	2-3	10	1500	1	3
	Roches Point	1036·8	-4	SSE	4	bc	47	75	8	5	-	5	4-6	4-6	2500	1	4

PAST 24 HOURS.

District	Stations	Weather 7h.—13h. 17th (37)	Weather 13h.—18h. 17th (38)	Weather 18h. 17th to 1h. 18th (39)	Weather 1h.—7h. 18th (40)
1	London (Kew)	bm$_0$bm	bmbf	bfFFx	oFFx F
	Croydon	bfxbf	bfcfbf	bfbFx	bFx
	S. Farnborough	bm$_0$Fxm$_0$	bbcz$_0$fw	bxFFo	FFxo
	Boscombe Down	bm$_0$b	bm$_0$	bux, bfx	oFxcFx
	Calshot (Soton.)	bm$_0$	bcbz$_0$mw	bmbffx	bcfbFFx
	Lympne	bbcm$_0$	bccbm$_0$		
	Manston	bm$_0$cm$_0$	bcm$_0$bm$_0$		F
2	Shoeburyness	bm$_0$	bm$_0$bc		fFxfFe
	Felixstowe	bm$_0$	bm$_0$	bmbcifx	bcFfem
	Gorleston	bbcz$_0$	bcbz$_0$	bczmfe	ofem
	Mildenhall	bm$_0$mxm$_0$	bm$_0$bFx	bFex	bFex
	Cranwell	bcbz$_0$	bz$_0$bff	bff,cbcff	bcf,oFcf
3	Birmingham	bf	bf	bf	fb,cx
	Upper Heyford	bm$_0$mbffbm	bcm	bfF	bFoF
4	Ross-on-Wye	bfbm	bcmbf	bfxF	Fxce
5	Hartland Point	bbc	bc	bccbc	bcc
	Bristol	bm$_0$mfmx	bcm$_0$bmx	bbcfbmx	bbcmx
	Portland Bill	bcbc	cbc	bcc	c
	Plymouth	bmc	cbcbcm$_0$bm	bcmwbmw	bcm$_0$wcwm$_0$
	The Lizard	bc	bc	bcc	c
	Scilly (St. Mary's)	bb	bcc	cbcc	codof
	Guernsey				
6	Pembroke	bm$_0$bc	z$_0$bc	bcc	cq
7	Holyhead	cm$_0$jfbc	bcwb	bwqc	qr$_0$r$_0$m$_0$c
	Chester (Sealand)	bxffmm$_0$	bm$_0$mb	buxcm$_0$	oshir$_0$s$_0$
8	Manchester	bfoFFx	xoFbFfoF	oxFFbcf	bcfcmr$_0$r$_0$
10	Spurn Head	cbcw	bcm	bcw	*
	Catterick	cfg$_0$bm$_0$	m$_0$mbfx	xFx	oFxcm
	Tynemouth	bcm	bcm	bccm	cmoir
11	St. Abbs Head	bcb	bc	bcc	m$_0$qr$_0$
	Leuchars	bcbm$_0$	bm$_0$bcm$_0$	bcm$_0$cm$_0$w	cm$_0$wr$_0$r$_0$m$_0$
12	Renfrew (Abbots I.)	bcbm$_0$bc	bbcz$_0$m$_0$m	bccmm$_0$	m$_0$rrRrr
	Eskdalemuir	bbcxbc	bccm	cm$_0$	cor$_0$RR
	Point of Ayre	b	bc	c	rr
13A	Tiree	bc	cbc	bcc	corr
13B	Stornoway	b,cpr	cpr	c	c
15	Dalwhinnie	cpr	cbc	*	cir$_0$
	Aberdeen	bcbz$_0$	bz$_0$	bbcc	cir$_0$
	Wick	bbcc	cbc	bccq	cq
16	Lerwick	bcc	c	cbcc	c
17	Blacksod Point	c	c	rrq	rrq
18	Malin Head	bc	c	cr$_0$rr$_0$rc	ccprc
	Aldergrove	cxbxbc	bcc	c,rrm$_0$o	rrirlr$_0$
19	Birr Castle	c	c	circ	c
20	Valentia Obsy. †	bbcc	ccir$_0$	crcirir$_0$c	cir$_0$cd$_0$oir$_0$
	Roches Point	c	cbc	ir$_0$c	cir$_0$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.*

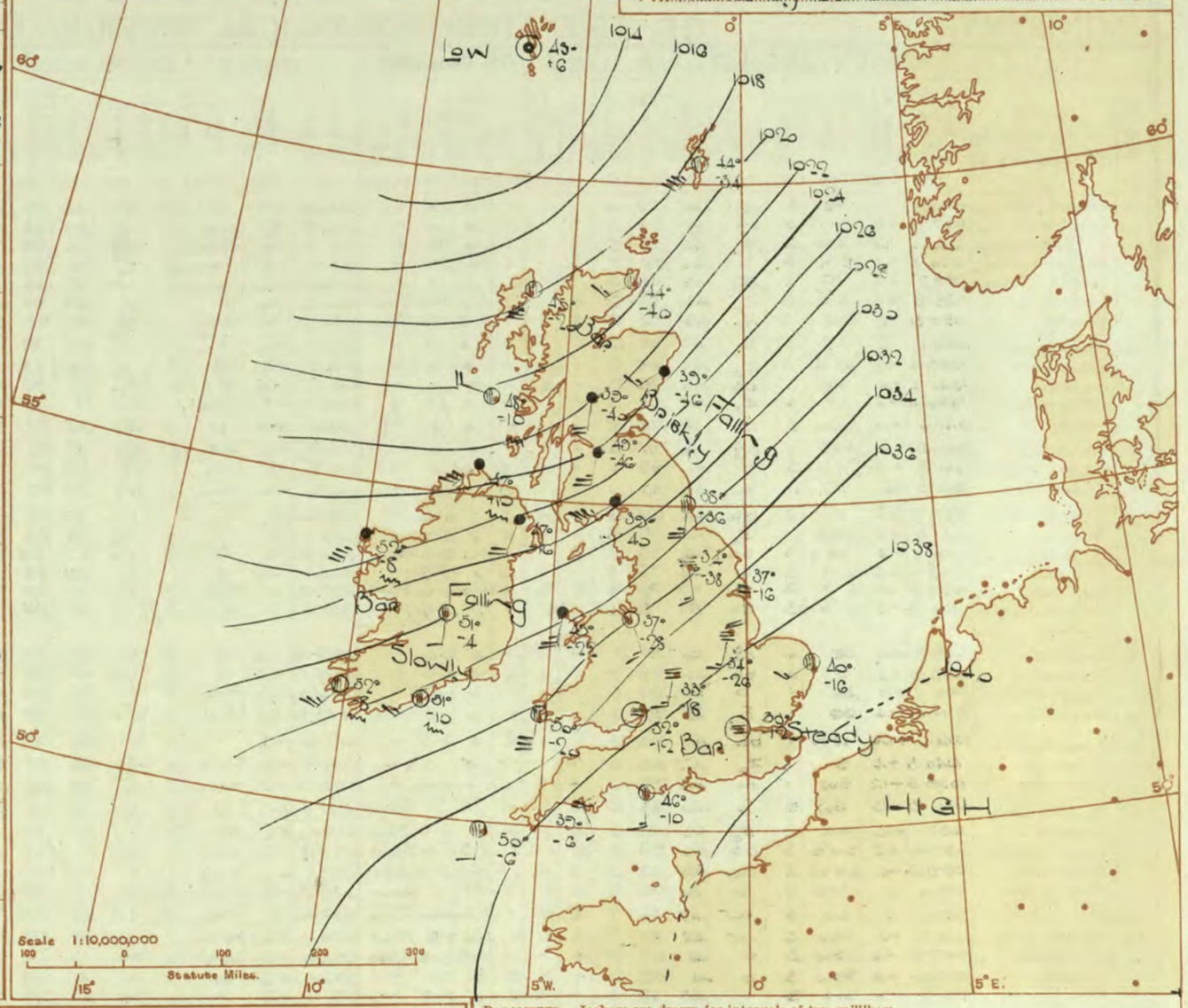
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 17th December			18h. G.M.T.			01h. G.M.T. 18th December			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	01744	18514	50	00863	20413	07	02890	50517			
115	85	14854	53785	52	81854	53785	52	14854	52887	52	14854	20627
203												
206	84	01963	22414	54	00961	21412	52	02855	54528	52	61754	53468
210	54	00961	20402	50	02857	20427	52	02866	59528	52	62747	18468
220										52	25644	23388
230	86	01842	16314	00	01790	16314	52	62644	18168	02	52418	52558
245	00	05590	24100	04	05590	18203	01	05690	20328	5-	62548	51468
260	50	00861	20201				57	05673	18428	51	62754	17668
277	04	00890	19303	51	02851	16327	52	64746	16568	52	62737	52668
279				50	05561	16114				02	64648	53668
285	10	00852	30412	23	01634	20314				5-	68748	04378
288	00	00890	18211				01	45290	18348	5-	61455	16348
273	00	00790	12200							43	56544	19358
301	00	08490	20200	00	47190	00040	53	43362	12443	5-	22553	14468
321	00	47390	20100	00	47290	00040	00	43290	18244	07	54390	22348
299	70	05653	24213	50	05652	22202	00	08490	22228	5-	08448	22528
292	00	08490	00010	00	47290	00040	--	48109	00049	02	45378	16248
310	--	04531	26311	--	01523	08313				--	67209	20449
316	00	48890	00040	00	45190	00040	03	43190	00047	07	43290	18247
333	00	17590	08205	00	00390	12312	03	02890	15515	52	02754	16468
334												
340	00	05690	00003	00	45390	00042	03	45390	14443	52	45365	14448
136	04	05690	28201	00	05590	06101	03	47190	00042	03	47190	18246
336	10	01752	08413	10	01753	32313				14	03754	08328
350	03	05690	32201							03	45190	16147
368												
379	00	05690	22203	00	08490	06200	--	48109	00009	--	46109	20249
390	00	05690	06200	00	47290	00090	--	46009	00049	--	48009	00049
382	00	05690	02103	00	08490	06101	--	46009	00049	03	45090	00045
438	00	00790	04300							80	02746	26226
430	00	00590	04301	00	45390	08140	00	47390	00000	03	43290	00043
409	00	00790	08205	54	05654	08313	00	05690	12305	57	05590	15317

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 18th December 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. 18th December, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Freshening SSW wind; persistent fog at first in eastern counties, dense in places, clearing; otherwise fair with cloud increasing; less cold.
4 W. Midlands ... 5 S.W. England 6 South Wales ...	Moderate SW winds, fresh at times on the coast; mainly cloudy; some local coast drizzle; rather mild.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Fresh southwesterly winds; dull, rain at times today; becoming 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 18 N. E. Ireland	Southwest winds fresh to strong at times on coast; mainly dull; occasional rain; mild.
19 S. E. Ireland	As 4-6
20 S. W. Ireland	As 12-18

GENERAL INFERENCE.

A large anticyclone covers most of Europe. A depression south of the Faeroes will move ENE and another NW of the Azores will move NE. Weather will be unsettled and rather mild in the northwestern half of the British Isles with occasional rain. Weather will continue fair in the Southeast but there will be some persistent fog in the eastern counties at first.

FURTHER OUTLOOK.

Fair and rather mild in the Southeast; continuing unsettled and mild in the west and north.

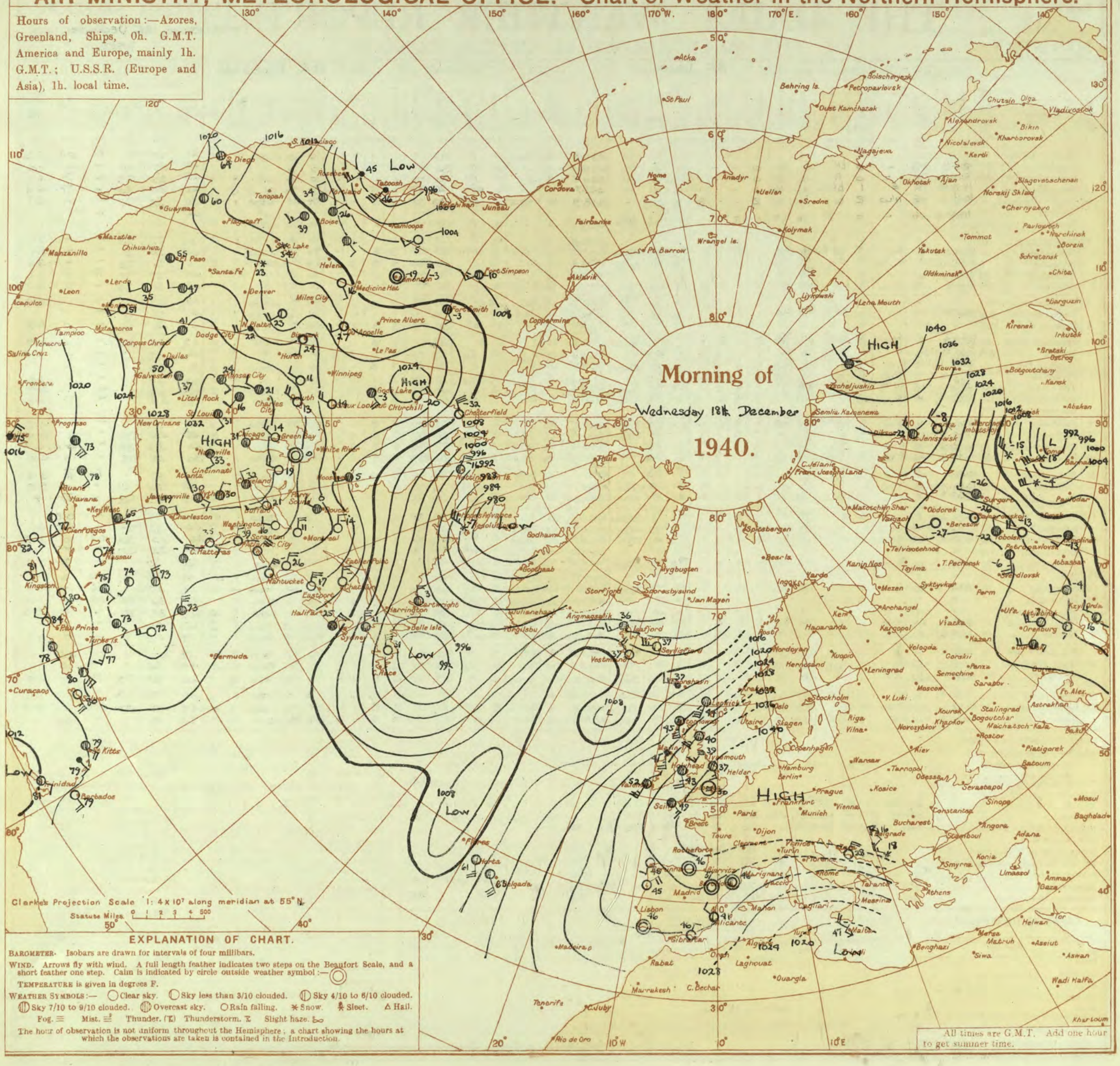
Gale warning issued at 14.30h on 17th for districts 17 & 20, at 21.10h on 17th for districts 13A, 13B, 16 & part of 18, and at 0300h on 18th for districts 7, 8, 12, 11, 15, remainder of 18 and part of 19.

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

Wednesday 18th December, 1940.

No. 28881.

OBSERVATIONS at 1 hr. G.M.T. 18th December

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	1041·9	+2	–	0	bF	30	97	0	–	–	–	0	0	–
	S. Farnborough	226	1042·3	-2	–	0	F	30	97	0	–	–	–	0	0	–
	Boscombe Down	417	1041·8	-4	E	1	bF+	29	97	1	–	–	–	0	c	–
	Calshot (Sthmtn.)	8	1041·0	-6	N'W	2	bcf-	35	97	2	–	–	8	0	2-3	–
	Lympne ...	346	1041·4	-6	–	0	F	36	97	1	5	–	–	4-6	4-6	<150
	Manston ...	154														
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1041·7	-2	NW	3	bc F+	36	97	1	5	–	–	2-3	2-3	2000
	Gorleston ...	5	1041·7	-4	NW'W	2	F+	36	92	1	–	–	–	10	10	<150
	Mildenhall ...	19	1041·8	-6	–	0	F	29	97	0	–	–	–	0	0	–
	Cranwell ...	240	1041·8	-8	SSW	3	bcf-	32	97	3	–	5	6	0	4-6	–
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1041·8	-4	–	0	bF+	29	97	1	–	–	–	0	0	–
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1039·2	-6	SE	3	bc	40	85	8	–	4	6	1	4-6	5000
	Bristol ...	209	1041·2	-10	–	0	m/f	31	97	4	–	3	1	0	2-3	–
	Portland Bill ...	32	1040·1	-6	NE	3	c	41	92	7	5	–	–	10	10	4000
	Plymouth ...	82	1040·2	-6	ESE	1	Zo	36	85	5	–	1	–	0	4-6	–
	The Lizard ...	240	1038·4	-10	SE'E	4	c	48	85	7	8	2	–	7·8	9+	2000
	Scilly (St. Mary's)	163	1037·8	-4	SE	3	c	49	92	7	8	6	3	4-6	7·8	2200
	Guernsey ...	175														
6	Pembroke ...	142	1038·5	-8	SSE	5	c	46	85	7	8	6	–	4-6	7·8	3000
7	Holyhead ...	26	1036·5	-18	S	5	c	43	75	8	5	–	–	10	10	4500
	Chester (Sealand)	16	1038·5	-20	E'S	1	bc	33	85	5	–	3	–	0	4-6	–
8	Manchester ...	70	1039·8	-16	ESE	2	bcf-	34	85	3	–	3	–	0	4-6	–
10	Spurn Head ...	29	1041·1	-4	S'E	3	bc	37	92	6	–	4	–	0	2-3	–
	Catterick ...	175	1038·7	-18	SSW	1	F	31	97	0	–	–	–	10	10	<150
	Tynemouth ...	108	1037·7	-18	SSW	3	m	39	85	4	5	–	–	9	9	1800
11	St. Abbs Head	280	1034·2	-20	SW	5	c	39	85	7	5	2	–	7·8	10	2500
	Leuchars ...	36	1034·1	-22	SSW	1	Zo	38	92	6	5	2	–	4-6	10	4000
12	Renfrew (Abbots I.)	19	1033·5	-24	SSW	2	Zo	43	75	6	5	2	–	2-3	10	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1036·1	-20	SW'S	4	c	44	65	8	5	2	–	7·8	10	4000
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1023·5	-24	S	7	c	45	85	7	5	–	–	9	9	1200
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1027·3	-28	SSW	6	cq	44	65	8	5	2	–	7·8	10	2500
16	Lerwick ...	156	1025·2	-20	SSW	7	c	44	75	7	5	2	–	4-6	9+	1500
17	Blacksod Point	18	1024·6	-16	S	7	ro ro	48	97	7	6	–	–	10	10	800
18	Malin Head ...	84	1025·7	-50	S	5	ro ro	41	92	6	6	–	–	9	9	1500
	Aldergrove ...	268	1031·7	-34	S'E	4	rr	41	92	6	–	2	–	10	10	2000
19	Birr Castle ...	173	1031·8	-16	S	3	c	47	92	7	5	1	–	7·8	10	2500
20	Valentia Obsy.	30	1032·0	-10	SSW	5	c	52	97	8	5	2	–	9	10	2500
	Roches Point	22	1034·5	-14	S	5	c/r	49	92	7	6	2	–	7·8	9	1500

OBSERVATIONS at 7 hr. G.M.T. 18th December.

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)	1039·8	-8	S'W	1	F	33	97	1	–	–	–	10	10	<150	1	*
	Croydon ...	1039·1	-12	–	0	F	30	97	1	–	–	–	0	0	–	1	*
	S. Farnborough	1040·1	-8	S	1	F-	30	97	1	–	–	–	10	10	<150	3	*
	Boscombe Down	1039·7	-10	–	0	cF+	26	97	1	S	–	–	9+	9+	5000	3	*
	Calshot (Sthmtn.)	1038·9	-10	NW'N	1	cf-	33	97	3	S	–	–	9+	9+	2500	1	1
	Lympne ...																§
	Manston ...	1039·5	-6	–	0	F	37	97	1	–	–	–	10	10	<150		*
2	Shoeburyness ...	1039·4	-10	–	0	F	35	97	1	–	–	–	10	10	<150	1	*
	Felixstowe ...	1039·2	-10	SSW	2	cf+	37	97	3	S	–	–	9+	9+	4000	1	1
	Gorleston ...	1038·6	-16	SW	3	c	40	85	6	S	3	–	4-6	7·8	1500	1	2
	Mildenhall ...	1039·0	-14	S	1	bf-	31	97	1	–	–	–	0	0	–	3	*
	Cranwell ...	1037·4	-26	SSW	c	cf	34	97	3	–	7	–	0	9+	–	0	*
3	Birmingham ...	1037·5	-18	SSW	3	cf	33	97	3	S	–	–	9	9	4000	1	*
	Upper Heyford	1038·5	-14	SSE	2	F	28	97	1	–	–	–	10	10	<150	3	*
4	Ross-on-Wye	1037·7	-12	–	0	cf	32	92	3	S	7	–	4-6	9	2500	1	*
5	Hartland Point	1036·4	-14	S	4	c	43	85	7	8	–	–	9+	9+	2500	1	2
	Bristol ...	1038·3	-14	S	3	Zo	38	92	6	–	3	6	0	4-6	–	3	*
	Portland Bill ...	1038·7	-10	S	3	c	46	85	7	S	–	–	10	10	4000	1	3
	Plymouth ...	1038·6	-6	SE	1	Zo	39	92	5	–	7	–	0	9	–	0	1
	The Lizard ...	1037·2	-4	S	2	c	49	97	7	S	2	–	7·8	9+	2000	1	2
	Scilly (St. Mary's)	1036·8	-6	S	2	c/f	50	97	5	S	–	–	10	10	500	1	2
	Guernsey ...																
6	Pembroke ...	1034·5	-20	S'W	6	cq	50	92	7	8	–	–	9+	9+	3000	1	3
7	Holyhead ...	1031·9	-22	S'W	5	ro ro	48	97	6	6	2	–	4-6	10	800	1	3
	Chester (Sealand)	1034·3	-28	SE'S	3	c	37	85	6	5	7	–	4-6	10	2500	1	*
8	Manchester ...	1035·3	-28	SSE	3	c/r	36	92	5	5	2	–	2-3	10	2000	1	*
10	Spurn Head ...	1037·1	-16	SSE	4	f+	37	92	2	5	–	–	10	10	800	0	3
	Catterick ...	1033·1	-38	S'E	3	m/f	34	92	4	5	–	–	10	10	300	0	*
	Tynemouth ...	1030·6	-36	SSW	5	c/r	38	75	2	5	–	–	10	10	1800	1	3
11	St. Abbs Head	1024·5	-54	SW	8	c/r	38	92	6	5	8	–	7·8	10	2500	1	4
	Leuchars ...	1024·5	-54	SSW	3	ro ro	40	92	6	–	2	–	10	10	1800	1	*
12	Renfrew (Abbots I.)	1023·7	-46	SSW	5	rr	49	85	5	5	2	–	9	10	1200	1	*
	Eskdalemuir ...	1027·6	-40	SW'W	7	RR	39	92	5	–	2	–	10	10	450	1	*
	Point of Ayre ...	1028·6	-28	SW'S	6	c/r	47	97	7	5	2	–	7·8	10	1500	1	3
13A	Tiree ...	1019·7	-10	W'N	4	c	48	97	7	5	–	–	10	10	1500	1	4
13B	Stornoway ...	1018·5	-20	SSW	5	c	45	92	7	5	7	–	9	10	1200	1	3
15	Dalwhinnie ...	1021·9	-40	SSW	4	ro	39	92	7	5	2	–	7·8	10	1500	1	*
	Aberdeen ...	1023·2	-46	SW	3	ro	39	92	6	6	2	–	7·8	10	1500	1	2
	Wick ...	1019·1	-40	SW	3	cq	44	75	7	5	2	–	4-6	10	1500	1	3
16	Lerwick ...	1018·3	-34	SW'S	7	c	44	85	7	5	2	–	4-6	10	1500	1	*
17	Blacksod Point	1024·4	-8	SSW	7	rr	52	97	7	6	–	–	10	10	800	2	5
18	Malin Head ...	1023·2	+10	SW	6	ro	47	92	6	6	–	–	9+	9+	800	1	4
	Aldergrove ...	1026·8	-10	SSW	4	ro	47	97	6	5	2	–	9+	10	1200	2	*
19	Birr Castle ...	1020·9	-4	S	2	c	51	85	8	5	1	–	7·8	10	2500	1	*
20	Valentia Obsy.	1031·0	-8	SW'S	5	c/r	52	97	8	5	1	–	9+	10	1500	1	4
	Roches Point	1032·5	-10	SW	3	c	51	92	8	5	7	–	4-6	9	1500	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 17th. Hrs. (36)
1	London (Kew)	44	29	20	Tr	0·1	3·5
	Croydon ...	42	27	26	–	–	1·0
	S. Farnborough	45	25	22	–	Tr	3·3
	Boscombe Down	44	24	24	–	Tr	6·4
	Calshot (Sthmtn.)	46	25	27	–	–	6·1
	Lympne ...	44			–		
	Manston ...						
2	Shoeburyness ...	45	33	25	–	–	5·9
	Felixstowe ...	46	34	31	–	–	5·1
	Gorleston ...	47	31	28	–	–	5·6
	Mildenhall ...	42	27	21	Tr	Tr	4·4
	Cranwell ...	44	31	23	–	Tr	5·7
3	Birmingham ...	43	32	20	–	–	0·5
	Upper Heyford	41	26	17	–	–	*
4	Ross-on-Wye	41	24	21	–	–	5·7
5	Hartland Point	43	36	32	–	–	6·9
	Bristol ...	43	29	19	–	–	4·3
	Portland Bill ...	51	38	*	–	–	*
	Plymouth ...	45	34	*	–	–	7·0
	The Lizard ...	50	46	*	–	–	6·9
	Scilly (St. Mary's)	50	44	*	–	Tr	6·4
	Guernsey ...						
6	Pembroke ...	46	44	*	–	–	4·3
7	Holyhead ...	46	40	35	–	1	5·4
	Chester (Sealand)	40	32	25	–	0·4	0·5
8	Manchester ...	34	25	22	–	1	0·0
10	Spurn Head ...	41	37	*	Tr	Tr	5·4
	Catterick ...	43	30	29	–	–	5·2
	Tynemouth ...	45	35	32	–	Tr	*
11	St. Abbs Head	41	38	*	–	0·2	*
	Leuchars ...	44	36	29	–	0·3	3·1
12	Renfrew (Abbots I.)	46	40	35	0·1	10	3·8
	Eskdalemuir ...	40	34	32	–	7	1·6
	Point of Ayre ...	50	39	*	–	2	5·6
13A	Tiree ...	48	46	*	0·3	6	2·4
13B	Stornoway ...	48	43	*	0·4	–	0·7
15	Dalwhinnie ...	40	34	26	0·5	4	1·3
	Aberdeen ...	43	38	34	–	1	3·9
	Wick ...	45	40	*	–	–	*
16	Lerwick ...	49	43	*	–	–	0·2
17	Blacksod Point	48	43	*	–	24	*
18	Malin Head ...	44	36	*	–	4	1·1
	Aldergrove ...	44	37	35	Tr	8	4·7
19	Birr Castle ...	40	39	38	–	0·4	0·5
20	Valentia Obsy.	49	47	45	0·1	6	0·3
	Roches Point	50	46	*	–	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. % (Yesterday.)	Humidity 9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew ...	18	bmxbm	bmbf	bfFFxOFF	44	29	20	Tr	0·1	3·5	*	*	1
Croydon ...	217	bfxbf	bfcfbf	bfbFxbfx	42	27	26	–	–	1·0	*	*	0
Greenwich (Royal Observatory) ...	149	bm	bbcbm	bmxfFc	43	30	21	–	Tr	4·2	83	98	0
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	42	33	30	0·1			81	99	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	44	33	19	–	–		76	99	*
Camden Square ...	110	b	b	*	45	32	26	–	0·1	*	*	98	*
Kensington ...	80	bz	bc	*	44	32	21	–	0·1		93	98	*
Hampstead Observatory ...	450	bc	bzx	bf	42	31	27	–	–		*	98	*

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.
1·1	21h 17th	0·3	10h 17th

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 ,,	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

Thursday 19th December, 1940.

No. 28,882

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

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)...	1036·2	-24	SW	1	cf-	38	97	2	7	-	1	9	9+	4000
	Croydon	1035·8	-30	S	2	zo	43	75	5	5	-	4	2-3	7-8	4000
	S. Farnborough	1036·5	-28	SSW	3	zo	42	85	5	5	3	-	7-8	9+	2600
	Boscombe Down	1036·4	-24	S	3	zo	40	92	5	5	-	-	9	9	4500
	Calshot (Soton.)	1037·0	-18	SSW	4	c	44	92	7	5	7	8	4-6	9	3500
	Lympne ...	1037·5	-16	-	0	z	41	97	6	5	-	-	9.	9+	3200
	Manston ...	1036·9	-24	SW'S	1	zo	43	92	5	-	7	4	0	4-6	—
2	Shoeburyness ...	1036·4	-28	SSW	1	cf-	39	97	3	5	7	1	2-3	7-8	1500
	Felixstowe ...	1036·2	-30	SW'S	3	zo	42	85	5	5	3	-	1	4-6	4000
	Gorleston ...	1034·4	-20	SW	3	c	42	85	6	5	-	-	7-8	7-8	2500
	Mildenhall ...	1034·3	-38	SSW	4	zo	41	85	6	5	7	-	4-6	10	4000
	Cranwell ...	1032·5	-32	SW'W	5	zo	42	85	6	5	7	-	4-6	10	3500
3	Birmingham	1033·2	-14	SW	3	c	41	85	6	5	-	-	10	10	5700
	Upper Heyford	1035·4	-26	SW'S	3	c/f	37	97	4	5	7	-	7-8	9+	1800
4	Ross-on-Wye ...	1033·9	-20	SW	3	zo	43	85	6	5	2	-	9+	10	1500
5	Hartland Point	1034·2	-14	SSW	4	c	50	85	7	5	-	-	9+	9+	3000
	Bristol	1035·6	-22	SSW	3	c	46	88	7	5	7	-	9	10	4500
	Portland Bill ...	1036·5	-10	SW	4	c	48	85	8	5	4	-	7-8	10	4000
	Plymouth ...	1036·1	-20	S	2	ido	49	92	6	5	2	-	7-8	10	800
	The Lizard ...	1036·5	-10	SW	3	o	51	97	8	5	-	-	10	10	600
	Scilly (St. Mary's)	1036·0	-6	SW'W	4	c	51	97	7	5	2	-	7-8	9+	800
	Guernsey ...														
6	Pembroke ...	1033·2	-12	SW	6	f	51	97	2	-	-	-	10	10	<150
7	Holyhead ...	1029·3	-18	SW'S	5	c	52	85	8	5	-	-	9+	9+	3200
	Chester (Sealand)	1030·1	-26	SW'S	2	ido	48	85	6	5	3	-	7-8	9	2000
8	Manchester ...	1029·8	-26	S'W	4	zo	43	85	5	5	7	-	4-6	9+	2500
10	Spurn Head ...	1030·3	-28	S	4	o	39	92	6	5	-	-	10	10	1500
	Catterick ...	1027·3	-26	SSW	3	c/d	43	85	4	5	2	-	9+	10	1500
	Tynemouth ...	1025·3	-28	SW	4	zo	46	85	6	5	-	-	9+	9+	1300
11	St. Abbs Head	1020·7	-4	SW	6	cq	48	92	8	8	2	-	4-6	10	2500
	Leuchars ...	1020·3	-6	WSW	4	ido	50	92	6	5	7	-	7-8	10	1500
12	Renfrew (Abbots I.)	1022·5	-10	WSW	3	rr	49	97	6	5	2	-	4-6	10	1000
	Eskdalemuir ...	1022·8	-20	W'S	6	RR	47	97	6	-	2	-	10	10	220
	Point of Ayre ...	1025·6	-16	W'S	6	c	51	92	8	8	2	-	2-3	10	1500
13A	Tiree	1022·6	+4	N	4	c	46	85	8	5	-	-	9	9	1800
13B	Stornoway ...	1009·9	+14	WNW	4	b	45	75	7	5	-	-	1	1	1700
15	Dalwhinnie ...	1022·3	+4	W	2	iro	43	85	7	5	2	-	4-6	10	1500
	Aberdeen ...	1018·7	+2	W'N	2	c	48	85	6	5	7	-	1	9+	1500
	Wick	1018·4	+10	WNW	4	c/r	42	92	8	5	7	8	4-6	9	1500
16	Lerwick... ...	1014·0	-14	WNW	5	rr	40	92	7	6	2	-	4-6	10	800
17	Blacksod Point..	1023·3	-8	SW	6	RR	53	97	6	6	-	-	10	10	450
18	Malin Head ...	1023·1	0	SW	4	df	49	97	5	5	-	-	9+	9+	800
	Aldergrove ...	1025·0	+12	SW	4	roro	49	97	7	6	-	-	10	10	900
19	Birr Castle ...	1028·0	-12	SW	3	c	53	75	8	5	1	-	7-8	10	2500
20	Valentia Obsy. †	1030·3	-6	SW	5	c	53	97	8	5	-	-	10	10	800
	Roches Point ...	1031·5	-6	W'S	3	c	52	92	8	5	-	-	9+	9+	1500

OBSERVATIONS at 18h. G.M.T. 18th December

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)	1033·6	-14	WSW	2	zo	42	92	6	5	-	-	10	10	2500	1	*
Croydon	1032·4	-24	SW	3	zo	41	92	6	5	1	-	4-6	10	3000	1	*
S. Farnborough	1033·7	-10	SW'W	4	zo	43	85	6	5	3	-	7-8	10	1300	*	*
Boscombe Down	1033·4	-16	SSW	4	o/d	44	97	5	5	-	-	10	10	600	1	*
Calshot (Soton.)	1034·4	-14	SW'W	3	zo	45	92	6	5	7	-	9	10	1800	1	2
Lympne	1034·8	-8	SW	2	zo	40	85	5	5	-	-	9+	9+	2500	1	§
Manston	1033·6	-18	SW'S	3	zo	41	85	6	5	7	-	7-8	10	3500	*	*
Shoeburyness	1032·9	-22	SW	4	c	43	85	6	5	-	-	10	10	2500	1	*
Felixstowe	1032·2	-22	SW	4	zo	42	85	5	5	-	-	10	10	5000	1	3
Gorleston	1030·7	-22	SW	4	zo	42	85	5	5	-	-	10	10	2500	1	2
Mildenhall	1030·8	-18	SW'S	5	zo	43	85	5	5	2	-	9	10	1800	1	*
Cranwell	1029·0	-14	WSW	5	zo	44	85	5	5	-	-	10	10	2500	1	*
Birmingham	1030·2	-8	SSW	3	o	43	92	6	5	-	-	10	10	800	1	*
Upper Heyford	1032·6	-18	SSW	3	c/f	41	92	5	6	2	-	7-8	10	400	1	*
Ross-on-Wye	1030·8	-14	SW	3	ido	47	97	6	5	-	9	10	10	1500	1	*
Hartland Point	1031·7	-10	WSW	5	c	49	97	8	5	2	-	9+	10	1000	1	3
Bristol	1032·3	-6	SW'S	4	d.d.	47	97	5	6	-	-	10	10	1000	1	*
Portland Bill	1033·6	-20	S	4	o	47	92	7	5	-	-	10	10	2500	1	3
Plymouth	1034·4	-10	SW	3	o/d	50	97	6	6	-	-	10	10	500	1	2
The Lizard	1034·4	-10	WSW	4	pr	50	92	8	8	2	-	9	10	2000	1	3
Scilly (St. Mary's)	1034·2	-8	WSW	4	c/d	50	97	7	5	2	-	7-8	10	1000	1	2
Guernsey																
Pembroke	1030·9	-18	WSW	6	cq	51	92	7	8	-	-	9+	9+	2000	1	3
Holyhead	1026·8	-10	SW	5	rr	50	97	5	-	2	-	10	10	900	1	2
Chester (Sealand)	1027·2	-16	SW	5	cq	52	75	7	5	2	-	4-6	10	400	1	*
Manchester	1026·6	-18	SW	4	zo	51	85	6	5	-	-	9+	9+	2500	1	*
Spurn Head	1026·3	-20	SSW	4	o	44	85	7	5	-	-	10	10	1500	0	3
Catterick	1024·1	-14	W'N	4	iro	50	85	6	5	2	-	7-8	10	1500	1	
Tynemouth	1023·6	-2	W	3	iro	50	92	5	-	2	-	10	10	800	1	3
St. Abbs Head	1022·8	+18	N	5	cq	45	97	7	5	2	-	7-8	10	2000	1	3
Leuchars	1024·0	+34	NW	3	bc	42	75	8	8	-	-	2-3	2-3	2500	1	*
Renfrew (Abbots I.)	1024·8	+22	NW'W	3	zo	43	92	6	5	7	-	1	4-6	1800	1	*
Eskdalemuir	1023·5	+8	NNW	1	c	46	85	7	5	-	-	10	10	800	2	*
Point of Ayre	1024·2	-2	W'S	5	rr	50	97	7	-	2	-	10	10	2500	1	3
Tiree	1026·0	+14	N	4	b	46	75	8	1	-	-	1	1	3500	0	3
Stornoway	1025·1	+24	N	4	b	42	97	7	5	-	8	Tr	Tr	3500	1	2
Dalwhinnie	*	+24	NW	1	bc	35	85	7	5	-	-	4-6	4-6	1500	1	*
Aberdeen	1023·3	+20	NW'N	3	b	41	75	6	5	-	-	Tr	Tr	4000	1	2
Wick	1022·5	+24	WNW	4	bc	40	85	8	8	7	8	4-6	4-6	1500	1	2
Lerwick	1018·9	+32	N'W	6	c	41	85	7	8	7	-	4-6	7-8	800	1	*
Blacksod Point	1026·6	+18	N'W	4	o	49	97	7	5	-	-	10	10	800	2	3
Malin Head	1026·7	+22	NNE	3	c	46	75	7	8	-	-	7-8	7-8	4000	1	3
Aldergrove	1024·8	+6	NE	3	iro	47	97	6	-	2	-	9+	9+	7000	2	*
Birr Castle	1026·8	0	WSW	2	rr	51	97	7	6	2	-	7-8	10	1500	1	*
Valentia Obsy. †	1029·8	+6	WSW	5	roro	52	97	5	6	-	-	10	10	800	1	3
Roches Point	1030·2	-2	W	3	c	52	85	8	5	-	-	9	9	1500	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)	oFFecff	cfc iro cmo	cdcgr	rogcmo
Croydon		czo	cid mirom	rorr m
S. Farnborough	oFxcfmo	cmo	dodmorc	rr modode
Boscombe Down	bmFf bm	cmo	oirocroro	ciroido
Calshot (Soton.)	ffc	cido cmo	cmoidoc	corridom
Lympne	iddcmo	cbcmo	cmd	ffcmrr
Manston			cdd cmo	cmoiro
Shoeburyness	FeFf	bcmo	cmoirorr	cmrff
Felixstowe	ifcm bcmo	bcmo cmo	cmooidir	oirddmb
Gorleston	czozo	czo zo	coroo	ororo bc
Mildenhall	bFxcmo	cmocmcmo	crofddmo	cddrrmo
Cranwell	cfcmo	cmo	cidDrf	Drffr, b
Birmingham	fe	co	oiro	orobm
Upper Heyford	bFofcm	cmoc, idfcmo	ddmcmoir	cirodd mobc
Ross-on-Wye	cfmcmo	cmo omo	ocor	c
Hartland Point	c	ro dfc	crcrr	rfdfc
Bristol	bcmo xc	cid.d.d.	cddmo, rm	crorodd m
Portland Bill	cc	co	oc	oro
Plymouth	cmomido	cd.d.cmo	cmoiddc	cidd pfo
The Lizard	dfFo	cpr	cidc	cprid
Scilly (St. Mary's)	ffec	cido	cidc	cido
Guernsey				
Pembroke	pqdfe	ifiro mcq	crriroq	bcc bc
Holyhead	roromoc	cmo rro	rrcbc	b
Chester (Sealand)	cmorodo	cd.moq	roroomo	bc
Manchester	cmomoiromo	cmo	cromo	rr
Spurn Head	o	co	prrc	bcc
Catterick	fmocidm	mrormoiro	moirodc	bbcc
Tynemouth	oiroc	oiro	oirbc	bcc
St. Abbs Head	cq	ro cq	bqbc	cbcq
Leuchars	rorododo	d.romocbc	bcbbcb	bbx
Renfrew (Abbots I.)		cmorromo	bmo bx	bxmomfD
Eskdalemuir	RrrRR	oRRrrc	cbcbx	bx
Point of Ayre	cprc	rr	cbcb	b
Tiree	codrc	bcb	bbz	bcb
Stornoway	crorob	bpro	bbcc	-, b
Dalwhinnie	ciroo	ciro	*	cbcc
Aberdeen	crroc	ccq, b	probc	bcc
Wick	rrcrr	cprbc	prbcq	bcc
Lerwick	cirorr	crr ir	cbc	bcc
Blacksod Point	rrq	c	bc	bc
Malin Head	crrc	crrcprc	cbcb	bc
Aldergrove	idomororo	rr RRmo	rr	c, b
Birr Castle	c	crr	c	ffx
Valentia Obsy. †	cproc	cidoiDroro	crromddD	o d domf
Roches Point	c	c	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/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.*

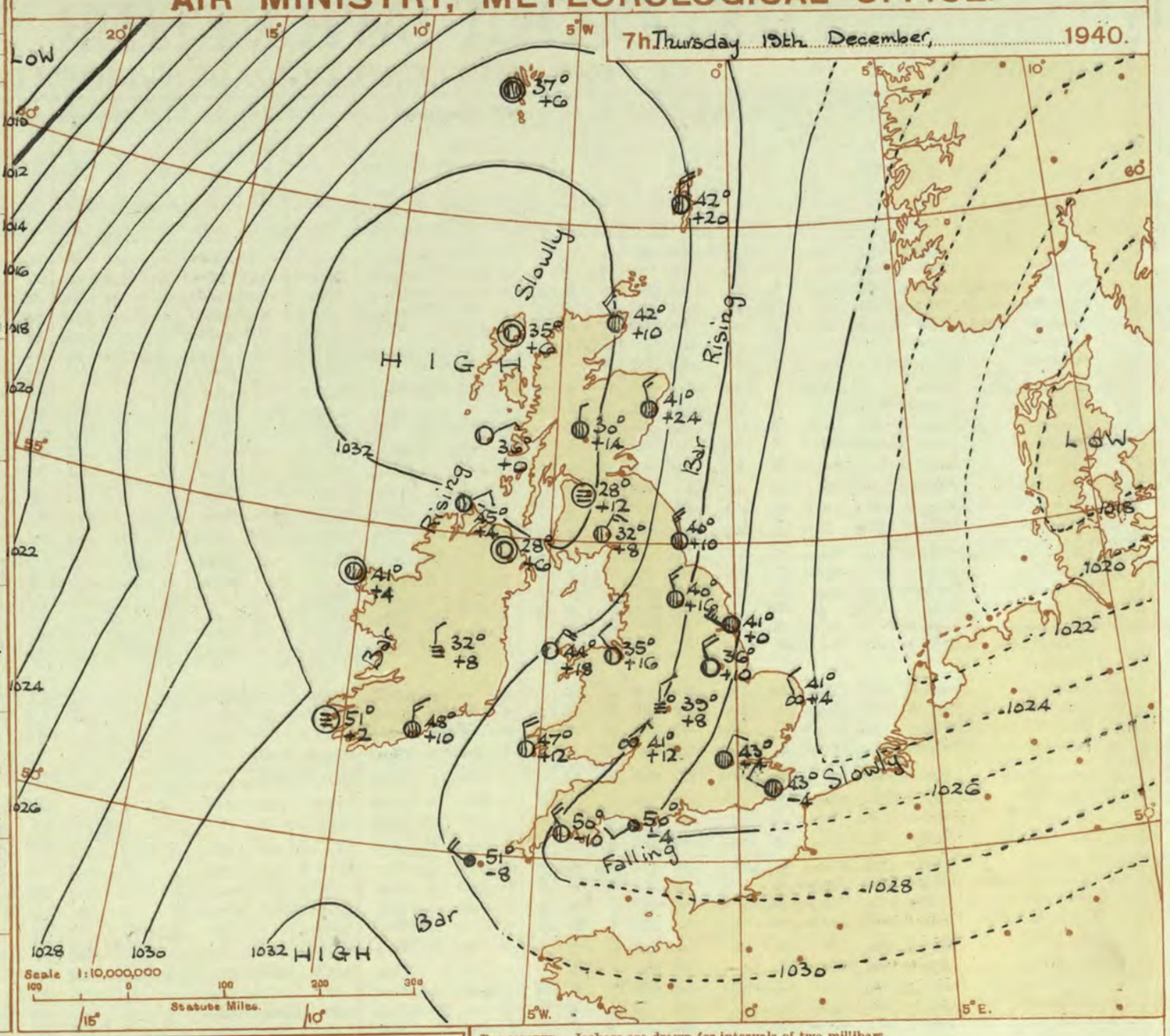
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h Thursday 19th December, 1940.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 18th December			18h. G.M.T.			01h. G.M.T. 19th December			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	8-	22744	26564	8-	25744	28584	50	01874	28604	5-	03866	31426
115	87	14854	57565	52	81844	26587	87	02854	32385	87	02964	32325
203							1-	01954	06314	1-	01953	06213
206	52	62855	23267	80	25845	26284	54	00861	28112	57	02865	00027
210	5-	62747	61467	5-	02858	25468	8-	02866	63486	5-	02867	29327
220				04	01790	30202				01	01890	32101
230	62	64737	26468	00	00990	30160	00	00890	12200	00	05690	12115
245	54	05643	23357	52	00961	28322	10	00951	63401	5-	01964	28414
260	52	54526	20468	52	05655	26368	00	05690	00010	50	00762	00002
277	52	58637	21568	62	62637	24268	--	05690	32260	04	00990	01308
279				62	64526	19468	00	05690	04100	00	00790	32200
285	5-	61438	24828							80	01745	30415
288	02	51458	18568	52	69545	19368	50	05681	29261	5-	05557	29207
273	46	66544	22368							00	00890	12200
301	57	05656	20457	02	64648	22468				00	08490	00010
321	5-	05590	20445	57	08465	20428	52	62555	99468	50	05651	29461
299	5-	08448	21568	5-	61438	22568	57	22844	22668	8-	02735	28515
292	52	51456	16148	52	52445	20458	57	02755	02268	5-	02756	30306
310	--	46205	20449	--	05528	20448				--	01523	08313
316	53	61455	18447	5-	02548	20428	5-	05578	29258	00	08490	32210
333	5-	02658	22568	52	51745	55657				50	01852	04112
334												
340	5-	05647	17447	5-	02767	55427				03	05690	30202
136	52	05641	20448	5-	05568	19428	62	62626	21568	40	01861	2841
336	52	51645	20458	62	58644	24658				53	02754	32315
350	52	05675	16448									
368												
379	5-	41638	26248				6-	62528	20468	52	05646	02327
390	03	43290	16346	5-	41458	18448	5-	67338	19268	53	02655	32226
382	53	05654	19247	5-	61448	20358	52	62546	22368	5-	05657	32227
438	5-	02868	22228							5-	57209	22259
430	53	05564	20225	53	05654	22114	5-	05637	22258	6-	52638	00058
409	5-	05618	16358	5-	21638	20558	5-	05648	20552	5-	05618	31368

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 December
1 S.E. England 2 E. England ... 3 E. Midlands ...	Wind becoming northeast, light to moderate, probably fresh locally on the coast; fair or fine inland, but cloud increasing by to-morrow: local showers near the East coast: becoming rather cold.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ...	Wind northerly, light to moderate, veering northeast; mainly fine, average day temperature; frost locally at night.
8 N.W. England 9 N. Midlands ...	As 11-13b.
10 N.E. England	As 1-3.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland.	Light variable wind, finally southeast; mainly fine, fog developing in places to-night, persisting locally tomorrow; average day temperature, sharp frost at night.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Wind variable, light; fair or fine, rather cold: frost at night.
17 N. W. Ireland	As 20
18 N. E. Ireland 19 S. E. Ireland	As 11-13b.
20 S. W. Ireland	Wind light, southerly; mainly fair, average temperature.

GENERAL INFERENCE.

An anticyclone centred over Northwest Scotland is likely to move eastwards. The high pressure belt on the Continent will continue to give way as a depression over the Kattegat moves south-southeast. Weather will be fair or fine in many districts with frost and some local fog at night, but there will be local showers near the East coast.

FURTHER OUTLOOK.

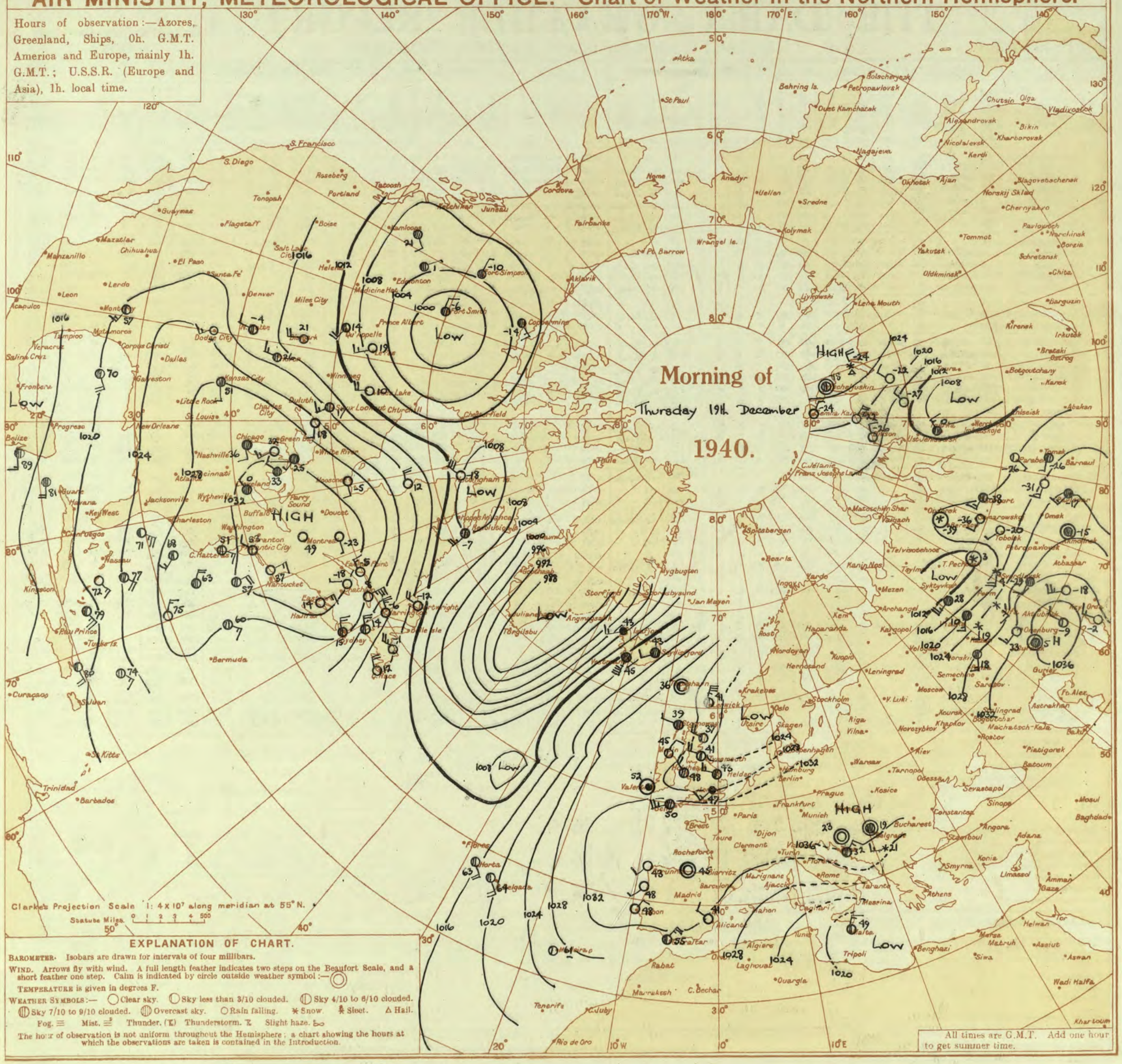
Cloudy in the Southeastern half of the British Isles. Mainly fine with night frost in the Northwest.

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
Thursday 19th December 1940.
No. 28,882

OBSERVATIONS at 1 hr. G.M.T. 19th December

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	1027.7	-28	SW	3	ir	47	97	4	-	2	-	10	10	800
	S. Farnborough	226	1028.0	-30	WSW	4	ir	47	97	6	5	-	-	10	10	1200
	Boscombe Down	417	1028.5	-20	WSW	3	r°r°	47	85	7	5	-	-	10	10	2000
	Calshot (Sthmtn.)	8	1028.6	-26	W'S	3	c	48	97	7	5	-	-	10	10	4500
	Lympne ...	346	1028.1	-38	SW	3	°/d	44	97	5	5	-	-	10	10	1000
	Manston ...	154	1027.7	-34	SW	4	°/d	44	97	6	5	-	-	10	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1025.8	-32	SW'W	4	ir	43	97	5	5	-	-	10	10	600
	Gorleston ...	5	1026.1	-30	WSW	3	c	44	97	6	6	-	-	10	10	1500
	Mildenhall ...	19	1025.0	-24	SW'W	4	dd	47	97	6	5	7	-	7-8	10	1500
	Cranwell ...	240	1025.6	-6	W'N	4	D°	46	97	3	5	-	-	10	10	900
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1027.1	-20	WSW	2	rr	47	97	6	5	2	-	7-8	10	700
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1027.8	-18	WSW	5	rr	49	97	7	6	2	-	7-8	10	800
	Bristol ...	209	1028.0	-26	WSW	4	r°r°	48	97	5	6	2	-	4-6	10	800
	Portland Bill ...	32	1028.6	-20	SW	4	c	50	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1030.8	-20	SW'W	4	z	49	92	6	5	2	-	4-6	10	1400
	The Lizard ...	240	1031.6	-16	W'S	5	c	49	97	7	5	4	-	7-8	10	1500
	Scilly (St. Mary's)	163	1031.9	-14	W'S	5	c	50	92	8	5	7	-	4-6	9+	1500
	Guernsey ...	175														
6	Pembroke ...	142	1027.4	-14	W'N	6	ir°	51	97	7	8	2	-	7-8	10	2000
7	Holyhead ...	26	1026.9	+12	N'W	4	bc	48	92	8	5	3	-	2-3	4-6	3500
	Chester (Sealand)	16	1025.8	-2	WNW	3	c	48	92	6	5	-	-	10	10	2500
8	Manchester ...	70	1025.9	+4	NE'E	4	ir°	48	97	5	5	2	-	4-6	10	1500
10	Spurn Head ...	29	1024.2	-10	NW	3	c	43	92	7	5	-	-	9+	9+	2500
	Catterick ...	175	1027.4	+16	-	0	b	40	75	8	-	4	-	0	1	-
	Tynemouth ...	108	1026.6	+14	NW	4	bc	41	75	7	-	3	-	0	2-3	-
11	St. Abbs Head	280	1026.7	+10	NNW	5	bc	43	75	8	2	4	-	2-3	4-6	2500
	Leuchars ...	36	1028.3	+14	N	1	b	39	75	8	-	-	-	0	0	-
12	Renfrew (Abbots I.)	19	1030.2	+18	NW'N	3	b	32	85	7	-	3	1	0	Tr	-
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1027.7	+26	ENE	5	b	44	65	8	5	-	-	1	1	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1031.3	+20	WNW	1	c	39	92	7	5	-	-	9	9	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1027.9	+20	WNW	5	bcq	39	75	8	2	4	5	Tr	2-3	2500
16	Lerwick ...	156	1027.0	+32	N'E	7	bc	41	86	8	5	3	-	4-6	4-6	1500
17	Blacksod Point	18	1030.5	+8	-	0	bc	45	97	8	-	5	-	0	4-6	-
18	Malin Head ...	84	1030.7	+20	NE	2	b	45	65	8	7	-	-	1	1	4000
	Aldergrove ...	268	1030.5	+20	-	0	b	35	92	8	-	-	-	0	0	-
19	Birr Castle ...	173	1030.7	+10	N	1	c	41	92	8	4	-	-	7-8	7-8	2500
20	Valentia Obsy.	30	1030.4	+2	-	0	dd	52	97	4	5	-	-	10	10	220
	Roches Point	22	1029.0	-2	WNW	4	c	50	92	8	5	-	-	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 19th December

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)	1026.5	+10	NNE	3	z	44	85	6	5	-	-	9+	9+	2500	1	*
	Croydon	1025.7	+4	NNE	2	°/r	43	92	5	-	2	-	10	10	1600	1	*
	S. Farnborough	1026.5	+10	NE'N	3	°/r	44	92	6	5	-	-	10	10	1600	1	*
	Boscombe Down	1026.7	+6	N'E	4	c	45	92	7	5	-	-	10	10	1000	1	*
	Calshot (Sthmtn.)	1025.6	-6	NW'N	3	id	48	97	6	5	-	-	10	10	1800	1	1
	Lympne	1024.8	-4	WNW	2	c/r	43	97	5	6	7	-	4-6	9	1500	1	§*
	Manston	1024.6	+2	N	2	ir	43	92	6	6	2	-	7-8	9	1000		*
2	Shoeburyness	1025.8	+2	NW	2	PR	43	97	6	8	-	-	9+	9+	1500	1	*
	Felixstowe	1025.2	+8	NW'N	3	b	42	92	7	-	3	-	0	1	-	1	2
	Gorleston	1024.4	+4	NNW	2	z	41	85	6	4	-	-	Tr	Tr	2500	1	2
	Mildenhall	1025.8	+8	NW'N	3	b	39	97	7	-	4	-	0	Tr	-	1	*
	Cranwell	1027.6	+10	NNW	4	b	36	86	7	-	-	-	0	0	-	1	*
3	Birmingham	1028.1	+8	N	2	m	39	85	4	-	-	-	0	0	-	1	*
	Upper Heyford	1027.8	+18	NNE	2	bc/d	41	86	8	5	-	-	2-8	2-8	2500	1	*
4	Ross-on-Wye	1028.0	+12	NE	1	z	41	92	6	5	-	-	4-6	4-6	2500	1	*
5	Hartland Point	1028.0	+6	NW	4	c	48	97	8	6	1	-	7-8	9+	800	1	3
	Bristol	1027.6	+8	NNE	3	m/d	45	97	4	5	-	-	9+	9+	1000	1	*
	Portland Bill	1025.9	-4	SW	2	r°r	50	92	7	5	-	-	10	10	2500	1	2
	Plymouth	1027.6	-10	NW	4	bc/pr	50	97	7	8	-	-	4-6	4-6	1200	1	2
	The Lizard	1028.9	-4	NW	5	id	51	97	6	5	-	-	10	10	1000	1	3
	Scilly (St. Mary's)	1029.9	-8	NW'N	4	id	51	97	5	5	2	-	7-8	9+	800	1	2
	Guernsey																
6	Pembroke	1029.8	+12	N'W	4	bc	47	85	7	8	-	/	2-8	2-8	2500	1	2
7	Holyhead	1029.9	+18	NE'N	4	b	44	85	8	-	-	-	0	0	-	1	2
	Chester (Sealand)	1029.7	+16	NW	2	b	35	92	6		-	-	0	0	-	1	*
8	Manchester	1029.6	+20	N	1	b	35	85	7	-	-	-	0	0	-	1	*
10	Spurn Head	1025.3	0	WNW	5	bc	41	85	7	8	6	-	4-6	4-6	4000	0	3
	Catterick	1029.5	+16	NNW	3	c	40	75	7	5	-	-	9+	9+	2800	1	*
	Tynemouth	1028.4	+10	NNW	5	c	40	75	7	8	-	-	9	9	2500	1	3
11	St. Abbs Head	1028.9	+8	N	6	bcq	42	65	8	4	4	-	2-3	4-6	2500	0	3
	Leuchars	1031.1	+14	N	2	b	37	76	8	5	-	-	Tr	Tr	4000	3	*
12	Renfrew (Abbots I.)	1032.3	+12	-	0	bcf	28	92	3	-	-	4	0	4-6	-	3	*
	Eskdalemuir	1031.8	+8	NNE	3	b	32	75	8	5	-	-	Tr	Tr	2500	3	*
	Point of Ayre	1031.2	+12	NE	3	b	41	75	8	-	-	-	0	0	-	1	2
13A	Tiree	1031.3	0	ENE	1	b	36	92	8	-	3	-	0	1	-	0	2
13B	Stornoway	1032.7	+6	-	0	b	35	92	7	5	-	-	1	1	2500	1	0
15	Dalwhinnie	1032.3	+14	N	1	c	30	85	8	2	-	-	7-8	7-8	2500	3	*
	Aberdeen	1030.9	+24	N'W	3	c	41	75	7	5	-	-	9+	9+	4000	1	2
	Wick	1031.8	+20	NW	4	c	42	92	8	6	7		7-8	9+	1500	1	2
16	Lerwick	1030.2	+20	N	4	cjp	42	75	8	5	3	-	4-6	7-8	1500	1	*
17	Blacksod Point	1031.4	+4	-	0	bc	41	97	8	4	-	-	2-3	2-3	2000	0	2
18	Malin Head	1031.6	+4	NE	2	b	45	75	8	-	-	2	0	1	-	0	3
	Aldergrove	1032.4	+6	-	0	b	28	97	8	-	-	1	0	Tr	-	5	*
19	Birr Castle	1032.3	+8	N	1	of+	32	97	3	5	-	-	10	10	2500	1	*
20	Valentia Obsy.	1030.8	+2	-	0	of+	51	97	3	5	-	-	10	10	<150	1	0
	Roches Point	1031.2	+10	N	3	c	48	92	8	5	-	-	9+	9+	2500	1	3

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 18th. Hrs. (36)
1	London (Kew)	42	42	39	Tr	3	0.0
	Croydon	44	41	39	-	3	1.9
	S. Farnborough	44	43	39	-	3	1.2
	Boscombe Down	44	42	43	0.2	3	0.5
	Calshot (Sthmtn.)	46	45	44	Tr	2	0.1
	Lympne	43	40	37	0.1	5	0.0
	Manston	*	*	*	*	*	*
2	Shoeburyness	44	41	40	-	4	0.7
	Felixstowe	42	41	38	-	3	2.9
	Gorleston	44	40	36	-	3	0.5
	Mildenhall	43	38	29	0.2	3	1.0
	Cranwell	45	35	32	-	1	0.0
3	Birmingham	43	39	32	*	2	0.0
	Upper Heyford	41	40	35	0.3	2	*
4	Ross-on-Wye	47	41	35	Tr	2	0.0
5	Hartland Point	50	48	41	1	9	0.0
	Bristol	47	(45)	43	0.2	3	0.1
	Portland Bill	49	41	*	-	0.2	*
	Plymouth	51	48	47	2	3	0.0
	The Lizard	51	49	*	1	1	0.0
	Scilly (St. Mary's)	53	49	*	0.1	0.5	0.3
	Guernsey						
6	Pembroke	51	46	*	0.5	3	0.0
7	Holyhead	52	42	36	1	3	0.0
	Chester (Sealand)	53	35	28	0.1	2	0.0
8	Manchester	51	33	22	Tr	4	0.0
10	Spurn Head	44	39	*	-	1	0.0
	Catterick	50	36	33	0.3	5	0.0
	Tynemouth	50	40	35	3	2	
11	St. Abbs Head	50	41	*	0.3	-	*
	Leuchars	50	33	22	0.1	-	0.0
12	Renfrew (Abbots I.)	50	28	18	9	-	0.0
	Eskdalemuir	48	30	23	19	-	0.0
	Point of Ayre	51	41	*	9	3	0.0
13A	Tiree	50	34	*	0.4	-	0.0
13B	Stornoway	40	34	*	0.4	-	2.7
15	Dalwhinnie	(43)	29	22	3	Tr	0.0
	Aberdeen	49	38	33	1	Tr	0.0
	Wick	44	37	*	2	Tr	*
16	Lerwick	49	40	*	5	-	0.0
17	Blacksod Point	53	40	*	11	-	*
18	Malin Head	51	40	*	14	-	0.0
	Aldergrove	49	27	26	10	0.2	0.0
19	Birr Castle	54	32	29	5	2	0.1
20	Valentia Obsy.	54	51	50	2	5	0.1
	Roches Point	53	48	*	Tr	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	oFFecff	cfeircrs	r°r°cm°	42	42	39	Tr	3	0.0	*	*	6
Croydon ...	217		cz	cid m°r°	*	41	39	*	3	1.9	*	*	4
Greenwich (Royal Observatory) ...	149	FFfcf	efcd°m°	cd°r r°b°	44	40	34	Tr	4	1.6	78	88	5
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	47	34	32	3			78	89	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	47	33	31	-	3		77	91	*
Camden Square ...	110			*						*	*		*
Kensington ...	80	c	cbc	*	47	41	33	-	3		90	94	*
Hampstead Observatory ...	450	ofbc	or	bcr	46	34	34	-	3		*	98	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 19th

	Max.	Time.	Min.	Time.
South Kensington.				
Kew Observatory.	6.8	12h 18+h	<0.1	0-4h 19+h

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

Friday 20th December 1940.

No. 28883

OBSERVATIONS at 13h. G.M.T. 19th December

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)	1027·0	−4	N'W	3	z₀	43	65	6	1	–	–	Tr	Tr	2500
	Croydon	1026·6	+4	NNW	3	z₀	43	65	5	1	–	–	1	1	2000
	S. Farnborough	1027·4	−6	N'W	4	z₀	43	65	6	–	–	9	0	Tr	–
	Boscombe Down	1028·7	0	N	4	b	42	65	7	–	–	–	0	Tr	–
	Calshot (Soton.)	1027·4	+2	N'E	4	z₀	44	75	6	1	–	–	Tr	Tr	2000
	Lympne	1027·4	−10	NNW	4	b	42	75	7	5	7	–	Tr	1	1500
	Manston	1024·1	−16	NW	5	bc	41	*	7	5	–	*	4-6	4-6	3000
2	Shoeburyness	1025·1	−16	N'W	3	bc	43	75	6	7	3	–	4-6	4-6	4000
	Felixstowe	1023·6	−16	NW	6	ir₀	41	85	7	5	–	–	9+	9+	1500
	Gorleston	1022·3	−18	N'W	5	r₀r₀	43	92	6	6	–	–	10	10	1500
	Mildenhall	1025·1	−10	NW	5	c	41	85	7	5	–	–	10	10	3000
	Cranwell	1027·4	−10	NNW	6	bcjp	41	85	7	8	–	–	4-6	4-6	1800
3	Birmingham	1029·3	0	NNW	3	z₀	39	75	5	–	–	–	0	0	–
	Upper Heyford	1028·4	−2	NNW	3	z₀	41	75	6	–	–	–	0	0	–
4	Ross-on-Wye	1029·4	−4	N	2	z₀	42	65	6	–	–	1	0	Tr	–
5	Hartland Point	1029·1	−2	NE	3	c	47	92	8	8	–	5	4-6	7-8	1500
	Bristol	1029·3	−2	NNE	3	z₀	42	85	6	1	–	–	9	9	2200
	Portland Bill														
	Plymouth	1028·9	+2	N	3	c	49	85	8	4	–	–	9	9	2000
	The Lizard	1029·4	0	N	3	c	47	92	8	8	6	–	7-8	7-8	1500
	Scilly (St. Mary's)	1030·4	−2	N	3	c	49	75	8	5	–	–	10	10	2000
	Guernsey														
6	Pembroke	1030·7	+6	NE	2	bc	47	75	8	2	–	2	2-3	4-6	4000
7	Holyhead	1031·4	+2	NE	4	bc	44	75	8	5	–	4	Tr	4-6	3500
	Chester (Sealand)	1030·9	−4	NW'W	2	bc	39	75	6	–	3	1	0	2-3	–
8	Manchester	1030·4	−4	NW'W	4	m	39	75	4	–	4	5	0	1	–
10	Spurn Head	1024·6	0	NW'N	6	c	44	92	7	5	5	–	4-6	9	1500
	Catterick	1029·7	−6	N	3	c	42	75	7	5	–	–	9+	9+	4000
	Tynemouth	1029·5	−2	N	6	e/pr	43	92	6	9	–	–	9	9	1200
11	St. Abbs Head	1031·2	+10	N	6	cq	42	75	8	5	7	–	7-8	9+	2500
	Leuchars	1032·9	+6	WNW	2	c	40	75	8	5	7	–	7-8	10	3500
12	Renfrew (Abbots I.)	1034·1	+6	W'S	1	F	30	92	3	–	–	9	0	7-8	–
	Eskdalemuir	1031·6	−2	NNE	3	bc	39	75	7	5	–	2	1	4-6	4000
	Point of Ayre	1032·7	+2	NE	3	c	43	75	8	–	–	4	0	9	–
13A	Tiree	1032·4	0	SE'E	1	bc	42	85	9	1	3	6	Tr	4-6	3500
13B	Stornoway	1033·5	+4	ESE	3	c	43	75	8	5	5	–	4-6	9	2500
15	Dalwhinnie	1034·0	+2	N	1	c	35	75	8	2	4	4	2-3	7-8	2500
	Aberdeen	1032·4	+6	NNW	3	c	42	75	7	5	–	–	9+	9+	2500
	Wick	1033·0	0	WNW	2	c	41	75	8	5	7	2	7-8	9	1500
16	Lerwick	1033·2	+10	NE	4	c	42	75	8	5	7	–	7-8	9	1500
17	Blacksod Point	1031·7	+4	–	0	bc	48	85	8	–	5	–	0	4-6	–
18	Malin Head	1032·8	+2	S	1	c	42	85	8	4	7	1	2-3	7-8	5700
	Aldergrove	1033·7	+12	–	0	bc	39	92	7	–	–	2	0	2-3	–
19	Birr Castle	1032·7	0	S	1	f	37	97	3	5	–	–	10	10	2500
20	Valentia Obsy. †	1031·3	−2	–	0	z₀	53	97	5	5	–	–	10	10	220
	Roches Point	1031·7	−2	N	1	c	47	92	8	5	–	–	9+	9+	1500

OBSERVATIONS at 18h. G.M.T. 19th December

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)	1025·9	−2	N	3	ir₀	42	85	5	5	–	–	10	10	1500	1	*
Croydon	1025·1	−6	NNW	4	r₀r₀	41	92	4	–	2	–	10	10	1200	1	*
S. Farnborough	1026·4	−2	NNW	4	e/pr	41	75	6	8	2	–	4-6	9+	2000	1	*
Boscombe Down	1027·7	−8	NNW	4	m	39	75	4	5	–	–	9+	9+	2000	1	*
Calshot (Soton.)	1026·7	−2	N'W	4	z₀	43	75	6	5	7	–	9	9+	3000	1	2
Lympne	1022·6	−8	NNW	4	e/pr	41	92	5	–	2	–	10	10	700	1	§
Manston	1022·2	−4	NNW	6	d₀d₀	41	92	6	9	–	–	9+	9+	800	*	*
Shoeburyness	1023·7	−4	NNW	4	epr/d	42	85	6	8	–	–	10	10	2500	1	*
Felixstowe	1022·6	0	N	5		43	75	6	5	–	–	7-8	7-8	3000	1	3
Gorleston	1022·4	+4	NNE	6	ir₀	43	85	6	6	–	–	10	10	1200	1	4
Mildenhall	1025·2	+6	N	5	id₀	43	85	6	5	–	–	10	10	1900	1	*
Cranwell	1027·7	+6	N'E	5	o/d	42	85	5	5	–	–	10	10	1000	1	*
Birmingham	1029·2	−2	NNW	4	c	37	85	5	5	–	–	9+	9+	2500	1	*
Upper Heyford	1027·3	−6	NNW	4	z₀	39	85	5	–	–	–	0	0	–	1	*
Ross-on-Wye	1029·1	0	NNW	2	z₀	39	75	5	5	–	–	9+	9+	1500	1	*
Hartland Point	1029·3	0	SSE	3	bc	43	75	8	5	–	–	4-6	4-6	2500	1	3
Bristol	1029·3	0	NNW	2	m	37	75	4	5	–	–	2-3	2-3	4000	1	*
Portland Bill	1027·2	+8	N	2	c	41	92	7	5	–	–	7-8	7-8	4000	1	2
Plymouth	1029·5	+8	NNE	1	z₀	43	75	6	–	–	2	0	2-3	–	1	1
The Lizard	1029·4	+4	N'E	3	bc	42	97	8	8	–	–	4-6	4-6	3500	1	2
Scilly (St. Mary's)	1030·0	+2	N	3	c	47	85	8	5	–	–	9+	9+	1800	1	2
Guernsey																
Pembroke	1031·0	+4	NE'N	3	bc	40	75	8	7	7	–	2-3	2-3	4000	0	2
Holyhead	1031·3	−6	NNE	4	b	42	85	7	5	–	–	Tr	Tr	4000	1	3
Chester (Sealand)	1031·0	−2	NW'N	3	bc	40	85	6	5	–	–	4-6	4-6	2500	1	*
Manchester	1030·6	+2	W	3	m	36	92	4	5	–	–	4-6	4-6	2500	1	*
Spurn Head	1026·4	+10	N'E	6	cq	43	97	7	2	–	–	10	10	1500	0	4
Catterick	1030·8	+8	N	3	c/pr	41	92	6	5	–	–	9+	9+	2500	1	
Tynemouth	1030·5	+12	N	5	e/pr	45	85	6	8	–	–	9+	9+	1500	1	3
St. Abbs Head	1032·3	+10	N	5	id₀	42	92	7	3	2	–	7-8	10	2500	1	3
Leuchars	1033·6	+4	NNW	2	z₀	42	75	6	5	7	–	9	10	4000	1	*
Renfrew (Abbots I.)	1034·0	0	SSW	1	bcf	31	85	2	–	–	2	0	4-6	–	3	*
Eskdalemuir	1032·6	+6	NNE	3	c	38	75	7	5	–	–	7-8	7-8	1500	1	*
Point of Ayre	1032·5	0	ENE	4	b	41	85	8	–	–	2	0	1	–	0	3
Tiree	1032·8	0	SSE	1	b	34	97	9	–	2	5	0	1	–	0	1
Stornoway	1032·8	0	S	3	bc	42	75	8	5	–	–	4-6	4-6	3500	1	2
Dalwhinnie	1034·0	+2	–	0	b	24	85	8	4	–	–	1	1	2500	3	*
Aberdeen	1034·2	+10	NW	2	z₀	41	85	6	5	–	–	10	10	3000	1	
Wick	1034·1	+2	W	1	c	35	92	6	5	7	–	7-8	9+	2500	1	1
Lerwick	1034·9	+6	NE	2	c	39	85	8	5	7	–	4-6	7-8	1500	1	*
Blacksod Point	1031·5	+6	N'E	2	c	45	92	8	–	7	–	0	9	–	0	2
Malin Head	1033·3	0	S	1	b	35	75	8	–	–	–	0	0	–	0	2
Aldergrove	1033·9	+4	ESE	1	F	30	97	1	–	–	–	0	0	–	1	*
Birr Castle	1032·7	+2	ENE	1	b	34	92	7	–	–	–	0	0	–	1	*
Valentia Obsy. †	1031·1	+4	–	0	df	51	97	3	5	–	–	10	10	800	1	0
Roches Point	1032·3	+6	E'S	2	bc	41	97	8	5	–	5	4-6	4-6	1500	1	3

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)	bcbm₀z₀	b,cir₀rr₀m₀	cr₀cir₀cm₀	cm₀
Croydon	cbmm₀	bcr₀r₀m	r₀r₀cm	cm₀id₀
S. Farnborough	cm₀bz₀	b,cpr₀z₀	cd₀d₀m₀	m₀id₀e
Boscombe Down	b	bm₀cm₀	cm₀ir₀m₀	cir₀m₀d₀m₀
Calshot (Soton.)	id₀m₀bz₀	b, cz₀	cz₀d₀d₀m₀	bm₀cm₀
Lympne	id₀m₀bcm₀	cm₀pr₀	cd₀r₀m₀	cm₀c
Manston	bm₀bc	bcd₀d₀m₀	d₀d₀r₀r₀c	cm₀ir₀
Shoeburyness	prcm₀bm₀	bcm₀pc	cprm₀crr	cm₀rrcrr
Felixstowe	bm₀pr₀c	id₀r₀d₀d₀bc	cid₀pr	cpr₀id₀
Gorleston	cor₀r₀	or₀ir₀q	cr₀	cq
Mildenhall	bcm₀pr₀c	cid₀m₀	cid₀m₀	cd₀d₀r₀m₀
Cranwell	b,cz₀bcjp	cpr₀d₀d₀m₀	cd₀d₀m₀	cd₀d₀m₀
Birmingham	bm	b,c	c	cor₀f
Upper Heyford	bm₀bz₀	bz₀bcc,m₀	bpr₀ic₀dd	cd₀d₀m₀
Ross-on-Wye	bcbz₀	bz₀c,bcz	czoz	om₀
Hartland Point	cbcc	cbc	bc	bcc
Bristol	cm, bm₀	c,bbcm₀	cm,cm₀id₀	cd₀d₀m₀
Portland Bill		c	c	c
Plymouth	bcc	cbcm₀	bm₀,cm₀w,bc	bcm₀wcm₀w
The Lizard	c	cbc	bcc	c
Scilly (St. Mary's)	cid₀c	c	cbc	c
Guernsey				
Pembroke	bc	bc	bc	
Holyhead	b,cbc	bccb	bwc	wm₀d₀e
Chester (Sealand)	bm₀bcz₀	cz₀bc	bcbm₀c	d₀r₀id₀m₀c
Manchester	bxbm₀z₀	cz₀bc,m	bcmz₀cz₀	cm₀ir₀m₀
Spurn Head	c	coq	cq,pr₀	cq
Catterick	cbc	cm₀prcm₀	cm₀ir₀c	ir₀id₀c
Tynemouth	cp	cpr	c	c
St. Abbs Head	cq	id₀c	c	cir₀
Leuchars	bcc	cm₀	cm₀	cm₀c
Renfrew (Abbots I.)	bcbcffx	cbcffx	b,cffx	cffx
Eskdalemuir	bxbc	bc	cbcb	bcir₀c
Point of Ayre	c	bcb	bbce	bbcc
Tiree	bc	bcb	bbc	b
Stornoway	bc	cbc	bcb	bbc
Dalwhinnie	c	cbc	*	cbc
Aberdeen	c	c	c	c
Wick	c	cm₀	cm₀c	cbc
Lerwick	c	c	bcc	c
Blacksod Point	bc	c	c	bc
Malin Head	bcc	bc	bc	bcz₀zc
Aldergrove	bxcxbc	fbcFFx	FFbmbf	bcmbcm₀
Birr Castle	cff	cb	b	ffbc
Valentia Obsy. †	offeDfem₀	om,ffeod	fodf₀Fr₀d₀d₀	cd₀d₀ir₀om₀
Roches Point	c	cbcw	bcb	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/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.

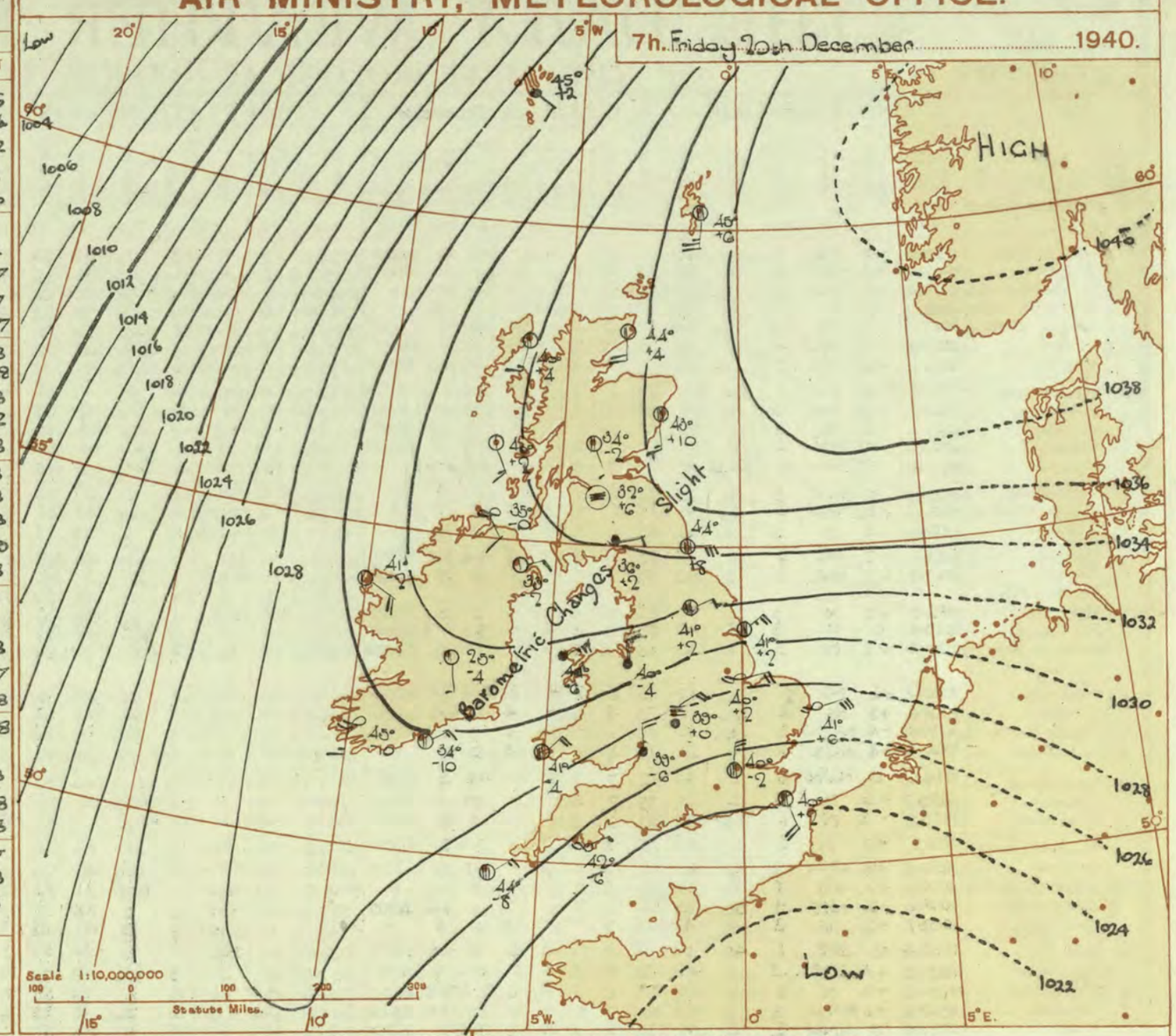
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 19th December			18h. G.M.T.			01h. G.M.T. 20th December			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	53	02965	24115	03	09590	20113	50	01864	14114	5-	02766	14326
115	52	02954	12225	52	02954	14225	73	01854	20324	51	01954	20214
203	5-	01864	12314				5-	00963	16313	5-	00962	12212
206	53	02864	30220	50	00863	28123	50	00761	00013	50	00862	25102
210	51	02864	32125	5-	02867	22127	52	05665	00028	5-	02866	00016
220	03	01990	09303	04	01890	16301						
230	03	02990	08116	03	01790	00013	00	01890	00014	03	05690	12114
245	73	02965	31426	5-	02957	20327	5-	02856	02426	8-	02867	21627
260	5-	08477	00017	50	08474	00024	5-	08468	00028	53	61665	08267
277	00	02990	29227	04	01790	28214	03	04890	26217	57	02864	07327
279	54	02756	29227	03	05690	02125				5-	05648	03268
285	23	02745	26486	9-	81637	24387				5-	61638	04368
288	8-	81487	31387	8-	25546	02386	53	05546	02328	62	22514	04478
273	18	08761	13202							14	09661	08102
301	04	05690	32326	50	08463	28323	53	09655	02116	5-	21658	32268
321	57	01765	20525	8-	25657	31487	52	52645	30568	52	52546	02458
299	50	01743	30613	5-	05648	01628	5-	05548	04658	5-	05548	04628
292	57	15647	30418	8-	81547	30387	53	02755	32488	52	05645	32368
310	--	01643	04534							--	57209	04649
316	5-	05555	63415	8-	81545	66485	5-	52538	32468	5-	21548	02558
333	00	17990	30125	00	00890	04303	5-	01865	00015	5-	02758	03218
334												
340	5-	05590	28302	5-	05667	30317	5-	02858	32328	6-	51638	32158
136	86	25646	30587				52	52656	04468	5-	21657	04557
336	10	01753	04413	50	01764	04414				61	03754	32428
350	53	05662	30302							5-	52538	02358
368												
379	00	05690	04400	00	05590	32400	6-	62548	04468	6-	52528	37458
390	5-	05665	28415	6-	22538	63668	5-	05548	32668	5-	62538	02568
382	00	05690	30401	5-	41454	30424	5-	51548	01458	52	52535	04453
438	50	01643	02403							8-	02747	04467
430	10	05651	31401	50	22544	30364	20	61744	32314	8-	51638	02458
409	52	02846	30357	50	01752	01324	04	05690	04213	5-	05648	04428

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 20th December
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Moderate east wind, fresh or strong on coasts. Cloudy at first with local rain. Bright intervals later with slight snow showers chiefly near East coast. Very cold; day temperatures falling to near the freezing point. Sharp frost at night.
7 North Wales ... 8 N.W. England ~~9 N. Midlands ...~~	Moderate east wind, fresh on coasts. Mainly cloudy, bright intervals later with local sleet or snow showers. Cold; frost at night.
10 N.E. England 11 S.E. Scotland ~~12 S.W. Scotland~~ & Isle of Man.	Moderate east to southeast wind fresh on coasts. Mainly cloudy, sleet or snow showers; cold. As 7-8
13 A. W. Scotld. / B.N.W. Scotland. 14 Mid Scotland	Light or moderate southeast wind; fair; local morning fog. Cold; sharp frost at night.
15 N. E. Scotland 16 Orkneys and Shetlands	Moderate southeast to south wind. Bright intervals, local wintry showers. Rather cold; frost locally at night.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Slight or moderate east to southeast wind. Mainly fair; local morning fog: cold, frost at night.

GENERAL INFERENCE.

A large anticyclone over South Scandinavia is spreading southeast. Cold east winds will spread across England giving slight snow locally. In North and West Scotland weather will be fair with frost at night. Day temperatures will fall to near the freezing point in Southern districts and frost will be rather widespread at night.

FURTHER OUTLOOK.

Continuing cold; frost day and night in the South.

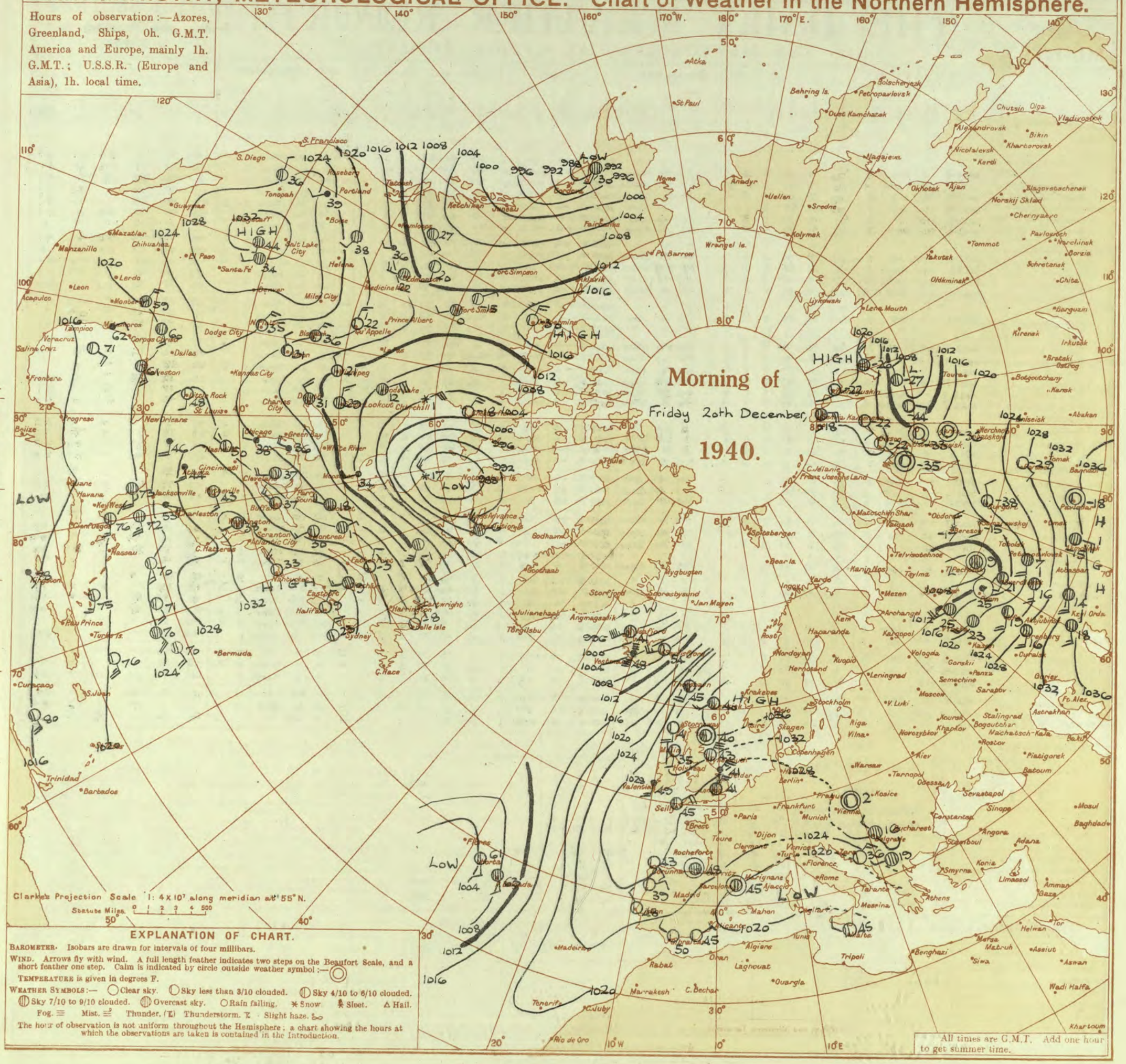
Forecasts issued at 1030 G.M.T.

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.

Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 20th December 1940.

No. 28883

OBSERVATIONS at 1 hr. G.M.T. 20th December

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	1024·8	-2	NNW	4	zo	41	85	5	5	1	-	7-8	9+	1000
	S. Farnborough	226	1025·9	-6	N'E	4	zo	41	85	6	5	3	-	2-3	9	2000
	Boscombe Down	417	1027·2	-2	N'E	4	iro	39	85	5	5	-	-	10	10	2500
	Calshot (Sthmtn.)	8	1025·4	-6	N'E	5	zo	42	85	6	5	-	-	1	1	5700
	Lympne ...	346	1023·3	+10	N	4	c/r	41	92	5	5	-	-	10	10	1200
	Manston ...	154	1023·6	+10	NNE	6	c/r	41	92	6	5	-	-	7-8	7-8	1800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1025·0	+14	NE	5	pr	41	97	6	9	-	-	9+	9+	1200
	Gorleston ...	5	1023·2	+10	NE'N	5	c	43	85	6	5	-	-	7-8	7-8	1500
	Mildenhall ...	19	1026·6	+6	N'E	3	ido	41	97	6	5	-	-	10	10	1200
	Cranwell ...	240	1029·2	+2	NE'E	4	dodo	40	92	5	5	-	-	10	10	1000
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1027·6	-2	N'E	4	d.d.	39	92	5	5	-	-	10	10	900
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1028·5	-8	NE	3	bc	42	75	8	5	-	-	4-6	4-6	2500
	Bristol ...	209	1029·0	-2	NNE	3	ido	40	85	5	5	2	-	4-6	10	1200
	Portland Bill ...	32	1026·3	-6	N	3	c	41	92	7	5	-	-	10	10	4000
	Plymouth ...	82	1028·7	-8	-	0	zo	39	85	6	5	-	-	4-6	4-6	3500
	The Lizard ...	240	1028·6	-4	NNE	4	c	38	85	7	8	6	-	4-6	7-8	2500
	Scilly (St.Mary's)	163	1028·7	-6	NE'N	4	c	45	75	7	5	3	-	4-6	9	2500
	Guernsey ...	175														
6	Pembroke ...	142	1030·5	-4	N'E	3	bc	39	92	8	-	7	-	0	2-3	-
7	Holyhead ...	26	1031·8	+2	NE	4	e	44	85	7	7	3	-	1	7-8	3000
	Chester(Sealand)	16	1031·6	0	WNW	2	c	40	85	6	5	-	-	9	9	4200
8	Manchester ...	70	1031·2	0	NNE	2	zo	40	75	6	5	3	-	2-3	9	3500
10	Spurn Head ...	29	1029·1	+4	NNE	5	pr	41	85	6	5	-	-	10	10	1500
	Catterick ...	175	1032·6	+4	NE	3	c/r	40	85	7	5	3	-	2-3	9+	4500
	Tynemouth ...	108	1032·7	+6	NNE	6	c	43	65	7	2	-	-	7-8	7-8	1600
11	St. Abbs Head	280	1022·7	+4	NE	3	c	43	85	7	5	2	-	7-8	9	2500
	Leuchars ...	36	1034·9	+2	W	2	zo	37	85	6	5	-	-	9+	9+	2800
12	Renfrew (Abbots I.)	19	1035·6	+2	-	0	ef	30	97	2	5	-	-	9+	9+	3500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1033·0	0	NE	3	c	42	85	8	8	-	-	7-8	7-8	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1033·3	+4	S	4	b	47	92	8	5	-	-	Tr	Tr	3500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1035·0	0	SSW	3	c	40	85	7	5	7	-	7-8	9+	2500
16	Lerwick ...	156	1036·3	+10	SW	3	c	40	85	7	5	7	-	7-8	9	1500
17	Blacksod Point	18	1031·3	+4	ESE	3	c	43	85	8	-	5	-	0	7-8	-
18	Malin Head ...	84	1033·8	+2	S	1	b	35	75	8	-	-	2	0	1	-
	Aldergrove ...	268	1035·0	+4	-	0	m/f	27	97	4	-	3	1	0	2-3	-
19	Birr Castle ...	173	1032·8	+2	SSE	1	b	25	97	7	-	-	-	0	0	-
20	Valentia Obsy.	30	1030·0	-10	S	3	d.d.	49	92	6	6	-	-	10	10	450
	Roches Point	22	1031·9	-2	NE	2	b	38	92	8	-	-	-	0	0	-

OBSERVATIONS at 7 hr. G.M.T. 20th December — 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 19th Hrs. (36)
London (Kew)	1025·2	+2	NE	5	zo	41	85	5	5	-	-	10	10	1500	1	*	44	41	37	0·5	0·1	4·7
Croydon	1024·8	-2	NNE	5	c/d	40	92	5	5	-	-	9	10	1200	1	*	43	39	38	0·3	Tr	3·1
S. Farnborough	1025·2	-4	NE'N	4	c/d	41	85	6	5	-	-	10	10	1100	1	*	44	40	38	Tr	Tr	5·0
Boscombe Down	1025·8	-2	NE'N	4	zo	39	92	6	5	-	-	10	10	2000	1	*		37	35		0·1	4·9
Calshot (Sthmtn.)	1024·7	-2	NNE	3	zo	42	85	6	5	-	-	10	10	2500	1	§2	49	40	38		Tr	4·7
Lympne	1023·8	+2	NNE	4	c	40	85	7	5	-	-	9+	9+	1500	1		43	39	37	0·4	2	4·9
Manston	1024·1	+4	NE'E	4	c/r	41	85	6	5	-	-	9+	9+	1000	*	*	*	*	*	*	*	*
Shoeburyness	1025·1	+2	NE'E	4	roro	40	97	6	5	-	-	10	10	1500	1	*	44	40	38	0·2	4	4·6
Felixstowe	1025·6	+8	NE'E	6	c/d	41	85	6	5	-	-	9+	9+	1500	1	3	43	40	39	0·4	3	1·5
Gorleston	1026·7	+6	E'N	6	zo	41	85	6	8	-	-	10	10	1500	1	4	44	40	39	0·5	0·2	0·0
Mildenhall	1026·8	+2	NE'E	5	zo	40	85	6	5	-	-	10	10	1600	1	*	43	40	37	0·1	0·3	0·8
Cranwell	1029·3	+2	ENE	4	zo	40	92	5	5	-	-	10	10	1000	1	*	42	37	35	0·2	1	3·0
Birmingham	1027·7	0	NE	4	rf	39	97	3	6	-	-	10	10	800	1	*	39	37	34	*	0·4	4·0
Upper Heyford	1026·7	-6	NE	4	d.d.	39	97	5	5	-	-	10	10	600	1	*	45	38	34	Tr	0·4	*
Ross-on-Wye	1027·8	-6	N	4	ido	39	92	5	5	-	-	10	10	800	1	*	42	39	32	-	Tr	6·0
Hartland Point	1026·8	-6	NE	4	c	42	75	8	5	2	-	7-8	10	1500	1	3	49	41	37	-	-	4·2
Bristol	1027·3	-6	NNE	4	d.d.	39	97	5	5	2	-	9	10	1000	1	*	46	36	32	-	Tr	4·2
Portland Bill	1024·1	-2	NNE	4	e	42	92	7	5	-	-	10	10	4000	1	3	50	38	*	-	-	*
Plymouth	1026·8	-6	ENE	1	zo	42	75	6	5	-	-	10	10	1200	1	0	51	32	28	-	-	2·3
The Lizard	1026·5	-10	NNE	3	c	42	85	7	8	2	-	9	10	2000	1	2	51	37	*	Tr	-	0·7
Scilly (St.Mary's)	1027·2	-8	NE'E	3	c	44	75	7	8	-	-	9+	9+	2300	1	2	51	43	*	0·2	-	0·1
Guernsey																						
Pembroke	1029·1	-4	NE	4	e	41	75	7	5	-	-	10	10	3000	1	2	48	37	*	-	-	2·2
Holyhead	1031·0	-6	NE'E	5	ido	44	75	6	5	2	-	7-8	10	2200	1	3	44	38	38	-	Tr	4·5
Chester(Sealand)	1030·9	-4	NNW	2	ido	40	85	6	5	2	-	7-8	10	2200	1	*	41	39	39	-	0·1	2·7
Manchester	1030·7	-2	NE	3	iro	42	85	6	5	2	-	7-8	10	1500	1	*	40	34	30	-	0·1	2·6
Spurn Head	1029·2	+2	NE	5	eq	41	85	7	6	-	-	9+	9+	800	0	4	45	39	*	1	Tr	1·0
Catterick	1032·3	+2	ENE	2	c	41	92	7	5	-	-	10	10	2000	1	*	42	38	37	0·1	0·5	2·0
Tynemouth	1037·7	+8	E	6	e	44	75	7	5	-	-	9+	9+	1600	1	4	45	42	39	2	-	*
St. Abbs Head	1034·3	+4	SE	4	iro	43	75	7	5	2	-	7-8	10	2000	1	2	43	41	*	Tr	Tr	*
Leuchars	1035·7	+4	E	3	c	43	65	7	5	-	-	9+	9+	2500	1	*	42	36	33	-	-	0·9
Renfrew (Abbots I.)	1035·5	+6	-	0	f-	32	97	3	5	-	-	9+	9+	2400	3	*	32	25	19	Tr	-	0·0
Eskdalemuir	1034·6	+2	ENE	2	ido	36	85	7	5	-	-	9+	9+	1500	1		39	35	32	-	0·1	3·2
Point of Ayre	1032·7	0	E'S	4	c	43	85	8	5	-	-	9+	9+	2500	0	2	43	40	*	-	-	4·1
Tiree	1033·4	+2	SE	3	b	40	85	8	-	3	-	0	1	-	0	1	43	32	*	-	-	5·5
Stornoway	1033·7	+4	SSW	3	bc	40	85	8	5	-	-	2-3	2-3	3500	1	2	43	39	*	-	-	1·1
Dalwhinnie	1035·5	-2	SE	1	bc	34	75	7	8	-	-	4-6	4-6	2500	3	*	*	19	11	-	-	2·0
Aberdeen	1036·6	+10	SSE	3	c	43	75	7	5	-	-	10	10	1500	1	2	42	37	29	-	-	0·0
Wick	1035·3	+4	S	4	bc	44	85	8	2	1	8	4-6	4-6	1500	1	2	43	35	*	-	-	*
Lerwick	1036·6	+6	S'W	5	e	45	75	8	5	7	-	7-8	9+	1500	1	*	44	39	*	-	-	0·0
Blacksod Point	1030·4	-2	ESE	4	b	41	92	8	-	-	5	0	1	-	0	3	48	40	*	1	-	*
Malin Head	1033·1	0	SE	2	zo	35	92	6	5	-	-	1	1	5700	0	2	48	31	*	-	-	4·1
Aldergrove	1033·7	-2	E'N	2	b	33	85	7	5	-	-	1	1	2500	5	*	41	24	21	0·1	-	2·8
Birr Castle	1032·0	-4	SSE	1	bc	25	97	7	5	3	-	2-3	4-6	2500	1	*	41	23	20	-	-	1·8
Valentia Obsy.	1028·8	-10	S'W	3	zo	45	97	5	5	-	-	10	10	450	1	1			45	1	3	0·0
Roches Point	1029·8	-10	NE'E	3	bc	34	85	8	-	-	5	0	2-3	-	1	2	50	33	*	Tr	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. %	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
Kew ...	18	bcbmozo	b,ciro,rom	cro,ciro,mo	44	41	37	0·5	0·1	4·7	*	*	5
Croydon ...	217	cbmmo	bcro,rom	rro,cmo,ido	43	39	38	0·3	Tr	3·1	*	*	5
Greenwich (Royal Observatory)...	149	b	bcd	idcddmo	43	39	36	Tr	0·5	3·0	76	87	5
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	45	41	38	0·3			75	86	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	44	40	33	-	Tr		75	87	*
Camden Square ...	110	b	c	*	44	40	35	-	0·3	*	*	86	*
Kensington ...	80	cmr	c	*	44	40	37	Tr	0·5		83	88	*
Hampstead Observatory ...	450	bcor	o	o	41	37	34	Tr	0·5		*	91	*

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.
0·2	15h, 17h	<0·1	0-2h, 20h

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 21st December 1940.

No. 28,884

OBSERVATIONS at 13h. G.M.T. 20th December

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)	1026·3	-2	NE	4	zo	40	75	5	5	–	–	10	10	800
	Croydon	1025·8	-2	E'N	5	zo	38	75	5	9	–	–	10	10	2000
	S. Farnborough	1026·1	-4	ENE	4	o/d	39	85	6	5	–	–	10	10	700
	Boscombe Down	1026·2	-6	NE	4	ido	39	85	6	5	–	–	10	10	1400
	Calshot (Soton.)	1025·0	-2	NE'E	4	roro	41	85	5	5	2	–	9	10	800
	Lympne	1025·3	+2	E	4	zo	37	85	5	6	2	–	7-8	10	900
	Manston	1025·8	+2	ENE	5	zo	37	92	6	5	–	–	9+	9+	600
2	Shoeburyness	1026·5	-2	ENE	4	c	39	85	6	5	–	–	10	10	2500
	Felixstowe	1027·8	+6	ENE	6	zo	38	85	6	8	–	–	10	10	1000
	Gorleston	1029·1	0	E	6	c	39	85	6	5	–	–	10	10	1700
	Mildenhall	1028·5	+2	ENE	4	ido	38	92	6	5	–	–	10	10	1500
	Cranwell	1030·7	-2	E'N	5	bc	40	75	7	5	–	–	4-6	4-6	1500
3	Birmingham	1029·1	-4	ENE	4	c	38	75	5	8	–	–	9+	9+	1500
	Upper Heyford	1027·8	-4	NE'E	4	zo	39	85	6	5	–	–	9+	9+	1200
4	Ross-on-Wye	1027·7	-6	NE	4	ido	39	92	6	5	–	–	10	10	800
5	Hartland Point	1025·6	-12	NE	5	c	42	85	7	5	2	–	7-8	10	1000
	Bristol	1027·2	-6	NE	4	dodo	39	97	5	5	2	–	9	10	700
	Portland Bill	1023·9	-8	NE	4	c	42	85	7	5	–	–	0	10	2500
	Plymouth	1025·6	-10	ENE	4	zo	42	85	6	8	–	–	9+	9+	1500
	The Lizard	1025·8	-10	NNE	3	c	42	85	8	8	2	–	9	10	1500
	Scilly (St. Mary's)	1025·4	-14	NE	5	c	45	65	7	8	6	–	7-8	9+	2200
	Guernsey														
6	Pembroke	1028·1	-4	NE'E	4	c	42	85	8	8	2	–	7-8	10	2500
7	Holyhead	1030·6	-10	ENE	5	c	43	85	6	5	–	–	9+	9+	2200
	Chester (Sealand)	1031·2	-6	E'N	3	zo	41	75	6	5	–	–	9	9	3500
8	Manchester	1031·7	+2	NE'E	3	zo	41	65	5	1	–	–	7-8	10	2700
10	Spurn Head	1031·3	0	NE'E	5	dd	42	85	7	8	–	–	7-8	7-8	4000
	Catterick	1034·4	-2	E	2	c	42	75	7	8	–	–	9	9	3000
	Tynemouth	1035·1	+4	E	5	c	42	75	8	2	–	–	7-8	7-8	3200
11	St. Abbs Head	1035·4	-4	ESE	4	c	43	75	8	8	4	–	4-6	7-8	2500
	Leuchars	1036·5	-2	ESE	3	c	44	85	7	7	3	7	4-6	7-8	3200
12	Renfrew (Abbots I.)	1035·7	-6	E	2	m/f	41	85	4	5	3	–	2-3	7-8	2800
	Eskdalemuir	1035·2	+4	E	3	bc	38	85	8	5	–	2	4-6	4-6	2500
	Point of Ayre	1032·7	-4	E'S	4	bc	44	85	8	5	–	–	2-3	2-3	2500
13A	Tiree	1033·4	-2	SE'E	5	c	43	75	8	5	–	–	7-8	7-8	2400
13B	Stornoway	1034·2	0	S	4	c	44	75	8	2	7	7	tr	9	2500
15	Dalwhinnie	1036·0	0	SE	2	c	37	85	7	8	–	–	9	9	1500
	Aberdeen	1037·2	-6	SSE	3	c	43	75	6	5	–	–	7-8	7-8	1500
	Wick	1036·8	+2	SSW	5	c	44	75	8	5	2	–	7-8	10	2500
16	Lerwick	1037·8	-2	S	5	c	43	75	8	5	7	–	7-8	10	1500
17	Blacksod Point	1029·0	-6	SE	3	b	43	92	8	–	4	–	0	1	–
18	Malin Head	1032·6	-10	SE	3	c	43	75	8	2	–	–	2-3	7-8	5700
	Aldergrove	1033·2	-10	ENE	2	zo	40	85	6	5	–	–	9+	9+	4000
19	Birr Castle	1030·6	-14	E	1	c	37	92	7	5	–	–	7-8	10	1500
20	Valentia Obsy. †	1027·9	-10	ESE	4	bc	44	75	9	5	7	–	1	2-3	2500
	Roches Point	1028·5	-12	ENE	3	c	42	75	8	5	–	–	9	9	2500

OBSERVATIONS at 18h. G.M.T. 20th December

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)	1026·8	+6	NE	4	m	38	85	4	5	–	–	10	10	800	1	*
Croydon	1026·2	+4	NE	5	m/r	36	85	4	5	–	–	10	10	1000	1	*
S. Farnborough	1026·6	+2	NE'E	3	zo	37	85	5	5	–	–	10	10	1600	1	*
Boscombe Down	1026·3	+6	NE	4	o/d	36	92	6	5	–	–	10	10	600	1	*
Calshot (Soton.)	1024·9	0	E'N	4	zo	39	85	6	5	–	–	10	10	1500	1	2
Lympne	1025·5	+2	E	4	zo	35	85	5	5	–	–	7-8	7-8	1200	*	§
Manston	1026·2	+4	E'N	4	zo	37	85	6	2	–	–	1	1	2000	*	*
Shoeburyness	1026·8	+2	NE'E	4	bc	38	85	6	5	–	–	4-6	4-6	500	1	*
Felixstowe	1027·9	+4	ENE	6	zo	39	75	6	5	–	–	9	9	1500	1	3
Gorleston	1029·7	+4	E'N	6	bc	38	75	5	4	–	–	4-6	4-6	1500	1	4
Mildenhall	1028·9	+2	ENE	4	zo	37	85	6	5	–	–	10	10	1500	1	*
Cranwell	1030·7	0	E'N	4	b	33	85	7	–	–	–	0	0	–	1	*
Birmingham	1029·1	0	ENE	4	bc	36	75	5	5	–	–	2-3	2-3	1500	1	*
Upper Heyford	1028·0	+2	NE	4	zo	36	92	6	5	–	–	10	10	1000	1	*
Ross-on-Wye	1027·9	0	ENE	5	o	37	75	6	5	–	–	10	10	1500	1	*
Hartland Point	1024·6	-4	NE	5	c	40	75	7	8	2	–	7-8	10	1500	1	4
Bristol	1027·1	-4	ENE	4	zo	37	85	5	5	–	–	10	10	1200	1	*
Portland Bill	1023·8	-6	NE	4	o	39	92	7	5	–	–	10	10	2500	1	4
Plymouth	1024·6	-2	NE	4	zo	41	75	6	5	–	–	9+	9+	2000	1	2
The Lizard	1023·9	-2	NE	6	c	43	85	6	8	2	–	9	10	1500	1	3
Scilly (St. Mary's)	1023·6	-6	NE'E	4	c	44	65	7	9	2	–	7-8	10	1200	1	3
Guernsey																
Pembroke	1026·4	-4	ENE	4	c	40	75	7	8	–	–	7-8	7-8	3000	1	2
Holyhead	1029·4	-8	E'N	6	bc	41	75	6	5	–	–	4-6	4-6	2200	1	3
Chester (Sealand)	1030·7	+2	NE'E	2	zo	38	75	6	–	–	–	0	0	–	1	*
Manchester	1031·1	0	ENE	4	zo	39	65	5	–	–	–	0	0	–	1	*
Spurn Head	1030·9	0	ENE	6	cq	40	75	7	8	–	–	4-6	7-8	4000	1	4
Catterick	1033·9	+6	–	0	bc	36	85	7	4	–	–	4-6	4-6	2500	0	
Tynemouth	1024·5	0	E	5	c	42	75	7	2	–	–	7-8	7-8	3000	1	3
St. Abbs Head	1034·2	-4	SE	4	bc	41	85	8	4	4	–	4-6	4-6	2500	0	3
Leuchars	1036·3	+2	E	3	zo	42	75	6	4	3	–	7-8	7-8	3200	1	*
Renfrew (Abbots I.)	1035·1	+2	ESE	2	zo	38	85	5	–	–	–	0	0	–	1	*
Eskdalemuir	1034·6	0	E	1	b	34	85	7	5	–	–	1	1	2500	1	*
Point of Ayre	1031·9	0	NE'E	3	bc	41	75	7	4	–	–	2-3	2-3	2500	0	2
Tiree	1032·3	-2	ESE	3	bc	41	85	8	5	–	–	4-6	4-6	2500	0	3
Stornoway	1034·2	-2	ESE	3	bc	43	75	7	5	–	–	2-3	2-3	2500	1	2
Dalwhinnie	1035·8	0	S	2	c	36	85	7	5	–	–	7-8	7-8	1500	1	*
Aberdeen	1037·4	+4	SSE	2	bc	41	75	5	5	–	6	4-6	4-6	2500	1	2
Wick	1036·7	0	S	4	c	43	75	7	8	7	–	4-6	7-8	1500	1	2
Lerwick	1037·5	+2	S	6	c	43	75	7	5	2	–	4-6	10	800	1	*
Blacksod Point	1029·0	0	SE	3	b	41	92	8	–	4	–	0	1	–	0	3
Malin Head	1031·7	-2	–	0	b	38	85	8	–	–	–	0	0	–	0	2
Aldergrove	1032·2	-2	E'N	2	zo	38	85	5	5	–	–	1	1	3500	1	*
Birr Castle	1029·0	-4	NE	1	c	37	92	7	5	1	–	7-8	10	1500	1	*
Valentia Obsy. †	1026·4	-4	E'S	3	c	43	65	8	5	–	–	7-8	7-8	4000	1	1
Roches Point	1026·8	-8	E'N	3	c/r	43	85	8	6	–	–	7-8	7-8	1500	2	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 20th (37)	13h.—18h. 20th (38)	18h. 20th to 1h. 21st (39)	1h.—7h. 21st (40)
London (Kew)	cmo oidomo	cmocm	cmcbcmo	bccmo
Croydon	r	czomdorov	mmbcmo	bmocmo
S. Farnborough	dodomoc	dodomoc	moc	cmobc
Boscombe Down	cidomo	cmo cido	cm	cbx
Calshot (Soton.)	crorgmo	crododdmo	cbccmo	cmobmox
Lympne	moidocmo	cbcmo	bcbmo	bbcmox
Manston	cmo	cbcbmo	bmobcmo	bcbmox
Shoeburyness	crorocmo	cmo	cmo	bcmo
Felixstowe	cidocpro	cmo	cmobmo	cmobmo
Gorleston	cq	cbcq	bccb	bccqx
Mildenhall	cmoido	cmoidocmo	cmobmox	bmoxbc
Cranwell	cmo,ido,bc	bcmob	bbcbmox	bmox
Birmingham	of doc	cbc	bcc	cbcmox
Upper Heyford	cdodoidomc	cidomoc	cbcbmo	bbccmo
Ross-on-Wye	idoomo	c	c	c
Hartland Point	c	cdo	c	c
Bristol	cffmo	cdocmo	cido dodomo	cmo,bcf
Portland Bill	co	o	b	bc
Plymouth	cmoidocmo	cmo	cmoidcmo	cmo
The Lizard	c	c	ddc	c
Scilly (St. Mary's)	c	c	c	c
Guernsey				
Pembroke	c	zoc	c	bc
Holyhead	moc	cmobc	qbcmob	qbmoc
Chester (Sealand)	cmo	bczob	bcmo	bcbbcmox
Manchester	idoczo	bczobzo	bzo	bczobzo
Spurn Head	cq	cq	cbc	cbcq
Catterick	ccmoc	cbc	c	ccmo
Tynemouth	c	c	c	c
St. Abbs Head	c	bc	c	cq
Leuchars	cidoc	cbccmo	cmoc	c
Renfrew (Abbots I.)	cffxm	cm, bmo	bmcmox	cbczox
Eskdalemuir	cidocbc	bcb	cidoc	c
Point of Ayre	cbc	bbc	c	bbc
Tiree	bcc	cbc	b	bbc
Stornoway	bcc	cbc	bc	bc
Dalwhinnie	clro	c	*	c
Aberdeen	czo	cbczo	bczo	bcc
Wick	bcc	c	cbco	bcc
Lerwick	c	c	c	c
Blacksod Point	bc	bc	bc	bc
Malin Head	czobcc	czobc	bc	cbcbc
Aldergrove	bxbccmo	cmobcbmo	bcmoxbzo	bczox
Birr Castle	c	c	b	bc
Valentia Obsy. †	bmooddcbc	bcbbc	bccocidoq	c
Roches Point	c	iroc	c	ciro

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.

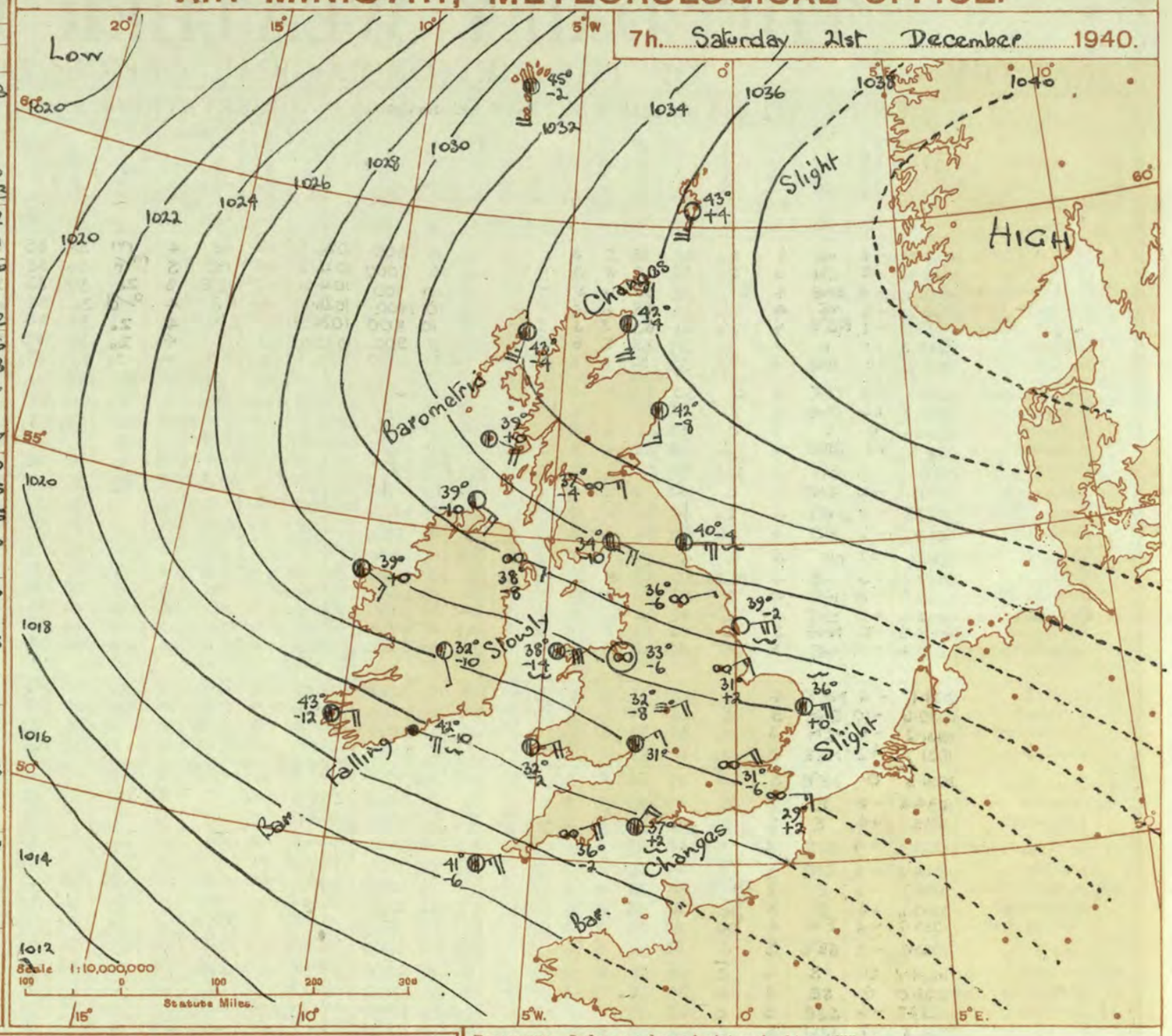
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 20th December			18h. G.M.T.			01h. G.M.T. 21st December			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	5-	21708	15408	5-	02858	16328	50	00863	14413	5-	03858	15428
115	51	01854	20216	51	01853	16214	51	01861	28213	51	01961	12213
203				54	01961	12313						
206	53	01863	26115	50	00652	00012	00	00690	00000	00	03590	00000
210				00	00890	11320	00	05630	00000	50	00863	00013
220				54	01754	16414				83	01790	15302
230	5-	02857	08117	50	00851	06211	50	00862	10402	04	00890	08401
245	10	02854	10408	40	01754	11424	8-	01855	10425	8-	02856	13526
260	04	05690	08203	50	05551	06201	5-	05657	08227	5-	02767	10327
277	54	01851	08413	00	05690	08300	00	00790	08300	03	00890	08402
279				50	05652	08302	--	01790	06400	5-	02766	04326
285	50	02746	10426	5	02747	08327				6-	03638	08528
288	74	05656	05327	5-	05656	06126	5-	02757	06327	8-	02757	08227
273	54	05653	08216									
301	50	05663	08453	50	05552	08312	50	05664	41314	03	05690	08327
321	50	02765	03325	50	05663	04235	5-	05665	04215	00	05690	03200
299	80	01744	08614	80	02745	08615	8-	03646	08626	8-	02745	08515
292	76	02756	04226	50	00751	06301	5-	05655	06325	5-	02755	06225
310	--	01635	08615	--	02636	04526				--	02636	04716
316	50	01744	06424	00	05590	04310	50	01651	04411	00	00690	02410
333	23	05647	06327	50	01752	04202	50	17652	08402	03	01790	07503
334												
340	2-	02756	04456	40	05661	04311	50	00763	04513	5-	02755	04515
136				00	05690	06410				63	01790	07402
336	52	03755	04428	52	03754	04428						
350	8-	05647	07458							5-	05663	07315
368												
379	5-	21635	08558	5-	52548	08458	00	05690	06400	5-	05658	08428
390	52	51546	04458	5-	08447	06428	00	05590	07410	50	05552	08412
382	5-	05645	05455	5-	51548	04358	00	00790	04300	50	05643	04313
438	8-	03636	04628							5-	02657	04527
430	6-	52635	04558	5-	05537	06427	50	05653	08313	00	05690	06200
409				5-	05647	06457	5-	52648	04358	5-	05643	05428

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 21st December
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate east wind, fresh or strong locally on coasts. Mainly fair, very cold. Day temperatures about the freezing point; frost at night.
5 S.W. England 6 South Wales ...	Moderate east wind, fresh or strong on coasts. Bright intervals, local wintry showers. Cold; frost locally at night.
7 North Wales ... 8 N.W. England	As 1-4
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Moderate east to southeast wind, fresh locally on coasts. Mainly cloudy; local wintry showers: cold.
12 S.W. Scotland & Isle of Man.	Moderate east wind, fresh on coasts. Mainly fair. Cold; frost locally at night.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland	Light or moderate southeast wind, fresh locally on coasts. Fine; cold; frost at night.
15 N. E. Scotland 16 Orkneys and Shetlands	As 9-11
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland	As 12
20 S. W. Ireland	As 5

GENERAL INFERENCE.

A large anticyclone is centred over Southern Scandinavia Cold and mainly fair weather will continue, with day temperatures about freezing point in the South.

FURTHER OUTLOOK.

Continuing cold for a day or two, especially in the South.

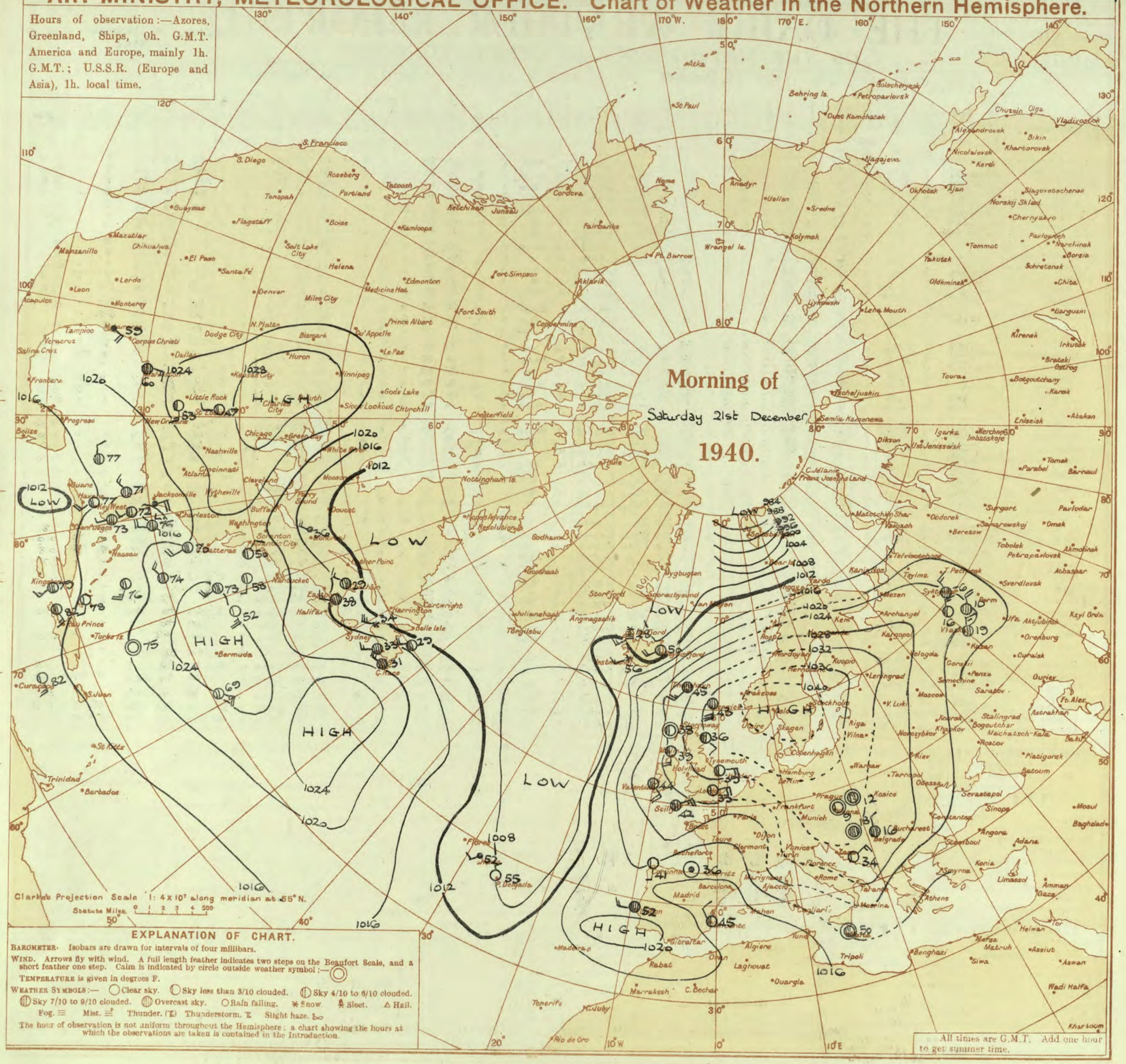
Forecasts issued at 1030 G.M.T.

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.

Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 21st December 1940.

No. 28884

OBSERVATIONS at 1 hr. G.M.T. 21st December

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	1026.2	0	ENE	4	z	33	85	5	5	-	-	1	1	1800
	S. Farnborough	226	1026.3	-2	NE'N	3	z	35	75	6	5	-	-	9	9	2200
	Boscombe Down	417	1026.1	-2	NE	4	z	35	75	6	5		-	10	10	1500
	Calshot (Sthmtn.)	8	1024.9	-2	S	4	z	39	75	6	5	-	-	10	10	2500
	Lympne	346	1025.8	+2	E	4	z	33	85	6	5	-	-	Tr	Tr	2000
	Manston	154	1026.0	-6	ENE	4	z	34	85	6	5	3	-	4-6	4-6	2000
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1027.7	-2	E'N	6	z	35	75	6	5	-	-	4-6	4-6	3000
	Gorleston	5	1029.2	-4	E	6	b	36	88	7	-	4	-	0	Tr	-
	Mildenhall	19	1028.4	-6	ENE	3	z	30	85	6	-	-	-	0	0	-
	Cranwell	240	1030.4	-6	NE'E	3	z	32	85	6	-	-	-	0	0	-
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1028.1	-2	NE'E	4	z	30	85	6	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1024.8	0	NE	5	c	38	85	7	8	2	-	7-8	10	1500
	Bristol	209	1027.0	-4	ENE	4	z	35	75	6	5	-	-	10	10	1400
	Portland Bill	32	1024.1	+10	NE	4	o	38	92	7	5	-	-	10	10	2500
	Plymouth	82	1024.5	-4	NE	4	z	38	85	6	5	-	-	10	10	2000
	The Lizard	240	1022.9	-6	NE	6	c	41	92	6	8	2	-	9	10	1500
	Scilly (St. Mary's)	163	1022.8	-4	NE'E	5	c	42	85	6	5	2	-	9	10	1500
	Guernsey	175														
6	Pembroke	142	1026.5	-4	ENE	5	c	38	85	6	8	2	-	7-8	10	3000
7	Holyhead	26	1029.3	-4	E'N	6	bq	38	75	6	5	-	-	Tr	Tr	4000
	Chester (Sealand)	16	1031.0	-2	-	0	z	35	85	6	5	-	-	7-8	7-8	2500
8	Manchester	70	1030.5	-6	ENE	4	z	37	65	6	5	-	-	2-3	2-3	5000
10	Spurn Head	29	1030.8	-2	E'N	5	bc	40	75	7	4	6	-	2-3	4-6	2500
	Catterick	175	1033.3	-6	E'N	2	c	38	75	7	5	-	-	9+	9+	3000
	Tynemouth	108	1034.5	-2	E	4	c	41	65	7	8	-	-	9+	9+	3000
11	St. Abbs Head	280	1034.7	+4	SE	5	cq	40	85	8	5	4	-	4-6	7-8	2500
	Leuchars	36	1035.8	-4	ESE	3	c	41	75	8	5	-	-	7-8	7-8	3500
12	Renfrew (Abbots I.)	19	1034.4	-8	E	3	z	39	75	5	5	-	-	9	9	3500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1031.7	0	SE'S	4	bc	40	75	8	4	-	-	2-3	2-3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1033.8	0	-	0	bc	38	92	7	5	-	-	2-3	2-3	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1036.4	0	S	4	bc	42	75	7	8	1	-	4-6	4-6	1500
16	Lerwick	156	1037.5	-2	S	6	c	43	75	7	8	7	-	4-6	7-8	1500
17	Blacksod Point	18	1028.3	-6	ESE	4	bc	42	85	7	-	4	-	0	4-6	-
18	Malin Head	84	1030.7	0	S'E	3	bc	39	75	8	5	-	-	4-6	4-6	4000
	Aldergrove	268	1031.6	-2	ESE	4	z	38	75	6	5	-	-	2-3	2-3	2500
19	Birr Castle	173	1028.1	-2	NE	1	b	35	85	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1024.7	-10	SSE	4	cq	44	85	8	5	-	-	9+	9+	2500
	Roches Point	22	1025.7	-4	E'S	5	c	43	75	8	5	-	-	9+	9+	1500

OBSERVATIONS at 7 hr. G.M.T. 21st December

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)
1	London (Kew)	1025.5	-4	NE'E	3	z	33	85	5	5	3	-	4-6	9	1500
	Croydon	1025.0	-6	ENE	4	z	31	85	5	5	-	-	9+	9+	1200
	S. Farnborough	1025.3	-2	NE'E	3	z	32	85	6	5	-	-	7-8	7-8	2500
	Boscombe Down	1024.7	-2	NE'E	4	6	30	85	7	-	-	-	0	0	-
	Calshot (Sthmtn.)	1024.3	-2	NE'E	3	z	33	85	5	-	-	-	0	0	-
	Lympne	1025.2	+2	E	3	z	29	85	6	5	-	-	2-3	2-3	1000
	Manston	1025.6	+2	E	2	z	32	92	5	5	-	-	2-3	2-3	1200
2	Shoeburyness	1026.2	-4	ENE	5	c	34	75	6	5	-	-	7-8	7-8	2500
	Felixstowe	1026.9	-6	E	6	z	35	75	6	5	-	-	1	1	2000
	Gorleston	1028.4	0	E'N	5	c	36	75	6	8	-	-	7-8	7-8	1500
	Mildenhall	1027.4	-2	E	4	c	33	85	7	5	-	-	7-8	7-8	1600
	Cranwell	1029.5	+2	ENE	3	z	31	85	6	-	-	-	0	0	-
3	Birmingham	1027.5	-8	ENE	4	m	32	92	4	6	-	-	10	10	800
	Upper Heyford	1027.4	-2	E'N	4	z	31	85	6	5	-	-	9+	9+	1300
4	Ross-on-Wye	1026.8	*	NE'E	3	e	31	75	6	5	-	-	10	10	1500
5	Hartland Point	1023.3	-6	NE	4	c	34	75	8	5	-	-	7-8	7-8	1500
	Bristol	1026.2	-8	ENE	3	c	31	85	7	5	-	-	9	9	2500
	Portland Bill	1023.1	+2	NE	4	c	37	92	7	5	-	-	10	10	2500
	Plymouth	1023.4	-2	ENE	4	z	36	75	6	5	-	-	10	10	2000
	The Lizard	1022.1	0	NE	6	c	39	92	6	8	2	-	9	10	1500
	Scilly (St. Mary's)	1021.4	-6	NE'E	5	c	41	85	5	5	2	-	7-8	10	1500
	Guernsey														
6	Pembroke	1025.5	-2	ENE	4	bc	32	85	8	2	-	-	2-3	2-3	4000
7	Holyhead	1027.1	-14	E'N	6	cq	38	85	8	5	3	1	1	7-8	4000
	Chester (Sealand)	1029.4	-6	-	0	z	33	75	6	-	3	-	0	2-3	-
8	Manchester	1028.6	-6	ENE	5	z	37	65	5	-	3	-	0	1	-
10	Spurn Head	1029.4	-2	E'N	6	bq	39	65	7	-	-	-	0	0	-
	Catterick	1032.3	-6	E'N	1	z	36	85	6	5	-	-	9+	9+	2800
	Tynemouth	1033.3	-4	E	5	c	40	75	8	8	-	-	9+	9+	2800
11	St. Abbs Head	1033.2	-4	SE	5	cq	40	75	8	5	2	-	7-8	10	2500
	Leuchars	1034.4	-2	ESE	5	c	41	75	8	5	-	-	9+	9+	3500
12	Renfrew (Abbots I.)	1033.4	-4	E'N	3	z	37	75	6	5	3	-	2-3	4-6	4000
	Eskdalemuir	1032.9	-10	ESE	4	c	34	75	8	5	-	-	9	9	1500
	Point of Ayre	1029.8	-10	E'S	4	bc	40	75	7	5	-	-	2-8	2-8	2500
13A	Tiree	1030.6	0	E'S	4	bc	39	85	8	2	7	-	2-3	2-3	2500
13B	Stornoway	1032.5	-6	-	0	bc	35	92	7	5	-	-	2-3	2-3	2500
15	Dalwhinnie	990.2	-2	SW	2	c	35	75	7	5	4	-	4-6	7-8	1500
	Aberdeen	1035.4	-8	SSE	3	c	42	65	7	5	-	-	9+	9+	1500
	Wick	1035.3	-4	SSE	5	c	42	75	8	5	7	-	7-8	9+	1500
16	Lerwick	1037.2	+4	S'W	5	c	43	75	8	5	7	-	7-8	9	1500
17	Blacksod Point	1026.8	0	ESE	3	c	39	85	8	-	7	-	0	7-8	-
18	Malin Head	1029.5	-10	SE	3	bc	39	65	8	1	-	-	4-6	4-6	5700
	Aldergrove	1029.8	-8	E'S	2	z	38	85	6	5	-	-	4-6	4-6	2500
19	Birr Castle	1026.7	-10	SSE	1	bc	32	85	8	-	3	-	0	4-6	2500
20	Valentia Obsy.	1022.4	-12	E'N	4	c	43	75	8	8	-	-	9+	9+	2500
	Roches Point	1023.4	-10	E'S	5	ic	42	75	8	6	2	-	7-8	9+	1500

PAST 24 HOURS.

District	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 20th Hrs. (36)
1	London (Kew)	1	*	42	33	27	Tr	-	0.0
	Croydon	1	*	40	31	30	Tr	-	0.0
	S. Farnborough	1	*	41	31	28	Tr	-	3.8
	Boscombe Down	3	*	44	29	26	Tr	Tr	0.0
	Calshot (Sthmtn.)	1	2§	43	33	30	Tr	-	0.0
	Lympne	3	*	*	29	26	*	-	0.0
	Manston	*		*	*	*	*	*	*
2	Shoeburyness	0	*	41	33	30	Tr	-	0.0
	Felixstowe	1	3	41	34	31	Tr	-	0.0
	Gorleston	3	4	41	35	32	-	-	0.0
	Mildenhall	3	*	42	29	24	Tr	Tr	0.2
	Cranwell	3	*	(40)	31	28	0.1	-	3.8
3	Birmingham	1	*	39	30	24	0.2	-	0.2
	Upper Heyford	3	*	40	29	24	0.4	-	*
4	Ross-on-Wye	3	*	41	31	27	Tr	-	0.1
5	Hartland Point	1	3	43	34	33	Tr	-	0.0
	Bristol	1	*	40	30	27	Tr	Tr	0.0
	Portland Bill	1	4	43	36	*	-	-	*
	Plymouth	1	1	43	35	27	Tr	Tr	0.0
	The Lizard	1	3	43	38	*	-	Tr	0.0
	Scilly (St. Mary's)	1	3	45	41	*	1	-	0.0
	Guernsey								
6	Pembroke	1	2	43	32	*	-	-	0.0
7	Holyhead	1	4	44	36	33	-	-	0.0
	Chester (Sealand)	3	*	42	30	19	Tr	-	1.0
8	Manchester	0	*	42	36	32	0.1	-	0.0
10	Spurn Head	1	4	44	38	*	-	-	2.3
	Catterick	0	*	42	35	33	-	-	2.2
	Tynemouth	1	4	45	40	38	-	-	
11	St. Abbs Head	0	3	43	40	*	-	-	*
	Leuchars	1	*	45	40	36	Tr	-	1.8
12	Renfrew (Abbots I.)	1	*	41	35	29	-	Tr	0.0
	Eskdalemuir	1		39	32	27	Tr	Tr	0.8
	Point of Ayre	0	2	44	38	*	-	-	2.7
13A	Tiree	0	3	43	38	*	-	-	4.0
13B	Stornoway	1	0	44	34	*	-	-	4.1
15	Dalwhinnie	3	*		34	28	Tr	-	
	Aberdeen	1	2	43	40	36	-	2	0.0
	Wick	1	2	45	40	*	-	-	*
16	Lerwick	1	*	47	42	*	-	-	0.0
17	Blacksod Point	0	3	44	38	*	-	-	*
18	Malin Head	0	3	44	35	*	-	-	3.2
	Aldergrove	1	*	41	36	26	0.1	Tr	0.6
19	Birr Castle	1	*	38	31	28	-	-	0.1
20	Valentia Obsy.	1	2	46	43	40	0.5	Tr	4.3
	Roches Point	1	4	44	41	*	0.3	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.	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	cmzoidz (?)	cmzcm (?)	cmcbcmz (?)	42	33	27	Tr	1	0.0	*	*	5
Croydon	217	r	czmdzv (?)	cmmbc (?)	40	31	30	Tr.	-	0.0	*	*	5
Greenwich (Royal Observatory)	149												
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	42	33	31	-			88	81	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	41	32	24	-	-		83	79	*
Camden Square	110	c	c	*	40	31	27	-	-	*	*	85	*
Kensington	80	c	c	*	41	32	26	-	Tr		91	95	*
Hampstead Observatory	450	od	ox	bc	39	30	27	Tr	-		*	87	*

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.
0.3	18h. 20th.	<0.1	1h. 21st.

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 22nd December, 1940.

No. 28885

OBSERVATIONS at 13h. G.M.T. 21st December

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)	1025·8	-4	ENE	4	zo	37	75	5	5	-	6	2-3	4-6	1500
	Croydon	1025·4	-4	E	4	zo	37	75	6	1	-	4	Tr	1	2000
	S. Farnborough	1025·4	-8	ENE	3	zo	37	75	5	1	-	-	Tr	Tr	2000
	Boscombe Down	1025·0	-4	NE'E	4	zo	34	85	5	-	-	-	0	0	-
	Calshot (Soton.)	1024·4	-6	E'N	4	zo	36	75	6	-	-	-	0	0	-
	Lympne	1025·2	-6	E	4	zo	35	75	6	-	-	2	0	9	-
	Manston	1025·9	-8	E'N	5	zo	36	75	6	-	-	9	0	7-8	-
2	Shoeburyness	1026·5	-2	E	5	c	39	75	6	5	-	6	2-3	9	2500
	Felixstowe	1027·4	-2	E'N	6	zo	38	75	6	-	4	1	0	2-3	-
	Gorleston	1029·4	0	E	5	zo	39	75	6	1	-	-	Tr	Tr	2500
	Mildenhall	1027·9	-2	E'N	5	zo	37	85	6	5	-	1	Tr	Tr	2000
	Cranwell	1029·6	-6	E	3	zo	38	85	6	-	-	-	0	0	-
3	Birmingham	1028·2	+2	ENE	3	zo	30	85	5	1	-	-	1	1	1500
	Upper Heyford	1027·4	-2	ENE	4	zo	33	85	6	5	-	-	Tr	Tr	1200
4	Ross-on-Wye	1026·9	-4	ENE	3	zo	33	75	6	5	-	-	9	9	2500
5	Hartland Point	1023·6	-8	ENE	3	bc	33	75	7	1	4	-	2-3	4-6	2500
	Bristol	1026·5	-2	E'N	3	zo	33	75	6	5	-	-	9+	9+	2200
	Portland Bill	1023·1	-8	NE	4	c	36	92	7	5	-	-	10	10	2500
	Plymouth	1023·8	0	ENE	3	c	34	75	6	5	-	-	9	9	2500
	The Lizard	1022·2	+2	ENE	6	c	39	92	8	8	2	-	9	10	1500
	Scilly (St. Mary's)	1021·6	-4	E'N	5	c	41	85	7	8	2	-	7-8	10	1500
	Guernsey														
6	Pembroke	1025·1	0	ENE	4	b	36	85	6	-	-	-	0	0	-
7	Holyhead	1026·4	-2	E'N	7	b	39	75	6	1	-	-	Tr	Tr	2700
	Chester (Sealand)	1028·9	-4	ESE	2	zo	39	75	6	5	-	-	Tr	Tr	2500
8	Manchester	1029·3	-2	E	4	zo	39	65	5	5	-	-	Tr	Tr	3000
10	Spurn Head	1029·9	-2	E'N	5	b	41	65	7	-	-	-	0	0	-
	Catterick	1031·7	-10	SE'E	1	b	42	75	8	1	-	-	1	1	3500
	Tynemouth	1033·1	-4	ESE	5	bc	42	65	8	2	-	-	4-6	4-6	3200
11	St. Abbs Head	1033·3	-4	SE	5	c	40	65	9	5	2	-	7-8	9+	2500
	Leuchars	1034·3	-6	ESE	4	c	42	65	8	5	-	-	9+	9+	3500
12	Renfrew (Abbots I.)	1033·0	-4	E	3	zo	40	65	6	7	4	6	4-6	7-8	4000
	Eskdalemuir	1032·6	+2	E'N	2	c	37	65	7	5	-	-	9	9	1500
	Point of Ayre	1029·3	-8	SE	6	bc	42	65	8	1	-	5	1	2-3	2500
13A	Tiree	1030·5	0	ESE	4	bc	41	75	8	7	3	-	4-6	7-8	3500
13B	Stornoway	1028·1	-4	SE	2	b	43	65	8	-	4	-	Tr	Tr	6500
15	Dalwhinnie	1033·0	0	SW	2	c	35	75	8	8	-	-	7-8	7-8	2500
	Aberdeen	1035·6	-6	SE'S	3	c	41	65	6	5	-	-	9+	9+	2500
	Wick	1035·8	0	SSE	5	c	42	75	8	5	7	-	7-8	9+	1500
16	Lerwick	1037·7	-2	S	5	c	41	92	8	5	7	-	7-8	9	1500
17	Blacksod Point	1025·6	-14	E'S	4	bojp	40	85	7	-	4	-	0	2-3	-
18	Malin Head	1028·8	-10	ESE	3	c	40	65	8	5	-	4	2-3	7-8	5700
	Aldergrove	1029·8	-8	E'S	3	zo	41	65	6	5	-	-	4-6	4-6	2000
19	Birr Castle	1026·2	-6	S	1	b	42	65	7	-	-	-	0	0	-
20	Valentia Obsy. †	1021·3	-12	E'S	4	c	41	75	7	5	-	-	9+	9+	4000
	Roches Point	1023·7	-6	E	5	c	40	75	8	5	-	-	9+	9+	1500

OBSERVATIONS at 18h. G.M.T. 21st December

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)	1025·5	+2	NE'E	3	zo	36	85	5	5	-	8	4-6	9+	1500	1	*
Croydon	1025·3	0	E	4	zo	34	75	5	-	4	2	0	7-8	-	1	*
S. Farnborough	1024·9	-2	ENE	4	zo	36	65	5	-	-	6	0	7-8	-	1	*
Boscombe Down	1024·3	0	NE'N	4	zo	33	92	5	-	7	-	0	2-3	-	3	*
Calshot (Soton.)	1023·7	+2	E'N	3	zo	37	75	6	-	3	1	0	2-3	-	1	2
Lympne	1024·8	+4	E	3	zo	33	85	6	-	-	1	0	2-3	-	3	§
Manston	1025·0	-4	ENE	4	zo	35	75	6	-	4	-	0	Tr	-		*
Shoeburyness	1025·8	+2	ENE	6	bc	37	65	7	5	-	-	2-3	2-3	7200	0	*
Felixstowe	1026·5	-2	ENE	6	zo	37	65	6	-	3	-	0	1	-	1	3
Gorleston	1028·4	-6	E'N	6	zo	38	75	6	5	-	-	2-3	2-3	2500	1	4
Mildenhall	1027·7	-2	NE	3	zo	32	85	6	-	7	-	0	1	-	3	*
Cranwell	1029·6	+2	E	3	zo	32	85	6	-	3	-	0	2-3	-	3	*
Birmingham	1027·7	-2	ENE	3	zo	32	92	5	-	-	-	0	0	-	1	*
Upper Heyford	1026·5	-4	ENE	3	zo	33	92	6	5	4	-	Tr	2-3	2500	1	*
Ross-on-Wye	1026·7	-4	N'E	3	zo	33	85	5	5	-	-	9	9	2500	.	*
Hartland Point	1021·6	-12	N	5	b	34	75	7	-	-	-	0	0	-	0	
Bristol	1025·8	+2	NE	2	m	31	85	4	-	-	-	0	0	-	1	*
Portland Bill	1023·1	-4	NE	4	bc	37	92	7	5	-	-	4-6	4-6	2500	1	4
Plymouth	1022·9	-2	ENE	3	zo	34	75	6	5	-	-	Tr	Tr	2500	0	2
The Lizard	1021·5	0	ENE	2	c	40	85	6	8	2	-	9	10	900	1	3
Scilly (St. Mary's)	1021·0	-2	NE'E	5	zo	39	85	6	5	2	-	7-8	10	1500	1	3
Guernsey																
Pembroke	1024·6	-2	ENE	3	zo	33	85	6	5	-	-	2-3	2-3	3000	1	2
Holyhead	1026·6	+2	ENE	3	zo	37	85	6	-	-	-	0	0	-	1	4
Chester (Sealand)	1028·8	0	-	0	b	29	97	5	-	3	-	0	Tr	-	3	*
Manchester	1029·4	0	ENE	4	bf	37	75	3	-	-	-	0	0	-	0	*
Spurn Head	1029·9	0	E'N	5	bc	39	65	7	4	4	-	2-3	4-6	2500	1	4
Catterick	1032·0	+2	-	0	zo	35	85	6	5	-	-	Tr	Tr	5000	1	
Tynemouth	1033·1	+4	SE	4	bc	41	65	7	2	-	-	4-6	4-6	3000	1	3
St. Abbs Head	1033·2	+2	SE	4	c	40	65	8	4	4	-	4-6	7-8	2500	0	3
Leuchars	1034·1	0	E	4	c	41	65	7	5	-	-	7-8	7-8	3200	1	*
Renfrew (Abbots I.)	1033·1	0	ENE	2	zo	36	75	6	-	-	-	0	0	-	1	*
Eskdalemuir	1032·9	0	E'N	2	bc	32	85	7	5	-	-	4-6	4-6	1500	1	*
Point of Ayre	1029·1	0	SE'E	6	b	40	75	8	5	-	-	Tr	Tr	2500	0	3
Tiree	1030·0	0	ESE	4	b	38	85	8	7	-	-	1	1	3500	0	4
Stornoway	1031·9	+2	-	0	b	34	97	7	1	-	-	Tr	Tr	4500	3	0
Dalwhinnie	1033·5	+2	SSE	2	o	35	75	7	5	1	-	9	10	1500	0	*
Aberdeen	1035·5	+2	SSE	3	c	41	65	6	5	-	-	9+	9+	2500	1	2
Wick	1034·8	-2	SSE	5	bc	42	65	7	5	4	-	4-6	4-6	1500	1	3
Lerwick	1027·7	0	S'E	4	c	41	75	8	5	7	-	7-8	9+	1500	1	*
Blacksod Point	1025·4	+10	ESE	3	c	40	85	7	-	4	-	0	7-8	-	0	2
Malin Head	1028·7	+2	ESE	3	bc	40	65	7	4	-	-	2-3	2-3	4000	0	3
Aldergrove	1028·5	-8	E'S	5	b	37	65	7	5	-	-	1	1	2500	1	*
Birr Castle	1025·5	0	ENE	1	b	36	75	7	-	-	-	0	0	-	1	*
Valentia Obsy. †	1021·2	+2	E	5	bc	41	75	7	5	-	-	2-3	2-3	4000	1	2
Roches Point	1023·0	0	E	5	c	42	75	8	5	-	-	9	9	1500	1	4

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)	crcmo	beezo	c,bbcez	cz
Croydon	cmobzo	cbezo	bcbm	bcmcm
S. Farnborough	bccbzo	bcbmo	cbzcmx	czx
Boscombe Down	bxbcmobmo	bbcmo	bmbx	cx
Calshot (Soton.)	bmoxbzo	bzo	bzbm	bcbxcm
Lympne	bcbmox	cbcmox	bmx	cmx
Manston	bbcmox	obcbmo	bmcmx	cmx
Shoeburyness	cmo	czocbc	bc	bcb
Felixstowe	bmo	bcmocycm	bmcm	cm
Gorleston	bcb	bcebcq	bccq	cq
Mildenhall	bcxbmo	cmobmo	bmbxc	ccmcz
Cranwell	bxbcbmo	bcbmo	b,cm	cm
Birmingham	cb	b	bbc	bcc
Upper Heyford	cmobmo	bcmobbccm	bmbcmc	cmc
Ross-on-Wye	c	bzocmo	cmbm	bmc
Hartland Point	cbc	bcb	bbc	bc
Bristol	cmo	cbcbmom	bmbcmb	bx, cx
Portland Bill	c	cbc	bcbc	
Plymouth	cmoccmo	cmobmo	bmcmcz	cz, bm
The Lizard	c	c	c	c
Scilly (St. Mary's)	c	c	c	c
Guernsey				
Pembroke	cbzo	bzobc	bz	bqc
Holyhead	bmobx	qmob	qmb	bqmbc
Chester (Sealand)	bcbmmo	bmoxb	bbcmx	xbccm
Manchester	bz,mzo	bzoz ff	bzbcm	bczcz
Spurn Head	cqb	bc	cq	coq
Catterick	cmobcb	bbmo	bcm	bcmc
Tynemouth	cbc	bc	bcc	c
St. Abbs Head	c	c	c	c
Leuchars	c	c	cbcc	c
Renfrew (Abbots I.)	bcczo	cbczob	bbcmx	bccmx
Eskdalemuir	c	cbc	bbc	bbc
Point of Ayre	cbc	b	c	bc
Tiree	bc	bcc	bcb	bbc
Stornoway	bcb	b	bx	bx
Dalwhinnie	c	co	*	cbc
Aberdeen	cczo	czo	cz	cz
Wick	c	cbc	bcc	c
Lerwick	c	c	c	c
Blacksod Point	bc	bc	b	b
Malin Head	bccc	cc	bc	bcc
Aldergrove	bczo	bczobcb	bbczx	bczx
Birr Castle	bcb	b	b	bx
Valentia Obsy. †	c	cb,cid,cbc	bbcc	czbczc
Roches Point	c	c	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.*

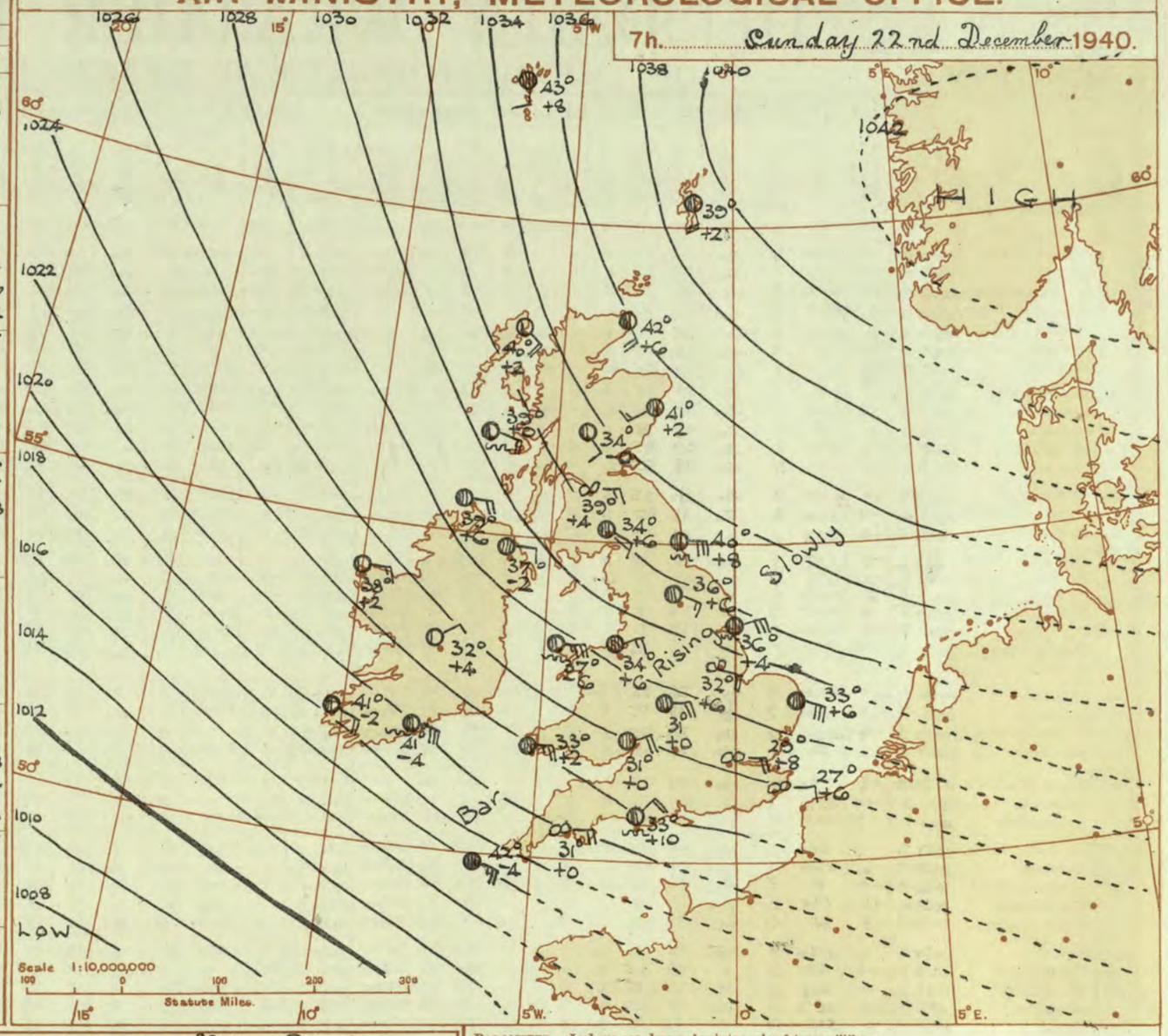
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 21st December			18h. G.M.T.			01h. G.M.T. 22nd December			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	5-	02854	13426	5-	02755	13425	5-	01864	13424	5-	02865	12325
115	7-	01963	12414	51	01861	12313	51	14863	45414	51	14861	45413
203							00	00990	10310			
206	03	00690	00002	50	00762	00012	50	00861	12301	50	01863	12313
210	54	01863	10313	50	00873	10213	5-	01864	12314	57	02865	10317
220	53	01964	15314	50	01754	16414						
230	74	01851	31539	50	00751	08201	50	00861	08301	50	00861	08301
245	5-	02857	10427	5-	02866	44426	5-	02767	11527	5-	03758	10528
260	5-	02867	08327	50	05661	08311	5-	05666	08326	5-	02767	08427
277	04	01890	08413	00	00790	07500	00	00890	08400	53	01863	08414
279	20	00761	08412				--	08490	02300	5-	02757	30737
285	20	01844	08514	20	01634	12514						
288	20	00852	06322	40	00753	04203	5-	05657	04427	5-	02758	07428
273												
301	00	05690	08300	00	05590	08300	5-	05656	07316	5-	05656	41326
321	00	00790	06300	03	05690	07214	5-	02658	39318	5-	02658	08328
299				50	00743	08613	5-	05658	08628	50	02755	08617
292	10	00861	10301	50	00763	06103	5-	02758	09128	5-	02758	08328
310	--	01636	04616									
316	50	00631	07411	04	05590	06303	5-	05557	07317	5-	05658	08428
333	00	00790	08500				50	17652	08502	5-	02757	30616
334												
340	50	17654	08414	03	17590	04301	5-	05657	05207			
136	10	01742	08402				5-	01765	07415	5-	02748	08428
336	26	01753	08414	54	01753	08412						
350										5-	05645	06325
368	10	05561	04411									
379	5-	05647	08427				50	05652	08402	5-	05658	08428
390	00	05690	08413	00	05590	08410	5-	05557	08417	5-	05557	08427
382	00	05590	06320	00	05590	05310	5-	05666	04316	5-	05658	07328
438	50	01644	06314							5-	02647	06317
430	00	05590	06400	07	05590	04417	00	05690	06300	5-	05658	08328
409	5-	05647	04227	5-	05655	04125	5-	05658	06228	00	05690	07410

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 22nd December 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. 22nd December.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Fresh easterly wind, strong locally. Mainly cloudy, but a few bright intervals. Cold with temperatures near freezing point throughout the day and slightly below freezing point at night.
5 S.W. England ♦	Fresh or strong east wind, perhaps gale locally. Cloudy, chance of some slight rain or snow later. Cold with local frost at night.
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.	Fresh easterly wind strong locally. Mainly cloudy but some bright intervals. Cold with local frost at night.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Moderate to fresh southeasterly wind. Fair but with considerable bright intervals in the west. Average temperature, or rather cold.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland	As 6 - 12.
20 S. W. Ireland ♦	As 5.

GENERAL INFERENCE.

Pressure is high to the N.E. of the British Isles. A depression off N.W Spain is moving eastwards, and troughs associated with it are moving N.E. and may give some rain or snow in extreme southern or southwestern districts later. It will be cold in all districts, with temperature remaining near freezing point all day in the south, and with frost in many places at night.

FURTHER OUTLOOK.

Little change. Easterly type persisting for several days, with mainly fair cold weather over most of the British Isles.

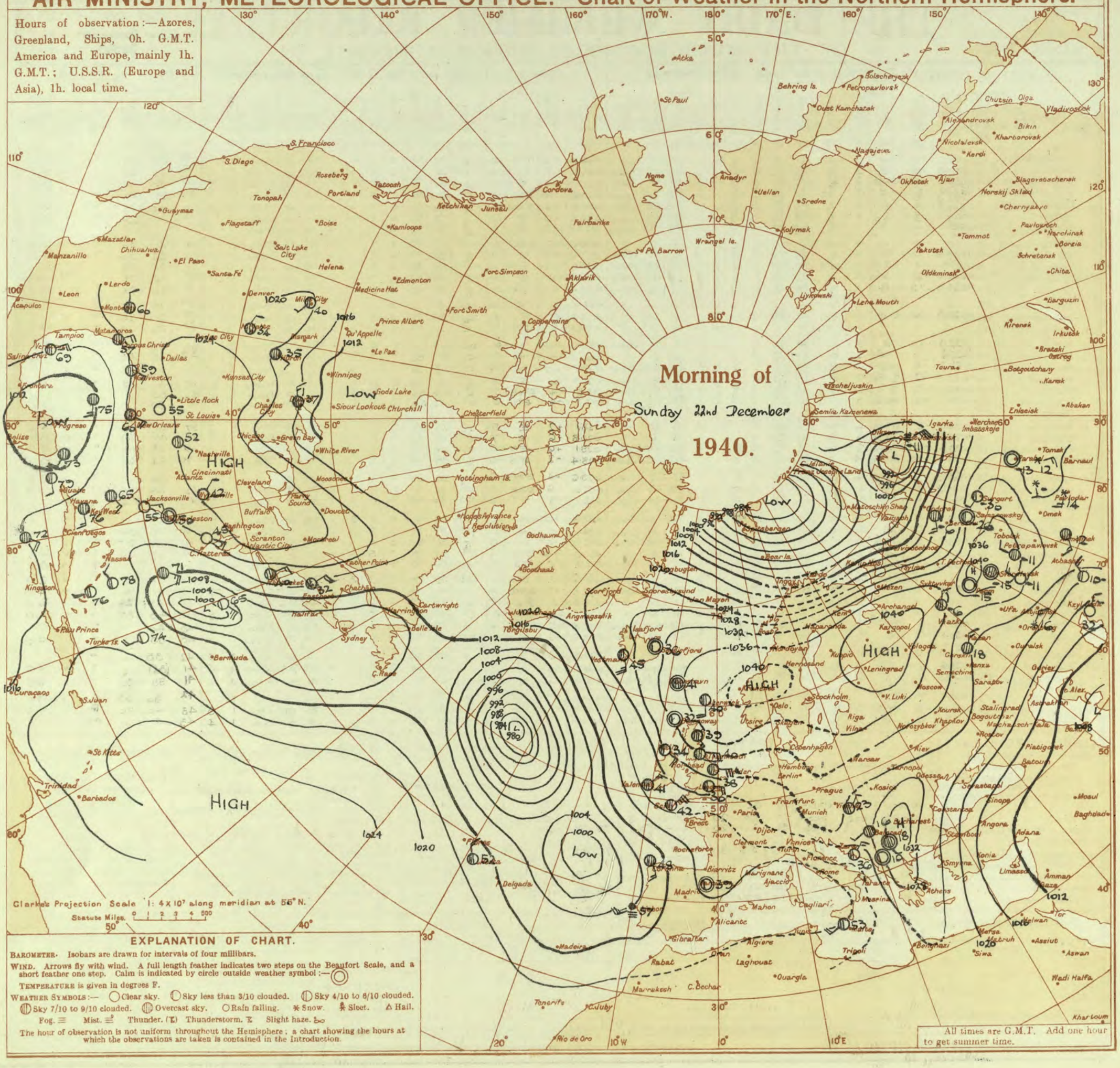
♦ Gale warning issued at 0700h on 22nd for districts 5 and 20.

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.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION

Sunday 22nd December 1940.

No. 28888

OBSERVATIONS at 1 hr. G.M.T. 22nd December

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	1024.5	-6	E	4	7	30	85	8	5	-	-	4-6	4-6	3000
	S. Farnborough	226	1024.6	-10	ENE	2	7	32	75	5	5	-	-	9	9	2500
	Boscombe Down	417	1024.4	-4	NE	3	bc	29	85	7	5	-	-	2-3	2-3	3000
	Calshot (Sthmtn.)	8	1023.8	0	E'N	3	7	32	85	5	5	-	-	7-8	7-8	2500
	Lympne ...	346	1024.9	+2	E	3	7	28	75	6	5	-	-	4-6	4-6	2000
	Manston ...	154	1024.9	-2	E	3	7	30	85	6	5	-	-	7-8	7-8	2000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1026.4	0	E	5	7	33	75	6	5	-	-	9	9	2500
	Gorleston ...	5	1027.8	-4	E	6	c	35	75	6	8	-	-	7-8	7-8	2300
	Mildenhall ...	19	1026.8	-6	E	4	c	32	85	7	5	2	-	7-8	9	3000
	Cranwell ...	240	1025.5	-10	E	4	7	33	85	6	5	-	-	10	10	3000
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1026.5	-6	ENE	5	c	29	85	7	-	5	-	0	7-8	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1022.3	0	E	5	b	35	86	7	1	-	-	1	1	2500
	Bristol ...	209	1025.6	-2	NE	2	b	29	85	7	-	-	-	0	0	-
	Portland Bill ...	32	1022.3	-4	NE	4	bc	35	82	7	5	-	-	4-6	4-6	2500
	Plymouth ...	82	1022.3	-2	ENE	2	7	35	75	6	5	-	-	10	10	2000
	The Lizard ...	240	1018.5	-12	E'N	6	c	48	75	7	8	2	-	9	10	1500
	Scilly (St. Mary's)	163	1018.6	-10	NE'E	5	c	42	75	6	8	6	-	4-6	7-8	1500
	Guernsey ...	175														
6	Pembroke ...	142	1024.2	-2	ENE	4	b	38	85	7	-	-	-	0	0	-
7	Holyhead ...	26	1026.8	-2	E'N	6	fs	36	85	6	-	-	-	0	0	-
	Chester (Sealand)	16	1028.7	-6	E'N	2	bc	28	92	6	5	-	-	4-6	4-6	3500
8	Manchester ...	70	1029.1	-10	ENE	4	7	36	65	5	5	-	-	4-6	4-6	2800
10	Spurn Head ...	29	1028.7	-4	E'N	6	cq	38	75	7	9	-	-	7-8	7-8	1500
	Catterick ...	175	1031.5	-8	E	2	7	37	75	6	5	-	-	7-8	7-8	2500
	Tynemouth ...	108	1032.5	-6	E	5	c	40	75	7	5	-	-	9+	9+	2200
11	St. Abbs Head	280	1033.0	-4	SE	5	c	40	65	8	5	2	-	7-8	10	2500
	Leuchars ...	36	1034.3	-2	E	4	c	41	75	8	5	-	-	10	10	2900
12	Renfrew (Abbots I.)	19	1032.8	-6	E'N	3	7	37	75	6	5	-	-	4-6	4-6	3500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1030.0	+2	SE'S	4	b	39	85	8	5	-	-	1	1	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1032.4	0	-	0	b	32	87	7	5	-	-	Tr	Tr	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1035.7	+2	SE'S	4	bc	41	85	8	5	-	-	4-6	4-6	3000
16	Lerwick ...	156	1038.4	-2	S	4	c	40	75	8	5	3	-	7-8	9	1500
17	Blacksod Point	18	1024.3	-6	ESE	3	b	38	85	7	-	-	-	0	0	-
18	Malin Head ...	84	1028.6	0	E'S	4	bc	34	75	8	5	-	-	4-6	4-6	2500
	Aldergrove ...	268	1029.3	0	E	3	7	36	75	6	5	-	-	2-3	2-3	4500
19	Birr Castle ...	173	1025.1	-4	ENE	1	b	35	75	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1021.0	-4	NNE	3	c	41	65	7	5	-	-	7-8	7-8	2500
	Roches Point	22	1022.5	-6	E	5	c	42	75	8	5	-	-	9+	9+	1500

OBSERVATIONS at 7 hr. G.M.T. 22nd December

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)	1026.0	+10	E'N	6	7	32	75	6	5	-	-	10	10	1500	8	*
Croydon ...	1026.8	+8	E	4	7	28	87	6	5	-	-	10	10	1500	1	*
S. Farnborough	1026.1	+14	E	3	7	30	75	6	5	-	-	10	10	2000	3	*
Boscombe Down	1025.4	+10	ESE	3	c	28	75	7	5	-	-	7-8	7-8	2000	3	*
Calshot (Sthmtn.)	1024.7	+6	ENE	5	7	30	75	6	5	-	-	10	10	2500	3	3
Lympne ...	1025.8	+6	E	2	7	27	85	6	5	-	-	10	10	1400	3	*
Manston ...	1026.3	+8	E'N	3	7	28	85	6	5	-	-	10	10	1400		*
Shoeburyness ...	1026.3	+6	ESE	5	c	32	85	7	5	-	-	9+	9+	2500	0	*
Felixstowe ...	1027.3	+8	E	5	7	33	75	6	5	-	-	9+	9+	2000	3	3
Gorleston ...	1028.7	+6	E'S	6	c	33	85	6	8	-	-	10	10	1500	3	4
Mildenhall ...	1027.3	+6	E	4	7	33	75	6	5	7	-	7-8	10	2300	3	*
Cranwell ...	1029.4	+6	E'S	4	7	32	85	6	5	-	-	10	10	2500	3	*
Birmingham ...	1027.1	0	E	4	c	31	75	6	5	-	-	10	10	1500	1	*
Upper Heyford	1026.7	+2	E	4	7	30	75	6	5	-	-	10	10	2000	3	*
Ross-on-Wye	1026.1	0	E'N	4	c	31	85	6	5	-	-	10	10	1500	3	*
Hartland Point	1022.0	+10	E	5	bc	31	75	8	4	-	-	4-6	4-6	2500	3	3
Bristol ...	1025.6	+4	NE	4	c	31	85	7	5	-	-	10	10	2500	1	*
Portland Bill ...	1023.7	+10	NE	4	c	33	92	7	5	-	-	10	10	2500	1	4
Plymouth ...	1021.7	0	E	4	7	31	85	6	5	-	-	1	1	3000	0	2
The Lizard ...	1018.8	-4	ENE	7	c	40	92	7	8	2	-	9	10	1500	0	4
Scilly (St. Mary's)	1017.7	-4	E'S	3	c	42	65	6	8	2	-	7-8	10	800	1	3
Guernsey ...																
Pembroke ...	1023.1	+2	E	5	cq	33	92	7	8	-	-	9+	9+	2500	3	2
Holyhead ...	1023.8	-6	E	7	b	37	75	7	5	-	-	1	1	3500	1	4
Chester (Sealand)	1028.1	+6	E'N	3	c	34	75	6	5	-	-	10	10	2500	3	*
Manchester ...	1028.4	-2	E'N	6	7	35	75	6	5	-	-	9	9	2800	3	*
Spurn Head ...	1023.6	+4	E'N	6	cq	36	65	7	5	-	5	10	10	1500	1	4
Catterick ...	1032.0	+6	ESE	3	c	36	75	7	5	-	-	9	9	2500	0	*
Tynemouth ...	1032.2	+8	E	6	c	40	65	7	8	-	-	9+	9+	2200	1	4
St. Abbs Head	1033.3	+6	SE	5	c	39	75	8	5	2	-	7-8	10	2500	0	3
Leuchars ...	1034.0	0	E	5	c	41	65	8	5	7	-	9	10	3500	1	*
Renfrew (Abbots I.)	1032.5	+4	E	3	7	39	65	6	5	-	-	9+	9+	4000	1	*
Eskdalemuir ...	1031.6	+6	ESE	2	c	34	75	7	5	-	-	9+	9+	1500	0	*
Point of Ayre ...	1028.8	-2	SE'S	6	bc	38	75	8	4	-	-	4-6	4-6	2500	0	3
Tiree ...	1030.2	0	E'S	4	bc	39	75	8	7	3	-	2-3	2-3	3500	0	4
Stornoway ...	1032.8	+2	ESE	4	b	40	85	7	-	-	-	0	0	-	2	5
Dalwhinnie ...	1030.3	0	SSE	2	bc	34	75	7	2	-	-	4-6	4-6	2500	3	*
Aberdeen ...	1035.7	+2	SW	3	c	41	75	6	5	-	-	9+	9+	1500	1	2
Wick ...	1035.8	+6	SSE	4	c	42	75	8	5	7	-	7-8	9+	2500	1	2
Lerwick ...	1038.6	+2	SE	4	c	39	75	8	8	7	-	7-8	9+	1500	1	*
Blacksod Point	1024.5	+2	E	3	b	38	85	8	-	-	-	0	0	-	3	3
Malin Head ...	1028.9	+6	E	4	c	39	65	8	8	-	-	7-8	7-8	2500	0	3
Aldergrove ...	1028.9	-2	E	2	c	37	75	7	5	-	-	9+	9+	3000	3	*
Birr Castle ...	1024.9	+4	NE	1	b	32	75	8	-	-	-	0	0	-	1	*
Valentia Obsy.	1018.9	-2	SE'E	4	c	41	65	7	7	-	-	9+	9+	2500	1	3
Roches Point	1020.8	-4	E'S	6	c	41	75	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 21st. Hrs. (36)
London (Kew)	38	32	27	-	-	1.5
Croydon ...	37	28	28	-	-	3.8
S. Farnborough	38	30	26	-	-	3.3
Boscombe Down	34	28	25	-	-	3.3
Calshot (Sthmtn.)	39	30	27	-	-	5.8
Lympne ...	35	27	23	-	-	4.8
Manston ...						
Shoeburyness ...	38	31	30	-	-	3.4
Felixstowe ...	39	32	30	-	-	4.3
Gorleston ...	39	33	32	-	-	
Mildenhall ...	37	29	21	-	Tr	4.8
Cranwell ...	37	30	28	-	-	5.6
Birmingham ...	34	28	24	-	-	1.3
Upper Heyford	35	28	24	-	-	*
Ross-on-Wye	33	29	25	-	-	2.1
Hartland Point	35	30	29	-	-	5.2
Bristol ...	34	28	20	-	-	1.6
Portland Bill ...	38	31	*	-	-	*
Plymouth ...	37	31	29	-	-	0.0
The Lizard ...	40	39	*	-	-	0.0
Scilly (St. Mary's)	41	39	*	-	-	0.0
Guernsey ...						
Pembroke ...	37	31	*	-	-	4.4
Holyhead ...	39	34	32	-	-	5.8
Chester (Sealand)	39	28	16	-	-	4.1
Manchester ...	40	34	26	-	-	3.1
Spurn Head ...	41	34	*	-	-	5.8
Catterick ...	42	34	30	0.1	-	5.5
Tynemouth ...	42	39	34	-	-	
St. Abbs Head	40	39	*	-	-	*
Leuchars ...	42	39	34	-	-	0.0
Renfrew (Abbots I.)	41	38	27	Tr	-	
Eskdalemuir ...	38	29	26	-	-	2.4
Point of Ayre ...			*	T	-	5.8
Tiree ...	41	37	*	-	-	2.0
Stornoway ...	43	31	*	-	-	4.0
Dalwhinnie ...	37	33	28	-	-	0.4
Aberdeen ...	42	40	37	-	-	0.0
Wick ...	43	40	*	-	-	*
Lerwick ...	45	39	*	-	-	0.0
Blacksod Point	42	35	*	-	-	*
Malin Head ...	41	(34)	*	-	-	4.6
Aldergrove ...	41	35	30	-	-	3.8
Birr Castle ...	42	30	29	-	-	5.1
Valentia Obsy.	43	40	36	Tr	-	0.4
Roches Point	43	41	*	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.)	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	crcm3	bcc3	cbbcc3	38	32	27	-	-	1.5	*	*	5
Croydon ...	217	cm3b3	cbc3	bcbm3	37	29	28	-	-	3.8	*	*	6
Greenwich (Royal Observatory) ...	149	cbcb	b	bcbc	38	30	25	-	-	2.0	73	78	6
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	39	32	31	-	-		71	97	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*									*
Camden Square ...	110	bc	bc	*	38	31	27	-	-	*	*	79	*
Kensington ...	80	bc	bc3	*	39	31	26	-	-		86	91	*
Hampstead Observatory ...	450	bc	bc	o3	36	28	27	-	-		*	89	*

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.
0.5	10h. 21st	<0.1	1-2h. 22nd

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 ,,	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.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 23rd December 1940.

No. 28386

OBSERVATIONS at 13h. G.M.T. 22nd December

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)	1027.5	+2	ENE	5	Zo	33	75	6	5	-	-	9+	9+	1500
	Croydon	1027.2	+2	E'S	5	Zo	31	85	6	5	-	-	9+	9+	2000
	S. Farnborough	1027.2	0	ENE	4	Zo	32	85	5	5	-	-	9+	9+	3000
	Boscombe Down	1026.6	+2	ENE	3	Zo	31	85	5	5	-	-	9	9	2500
	Calshot (Soton.)	1026.2	+2	E'N	4	Zo	32	75	6	5	-	-	7-8	7-8	3000
	Lympne	1027.0	0	E	5	c	31	75	7	1	-	-	7-8	7-8	1500
	Manston	1027.7	+2	E'N	4	c	32	85	7	5	-	-	9	9	1900
2	Shoeburyness	1028.1	0	E'N	4	c	34	75	8	5	-	-	9+	9+	2000
	Felixstowe	1029.0	+2	E	6	c	35	65	7	5	-	-	9+	9+	1600
	Gorleston	1030.9	+4	E'S	5	Zo	35	85	6	8	-	-	9+	9+	1500
	Mildenhall	1029.4	+2	E'N	4	c	34	85	8	5	-	-	9+	9+	1800
	Cranwell	1031.0	+6	ESE	4	c	33	75	7	5	-	-	10	10	2500
3	Birmingham	1029.1	+10	E	4	o	31	75	5	5	-	-	10	10	1500
	Upper Heyford	1028.1	0	E'N	3	c	32	75	7	5	-	-	9+	9+	1800
4	Ross-on-Wye	1027.8	+6	E'N	3	c	32	75	6	5	-	-	9+	9+	2500
5	Hartland Point	1023.9	+8	NE	5	c	32	85	7	5	-	-	9	9	2500
	Bristol	1027.0	+2	E	4	Zo	32	85	6	5	-	-	9+	9+	2200
	Portland Bill														
	Plymouth	1023.3	+10	E	5	Zo	35	85	6	8	-	-	10	10	1600
	The Lizard	1020.5	+2	E	7	c	40	85	8	8	2	-	7-8	9+	2500
	Scilly (St. Mary's)	1019.7	+6	ESE	5	c	41	75	7	8	2	5	7-8	9+	1500
	Guernsey														
6	Pembroke	1025.0	+4	E	6	c	35	92	6	8	-	-	9+	9+	3000
7	Holyhead	1027.6	+2	S'S	6	bq	37	85	7	1	-	-	Tr	Tr	3000
	Chester (Sealand)	1029.9	-6	ESE	2	Zo	35	75	6	5	-	-	9+	9+	2800
8	Manchester	1030.5	+10	ENE	4	Zo	36	65	5	5	-	-	4-6	4-6	2200
10	Spurn Head	1031.5	+8	E'S	6	cq	37	85	7	5	-	2	9+	9+	1500
	Catterick	1033.3	+2	E'S	2	c	37	75	8	5	-	-	10	10	3000
	Tynemouth	1034.0	+6	SE	5	c	40	75	7	8	-	-	9+	9+	1800
11	St. Abbs Head	1034.7	+4	SE	4	c	39	75	8	5	2	-	7-8	9+	2500
	Leuchars	1035.3	0	ESE	4	c	41	65	8	5	7	-	9	9+	3500
12	Renfrew (Abbots I.)	1033.6	-2	ENE	4	c	40	65	7	7	-	-	9	9	3500
	Eskdalemuir	1033.0	0	ESE	4	c	37	75	7	5	-	-	7-8	7-8	1500
	Point of Ayre	1029.7	+8	SE	6	c	38	75	8	8	-	-	7-8	7-8	2500
13A	Tiree	1030.7	0	ESE	4	bc	41	75	8	7	-	-	4-6	4-6	3500
13B	Stornoway	1033.4	*	SE'E	4	b	42	75	8	1	-	-	Tr	Tr	4500
15	Dalwhinnie	1034.5	+2	SSE	3	bc	35	75	8	2	-	-	4-6	4-6	2500
	Aberdeen	1036.6	-2	SE'S	3	c	41	65	6	5	-	-	9+	9+	2500
	Wick	1037.2	+2	SE	4	c	42	75	8	5	7	8	7-8	10	2500
16	Lerwick	1040.0	+2	SE	3	c	40	85	8	5	7	-	7-8	9	1500
17	Blacksod Point	1025.0	-14	E	6	bcq	39	85	7	-	4	-	0	4-6	-
18	Malin Head	1029.3	+2	SE	5	c	40	85	7	5	-	2	4-6	7-8	2500
	Aldergrove	1029.6	+6	E'S	5	Zo	37	65	6	5	-	-	7-8	7-8	3500
19	Birr Castle	1025.3	+2	ESE	1	c	35	75	8	5	-	-	9	9	1500
20	Valentia Obsy. †	1021.1	+4	ESE	4	c	39	65	8	7	-	-	9+	9+	2500
	Roches Point	1022.3	-4	E	6	S/ps	40	65	8	8	-	-	9	9	1500

OBSERVATIONS at 18h. G.M.T. 22nd December

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. (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)	1029.0	+14	ENE	3	Zo	34	75	6	5	-	-	10	10	2500	3	*
	Croydon	1028.7	+14	E	5	Zo	33	92	5	5	-	-	10	10	2000	3	*
	S. Farnborough	1028.7	+10	ENE	4	Zo	33	75	6	5	-	-	4-6	4-6	2000	3	*
	Boscombe Down	1027.9	+12	NE'E	4	Zo	30	85	5	5	-	-	2-3	2-3	2500	3	*
	Calshot (Soton.)	1027.0	+10	E'N	3	Zo	33	85	6	4	-	-	1	1	3500	3	2
	Lympne	1028.1	+14	ENE	4	bc	30	85	6	5	-	-	4-6	4-6	2100	3	§4
	Manston	1028.9	+6	ENE	3	Zo	32	85	6	5	-	-	9	9	1200		*
2	Shoeburyness	1029.1	+8	E	5	c	35	75	8	5	-	-	10	10	1500	0	*
	Felixstowe	1029.9	+8	E'N	6	c	36	65	7	5	-	-	9+	9+	2000	1	3
	Gorleston	1031.5	+6	E'N	5	Zo	36	85	6	8	-	-	9+	9+	1500	0	4
	Mildenhall	1030.8	+12	E'N	5	c	35	85	7	5	-	-	9+	9+	1600	3	*
	Cranwell	1032.5	+14	ESE	3	c	33	85	7	5	-	-	10	10	2500	3	*
3	Birmingham	1030.5	+18	E	4	c	31	75	5	5	-	-	9+	9+	1500	3	*
	Upper Heyford	1029.8	+12	E'N	4	c	31	85	7	5	-	-	7-8	7-8	2000	3	*
4	Ross-on-Wye	1029.0	+10	ENE	4	c	32	75	6	5	-	-	9+	9+	1500	3	*
5	Hartland Point	1025.1	+10	ENE	5	Zo	31	85	6	5	-	-	4-6	4-6	2500	3	3
	Bristol	1028.4	+10	E'N	4	Zo	31	85	6	5	-	-	7-8	7-8	1800	3	*
	Portland Bill	1025.5	+10	ENE	5	o	31	85	7	5	-	-	10	10	2500	1	4
	Plymouth	1025.1	+18	E'S	5	Zo	32	85	6	5	-	-	10	10	1200	0	2
	The Lizard	1022.0	+10	E	7	c	40	92	7	8	-	-	9	10	2000	1	4
	Scilly (St. Mary's)	1021.4	+16	E	5	c	42	75	7	8	-	-	7-8	7-8	1500	1	3
	Guernsey																
6	Pembroke	1027.0	+2	E'N	4	Zo	32	97	6	-	7	-	0	0	-	3	2
7	Holyhead	1028.8	+10	E	6	Zo	35	85	6	-	-	-	0	0	-	1	4
	Chester (Sealand)	1031.6	+18	ESE	2	Zo	35	75	6	5	-	-	9+	9+	2500	1	*
8	Manchester	1032.0	+14	E'N	4	c	36	65	5	5	-	-	9+	9+	2500	3	*
10	Spurn Head	1032.8	+8	ENE	5	cq	39	75	7	5	-	-	9	9	1500	1	4
	Catterick	1034.7	+6	–	0	c	37	75	7	5	-	-	10	10	2000	0	
	Tynemouth	1034.5	+8	E	5	c	41	75	8	8	-	-	9+	9+	2400	1	4
11	St. Abbs Head	1034.4	-2	SE	4	bc	39	75	8	4	4	-	4-6	4-6	2500	0	3
	Leuchars	1036.2	+10	E	2	c	41	65	8	5	-	-	10	10	2500	1	*
12	Renfrew (Abbots I.)	1034.2	+8	E	4	Zo	39	65	6	5	-	-	2-3	2-3	3000	1	*
	Eskdalemuir	1033.9	+6	E'S	4	c	35	75	7	5	-	-	7-8	7-8	1500	0	*
	Point of Ayre	1031.3	+16	SSE	6	c	39	85	8	8	-	-	9	9	1500	0	3
13A	Tiree	1031.1	+4	E'S	4	bc	40	75	8	2	4	-	2-3	2-3	3500	0	3
13B	Stornoway	1033.9	+6	ESE	5	b	41	75	7	-	-	-	0	0	-	5	2
15	Dalwhinnie	1036.0	-2	WNW	3	bc	35	75	8	8	-	-	4-6	4-6	2500	0	*
	Aberdeen	1037.1	+6	SE	3	c	41	65	6	5	-	-	9+	9+	2500	1	2
	Wick	1037.3	+6	SE	4	c	42	75	8	5	7	-	7-8	10	2500	1	2
16	Lerwick	1039.8	0	E	3	c	40	75	8	5	-	-	7-8	9+	1500	1	*
17	Blacksod Point	1025.6	+18	ESE	4	bc	36	85	7	-	4	-	0	2-3	-	0	3
18	Malin Head	1030.4	+14	SE	4	c	40	65	8	5	-	-	9	9	4000	0	2
	Aldergrove	1030.5	+10	E'S	5	Zo	37	75	6	5	-	-	9	9	2500	3	*
19	Birr Castle	1027.3	+14	SE	2	bc	32	85	8	5	-	-	4-6	4-6	2500	1	3
20	Valentia Obsy. †	1021.4	+14	E'S	6	c	43	75	7	5	-	-	10	10	2500	0	4
	Roches Point	1024.8	+24	E	6	c	42	75	8	8	-	-	9+	9+	1500	1	4

PAST 24 HOURS.

Stations.	Weather. 7h.—13h. 22nd. (37)	Weather. 13h.—18h. 22nd. (38)	Weather. 18h. 22nd to 1h. 23rd (39)	Weather. 1h.—7h. 23rd. (40)
London (Kew)	czo	czo	czo	czo
Croydon	cmo	cmo	cmo	cmo
S. Farnborough	czo	cbczo	cidcmo	cmo
Boscombe Down	c	cmo	bcmocmo	cmo
Calshot (Soton.)	cmoxbczo	bczobmo	bmoxcmo	czo
Lympne	cmox	bcmox	bccmox	moxcmo
Manston	cmocx	bccmox	cmo	cmo
Shoeburyness	c	c	c	c
Felixstowe	cmoc	c		cmoc
Gorleston	cq	cq	cq	cq
Mildenhall	czoc	c	co	o
Cranwell	c	c		czo
Birmingham	co	oc	c	cof
Upper Heyford	czoc	cbc	bcc	c
Ross-on-Wye	c	c	c	c
Hartland Point	bbcc	cbc	bcb	bbc
Bristol	cmox	cmox	cmoxbccmo	cmoc
Portland Bill		o	o	o
Plymouth	bmocmo	cbccmo	cmobcmo	bccbmo
The Lizard	c	c	cq	c
Scilly (St. Mary's)	c	c	bc	cbcc
Guernsey				
Pembroke	zoqc	cbcmo	bc	bcx
Holyhead	nqbc	qmob		
Chester (Sealand)	czomoc	cmo		
Manchester	bczo	bczoczq		
Spurn Head	cq	cq	co	c
Catterick	c	ccisoc	cmoc	c
Tynemouth	c	c	co	oc
St. Abbs Head	c	cbc	c	c
Leuchars	c	c	c	c
Renfrew (Abbots I.)	czoc		bmocmo	cmox
Eskdalemuir	cbc	bccbc	c	c
Point of Ayre	bcc	c	c	bcb
Tiree	bc	bc		
Stornoway	b	b	b	
Dalwhinnie	cbc	cbc		
Aberdeen	czo	czo	czo	ccirc
Wick	c	c	cbc	bcc
Lerwick	c	c	c	c
Blacksod Point	bbc	bc	b	b
Malin Head	cyc	c	clbcc	bc
Aldergrove	cbczoczo	czo	bcczob	bbccxc
Birr Castle	c	cbc	cb	bcbx
Valentia Obsy.	c	cbcc	c	cbc
Roches Point	psopsc	c	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, overeast 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.

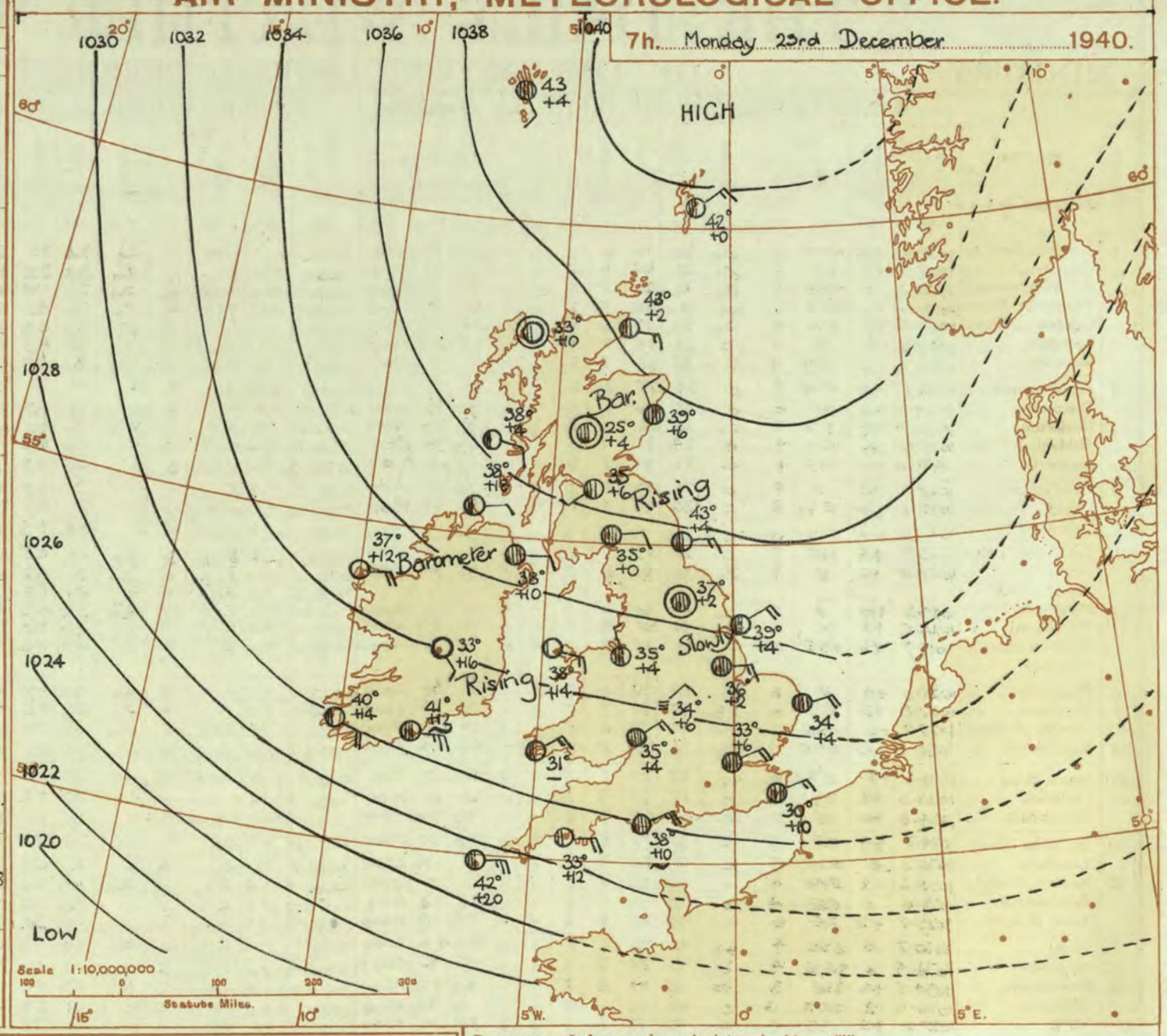
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 22nd December			18h. G.M.T.			01h. G.M.T. 23rd December			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 5-	03858	11328	5-	03858	12228	5-	02864	12324	5-	03857	13127
115 51	14864	47414	51	01864	08315	51	01863	08414	51	01864	08314
203											
206 50	01863	08313	50	00862	10412	00	00890	10200	5-	02857	00027
210 53	02866	08226	5-	02866	09226	5-	01864	16114			
220 20	01963	15403									
230 80	01853	09313	50	01862	08312	50	00861	08301	00	00890	12200
245 5-	02857	10527	5-	03858	08628	5-	02857	01227	5-	03858	02328
260 50	05664	08414	5-	05667	09327	5-	02764	08128	5-	51758	04428
277 70	01863	09513	5-	02766	08416	50	00761	08401	00	00890	08200
279 50	01855	08325									
285									5-	03758	08328
288 5-	02867	08327	5-	02858	07228	5-	02758	07128	5-	02758	08128
273											
301 50	05654	10414	50	05663	10413	50	05552	00002	5-	05656	08126
321 5-	02758	41428	5-	02658	06328	5-	02658	02228	5-	02656	06226
299 52	02745	08628	5-	01745	08815	5-	05657	08427	5-	02747	08328
292 5-	51858	10228	5-	02758	00058	5-	02758	06128	5-	02757	04127
310									--	48200	04580
316 5-	02757	08427	5-	02658	07328	5-	05658	08328	5-	05557	06257
333 50	17753	09523	00	05690	08500	50	05661	08601	50	00762	07302
334											
340 5-	02757	08427	5-	05657	08327	5-	05648	04228			
136 5-	02757	08427	5-	02758	08428	5-	02758	06328	5-	02758	06328
336									24	02754	08427
350 5-	05648	06428									
368 60	05657	06527									
379 5-	05658	08428	5-	05657	08427	5-	05647	08427	5-	05648	08328
390 5-	05657	08427	5-	05648	07428	5-	05648	08428	5-	05658	08428
382 5-	05657	07327	5-	05655	07425	5-	05658	06328	5-	05658	06328
438 8-	02695	04515							02	02647	04327
430 50	05655	08415	50	05651	06411	5-	05658	06428	5-	05658	06328
409 5-	05647	07427	5-	05652	04322	50	05651	07411	00	05690	07200

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 23rd December, 1940.
1 S.E. England	Moderate E. wind backing towards N.E.; cloudy, with a few very slight scattered wintry showers; still rather cold, but temperature rising somewhat
2 E. England ...	
3 E. Midlands ...	
4 W. Midlands ...	Moderate E. wind backing N.E.; cloudy, with few slight wintry showers; rather cold.
5 S.W. England	
6 South Wales ...	Fresh E. wind, strong locally at first, moderating; fair; rather cold.
7 North Wales ...	
8 N.W. England	Moderate E. to N.E. wind; cloudy, with some slight wintry showers, bright intervals in the West; rather cold.
9 N. Midlands ...	
10 N.E. England	Moderate to light E. to N.E. wind; cloudy; a few slight wintry showers; rather cold
11 S.E. Scotland	
12 S.W. Scotland & Isle of Man.	Moderate or light E. to N.E. wind; fair; rather cold.
13 A. W. Scotld. B. N.W. Scotland.	
14 Mid Scotland	
15 N. E. Scotland	Light variable winds; fair; average temperature or rather cold.
16 Orkneys and Shetlands	
17 N. W. Ireland	As 12-15
18 N. E. Ireland	
19 S. E. Ireland	As 5
20 S. W. Ireland	

GENERAL INFERENCE.

An anticyclone centred to the N.E. of Scotland will move slightly westwards. Weather over the British Isles will remain fair apart from a few slight scattered wintry showers, and will become somewhat less cold than of late.

FURTHER OUTLOOK.

Continuing mainly fair and rather cold.

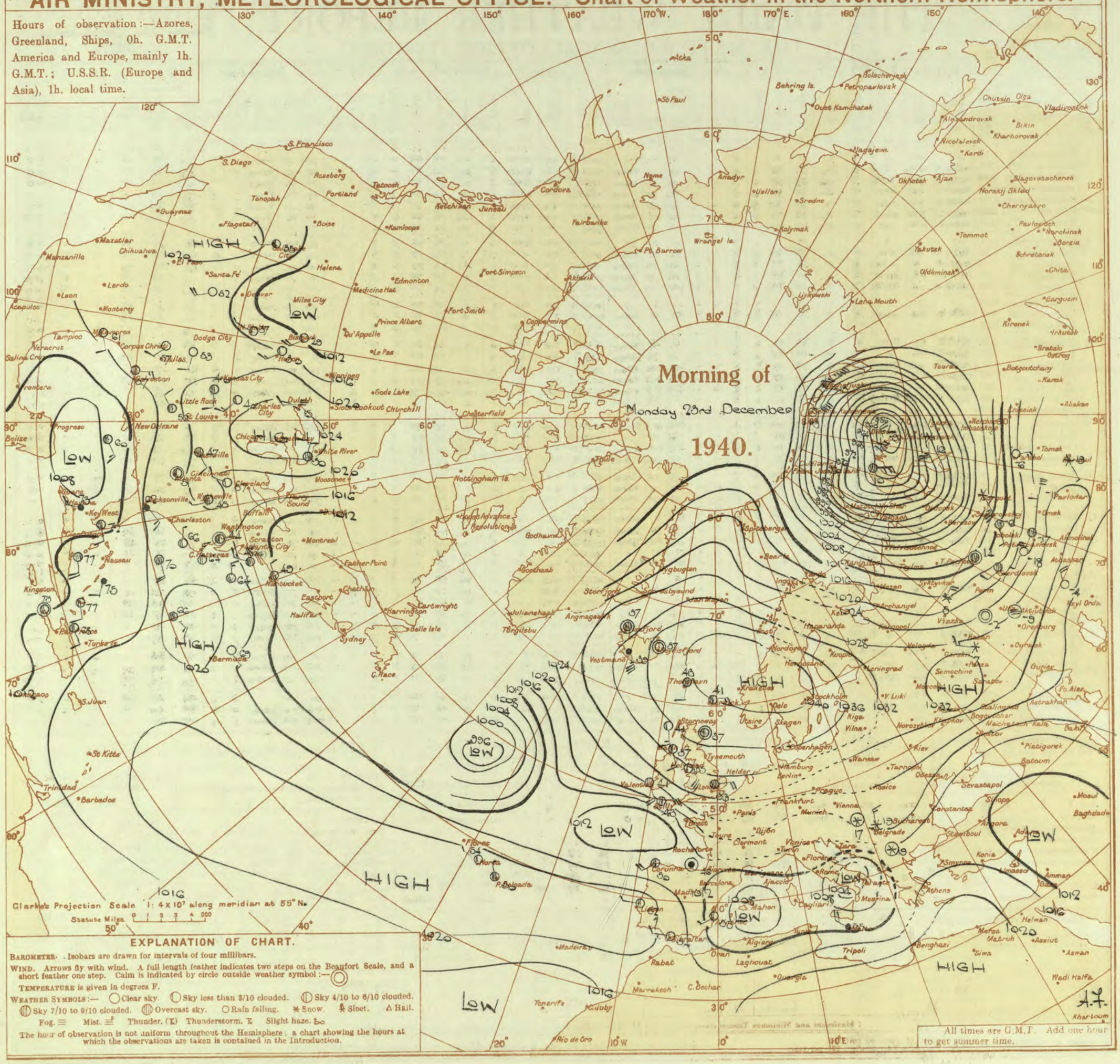
Forecasts issued at 1030h G.M.T.

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 23rd December 1940.

No. 28886

OBSERVATIONS at 1 hr. G.M.T. 23rd December

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	1030·1	+4	E	4	Zo	33	85	6	5	-	-	10	10	2000
	S. Farnborough	226	1030·3	+10	ENE	3	Zo	34	75	6	5	-	-	10	10	2300
	Boscombe Down	417	1029·9	+10	ENE	4	Zo	33	92	6	5	-	-	10	10	1500
	Calshot (Sthmtn.)	8	1029·0	+6	E	5	c	34	85	6	5	-	-	9+	9+	2000
	Lympne ...	346	1029·8	+6	ENE	4	Zo	31	75	5	5	-	-	10	10	800
	Manston ...	154	1030·1	+2	NE	2	Zo	32	75	6	5	-	-	10	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1031·3	+2	E'N	4	Zo	35	75	6	5	-	-	9+	9+	2300
	Gorleston ...	5	1031·9	0	E'N	4	c	35	75	4	8	-	-	10	10	1500
	Mildenhall ...	19	1031·7	+2	NE'E	2	o	35	75	7	5	-	-	10	10	2000
	Cranwell ...	240	1033·0	-2	NE'E	3	Zo	35	85	6	5	-	-	10	10	1500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1031·6	+6	ENE	4	c	33	75	7	5	-	-	10	10	2000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1027·3	+6	ENE	6	b	32	85	6	1	-	-	Tr	Tr	3000
	Bristol ...	209	1030·5	+6	E	4	Zo	34	75	6	5	-	-	9+	9+	2000
	Portland Bill ...	32	1028·7	+10	ENE	5	o	29	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1026·7	+8	E'N	5	Zo	33	85	6	5	-	-	2-3	2-3	2500
	The Lizard ...	240	1024·6	+4	E'N	7	c	41	85	7	8	6	-	7-8	7-8	2000
	Scilly (St. Mary's)	163	1027·4	+2	ENE	5	c	43	85	6	8	-	-	7-8	7-8	1500
	Guernsey ...	175														
6	Pembroke ...	142	1029·1	+6	E	4	bc	32	92	7	2	-	-	2-3	2-3	4000
7	Holyhead ...	26	1031·3	+10	E'S	6	b	35	85	7	-	-	-	0	0	-
	Chester (Sealand)	16	1033·3	+6	E'N	1	c	34	85	6	5	-	-	7-8	7-8	3000
8	Manchester ...	70	1033·5	+2	NE'E	4	Zo	36	75	5	5	-	-	4-6	4-6	2800
10	Spurn Head ...	29	1032·9	0	NE'E	4	Zo	40	85	6	5	-	-	10	10	800
	Catterick ...	175	1035·0	-2	-	0	c	37	85	7	5	-	-	10	10	2500
	Tynemouth ...	108	1034·6	-2	E	4	o	42	75	7	5	-	-	10	10	2200
11	St. Abbs Head	280	1034·4	-8	E	2	c	42	75	8	5	5	-	4-6	9	2500
	Leuchars ...	36	1036·8	-2	-	0	c	41	75	8	5	-	-	9+	9+	2800
12	Renfrew (Abbots I.)	19	1036·7	+8	NE	1	Zo	37	75	6	5	-	-	7-8	7-8	3500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1033·5	+4	SE'S	5	b	39	75	8	4	-	-	Tr	Tr	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1035·2	+8	SE	4	b	41	75	7	-	-	-	0	0	-
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1037·8	-2	SSE	3	bc	43	75	7	5	-	-	4-6	4-6	1500
16	Lerwick ...	156	1039·9	0	E	3	c	41	75	7	5	7	-	4-6	9	1500
17	Blacksod Point	18	1030·5	+20	ESE	5	b	36	85	7	-	-	-	0	0	-
18	Malin Head ...	84	1033·3	+14	SE	3	c	37	75	8	4	6	-	4-6	7-8	2500
	Aldergrove ...	268	1034·0	+14	SE'E	3	b	36	75	7	5	-	-	1	1	2400
19	Birr Castle ...	173	1030·3	+8	SE	2	b	35	75	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1026·5	+16	ESE	4	c	41	75	7	5	-	-	10	10	2500
	Roches Point	22	1028·1	+8	E	6	c	41	75	8	5	-	-	9+	9+	1500

OBSERVATIONS at 7 hr. G.M.T. 23rd December

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)	1031·7	+10	ENE	5	Zo	34	65	6	5	-	-	10	10	1500	1	*
	Croydon ...	1032·9	+6	ENE	4	Zo	33	92	6	5	-	-	10	10	2500	0	*
	S. Farnborough	1031·4	+10	ENE	3	Zo	34	75	6	5	-	-	10	10	2000	3	*
	Boscombe Down	1031·1	+6	NE'E	3	Zo	32	75	6	5	-	-	9+	9+	1800		*
	Calshot (Sthmtn.)	1030·0	+6	ENE	7	Zo	35	75	6	5	-	-	9+	9+	2500	3	2
	Lympne ...	1030·5	+10	ENE	3	Zo	30	85	5	5	-	-	10	10	800	3	§
	Manston ...	1031·3	+10	NE	4	Zo	30	85	6	5	-	-	10	10	1600		*
2	Shoeburyness ...	1031·8	+10	ENE	3	c	34	65	7	5	-	-	10	10	2500	0	*
	Felixstowe ...	1031·9	+2	E'N	4	o	33	75	7	5	-	-	10	10	2000	1	2
	Gorleston ...	1032·5	+4	E'N	4	Zo	34	75	6	8	-	-	10	10	1500	0	3
	Mildenhall ...	1032·7	+8	ENE	3	o	34	75	7	5	-	-	10	10	2000	3	*
	Cranwell ...	1033·3	+2	E	3	Zo	36	75	6	5	-	-	10	10	1500	0	*
3	Birmingham ...	1033·3	+6	NE	2	cf	34	92	3	5	-	-	10	10	450	1	*
	Upper Heyford	1032·4	+8	ENE	3	c	33	85	7	5	-	-	10	10	2000	3	*
4	Ross-on-Wye	1031·2	+4	NE	3	c	35	75	6	5	-	-	10	10	2500	3	*
5	Hartland Point	1029·4	+12	ENE	4	b	32	85	8	5	-	-	1	1	2000	3	3
	Bristol ...	1031·8	+6	E	4	c	34	75	7	5	-	-	9	9	2400	3	*
	Portland Bill ...	1029·6	+10	ENE	5	o	38	92	7	5	-	-	10	10	2500	1	4
	Plymouth ...	1029·4	+12	E	4	Zo	33	85	6	-	-	5	0	2-3	-	3	2
	The Lizard ...	1026·8	+8	E	7	c	40	92	7	8	6	-	7-8	7-8	2500	0	4
	Scilly (St. Mary's)	1026·6	+20	E	5	c	42	75	7	8	2	-	4-6	9+	1500	0	3
	Guernsey ...																
6	Pembroke ...	1031·5	+10	NE'E	3	bc	31	85	7	4	7	-	2-3	2-3	3500	3	2
7	Holyhead ...	1033·5	+14	E'S	3	Zo	38	85	5	5	-	-	1	1	4500	1	3
	Chester (Sealand)	1034·0	+4	N'W	1	c/d	35	92	6	5	-	-	9	10	2100	1	*
8	Manchester ...	1033·8	+2	NE	3	Zo	37	85	6	5	-	-	4-6	4-6	2400	1	*
10	Spurn Head ...	1032·8	+4	ENE	4	c	39	85	7	5	-	-	9+	9+	1500	1	3
	Catterick ...	1035·3	+2	-	0	c	37	85	7	5	-	-	10	10	2500	0	*
	Tynemouth ...	1035·2	+4	E	3	c	43	75	7	8	-	-	9+	9+	2200	0	2
11	St. Abbs Head	1035·8	+18	E	3	c	42	85	8	5	2	-	7-8	10	2500	0	1
	Leuchars ...	1036·9	+6	NNE	2	c	40	85	8	5	-	-	9+	9+	2500	1	*
12	Renfrew (Abbots I.)	1037·3	+6	SW	1	Zo	35	85	6	5	-	-	9+	9+	3500	1	*
	Eskdalemuir ...	1035·6	0	E	2	c	35	85	7	5	-	-	10	10	1500	0	*
	Point of Ayre...	1034·8	+6	ESE	2	b	39	85	8	-	-	-	0	0	-	0	2
13A	Tiree	1035·7	+4	ESE	2	bc	38	85	8	5	3	-	2-3	2-3	3500	0	2
13B	Stornoway ...	1036·7	+10	-	0	bc	33	92	7	5	4	-	1	2-3	4500	5	0
15	Dalwhinnie ...	1037·0	+4	-	0	c	25	92	7	5	-	-	9	9	2500	3	*
	Aberdeen ...	1037·7	+6	NW'N	2	c/r	39	92	5	5	-	-	10	10	2500	1	2
	Wick ...	1038·2	+2	ESE	3	c	43	75	8	5	7	-	7-8	9+	1500	0	2
16	Lerwick ...	1039·9	0	NE	3	c	42	75	8	5	7	-	4-6	7-8	1500	1	*
17	Blacksod Point	1032·4	+12	E	4	b	37	92	7	-	-	-	0	0	-	3	3
18	Malin Head ...	1034·8	+18	E	1	bc	38	75	8	5	-	-	2-3	2-3	5700	0	2
	Aldergrove ...	1035·1	+10	E	2	c	38	75	7	5	-	-	10	10	2200	3	*
19	Birr Castle ...	1032·5	+16	SE	1	b	33	92	8	-	-	-	0	0	-	3	*
20	Valentia Obsy.	1029·4	+14	E'S	4	bc	40	75	7	5	-	-	4-6	4-6	2500	0	3
	Roches Point	1030·5	+12	E	5	c	41	75	8	5	-	-	7-8	7-8	1500	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 Hrs. (36)
1	London (Kew)	34	34	32	-	-	0·0
	Croydon ...	33	33	33	-	-	0·0
	S. Farnborough	33	32	29	-	-	0·0
	Boscombe Down	31			-		
	Calshot (Sthmtn.)	33	32	29		-	2·6
	Lympne ...	32	30	28	-	-	3·5
	Manston ...						
2	Shoeburyness ...	35	33	32	-	-	0·3
	Felixstowe ...	36	33	32	-	-	0·7
	Gorleston ...	37	33	32	-	-	0·0
	Mildenhall ...	35	33	29	-	-	0·0
	Cranwell ...	34	33	32	-	Tr	0·0
3	Birmingham ...	31	31	29	*	-	0·0
	Upper Heyford	32	30	28	-	-	*
4	Ross-on-Wye	32	31	29	-	-	0·0
5	Hartland Point	32	30	29	-	-	1·5
	Bristol ...	32	31	28	-	-	0·0
	Portland Bill ...	36	27	*	-	-	*
	Plymouth ...	35	31	28	-	-	0·0
	The Lizard ...	42	39	*	-	-	0·1
	Scilly (St. Mary's)	43	41	*	-	-	0·1
	Guernsey ...						
6	Pembroke ...	36	30	*	-	-	0·1
7	Holyhead ...	37	33	31	-	-	4·6
	Chester (Sealand)	35	33	25	-	Tr	0·0
8	Manchester ...	36	34	27	-	-	0·1
10	Spurn Head ...	39	37	*	*	Tr	0·0
	Catterick ...	37	36	34	Tr	-	0·0
	Tynemouth ...	41	40	37	-	-	*
11	St. Abbs Head	40	40	*	-	-	*
	Leuchars ...	42	38	34	-	-	0·0
12	Renfrew (Abbots I.)	40	33	28	-	-	0·0
	Eskdalemuir ...	37	33	31	-	-	0·9
	Point of Ayre...	39	37	*	-	-	0·4
13A	Tiree	41	37	*	-	-	1·5
13B	Stornoway ...	42	32	*	-	-	5·3
15	Dalwhinnie ...	35	24	18	-	-	0·0
	Aberdeen ...	41	37	33	-	Tr	0·0
	Wick ...	43	41	*	-	-	*
16	Lerwick ...	42	39	*	-	-	0·0
17	Blacksod Point	40	34	*	-	-	*
18	Malin Head ...	41	39	*	-	-	2·0
	Aldergrove ...	38	34	34	-	-	0·0
19	Birr Castle ...	30	29	23	-	-	0·2
20	Valentia Obsy.	44	40	35	-	-	2·2
	Roches Point	43	39	*	0·0	-	*

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. %	Humidity 9h. G.M.T. % (To-day.)	Visibility 9h.
KEW	18	czo	czo	czo	34	34	32	-	-	0·0	*	*	6
CROYDON	217	cmo	cmo	cmo	33	33	33	-	-	0·0	*	*	6
GREENWICH (Royal Observatory)...	149												
CITY (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*	36	32	*	-			81	78	*
REGENTS PK. (Botanic Gardens)‡...	168	*	*	*	35	31	30	-	-		79	95	*
CAMDEN SQUARE	110	o	bc	*	33	31	31	-	-	*	*	79	*
KENSINGTON	80	bc	c	*	34	33	31	-	-		90	98	*
HAMPSTEAD OBSERVATORY	450										*		*

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.
0·2	15h 22nd	<0·1	0-2h 23rd

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

Tuesday 24th December, 1940.

No. 28887

OBSERVATIONS at 13h. G.M.T. 23rd December

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)	1033.3	+4	NE'N	4	zo	33	75	6	5	-	-	9+	9+	1500
	Croydon	1032.6	0	ENE	4	zo	32	75	5	5	-	-	10	10	2500
	S. Farnborough	1033.2	+4	NE'N	3	zo	33	75	6	5	-	-	10	10	2100
	Boscombe Down	1033.1	+6	NE'N	3	c	33	75	7	5	-	-	9+	9+	1600
	Calshot (Soton.)	1032.3	+6	ENE	3	zo	36	65	6	5	-	-	9+	9+	2500
	Lympne	1032.0	-2	NE	2	c	31	75	7	5	-	-	10	10	1500
	Manston	1032.3	-4	NE	3	c	31	85	7	5	-	-	9+	9+	1800
2	Shoeburyness	1033.1	+2	N'E	2	c	33	75	8	5	-	-	10	10	1500
	Felixstowe	1032.8	-2	NE'N	3	c	33	75	7	5	-	-	10	10	2000
	Gorleston	1033.9	-2	NE'E	2	c	34	75	7	5	4	-	4-6	7-8	1500
	Mildenhall	1034.0	-2	NE	3	c	34	75	7	5	3	-	4-6	7-8	3000
	Cranwell	1034.9	-2	ENE	3	zo	37	75	6	5	-	-	7-8	7-8	2000
3	Birmingham	1034.7	+8	ENE	3	c	35	75	5	5	-	-	10	10	1500
	Upper Heyford	1034.3	+6	ENE	3	c	32	75	8	5	-	-	10	10	1800
4	Ross-on-Wye	1031.0	+8	ENE	3	c	35	75	7	5	-	-	10	6	2500
5	Hartland Point	1032.1	+10	ENE	4	bc	34	75	7	7	-	-	2-3	2-3	3000
	Bristol	1034.0	+6	ENE	3	c	33	85	7	5	-	-	9+	9+	2000
	Portland Bill	1032.6	+10	ENE	4	c	35	92	7	5	-	-	9	9	2500
	Plymouth	1032.2	+6	NE'E	5	c	35	75	7	7	-	-	7-8	7-8	3000
	The Lizard	1030.5	+4	E	4	bc	39	85	8	8	6	-	4-6	4-6	2600
	Scilly (St. Mary's)	1030.5	+10	E'N	4	c	42	75	7	8	1	-	7-8	7-8	1500
	Guernsey														
6	Pembroke	1033.5	0	E	3	bc	38	75	8	5	6	-	2-3	2-3	4500
7	Holyhead	1034.4	+2	ENE	4	b	40	85	5	-	-	-	0	0	-
	Chester (Sealand)	1035.5	-2	-	0	cf+	38	85	7	5	-	-	9+	9+	2900
8	Manchester	1035.3	+0	NE	2	m/f	40	75	4	5	-	-	7-8	7-8	3500
10	Spurn Head	1034.7	-2	N'E	2	c	41	75	7	5	4	-	9	10	4000
	Catterick	1036.4	-2	N	2	zo	41	85	6	5	-	-	10	10	2500
	Tynemouth	1037.6	0	NE	3	c	48	45	6	8	-	-	9+	9+	3200
11	St. Abbs Head	1037.3	0	NE	3	c	41	75	8	5	2	-	7-8	10	3000
	Leuchars	1037.9	-2	NNE	2	c	42	85	7	5	-	-	10	10	3200
12	Renfrew (Abbots I.)	1038.1	+2	NE	2	zo	42	75	5	5	-	-	9+	9+	3500
	Eskdalemuir	1037.2	0	E'N	3	c	38	85	8	5	-	-	10	10	1500
	Point of Ayre	1036.2	0	E	2	b	43	85	8	4	4	-	Tr	1	-
13A	Tiree	1037.5	+2	ESE	1	b	43	75	8	1	-	-	1	1	3500
13B	Stornoway	1038.6	+6	-	0	b	39	85	6	1	5	-	Tr	1	3500
15	Dalwhinnie	*	0	-	0	o	33	85	8	5	[illegible]	-	10	10	2500
	Aberdeen	1038.3	0	N'W	1	c	41	85	6	5	-	-	10	10	2500
	Wick	1039.0	+2	E	2	c	43	75	8	5	7	-	7-8	9+	2500
16	Lerwick	1039.9	-4	NE'E	3	c	43	75	8	5	3	-	7-8	9+	1500
17	Blacksod Point	1035.5	+8	ESE	3	b	39	92	7	-	-	-	0	0	-
18	Malin Head	1037.2	+4	S'E	1	c	41	75	8	8	-	-	9	9	4000
	Aldergrove	1037.0	+2	-	0	zo	39	85	6	5	-	-	9+	9+	2500
19	Birr Castle	1035.2	+6	N'E	1	c	35	85	8	5	1	-	9	10	1500
20	Valentia Obsy. †	1031.9	+10	ESE	3	bc	42	75	8	5	-	2	4-6	4-6	4000
	Roches Point	1033.8	+8	E	4	c	40	75	8	5	-	-	7-8	7-8	2500

OBSERVATIONS at 18h. G.M.T. 23rd December

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)	1033.4	+4	NNE	3	zo	33	75	6	5	-	-	10	10	1500	1	*
Croydon	1032.8	+4	NE	3	m	32	85	4	5	-	-	10	10	3000	*	*
S. Farnborough	1033.5	+2	NNE	2	zo	32	75	5	5	-	-	10	10	2100	3	*
Boscombe Down	1033.5	+2	N'E	4	zo	30	85	6	5	-	-	9	9	2000	3	*
Calshot (Soton.)	1032.8	+6	NNE	3	zo	32	75	5	5	3	-	2-3		2500	3	2
Lympne	1032.1	+2	NE	2	c	30	75	8	5	-	-	9+	9+	1800	3	§
Manston	1032.3	+2	NE	1	zo	31	85	6	5	-	-	9+	9+	2500		*
Shoeburyness	1033.3	0	N'E	2	iso	33	85	7	5	-	-	10	10	2500	0	*
Felixstowe	1032.8	-4	N	2	iso	33	85	6	5	-	-	10	10	2000		
Gorleston	1032.3	-4	ENE	1	c	36	85	5	5	-	-	10	10	1200	0	1
Mildenhall	1033.1	-6	WNW	2	zo	33	85	6	5	-	-	10	10	2000	3	*
Cranwell	1034.3	-2	NNW	3	zo	37	92	6	5	-	-	10	10	2000	0	*
Birmingham	1034.7	+2	N	2	cf+	35	85	3	-	2	-	0	10	-	1	*
Upper Heyford	1034.2	0	NE'N	2	zo	32	85	6	5	-	-	10	10	2200	3	*
Ross-on-Wye	1034.5	0	N	2	zo	33	75	5	5	-	-	2-3	2-3	1500	3	*
Hartland Point	1033.7	+10	NE'N	7	b	33	85	7	-	-	-	0	0	-	3	2
Bristol	1034.6	+4	ENE	2	zo	31	85	5	5	3	-	2-3	2-3	3000	3	*
Portland Bill	1032.7	+4	ENE	3	bc	32	92	7	5	-	-	4-6	4-6	2500	1	3
Plymouth	1033.6	+10	NE'E	3	m	32	85	4	-	-	-	0	0	-	3	1
The Lizard	1032.2	+10	ENE	5	c	37	85	7	8	6	-	7-8	7-8	2000	0	3
Scilly (St. Mary's)	1032.2	+8	NE'E	4	c	38	75	7	8	6	-	4-6	7-8	1500	1	3
Guernsey																
Pembroke	1035.2	+8	NE'E	3	bc	35	85	6	5	-	-	4-6	4-6	3500	1	2
Holyhead	1035.5	+12	E	3	zo	39	85	6	-	-	1	0	Tr	-	1	2
Chester (Sealand)	1036.2	+8	NW'W	1	c	33	97	2	5	-	-	9+	9+	2600	1	*
Manchester	1035.8	+6	N'E	2	c/f	39	85	4	5	3	-	9	10	3500	1	*
Spurn Head	1033.7	-2	N'W	4	o	41	85	7	5	-	-	10	10	2500	1	3
Catterick	1036.6	0	N	2	zo	40	85	5	5	-	-	10	10	1600	0	4
Tynemouth	1036.5	-4	NNE	4	c	42	85	8	8	-	-	9+	9+	2800	0	2
St. Abbs Head	1037.2	0	NNE	2	c	41	85	8	5	2	-	7-8	10	2500	0	1
Leuchars	1036.1	+2	-	0	c	41	85	7	5	-	-	10	10	2500	1	*
Renfrew (Abbots I.)	1038.6	+6	ENE	2	m	41	85	4	5	-	-	10	10	2100	1	*
Eskdalemuir	1037.2	0	NE'E	2	c	37	85	7	5	-	-	10	10	1500	0	*
Point of Ayre																
Tiree	1038.2	+2	-	0	bc	37	92	8	5	-	-	2-3	2-3	3500	3	1
Stornoway	1038.7	0	-	0	b	35	92	7	5	-	-	Tr	1	3500	5	0
Dalwhinnie	1038.7	+4	-	0	ido	32	97	6	5	-	-	10	10	1500	1	*
Aberdeen	1038.8	+2	N	2	c	41	85	6	5	-	-	10	10	2500	1	2
Wick	1039.4	+2	ENE	2	c	43	75	7	5	7	-	7-8	10	2500	0	1
Lerwick	1039.9	0	NE	4	c	43	75	8	5	7	-	7-8	10	1500	1	*
Blacksod Point	1036.7	+14	ESE	2	b	38	85	7	-	-	-	0	0	-	3	2
Malin Head	1038.1	+10	-	0	c	39	75	8	8	-	-	9	9	4000	0	2
Aldergrove	1037.7	+8	E'N	2	zo	40	85	6	5	-	-	10	10	1800	1	*
Birr Castle	1036.4	+6	N'E	1	c	35	92	7	5	-	-	10	10	1500	7	*
Valentia Obsy. †	1034.6	+12	E'S	3	bc	38	75	8	5	-	-	2-3	2-3	4000	0	2
Roches Point	1035.3	+12	E	3	c	39	75	8	5		-	7-8	7-8	1500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 23rd (37)	13h.—18h. 23rd (38)	18h. 23rd – 1h. 24th (39)	1h.—7h. 24th (40)
London (Kew)	czo	c..	csosoisocmo	cmo
Croydon	cmozo	czom	rs	cmo
S. Farnborough	czo	czoo	rs	domoc
Boscombe Down	c	cmo	cmo	crosocmo
Calshot (Soton.)	czo	czo	czosoomo	omo
Lympne	cmoc	c	cmiro	dororocmo
Manston	cmoc		cmorr	rorocmo
Shoeburyness	c	ciroc	cirocbc	bciro
Felixstowe	c		cisomosh	cprororomo
Gorleston	c	czozo	oiro	coir
Mildenhall	bc	como	omobciro	bcmocmo
Cranwell	cmo	cmo	cdodomo	dd rormo
Birmingham	ofc	cbcc	cf	cofro
Upper Heyford	c	ccmo	cmoidocis	cirspimo
Ross-on-Wye	c	cbcz	cmoomo	idoom
Hartland Point	bc	bcb	bbc	bcc
Bristol	cmobbcb	cbcmo	bcmocmo	cmododo
Portland Bill	c	bc	bcc	c
Plymouth	bbmo	bcbzom	bmobcmo	bcmocmo
The Lizard	cbc	cbcc	bccbc	
Scilly (St. Mary's)	c	c	bc	bcc
Guernsey				
Pembroke	bc	*	bcb	c
Holyhead	x	mmob	bwmoc	cmobcc
Chester (Sealand)	*	cf	cffe	cffmc
Manchester	*	cxf	cmo	czoc
Spurn Head	c	cq	ciro	oc
Catterick	cmomm	*	cmoido	cmddo
Tynemouth	c	*	c	cpc
St. Abbs Head	c	*	cidop	oroc
Leuchars	c	c	c	cidoc
Renfrew (Abbots I.)	cmoffmo	*	cm	cffmo
Eskdalemuir	c	c	c	cbc
Point of Ayre	b		c	c
Tiree	b	bc	bcc	c
Stornoway	bcb	b	b,c	cdodo
Dalwhinnie	co	oido	*	o
Aberdeen	czo	czo	czo	cciro
Wick	c	c	c	c
Lerwick	c	c	c	c
Blacksod Point	b	b	b	bc
Malin Head	c	c	c	c
Aldergrove	ccmo	cmo	cmo	cmo
Birr Castle	c	c	b	b
Valentia Obsy. †	bccbc	bcbbcb	b	bbx
Roches Point	c	c	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/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.

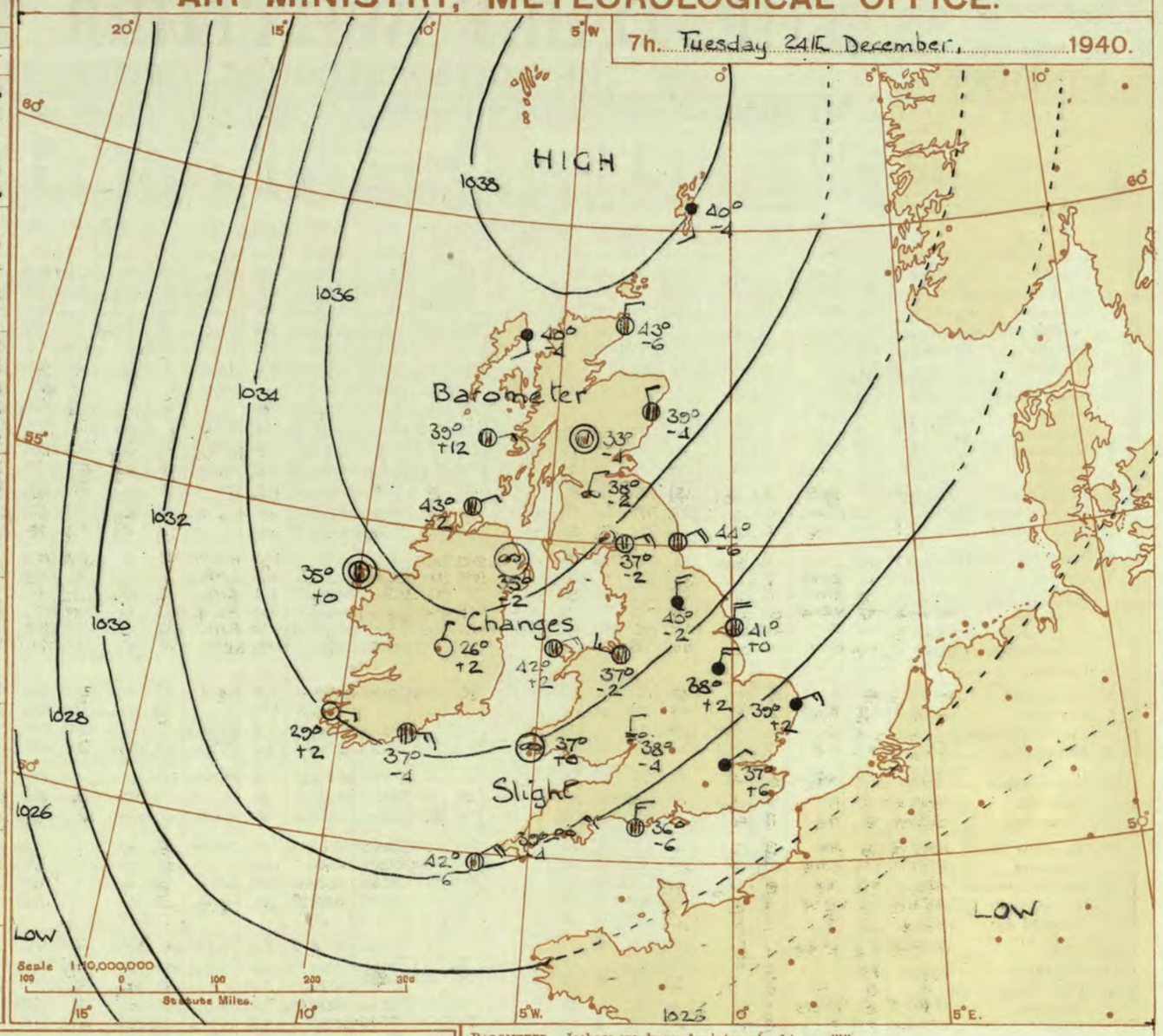
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 23rd December			18h. G.M.T.			01h. G.M.T. 24th December			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	5-	02057	09127	5-	02848	00028	5-	03858	08228	5-	03858	06228
115	54	01863	08114	51	01863	12214	52	03855	12228	52	03855	16128
203				1-	00962	06112	8-	03958	08228	5-	61958	08168
206	52	05646	28128	5-	05658	08158	5-	05648	00028	5-	52648	00058
210	5-	02868	20228	5-	05668	22228	5-	05658	18228	5-	51648	18258
220				40	01753	00003				54	05655	12115
230	5-	02966	00016	5-	05658	00028	5-	05658	06128	5-	05658	06228
245	5-	02747	02227	5-	05658	02328	5-	03758	32228	5-	51658	31358
260	5-	05557	04127	5-	05558	00028	5-	05558	02228	5-	05658	32228
277	5-	02866	06226	50	01763	04213	5-	02846	00026	5-	02758	26228
279	5-	05655	08315	5-	05658	03228	5-	05658	32128	5-	02757	32227
285	5-	02637	08227	5-	03638	32328				6-	54438	24353
288	5-	02768	04228	5-	17358	02328	51	51554	02458	5-	51548	32358
273	53	05653	07206							00	02650	06200
301	5-	02765	08325	00	47190	00040	5-	08464	32144	5-	08466	32126
321	5-	05658	02128	5-	05667	30227	5-	52558	31378		62538	31168
299	5-	02758	04328	5-	02758	32428				5-	02758	02558
292	5-	02857	03227	5-	02758	32128	5-	21646	32356	5-	21658	01378
310				--	02528	04328				--	02536	04326
316	5-	05657	03227	5-	41458	32348	5-	52548	32358	5-	21548	32358
333	00	00890	08400	03	05650	00004	50	05664	00004	50	00751	24121
334												
340	5-	05667	06327	50	08455	32225	5-	05558	32128	5-	05668	32328
136	5-	02765	06226	5-	05658	04328	8-	25744	04384			
336	54	02754	08527	51	02754	08426				51	03754	04428
350	5-	02758	03428							51	61645	02268
368	5-	05657	08327									
379	5-	02758	08328	5-	05658	04328	50	68645	06365	5-	62608	06368
390	5-	05648	03328	5-	05548	02128	52	05545	32378	5-	05648	01358
382	5-	02758	06228	5-	05668	32128	51	61655	32367	5-	62658	02368
438	5-	02646	04426							5-	02747	06477
430	5-	02746	06426	50	08453	02213	5-	71558	02278	6-	63548	32368
409	00	05650	04100	00	05650	03200	50	05664	06104	53	05644	05226

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 24th December, 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. 13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Light or moderate N.E. winds; dull, with occasional slight rain or drizzle in most districts, but no precipitation on western sides of large hill masses; rather cold.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light, variable, mainly E. or N.E. wind; fair; cold.

GENERAL INFERENCE.

An anticyclone centred to the N.W. of Scotland is almost stationary, and a rather moist N.E'ly current of air is spreading across the British Isles. It will be mainly dull in all districts, with occasional slight rain or drizzle in the Eastern half of the country. Temperatures will be somewhat higher than of late, but still below the seasonal average.

FURTHER OUTLOOK.

No great change indicated

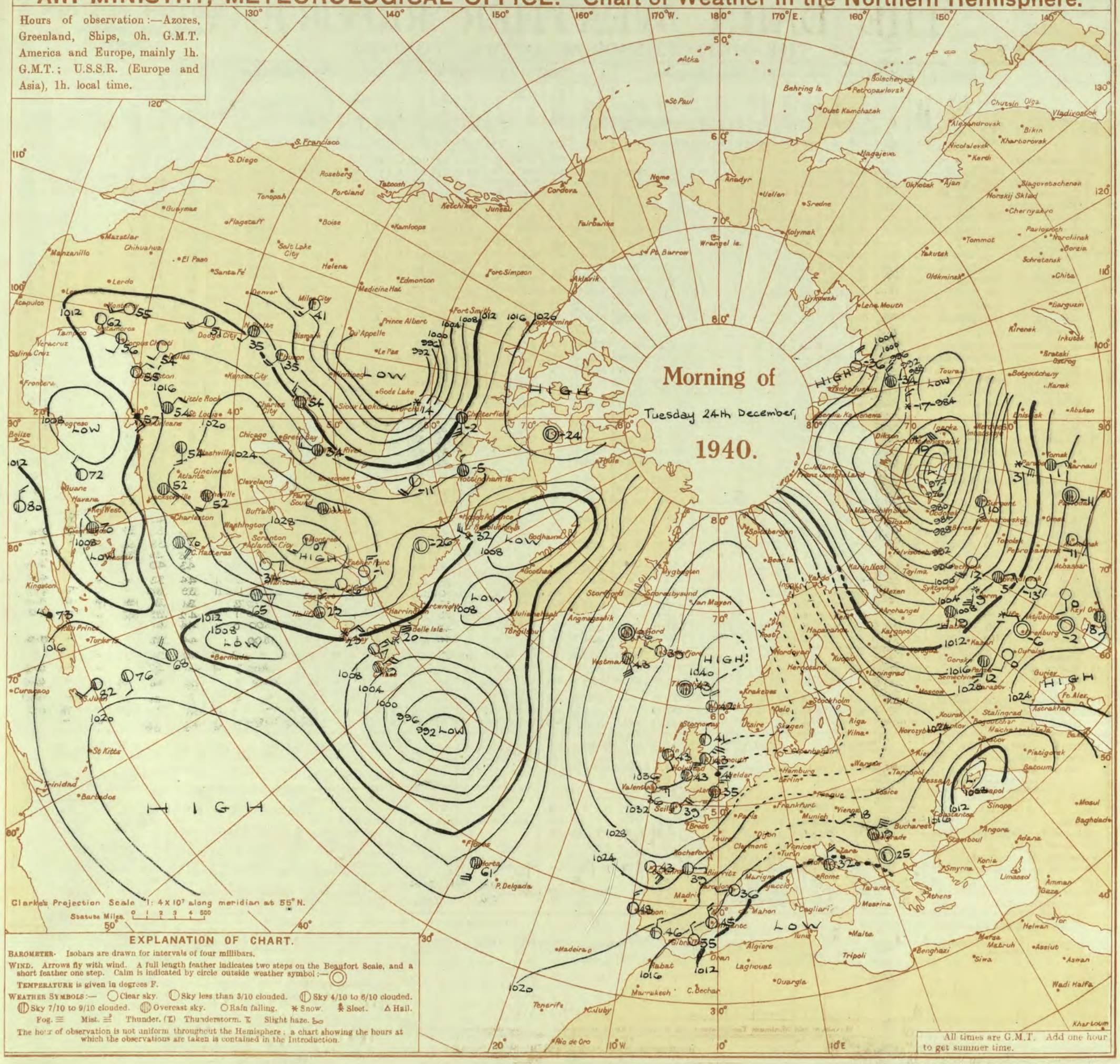
Forecasts issued at 1030h G.M.T.

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.

Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 24th December 1940.

No 28887

OBSERVATIONS at 1 hr. G.M.T. 24th December

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	1030·6	−12	NNE	3	zo	35	92	5	5	–	–	9+	9+	2000
	S. Farnborough	226	1031·2	−10	NW'N	2	o/s	35	92	5	5	–	–	10	10	3500
	Boscombe Down	417	1032·4	−4	NNW	2	zo	35	92	5	5	–	–	10	10	2500
	Calshot (Sthmtn.)	8	1031·3	−12	NNW	3	zo	34	85	5	5	–	–	10	10	1800
	Lympne	346	1028·7	−22	WNW	2	ido	34	85	4	–	2	–	10	10	400
	Manston	154	1029·0	−14	NE'E	4	c/f	38	92	6	6	2	–	9	10	500
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1030·3	−6	NE'N	3	pr	38	85	6	8	–	–	9+	9+	1700
	Gorleston	5	1030·8	−4	ENE	4	iro	40	85	6	6	–	–	10	10	1500
	Mildenhall	19	1031·3	−6	N'W	2	zo	37	92	6	5	–	–	4-6	4-6	2500
	Cranwell	240	1033·3	−6	N	3	dodo	39	97	5	5	–	–	10	10	1500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1032·6	−6	NNE	3	o/s	36	97	6	5	–	–	10	10	3000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1033·3	+2	ENE	2	bc	37	85	7	5	–	–	2-3	2-3	2500
	Bristol	209	1033·6	−6	NNE	2	zo	36	85	5	5	–	–	10	10	2000
	Portland Bill	32	1031·7	−10	NE	3	c	32	92	7	5	–	–	10	10	2500
	Plymouth	82	1033·3	−2	NE	3	zo	37	85	6	5	–	–	7-8	7-8	2500
	The Lizard	240	1032·6	−6	ENE	5	bc	38	75	8	8	–	–	4-6	4-6	2000
	Scilly (St. Mary's)	163	1032·6	−6	NE'N	4	bc	39	85	6	8	–	–	4-6	4-6	1800
	Guernsey	175														
6	Pembroke	142	1034·0	0	NE	2	b	33	85	7	–	–	–	0	0	–
7	Holyhead	26	1035·2	−2	NNE	5	c	43	97	7	5	–	–	9+	9+	3200
	Chester (Sealand)	16	1035·6	−2	WNW	1	of	35	92	3	5	–	–	10	10	2300
8	Manchester	70	1035·3	−4	NW	2	zo	41	75	6	5	–	–	10	10	2800
10	Spurn Head	29	1032·6	−4	NNE	4	iro	41	92	7	5	–	–	7-8	7-8	1500
	Catterick	175	1035·4	−6	N	3	ido	40	97	6	5	–	–	10	10	1500
	Tynemouth	108	1035·4	−4	NE	5	c	43	75	7	8	–	–	9	9	2200
11	St. Abbs Head	280	1037·0	−2	N	3	o/d	41	85	7	5	–	–	10	10	2000
	Leuchars	36	1037·9	−6	N	2	c	40	75	7	5	–	–	10	10	2200
12	Renfrew (Abbots I.)	19	1038·4	−2	NE	1	m	40	85	4	5	–	–	10	10	2200
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1036·8	0	NE'E	4	c	41	92	8	5	2	–	7-8	9+	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1038·4	−2	–	0	c	37	92	7	5	–	–	2-3	10	3500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1039·0	−2	NE	2	c	43	75	8	5	7	–	7-8	10	2500
16	Lerwick	156	1039·3	−4	N	4	c	42	85	7	5	7	–	7-8	10	1500
17	Blacksod Point	18	1028·0	+2	–	0	b	33	97	7	–	–	–	0	0	–
18	Malin Head	84	1037·7	−6	SE	1	c	43	65	7	9	–	–	9	9	2500
	Aldergrove	268	1037·6	−4	–	0	zo	36	92	6	5	–	–	9+	9+	2500
19	Birr Castle	173	1037·0	0	N'E	1	b	28	97	8	–	–	–	0	0	–
20	Valentia Obsy.	30	1036·1	+6	E	3	b	36	75	8	–	–	–	0	0	–
	Roches Point	22	1035·8	+2	E'N	3	c	38	85	8	5	–	–	7-8	7-8	2500

OBSERVATIONS at 7 hr. G.M.T. 24th December

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)	1030·9	+4	NNE	3	zo	38	85	6	5	–	–	10	10	2500	1	*
	Croydon	1030·6	+6	NE	1	dr	37	92	5	–	2	–	10	10	1500	1	*
	S. Farnborough	1031·2	+4	N'E	2	zo	37	85	5	5	–	–	10	10	3500	1	*
	Boscombe Down	1031·7	0	N'E	4	zo	36	92	6	5	–	–	9+	9+	1000	3	*
	Calshot (Sthmtn.)	1030·7	+2	N'E	3	zo	38	85	6	5	–	–	10	10	3100	1	§2
	Lympne	1030·5	+14	ENE	2	zo	33	85	6	5	–	–	10	10	1000	3	*
	Manston	1030·6	+10	ENE	2	zo	34	92	6	5	–	–	10	10	3000	*	
2	Shoeburyness	1031·2	+8	E	3	o/f	36	92	7	5	–	–	10	10	2500	1	*
	Felixstowe	1031·0	+6	E'S	1	zo	36	92	6	5	–	–	10	10	1800	1	2
	Gorleston	1030·5	+2	ENE	3	iro	39	97	6	8	–	–	10	10	1500	1	2
	Mildenhall	1031·4	+2	NNE	2	zo	37	85	6	5	2	–	7-8	10	3400	1	*
	Cranwell	1032·7	+2	NNE	3	roro	38	97	5	5	–	–	10	10	1500	1	*
3	Birmingham	1032·9	−2	NNE	2	rf	30	97	3	6	–	–	10	10	800	1	*
	Upper Heyford	1032·1	0	NNE	3	pr	37	92	6	8	–	–	9+	9+	1500	1	*
4	Ross-on-Wye	1032·7	−4	N	2	m	38	92	4	5	–	–	10	10	800	1	*
5	Hartland Point	1032·1	−4	NNE	3	c	41	85	7	8	2	–	7-8	9	1500	0	2
	Bristol	1032·6	−14	NE	3	dodo	37	97	4	–	2	–	10	10	900	1	*
	Portland Bill	1030·5	−6	N	3	c	36	92	7	5	–	–	10	10	2500	1	3
	Plymouth	1032·3	−4	NE	3	zo	39	85	6	5	–	–	9	9	2500	3	1
	The Lizard																
	Scilly (St. Mary's)	1032·3	−6	NE'E	4	c	42	75	7	8	–	–	9+	9+	1800	0	3
	Guernsey																
6	Pembroke	1024·6	0	ESE	3	zo	37	92	6	8	2	–	7-8	10	2000	1	2
7	Holyhead	1035·5	+2	NE	3	c	42	85	6	5	–	–	10	10	3200	1	1
	Chester (Sealand)	1034·8	−2	WNW	3	o	37	92	6	5	–	–	10	10	2900	1	*
8	Manchester	1034·4	−4	N	3	zo	41	85	6	5	–	–	9	9	3200	0	*
10	Spurn Head	1022·2	0	N	4	c	41	75	7	5	–	–	7-8	10	2500	0	3
	Catterick	1034·6	−2	N'W	3	ido	40	97	6	5	–	–	9	9	1200	0	*
	Tynemouth	1034·7	−6	NE	4	c	44	85	7	8	–	–	9+	9+	2200	1	3
11	St. Abbs Head	1035·9	−2	NE	3	c/f	41	92	8	3	2	–	4-6	9	2500	1	2 *
	Leuchars	1037·1	−4	N	2	o/d	40	85	8	5	–	–	10	10	1800	1	*
12	Renfrew (Abbots I.)	1037·9	−2	N'E	2	zo	38	85	5	5	–	–	10	10	2500	1	*
	Eskdalemuir	1036·0	−2	NE	3	bc	37	85	6	5	–	–	4-6	4-6	1500	0	
	Point of Ayre	1036·1	−2	ENE	4	c	42	85	8	5	1	–	9	10	2500	0	3
13A	Tiree	1037·1	+12	ENE	1	c	39	92	7	5	–	–	9+	9+	3500	0	1
13B	Stornoway	1037·7	−4	SSE	2	dodo	40	92	7	5	2	–	7-8	10	2500	1	1
15	Dalwhinnie	1037·0	−4	–	0	o	33	92	7	5	–	–	10	10	1500	3	*
	Aberdeen	1036·8	−4	NNW	2	o/f	39	92	6	5	–	–	10	10	2500	1	2
	Wick	1037·7	−6	N	2	c	43	65	8	5	2	–	7-8	10	2500	0	1
16	Lerwick	1038·3	0	N'W	3	c	40	92	8	5	7	–	7-8	10	1500	1	*
17	Blacksod Point	1037·4	0	–	0	bc	35	97	7	–	5	–	0	4-6	–	3	3
18	Malin Head	1037·4	−2	NE	1	c	43	65	7	6	–	–	9	9	2500	0	0
	Aldergrove	1037·3	−2	–	0	o	35	97	6	5	–	–	10	10	2100	1	*
19	Birr Castle	1036·9	+2	N'E	1	b	26	97	7	–	–	–	0	0	–	3	*
20	Valentia Obsy.	1035·8	+2	E'N	1	b	29	92	8	–	–	–	0	0	–	3	1
	Roches Point	1035·2	−4	E'N	3	c	37	85	8	5	–	–	7-8	7-8	2500	1	3

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 23rd Hrs. (36)
1	London (Kew)	34	32	31	–	0·1	0·0
	Croydon	33	31	29	–	0·1	0·0
	S. Farnborough	33	31	31	–	0·1	0·0
	Boscombe Down	33	30	27	–	Tr	0·0
	Calshot (Sthmtn.)	36	32	28	–	Tr	0·2
	Lympne	32	29	29	–	0·3	0·0
	Manston	*	*	*	*	*	*
2	Shoeburyness	35	31	31	Tr	0·1	0·0
	Felixstowe	34	32	31	*	1	0·0
	Gorleston	36	34	33	–	1	0·4
	Mildenhall	35	33	31	–	Tr	0·3
	Cranwell	39	37	36	–	0·6	0·0
3	Birmingham	35	35	33	–	0·2	0·0
	Upper Heyford	33	32	31	–	1	*
4	Ross-on-Wye	35	33	27	–	0·1	0·1
5	Hartland Point	34	31	27	–	–	6·0
	Bristol	34	30	18	–	0·1	0·2
	Portland Bill	35	30	*	–	–	*
	Plymouth	36	30	22	–	–	5·8
	The Lizard			*	–		
	Scilly (St. Mary's)	42	35	*	–	–	0·0
	Guernsey						
6	Pembroke			*	–	–	5·4
7	Holyhead	41	37	33	–	–	3·2
	Chester (Sealand)	38	30	24	–		0·0
8	Manchester	41	38	35	–		0·0
10	Spurn Head	41	39	*	–	Tr	0·0
	Catterick	41	39	36	–	0·1	0·0
	Tynemouth	48	40	38	–		*
11	St. Abbs Head	42	41	*	–	Tr	*
	Leuchars	42	39	37	–	Tr	0·0
12	Renfrew (Abbots I.)	42	38	36	–	–	0·0
	Eskdalemuir	38	36	34	–	–	0·1
	Point of Ayre	43	40	*		–	2·6
13A	Tiree	44	33	*	–	–	4·5
13B	Stornoway	39	34	*	–	Tr	4·9
15	Dalwhinnie	34	31	19	Tr	Tr	0·0
	Aberdeen	42	39	37	–	Tr	0·0
	Wick	44	41	*	–	–	*
16	Lerwick	44	39	*	–	–	0·0
17	Blacksod Point	40	31	*	–		*
18	Malin Head	41	37	*	–	–	0·0
	Aldergrove	40	34	33	–	–	0·0
19	Birr Castle	?	24	22	–	–	0·0
20	Valentia Obsy.	43	27	22	–	Tr	1·2
	Roches Point	42	36	*	–	–	*

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	czo	czo	isocmo	34	32	31	–	0·1	0·0	•	•	4
Croydon	217	cmozo	czom	rscmo	33	31	29	–	0·1	0·0	•	•	4
Greenwich (Royal Observatory)	149	c	c	csorocm	33	32	27	–	0·5	0·0	77	80	4
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park)	27	•	•	•	39	33	31	0·2		0·0	75	88	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	38	32	26	–	Tr	0·0	79	86	•
Camden Square	110	c	bc	•	37	32	30	–	0·3	*	•	90	•
Kensington	80	c	bc	•	38	32	31	–	0·2	*	96	91	•
Hampstead Observatory	450	o	bc	ox	32	30	29	–	0·2		•	97	•

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

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

	Max.	Time.	Min.	Time.
South Kensington.				
Kew Observatory.	<0.5	21h 23rd	<0·1	2-4hs 24th

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.
- 1 Smooth.
- 2 Slight.
- 3 Moderate.
- 4 Rough.
- 5 Very rough.
- 6 High.
- 7 Very high.
- 8 Preciptious.
- 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 25th Dec. 1940.
No. 28,888.

OBSERVATIONS at 13h. G.M.T. 24th December

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)	1031.2	-6	N	2	iro	39	85	4	5	-	-	10	10	1500
	Croydon	1031.2	-6	-	0	sf	39	92	3	-	2	-	10	10	1000
	S. Farnborough	1031.7	-6	NNE	2	c/d	39	85	6	5	3	-	7-8	10	1200
	Boscombe Down	1031.8	-6	N'E	3	zo	38	85	6	5	-	-	9	9	4000
	Calshot (Soton.)	1031.4	-2	NE'N	1	zo	38	85	6	5	2	1	4-6	10	900
	Lympne	1031.1	-4	ENE	2	sh	34	75	7	-	2	-	9	10	2000
	Manston	1031.2		E	1	c	31	75	7	5	-	-	10	10	2000
2	Shoeburyness	1031.5	-4	N'E	1	ido	35	92	6	5	-	-	10	10	1500
	Felixstowe	1031.3	-2	SW'S	1	iro	35	92	7	-	7	-	9+	9+	4000
	Gorleston	1030.2	0	S	3	c/r	39	92	6	8	-	-	10	10	1500
	Mildenhall	1031.4	-4	NNE	2	c/pr	40	92	7	5	7	-	7-8	9+	1300
	Cranwell	1033.1	-2	NNE	3	c	41	85	7	5	-	-	9+	9+	1500
3	Birmingham	1032.9	0	NNE	2	m	39	92	4	5	-	-	10	10	800
	Upper Heyford	1032.1	-6	NE	4	ido	39	92	6	5	3	-	9	9+	1400
4	Ross-on-Wye	1032.6	-4	N	3	m	39	85	4	5	-	-	10	10	1500
5	Hartland Point	1031.8	-6	NE	3	c	42	75	7	8	-	-	9+	9+	1500
	Bristol	1032.6	-8	NNE	2	m	40	92	4	5	-	-	9+	9+	1800
	Portland Bill	1030.8	+6	N	3	c	39	85	7	5	-	-	10	10	4000
	Plymouth	1032.1	-6	ENE	3	c	41	75	8	8	-	-	9+	9+	2000
	The Lizard	1031.5	-4	NE	3	c	41	85	8	8	2	-	9	10	3000
	Scilly (St. Mary's)	1031.7	-4	ENE	4	c	43	65	8	8	-	-	10	10	1800
	Guernsey														
6	Pembroke	1033.3	-8	NNE	3	c	42	85	6	8	-	-	9+	9+	4000
7	Holyhead	1034.7	-6	N'W	3	c	44	75	8	5	-	-	9+	9+	4000
	Chester (Sealand)	1034.2	-6	N	1	of+	40	85	2	5	-	-	10	10	800
8	Manchester	1034.2	-2	NE	2	zo	42	85	5	5	3	-	4-6	7-8	2500
10	Spurn Head	1033.0	-4	NE'E	3	c	41	85	7	8	6	-	4-6	7-8	2500
	Catterick	1034.4	-4	-	0	ido	41	97	5	5	-	-	10	10	1200
	Tynemouth	1034.2	-6	NNE	4	c/pr	44	85	8	2	3	-	4-6	7-8	3400
11	St. Abbs Head	1035.0	-8	N	2	c	42	92	7	5	2	-	7-8	9+	2500
	Leuchars	1036.3	-10	N	2	roro	42	85	7	5	-	-	9	9	1800
12	Renfrew (Abbots I.)	1037.3	-4	N'E	1	c	40	85	7	5	-	-	9+	9+	3000
	Eskdalemuir	1035.4	-8	NE	2	ido	39	92	7	5	-	-	10	10	800
	Point of Ayre	1035.5	-4	ENE	3	c	43	85	8	5	7	-	7-8	9+	1500
13A	Tiree	1036.9	0	E'S	1	c	38	85	8	5	-	-	9+	9+	3500
13B	Stornoway	1037.3	-4	SE	1	pr	40	85	8	5	-	-	9	9	3300
15	Dalwhinnie	*	-4	-	0	c	35	85	8	5	-	-	9+	9+	2500
	Aberdeen	1035.9	-12	NNW	2	c/pr	41	85	7	8	-	-	9+	9+	2500
	Wick	1037.4	-4	NE	3	c/pr	41	85	8	5	7	-	7-8	9+	2500
16	Lerwick	1037.2	-10	NNW	3	c	41	85	8	8	7	1	7-8	9	1500
17	Blacksod Point														
18	Malin Head	1037.4	-2	E	1	c	42	75	8	5	-	-	9	9	5700
	Aldergrove	1036.8	-6	-	0	zo	40	85	6	5	-	-	10	10	2500
19	Birr Castle	1036.4	-4	N	1	c	33	85	7	5	1	-	7-8	9+	2500
20	Valentia Obsy. †	1035.2	-6	NE'E	1	b	38	85	7	-	-	-	0	0	-
	Roches Point	1034.9	-6	NE	2	zo	41	85	6	-	-	-	0	0	-

OBSERVATIONS at 18h. G.M.T. 24th December

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)	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)	1031.6	+6	ESE	2	iro	38	92	3	5	-	-	10	10	1500	1	*
Croydon	1031.1	+4	-	0	d+	33	97	3	5	-	-	10	10	800	1	*
S. Farnborough	1031.5	+6	NNE	2	m/r	39	85	5	5	-	-	10	10	1700	1	*
Boscombe Down	1031.7	+2	N	3	zo	36	92	5	5	-	-	10	10	3000	1	*
Calshot (Soton.)	1030.8	0	E'S	1	ido	38	85	5	5	-	-	10	10	1800	1	1
Lympne	1031.8	+6	E	2	c	32	75	7	5	-	-	10	10	2500	1	§2
Manston	1031.8	+4	-	0	zo	33	85	6	5	-	-	10	10	2300		*
Shoeburyness	1031.7	+4	SE	1	c	35	75	7	5	-	-	10	10	800	1	*
Felixstowe	1032.1	+4	ESE	2	zo	36	85	6	5	-	-	10	10	2500	1	1
Gorleston	1031.7	0	SW'S	1	c	36	85	6	8	-	-	10	10	1500	1	2
Mildenhall	1031.6	+6	N'E	2	c	37	85	7	5	-	-	9+	9+	2900	1	*
Cranwell	1033.2	+2	NE'N	2	zo	37	92	6	5	-	-	10	10	1600	1	*
Birmingham	1032.7	0	NNE	2	of+	38	85	3	5	-	-	10	10	800	1	*
Upper Heyford	1032.3	+6	N'E	3	zo	35	92	6	5	-	-	4-6	4-6	2000	1	*
Ross-on-Wye	1032.2	0	NNE	2	m	39	85	4	5	-	-	10	10	800	1	*
Hartland Point	1031.6	0	NE	4	c	41	75	7	8	6	-	7-8	9+	1500	0	0
Bristol	1032.3	0	ENE	2	m	38	92	4	5	-	-	10	10	2000	1	*
Portland Bill	1030.8	0	NNE	3	o	39	85	7	5	-	-	10	10	2500	1	3
Plymouth	1031.8	+2	NE'E	4	zo	40	75	6	5	-	-	10	10	2000	0	2
The Lizard	1030.9	0	NE	3	c	41	75	7	8	2	-	9	10	2500	0	2
Scilly (St. Mary's)	1031.0	0	NE'E	4	c	42	65	8	5	-	-	10	10	2500	0	3
Guernsey																
Pembroke	1032.4	0	NE	3	c	41	85	7	5	-	-	9+	9+	4000	1	2
Holyhead	1034.0	+2	NE'N	4	c	44	85	7	5	-	-	10	10	2200	1	2
Chester (Sealand)	1034.0	+2	WNW	1	cf	39	92	3	5	-	-	10	10	4000	1	*
Manchester	1033.4	+2	N	2	m	39	85	4	5	-	-	7-8	7-8	2500	0	*
Spurn Head	1033.0	0	NE'E	2	c	40	85	7	4	7	-	4-6	7-8	2500	0	2
Catterick	1033.8	+2	NW'N	1	iro	40	97	5	5	-	-	10	10	1500	1	4
Tynemouth	1034.1	0	NNE	3	c/pr	42	92	7	2	-	-	7-8	7-8	3200	1	3
St. Abbs Head	1034.5	-2	N	3	iro	41	92	7	5	2	-	9	10	2000	1	2
Leuchars	1035.6	0	WNW	1	c/r	40	92	6	5	7	-	4-6	7-8	2500	1	*
Renfrew (Abbots I.)	1036.8	-2	WSW	2	zo	38	85	6	5	-	-	9+	9+	3300	1	*
Eskdalemuir	1035.3	+2	N'E	3	o/d	37	85	6	5	-	-	10	10	800	1	*
Point of Ayre	1035.0	-2	NE	2	roro	42	92	7	8	2	-	7-8	10	1500	1	2
Tiree	1036.1	-2	NNE	1	bc	37	85	8	5	-	-	4-6	4-6	3500	0	1
Stornoway	1037.1	-4	-	0	c	36	85	7	5	-	-	7-8	7-8	1500	1	1
Dalwhinnie	*	0	-	0	c	30	92	7	5	-	-	7-8	7-8	2500	0	*
Aberdeen	1035.9	0	NNW	3	c	38	97	6	8	-	-	7-8	7-8	2500	1	2
Wick	1036.5	-2	NW	2	bc	38	92	7	5	7	-	2-3	4-6	1500	0	1
Lerwick	1035.8	-4	NW	2	c	39	85	7	5	7	-	4-6	7-8	1500	1	*
Blacksod Point	1036.5	0	ENE	1	bc	39	92	7	-	4	-	0	2-3	-	0	2
Malin Head	1036.7	-4	NE	2	c	42	75	8	6	-	-	9	9	2500	0	2
Aldergrove	1036.3	0	-	0	zo	39	85	6	5	-	-	10	10	2100	1	*
Birr Castle	1035.6	+2	N	1	c	34	97	7	5	-	-	10	10	2500	3	*
Valentia Obsy. †	1034.2	-2	NE	1	b	32	92	7	-	-	-	0	0	-	3	1
Roches Point	1034.2	0	NE	2	c	40	85	8	5	-	-	7-8	7-8	2500	1	2

PAST 24 HOURS.

Stations	Weather 7h.—13h. 24th (37)	13h.—18h. 24th (38)	18h 24th to 1h. 25th (39)	1h.—7h. 25th (40)
London (Kew)	mfidocrom	ciromf	rosorosomc	cmo
Croydon	cdodosom	fsopfro	dofsocf	cfmf
S. Farnborough	*	moiroc	orosocdomo	cmomo
Boscombe Down	cmo	cmo	irocmo	irocmo
Calshot (Soton.)	omocmo	cmoidocmo	cidomo	idocmo
Lympne	cisosh	cisoc	ccmo	cmoc
Manston	*	cisocmo	cmo	cbc
Shoeburyness	ccmoirs	cirmorsoc	c	crsosobc
Felixstowe	ororors	cirocvirosoo	cmoirobmo	oido, bcmo
Gorleston	oiroc	oiroc	oirozoc	czo zo
Mildenhall	bccprc	c	irocmoido	cmobmox
Cranwell	*	ccmo	cmo	cmo
Birmingham	firocm	cm	cfdobc	fbcbx
Upper Heyford	cprocirdom	cidomocmo	d	cbmo
Ross-on-Wye	omdoom	*	om	omcmob
Hartland Point	c	c	c	c
Bristol	cfdom	cmdocmo	cmdomo	cmmo
Portland Bill	c	c	c	co
Plymouth	cmorosocmo	cczo	czocmo	cmo
The Lizard	c	c	c	c
Scilly (St. Mary's)	c	c	c	c
Guernsey				
Pembroke	omcmo	c	c	c
Holyhead	cmoc	c	cmo	cmoroc
Chester (Sealand)	cmomfc	cf	cffmc	cmdomoc
Manchester	cdfmmo	cmoirom	cmororo	cmfrorom
Spurn Head	cpr	c	c	o
Catterick	cidomo	*	cmororo	cmororoiro
Tynemouth	cpo	*	cp	bpro
St. Abbs Head	idoc	*	iroc	cbcc
Leuchars	crocro	crorocmo	cmobccmo	iromororoc
Renfrew (Abbots I.)	cmoc	cedoc	cbccmo	cmoiromow
Eskdalemuir	bccido	cidododof	cmoc	cmo
Point of Ayre	c	croro		croro
Tiree	c	cbc	cbc	bcb
Stornoway	cdodo	ciro	c	c
Dalwhinnie	oc	c		
Aberdeen	cpro	crro	proc	cmoc
Wick	cproc	cbc	bcc	c
Lerwick	c	c		c
Blacksod Point		bc	c	c
Malin Head	c	c	c	cproc
Aldergrove	cmo	cmo	cmo	cmoidoiro
Birr Castle	bbcc	c	c	c
Valentia Obsy. †	bxjfb	bjfbmobxjf	bjfbmox	bmox
Roches Point	bcbzo	c	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.*

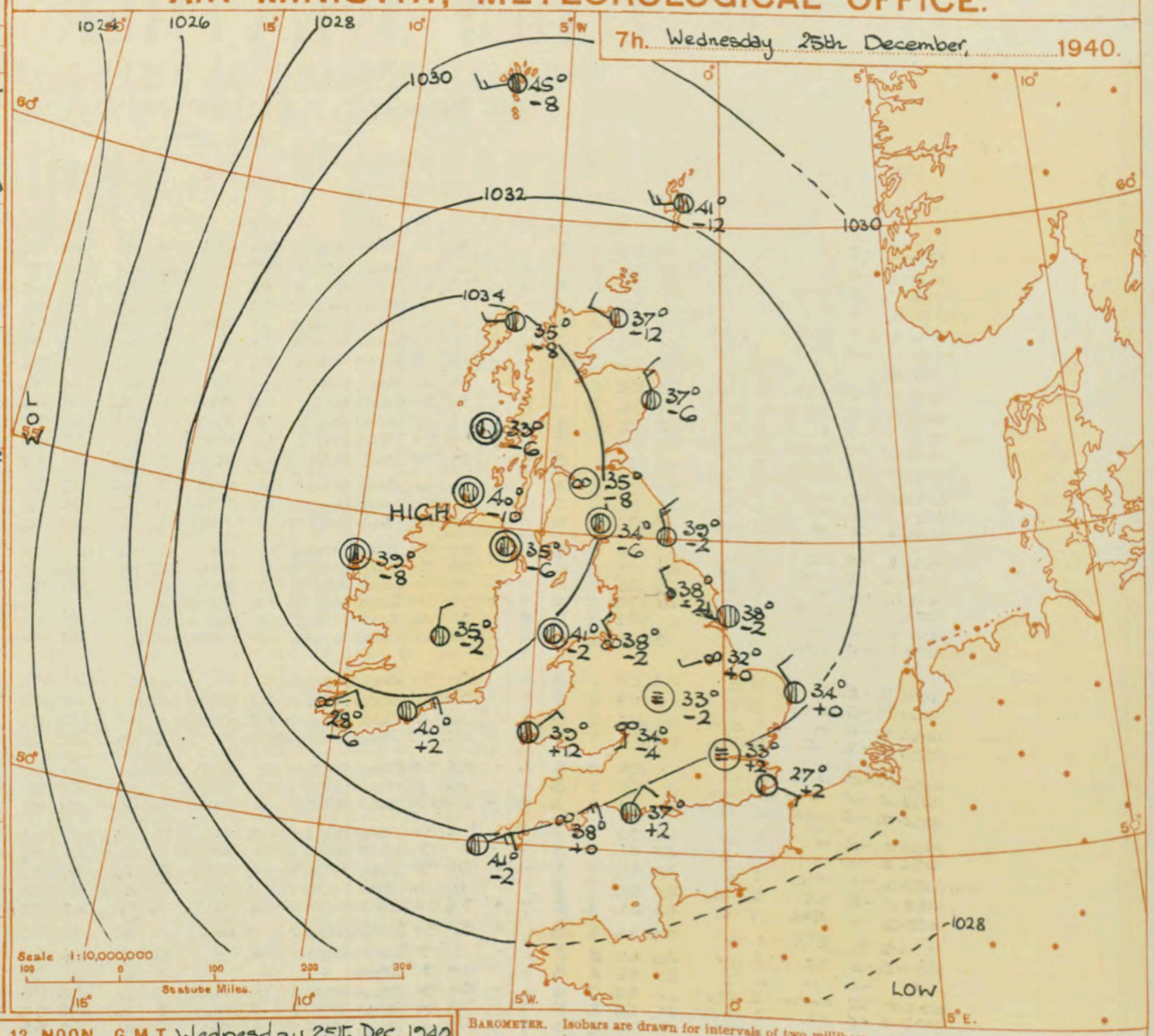
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Wednesday 25th December, 1940.

Abridged observations of additional stations in the AVIATION WEATHER CODE

	13h. G.M.T. 24th December			18h. G.M.T.			01h. G.M.T. 25th December			07h. G.M.T.		
IIIi	$C_L C_M$	wwVhN	DDFWN	$C_L C_M$	wwVhN	DDFWN	$C_L C_M$	wwVhN	DDFWN	$C_L C_M$	wwVhN	DDFWN
109	56	81756	30286	5-	02854	00084	50	01863	23213	5-	02754	24354
115	52	61618	20168	52	02744	20165	52	02844	20227	52	81844	20387
203												
206	53	22655	28167	52	22656	30168	5-	52648	00068	5-	03748	00058
210	53	10754	22158	5-	05658	22258	5-	62548	21268	5-	05648	22268
220	52	02855	14328	52	03645	14128				52	03635	10128
230	5-	02848	08128	5-	02748	00058	53	02755	12117	57	02755	12117
245	8-	01858	32355	50	00853	32383	50	00862	32112	5-	03768	26168
260	5-	05656	32156	5-	51667	00057	5-	21568	00058	5-	22655	00065
277	5-	04768	28128	5-	51756	01226	5-	02768	27228	5-	02768	26128
279	5-	02757	32227	5-	02757	30257	50	05546	32226	5-	02758	00028
285	5-	02637	04357	6-	59538	04468	5-	03638	02258	5-	03638	02258
288	5-	08448	01158	51	67347	01148	50	21443	28163	5-	51547	28267
273	74	05762	05104									
301	5-	41458	04348	5-	47258	32158	5-	05665	02145	5-	05668	31128
321	57	05664	04115	5-	05657	02127	5-	08458	00068	--	46305	00048
299	8-	25755	02385	5-	02757	00017						
292	5-	02867	03167	5-	22648	00068				5-	05658	28158
310	--	01535	04425	--	05528	04428						
316	5-	51587	03357				5-	05548	32128	53	47253	26145
333	5-	02767	28227	5-	02757	04227	5-	05658	00028	5-	05658	28228
334												
340	5-	21458	32358	5-	08468	02328	5-	21468	00058	5-	47358	32158
136	5-	02868	02388							5-	02868	30218
336	53	03754	04428									
350	53	05644	01358									
368	53	05656	06227									
379	5-	62628	04368				5-	05668	06328	00	05690	06210
390	5-	05556	02356				5-	45358	24178	53	08486	04128
382	5-	51657	02257				5-	51648	02258	50	05652	02222
428	8-	02748	04328							8-	02758	06128
430	5-	05658	08128				5-	08458	04228	5-	05568	00028
409	5-	05647	04227	5-	05658	04328				5-	05668	06228

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 25th Dec. 1940.
1 S.E. England	Light variable winds; cloudy, with slight local rain or sleet; some bright intervals; fog becoming widespread during the night and persisting locally tomorrow; cold, frosty at night.
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.	
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	

GENERAL INFERENCE.

An anticyclone centred off N.W. Ireland covers the British Isles. Cold and mainly cloudy weather will continue with slight rain or sleet locally. Bright intervals will occur in some districts. There will be mist or fog locally at first, particularly near large towns, and fog will probably become widespread tonight.

FURTHER OUTLOOK.

Continuing cold, quiet and foggy.

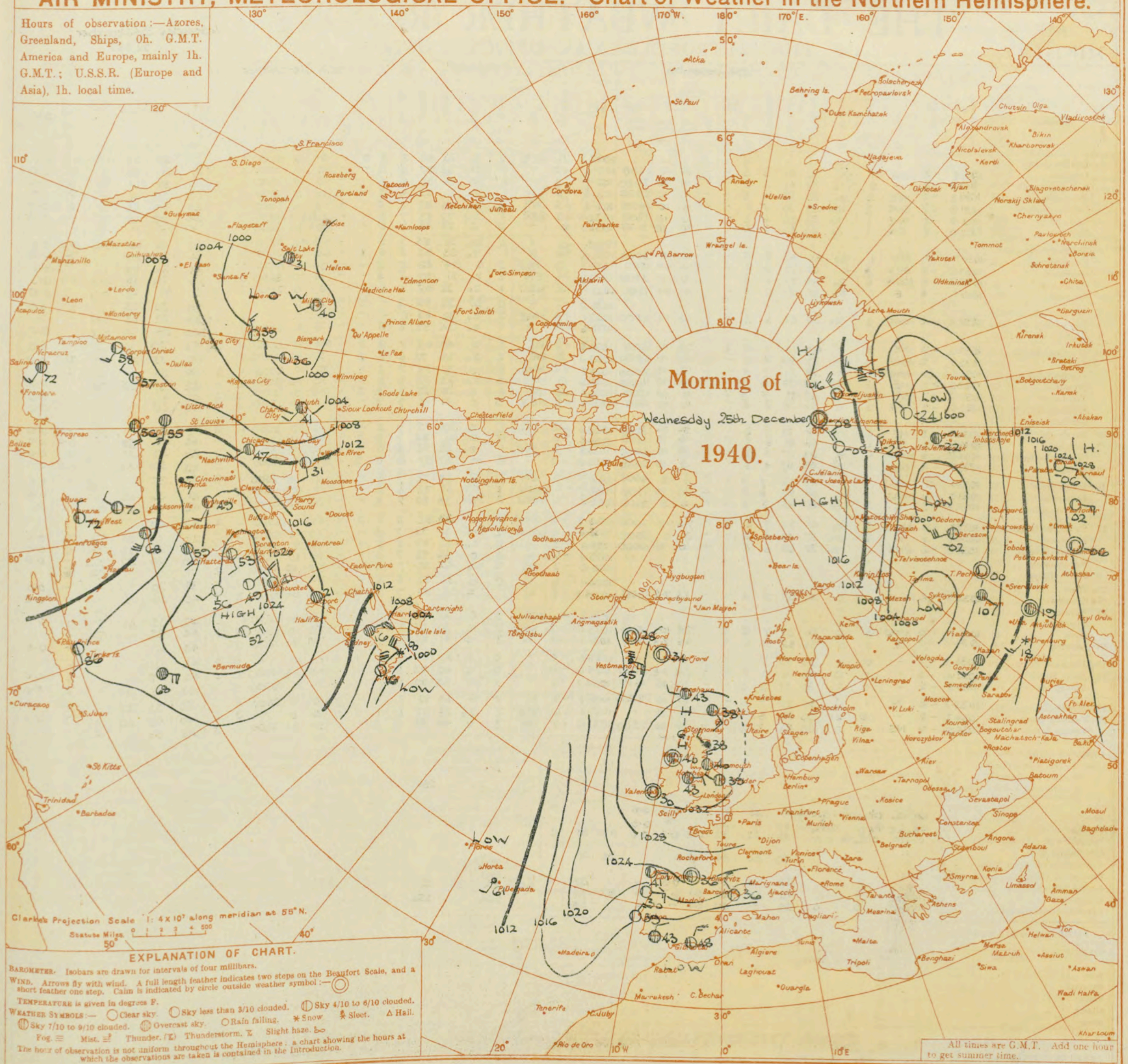
Forecasts issued at 1030h G.M.T.

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.



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 25th December 1940.

No 28,888

OBSERVATIONS at 1 hr. G.M.T. 25th December

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	1031·8	−2	NW	1	of	32	97	3	5	–	–	10	10	1200
	S. Farnborough	226	1032·3	−2	–	0	o/d	33	92	5	5	–	–	10	10	3000
	Boscombe Down	417	1032·2	−2	N'E	2	zo	35	85	6	5	–	–	10	10	2000
	Calshot (Sthmtn.)	8	1031·9	+2	ENE	2	ido	35	85	5	5	–	–	10	10	1400
	Lympne ...	346	1031·9	−2	ENE	1	zo	32	85	6	5	–	–	10	10	1800
	Manston ...	154	1032·0	+2	E'N	1	zo	33	85	6	5	–	–	10	10	2100
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1031·7	−4	N'W	1	zo	35	92	5	5	–	–	10	10	3000
	Gorleston ...	5	1032·3	+2	SE'S	3	c	38	85	6	8	–	–	9+	9+	1500
	Mildenhall ...	19	1032·2	−2	NW'N	2	zo	34	97	6	5	–	–	10	10	3500
	Cranwell ...	240	1033·2	−4	E	1	zo	35	97	6	5	–	–	9+	9+	1500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1032·8	−2	NNE	2	zo	35	92	6	5	–	–	10	10	2500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1032·2	−2	NE	3	c	40	75	7	5	2	–	7-8	10	1500
	Bristol ...	209	1032·7	−2	ENE	3	m	37	92	4	5	–	–	10	10	2000
	Portland Bill ...	32	1036·1	0	NNE	3	c	38	92	7	5	–	–	10	10	2500
	Plymouth ...	82	1032·5	+2	NE	3	zo	38	75	6	5	–	–	10	10	2000
	The Lizard ...	240	1030·7	+2	N'E	3	c	39	85	7	8	2	–	9	10	1500
	Scilly (St. Mary's)	163	1031·6	−2	NE'E	3	c	42	75	6	5	–	–	10	10	1800
	Guernsey ...	175														
6	Pembroke ...	142	1033·4	+2	NE	3	c	39	75	7	5	–	–	9+	9+	3000
7	Holyhead ...	26	1033·9	−2	E	2	zo	43	85	6	5	–	–	10	10	1500
	Chester (Sealand)	16	1034·0	−2	WNW	1	m	38	97	4	5	–	–	10	10	2900
8	Manchester ...	70	1033·4	−4	NNW	1	m/r	38	97	4	5	–	–	9	10	2500
10	Spurn Head ...	29	1033·1	0	WNW	1	c	39	92	7	5	–	–	9	9	4000
	Catterick ...	175	1033·3	−6	NNW	1	ro ro	39	97	6	5	–	–	10	10	1700
	Tynemouth ...	108	1032·8	−8	N	3	c/pr	40	85	7	8	–	–	9	9	3200
11	St. Abbs Head	280	1033·7	−6	NNW	3	ir	41	92	7	5	2	–	7-8	10	2000
	Leuchars ...	36	1034·8	−6	W	2	zo	37	92	6	5	–	–	9	9	3500
12	Renfrew (Abbotsl.)	19	1035·8	−6	SW'S	1	zo	37	85	6	5	–	–	10	10	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30														
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1035·9	−4	–	0	c	35	97	7	5	–	–	7-8	7-8	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1035·0	−10	WNW	3	c	36	92	7	5	2	–	7-8	10	1500
16	Lerwick ...	156	1034·2	−10	SE	3	c	38	85	7	5	7	–	4-6	7-8	1500
17	Blacksod Point	18	1036·3	−2	–	0	c	38	92	7	–	1	–	0	9+	–
18	Malin Head ...	84	1035·4	−6	–	0	c	40	75	8	9	–	–	7-8	7-8	4000
	Aldergrove ...	268	1035·8	−2	–	0	zo	37	92	5	5	–	–	10	10	2200
19	Birr Castle ...	173	1035·7	−4	N	1	0	34	97	7	5	–	–	10	10	2500
20	Valentia Obsy.	30	1034·3	−2	–	0	zo	30	92	6	–	–	–	0	0	–
	Roches Point	22	1034·0	−6	NE	3	c	39	85	7	5	–	–	9+	9+	2500

OBSERVATIONS at 7 hr. G.M.T. 25th December

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)	1032·1	0	NE'E	2	zo	35	92	5	5	2	–	9+	10	1500	1	*
Croydon ...	1031·6	+2	–	0	of+	33	97	3	5	–	–	10	10	1500	1	*
S. Farnborough	1031·7	−2	–	0	m	33	92	4	5	–	–	10	10	1200	1	*
Boscombe Down	1031·8	−6	N	1	zo	33	92	6	5	–	–	10	10	2500	1	*
Calshot (Sthmtn.)	1031·8	−2	N'E	2	zo	35	85	5	5	–	–	10	10	2000	1	1
Lympne ...	1032·0	+2	ESE	1	bc	27	85	7	5	–	–	2-3	2-3	4500	3	§2
Manston ...	1032·1	0	–	0	c	28	85	7	5	–	–	9+	9+	3500	*	*
Shoeburyness ...	1031·8	0	S	2	bc	31	85	7	5	–	–	4-6	4-6	2500	3	*
Felixstowe ...	1032·4	+4	N	1	zo	33	92	5	5	3	–	4-6	9+	2000	1	1
Gorleston ...	1032·1	0	NW	2	c	34	85	5	5	–	–	9+	9+	1500	1	1
Mildenhall ...	1032·6	+6	E'N	2	zo	31	97	5	5	–	–	10	10	3500	3	*
Cranwell ...	1033·1	0	WSW	1	zo	32	97	5	5	–	–	9	9	2000	3	*
Birmingham ...	1032·9	−2	–	0	bf	33	92	3	–	–	–	0	0	–	1	*
Upper Heyford	1032·1	−4	NNE	2	zo	32	85	6	–	–	–	0	0	–	1	*
Ross-on-Wye	1032·6	−4	S	1	zo	34	92	6	5	–	–	Tr	Tr	2500	1	*
Hartland Point	1031·8	−2	NE	3	c	40	65	7	5	2	–	4-6	9+	1500	0	3
Bristol ...	1032·4	0	NE	2	zo	36	75	6	5	7	–	9+	10	2000	1	*
Portland Bill ...	1031·2	+2	NNE	2	o	37	92	7	5	–	–	10	10	2500	1	3
Plymouth ...	1032·3	0	NE	3	zo	38	85	6	5	–	–	10	10	2000	0	2
The Lizard ...	1031·7	+4	NE	4	c	39	75	7	8	2	–	7-8	9+	1500	0	2
Scilly (St. Mary's)	1031·4	−2	NE'E	3	c	41	75	7	5	–	–	10	10	1800	0	2
Guernsey ...																
Pembroke ...	1033·3	+12	NE	1	c	39	75	7	5	–	–	10	10	3000	1	2
Holyhead ...	1033·4	−2	–	0	c	41	85	7	8	2	–	7-8	10	1200	1	1
Chester (Sealand)	1033·5	−2	NW	1	zo	38	92	5	5	–	–	10	10	2500	1	*
Manchester ...	1033·0	−2	–	0	m	37	97	4	5	3	–	7-8	9+	3000	1	*
Spurn Head ...	1032·7	−2	W'N	2	o	38	92	7	5	–	–	10	10	2500	1	2
Catterick ...	1032·7	−2	NNW	1	ir	38	92	6	5	–	–	10	10	1800	1	*
Tynemouth ...	1032·4	−2	NNW	3	c/pr	39	85	7	8	–	–	7-8	7-8	2500	1	3
St. Abbs Head	1033·2	−2	NNW	3	c	39	92	8	5	5	–	4-6	9	2500	1	2
Leuchars ...	1033·6	−6	WNW	2	c/r	37	92	7	5	–	–	7-8	7-8	2500	1	*
Renfrew (Abbotsl.)	1034·4	−8	–	0	zo	35	92	5	5	–	–	10	10	4000	1	*
Eskdalemuir ...	1033·4	−6	–	0	c	34	92	7	5	–	–	10	10	1500	1	*
Point of Ayre ...	1035·0	−2	NE	2	ro ro	42	92	7	8	2	–	7-8	10	1500	1	2
Tiree ...	1034·1	−6	–	0	b	33	92	8	5	–	–	1	1	8500	3	1
Stornoway ...	1034·2	−8	W	1	c	35	92	7	5	7	–	7-8	9+	1500	3	1
Dalwhinnie ...																*
Aberdeen ...	1033·6	−6	NNW	3	c	37	92	7	5	–	–	9+	9+	2500	1	2
Wick ...	1033·0	−12	WNW	2	c	37	85	8	5	2	–	7-8	10	2500	0	1
Lerwick ...	1031·5	−12	W	3	c	41	85	7	5	7	–	7-8	9+	1500	7	*
Blacksod Point	1035·4	−8	–	0	c	39	85	7	–	1	–	0	10	–	0	2
Malin Head ...	1034·6	−10	–	0	c	40	85	8	6	–	–	7-8	7-8	4000	0	0
Aldergrove ...	1034·7	−6	–	0	c/r	35	92	6	5	–	–	9	9	3200	1	*
Birr Castle ...	1034·8	−2	N	1	c	35	92	7	5	–	–	10	10	2500	1	*
Valentia Obsy.	1033·4	−6	NE'E	2	zo	28	97	6	–	–	–	0	0	–	3	1
Roches Point	1033·6	+2	NE	3	c	40	85	7	5	–	–	9+	9+	2500	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F.	Temperature Min. Night 18h–7h °F	Temperature Min. on Grass °F.	Rainfall Day 7h–18h mm.	Rainfall Night 18h–7h mm.	Sunshine 24th Hrs. (36)
London (Kew)	41	33	31	0·1	0·3	0·0
Croydon ...	37	31	31	1	Tr	0·0
S. Farnborough	40	32	31	Tr	Tr	0·0
Boscombe Down	39	31	31	–	Tr	0·0
Calshot (Sthmtn.)	39	34	28	Tr	Tr	0·0
Lympne ...	34	27	19	Tr	–	0·0
Manston ...	*	*	*	*	*	*
Shoeburyness ...	37	31	20	0·4	0·2	0·0
Felixstowe ...	36	33	30	1	Tr	0·0
Gorleston ...	41	36	32	1	1	0·2
Mildenhall ...	41	29	19	0·2	0·1	0·3
Cranwell ...	41	31	27	0·3	–	0·0
Birmingham ...	39	33	23	*	Tr	0·0
Upper Heyford	39	32	25	0·4	–	*
Ross-on-Wye	40	34	24	0·2	–	0·0
Hartland Point	42	37	36	–	–	0·0
Bristol ...	40	35	33	0·1	Tr	0·0
Portland Bill ...	40	34	*	–	–	*
Plymouth ...	42	37	35	Tr	–	0·2
The Lizard ...	41	36	*	–	–	0·0
Scilly (St. Mary's)	43	40	*	–	–	0·0
Pembroke ...	42	38	*	–	–	0·0
Holyhead ...	44	40	38	–	0·4	0·0
Chester (Sealand)	40	39	35	–	Tr	0·0
Manchester ...	43	36	34	–	0·6	0·0
Spurn Head ...	43	35	*	0·6	–	0·4
Catterick ...	41	36	33	1	1	0·0
Tynemouth ...	45	39	37	0·1	2	*
St. Abbs Head	42	40	*	1	1	*
Leuchars ...	42	36	31	Tr	Tr	0·0
Renfrew (Abbotsl.)	40	35	29	Tr	Tr	0·0
Eskdalemuir ...	40	34	32	0·4	–	0·0
Point of Ayre ...			*	Tr	Tr	
Tiree ...	39	30	*	–	–	0·0
Stornoway ...	40	34	*	1	–	0·0
Dalwhinnie ...				–		
Aberdeen ...	42	35	33	7	0·1	0·1
Wick ...	44	35	*	Tr	–	*
Lerwick ...	43	37	*	–	–	0·0
Blacksod Point	43	35	*	–	–	*
Malin Head ...	43	38	*	–	Tr	0·0
Aldergrove ...	40	35	32	–	Tr	0·0
Birr Castle ...	36	33	32	–	–	1·1
Valentia Obsy.	40	27	20	–	Tr	5·7
Roches Point	43	39	*	–	–	*

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	cmfido	ciromf	rosocmo	41	33	31	*	0·3	0·0	*	*	4
Croydon ...	217	cdido s	fsp	dofsmf	37	31	31	1	Tr	0·0	*	*	
Greenwich (Royal Observatory) ...	149	cidm	cidom	cm	36	32	32	0·5	0·3	0·0	97	91	4
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	40	34	34	0·3			90	91	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*									*
Camden Square ...	110	o	c	*	35	33	34	–	0·3	*	*	92	*
Kensington ...	80	cbcc	cf	*	40	34	31	0·1	0·2	*	87	91	*
Hampstead Observatory ...	450	osx	o	o	39	31	30	0·1	–	*	*	98	*

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.
1·0	17h 24th	0·2	2h 25th

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.
Paris ...										
Brussels ...										
Berlin ...										
Zürich ...										
Rome ...										

Past 24 Hours.

Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.

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.

‡ 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 26th December, 1940.

No 28,889

OBSERVATIONS at 13h. G.M.T. 25th December

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)...	1033·1	-4	NW	1	cf+	36	85	3	5	-	-	9+	9+	4000
	Croydon	1032·6	-6	-	0	m	35	85	4	5	-	-	10	10	1500
	S. Farnborough	1033·4	-2	-	0	m	35	72	4	5	3	-	9	9+	1200
	Boscombe Down	1033·5	0	-	0	z₀	35	75	6	5	-	-	10	10	1500
	Calshot (Soton.)	1032·8	-2	E'N	1	z₀	36	75	6	5	-	-	10	10	2500
	Lympne ...	1032·4	-10	NW	1	is₀	32	75	7	5	2	-	7-8	10	3000
	Manston ...	1031·8	-10	W'S	c	c/rdh	33	75	6	5	-	-	9	9	3000
2	Shoeburyness ...	1032·4	-10	WNW	2	c	36	85	5	5	-	-	9+	9+	4000
	Felixstowe ...	1032·1	-8	WNW	4	z₀	36	85	5	5	3	-	1	9+	3000
	Gorleston ...	1031·1	-8	N'W	2	c	37	92	5	8	-	-	10	10	1800
	Mildenhall ...	1032·7	-6	WSW	2	m	35	97	4	5	-	-	9+	9+	4000
	Cranwell ...	1033·1	-4	-	0	om/f	36	92	4	5	-	-	10	10	2000
3	Birmingham	1033·1	+2	-	0	cf	37	85	1	-	-	-	10	10	<150
	Upper Heyford	1033·4	-2	-	0	z₀	34	92	5	5	-	-	10	10	5000
4	Ross-on-Wye ...	1033·3	-4	NE	1	c/f	39	75	6	5	3	-	4-6	7-8	2500
5	Hartland Point	1032·9	0	NE	3	bc	38	55	8	4	-	-	2-3	2-3	2500
	Bristol	1033·6	-2	E'N	2	b	38	75	7	5	-	1	1	1	4000
	Portland Bill ...	1032·2	+10	NE	2	o	37	92	7	5	-	-	10	10	2500
	Plymouth ...	1032·6	-4	W'S	2	z₀	39	85	6	5	3	-	9+	9+	3500
	The Lizard ...	1031·7	-6	NE	3	c	38	85	8	8	2	-	7-8	9+	2000
	Scilly (St. Mary's)	1032·0	-2	NE	4	c	42	65	8	8	-	-	7-8	7-8	2500
	Guernsey ...														
6	Pembroke ...														
7	Holyhead ...	1033·4	-2	SW	2	z₀	42	92	6	5	-	-	10	10	3500
	Chester (Sealand)	1033·3	-2	NW	1	c	46	97	6	5	-	-	9+	9+	4000
8	Manchester ...	1033·3	-2	-	0	cf	39	97	2	5	-	-	10	10	3000
10	Spurn Head ...	1032·8	-4	W	3	m	39	92	5	5	-	-	10	10	2500
	Catterick ...	1032·9	-2	-	0	o/r	40	92	7	5	-	-	10	10	1800
	Tynemouth ...	1032·5	0	NW	2	pr	40	85	6	8	-	-	7-8	7-8	2400
11	St. Abbs Head	1033·1	-2	NW	3	r₀r₀	38	97	7	6	2	-	7-8	10	2000
	Leuchars ...	1033·5	-4	W	2	c	39	85	7	5	-	-	10	10	3200
12	Renfrew (Abbots I.)	1034·3	-2	W	1	z₀	39	85	6	5	-	-	9+	9+	3500
	Eskdalemuir ...	1033·4	0	NE	1	c	38	85	8	5	-	-	10	10	2500
	Point of Ayre ...	1033·6	0	-	0	c	42	85	8	5	-	-	10	10	4000
13A	Tiree	1034·0	0	E	1	c	39	85	8	5	3	-	4-6	9	3500
13B	Stornoway ...	1033·2	-6	-	0	c	39	85	9	5	7	-	Tr	9+	2000
15	Dalwhinnie ...	*	-2	N	1	o	32	92	7	5	-	-	10	10	1500
	Aberdeen ...	1032·8	-4	NW'W	2	c	39	85	6	5	-	-	9+	9+	2500
	Wick	1032·3	-6	W	3	c	39	85	8	5	7	-	7-8	9+	2500
16	Lerwick... ...	1029·3	-16	W	4	c	43	85	8	8	3	-	7-8	9	1500
17	Blacksod Point..	1035·2	0	ESE	1	c	41	85	7	-	3	-	0	9+	-
18	Malin Head ...	1034·6	0	SW'W	2	cjp	42	85	8	3	6	-	2-3	2-3	4000
	Aldergrove ...	1034·6	-2	-	0	z₀	38	85	6	5	-	-	10	10	3500
19	Birr Castle ...	1035·0	+2	N	1	c	37	92	7	5	1	-	7-8	10	1500
20	Valentia Obsy. †	1033·9	-2	-	0	c	39	85	7	5	-	-	9+	9+	4000
	Roches Point ...	1034·3	0	NNE	2	c	41	85	8	5	-	-	9+	9+	2500

OBSERVATIONS at 18h. G.M.T. 25th December

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)	1033·3	+4	WSW	1	m	36	85	3	5	-	-	10	10	2500	1	*
Croydon	1033·0	+2	-	0	of	34	97	2	5	-	-	10	10	1000	1	*
S. Farnborough	1033·5	0	NW	2	m	34	92	4	5	-	-	10	10	8000	1	*
Boscombe Down	1033·9	+4	-	0	z₀	34	85	5	5	-	-	10	10	3000	1	*
Calshot (Soton.)	1033·0	+2	NW'N	1	m	35	85	4	5	-	-	10	10	5700	1	0
Lympne	1031·8	0	NW	2	m	34	92	4	5	-	-	10	10	2000	3	§
Manston	1031·7	0	N'W	3	z₀	37	97	5	5	3	-	2-3	10	3000		*
Shoeburyness	1032·4	0	NW	2	c	38	92	5	5	-	-	10	10	4000	1	*
Felixstowe	1032·3	+2	N	4	m	37	92	4	5	-	-	10	10	6000	1	2
Gorleston	1032·2	+6	NE'N	3	c	41	85	6	2	-	-	9	9	2000	1	2
Mildenhall	1032·8	+2	WNW	1	m	34	97	4	5	-	-	9+	9+	1800	1	*
Cranwell	1033·3	+2	W	1	f	36	92	2	-	-	-	10	10	<150	0	*
Birmingham	1033·3	0	WNW	1	cF	36	97	1	-	-	-	10	10	<150	1	*
Upper Heyford	1033·5	0	-	0	m	33	92	4	5	-	-	10	10	3500	1	*
Ross-on-Wye	1033·5	+4	NW	1	z₀	37	83	5	5	-	-	10	10	1500	1	*
Hartland Point	1033·2	+2	E	3	bc	36	65	8	5	-	-	2-3	2-3	2500	0	2
Bristol	1034·1	+2	-	0	z₀	35	75	5	5	-	-	10	10	5000	1	*
Portland Bill	1033·9	+8	NE	2	c	36	92	7	5	-	-	10	10	2500	1	3
Plymouth	1033·1	+6	ENE	1	m	37	75	4	5	-	-	9+	9+	3500	1	1
The Lizard	1032·2	+8	E	4	c	41	85	8	8	2	-	9	10	2000	1	2
Scilly (St. Mary's)	1032·0	+2	NE	4	c	41	65	8	5	-	-	9	9	2500	0	2
Guernsey																
Pembroke	1033·8	+4	E	2	c	39	85	6	5	-	-	10	10	3500	1	1
Holyhead	1033·5	+2	-	0	z₀	41	85	5	5	-	-	10	10	4500	1	1
Chester (Sealand)	1033·7	+2	NW'W	1	c	39	92	5	5	-	-	10	10	4600	1	*
Manchester	1033·2	+2	NW'W	2	of-	38	92	3	5	-	-	10	10	3600		*
Spurn Head	1032·8	0	W	1	of	37	97	5	5	-	-	10	10	2500	1	1
Catterick	1032·9	0	-	0	of	39	92	3	5	-	-	10	10	3200	1	
Tynemouth	1032·8	0	NNW	3	c	39	92	6	8	-	-	7-8	7-8	2400	1	2
St. Abbs Head	1022·9	0	NW	3	c	38	85	7	5	2	-	7-8	10	2000	1	2
Leuchars	1033·4	+2	W	1	c	37	92	7	5	-	-	10	10	3200	1	*
Renfrew (Abbots I.)	1033·9	-2	-	0	z₀	37	83	6	5	-	-	10	10	3300	1	*
Eskdalemuir	1033·4	+2	-	0	c	36	92	7	5	-	-	10	10	1500	1	*
Point of Ayre	1033·6	-4	SSE	1	c	42	92	7	5	2	-	4-6	10	1500	1	1
Tiree	1033·8	0	-	0	o	35	85	8	5	-	-	10	10	3500	3	1
Stornoway	1032·6	+2	SW	3	c	40	92	7	5	7	-	9	10	2500	1	1
Dalwhinnie	*	-2	NW	1	c	28	92	7	5	1	-	4-6	7-8	1500	4	*
Aberdeen	1032·9	+2	NW	2	bc	36	85	6	5	-	-	4-6	4-6	2500	1	2
Wick	1031·9	0	W	3	c	38	85	7	6	7	-	4-6	7-8	1500	0	1
Lerwick	1029·0	0	WN	4	c	45	85	8	8	7	-	7-8	9	1500	1	*
Blacksod Point	1035·5	+2	SE	1	c	38	85	7	-	7	-	0	9+	-	0	1
Malin Head	1034·9	+2	W	1	c	40	85	8	5	-	-	9	9	4000	0	1
Aldergrove	1034·5	+4	-	0	c/r	37	92	7	5	-	-	9	9	2500	1	*
Birr Castle	1035·0	+4	N	1	c	36	92	7	5	-	-	10	10	1500	1	*
Valentia Obsy. †	1033·8	+4	-	0	c	39	85	7	5	-	-	9+	9+	4000	3	0
Roches Point	1034·5	+6	NNE	2	c	40	85	7	5	-	-	9+	9+	2500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 25th (37)	13h.—18h. 25th (38)	18h 25th to 1h. 26th (39)	1h.—7h. 26th (40)
London (Kew)	omcf	cffpr₀cm	cffcm	cm
Croydon	cfm		cffcm	c
S. Farnborough	cm	cmm₀c	c	cfm₀c
Boscombe Down	cm₀bcm₀	cm₀	cmcm₀	cm₀
Calshot (Soton.)	cm₀	cz₀cm₀	cm₀	cm₀
Lympne	bcm₀is₀	m₀s₀s₀cm	cmff	off
Manston	cicism₀	cm₀	cir₀bccm₀	cm₀F
Shoeburyness	bccms₀	cm₀s₀c	cm₀ff	cm₀omw
Felixstowe	cs₀fcm₀	cm₀m	cm ff	cff
Gorleston	pr₀s₀z₀c	cz₀z₀	cbcz₀w	cmof
Mildenhall	cm₀xcm	cm	cmcfofx	ofx id₀fof
Cranwell	cf,fg,fm	cm,cff	f	off
Birmingham	bfF	FF	Fmc	cm
Upper Heyford	bbccm₀	cm₀cm	cmf,cm₀	cm₀cm
Ross-on-Wye	bmbff	ccm₀	om₀	om₀cm₀
Hartland Point	cbcy	bcbc	bc	bcc
Bristol	cfbmm₀	b,cm₀	cm₀	cm₀cm₀
Portland Bill	o	cc	c	c
Plymouth	cm₀			cm₀
The Lizard	c	c	rrprc	c
Scilly (St. Mary's)	cbcc	cbc	cpc	c
Guernsey				
Pembroke		z₀c		did₀
Holyhead	jfmm₀c	mwm₀c	pmorrc	cm₀c
Chester (Sealand)	mod₀r₀mc	cm₀c	cm₀m₀f	of mir₀
Manchester	cmf	cff	cfmff	cff
Spurn Head	om	om	obmw	c
Catterick	i₀ccair	ccf	cf,m₀m	cm
Tynemouth	cpr	cpc	coid₀	oid₀c
St. Abbs Head	cir₀	r₀c	c	cbc
Leuchars	c	cir₀c	cbccm₀x	cm₀xbx
Renfrew (Abbots I.)	cm₀wfgm	cm₀c	cbcbm₀	cbcbm₀
Eskdalemuir	cid₀	c	cx	c
Point of Ayre	c	cir₀	r₀r₀c	
Tiree	bcc	c	oid₀c	c
Stornoway	c	c	c	cbc
Dalwhinnie	p₀s	oc		c
Aberdeen	cz₀	cbcz₀	bcc*z₀	cz₀
Wick	c	c	cbc	ir₀c
Lerwick	c	c	cbcc	c
Blacksod Point	c	c	c	c
Malin Head	c	c	c	c
Aldergrove	cmir₀c	cm₀cr₀c	c,bffbxcm	cxm₀ir₀
Birr Castle	c	c		ffc
Valentia Obsy. †	bm₀bcxcxc	c	c	cbcbx
Roches Point	c	c	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/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.*

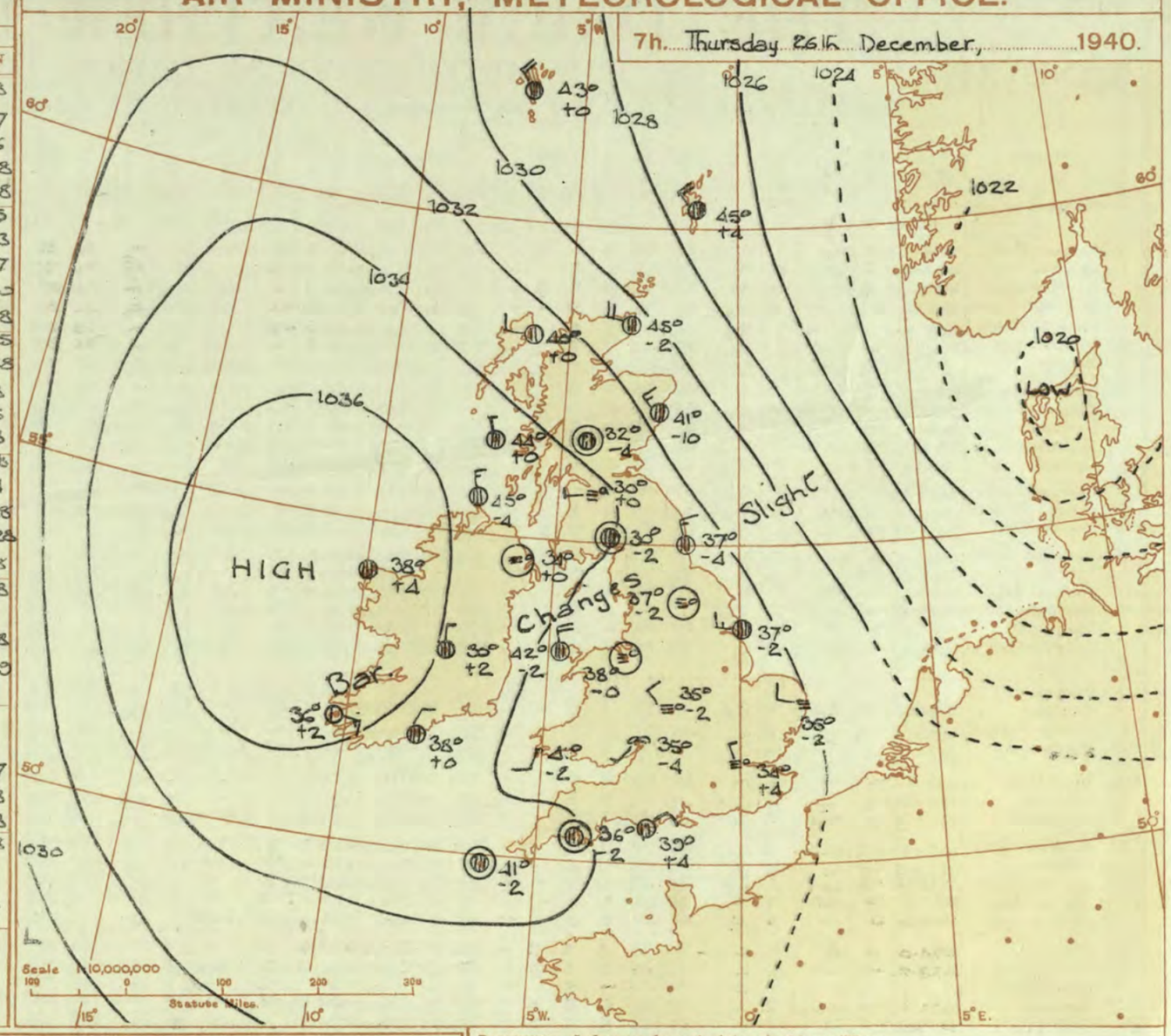
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 25th December			18h. G.M.T.			01h. G.M.T. 26th December			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	5-	25857	22387	80	25853	22483				5-	03848	26568
115	87	81844	20487				52	02844	20487	52	81844	24487
203				5-	03858	16428	5-	03858	16428	8-	02946	16326
206	5-	02977	21227	57	02874	24226	5-	02865	24125	57	02854	00028
210	5-	02865	20325	5-	02867	24327	00	00890	22410	5-	02858	22468
220	53	02853	15217							53	01744	00015
230	53	02954	00017	50	17662	00012	57	02764	00028	57	05652	00013
245	8-	02857	24227	5-	02767	24127	5-	02767	24227	5-	02767	56317
260	5-	05568	24158	5-	05568	00028	50	08462	24112	00	05500	24100
277	5-	05658	00028	5-	05668	27158	00	00700	32250	5-	05668	00018
279	5-	22558	00068	5-	08458	28128				5-	05655	26225
285				5-	03748	32228				5-	03748	32328
288	5-	47348	28168	5-	47248	28148	5-	05548	28148	5-	05548	20158
273	53	09663	25103							53	02753	27115
301	5-	08468	02158	5-	08458	00028	5-	08458	00028	5-	08458	02168
321	5-	57358	20158	--	45309	00049	5-	45368	00048	5-	08478	28248
299	5-	05547	22327	5-	05544	24114	5-	08448	25228	5-	01844	22214
292	5-	05658	30158	5-	47378	22148	5-	08458	00028	5-	05668	30228
310										--	02528	20428
316	5-	45358	24148	5-	45258	00048	5-	08468	24248	5-	45368	26148
333	5-	02968	28128	5-	08768	00028	5-	62658	00068	5-	64648	00068
334												
340	--	46109	00059	5-	45267	00057	5-	45268	00048	5-	08468	28128
336	5-	05677	27317	5-	47338	00025	--	44209	25149	--	46109	26249
336												
350	5-	08468	00028									
368												
379	5-	05667	06227	5-	05558	32128	5-	05568	28228	53	05555	00027
390	53	05445	28127	5-	41468	28228	5-	08458	28128	5-	08458	25228
382	5-	05568	00028	5-	47368	00048	5-	08478	00028	5-	05578	26228
438	5-	03638	32328							8-	03668	04328
430	5-	09648	06128	5-	45348	32148	5-	08478	02228			
409	54	01763	04323				5-	05558	07228	5-	05668	04128

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 26th December, 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. 26th December, 1940
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light westerly or variable wind. Overcast with fog or mist in many places; fog becoming widespread after dusk. Cold.
5 S.W. England 6 South Wales ... 7 North Wales ...	Light variable wind. Fair to cloudy. Rather cold.
8 N.W. England 9 N. Midlands ...	Light northerly or variable wind. Partly cloudy. Fog locally, especially industrial areas. Cold.
10 N.E. England 11 S.E. Scotland	Light northwesterly wind. Bright periods. Local showers later. Rather cold.
12 S.W. Scotland & Isle of Man.	Light northwest or variable wind. Mainly fair. Cool.
13 { A. W. Scotld. / B. N.W. Scotland.	Light or moderate northwest wind. Bright intervals and occasional local rain or showers. Average Temperature.
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 wind. Mainly cloudy. Cool.

GENERAL INFERENCE.

An anticyclone off West Ireland is almost stationary and a ridge extending to Iceland is intensifying. There will be bright intervals in Scotland and later in N.E. England; with occasional slight rain or showers associated with feeble troughs, moving S.E. across the North Sea. Elsewhere weather will be mainly overcast, but there will be some brighter intervals in S.W. England. Widespread fog at first in the Midlands and Eastern England will persist in many places throughout the day, and there will be much fog again tonight in Central and Southern England.

FURTHER OUTLOOK.

Little Change.

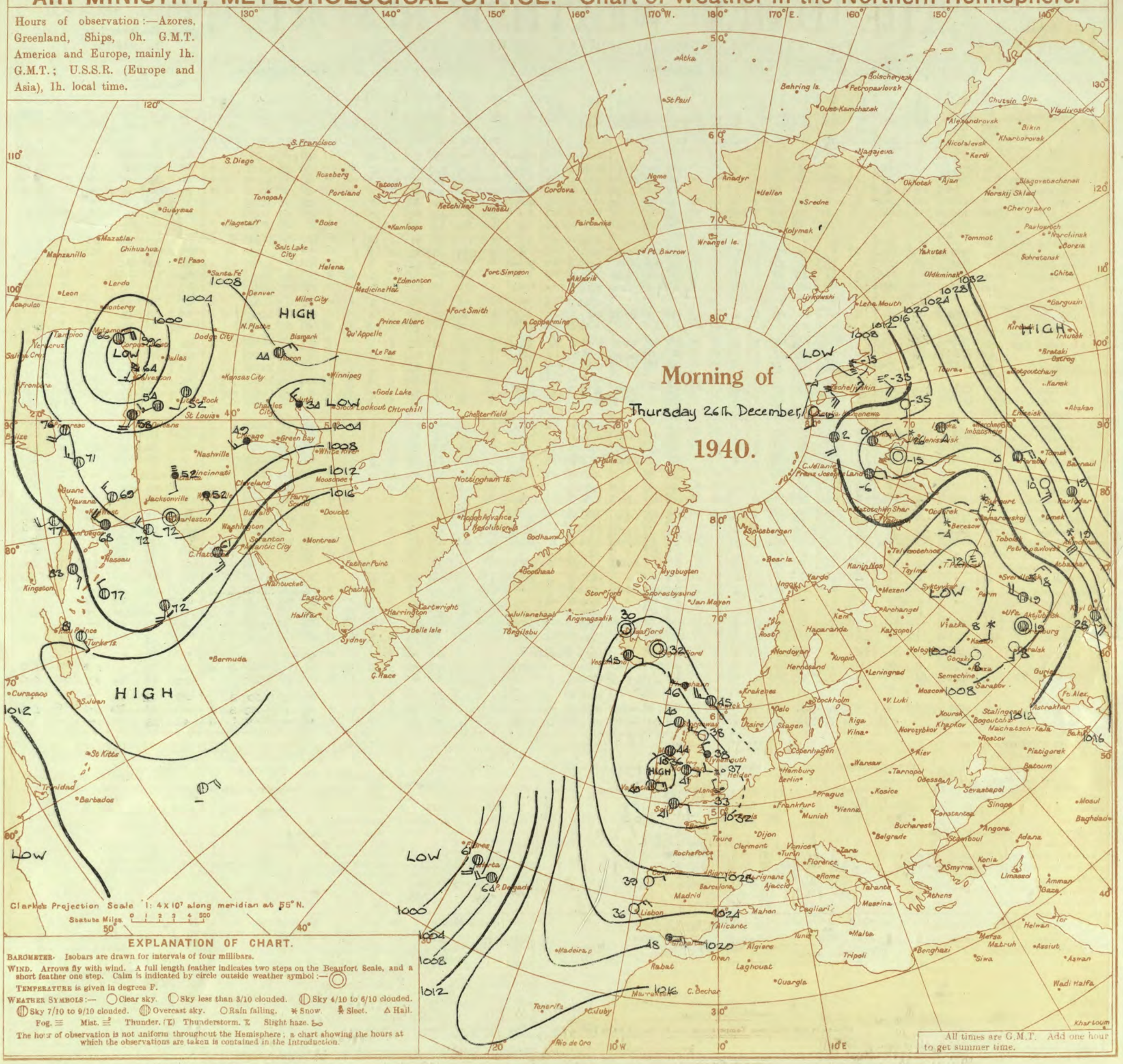
Forecasts issued at 10 30 G.M.T.

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

Thursday 26th December 1940.

No. 288 89

OBSERVATIONS at 1 hr. G.M.T. 26th December

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	+2	NNW	1	m	33	92	4	5	–	–	10	10	1500
	S. Farnborough	226	1034·0	–2	W'S	1	of+	33	92	3	5	–	–	10	10	5000
	Boscombe Down	417	1034·5	0	NW	2	zo	35	85	5	5	–	–	10	10	3000
	Calshot (Sthmtn.)	8	1033·6	+2	NNW	2	zo	36	85	5	5	–	–	10	10	5000
	Lympne ...	346	1032·8	+2	NNW	1	of+	34	97	2	5	–	–	10	10	800
	Manston ...	154	1032·9	+4	N	1	zo	37	97	6	5	3	–	7-8	10	1600
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1032·9	–2	NNW	2	f	35	97	3	5	–	–	10	10	6000
	Gorleston ...	5	1032·7	0	W'N	2	bc	37	92	5	5	–	–	4-6	4-6	1500
	Mildenhall ...	19	1033·2	–4	SW	2	of	33	97	3	5	–	–	10	10	7200
	Cranwell ...	240	1033·3	–4	WNW	1	F	35	97	1	*	–	–	10	10	<150
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1034·2	0	WNW	3	zo	35	85	5	5	–	–	10	10	5700
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1034·6	+2	SE	3	bc	36	65	8	5	–	–	4-6	4-6	2500
	Bristol ...	209	1035·0	–2	–	0	zo	34	85	5	5	–	–	10	10	4500
	Portland Bill ...	32	1033·7	+2	NE	2	c	39	85	7	5	–	–	10	10	2500
	Plymouth ...	82														
	The Lizard ...	240	1034·3	+4	E'N	3	c	39	85	7	5	–	–	10	10	1500
	Scilly (St. Mary's)	163	1034·2	+6	E'S	2	c	41	97	7	5	–	–	9+	9+	1500
	Guernsey ...	175														
6	Pembroke ...	142														
7	Holyhead ...	26	1033·9	–2	ESE	1	zo	41	92	6	5	–	–	10	10	1400
	Chester (Sealand)	16	1034·2	+2	–	0	of	36	97	3	5	–	–	10	10	4500
8	Manchester ...	70	1034·2	+2	W'N	1	f–	37	92	3	5	–	–	10	10	3000
10	Spurn Head ...	29	1032·8	–2	W'N	2	m	37	97	4	–	–	–	0	0	–
	Catterick ...	175	1033·8	–2	–	0	m	37	92	4	5	–	–	10	10	3100
	Tynemouth ...	108	1033·3	0	NNW	2	id.	38	92	6	–	2	–	10	10	1800
11	St. Abbs Head	280	1033·0	+2	WNW	3	c	38	85	7	5	2	–	7-8	10	2500
	Leuchars ...	36	1033·2	–2	W	2	zo	35	85	6	5	–	–	10	10	3200
12	Renfrew (Abbots I.)	19	1034·9	+2	WSW	1	zo	30	92	6	5	–	–	9	9	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1033·8	0	–	0	c	38	85	8	5	1	–	9	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1033·8	+2	WSW	2	c	40	97	7	5	2	–	9	10	2000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1031·6	–2	WNW	3	bc	37	85	8	5	7	–	2-3	2-3	2500
16	Lerwick ...	156	1027·4	–10	N	5	c	45	92	8	5	7	–	4-6	7-8	1500
17	Blacksod Point	18	1037·0	+4	–	0	c	38	92	7	–	7	–	0	10	–
18	Malin Head ...	84	1035·1	0	SW	1	c	44	92	7	5	–	–	9	9	2500
	Aldergrove ...	268	1035·6	+4	–	0	zo	31	97	6	5	–	–	9	9	2800
19	Birr Castle ...	173														
20	Valentia Obsy.	30	1035·6	+4	E	3	c	40	75	7	5	–	–	10	10	4000
	Roches Point	22	1035·9	+2	NNE	2	c	39	85	7	5	–	–	9+	9+	2500

OBSERVATIONS at 7 hr. G.M.T. 26th December

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)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 25h. Hrs. (36)
London (Kew)	1033·2	–2	WSW	2	m	35	92	4	5	–	–	10	10	2500	1	*	36	34	30	Tr	–	0·0
Croydon ...	1032·9	+4	NNW	1	m	34	92	4	5	–	–	10	10	1000	1	*	35	32	31	Tr	–	0·0
S. Farnborough	1033·4	–2	W	1	zo	34	92	6	5	–	–	10	10	5000	1	*	36	32	30	–	–	0·0
Boscombe Down	1033·9	–2	NNW	1	zo	34	85	5	5	–	–	10	10	3000	1	*	36	32	30	–	–	0·8
Calshot (Sthmtn.)	1033·5	–2	NW'N	2	zo	36	85	5	5	–	–	10	10	3500	1	1	37	34	33	–		0·0
Lympne ...	1032·9	+2	–	0	of	33	92	2	5	–	–	10	10	200	1	§	36	33	30	Tr	–	0·0
Manston ...	1032·4	–2	W	1	f+	34	97	2	5	–	–	10	10	500	*	*	*	*	*	*	*	*
Shoeburyness ...	1033·1	–2	W'N	2	m	35	92	4	5	–	–	10	10	2500	1	*	37	34	32	0·1	–	0·0
Felixstowe ...	1032·2	–2	N	3	of+	35	92	2	5	–	–	9+	9+	6000	1	1	37	34	32	Tr	–	0·0
Gorleston ...	1032·0	–2	WNW	2	f	35	85	2	5	–	–	10	10	200	1	1	41	35	33	2	–	*
Mildenhall ...	1032·3	–6	W'S	2	of+	34	97	2	5	–	–	10	10	500	1	*	36	33	29	–	Tr	0·0
Cranwell ...	1032·9	–4	WNW	1	F–	34	97	1	5	–	–	10	10	<150	0	*	37	33	31	–	–	0·0
Birmingham ...	1033·3	–2	NW	2	m	35	92	4	5	–	–	9	9	1500	1	*	37	35	32	–	–	0·0
Upper Heyford	1033·3	–4	W'S	2	zo	35	92	5	5	–	–	10	10	4500	1	*	35	33	31	–	–	*
Ross-on-Wye	1033·7	–4	SW'S	1	zo	35	85	6	5	–	–	10	10	1500	1	*	42	34	32	–	–	4·2
Hartland Point	1034·2	0	SSW	2	c	40	65	8	5	–	–	9+	9+	2500	0	2	40	33	30	–	–	4·4
Bristol ...	1034·3	–2	WNW	1	zo	35	85	5	5	–	–	10	10	3500	1	*	40	33	31	–	–	4·0
Portland Bill ...	1033·9	–4	NE	2	c	39	85	7	5	–	–	10	10	2500	1	3	39	34	*	–	–	*
Plymouth ...	1034·5	–2	–	0	zo	36	85	6	5	–	–	4-6	4-6	2000	0	1	40	35	31	–	–	0·3
The Lizard ...	1034·3	0	NNE	3	c	39	85	7	8	2	–	9	10	1500	0	2	41	38	*	–	0·5	0·0
Scilly (St. Mary's)	1034·3	–2	–	0	c	41	65	7	8	2	–	4-6	10	1500	1	2	42	39	*	–	·1	2·8
Pembroke ...	1033·6	–2	SSW	2	id.	41	85	7	8	–	–	9+	9+	2500	1	1	41	39	*		Tr	0·0
Holyhead ...	1033·3	–2	N'W	4	c	42	85	7	5	–	–	9+	9+	2200	1	2	42	39	38	–	2	0·0
Chester (Sealand)	1033·9	0	–	0	m	38	92	4	5	–	–	10	10	2000	1	*	40	36	34	0·1	Tr	0·0
Manchester ...	1033·5	–4	S	1	of+	36	97	2	5	–	–	10	10	3000	1	*	*	34	33	*	–	0·0
Spurn Head ...	1032·0	–2	W'N	3	o	37	97	6	5	–	–	10	10	1500	1	2	40	35	*	–	Tr	0·1
Catterick ...	1033·5	–2	–	0	m	37	97	4	5	–	–	10	10	3500	1	*	40	36	34	1	–	0·0
Tynemouth ...	1032·3	–4	NNW	3	c	37	75	6	8	–	–	7-8	7-8	1900	1	2	41	34	31	2	0·2	*
St. Abbs Head	1032·4	–4	WNW	3	bc	39	75	8	4	4	–	2-3	2-3	2500	0	2	40	38	*	3	–	*
Leuchars ...	1032·8	–2	WSW	2	b	34	92	8	5	–	–	1	1	6000	1	*	40	33	27	Tr	–	0·0
Renfrew (Abbots I.)	1034·5	0	WSW	1	m	30	92	4	5	–	–	2-3	2-3	3000	1	*	40	28	21	–		0·0
Eskdalemuir ...	1034·2	–2	–	0	c	30	92	7	5	–	–	9+	9+	1500	1	*	38	29	25	0·1	–	0·0
Point of Ayre ...	1033·8	0	NE'N	2	b	39	85	7	5	–	–	1	1	2500	1	1	42	37	*	0·2	1	0·0
Tiree	1033·9	0	NNW	1	c	44	92	8	5	–	–	9+	9+	3500	0	1	39	35	*	–	Tr	0·8
Stornoway ...	1033·9	0	W	2	bc	40	97	7	5	–	–	4-6	4-6	2000	1	1	40	39	*	–	–	0·0
Dalwhinnie ...	1033·4	–4	–	0	c	32	92	7	5	–	–	9+	9+	1500	3	*	33	26	22	Tr	–	0·0
Aberdeen ...	1030·3	–10	NW	3	c	41	85	6	5	–	–	9	9	1500	1	2	40	35	27	–	–	0·0
Wick ...	1030·2	–2	WNW	4	c	45	97	7	5	2	–	7-8	10	1500	1	2	40	34	*	–	0·3	*
Lerwick ...	1026·7	+4	NNW	4	c	45	92	8	8	7	–	4-6	7-8	1500	1	*	45	42	*	–	–	1·0
Blacksod Point	1037·3	+4	–	0	c	38	92	7	–	7	–	0	10	–	0	2	42	34	*	–	–	*
Malin Head ...	1034·5	–4	NNW	3	c	45	85	7	6	–	–	9	9	2500	0	0	43	37	*	0·2	Tr	0·0
Aldergrove ...	1035·3	0	–	0	m	34	97	4	5	–	–	10	10	2200	1	*	39	28	22	0·1	0·1	0·0
Birr Castle ...	1036·6	+2	N	1	o	30	97	7	5	–	–	10	10	1500	3	*	38	26	24	–	–	0·0
Valentia Obsy.	1035·7	+2	–	0	b	36	85	8	5	–	–	1	1	4000	3	1	40	36	29	0·1	Tr	0·0
Roches Point	1035·9	0	NNE	2	c	38	85	7	5	–	–	9+	9+	2500	1	3	42	38	*	–	–	*

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	omcf	cffproc	cm	36	34	30	Tr	–	0·0	*	*	2
Croydon ...	217	cfm	cffm	c	35	32	31	Tr	–	0·0	*	*	4
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. 26th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
0·6	20h 25th	0·2	8h 25th

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

Friday 27th December 1940.

No. 28,890

OBSERVATIONS at 13h. G.M.T. 26th December

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)	1033·4	-8	W'N	2	cf–	38	85	3	5	-	-	9+	9+	2500
	Croydon	1032·8	-8	NW	1	cf	36	92	3	5	-	-	9+	9+	4000
	S. Farnborough	1034·0	-6	W	2	id_0	37	85	5	5	-	-	10	10	3500
	Boscombe Down	1034·0	-10	NW	1	z_0	37	75	6	5	-	-	10	10	5600
	Calshot (Soton.)	1033·6	-6	NW'N	2	z_0	38	75	5	5	-	-	10	10	5700
	Lympne	1032·3	-10	NW	1	fg	34	97	3	5	-	-	10	10	800
	Manston	1032·2	-12	W'N	4	fg–	36	97	3	5	-	-	10	10	<150
2	Shoeburyness	1032·5	-12	NNW	2	c	40	85	4	-	3	-	0	9	-
	Felixstowe	1031·7	-10	NW'W	4	m	37	92	4	5	-	-	9+	9+	5000
	Gorleston	1031·1	-8	W'N	2	fg	38	92	4	5	-	-	9	9	1500
	Mildenhall	1032·3	-10	WNW	2	fg	37	97	4	5	-	-	10	10	4000
	Cranwell	1033·5	-2	WNW	3	bcfg	38	92	3	5	-	-	4-6	4-6	3000
3	Birmingham	1033·8	+4	NW	2	ofg	38	85	3	5	-	-	10	10	1500
	Upper Heyford	1033·7	-8	NW	2	z_0	37	85	5	5	-	-	10	10	4000
4	Ross-on-Wye	1033·9	-4	NNW	2	fg	36	85	3	5	-	-	10	10	1500
5	Hartland Point	1033·4	-16	W	3	c	41	75	8	8	2	-	7-8	10	2500
	Bristol	1034·6	-6	—	0	z_0	38	75	5	5	-	-	10	10	6000
	Portland Bill	1033·8	-6	N	2	o	40	85	7	5	-	-	10	10	2500
	Plymouth	1034·0	-8	—	0	m	38	65	4	5	-	-	10	10	5500
	The Lizard	1034·4	-12	NE	3	c	40	85	7	5	-	-	10	10	2000
	Scilly (St. Mary's)	1035·2	-2	N'E	1	c	44	75	8	8	2	-	4-6	10	1500
	Guernsey														
6	Pembroke	1033·0	-4	NNW	3	c	41	92	7	8	7	1	9+	9+	2500
7	Holyhead	1034·3	+2	NNE	3	z_0	43	85	6	8	-	-	9+	9+	2500
	Chester (Sealand)	1034·6	+2	—	0	o/fg	39	85	4	5	-	-	10	10	3500
8	Manchester	1034·0	-4	W	2	cfg–	38	97	2	5	-	-	7-8	7-8	5000
10	Spurn Head	1031·7	-4	W	2	bc	40	85	7	4	4	-	2-3	4-6	2500
	Catterick	1032·6	-10	WNW	2	c	44	65	7	5	-	-	7-8	7-8	7200
	Tynemouth	1032·2	-10	W	3	c	40	65	6	8	-	-	9+	9+	1600
11	St. Abbs Head	1031·1	-8	WNW	4	c	43	75	8	5	4	-	7-8	9	2500
	Leuchars	1032·6	-8	WNW	3	bc	49	75	8	5	3	-	2-3	4-6	3200
12	Renfrew (Abbots I.)	1035·0	-2	WSW	1	m	36	85	4	5	-	-	7-8	7-8	6000
	Eskdalemuir	1034·2	-2	—	0	c	34	75	7	5	-	-	2-3	7-8	2500
	Point of Ayre	1034·7	0	W	1	b	43	85	7	-	4	-	0	Tr	-
13A	Tiree	1035·2	0	NW'N	1	bc	47	92	8	7	3	-	2-3	4-6	3500
13B	Stornoway	1034·6	0	NNW	3	c	42	92	8	5	7	-	4-6	7-8	2000
15	Dalwhinnie	1033·7	+2	NW	1	c	41	75	8	8	-	-	9	9	2500
	Aberdeen	1030·6	-4	NNW	5	bc	45	85	6	5	-	1	2-3	2-3	2500
	Wick	1030·7	0	NW	4	bc	46	85	7	5	4	8	2-3	4-6	1500
16	Lerwick	1027·7	-4	NW	4	c/r	44	92	8	8	7	-	4-6	9	800
17	Blacksod Point	1037·6	0	—	0	c	44	92	7	-	7	-	0	10	-
18	Malin Head	1036·5	+4	N	1	bc	47	85	8	4	-	-	2-3	2-3	5700
	Aldergrove	1035·9	-2	—	0	f-	37	97	3	-	-	-	0	0	-
19	Birr Castle	1036·8	-6	SSW	1	c	35	92	7	5	1	-	7-8	10	2500
20	Valentia Obsy. †	1037·2	+2	NE'E	1	b	42	65	9	5	-	-	Tr	Tr	4000
	Roches Point	1036·7	-4	N	3	c	40	75	7	5	-	-	9	9	2500

OBSERVATIONS at 18h. G.M.T. 26th December

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)	1033·8	+6	WSW	1	cfg+	36	92	2	-	3	-	0	9+	—	1	*
Croydon	1033·1	+2	WNW	2	cfg	35	97	3	5	-	-	10	10	3000	1	*
S. Farnborough	1034·4	+6	W	2	m	32	97	4	5	-	-	2-3	2-3	3000	1	*
Boscombe Down	1034·7	+6	NW'W	2	m	33	85	4	5	-	-	Tr	Tr	5000	1	*
Calshot (Soton.)	1033·8	+4	NW'N	2	m	35	85	4	5	-	-	Tr	Tr	5700	1	1
Lympne																§
Manston	1031·9	+2	WNW	4	f/fg	37*	97	4	5	3	-	4-6	9+	500		*
Shoeburyness	1032·5	-2	NW	1	b	37	92	4	-	-	-	0	0	-	1	*
Felixstowe	1031·6	-2	WNW	4	m	36	92	4	5	3	-	Tr	7-8	1000	1	2
Gorleston	1029·9	-6	NW'W	3	ir_0	38	85	5	6	-	-	10	10	1500	1	2
Mildenhall	1031·7	-6	W'N	3	m	35	97	4	5	7	-	2-3	7-8	4000	1	*
Cranwell	1032·4	-6	WNW	4	ofg+	37	85	3	5	-	-	10	10	5000	0	*
Birmingham	1034·3	+10	NW	2	bfg	35	85	3	-	-	-	0	0	—	1	*
Upper Heyford	1034·2	+2	NW	2	mfg	35	92	4	5	-	-	2-3	2-3	4000		*
Ross-on-Wye	1034·8	+4	N	1	bfg	34	92	3	5	-	-	Tr	Tr	1500	1	*
Hartland Point	1033·8	+2	W	1	c	42	75	8	8	2	-	7-8	9+	2500	0	2
Bristol	1035·1	+6	-	0	m	36	85	4	5	-	-	9	9	5000	1	*
Portland Bill	1034·7	+6	N	2	o	40	85	7	5	-	-	10	10	2500	1	2
Plymouth	1035·0	+2	—	0	m	37	85	4	5	-	-	10	10	5700	0	0
The Lizard	1034·4	0	NNW	2	c	40	92	7	8	2	-	9	10	2000	0	2
Scilly (St. Mary's)	1034·9	+2	N'W	2	c	44	75	8	8	2	-	7-8	10	1500	1	2
Guernsey																
Pembroke	1035·1	+2			bc	40	92	7	8	-	-	4-6		3000	1	1
Holyhead	1035·2	+4	ESE	1	z_0	39	85	6	-	-	-	0	0	—	1	1
Chester (Sealand)	1035·0	+4	NW'N	2	bfg	34	92	3	-	-	-	0	0	—	1	*
Manchester	1034·6	+2	W'S	2	cfg	36	92	3	5	3	-	4-6	7-8	3500	1	*
Spurn Head	1029·9	-4	W	5	c	40	92	6	5	-	-	10	10	2500	0	3
Catterick	1033·1	0	NW'W	3	z_0	43	75	6	5	-	-	9+	9+	2200	0	
Tynemouth	1031·8	0	NW	3	z_0	40	85	6	-	4	-	0	2-3	-	1	2
St. Abbs Head	1031·3	+2	NW	5	bc	44	65	7	4	-	-	2-3	2-3	2500	0	3
Leuchars	1032·4	-2	WNW	3	c	43	75	8	5	-	-	7-8	7-8	3800	1	*
Renfrew (Abbots I.)	1035·1	+6	WSW	2	bfg	33	92	3	-	-	-	0	0	—	1	*
Eskdalemuir	1033·9	+2	NW'N	3	bc	37	75	8	5	-	-	Tr	Tr	4000	1	*
Point of Ayre	1035·1	+2	NW	3	bc	42	92	7	-	4	-	0	2-3	—	1	1
Tiree	1036·0	+2	N'W	3	bc	47	92	8	5	-	-	4-6	4-6	2800	0	2
Stornoway	1033·9	0	NW	3	b	45	85	8	5	-	-	1	1	2500	1	2
Dalwhinnie	990·0	-2	—	0	c	34	92	7	5	-	-	4-6	4-6	1500	0	*
Aberdeen	1030·5	-4	NW'N	4	bc	43	85	6	-	4	-	0	Tr	—	1	2
Wick	1030·2	-4	WNW	5	c/pr	46	92	7	5	7	8	7-8	9	1500	1	2
Lerwick	1027·9	+4	NNW	4	c	41	85	7	5	7	-	4-6	9	800	1	*
Blacksod Point	1037·6	+4	—	0	bc	39	97	7	-	5	-	0	4-6	—	0	0
Malin Head	1036·8	+8	N	1	bc	46	92	8	2	-	-	1	1	4000	0	1
Aldergrove	1036·8	+6	—	0	bcfg	32	97	3	5	-	-	4-6	4-6	1400	1	*
Birr Castle	1037·3	+4	SE	1	bc	32	92	7	5	-	-	2-3	2-3	2500	1	*
Valentia Obsy. †	1037·2	+6	—	0	c	40	85	9	5	-	-	9	9	4000	1	0
Roches Point	1036·6	+4	N	3	c	42	85	7	5	-	-	9	9	2500	1	2

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)	cmcfg	cmbcfgw	bcffxcm	$cmxcm_0$
Croydon		cf	cbfcm	$cm_0r_0m_0$
S. Farnborough	m_0id_0c	cid_0mmbm	bfoFbm	cm_0
Boscombe Down	cm_0	$cmbcm_0$	bm_0	bm_0
Calshot (Soton.)	cz_0fg	cz_0cmbm	$bmbm_0x$	bcm_0x
Lympne	fmcfg		$bcff\,pm_0$	cm_0ir_0
Manston	ofg	cmfgm	$cF\,p_0m_0$	$cprm_0$
Shoeburyness	omfcm	cmbcm	$bcmp_0c$	$cbccm_0$
Felixstowe	cfgoFcm	cm	pr	prm_0
Gorleston	bfgcm	cm_0ir_0	$oir_0\,cz_0$	czir
Mildenhall	bfF ofcm	cmbcmcm	$cmir_0cm_0$	pr_0cm_0bc
Cranwell	oFF,bcfg	bfg,cfg	Fdfbm	bm_0,cpr_0
Birmingham	cmf	fcb	Fbbc	Fbcc
Upper Heyford	cm_0	cm_0cm	bcm_0qb	m_0bbc
Ross-on-Wye	cm_0mcf	cfbf	bFbmx	bxbcx
Hartland Point	c	c	cbcb	b
Bristol	cm_0	cm_0m	cmbbcFmx	bcmbFx
Portland Bill	co	oo	bc	bcb
Plymouth	cm_0z	cz	$czbc,bm_0$	$bbcbxm_0$
The Lizard	c	c	cbc	bcx
Scilly (St. Mary's)	c	c	cp_0c	cbc
Guernsey				
Pembroke	id_0c	cbc	bx	bcc
Holyhead	ir_0m_0c	m_0b	bwjf	bwbcc
Chester (Sealand)	cmfgc	cmfbcb	bFm_0x	bm_0cir_0
Manchester	cfFfg	cmf	cfmFxm	$cbcm_0c$
Spurn Head	cbc	cpr_0	bbc	c
Catterick	cm_0cbc	ccz_0	bccbc	$bcpr_0m_0bc$
Tynemouth	bccpc	cbc	bcb	c
St. Abbs Head	ir_0c	bc	bccr	rqc
Leuchars	$bKcm_0bc$	bcb,c	cbbcc	cbcx
Renfrew (Abbots I.)	bbcmcfxcm	cmbfgx	bffbmx	$b,cbcm_0x$
Eskdalemuir	cbcc	cbcb	b	bbc
Point of Ayre	b	bbc	bw	bw
Tiree	bc	bc	bc	bck
Stornoway	$bccpr_0$	cb	bccpr	cPrrr
Dalwhinnie	c	c		cir_0o
Aberdeen	cr_0bcfs	$bcbz_0$	$bcir_0$	cir_0
Wick	cprbc	bcprc	$cprr_0c$	bccdd
Lerwick	cir	cir_0	cpr_0	c
Blacksod Point	c	cbc	b	b
Malin Head	ccbcb	bc	bcbcc	c
Aldergrove	iFbff	bFfgfgx	oFFbcf	bcffoFF
Birr Castle	c	bc	bc	c
Valentia Obsy. †	bxb	bvb vvc	cbcbx	bcxbx
Roches Point	bcz_0c	cz_0c	bcbw	bcbw

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.*

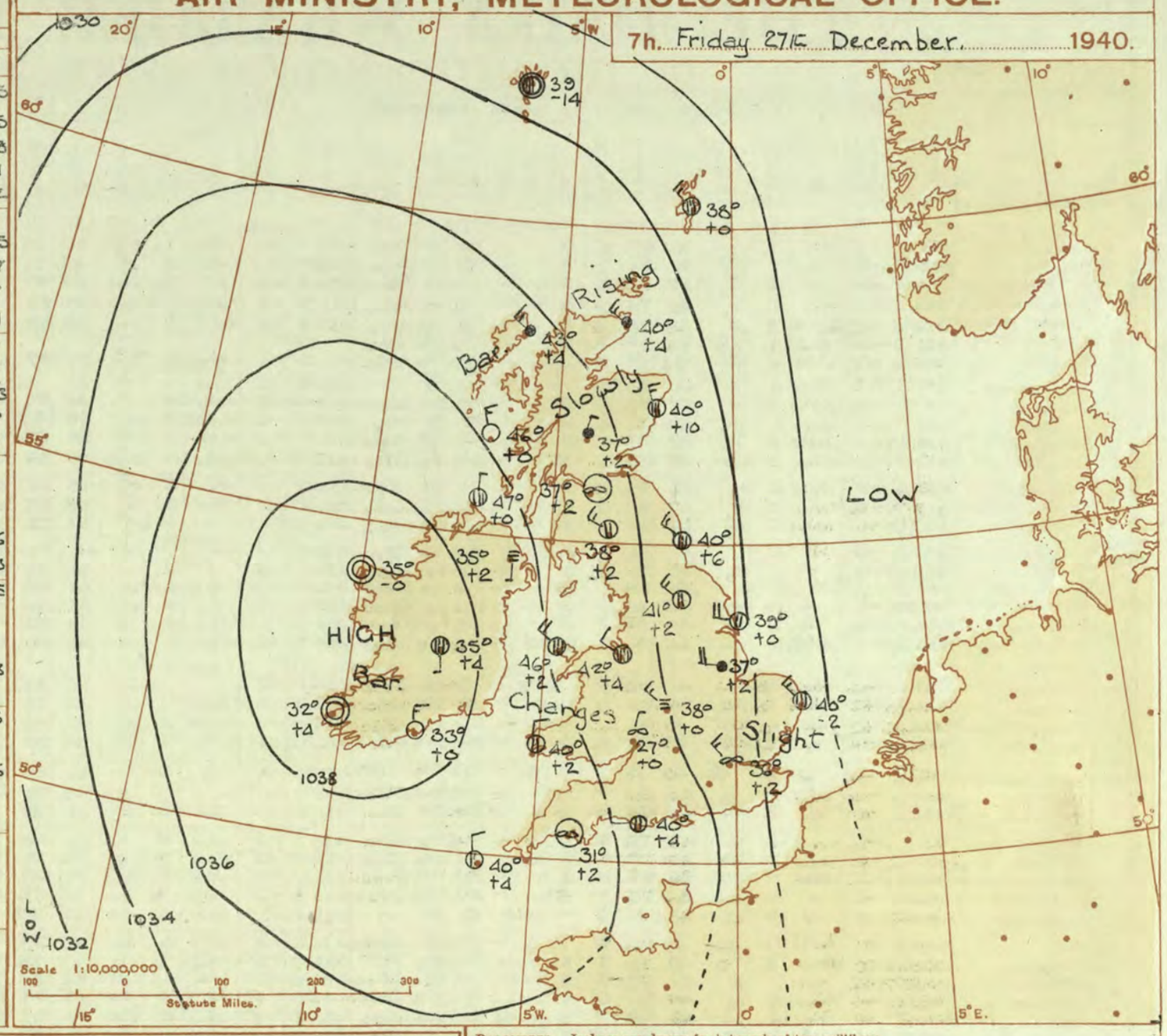
Abridged observations of additional stations in the
AVIATION WEATHER CODE

13h. G.M.T. 26th Dec.				18h. G.M.T.			01h. G.M.T. 27th. Dec.			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	6-	81637	26527	80	01854	27484				8-	81756	26215
115	32	02734	28486	52	81734	28487	52	02834	28487	51	01854	32285
203							5-	10845	30315	5-	81848	28388
206	86	25855	24286	80	01854	26384	5-	62748	00088	80	01854	00064
210	53	02866	23326	5-	02857	22327	5-	01854	26414	5-	00762	28212
220				62	64635	20368						
230	50	05631	00001	50	05652	26212	50	05653	28212	04	02765	28425
245				04	00900	24211	5-	02857	26127	5-	02857	30127
260	5-	22577	24167	00	45390	24240	5-	05565	22115	5-	62677	24167
277	54	00772	30103	04	00700	26101	50	00851	30301	50	00861	20301
279	93	05590	00005	50	05564	19214	5-	05663	00013	50	05663	00013
285	5-	02856	28416	8-	02746	30516				50	01744	32414
288	5-	05566	25216	5-	08464	25264	50	05664	27204	50	05653	28323
273										00	09590	00000
301	5-	41463	00043	50	05564	30124	00	05690	30220	50	05564	00024
321	00	08490	26100	5-	21566	24358	00	05590	27200	50	05664	26314
299	57	05643	25214	5-	05647	25467				4-	62647	26567
292	50	05664	26124	5-	22656	26166	50	05664	26114	50	01764	27214
310	--	02645	24325	- -	02646	24326				--	02446	24326
316	5-	45365	24245	5-	47367	24247	00	00590	28300	50	01563	26223
333	53	02755	32187	00	00700	00010	5-	05667	00007	50	25655	32285
334												
340	5-	08467	30157	00	08490	20110	00	08490	00000	5-	05647	24117
136	5-	08476	25246	8-	81458	26488	5-	05667	26487	50	05663	26483
336				50	01754	16314				53	01753	14314
350	5-	08468	04268							5-	05668	26425
368	57	52660	00058									
379	5-	05667	24327	5-	05673	30313	00	05590	26300	5-	05666	28226
390	50	45375	28245	50	45343	28143	5-	08448	24448	5-	08447	
382	5-	05568	32128	5-	08476	28226	50	05562	25322	50	05562	26312
438	02	33538	02228							5-	02557	30417
430	5-	05568	32128	00	08490	32110	50	05564	28214	50	05565	26215
409				5-	02667	00067	00	05690	12110	00	05690	00000

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 27th December. 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. 27th December, 1940
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light or moderate W to N.W. wind. Occasional slight local rain or showers and bright intervals. Less cold.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Light northwesterly wind. Mainly fair. Less cold.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	As 1-3.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland.	Light W. to N.W. wind, becoming moderate or fresh tomorrow. Mainly cloudy, occasional local drizzle. Average temperature.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Light or moderate W. to N.W. wind, freshening. Occasional showers and bright intervals. Average temperature.
17 N. W. Ireland 18 N. E. Ireland	Light variable wind, becoming W. to N.W. Mainly fair. Becoming less cold.
19 S. E. Ireland 20 S. W. Ireland	Light variable wind. Fair. Becoming less cold.

GENERAL INFERENCE.

An anticyclone centred over Ireland will move slightly S. or S.W while a depression north of Iceland moves S.E. In the west of the British Isles weather will be fair, while in the east it will be partly cloudy with occasional local rain or showers but some bright intervals.

FURTHER OUTLOOK.

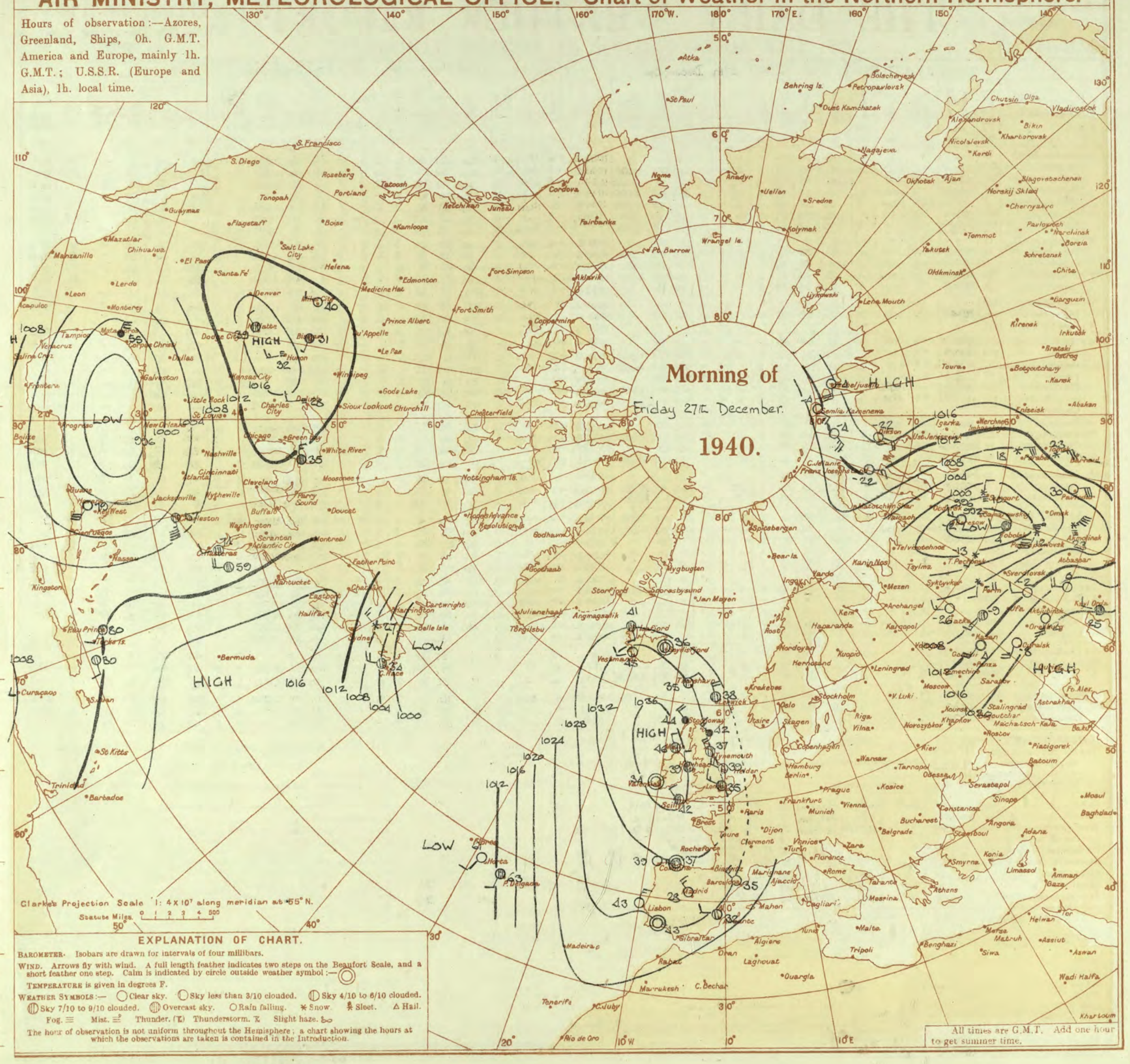
Little change, but becoming milder.

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.



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 27th December 1940.

No. 28890

OBSERVATIONS at 1 hr. G.M.T. 27th December

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	1032·7	−6	NW'N	3	zo	35	92	5	5	–	–	9+	9+	2000
	S. Farnborough	226	1033·8	−6	W	2	m	33	92	4	5	–	–	9	9	3000
	Boscombe Down	417	1034·9	−6	WNW	3	zo	31	97	8	5	–	–	2-3	2-3	5700
	Calshot (Sthmtn.)	8	1034·4	+2	NNW	3	zo	34	85	5	5	–	–	10	10	5000
	Lympne ...	346	1031·2	−10	SW	4	zo	35	92	5	5	–	–	10	10	900
	Manston ...	154	1030·3	−10	W	5	zo	38	85	5	8	–	–	9	9	2000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1030·3	−4	NW	4	zo	39	75	5	5	–	–	7-8	7-8	7000
	Gorleston ...	5	1030·1	0	NNW	3	c	38	85	5	5	–	–	9	9	1500
	Mildenhall ...	19	1031·3	0	WNW	4	zo	38	85	5	5	–	–	10	10	2400
	Cranwell ...	240	1032·5	+2	WNW	4	zo	35	85	5	–	–	–	0	0	–
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1034·1	−2	W'N	3	zo	34	85	6	–	–	–	0	0	–
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1035·9	+6	ENE	2	b	40	85	7	–	–	–	0	0	–
	Bristol ...	209	1033·5	−2	W	1	m/f	31	92	4	5	–	–	2-3	2-3	5000
	Portland Bill ...	32	1035·0	+4	N	2	bc	37	92	8	5	–	–	2-3	2-3	4000
	Plymouth ...	82	1036·3	+6	–	0	zo	32	85	5	–	–	–	0	0	–
	The Lizard ...	240	1035·9	+4	NE'E	2	bc	39	97	8	8	–	–	4-6	4-6	2500
	Scilly (St.Mary's)	163	1035·8	+2	NW	2	c	42	85	8	8	4	–	4-6	7-8	2500
	Guernsey ...	175														
6	Pembroke ...	142	1031·6	+2	N'W	1	b	37	92	7	–	–	–	0	0	–
7	Holyhead ...	26	1036·0	+2	NW'N	1	zo	39	92	6	7	–	–	7-8	7-8	3000
	Chester(Sealand)	16	1034·8	−4	NW'W	2	zo	35	92	6	–	–	–	0	0	–
8	Manchester ...	70	1034·7	−2	NNW	2	zo	37	92	5	5	–	–	10	10	2500
10	Spurn Head ...	29	1030·4	+2	W'N	4	bc	39	85	7	–	5	–	0	2-3	–
	Catterick ...	175	1032·7	+2	W'N	2	bc	39	85	7	5	–	–	4-6	4-6	4500
	Tynemouth ...	108	1031·6	−2	NW	4	c	37	75	7	8	–	–	7-8	7-8	1600
11	St. Abbs Head	280	1031·3	+2	NW	5	ro	43	75	7	5	2	–	9	10	2500
	Leuchars ...	36	1032·3	−2	WSW	3	c	44	75	7	5	–	–	7-8	7-8	4000
12	Renfrew (Abbots I.)	19	1034·8	−2	WS	2	m	35	97	4	–	–	–	0	0	–
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1035·1	0	N	3	b	44	97	7	–	4	–	0	Tr	–
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1034·2	−2	NW	4	pr	44	85	8	8	–	–	7-8	7-8	1800
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1031·3	0	NW	5	cq	42	85	7	5	7	–	7-8	9+	1500
16	Lerwick ...	156	1030·1	+6	NNW	4	c	38	85	7	8	7	–	4-6	7-8	800
17	Blacksod Point	18	1038·5	0	–	0	b	34	97	7	–	–	–	0	0	–
18	Malin Head ...	84	1037·2	−2	N'W	1	c	46	92	7	8	–	–	9	9	1500
	Aldergrove ...	268	1037·2	−4	–	0	f–	36	97	3	5	–	–	4-6	4-6	2500
19	Birr Castle ...	173	1038·5	+4	SE	1	c	34	97	7	5	–	–	10	10	2500
20	Valentia Obsy.	30	1037·5	0	–	0	b	34	85	9	–	–	–	0	0	–
	Roches Point	22	1037·8	+2	N	3	b	35	92	8	–	–	–	0	0	–

OBSERVATIONS at 7 hr. G.M.T. 27th December

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)	1033·2	+4	NNW	3	zo	38	85	6	5	–	–	10	10	2500	1	*
Croydon ...	1033·0	+2	NW	3	zo	36	92	5	5	–	–	10	10	1500	*	*
S. Farnborough	1034·1	−2	W	3	zo	33	92	6	5	–	–	9	9	5000	1	*
Boscombe Down	1035·4	+2	W'N	2	zo	30	97	5	–	–	–	0	Tr	–	3	*
Calshot (Sthmtn.)	1034·5	0	NW'N	4	zo	33	85	5	5	–	–	7-8	7-8	4500	3	*
Lympne ...	1031·5	+2	W	4	zo	38	85	6	5	7	–	9	9+	1600	1	*
Manston ...	1030·8	−2	NNW	5	zo	38	92	5	8	–	–	9	9	2000	*	
Shoeburyness ...	1031·8	+4	NNW	3	c	39	85	6	5	–	–	9	9	2500	1	*
Felixstowe ...	1030·5	0	NW	4	zo	39	85	5	5	–	8	2-3	4-6	4000	1	2
Gorleston ...	1029·1	−2	NW	3	c	40	92	6	5	–	–	7-8	7-8	1500	1	2
Mildenhall ...	1031·2	−2	WNW	3	m	37	85	4	8	–	–	4-6	4-6	3000	1	*
Cranwell ...	1032·5	+2	W'N	4	pr	37	85	6	8	–	–	7-8	7-8	2000	0	*
Birmingham ...	1034·2	0	NW	3	of	38	92	3	5	–	–	10	10	1500	1	*
Upper Heyford	1034·0	−2	NW	3	zo	34	85	6	5	–	–	4-6	4-6	5700	1	*
Ross-on-Wye	1035·6	0	N'E	1	zo	27	92	6	5	–	–	9+	9+	1500	3	*
Hartland Point	1036·6	+4	N	2	b	42	75	8	–	–	–	0	0	–	0	2
Bristol ...	1036·0	+2	–	0	if	31	97	3	–	–	–	0	0	–	1	*
Portland Bill ...	1035·5	+4	W	2	bc	40	85	8	4	–	–	4-6	4-6	4000	1	2
Plymouth ...	1036·7	+2	–	0	zo	31	97	5	–	–	–	0	0	–	3	0
The Lizard ...	1036·3	+4	–	0	bc	38	92	8	4	–	–	2-3	2-3	2500	0	1
Scilly (St.Mary's)	1036·6	+4	N'W	2	bc	40	75	7	8	–	–	2-3	2-3	1500	1	2
Guernsey ...																
Pembroke ...	1036·9	+2	N	2	bc	40	85	7	5	–	–	2-3	2-3	4000	1	1
Holyhead ...	1035·8	+2	NW	4	c	46	92	7	5	–	–	9	9	3000	1	3
Chester(Sealand)	1035·0	+4	NW	2	o/r	42	92	5	5	–	–	10	10	1000	1	*
Manchester ...	1034·5	+2	WSW	1	m	34	92	4	5	3	–	7-8	10	2500	1	*
Spurn Head ...	1030·4	0	W'N	4	bc	39	92	7	–	4	–	0	4-6	–	1	3
Catterick ...	1033·3	+2	NW	3	bc	41	85	7	5	–	–	2-3	2-3	4000	1	*
Tynemouth ...	1032·5	+6	NW	3	c	40	85	7	8	–	–	7-8	7-8	1600	1	2
St. Abbs Head	1032·5	+6	NW	4	c	43	*	7	5	4	–	4-6	7-8	2500	0	3
Leuchars ...	1033·7	+6	NW	1	bc	39	85	8	5	–	–	4-6	4-6	4000	1	*
Renfrew (Abbots I.)	1035·2	+2	–	0	zo	37	92	5	5	–	–	2-3	2-3	3000	1	*
Eskdalemuir ...	1034·3	+2	N'W	3	bc	38	85	8	5	–	–	2-3	2-3	2500	1	
Point of Ayre...	1035·2	0	NNW	3	b	44	97	8	–	4	–	0	1	–	1	2
Tiree	1035·6	0	NNW	3	b	46	92	8	1	4	–	Tr	Tr	3500	0	2
Stornoway ...	1034·5	+4	NW	3	rr	43	97	7	8	7	–	9	10	1500	1	2
Dalwhinnie ...	1034·3	+2	NNE	1	ro	37	97	7	5	–	–	10	10	1500	1	*
Aberdeen ...	1032·7	+10	NNW	3	c	40	92	6	6	7	–	7-8	9+	1500	1	2
Wick ...	1032·7	+4	NW	3	dd	40	92	7	5	1	–	4-6	7-8	800	1	2
Lerwick ...	1030·5	0	NW	3	c	38	65	8	5	3	–	4-6	7-8	1500	1	*
Blacksod Point	1038·6	0	–	0	b	35	97	7	–	–	–	0	0	–	0	1
Malin Head ...	1037·1	0	N	1	c	47	85	8	5	7	–	4-6	7-8	2500	0	0
Aldergrove ...	1037·6	+2	S	1	F	35	97	0	*	–	–	10	10	<150	1	*
Birr Castle ...	1038·9	+4	SSE	1	c	35	97	7	5	–	–	10	10	2500	1	*
Valentia Obsy.	1038·1	+4	–	0	b	32	92	8	–	–	–	0	0	–	3	0
Roches Point	1038·3	0	N	3	b	33	97	8	–	–	–	0	0	–	1	2

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 26th Hrs. (36)
London (Kew)	*	*	*	*	*	*
Croydon ...	38	34	19	–	Tr	0·3
S. Farnborough	37	33	29	–	0·3	0·0
Boscombe Down	37	31	23	Tr	–	0·0
Calshot (Sthmtn.)	38	29	24	–	–	0·0
Lympne ...	38	32	28	–	–	0·0
Manston ...		31	26		0·2	0·0
Shoeburyness ...	*	*	*	*	*	*
Felixstowe ...	41	35	28	–	Tr	0·2
Gorleston ...	38	36	32	–	Tr	0·0
Mildenhall ...	39	37	35	Tr	0·4	0·2
Cranwell ...	38	35	29	–	0·1	0·0
Birmingham ...	40	35	31	–	Tr	1·7
Upper Heyford	38	34	27	–	–	0·0
Ross-on-Wye	37	32	27	–	–	*
Hartland Point	36	25	19	–	–	0·0
Bristol ...	42	37	30	–	–	0·0
Portland Bill ...	39	27	*	–	–	0·0
Plymouth ...	41	36		–	–	*
The Lizard ...	39	28	28	–	–	0·0
Scilly (St.Mary's)	40	36	*	–	–	0·0
Guernsey ...	44	40		–	0·4	0·0
Pembroke ...	*	*	*	Tr	–	*
Holyhead ...	44	34	26	Tr	–	0·0
Chester(Sealand)	39	33	26	–	Tr	0·0
Manchester ...	39	33	26	–	–	0·6
Spurn Head ...	41	37	*	Tr	–	2·4
Catterick ...	44	38	33	–	Tr	3·3
Tynemouth ...	41	37	32	0·2	–	*
St. Abbs Head	44	39	*	Tr	Tr	*
Leuchars ...	45	37	28	–	–	0·7
Renfrew (Abbots I.)	37	31	24	–	Tr	0·0
Eskdalemuir ...	39	33	27	–	–	3·2
Point of Ayre...	44	41		–	–	5·8
Tiree	48	45	*	–	–	2·5
Stornoway ...	46	42	*	Tr	5	0·1
Dalwhinnie ...	41	34	30	–	1	0·4
Aberdeen ...	45	40	36	Tr	1	1·3
Wick ...	47	39	*	0·3	2	*
Lerwick ...	48	37	*	2	Tr	0·8
Blacksod Point	45	32	*	–	–	*
Malin Head ...	48	44	*	–	–	3·3
Aldergrove ...	40	29	25	Tr	–	3·3
Birr Castle ...	38	31	25	–	–	0·3
Valentia Obsy.	44	30	24	Tr	Tr	6·2
Roches Point	43	33	*	–	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. (To-day)
Kew...	18	cmcff	bcffw	ffxcm	38	34	19	–	Tr	0·3	*	*	6
Croydon	217		cf	cbfc,rom	37	33	29	–	0·3	0·0	*	*	4
Greenwich (Royal Observatory)...	149	cf	cbcfm	bxcrem	37	34	26	–	0·3	0·0	90	85	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	39	33	29	Tr			70	88	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	39	35	27	–	–		81	81	*
Camden Square	110	o	bc	*	39	35	31	–	–	*	*	89	*
Kensington	80	cbc	bccf	*	39	34	24	–	0·2		98	88	*
Hampstead Observatory	450	o	bc	odbc	38	34	29	–	0·1		*	93	*

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.
1·0	9h 26th	0·2	23h 26th

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 28th December 1940.

No. 28,891

OBSERVATIONS at 13h. G.M.T. 27th December

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)...	1034·3	0	NW	3	z$_o$	42	75	5	5	-	-	9+	9+	2500
	Croydon	1033·7	-2	NNW	2	id$_o$	40	92	4	5	3	-	7-8	9+	2500
	S. Farnborough	1035·1	0	NW	2	c/pr	41	85	6	5	-	-	9+	9+	4700
	Boscombe Down	1035·9	+2	NNW	3	z$_o$	40	85	6	5	-	-	9	9	4000
	Calshot (Soton.)	1034·9	-2	NW'N	3	z$_o$	41	85	6	5	-	-	9+	9+	4000
	Lympne ...	1032·4	+2	NNW	4	z$_o$	41	85	6	5	-	-	9+	9+	3500
	Manston ...	1031·9	-2	NW'W	5	z$_o$	41	92	6	8	3	-	4-6	7-8	3000
2	Shoeburyness ...	1032·7	0	N'W	3	c	43	85	6	5	-	-	9	9	4000
	Felixstowe ...	1031·8	-2	NNW	4	z$_o$	44	75	6	5	-	8	2-3	4-6	1800
	Gorleston ...	1030·6	+2	NNW	4	c	44	85	7	8	5	-	2-3	4-6	2000
	Mildenhall ...	1032·7	-2	NW	4	z$_o$	42	85	6	5	3	-	4-6	7-8	3000
	Cranwell ...	1033·7	+2	NNW	4	c/pr	42	85	5	5	3	-	9	9+	4000
3	Birmingham	1034·9	+2	NW	3	m	41	92	4	5	-	-	10	10	1500
	Upper Heyford	1034·7	-6	WNW	2	c/pr	41	85	5	5	-	-	9+	9+	3000
4	Ross-on-Wye ...	1035·7	0	W'N	1	c	41	85	8	5	-	-	9+	9+	2500
5	Hartland Point	1037·7	0	N	2	c	45	75	8	5	-	-	7-8	7-8	2500
	Bristol	1036·4	-2	WNW	2	z$_o$	42	85	6	5	-	-	9+	9+	3500
	Portland Bill ...	1035·8	+8	N	2	bc	45	92	8	5	-	-	4-6	4-6	4000
	Plymouth ...	1038·2	+2	-	0	z$_o$	41	85	5	-	-	-	0	0	-
	The Lizard ...	1038·5	+4	NNE	3	bc	48	75	8	4	-	-	2-3	2-3	4000
	Scilly (St. Mary's)	1038·7	+4	NE	1	bc	48	75	8	8	-	-	2-3	2-3	2500
	Guernsey ...														
6	Pembroke ...	1038·2	+4	WNW	2	bc	45	85	7	8	-	-	9	9	2500
7	Holyhead ...	1036·8	+2	NW'W	4	c	47	85	7	2	3	-	9	9+	2500
	Chester (Sealand)	1035·9	0	NW'W	3	cf	44	92	6	5	-	-	7-8	7-8	5000
8	Manchester ...	1035·4	-2	-	0	cf	38	97	2	5	-	-	9	9	4500
10	Spurn Head ...	1032·4	0	WNW	4	c	42	92	7	8	6	-	4-6	4-6	2500
	Catterick ...	1034·4	-2	NNW	3	c	44	85	7	5	-	-	9+	9+	3500
	Tynemouth ...	1034·4	+2	NW	3	c/pr	42	85	6	8	3	-	4-6	7-8	250[illegible]
11	St. Abbs Head	1034·0	+4	NW	3	c	43	85	8	4	5	-	4-6	9	3000
	Leuchars ...	1034·3	-4	WSW	1	c	43	85	6	5	7	-	7-8	9+	3200
12	Renfrew (Abbots I.)	1035·4	-6	WNW	2	bc	46	75	8	7	3	4	2-3	4-6	4000
	Eskdalemuir ...	1034·8	0	-	0	c	40	85	8	5	-	1	7-8	7-8	2500
	Point of Ayre ...	1036·2	+2	N'W	3	c	46	92	7	2	3	-	1	7-8	1500
13A	Tiree	1036·2	-2	NW	2	bc	48	75	8	1	3	-	2-3	4-6	3500
13B	Stornoway ...	1034·9	+14	WSW	3	c	43	92	8	8	7	-	7-8	9	2500
15	Dalwhinnie ...	1035·8	+2	N	1	c	41	85	7	8	-	4	4-6	9+	1500
	Aberdeen ...	1033·0	-4	NNW	3	c	42	85	6	5	-	-	9+	9+	2500
	Wick	1032·2	-8	W	2	bc	42	92	8	5	4	-	4-6	4-6	1500
16	Lerwick... ...	1029·2	-8	WNW	4	c/pr	39	85	8	8	7	-	4-6	9	1500
17	Blacksod Point..	1038·7	-4	-	0	bc	40	97	7	-	4	4	0	4-6	-
18	Malin Head ...	1038·0	0	W	3	c/f	45	92	6	8	-	2	4-6	7-8	1500
	Aldergrove ...	1027·9	-6	S'W	1	c/f	37	97	4	5	-	-	9+	9+	2000
19	Birr Castle ...	1039·0	+4	SSE	1	c	38	92	7	5	-	-	10	10	2500
20	Valentia Obsy. †	1038·5	-6	-	0	c	40	85	8	5	-	6	1	7-8	4000
	Roches Point ...	1039·5	+2	N	3	bc	38	92	7	-	-	5	0	2-3	-

OBSERVATIONS at 18h. G.M.T. 27th December — 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. (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. 27th (37)	Weather 13h.–18h. 27th (38)	Weather 18h. 27th to 1h. 28th (39)	Weather 1h.–7h. 28th (40)
London (Kew)	1035·6	+12	NW'N	2	c/d	42	85	5	5	-	-	9+	9+	2500	1	*	cbccm$_o$	cm$_o$id$_o$cm	cm$_o$	cm$_o$m
Croydon	1034·6	+2	NW	2	rf	41	97	3	5	-	-	7-8	7-8	2000	1	*	cm	m$_o$bcfir$_o$	fr$_o$cm	cm
S. Farnborough	1036·0	+8	NW	2	z$_o$	41	85	5	5	-	-	10	10	5000	1	*	cxbccpr$_o$	cpr$_o$	mm$_o$c	cm$_o$fm
Boscombe Down	1036·4	+4	NW	1	z$_o$	38	92	5	5	-	-	9	9	4000	1	*	bm$_o$bcm$_o$	cm$_o$m$_o$c	cm$_o$	cm$_o$bcc
Calshot (Soton.)	1035·7	+6	NW'N	2	z$_o$	40	85	5	5	-	-	10	10	3500	1	1	cbxm$_o$cm$_o$	cm$_o$	cm$_o$	cm$_o$
Lympne	1034·1	+14	NW	3	bc/r	41	85	6	5	-	-	4-6	4-6	2500	1	2	cm$_o$	cm$_o$r$_o$r$_o$		
Manston	1033·0	+10	NW	4	pr	40	92	5	8	-	-	10	10	1000	*	*	cm$_o$	cm$_o$pr$_o$		
Shoeburyness	1034·4	+14	NW	2	bc	41	92	6	8	-	-	4-6	4-6	4000	1	*	cbccm$_o$	cbcm$_o$p	pr$_o$cm$_o$	cm
Felixstowe	1033·8	+14	NW'N	3	pr	40	92	6	8	-	-	9	9	2100	1	2	bcm$_o$cpr$_o$	bcm$_o$cpr$_o$m	bcm$_o$cpr$_o$	cm
Gorleston	1032·9	+10	NW	2	c	40	85	6	8	-	-	7-8	7-8	1800	1	2	cir$_o$bc	bcpr$_o$c	cpr$_o$bc	bcz$_o$
Mildenhall	1034·2	+14	NW	3	z$_o$	39	92	6	5	4	-	2-3	2-3	3600	1	*	bcmcpr$_o$cm$_o$	cm$_o$bcm$_o$	bcm$_o$cm$_o$	cpr$_o$m$_o$w
Cranwell	1035·1	+6	NW	3	z$_o$	41	85	6	5	-	-	7-8	7-8	2000	1	*	cpr$_o$cm$_o$	cm$_o$	cm$_o$	cm$_o$,b,off
Birmingham	1035·8	+6	NW	2	cf	41	92	3	5	-	-	9+	9+	1500	1	*	fcm	r$_o$cmf	c	fcbcm
Upper Heyford	1035·8	+8	WNW	2	m	39	92	4	5	-	-	9+	9+	4000	1	*	ccpr$_o$cm$_o$	cm$_o$ir$_o$cm	bm$_o$cm$_o$	m$_o$cbcc
Ross-on-Wye	1036·2	+4	WNW	1	c	41	85	6	5	-	-	10	10	2500	1	*	cmbcfc	cc	c	cm$_o$
Hartland Point	1037·7	+6	NNW	2	c	45	75	8	5	-	-	9	9	2500	1	2	bbcc	cbcc	cbc	bc
Bristol	1037·0	+4	-	0	m	40	92	4	5	-	-	10	10	3500	1	*		cm$_o$m	bc	cm$_o$w
Portland Bill	1036·3	+10	N	2	c	44	92	7	5	-	-	10	10	4000	1	2	bcbc	cc	c	bmxbcmx
Plymouth	1038·2	+6	N	3	m	39	97	4	-	-	1	0	2-3	-	0	1	bmxm$_o$	bm$_o$bcm	f	c
The Lizard	1038·5	+4	N	2	bc	41	85	8	8	-	-	2-3	2-3	3000	0	1	bc	bc	bccw	c
Scilly (St. Mary's)	1038·7	+4	-	0	bc	42	75	8	8	-	4	2-3	4-6	2500	1	1	bc	bc	bcc	cx
Guernsey																				
Pembroke	1038·3	+4	NW'W	2	c	45	92	7	8	6	-	4-6	7-8	3500	1	1	bc	bccc	f	bcifc
Holyhead	1036·9	+2	WNW	4	z$_o$	44	97	5	5	3	-	1	2-3	500	1	2	cwbcc	cwm$_o$bc	bcm$_o$wc	cwxb
Chester (Sealand)	1036·0	+2	NW	3	cf	42	92	6	5	-	-	7-8	7-8	4500	1	*	cm$_o$ff	cm$_o$ir$_o$c	cbccm$_o$	cifbc
Manchester	1035·8	+6	SW'W	1	bf-	37	97	2	-	-	-	0	0	-	1	*	cm ff	cffbf	bFFo	oFFm$_o$
Spurn Head	1033·5	+4	WNW	4	c	39	92	7	8	4	-	4-6	4-6	2500	0	3	c	c	or$_o$rc	bcz$_o$
Catterick	1035·2	+2	WNW	1	c/pr	40	85	6	5	-	-	9+	9+	2200	0		bcc	cpr$_o$fgm$_o$	bmb	bbx
Tynemouth	1034·4	+6	NW	3	c/pr	42	85	5	8	-	-	9	9	2500	1	2	cpr	cp$_o$	cbcb	b
St. Abbs Head	1033·7	+2	NW	3	c	44	75	6	5	2	7	4-6	7-8	2500	0	2	c	cprm$_o$	bcb	bbc
Leuchars	1034·1	+2	WNW	3	b	42	85	8	7	-	-	2-3	2-3	3500	1	*	bcxcm	cm$_o$bcb	bbx	bxbcx
Renfrew (Abbots I.)	1035·7	+2	W'N	3	z$_o$	39	85	5	5	-	-	Tr	Tr	3000	1	*	cbcm$_o$bbc	cbcbm$_o$	bm$_o$x	bm$_o$xcm$_o$
Eskdalemuir	1035·3	+2	NE	1	bc	35	92	6	5	-	-	1	1	2500	1	*	bcxc	cbcb	bbx	bx
Point of Ayre	1036·3	+2	NW'N	3	c	45	92	8	5	1	-	7-8	10	2500	1	2	bbcc	c	bbcbw	bx
Tiree	1035·6	0	NW'W	1	b	42	92	8	1	-	-	Tr	Tr	3500	0	1	bc	bcb	bbcpr	bcc
Stornoway	1033·9	-4	WSW	3	c	42	92	7	8	7	-	7-8	9+	1500	1	2	crr	cpr	cbbc	bccpr
Dalwhinnie	1034·8	0	WNW	1	c	36	85	8	5	-	-	9+	9+	2500	1	*	c	cbcc		cbcc
Aberdeen	1032·7	-2	WNW	2	bc	42	85	6	5	4	-	4-6	4-6	2500	1	2	r$_o$cz$_o$	cbcz$_o$	cr$_o$bc	bcxmz
Wick	1031·5	-2	W	2	c	40	92	8	8	7	-	2-3	2-3	1500	1	1	ddcbc	cprbc	bcpr$_o$	cpr$_o$c
Lerwick	1026·8	-8	WNW	4	c	43	92	7	8	7	-	4-6	7-8	800	1	*	cpr$_o$	cpr$_o$	cprbcc	cpr
Blacksod Point	1037·8	0	SE	2	bc	39	97	7	-	-	5	0	2-3	-	0	2	cbc	cbc	c	c
Malin Head	1037·4	0	W	1	c	43	92	7	9	-	-	9+	9+	800	0	2	cciFc	c	cifc	bcc
Aldergrove	1038·0	0	S	1	bF+	32	97	1	-	-	-	0	0	-	1	*	oFFcm	bcmbff	oFFxbf	oFFffx
Birr Castle	1039·2	+2	SW	1	f	33	97	3	5	-	-	10	10	2500	1	*	c	cof	fb	bbcx
Valentia Obsy. †	1038·1	0	NE	1	c	41	85	9	5	-	6	9	10	4000	1	0	bxbcxcxc	c	cbcc	cbccpr$_o$c
Roches Point	1039·0	+2	NNE	2	z$_o$	39	92	6	-	-	5	0	4-6	-	1	2	bc	bcz$_o$	bxffe	bcxcw

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.*

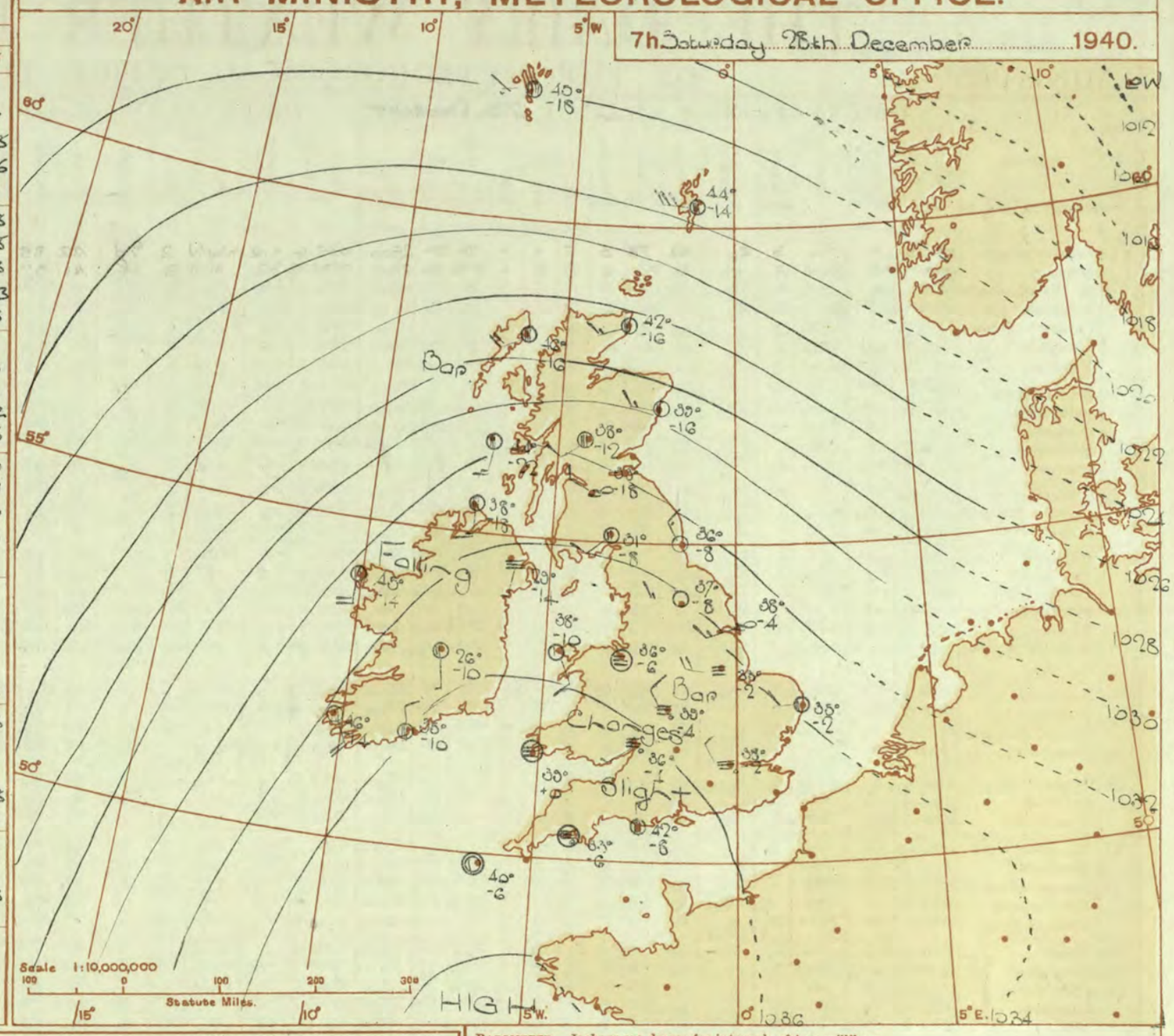
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Saturday 28th December 1940.

Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 27th Dec.			18h. G.M.T.			01h. G.M.T. 28th Dec.			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	8-	81647	24387	50	00852	24482	80	01853	24413			
115				52	81844	24487	52	81844	51585	52	81834	51587
203							8-	02848	16416	5-	03848	16528
206	84	02764	24285	44	01863	26183	00	00890	26200	8-	02866	26286
210	53	02855	22386	53	02865	26386	50	00061	21411	50	01864	22514
220	83	01954	27304	40	01763	27103				52	03644	23428
230	83	02745	27316	80	00742	30382	8-	81648	00018	5-	05648	18388
245	73	02855	28226	8-	01954	00084	00	00890	22210	50	01863	24303
260	53	08473	24114	50	08462	00022	00	05590	00040	50	05663	26203
277	70	01752	27413	24	00751	25211	00	00790	25210	50	01763	25203
279	5-	25557	00087	53	08464	20225	50	05563	20203	57	05563	22114
285	53	22734	26467	5-	02847	32327				20	01635	30585
288	86	05556	30287	5-	08458	28128	00	05590	22110	00	05590	18103
273	--	47309	00049							50	01762	13102
301	5-	41464	01144	5-	45364	00044	00	45190	00040	5-	45156	00046
325	53	01664	29415	53	05554	26225	5-	08467	24167	00	47390	24140
299	50	01843	30463	80	01744	30414	50	05544	25214	50	05641	25201
292	5-	05657	30327	5-	05658	30188	50	05562	00022	00	08490	26200
310	--	05536	26426	--	48109	26420				--	46109	16549
316	5-	05566	26226	5-	41468	30248	5-	45367	28147			
333	2-	25747	28387	5-	02656	32386	5-	05658	32128			
334												
340	5-	05547	28127	50	25645	32185	5-	43348	00048	5-	05646	00016
136	56	25653	29486	86	25653	28383	8-	25665	27385			
336	54	01753	14414	54	02754	24416				51	43754	16328
350	5-	05568	26328							5-	05468	28228
360	54	05665	26215									
379	5-	05667	28327	50	22564	28264	5-	05558	28228	50	05654	28214
390	53	05564	26426	53	08451	26365	5-	08468	28217	5-	08468	28248
385	53	05666	28227	5-	05567	28127	5-	05568	28128	5-	08448	00028
438	50	01645	30315							5-	03548	02328
430	5-	05678	32228	5-	47367	28147	5-	08468	00028	5-	05567	00027
409	5-	02767	00007	50	01763	28113	50	05651	00011	5-	05653	00023

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. 28th December, 1940.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light or moderate W to N.W. winds. Mainly fair. Rather cold.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ...	Light W. to N.W. wind. Fair today. Much fog tonight and tomorrow. Rather cold.
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Moderate westerly wind. Fair. Rather cold, becoming milder.
13 { A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland	Moderate or fresh westerly wind. Occasional showers and bright intervals. Average temperature.
15 N. E. Scotland 16 Orkneys and Shetlands	Fresh or strong W. to N.W. wind, veering N. later. Cloudy. Occasional showers, some rain tomorrow. Average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind light or moderate, mainly S.W to W. Bright intervals. Local fog tonight and tomorrow. Rather cold, becoming milder

GENERAL INFERENCE.

An anticyclone over the Bay of Biscay is drifting slowly south. A depression off N.W. Norway is moving S.E. and an associated trough north of the Faroes is moving slowly south. There will be occasional showers and bright intervals in North Scotland and some fog tonight in the S.W. Elsewhere weather will be mainly fair.

FURTHER OUTLOOK.

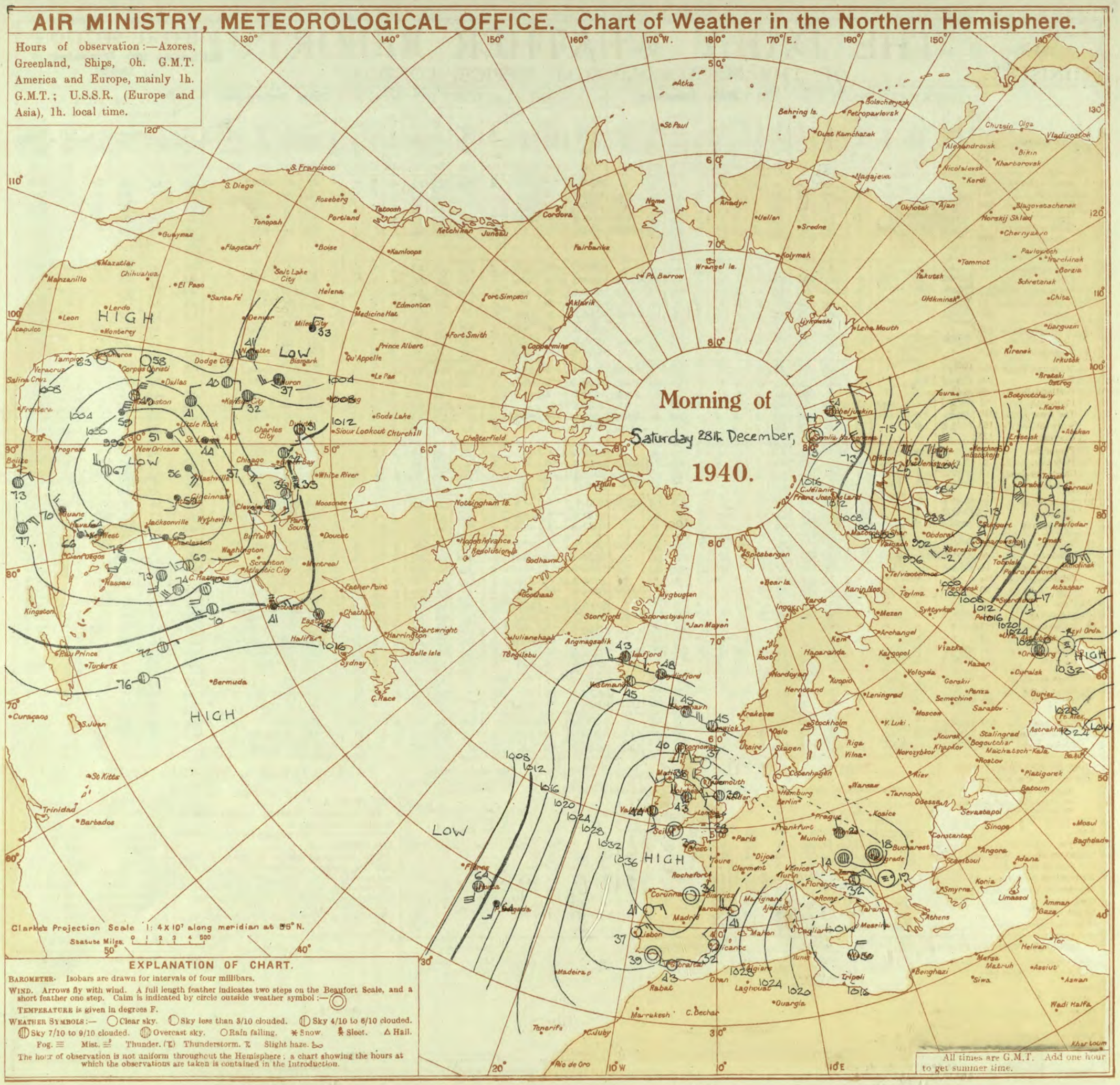
Mainly fair in the south, unsettled in the north.

Forecasts issued at 12 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

Saturday 28th December 1940.

No. 28,891

OBSERVATIONS at 1 hr. G.M.T. 28th December

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	1035·5	+2	NW	2	m	38	92	4	5	-	-	10	10	2000
	S. Farnborough	226	1036·5	0	W	1	z₀	38	92	5	5	-	-	10	10	4000
	Boscombe Down	417	1036·8	-2	-	0	z₀	37	92	5	5	-	-	10	10	2000
	Calshot (Sthmtn.)	8	1036·5	+2	NW	1	z₀	40	92	5	5	-	-	10	10	4500
	Lympne ...	346														
	Manston ...	154														
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1034·5	0	NW	3	m	37	97	4	5	-	-	9+	9+	4000
	Gorleston ...	5	1033·5	0	NW'W	2	bc	38	85	6	5	-	-	4-6	4-6	2500
	Mildenhall ...	19	1035·0	+2	WNW	2	z₀	35	97	6	5	-	-	10	10	3000
	Cranwell ...	240	1035·3	-2	WNW	4	z₀	39	85	5	5	-	-	10	10	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1036·6	-2	-	0	z₀	39	97	5	5	-	-	10	10	4000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1037·7	-2	N	3	bc	44	85	8	2	-	-	4-6	4-6	2000
	Bristol ...	209	1037·4	+2	-	0	z₀	38	92	5	5	-	-	9+	9+	4500
	Portland Bill ...	32	1036·8	-4	N	2	c	43	85	7	5	-	-	10	10	2500
	Plymouth ...	82	1028·5	-6	NW	1	m	35	97	4	-	-	-	0	0	-
	The Lizard ...	240	1038·2	-4	NW'N	2	c	40	92	8	8	2	-	7-8	9+	2500
	Scilly (St.Mary's)	163	1039·0	0	-	0	b	39	85	7	8	-	-	1	1	2500
	Guernsey ...	175														
6	Pembroke ...	142	1037·3	-4	N'E	1	bF+	39	97	1	-	-	-	0	0	-
7	Holyhead ...	26	1036·8	-2	WNW	4	c	43	92	7	5	3	-	4-6	7-8	3500
	Chester(Sealand)	16	1036·3	-2	NW	1	z₀	41	97	5	5	-	-	9	9	5500
8	Manchester ...	70	1036·6	-2	ENE	1	F-	34	97	1	*	-	-	10	10	<150
10	Spurn Head ...	29	1034·2	0	W	3	c	39	97	6	5	-	-	7-8	7-8	2500
	Catterick ...	175	1035·0	-2	-	0	b	37	92	7	-	-	-	0	0	-
	Tynemouth ...	108	1034·4	-4	NW	4	b	36	92	6	-	-	-	0	0	-
11	St. Abbs Head	280	1032·8	-4	NW	4	b	43	75	7	4	-	-	Tr	Tr	3000
	Leuchars ...	36	1033·4	-6	NW	2	b	37	85	8	-	-	-	0	0	-
12	Renfrew (Abbots I.)	19	1035·4	-6	W	1	z₀	36	97	5	-	-	-	0	0	-
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1036·3	0	NNW	3	b	45	97	8	5	-	-	1	1	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1031·2	-18	SSW	2	bc	40	85	8	5	-	-	2-3	2-3	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1029·6	-12	WSW	4	pr	40	85	7	5	7	-	4-6	7-8	1500
16	Lerwick ...	156	1024·2	-22	WNW	6	c	45	85	7	8	7	-	7-8	9	1500
17	Blacksod Point	18	1035·8	-8	SE	3	c	40	92	7	-	7	-	0	10	-
18	Malin Head ...	84	1035·7	-16	SW	3	b	35	92	8	-	-	-	0	0	-
	Aldergrove ...	268	1037·7	-6	-	0	F+	26	97	1	*	-	-	10	10	<150
19	Birr Castle ...	173	1038·1	-4	SSE	1	b	27	97	7	-	-	-	0	0	-
20	Valentia Obsy.	30	1037·2	-6	SSE	3	c	44	75	8	5	-	-	9+	9+	4000
	Roches Point	22	1038·7	-6	NNE	2	bf	33	97	9	5	-	-	1	1	<150

OBSERVATIONS at 7 hr. G.M.T. 28th December

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)	1035·3	-4	W'N	2	m	39	92	4	5	-	-	10	10	2500	1	*
	Croydon ...	1035·1	-2	NW	1	m	38	91	4	5	-	-	10	10	2000	1	*
	S. Farnborough	1035·8	-6	W'S	1	m/f	38	97	4	5	-	-	9+	9+	4600	1	*
	Boscombe Down	1036·3	-4	WNW	2	z₀	37	97	5	5	-	-	9+	9+	2000	1	*
	Calshot (Sthmtn.)	1036·1	-2	-	0	z₀	37	97	5	5	-	-	7-8	9+	5500	1	1
	Lympne ...																§
	Manston ...																*
2	Shoeburyness ...	1032·7	-4	N'W	2	m	39	92	4	5	-	-	10	10	4000	1	*
	Felixstowe ...	1034·2	-2	W'N	2	m	37	92	4	5	-	-	9+	9+	4500	1	1
	Gorleston ...	1032·9	-2	W	2	bc	35	92	6	5	-	-	4-6	4-6	2500	1	2
	Mildenhall ...	1034·1	-6	W	2	m	37	92	4	5	-	-	9+	9+	3800	1	*
	Cranwell ...	1034·7	-2	W'N	4	F	33	97	0	*	-	-	10	10	<150	0	*
3	Birmingham ...	1036·4	-4	NW	2	m	39	92	4	5	-	-	4-6	4-6	1500	1	*
	Upper Heyford	1035·6	-2	NW	2	z₀	39	92	5	5	-	-	10	10	1200	1	*
4	Ross-on-Wye	1036·0	-4	SW	1	m	36	97	4	5	-	-	10	10	2500	1	*
5	Hartland Point	1036·6	-6	SSE	2	bc	40	92	8	2	-	-	4-6	4-6	2000	0	2
	Bristol ...	1036·3	-6	WNW	1	z₀	37	97	6	5	-	-	10	10	5500	1	*
	Portland Bill ...	1035·9	-8	N	2	c	42	92	7	5	-	-	10	10	2500	1	3
	Plymouth ...	1037·5	-6	-	0	m	33	97	4	5	-	-	2-3	2-3	2000	3	1
	The Lizard ...	1037·0	-4	NNW	2	c	42	92	7	8	2	-	9	10	2000	0	2
	Scilly (St.Mary's)	1037·6	-6	-	0	b	40	85	7	5	-	-	1	1	2500	1	1
6	Pembroke ...	1036·9	0	W	1	if	39	97	6	2	-	-	7-8	7-8	2500	1	1
7	Holyhead ...	1035·4	-10	SE	2	b	38	97	7	5	-	-	Tr	Tr	3500	1	1
	Chester(Sealand)	1035·5	-6	-	0	if	36	97	3	5	-	-	7-8	7-8	4600	1	*
8	Manchester ...	1035·4	-8	SE	1	F+	37	97	1	*	-	-	10	10	<150	1	*
10	Spurn Head ...	1033·4	-4	W'S	3	z₀	38	92	5	4	-	-	4-6	4-6	2500	0	3
	Catterick ...	1033·8	-8	WNW	3	b	37	9.	7	-	-	-	0	0	-	0	*
	Tynemouth ...	1032·6	-8	NW	3	b	36	92	6	-	-	-	0	0	-	1	2
11	St. Abbs Head	1031·4	-6	WNW	4	bc	38	85	7	4	4	-	2-3	2-3	3000	0	2
	Leuchars ...	1030·8	-14	WSW	3	bc	35	92	7	-	7	-	0	4-6	-	1	*
12	Renfrew (Abbots I.)	1032·6	-18	NW	2	z₀	33	97	5	5	-	-	7-8	7-8	3000	1	*
	Eskdalemuir ...	1033·8	-8	SW	2	bc	31	92	7	-	4	-	0	2-3	-	3	
	Point of Ayre...	1034·2	-14	SW'W	3	b	33	97	8	5	4	-	Tr	1	2500	1	1
13A	Tiree	1029·8	-16	SW'W	4	c	46	92	7	5	-	-	9+	9+	2100	0	3
13B	Stornoway ...	1027·2	-22	SSW	3	c	44	85	7	5	7	-	4-6	9+	2500	1	2
15	Dalwhinnie ...	1030·7	-12	SW	2	c	38	75	7	5	1	-	2-3	9+	2500	3	*
	Aberdeen ...	1029·0	-16	WNW	3	bc	39	75	6	5	7	-	4-6	4-6	2500	1	2
	Wick ...	1026·6	-16	WSW	3	c	42	85	7	5	7	-	7-8	10	1500	1	2
16	Lerwick ...	1020·9	-14	W'N	6	c/pr	44	92	7	8	7	-	7-8	9+	800	1	*
17	Blacksod Point	1032·9	-14	S	4	c	45	92	7	-	7	-	0	10	-	0	2
18	Malin Head ...	1032·2	-18	S	3	c	38	75	8	5	6	-	4-6	7-8	4000	0	0
	Aldergrove ...	1035·1	-14	SSW	1	F	29	97	1	*	-	-	10	10	<150	1	*
19	Birr Castle ...	1035·6	-10	SSE	1	bc	26	97	8	-	4	-	0	2-3	-	3	*
20	Valentia Obsy.	1034·3	-14	SE'S	4	c	46	75	8	5	-	-	10	10	2500	1	2
	Roches Point	1036·2	-10	N	2	c	35	97	7	5	-	-	9	9	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 27th Hrs. (36)
London (Kew)	43	39	36	Tr	-	0·2
Croydon ...	41	37	35	Tr	0·1	0·0
S. Farnborough	42	37	35	Tr	-	0·3
Boscombe Down	41	35	30	-	-	1·8
Calshot (Sthmtn.)	42	37	34	-	-	2·6
Lympne ...	41			Tr		
Shoeburyness ...	44	37	33	0·1	Tr	0·7
Felixstowe ...	43	37	34	0·2	Tr	2·5
Gorleston ...	45	32	31	0·4	0·4	1·3
Mildenhall ...	43	34	25	0·1	Tr	0·6
Cranwell ...	43	32	30	Tr	Tr	0·0
Birmingham ...	42	39	35	Tr	-	0·0
Upper Heyford	41	37	34	0·1	-	*
Ross-on-Wye	42	36	33	-	-	1·3
Hartland Point	45	39	32	-	-	2·2
Bristol ...	42	37	32	-	-	1·3
Portland Bill ...	45	40	*	-	-	*
Plymouth ...	43	32	21	-	-	6·3
The Lizard ...	43	38	*	-	-	6·7
Scilly (St.Mary's)	43	38	*	-	-	4·5
Pembroke ...	46	35	*	-	Tr	2·5
Holyhead ...	47	37	30	-	0·1	1·2
Chester(Sealand)	44	34	29	0·1	-	0·1
Manchester ...	39	31	26	-	-	0·0
Spurn Head ...	42	36	*	0·3	0·3	2·0
Catterick ...	44	37	29	Tr	-	0·5
Tynemouth ...	43	35	31	1	-	*
St. Abbs Head	44	37	*	Tr	-	*
Leuchars ...	47	33	27	-	-	0·4
Renfrew (Abbots I.)	46	31	21	-	Tr	4·1
Eskdalemuir ...	43	30	24	-	-	3·4
Point of Ayre...	46	33	*	-	-	1·7
Tiree	48	34	*	-	Tr	3·9
Stornoway ...	44	37	*	1	0·2	0·8
Dalwhinnie ...	41	35	26	0·2	-	0·0
Aberdeen ...	43	36	28	0·1	Tr	0·1
Wick ...	44	36	*	.2	0·3	*
Lerwick ...	45	42	*	0·2	3	0·0
Blacksod Point	41	37	*	-	-	*
Malin Head ...	48	33	*	-	-	0·0
Aldergrove ...	38	26	26	0·1	-	0·0
Birr Castle ...	38	25	22	-	-	0·0
Valentia Obsy.	42	40	35	Tr	Tr	3·7
Roches Point	42	33	*	Tr	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. (To-day.)
Kew...	18	cbccmo	cidoc	cm	43	39	36	Tr	-	0·2	*	*	4
Croydon	217	cm	mobcfrio	fr.cm	41	37	35	Tr	0·1	0·0	*	*	4
Greenwich (Royal Observatory)...	149	cm	cirom	cmf	43	38	34	Tr	-	0·0	78	91	2
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	44	39	37	Tr		0·0	77	92	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	43	38	34	-	-	0·0	75	87	*
Camden Square	110	bc	bc	*	43	38	35	-	-	*	*	93	*
Kensington	80	bc	cmr	*	43	39	36	Tr	-		83	93	*
Hampstead Observatory	450	dcp	cod	of	41	36	35	Tr	0·2		*	98	*

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.
0·6	19-20h 27th	0·2	9h 27th

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

Sunday 29th December 1940.

No. 28892

OBSERVATIONS at 13h. G.M.T. 28th December

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)...	1036·0	·6	W	2	zo	41	85	5	5	-	-	10	10	2500
	Croydon ...	1035·2	-6	WNW	1	m	40	92	4	5	-	-	10	10	700
	S. Farnborough	1035·6	-10	NW	2	zo	42	85	6	5	-	-	9+	9+	5400
	Boscombe Down	1035·7	-10	-	0	z	42	85	5	5	-	-	9+	9+	3500
	Calshot (Soton.)	1035·9	-6	-	0	m	42	92	4	5	-	-	9+	9+	7000
	Lympne ...	1034·6	-10	NE'N	1	of	41	85	3	5	-	-	10	10	4500
	Manston ...	1034·2	-14	W	3	of	40	97	3	5	-	-	10	10	3000
2	Shoeburyness ...	1032·4	-10	WNW	2	fg	42	92	3	5	-	-	9+	9+	800
	Felixstowe ...	1034·0	-10	WNW	4	z	41	85	5	-	3	-	0	4-6	2500
	Gorleston ...	1033·2	-6	W	3	m	37	92	4	5	-	-	10	10	400
	Mildenhall ...	1034·4	-12	WSW	3	zo	39	97	5	5	-	-	9	9	700
	Cranwell ...	1033·9	-18	WS	4	m	41	85	4	-	-	7	0	10	-
3	Birmingham	1034·3	-10	W	2	z	43	65	6	-	-	6	0	4-6	-
	Upper Heyford	1035·3	-10	-	0	zo	48	85	6	-	-	4	0	Tr	-
4	Ross-on-Wye ...	1034·9	-10	SW	1	bc	44	75	7	-	4	1	0	4-6	-
5	Hartland Point	1035·9	-12	SSW	2	c	44	85	8	8	6	-	2-3	9	2000
	Bristol ...	1035·7	-14	-	0	zo	45	75	6	5	3	2	1	4-6	5700
	Portland Bill ...	1035·6	-6	NW	2	c	45	85	8	5	-	-	10	10	4000
	Plymouth ...	1037·1	-6	W	1	zo	46	75	5	7	4	1	1	2-3	2500
	The Lizard ...	1036·2	-10	WSW	3	bc	50	65	8	8	6	-	4-6	4-6	3000
	Scilly (St. Mary's)	1037·0	-6	SSE	2	e/p	42	85	8	5	7	-	7-8	10	2000
	Guernsey ...														
6	Pembroke ...	1035·7	-4	E'S	1	if	41	97	6	2	6	-	4-6	9+	2500
7	Holyhead ...	1034·0	-10	SWW	3	bc	47	65	8	1	3	2	Tr	2-3	3000
	Chester (Sealand)	1034·0	-14	WSW	2	c	47	65	7	5	-	8	Tr	7-8	2500
8	Manchester ...	1034·2	-14	S'E	2	cf-	38	87	3	5	-	-	9	10	1100
10	Spurn Head ...	1032·2	-4	W'S	3	c	39	92	6	5	5	2	2-3	7-8	4000
	Catterick ...	1031·5	-22	W'S	3	bc	42	85	7	8	4	2	1	4-6	3000
	Tynemouth ...	1030·5	-16	W	3	bc	40	92	5	2	3	1	4-6	4-6	2800
11	St. Abbs Head	1028·5	-20	W	4	c	41	75	9	5	7	4	4-6	9+	2500
	Leuchars ...	1027·4	-22	SW	3	zo	38	85	6	5	7	-	9+	10	3200
12	Renfrew (Abbots I.)	1029·5	-22	WSW	2	c	41	85	7	5	7	-	2-3	10	3500
	Eskdalemuir ...	1030·6	-16	S'W	2	c	34	92	7	5	7	-	7-8	9+	2500
	Point of Ayre ...	1032·1	-14	W'S	4	bc	45	85	8	5	4	9	2-3	4-6	4000
13A	Tiree ...	1026·3	-16	SW'W	5	roro	45	97	6	-	2	-	10	10	1200
13B	Stornoway ...	1022·2	-38	SW	4	roro	47	92	6	5	2	-	7-8	10	1500
15	Dalwhinnie ...	1026·5	-24	SW	2	ido	42	75	7	5	2	-	7-8	10	1500
	Aberdeen ...	1024·7	-24	SW	2	c	40	85	5	5	7	-	2-3	10	5700
	Wick ...	1022·0	-26	SW	3	c	45	85	8	5	2	-	7-8	10	4000
16	Lerwick...	1017·6	-18	W'N	5	c/pr	40	85	7	8	7	-	7-8	9+	800
17	Blacksod Point..	1030·4	-12	S	4	iro	47	97	7	6	-	-	10	10	1500
18	Malin Head ...	1029·7	-18	SSW	4	c/pr	41	75	8	4	7	-	2-3	7-8	4000
	Aldergrove ...	1033·0	-18	SSW	1	c	31	97	7	5	-	-	9+	9+	3000
19	Birr Castle ...	1033·7	-14	SSE	1	c	37	92	8	5	-	-	9+	9+	4000
20	Valentia Obsy. †	1032·7	-14	SSW	4	c/r	48	75	8	5	2	-	9	10	2500
	Roches Point ...	1034·8	-10	N	1	c/r	40	97	7	6	-	5	4-6	7-8	1500

OBSERVATIONS at 18h. G.M.T. 28th December

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)	1034·0	-10	SW	1	bf+	35	97	3	-	-	-	0	0	-	1	*
Croydon	1033·8	-14	-	0	m	35	97	4	-	4	-	0	Tr	-	0	*
S. Farnborough	1034·4	-4	W'S	1	zo	35	92	5	-	-	1	0	2-3	-	1	*
Boscombe Down	1034·6	-4	W'S	2	zo	36	92	5	5	-	1	2-3	2-3	4000	1	*
Calshot (Soton.)	1034·6	-6	W	1	m	39	92	4	5	-	-	9	9	6500	1	0
Lympne	1033·8	-4	WNW	1	bf+	35	97	2	-	-	-	0	0	-		§1
Manston	1033·3	·8	W'S	3	bf	36	97	3	-	-	-	0	0	-		*
Shoeburyness	1033·5	-6	WNW	1	bm	36	92	4	-	-	-	0	0	-	-	*
Felixstowe	1032·7	-10	WNW	2	m	37	92	3	-	-	-	0	4-6	-	1	2
Gorleston	1031·3	-6	WSW	3	b	36	92	4	-	-	-	0	0	-	1	1
Mildenhall	1032·5	-10	WSW	3	b	35	97	4	-	-	-	0	0	-	1	*
Cranwell	1031·8	-10	W'S	4	zo	36	92	5	-	-	4	0	7-8	-	0	*
Birmingham	1033·0	-6	WSW	2	m	38	85	4	-	-	2	0	4-6	-	1	*
Upper Heyford	1033·8	-8	-	0	zo	34	97	6	-	-	1	0	2-3	-	1	*
Ross-on-Wye	1033·6	-10	SW	2	fg	37	85	6	-	-	1	0	1	-	1	*
Hartland Point	1034·0	-10	W	3	c	45	75	8	5	7	-	2-3	9+	2000	1	2
Bristol	1034·5	-6	W	1	zo	39	92	6	5	3	6	2-3	7-8	5700	1	*
Portland Bill	1034·6	-6	NW	2	bc	43	85	8	5	-	-	4-6	4-6	4000	1	2
Plymouth	1035·4	-2	N	1	bc/+	40	92	2	-	3	-	0	4-6	-	0	1
The Lizard	1035·2	-2	W	3	cpr	45	85	8	8	2	-	9	10	2500	1	2
Scilly (St. Mary's)	1034·9	-10	SW'S	3	c	45	75	8	8	7	-	4-6	9+	1800	1	2
Guernsey																
Pembroke	1032·9	-20	SW'W	4	c	46	85	7	5	2	-	4-6	10	2500	1	2
Holyhead	1031·6	-12	W'S	4	c	44	85	7	5	3	-	2-3	9+	3000	1	2
Chester (Sealand)	1031·8	-12	SW'W	1	m	39	85	4	5	-	6	9	9+	3800	1	*
Manchester	1031·6	-12	SW	3	m	36	97	4	-	3	-	9	2-3	-	1	*
Spurn Head	1028·9	·10	SW'W	4	bc	38	97	5	5	-	-	2-3	2-3	4000	0	3
Catterick	1029·2	-14	W	2	c	41	75	7	5	7	-	4-6	7-8	2250	0	
Tynemouth	1027·3	-18	W	4	c	42	85	6	5	-	-	9+	9+	2800	1	2
St. Abbs Head	1024·8	-18	W	5	c	39	87	8	5	2	-	7-8	10	2500	0	2
Leuchars	1023·8	-24	WSW	3	iro	41	85	6	5	2	-	7-8	10	3200	1	*
Renfrew (Abbots I.)	1026·6	-10	WSW	4	ido	43	85	6	5	7	-	9	9+	2500	1	*
Eskdalemuir	1027·6	-16	WSW	3	c	36	85	6	5	-	-	10	10	1500	1	*
Point of Ayre	1029·1	-10	W	4	bcjf	42	92	8	8	-	-	4-6	4-6	2500	1	2
Tiree	1023·1	-10	WSW	5	dodo	47	97	6	-	2	-	10	10	1200	1	4
Stornoway	1018·9	-14	WSW	5	rr	48	97	6	5	2	-	9	10	<1000	1	3
Dalwhinnie	1022·8	-20	SW	3	ido	41	92	6	5	2	-	7-8	10	1500	1	*
Aberdeen	1020·9	-4	SW'W	2	iro	42	85	6	5	2	-	1	10	4000	1	2
Wick	1017·0	·36	SW	4	iro	46	92	7	5	7	-	4-6	7-8	1500	1	2
Lerwick	1013·1	-20	SSW	4	rr	45	97	5	5	2	-	7-8	10	450	1	*
Blacksod Point	1027·7	-12	S	4	iro	48	97	6	6	-	-	9+	9+	1500	2	3
Malin Head	1026·6	-18	SW	4	c	44	85	8	5	-	-	9	9	4000	0	2
Aldergrove	1029·4	-2	SW	3	c	36	97	7	5	-	-	9+	9+	3800	1	3 *
Birr Castle	1031·1	-12	S	1	bc	39	85	8	-	4	-	0	2-3	-	1	*
Valentia Obsy. †	1030·9	-12	SSW	4	c	48	85	8	5	2	-	9+	10	1500	1	2
Roches Point	1032·4	-10	SW	2	c/r	46	85	7	6	1	-	7-8	9	1500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 28th (37)	Weather 13h.—18h. 28th (38)	Weather 18h. 28th to 1h. 29th (39)	Weather 1h.—7h. 29th (40)
London (Kew)	cfmf mm	crobf	bffx	bbccmo
Croydon	cm	cm bm	bmfbcf	cfbcem
S. Farnborough	cmo	cbmow	bmfx bc	bcmoiroc
Boscombe Down	cm cmo	cm bcmo	bm	cmo
Calshot (Soton.)	cm cm	cm cmo cm	cbmxff	xbff cmo
Lympne	cff	#	bfFx	Fxcmo
Manston	cff	#	cbffm	bbccmo
Shoeburyness	cf	cfcm	bmbfx	bxcmbbx
Felixstowe	cmifmb	cm cmo bcm	bifcff	bcfcmiro
Gorleston	bcmz	cmobcbm	bmczo	czbc
Mildenhall	oFcmo	obcbm	bmobcmox	bcxcwmo
Cranwell	oFFobcm	cmbcmo	bcmo momo	bcbbcmo
Birmingham	mfbc	bcz	bcmc	c
Upper Heyford	cmobcbm	bcmo	bmobmbf	cmo
Ross-on-Wye	cmbFFbm	cbcb	bbcmoc	c
Hartland Point	bcrr	c	rorc	irep
Bristol	cocmo	bccmo	c,b,cmo	cbccroro
Portland Bill	c	cbc	bcbc	bcc
Plymouth	bcmxcFf	bcmobcf	bcfofbfcm	cmx
The Lizard	bc	cprc	c	cprc
Scilly (St. Mary's)	bcciro	c	crobcc	cpoc
Guernsey				
Pembroke	bciFc	ifc	iroc	proc
Holyhead	bxmombc	bcc	cmobc	bcmodc
Chester (Sealand)	FFbbcmo	bccm	cbcm moc	cmoc
Manchester	oFFf	ffgm bcmo	bcmoiro	bcmocmo
Spurn Head	cmifcm	bm	bcmc	bcc
Catterick	xfgmobc	bcc	cbc	bcpriro
Tynemouth	bbcmo	bcc	c	c
St. Abbs Head	c	cq	bcc	croq
Leuchars	bcxcmo	cmoiro	cbccmo	crorbcm
Renfrew (Abbots I.)	ccmozxc	ccroido	dorRro	cmororiro
Eskdalemuir	bbcxc	cmo	cododo	dorrdo
Point of Ayre	cbc	cbc	bcc	rorr
Tiree	odr	orododo	odr	orroc
Stornoway	crr	crr	crr	croiro
Dalwhinnie	co	cidoo		cido
Aberdeen	bcroc	cciro	roczo	ceiro
Wick	c	croir	ciroc	rordd
Lerwick	cpro	<prorr	crropr	c
Blacksod Point	ir	ir	c	ideq
Malin Head	c	c	cproc	cidocdodc
Aldergrove	FFxcx	cxcmoc	c,ododmo	iroirmoo
Birr Castle	c	cbc	o	o
Valentia Obsy. †	ciroc iroc	cirocid	ccidoiroc	cido
Roches Point	czirocⴲ	iroc	iroc	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.*

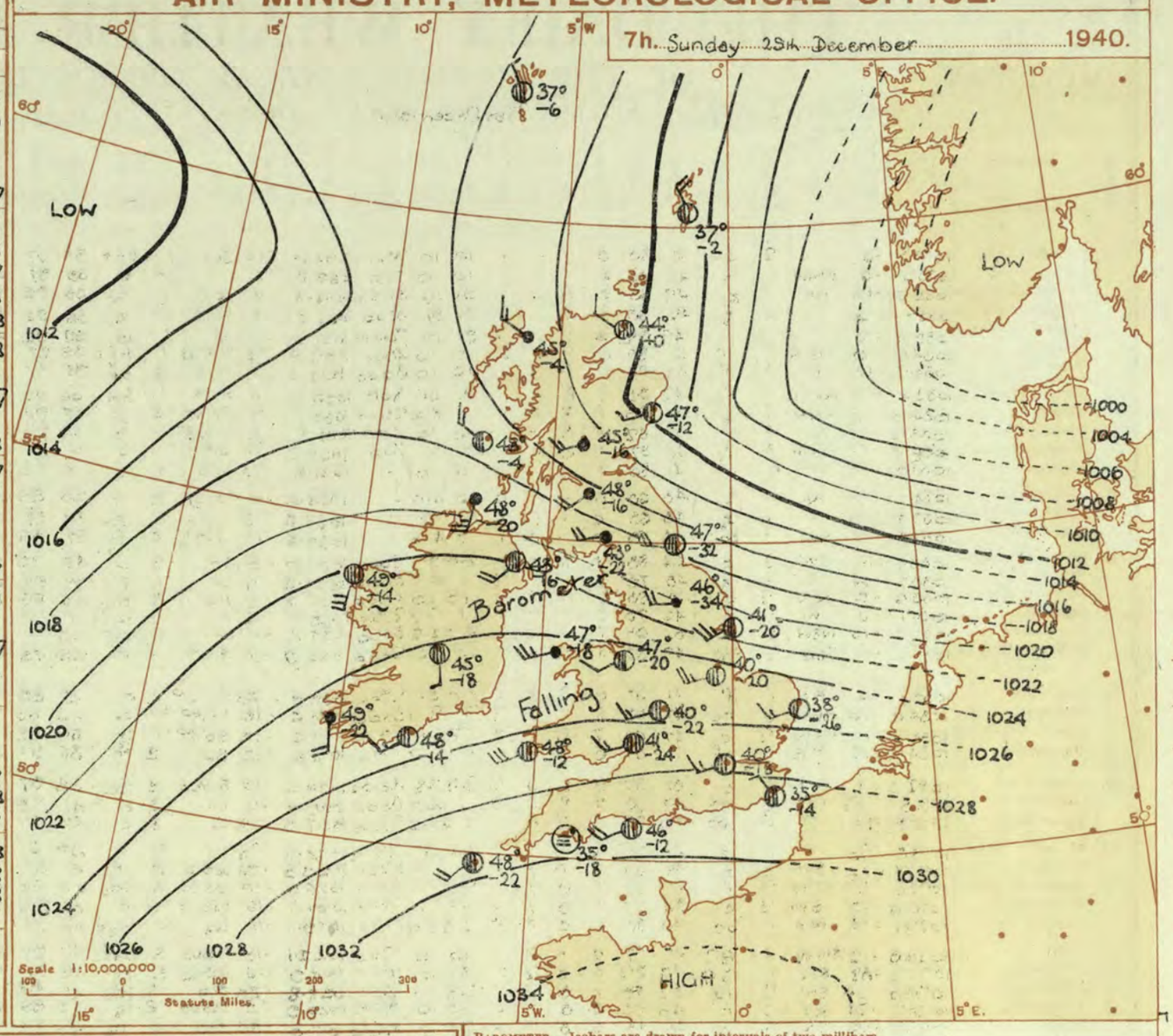
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 28th December			18h. G.M.T.			01h. G.M.T. 29th December			07h. G.M.T.		
IIH	$C_L C_M$	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	5-	61658	23568	6-	53638	55668	6-	64538	56458	5-	02755	29355
115	52	62685	55888	--	67103	53569	52	14844	61566	--	67203	12289
203				5-	64648	20568	5-	52648	20458			
206	57	02865	24887	87	25364	22385	50	22854	22264	8-	02855	24185
210	57	02864	21428	52	61855	55468	5-	61848	54568	5-	22747	24467
220										6-	54428	27358
230	5-	52648	18458	6-	53428	54568	02	54538	55568	52	02746	22468
245	57	22654	20868	52	61556	22368	57	01764	55425	52	51665	22457
260	57	02762	20227	53	02754	20326	5-	61745	57465	52	22746	55468
277	57	05664	23428				5-	51668	22458	51	05645	56668
279				57	05663	22325	--	05548	16428	5-	05648	20568
285	23	02635	24516	3-	02637	28627						
288	07	02790	18220	07	02790	20227	57	01752	22314	5-	61667	22367
273	76	05663	21105									
301	5-	05656	22246	50	05654	23224	50	05654	24364	52	61656	24368
321	00	08490	24114	53	05564	22225	50	05663	23223	5-	05667	22127
299	50	05643	23315	5-	05546	22316	50	05644	22514	5-	64648	22568
292	57	05651	20215	5-	05653	17113	57	02745	22416	5-	22748	22618
310	--	47208	20448									
316	00	08490	20145	03	08490	20125	57	05564	20217	57	05556	22417
333	00	48190	00041	5-	05667	22247	5-	05657	22328	5-	05658	22428
334												
340	00	01790	24214	50	01764	20214	8-	81766	21286	5-	02757	20487
136	00	05590	22845	03	08490	22314	03	05590	19423	03	05690	21516
356	14	01854	24315	14	01753	24314						
350	50	05646	22227									
368												
379	50	05652	26314	00	05690	24112	50	47254	28144	5-	05656	22326
390	5-	41488	28848	00	47390	00010	00	45190	20140	53	45355	23248
382	03	05690	00013	03	08490	00013	5-	08465	24245	5-	02767	22227
438	5-	03658	02228							8-	02658	24228
430	5-	05677	00047	50	47272	00042	00	43190	00040	5-	08458	00028
409	54	02762	19227	03	05690	16128	5-	05658	14168	--	61648	17268

IH = 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 29th December 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 29th Dec. 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 locally on coasts; mainly cloudy; occasional rain or drizzle; average temperature.
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 or fresh S.W. wind, strong locally on coasts; cloudy; occasional rain, rather mild.
13 A. W. Scotld. B.N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Light or moderate north wind perhaps backing and freshening; bright intervals and local wintry showers at first; perhaps rain later; rather cold; frost locally at night.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate S.W. or S. wind; fresh locally; mainly cloudy; occasional rain; rather mild.

GENERAL INFERENCE.

A trough of low pressure over Scotland is moving South, and there are some indications of a depression approaching from the Atlantic. Weather will be cloudy with occasional rain in most districts, but it will be very slight in the South. Temperature will be generally higher than of late, but it will fall somewhat in Scotland.

FURTHER OUTLOOK.

Unsettled.

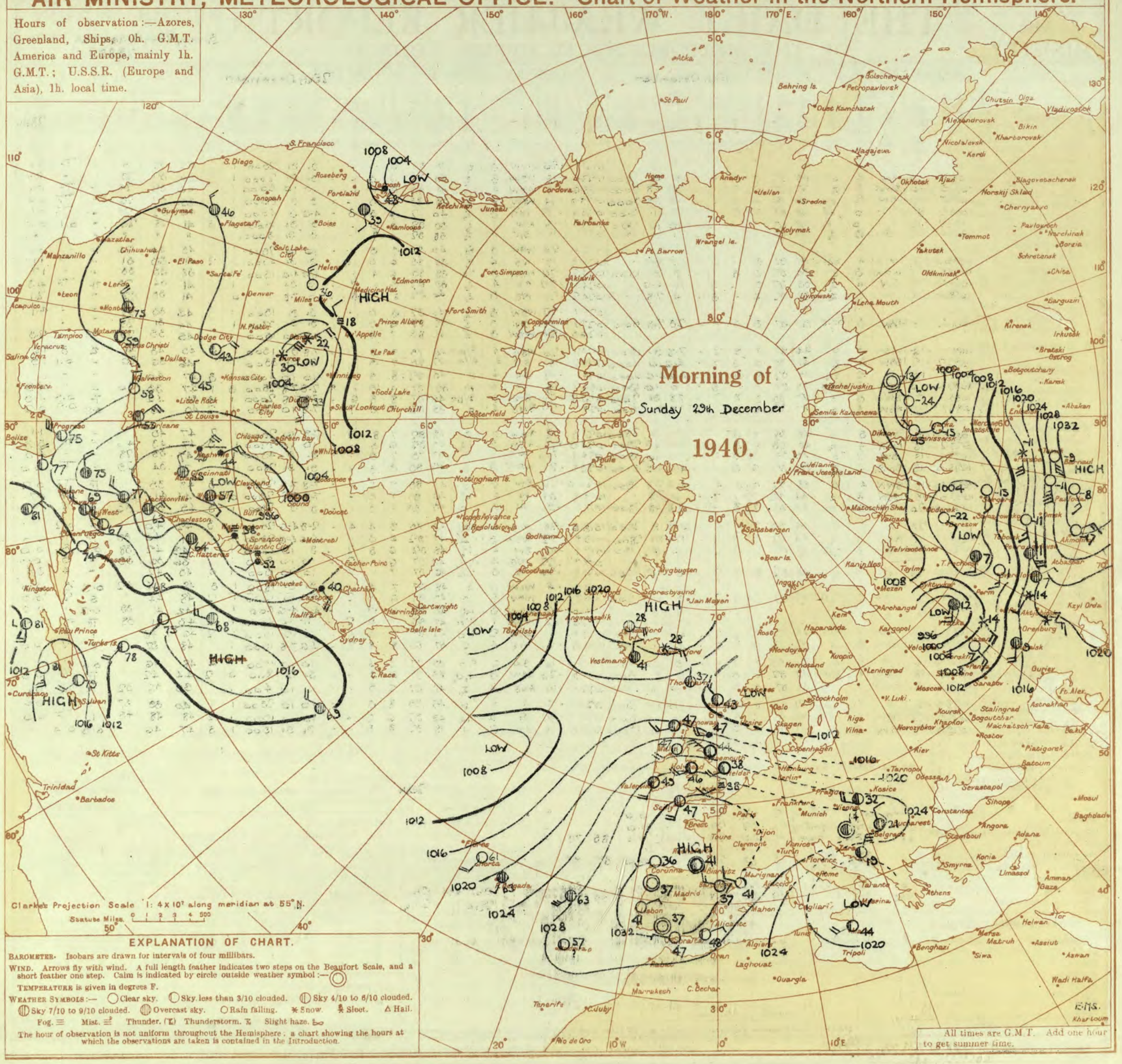
Gale warning issued 0430h 29/12/40 in Dogger and Forties.

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

Sunday 29th December 1940.

No. 28,892

OBSERVATIONS at 1 hr. G.M.T. 29th December

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	1031.4	-10	SW	3	cf	38	92	3	5	-	-	9+	9+	2500
	S. Farnborough	226	1032.5	-10	SWW	3	z0	35	97	6	5	-	-	7-8	7-8	5000
	Boscombe Down	417	1032.7	-10	SW	2	m	35	97	4	5	-	-	7-8	7-8	3000
	Calshot (Sthmtn.)	8	1033.2	-8	-	0	bf	33	97	3	5	-	-	1	1	7000
	Lympne	346	1032.2	-10	-	0	F-	29	97	1	-	-	-	10	10	<150
	Manston	154	1031.4	-12	SW	3	z	34	97	5	5	-	-	1	1	2500
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1030.0	-18	WS	4	bcf-	37	97	3	-	3	-	0	4-6	-
	Gorleston	5	1028.8	-20	WSW	3	c	36	92	5	5	-	-	9	9	1500
	Mildenhall	19	1029.2	-18	SW	4	z0	35	92	5	-	3	-	0	4-6	-
	Cranwell	240	1028.0	-24	W	5	z0	37	92	6	-	3	-	0	7-8	-
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1031.4	-14	SSW	3	bc/f	31	97	5	5	-	-	2-3	2-3	5000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1031.1	-16	WSW	3	p	44	85	7	8	2	-	7-8	9+	1500
	Bristol	209	1032.2	-12	SSW	3	z0	41	85	6	5	7	-	4-6	10	4000
	Portland Bill	32	1032.4	-10	W	2	bc	45	92	8	5	-	-	4-6	4-6	4000
	Plymouth	82	1033.6	-10	ES	2	m/f	35	97	4	-	3	-	0	10	1300
	The Lizard	240	1033.1	-8	SWW	5	c	47	85	8	8	2	-	7-8	9+	2000
	Scilly (St. Mary's)	163	1032.7	-10	SSW	4	c	47	85	8	8	7	-	7-8	9+	1500
	Guernsey	175														
6	Pembroke	142	1031.5	-8	WSW	5	c	48	75	7	5	-	-	9+	9+	2500
7	Holyhead	26	1028.2	-18	SWW	4	z0	46	85	6	5	-	-	2-3	2-3	2500
	Chester (Sealand)	16	1028.5	-18	SW	2	c0	45	75	5	5	-	-	10	10	4500
8	Manchester	70	1028.0	-18	SWS	3	z0	39	92	6	5	-	-	4-6	4-6	3000
10	Spurn Head	29	1025.4	-18	SWW	4	c	38	92	6	5	4	-	4-6	7-8	2500
	Catterick	175	1025.0	-18	WSW	4	c	44	85	7	-	7	-	0	7-8	-
	Tynemouth	108	1023.0	-20	NW	5	c	44	85	7	8	-	-	7-8	7-8	2800
11	St. Abbs Head	280	1019.1	-24	W	5	c	46	85	8	4	5	-	4-6	9	2500
	Leuchars	36	1019.1	-20	WSW	6	z0	44	92	6	5	2	-	4-6	9+	2800
12	Renfrew (Abbots I.)	19	1021.4	-32	WSW	4	r0r0	45	92	5	5	-	-	10	10	1700
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1025.8	-14	WS	4	c	45	92	8	5	2	-	9	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1017.2	-12	WSW	3	c/p	47	92	7	5	2	-	9	10	1000
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1013.4	-12	WNW	4	c/p	47	97	7	5	6	-	4-6	7-8	1500
16	Lerwick	156	1011.0	-2	NWN	3	c	43	92	6	8	7	-	4-6	9	800
17	Blacksod Point	18	1025.3	-6	S	5	c	50	85	7	5	-	-	9+	9+	1500
18	Malin Head	84	1022.7	-18	SWS	4	c/pp	47	92	6	5	-	-	9	9	1500
	Aldergrove	268	1025.9	-18	SWS	3	ir0	41	97	6	5	-	-	10	10	700
19	Birr Castle	173	1028.6	-8	S	1	o	42	92	8	5	-	-	10	10	2500
20	Valentia Obsy.	30	1028.5	-12	SSW	4	c	49	85	7	5	-	-	10	10	1500
	Roches Point	22	1029.9	-12	SW	3	c	47	85	8	6	1	-	7-8	9	1500

OBSERVATIONS at 7 hr. G.M.T. 29th December

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)	1027.7	-20	SWW	3	z0	39	85	6	5	-	-	9.	9+	2500
Croydon	1028.1	-18	WSW	3	z	40	95	5	5	-	-	9+	9+	2000
S. Farnborough	1028.6	-18	WSW	4	o/p	38	85	6	5	-	-	10	10	5000
Boscombe Down	1028.6	-24	WSW	4	z	38	85	6	5	-	-	9	9	3000
Calshot (Sthmtn.)	1029.4	-22	WS	3	z0	40	92	6	5	3	-	4-6	9	4000
Lympne	1028.8	-14	NW	1	z0	35	92	5	5	-	-	9+	9+	1500
Manston	1027.4	-20	SW	4	z0	38	92	6	5	-	-	9+	9+	3000
Shoeburyness	1027.4	-20	WSW	3	fg	40	80	3	5	-	-	10	10	2500
Felixstowe	1026.3	-18	WS	4	ir0	39	83	6	5	-	-	9+	9+	1500
Gorleston	1024.2	-26	WSW	3	bc	38	85	6	4	-	-	4-6	4-6	1500
Mildenhall	1024.5	-22	SW	4	z0	39	92	5	-	7	-	0	9+	-
Cranwell	1024.2	-20	WS	5	z0	40	92	6	-	3	-	0	7-8	-
Birmingham	1020.7	-22	WSW	3	z	40	92	5	5	-	-	9+	9+	1500
Upper Heyford	1027.2	-22	SW	3	z0	38	92	6	5	-	-	9+	9+	5700
Ross-on-Wye	1026.5	-24	WSW	3	c0	41	85	7	5	-	-	10	10	1500
Hartland Point	1027.8	-20	WSW	4	c/pp	46	75	7	8	2	-	7-8	9	1500
Bristol	1028.3	-18	SW	4	c/p	42	85	7	5	-	-	9+	9+	3300
Portland Bill	1029.1	-12	SW	4	c	46	92	8	5	-	-	10	10	4000
Plymouth	1030.2	-18	-	0	m	35	97	4	5	-	8	2-3	7-8	2500
The Lizard	1030.2	-20	SW	5	c/pp	46	97	8	8	6	-	7-8	7-8	2000
Scilly (St. Mary's)	1029.1	-22	SWS	4	c	48	92	7	5	7	-	7-8	10	1500
Guernsey														
Pembroke	1027.3	-12	SWW	6	c	48	92	7	8	2	-	7-8	10	2500
Holyhead	1024.5	-18	WSW	5	id0	47	92	6	5	-	-	10	10	2200
Chester (Sealand)	1024.4	-20	WS	2	c0	47	75	7	5	-	-	9+	9+	4500
Manchester	1023.8	-22	WSW	3	z0	42	85	5	5	-	-	9+	9+	2800
Spurn Head	1020.6	-20	SW	5	c	41	85	7	5	-	-	7-8	7-8	2500
Catterick	1018.8	-34	W	4	ir0	46	85	7	5	-	-	7-8	7-8	2500
Tynemouth	1017.6	-32	W	6	c	47	85	7	5	-	-	9	9	2500
St. Abbs Head	1013.6	-24	W	6	bcq	48	80	8	4	4	-	2-3	4-6	2500
Leuchars	1013.8	-22	WSW	5	[illegible]	47	92	6	5	-	-	4-6	4-6	2500
Renfrew (Abbots I.)	1017.1	-16	SW	4	ir0	45	92	6	5	2	-	9	10	1600
Eskdalemuir	1017.7	-22	WS	4	d0d0	43	97	6	-	2	-	10	10	800
Point of Ayre	1021.3	-25	W	5	r0r0	46	97	7	-	2	-	10	10	1500
Tiree	1016.9	-4	WNW	3	c	48	97	7	5	-	-	9+	9+	1800
Stornoway	1010.9	-4	WNW	3	ir0	45	92	6	5	2	-	9	10	1000
Dalwhinnie	1016.0	-16	WSW	3	id0	45	92	6	5	-	-	4-6	4-6	800
Aberdeen	1012.6	-12	WSW	1	c/r0	47	85	7	5	2	-	Tr	10	4000
Wick	1012.4	0	WNW	2	p/d	44	97	7	5	-	-	10	10	1500
Lerwick	1010.5	-2	NW	4	c	37	85	8	8	7	-	4-6	7-8	1500
Blacksod Point	1022.3	-14	SW	6	c/p	49	97	6	6	-	-	10	10	1500
Malin Head	1019.8	-20	SSW	5	d0d0	48	97	6	9	-	-	9+	9+	800
Aldergrove	1022.9	-16	SWS	4	z0	48	97	6	5	-	-	10	10	400
Birr Castle	1024.8	-18	S	1	o	45	85	8	5	-	-	10	10	2500
Valentia Obsy.	1024.4	-22	S	4	id0	49	92	6	5	-	-	10	10	1500
Roches Point	1026.3	-14	SW	3	c	48	92	8	5	-	-	9+	9+	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 28th Hrs. (36)
London (Kew)	1	*	42	33	19	-	Tr	0.0
Croydon	1	*	40	32	29	-	-	0.0
S. Farnborough	1	*	42	32	24	-	Tr	0.0
Boscombe Down	1	*	43	32	26	-	Tr	0.4
Calshot (Sthmtn.)	1	§	44	32	27	-	Tr	0.1
Lympne	1	3	41	28	25	-	0.1	0.0
Manston		*	*	*	*	*	*	*
Shoeburyness	1	*	43	34	24	-	-	0.1
Felixstowe	1	2	41	35	31	-	Tr	1.1
Gorleston	1	1	38	35	33	-	-	1.7
Mildenhall	1	*	41	34	25	Tr	Tr	0.8
Cranwell	0	*	41	35	32	-	-	2.1
Birmingham	1	*	43	35	32	-	-	4.1
Upper Heyford	1	*	44	31	23	-	-	*
Ross-on-Wye	1	*	45	35	29	-	-	2.9
Hartland Point	1	3	45	43	41	2	3	1.6
Bristol	1	*	46	36	26	-	0.1	1.9
Portland Bill	1	3	47	40	*	-	-	*
Plymouth	3	1	47	33	30	-	-	4.5
The Lizard	1	3	51	44	*	Tr	0.5	4.9
Scilly (St. Mary's)	1	2	40	45	*	0.3	0.2	0.2
Guernsey								
Pembroke	1	2	47	45	*	-	1	1.1
Holyhead	1	3	47	43	40	-	Tr	5.3
Chester (Sealand)	1	*	47	38	28	-	-	4.3
Manchester	1	*	39	34	29	-	Tr	0.0
Spurn Head	1	3	43	35	*	Tr	Tr	0.2
Catterick	9	[illegible]	44	41	36	-	Tr	4.7
Tynemouth	1	3	45	39	36	-	-	*
St. Abbs Head	[illegible]	3	42	40	*	-	0.2	*
Leuchars	[illegible]	*	41	40	39	Tr	Tr	0.0
Renfrew (Abbots I.)	1	*	43	42	38	0.1	3	0.0
Eskdalemuir	1		36	36	35	-	5	0.0
Point of Ayre	1	3	45	42	*	-	4	3.4
Tiree	1	3	48	44	42	0.3	3	0.0
Stornoway	1	2	48	44	*	5	2	0.0
Dalwhinnie	1	*	42	41	39	0.3	1	0.0
Aberdeen	1	2	43	41	38	Tr	0.1	0.0
Wick	1	2	46	43	*	1	3	*
Lerwick	1	*	48	37	*	2	2	0.0
Blacksod Point	1	4	48	46	*	0.6	1	*
Malin Head	0	2	44	42	*	Tr	2	0.0
Aldergrove	1	*	36	36	32	Tr	2	0.0
Birr Castle	1	*	40	39	37	-	-	0.0
Valentia Obsy.	1	2	48	48	45	1	Tr	0.0
Roches Point	1	3	47	46	*	0.3	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	cfmfm	cmbf	bffxm	42	33	19	-	Tr	0.0	*	*	5
Croydon	217	cm	cmbm	bmfbc	40	32	29	-	-	0.0	*	*	6
Greenwich (Royal Observatory)	149	cf	cfbm	bcm	41	34	25	-	-	0.0	83	79	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	41	33	29			0.0	87	87	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*									*
Camden Square	110			*	41	35	29	-	-	*	*	86	*
Kensington	80	o bcz	o bc	*	42	34	23	-	Tr		80	87	*
Hampstead Observatory	450												

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.
0.1	19h. 28th	<0.1	5h. 29th

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 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

Monday 30th December 1940.

No. 28,893

OBSERVATIONS at 13h. G.M.T. 29th December.

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)	1024.9	-24	WSW	4	zo	44	85	6	5	-	-	9+	9+	1500
	Croydon	1025.2	-22	WSW	3	zo	44	85	6	5	4	2	9	9	3000
	S. Farnborough	1025.7	-22	SW'W	4	c	44	85	7	5	3	-	9	9+	3400
	Boscombe Down	1025.9	-22	WSW	4	c	47	85	7	7	3	1	7-8	9	3500
	Calshot (Soton.)	1026.3	-24	WSW	4	c	47	85	8	5	3	5	2-3	9+	4500
	Lympne	1025.6	-22	W	3	c	44	85	7	5	7	1	7-8	9+	5000
	Manston	1024.0	-26	SW'W	5	c	44	85	7	5	3	4	2-3	9	4500
2	Shoeburyness	1024.7	-18	W'S	3	c	45	75	5	5	7	4	7-8	7-8	4000
	Felixstowe	1023.0	-22	W'S	6	iro	45	75	6	5	7	-	4-6	9+	6000
	Gorleston	1020.4	-20	W'S	3	c	44	85	7	8	-	-	9+	9+	1800
	Mildenhall	1021.5	-26	WSW	5	c	45	85	7	5	3	-	4-6	9+	4000
	Cranwell	1020.2	-28	W	6	c/r	43	85	6	5	-	-	9+	9+	1500
3	Birmingham	1022.3	-12	SW	3	c	45	85	6	5	7	-	7-8	9+	1500
	Upper Heyford	1024.1	-26	WSW	4	zo	44	85	6	5	7	-	9	9+	3500
4	Ross-on-Wye	1023.7	-20	WSW	3	c	46	85	7	5	1	-	9+	10	2500
5	Hartland Point	1024.9	-28	WSW	4	c	47	92	8	5	2	-	2-3	9	1500
	Bristol	1025.6	-18	WSW	4	c	46	85	7	5	7	-	1	10	1600
	Portland Bill	1026.9	-16	WSW	3	c	47	92	8	5	-	-	10	10	4000
	Plymouth	1027.5	-22	W'S	3	zo	49	92	6	5	7	-	2-3	10	1800
	The Lizard	1027.8	-20	WSW	5	bc	50	92	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1027.1	-16	SW'S	4	c/pr	50	75	8	5	6	-	7-8	9+	1800
	Guernsey														
6	Pembroke	1024.3	-16	SW'W	5	c	50	92	7	8	2	-	9	10	3000
7	Holyhead	1021.6	-18	SW'W	4	c	48	92	7	5	2	1	4-6	9+	2600
	Chester (Sealand)	1021.6	-16	W	3	c	50	75	7	5	7	7	7-8	10	2500
8	Manchester	1021.0	+14	W'S	4	zo	47	85	6	5	3	-	7-8	9+	2500
10	Spurn Head	1017.1	-14	W'S	6	c	45	85	6	4	4	-	4-6	7-8	3600
	Catterick	1016.9	-18	W'S	4	c	49	85	8	5	4	6	4-6	9+	2500
	Tynemouth	1016.7	0	W	5	zo	48	85	6	8	-	-	9	9	2400
11	St. Abbs Head	1013.0	-2	W	6	bcq	50	75	8	4	4	9	2-3	4-6	2500
	Leuchars	1013.1	-8	WSW	3	bcjp	51	85	8	5	4	6	2-3	2-3	3500
12	Renfrew (Abbots I.)	1015.5	-14	W	3	ido	50	92	6	5	7	-	7-8	10	2500
	Eskdalemuir	1016.1	-10	W'N	3	ido	47	92	6	5	-	-	10	10	9200
	Point of Ayre	1019.4	-12	W'S	4	rr	47	87	7	5	2	-	7-8	10	1500
13A	Tiree	1015.4	-6	NW'W	2	dd	48	97	5	-	2	5	10	10	600
13B	Stornoway	1014.5	-10	W	3	c/d	46	97	7	5	7	6	7-8	9+	600
15	Dalwhinnie	1014.0	-6	NW	2	c	45	75	8	8	-	4	4-6	7-8	2500
	Aberdeen	1012.9	-2	NNW	1	iro	45	92	6	6	-	-	10	10	450
	Wick	1012.5	-4	NNW	2	c/d	42	92	8	5	7	8	7-8	9+	2500
16	Lerwick	1011.4	-2	NNW	4	c	38	85	8	8	7	-	7-8	9	1500
17	Blacksod Point	1018.7	-18	S'W	3	iro	50	97	7	6	-	-	10	10	1500
18	Malin Head	1017.7	-18	W'S	5	ddo	48	97	6	6	-	-	9+	9+	800
	Aldergrove	1019.7	-18	SSW	3	c/r	44	97	6	5	-	-	10	10	600
19	Birr Castle	1021.9	-18	SW	1	c	49	85	8	5	1	-	4-6	10	2500
20	Valentia Obsy. †	1020.1	-34	S'E	5	rr	51	97	6	6	2	-	7-8	10	800
	Roches Point	1022.9	-24	WSW	3	id	49	97	6	5	-	-	9+	9+	800

OBSERVATIONS at 18h. G.M.T. 29th December.

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)	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)	1022.0	-16	SW'W	3	zo	45	85	6	5	-	2	4-6	7-8	2500	1	*
Croydon	1022.2	-8	SW'W	3	z	*	*	6	5	-	-	7-8	7-8	3000	1	*
S. Farnborough	1022.9	-12	SW'W	3	c	44	85	7	5	7	-	4-6	9+	3000	1	*
Boscombe Down	1023.3	-8	SSW	3	c	45	85	7	5	-	-	10	10	3000	1	*
Calshot (Soton.)	1023.6	-14	WSW	3	zo	47	92	6	5	-	-	10	10	4000	1	2
Lympne	1022.8	-16	W	3	c	44	85	7	5	-	-	9+	9+	4000	1	§4
Manston	1021.4	-14	WSW	4	zo	44	92	6	5	-	-	10	10	3300		*
Shoeburyness	1021.5	-14	W'S	3	c	45	85	5	5	-	-	10	10	2500	1	*
Felixstowe	1020.3	-14	W	5	zo	45	85	6	5	7	-	7-8	10	4000	1	3
Gorleston	1018.6	-12	W'S	3	c	45	85	6	5	-	-	10	10	2000	1	2
Mildenhall	1019.2	-14	SW'W	4	ido	45	85	6	5	7	-	7-8	10	3000	1	*
Cranwell	1018.1	-16	W	5	zo	45	85	6	5	-	-	10	10	2000	1	*
Birmingham	1020.2	-8	WSW	3	c	46	85	7	5	-	-	7-8	7-8	1500	1	*
Upper Heyford	1022.0	-8	SW	3	zo	45	92	6	5	7	-	9+	10	1000	1	*
Ross-on-Wye	1020.9	-8	WSW	4	c	48	75	7	5	1	-	9+	10	1500	1	*
Hartland Point																
Bristol	1022.6	-16	SW	3	c	47	85	7	5	7	-	7-8	10	3000	1	*
Portland Bill	1023.0	-20	SW	4	o	47	92	7	5	-	-	10	10	4000	1	3
Plymouth	1024.6	-16	SW	5	zo	48	97	6	6	2	-	4-6	10	1600	1	2
The Lizard	1024.6	-20	WSW	6	c	48	97	7	8	2	-	7-8	10	2000	1	4
Scilly (St. Mary's)	1023.5	-14	SW'S	4	r	49	92	7	5	-	-	10	10	1500	1	2
Guernsey																
Pembroke	1020.6	-14	SW	5	c	49	92	7	5	2	-	7-8	10	2500	1	3
Holyhead	1017.7	-22	SW'S	4	c/r	48	92	6	5	2	-	4-6	10	2200	1	2
Chester (Sealand)	1018.5	-18	W'N	3	c	49	85	7	5	2	-	7-8	10	6000	1	*
Manchester	1018.3	-18	SW	2	c/r	45	92	5	5	7	-	7-8	10	2500	1	*
Spurn Head	1015.4	-8	SW'W	4	ido	48	85	6	5	-	-	10	10	1500	0	3
Catterick	1014.8	-8	WSW	5	iro	47	85	7	5	7	-	7-8	9+	3200	0	*
Tynemouth	1014.5	-16	NW	5	c	48	92	6	8	-	-	9+	9+	1200	1	2
St. Abbs Head	1011.2	-8	W	5	bc	49	85	8	4	1	-	2-3	4-6	2500	0	3
Leuchars	1011.4	-6	WNW	3	c	45	92	8	-	7	6	0	7-8	-	1	*
Renfrew (Abbots I.)	1012.7	-10	WSW	4	c/r	48	92	6	5	7	1	4-6	9	1800	1	*
Eskdalemuir	1013.4	+14	WSW	2	ido	45	92	6	5	-	-	10	10	800	1	*
Point of Ayre	1015.9	-16	W'S	4	dd	46	97	6	-	2	-	10	10	1500	1	3
Tiree	1012.0	-14	-	0	dd	47	85	5	-	2	-	10	10	600	1	2
Stornoway	1011.9	-4	NE	3	ddo	43	97	6	5	2	-	9+	10	800	1	2
Dalwhinnie	1012.0	-14	SW	2	c	43	75	7	5	-	-	9+	9+	2500	1	*
Aberdeen	1011.9	-8	NW'N	1	roro	41	97	4	-	2	-	10	10	800	1	2
Wick	1011.4	-6	NNW	3	c	41	85	7	5	7	-	7-8	9+	1500	1	1
Lerwick	1011.4	0	N'E	5	c	35	85	7	8	7	-	7-8	10	1500	1	*
Blacksod Point	1012.8	-28	S	3	rr	51	97	6	6	-	-	10	10	800	1	3
Malin Head	1013.7	-24	W	4	ido	48	97	6	8	-	-	9+	9+	800	1	2
Aldergrove	1016.0	-20	SW'S	3	dr	45	97	5	-	2	-	10	10	3000	1	*
Birr Castle	1015.8	-30	SW	1	rr	48	97	6	5	-	-	10	10	2500	1	*
Valentia Obsy. †	1015.7	-18	SW	4	dodo	53	97	6	5	-	-	10	10	450	1	3
Roches Point	1017.7	-30	SW	4	dr	48	97	6	5	-	-	10	10	450	1	4

PAST 24 HOURS.

Stations	Weather 7h.—13h. 29th (37)	Weather 13h.—18h. 29th (38)	Weather 18h. 29th to 1h. 30th (39)	Weather 1h.—7h. 30th (40)
London (Kew)	cmo	cbcmo	bcc	crrrocm
Croydon	cmo	cmo	crocmo	crrmro
S. Farnborough	cmoc	c	cm,idoc	rrRRodc
Boscombe Down	c	c	cidomcror	crrodd
Calshot (Soton.)	cmoc	ccmo	cmodoc	crddm
Lympne	cmoc	c	cmoiro	crrmrc
Manston	irocmoc	cmoocmo	cbccm	crororm
Shoeburyness	cfrocmo	cmo	cmo	idrsRR
Felixstowe	ciromo	ciromocmo	cmiro	proorrro
Gorleston	bccpro	bcc	czc	ororr
Mildenhall	cprc	ccmoido	cidoiroom	ocrridom
Cranwell	crorocmo	cmo	cmoiroom	orrrom
Birmingham	c	oc	ciro	iroc
Upper Heyford	cmocbccm	cmo	cm crrm	crrm cmo
Ross-on-Wye	cbcc	c	ccroor	rss
Hartland Point	c		crro	ffd
Bristol	cproc	c	brorrr	r
Portland Bill	c	o	orr	orrbc
Plymouth	cm-idoccm	cmo	cirorrff	orfddc
The Lizard	cbc	bcprc	rrcrr	dfdd
Scilly (St. Mary's)	cpoq	cro	crrc	odfdfbc
Guernsey				
Pembroke	prc	mopre	orrm q	omobc
Holyhead	domoroc	cromoc	cmmrrrc	mrrRc
Chester (Sealand)	cmoiroc	c	crrmoo	orrmoc
Manchester	irororomo	cmoirorord	idororrr	rrdcrr
Spurn Head	c	coido	cproc	orr
Catterick	bciroc	cciro	cbcc	r
Tynemouth	c	c	oiro	ororom
St. Abbs Head	cbcq	cbc	bcofd	ofrmd
Leuchars	bcmo bcjp	bccroc	cmdodo	cmdoroo
Renfrew (Abbots I.)	crodoido	cdocirom	omiroir	cmiromR
Eskdalemuir	doido	idoiro cido	idoroo	roirorr
Point of Ayre	rorc	dd	crrrr	rrD
Tiree	oid	odd	odro	orr
Stornoway	cirododo	cdodo	cdodopro	cid
Dalwhinnie	idoc	c	*	cidof
Aberdeen	cromo	rorom	iroom	oororo
Wick	cdoc	c	cproc	doroocro
Lerwick	cpro		ciso	cbcops
Blacksod Point	ir	rr	dr	id
Malin Head	cdodc	cidoc	cdodcido	orf
Aldergrove	omoiriro		idororrr	irrorr
Birr Castle	c	corr	o	oiro
Valentia Obsy. †	codododcrr	crroddd	dodoido	idododoo
Roches Point	idoid	drdr	ddcbc	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/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.*

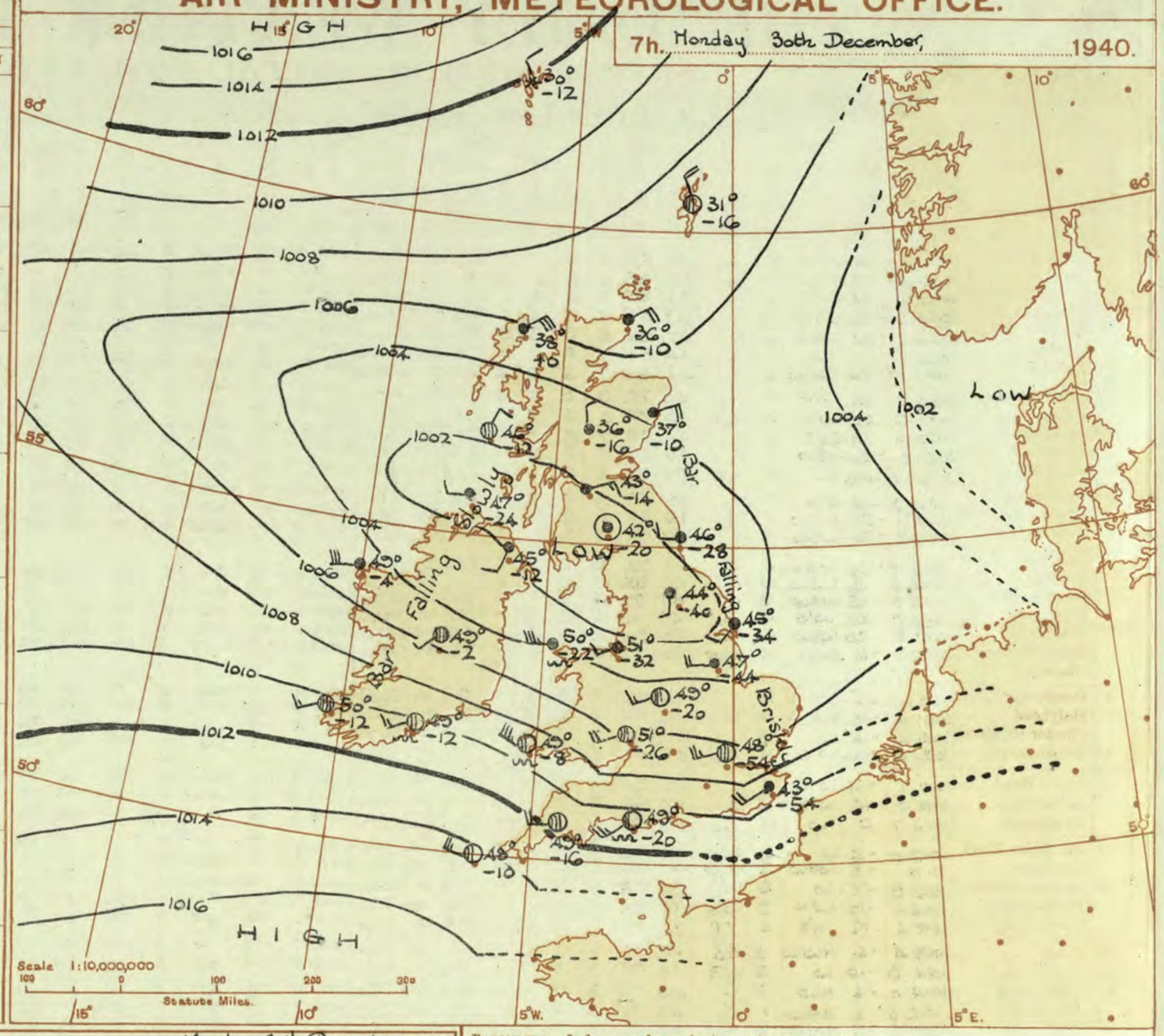
Abridged observations of additional stations in the
AVIATION WEATHER CODE

	13h. G.M.T. 29th Dec.				18h. G.M.T.			01h. G.M.T. 30th Dec.			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	8-	02966	28326	5-	02754	30224	5-	52538	02458	5-	23746	03376
115	--	67209	04369	52	02834	12267	52	62735	12468	52	62735	41668
203	5-	81848	24418	5-	52738	24458	5-	25838	20288			
206	57	51866	24157	02	58538	00068	02	52648	00058	02	62648	04468
210	53	62737	26168	62	21648	00058	02	52648	00058	02	62538	36558
220	53	02834	24214	*2	45390	25148				62	03645	29328
230	5-	58648	22368	02	58418	22168	--	67209	00059	6-	64528	00068
245	8-	02945	18155	5-	61656	08227	5-	05648	02328	5-	52538	04358
260	50	05664	24415	52	05545	24228	52	61538	00058	02	52528	02258
277	57	51767	22568	52	64645	21368	02	52518	16168	6-	62648	24368
279	62	22636	24568	5-	05648	24468	02	52428	22458	02	64438	00068
285										5-	62738	26368
288	57	02856	24427	57	02766	20228	57	02756	20328	02	62548	20168
273												
301	52	61656	23458	02	62558	23468	52	64534	20168	02	54538	18168
327	57	05684	25567	57	05552	22326	5-	62578	22368	02	62578	20368
299	57	02744	24526	5-	25648	24588	5-	05548	23428	5-	64448	23268
299	57	02934	24526	57	61735	22428	5-	02738	17268	5-	47338	16268
310										--	67109	20349
316	57	05547	22427	57	05554	22455	02	62648	22468	52	58546	23368
333	57	02844	20427	6-	21636	53458	62	62636	19468	5-	51646	22566
334												
340	50	02865	22327	5-	02748	20228	5-	64648	18368	5-	02757	21367
136	57	05654	21567	5-	05658	22528	5-	05648	18458	5-	62628	18468
336										62	81644	24688
350	57	05665	18527							52	61628	20568
368	57	02754	23428									
379	53	05646	22327	5-	05648	22428	6-	62628	22468	5-	22627	22527
390				57	08454	24428	5-	05558	16428	62	62526	17468
382	57	02855	22427	5-	02748	21228	6-	64648	20368	5-	22638	22468
438	8-	02868	24528									
430	57	22655	24366	5-	05568	22488	5-	63558	53568	52	51425	24458
409	57	16468	27145	6-	22638	19468	02	62538	19568	02	51518	56468

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 30th December, 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. Monday 30th December 1940
1 S.E. England ✝ 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England ✝ 6 South Wales ...	Moderate or fresh southwest to west wind, strong on coasts veering northwest later and decreasing; mainly cloudy; rain at times; mild becoming colder.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Moderate southwest wind fresh or strong locally on coasts veering north to northeast and decreasing; rain at first changing to sleet or snow; becoming colder.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Light or moderate northeast wind; dull; rain at first changing to snow; perhaps bright intervals later; cold frost at night.
13 ~~A. W. Scotld.~~ B.N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Moderate northeast wind; some snow at first; bright intervals; snow showers later; cold, frost at night.
17 N. W. Ireland 18 N. E. Ireland	Moderate west wind veering north; cloudy; occasional rain; snow locally later; becoming colder.
19 S. E. Ireland 20 S. W. Ireland	Moderate or fresh southwest wind; cloudy; rain at times; average temperature.

GENERAL INFERENCE.

A depression over southwest Scotland is moving east-southeast and deepening, and further depressions are approaching from the Atlantic. There will be rain in most areas and snow in North Scotland which will spread to many northern districts within 24 hours.
There is a risk of snow within the next 2 or 3 days even in the South.

FURTHER OUTLOOK.

Cold in the North with some snow. Perhaps snow in the Midlands and South.

✝ Gale warning issued 0150 30/12/40 in districts 1 (part of) and 5.

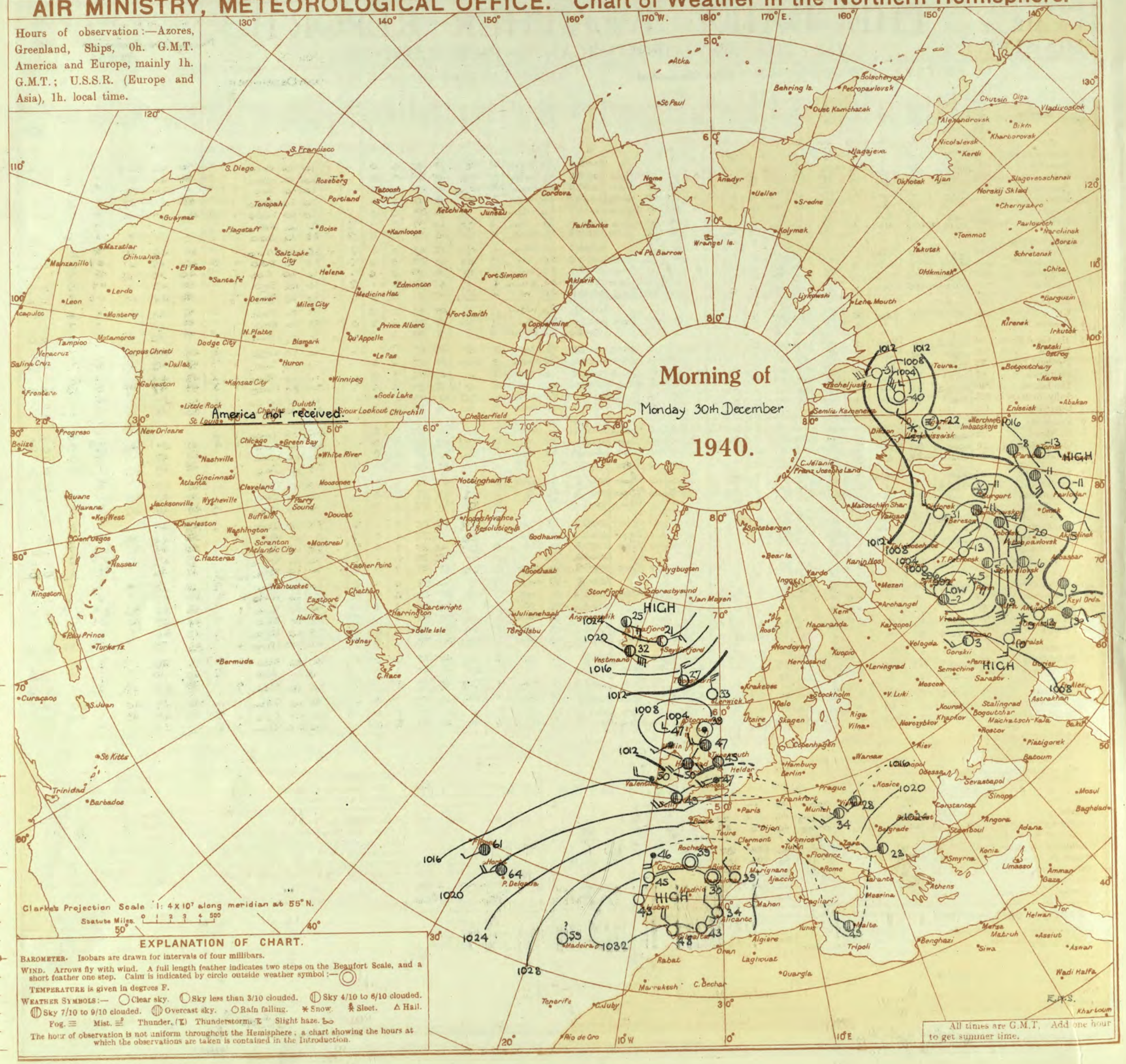
Forecasts issued at 10·30

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 30th December 1940.

No. 28,893

OBSERVATIONS at 1 hr. G.M.T. 30th December

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	1016.5	-38	WSW	3	r°r°	47	85	6	-	2	-	10	10	1200
	S. Farnborough	226	1016.4	-38	SW	5	ir°	47	92	6	5	-	-	10	10	1400
	Boscombe Down	417	1016.0	-42	SW'S	4	r°r°	47	92	6	6	2	-	10	10	1000
	Calshot (Sthmtn.)	8	1017.4	-38	WSW	6	rr	47	92	6	5	-	-	10	10	1000
	Lympne	346	1018.2	-28	SW	4	ir°	45	97	5	-	2	-	10	10	1200
	Manston	154	1016.8	-34	SW	5	z°	46	97	6	5	-	-	10	10	1200
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1014.7	-28	WSW	4	c/r	45	85	6	5	7	-	9	10	1500
	Gorleston	5	1013.8	-28	W'S	4	c	46	85	6	7	-	-	10	10	1500
	Mildenhall	19	1013.6	-30	SW'W	5	z°	46	85	6	5	-	-	10	10	1200
	Cranwell	240	1012.1	-34	W'S	5	r°r°	45	92	5	6	-	-	10	10	800
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1015.0	-38	SSW	4	rr	44	97	6	6	2	-	9	10	800
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1012.8	-46	SW	6	rr	47	97	6	-	2	-	10	10	1000
	Bristol	209	1010.1	-46	SSW	4	rr	47	97	6	-	2	-	10	10	1000
	Portland Bill	32	1017.6	-30	SW	5	rr	47	92	7	5	-	-	10	10	2500
	Plymouth	82	1017.7	-36	SW	6	r°r°	48	97	5	-	2	-	10	10	600
	The Lizard	240	1016.3	-34	SW	7	rr	49	97	5	5	-	-	10	10	1500
	Scilly (St. Mary's)	163	1016.7	-28	SW	3	c/p	49	97	5	5	-	-	9+	10	800
	Guernsey	175														
6	Pembroke	142	1012.0	-28	WSW	7	r°r°	50	97	5	5	2	-	7-8	10	2000
7	Holyhead	26	1008.2	-52	SW'S	4	o/p	50	97	5	5	-	-	10	10	1500
	Chester (Sealand)	16	1003.9	-50	SSE	2	rr	47	97	6	-	2	-	10	10	1700
8	Manchester	70	1010.4	-46	S	3	r°r°	46	97	5	-	2	-	10	10	800
10	Spurn Head	29	1009.7	-26	SW'W	3	c	45	92	7	5	-	-	10	10	1500
	Catterick	175	1008.8	-38	-	0	c	47	92	7	5	2	-	7-8	10	2500
	Tynemouth	108	1008.6	-26	W	3	o/p	47	92	6	5	-	-	10	10	1500
11	St. Abbs Head	280	1007.4	-26	NW	1	df	45	97	3	5	-	-	10	10	1500
	Leuchars	36	1007.2	-26	NE	1	d°d°	48	97	5	-	2	-	10	10	700
12	Renfrew (Abbots I.)	19	1007.1	-30	SW'W	2	ir°	47	97	5	-	2	-	10	10	1200
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1008.6	-38	-	0	rr	47	97	7	-	2	-	10	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1008.6	-18	NE	2	d	48	92	6	5	2	-	9	10	1000
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1008.4	-16	E	4	c/pr	40	85	7	5	2	-	7-8	10	1500
16	Lerwick	156	1009.6	-16	N	3	c	33	92	8	8	7	-	4-6	7-8	1500
17	Blacksod Point	18	1008.1	-4	W	4	Dr	51	97	6	6	-	-	10	10	800
18	Malin Head	84	1006.5	-28	SW	1	d°d°	47	92	5	3	-	-	9+	9+	450
	Aldergrove	268	1007.2	-42	S	2	r°r°	46	97	6	-	2	-	10	10	500
19	Birr Castle	173	1009.8	-12	SW	3	o	50	97	8	5	-	-	10	10	2500
20	Valentia Obsy.	30	1015.4	0	W	4	id°	50	97	6	5	-	-	10	10	450
	Roches Point	22	1013.2	-8	W'S	4	bc	49	97	8	5	-	-	4-6	4-6	1500

OBSERVATIONS at 7 hr. G.M.T. 30th December — 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 29th Hrs. (36)
London (Kew)	1006.4	-50	SW'W	4	z°	47	97	6	5	-	-	10	10	1500	1	*	46	44	40	-	7	0.4
Croydon	1007.3	-54	WSW	5	c/p	48	97	7	5	-	-	10	10	1000	1	*	46	44	41	-	7	0.2
S. Farnborough	1007.6	-46	SW'W	4	d°d°	49	97	6	5	-	-	10	10	700	1	*	✱	43	38	-	3	0.1
Boscombe Down	1008.5	-34	WSW	5	z°	49	97	6	5	-	-	10	10	1200	1	*	47	44	42	-	6	0.2
Calshot (Sthmtn.)	1009.2	-40	WSW	4	id°	48	97	6	5	-	-	10	10	1000	1	§3	48	45	44	-	5	0.1
Lympne	1010.0	-54	SW	4	r°r°	48	97	5	-	2	-	10	10	400		*				-		
Manston	1006.8	-56	SW'S	6	rr	45	97	5	6	2	-	7-8	10	600			✱	✱	✱	✱	✱	✱
Shoeburyness	1006.7	-60	SSW	4	r°r°	46	97	5	6	2	-	7-8	10	1500	1	*	45	44	42	Tr	4	1.4
Felixstowe	1005.3	-56	SW	3	dp	48	97	5	6	2	-	7-8	10	800	1	3	46	42	41	0.1	5	0.0
Gorleston	1004.8	-56	SW'W	3	rr	46	97	6	6	-	-	10	10	800	1	2	46	45	43	Tr	5	✱
Mildenhall	1003.3	-54	SW'W	4	ir°	47	97	6	-	2	-	10	10	800	1	*	46	45	✱	0.1	12	0.2
Cranwell	1003.1	-44	W	4	r°r°	47	97	5	6	-	-	10	10	500	2		46	44	43	0.3	7	0.0
Birmingham	1003.9	-20	WSW	3	c	49	92	6	6	-	-	9+	9+	800	1	*	47	45	44	*	4	0.0
Upper Heyford	1007.0	-30	SW	3	c/p	48	97	6	5	3	-	7-8	10	800	1	*	45	44		-	7	*
Ross-on-Wye	1006.0	-26	SW'W	4	c	51	85	7	5	-	-	9	9	1500	1	*	49	46	44	-	3	0.6
Hartland Point	1010.8	-12	W	5	dF	47	97	1	-	-	-	10	10	<150	1	4	48	47	46		7	0.0
Bristol	1008.8	-22	WSW	6	o/r	48	97	6	5	-	-	10	10	700	1		48	45	42	Tr	9	0.3
Portland Bill	1010.2	-20	SW	5	o	49	92	7	5	-	-	10	10	2500	1	4	48	44		-	10	
Plymouth	1012.6	-16	W	4	c	49	97	6	6	-	-	7-8	7-8	1000	1	3	49	47	47	3	13	0.0
The Lizard	1013.3	-12	WNW	6	DD	48	97	4	5	-	-	10	10	1000	1	4	50	47	*	Tr	7	0.3
Scilly (St. Mary's)	1014.1	-10	W'N	5	bc	48	97	6	5	-	-	4-6	4-6	800	1	3	50	48		Tr	4	0.8
Guernsey																						
Pembroke	1009.8	-8	WNW	7	bcq	49	92	7	8	-	-	4-6	4-6	2000	1	4			*	-	13	0.0
Holyhead	1003.1	-22	W	7	r°r°	50	97	6	5	-	-	10	10	900	1	4	49	47	46	0.4	8	0.0
Chester (Sealand)	1002.9	-32	WSW	2	dp	51	97	6	5	-	-	10	10	1300	1	*	50	47	45	Tr	3	0.1
Manchester	1002.1	-34	W'S	4	rr	49	97	5	5	2	-	7-8	10	700	2		49	45	42	1	8	0.0
Spurn Head	1001.6	-34	SW'S	2	rr	45	92	6	5	-	-	10	10	1500	0	1	46	42	*	Tr	4	0.0
Catterick	1001.6	-40	S	1	r°r°	44	97	5	5	-	-	10	10	800	1		50	45	43	Tr	3	1.0
Tynemouth	1002.9	-28	W	2	ir°	46	92	4	5	-	-	10	10	1500	1	2	48	45	42	-	3	✱
St. Abbs Head	1002.9	-24	NE	3	d°d°	42	97	7	5	2	-	7-8	10	2000	1	2	50	42	*	-	3	*
Leuchars	1003.3	-18	NE	2	r°r°	41	92	5	5	2	-	9	10	1200	1	*	52	40	38	Tr	2	1.7
Renfrew (Abbots I.)	1002.8	-14	ENE	3	r°r°	48	97	5	6	2	-	7-8	10	700	1	*	50	43	42	0.3	7	0.0
Eskdalemuir	1001.5	-20	-	0	rr	42	97	5	-	2	-	10	10	<150	1		48	42	41	0.3	2	0.0
Point of Ayre	1002.2	-20	NW'W	3	r°r°	46	97	7	-	2	-	10	10	1500	1	2	47	46		4	8	0.0
Tiree	1001.8	-12	NNE	2	c	46	92	6	-	2	-	10	10	1800	1.	2	49	40	*	2	7	0.0
Stornoway	1006.4	0	NE	6	iD	38	97	6	5	2	-	9	10	1000	1	3	47	37	*	1	0.4	0.0
Dalwhinnie	1003.0	-16	N	1	id°	36	97	4	5	-	-	10	10	800	1		46	34	30	0.2	0.3	0.0
Aberdeen	1004.9	-10	ENE	4	r°r°	37	97	5	-	2	-	10	10	800	1	3	48	37	36	3	2	0.0
Wick	1006.3	-10	NE	4	rs	36	85	6	5	2	-	7-8	10	1500	1	2	45	34	*	1	2	
Lerwick	1006.5	-16	NNW	4	c/ps	31	75	7	8	7	-	4-6	7-8	1500	4		39	29	*	0.3	Tr	0.0
Blacksod Point	1008.1	-4	W	6	id°	49	97	6	6	-	-	9+	9+	800	1	3	51	48	*	3	2	*
Malin Head	1002.5	-24	W	2	dF	47	97	1	3	-	-	10	10	450	1	2	49	45	*	1	12	0.0
Aldergrove	1003.5	-12	SSW	2	r°r°	45	97	5	-	2	-	10	10	1200	2		45	43	43	3	12	0.0
Birr Castle	1009.1	-2	SW	1	o/p	49	92	7	5	-	-	10	10	2500	1	*	50	47	46	1	5	0.0
Valentia Obsy.	1013.4	-12	W'S	3	o	50	97	7	5	-	-	10	10	800	1	2	53	49	49	9	0.4	0.0
Roches Point	1011.2	-12	WSW	3	bc	49	92	8	5	-	-	4-6	4-6	2500	1	4	50	48	*	4	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. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
		24 hrs. ended 9h.											
Kew	18	cm°	cbcm°	bcrr	46	44	40	-	7	0.4	*	*	6
Croydon	217	cm°	cm°	cr°r°m°	46	44	41	-	7	0.2	*	*	
Greenwich (Royal Observatory)	149	cbcm	cm°	crrd°c	46	45	42	-	6	0.3	77	88	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	50	40	37	6			83	91	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	50	40	36	-	7		77	93	*
Camden Square	110	o	o	*	46	40	37	-	7	*	*	91	*
Kensington	80	bcc	c	*	46	40	39	-	7		89	94	*
Hampstead Observatory	450	o	or	o	44	✱	39	-	7		*	97	*

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.
6.2	9-10h. 29th.	<0.1	0-3h. 30th.

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

Tuesday 31st December 1940.

No. 28894

OBSERVATIONS at 13h. G.M.T. 30th December

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)...	1004·4	-10	W'S	5	zo	51	85	6	5	-	-	10	10	1500
	Croydon ...	1004·4	-12	W	5	c	50	85	7	5	-	-	10	10	900
	S. Farnborough	1005·9	-8	W	5	c	49	92	8	5	-	-	10	10	600
	Boscombe Down	1006·8	-10	W	6	c	49	85	7	6	7	8	4-6	9+	1500
	Calshot (Soton.)	1007·4	-14	WNW	6	c	50	85	8	5	-	-	10	10	1500
	Lympne ...	1005·2	-18	WSW	4	c	49	85	8	5	-	-	10	10	700
	Manston ...	1002·2	-22	WSW	6	o/d	51	92	7	6	2	-	7-8	10	900
2	Shoeburyness ...	1003·2	-20	SW	4	ido	49	85	4	6	2	-	7-8	10	1500
	Felixstowe ...	1000·9	-22	W	6	rr	49	97	5	6	2	-	7-8	10	800
	Gorleston ...	999·6	-2	WNW	3	roro	49	92	6	6	-	-	10	10	1000
	Mildenhall ...	1000·1	-14	W'N	6	o/r	50	97	7	6	2	-	7-8	10	500
	Cranwell ...	1001·5	0	WNW	4	roro	48	97	4	6	-	-	10	10	200
3	Birmingham	1003·5	0	W	4	c	51	85	7	5	-	-	10	10	1500
	Upper Heyford	1005·1	+2	W	5	c	51	85	8	5	-	-	9+	9+	1100
4	Ross-on-Wye ...	1006·1	0	W'S	3	o	51	75	8	5	-	-	10	10	1500
5	Hartland Point	1005·6	-12	W	4	c	49	97	7	5	2	-	7-8	9+	1000
	Bristol ...	1007·4	-10	WNW	5	c	48	97	7	5	2	-	7-8	10	900
	Portland Bill ...	1009·5	-12	W	4	c	50	92	8	5	7	-	7-8	10	4000
	Plymouth ...	1011·6	-12	W	4	ido	50	92	6	5	-	-	10	10	900
	The Lizard ...	1013·0	-10	WNW	6	ido	49	97	4	5	-	-	10	10	1000
	Scilly (St. Mary's)	1012·7	-10	W'S	5	c	50	97	6	5	2	-	7-8	10	800
	Guernsey ...														
6	Pembroke ...	1008·1	-4	W	7	cq	51	92	7	8	7	-	7-8	9+	2000
7	Holyhead ...	1003·9	-6	W'S	6	c	49	85	8	5	-	-	9+	9+	2200
	Chester (Sealand)	1002·8	-8	W'N	6	ido	50	85	6	6	2	-	7-8	10	1000
8	Manchester ...	1001·5	-6	W	5	dd	48	97	5	6	2	-	9	10	600
10	Spurn Head ...	999·4	-2	W	3	F	43	97	1	5	-	-	10	10	800
	Catterick ...	1000·2	-12	N'E	2	roro	45	97	6	6	2	-	9	10	1000
	Tynemouth ...	1001·7	-8	ENE	2	ir	44	97	6	-	2	-	10	10	1100
11	St. Abbs Head	1001·6	-6	NE	4	rf	39	97	3	5	2	-	7-8	10	2000
	Leuchars ...	1003·2	-2	NE	3	roro	37	92	7	6	2	-	9	10	700
12	Renfrew (Abbots I.)	1002·6	-6	ENE	3	roro	40	92	7	5	2	-	7-8	10	1200
	Eskdalemuir ...	1000·9	-4	NE	2	rr	40	92	7	6	-	-	10	10	800
	Point of Ayre ...	1001·2	-6	NW'N	4	dd	48	97	6	8	2	-	10	10	1500
13A	Tiree ...	1001·8	0	NNE	2	dodo	44	85	8	5	-	-	9+	9+	1800
13B	Stornoway ...	1007·2	-4	NNE	5	prs	36	75	7	8	7	-	4-6	10	1500
15	Dalwhinnie ...	1004·0	+2	NNE	4	SoSo	31	97	3	4	-	-	0	0	<150
	Aberdeen ...	1004·8	-4	NNE	3	SoSo	33	85	6	6	2	-	2-3	10	800
	Wick ...	1005·8	-8	N	3	c	36	65	8	5	7	6	7-8	9	1500
16	Lerwick...	1005·5	-10	NE	4	c/ps	35	75	8	8	7	-	4-6	7-8	800
17	Blacksod Point...	1006·9	-8	W	4	c	51	97	7	3	-	-	9	9	800
18	Malin Head ...	1002·0	+4	N	4	ir	46	97	5	6	-	-	9+	9+	220
	Aldergrove ...	1002·5	*	W	3	c	48	85	8	5	-	-	10	10	900
19	Birr Castle ...	1008·1	-8	WSW	1	ido	50	92	7	6	2	-	4-6	10	1500
20	Valentia Obsy. †	1011·1	-10	W	3	c	51	97	7	5	-	-	10	10	800
	Roches Point ...	1010·7	-6	W	3	c	52	92	8	5	-	-	9	9	1500

OBSERVATIONS at 18h. G.M.T. 30th December

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)	1004·0	-2	WSW	4	zo	50	85	6	5	-	-	10	10	1500	1	*
Croydon	1004·1	-2	W	3	zo	49	85	6	5	-	-	10	10	1000	1	*
S. Farnborough	1005·0	-2	WSW	4	c	49	85	7	5	-	-	10	10	3000	1	*
Boscombe Down	1005·6	-22	W	5	iro	48	92	6	6	-	-	9+	9+	1200	1	*
Calshot (Soton.)	1006·5	-2	W'S	3	c/d	48	92	6	5	-	7	7-8	10	1400	1	2
Lympne	1004·6	+2	WNW	5	o	49	85	8	5	7	-	7-8	9+	800	1	§
Manston	1002·6	+2	WSW	5	zo	48	92	6	5	-	-	10	10	3600		*
Shoeburyness	1003·3	+2	W'S	4	c	50	85	5	5	-	-	9+	9+	1500	1	*
Felixstowe	1000·7	-2	W'N	5	c/d	49	85	6	5	-	-	9+	9+	3000	1	3
Gorleston	999·3	-6	WNW	4	roro	47	92	6	6	-	-	10	10	1500	1	2
Mildenhall	1000·4	-6	W	5	zo	49	85	6	5	7	-	7-8	10	2400	1	*
Cranwell	1000·8	-2	WNW	6	zo	47	85	6	6	-	-	10	10	200	2	*
Birmingham	1003·3	0	W	3	c	48	85	7	5	-	-	10	10	800	1	*
Upper Heyford	1004·1	-6	W'S	5	c	49	85	7	5	-	-	10	10	2000	1	*
Ross-on-Wye	1005·0	-4	W'S	4	c	51	75	8	5	-	-	10	10	2500	1	*
Hartland Point	1005·0	-12	NW	4	c	48	97	8	5	-	-	9+	9+	2500	1	4
Bristol	1006·8	-2	W	5	c/d	48	97	6	5	-	-	10	10	800	1	*
Portland Bill	1008·5	-10	WSW	4	c	50	92	8	5	-	-	10	10	2500	1	4
Plymouth	1009·8	-8	W	4	zo	50	92	6	5	1	-	9+	10	500	1	2
The Lizard	1011·2	-6	W	6	df	49	97	3	5	-	-	10	10	800	1	4
Scilly (St. Mary's)	1011·6	-8	WSW	4	c/f	50	97	5	5	-	-	10	10	800	1	3
Guernsey																
Pembroke	1006·8	-2	W	5	cq	50	92	7	8	7	-	7-8	9+	2000	1	3
Holyhead	1002·5	-10	W'S	6	c	50	85	7	5	-	-	10	10	2500	1	4
Chester (Sealand)	1001·3	-10	W'S	5	c	52	85	7	5	-	-	9	9	3800	1	*
Manchester	1000·5	-8	W'S	5	zo	48	92	5	5	2	-	7-8	10	2000	2	*
Spurn Head	998·4	-4	W'N	2	F	43	97	1	5	-	-	10	10	800	0	2
Catterick	999·7	+2	N	3	rr	43	97	4	5	-	-	10	10	600	1	4
Tynemouth	1001·1	+2	ENE	5	rr	41	97	6	6	-	-	10	10	800	1	4
St. Abbs Head	1003·4	+8	NE	4	roro	35	97	7	5	2	-	7-8	10	2000	1	3
Leuchars	1004·5	+10	NNE	2	SoSo	33	92	6	6	2	-	9	10	600	1	*
Renfrew (Abbots I.)	1004·2	+10	ESE	2	c/r	36	85	6	5	-	-	10	10	1500	1	*
Eskdalemuir	1002·2	+14	NE'E	4	rs	33	92	5	-	2	-	10	10	5700	1	*
Point of Ayre	1000·9	+6	NE'N	4	o	43	92	7	-	2	-	10	10	2500	1	3
Tiree	1004·9	+12	N'E	4	c	40	75	8	8	-	-	9	9	1800	1	4
Stornoway	1007·9	+2	N	4	c/ph	33	85	7	8	-	-	7-8	7-8	1500	1	2
Dalwhinnie	1004·4	+10	NE	1	o	29	97	6	5	-	-	10	10	800	7	*
Aberdeen	1004·9	+2	N'W	3	c/ph	33	92	3	9	2	-	Tr	9+	450	4	2
Wick	1005·7	0	NNE	5	o/ps	35	92	7	3	1	-	7-8	7-8	1500	4	2
Lerwick	1005·0	-2	NE	4	c/ps	33	92	7	8	7	-	4-6	7-8	800	4	*
Blacksod Point	1006·4	0	NW	2	c	47	97	7	-	7	-	0	7-8	-	1	2
Malin Head	1004·2	+18	N	5	c/pr	42	92	7	9	-	-	9+	9+	800	0	3
Aldergrove	1003·5	+18	N'W	2	c/d	42	97	6	5	-	-	9+	9+	800	2	*
Birr Castle	1006·4	-4	W	3	c/d	49	92	7	6	2	-	4-6	10	1500	1	*
Valentia Obsy. †	1008·9	-16	SW'S	3	c	51	97	8	5	7	-	7-8	10	4000		
Roches Point	1008·4	-12	W	2	c	49	92	8	5	7	5	4-6	7-8	1500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 30th (37)	13h.—18h. 30th (38)	18h. 30th to 1h. 31st (39)	1h.—7h. 31st (40)
London (Kew)	cmo	cmo	circm	cmdd
Croydon	cmoc	ccmo	cmircm	cmidm
S. Farnborough	cdd,idoc	c	cm	cmdd
Boscombe Down	cirmoq	cirmo	cidcm	cmidcm
Calshot (Soton.)	cidomoc	ccido	ccidm	cid irm
Lympne	cmoocdo	cidoc	c	cdmcm
Manston	rrmoccido	ccmo	cm	cirdm
Shoeburyness	cmod	cmoidcmo	cm	bcmido
Felixstowe	pdd,iddd,mo	orrdodm	cmiro	ircmo
Gorleston	oroo	ororo	oriro	oirop
Mildenhall	irododerrmo	cirododmo	ccrocm	cbcocm
Cranwell	crorom om	crorocmo	crorodd	ddddid
Birmingham	cir	c	ciro	cf
Upper Heyford	cidomocmoc	c	ceddm	cidmcm
Ross-on-Wye	cc	c	c	com
Hartland Point	fdc	bcc	bcc	cddor
Bristol	crododoq	cmododomo	cmdd	cmidf
Portland Bill	c	c	c	orr
Plymouth	cmocido	cidocmo	cidm	cidrrm
The Lizard	cid	df	odf	rr
Scilly (St. Mary's)	oidoico	cpid	cifrof	ofr
Guernsey				
Pembroke	bccqc	cq	c	dodc
Holyhead	rorodde	c	iddmc	iromc
Chester (Sealand)	cmododoido	docqc	cdmc	cmo
Manchester	rrdfdd	cmodddod	bcmcm	cmm
Spurn Head	rrsso	rorff	odd	odd
Catterick	orforr	rodderm	orrcom	midoso
Tynemouth	omir	orr	orrir	oir
St. Abbs Head	crrf	cmr	docrs	cshrc
Leuchars	dododdid	srocsrosoSom	cmssbcb	bmx
Renfrew (Abbots I.)	cmorocrorr	crrromo	mirbcb	bcbx
Eskdalemuir	rrororr	corrrs	sSoc	cbc
Point of Ayre	dd	o	cbcbc	c
Tiree	odroc	c	b	bcb
Stornoway	cidprs	cpraph	cbcpbb	bc RSPh
Dalwhinnie	SoSof	SoSoo	*	oc
Aberdeen	rrrss	SoSoc	cbcb	psob
Wick	rssos	cpscq	ps bc	bcphs
Lerwick	cpsc	cps	cpsso	cps
Blacksod Point	c	c	rr	bcq
Malin Head	oDfo	cproco	c	c
Aldergrove	roromocdo	cdormoc	iroidcm	c
Birr Castle	cido	cido	ciro	circ
Valentia Obsy. †	oidoc	cdcidocc	codrrdd	oiRrroid
Roches Point	c	c	irc	circ

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.*

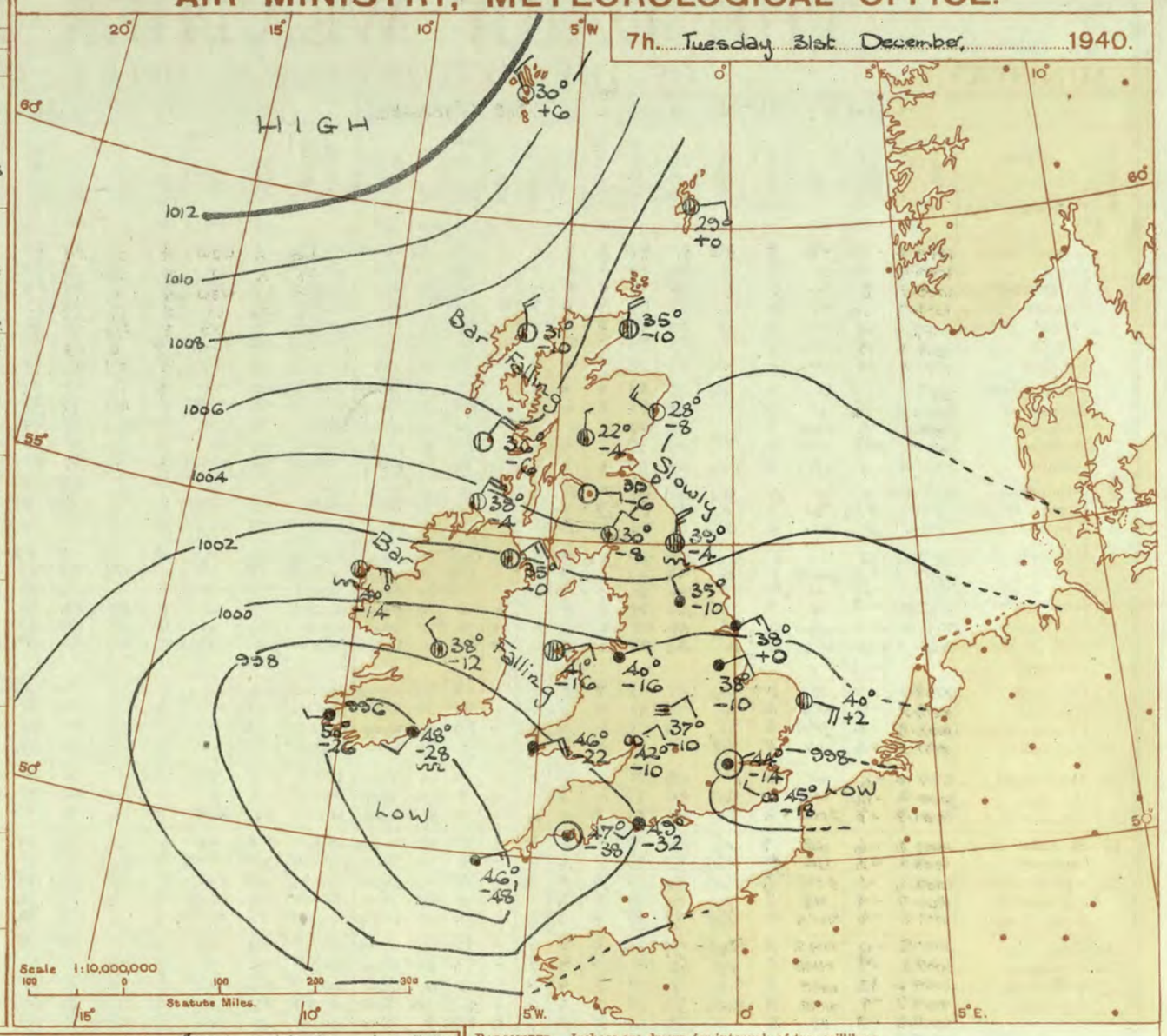
Abridged observations of additional stations in the
AVIATION WEATHER CODE

13h. G.M.T. 30th December			18h. G.M.T.			01h. G.M.T. 31st December			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 99	10654	64425	30	26844	00084	30	01844	02484	30	01844	04414
115 53	02944	04466	52	10844	08484	52	83744	06386	52	83834	06385
203			84	01344	04314						
206 62	23845	06278	01	01890	02124	50	00862	32102	50	00863	00003
210 62	83786	06478	50	27853	02483	8-	01854	20284	8-	01855	20315
220 52	63846	05528	5-	03646	02428						
230 5-	62648	02168				04	00890	04262	00	00990	06100
245 6-	68638	04568	5-	23668	02278	50	00861	32511	80	00862	28402
260 62	51626	02368	62	74435	04378	50	01763	00073	50	01754	00014
277 52	54626	24468	50	01844	30364	5-	22858	09268	8-	02868	03388
279 62	62646	32168	52	64637	04468				8-	85746	32386
285 -2	64638	04268	-2	64638	04368				6-	68538	06478
288 02	62538	02368	02	67338	28268	52	62545	04268	5-	22648	12168
273 46	54334	23658							51	01753	04214
301 62	05746	26568	5-	05657	26567	5-	05658	30118	5-	05658	04128
321 02	64438	22268	62	08447	24358	52	21535	30468	02	52438	03358
299 5-	64448	25268	5-	64638	26268	5-	62538	06668	5-	02745	06365
292 5-	62428	00048	52	64546	30158	5-	61638	32368	52	22647	02267
310 --	67109	20549	--	02428	24628				--	46109	26549
316 57	51545	24368	52	05646	57458	62	51635	32458	62	52536	04358
333 5-	0284-	24527	5-	51768	23528	5-	02648	00058	5-	61648	02168
334											
340 5-	22847	24367	5-	02758	24328	70	01844	28364	5-	51638	08358
136 5-	22418	28468	5-	22648	09648	5-	05628	28568	5-	21638	10358
336 62	63535	28468	62	63756	28568				51	03754	28328
350 53	21736	24457							5-	05638	24158
368											
379 5-	02857	22527	5-	02758	24428	5-	05645	24325	5-	51628	06258
390 5-	51626	23558	5-	51648	26558	50	05665	22455	5-	05648	30358
382 5-	02747	23427	53	02755	23328	5-	21758	22458	5-	52658	01158
438 02	03748	24628									
430 5-	05647	24327	5-	05647	24428	57	51665	24558	5-	53638	00058
409 5-	52618	22458	52	05627	24458	5-	57308	20558	02	64518	6168

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 31st December, 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 31st December 1940
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light or moderate east to northeast wind fresh locally on coasts; dull; some rain or sleet; snow locally later; local mist; becoming cold.
4 W. Midlands ... 5 S.W. England	Variable winds finally east or northeast moderate; some rain or sleet; snow locally; bright intervals later; becoming cold.
6 South Wales ... 7 North Wales ...	Light or moderate northeast wind; cloudy; occasional sleet; snow locally; bright intervals later; cold; frost at night.
8 N.W. England 9 N. Midlands ...	Light or moderate northeast wind; cloudy with sleet or snow showers at first; bright intervals later; local morning fog; cold; frost at night.
10 N.E. England 11 S.E. Scotland	Light or moderate northeast winds; bright intervals; snow showers; local morning fog; cold; frost at night.
12 S.W. Scotland & Isle of Man.	Light northeast wind; fine; local fog near large towns; cold; frost at night, severe inland.
13 A. W. Scotld. / B. N.W. Scotland.	Light northeast wind; bright periods; local snow showers; cold; frost at night, severe inland.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	
17 N. W. Ireland 18 N. E. Ireland	Light or moderate northeast wind; bright intervals; local snow showers; cold; frost at night, severe inland.
19 S. E. Ireland 20 S. W. Ireland	Moderate northeast wind; rain at first; bright intervals and local wintry showers later; cold; frost at night.

GENERAL INFERENCE.

Pressure is relatively high to north of Iceland. A depression just south of Ireland is moving east-southeast and a trough of low pressure over East Anglia and the Midlands is moving slowly South. In the North there will be bright periods and local snow showers. In the South and Midlands there will be rain or sleet at first with snow locally later but amounts of snowfall are doubtful.

FURTHER OUTLOOK.

Continuing cold in most areas; risk of heavy snowfall locally.

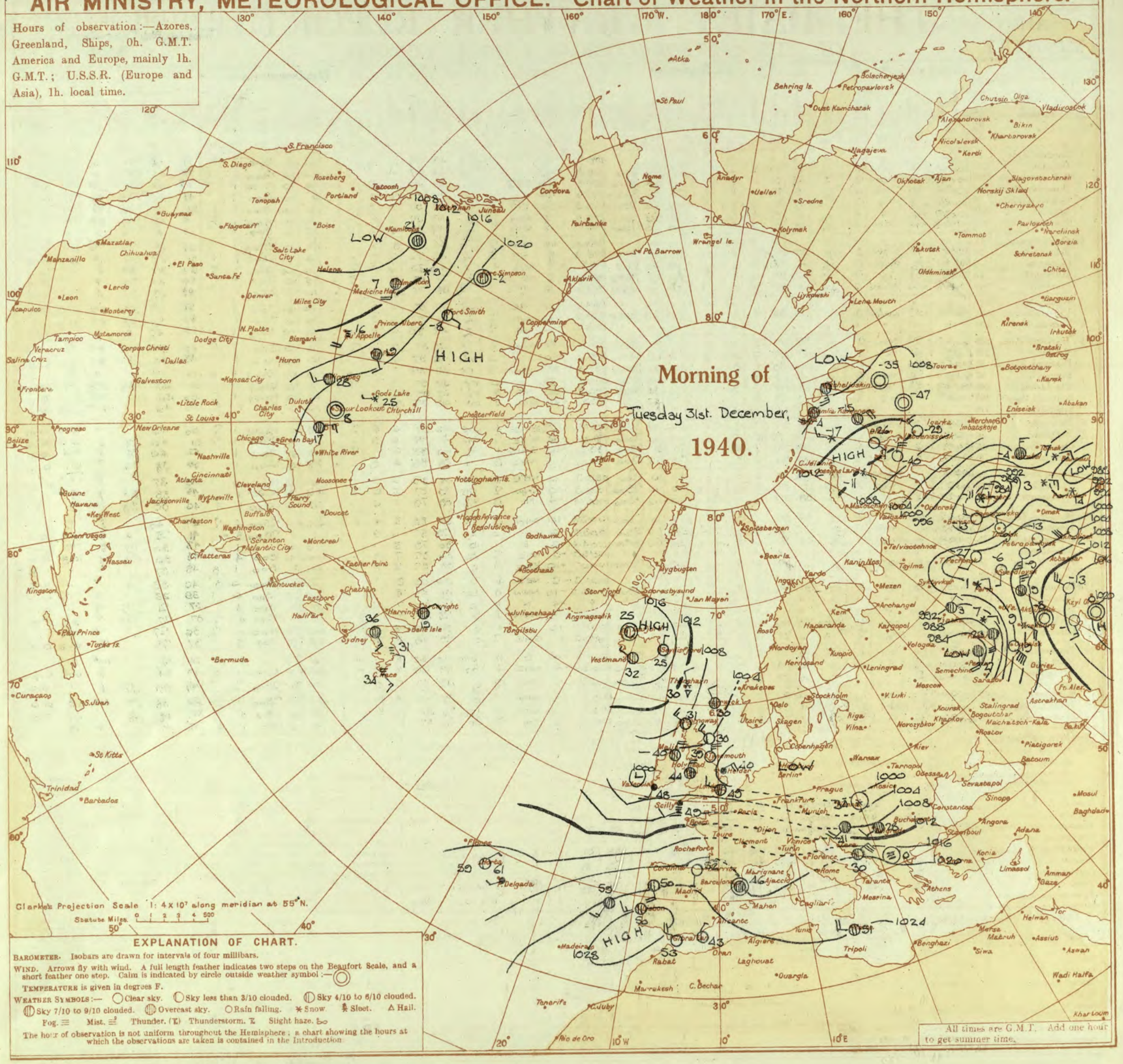
Forecasts issued at 10·30.

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 31st December 1940.

No. 28,894

OBSERVATIONS at 1 hr. G.M.T. 31st December

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	1001.0	-14	W'N	3	id	49	92	5	6	2	-	7-8	10	800
	S. Farnborough	226	1002.4	-10	WSW	3	z	49	85	6	5	-	-	10	10	3500
	Boscombe Down	417	1003.0	-10	W'N	4	z	48	85	6	8	-	-	9+	9+	3000
	Calshot (Sthmtn.)	8	1003.8	-14	W	3	c/d	48	92	6	5	-	-	10	10	2500
	Lympne ...	346	1003.2	-10	W	4	id	47	92	6	6	-	-	10	10	1500
	Manston ...	154	1000.5	-14	SSW	4	z	49	92	6	5	-	-	10	10	4000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	999.5	-10	WSW	5	c/r	47	92	6	5	-	-	9	10	3000
	Gorleston ...	5	997.8	-4	WNW	3	ir	47	92	8	6	-	-	10	10	800
	Mildenhall ...	19	998.6	-10	W	5	c/r	47	97	6	5	-	-	9+	10	1500
	Cranwell ...	240	1000.2	+14	WNW	4	dd	41	97	5	6	-	-	10	10	600
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1001.4	-12	NWW	3	bc	47	85	7	5	-	-	2-3	2-3	3000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1003.7	-22	NW	3	c	48	97	8	5	-	-	9	9	2000
	Bristol ...	209	1003.1	-14	W	4	c/d	47	97	6	5	-	-	10	10	1400
	Portland Bill ...	32	1004.5	-20	W	4	c	50	85	7	5	-	-	10	10	2500
	Plymouth ...	82	1005.4	-24	W	4	id	49	97	6	5	-	-	10	10	600
	The Lizard ...	240	1005.8	-28	W'S	3	bf	49	97	3	5	-	-	10	10	800
	Scilly (St. Mary's)	163	1005.2	-32	SW'S	2	pf	49	97	2	-	-	-	10	10	(1500)
	Guernsey ...	175														
6	Pembroke ...	142	1002.4	+10	WNW	3	c	49	92	7	8	2	-	4-6	10	2500
7	Holyhead ...	26	1002.3	-4	NNE	4	z	44	92	6	5	-	-	10	10	2000
	Chester (Sealand)	16	1001.8	-6	NW	4	c	42	92	7	5	-	-	9	9	2500
8	Manchester ...	70	1001.8	+8	NE	2	z	39	85	6	5	-	-	7-8	7-8	2100
10	Spurn Head ...	29	999.4	0	NE'N	4	dd	40	97	6	5	-	-	10	10	1500
	Catterick ...	175	1002.7	+2	N'W	2	o/p	37	97	6	5	-	-	10	10	2500
	Tynemouth ...	108	1002.7	+4	N	5	o/p	39	92	7	-	2	-	10	10	1200
11	St. Abbs Head	280	1004.2	0	N	8	is	36	85	7	5	2	-	7-8	10	2000
	Leuchars ...	36	1004.0	0	NW	2	z	32	85	6	5	-	-	2-3	2-3	2500
12	Renfrew (Abbots I.)	19	1005.4	-4	NNE	1	z	38	85	6	5	-	-	2-3	2-3	3000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1003.0	+4	NE'E	4	bc	39	92	8	8	-	-	4-6	4-6	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1008.1	-10	NW	3	bc	31	92	8	8	-	-	1	1	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1005.7	-4	NW	2	bc/pd	29	92	7	8	4	-	4-6	4-6	1500
16	Lerwick ...	156	1005.6	0	NNW	2	c/d	30	97	6	8	7	-	4-6	7-8	1500
17	Blacksod Point	18	1002.7	-14	E'N	4	RR	48	97	6	6	-	-	10	10	800
18	Malin Head ...	84	1004.4	-6	N'E	4	c	40	75	7	9	-	-	7-8	7-8	4000
	Aldergrove ...	268	1004.0	-4	-	0	z	36	97	6	5	-	-	10	10	2500
19	Birr Castle ...	173	1003.0	-20	W	1	ir	44	92	7	5	-	-	10	10	2500
20	Valentia Obsy.	30	1001.9	-32	S'W	3	dd	48	97	5	8	-	-	10	10	800
	Roches Point	22	1002.8	-26	W	2	c/r	47	92	8	6	2	-	7-8	8	1500

OBSERVATIONS at 7 hr. G.M.T. 31st December

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)	998.3	-16	N	1	dd	45	92	6	5	-	-	10	10	1500	1	*
	Croydon ...	998.8	-14	-	0	id	44	92	4	-	2	-	10	10	1000	1	*
	S. Farnborough	998.4	-20	NE'E	2	dd	44	92	6	5	-	-	10	10	1500	1	*
	Boscombe Down	997.8	-30	-	0	z	46	97	6	5	7	-	9	10	3100	1	*
	Calshot (Sthmtn.)	998.3	-34	W'S	2	rr	47	97	6	5	-	-	10	10	1500	1	1
	Lympne ...	999.8	-18	WNW	1	z	45	92	6	5	-	-	10	10	1500	1	*
	Manston ...	998.6	-4	NNW	2	dd	42	97	5	5	2	-	7-8	10	900	*	*
2	Shoeburyness ...	999.6	-10	N'W	2	c/d	44	92	5	5	-	-	10	10	2500	1	*
	Felixstowe ...	998.5	-8	NE	3	z	42	92	6	5	-	-	10	10	2400	1	1
	Gorleston ...	997	+2	ESE	4	c	40	85	6	5	-	-	10	10	1500	1	2
	Mildenhall ...	998.4	-6	NE'E	2	z	41	97	6	5	2	-	7-8	10	500	1	*
	Cranwell ...	999.8	-10	NE'E	2	id	38	97	5	5	-	-	10	10	900	1	*
3	Birmingham ...	999.6	-10	NE	2	of	37	97	8	5	-	-	10	10	800	1	*
	Upper Heyford	999.6	-10	NNW	2	z	41	97	6	5	-	-	10	10	700	1	*
4	Ross-on-Wye	998.6	-10	NE	2	z	42	85	6	5	-	-	10	10	800	1	*
5	Hartland Point	996.7	-32	WSW	2	ir	47	97	5	-	2	-	10	10	800	1	3
	Bristol ...	998.0	-30	-	0	of+	46	97	3	5	-	-	10	10	100	1	*
	Portland Bill ...	997.5	-32	SW	2	rr	49	92	7	5	-	-	10	10	1500	1	3
	Plymouth ...	997.3	-38	-	0	rr	47	97	5	-	2	-	10	10	600	1	1
	The Lizard ...	996.2	-30	NE	3	rr	47	97	6	5	-	-	10	10	1000	1	2
	Scilly (St. Mary's)	995.9	-48	ENE	3	rr	46	97	5	6	-	-	10	10	500	1	2
6	Pembroke ...	997.2	-22	ENE	4	dd	46	97	6	8	2	-	7-8	10	1600	1	2
7	Holyhead ...	999.0	-16	ENE	2	o/p	41	92	6	5	-	-	10	10	2200	1	2
	Chester (Sealand)	999.7	-16	ENE	1	ir	40	85	6	-	2	-	10	10	1800	1	*
8	Manchester ...	1000.1	-10	NE'E	3	m	38	85	4	5	-	-	7-8	10	1400	1	*
10	Spurn Head ...	999.5	0	NE'E	3	dd	38	92	6	5	-	-	10	10	1500	0	2
	Catterick ...	1001.3	-10	NNW	2	rs	35	97	6	6	2	-	4-6	10	1000	1	*
	Tynemouth ...	1002.4	-4	N	0	c/p	39	75	7	6	-	-	10	10	1000	1	4
11	St. Abbs Head	1002.8	-10	NNW	3	bc	36	85	8	4	4	-	4-6	4-6	2500	4	2
	Leuchars ...	1003.9	-6	-	0	z	29	85	6	5	-	-	1	1	2600	3	*
12	Renfrew (Abbots I.)	1004.4	-6	E	1	b	30	75	8	-	-	-	0	0	-	1	*
	Eskdalemuir ...	1002.9	-8	NNE	2	bc	30	92	7	5	-	-	4-6	4-6	1500	4	*
	Point of Ayre...	1000.7	-10	ENE	5	c	38	92	8	8	1	-	4-6	8	1500	1	3
13A	Tiree	1004.6	-6	NE'N	4	b	36	65	9	1	-	-	Tr	Tr	3500	0	3
13B	Stornoway ...	1006.6	-10	NNW	3	bc	31	85	8	8	-	-	2-3	2-3	2500	4	1
15	Dalwhinnie ...	*	-4	N	1	c	29	97	7	5	-	-	9+	9+	1500	8	*
	Aberdeen ...	1004.2	-8	NW'N	3	b	28	97	7	3	-	-	1	1	2500	4	2
	Wick ...	1004.1	-10	N	4	c	35	85	8	5	7	-	4-6	7-8	1500	4	2
16	Lerwick ...	1005.6	0	ENE	2	c	29	85	8	8	7	-	4-6	7-8	800	8	*
17	Blacksod Point	1001.0	-14	E	5	bcq	40	85	8	-	4	-	0	2-3	-	1	4
18	Malin Head ...	1003.4	-4	NNE	4	bc	38	65	7	9	-	-	4-6	4-6	4000	1	3
	Aldergrove ...	1002.0	0	NE	3	c	35	85	8	5	-	-	9+	9+	2500	2	*
19	Birr Castle ...	999.7	-12	NW	1	c	38	92	8	5	-	-	7-8	7-8	2500	1	*
20	Valentia Obsy.	996.1	-26	W'N	1	id	50	97	5	5	-	-	10	10	450	1	1
	Roches Point	996.0	-28	SW	2	dr	48	97	6	5	-	-	10	10	450	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 30th Hrs. (36)
1	London (Kew)	51	44	41	-	0.1	0.0
	Croydon ...	50	43	42	-	0.1	0.0
	S. Farnborough	50	44	*	Tr	Tr	*
	Boscombe Down	49	45	43	0.1	Tr	0.0
	Calshot (Sthmtn.)	51	45	45	Tr	0.2	0.0
	Lympne ...	*	45	43	0.2	Tr	0.0
	Manston ...	*	*	*	*	*	*
2	Shoeburyness ...	51	43	41	Tr	0.1	0.0
	Felixstowe ...	51	42	41	2	0.1	0.0
	Gorleston ...	50	39	39	8	0.5	0.0
	Mildenhall ...	50	41	30	4	1	0.0
	Cranwell ...	49	37	37	5	1	0.0
3	Birmingham ...	51	37	35	0.3	0.6	0.1
	Upper Heyford	53	40	32	0.1	0.2	*
4	Ross-on-Wye	52	42	41	-	-	0.3
5	Hartland Point	49	47	46	0.3	2	0.0
	Bristol ...	49	45	40	0.1	0.1	0.0
	Portland Bill ...	51	47	*	-	3	*
	Plymouth ...	51	47	46	0.3	12	0.0
	The Lizard ...	50	46	*	0.5	11	0.0
	Scilly (St. Mary's)	50	46	*	0.4	12	0.0
6	Pembroke ...	50	45	*	-	0.5	0.0
7	Holyhead ...	51	40	38	1	0.3	0.0
	Chester (Sealand)	52	40	38	2	0.4	0.0
8	Manchester ...	50	38	36	7	0.1	0.0
10	Spurn Head ...	45	37	*	7	5	0.0
	Catterick ...	45	33	33	7	5	0.0
	Tynemouth ...	46	35	33	12	8	*
11	St. Abbs Head	47	40	*	7	3	*
	Leuchars ...	41	28	*	6	0.1	0.0
12	Renfrew (Abbots I.)	43	30	19	8	Tr	0.0
	Eskdalemuir ...	43	30	29	4	0.3	0.0
	Point of Ayre...	48	37	*	6	-	0.0
13A	Tiree	46	33	*	5	-	0.0
13B	Stornoway ...	39	28	*	1	1	0.0
15	Dalwhinnie ...	37	21	12	2	-	0.0
	Aberdeen ...	37	27	21	4	0.1	0.0
	Wick ...	36	27	*	0.6	0.2	*
16	Lerwick ...	37	28	*	Tr	0.6	0.0
17	Blacksod Point	51	39	*	0.4	1	*
18	Malin Head ...	49	34	*	6	0.4	0.0
	Aldergrove ...	48	35	32	1	1	0.0
19	Birr Castle ...	50	38	37	0.1	3	0.0
20	Valentia Obsy.	52	48	48		13	0.0
	Roches Point	52	47	*	-	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. % (Yesterday.)	Humidity 9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew...	18	cm	cm	cicm	51	44	41	-	0.1	0.0	*	*	4
Croydon	217	cmc	ccm	cmicm	50	43	42	-	0.1	0.0	*	*	3
Greenwich (Royal Observatory)...	149	c	c	cd dm	51	41	41	Tr	0.3	0.0	81	94	4
City (Bunhill Row)	[illegible]	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	51	43	41	0.3			85	91	*
Regents Pk. (Botanic Gardens)†...	168	*	*	*	42	41	38	-	0.3		86	91	*
Camden Square	110	c	c	*	50	42	41	-	0.3	*	*	91	*
Kensington	80	c	c	*	51	42	41	Tr	0.3		88	95	*
Hampstead Observatory	450		*								*		*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 31st...

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
0.2	18-20h 30th	<0.1	1-3h. 31st

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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