M.O. Form 2373

THE DAILY WEATHER REPORT

BRITISH SECTION

1st October to 31st December

1939

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

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 British health resorts for the previous day, arranged under forecast districts.

(*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.

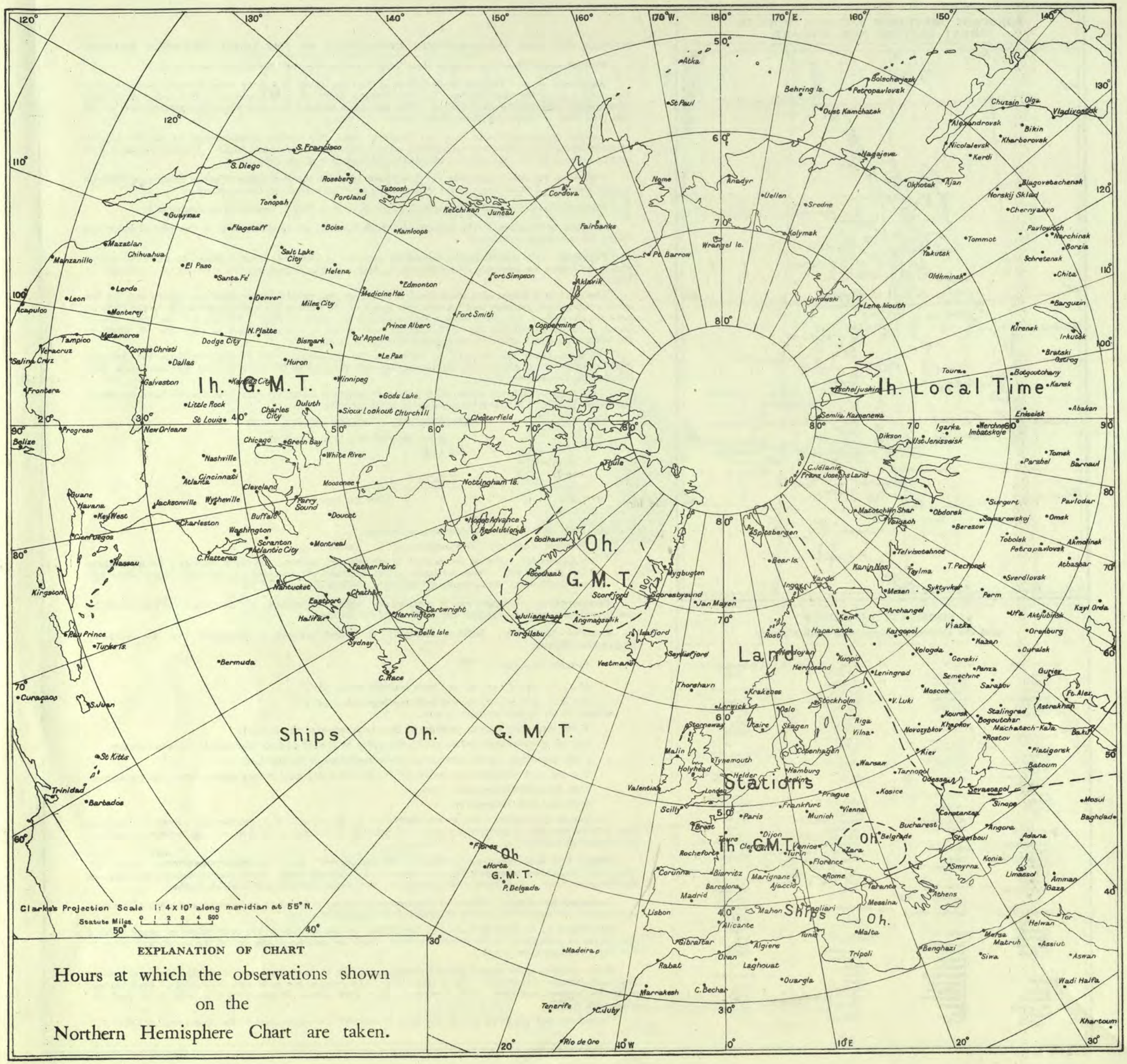
The *South Cone* (point downwards) is hoisted for gales commencing from a Southerly point. Such gales often veer, sometimes as far as Northwest.

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.



EXPLANATION OF CHART

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

FORECAST DISTRICTS AND STATIONS IN GREAT BRITAIN AND IRELAND

FORECAST DISTRICTS
and the Counties comprised within them

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.
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.

Valentia.—The observations at 1h. G.M.T. are taken at the Post Office Wireless Station on Valentia Island, those at all other hours at the Observatory near Cahirciveen on the mainland.

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.

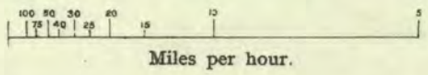
The scale below can be used to determine the theoretical wind as deduced from the pressure distribution on either chart. On the assumption that the path of the air is straight this theoretical wind is called the Geostrophic Wind.

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 between 0 and 19 : 25, between 20 and 29 ;.....and so on ; 92, between 90 and 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

G.542/3794, m.8040, D.4604 Co. 249. 11/39

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

MONTHLY SUPPLEMENT, NOVEMBER. 1939. No. 275.

Stormy. Wet, mild and dull.

Except for a brief anticyclonic interlude on 20th and 21st, conditions were extremely disturbed, with an almost continuous succession of active troughs or centres moving across the country. During the night of 18th and 19th a depression deepened unusually quickly as it crossed England, causing pressure at Gorleston to fall 23.8 mb between 1800 and 0400 G.M.T. Another noteworthy short-period pressure fall was one of 22.6 mb. in 6 hours at Lerwick in the early morning of 26th, when an intense depression which moved from Iceland to north of Shetland deepened eventually to below 94.5 mb.

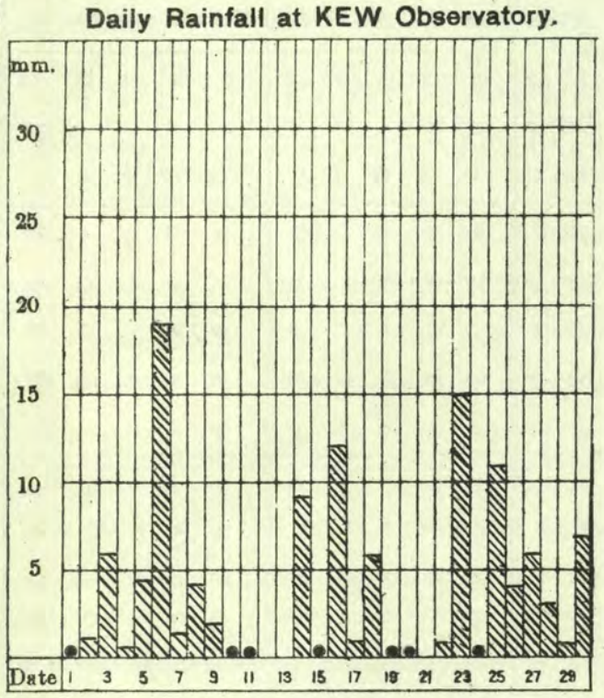
Gales were frequent. There were only 8 days free from gales along some part of our coasts, while wind gusts of 82 m.p.h. occurred at Pembroke on 6th, 77 m.p.h. at Stornoway on 26th and 70 m.p.h. or more at several places inland on 19th and 26th.

Over the greater part of the country rainfall aggregates were very considerably above the monthly average, though there was a slight deficiency locally in N. Wales. In Southern England many places measured double the usual amounts, while in Central Ireland (Birr Castle) it was the wettest November since 1862. Outstanding among many 24 hour falls of more than an inch were 41 mm. (1.61 ins) at Scilly on 23rd and 39 mm (1.54 in) at Spurn Head on 19th. Snow was reported on high ground in Scotland on 12th and on most days in the second half of the month.

There were one of two short bursts of polar air (19th and 24th), but the air supply was mainly maritime or sub- tropical in character, and temperatures were accordingly appreciably above the seasonal average. Many districts inland were free from frosts throughout the month, and even at Dalwhinnie (1176 ft above M.S.L.) air temperature did not fall below 27°F. 60°F was reached at Kensington Palace on 7th and Ross-on-Wye on 29th. Sunshine totals reveal a general deficiency. A low record for November was created at Aldergrove (37 hours).

Thunderstorms occurred in the South of England on 1st and 6th and in Ireland on 7th, while lightning was observed at widely distributed stations on 8th and 14th. Fog was much less persistent than is usual in November but there was persisted sea fog near the southwest coasts on 29th and 30th.

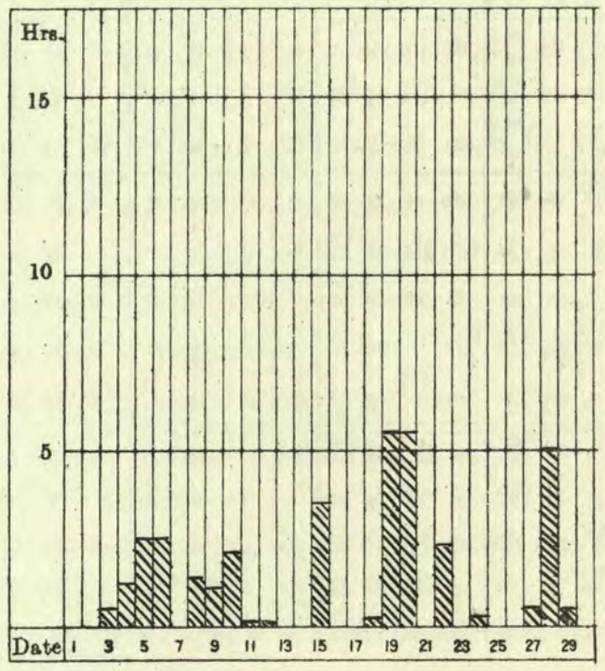
Daily Rainfall at KEW Observatory.



● = Less than 0·5 mm.

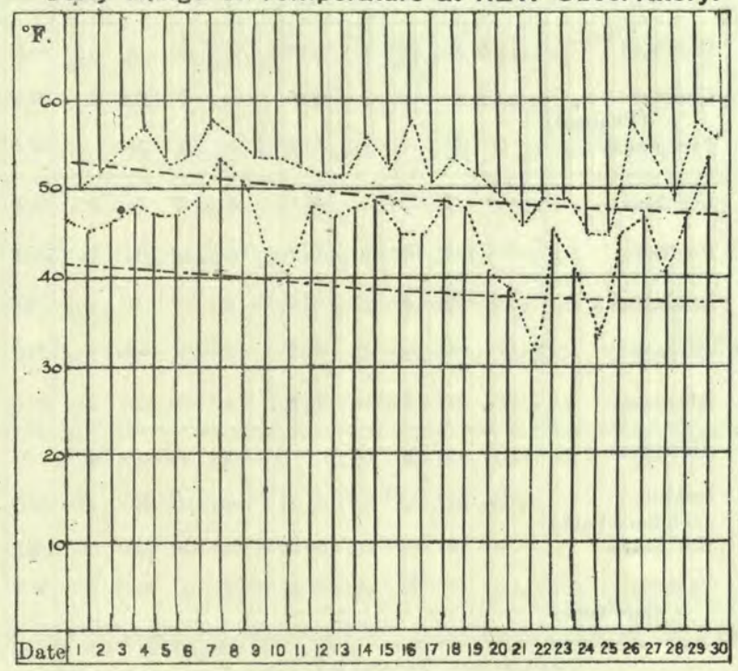
RAINFALL. Total for Month. 112 mm.

Daily Sunshine at KEW Observatory



SUNSHINE. Total for Month. 36 hrs.

Daily Range of Temperature at KEW Observatory.



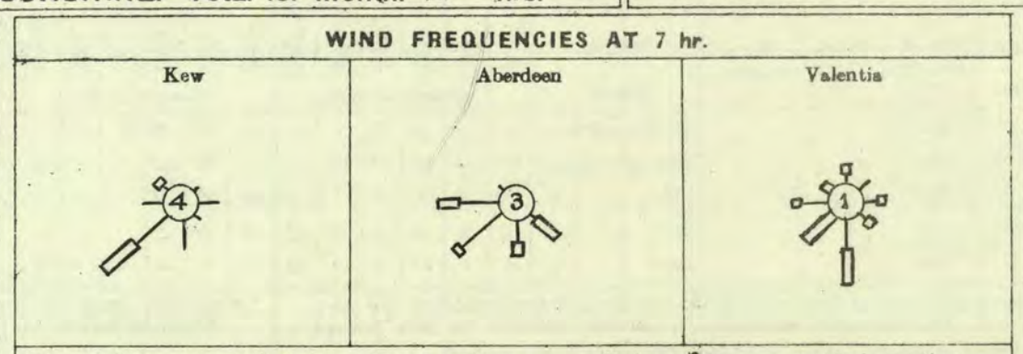
TEMPERATURE. The pecked curves indicate the maximum temperature recorded each day, and the minimum temperature each night throughout the month. The chain lines show normal values.

MEAN VALUES FOR THE MONTH.*

STATIONS.	PRESSURE Mean	PRESSURE Difference from average	TEMPERATURE Mean	TEMPERATURE Difference from average
	mb.	mb.	°F.	°F.
Kew	1011.5	−3.1	45.1	+4.8
Aberdeen	1003.5	−6.5	44.0	+1.7
Valentia	1007.1	−5.9	51.0	+3.5

*Pressure—The mean is for the 24 hours. It is derived from values at 7 h. and 18 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 ; 10 mm. 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 ...	7,005
Aberdeen ...	
Lerwick ...	15,734
Valentia ...	

SUMMARY OF RECORDS OF TEMPERATURE, LOW CLOUD, VISIBILITY,

District.	Stations.	† Temperature. Number of daily readings within fixed limits. Maximum. 33°–41°	42°–50°	51°–59°	60°–68°	Average Maximum.	Minimum. 24°–32°	33°–41°	42°–50°	51°–59°	Average Minimum.	Extremes—Warmest and Coldest. Days. Highest Max.	Date.	Lowest Max.	Date.	Nights. Highest Min.	Date.	Lowest Min.	Date.	Number of Ground Frosts.	Low Cloud. Number of observations within fixed limits. 7 h. Below 1,000 ft.	1,000–5,000 ft.	5,000–8,000 ft.	13 h. Below 1,000 ft.	1,000–5,000 ft.	5,000–8,000 ft.	18 h. Below 1,000 ft.	1,000–5,000 ft.	5,000–8,000 ft.	Fog, Mist and Good Visibility. Number of observations within fixed limits. 7 h. Dense fog.	Thick fog.	Fog.	Mist.	Good Visibility.	13 h. Dense fog.	Thick fog.	Fog.	Mist.	Good Visibility.
						°F.					°F.	°F.				°F.																							
	London (Kew Obsy.)	0	8	22	0	43.6	1	6	20	3	40.0	58	7,16, 26,28	45	24, 25	54	8, 30	32	22	3	2	26	0	1	26	0	1	25	0	0	2	3	3	6	0	0	1	3	4
	Croydon ...	0	8	22	0	43.1	0	6	21	3	39.4	58	8, 26, 29	44	21, 24	54	30	34	21, 22, 25	2	5	23	0	6	20	2	4	22	2	0	0	3	2	6	0	0	1	2	5
	Calshot** ...	0	3	27	0	50.1	0	4	22	4	41.5	58	8, 9, 16, 17	46	24	53	8, 18, 30	33	25	1	9	20	0	10	20	0	8	19	0	0	1	1	2	6	0	0	0	0	15
	(Southampton) Lympne ...	0	12	18	0	47.9	1	6	20	3	39.4	59	12	43	24	53	8, 9, 30	32	25	1	11	15	1	14	13	2	8	16	2	0	0	1	1	13	0	0	1	0	15
2	Shoeburyness ...	0	8	22	0	45.2	0	4	23	3	39.0	59	14	44	24	54	30	34	22, 25	3	6	14	3	2	22	0	3	22	0	0	0	0	16	3	0	0	0	6	10
	Gorleston ...	0	13	17	0	48.6	1	4	22	3	40.8	59	8	44	24	52	8, 9, 30	32	25	0	2	28	0	1	29	0	0	28	0	0	0	2	0	2	0	0	0	0	2
	Cranwell ...	0	13	17	0	47.1	1	9	19	1	37.1	59	29	44	25	52	30	32	25	3	3	22	0	7	20	0	6	20	0	0	0	2	7	3	0	0	0	2	5
3	Birmingham ...	0	14	16	0	46.9	0	10	18	2	39.0	59	29	43	25	53	30	34	22, 25	3	11	11	0	5	20	0	12	13	0	0	1	3	5	7	0	0	3	1	10
	(Edgbaston)																																						
4	Ross-on-Wye ...	0	9	20	1	48.4	1	5	22	2	39.0	60	29	46	21, 25	54	30	30	22	2	8	18	0	1	27	0	4	24	0	0	0	2	2	18	0	0	1	0	22
5	The Lizard ...	0	2	28	0	*	0	1	20	9	*	58	2, 10, 11	50	24, 25	55	17	39	25	*	6	24	0	3	27	0	3	27	0	0	0	2	1	23	0	0	4	1	20
7	Holyhead ...	0	6	24	0	45.7	0	0	25	5	44.4	57	3, 7	48	23, 24, 27	52	8, 14	43	2	0	3	27	0	7	23	0	8	22	0	0	0	0	0	27	0	0	0	0	26
8	Chester ...	0	11	17	2	48.3	0	8	20	2	38.2	63	14	45	16, 23	51	9, 30	35	23	0	3	27	0	1	28	1	2	28	0	0	0	1	4	6	0	0	0	1	18
	(Sealand)																																						
10	Tynemouth ...	0	17	13	0	47.5	0	8	21	1	40.4	56	8, 29	44	24, 25, 28	51	9	35	25	2	0	30	0	0	30	0	0	30	0	0	0	2	1	3	0	0	3	1	3
11	Leuchars ...	1	16	13	0	46.7	2	17	11	0	36.3	54	14, 18	41	28	49	14	31	29	10	4	23	2	5	21	1	3	20	1	0	1	0	0	22	0	0	0	1	22
12	Renfrew ...	1	15	14	0	46.1	0	14	16	0	36.1	56	8	41	28	49	8, 14	33	20, 25	4	2	28	0	3	27	0	2	27	0	0	1	3	1	12	0	0	4	0	15
	Eskdalemuir ...	4	22	4	0	43.9	5	17	8	0	34.3	55	7	38	20	48	14	28	20	7	15	13	0	15	15	0	15	15	0	0	1	1	2	14	0	0	0	0	20
13B	Stornoway	0	20	10	0	47.2	0	11	18	1	39.6	53	3, 14, 19	42	27, 28	51	4	33	12	*	0	30	0	0	30	0	0	30	0	0	0	0	0	24	0	0	0	0	27
15	Aberdeen ..	1	21	8	0	46.2	1	17	12	0	38.3	55	9	41	28	50	8	29	23	12	6	22	1	6	19	3	5	20	1	0	0	0	0	12	0	0	0	1	15
18	Aldergrove ...	0	17	13	0	*	0	15	15	0	*	55	8, 11	43	27, 28	48	4, 8	35	24, 25	5	1	28	0	6	22	0	5	25	0	0	0	0	1	19	0	0	0	0	19
19	Dublin ...	0	6	24	0	45.8	0	14	15	1	36.9	59	8	45	23, 27	51	29	33	24		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	(Phœnix Park)																																						
	Birr Castle ...	0	7	23	0	48.6	1	8	21	0	38.2	57	8, 11, 29, 30	45	23, 27	49	4, 11, 30	31	24	3	0	28	0	2	28	0	2	22	0	0	0	0	0	30	0	0	0	0	30
20	Valentia ...	0	3	27	0	51.2	0	3	22	5	43.7	57	16, 29, 30	47	23	55	17, 30	39	25	0	8	21	0	10	20	0	7	23	0	0	0	0	2	24	0	0	0	0	20
	(Cahirciveen)																																						

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	1,740	42.0	44.7	59	43.7	60		
850	4,960	34.2	36.2	59	34.7	60		
750	7,950	25.3	27.9	59	26.3	60		
650	11,620	14.2	16.7	59	14.9	60		
550	15,750	0.5	2.5	59	1.6	60		

UPPER WINDS.

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

Station. Height. Metres.	Lympne. *No. of Obs.	6 to 25	26 to 50	51 to 75	76 to 100	Above 100	Plymouth (Mt. Batten). *No. of Obs.	6 to 25	26 to 50	51 to 75	76 to 100	Above 100	Holyhead. *No. of Obs.	6 to 25	26 to 50	51 to 75	76 to 100	Above 100	Renfrew. *No. of Obs.	6 to 25	26 to 50	51 to 75	76 to 100	Above 100	Station. Height. Metres.
		kilometres per hour.						kilometres per hour.						kilometres per hour.						kilometres per hour.					
500 above ground.	81	16	38	25	2	0	61	14	36	8	2	0	25	3	14	7	1	0	59	11	35	12	0	1	500 above ground.
1000 above M.S.L.	55	14	23	13	4	0	44	15	20	5	3	0	20	1	14	5	0	0	38	7	15	13	0	3	1000 above M.S.L.
2000 „ „	20	7	9	4	0	0	12	4	7	1	0	0	1	0	0	1	0	0	10	1	5	4	0	0	2000 „ „
3000 „ „	6	2	4	0	0	0	3	2	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3000 „ „
4000 „ „	4	1	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4000 „ „

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

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

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

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

SUNSHINE, RAINFALL, AND HUMIDITY — NOVEMBER — 1939.

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.
1	London ... (Kew Obsy).	14	12	4	0	0	5.7	19	1530	+61	36	−17	1880	81	1883	26	1886 1932
	Croydon ...	13	12	5	0	0	5.6	20	1500	−25	37	−15	1922	83	1923	28	1932
	Calshot** ... (Southampton)	12	9	7	2	0	7.9	19	1712	−34	51	−22	1881	109	1923	31	1886
	Lympne ...	14	8	6	2	0	6.8	19	1754	+29	55	−14	1921	108	1925	35	1934
2	Shoeburyness ...	13	10	6	1	0	7.2	20	1670	−46	46	−20	1919	104	1920	43	1934 1936
	Gorleston ...	*	*	*	*	*	*	*	*	*	*	*	1908	106	1920	37	1912
	Cranwell ...	7	15	8	0	0	5.7	9 20	1392	−146	54	−12	1921	97	1925	38	1932
3	Birmingham ... (Edgbaston)	11	13	6	0	0	5.5	9	1236	−68	43	−3	1887	93	1913	13	1912
4	Ross-on-Wye ...	12	13	5	0	0	5.7	9	1448	−37	44	−19	1915	108	1923	26	1934
5	Falmouth ... (Observatory)	14	9	7	0	0	5.1	21	1757	+47	47	−29	1881	145	1923	38	1917
7	Holyhead ...	11	13	6	0	0	5.6	24	1644	+94	40	−24	1914	124	1925	36	1922
8	Chester ... (Sealand)	11	12	6	1	0	6.8	9	1415	+39	45	−8	1923	89	1938	34	1934
10	Tynemouth ...	*	*	*	*	*	*	*	*	*	*	*	1935	*	*	*	*
11	Leuchars ...	12	9	8	1	0	6.2	24	1386	−84	52	−18	1922	101	1925	46	1933
12	Renfrew ...	12	15	3	0	0	4.6	24	1242	+49	29	−15	1921	60	1927	28	1932 1936
	Eskdalemuir ...	11	17	1	1	0	6.8	24	1192	−9	30	−25	1910	89	1925	28	1938
13B	Stornoway	3	24	3	0	0	5.2	1	1316	+101	38	−8	1881	67	1911	19	1881
15	Aberdeen ...	11	11	8	0	0	5.7	24	1273	−56	56	−3	1881	83	1904	32	1924
18	Aldergrove ...	10	16	4	0	0	5.1	24	1333	*	37	*	1927	77	1930	44	1937
19	Dublin ... (Phœnix Park)	11	14	4	1	0	7.0	24	1300	−137	42	−29	1881	104	1935	36	1888
	Birr Castle ...	15	11	4	0	0	5.9	24	1330	+24	39	−22	1881	95	1881 1909	26	1917
20	Valentia ... (Cahirciveen)	13	10	7	0	0	4.8	9	1553	+185	36	−27	1880	118	1909	33	1917

District.	Stations.	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).	9	5	7	7	2	0	19	6	751	+145	112	+56	1856	130	1926	10	1858	1	0
	Croydon ...	8	6	6	9	1	0	16	23	873	+194	118	+49	1921	160	1929	24	1932	0	0
	Calshot** ... (Southampton)	5	5	8	11	0	1	27	23	804	+158	149	+82	1871	176	1935	13	1879	2	0
	Lympne ...	8	5	5	11	1	0	24	9	981	+257	148	+67	1920	173	1926	26	1932	0	0
2	Shoeburyness ...	10	6	6	7	1	0	16	23	703	+200	96	+42	1920	105	1929	17	1920	2	0
	Gorleston ...	11	4	11	2	1	1	30	18	772	+150	106	+45	1871	208	1878	20	1920	0	0
	Cranwell ...	12	3	11	2	1	1	28	18	722	+132	89	+42	1917	124	1935	22	1920	1	0
3	Birmingham ... (Edgbaston)	8	3	11	7	1	0	22	23	851	+177	116	+55	1893	181	1929	17	1920	0	0
4	Ross-on-Wye ...	10	5	7	7	1	0	19	23	761	+44	107	+43	1859	227	1929	14	1933	2	0
5	Falmouth ... (Observatory)	5	4	8	8	3	2	44	23	1148	+41	214	+92	1871	340	1929	21	1901	0	0
7	Holyhead ...	9	6	8	5	2	0	18	25	902	+15	99	−6	1871	204	1877	38	1922	0	0
8	Chester ... (Sealand)	7	1	15	6	1	0	19	18	815	+154	101	+40	1922	116	1929	27	1922	0	0
10	Tynemouth ...	10	11	4	4	0	1	26	18	748	+127	71	+17	1915	112	1933	19	1922	0	0
11	Leuchars ...	9	3	9	9	0	0	15	14	739	+86	108	+50	1922	129	1931	13	1937	0	0
12	Renfrew ...	3	4	10	8	4	1	29	30	996	+57	204	+105	1921	265	1938	14	1937	1	0
	Eskdalemuir ...	3	5	10	5	4	3	30	8	1511	+82	236	+89	1910	297	1938	30	1937	0	3
13B	Stornoway	3	3	12	10	2	0	16	25	1128	−138	162	+14	1870	250	1898	45	1933	0	0
15	Aberdeen ...	5	7	12	6	0	0	11	5	762	+14	82	+7	1871	164	1872	31	1904	0	0
18	Aldergrove ...	4	8	8	9	1	0	23	7	927	+89	119	+37	1926	135	1931	18	1934 1937	0	0
19	Dublin ... (Phœnix Park)	5	6	10	8	1	0	18	4	782	+80	108	+36	1865	159	1916	10	1922	0	0
	Birr Castle ...	6	3	8	10	2	1	29	7	865	+38	188	+109	1862	157	1931	21	1922	0	0
20	Valentia ... (Cahirciveen)	3	1	10	9	5	2	29	5	1355	−59	265	+126	1866	310	1931	20	1879	0	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)	1	2	9	11	6	1	0	0	0	0
Ross-on-Wye ...	0	0	7	12	9	2	0	0	0	0
Falmouth (Obsy.)	10	7	4	6	3	0	0	0	0	0
Renfrew ...	0	0	9	14	7	0	0	0	0	0
Eskdalemuir ...	0	0	7	10	12	1	0	0	0	0
Aberdeen ...	0	0	7	7	9	7	0	0	0	0
Valentia ...	0	2	7	9	9	3	0	0	0	0

STATE OF GROUND AT 18 h.

No. of Days each type was recorded.

Stations.	0	1	2	3	4	5	6	7	8	9
London (Kew)	0	30	0	0	0	0	0	0	0	0
Ross-on-Wye	0	30	0	0	0	0	0	0	0	0
Renfrew ...	0	30	0	0	0	0	0	0	0	0
Eskdalemuir	0	27	2	0	1	0	0	0	0	0
Aberdeen ...	3	26	0	1	0	0	0	0	0	0
Valentia ...	0	28	2	0	0	0	0	0	0	0

CODE for State of Ground.

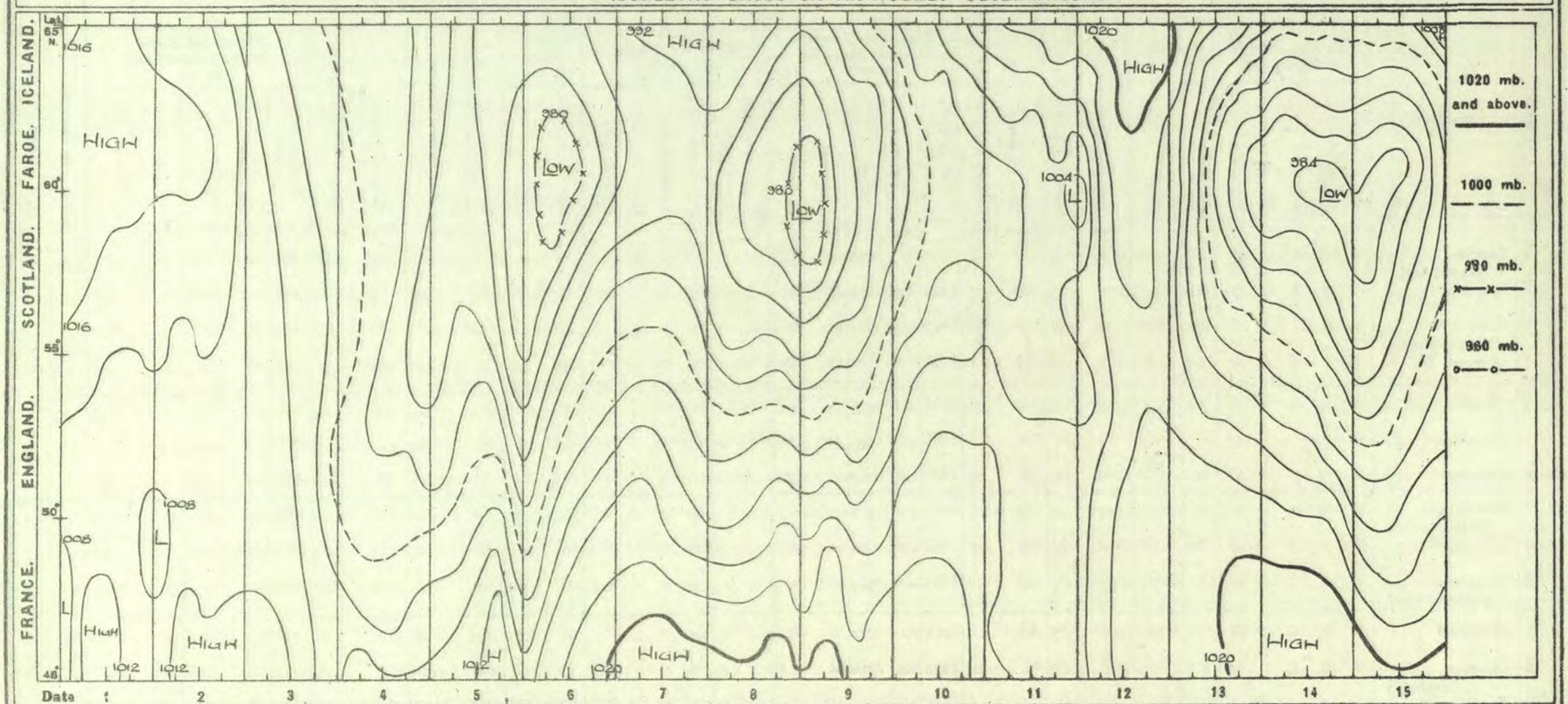
0 Dry.
1 Wet.
2 Flooded.
3 Frozen hard and dry.
4 Partly covered with snow or hail.
5 Covered with ice or glazed frost.
6 Covered with thawing snow.
7 Covered with snow, less than 6 ins., but ground not frozen.
8 Covered with snow, less than 6 ins., and ground frozen.
9 Covered with snow, greater than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

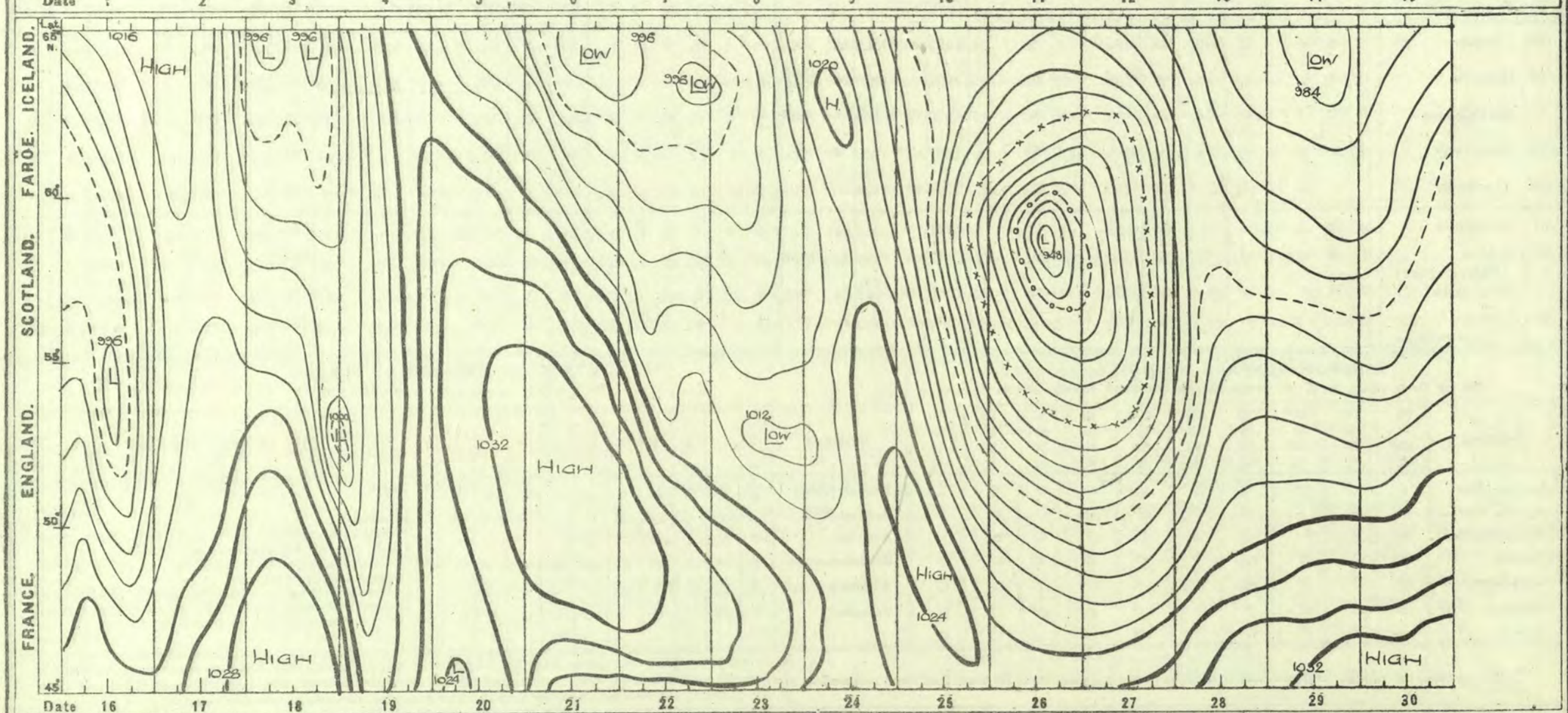
** The extremes of rainfall and sunshine from Calshot are supplemented by those from Southampton.

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

PRESSURE: ICELAND TO GULF OF LIONS ..... NOVEMBER ..... 1939.

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.

C. 634/3798. Nr. 8038. D. 4805. G.P. 948. 880. 12/39

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 1st November 1939 1939.

No. 2846

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	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)...	1012·3	-6	SW	3	zo	47	75	6	5	–	–	10	10	1500
	Croydon ...	1012·7	-2	ESE	2	z.	46	85	6	5	–	–	10	10	4000
	S. Farnborough	1011·7	+2	E	3	zo	44	85	6	5	2	–	4-6	10	1500
	Boscombe Down	1010·2	-8	EN	4	zo	43	92	6	5	2	–	7-8	10	800
	Calshot (Soton.)	1010·0	-2	EN	5	zo	47	92	6	5	–	–	10	10	1500
	Lympne ...	1013·7	-6	ES	3	zo	44	85	6	5	3	–	7-8	10	1500
	Manston ...	1012·8	-18	ESE	3	c	47	75	6	5	3	1	1	9	2500
2	Shoeburyness ...	1013·3	-8	ESE	5	c	46	85	6	5	7	–	4-6	9+	1500
	Felixstowe ...	1014·0	-14	ESE	5	zo	47	85	6	5	3	–	7-8	9	1500
	Gorleston ...	1013·7	-10	E	5	c	47	75	6	5	–	–	9+	9+	2500
	Mildenhall ...	1014·1	-10	E	5	c	47	75	7	5	7	–	9+	9+	2500
	Cranwell ...	1015·2	-12	E	4	c	46	85	7	5	–	–	9+	9+	2500
3	Birmingham	1012·7	-10	ESE	3	iro	44	85	6	6	2	–	9+	10	800
	Upper Heyford	1012·9	-2	E	4	zo	45	85	6	5	2	–	4-6	10	1500
4	Ross-on-Wye ...	1010·8	-8	E	4	zo	45	85	6	6	–	–	10	10	1500
5	Hartland Point	1005·5	0	ENE	5	r	47	92	7	8	2	–	9	10	1500
	Bristol ...	1009·9	-6	ES	3	c	46	85	6	5	2	–	4-6	10	1500
	Portland Bill ...	1008·7	+8	SE	5	c	52	92	8	5	–	–	7-8	7-8	4000
	Plymouth ...	1005·9	+4	SE	3	c	53	75	8	8	5	–	4-6	7-8	2500
	The Lizard ...	1003·1	+10	SE	5	c	53	97	8	8	2	–	9	10	1500
	Scilly (St. Mary's)	1002·6	-6	SEE	5	c	53	92	8	8	4	3	4-6	7-8	800
	Guernsey ...	1007·0	+2	SE	2	bc	52	85	8	2	3	–	4-6	4-6	1500
6	Pembroke ...	1006·0	-6	SE	8	c/r	48	85	6	8	2	–	7-8	7-8	1500
7	Holyhead ...	1009·4	-24	EN	8	c	49	75	7	5	2	–	9	10	4000
	Chester (Sealand)	1013·3	-14	E	4	zo	49	55	6	5	2	–	7-8	10	2500
8	Manchester ...	1013·4	-18	EN	5	zo	49	65	6	4	4	9	1	2-3	1500
10	Spurn Head ...	1015·9	-10	ESE	6	c	46	75	7	5	–	–	9+	9+	2500
	Catterick ...	1017·9	-14	ESE	1	c	45	75	8	5	–	–	10	10	1500
	Tynemouth ...	1018·9	-14	SE	3	ir	48	92	6	8	–	–	10	10	1500
11	St. Abbs Head ...	1019·7	-14	ESE	5	c	45	92	8	8	2	–	7-8	10	1500
	Leuchars ...	1020·7	-12	E	4	c/pr	48	75	7	5	–	–	9+	9+	1500
12	Renfrew (Abbots I.)	1018·4	-22	ENE	4	c	49	75	7	5	–	–	7-8	7-8	2500
	Eskdalemuir ...	1017·3	-20	EN	4	d.d.	44	92	6	6	–	–	10	10	450
	Point of Ayre ...	1014·8	-16	SEE	6	c	52	65	8	8	–	–	9	9	2500
13A	Tiree ...	1017·1	-20	ES	4	bc	49	65	8	5	4	–	2-3	4-6	2500
13B	Stornoway ...	1021·1	-18	E	4	c	47	75	8	5	7	–	4-6	7-8	4000
15	Dalwhinnie ...	1020·8	-20	SE	4	c	44	75	7	4	2	–	4-6	9+	2500
	Aberdeen ...	1022·5	-8	ES	3	iro	46	75	8	5	–	–	9+	9+	1500
	Wick ...	1023·3	-12	ESE	4	c	47	65	8	5	7	–	7-8	9+	2500
16	Lerwick...	1026·2	-4	SSE	4	c	46	*	8	8	7	–	7-8	9	1500
17	Blacksod Point..	1010·4	-30	E	6	iro	48	75	7	–	7	–	0	10	-
18	Malin Head ...	1015·1	-16	E	6	c	50	75	8	8	–	–	7-8	7-8	5700
	Aldergrove ...	1013·7	-22	ESE	5	e	50	75	7	5	3	–	7-8	9+	2500
19	Birr Castle ...	1008·9	-26	ENE	4	c	47	75	8	3	7	–	2-3	5	1500
20	Valentia Obsy. †	1004·8	-38	EN	5	iro	46	75	7	6	2	–	7-8	10	1500
	Roches Point ...	1004·4	-26	EN	4	rr	46	92	7	6	2	–	7-8	10	800

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

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)	1011·6	-4	EN	3	m	46	85	4	5	–	–	10	10	800	1	*
Croydon	1011·8	-4	ENE	2	zo	45	85	5	5	–	–	10	10	1500	1	*
S. Farnborough	1010·9	-4	ENE	3	roro	44	92	5	5	2	–	7-8	10	1500	1	*
Boscombe Down	1009·3	-8	EN	4	d.d.	43	97	5	6	–	–	10	10	450	1	*
Calshot (Soton.)	1009·2	-4	E	4	zo	47	92	6	5	–	–	4-6	4-6	2500	1	4
Lympne	1012·7	-2	ESE	3	zo	46	85	6	5	7	–	7-8	10	1500	1	§3
Manston																*
Shoeburyness	1012·3	-8	ESE	3	m	47	85	4	5	–	–	10	10	1500	1	*
Felixstowe	1012·8	-6	ESE	4	zo	48	85	6	5	–	–	10	10	1500	1	3
Gorleston	1014·1	-4	ESE	5	c	46	85	6	5	–	–	10	10	2500	0	4
Mildenhall	1012·6	-10	E	3	e	43	85	6	5	–	–	10	10	1500	1	*
Cranwell	1013·9	-6	E	3	zo	43	85	6	5	–	–	10	10	2500	0	*
Birmingham	1012·1	-2	E	3	o	44	85	6	6	–	–	10	10	800	1	*
Upper Heyford	1011·8	-10	EN	3	iro	43	92	5	–	2	–	10	10	1500	1	*
Ross-on-Wye	1009·6	-6	E	3	zo	45	85	5	5	–	–	9+	9+	800	1	*
Hartland Point	1004·6	-10	E	4	c	47	97	7	8	4	4	4-6	9	2500	1	3
Bristol	1009·2	-4	E	1	c/d	44	97	6	5	–	–	10	10	1500	1	*
Portland Bill	1009·7	+12	ESE	4	c	52	85	8	5	4	–	7-8	7-8	4000	1	4
Plymouth	1005·0	-4	SE	3	pr	51	85	6	8	–	–	10	10	1500	1	2
The Lizard	1003·3	-2	SE	5	c	51	85	8	8	2	–	7-8	9+	1500	1	3
Scilly (St. Mary's)	1001·7	+2	SE	5	bc	50	85	8	8	–	–	2-3	2-3	1500	1	3
Guernsey	1006·1	-4	SE	2	rr	48	97	5	5	–	–	10	10	800	2	3
Pembroke	1005·6	-4	ESE	6	cq	48	97	6	8	2	–	7-8	10	1500	1	3
Holyhead	1009·0	-8	E	6	c	47	75	6	5	2	–	9+	9+	2500	1	4
Chester (Sealand)	1012·7	0	ESE	3	ir	45	75	6	6	2	–	9	10	1500	1	*
Manchester	1013·0	+4	ES	5	zo	45	75	5	5	–	–	9+	9+	1500	1	*
Spurn Head	1014·3	-6	ESE	5	c	46	75	7	5	–	–	10	10	2500	0	4
Catterick	1016·4	–	EN	2	ido	43	85	6	5	–	–	10	10	1500	1	
Tynemouth	1017·6	-4	E	5	c/r	47	75	7	6	–	–	10	10	1500	1	3
St. Abbs Head	1017·4	-2	ESE	5	ir	45	85	8	8	2	–	7-8	9+	1500	1	3
Leuchars	1018·1	-14	E	4	c	45	85	7	5	–	–	9+	9+	1500	1	*
Renfrew (Abbots I.)	1016·5	-8	EN	4	zo	45	85	6	5	–	–	10	10	2500	0	*
Eskdalemuir	1016·2	-2	NE	3	d.d.	41	85	6	6	–	–	10	10	800	1	*
Point of Ayre	1012·6	-6	SE	6	c	48	75	7	8	1	–	7-8	10	1500	0	3
Tiree	1014·8	-10	E	4	c	48	65	8	5	–	–	9	9	1500	0	3
Stornoway	1019·0	-8	E	6	c	47	75	8	5	7	–	4-6	9	2500	0	3
Dalwhinnie	1018·8	-4	N	2	c	39	75	8	4	6	–	4-6	7-8	4000	0	
Aberdeen	1020·5	-10	ESE	4	pro	42	92	8	8	–	–	10	10	1500	1	2
Wick	1020·7	-10	SE	5	c	47	65	7	8	2	–	7-8	10	1500	1	2
Lerwick	1024·4	-8	SSE	3	c	43	75	8	5	3	–	7-8	10	1500	1	*
Blacksod Point	1007·5	-8	E	4	c	48	85	7	8	–	–	7-8	7-8	800	1	3
Malin Head	*	-12	E	5	c	50	55	7	8	–	–	9	9	4000	0	4
Aldergrove	1011·7	-4	E	4	iro	46	75	7	5	–	–	10	10	2500	1	*
Birr Castle	1006·8	-10	ESE	3	c	45	92	8	6	2	–	4-6	10	1500	1	
Valentia Obsy. †	1001·6	-14	EN	4	c	48	85	8	5	8	1	7-8	7-8	2500	0	2
Roches Point	1002·7	-2	SE	5	c	52	85	8	6	2	–	7-8	9	1500	1	4

PAST 24 HOURS.

Stations	Weather 7h.—13h. 31st (37)	13h.—18h. 31st (38)	18h. 31st to 1h. 1st (39)	1h.—7h. 1st (40)
London (Kew)	cid.cz.	om.	omcm	cmcrpcm
Croydon	cir.r.cm	cm.cm	cmpcm⊕	cpr.ir.
S. Farnborough	r.rrcm.	cm.d.r.	ir.d.⊕c	*
Boscombe Down	crrr.r.cm	cd.d.m.	cdcmcr.c.	cr.mcmc
Calshot (Soton.)	cir.cm.	cir.bcm.	bcrrqm	Rq.t.l.h
Lympne	cm.r.cm.	cm.		bccmw
Manston	cm.		cm	bcmcm
Shoeburyness	m.c	tm.mc	bmm	mc
Felixstowe	cm.	cm.om.	omo	c
Gorleston	cq	cq	cqz	czz
Mildenhall	bcc	co	ocdd	cm
Cranwell	c	ccm.	cddcm	ddcm
Birmingham	oir.	r.o	o	or.m
Upper Heyford	crm.cm.	cm.,irm.	cdmcm	cmidm
Ross-on-Wye	ir.oro	om.	om	omir
Hartland Point	cr	r.r.c	r.r.c	crrbc
Bristol	cm.r.r.	cm.id.	cmm	cmrRc
Portland Bill	c	c	c	cbc
Plymouth	cm.r bcc	cPr pr.	cprm	cprmbc
The Lizard	bcc	cpr.c	cbcc	cbc
Scilly (St. Mary's)	cbcc	cpbc	bc	bcc
Guernsey	cbc	bcorr	ciR	cbc
Pembroke	orrmq	cprmq	irr.r.mq	cirr.r.
Holyhead	m.r.c	r.r.c	c	mc
Chester (Sealand)	cm.z.y	cz.ir.r	czircm	cmmm
Manchester	cz.q,z.	bcz.cz.	czirm	cmbcm
Spurn Head	or.cq	cq	co	irom
Catterick	cm.ir.c	cid.m.	midcm	midcm
Tynemouth	ocpoir	oir	oico	
St. Abbs Head	ir.c	cir	irc	ircq
Leuchars	cr.r.cr.c	r.r.c	cir.	cir.r.c
Renfrew (Abbots I.)	cid.c	cir.m.c	cmcbc	ccm
Eskdalemuir	cid.d.d.	cd.d.m.	cdd	cddm
Point of Ayre	c	c	c	c
Tiree	bc	bc	c	c
Stornoway	cbcc	c	c	bcc
Dalwhinnie	c	cid.		cir
Aberdeen	cir.	ir.cpr	cprbcpr	cPRc
Wick	cpr.c	cprc	cpr.c	PRpr
Lerwick	c	c	cpr.	c
Blacksod Point	ir.c	ir.c	cqbc	c
Malin Head	c	cyc	*	c
Aldergrove	ir.,r.r.m.c	cclr.	ir.cidm	cddm
Birr Castle	cprc	circ		c
Valentia Obsy. †	cir.	cmirpr.c		pcir psbc
Roches Point	crr	cprc	cpr	cprbcprc

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).

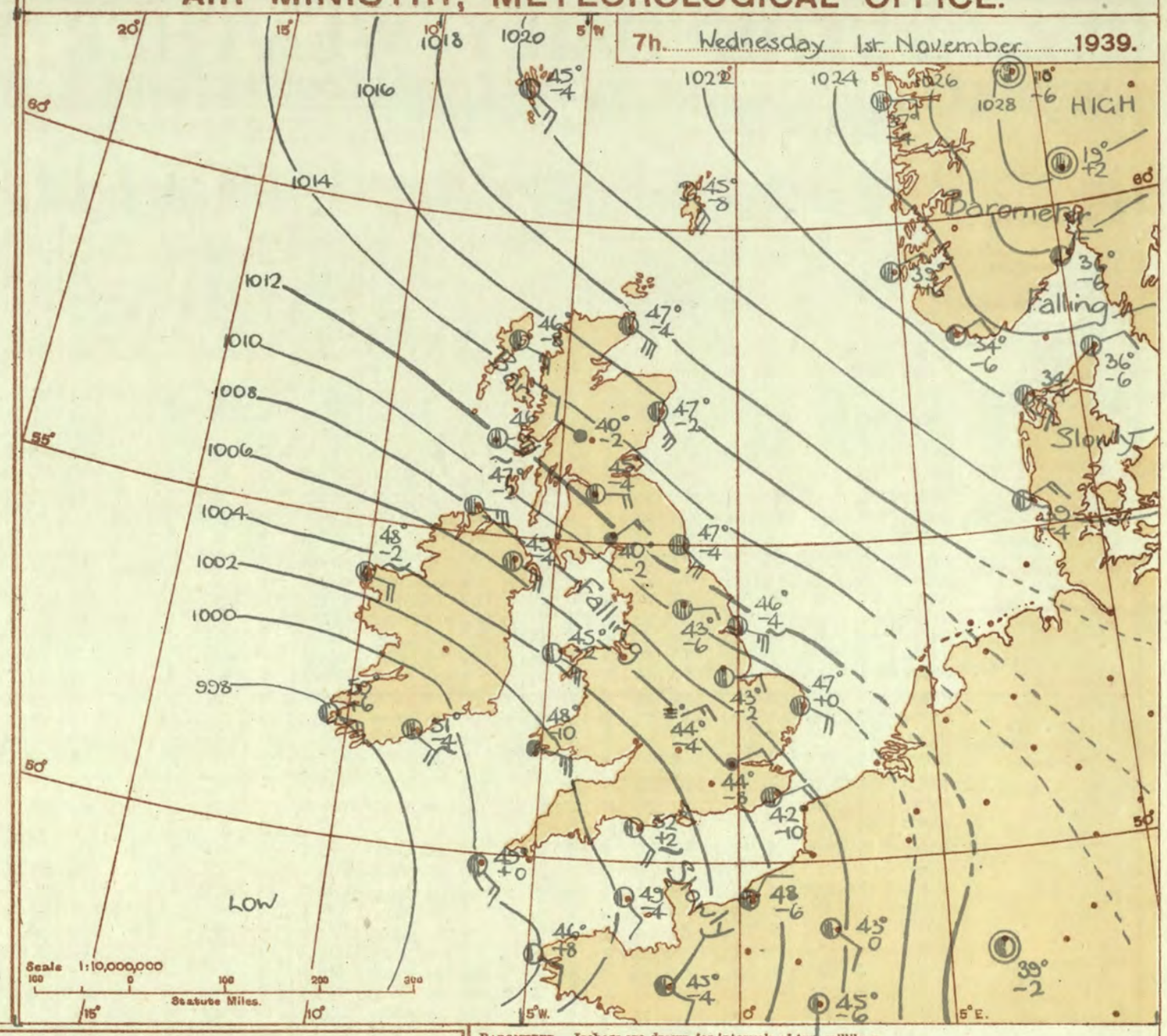
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac; Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 1st November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind southeast, fresh locally, moderating; mainly cloudy, some light rain; brighter periods by tomorrow; rather mild.
5 S.W. England 6 South Wales ... 7 North Wales ...	Wind southeast to south, moderate to light; some occasional rain or showers, perhaps with local thunder; brighter periods; mild.
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	Wind southeast, fresh to strong at times near the coasts; cloudy, occasional rain, heaviest falls probable in the western districts; average temperature to rather mild.
19 S. E. Ireland 20 S. W. Ireland	As 5 - 6.

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.

GENERAL INFERENCE.

An anticyclone persists over Scandinavia. A low pressure area off our southwest coasts is spreading slowly over the country as secondaries move up from the South. A mild, rather unsettled type of weather will prevail with some occasional rain in most districts, but the falls are expected to be slight in the eastern half of the country.

FURTHER OUTLOOK.

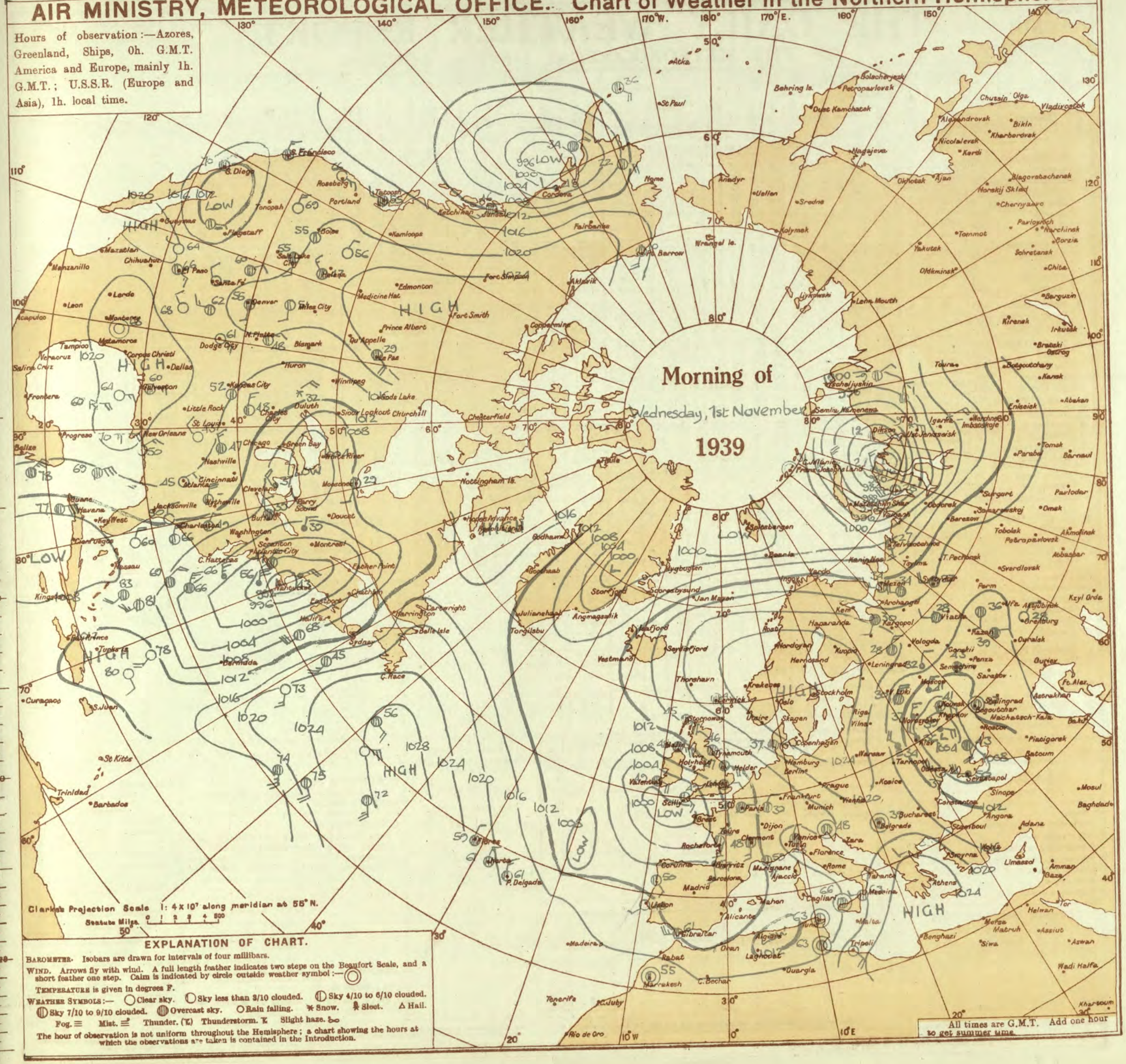
Rather mild and unsettled.

Forecasts issued at 0930 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.



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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 1st November 1939.

No 28468 No.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1003.4	-16	E'N	2	z₀	44	97	5	5	5	7	Tr	10	4000
	S. Farnborough	226	1007.8	-16	E'N	3	z₀	46	92	5	5	-	-	9+	9+	1500
	Boscombe Down	417	1006.4	-16	E	3	r₀r₀	46	97	5	6	-	-	10	10	800
	Calshot (Sthmtn.)	8	1008.2	-18	ESE	3	r	49	97	6	8	-	-	10	10	450
	Lympne	346	1010.2	-14	E	3	z₀	45	92	6	5	3	-	2-3	7-8	4000
	Manston	154	1009.9	-12	E'S	2	z₀	47	85	5	5	-	-	9+	9+	4000
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1010.4	-14	ESE	3	c	47	85	7	5	-	-	9+	9+	2500
	Gorleston	5	*	-10	E'S	3	PR	48	75	6	5	-	-	10	10	2500
	Mildenhall	19	1011.3	-12	ENE	2	o/d	45	92	6	5	-	-	10	10	2500
	Cranwell	240	1011.9	-6	E	2	z₀	43	92	5	5	-	-	10	10	1500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1003.7	-14	NE	3	z₀	43	97	5	5	-	-	10	10	500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1002.8	-18	E	3	c	47	97	7	5	4	-	7-8	9+	1500
	Bristol	209	1006.3	-18	E	3	m	45	92	4	5	-	-	10	10	800
	Portland Bill	32	1004.2	-20	SE	4	c	50	85	7	5	-	-	10	10	4000
	Plymouth	82	1003.0	-10	E	2	pr	48	92	6	9	-	-	10	10	2500
	The Lizard	240	1001.9	-14	SE	3	c	50	85	8	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	163	1001.1	-8	SE'E	3	bc	49	92	8	8	-	3	2-3	4-6	2500
	Guernsey	175	1003.3	-2	SE	2	c	50	92	8	2	7	-	4-6	7-8	2500
6	Pembroke	142	1003.3	-10	E'S	3	r₀r₀	46	92	5	8	2	-	7-8	10	1500
7	Holyhead	26	1007.0	-10	E'N	4	[illegible]	46	85	6	5	-	-	9+	9+	4000
	Chester (Sealand)	16	1009.7	-18	ESE	2	e/r	44	85	5	5	-	-	10	10	1500
8	Manchester	70	1010.5	-10	E'N	4	z₀	44	85	5	5	-	-	10	10	1500
10	Spurn Head	29	1011.3	-14	ESE	5	o	47	75	6	5	-	-	10	10	2500
	Catterick	175	1013.1	-14	NE	1	z₀	42	92	6	5	-	-	10	10	1500
	Tynemouth	108	1014.3	-8	ESE	5	c	46	75	7	6	-	-	10	10	1500
11	St. Abbs Head	280	1014.1	-14	SSE	5	e/r	46	75	8	8	2	-	7-8	10	1500
	Leuchars	36	1015.5	-10	ESE	4	ir₀	45	85	8	5	-	-	9	9	1500
12	Renfrew (Abbots I.)	19	1014.0	-10	E'N	3	c	42	85	7	5	-	-	9	9	2500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1010.3	-13	SE E	6	c	46	85	7	8	1	-	9	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1017.4	-12	ESE	5	c	45	75	7	5	7	-	4-6	9+	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1018.0	-10	SE	5	c/pr	45	75	7	5	2	-	7-8	10	1500
16	Lerwick	156	1022.5	-8	SE	5	c	45	75	8	8	3	-	7-8	9	800
17	Blacksod Point	18	1004.3	-14	E	5	eq	47	85	8	3	-	-	7-8	7-8	800
18	Malin Head	84	1009.3	-14	ESE	4	id₀	44	85	6	5	-	-	10	10	500
	Aldergrove	268														
19	Birr Castle	173														
20	Valentia Obsy.	30	1001.5	-12	SE	5	pr	51	85	8	3	-	3	7-8	7-8	1500
	Roches Point	22														

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1003.5	-10	E N	3	[illegible]	46	92	4	5	-	-	10	10	2500	1	*
Croydon	1007.2	-8	ENE	2	[illegible]	44	97	4	5	7	-	4-6	10	1500	1	*
S. Farnborough	1005.5	-10	ENE	3	[illegible]	45	92	5	5	-	-	9+	9+	800	1	*
Boscombe Down	1004.8	0	E'N	3	[illegible]	46	88	6	6	-	-	10	10	800	1	*
Calshot (Sthmtn.)	1004.3	-2	E	3	x	46	97	6	5	-	-	10	10	800	1	1
Lympne	1007.8	-10	E'N	4	z₀	[illegible]	92	6	-	5	8	0	7-8	-	1	§2
Manston	1007.4	-6	E	3	z₀	46	85	5	-	7	-	0	9	-	0	*
Shoeburyness	1008.1	-6	E'S	3	c	47	92	5	-	7	-	0	10	-	1	*
Felixstowe	1008.4	-6	ESE	3	z₀	46	92	6	5	-	5	7-8	7-8	2500	1	3
Gorleston	1010.1	0	E'S	4	c	47	97	6	5	-	-	10	10	2500	0	3
Mildenhall	1008.6	-6	E'N	3	z₀	43	92	6	5	2	-	4-6	10	2500	1	*
Cranwell	1005.5	-2	E	2	z₀	43	97	5	5	-	-	7-8	7-8	2500	1	*
Birmingham	1007.7	-4	ENE	3	m	44	92	4	5	-	-	10	10	450	1	*
Upper Heyford	1007.4	-6	ENE	3	o/d	45	92	5	5	-	-	10	10	450	1	*
Ross-on-Wye	1008.3	-8	ENE	2	ir₀	45	97	4	6	-	-	10	10	800	1	*
Hartland Point	1001.4	0	E	3	bc	44	97	8	3	4	4	2-3	4-6	2500	1	3
Bristol	1005.0	-2	E	1	r₀r₀	47	97	6	9	2	-	7-8	10	1500	1	*
Portland Bill	1003.1	+2	SE	4	bc	52	85	8	5	-	-	4-6	4-6	4000	1	4
Plymouth	1002.1	-2	E	1	bcjp	46	97	8	3	-	-	2-3	2-3	1500	1	1
The Lizard	1001.2	-4	SE	3	bc	49	92	8	8	6	-	4-6	4-6	2500	0	1
Scilly (St. Mary's)	1000.2	0	SE	3	cjp	49	92	8	8	4	3	4-6	7-8	1500	1	2
Guernsey	1002.2	-4	SE	2	bc	49	85	8	2	7	-	4-6	4-6	1500	1	3
Pembroke	1001.7	-10	E'S	3	r₀r₀	48	97	6	8	2	-	7-8	10	1500	1	3
Holyhead	1005.1	-2	E'S	5	c	45	92	6	5	4	-	7-8	7-8	4000	1	3
Chester (Sealand)	1007.6	-6	E	2	z₀	46	85	5	5	-	-	10	10	1500	1	*
Manchester	1008.5	-6	E	3	m	45	92	4	5	-	-	9	9	800	1	*
Spurn Head	1010.0	-4	ESE	3	o	46	92	5	5	-	-	10	10	450	1	4
Catterick	1011.2	-6	E	1	z₀	45	92	6	5	-	-	10	10	1500	1	*
Tynemouth	1012.8	-4	SE	6	c	47	75	6	6	-	-	10	10	1500	1	3
St. Abbs Head	1012.5	-4	SE	6	eq	45	92	7	8	2	-	7-8	10	1500	1	4
Leuchars	1014.0	0	ESE	4	c	46	75	7	5	-	-	10	10	800	1	*
Renfrew (Abbots I.)	1012.0	-4	E	4	z₀	45	75	6	5	7	-	9+	10	2500	0	*
Eskdalemuir	1011.5	-2	NE	3	d₀d	40	92	6	5	-	-	10	10	220	1	*
Point of Ayre	1007.8	-10	SE	6	c	48	85	7	5	1	-	9	10	1500	0	3
Tiree	1010.1	-6	ESE	1	c	46	65	7	8	-	-	7-8	7-8	1500	0	4
Stornoway	1015.1	-8	ESE	5	c	46	85	8	5	7	-	4-6	9+	2500	0	3
Dalwhinnie	1014.1	-2	WNW	2	ir	40	85	6	6	1	-	7-8	10	1500	1	*
Aberdeen	1015.7	-2	SE	5	c	47	65	6	5	-	-	10	10	2500	1	2
Wick	1016.4	-4	ESE	6	c/pr	47	75	8	5	7	8	7-8	9+	1500	1	2
Lerwick	1020.7	-8	SE	5	c	45	65	8	5	7	-	7-8	10	1500	0	*
Blacksod Point	1003.4	-2	E	4	c	48	85	7	5	-	-	9+	9+	800	0	4
Malin Head	1007.9	-2	E	5	c/pr	47	75	7	9	-	-	9	9	4000	0	3
Aldergrove	1007.2	-4	E'S	4	z₀	45	85	6	5	-	-	10	10	1500	1	*
Birr Castle	1003.7	-4	SE	1	c	47	85	7	5	-	-	10	10	2500	1	*
Valentia Obsy.	998.5	+6	E	3	bc	50	75	8	8	7	1	4-6	4-6	2500	1	2
Roches Point	983.9	-4	SE	4	c/pr	51	85	8	3	-	-	7-8	7-8	1500	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 31st Hrs. (36)
London (Kew)	47	46	43	Tr	0.4	0.0
Croydon	47	42	40	0.2	0.5	0.1
S. Farnborough	46	44	48	1	0.1	0.0
Boscombe Down	44	44	44	3	9	0.0
Calshot (Sthmtn.)	48	46	46	1	17	0.0
Lympne	46	42	40	0.5	-	0.7
Manston		45	41		-	0.4
Shoeburyness	48	46	42	-	-	0.3
Felixstowe	48	47	44	-	-	0.1
Gorleston	48	46	45	-	-	*
Mildenhall	50	44	42	-	Tr	2.1
Cranwell	49	42	39	-	0.1	1.2
Birmingham	45	41	40	0.1	Tr	0.0
Upper Heyford	45	42	39	1	Tr	*
Ross-on-Wye	46	43	42	1	3	0.0
Hartland Point	48	44	42	1	3	1.5
Bristol	46	44	42	3	5	0.0
Portland Bill	52	48	*	4	-	*
Plymouth	54	46	43	1	14	1.5
The Lizard	54	48	*	0.5	-	2.9
Scilly (St. Mary's)	53	47		0.3	-	3.8
Guernsey	54	48	43	1	5	1.9
Pembroke	50	45		3	1	0.0
Holyhead	49	44	42	0.2	-	0.0
Chester (Sealand)	49	46	42	0.2	1	0.3
Manchester	49	43	41	-	Tr	1.3
Spurn Head	48	45		Tr	0.3	0.0
Catterick	45	41	40	1	0.1	0.0
Tynemouth	49	46	43	5	0.1	*
St. Abbs Head	48	44		0.1	2	
Leuchars	48	43	40	1	1	0.0
Renfrew (Abbots I.)	49	42	35	Tr	-	0.9
Eskdalemuir	44	39	38	2	0.6	0.0
Point of Ayre	52	46	*	-	-	0.9
Tiree	50	44	40	-	-	3.2
Stornoway	49	43		-	-	5.1
Dalwhinnie	45	38	34	-	1	0.7
Aberdeen	47	41	39	-	4	0.1
Wick	48	43	*	Tr	0.3	*
Lerwick	47	43	*	-	Tr	0.0
Blacksod Point	49	44		0.4	0.1	
Malin Head	51	42	*	Tr	Tr	0.3
Aldergrove	51	43	41	1	0.5	0.7
Birr Castle	47	45	44	0.6	-	0.2
Valentia Obsy.	48	48	43	Tr	1	0.1
Roches Point	52	48	*	10	11	*

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. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
		24 hrs. ended 9h.											
Kew	18	cidcz₀	brm₀	bmr₀r₀	47	46	43	Tr	0.4	0.0	*	*	6
Croydon	217	cir₀r₀cm₀	cm₀cm	cm₀p₀s	47	42	40	0.2	0.5	0.1	*	*	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. 1st

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
0.5	19h 31st	0.1	24h 31st

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 31st October Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 1st November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	[illegible]	E	2	bc	42						55			
Brussels														
Berlin														
Zürich														
Rome	[illegible]	SSE	5	bc	[illegible]						*	*		

‡ 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 ,,	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.

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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 2nd November 1939.

No. 28,469.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1006·2	-2	ENE	3	zo	49	85	6	5	-	-	10	10	1500
	Croydon ...	1006·8	-4	ENE	3	zo	49	92	6	5	-	-	9+	9+	2500
	S. Farnborough	1005·5	-12	E	3	zo	51	75	6	7	7	1	2-3	4-6	2500
	Boscombe Down	1005·4	-4	E	3	zo	46	92	8	5	2	-	9+	10	800
	Calshot (Soton.)	1004·8	0	E	4	c/d	49	92	6	5	7	-	4-6	9+	1500
	Lympne ...	1006·2	-18	ENE	2	iro	44	85	5	5	-	-	10	10	450
	Manston ...	1006·4	-10	ESE	3	zo	46	85	6	5	7	-	7-8	10	1500
2	Shoeburyness ...	1007·4	-8	E	4	c	48	85	6	5	-	-	10	10	1500
	Felixstowe ...	1007·6	-8	E	3	zo	46	85	5	5	-	-	10	10	1500
	Gorleston ...	1009·3	-4	EN	4	c	45	85	6	5	-	-	10	10	2500
	Mildenhall ...	1007·9	-6	EN	4	zo	46	85	6	5	2	-	9+	10	1500
	Cranwell ...	1008·9	-4	E	3	zo	45	85	6	5	-	-	10	10	1500
3	Birmingham	1007·2	0	ENE	3	c	47	75	6	5	7	-	7-8	9+	1500
	Upper Heyford	1007·0	-6	E	4	zo	48	85	6	5	2	-	9	10	800
4	Ross-on-Wye ...	1005·7	-4	E	3	zo	50	85	5	5	-	-	9+	9+	2500
5	Hartland Point	1002·0	-6	E	3	bc	52	85	8	2	4	1	4-6	4-6	2500
	Bristol ...	1005·0	-2	ESE	2	zo	49	85	6	5	2	-	7-8	10	1500
	Portland Bill ...	1004·0	+10	E	4	bc	53	92	8	5	4	-	4-6	4-6	4000
	Plymouth ...	1002·2	-2	ESE	3	bc	56	65	8	8	-	5	4-6	4-6	2500
	The Lizard ...	1001·6	0	SE	4	c	55	85	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	1000·0	-6	ESE	4	c	53	85	8	8	1	-	2-3	7-8	1500
	Guernsey ...	1003·0	+4	SEE	1	bc	51	85	9	2	7	-	4-6	4-6	1500
6	Pembroke ...	1003·9	-2	SES	6	bc	54	85	7	5	7	-	4-6	4-6	2500
7	Holyhead ...	1004·8	-2	EN	5	c/d	51	75	7	5	-	-	9	9	2500
	Chester (Sealand)	1007·9	-2	E	3		49	75	6	5	2	-	7-8	10	2500
8	Manchester ...	1007·8	-6	ES	4	zo	50	75	5	5	3	1	4-6	9	1500
10	Spurn Head ...	1008·5	-4	ESE	5	o	45	75	6	5	-	-	10	10	800
	Catterick ...	1012·6	-2	ESE	6	c/r	45	85	6	6	-	-	10	10	1500
	Tynemouth ...	1012·6	-2	ESE	6	c/r	45	85	6	6	-	-	10	10	1500
11	St. Abbs Head	1012·1	-6	SE	6	cq	45	75	8	5	2	-	7-8	10	2500
	Leuchars ...	1013·2	-6	ESE	4	c	46	65	7	5	-	-	10	10	800
12	Renfrew (Abbots I.)	1011·8	-4	EN	3	zo	45	75	5	5	-	-	10	10	2500
	Eskdalemuir ...	1010·4	-4	EN	4	d.do	42	97	6	6	-	-	10	10	450
	Point of Ayre ...	1008·1	0	SE	5	c	49	85	7	8	1	-	9	10	1500
13A	Tiree ...	1009·8	-2	ES	4	c	48	75	7	5	-	-	7-8	7-8	2500
13B	Stornoway ...	1014·5	-8	ESE	4	c	48	75	8	5	6	-	4-6	7-8	4000
15	Dalwhinnie ...	1013·9	-8	WNW	3	c	40	75	6	8	2	-	4-6	9	2500
	Aberdeen ...	1015·2	-4	SEE	4	c/r	46	65	6	5	-	-	10	10	1500
	Wick ...	1015·8	-4	SE	5	c/pr	47	85	8	5	7	9	7-8	9+	1500
16	Lerwick...	1020·4	-2	SE	5	c	45	75	7	8	2	-	7-8	10	800
17	Blacksod Point..	1002·8	-8	E	3	c	50	75	7	-	7	-	0	10	-
18	Malin Head ...	1007·0	+6	E	4	zo	49	75	6	5	-	-	7-8	7-8	4000
	Aldergrove ...	1006·5	-8	ES	4	c/r	48	75	6	8	2	8	4-6	9	1500
19	Birr Castle ...	1002·8	-6	ESE	1	c	51	85	7	5	1	-	7-8	10	1500
20	Valentia Obsy. †	998·4	-6	ESE	4	pr	53	75	8	8	4	-	9+	9+	2500
	Roches Point ...	1000·1	-4	SEE	4	bc	54	85	8	3	-	5	4-6	4-6	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1006·7	+6	NE	3	zo	47	75	5	5	-	-	10	10	800	1	*
Croydon	1006·7	+2	EN	1	z.	45	92	5	5	-	-	10	10	1500	1	*
S. Farnborough	1006·3	+6	NWW	2	m	46	85	4	5	-	-	10	10	1500	1	*
Boscombe Down	1005·4	+2	ENE	3	zo	46	92	6	5	-	-	10	10	1500	0	*
Calshot (Soton.)	1005·1	+2	ENE	3	zo	48	92	5	5	7	-	7-8	9	2500	1	3
Lympne	1007·0	+4	EN	2	m/f	44	97	4	5	-	-	9+	9+	4000	1	§3
Manston	1006·8	+6	ESE	1	zo	46	92	5	5	-	-	10	10	800	0	*
Shoeburyness	1007·1	+4	NEE	2	c	47	92	6	5	-	-	10	10	1500	1	*
Felixstowe	1007·0	0	E	3	z.	46	92	5	5	-	-	10	10	1500	1	3
Gorleston	1008·2	-2	E	3	c	44	85	6	5	-	-	10	10	2500	0	3
Mildenhall	1007·9	+2	ENE	2	zo	44	85	5	5	-	-	10	10	1500	1	*
Cranwell	1009·0	+8	E	3	zo	42	85	6	5	-	-	10	10	1500	0	*
Birmingham	1007·8	+6	E	3	roro	43	85	5	6	-	-	10	10	800	1	*
Upper Heyford	1007·7	+6	E	3	ido	43	97	5	5	2	-	9	10	800	1	*
Ross-on-Wye	1006·3	+4	E	3	zo	47	85	5	5	-	-	10	10	800	1	*
Hartland Point	1001·7	0	ESE	3	c	48	92	8	3	4	-	4-6	7-8	2500	0	3
Bristol	1005·2	0	E	2	iro	47	85	6	5	2	-	9	10	1500	1	*
Portland Bill	1004·0	-12	SE	4	bc	52	85	8	5	-	-	4-6	4-6	4000	1	3
Plymouth	1002·4	+4	SES	3	c	50	85	7	8	-	-	7-8	7-8	2500	1	2
The Lizard	1000·3	-2	ESE	5	c	51	92	8	8	2	-	9	10	1500	0	2
Scilly (St. Mary's)	998·0	-6	ESE	5	rr	51	97	6	8	2	-	4-6	10	1500	1	2
Guernsey	1002·9	0	ESE	1	bc	50	92	8	1	7	-	2-3	4-6	2500	1	2
Pembroke	1002·4	0	SEE	5	cq	49	92	5	8	7	-	4-6	9+	1500	1	3
Holyhead	1005·7	+8	ES	4	c	49	85	6	5	-	-	7-8	7-8	4000	0	2
Chester (Sealand)	1008·2	+8	ES	3	m	46	75	4	5	-	-	10	10	2500	1	*
Manchester	1008·6	+6	EN	4	m	45	85	4	5	-	-	10	10	1500	1	*
Spurn Head	1010·1	+2	ES	5	o	45	65	7	5	-	-	10	10	1500	0	
Catterick	1010·8	+2	ENE	2	zo	41	82	6	5	-	-	9+	9+	2500	1	
Tynemouth	1012·3	+4	ESE	5	o	45	65	7	8	-	-	10	10	1500	1	3
St. Abbs Head	1012·4	+4	SE	5	c	45	75	7	8	2	-	7-8	10	1500	0	4
Leuchars	1013·0	0	ESE	4	e	46	65	7	5	-	-	10	10	2500	1	*
Renfrew (Abbots I.)	1011·3	+2	E	4	zo	45	85	5	5	-	-	10	10	1500	1	*
Eskdalemuir	1011·2	+6	EN	4	c	40	85	6	5	-	-	10	10	800	1	*
Point of Ayre	1008·0	0	SE	6	c	48	85	7	5	-	-	9	9	1500	0	3
Tiree	1009·6	+4	ES	4	c	47	75	7	5	-	-	9+	9+	2500	0	4
Stornoway	1012·7	0	ESE	5	bc	47	65	8	8	7	-	2-3	4-6	4000	0	2
Dalwhinnie	1014·0	+4	SE	2	c	39	85	6	8	2	-	4-6	10	2500	1	*
Aberdeen	1014·7	-2	SE	4	c	47	75	6	5	-	-	10	10	1500	1	3
Wick	1015·6	+6	SSE	6	c	48	65	7	5	7	-	7-8	10	1500	1	3
Lerwick	1019·9	+2	SSE	5	c	45	75	7	8	7	-	7-8	9+	800	*	*
Blacksod Point	1002·1	+4	E	3	c	50	85	7	-	7	-	0	10	-	0	3
Malin Head	1006·9	+4	E	5	zo	50	75	6	8	-	-	9	9	4000	0	3
Aldergrove	1007·1	+8	E	4	zo	48	75	6	5	-	-	10	10	1500	1	*
Birr Castle	1002·4	+2	ESE	2	c	49	85	8	5	7	-	4-6	7-8	2500	1	*
Valentia Obsy. †	997·4	-4	E	3	c	51	75	8	5	1	-	7-8	9+	2500	1	2
Roches Point	998·8	-8	SEE	6	c	53	85	8	6	2	-	7-8	10	1500	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 1st (37)	13h.—18h. 1st (38)	18h. 1st. to 1h. 2nd (39)	1h.—7h. 2nd (40)
London (Kew)	cmo	omo	omo	om
Croydon	cmcmo	cmo	cmodmofw	ocofw
S. Farnborough	irocbczo	cmobcm	cmofe	ofecm
Boscombe Down	croiro cmo	cmo	cmo	cmo
Calshot (Soton.)	ctlr Rr	cprocmo	cbmcm	cmffcmo
Lympne	cmoro	cmorfdo	ofcro cmo	cmocf
Manston	c	irocmo	cmociro	cmocfcmo
Shoeburyness	moc	cmoomo	omodoc	cifmo
Felixstowe	c	omoidoc	omoido cmo	cmo
Gorleston	czo	czo	czopro	czozow
Mildenhall	cmo	cmoomo	omo	omocmo
Cranwell	cmo	cmo	cmo	cmo idom
Birmingham	mo	co	oido	oidof
Upper Heyford	cromocmo	cmodo	cdodomcdo	myfcmof
Ross-on-Wye	romcmo	cmoomo	omo	omro
Hartland Point	bc	bcc	cdo c	doiro
Bristol	cmiro	cmoro	crocmo	cirocmo
Portland Bill	bcc	bc	c	oc
Plymouth	bcbbc	bcc	iroRRmo	crorom o
The Lizard	bcc	c	crr	rrc
Scilly (St. Mary's)	cbcc	crr	crrcr	clrqp
Guernsey	bccbc	bcc	bcc	cpro
Pembroke	cbc	bccmo	moqroroo	rrmoq
Holyhead	ro moc	cbc	bcmob	bmobc
Chester (Sealand)	cmoiro	cmocm	cmozo	czomo
Manchester	cmzo	czocm	cmbczocmo	cmozom
Spurn Head	o	o	cido	ciro
Catterick	oiro	idoiromo	cmo	cmo
Tynemouth	oiro	o	oiroc	coiroo
St. Abbs Head	cq	c	irc	cq
Leuchars	ciroc	c	cirocpro	cprocpRc
Renfrew (Abbots I.)	cmororoc	czomo	cmozo	czoiromo
Eskdalemuir	cmododo	cdodomoc	bcb	bbcmo
Point of Ayre	cproc	c	cbcb	bbc
Tiree	c	c	cbc	bc
Stornoway	c	cbc	bc	bcc
Dalwhinnie	cir	cir		cir*
Aberdeen	czoiro	czo	bccprzo	czopr
Wick	cprc	cproc	cpreq	cqpro
Lerwick	cproc	c	c	cpro
Blacksod Point	c	c	bc	iroc
Malin Head	czozc	z	bczocproc	c
Aldergrove	idorocido	cmo,rriro	irocmo	c,bmoc
Birr Castle	c	c	cpro	cir
Valentia Obsy. †	bccpro	cproc	crorоiro	cirocb
Roches Point	bc	c	rr	rrirc

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).

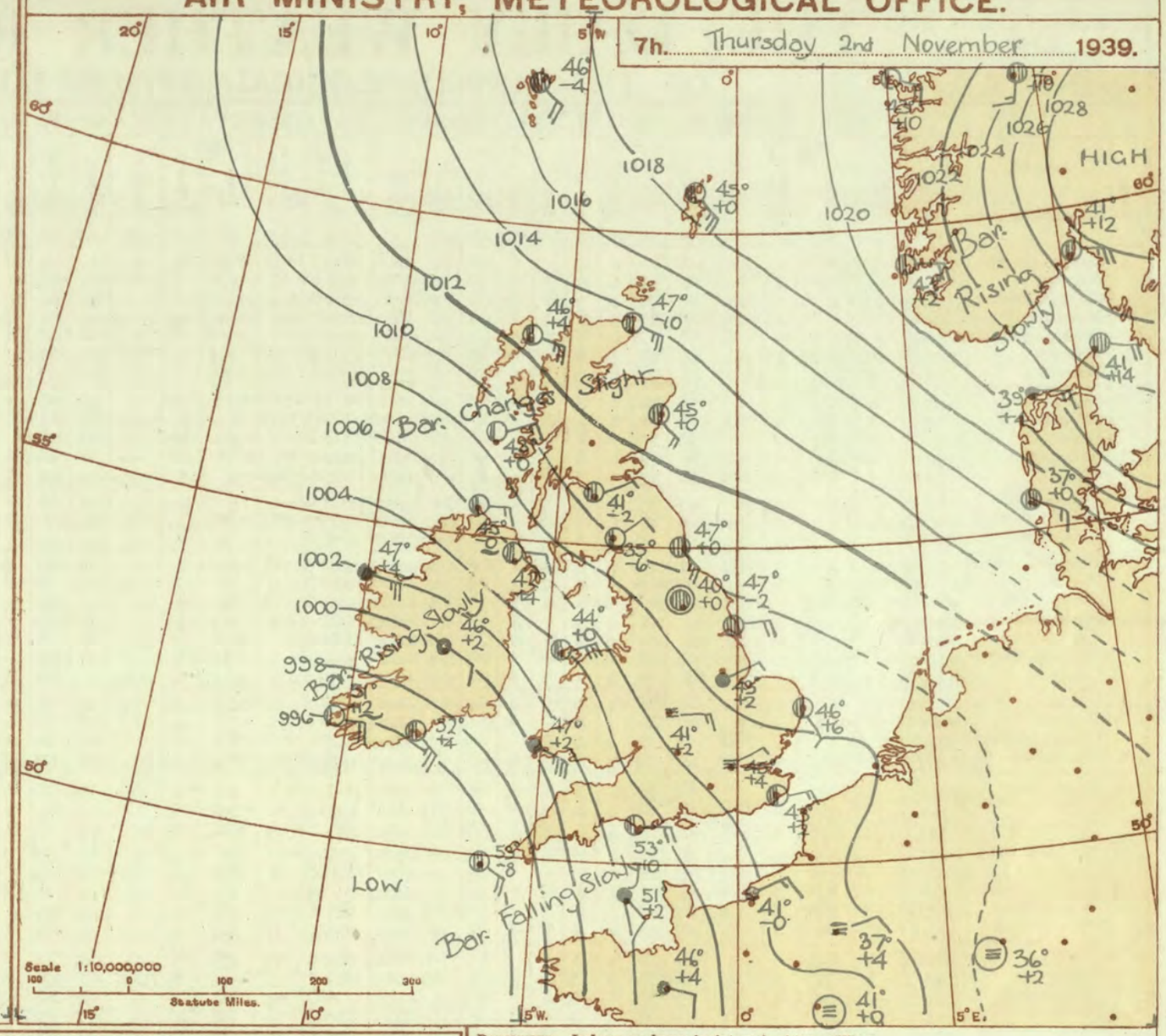
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



Districts.	Forecasts for the 24 hours commencing 12 noon, G.M.T. 2nd November, 1939.
1 S.E. England	Wind southeast, light to moderate; mainly dull; some occasional light rain or drizzle; average temperature.
2 E. England ...	Wind east to southeast, light to moderate; dull; rather misty; average temperature.
3 E. Midlands ...	
4 W. Midlands ...	
5 S.W. England	As (1)
6 South Wales ...	Wind southeast, fresh to strong at times on the coast; cloudy, occasional rain, fairer periods; mild.
7 North Wales ...	
8 N.W. England	Wind southeast, light to moderate, fresh locally on the coast; cloudy or dull; some light local rain or drizzle; temperature rather below average.
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	Wind east to southeast, fresh to strong at times on the coast; cloudy; occasional rain; rather mild.
18 N. E. Ireland	
19 S. E. Ireland	
20 S. W. Ireland	

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.

GENERAL INFERENCE.

An anticyclone covers the Baltic area. A depression is stationary off our southwest coasts and secondaries are moving up in the Bay of Biscay area. Weather will be generally cloudy or dull with occasional rain or drizzle over most of the southwestern half of the British Isles and local light rain or drizzle elsewhere. Temperature will be mainly about average.

FURTHER OUTLOOK.

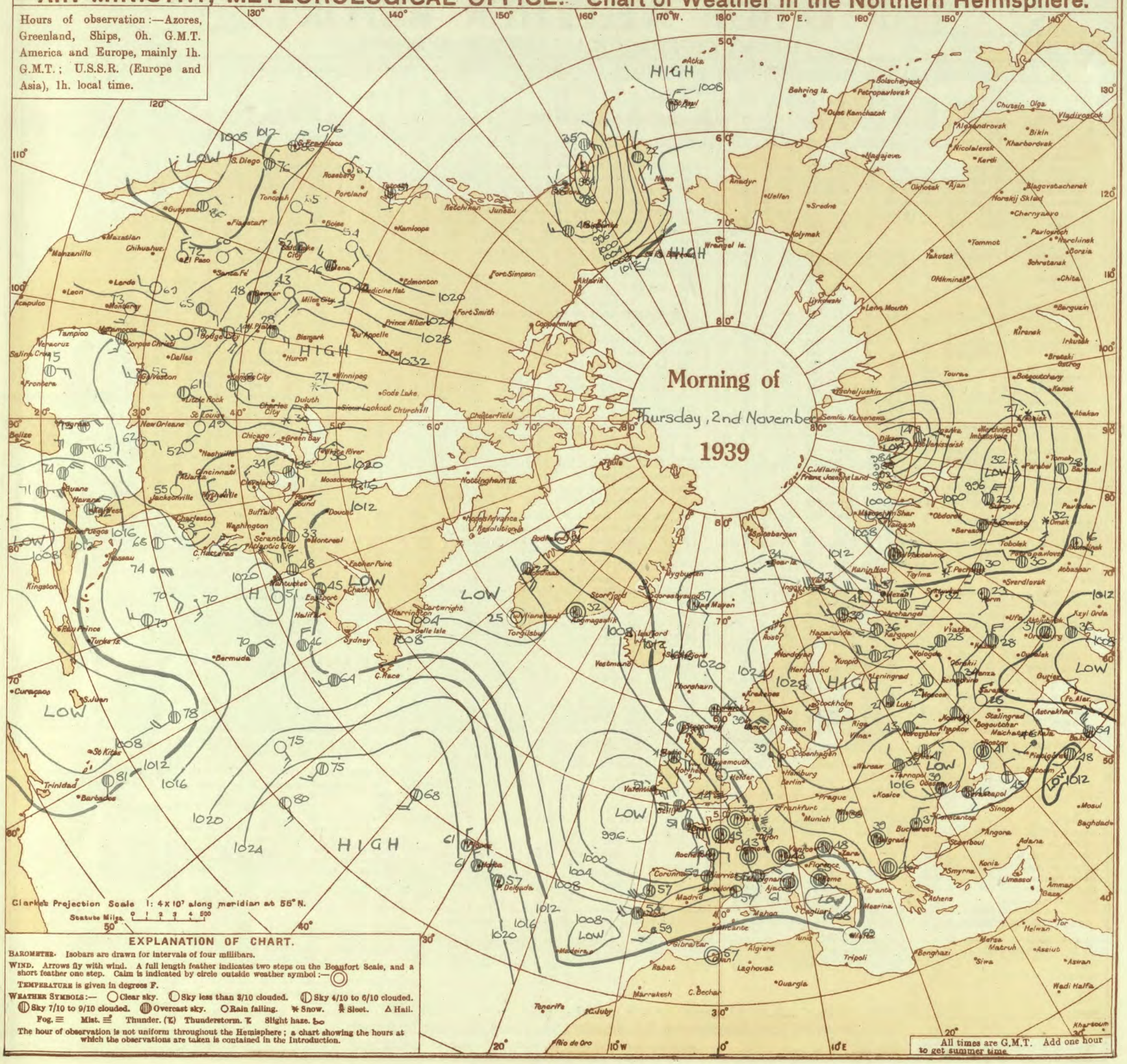
Unsettled.

Forecasts issued at 0930 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 2nd November 1939.

No 28469

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1007·1	0	E'N	2	cf	44	97	3	5	-	-	10	10	1500
	S. Farnborough	226	1006·1	-6	NE	2	f+	44	97	2	-	-	-	10	10	<450
	Boscombe Down	417	1005·4	-2	E'N	3	zo	43	97	6	5	-	-	10	10	2500
	Calshot (Sthmtn.)	8	1005·2	-4	ENE	3	m	45	97	4	5	-	-	9	9	4000
	Lympne ...	346	1007·8	+2	E'N	3	zo	44	97	5	5	3	-	4-6	9	800
	Manston ...	154	1006·8	-4	-	0	ir.	47	97	5	5	-	-	10	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1007·0	0	E	2	zo	45	92	6	5	-	-	9+	9+	4000
	Gorleston ...	5	1008·0	0	NE	2	c	46	85	6	5	-	-	10	10	2500
	Mildenhall ...	19	1007·6	-2	NE	2	c	43	92	6	5	-	-	10	10	1500
	Cranwell ...	240	1008·4	-2	E	1	zo	41	85	6	5	-	-	10	10	1500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1007·7	-2	ENE	2	m/d	41	97	4	5	-	-	10	10	450
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1000·8	-4	E	4	d	48	92	7	5	2	-	7-8	10	1500
	Bristol ...	209	1005·5	-6	E'N	3	zo	44	92	5	5	7	-	9	9+	800
	Portland Bill ...	32	1002·9	-10	SE	4	c	51	85	7	5	-	-	10	10	2500
	Plymouth ...	82	1001·1	-8	SE	3	c/r	51	92	7	5	-	-	10	10	2500
	The Lizard ...	240	998·5	-12	SE	6	RR	52	97	8	8	2	-	9	10	1500
	Scilly (St.Mary's)	163	996·3	-2	SE'E	4	c/r	51	97	8	8	6	-	4-6	9+	1500
	Guernsey ...	175	1002·4	-4	SE	1	c	53	92	8	5	1	-	4-6	10	2500
6	Pembroke ...	142	1000·6	-4	SE'E	7	r.r.	48	92	5	5	-	-	10	10	1500
7	Holyhead ...	26	1005·0	-10	E'N	5	b	45	85	6	-	3	-	0	Tr	-
	Chester(Sealand)	16	1007·7	-6	E	3	zo	42	75	6	5	-	-	10	10	1500
8	Manchester ...	70	1008·2	-2	E'S	3	zo	40	85	5	5	3	-	9	10	2500
10	Spurn Head ...	29	1008·7	-4	E	4	id.	45	75	6	5	-	-	10	10	1500
	Catterick ...	175	1009·7	-6	-	0	zo	40	85	6	5	-	-	9+	9+	1500
	Tynemouth ...	108	1011·0	-6	SE	5	c	46	65	7	8	-	-	9	9	1500
11	St. Abbs Head	280	1010·7	-8	SE	5	c/r	44	85	8	8	6	-	4-6	7-8	2500
	Leuchars ...	36	1012·1	-6	ESE	2	pr	44	75	8	8	-	-	7-8	7-8	2500
12	Renfrew (Abbots I.)	19	1011·6	-2	E'S	2	zo	42	75	6	5	-	-	9	9	5700
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1007·8	-2	SSE	6	b	44	75	7	1	-	-	Tr	Tr	4000
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1013·4	0	ESE	5	bc	46	65	8	5	4	-	4-6	4-6	4000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1015·1	-4	ESE	5	cq	47	75	7	9	2	-	7-8	10	1500
16	Lerwick ...	156	1018·8	-10	SE	5	c	46	85	7	5	7	-	4-6	9	800
17	Blacksod Point	18	1002·2	-4	E	3	bc	49	85	8	-	3	-	0	4-6	-
18	Malin Head ...	84	1007·4	-2	E	4	c	45	85	7	5	9	-	4-6	9	4000
	Aldergrove ...	268	1007·0	-2	E	4	zo	44	75	6	5	-	-	10	10	*
19	Birr Castle ...	173	1002·4	-4	SE	3	c/pr	49	85	8	3	2	-	4-6	10	1500
20	Valentia Obsy.	30	995·8	-12	E'N	5	ir.	51	75	8	5	1	-	7-8	10	2500
	Roches Point	22	996·4	-16	SE	7	rr	51	92	6	6	2	-	7-8	10	800

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount. Low 0–10 (26)	Cloud. Amount. Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1006·5	+2	E	2	m	46	92	4	5	-	-	10	10	1500	1	*
	Croydon ...	1006·9	+4	ENE	1	f-	45	97	3	5	-	-	10	10	800	1	*
	S. Farnborough	1006·1	+2	E'N	3	c/f	45	97	4	5	-	-	10	10	450	1	*
	Boscombe Down	1004·8	0	E'N	4	zo	44	97	5	5	4	-	7-8	7-8	1500	0	*
	Calshot (Sthmtn.)	1004·6	-2	E'N	4	zo	48	92	6	5	7	-	7-8	10	2500	1	3
	Lympne ...	1007·6	+2	E'N	3	c/f	43	97	6	-	9	2	0	9	-	1	§2
	Manston ...	1007·2	+6	ESE	3	zo	46	97	6	5	-	-	9+	9+	1500	0	*
2	Shoeburyness ...	1008·3	+4	SE'E	3	c	46	97	4	5	-	-	10	10	450	1	*
	Felixstowe ...	1007·4	+4	E'N	2	m	46	97	4	5	-	-	9+	9+	1500	1	2
	Gorleston ...	1008·5	+6	SSE	1	c	46	97	5	5	-	-	9	9	2500	0	2
	Mildenhall ...	1007·5	+2	ENE	2	zo	43	97	6	5	3	-	9	9+	5700	1	*
	Cranwell ...	1008·2	+2	ENE	1	id.	43	92	4	5	-	-	10	10	1500	1	*
3	Birmingham ...	1007·7	+2	E	3	df	41	97	2	-	-	-	10	10	<150	1	*
	Upper Heyford	1007·2	+2	ENE	2	c/f	42	97	4	5	-	-	10	10	800	1	*
4	Ross-on-Wye	1005·7	0	E	2	ir.	43	97	4	5	-	-	10	10	800	1	*
5	Hartland Point	1000·1	0	NE	4	ir.	47	97	7	6	2	-	4-6	9+	1500	1	3
	Bristol ...	1005·0	+2	E	3	c/r	45	92	5	5	2	-	7-8	10	800	1	*
	Portland Bill ...	1003·3	-10	E	4	c	53	92	7	5	-	-	10	10	2500	1	3
	Plymouth ...	1000·6	+2	SE	3	r.r.	50	97	6	-	2	-	10	10	1500	1	3
	The Lizard ...	997·4	-8	SE	7	c	53	92	8	8	2	-	7-8	9+	1500	1	4
	Scilly (St.Mary's)	995·1	-8	ESE	4	c	53	97	7	8	6	-	4-6	7-8	1500	1	3
	Guernsey ...	1001·9	+2	SE	2	pr	51	92	7	8	-	-	9+	9+	1500	1	2
6	Pembroke ...	1000·6	+2	SE'E	7	r.r.	47	97	5	8	-	-	9+	9+	1500	1	3
7	Holyhead ...	1003·8	0	E'N	6	bc	44	85	7	5	4	-	2-3	4-6	2500	0	3
	Chester(Sealand)	1007·0	-2	E'S	3	zo	43	85	5	5	-	-	10	10	1500	1	*
8	Manchester ...	1007·9	+2	E'S	2	cf+	42	85	3	5	-	-	10	10	800	1	*
10	Spurn Head ...	1008·4	-2	E	4	c	47	85	6	5	-	-	10	10	800	1	3
	Catterick ...	1009·3	0	-	0	zo	40	92	6	5	-	-	10	10	1500	1	*
	Tynemouth ...	1010·3	0	SE	5	c	47	85	7	6	-	-	10	10	1500	1	2
11	St. Abbs Head	1010·1	-2	ESE	6	cq	45	65	8	8	2	-	7-8	10	1500	0	4
	Leuchars ...	1011·1	-2	ESE	4	c/pr	45	85	7	8	-	-	10	10	2500	1	*
12	Renfrew (Abbots I.)	1010·7	-2	E'N	1	zo	41	85	5	5	3	-	4-6	7-8	2500	0	*
	Eskdalemuir ...	1009·5	-6	NE	2	bc	35	92	6	5	-	-	2-3	2-3	2500	1	*
	Point of Ayre...	1006·8	-4	SE'S	5	bc	45	75	7	8	7	6	2-3	4-6	4000	0	3
13A	Tiree	1009·3	0	E'N	3	bc	43	75	8	2	4	5	2-3	4-6	2500	0	3
13B	Stornoway ...	1013·4	+4	ESE	5	c	46	75	8	5	4	-	4-6	7-8	2500	0	3
15	Dalwhinnie ...	1012·3	-2	N	1	c	37	85	7	4	7	-	7-8	9+	2500	1	*
	Aberdeen ...	1013·3	0	SE	4	c/pr	45	75	6	9	-	-	9+	9+	1500	1	3
	Wick ...	1013·3	-10	ESE	5	c/pr	47	85	7	8	7	-	7-8	10	1500	1	2
16	Lerwick ...	1018·6	0	SE	5	c/pr	45	85	8	8	7	-	7-8	10	800	1	*
17	Blacksod Point	1002·7	+4	E	5	ir.	47	92	7	6	-	-	10	10	800	0	4
18	Malin Head ...	1006·6	0	E	3	bc	45	75	7	8	-	-	4-6	4-6	5700	0	4
	Aldergrove ...	1006·7	+4	E	2	zo	42	75	6	5	-	2	7-5	9+	1500	1	*
19	Birr Castle ...	1002·0	+2	ESE	2	ir	46	85	7	6	2	-	4-6	10	1500	1	*
20	Valentia Obsy.	996·5	+12	E	4	bc	51	75	9	5	4	-	2-3	2-3	2500	1	2
	Roches Point	996·9	+4	SE	5	c	52	97	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)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 1st Hrs. (36)
1	London (Kew)	50	45	44	Tr	-	0·0
	Croydon ...	49	43	42	-	Tr	0·0
	S. Farnborough	54	44	*	Tr	-	*
	Boscombe Down	48	43	40	2	-	0·0
	Calshot (Sthmtn.)	51	43	43	9	-	0·3
	Lympne ...	45	37	35	1	0·2	0·3
	Manston ...	47	42	37	Tr	-	0·0
2	Shoeburyness ...	49	44	37	-	Tr	0·0
	Felixstowe ...	48	43	41	Tr	Tr	0·0
	Gorleston ...	47	43	42	-	Tr	*
	Mildenhall ...	48	41	37	-	-	0·0
	Cranwell ...	46	41	40	-	Tr	0·0
3	Birmingham ...	48	40	39	Tr	0·0	Tr
	Upper Heyford	49	40	40	Tr	Tr	*
4	Ross-on-Wye	50	42	40	0·5	0·3	0·1
5	Hartland Point	53	46	45	-	1	7·3
	Bristol ...	49	44	40	0·4	Tr	0·3
	Portland Bill ...	53	48	*	-	-	*
	Plymouth ...	56	49	47	-	12	6·4
	The Lizard ...	57	50	*	-	8	5·1
	Scilly (St.Mary's)	55	49	*	0·1	7	3·5
	Guernsey ...	53	50	45	-	0·5	1·6
6	Pembroke ...	54	46	*	Tr	2	4·3
7	Holyhead ...	52	43	41	Tr	-	1·1
	Chester(Sealand)	49	42	41	0·1	-	0·0
8	Manchester ...	50	40	33	-	-	0·1
10	Spurn Head ...	46	43	*	Tr	Tr	0·0
	Catterick ...	45	38	37	0·1	-	0·0
	Tynemouth ...	47	44	42	0·3	0·6	*
11	St. Abbs Head	46	42	*	Tr	0·5	*
	Leuchars ...	47	43	39	0·1	1	0·0
12	Renfrew (Abbots I.)	46	40	34	0·3	Tr	0·0
	Eskdalemuir ...	43	35	32	0·3	0·3	0·0
	Point of Ayre...	50	43	*	Tr	-	0·0
13A	Tiree	49	41	38	-	-	1·1
13B	Stornoway ...	49	45	*	-	-	5·2
15	Dalwhinnie ...	40	35	30	1	0·4	0·0
	Aberdeen ...	47	43	39	Tr	3	0·0
	Wick ...	49	45	*	Tr	0·2	*
16	Lerwick ...	46	43	*	Tr	Tr	0·0
17	Blacksod Point	50	40	*	-	0·2	*
18	Malin Head ...	50	41	*	Tr	Tr	0·1
	Aldergrove ...	48	40	35	1	Tr	0·0
19	Birr Castle ...	52	45	43	-	-	1·8
20	Valentia Obsy.	53	48	43	0·4	1	2·0
	Roches Point	55	49	*	0·1	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.	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	cmo	omo	omomf	50	45	44	Tr	-	0·0	*	*	4
CROYDON	217	cmcm.	cmo	domofcfw	49	43	42	-	Tr	0·0	*	*	4
GREENWICH (Royal Observatory)...	149	cmo	cmo	cdocf	48	43	40	-	Tr	0·1	86	96	3
CITY (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*	48	45	43	-			80	89	*
REGENTS PK. (Botanic Gardens)‡...	168	*	*	*	50	44	40	-	-		70	92	*
CAMDEN SQUARE	110	bc	o	*	49	44	41	-	-	*	*	97	*
KENSINGTON	80	bcc	c	*	50	44	43	-	Tr		87	95	*
HAMPSTEAD OBSERVATORY	450	o	o	of	47	43	40	-	-		*	99	*

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.
0·3	19h 1st	0·1	23h 1st

FOREIGN OBSERVATIONS.

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

Stations.	Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.
PARIS	1007·0	-	0	m	48
BRUSSELS					
BERLIN					
ZÜRICH					
ROME	1011·3	SE	3	c	63

7h. G.M.T. 2nd November

Stations.	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	1007·1	E	1	c	37	55	37	3	-
BRUSSELS									
BERLIN									
ZÜRICH									
ROME	1010·7	S	2	o	69	*	*	-	-

‡ 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 3rd November 1939.

No. 28,470

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

District.	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low. (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1006·2	-10	E'N	3	m	51	85	4	-	4	8	0	10	-
	Croydon	1006·9	+4	NE'E	3	m	51	92	4	5	-	-	7-8	7-8	1500
	S. Farnborough	1005·6	-10	E'N	3	z_o	51	85	6	5	1	-	2-3	9+	1500
	Boscombe Down	1004·4	-6	E	3	z_o	52	85	6	5	1	-	7-8	10	800
	Calshot (Soton.)	1004·0	-8	E	4	z_o	53	92	6	5	1	-	4-6	10	4000
	Lympne ...	1007·5	-6	E'S	3	c	53	75	7	2	3	8	1	9+	4000
	Manston ...	1007·3	-6	E	3	z_o	52	85	6	-	3	2	0	7-8	-
2	Shoeburyness ...	1007·6	-4	ENE	3	c	53	92	6	-	-	6	0	7-8	-
	Felixstowe ...	1008·0	-2	E	2	z_o	51	92	6	5	-	-	9+	9+	800
	Gorleston ...	1009·2	+2	SE'E	2	c	51	92	6	5	3	-	4-6	7-8	2500
	Mildenhall ...	1007·8	-2	ESE	3	c	52	85	7	5	4	1	4-6	9	5700
	Cranwell ...	1008·1	-6	E	1	z_o	52	85	6	1	3	1	2-3	4-6	1500
3	Birmingham	1006·4	-2	E	3	z_o	48	85	5	5	7	-	7-8	9+	1500
	Upper Heyford	1006·9	-6	E	3	z_o	49	65	6	3	-	-	10	10	800
4	Ross-on-Wye ...	1005·4	-4	E'N	3	z_o	49	85	6	5	-	-	10	10	800
5	Hartland Point	999·6	-4	E	4	c	54	85	8	7	4	2	2-3	7-8	2500
	Bristol	1004·3	-6	SE'E	3	z_o	51	85	6	5	7	-	4-6	9	1500
	Portland Bill ...	1002·9	-6	E	4	c	55	92	8	5	-	-	10	10	4000
	Plymouth ...	1000·2	-6	SE	4	e	57	75	8	8	3	1	7-8	9	1500
	The Lizard ...	997·2	-8	ESE	7	e	57	92	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	994·6	-2	SE'E	5	c	56	92	6	8	7	-	4-6	9+	1800
	Guernsey ...	1001·9	-2	SE'S	2	e	55	85	8	-	7	8	0	7-8	-
6	Pembroke ...	1001·2	-6	SE'E	7	cq	51	92	6	5	7	-	7-8	9	1500
7	Holyhead ...	1004·3	-4	E'N	5	c/r	48	85	6	5	2	-	9	10	5700
	Chester (Sealand)	1007·2	-6	E	1	z_o	49	75	6	3	3	-	7-8	9	2500
8	Manchester ...	1007·6	-6	E'N	3	z/r	49	75	4	5	-	-	9+	9+	1500
10	Spurn Head ...	1009·0	0	SE	2	c	51	85	6	-	7	-	0	7-8	-
	Catterick ...	1009·7	-2	NE	1	id	46	92	6	5	-	-	10	10	1500
	Tynemouth ...	1011·0	+4	ESE	5	c/r_o	48	92	6	6	-	-	10	10	1500
11	St. Abbs Head	1011·1	0	SE	6	ir_o	46	85	7	8	2	-	7-8	10	2500
	Leuchars ...	1012·1	-4	E	3	c	46	85	7	8	-	-	10	10	1500
12	Renfrew (Abbots I.)	1010·7	-2	E'N	2	z_o	46	75	5	5	-	-	10	10	4000
	Eskdalemuir ...	1010·0	-2	E'N	3	id_o	45	92	6	5	-	-	10	10	800
	Point of Ayre ...	1007·5	+2	SE	4	c	48	85	7	8	2	-	4-6	9+	1800
13A	Tiree	1009·1	-2	ESE	4	c	47	65	7	5	-	-	9+	9+	2500
13B	Stornoway ...	1013·2	-4	ESE	4	c	47	75	8	5	4	-	4-6	7-8	2500
15	Dalwhinnie ...	1011·8	-6	SW	3	bc	40	85	6	4	6	-	4-6	4-6	2500
	Aberdeen ...	1013·4	0	SE'E	4	c	47	65	6	9	-	-	10	10	1500
	Wick	1013·9	+2	SE	6	c/pr	47	75	8	8	7	1	7-8	9+	1500
16	Lerwick... ...	1018·3	-2	SSE	6	c/pr	45	85	8	8	7	-	7-8	9	800
17	Blacksod Point...	1003·4	0	E	3	c	48	85	7	-	7	-	0	10	-
18	Malin Head ...	1006·8	-4	E	3	c	47	75	8	8	-	-	7-8	7-8	5700
	Aldergrove ...	1006·6	-2	E	3	z_o	46	75	6	5	-	-	10	10	1500
19	Birr Castle ...	1002·3	-4	ESE	2	c	49	85	7	6	2	-	4-6	10	1800
20	Valentia Obsy. †	997·8	+2	ENE	3	c	54	75	8	5	7	-	7-8	9+	2500
	Roches Point ...	998·5	+2	SE'E	6	c	53	85	8	5	-	-	9	9	1500

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

Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low. (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea. 0–9 (30)
London (Kew)	1006·7	+5	ENE	3	m	51	85	4	5	-	-	10	10	1500	1	*
Croydon	1006·9	+2	ENE	2	m	49	92	4	5	7	-	4-6	10	1500	1	*
S. Farnborough	1006·1	+6	ENE	2	m	50	92	4	5	2	-	4-6	10	2500	1	*
Boscombe Down	1005·2	+10	E'N	3	m	49	92	4	5	1	-	7-8	10	1500	0	*
Calshot (Soton.)	1005·2	+10	E	3	z_o	51	92	5	5	7	-	7-8	10	2500	1	3
Lympne	1007·6	+8	E'S	3	m/r	50	85	4	5	2	-	9	10	1500	1	§ 3
Manston	1007·5	+6	ESE	3	z_o	51	92	5	5	-	-	10	10	4000	0	*
Shoeburyness	1007·5	+2	E'N	3	c	51	92	6	-	7	-	0	10	-	1	*
Felixstowe	1007·6	+2	E'N	3	z_o	50	92	6	5	7	-	4-6	7-8	2500	1	2
Gorleston	1008·9	0	E'S	4	bc	50	92	6	5	-	-	2-3	2-3	2500	0	2
Mildenhall	1007·9	+2	E	3	z_o	49	92	6	5	-	7	1	10	2500	1	*
Cranwell	1009·0	+10	E	2	cf+	44	92	3	5	-	6	2-3	7-8	2500	0	*
Birmingham	1007·3	+2	E	3	o	48	85	5	5	-	-	10	10	1500	1	*
Upper Heyford	1007·1	+6	E'S	2	z_o	45	92	6	3	7	-	9+	10	1500	1	*
Ross-on-Wye	1005·8	+4	E'N	3	m	48	92	4	5	-	-	9+	9+	800	1	*
Hartland Point	1000·9	+10	E	4	c/pr	52	92	8	8	-	3	7-8	7-8	2500	1	3
Bristol	1004·6	+2	SE'E	2	z_o	50	85	6	5	7	-	7-8	9+	1500	1	*
Portland Bill	1004·0	+16	E	3	c	54	92	8	5	-	-	10	10	4000	1	3
Plymouth	1001·8	+10	S'E	3	c/r	55	92	7	8	-	-	9+	9+	1500	1	4
The Lizard	1000·4	+16	SE	5	bc	55	92	8	8	-	-	4-6	4-6	2500	0	3
Scilly (St. Mary's)	996·7	+10	SSE	6	cjp	58	97	8	9	6	3	4-6	7-8	1500	1	4
Guernsey	1003·3	+16	SE'S	2	o	58	92	7	5	1	-	7-8	7-8	2500	1	2
Pembroke	1001·2	+2	SE'E	6	cq	52	92	6	8	-	-	9+	9+	1800	1	3
Holyhead	1004·8	+4	E'N	4	c	50	85	6	6	2	-	9	10	1500	1	3
Chester (Sealand)	1007·6	+8	-	0	z_o	48	85	5	5	-	-	10	10	2500	1	*
Manchester	1007·6	+2	E	3	m	49	75	4	5	-	-	10	10	2500	1	*
Spurn Head	1009·2	+4	ESE	4	bc	48	92	6	-	8	-	0	4-6	-	0	3
Catterick	1009·5	+4	-	0	z_o	46	92	5	3	-	-	10	10	2500	1	
Tynemouth	1010·8	-2	SE	4	e	49	85	6	6	-	-	10	10	1500	1	3
St. Abbs Head	1010·9	+4	SE	5	rr	47	97	7	3	2	-	9	10	1500	1	3
Leuchars	1011·3	-2	ESE	4	ir_o	47	92	6	5	-	-	10	10	2500	1	*
Renfrew (Abbots I.)	1010·3	+2	E'N	2	z_o	46	85	9	5	-	-	9	9+	2500	1	*
Eskdalemuir	1009·7	+4	NE'N	3	id_o	45	97	6	5	-	-	10	10	450	1	*
Point of Ayre	1007·3	+2	SE	4	c	50	85	7	5	4	-	4-6	9+	1500	0	3
Tiree	1008·7	0	ESE	3	c	48	75	7	5	-	-	9+	9+	2500	0	3
Stornoway	1012·6	0	SE	4	bc	47	75	8	5	7	-	2-3	4-6	2500	0	2
Dalwhinnie	1011·7	-2	-	0	ir_o	39	85	6	4	6	-	4-6	4-6	2500	1	*
Aberdeen	1013·5	+2	ESE	5	ir_o	46	92	6	6	-	-	10	10	1500	1	3
Wick	1018·3	+2	SE	7	cq	47	75	7	5	7	-	7-8	10	1500	1	2
Lerwick	1017·6	-4	SSE	6	pr	45	85	7	8	7	-	7-8	9+	800	1	*
Blacksod Point	1003·2	+4	E	4	c	48	85	7	-	2	-	0	10	-	1	3
Malin Head	1006·5	-4	E	2	z_o	48	75	7	8	-	-	7-8	7-8	4000	0	2
Aldergrove	1006·5	-2	E	4	z_o	48	75	6	5	3	-	9	10	2500	1	*
Birr Castle	1002·4	+2	ESE	2	c	49	85	7	5	1	-	7-8	10	1500	1	*
Valentia Obsy. †	997·4	-2	NE'E	4	pr	52	85	7	5	-	-	10	10	1500	1	2
Roches Point	997·0	-4	ESE	7	rr	53	92	6	6	2	-	7-8	10	800	1	4

PAST 24 HOURS.

Stations.	Weather 7h.—13h. 2nd (37)	Weather 13h.—18h. 2nd (38)	Weather 18h. 2nd to 1h. 3rd (39)	Weather 1h.—7h. 3rd (40)
London (Kew)	cm	cmprcm	omr₀r₀c	cffe
Croydon	ofcm	cmmm	cmo f r	bccbcm
S. Farnborough	cm	cm cm	r ir c	cm r cm
Boscombe Down	cm	cm	cmcm ir	cir crrcm
Calshot (Soton.)	cm	cm	cm fcm	ir cm
Lympne	cm ⊕	cmmrr	cm r cm	cmpbcf
Manston	bcmcm	cm	cpr cm	cm
Shoeburyness	bcm	bccm	cfcir	cbcm
Felixstowe	cm	cm	cm	cm
Gorleston	czz	obczz	bccz	cz
Mildenhall	cm bcm	cm	cm ir m	cm ir m
Cranwell	idcm bcm	bccmf	cff	ffrfcm
Birmingham	d foc	c	o	oir m
Upper Heyford	cmcm	cm	cmd r r	cir id m
Ross-on-Wye	fmomcm	omcm	ombcmc	ir
Hartland Point	ir r r	cp	cp	clrr
Bristol	cm	cm ir c	cbccir	cmir bc
Portland Bill	c	c	c	cbc
Plymouth	cr r mc	ccir	ocbcc	cbccpr
The Lizard	c	cbc	bcw	bcc
Scilly (St. Mary's)	cpqc	cbcc	cp zc	bcw
Guernsey	ir bc	cbcc		bcc
Pembroke	irmqc	cqm	cirmqbcc	cqir
Holyhead	bcr mc	r r mc	cbcm c	cm rbc
Chester (Sealand)	cm	czm	mr r cm	cmir cm
Manchester	cff dcm	cz	czbcm cm	cd mr m
Spurn Head	rrc	c	cwm	cwom
Catterick	mcid m	ddd d m	cm	cmr r
Tynemouth	oir	o	oir c	cqir
St. Abbs Head	irc	crr	prcm	m c
Leuchars	cprc	PRoir m	ir iRcm	cm c
Renfrew (Abbots I.)	cmmz	czm	cm	cmir r r
Eskdalemuir	aid m	cid m	bcm	bccid m
Point of Ayre	bcc	c	cbcc	c
Tiree	bcc	c	cbc	cbcc
Stornoway	c	cbc	bc	c
Dalwhinnie	cir	cir		cir
Aberdeen	cbccpr	cir	oir z	cz ir
Wick	cprcq	prcq	cprir	cirq
Lerwick	cpr	cpr	cprPR	cprq
Blacksod Point	c	c	c	c
Malin Head	c	cczzc	c	czzc
Aldergrove	cm	cz	cm	ir irc
Birr Castle	circ	c	cpr	cpr
Valentia Obsy. †	bbcc	ccpr	pr irir pr	pcirir pr
Roches Point	c	crr	iR	iRirrr

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).

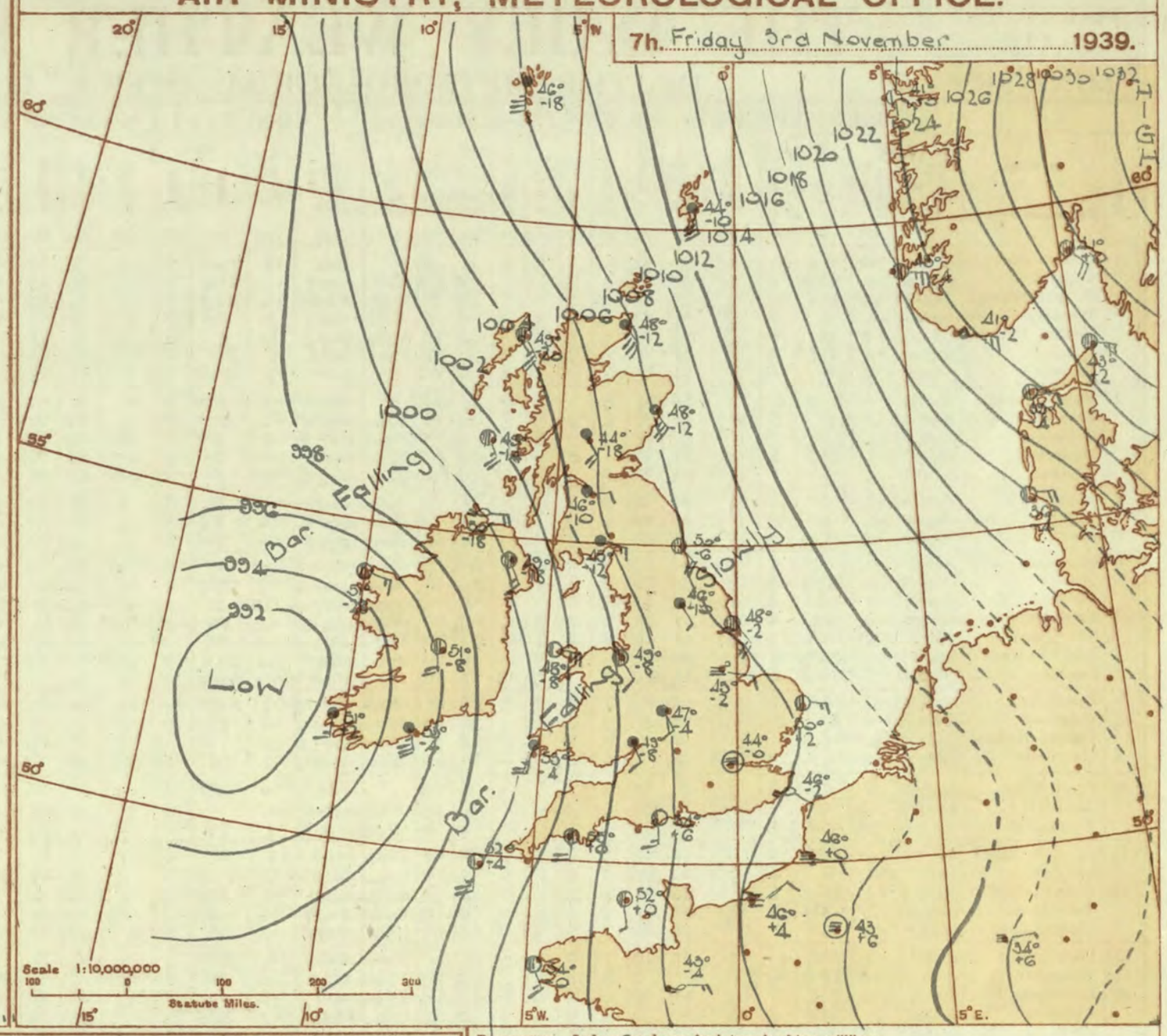
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac; Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 3rd November, 1939.
1 S.E. England	Wind southeast, moderate, backing and freshening tomorrow; cloudy or dull; local rain at first; more general rain later; mainly mild.
2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind southeast, light to moderate, freshening tomorrow; cloudy; light local rain today; more general rain probable tomorrow; average temperature to rather mild.
5 S.W. England 6 South Wales ...	Wind south, fresh, decreasing, backing, increasing; showers and bright periods at first; becoming dull; rain at times; mild.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland	Wind southeast, fresh, to strong at times on the coasts; cloudy or dull; occasional rain especially in West; becoming mild.
15 N. E. Scotland ↓ 16 Orkneys and Shetlands ↓	Wind southeast, strong to gale on the coast; cloudy; occasional light rain; average temperature.
17 N. W. Ireland 18 N. E. Ireland	As 7 - 14.
19 S. E. Ireland 20 S. W. Ireland	As 5 - 6.

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.

GENERAL INFERENCE.

Pressure continues high over Russia and the Baltic. A depression centred just off West Ireland will move north and be followed by further disturbances moving up from the south. Weather will be unsettled with rain in most districts, especially in the West. Conditions will be mainly mild.

FURTHER OUTLOOK.

Mild and unsettled.

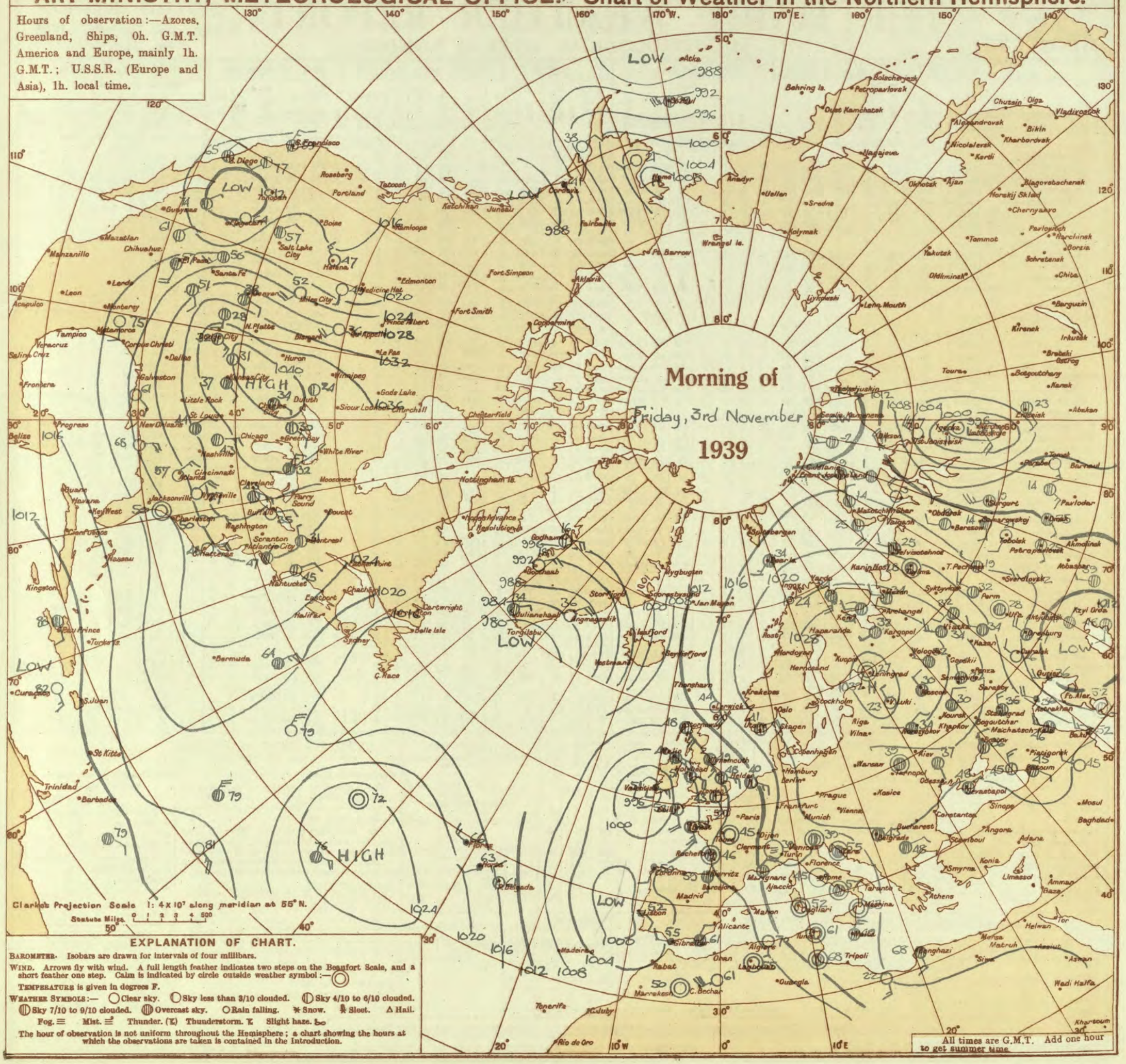
↓ South Cone hoisted 0700h.

Forecasts issued at 1100 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

Friday 3rd November 1939.

No. 28,470

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1007.5	0	SSE	3	bc/r	43	97	5	6	7	-	1	4-6	1500
	S. Farnborough	226	1007.0	0	E'N	2	zo	49	97	5	5	-	-	10	10	450
	Boscombe Down	417	1006.1	+2	SE'E	2	ir	48	97	4	6	-	-	10	10	800
	Calshot (Sthmtn.)	8	1006.4	+2	ESE	2	zo	50	97	6	5	3	-	7-8	9	4000
	Lympne ...	346	1008.5	0	S'E	1	zo	48	97	6	5	-	-	10	10	450
	Manston ...	154	1008.1	+2	S	1	zo	48	97	6	5	-	-	10	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1008.1	+2	ESE	2	zo	48	97	5	-	3	-	0	9+	-
	Gorleston ...	5	1008.7	-2	E'S	3	c	49	85	5	5	-	-	10	10	220
	Mildenhall ...	19	1007.8	-2	E	2	c/r	49	97	5	6	2	-	9	9+	800
	Cranwell ...	240	1008.3	-6	E	2	cf	47	97	3	5	-	-	10	10	450
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408														
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1002.4	0	SE	3	c	50	97	8	8	-	-	7-8	7-8	2500
	Bristol ...	209	1005.7	0	SE	3	ir	49	97	5	5	2	-	7-8	10	800
	Portland Bill ...	32	1005.5	+16	SSW	3	c	55	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1003.2	0	S	5	c	55	92	7	5	-	-	9	9	5700
	The Lizard ...	240	1002.1	+6	S	5	bc	54	92	7	4	3	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	1000.3	+8	S'E	4	bc	58	97	7	4	-	-	2-3	2-3	2500
	Guernsey ...	175														
6	Pembroke ...	142	1002.0	0	SE'S	5	c	53	92	8	8	-	-	7-8	7-8	1500
7	Holyhead ...	26	1003.6	-2	ESE	4	c	51	85	6	5	-	-	9+	9+	5700
	Chester (Sealand)	16	1006.5	-10	SE'E	2	zo	49	85	5	5	-	-	10	10	800
8	Manchester ...	70	1007.1	-4	ESE	3	ido	48	85	4	5	-	-	10	10	800
10	Spurn Head ...	29	1008.8	-2	ESE	3	c	48	97	5	-	8	9	0	9+	-
	Catterick ...	175	1009.3	-6	-	0	m	43	97	4	5	-	-	10	10	1500
	Tynemouth ...	108	1010.2	0	SE	3	c	49	92	7	8	-	-	9	9	1500
11	St. Abbs Head	280	1009.3	-8	SE	5	c/pr	48	97	6	8	2	-	7-8	10	1500
	Leuchars ...	36	1009.7	-10	SE	5	zo	48	85	6	5	-	-	9+	9+	1500
12	Renfrew (Abbots I.)	19	1008.4	-14	E'N	2	zo	45	92	5	5	3	-	4-6	7-8	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1006.0	-10	SSE	5	c	50	85	7	5	2	-	4-6	10	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1009.3	-12	SE	5	c	48	85	8	5	7	-	7-8	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1011.5	-12	SE	7	ir	48	92	7	5	2	-	7-8	10	1500
16	Lerwick ...	156	1016.5	-10	SSE	7	c/pr	44	85	7	8	7	-	7-8	9+	800
17	Blacksod Point	18	1000.4	-14	E'S	4	c	49	92	7	8	-	-	7-8	7-8	450
18	Malin Head ...	84	1004.1	-16	E'S	3	c	49	85	7	8	7	-	4-6	9	4000
	Aldergrove ...	268	1004.3	-14	ESE	3	zo	49	85	6	5	2	-	9	10	1500
19	Birr Castle ...	173	999.7	-16	ESE	4	c/pr	51	85	8	8	-	-	7-8	7-8	1500
20	Valentia Obsy.	30	993.6	-26	E	3	pr	51	85	8	8	-	-	7-8	7-8	2500
	Roches Point	22	996.4	0	SE	7	iR	53	92	8	6	-	-	7-8	7-8	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 2nd Hrs. (36)
London (Kew)	1006.9	-8	-	0	cf	47	92	3	5	-	-	9	9	2500	1	*	52	46	38	0.1	1	0.0
Croydon	1007.1	0	-	0	bcf	44	97	3	5	3	-	2-3	4-6	2500	1	*	52	44	37	-	1	1.6
S. Farnborough	1006.7	-2	ESE	2	m	47	97	4	5	-	-	9+	9+	1500	1	*	53	47	45	-	0.3	0.0
Boscombe Down	1005.8	+2	ESE	3	c/r	48	97	5	6	-	-	10	10	450	1	*	53	47	46	-	10	0.0
Calshot (Sthmtn.)	1006.0	0	SE'E	3	zo	50	97	6	8	3	-	7-8	9	2500	1	2	53	48	47	-	0.6	0.0
Lympne	1008.6	-2	SE'E	2	zo	46	92	6	5	-	-	9+	9+	1500	1	§2	54	44	39	0.3	Tr	4.2
Manston	1008.1	+6	ESE	1	zo	46	97	5	5	-	-	9+	9+	1500	1	*	53	45	36	-	0.3	3.6
Shoeburyness	1008.0	0	SE	2	bc	48	92	6	5	-	2	4-6	4-6	1500	1	*	53	44	39	-	Tr	1.4
Felixstowe	1007.8	0	SE	1	zo	47	97	5	5	-	-	10	10	1500	1	1	52	46	41	-	-	0.1
Gorleston	1008.2	-2	E'S	3	c	50	92	6	5	-	-	10	10	2500	0	2	51	49	47	-	-	*
Mildenhall	1007.6	-2	E'S	2	c/r	47	97	4	5	2	-	9+	10	2500	1	*	53	47	44	-	0.2	0.9
Cranwell	1007.6	-2	E'S	2	m/f	45	97	4	5	-	-	10	10	450	1	*	52	43	40	-	1	1.8
Birmingham	1006.0	-4	SE	2	iro	47	97	4	5	-	-	10	10	450	1	*	49	47	45	Tr	0.2	0.0
Upper Heyford	1007.1	0	SE'E	1	m	47	97	4	-	2	-	10	10	450	-	*	50	*	43	-	0.2	*
Ross-on-Wye	1005.0	-8	SE	2	pr	49	97	6	9	-	-	7-8	7-8	1500	1	*	50	47	44	0.1	2	0.0
Hartland Point	1001.8	-4	SSE	3	c	51	92	8	8	1	-	4-6	7-8	2500	1	2	55	49	47	0.5	3	3.7
Bristol	1004.7	-4	SSE	2	bc/r	48	97	6	8	-	8	4-6	4-6	1500	1	*	53	48	42	Tr	3	0.0
Portland Bill	1005.5	+6	S	3	bc	54	92	8	5	-	-	4-6	4-6	4000	1	3	55	50	*	-	3	*
Plymouth	1003.2	0	S	4	c/pr	55	85	7	9	-	-	7-8	7-8	1500	1	4	57	55	51	1	Tr	1.7
The Lizard	1002.2	+2	S	5	c	54	92	7	8	2	-	9	10	1500	0	3	58	53	*	-	-	3.5
Scilly (St. Mary's)	999.9	-4	S'E	5	bc	52	97	6	8	4	3	2-3	4-6	2500	1	3	56	52	*	4	0.2	2.5
Guernsey	1005.1	0	SSE	1	c	52	97	8	8	1	-	7-8	7-8	1500	1	2	57	51	44	0.4	1	3.5
Pembroke	1000.4	-4	S'W	5	ir	53	97	7	8	7	-	7-8	9	1500	1	3	53	51	*	1	3	0.7
Holyhead	1001.9	-8	ESE	3	bc	48	85	7	5	-	-	4-6	4-6	4000	1	2	50	47	44	0.2	0.6	0.0
Chester (Sealand)	1004.8	-8	SE	2	c/r	49	85	5	5	-	-	10	10	800	1	*	50	46	43	-	0.1	0.1
Manchester	1005.4	-8	E'S	3	m	49	92	4	5	-	-	9+	9+	1500	1	*	50	47	42	Tr	*	0.0
Spurn Head	1008.0	-2	SE'E	4	c	48	85	5	5	-	-	10	10	800	0	3	51	47	*	1	Tr	1.5
Catterick	1007.5	-10	SE	1	roro	46	97	4	6	-	-	10	10	800	1	*	46	43	40	0.6	1	0.0
Tynemouth	1008.7	-6	SE	4	c/r	50	92	6	6	-	-	10	10	1500	1	3	50	48	45	0.3	0.1	*
St. Abbs Head	1007.3	-12	SE	5	c	48	92	7	8	6	-	7-8	9+	1500	0	3	47	46	*	0.1	3	*
Leuchars	1007.2	-10	ESE	3	c	48	92	7	8	7	-	7-8	10	1500	1	*	47	47	43	1	1	0.0
Renfrew (Abbots I.)	1006.1	-10	E'N	2	roro	46	92	4	5	-	-	10	10	2500	1	*	47	43	37	-	0.3	0.0
Eskdalemuir	1006.3	-12	ESE	3	ido	45	85	6	5	-	-	10	10	1500	1	*	44	43	38	1	-	0.0
Point of Ayre	1003.3	-18	SSE	6	c	50	92	6	5	2	-	7-8	10	1500	0	4	51	49	*	-	-	0.0
Tiree	1001.7	-14	SE'E	5	c	49	75	7	5	-	-	9+	9+	2500	1	1	48	45	*	Tr	1	*
Stornoway	1004.2	-20	SE	5	c	49	75	8	5	7	-	4-6	7-8	4000	0	3	48	46	*	-	-	1.2
Dalwhinnie	1006.6	-18	SE	4	ir	44	85	6	6	-	-	10	10	1500	1	*	41	39	34	0.1	3	0.7
Aberdeen	1009.0	-12	SE'E	5	iro	48	85	6	6	2	-	9+	10	800	1	3	47	46	44	0.4	0.4	1.1
Wick	1008.8	-12	SE	7	iR	48	92	6	5	2	-	7-8	10	800	1	3	48	46	*	2	3	*
Lerwick	1013.6	-10	S'E	7	pr	44	85	7	8	7	-	7-8	10	800	1	*	47	42	*	1	2	0.3
Blacksod Point	994.9	-28	E'S	3	c	51	85	8	-	6	-	0	7-8	-	0	2	50	47	*	2	-	*
Malin Head	999.5	-18	E	4	zo	50	85	6	8	-	-	7-8	7-8	4000	0	3	49	45	*	-	-	0.0
Aldergrove	1000.8	-18	SE	3	c/r	49	92	6	5	-	-	10	10	800	1	*	48	47	44	-	1	0.0
Birr Castle	996.4	-8	S'E	4	c/lr	51	85	8	8	-	-	7-8	7-8	1500	1	*	50	48	48	0.2	2	0.0
Valentia Obsy.	992.4	+2	S	3	pr	51	92	7	5	-	-	9	9	800	1	3	55	50	46	Tr	3	0.5
Roches Point	994.6	-4	S'E	7	rr	53	97	7	6	2	-	7-8	9+	800	1	4	54	52	*	4	11	*

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	cm	cmpro cm	owc.cffe	52	46	38	0.1	1	0.0	*	*	3
Croydon	217	ofcmo	cm mo m	mor.r.bcm	52	44	37	-	1	1.6	*	*	
Greenwich (Royal Observatory)	149	cfm	cmo	cdodef	52	45	37	-	0.1		85	96	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	53	47	44	0.3			81	88	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	52	46	41	-	0.7		89	93	*
Camden Square	110	o	c	*	51	47	43	-	0.5	*	*	96	*
Kensington	80	cm	c	*	52	45	38	Tr	0.6			98	*
Hampstead Observatory	450										*		*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

	Max.	Time.	Min.	Time.
South Kensington				
Kew Observatory	0.4	19h 2nd	<0.1	4h 3rd

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 2nd November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 3rd November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1008.1	-	0	bc	46	1010.2	-	0	f+	43	*	43	*	0.2
Brussels														
Berlin														
Zürich														
Rome	1013.4	SE	2	bc	63	1015.0	ENE	1	bc	52	*	*	-	-

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.

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

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 4th November 1939.

No. 28,471

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1005.8	-14	SSE	2	c/pr	55	92	6	5	-	-	9.	9+	1500
	Croydon	1006.5	-8	SSE	2	z	56	85	6	2	-	-	7-8	7-8	2500
	S. Farnborough	1005.5	-10	S	3	c/pr₀	55	85	7	8	7	2	4-6	7-8	1500
	Boscombe Down	1004.4	-14	SSE	4	c	55	85	8	8	-	2	4-6	7-8	1500
	Calshot (Soton.)	1005.4	-6	SSE	4	c	54	85	8	8	7	6	4-6	9+	1500
	Lympne ...	1008.5	-2	SE'S	3	z	50	92	6	5	-	-	10	10	2500
	Manston ...	1007.7	-6	S	3	z₀	52	85	6	5	-	-	10	10	1500
2	Shoeburyness ...	1007.2	-8	SE'S	3	c	52	92	6	3	-	-	10	10	2500
	Felixstowe ...	1007.3	-10	SE	2	z	54	88	6	8	3	1	2-3	4-6	2500
	Gorleston ...	1008.6	-6	SE	3	c	51	85	6	5	-	-	9+	9+	2500
	Mildenhall ...	1006.3	-16	SE	3	c	54	85	7	5	-	-	9+	9+	2500
	Cranwell ...	1006.1	-14	ESE	3	z₀	49	92	5	5	-	-	10	10	800
3	Birmingham	1004.8	-8	SSE	3	c	50	92	6	5	7	-	9	9+	1500
	Upper Heyford	1006.1	-8	SE'E	1	z₀	53	92	6	5	3	-	9	9+	800
4	Ross-on-Wye ...	1003.4	-14	SSE	1	c	54	85	7	9	1	3	4-6	9+	1500
5	Hartland Point	1000.8	-12	S	3	c	55	85	8	8	6	3	4-6	9	2500
	Bristol	1003.6	-14	SE'S	3	pr	56	75	8	8	7	8	4-6	4-6	1500
	Portland Bill ...	1004.5	-8	S	3	c	54	92	8	5	-	-	10	10	4000
	Plymouth ...	1002.8	-8	S	4	c	55	85	8	9	3	3	7-8	9+	1500
	The Lizard ...	1001.6	-10	S'W	5	rr	51	97	8	5	-	-	10	10	1500
	Scilly (St. Mary's)	999.5	-12	S	4	bc	55	85	8	8	7	3	2-3	4-6	1500
	Guernsey ...	1003.5	-16	SSE	2	c	53	85	9	4	7	-	4-6	7-8	2500
6	Pembroke ...	1000.1	-10	S'W	6	cq	55	85	7	8	6	-	4-6	7-8	1500
7	Holyhead ...	999.4	-6	SSE	5	c	56	75	8	8	-	1	7-8	7-8	2500
	Chester (Sealand)	1002.7	-20	SE'E	4	bc	54	85	6	8	7	9	4-6	4-6	1500
8	Manchester ...	1004.2	-14	SE	3	z₀	51	85	6	5	3	-	7-8	9+	1500
10	Spurn Head ...	1006.3	-6	SSE	4	o	49	85	6	5	-	-	10	10	1500
	Catterick ...	1005.4	-16	SE	2	ir₀	48	97	5	5	2	-	7-8	10	800
	Tynemouth ...	1006.7	-10	SE	4	c	49	85	6	6	-	-	10	10	1500
11	St. Abbs Head	1005.0	-10	SSE	6	cq	48	97	7	9	2	-	7-8	10	800
	Leuchars ...	1005.1	-14	ESE	3	ir₀	49	85	6	6	-	-	10	10	800
12	Renfrew (Abbots I.)	1002.6	-20	ESE	4	c/r	51	85	5	5	7	-	9+	10	2500
	Eskdalemuir ...	1003.2	-18	SE'E	6	r₀i r₀	46	85	6	6	-	-	10	10	800
	Point of Ayre ...	1000.6	-12	S'E	6	c₀	52	92	6	3	3	3	4-6	9+	1500
13A	Tiree	997.5	-20	SE'E	5	c	50	85	7	5	-	-	9+	9+	1500
13B	Stornoway ...	1001.9	-20	SE	5	c	52	75	7	5	7	4	4-6	9	2500
15	Dalwhinnie ...	1004.0	-32	SE	6	ir	45	85	5	6	7	-	7-8	10	2500
	Aberdeen ...	1007.3	-10	SE	5	ir₀	48	85	6	6	2	-	9+	10	800
	Wick	1003.9	-14	SE	7	c/pr	49	85	6	5	2	-	7-8	10	800
16	Lerwick... ...	1011.3	-18	SSE	8	ir	45	85	7	8	2	-	7-8	10	800
17	Blacksod Point...	990.8	-22	S'E	3	c	53	85	8	9	-	-	9+	9+	450
18	Malin Head ...	994.9	-26	E'S	4	z₀	53	75	7	2	-	4	4-6	7-8	5700
	Aldergrove ...	996.8	-22	SE'E	4	pr	52	85	6	9	-	-	9	9+	800
19	Birr Castle ...	993.9	-14	S	2	pr	53	85	7	9	2	-	4-6	9	800
20	Valentia Obsy. †	992.3	-10	SSW	5	c	55	75	8	2	5	-	7-8	9	1500
	Roches Point ...	994.4	-6	SW	3	c	54	92	8	3	4	-	4-6	7-8	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1004.3	-10	SE'E	3	z₀	50	85	6	5	7	-	4-6	9+	2500	1	*
Croydon	1005.3	-10	ESE	3	z₀	50	92	6	5	7	-	4-6	10	1500	1	*
S. Farnborough	1003.9	-10	ESE	3	z₀	50	85	6	8	2	-	9	10	1500	1	*
Boscombe Down	1002.3	-10	SE	4	z₀	50	92	6	6	3	-	7-8	10	800	0	*
Calshot (Soton.)	1002.8	-14	E'S	4	z₀	52	92	5	6	2	-	7-8	10	1500	1	3
Lympne	1006.5	-14	E'N	3	z₀	48	92	6	5	-	-	10	10	800	1	§ 2
Manston	1005.8	-10	SE'E	3	z₀	49	92	6	5	-	-	10	10	800	0	*
Shoeburyness	1006.2	-8	ESE	2	c	49	97	7	-	7	6	0	9+	-	1	*
Felixstowe	1006.3	-8	SE	4	z₀	49	92	6	5	-	-	9	9	2500	1	2
Gorleston	1006.9	-6	SE'E	3	c	50	92	6	5	-	-	10	10	2500	1	2
Mildenhall	1005.5	-6	SE	3	z₀	50	92	6	5	-	-	10	10	1500	1	*
Cranwell	1004.6	-6	SE'E	3	m	48	97	4	5	7	-	2-3	2-3	800	1	*
Birmingham	1003.2	-4	SE	2	m	50	92	4	6	-	-	7-8	7-8	800	1	*
Upper Heyford	1004.2	-6	SE	1	z₀	49	97	6	4	7	-	2-3	7-8	1500	1	*
Ross-on-Wye	1001.9	-4	SE'S	2	bc	51	85	7	8	-	2	2-3	4-6	2500	1	*
Hartland Point	998.6	-8	E	3	c	51	92	8	8	2	-	7-8	9+	1500	1	2
Bristol	1001.9	-6	SE	3	c	51	85	7	5	7	-	7-8	9+	1500	1	*
Portland Bill	1001.0	-16	E	4	c	54	92	8	5	-	-	7-8	7-8	4000	1	4
Plymouth	999.6	-14	SE'E	3	c	53	92	7	3	6	-	7-8	9	1500	1	2
The Lizard	998.4	-10	SE	4	c	53	92	8	8	2	-	9	10	1500	1	3
Scilly (St. Mary's)	997.4	-6	SW'S	4	c/pr	52	92	8	8	6	-	7-8	9+	1500	1	3
Guernsey	1000.5	-14	SE	3	ir₀	53	85	7	4	1	-	7-8	10	2500	1	3
Pembroke	998.5	-4	S'E	5	c	54	85	8	8	7	-	7-8	9+	2500	1	3
Holyhead	998.2	-2	SSE	4	c	54	75	7	5	-	-	9	9	4000	1	2
Chester (Sealand)	1001.4	-8	SE	3	z₀	50	85	5	5	2	-	7-8	9	1500	1	*
Manchester	1002.4	-10	ESE	3	m	50	85	4	5	4	-	4-6	4-6	2500	1	*
Spurn Head	1005.4	-2	SE	4	c	49	92	5	5	-	-	9+	9+	800	0	3
Catterick	1003.9	-8	SE	2	z₀	48	97	5	5	-	-	10	10	450	1	
Tynemouth	1005.0	-4	SE	5	o	50	85	6	5	-	-	10	10	1500	1	3
St. Abbs Head	1003.2	-6	SSE	6	c	48	92	7	3	8	-	7-8	10	1500	1	4
Leuchars	1003.1	-10	SE	5	c/r	49	85	6	6	2	-	9+	10	450	1	*
Renfrew (Abbots I.)	1000.6	-16	ESE	4	z₀	48	85	8	5	4	-	7-8	7-8	2500	1	*
Eskdalemuir	1001.9	-4	SE'S	4	c₀	46	85	5	5	-	-	9	9	800	1	*
Point of Ayre	996.4	-4	S'E	6	c	52	92	6	5	2	-	4-6	10	1500	0	4
Tiree	994.2	-10	SE'E	5	d/r	50	85	7	6	-	-	7-8	7-8	1500	1	5
Stornoway	998.1	-12	SE	6	c	51	75	7	5	7	-	4-6	7-8	2500	1	3
Dalwhinnie	1001.5	-8	SE	5	c	48	92	5	6	-	-	10	10	1500	1	*
Aberdeen	1005.6	-10	SE	6	ir₀	48	92	6	6	2	-	9	10	800	1	4
Wick	1004.3	-6	SE	8	c/d	49	85	6	5	2	-	7-8	10	600	1	4
Lerwick	1009.9	-6	SE	7	c/r	45	75	7	8	2	-	7-8	10	800	1	*
Blacksod Point	990.2	-2	S	5	c	53	75	8	9	-	-	7-8	7-8	800	1	4
Malin Head	992.5	-4	S	4	c	50	85	7	8	8	-	4-6	7-8	4000	0	2
Aldergrove	995.0	-4	SE	4	z₀	50	92	6	5	-	-	9	9	1500	1	*
Birr Castle	993.9	0	S	2	bc	53	92	8	5	8	-	2-3	4-6	2500	1	*
Valentia Obsy. †	998.9	-24	SSE	5	c	54	85	8	8	1	-	7-8	10	1500	1	3
Roches Point	992.9	-12	SSW	5	c	53	92	8	8	7	5	4-6	7-8	1500	1	4

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 3rd (37)	13h.—18h. 3rd (38)	18h. 3rd to 1h. 4th (39)	1h.—7h. 4th (40)
London (Kew)	ofeprcm₀	cm₀	cr₀r₀ir₀m	cm₀r₀rrm₀
Croydon	bcfc₀bcm	cm₀	cm₀rr	crrr₀r₀
S. Farnborough	cpr₀bc	cpr₀m	cr₀rr	crrRr₀
Boscombe Down	orfcm₀c	cm₀	cr₀r₀rrr₀r₀	cr₀r₀m₀
Calshot (Soton.)	cm₀bc	ccm₀	m₀ir₀rr	rrmr₀r₀
Lympne	m	cm₀c	om₀r₀rr	om₀rrfr
Manston	bcm₀m	cm₀	cm₀orr	or₀r₀
Shoeburyness	bcm₀c	cm₀c	cir₀	rrmo
Felixstowe	cm₀bm	cir₀cm₀	om₀d₀	r₀r₀mo
Gorleston	cz₀pz₀c₀	cz₀	c	corr
Mildenhall	cmcm₀c	ccm₀	cm₀ir₀m₀	cir₀rrm₀
Cranwell	ir₀cmcm₀	cm₀bcm	cm	cr₀r₀m
Birmingham	r₀oc	cir₀m		
Upper Heyford	cd₀mir₀m	cm₀c	bccm₀r₀r₀	r₀r₀rrddm₀
Ross-on-Wye	bcc	ct p bcc	bcc	orro
Hartland Point	cbcR	cp	cr₀r₀	cr₀r₀
Bristol	bcm₀cp₀	cpr₀c	cbccr₀m₀	cr₀Rr₀d₀
Portland Bill	bcc	c	orr	oc
Plymouth	cpr₀c	c	rridiRm₀	cbcc
The Lizard	crr	crrc	crrc	crr
Scilly (St. Mary's)	bccbc	bccp₀	cp₀bcc	cir₀
Guernsey	c	cir₀	cirorr	
Pembroke	cirq	qc	bccirrq	
Holyhead	bc	bcpr₀c	c	c
Chester (Sealand)	cm₀om₀cbc	bccm₀	r₀cm₀ir₀	m₀irr₀r₀
Manchester	cmir₀m₀	cm₀bcm	bcmcm₀,	bm₀bm₀,cmr₀r₀
Spurn Head	owm	cm₀	cw	oRr
Catterick	r₀r₀mir₀	oir₀id₀	omoom	omr₀r₀
Tynemouth	oido	oir₀o	oir₀	oir₀
St. Abbs Head	rrcq	irc	cqir₀	
Leuchars	cr₀Rr₀cm	iRrrir₀c	cm₀bcc	
Renfrew (Abbots I.)	cm₀r₀mir₀	cm₀pr₀	cm₀ir₀irm	cir₀mobc
Eskdalemuir	cr₀r₀m	cr₀r₀cm₀	cbcc	cbcc
Point of Ayre	c	c	prcr₀	c
Tiree	c	cidrR	cRc	c
Stornoway	cir₀	cpr₀	c	cpr₀
Dalwhinnie	cir	ciR		
Aberdeen	cicz	cz₀ir₀	cir₀	cir₀c
Wick	prom₀	d₀cm₀	rrm₀q	cm₀q
Lerwick	cpriq	cirq	cprq	cpr
Blacksod Point	pr₀c	c	cq	ir₀c
Malin Head	czzc	czzcpr₀c	cbcclc	c
Aldergrove	ir₀irpr	cprmcpr	cm₀lr₀bc	bccm₀
Birr Castle	bccpr	cbc	bcpr	c
Valentia Obsy. †	cpr₀c	c	iRrrr₀r₀	RRrrRR
Roches Point	cpr₀c	bcc	c	cirrr

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).

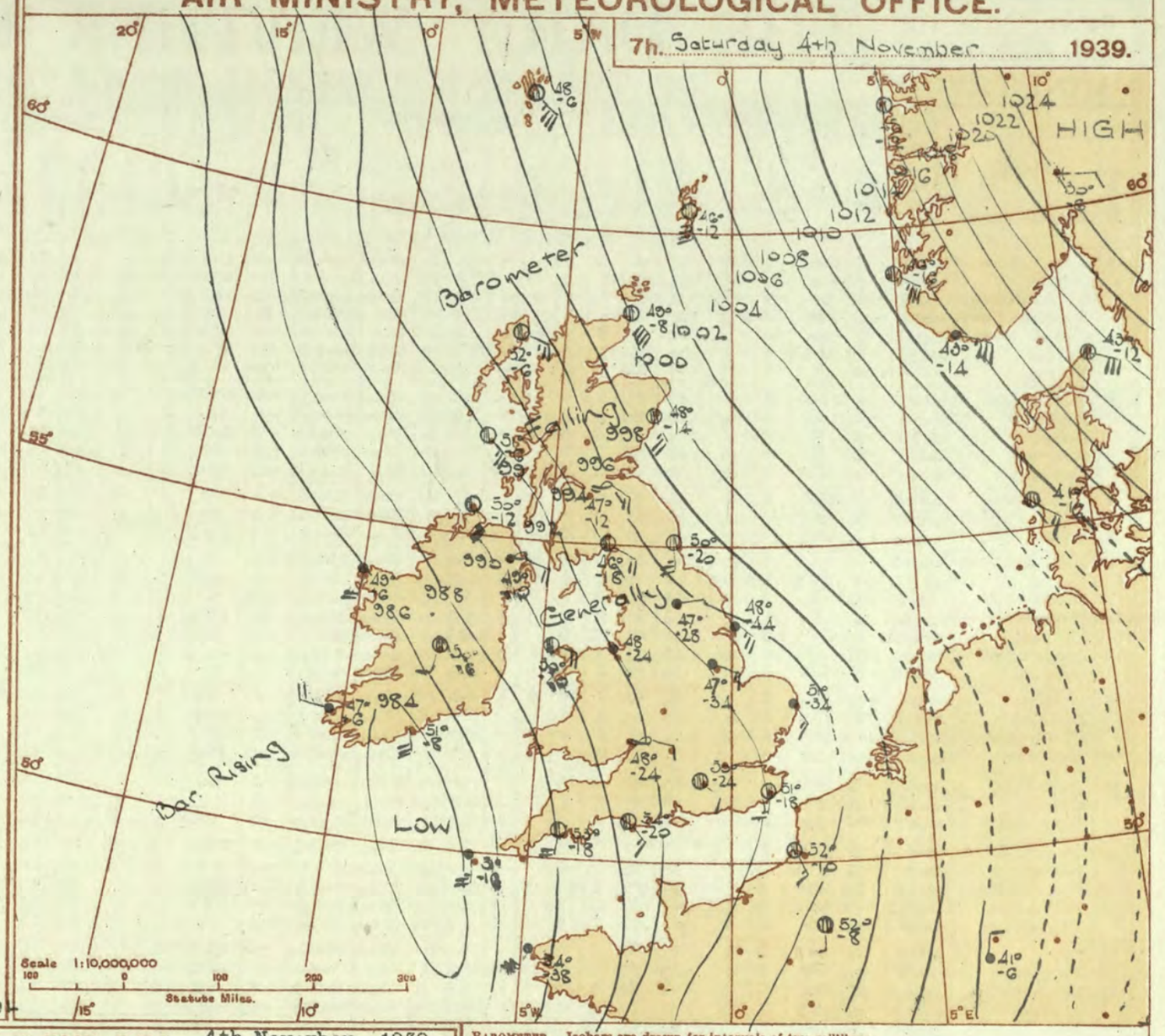
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac; Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



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. 4th November, 1939.
1 S.E. England 2 E. England ...	Wind southeast, moderate or fresh, veering south to southwest later; cloudy, occasional rain; mild.
3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Wind southeast, moderate, fresh locally, veering southwest to west; dull, rain at first; bright periods with some showers spreading from the west; mild then cooler.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Wind southeast to east, moderate to fresh locally; dull, rain at times; mild.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Wind southeast, fresh to strong, gale on the north and east coast; dull; occasional rain; coast mist or fog; rather mild.
17 N. W. Ireland	As 19 - 20.
18 N. E. Ireland	As 7 - 13A.
19 S. E. Ireland 20 S. W. Ireland	Wind becoming westerly, moderate, fresh locally; some rain early, then bright periods and showers; temperature falling.

GENERAL INFERENCE.

A complex area of low pressure covers the Eastern Atlantic and France. A depression centred between Southwest Ireland and the Scilly Isles will move east-south-east and then east. Weather will be very unsettled and mild with considerable rain in the southwestern half of the British Isles. The southeast gale will continue on the northeastern seaboard and in the North Sea.

FURTHER OUTLOOK.

Unsettled; bright periods in the Southern half of the country.

South Cone hoisted 7h. 3.11.39
" " " 14.30h. 3.11.39

Forecasts issued at 0930 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 4th November 1939

No. 28471.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	999·0	-40	E'S	2	rr	47	97	5	-	2	-	10	10	4000
	S. Farnborough	226	997·5	-42	ENE	2	rr	47	97	5	6	-	-	10	10	450
	Boscombe Down	417	996·3	-34	E'S	3	ro ro	48	97	5	6	2	-	7-8	10	800
	Calshot (Sthmtn.)	8	996·0	-42	E	4	rr	50	97	5	6	2	-	9	10	800
	Lympne ...	346	999·5	-42	E'S	4	ro ro	47	97	5	6	-	-	10	10	220
	Manston ...	154	999·0	-42	ESE	4	ro ro	49	92	6	5	-	-	10	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1000·2	-44	ESE	3	ir	50	97	5	5	-	-	9+	10	1500
	Gorleston ...	5	1001·9	-36	E'S	5	c	50	92	6	5	-	-	10	10	2500
	Mildenhall ...	19	999·5	-40	E	3	ir o	49	92	6	6	2	-	7-8	10	800
	Cranwell ...	240	1000·6	-30	ESE	2	m	46	97	4	5	-	-	10	10	450
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	999·1	-30	SSE	2	ro ro	46	97	5	5	2	-	7-8	10	800
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	992·0	-36	ESE	3	ro ro	50	92	8	8	1	-	4-6	9	1500
	Bristol ...	209	996·2	-32	SE	3	ir o	49	92	5	5	2	-	9	10	800
	Portland Bill ...	32	994·9	-32	SE	4	rr	53	85	7	5	-	-	10	10	4000
	Plymouth ...	82	993·3	-30	S	4	c	54	92	7	5	-	-	9+	9+	2500
	The Lizard ...	240	992·5	-24	SE	5	c	52	92	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	163	990·6	-28	SSE	5	c	52	97	8	8	3	-	4-6	9+	1500
	Guernsey ...	175	994·4	-30	SSE	2	c	52	97	8	8	-	-	10	10	2500
6	Pembroke ...	142	991·8	-24	SSE	6	rr	52	97	6	8	2	-	7-8	10	4000
7	Holyhead ...	26	994·4	-26	SE	5	c	51	75	8	8	-	-	9+	9+	2500
	Chester (Sealand)	16	997·7	-26	SE'E	3	ir o	48	85	5	5	-	-	10	10	1500
8	Manchester ...	70	998·4	-30	E'S	4	zo	48	92	6	5	3	-	2-3	2-3	4000
10	Spurn Head ...	29	1001·7	-24	SE	4	c	49	92	6	5	2	-	7-8	10	1500
	Catterick ...	175	1001·2	-18	SE	3	m	47	97	4	5	-	-	10	10	450
	Tynemouth ...	108	1002·4	-16	SSE	5	c/r	50	92	6	6	-	-	10	10	1500
11	St. Abbs Head	280	999·7	-20	SSE	6	ir o	49	97	7	3	2	-	7-8	10	1500
	Leuchars ...	36	1000·5	-14	SE	6	c	50	92	7	5	-	-	9+	9+	1500
12	Renfrew (Abbots I.)	19	998·4	-14	ESE	3	zo	49	85	5	5	2	-	9	10	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	996·4	-12	SSE	6	ro ro	51	92	6	5	2	-	7-8	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	996·4	-12	SE	6	c	52	75	6	5	7	-	7-8	7-8	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1002·9	-6	SE	8	cq	50	92	5	5	2	-	7-8	10	800
16	Lerwick ...	156	1007·0	-12	S	8	c/pr	46	92	7	8	7	-	7-8	10	800
17	Blacksod Point	18	986·5	-16	S	5	cq	51	85	8	5	-	-	9	9	2500
18	Malin Head ...	84	991·8	-16	S	4	c	50	85	7	6	7	-	4-6	7-8	4000
	Aldergrove ...	268	992·7	-20	SE	4	zo	51	85	6	5	-	8	4-6	7-8	1500
19	Birr Castle ...	173	989·2	-22	SSW	5	bc/pr	50	85	8	3	7	-	2-3	4-6	1500
20	Valentia Obsy.	30	983·2	-20	SE'S	6	ro ro	49	85	6	6	2	-	2-3	10	1500
	Roches Point	22	986·6	-34	S'E	7	c	53	92	8	6	1	-	7-8	9+	1500

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	992·6	-26	ESE	2	ir o	50	92	4	5	-	-	10	10	1500	1	*
	Croydon ...	993·7	-24	SE	2	c/r	50	97	5	-	2	-	10	10	800	1	*
	S. Farnborough	991·9	-22	ESE	6	c/r	50	97	5	-	-	-	10	10	450	1	*
	Boscombe Down	991·2	-18	SSE	2	zo	50	97	6	5	2	-	9+	10	450	1	*
	Calshot (Sthmtn.)	991·9	-12	SE	3	zo	51	97	6	5	7	-	4-6	9+	2500	1	2
	Lympne ...	994·5	-18	S	3	c/r	51	97	4	6	-	-	10	10	2150	1	§3
	Manston ...	994·2	-18	SSE	3	ro ro	51	97	4	5	-	-	10	10	450	1	*
2	Shoeburyness ...	994·4	-20	SE	3	ro ro	49	97	4	-	2	-	10	10	800	1	*
	Felixstowe ...	994·0	-28	SSE	3	ro ro	50	97	5	6	2	-	9+	10	450	1	3
	Gorleston ...	994·9	-34	SE	5	rr	51	97	5	6	-	-	10	10	1500	1	4
	Mildenhall ...	993·4	-26	ESE	3	rr	49	97	6	-	2	-	10	10	1500	1	*
	Cranwell ...	993·3	-34	ESE	3	ro ro	47	97	4	5	-	-	10	10	220	1	*
3	Birmingham ...																*
	Upper Heyford	992·6	-26	ESE	1	m/d	48	97	4	2	-	-	10	10	450	1	*
4	Ross-on-Wye	991·1	-24	ESE	2	zo	48	97	6	6	-	-	10	10	800	1	*
5	Hartland Point	989·7	-20	SSE	3	c	50	92	8	5	4	3	4-6	7-8	2500	1	2
	Bristol ...	990·9	-22	SE	2	zo	49	97	6	8	-	-	9	9	1500	1	*
	Portland Bill ...	991·4	-20	SE	3	c	54	85	7	5	4	-	7-8	9	2500	1	3
	Plymouth ...	989·1	-18	S'W	4	c	53	85	8	2	7	-	7-8	9	1500	1	3
	The Lizard ...	986·9	-30	SSE	5	rr	52	97	7	5	-	-	10	10	1500	1	3
	Scilly (St. Mary's)	985·0	-16	SSE	5	ir o	51	97	7	6	2	-	7-8	10	1500	1	3
	Guernsey ...																
6	Pembroke ...																
7	Holyhead ...	989·6	-20	ESE	4	c	50	97	8	5	-	-	9+	9+	2500	1	2
	Chester (Sealand)	992·3	-24	SE'E	1	ro ro	48	92	5	5	-	-	10	10	800	1	*
8	Manchester ...	992·8	-34	ENE	4	ro ro	49	85	5	5	7	-	7-8	9+	1500	1	*
10	Spurn Head ...	994·3	-44	SE'E	5	RR	48	97	5	5	-	-	10	10	800	2	3
	Catterick ...	995·5	-28	ENE	1	ro ro	47	97	5	6	-	-	10	10	800	1	*
	Tynemouth ...	998·1	-20	SSE	5	c/r	50	92	6	6	-	-	10	10	1500	1	3
11	St. Abbs Head	997·8	-14			c	49	92	7	5	1	-	9+		800	1	*
	Leuchars ...	995·8	-12	SE'E	4	zo	47	85	5	5	3	-	Tr	2-3	4000	1	*
12	Renfrew (Abbots I.)	995·3	-18	ESE	4	c	46	85	6	5	2	-	9	10	800	1	*
	Eskdalemuir ...	992·4	-20	SE	5	c	49	92	7	5	7	-	4-6	10	1500	1	3
	Point of Ayre ...																
13A	Tiree ...	991·3	-6	SE'E	5	c	51	85	7	8	7	-	4-6	7-8	1500	0	5
13B	Stornoway ...	995·6	-6	ESE	5	c	52	75	6	5	7	-	7-8	9	2500	1	3
15	Dalwhinnie ...																*
	Aberdeen ...	1000·1	-14	SE	5	c	48	85	6	6	2	-	9	10	800	1	3
	Wick ...	1000·1	-8	SE	8	cq	49	85	6	5	2	-	7-8	10	800	1	4
16	Lerwick ...	1005·1	-12	SSE	8	c/pr	46	85	7	8	7	-	7-8	10	800	1	*
17	Blacksod Point	985·6	+6	S	4	ro ro	49	92	8	6	-	-	10	10	800	1	3
18	Malin Head ...	988·6	-12	SSE	5	c	50	85	7	8	7	-	4-6	7-8	9000	0	3
	Aldergrove ...	990·1	-10	ESE	4	zo	49	85	6	5	-	-	10	10	1500	1	*
19	Birr Castle ...	986·2	-6	SSW	2	c	50	85	8	5	-	-	9	9	2500	1	*
20	Valentia Obsy.	995·1	+6	W'N	4	RR	47	97	6	6	-	-	10	10	1500	1	3
	Roches Point	983·4	-8	S'E	6	rr	51	92	7	6	2	-	7-8	10	800	1	4

PAST 24 HOURS.

District	Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 3rd Hrs. (36)
1	London (Kew)	55	48	47	1	5	0·6
	Croydon ...	56	46	46	Tr	5	2·4
	S. Farnborough	56	47	46	0·1	9	0·8
	Boscombe Down	55	46	44	1	3	0·4
	Calshot (Sthmtn.)	55	49	48	-	6	3·2
	Lympne ...	51	46	46	-	5	0·0
	Manston ...	53	48	47	-	3	1·6
2	Shoeburyness ...	53	46	44	-	4	1·5
	Felixstowe ...	55	49	46	Tr	5	1·5
	Gorleston ...	51	49	48	Tr	4	*
	Mildenhall ...	55	48	45	-	4	1·1
	Cranwell ...	50	46	46	0·1	7	0·0
3	Birmingham ...	51			0·1		
	Upper Heyford	55	45	50	0·3	5	*
4	Ross-on-Wye	55	46	43	2	4	1·2
5	Hartland Point	57	48	46	2	1	0·6
	Bristol ...	57	48	45	Tr	2	0·8
	Portland Bill ...	55	51	*	-	3	*
	Plymouth ...	56	52	49	Tr	8	1·2
	The Lizard ...	55	50	*	3	5	0·6
	Scilly (St. Mary's)	56	50	*	0·5	1	5·1
	Guernsey ...				Tr		
6	Pembroke ...				1		
7	Holyhead ...	57	49	46	Tr	-	3·2
	Chester (Sealand)	(54)	48	43	0·3	1	0·1
8	Manchester ...	52	46	40	0·1	0·2	0·0
10	Spurn Head ...	50	47	*	-	5	0·4
	Catterick ...	48	46	45	1	1	0·0
	Tynemouth ...	50	49	47	0·4	1	
11	St. Abbs Head			*	2		*
	Leuchars ...	50		45	10	Tr	0·0
12	Renfrew (Abbots I.)	51	47	41	0·2	1	0·0
	Eskdalemuir ...	47	44	41	1	-	0·0
	Point of Ayre ...	54	49	*	-	1	0·4
13A	Tiree ...	50	49	47	4	1	0·0
13B	Stornoway ...	53	51	*	0·2	Tr	0·9
15	Dalwhinnie ...	43			6		
	Aberdeen ...	49	47	45	1	0·2	0·0
	Wick ...	52	48	*	0·2	1	*
16	Lerwick ...	47	44	*	0·4	Tr	0·0
17	Blacksod Point	55	48	*	1	0·6	*
18	Malin Head ...	55	47	*	0·2	-	2·0
	Aldergrove ...	54	48	42	5	0·1	1·1
19	Birr Castle ...	54	49	48	4	0·4	1·6
20	Valentia Obsy.	56	48	46	0·1	25	1·2
	Roches Point	55	50	*	3	8	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	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	ofcprcm	cmo		55	48	47	1	5	0·6	*	*	4
Croydon ...	217	bcfcrbcm	cmo		56	46	46	Tr	5	2·4	*	*	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. 4th

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
0·4	8h 3rd	<0·1	15h 3rd

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 3rd November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 4th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1003·8	E	2	c	52	999·7	S	2	c	52	55	48	-	1
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1013·6	SE	2	bc	63	1013·1	SE	6	c	63	*	*	-	-

‡ 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 5th November, 1939.

No. 28,472.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	991·7	-6	SE'S	3	z0	55	85	6	8	7	-	7-8	9+	7200
	Croydon ...	992·6	-4	SSE	3	c	55	85	6	5	3	-	4-6	7-8	2500
	S. Farnborough	991·1	-10	S	3	c	54	85	7	9	7	9	4-6	7-8	800
	Boscombe Down	989·7	-14	SE'S	4	c	54	75	8	8	-	1	4-6	7-8	2500
	Calshot (Soton.)	990·7	-10	SSE	3	bc	55	75	8	8	3	-	2-3	4-6	2500
	Lympne ...	994·2	-2	S	3	c/r	54	92	7	8	6	-	7-8	9+	1500
	Manston ...	993·5	-2	S'E	3	ir0	53	92	6	6	-	-	10	10	800
2	Shoeburyness ...	993·3	-6	S'E	3	c	55	85	7	8	7	3	7-8	9+	1500
	Felixstowe ...	992·9	-6	SE'S	3	z0	52	97	6	5	7	-	2-3	9+	1500
	Gorleston ...	993·5	-4	SE'S	4	o	51	92	6	5	-	-	10	10	1500
	Mildenhall ...	991·8	-4	S'E	4	z0	57	85	6	8	7	-	9	9	1500
	Cranwell ...	991·4	-8	SSE	2	o/r	50	97	5	5	-	-	10	10	450
3	Birmingham	989·6	-10	SE	2	c	53	92	6	5	7	-	7-8	9	1500
	Upper Heyford	991·1	-8	SE'S	2	c	53	85	8	8	3	-	9	9	800
4	Ross-on-Wye ...	988·6	-14	SE	3	c	55	85	8	9	-	2	4-6	9	2500
5	Hartland Point	986·1	-10	Sw	2	r	51	92	8	5	2	-	7-8	10	1500
	Bristol ...	988·9	-12	SE'S	3	c	57	65	8	8	7	8	2-3	7-8	2500
	Portland Bill ...	989·2	-14	SSE	4	pr	54	85	7	5	-	-	10	10	2500
	Plymouth ...	986·3	-16	S	5	rr	53	92	6	9	2	-	9	10	800
	The Lizard ...	986·8	+4	w	5	c	52	92	8	8	1	-	9	10	1500
	Scilly (St. Mary's)	987·2	+14	w'N	5	c/pr	53	92	8	8	4	3	4-6	4-6	1500
	Guernsey ...	988·4	-14	Sw	4	rr	52	85	7	4	2	-	7-8	9+	1500
6	Pembroke ...	985·6	-18	S'E	5	ir0	52	92	7	8	7	-	4-6	7-8	1500
7	Holyhead ...	987·3	-12	SE	3	c	54	75	8	8	5	8	1	9+	2500
	Chester (Sealand)	989·8	-8	SE'S	2	z0	52	85	5	8	-	-	9+	9+	1500
8	Manchester ...	990·3	-6	SSE	3	z0	52	85	6	5	-	-	9+	9+	1500
10	Spurn Head ...	991·7	-6	SSE	2	ir0	49	97	4	5	-	-	10	10	800
	Catterick ...	991·4	+18	SSE	2	o/r	49	97	6	5	-	-	10	10	800
	Tynemouth ...	991·4	-24	SE	4	c/r	50	97	6	6	-	-	10	10	1500
11	St. Abbs Head	990·6	-40	SE	6	rr	48	97	6	9	2	-	9	10	800
	Leuchars ...	992·4	-32	E	4	rr	48	97	6	6	-	-	10	10	800
12	Renfrew (Abbots I.)	991·9	-22	ENE	3	ir0	50	85	5	5	7	-	9	9+	1500
	Eskdalemuir ...	990·1	-28	ENE	2	o	46	92	7	5	-	-	10	10	800
	Point of Ayre ...	989·3	-12	SE'S	4	c	51	92	7	5	1	-	7-8	10	1500
13A	Tiree ...	989·7	-12	N'E	4	c	51	75	7	5	-	-	9+	9+	1500
13B	Stornoway ...	993·7	-14	ESE	5	c	53	75	8	8	5	8	2-3	10	4000
15	Dalwhinnie ...	993·9	-24	SE	2	ir	45	85	6	6	2	-	7-8	10	1500
	Aberdeen ...	995·3	-30	E'S	6	rr	47	92	6	6	-	-	10	10	800
	Wick ...	997·6	-18	SE	7	c/pr	49	97	5	5	2	-	7-8	10	800
16	Lerwick...	1003·3	-12	SE'S	8	ir0	47	92	6	6	2	-	4-6	10	800
17	Blacksod Point..	988·6	+20	Nw	4	ir	48	85	7	6	-	-	10	10	<150
18	Malin Head ...	988·2	-4	NE	3	pr	50	75	7	9	-	-	9	9	4000
	Aldergrove ...	987·9	-10	SE'E	4	ir0	49	92	6	5	-	-	10	10	800
19	Birr Castle ...	985·8	-4	SSE	1	rr	50	92	8	6	2	-	4-6	10	1500
20	Valentia Obsy. †	991·2	+30	Nw	6	c	52	65	8	8	-	-	9+	9+	2500
	Roches Point ...	985·5	+26	Nw'N	6	rr	49	92	7	6	2	-	7-8	10	800

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	990·6	-4	SE'S	3	bc/pr	52	92	5	5	-	-	4-6	4-6	2500	1	*
Croydon	991·2	-10	SSE	3	z0	52	92	6	3	6	3	1	2-3	2500	1	*
S. Farnborough	989·9	-2	S	3	bc/r	51	85	6	8	3	-	4-6	4-6	1500	1	*
Boscombe Down	987·5	-10	S'W	3	c/r	49	92	6	6	2	-	9	10	800	1	*
Calshot (Soton.)	998·4	+2	SSW	3	bc	52	85	7	8	4	-	4-6	4-6	1500	1	2
Lympne	993·3	-2	S	4	c	53	85	8	5	-	-	10	10	2500	1	§ 3
Manston	993·1	+2	S'E	4	o/pr	53	92	6	5	-	-	10	10	800	1	*
Shoeburyness	992·8	-4	SSE	4	c/pr	51	92	8	8	7	-	7-8	9+	1500	1	*
Felixstowe	992·8	+2	SSE	4	z0	51	92	6	8	4	1	1	2-3	2500	1	3
Gorleston	993·5	0	SSE	4	bc	51	97	6	5	-	-	4-6	4-6	1500	1	3
Mildenhall	991·7	0	SE	3	z0	50	97	6	4	-	2	2-3	7-8	4000	1	*
Cranwell	990·8	-2	SE	2	bcf+	47	97	2	-	7	1	0	4-6	-	1	*
Birmingham	989·0	-6	ESE	3	ir0	51	85	5	6	-	-	10	10	800	1	*
Upper Heyford	989·2	-8	ESE	3	c0/r	49	92	7	3	3	-	7-8	9+	800	1	*
Ross-on-Wye	986·9	-12	SE'E	2	d0d0	50	92	6	5	-	-	10	10	1500	1	*
Hartland Point	988·0	+10	NW	4	c	50	92	8	8	6	-	7-8	9	1500	1	3
Bristol	986·1	-14	SE	3	r0r0	50	92	6	5	2	-	9+	10	1500	1	*
Portland Bill	989·2	-18	W	4	c	53	85	8	5	-	-	7-8	7-8	4000	1	4
Plymouth	992·3	+30	WNW	6	c/pr	51	85	6	9	-	-	7-8	7-8	1500	1	4
The Lizard	992·7	+30	W	7	rr	49	85	8	8	2	-	9	10	1500	1	4
Scilly (St. Mary's)	992·5	+32	WNW	7	bc	52	85	7	8	6	-	2-3	4-6	1500	1	4
Guernsey	991·9	+22	W	2	iR	50	97	8	8	-	-	9+	9+	1500	2	3
Pembroke	987·5	+4	WNW	4	d0d0	51	92	7	8	2	-	7-8	10	1500	1	3
Holyhead	986·6	+4	ENE	4	c0/r	51	85	7	5	2	-	9	10	1500	1	2
Chester (Sealand)	988·2	-2	ENE	1	z0	51	65	5	3	7	1	4-6	7-8	1500	1	*
Manchester	988·9	-4	E'N	3	cf+	50	92	3	-	3	-	0	7-8	-	1	
Spurn Head	991·0	-2	SE'S	4	c	49	97	6	5	2	-	7-8	10	1500	1	3
Catterick	990·5	+2	-	0	m	49	97	4	5	-	-	10	10	450	1	
Tynemouth	991·3	+8	SSE	2	o	50	97	5	5	-	-	10	10	1500	1	2
St. Abbs Head	990·3	+12	SSE	3	m/r	49	97	4	6	2	-	9	10	800	1	3
Leuchars	990·1	-4	ESE	3	z0	50	97	6	5	2	-	9+	10	800	1	*
Renfrew (Abbots I.)																*
Eskdalemuir	988·9	+8	-	0	c	46	92	7	5	-	-	10	10	800	1	*
Point of Ayre	988·4	+4	S'E	3	c	51	92	6	5	-	-	10	10	1500	0	2
Tiree	988·9	0	ESE	2	id0	49	85	7	5	-	-	9+	9+	1500	0	3
Stornoway	991·7	-8	ESE	6	r0r0	49	85	6	5	2	-	4-6	10	1500	1	3
Dalwhinnie	991·0	-16	SE	3	ir0	45	92	6	6	2	-	7-8	10	1500	1	*
Aberdeen	991·7	-18	ESE	5	ir0	48	97	6	6	-	-	10	10	800	1	4
Wick	994·0	-14	ESE	7	ir	48	97	6	5	2	-	7-8	10	800	1	4
Lerwick	1000·7	-6	SE'E	8	c	47	92	6	8	2	-	7-8	10	800	1	*
Blacksod Point	991·9	+22	WNW	4	c	49	65	7	9	-	-	10	10	450	1	4
Malin Head	987·9	-6	S	1	z0	50	85	7	8	-	-	7-8	7-8	4000	0	3
Aldergrove	987·9	+6	-	0	z0	48	92	4	5	-	-	9+	9+	2500	1	*
Birr Castle	990·7	+40	NW	2	rr	45	92	7	6	2	-	7-8	10	800	1	*
Valentia Obsy. †	996·0	+30	NW'W	5	bc/pr	50	65	8	8	-	-	2-3	2-3	2500	1	4
Roches Point	992·0	+40	NW	5	bc/r	49	75	8	3	-	5	2-3	4-6	1500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 4th (37)	13h.—18h. 4th (38)	18h. 4th — 1h. 5th (39)	1h.—7h. 5th (40)
London (Kew)	cr0m	cz pr0cm0	bcd0 bcm0	bcm0 cr0c
Croydon	crcm0	bccpr0	bccpr0m0	cm0qr0
S. Farnborough	cm0id0bc	cr0r0r	cid0m0	r0r0
Boscombe Down	cir0id0m0	bcdr0mcgc	cm0f0 bcm0	cm0r0d0f0
Calshot (Soton.)	cir0m0bc	r0r0qmbc	cbcc	cbcir0c
Lympne	om0r0qc	cbce	cr0morr	cm0c
Manston	om0id0ir0	bccm pr0	pr0cm0ir	irccm0
Shoeburyness	r0r0m0c	cpr	crrc	circ
Felixstowe	r0r0id0m0	cirbm	bm0cm0	cm0ir0c
Gorleston	orr0f0cz	cz d0d0bc	bccpr	c
Mildenhall	crrcm0	cpr0	cbc	bcc
Cranwell	r0r0cm0	cm bcf	bcf, cm0	cm0mm0
Birmingham	ir0oc	cbcc	or0c	corir0
Upper Heyford	cm0r0fcm0	cbccirm	cir0cmid0	cd0irpr0
Ross-on-Wye	coc	cbccod0	d0opc	r0qcq
Hartland Point	cpr	crrp	cp	cbc
Bristol	cbccm0	bccir0	r0Ror0R	cr0r0cq
Portland Bill	cpr	c	c	bc
Plymouth	cirrrm0	crrcpr	cprbcb	bbc
The Lizard	rrc	rrcrr	cbc	bc
Scilly (St. Mary's)	cr0cpq	cpgbc	bc	bcc
Guernsey	bcr0r0	ciR	ciRbc	prcbc
Pembroke	rrir0	cir0q	rrcq	bcq
Holyhead	cbcc	r0c	cir0c	crorc
Chester (Sealand)	cm0r0ir0cm0	cmcm	m0r0m0d0d0	r0irRRr0m0
Manchester	cm0r0f0m0	cm mf	cfmid0d0	fd0d0fr0c0f
Spurn Head	rddmo	cir0m	cw	cwm0
Catterick	rrir0om0	oidid0	r0r0om	omom0
Tynemouth	orr	o	o	oir0cff
St. Abbs Head	crr	rrcm	bcm0	ir0cm
Leuchars	ciRrrm0	rr0dcm	cm0bcff0	bcff, off0
Renfrew (Abbots I.)	bccm0ir0		cm0d0d0ir0	boFFff
Eskdalemuir	br0c	c	c	codd
Point of Ayre	cpre	c		c
Tiree	c	c	cdc	ciRbc
Stornoway	c	crr	cr0pr0	c
Dalwhinnie	cir	cir		o·*
Aberdeen	irorr	orrir	ir0om	umo
Wick	cprq	prqir	cr0rc	cpr0c
Lerwick	cpr0ir0	cir0m	cirrr	cmir
Blacksod Point	rrq	c	bc	c
Malin Head	cpr0c	c	cid0cpr0c	cbc
Aldergrove	r0r0d0m0	cir0mcm0	bc fcr0r0	cm0ir0cb
Birr Castle	crr	crr	d0b	bcx
Valentia Obsy. †	RRrrir0c	phcpcbcy	pr0bcprbc	bccir0r0
Roches Point	rr	ir0bc	bcb	bbcc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

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

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

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

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

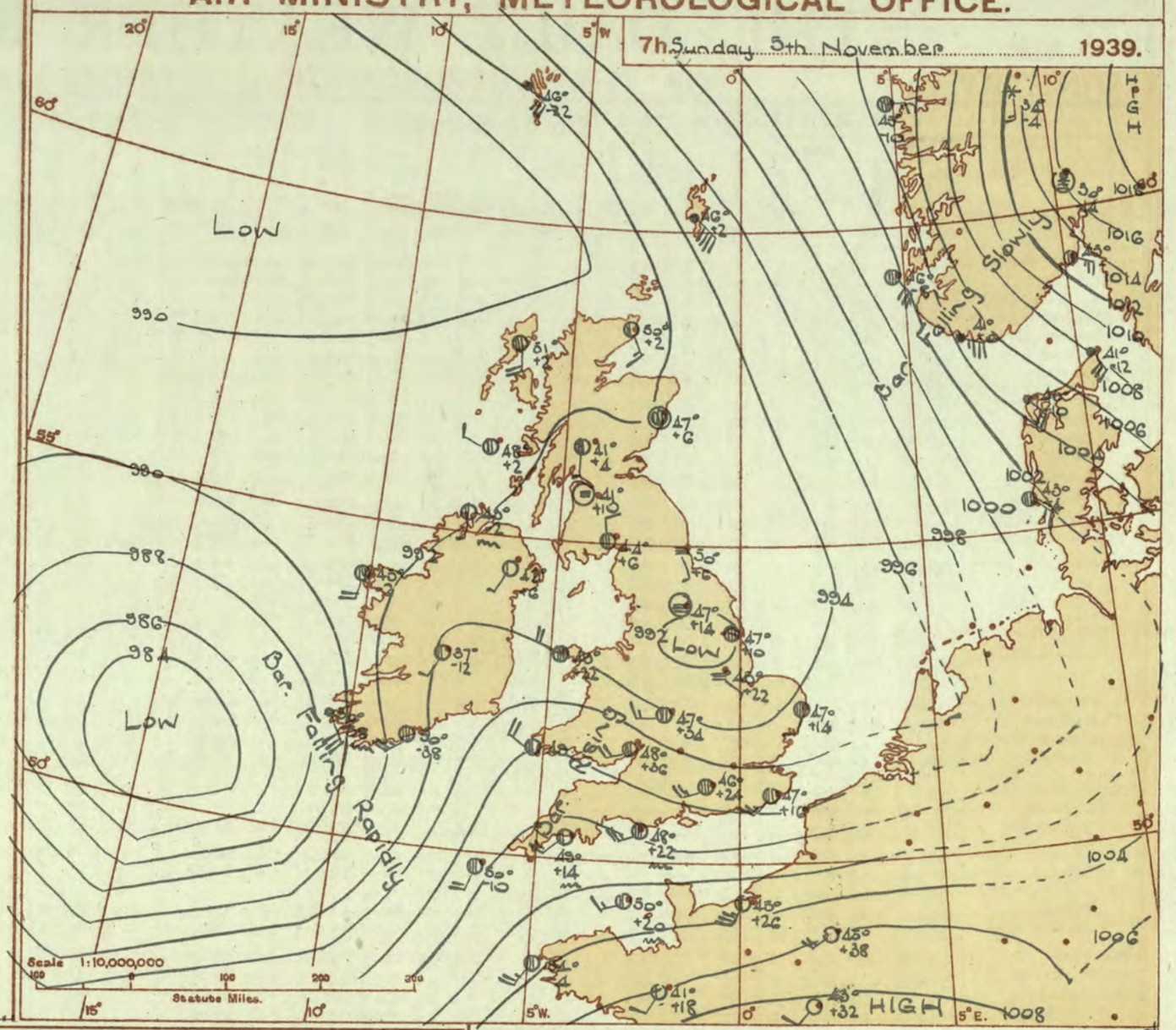
COLUMN 29.—STATE OF GROUND.

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

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

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h Sunday 5th November 1939.



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. 5th November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind south-southeast, increasing strong to gale, veering southwest later; fair early, then rain, considerable bright periods tomorrow; mild.
~~5 S.W. England~~ 6 South Wales ... 7 North Wales ...	Southeast gale, veering west, severe locally; dull; rair, then bright periods and showers; rather mild.
8 N.W. England 9 N. Midlands ... 10 N.E. England ~~11 S.E. Scotland~~	Wind increasing from southeast, strong, finally southwest, gale locally: cloudy, a period of rain tonight, brighter intervals tomorrow; rather mild.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland ~~15 N. E. Scotland~~	Wind mainly east to southeast, slowly freshening, finally southerly; fair today, then dull, rainy, some coast fog; average temperature.
16 Orkneys and Shetlands ~~17 N. W. Ireland~~	Wind southeast, gale at times; cloudy; occasional rain, average temperature.
18 N. E. Ireland 19 S. E. Ireland	Wind southeast to east, increasing strong, perhaps gale on coast; becoming dull, rainy, bright periods later; rather mild.
20 S. W. Ireland	As 5 - 6.

GENERAL INFERENCE.

An intense disturbance just off Southwest Ireland will move quickly east and then northeast across the British Isles with unsettled stormy weather in nearly all districts.

FURTHER OUTLOOK.

Gale moderating in the South; considerable fine periods.

Times of issue of Gale Warnings.

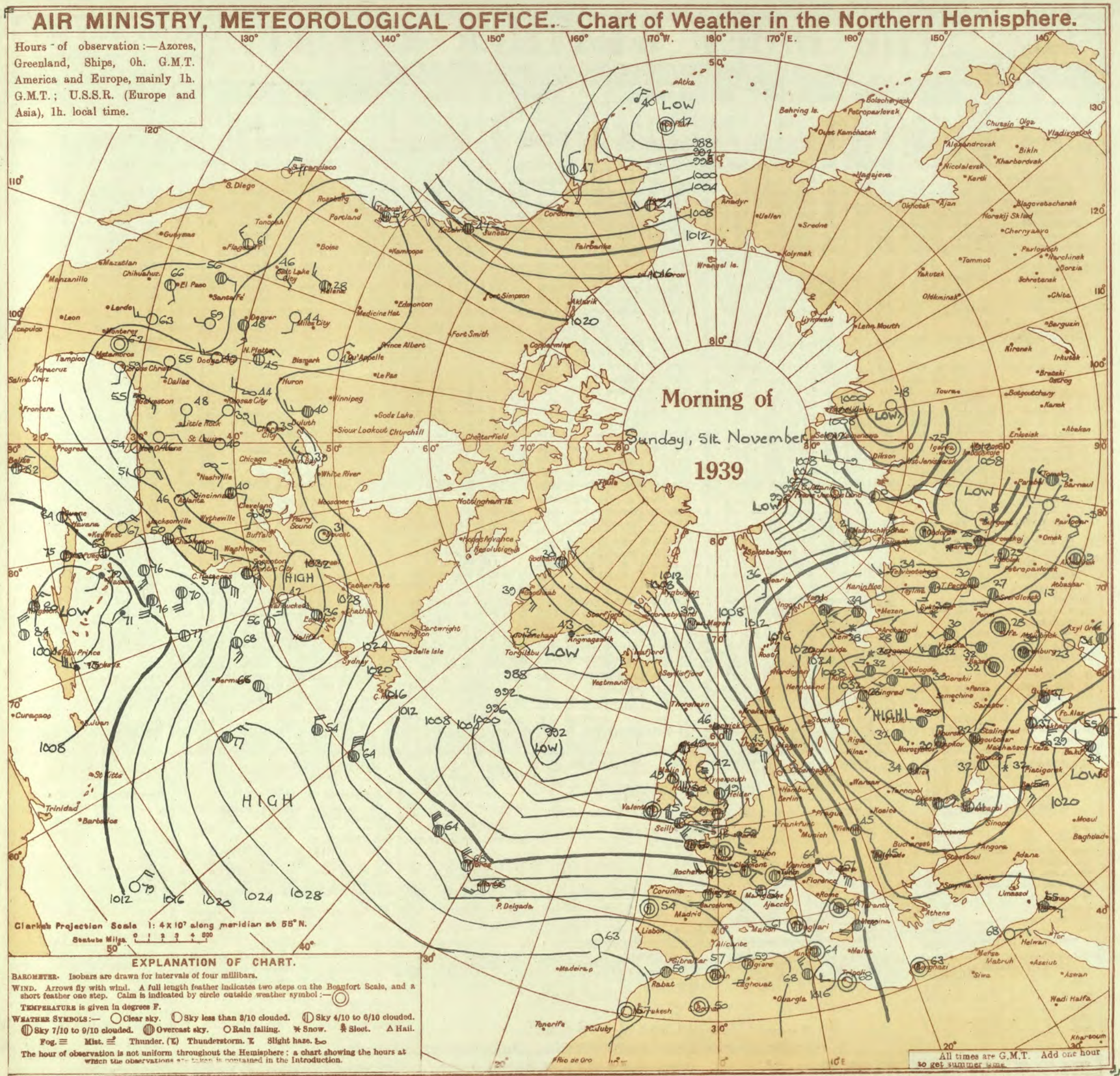
South cone hoisted at 0700 on 3/11/39 in district 16. South Cone hoisted at 0630 on 5/11/39 in districts 17 and 20. South cone hoisted at 0755 on 5/11/39 in districts 1.2.5,6,7.

Forecasts issued at 0930 G.M.T.

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

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

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 5th November 1939.

No. 28,472

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	992·1	+4	SW'S	4	zo	49	85	6	2	-	-	9+	9+	2500
	S. Farnborough	226	991·7	+12	SW'W	6	c	47	75	6	5	-	-	10	10	2500
	Boscombe Down	417	991·4	+10	W	6	bc	46	85	5	5	-	-	4-6	4-6	800
	Calshot (Sthmtn.)	8	992·9	+22	WSW	4	c	49	75	7	5	-	-	7-8	7-8	2500
	Lympne ...	346	993·7	+2	WSW	4	c/r	48	92	6	5	2	-	9	10	2500
	Manston ...	154	992·8	-2	SSW	3	ir	50	92	6	5	1	-	4-6	9	4000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	992·1	-6	S	4	zo	51	92	6	5	3	-	4-6	7-8	5700
	Gorleston ...	5	992·5	-8	SSE	4	c/pr	50	92	6	5	-	-	10	10	2500
	Mildenhall ...	19	990·2	-10	SSE	3	bc	49	97	7	5	7	-	2-3	4-6	4000
	Cranwell ...	240	989·5	-2	SE'S	2	zo	46	97	5	5	-	-	10	10	450
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	989·0	+2	SSE	2	id.	46	97	5	5	-	-	10	10	450
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	999·4	+24	NW	7	c	50	75	8	8	-	-	7-8	7-8	2500
	Bristol ...	209	991·3	+30	df	6	r.r.	45	85	6	5	2	-	7-8	10	1500
	Portland Bill ...	32	993·6	+22	W	6	c	52	85	8	5	-	-	7-8	7-8	4000
	Plymouth ...	82	997·5	+22	W	5	b	50	75	7	-	-	3	0	Tr	-
	The Lizard ...	240	999·0	+24	W	7	bc	51	75	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	999·5	+16	WNW	6	bc	50	85	8	4	-	-	2-3	2-3	2500
	Guernsey ...	175	998·6	+28	W	5	bc	51	65	8	2	3	-	4-6	4-6	2500
6	Pembroke ...	142	999·3	+24	NW	8	cq	50	75	7	8	-	-	9+	9+	1500
7	Holyhead ...	26	988·5	+10	WNW	7	ir	50	85	7	6	2	-	7-8	10	1500
	Chester (Sealand)	16	988·2	+2	NW	1	do.	49	92	4	5	-	-	10	10	1500
8	Manchester ...	70	988·3	-2	NE'E	2	df	50	92	3	5	2	-	9	10	1500
10	Spurn Head ...	29	990·3	-6	SE'S	3	c	49	92	6	-	8	-	0	7-8	-
	Catterick ...	175	990·3	-2	-	0	c/r	48	97	4	6	-	-	10	10	800
	Tynemouth ...	108	991·0	-4	SSE	3	c	50	97	6	5	-	-	10	10	1500
11	St. Abbs Head	280	991·4	+4	SSW	2	bc	47	97	5	5	6	-	2-3	4-6	220
	Leuchars ...	36	991·1	+2	-	0	f+	42	97	3	5	3	5	2-3	2-3	5700
12	Renfrew (Abbots I.)	19	991·4	+4	E'N	1	f+	42	92	2	-	-	-	0	0	-
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30														
13A	Tiree	22	985·7	-32	SE'E	4	c	50	85	8	8	*	*	7-8	7-8	1500
13B	Stornoway ...	80	990·7	0	SW	2	c/pr	49	92	7	5	7	-	7-8	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	991·1	-2	SE	4	c	50	97	6	5	2	-	7-8	10	800
16	Lerwick ...	156	996·5	-14	ESE	8	rr	46	92	6	6	2	-	4-6	10	800
17	Blacksod Point	18	994·5	0	W	3	bc	46	75	8	2	-	-	2-3	2-3	1500
18	Malin Head ...	84	991·0	+8	NW	3	c/pr	49	75	7	9	2	-	4-6	9	4000
	Aldergrove ...	268	991·4	+14	-	0	c/r	46	92	6	6	-	-	10	10	1500
19	Birr Castle ...	173	995·9	+16	NW	1	b	40	85	8	-	-	-	0	0	-
20	Valentia Obsy.	30	997·8	-4	-	0	bc	45	75	8	8	-	-	4-6	4-6	2500
	Roches Point	22	998·3	+20	NW	3	b	45	85	8	-	-	-	0	0	-

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	996·0	+30	WSW	4	c/r	47	85	8	5	-	-	10	10	1500	1	*
	Croydon ...	996·4	+24	WSW	5	c/r	46	92	7	6	2	-	9	10	1500	1	*
	S. Farnborough	996·7	+30	WSW	5	r.r.	46	85	7	5	2	-	9	10	1500	1	*
	Boscombe Down	997·8	+4	W'S	5	c	47	75	6	5	-	-	9	9	2500	1	*
	Calshot (Sthmtn.)	999·5	+22	WSW	5	c	48	75	7	5	7	-	7-8	9	4000	1	3
	Lympne ...	997·3	+16	WSW	5	c	47	75	8	8	-	-	9+	9+	2500	1	§
	Manston ...	996·4	+22	SW	5	zo	48	75	6	5	-	-	10	10	1500	1	*
2	Shoeburyness ...	995·5	+22	SW	4	c	48	85	6	5	-	-	10	10	1500	1	*
	Felixstowe ...	994·3	+14	SW	5	ir.	48	85	7	6	2	-	9	10	1500	1	2
	Gorleston ...	994·4	+19	S'W	2	c	47	85	6	5	-	-	9+	9+	2500	1	2
	Mildenhall ...	993·1	+20	SSW	3	c	47	85	8	5	-	-	9+	9+	1500	1	*
	Cranwell ...	992·5	+22	ESE	1	zo	45	97	5	5	-	-	10	10	1500	1	*
3	Birmingham ...	994·0	+34	W	3	c/r	47	97	6	6	-	-	10	10	450	1	*
	Upper Heyford	995·1	+42	WNW	4	c/pr	46	85	9	5	7	-	9	10	1500	1	*
4	Ross-on-Wye	996·1	+36	W	4	c	48	75	8	5	-	-	9+	9+	2500	1	*
5	Hartland Point	999·0	+18	NW	5	bc	49	75	8	2	-	-	4-6	4-6	2500	1	3
	Bristol ...	998·4	+38	W	4	c	47	92	8	8	4	-	7-8	7-8	2500	1	*
	Portland Bill ...	999·3	+28	WNW	6	bc	51	85	8	5	-	-	4-6	4-6	4000	1	4
	Plymouth ...	1001·0	+14	WSW	4	bc	49	85	8	2	-	3	2-3	4-6	1500	1	4
	The Lizard ...	1001·0	+10	WSW	3	bc	50	85	8	8	6	-	4-6	4-6	2500	1	2
	Scilly (St. Mary's)	999·7	-10	SSW	4	c	50	92	8	5	4	-	4-6	7-8	2500	1	3
	Guernsey ...	1002·5	+20	W'S	3	bc	50	75	8	1	3	-	2-3	4-6	1500	1	4
6	Pembroke ...	998·2	+10	WNW	4	bc	49	75	8	5	4	-	2-3	2-3	1500	1	3
7	Holyhead ...	994·0	+22	WNW	4	c	49	85	7	2	-	-	9	9	1500	1	3
	Chester (Sealand)	993·2	+26	WNW	2	c/r	49	92	5	5	-	-	10	10	1500	1	*
8	Manchester ...	992·5	+26	W'N	1	f+	47	97	3	6	2	-	9	10	450	1	*
10	Spurn Head ...	992·0	+10	-	0	c	47	97	5	5	-	-	10	10	1500	1	1
	Catterick ...	992·5	+14	-	0	zo	47	97	5	5	-	-	10	10	1500	1	*
	Tynemouth ...	992·1	+6	SSE	1	f+	50	97	3	5	-	-	7-8	7-8	1500	1	1
11	St. Abbs Head	991·8	+4	-	0	c/r	49	97	5	5	6	-	7-8	9	1500	1	1
	Leuchars ...	992·6	+8	-	0	F+	49	92	1	-	-	-	10	10	<150	1	*
12	Renfrew (Abbots I.)	993·2	+10	-	0	F+	41	97	1	-	-	-	10	10	<150	1	*
	Eskdalemuir ...	992·6	+6	N	2	c/d	44	97	6	5	-	-	10	10	220	1	*
	Point of Ayre...	992·8	+16	N	3	c	51	92	7	8	1	-	4-6	7-8	1500	0	1
13A	Tiree	990·5	-2	WNW	2	c	48	85	8	8	6	-	4-6	4-6	1500	1	2
13B	Stornoway ...	990·9	+2	S	4	c	51	85	7	5	2	-	4-6	10	2500	1	2
15	Dalwhinnie ...	992·8	+4	S	1	c	41	92	6	4	4	+	4-6	7-8	1500	0	*
	Aberdeen ...	992·6	+6	-	0	c	47	97	6	5	-	-	10	10	800	1	3
	Wick ...	991·4	+2	SSE	3	bc	50	92	7	5	6	-	2-3	4-6	1500	1	3
16	Lerwick ...	995·3	+2	ESE	8	ir	46	97	6	6	2	-	4-6	10	800	1	*
17	Blacksod Point	991·5	-2	S	4	c	45	85	8	5	-	-	7-8	7-8	1500	0	3
18	Malin Head ...	991·5	-2	S	1	bc	43	75	8	5	4	-	2-3	4-6	5700	0	4
	Aldergrove ...	992·9	+6	SSW	1	b	42	92	7	5	-	-	Tr	Tr	2500	1	*
19	Birr Castle ...	994·6	-12	SSW	1	bc	37	92	8	-	3	-	0	2-3	-	1	*
20	Valentia Obsy.	989·7	-58	SE'S	6	r.r.	50	75	7	6	2	-	7-8	10	1500	1	5
	Roches Point	994·0	-38	SW	5	c	50	85	8	5	7	-	4-6	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 ...4th Hrs. (36)
1	London (Kew)	57	47	45	0·6	0·2	1·3
	Croydon ...	55	45	44	2	0·4	1·1
	S. Farnborough	58	44	44	1	1	1·7
	Boscombe Down	55	45	43	1	0·4	0·8
	Calshot (Sthmtn.)	55	47	45	1	0·3	1·6
	Lympne ...	55	45	41	0·2	1	1·6
	Manston ...	55	46	43	0·5	2	1·2
2	Shoeburyness ...	57	48	42	0·2	1	1·7
	Felixstowe ...	52	47	44	0·3	Tr	0·7
	Gorleston ...	52	46	45	3	0·2	*
	Mildenhall ...	57	47	43	1	-	0·2
	Cranwell ...	53	44	42	0·6	Tr	0·0
3	Birmingham ...	54	47	45	8·1	2	0·7
	Upper Heyford	53	44	43	1	0·4	*
4	Ross-on-Wye	58	47	44	0·2	1	1·3
5	Hartland Point	53	48	45	8	0·5	0·0
	Bristol ...	58	45	43	2	6	2·3
	Portland Bill ...	54	50	*	0·3	-	*
	Plymouth ...	54	47	43	7	1	0·0
	The Lizard ...	53	47	*	13	Tr	0·2
	Scilly (St. Mary's)	54	49	*	2	-	1·9
	Guernsey ...	54	48	42	3	2	0·9
6	Pembroke ...	54	53	*	0·5	3	0·7
7	Holyhead ...	56	48	45	Tr	1	1·4
	Chester (Sealand)	53	48	41	0·1	7	0·3
8	Manchester ...	53	47	43	Tr	1	0·0
10	Spurn Head ...	50	47	*	10	Tr	0·0
	Catterick ...	49	46	43	4	0·5	0·0
	Tynemouth ...	50	49	46	9	0·3	*
11	St. Abbs Head	49	45	*	7	1	*
	Leuchars ...	50	40	31	0	-	0·0
12	Renfrew (Abbots I.)		37	33		Tr	0·0
	Eskdalemuir ...	48	41	38	0·5	0·3	0·0
	Point of Ayre...	52	50	*	-	-	0·1
13A	Tiree	51	44	41	Tr	4	0·0
13B	Stornoway ...	53	48	*	0·5	1	3·4
15	Dalwhinnie ...	46	34	28	5	0·1	0·0
	Aberdeen ...	49	47	44	10	0·1	0·0
	Wick ...	50	47	*	3	2	*
16	Lerwick ...	48	42	*	1	5	0·0
17	Blacksod Point	50	40	*	20	-	*
18	Malin Head ...	51	40	*	1	0·4	0·0
	Aldergrove ...	51	41	31	1	1	0·5
19	Birr Castle ...	51	33	29	17	2	0·0
20	Valentia Obsy.	53	42	36	3	1	1·4
	Roches Point	53	40	*	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.	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				57	47	45	0·6	0·2	1·3	*	*	6
Croydon	217				55	45	44	2	0·4	1·1	*	*	7
Greenwich (Royal Observatory)...	149												
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	57	47	45	0·6			72	50	*
Regents Pk. (Botanic Gardens)†...	168	*	*	*									*
Camden Square	110	o	bc	*	55	46	43	0·5	-	*	*	83	*
Kensington	80	cmbc	cpbc	*	57	46	44	9	1		94	77	*
Hampstead Observatory	450	or	bc	odbc	54	44	42	-	1		*	87	*

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.
0·2	8-9h 4th	<0·1	0-7h 5th

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 4th November Barom. mb.	Wind Direc.	Wind Force	Weather.	Temp. °F.	7h. G.M.T. 5th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	996·7	S	3	r.r.	52	1005·8	SSW	4	b	45	57	45	2	2
Brussels														
Berlin														
Zürich														
Rome	1014·2	SSE	3	o	64	1010·2	SSE	4	o	61	*	*	1	6

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

EXPLANATION OF FIGURES, LETTERS, etc.

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

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

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

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

COLUMNS 8, 22 — Code for surface visibility.

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

COLUMN 30 — Code for State of Sea.

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

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

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

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 6th November 1939.

No. 28,473

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

District.	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low. (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	999.2	-6	SWW	2	c	52	65	8	1	-	6	Tr	9	2500
	Croydon	1001.1	+6	SW	4	c	53	58	7	1	4	8	Tr	7-8	4000
	S. Farnborough	999.8	+2	SW	4	c	52	55	7	1	-	8	Tr	7-8	5700
	Boscombe Down	998.6	-16	S	4	c	51	75	8	5	-	7	7-8	10	2500
	Calshot (Soton.)	999.6	-14	SSW	4	c	54	78	7	7	1	-	2-3	9+	4000
	Lympne	1001.7	+14	WSW	5	bc	54	58	8	2	-	5	1	2-3	2500
	Manston	1000.3	+14	SW	5	bc	54	55	8	5	-	6	4-6	4-6	5700
2	Shoeburyness	1000.0	+4	SWW	4	bc	50	85	8	5	7	1	2-3	4-6	4000
	Felixstowe	998.3	+14	SWW	5	z	49	75	6	-	2	-	10	10	4000
	Gorleston	997.0	+16	SW	2	c	49	86	6	5	-	-	10	10	2500
	Mildenhall	997.3	+18	SW	5	c	49	85	7	5	3	-	9+	10	2500
	Cranwell	995.7	+10	SW	3	zo	49	92	6	5	-	-	10	10	800
3	Birmingham	996.4	+2	SSW	3	c	50	55	7	-	7	3	0	7-8	-
	Upper Heyford	998.0	-2	SWW	5	c	51	65	8	1	4	6	Tr	7-8	2500
4	Ross-on-Wye	996.2	-12	S	3	c	51	65	8	5	7	-	2-3	9+	2500
5	Hartland Point	992.0	-60	SSW	4	c	53	85	8	8	2	-	7-8	9+	1500
	Bristol	997.3	-22	S	3	c	52	65	8	5	2	6	4-6	9+	1500
	Portland Bill	998.2	-24	S	6	d	54	92	7	5	-	-	10	10	2500
	Plymouth	994.4	-58	S	8	roro	58	97	3	-	2	-	10	10	800
	The Lizard	991.3	-50	S	8	rr	54	97	6	5	-	-	10	10	1500
	Scilly (St. Mary's)	987.9	-76	SSE	7	rr	53	97	5	5	-	-	10	10	1500
	Guernsey	999.8	-54	S	5	cq	54	92	7	8	2	-	7-8	10	1500
6	Pembroke	989.9	-50	S'E	7	cq	53	92	7	6	-	-	9+	9+	1500
7	Holyhead	989.9	-44	SE'S	5	c	50	65	9	8	1	4	2-3	7-8	2500
	Chester (Sealand)	993.7	-18	SSE	2	c	55	55	8	5	3	2	4-6	4-6	2500
8	Manchester	994.0	-6	SSW	2	zo	50	88	6	5	-	-	9	9	4000
10	Spurn Head	994.4	0	SSW	1	c	52	85	6	4	6	-	4-6	9+	1500
	Catterick	992.9	-8	SSE	1	bc	52	85	7	8	-	-	4-6	4-6	2500
	Tynemouth	992.4	-10	SE	2	bc	50	92	6	5	-	-	4-6	4-6	1500
11	St. Abbs Head	991.3	-14	SE	2	c	49	97	5	5	6	-	7-8	9+	1500
	Leuchars	991.4	-20	-	0	m	46	97	4	-	2	-	10	10	<150
12	Renfrew (Abbots I.)	990.5	-30	-	0	of	45	97	2	5	-	-	10	10	450
	Eskdalemuir	990.6	-22	SSE	3	c	48	85	6	5	-	-	9+	9+	800
	Point of Ayre	990.5	-22	SWS	4	bc	54	75	8	1	-	5	1	2-3	2500
13A	Tiree	989.2	-14	ESE	1	bc	50	85	8	8	-	-	4-6	4-6	1500
13B	Stornoway	989.0	-18	SSE	4	c	50	86	8	8	7	-	7-8	9+	4000
15	Dalwhinnie	990.2	-20	S	3	bc	44	92	6	4	6	-	4-6	4-6	1500
	Aberdeen	991.8	-10	SE	3	c	51	92	5	5	7	-	9	9+	453
	Wick	990.2	-16	SSE	4	bc	51	85	6	5	4	2	2-3	4-6	1500
16	Lerwick	993.4	-18	SSE	8	c/r	47	92	6	6	2	-	7-8	10	450
17	Blacksod Point	974.0	-100	E	8	ir	48	92	7	6	-	-	10	10	450
18	Malin Head	984.3	-20	S	3	c	48	65	8	3	-	4	4-6	7-8	5700
	Aldergrove	986.7	-50	SE'S	5	bc	50	55	8	5	7	1	Tr	4-6	2500
19	Birr Castle	985.8	-86	SSE	6	c	50	85	8	5	-	-	10	10	2500
20	Valentia Obsy. †	971.3	-98	SSE	7	rr	55	92	6	6	2	-	7-8	10	1500
	Roches Point	977.6	-108	S'E	8	ir	54	97	6	6	2	-	7-8	10	800

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

Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low. (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea. 0–9 (30)
London (Kew)	993.0	-44	SSE	4	roro	51	92	6	6	2	-	7-8	10	1500	1	*
Croydon	994.4	-26	SSE	4	roro	50	92	6	6	2	-	9	10	1500	1	*
S. Farnborough	992.5	-46	SSE	4	rr	51	92	6	6	-	-	10	10	1500	1	*
Boscombe Down	989.0	-64	SSE	6	rr	51	97	5	6	2	-	9+	10	450	1	*
Calshot (Soton.)	991.0	-58	SSE	7	rr	52	92	5	6	-	-	10	10	800	1	4
Lympne	998.2	-30	S	5	iro	51	75	7	5	7	-	7-8	10	4000	1	§ 5
Manston	997.5	-34	S	5	c	52	75	7	5	2	-	9	10	4000	1	*
Shoeburyness	996.6	-36	S	5	c	52	75	8	5	-	-	10	10	1500	1	*
Felixstowe	996.8	-22	S	6	c	51	85	7	5	2	-	2-3	10	5700	1	4
Gorleston	996.5	-10	S'E	4	c	47	85	6	5	-	-	7-8	7-8	2500	0	2
Mildenhall	993.3	-38	SSE	5	zo	50	75	6	5	7	+	1	9	2500	1	*
Cranwell	990.7	-38	S'E	4	zo	46	85	6	5	2	+	4-6	10	2500	0	*
Birmingham	986.8	-72	SSE	4	rr	49	97	6	6	-	-	10	10	450	1	*
Upper Heyford	990.5	-54	SSE	5	rr	49	97	5	6	2	-	9+	10	450	1	*
Ross-on-Wye	984.2	-42	SSE	6	rr	52	92	6	6	-	8	10	10	1500	1	*
Hartland Point	982.3	-6	SW	6	rr	53	92	8	6	2	-	4-6	9+	1500	1	4
Bristol	985.8	-66	SSE	5	ir	53	85	6	6	2	-	4-6	10	1500	1	*
Portland Bill	988.1	-56	S	6	rr	55	85	7	5	-	-	10	10	1500	1	5
Plymouth	986.8	-32	WS	6	c/r	54	97	7	8	2	-	7-8	9+	800	1	4
The Lizard	986.6	+20	SW	7	d	55	97	8	8	2	-	9	10	1600	1	5
Scilly (St. Mary's)	985.8	+26	SW'W	7	c/r	54	92	7	9	6	-	7-8	9	1500	1	4
Guernsey	990.0	-16	S	6	rr	54	97	5	5	-	-	10	10	800	2	4
Pembroke	981.5	-36	WSW	6	c/r	53	97	7	8	-	-	10	10	1500	1	4
Holyhead	977.3	-72	SE'S	6	rr	52	85	6	6	2	-	9	10	800	1	4
Chester (Sealand)	982.4	-82	SE'E	5	rr	49	92	5	6	2	-	7-8	10	800	1	*
Manchester	985.1	-64	SSE	4	rr	50	85	5	6	2	-	4-6	10	1500	1	*
Spurn Head	991.9	-16	SSE	4	c	47	85	6	-	2	-	0	10	-	1	6
Catterick	987.4	-40	SE	3	zo	46	85	5	5	7	-	7-8	10	2500	1	
Tynemouth	988.2	-30	S	3	o	50	85	5	5	-	-	10	10	1500	1	1
St. Abbs Head	985.6	-24	SSE	5	c	48	92	5	6	6	-	4-6	10	1500	0	3
Leuchars	985.4	-34	ESE	4	zo	49	92	5	5	-	-	4-6	4-6	800	1	*
Renfrew (Abbots I.)	982.6	-58	E'S	4	zo	49	85	5	5	2	-	9	10	1500	1	*
Eskdalemuir	984.3	-42	SSE	4	o	44	85	6	5	-	-	10	10	800	1	*
Point of Ayre	980.0	-70	SSE	7	RR	49	92	6	6	2	-	7-8	10	1500	1	4
Tiree	974.5	-60	ESE	7	c	50	85	7	5	-	-	9+	9+	2500	0	5
Stornoway	981.6	-36	ESE	6	bc	51	75	6	5	-	-	2-3	4-6	4000	1	3
Dalwhinnie	982.5	+52	S	4	c	45	85	6	6	2	-	7-8	9+	1500	0	*
Aberdeen	987.1	-30	SSE	4	c/d	50	92	5	5	-	-	9+	9+	800	1	3
Wick	986.3	-26	SE	5	c/pr	51	97	6	5	2	-	7-8	10	800	1	3
Lerwick	992.0	-8	SSE	8	rob	48	92	6	6	2	-	4-6	10	450	1	*
Blacksod Point	965.2	-36	S	7	oq	49	92	7	9	-	-	10	10	220		
Malin Head	968.8	-72	SE	7	roro	49	85	6	6	2	-	7-8	10	2500	0	4
Aldergrove	973.5	-74	SE'E	6	rr	48	92	6	6	-	-	10	10	800	1	*
Birr Castle	974.0	+24	SSW	2	bc	47	92	8	3	4	-	2-3	2-3	1500	1	*
Valentia Obsy. †	976.6	+40	SW'W	7	RR	47	92	7	-	2	-	10	10	2500	1	
Roches Point	978.3	-30	WS	6	c/pr	52	75	8	3	-	3	4-6	7-8	1500	1	4

PAST 24 HOURS.

Stations.	Weather 7h.—13h. 5th. (37)	Weather 13h.—18h. 5th. (38)	Weather 18h. 5th. to 1h. 6th. (39)	Weather 1h.—7h. 6th. (40)
London (Kew)	bc	ccroro	crrrocmo	cbcbmo
Croydon	cczbcb	croro	crrbcbm	bzo
S. Farnborough	crorobcby	c,cdor	cRrirb	b
Boscombe Down	cmbcbc	cirorormorr	bcm bm	bm bcmo
Calshot (Soton.)	b bcbc	rororr	bcprgb	bblbc
Lympne	fcby	bcyeproc	cmrrRbcz	bzob
Manston	cmBcy	bccyc	rr bcprb	bbmo
Shoeburyness	cm bc	bcc	RR	Rcbcb
Felixstowe	ciro o	omoc	ofomb c	bbmo
Gorleston	c	c	corrBcq	bcbqbc
Mildenhall	croOc	ccmo	cmrrmbc	b
Cranwell	cm	cmoccmo	roroirobm	bmob
Birmingham	orobc	cor	orRirc	obc
Upper Heyford	cbc	bccrorrmo	RRirPRm	bmob
Ross-on-Wye	cbbcc	corrq	rqcpoqbcq	cqltP
Hartland Point	bcc	crr	rrcbc	bcter
Bristol	cbcc	crorrq	rRrcbcq	bcroprb,c
Portland Bill	bco	orr	bc	bcc.
Plymouth	ccdfofom	rororrmo	cprbPR	b,ciRiromo
The Lizard	crr	rrcq	cpreq	cprlc
Scilly (St. Mary's)	crro	rrddcr	cpqbcl	csdql
Guernsey	bcepr	cqorr	rrPR	
Pembroke	bcclfoq	rrmqc	bcpil	cqprl
Holyhead	cbc	bcRrrc	RprbC	cPRc
Chester (Sealand)	cbcy	czorrmo	crrm PR	bcbcPR
Manchester	fmdlfom	cmorrmo	rrfombcq	cprozobcprc
Spurn Head	cmmz	czo	qrrc	. cq
Catterick	cm bc	bccmo	RRrrc	ifomocbc
Tynemouth	ocffbc	bcco	orrbc	bcpobc
St. Abbs Head	ocm	bccmo	rrmc	cq
Leuchars	oFfwm	omcbcmo	bccRRlfm	cbccir
Renfrew (Abbots I.)	ocfeff	cffcmo	cmifofrm	crrifm
Eskdalemuir	ocm	cmo	corro	roRRcbc
Point of Ayre	prcbc	bcrr	rbcR	bc
Tiree	bc	c	cRc	crrbc
Stornoway	cpro	cbc	bcc	crrR
Dalwhinnie	ciro	co		cRrrir
Aberdeen	doffe	cido	cmrr	RRcfo
Wick	bcmz	moprc	cprq	mqrrc
Lerwick	cirrr	crorormo	cpfo	cpr
Blacksod Point	irq	PRcq	bcq	cbcq
Malin Head	c	ccrorc	cbcpc	bccbc
Aldergrove	bbcy	bcycrorr	crrb cpfo	cbcb
Birr Castle	c	cbc	cpr	cprc
Valentia Obsy. †	rororr	bcprcRR	poroiropf	llpfbcclpf
Roches Point	roadir	bcprc	bc	bclprc

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. lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r$_o$, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
Solar halo. lunar halo. Aurora.

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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

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

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

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

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

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

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

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

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

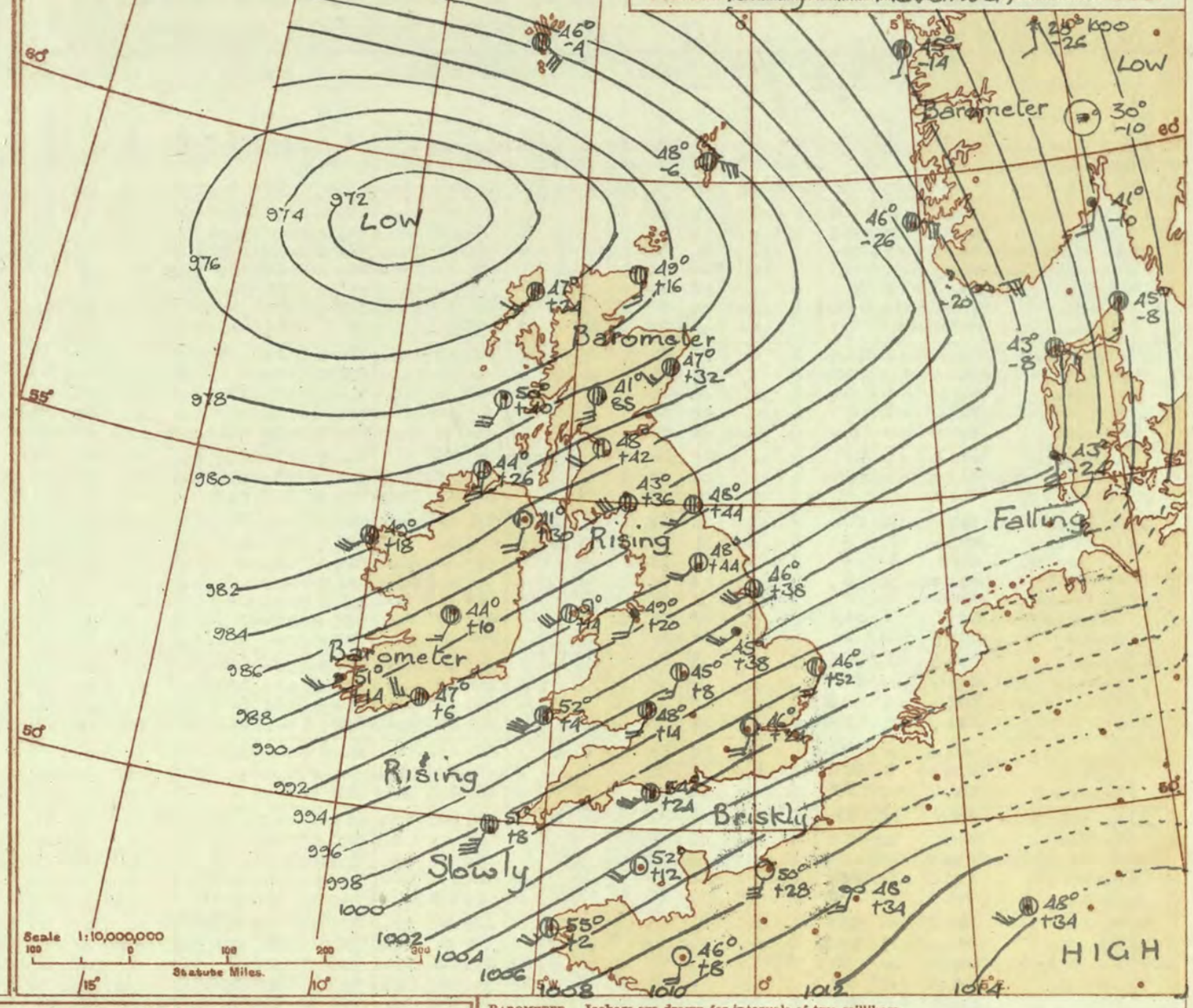
COLUMN 29.—STATE OF GROUND.

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

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

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Monday 6th November, 1939.



Districts.	Forecasts for the 24 hours commencing 12 noon, G.M.T. 6th November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Fresh squally southwest wind, strong on coasts, decreasing temporarily; bright intervals; thundery showers; average temperature.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ...	Fresh squally southwest wind, strong on coasts; bright intervals, showers, local thunderstorms; average temperature.
10 N.E. England 11 S.E. Scotland	Moderate or fresh squally southwest wind; bright intervals; local thundery showers; average temperature.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland	Moderate or fresh squally southwest to south wind, strong on coasts; bright intervals, showers; local thunderstorms; average temperature.
15 N. E. Scotland 16 Orkneys and Shetlands	Fresh squally south wind, strong on coasts; bright intervals; thundery showers; average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 4 - 9.

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.

GENERAL INFERENCE.

A deep depression off Northwest Scotland is filling up slowly and a secondary over North Spain will move east-north-east. Further disturbances will probably advance from the Atlantic. There will be bright intervals and showers in all districts with local thunder, chiefly in the West and Southwest.

FURTHER OUTLOOK.

Bright intervals and showers.

Times of Issue of Gale Warnings.

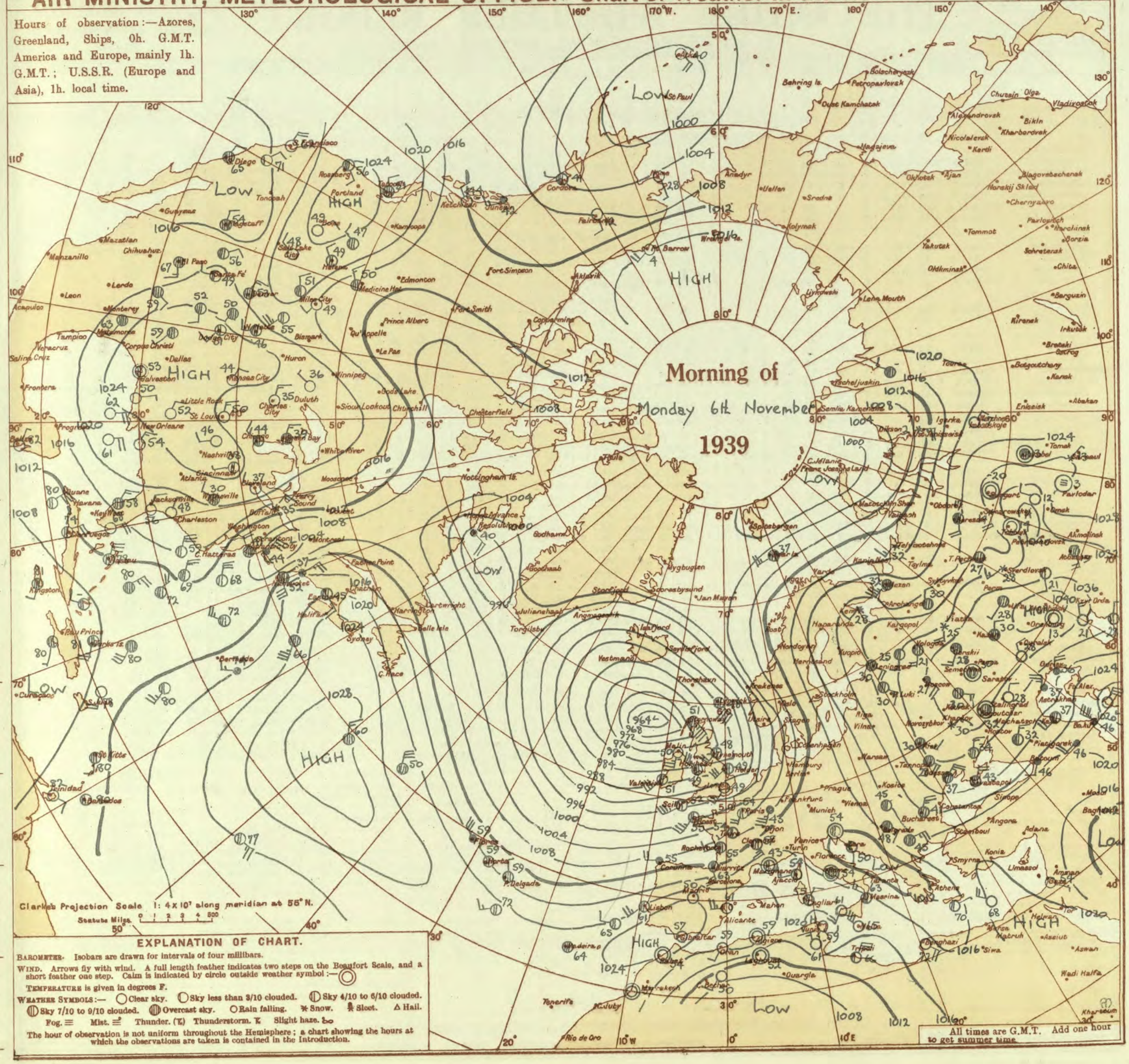
South cone hoisted at 0700 on 3rd in districts 16, at 0755 on 5th in districts 1, 2, 5, 6, 7, 19 and 20 and at 1400 on 5th in districts, 8, 10, 11, 12, 13A, 13B, 15, 17 and 18.

Forecasts issued at 0930 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

Monday 6th November 1939.

No. 28473

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	995.0	+50	SW	5	b	49	75	6	-	-	-	0	0	-
	S. Farnborough	226	994.4	+54	SWW	5	b	47	75	7	-	-	-	0	0	-
	Boscombe Down	417	994.2	+46	WSW	5	z	47	75	6	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	995.4	+50	WSW	6	b	51	65	7	-	-	-	0	0	-
	Lympne ...	346	995.9	+42	W'S	5	z	48	75	6	-	-	-	0	0	-
	Manston ...	154	994.3	+34	WSW	6	b	48	75	7	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	991.2	+18	SW	6	b	52	75	7	5	-	-	1	1	1500
	Gorleston ...	5	989.8	-22	SW	5	bc	49	92	8	8	-	-	2-3	2-3	2500
	Mildenhall ...	19	989.8	+34	SWW	7	b	50	75	7	5	-	-	Tr	Tr	1500
	Cranwell ...	240	986.8	+34	SW	5	z	46	85	6	5	-	-	Tr	Tr	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	992.6	+54	SW'W	5	b	44	75	7	-	4	-	0	Tr	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	991.8	+52	W	8	bc	51	65	7	5	-	-	4-6	4-6	1500
	Bristol ...	209	993.2	+50	WSW	6	bc/r	48	65	7	8	-	-	4-6	4-6	2500
	Portland Bill ...	32	995.4	+40	W	7	bc	53	85	8	5	-	-	4-6	4-6	4000
	Plymouth ...	82	996.9	+38	W	7	b	52	65	7	-	-	-	0	0	-
	The Lizard ...	240	997.2	+30	SW	8	c	53	85	8	8	6	-	7-8	7-8	1500
	Scilly (St. Mary's)	163	995.3	+32	SWW	7	bcl	52	85	7	8	-	-	2-3	2-3	1500
	Guernsey ...	175	1000.0	+36	SW	5	bq	53	65	7	1	-	-	Tr	Tr	2500
6	Pembroke ...	142	989.6	+36	W	9	bcq	51	75	7	8	-	-	4-6	4-6	1500
7	Holyhead ...	26	984.1	+50	NWW	7	c	49	65	7	5	-	-	9	9	2500
	Chester (Sealand)	16	985.1	+34	SSW	3	bc	50	65	7	5	-	-	4-6	4-6	2500
8	Manchester ...	70	984.4	+38	SW	5	pr	48	75	6	8	-	-	10	10	1500
10	Spurn Head ...	29	984.2	+16	SW'W	6	cq	49	85	7	6	9	-	4-6	7-8	800
	Catterick ...	175	980.6	+14	SW	4	c	49	85	7	5	4	-	4-6	7-8	4000
	Tynemouth ...	108	979.1	-4	SW	4	bc	48	92	6	2	-	-	4-6	4-6	1500
11	St. Abbs Head	280	976.6	+6	SSE	5	rr	47	92	6	8	2	-	7-8	10	1500
	Leuchars ...	36	976.3	-18	SSE	3	c/r	47	92	7	-	2	-	9+	9+	4000
12	Renfrew (Abbots I.)	19	976.1	-2	SSW	2	z	49	75	6	8	-	-	9+	9+	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	978.5	+26	W	7	RR	47	92	7	6	2	-	4-6	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	973.9	-16	SE	7	c	51	65	6	5	7	-	4-6	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	978.1	-36	SE	8	cq	50	92	5	5	2	-	7-8	10	800
16	Lerwick ...	156	986.0	-32	SE	8	c/pr	48	85	6	8	2	-	7-8	10	800
17	Blacksod Point	18	976.7	+30	W	7	cq	50	65	7	9	-	-	7-8	7-8	800
18	Malin Head ...	84	975.8	+40	SSW	5	c/pr	50	65	7	8	-	-	7-8	7-8	4000
	Aldergrove ...	268	977.8	+38	SW	5	c	46	85	7	3	-	-	9	9	2500
19	Birr Castle ...	173	984.0	+48	SSW	5	pr	45	85	7	9	-	-	7-8	7-8	800
20	Valentia Obsy.	30	984.8	+14	SW'S	6	c/pr	51	75	7	8	-	-	7-8	7-8	1500
	Roches Point	22	988.0	+30	W	6	bc	49	85	8	5	-	-	2-3	2-3	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 5th Hrs. (36)
London (Kew)	1000.7	+22	SW'S	4	z	48	75	6	5	-	-	Tr	Tr	2500	1	*	53	47	43	0.3	4	2.7
Croydon	1001.4	+24	SSW	4	b	46	85	6	2	-	-	1	1	2500	1	*	55	44	41	0.6	11	2.8
S. Farnborough	1000.9	+22	SW'S	2	b	47	85	7	8	-	-	1	1	2500	1	*	54	45	41	2	7	2.9
Boscombe Down	999.7	+18	SSW	3	z	47	85	6	8	1	-	2-3	4-6	1500	1	*	52	45	42	*	8	2.7
Calshot (Sthmtn.)	1001.0	+22	SW	5	c	53	75	7	8	-	-	7-8	7-8	1500	1	3	56	48	46	5	7	3.7
Lympne	1003.3	+26	SWW	4	b	45	85	7	2	-	-	1	1	800	1	§4	54	43	38	Tr	11	2.8
Manston	1002.0	+32	SW	4	z	45	75	6	-	-	-	0	0	-	1	*	55	44	39	-	5	2.5
Shoeburyness	1001.2	+28	S'E	5	b	48	85	8	-	-	1	0	Tr	-	1	*	55	47	49	—	2	1.7
Felixstowe	999.9	+36	SWW	5	z	47	75	6	-	-	-	0	0	-	1	3	51	47	43	Tr	3	0.0
Gorleston	998.7	+52	SSW	4	bc	46	75	6	5	-	-	2-3	2-3	2500	1	3	50	46	44	-	4	*
Mildenhall	998.1	+38	SSE	5	b	46	75	7	5	-	-	Tr	Tr	4000	1	*	52	45	39	1	4	0.3
Cranwell	995.3	+38	SW	5	pr	45	92	6	2	3	-	1	2.3	2500	1	*	51	44	41	-	5	0.7
Birmingham	995.3	+8	SSW	3	bc	45	85	7	5	-	-	4-6	4-6	1500	1	*	52	44	49	3	8	2.1
Upper Heyford	998.3	+16	SW	5	bc	46	85	7	-	3	2	0	4-6	-	1	*	52	42	38	5	7	*
Ross-on-Wye	996.4	+14	SSW	4	c/rl	48	85	7	9	7	3	7-8	9	1500	1	*	52	47	42	8	5	2.9
Hartland Point	994.8	+16	W	8	PR	52	75	8	6	2	-	7-8	9+	800	1	5	55	43	41	11	1	0.6
Bristol	998.6	+18	SSW	4	c	48	75	8	8	3	-	4-6	9	2500	1	*	53	45	41	5	7	3.4
Portland Bill	999.9	+24	SW	7	c	54	85	7	5	4	-	4-6	7-8	4000	1	4	55	51	*	10	3	*
Plymouth	999.3	+10	WSW	7	rr	48	92	6	6	2	-	9	10	1500	1	5	57	48	45	22	3	0.7
The Lizard	999.2	+20	SW	5	c	50	97	8	8	2	-	9	10	1500	1	4	56	49	*	20	4	0.0
Scilly (St. Mary's)	996.8	+8	SW'S	7	c/r	51	92	7	9	6	3	7-8	9+	1500	1	4	56	48	*	12	1	0.0
Guernsey	1003.4	+12	SW	4	b	52	85	7	-	3	-	0	Tr	-	1	4	55	52	46	14	6	1.3
Pembroke	992.1	+4	SWW	8	c/pr	52	85	7	8	-	-	9+	9+	1500	1	4	54	43	*	13	2	0.7
Holyhead	988.9	+14	SWW	6	bc	51	75	8	3	-	-	4-6	4-6	2500	1	4	53	47	45	2	4	4.0
Chester (Sealand)	991.7	+20	SSW	4	PR	49	75	5	3	-	-	9+	9+	1500	1	*	55	48	39	5	6	2.3
Manchester	992.1	+26	S	3	c/pr	45	85	7	8	-	-	9	9	4000	1	*	53	45	37	0.1	2	0.2
Spurn Head	998.1	+38	SW'W	6	eq	46	85	7	-	4	8	0	7-8	-	1	7	52	45	*	Tr	5	0.6
Catterick	989.2	+44	SW	4	bc	48	75	8	9	-	2	4-6	4-6	800	1	*	54	45	42	-	10	1.9
Tynemouth	987.3	+44	SW	3	bc	48	75	6	8	-	-	4-6	4-6	1500	1	1	51	45	42	-	9	*
St. Abbs Head	982.0	+28	WSW	6	cq	46	75	8	8	6	-	7-8	9	1500	0	4	50	45	*	0.3	10	*
Leuchars	982.0	+46	WSW	4	ir	47	85	8	5	7	-	9	10	1500	1	*	50	45	39	-	11	0.0
Renfrew (Abbots I.)	983.8	+42	SW	4	c	48	85	7	8	-	-	4-6	4-6	2500	1.	*	49	43	39	Tr	6	0.0
Eskdalemuir	985.6	+36	WSW	6	bc	48	85	8	5	-	-	4-6	4-6	1500	1	*	50	41	41	-	18	0.8
Point of Ayre	987.0	+24	W	4	bc	47	85	9	8	4	5	2-3	2-3	2500	1	3	56	46	*	0.5	10	3.3
Tiree	978.5	+40	SW'S	6	bc	50	65	7	8	-	-	4-6	4-6	1500	0	5	51	46	44	8	4	3.0
Stornoway	975.7	+24	SW	3	c/r	47	92	6	5	7	-	7-8	9+	2500	1	1	51	47	*	Tr	3	1.9
Dalwhinnie	980.5	+20	S	5	c	41	85	7	8	7	-	7-8	10	2500	1	*	47	40	37	Tr	16	2.8
Aberdeen	979.9	+32	SW'W	3	c/r	47	85	7	5	-	-	9+	9+	1500	1	2	51	46	43	0.1	11	0.0
Wick	976.2	+16	S	3	c	49	92	7	5	7	8	4-6	9+	1500	1	3	52	48	*	0.1	2	*
Lerwick	981.9	-6	ESE	7	c	48	85	6	8	7	-	7-8	10	800	1	*	50	46	*	2	1	0.0
Blacksod Point	980.8	+18	SW	6	cq	49	65	7	9	-	-	7-8	7-8	1500	1	5	51	43	*	*	5	*
Malin Head	980.0	+26	S	5	bc	44	75	8	5	-	3	2-3	4-6	5700	0	3	59	41	*	1	2	3.4
Aldergrove	984.8	+30	S'W	4	b	41	86	8	5	-	-	Tr	Tr	2500	1	*	51	41	35	6	1	4.8
Birr Castle	987.3	+10	SSW	3	c	44	85	8	8	-	-	7-8	7-8	1500	1	*	53	38	40	5	9	0.3
Valentia Obsy.	987.0	+14	SW	5	pr	51	65	8	8	-	-	9	9	2500	1	5	*	47	43	27	2	0.6
Roches Point	989.4	+6	W	5	c/pr	47	85	8	3	-	3	4-6	7-8	1500	1	4	55	45	*	8	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	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
		24 hrs. ended 9h.											
Kew	18	bc	cerr	crrgcw	53	47	43	0.3	4	2.7	*	*	7
Croydon	217	cezbcb	cidr	crrbcw	55	44	41	0.6	11	2.8	*	*	6
Greenwich (Royal Observatory)	149	cb	bcr	rrb	55	45	39	Tr	4	2.5	68	70	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	56	48	43	3			65	71	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	54	47	40	-	4		61	73	*
Camden Square	110	bc	c	*	54	47	40	-	4	*	*	74	*
Kensington	80	c	bc	*	56	46	38	Tr	4		86	73	*
Hampstead Observatory	450	bc	or	orbc	52	44	39	3	6		*	80	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

	Max.	Time.	Min.	Time.
South Kensington				
Kew Observatory	0.1	10h 5th	<0.1	20-24h 5th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 5th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 6th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1004.7	S	5	r	52	1010.7	SSW	3	z	48	55	48	-	9
Brussels														
Berlin														
Zürich														
Rome	1011.9	W	6	bc	59	1018.4	*	*	c	48	*	*	-	-

‡ 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 Precipitous.
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 7th November, 1939.

No. 28,474

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	103·1	0	SW'S	4	rr	49	92	c	6	2	-	7·8	10	1500
	Croydon ...	1003·4	+10	SSW	4	PR	51	92	6	9	-	-	10	10	2500
	S. Farnborough	1003·3	+6	SW'W	5	c/r	48	85	8	9	2	3	7·8	9+	1500
	Boscombe Down	1001·6	+2	SW'S	5	c	51	85	8	7	3	2	4-6	7·8	1500
	Calshot (Soton.)	1003·2	+10	SW'S	5	c/pr	51	85	7	6	7	-	4-6	7·8	1500
	Lympne ...	1005·7	+10	SW	6	bc	55	65	8	7	3	-	4-6	7·8	1500
	Manston ...	1004·3	+6	SW	6	zₒ	55	75	6	8	-	2	2·3	7·8	2500
2	Shoeburyness ...	1003·8	0	SW'S	4	c	55	75	8	9	5	-	9	9+	1500
	Felixstowe ...	1002·8	+14	SW'S	5	c/pr	51	85	8	3	7	3	4-6	9+	1500
	Gorleston ...	1001·7	+4	SSW	5	c/pr	55	65	6	8	5	-	4-6	7·8	2500
	Mildenhall ...	1000·8	+12	SSW	5	pr	51	75	7	8	7	-	7·8	9+	2500
	Cranwell ...	997·7	+12	SW	5	c	52	75	7	6	-	-	10	10	800
3	Birmingham	998·4	+12	SW	4	bc	49	75	8	8	-	-	4-6	4-6	2500
	Upper Heyford	1000·0	+6	SW	5	bc	54	75	8	8	9	1	2·3	4-6	1500
4	Ross-on-Wye ...	999·0	+14	WSW	3	bc/pr	50	85	8	8	-	-	4-6	4-6	2500
5	Hartland Point	997·8	+20	WSW	8	c	53	85	7	8	7	3	4-6	7·8	2500
	Bristol ...	1000·9	+16	SW	5	bc	54	65	8	8	4	-	4-6	4-6	2500
	Portland Bill ...	1002·1	+14	SW	7	c	53	85	7	5	4	-	7·8	10	4000
	Plymouth ...	1001·2	+14	SW	7	c	55	85	8	3	-	-	7·8	7·8	1500
	The Lizard ...	1001·5	+10	SW	6	c	56	85	7	8	6	-	7·8	7·8	2500
	Scilly (St. Mary's)	999·4	+12	SW'S	5	c	54	92	7	8	6	-	7·8	9+	1500
	Guernsey ...	1004·9	+4	SW	5	cq	57	75	7	7	1	8	4-6	7·8	2500
6	Pembroke ...	997·4	+8	WSW	7	bcq	54	85	7	8	-	-	4-6	4-6	1500
7	Holyhead ...	993·4	+30	SW'S	5	bc	54	65	8	2	-	-	4-6	4-6	2500
	Chester (Sealand)	996·5	+18	SW'S	4	c	56	65	8	8	7	2	4-6	7·8	1500
8	Manchester ...	995·5	+18	SW	4	c	52	75	7	8	7	-	7·8	9	2500
10	Spurn Head ...	996·1	+6	SW'S	5	c	55	65	6	-	9	3	0	7·8	-
	Catterick ...	993·6	+18	SW	4	c	52	75	7	2	6	-	7·8	7·8	1500
	Tynemouth ...	981·8	+16	SW	4	c/pr	51	75	6	2	-	-	9+	9+	1500
11	St. Abbs Head	989·1	+26	SW	4	bc	50	65	8	8	4	-	2·3	4-6	2500
	Leuchars ...	988·0	+18	WSW	4	bc	49	75	8	8	7	1	4-6	4-6	2500
12	Renfrew (Abbots I.)	980·9	+34	SW	3	c	50	75	8	8	4	3	4-6	7·8	1500
	Eskdalemuir ...	989·7	+10	SW'W	6	bc	47	75	8	8	-	1	4-6	4-6	1500
	Point of Ayre ...	991·4	+22	W'S	5	bc	55	65	8	8	6	-	4-6	4-6	2500
13A	Tiree ...	984·1	-22	SSW	5	c/pr	48	75	8	8	-	-	7·8	7·8	1500
13B	Stornoway ...	981·6	+36	SSW	4	c/pr	45	85	7	5	7	-	7·8	10	2500
15	Dalwhinnie ...	980·0	+20	SW	6	bc	45	85	7	8	6	1	4-6	4-6	1500
	Aberdeen ...	987·0	+30	SW	4	b	62	65	8	1	3	-	1	1	2500
	Wick ...	983·6	+30	SSW	3	c	50	73	8	5	4	9	4-6	7·8	1500
16	Lerwick...	979·8	-12	ESE	7	ir	47	92	6	8	2	-	4-6	10	450
17	Blacksod Point	985·2	+18	SW	6	cq	51	85	8	9	-	-	10	10	800
18	Malin Head ...	985·2	+28	SSW	5	c/p	50	75	8	3	-	-	7·8	7·8	5700
	Aldergrove ...	988·7	+22	SSW	4	bc	51	65	8	1	-	3	Tr	2·3	2500
19	Birr Castle ...	991·4	+12	SSW	3	bc	53	75	8	5	-	1	2·3	2·3	2500
20	Valentia Obsy. †	990·4	+12	SW	6	pr	53	75	8	8	-	-	7·8	7·8	2500
	Roches Point ...	993·3	+14	W'S	5	c/pr	53	85	8	3	-	3	4-6	7·8	1500

OBSERVATIONS at 18h. G.M.T. 6th November. — PAST 24 HOURS.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°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)	Weather 7h.–13h. 5th (37)	Weather 13h.–18h. 5th (38)	Weather 18h. 5th to 1h. 6th (39)	Weather 1h.–7h. 6th (40)
London (Kew)	1005·2	+18	S	2	zₒ	49	92	6	5	-	-	2·3	2·3	2500	1	*	tlTHorm	crrₒcbc	bcerₒcm	cm
Croydon	1005·6	+18	S'W	4	b	49	92	7	4	-	-	1	1	4000	1	*	bprₒq PR	cPRqvbc	bbcpcbc	bcc
S. Farnborough	1004·8	+14	SSW	4	zₒ	49	92	6	4	-	-	1	1	4000	1	*	bTLR	bccbmₒ	bmircm	bcmcid
Boscombe Down	1004·1	+20	S	4	zₒ	49	92	6	5	-	-	2·3	2·3	1500	1	*	bccpRqc	cprₒ	bcirₒmbcm	cmdₒc
Calshot (Soton.)	1005·5	+22	WSW	2	c/pr	52	92	6	8	-	-	9	9	1500	1	2	tlPRkq	cPRcmₒ	bm bcb	bcₒc
Lympne	1008·2	+20	SW	2	rr	47	97	7	5	-	-	10	10	2500	1	§ 3	b,cprₒc	bccRrr	clrₒbcb	bbccmₒ
Manston	1007·0	+22	SW	4	c/pr	49	85	6	6	3	-	7·8	7·8	1500	1	*	cmₒbcmₒ	prcmₒ	cbcm	bbccm
Shoeburyness	1006·0	+20	SSW	4	bc	49	85	8	5	-	-	2·3	2·3	2500	1	*	bcqtlR	cqPRbc	bbc	bcem
Felixstowe	1005·0	+18	SW'S	5	zₒ	50	85	6	5	4	-	2·3	2·3	4000	1	3	qcprₒt	cphrₒq bc	bcmbm	bmcm
Gorleston	1004·1	+8	S'W	3	bc	49	85	6	5	-	-	2·3	2·3	2500	1	2	bccprₒ	cor bczₒ	bcbzbc	bbcwz
Mildenhall	1003·6	+22	SSW	4	bc	50	85	7	5	2	-	1	4-6	2500	1	*	bc-prₒq	cprₒbc	bcbc bm	bcmbcm
Cranwell	1009·4	+14	SW	2	zₒ	45	85	6	8	4	3	Tr	1	2500	1	*	bcprₒc	attrₒbmₒ	bbcbmw	b,cbcm
Birmingham	1001·7	+14	SW	3	b	48	75	8	8	6	-	1	1	2500	1	*	cpr	cPR bc	bbc	bc
Upper Heyford	1003·2	+20	SSW	3	b	49	85	7	5	-	-	Tr	Tr	2500	1	*	bccpr bc	bcc bc	bcmcpq	bcm pqc
Ross-on-Wye	1001·9	+12	S	3	c/r	49	92	7	9	-	-	2·3	2·3	2500	1	*	rₒqbcqPHRₒ	cpbcPcr	bccrbc	c
Hartland Point	999·9	+10	WSW	7	c/pr	53	92	7	6	4	-	7·8	9+	800	1	5	cpirₒ	cbccp	cpbcl	bcdc
Bristol	1002·7	+12	SSW	3	bc	51	85	8	4	4	-	2·3	2·3	2500	1	*	cprbcc	cPRhbc	bcpₒbbc	bccidbc
Portland Bill	1004·3	+18	SW	6	bc	55	85	7	5	-	-	4-6	4-6	4000	1	5	cpr	cpr	c	c
Plymouth	1002·4	+10	S'W	7	zₒ	55	85	6	3	3	-	7·8	9	2500	1	4	cpmₒtlₒprb	cpcmₒ	cmbcc	cbc
The Lizard	1002·4	+10	SSW	6	bc	54	92	7	8	6	-	4-6	4-6	2500	1	4	bcprc	cbc	bcw	bcc
Scilly (St. Mary's)	999·5	-2	SSW	5	bc/pr	53	97	7	8	-	-	2·3	2·3	1500	1	4	crbcc	cphrq	bbcb	cbcw
Guernsey	1005·9	+10	SSW	3	bc	55	85	7	-	4	-	0	2·3	-	1	4	bbccq	cq bcb	bbcb	bcorr
Pembroke	998·2	+2	SW	6	bcq	54	85	7	5	7	-	2·3	4-6	1500	1	4	cq bc	cbcpₒ	bcqdₒc	cq
Holyhead	996·1	+14	SSW	5	c	53	75	7	2	-	-	7·8	7·8	1500	1	3	cprbc	prₒcbc	bc	bcprc
Chester (Sealand)	998·9	+20	S	3	bc	50	75	7	8	3	-	2·3	4-6	2500	1	*	czₒPRprbc	bccbc	bz bc	b,cmₒ
Manchester	999·2	+16	S'W	4	zₒ	49	75	6	8	3	-	2·3	2·3	4000	1	*	cprₒc	cbcbzₒ	bzmb	bc
Spurn Head	999·7	+18	SW	5	b	47	85	6	-	-	-	0	0	-	0	3	c	bcb	bcw	bbcw
Catterick	997·4	+30	S	3	b	48	75	7	4	-	-	1	1	4000	1		cprₒbc	cbcb	bmbcm	bmcmw
Tynemouth	986·1	+20	SW	3	bc	48	85	5	2	-	-	2·3	2·3	1500	1	1	bccp	cpcbc	bc	bcc
St. Abbs Head	993·4	+20	SW	3	bc	46	75	8	5	-	-	2·3	2·3	2500	0	2	bcc bc	bcb	bbc	mirc
Leuchars	992·0	+26	SW	3	b	46	85	7	4	-	3	1	1	4000	1	*	cirₒcbc	bcb	bbcw	bcwrₒcm
Renfrew (Abbots I.)	992·4	+22	SSW	3	c/pr	49	85	6	5	7	-	4-6	7·8	1500	1	*	bc	bccprₒ	cmbzm	cirₒrrm
Eskdalemuir	994·4	+26	SW'S	4	bc	45	85	8	8	-	-	4-6	4-6	1500	1	*	bcpr	bcprₒ	bcprc	crrₒrₒ
Point of Ayre	994·8	+16	SW	4	bc	49	85	7	4	-	-	2·3	2·3	1500	0	2	bcc bc	bccbc	bcc	prorₒ
Tiree	987·5	-20	SSW	4	bc/pr	48	75	8	8	-	-	7·8	*	1500	1	4	cprbcc cPR	bcprq	cprl PHRql	ciRbc bccRR
Stornoway																				
Dalwhinnie	990·9	+28	S	6	c	43	75	7	8	4	-	4-6	7·8	2500	0	*	cir	cir		cirRr
Aberdeen	992·1	+34	SSW	2	bc	47	85	6	5	-	9	1	2·3	4000	1	2	cbcb	bcbzₒ	b,cirb	bbccirₒ
Wick	988·4	+24	SSW	3	bc	47	92	8	5	6	-	2·3	2·3	1500	1	2	c	cbc	bcl	bczr
Lerwick	984·2	+40	WSW	6	ir	47	92	6	8	2	-	4-6	10	800	1	*	cpri6	cprrr	cir	cbcc
Blacksod Point	986·8	+10	S	6	c	52	75	7	9	-	-	10	10	800	1	5	prₒcq	cq		
Malin Head	987·9	+18	S'W	5	bc	47	75	8	5	-	-	2·3	2·3	5700	0	4	bcc	cbc	c	cirₒc
Aldergrove	991·5	+8	SSE	3	b	46	85	7	5	-	-	Tr	Tr	2500	1	*	b,bccprₒ	bcbcprₒb	bbcc	cirₒrir
Birr Castle	992·1	+8	SSW	2	bc	48	85	8	5	4	-	2·3	2·3	2500	1	*	bc	bc	cprₒ	cprrr
Valentia Obsy. †	990·0	0	S'W	5	c	53	75	8	6	8	-	2·3	9+	2500	1	5	bccprₒ	prₒbcc	bcprpql	rcprₒbcc
Roches Point	993·9	+8	WSW	6	bc	52	85	8	3	-	3	2·3	2·3	2500	1	5	bcprc	bc	cir	rrir

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

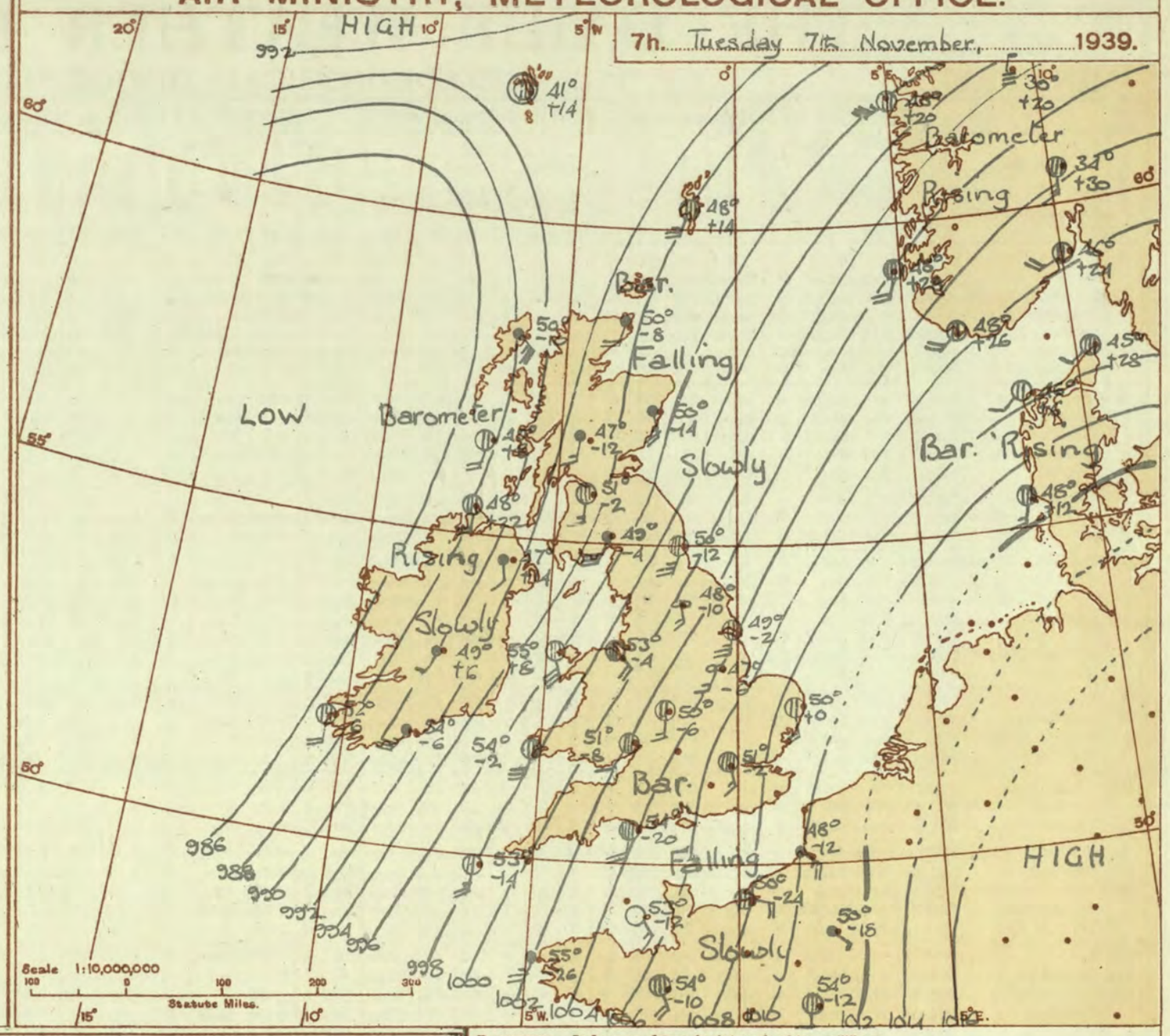
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac; Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



Districts.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 7th November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Strong southerly winds; occasional rain or showers, but bright intervals; mild.
5 S.W. England ▼ 6 South Wales ... ▼ 7 North Wales ... ▼ 8 N.W. England ▼	Strong southerly wind, gale locally on coast; occasional rain or showers, but bright intervals; mild.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	As 1 - 4.
12 S.W. Scotland & Isle of Man. ▼ 13 A. W. Scotld. ▼ / B.N.W.Scotland. ▼ 14 Mid Scotland 15 N. E. Scotland	As 5 - 7.
16 Orkneys and Shetlands	Wind southeast, strong or gale at times; cloudy, occasional rain; mild.
17 N. W. Ireland ▼ 18 N. E. Ireland ▼ 19 S. E. Ireland ▼ 20 S. W. Ireland ▼	As 5 - 7.

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.

GENERAL INFERENCE.

A large depression to the west of Ireland is moving East-southeast slowly and secondaries are moving north-northeast across the British Isles and France. There will be strong southerly winds with occasional rain or showers, but bright intervals in eastern districts. It will remain mild.

FURTHER OUTLOOK.

Unsettled and mild.

GALE WARNING.

▼ South Cone hoisted at 22.30 G.M.T. on 6th in Districts. 5, 6, 7, 8, 12, 13A, 13B, 17, 18, 19 and 20.

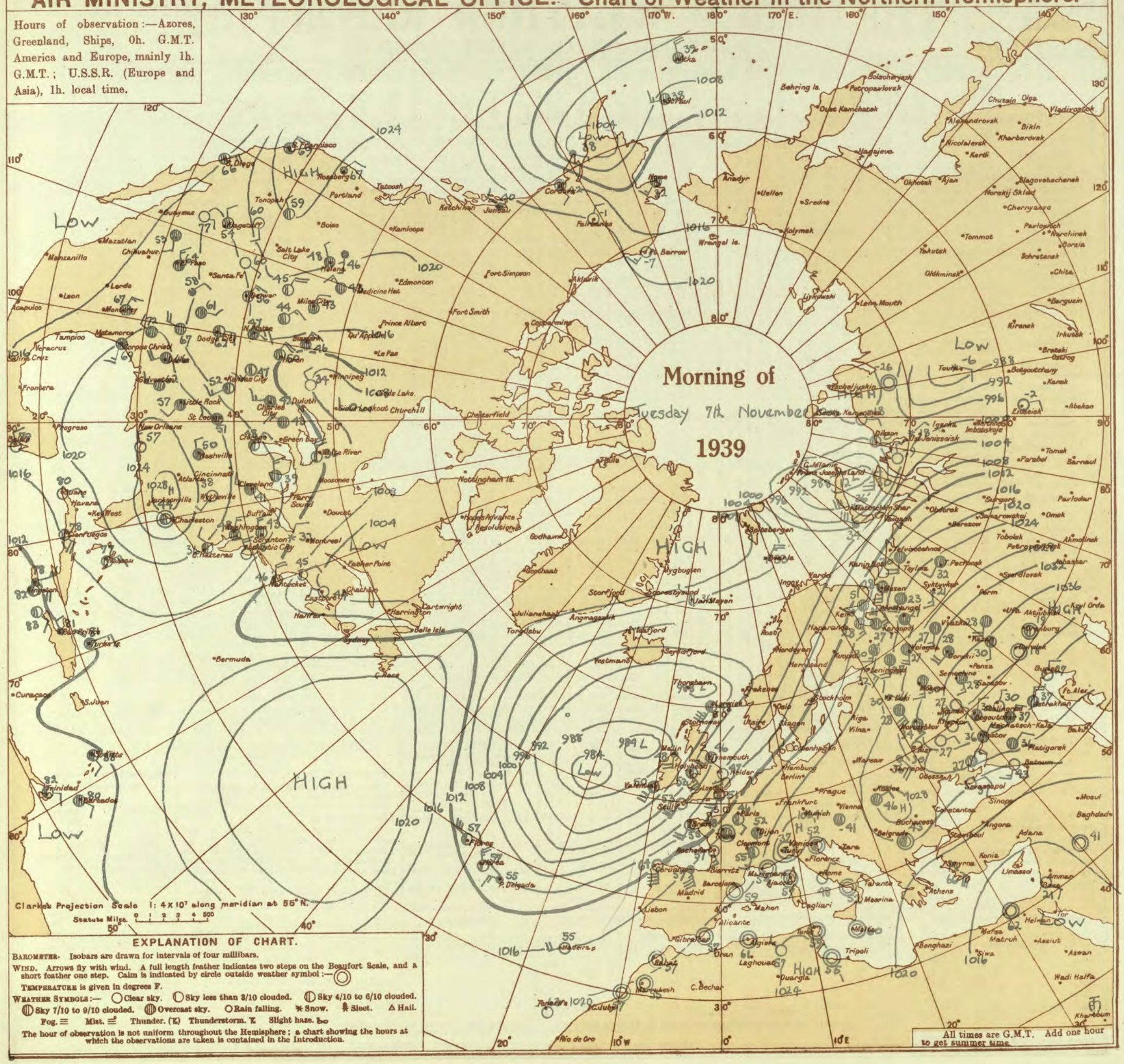
Forecasts issued at 1000 G.M.T.

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

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

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

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



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

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

TEMPERATURE is given in degrees F.

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Tuesday 7th November 1939.
No. 28474

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1008.4	+6	S'W	4	bc	51	92	7	2	-	-	4-6	4-6	2500
	S. Farnborough	226	1007.6	+6	S'W	3	z	53	85	6	5	-	-	9+	9+	1500
	Boscombe Down	417	1005.9	0	S'W	4	z	51	92	6	4	-	-	1	1	1500
	Calshot (Sthmtn.)	8	1007.3	+4	S'W	4	bc	53	92	7	5	-	-	4-6	4-6	1500
	Lympne ...	346	1010.8	+10	SSW	3	b	49	91	7	-	-	-	0	0	-
	Manston ...	154	1012.0	+10	SSW	3	z	51	85	6	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1008.6	+10	W'S	3	z	50	92	6	-	-	-	0	0	-
	Gorleston ...	5	1007.9	+10	S	4	bc	49	85	7	-	5	-	0	4-6	-
	Mildenhall ...	19	1007.0	+6	S'W	4	z	49	92	6	5	-	-	1	1	5700
	Cranwell ...	240	1004.9	+8	S'W	3	z	44	97	6	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1005.8	0	SSW	4	z	51	92	6	5	-	-	2-3	2-3	1500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1000.6	0	SW	6	bc	55	85	8	8	-	-	4-6	4-6	2500
	Bristol ...	209	1004.3	-2	S'W	4	bc	53	85	8	5	-	-	4-6	4-6	2500
	Portland Bill ...	32	1006.0	+10	SSW	4	c	55	85	7	5	-	-	10	10	4000
	Plymouth ...	82	1004.1	-4	SSW	6	c	55	92	7	5	-	-	9	9	1500
	The Lizard ...	240	1003.2	-2	SSW	6	bc	54	97	7	8	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	999.9	-6	SSW	6	b	53	97	6	-	-	-	0	0	-
	Guernsey ...	175	1007.5	-6	SSE	3	bc	53	97	7	2	-	-	4-6	4-6	2500
6	Pembroke ...	142	999.0	-6	SW'S	7	c/d	55	92	7	8	2	-	7-8	10	1500
7	Holyhead ...	26	996.8	-4	SSE	5	c	53	85	7	5	-	-	7-8	7-8	2500
	Chester (Sealand)	16	1001.0	+4	ESE	3	b	48	85	7	-	-	-	0	0	-
8	Manchester ...	70	1001.7	+6	SSE	4	bc	49	85	7	5	-	-	4-6	4-6	2500
10	Spurn Head ...	29	1003.8	+8	S	4	b	47	97	6	-	4	-	0	1	-
	Catterick ...	175	1001.2	+8	S'E	2	z	42	97	6	3	-	6	2-3	7-8	4000
	Tynemouth ...	108	1000.2	+10	SSW	4	bc	46	85	6	8	-	-	4-6	4-6	1500
11	St. Abbs Head	280	997.5	+6	S	2	bc	46	85	8	4	-	-	4-6	4-6	2500
	Leuchars ...	36	996.3	+10	-	0	z	44	92	6	3	-	-	4-6	4-6	2500
12	Renfrew (Abbots I.)	19	995.6	+6	ESE	2	z	49	85	6	3	-	-	9+	9+	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	996.8	+12	SSW	4	c/pr	52	97	8	8	-	-	9	9	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	990.3	+8	S	6	bc	50	83	7	3	-	-	4-6	4-6	4000
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	992.2	+14	SSW	3	bc	47	85	7	5	7	-	4-6	4-6	1500
16	Lerwick ...	156	991.2	+36	SW	7	c	48	85	8	8	7	-	4-6	7-8	1500
17	Blacksod Point	18														
18	Malin Head ...	84	988.3	-14	S	4	pr	48	85	6	8	-	-	9+	9+	2500
	Aldergrove ...	268	991.9	-14	SSE	4	c	51	75	8	5	-	-	10	10	2500
19	Birr Castle ...	173	990.3	-14	SSW	4	pr	53	85	7	3	7	-	2-3	7-8	1500
20	Valentia Obsy.	30	988.6	+14	SSW	6	c/pr	50	92	7	9	-	-	10	10	1500
	Roches Point	22	991.7	-6	SSW	7	ir	54	92	7	6	2	-	7-8	9	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	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)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 6th Hrs. (36)
London (Kew)	1006.4	-6	SSE	3	z	52	85	6	5	-	-	10	10	1500	1	*	54	49	44	18	0.4	2.7
Croydon	1007.5	-2	SSE	3	c	51	85	7	5	-	-	10	10	1500	1	*	54	48	46	5	0.2	2.4
S. Farnborough	1005.9	-6	SE'S	3	z	51	97	6	9	2	-	9	10	1500	1	*	56	49	45	16	0.5	3.2
Boscombe Down	1004.1	-10	SSE	4	z	50	92	6	5	-	-	10	10	1500	1	*	54	48	46	9	0.6	1.8
Calshot (Sthmtn.)	1005.6	-10	SE	3	z	52	92	6	5	2	-	7-8	10	1500	1	3	55	50	49	8	-	1.4
Lympne	1009.5	-6	SSE	3	c	49	92	6	5	-	-	9	10	450	1	§3	56	47	43	6	2	4.4
Manston	1008.9	-6	S	3	z	49	92	6	5	-	-	10	10	800	1	*	56	47	46	2	Tr	4.6
Shoeburyness	1008.3	-8	SSE	3	c	50	97	5	8	3	-	7-8	10	1500	1	*	56	49	41	4	0.1	2.0
Felixstowe	1007.9	-8	S'E	4	z	50	92	6	4	3	-	9	9+	2500	1	4	55	49	45	4	-	3.9
Gorleston	1008.8	0	S'E	4	bc	50	92	6	5	-	-	4-6	4-6	2500	1	2	55	48	47	3	-	*
Mildenhall	1006.1	-10	SE'S	4	z	49	92	6	5	-	-	4-6	4-6	5700	1	*	54	48	*	Tr	Tr	3.5
Cranwell	1004.4	-6	SSW	3	z	47	97	6	5	7	-	4-6	7-8	2500	0	*	54	42	43	2	Tr	3.7
Birmingham	1002.6	-6	S	3	bc	50	83	6	5	7	-	4-6	4-6	1500	1	*	51	45	39	[illegible]	-	2.2
Upper Heyford	1005.3	-2	SSE	3	z	49	97	6	5	7	-	9	10	1500	1	*	54	45	37	1	0.1	*
Ross-on-Wye	1002.4	-8	SW'S	2	c	51	88	7	5	-	1	7-8	9+	1500	1	*	54	49	42	7	0.4	2.5
Hartland Point	999.2	-6	SW	3	c/d	53	92	8	9	1	8	2-3	9	1500	1	4	54	52	49	0.5	0.5	2.9
Bristol	1002.9	-8	S	3	c	52	85	7	5	7	-	4-6	7-8	1500	1	*	54	49	43	2	1	2.1
Portland Bill	1003.8	-20	S	4	c	54	92	7	5	-	-	10	10	2500	1	4	55	52	*	3	-	*
Plymouth	1001.3	-16	S	5	c	53	85	7	3	1	-	7-8	10	2500	1	4	56	54	52	3	-	1.5
The Lizard	999.6	-20	S	6	c	54	85	7	5	-	-	10	10	1500	0	4	56	53	*	1	-	2.8
Scilly (St. Mary's)	997.0	-14	S	5	bc	53	97	7	5	4	-	2-3	4-6	1500	1	4	56	53	*	7	0.2	3.6
Guernsey	1003.6	-12	SE'S	3	o	53	97	7	5	-	-	10	10	1500	1	4	58	52	47	-	2	5.8
Pembroke	997.8	-2	SSW	6	c	54	92	7	8	-	-	7-8	7-8	1500	1	4	53	53	*	0.2	Tr	2.0
Holyhead	995.5	+8	SSE	6	c	55	75	7	8	-	-	9	9	2500	1	3	55	51	49	Tr	Tr	4.0
Chester (Sealand)	999.5	-4	SE'S	4	c	53	75	7	2	-	-	9	9	2500	1	*	57	44	39	3	-	4.0
Manchester	1000.5	-6	SSE	4	bc	53	85	7	5	-	-	4-6	4-6	2500	1	*	54	46	37	3	-	1.0
Spurn Head	1003.3	-2	S	5	bc	49	92	6	-	-	5	0	2-3	-	1	3	55	46	*	-	Tr	4.4
Catterick	1000.0	-10	S'E	3	z	48	97	5	5	-	-	7-8	7-8	1500	1	*	53	40	32	0.1	Tr	5.4
Tynemouth	998.9	-12	SSW	5	c	50	85	6	8	-	-	7-8	7-8	1500	1	2	53	43	41	4	-	*
St. Abbs Head	995.3	-8	SSE	4	c	47	85	7	5	2	-	7-8	10	1500	0	3	52	42	*	-	0.1	*
Leuchars	993.9	-14	ESE	4	roro	48	85	6	5	2	-	7-8	10	1500	1	*	52	41	32	0.1	Tr	3.7
Renfrew (Abbots I.)	993.0	-2	S	3	c/r	51	85	5	5	-	-	9+	9+	1500	1	*	52	46	38	Tr	9	3.8
Eskdalemuir	995.2	-4	S'W	6	roro	49	92	8	6	-	-	10	10	800	1	*	49	44	*	0.2	1	*
Point of Ayre	994.7	-4	SW'S	6	roro	54	92	7	8	1	-	9	10	1500	1	3	55	49	*	-	1	5.5
Tiree	987.5	+8	S'W	4	bc	49	83	8	5	-	*	4-6	4-6	2500	1	4	52	47	42	2	10	3.1
Stornoway	988.1	-10	SE	5	roro	50	75	7	8	7	-	7-8	10	2500	1	3	51	44	*		4	0.4
Dalwhinnie	992.5	-12	S	3	RR	47	92	6	6	2	-	7-8	10	2500	1	*	46	39	35	3	8	2.7
Aberdeen	994.6	-14	S'E	3	iro	50	85	6	5	-	-	9+	9+	800	1	2	52	44	34	-	0.4	4.8
Wick	992.2	-8	SSW	4	roro	50	97	7	5	2	-	7-8	10	800	1	1	51	42	*	3	Tr	*
Lerwick	994.4	+14	SSW	5	c	48	92	7	4	1	-	2-3	7-8	1500	1	*	49	45	*	4	1	0.0
Blacksod Point																	58		*	1		*
Malin Head	987.9	+22	S	4	c	48	85	8	8	-	4	4-6	7-8	5700	0	2	51	43	*	-	1	3.7
Aldergrove	991.4	+14	S'E	2	ir	47	85	7	6	-	-	10	10	1500	1	*	52	46	39	0.6	1	3.7
Birr Castle	990.2	+6	SSW	1	rr	49	92	7	9	2	-	7-8	10	1500	1	*	55	47	44	-	6	5.8
Valentia Obsy.	987.5	-6	S	4	c	52	85	8	5	-	-	9+	9+	1500	1	3	55	50	47	2	9	3.3
Roches Point	990.1	-6	SW'S	7	ir	54	97	6	6	2	-	7-8	9+	800	1	5	55	52	*	1	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.	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	clTHorw	crrcbc	bccrcw	54	49	46	18	0.4	2.7	•	•	6
Croydon ...	217	bpcqPR	ePRqvbc	bbrodr	54	48	46	5	0.2	2.4	•	•	6
Greenwich (Royal Observatory) ...	149	ctlror	rqrcb	bcrbcr	55	49	43	5	0.5	2.7	79	93	6
City (Bunhill Row) ...	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park) ...	27	•	•	•	57	47	44	17			74	88	•
Regents Pk. (Botanic Gardens)‡ ...	168	•	•	•	57	46	42	17	0.3		76	86	•
Camden Square ...	110	bc	bc	•	55	47	44	18	-	*	•	91	•
Kensington ...	80	bc	bctlr	•	57	49	46	17	0.5		81	90	•
Hampstead Observatory ...	450	bc	ortlh	bcod	54	45	43	15	0.1		•	93	•

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

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

	Max.	Time.	Min.	Time.
South Kensington.				
Kew Observatory.	0.1	11h. 6th	<0.1	23-24h. 6th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 6th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 7th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...						1011.4	SE	1	roro	50		46		1
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1021.0	WNW	1	b	66						•	•	-	

‡ 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 ,, 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.

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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, 8th November 1939.

No. 28,475.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1002·0	-24	S	3	c/pr	56	92	6	5	-	-	7-8	10	1500
	Croydon ...	1002·7	-22	S'E	3	o/d	55	97	6	5	-	-	10	10	1500
	S. Farnborough	1001·3	-22	S'E	3	c/d	56	92	6	5	7	-	9+	10	600
	Boscombe Down	999·2	-30	S'E	5	o/r	55	97	7	5	-	-	10	10	800
	Calshot (Soton.)	1000·8	-26	SSE	5	c	56	92	7	6	2	-	7-8	9+	1500
	Lympne ...	1005·9	-20	S	3	iro	53	97	6	5	1	-	7-8	10	800
	Manston ...	1005·6	-22	S'E	3	zo	54	97	6	6	2	-	7-8	9+	800
2	Shoeburyness ...	1004·7	-20	SE	3	c	52	92	5	8	3	-	9+	10	1500
	Felixstowe ...	1004·6	-26	SSE	4	ido	51	97	5	5	2	-	7-8	10	450
	Gorleston ...	1004·4	-36	SSE	6	c	51	92	6	5	-	-	9	9	2500
	Mildenhall ...	1002·6	-28	SSE	5	c	53	85	7	5	2	-	9	10	1500
	Cranwell ...	1001·5	-22	SSE	3	iro	50	97	6	5	-	-	10	10	800
3	Birmingham	999·5	-22	SE	3	ir	50	97	5	-	2	-	10	10	450
	Upper Heyford	1000·3	-28	SSE	3	rr	53	97	6	6	7	-	9+	10	450
4	Ross-on-Wye ...	996·9	-28	SE	3	iro	54	97	7	6	-	-	10	10	1500
5	Hartland Point	993·6	-36	S	3	iro	57	92	7	9	2	-	7-8	10	800
	Bristol ...	997·6	-34	S	3	iro	57	85	8	5	-	-	10	10	1500
	Portland Bill ...	999·7	-24	S	5	o	56	92	8	5	-	-	10	10	2500
	Plymouth ...	996·7	-18	S'W	6	c/d	52	92	6	5	2	-	7-8	10	1500
	The Lizard ...	995·3	-10	S	5	c	54	97	8	8	2	-	7-8	9+	2500
	Scilly (St. Mary's)	993·4	-12	S	5	c	55	97	7	5	7	3	2-3	7-8	1500
	Guernsey ...	1000·4	-20	SSE	3	c	58	92	7	2	7	8	2-3	7-8	2500
6	Pembroke ...	993·7	-18	S'E	4	dd	54	97	6	8	2	-	7-8	10	1500
7	Holyhead ...	993·9	-12	SSE	5	c	57	75	7	2	3	9	2-3	7-8	2500
	Chester (Sealand)	997·2	-18	SE	3	zo	55	75	6	8	3	-	9+	9+	2500
8	Manchester ...	997·7	-22	SSE	4	zo	54	75	6	5	3	-	2-3	7-8	2500
10	Spurn Head ...	1002·2	-10	S'E	5	c	51	*	6	5	8	4	4-6	10	2500
	Catterick ...	998·1	-12	S'E	4	c	63	75	5	8	-	-	7-8	7-8	2500
	Tynemouth ...	998·7	-8	SSW	5	bc	54	75	6	2	-	-	4-6	4-6	2500
11	St. Abbs Head	995·0	-10	SSE	6	c	56	65	8	4	6	2	4-6	7-8	1500
	Leuchars ...	995·1	-6	SE	1	rob	48	97	7	5	2	-	9	10	1500
12	Renfrew (Abbots I.)	994·2	6	E	1	fofo	50	97	3	6	2	-	7-8	10	1500
	Eskdalemuir ...	994·8	-4	S'W	6	c	63	75	8	5	3	1	4-6	9	1500
	Point of Ayre ...	994·5	0	SSW	5	c	54	85	8	9	6	9	7-8	9+	1500
13A	Tiree ...	989·6	0	SSE	4	c	51	85	8	5	7	-	4-6	7-8	2500
13B	Stornoway ...	990·0	+6	SSW	4	c	52	85	8	8	7	7	4-6	10	2500
15	Dalwhinnie ...	994·0	-4	S	4	ir	46	85	7	6	1	-	2-3	10	1500
	Aberdeen ...	995·2	+6	S'W	3	iro	49	92	6	5	-	-	10	10	2500
	Wick ...	991·3	+4	SSE	4	c	51	92	*	5	1	2	2-3	9+	2500
16	Lerwick...	993·3	+4	SSW	5	ir	50	92	6	6	2	-	7-8	10	800
17	Blacksod Point...	986·1	-10	SE	3	c	51	85	8	8	-	-	10	10	800
18	Malin Head ...	988·6	-2	S'E	4	c	50	85	8	6	7	-	4-6	9	4000
	Aldergrove ...	991·2	-4	SSE	2	roro	49	92	6	-	2	-	10	10	2500
19	Birr Castle ...	988·7	-12	S	1	rr	50	97	7	6	2	-	7-8	10	800
20	Valentia Obsy. †	984·4	-18	SSE	5	roro	53	92	7	5	2	-	4-6	10	1500
	Roches Point ...	987·7	-20	S	7	id	54	97	6	5	-	-	9+	9+	450

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	999·7	-10	S'W	3	iro	57	85	6	5	2	-	4-6	10	1500	2	*
Croydon	1000·8	-10	S	3	iro	57	92	6	6	2	-	7-8	10	800	1	*
S. Farnborough	999·1	-16	SE'S	4	c/r	56	92	6	6	2	-	10	10	5700	1	*
Boscombe Down	997·1	-14	S'E	5	rr	56	97	5	6	2	-	9+	10	800	1	*
Calshot (Soton.)	998·7	-12	SSE	6	p/r	57	85	6	5	-	-	10	10	1500	1	3
Lympne	1003·5	-8	S'W	3	bc	55	92	7	-	3	2	0	4-6	-	1	§4
Manston	1002·7	-10	SSE	3	zo	55	92	6	5	7	-	4-6	10	1500	1	*
Shoeburyness	1002·4	-6	S'E	4	c	55	92	7	5	7	-	9	10	4000	1	*
Felixstowe	1002·0	-6	SSE	5	zo	54	92	6	6	2	-	9	10	1500	1	
Gorleston	1002·7	-2	SSE	5	o	54	92	6	5	-	-	10	10	2500	1	3
Mildenhall	1000·0	-6	SSE	5	iro	56	92	6	6	2	-	4-6	10	4000	1	*
Cranwell	997·7	-14	S	5	c/d	55	92	4	6	2	-	9	10	450	1	*
Birmingham	995·9	-10	S	4	rr	55	92	6	6	-	-	10	10	450	1	*
Upper Heyford	996·6	-4	SSE	4	ido	55	97	6	6	2	-	7-8	10	450	1	*
Ross-on-Wye	994·8	-8	S	3	c/r	55	97	7	6	1	-	7-8	10	1500	1	*
Hartland Point	991·6	-16	S	4	c	55	85	8	5	2	-	4-6	9+	1500	1	3
Bristol	995·8	-4	S	4	roro	56	92	7	6	2	-	7-8	10	1500	1	*
Portland Bill	996·9	-12	S	4	o	56	92	7	5	-	-	10	10	1500	1	5
Plymouth	995·1	-8	S'W	5	zo	56	97	6	5	-	-	10	10	1500	1	4
The Lizard	992·4	-16	S'E	6	o	55	92	7	5	-	-	10	10	1500	1	4
Scilly (St. Mary's)	989·2	-24	S'E	6	o	55	92	6	5	-	-	10	10	1500	1	4
Guernsey	998·5	0	S	3	c	58	85	7	2	7	-	2-3	9+	1500	1	4
Pembroke	991·6	-16	S	6	cq	54	92	7	8	7	-	4-6	7-8	1500	1	3
Holyhead	990·2	-18	S'E	3	c/r	53	92	8	5	-	-	7-8	7-8	2500	1	2
Chester (Sealand)	993·4	-18	SE	2	c/r	52	97	5	5	-	-	7-8	7-8	1500	1	*
Manchester	994·2	-18	SSE	3	m/r	55	92	4	5	2	-	7-8	9+	1500	1	*
Spurn Head	998·0	-2	S	5	o	52	97	6	5	-	-	10	10	1500	1	6
Catterick	995·2	-20	SSE	2	ido	50	97	4	5	-	-	10	10	220	1	
Tynemouth	996·1	-8	S	4	o	51	92	6	5	-	-	10	10	1500	1	2
St. Abbs Head	993·6	-8	SSE	5	bc	49	85	6	4	3	-	4-6	4-6	1500	0	3
Leuchars	993·3	-6	SE	2	bc	48	92	7	5	-	-	2-3	2-3	2500	1	*
Renfrew (Abbots I.)	992·5	-14	S'E	4	zo	52	85	6	5	4	2	4-6	7-8	2500	1	*
Eskdalemuir	993·5	-12	W'S	1	bc	45	85	6	5	-	-	2-3	2-3	1500	1	*
Point of Ayre	991·2	-22	S	5	roro	52	97	7	-	2	-	10	10	1500	1	3
Tiree	988·0	-8	ESE	4	dr	50	92	7	-	2	-	9+	9+	1500	1	3
Stornoway	990·8	0	SSE	3	c	51	85	7	5	5	7	7-8	10	2500	1	2
Dalwhinnie	992·2	-10	S	3	ir	68	92	6	8	2	-	7-8	10	2500	1	*
Aberdeen	994·5	-2	S	3	bc	51	92	6	5	-	-	2-3	2-3	2500	1	2
Wick	992·2	0	S	4	c	51	97	7	5	7	8	4-6	9+	1500	1	2
Lerwick	993·9	+4	S	5	c	50	92	7	5	7	-	7-8	9+	800	1	*
Blacksod Point	982·5	-22	SE	3	pr	51	85	8	8	-	-	10	10	800	1	3
Malin Head	986·2	-16	S	3	rr	40	92	5	3	-	-	10	10	1500	0	3
Aldergrove	987·6	-8	SE'S	4	c	52	85	7	5	2	-	7-8	9+	1500	1	*
Birr Castle	983·8	-24	S	3	ir	53	85	7	6	2	-	7-8	10	800	1	*
Valentia Obsy. †	976·9	-30	SSE	4	c	50	85	7	5	2	-	7-8	7-8	1500	1	4
Roches Point	982·2	-30	SSW	6	ir	53	97	7	6	2	-	7-8	10	800	1	5

PAST 24 HOURS.

Stations	Weather 7h.—13h. 7th (37)	Weather 13h.—18h. 7th (38)	Weather 18h. 7th to 1h. 8th (39)	Weather 1h.—7h. 8th (40)
London (Kew)	cmoromo	ciromo	cmbcpfc	cpro
Croydon	coddmmo	ciromo	cropro bcm	bcmprocm
S. Farnborough	dodoir	croir		ciroiR
Boscombe Down	cmodr	cddmirocir	cirmcm	cmircpr
Calshot (Soton.)	cororo	cirmo	crorir	mc
Lympne	cfrrcmmr	cromoc	bczbc	cprobccirR
Manston	rorocmo	cmo	cmzbcm	bcmorr
Shoeburyness	crcmo	cmoc	c	cprc
Felixstowe	cmorodmo	oidocir	cm	cmiro
Gorleston	bcrobc	czozo	cbzoc	coiro
Mildenhall	bcmoc	ccciromo	cirocbc	cmcirom
Cranwell	bccmoiro	rororoidom	rorobcm	roromc
Birmingham	bcoir	orror	crrR	Rdcbc
Upper Heyford	cddmrr	cdmcmcR	rromlcpr	rorocmprc
Ross-on-Wye	corood	cdmrr	crocor	cbcb
Hartland Point	cbccr	iroc		bclc
Bristol	cdcrR	rodoRroR	cprRq	cqbc
Portland Bill	corr	opr	opr	oc
Plymouth	cproirdom	irdmdmo	cmbc	bc
The Lizard	crrc	c	cprbc	bcprc
Scilly (St. Mary's)	cidoc	c	crocbl	bbcl
Guernsey	ciroc	c		oroc
Pembroke	cdodddmo	irmqc	cbcq	cq
Holyhead	bbc	prorobc	proRc	ciroc
Chester (Sealand)	cbcczo	iromroromo	bcmcrrm	cbcpro
Manchester	bcmbzo	czrorfom	cmbczobc	cromobc
Spurn Head	cw	oiroc		cpcw
Catterick	bcmocmo	oidom	idoomd	irobcm
Tynemouth	cbc	bco	oro oc	coirobc
St. Abbs Head	irc	mocbc	mobcc	crrbc
Leuchars	roiRroro	crorocbc	b,cmw	
Renfrew (Abbots I.)	crrRRf	cRRcmmo	cmirorr	cmrrbcc
Eskdalemuir	rorocpro	cbcb	bbcc	cRcir
Point of Ayre	roroc	ciro	rocrc	crrd
Tiree	c	cd	ciR	ciR
Stornoway	crr	c	crrroro	crr
Dalwhinnie	cir	cRrir		cir
Aberdeen	ciro	circ	cziro	circ
Wick	roroc	cproc	c	mrc
Lerwick	crrir	cir	colrm	codf
Blacksod Point	q	proc	cbcq	proc
Malin Head	c	cror, rro	cuRrcir	bcebcc
Aldergrove	irrrrororr	roroidoc	roroRRf	b,cpro
Birr Castle	crr	cir	b	cpr
Valentia Obsy. †	cirororo	crorob	cirlroprc	prolprp
Roches Point	iroid	RRir		

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

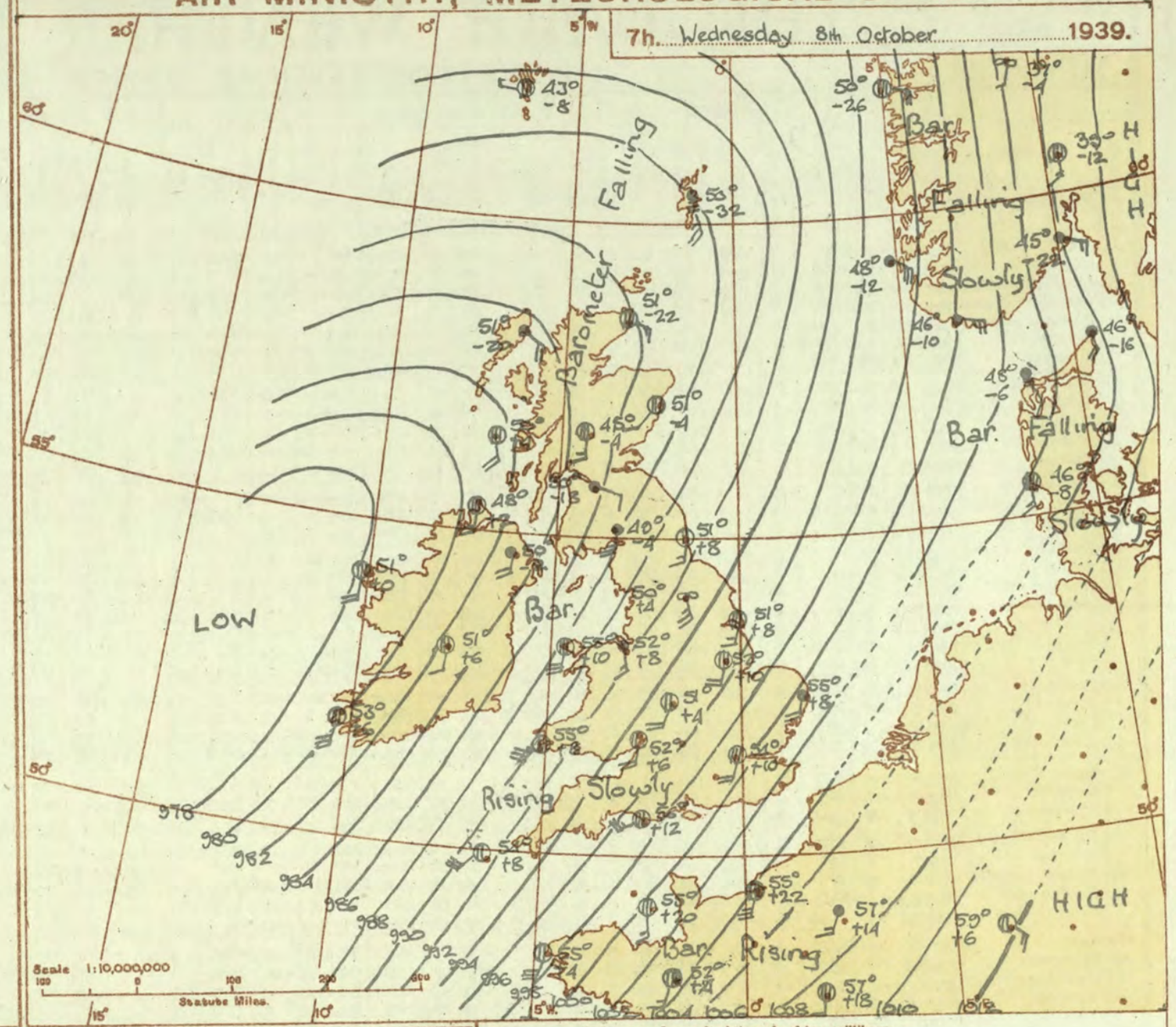
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac; Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



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 November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Fresh or strong south wind; occasional rain or showers but bright periods; mild.
5 S.W. England ▼ 6 South Wales ... ▼ 7 North Wales ... ▼ 8 N.W. England ▼	Strong southerly winds reaching gale force locally on the coast; occasional rain or showers but fair periods; mild.
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. ▼ 13 B.N.W.Scotland. ▼ 14 Mid Scotland	As 5 - 8.
15 N. E. Scotland 16 Orkneys and Shetlands	Fresh or strong southeast wind; cloudy, occasional rain; mild.
17 N. W. Ireland ▼ 18 N. E. Ireland ▼ 19 S. E. Ireland ▼ 20 S. W. Ireland ▼	As 5 - 8.

GENERAL INFERENCE.

A depression off the southwest of Ireland is almost stationary and is filling up. There will be a mild southerly current over the British Isles reaching gale force over the open sea in the west. There will be occasional rain or showers but bright periods in the east and Midlands.

FURTHER OUTLOOK.

Mild unsettled weather with southerly winds.

Time of Issue of Gale Warning.

▼ South Cone hoisted in districts 5,6,7,8, 12,13A,13B,17,18,19, and 20 at 22.30 6/11/39.

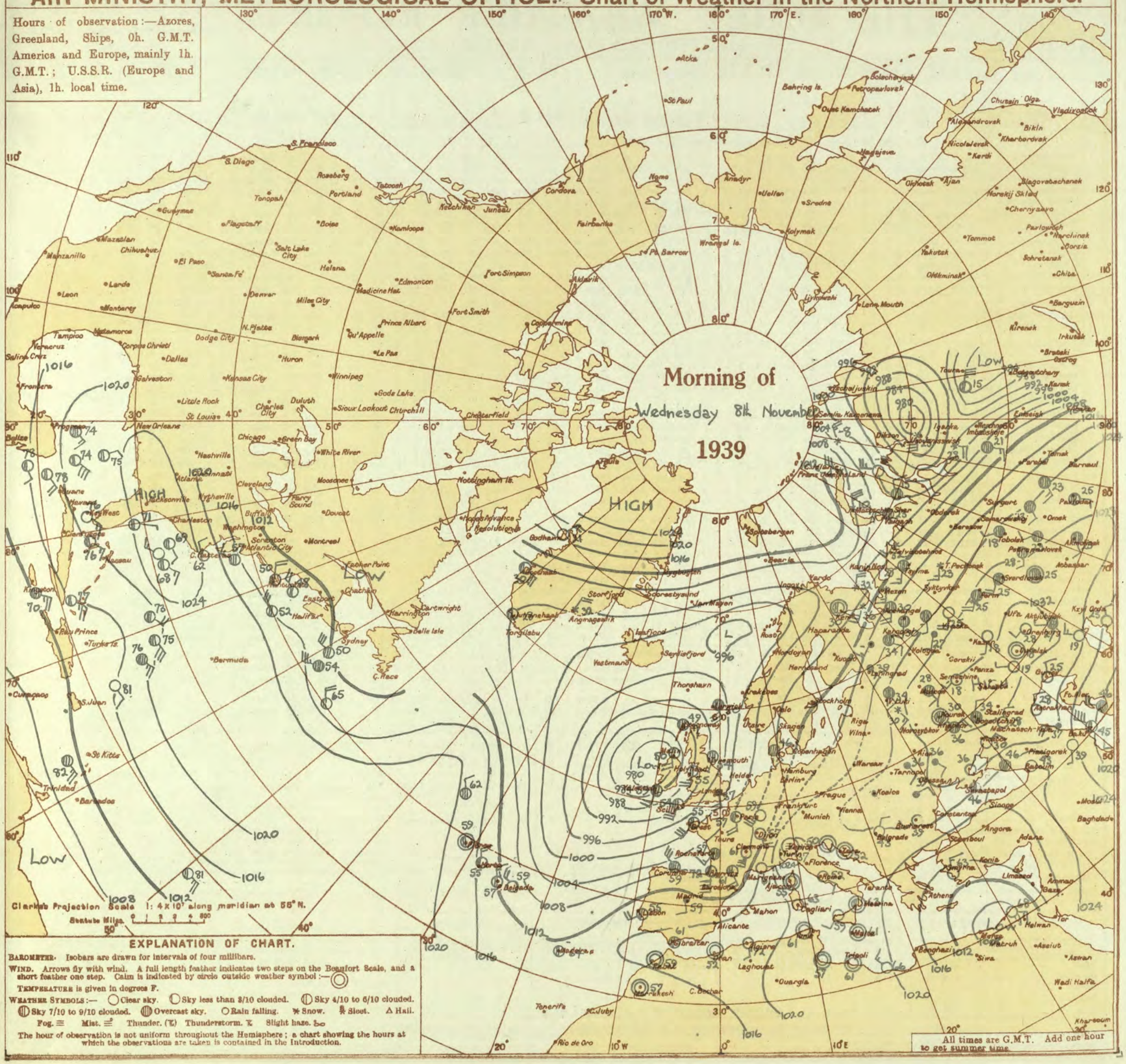
Forecasts issued at 0930 G.M.T.

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

Wednesday 8th November 1939.

No. 28,475.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	998.9	-14	S	4	pr	57	85	6	2	-	·	4-6	4-6	2500
	S. Farnborough	226														
	Boscombe Down	417	995.6	-10	S	6	rr	54	92	6	5	·	·	10	10	1500
	Calshot (Sthmtn.)	8	997.3	-10	S	6	ir	57	85	6	5	2	·	7-8	10	1500
	Lympne ...	346	1001.3	-14	S'E	3	c	55	85	7	5	·	·	7-8	7-8	4000
	Manston ...	154	1000.4	-18	SSE	2	z	56	85	6	5	·	·	4-6	4-6	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	999.6	-14	S	4	z	53	92	5	-	-	7	0	10	-
	Gorleston ...	5	999.9	-16	S	5	c	54	92	6	5	-	-	7-8	7-8	2500
	Mildenhall ...	19	997.4	-10	SSE	4	z	58	85	6	-	7	-	0	9	-
	Cranwell ...	240	987.5	-18	S	4	z	55	83	6	5	-	-	7-8	7-8	1500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408														
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	999.1	+8	SW	6	bc	55	85	8	5	-	-	4-6	4-6	1500
	Bristol ...	209	994.4	-6	S	6	c/r	55	85	7	6	2	·	7-8	10	1500
	Portland Bill ...	32	997.5	-12	SSW	4	o	55	92	7	5	-	-	10	10	1500
	Plymouth ...	82	994.2	+8	SW	6	c	56	85	7	5	-	-	7-8	7-8	1500
	The Lizard ...	240	992.5	+2	S	7	bc	54	92	8	4	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	990.2	+6	SSW	6	b	54	92	7	-	-	·	0	0	-
	Guernsey ...	175														
6	Pembroke ...	142	988.1	+4	SW	7	bcq	55	85	7	8	-	-	4-6	4-6	1500
7	Holyhead ...	26	987.4	+6	S	5	c	55	85	8	8	-	-	7-8	7-8	2500
	Chester (Sealand)	16	990.7	-8	S	3	c/r	53	85	7	5	-	-	9	9	5700
8	Manchester ...	70	991.2	-18	S	4	roro	54	92	6	6	2	·	7-8	10	1500
10	Spurn Head ...	29	998.2	-10	SSE	4	c	52	92	7	5	-	-	10	10	1500
	Catterick ...	175	991.5	-14	S'E	2	id	53	97	5	5	-	-	10	10	450
	Tynemouth ...	108	991.7	-12	S	3	c	54	92	6	8	-	-	9	9	1500
11	St. Abbs Head	280	989.1	-18	SE	3	c	51	92	5	4	6	-	4-6	9+	1500
	Leuchars ...	36	988.3	-32	-	0	z	47	97	6	5	-	·	9+	9+	4000
12	Renfrew (Abbots I.)	19	987.8	-22	SE	2	rr	52	92	3	5	-	·	10	10	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	987.0	-18	SW'S	4	c	53	97	7	8	-	·	7-8	7-8	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	987.6	-20	E	3	roro	49	92	7	5	2	-	2-3	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	989.0	-20	SSE	5	c	50	97	6	5	7	-	7-8	9+	1500
16	Lerwick ...	156	993.5	-10	S	6	o	50	97	6	5	-	-	10	10	450
17	Blacksod Point	18	978.0	-4	S	4	bc	50	85	8	8	-	·	4-6	4-6	800
18	Malin Head ...	84	980.3	+14	S	4	bc	50	85	7	8	-	-	4-6	4-6	4000
	Aldergrove ...	268	982.8	-12	S'E	4	b	51	85	8	5	-	-	1	1	2500
19	Birr Castle ...	173	981.6	+2	S	4	b	50	85	8	-	-	·	0	0	-
20	Valentia Obsy.	30	979.0	+8	SSW	4	c/pr	50	97	7	3	·	-	7-8	7-8	2500
	Roches Point	22														

OBSERVATIONS at 7 hr. G.M.T. 8th November — PAST 24 HOURS

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	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)	999.5	+12	SW'S	4	pr	54	85	7	5	1	-	9	10	1500	1	*	58	54	51	1	0.3	0.0
Croydon	999.9	+10	S'W	4	c/r	54	85	7	6	2	-	4-6	10	1500	1	*	57	53	51	1	0.6	0.1
S. Farnborough	999.4	+10	SSW	4	c/d	53	85	6	8	7	1	7-8	9	1500	1	*	57	58	50	3	4	0.3
Boscombe Down	997.4	+8	S'W	4	pr	52	92	6	5	-	-	9+	9+	1500	1	*	56	51	44	7	7	0.0
Calshot (Sthmtn.)	999.3	-14	SSW	5	bc	54	92	7	8	3	4	2-3	4-6	1500	1	4	57	53	52	2	1	0.0
Lympne	1002.8	+14	SW	5	rr	53	97	6	9	2	·	7-8	10	450	1	§4	55	53	51	3	6	0.0
Manston	1001.8	+22	SW'S	5	rr	55	92	6	5	2	-	7-8	10	1500	1	*	57	54	48	1	1	0.0
Shoeburyness	1001.0	+14	SSW	5	c	53	85	6	8	2	-	2-3	10	1500	1	*	55	53	48	0.6	0.4	0.0
Felixstowe	1000.2	+14	S'W	4	ir	53	92	6	-	7	-	10	10	4000	1	3	54	51	49	1	0.4	0.0
Gorleston	1000.7	+8	S	4	ir	55	85	6	6	2	·	4-6	10	1500	1	3	54	52	51	0.4	0.1	*
Mildenhall	998.0	+6	S'W	5	c/r	55	85	7	5	2	-	1	9+	4000	1	*	56	54	50	Tr	0.5	0.0
Cranwell	995.6	+10	S'W	4	c	52	92	7	5	1	-	9	10	1500	1	*	55	50	49	0.3	3	0.1
Birmingham	994.7	+4	SSW	4	bc	51	85	6	-	-	6	0	4-6	-	1	*	55	52	47	3	5	0.4
Upper Heyford	997.6	+10	SSW	4	bc	52	85	7	6	7	-	2-3	4-6	1800	1	*	55	51	46	4	3	*
Ross-on-Wye	994.7	+6	S	4	bc	52	85	7	9	-	3	1	2-3	2500	1	*	57	52	47	6	3	0.1
Hartland Point	992.1	+6	SW	6	c	55	85	8	8	-	·	7-8	7-8	1500	1	4	57	53	51	1	3	0.9
Bristol	996.3	+12	SSW	3	c	54	85	8	8	·	·	7-8	7-8	2500	1	*	58	53	46	7	7	0.5
Portland Bill	998.0	+12	SW	5	c	56	92	7	5	4	-	10	10	2500	1	5	57	53	*	6	2	*
Plymouth	995.6	+8	SSW	6	z	56	85	6	5	-	·	7-8	7-8	1500	1	4	56	55	53	4	-	0.0
The Lizard	994.7	+20	S	7	c	54	97	8	8	2	·	9	10	2500	1	4	57	53	*	2	3	0.0
Scilly (St. Mary's)	991.1	+8	SW'S	6	bc	54	92	7	3	8	-	2-3	4-6	1500	1	4	55	53	*	0.1	0.4	1.2
Guernsey	1000.3	+20	S'E	3	c	55	85	7	5	7	8	2-3	7-8	2500	1	3	59	55	48	-	1	0.1
Pembroke	990.4	+8	SW'S	7	cq	55	85	7	8	4	-	7-8	7-8	1500	1	4	55	53	*	3	2	2.8
Holyhead	987.8	+10	S	6	c/r	55	85	7	6	-	·	9	9	1500	1	3	57	52	50	0.6	2	3.6
Chester (Sealand)	991.4	+8	SSE	3	pr	52	75	7	8	·	·	4-6	4-6	2500	1	*	55	51	44	0.6	2	0.1
Manchester	992.4	+8	SSE	3	z	51	88	6	5	4	-	4-6	4-6	2500	1		56	51	44	1	1	2.1
Spurn Head	995.8	+8	S'W	3	c	51	92	7	-	5	-	0	7-8	-	1	7	52	50	*	0.4	2	2.3
Catterick	991.8	+4	SSE	5	z	50	85	6	6	7	-	4-6	7-8	1500	1	*	54	49	44	0.1	2	2.6
Tynemouth	991.1	+8	S	3	bc	51	85	6	2	-	-	4-6	4-6	2500	1	2	54	50	47	-	0.6	*
St. Abbs Head	988.6	+4	S	6	c	50	85	7	5	6	1	4-6	9	2500	0	1	56	46	*	0.2	0.3	*
Leuchars																*	51			8		
Renfrew (Abbots I.)	985.4	-18	SE'E	2	ir	50	92	6	6	2	-	9	10	1500	1	*	52	49	43	15	3	0.0
Eskdalemuir	987.3	-4	S	5	ir	49	88	8	6	-	-	10	10	800	1		55	48	39	1	3	0.6
Point of Ayre	986.2	-4	SW'S	5	rr	53	92	7	8	1	-	4-6	7-8	1500	1	3	55	51	*	1	5	0.1
Tiree	980.3	+4	S'E	4	c	50	85	7	8	-	-	7-8	7-8	1500	1	4	52	48	47	0.2	14	0.0
Stornoway	983.2	-20	SE	4	pr	51	85	7	8	7	·	7-8	9+	1500	1	2	52	48	*	0.5	7	1.2
Dalwhinnie	985.4	-4	S	3	c	45	85	7	8	6	-	4-6	7-8	2500	0	*	47	44	43	6	3	0.0
Aberdeen	987.3	-4	SW'S	2	c	51	85	6	3	-	·	9	9	4000	1	2	52	50	45	-	1	0.0
Wick	985.2	-22	SE	3	c	51	97	6	5	7	·	7-8	9+	1500	1	2	52	50	*	1	0.5	*
Lerwick	987.6	-32	SSE	5	df	50	97	3	-	·	·	10	10	<150	1	*	52	49	*	1	1	0.0
Blacksod Point	978.5	0	S	4	c	51	85	8	9	-	·	7-8	7-8	800	1	3	53	48	*	Tr	5	*
Malin Head	980.1	+2	S	4	c	48	85	8	8	8	-	4-6	7-8	4000	1	3	51	46	*	7	4	0.0
Aldergrove	982.5	-2	S	4	pr	50	88	7	5	3	-	4-6	7-8	2500	1	*	54	48	42	10	14	0.0
Birr Castle	982.0	+6	S	2	▽/pr	51	97	7	9	-	-	7-8	7-8	1500	1	*	54	47	45	18	13	0.0
Valentia Obsy.	978.6	+6	S'W	6	▽/pr	53	85	7	9	-	·	9	9	1500	1	5	55	49	47	8	11	0.0
Roches Point																	57		*	14		*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning (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	cm ir m	c ir m	cm bcq	58	54	51	1	0.3	0.0	*	*	8
Croydon ...	217	cd dd m	c ir m	c s pr m	57	53	51	1	0.6	0.1	*	*	5
Greenwich (Royal Observatory) ...	149												
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	60	52	51	0.3			85	79	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	57	51	50	0.6	Tr		87	81	*
Camden Square ...	110	c	o	*	59	51	49	0.5	-	*	*	85	*
Kensington ...	80	cp	c	*	60	54	49	0.3	0.3		89	84	*
Hampstead Observatory ...	450	pr	b	bcp	58	49	48	-	1		*	89	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

	Max.	Time.	Min.	Time.
South Kensington				
Kew Observatory	0.1	12h 7th	<0.1	1-6h 8th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 7th November: Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 8th November: Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours: Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1006.9	-	0	z	57	1007.5	SSW	3	ir	57	68	54	1	0.3
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1020.6	WNW	2	b	53	1023.1	E	2	z	50	*	*	-	-

‡ 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 Precipitous.
4 Rough. 9 Confused.

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

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

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

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 9th November 1939.

No. 28,476.

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

District	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1001·5	+4	SSW	5	c	56	75	7	8	–	–	7-8	7-8	2500
	Croydon	1003·0	+10	SSW	4	c/pr	56	75	8	2	6	-	4-6	7-8	2500
	S. Farnborough	1001·6	+8	SSW	5	zo	57	75	8	7	–	-	7-8	7-8	2500
	Boscombe Down	1000·0	+10	SSW	6	c	56	75	8	8	–	-	9	9	2500
	Calshot (Soton.)	1002·0	+6	S'W	7	bc	57	85	7	1	1	–	1	2-3	1500
	Lympne ...	1005·6	+14	SW	6	c	55	85	7	1	3	1	7-8	9	800
	Manston ...	1004·6	+14	SW'S	5	c	56	85	7	5	3	1	7-8	9	1500
2	Shoeburyness ...	1003·9	+4	SSW	5	c	57	75	8	8	1	1	4-6	9	2500
	Felixstowe ...	1002·3	+10	SSW	5	bc	57	75	7	2	4	6	Tr	4-6	2500
	Gorleston ...	1002·0	+6	S	5	bc	58	75	6	2	–	1	4-6	4-6	1500
	Mildenhall ...	1000·0	+6	S'W	6	bc	59	65	7	1	4	6	4-6	4-6	2500
	Cranwell ...	997·0	+2	SSW	6	bc	58	75	8	1	7	5	2-3	4-6	1500
3	Birmingham	996·5	+4	SSW	5	c/pr	52	92	7	6	7	–	9	9	800
	Upper Heyford	998·7	+2	S	6	c	57	65	8	8	4	-	7-8	9	1500
4	Ross-on-Wye ...	996·0	0	S'W	6	c/r	54	85	8	9	-	1	7-8	9	2500
5	Hartland Point	992·3	0	WSW	7	bc	55	75	7	9	–	-	2-3	4-6	1500
	Bristol	997·4	0	SSW	5	c/pr	56	75	8	9	-	9	9	9+	1500
	Portland Bill ...	1001·2	+16	SW	5	c	57	92	7	5	4	-	4-6	9	4000
	Plymouth ...	997·2	+4	SSW	7	zo	56	85	6	8	3	-	4-6	7-8	1600
	The Lizard ...	997·5	+6	S	7	c	56	97	7	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	993·1	+6	SW'S	7	cq	56	85	6	8	6	3	4-6	7-8	1500
	Guernsey ...	1002·9	+2	SSW	5	b	60	75	7	1	3	-	Tr	1	2500
6	Pembroke ...	1020·7	c	SW	7	cq	65	92	7	8	6	-	4-6	7-8	1500
7	Holyhead ...	988·2	0	S'W	6	ir	55	85	6	6	-	-	9+	9+	800
	Chester (Sealand)	992·1	-2	SSE	4	c/pr	53	85	7	8	-	-	9+	9+	1500
8	Manchester ...	993·2	-2	S	4	c/pr	54	85	6	8	4	3	4-6	7-8	2500
10	Spurn Head ...	996·0	+2	S'W	5	c	56	75	6	5	8	8	4-6	7-8	5700
	Catterick ...	992·2	-2	SSW	3	c/pr	53	85	6	9	8	1	7-8	9	800
	Tynemouth ...	990·9	-8	S	4	bc	55	75	6	8	3	-	4-6	4-6	2500
11	St. Abbs Head	987·9	-6	SSE	4	c	54	75	8	8	6	-	7-8	9+	1500
	Leuchars ...	987·1	-2	S	3	pr	50	92	8	8	7	-	7-8	9+	1500
12	Renfrew (Abbots I.)	985·9	-2	S	4	zo	55	75	6	6	2	-	9+	10	1500
	Eskdalemuir ...	987·8	0	S'W	4	RR	49	92	7	6	-	-	10	10	800
	Point of Ayre ...	987·4	+2	SW	5	c	56	85	7	8	-	-	9	9	1500
13A	Tiree	970·8	-8	S	4	dd	49	92	7	-	2	-	9+	9+	1500
13B	Stornoway ...	982·1	-6	S	4	c	52	85	8	5	4	5	4-6	9	2500
15	Dalwhinnie ...	986·0	-8	S	2	ir	49	85	7	8	5	-	4-6	7-8	2500
	Aberdeen ...	986·3	-8	S'W	5	c	53	85	6	7	9	-	2-3	7-8	2500
	Wick	983·4	-12	SSE	4	c	52	97	7	5	9	2	2-3	9	2500
16	Lerwick... ...	985·4	-8	S	5	c	50	97	7	5	2	-	7-8	10	800
17	Blacksod Point...	978·6	0	SW	3	c	53	85	8	9	-	-	7-8	7-8	800
18	Malin Head ...	979·9	-4	S	5	c	56	85	8	6	-	8	4-6	7-8	4000
	Aldergrove ...	983·0	+2	SSE	4	c	53	85	8	8	3	-	9	9+	2500
19	Birr Castle ...	982·6	-8	S	2	c/pr	55	85	7	3	7	-	4-6	7-8	1500
20	Valentia Obsy. †	981·6	+14	W	5	c/pr	53	97	8	9	4	-	9	9+	800
	Roches Point ...														

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

Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1002·5	+6	SW'S	5	c	55	75	7	5	-	-	7-8	7-8	2500	1	*
Croydon	1003·2	+4	S'W	5	c	56	75	7	2	-	-	7-8	7-8	1500	1	*
S. Farnborough	1002·3	+4	SSW	4	iro	55	85	7	5	2	-	7-8	9+	2500	1	*
Boscombe Down	1000·7	+10	SSW	6	bc/pr	53	92	6	9	-	-	4-6	4-6	1600		*
Calshot (Soton.)	1002·7	+6	S'W	7	zo	56	85	6	5	-	-	7-8	7-8	1500	1	4
Lympne	1006·6	0	SSW	5	c	53	85	7	5	-	6	7-8	9	2500	1	§4
Manston	1005·7	+2	SW	5	bc	55	85	7	5	3	-	2-3	4-6	4000	1	*
Shoeburyness	1004·5	+4	S	6	c	55	85	6	8	-	-	9	9	2500	1	*
Felixstowe	1003·0	+6	SSW	4	b	53	85	7	7	-	-	1	1	2500	1	3
Gorleston	1002·4	+4	S	5	bc	54	75	6	5	-	-	2-3	2-3	2500	1	3
Mildenhall	1000·6	+4	S'W	5	c	57	65	7	5	-	-	7-8	7-8	5700	1	*
Cranwell	996·7	-2	SE'S	6	bc/r	55	75	7	5	-	-	4-6	4-6	2500	1	*
Birmingham	996·7	-2	S'W	6	bc/r	55	75	7	5	-	-	4-6	4-6	2500	1	*
Upper Heyford	999·3	+4	SSW	5	bc/pr	53	85	7	5	4	-	4-6	4-6	2500	1	*
Ross-on-Wye	996·8	+10	SW'S	3	bc/pr	58	85	7	8	-	-	2-3	2-3	2500	1	*
Hartland Point	995·0	+8	WSW	8	c	55	85	7	9	-	-	7-8	7-8	1500	1	4
Bristol	991·	+14	S'W	4	bc/pr	53	85	7	9	4	-	4-6	4-6	1500	1	*
Portland Bill	1002·3	+6	SW	5	o	56	92	7	5	-	-	10	10	2500	1	5
Plymouth	999·4	+16	SW	7	zo	56	85	7	5	-	-	4-6	4-6	1500	1	5
The Lizard	1000·1	+16	SSW	7	c	54	97	7	8	6	-	7-8	7-8	2500	1	4
Scilly (St. Mary's)	996·3	+20	SW'S	6	bc	54	92	6	8	4	3	4-6	4-6	1500	1	4
Guernsey	1004·6	+18	SSW	5	c	56	85	7	2	1	-	7-8	9	2500	1	4
Pembroke	992·3	+14	SW	8	cq	54	97	7	8	6	-	7-8	9+	1500	1	4
Holyhead	987·5	+2	SSW	7	c/pr	54	85	7	9	-	-	9+	9+	1500	1	4
Chester (Sealand)	991·5	-4	S	5	pr	54	75	6	8	-	-	2-3	2-3	2500	1	*
Manchester	992·4	-4	S	5	bc/pr	53	85	6	8	-	-	4-6	4-6	2500	1	*
Spurn Head	996·0	+2	S'W	6	bc	54	75	7	5	-	-	4-6	4-6	2500	0	4
Catterick	991·9	0	S	5	bc/pr	53	85	6	8	3	-	4-6	4-6	1500	1	
Tynemouth	990·0	-8	S	4	bc	53	75	6	2	-	-	4-6	4-6	2500	1	2
St. Abbs Head	986·6	-6	S	5	c/r	52	75	8	8	6	-	7-8	9	1500	0	3
Leuchars	985·4	-8	S	4	bc/pr	52	85	8	4	6	-	4-6	4-6	2500	1	*
Renfrew (Abbots I.)	983·4	-10	S'E	2	zo	54	85	5	5	-	-	7-8	7-8	1500	1	*
Eskdalemuir	986·3	-4	S	6	c/r	49	92	7	6	-	-	10	10	800	1	*
Point of Ayre	984·7	-12	SW'S	6	pr	53	92	7	8	7	-	7-8	9+	1500	1	3
Tiree	978·8	-2	SW'W	2	dr	49	92	6	-	2	-	10	10	1500	1	3
Stornoway	980·6	-4	SSE	4	iro	49	85	7	8	2	-	7-8	10	1500	1	2
Dalwhinnie	982·3	-12	S	4	ir	47	92	7	6	2	-	7-8	10	1600	1	*
Aberdeen	985·1	-14	S	3	c	52	85	6	5	-	-	7-8	7-8	2500	4	1
Wick	981·4	-10	S	4	bc	51	92	7	5	7	1	4-6	4-6	2500	1	2
Lerwick	984·0	0	SW	5	c	50	92	7	5	7	-	7-8	9	800	1	*
Blacksod Point	981·5	+38	WNW	4	c	51	92	7	5	-	-	9+	9+	450	1	3
Malin Head	978·7	-2	S	3	bc	51	85	7	5	4	-	4-6	4-6	2500	1	3
Aldergrove	980·1	-16	S'E	4	pr	51	85	7	8	-	-	9+	9+	1500	1	*
Birr Castle	984·7	+28	SW	3	c/pr	51	92	8	3	7	-	7-8	9	1500	1	*
Valentia Obsy. †	990·1	+28	W	4	c	53	85	8	8	3	-	7-8	7-8	1500	1	4
Roches Point	989·9	+26	W	4	bc	52	92	8	8	-	5	4-6	4-6	1500	1	5

PAST 24 HOURS. WEATHER.

Stations.	7h.—13h. 8th (37)	13h.—18h. 8th (38)	18h. 8th to 1h. 9th (39)	1h.—7h. 9th (40)
London (Kew)	cproc	qbc	crocrobc	crocrrobc
Croydon	cbccpro	bcc	cprcbcm	bcprocrm
S. Farnborough	idobcprc	crcro	bccirc	ircmbc
Boscombe Down	ccq	cqprcpR	cprmbm	bmcpr
Calshot (Soton.)	cbcmob	bqbcmo	cmbcpro	bcqcpRm
Lympne	crmoc	cbc	cbbc	bcc
Manston	orrmoc	cbczbc	bcc	ceprcm
Shoeburyness	cbc	bcc	cbcc	prirc
Felixstowe	cirobc	bcprobc	bcb	bcmcpr
Gorleston	circbcq	bcq	bczo	bcprq
Mildenhall	cbc	bcc	cbcprobbc	bcbbc
Cranwell	cbc	probirobc	bcbbc	b,c
Birmingham	bccpr	probirobc	bc	bcciro
Upper Heyford	cprobc	cbcprobc	cdprbcb	bmpr
Ross-on-Wye	bcpoqcq	rcqipbcqpo	bcq	bccr
Hartland Point	cpbcq	bcpbc	cpbc	bccrr
Bristol	bccppo	cipoq	bcqbc	croRRbc
Portland Bill	c	c	bcbc	bcorr
Plymouth	bcmocpr	cpromo	bcbbc	bccpr
The Lizard	cq	cbccq	bcprc	cprbc
Scilly (St. Mary's)	bcpqc	cqbc	bccp	cpqbc
Guernsey	cbcb	bbcc	cbc	bc
Pembroke	rrcq	cprq	RRcq	bcproc
Holyhead	prorroc	propre	cbc	
Chester (Sealand)	bccpr	pbprbzo	bbczcPR	
Manchester	proqpr	bcprqcbcmo	bm,bmpro	prcmpro
Spurn Head	cq	cq	cb	bcc
Catterick	bcmocpr	probcmo	bcmpro	cmproc
Tynemouth	bc	bc	bcpbc	bcpo
St. Abbs Head	bcc	iroc	cir	cbc
Leuchars	ciRqpro	cprocbc	iroiRrorocbc	bbcc
Renfrew (Abbots I.)	cmotlrmo	cmopr		cmpropr
Eskdalemuir	iRRR	RroR	ciRrr	orrm
Point of Ayre	proc	cpr	cprqc	probc
Tiree	coRR	orRR	ciRbc	bcpr
Stornoway	cpr	crrir	cRR	bccPR
Dalwhinnie	cRrir	cRr	cmprpro	cicR
Aberdeen	bczo	bcprobc	bcbproc	cbc
Wick	mobcc	cbc	bcc	cproc
Lerwick	dfirc	c	cpr	cpromo
Blacksod Point	proc	irob	bcq	procq
Malin Head	crrcprc	cproc	cprcbc	cbcc
Aldergrove	cprobcc	procpro	cproc	cprobcb
Birr Castle	cpro	cpr	cprbc	bbc
Valentia Obsy. †	prpropr c	cprc	cprobc	bcprobc
Roches Point		prcbc	bc	bcb

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

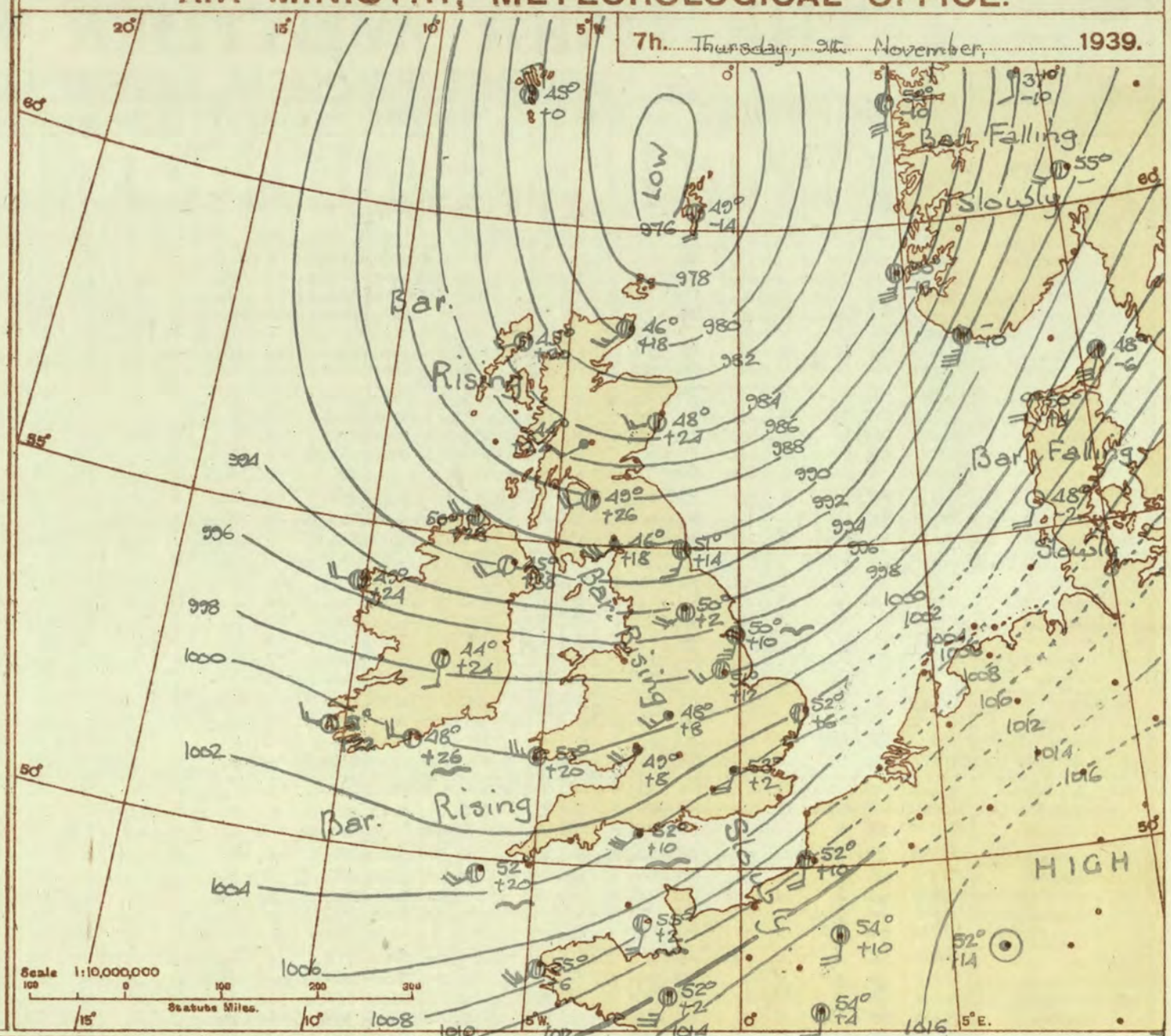
Cloud form abbreviations:— Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac; Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



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. 9th November, 1939.
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.	Wind west to southwest, strong, squally at first, moderating; showers of rain or hail, with thunder locally, but bright periods; cooler than of late.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Wind west to northwest, fresh or strong; squally showers of rain or hail, with thunder locally; bright intervals; cooler than of late.
~~17 N. W. Ireland~~ 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind west, backing later to southwest, fresh; showery to-day, with bright intervals; some rain tomorrow; average temperature.

RAW

GENERAL INFERENCE.

A deep depression near Shetland is filling up and moving away northeastwards. The wind will remain westerly and gradually moderate. There will be showery weather in all districts with showers of rain or hail and a lower temperature than of late. A new depression will affect the west tomorrow.

FURTHER OUTLOOK.

Generally unsettled with southwesterly winds.

Times of issue of Gale Warnings.

South Cone hoisted in districts 5 and 6 on 6/11/39 at 2230.

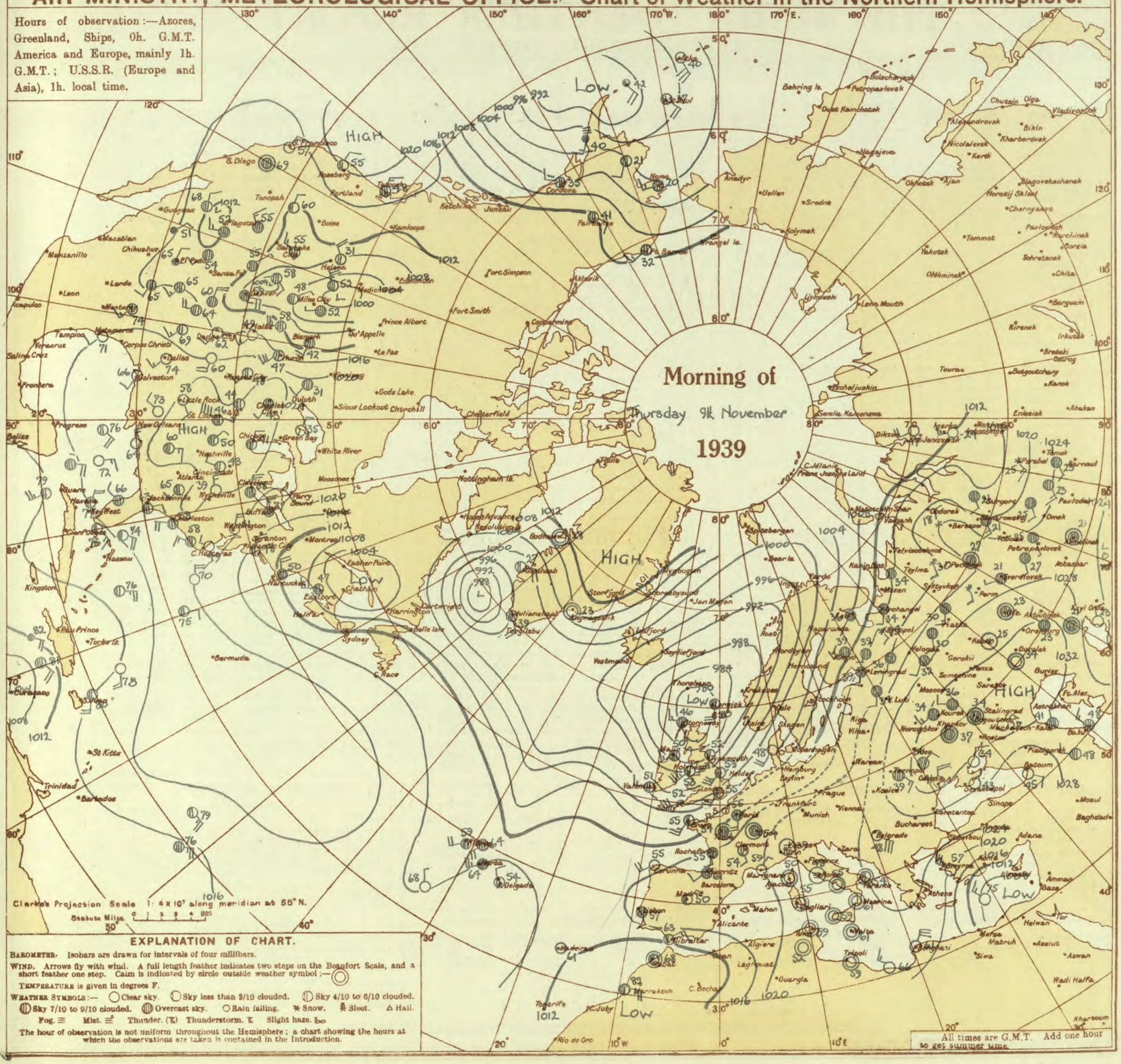
South Cone hoisted in districts 1,2,7,8,10,11, and 12. on 8/11/39 at 1845.

Forecasts issued at 0930 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 9th November 1939.
No. 28476

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1003.3	+2	SSW	4	bc	55	85	7	2	-	-	4-6	4-6	2500
	S. Farnborough	226	1003.2	+2	SW	5	c/r	53	85	6	5	-	-	9	9	4000
	Boscombe Down	417	1001.6	+2	SSW	5	b	52	85	6	5	-	-	1	1	1500
	Calshot (Sthmtn.)	8	1003.3	0	SW'S	6	bc	55	85	7	8	-	-	2-3	2-3	1500
	Lympne ...	346	1006.8	-2	SW'S	5	c	53	85	7	5	-	-	7-8	7-8	2500
	Manston ...	154	1005.4	-6	SW'S	6	c	55	85	7	5	-	-	9	9	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1003.3	-2	SW	6	≋	53	85	6	5	-	-	4-6	4-6	4000
	Gorleston ...	5	1002.2	0	S	6	bc	53	85	6	5	-	-	4-6	4-6	2500
	Mildenhall ...	19	1000.5	-2	SSW	6	bc/pr	55	75	7	5	-	-	2-3	2-3	4000
	Cranwell ...	240	997.3	+2	SSW	5	bc	53	85	6	5	-	-	2-3	2-3	1500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1000.6	+6	SSW	4	b	51	85	7	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	997.9	+10	WSW	6	bc	54	85	8	3	-	-	2-3	2-3	2500
	Bristol ...	209	1000.7	+8	SW	4	bc	53	85	7	5	-	-	2-3	2-3	1500
	Portland Bill ...	32	1002.9	+10	SW	6	bc	55	92	7	5	-	-	4-6	4-6	4000
	Plymouth ...	82	1001.5	+4	SW'W	6	bc	55	85	7	5	-	-	4-6	4-6	2500
	The Lizard ...	240	1001.9	+6	S'W	5	c/pr	52	97	7	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	163	999.1	-2	SW'S	5	pr	52	97	7	8	-	-	7-8	7-8	1500
	Guernsey ...	175	1005.7	0	SSW	4	bc	55	85	7	2	-	-	4-6	4-6	2500
6	Pembroke ...	142	996.5	+8	WSW	7	c/r	53	85	7	8	-	-	7-8	7-8	1500
7	Holyhead ...	26	991.6	+22	SW'W	7	c	53	75	8	5	-	-	7-8	7-8	2500
	Chester (Sealand)	16	994.2	+16	SSW	5	PR	52	75	6	3	-	-	10	10	800
8	Manchester ...	70	993.4	+6	S'W	5	pr	52	85	6	8	-	-	4-6	4-6	2500
10	Spurn Head ...	29	994.7	-6	SSW	6	bc	53	76	7	5	-	-	2-3	2-3	5700
	Catterick ...	175	990.0	-8	SSW	6	bc/pr	51	85	7	5	-	-	2-3	2-3	2500
	Tynemouth ...	108	987.5	-8	S	5	bc	52	75	7	2	-	-	4-6	4-6	2500
11	St. Abbs Head	280	983.3	-4	SSW	5	ir	49	92	7	3	2	-	7-8	10	1500
	Leuchars ...	36	981.7	+8	SSW	4	bc	50	85	7	5	-	-	4-6	4-6	2500
12	Renfrew (Abbots I.)	19	982.5	+10	WSW	4	c/pr	51	92	6	5	-	-	9+	9+	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	987.1	+20	W'S	6	c	51	92	7	8	-	-	9	9	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	980.2	+4	W	3	c	46	92	7	5	7	-	4-6	7-8	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	977.2	-30	S	4	c	51	97	7	5	7	-	7-8	9+	1500
16	Lerwick ...	156	980.8	-20	S	6	c/pr	50	97	7	8	2	-	7-8	10	800
17	Blacksod Point	18	991.4	+32	WN	5	bcq	49	75	7	8	-	-	4-6	4-6	800
18	Malin Head ...	84	984.0	+36	SW	3	c/pr	50	92	7	8	-	-	7-8	7-8	4000
	Aldergrove ...	268														
19	Birr Castle ...	173	992.8	+28	WNW	2	bc	48	92	8	3	-	-	2-3	2-3	1500
20	Valentia Obsy.	30	996.5	+24	W	3	bc	51	85	8	8	-	-	2-3	2-3	2500
	Roches Point	22	996.1	+20	W	4	bc	50	92	8	5	-	-	2-3	2-3	2500

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1003.4	+2	SW	4	bc/r	51	92	6	8	-	-	4-6	4-6	1500	1	*
	Croydon ...	1003.9	+2	SSW	4	rr	53	92	6	6	2	-	7-8	10	1500	1	*
	S. Farnborough	1003.1	+2	SW'S	5	bc/r	51	85	7	8	-	3	2-3	4-6	1500	1	*
	Boscombe Down	1003.3	+18	SW'W	4	pr	49	92	6	5	1	-	4-6	9	1500	1	*
	Calshot (Sthmtn.)	1004.2	+8	SW	6	PR	52	85	6	8	-	-	9+	9+	1500	1	4
	Lympne ...	1006.7	0	SW'S	5	c	53	85	8	8	-	-	9	9	1500	1	§4
	Manston ...	1005.6	+6	SW'S	6	c/pr	54	85	6	8	-	-	9	9	1500	0	*
2	Shoeburyness ...	1004.6	+6	SSW	6	c	54	85	7	8	-	-	9+	9+	1500	1	*
	Felixstowe ...	1003.4	-4	SW'S	6	pr	52	85	7	9	6	-	4-6	7-8	1500	1	4
	Gorleston ...	1002.9	+6	S'W	4	bc	52	85	7	5	-	-	2-3	2-3	2500	1	3
	Mildenhall ...	1001.1	+4	S'W	5	c	52	85	7	8	9	3	2-3	7-8	4000	1	*
	Cranwell ...	999.0	+12	SW'W	3	c	51	85	8	5	3	-	7-8	9	1500	0	*
3	Birmingham ...	999.5	+8	SW	3	ir	48	92	6	6	-	-	10	10	800	1	*
	Upper Heyford	1001.1	+2	SW	5	PR	50	92	6	9	4	-	7-8	9+	800	1	*
4	Ross-on-Wye	1000.4	+8	SW	4	ir	49	92	7	6	-	-	9+	9+	1500	1	*
5	Hartland Point	1000.2	+30	W	5	c	52	92	8	8	-	-	7-8	7-8	1500	1	3
	Bristol ...	1001.3	+6	WSW	4	c/p	49	85	7	9	3	3	4-6	7-8	1500	1	*
	Portland Bill ...	1003.0	+10	SW	6	rr	52	85	7	5	-	-	10	10	1500	1	5
	Plymouth ...	1002.6	+22	WSW	4	pr	53	92	6	8	-	-	7-8	7-8	1500	1	5
	The Lizard ...	1003.3	+20	SW	5	bc	53	97	8	8	4	-	4-6	4-6	2500	1	4
	Scilly (St. Mary's)	1002.3	+20	SW'W	4	bc	52	97	7	3	4	-	2-3	4-6	1500	0	4
	Guernsey ...	1005.8	+2	SSW	4	bc	55	85	7	2	3	-	4-6	4-6	2500	1	4
6	Pembroke ...	999.8	+20	W	5	c	53	92	8	8	6	-	4-6	7-8	1500	1	3
7	Holyhead ...																*
	Chester (Sealand)																*
8	Manchester ...	996.6	+18	SW'S	4	≋	49	85	6	5	4	-	2-3	4-6	4000	1	*
10	Spurn Head ...	996.2	+10	SSW	5	c	50	85	7	5	8	6	4-6	9	2500	0	4
	Catterick ...	993.7	+2	SW	4	c/pr	50	75	8	9	-	-	9+	9+	1500	1	*
	Tynemouth ...	990.6	+14	SSW	3	c/pr	51	85	6	8	-	-	7-8	7-8	2500	1	1
11	St. Abbs Head	986.6	+20	W	5	bc	48	85	8	4	4	9	4-6	4-6	2500	0	3
	Leuchars ...	985.9	+28	SSW	3	c	48	92	7	5	-	1	4-6	7-8	2500	1	*
12	Renfrew (Abbots I.)	988.2	+26	WSW	4	c/pr	49	85	8	8	6	-	7-8	9	1500	1	*
	Eskdalemuir ...	988.8	+18	SW	6	rr	46	92	6	-	2	-	10	10	800	1	*
	Point of Ayre ...	993.3	+36	W'S	5	bc	49	92	8	8	4	-	4-6	4-6	1500	1	3
13A	Tiree	986.1	-26	WNW	5	pr	49	85	8	8	-	-	7-8	7-8	1500	0	4
13B	Stornoway ...	983.2	+20	WSW	1	c/pr	45	92	7	5	7	-	4-6	7-8	2500	1	1
15	Dalwhinnie ...	985.1	+22	SW	2	RR	44	92	7	8	2	-	7-8	10	2500	1	*
	Aberdeen ...	983.6	+24	WSW	3	bc	48	75	7	5	-	5	4-6	4-6	4000	1	1
	Wick ...	979.7	+18	SW	3	c/pr	46	97	7	5	7	-	7-8	9	1500	1	1
16	Lerwick ...	976.3	-14	S	4	c	49	97	6	8	2	-	7-8	9+	800	1	*
17	Blacksod Point	995.8	+24	W	4	c	49	85	8	9	-	-	7-8	7-8	800	1	3
18	Malin Head ...	990.2	+28	W	4	c/pr	50	75	8	8	-	-	7-8	7-8	2500	0	4
	Aldergrove ...	992.7	+38	SW'W	4	b	45	92	7	5	-	-	1	1	1500	1	*
19	Birr Castle ...	997.8	+24	S	2	bc	44	92	8	5	4	-	2-3	2-3	2500	1	*
20	Valentia Obsy.	1000.1	+22	W	3	bc	51	85	8	8	-	-	4-6	4-6	1500	1	2
	Roches Point	999.5	+26	W	4	b	48	92	8	5	-	-	1	1	4000	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 8½ Hrs. (36)
1	London (Kew)	56	51	*	Tr	4	*
	Croydon ...	58	51	47	Tr	3	0.9
	S. Farnborough	58	50	*	0.1	3	*
	Boscombe Down	57	48	47	1	9	0.6
	Calshot (Sthmtn.)	58	51	49	-	2	5.2
	Lympne ...	56	53	43	0.1	-	1.7
	Manston ...	57	53	50	0.5	-	1.3
2	Shoeburyness ...	57	52	48	-	1	2.7
	Felixstowe ...	57	52	48	Tr	0.3	4.2
	Gorleston ...	59	52	50	Tr	*	*
	Mildenhall ...	60	52	46	-	Tr	5.0
	Cranwell ...	59	49	47	Tr	-	4.9
3	Birmingham ...	55	48	45	2	3	2.6
	Upper Heyford	58	48	44	0.1	6	*
4	Ross-on-Wye	55	49	47	3	1	1.7
5	Hartland Point	56	50	48	Tr	5	0.6
	Bristol ...	57	48	45	10	7	1.5
	Portland Bill ...	57	50	*	-	3	*
	Plymouth ...	58	53	50	1	2	0.4
	The Lizard ...	56	50	*	0.5	1	3.2
	Scilly (St. Mary's)	57	51	*	2	-	5.2
	Guernsey ...	61	55	49	-	-	6.3
6	Pembroke ...	56	49	*	2	15	0.8
7	Holyhead ...				1		
	Chester (Sealand)	56			2	2	
8	Manchester ...	56	48	42	1	3	1.7
10	Spurn Head ...	58	50	*	-	-	4.8
	Catterick ...	55	49	44	2	1	0.7
	Tynemouth ...	56	51	47	-	1	*
11	St. Abbs Head	54	47	*	Tr	2	*
	Leuchars ...	53	47	41	3	4	0.6
12	Renfrew (Abbots I.)	56	48	44	30	4	2.0
	Eskdalemuir ...	52	45	45	15	15	0.3
	Point of Ayre ...	56	49	*	3	1	0.8
13A	Tiree	52	43	39	20	4	0.0
13B	Stornoway ...	52	44	*	2	11	0.0
15	Dalwhinnie ...	49	42	41	16	9	0.1
	Aberdeen ...	53	47	41	Tr	1	1.7
	Wick ...	53	44	*	-	0.2	*
16	Lerwick ...	51	49	*	Tr	0.5	1.3
17	Blacksod Point	55	46	*	1	2	*
18	Malin Head ...	56	46	*	2	5	0.9
	Aldergrove ...	55	44	39	1	2	1.9
19	Birr Castle ...	57	42	39	1	2	2.1
20	Valentia Obsy.	54	49	41	5	1	0.6
	Roches Point	56	47	*	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	cpgc	cbc	cgcgbc	56	51	*	Tr	4	*	*	*	
Croydon ...	217	cbecpc	bcc	cpcrg	58	51	47	Tr	3	0.9	*	*	8
Greenwich (Royal Observatory) ...	149												
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...		*	*	*									*
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. 9th	Max.	Time.	Min.	Time.
South Kensington.				
Kew Observatory.				

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 8th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 9th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1012.9	SSW	3	c	57	1014.1	S	4	c	54	61	54	0.5	-
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...											*	*		

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

EXPLANATION OF FIGURES, LETTERS, etc.

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

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

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

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

COLUMNS 8, 22 — Code for surface visibility.

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

COLUMN 30 — Code for State of Sea.

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

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 10th November, 1939.

No. 28,477

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1005·2	+4	SW'S	4	c	53	92	7	8	-	5	4-6	9	1500
	Croydon	1005·5	+2	SSW	4	c/pr	52	92	6	9	6	3	4-6	7-8	2500
	S. Farnborough	1005·1	+2	SW	3	z₀	54	85	6	7	7	3	7-8	9	1500
	Boscombe Down	1004·7	+2	WSW	3	z₀	55	85	8	8	4	-	7-8	9	1500
	Calshot (Soton.)	1005·7	+2	SW'S	4	z₀	55	85	6	9	3	3	2-3	4-6	800
	Lympne	1008·3	+4	W'S	3	rr	48	97	6	9	-	-	9+	9+	800
	Manston	1006·8	+2	SW	3	pr	50	92	6	9	-	-	9+	9+	1500
2	Shoeburyness	1008·1	+4	SW	3	pr	51	92	7	9	7	-	9	9+	1500
	Felixstowe	1004·7	+8	SW	5	z₀	52	85	6	9	-	3	7-8	9	1500
	Gorleston	1003·8	+6	SW'S	4	c	55	75	7	8	-	-	7-8	7-8	2500
	Mildenhall	1003·1	+8	SW'W	5	c	57	65	8	2	-	3	7-8	7-8	4000
	Cranwell	1001·4	+6	SW	4	z₀	54	75	6	8	-	-	1	1	2500
3	Birmingham	1002·7	+4	WSW	3	bc	54	76	7	8	-	-	4-6	4-6	1500
	Upper Heyford	1003·9	+6	WSW	4	c	55	75	8	8	-	-	7-8	7-8	2500
4	Ross-on-Wye	1003·4	+8	WSW	3	bc	55	65	8	2	-	-	2-3	2-3	2500
5	Hartland Point	1004·5	+14	W	4	bc	53	85	8	8	-	-	4-6	4-6	2500
	Bristol	1004·6	+10	WSW	4	bc	55	75	8	3	4	-	4-6	4-6	2500
	Portland Bill	1006·2	+16	SW	5	c	55	92	8	5	4	-	4-6	7-8	4000
	Plymouth	1006·0	+12	W'S	3	z₀	56	85	8	2	-	-	2-3	2-3	2500
	The Lizard	1006·3	+20	WSW	3	bc	56	97	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1006·2	+14	SW'W	4	bc	56	85	7	2	4	-	1	2-3	2500
	Guernsey	1007·3	+2	SW'S	4	c	56	85	7	8	7	-	4-6	7-8	1500
6	Pembroke	1003·7	+8	W	5	bc	54	85	8	2	-	-	4-6	4-6	1500
7	Holyhead	1000·4	+12	SW	4	c	53	76	8	2	-	-	7-8	7-8	2500
	Chester (Sealand)	1001·1	+4	SW	2	bc	56	65	8	8	6	-	2-3	2-3	2500
8	Manchester	1000·2	+10	WSW	3	bc/pr	50	85	7	8	3	-	4-6	4-6	2500
10	Spurn Head	1000·1	+4	SW'W	4	c	55	65	6	-	8	8	0	7-8	-
	Catterick	997·6	+12	WSW	4	bc	53	66	8	2	6	3	1	2-3	2500
	Tynemouth	995·1	+14	W	5	bc	54	65	6	2	-	-	4-6	4-6	2500
11	St. Abbs Head	991·2	+20	WSW	5	bc	51	65	8	2	4	-	2-3	2-3	2500
	Leuchars	990·3	+18	W	4	bc	53	65	9	8	7	-	1	2-3	4000
12	Renfrew (Abbots I.)	994·1	+26	W'N	3	pr	49	86	8	9	6	3	7-8	9	1500
	Eskdalemuir	994·9	+14	WSW	5	c/pr	46	85	8	8	-	-	7-8	7-8	1500
	Point of Ayre	998·2	+20	W'N	5	c	53	86	8	8	3	-	4-6	7-8	2500
13A	Tiree	993·4	+20	WNW	5	bc/pr	50	75	8	8	-	-	4-6	4-6	1500
13B	Stornoway	988·2	+28	WNW	6	PR	47	92	7	5	7	-	9	9+	1500
15	Dalwhinnie	990·4	+36	W	4	RR	42	85	6	6	-	-	10	10	1500
	Aberdeen	987·3	+18	W'S	4	bc	55	65	8	5	9	-	2-3	2-3	4000
	Wick	984·2	+20	WSW	3	pr	50	85	8	5	6	4	4-6	9	800
16	Lerwick	979·1	+18	W	4	c/pr	50	92	6	8	7	-	7-8	10	800
17	Blacksod Point	1000·2	+22	WNW	4	c	52	85	8	9	-	-	7-8	7-8	800
18	Malin Head	995·5	+22	NW	4	bc	51	75	8	2	-	9	4-6	4-6	4000
	Aldergrove	998·4	+22	WSW	4	c	48	75	8	3	3	-	4-6	7-8	2500
19	Birr Castle	1001·5	+12	SSW	2	bc	51	85	8	3	4	4	2-3	4-6	1500
20	Valentia Obsy. †	1003·8	+12	W'S	3	bc	53	75	9	3	4	1	2-3	2-3	2500
	Roches Point	1003·5	+12	W	3	bc	54	75	8	3	-	3	4-6	4-6	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1007·9	+24	SW	2	z₀	50	92	6	-	-	-	0	0	-	1	*
Croydon	1008·2	+26	SSW	3	z₀	51	97	6	4	-	-	Tr	Tr	2500	1	*
S. Farnborough	1008·2	+24	SW'W	2	b	47	92	7	7	-	-	Tr	Tr	4000	1	*
Boscombe Down	1008·5	+34	SW	2	bc	47	92	7	4	-	-	2-3	2-3	2500	1	*
Calshot (Soton.)	1008·5	+26	SW	3	z₀	52	92	6	5	-	-	Tr	2-3	1500	1	2
Lympne	1008·4	+24	WSW	3	b	49	97	6	2	-	-	Tr	Tr	4000	1	§ 3
Manston	1008·1	+24	SW	3	z₀	49	97	6	5	-	-	1	1	4000	1	*
Shoeburyness	1007·6	+20	SW	3	bc	51	92	7	5	-	-	2-3	2-3	2500	1	*
Felixstowe	1006·3	+14	SW	3	z₀	50	92	6	4	-	-	1	1	2500	1	
Gorleston	1005·8	+16	S'W	3	bc	52	85	6	8	-	-	4-6	4-6	2500	1	3
Mildenhall	1006·0	+24	SW'S	3	b	49	85	7	4	-	-	Tr	Tr	2500	1	*
Cranwell	1004·1	+20	WSW	3	z₀	48	85	6	-	-	-	0	0	-	1	*
Birmingham	1005·9	+20	WSW	3	b	47	85	7	-	4	-	0	Tr	-	1	*
Upper Heyford	1007·2	+22	WSW	2	b	47	92	6	-	4	-	0	Tr	-	1	*
Ross-on-Wye	1006·8	+20	SW	3	b	50	85	7	8	-	-	1	1	2500	1	*
Hartland Point	1007·2	+18	WNW	3	c	52	92	8	6	-	-	7-8	7-8	1500	1	2
Bristol	1008·0	+20	W'S	2	b	49	85	7	3	-	-	2-3	2-3	2500	1	*
Portland Bill	1009·0	+18	W	4	bc	54	92	8	5	-	-	4-6	4-6	4000	1	4
Plymouth	1008·5	+12	SW'W	4	z₀	54	92	6	9	-	-	7-8	7-8	1500	1	3
The Lizard	1008·7	+8	SW	3	pr	53	97	7	8	2	7	7-8	7-8	2500	1	2
Scilly (St. Mary's)	1007·9	+14	SW'W	4	bc	52	97	7	8	4	-	4-6	4-6	1500	1	3
Guernsey	*	+20	WSW	2	bc	52	85	7	2	-	-	2-3	2-3	1500	1	4
Pembroke	1006·7	+16	W	5	bc	52	85	8	2	-	-	4-6	4-6	2500	1	3
Holyhead	1003·4	+20	WSW	3	bc	52	75	8	8	4	-	4-6	4-6	2500	1	2
Chester (Sealand)	1004·4	+22	SW'W	1	bc	47	85	7	8	-	-	2-3	2-3	2500	1	*
Manchester	1003·9	+22	SW	3	z₀	46	85	5	8	-	-	2-3	2-3	4000	1	*
Spurn Head	1003·3	+14	WSW	2	bc	47	85	7	-	4	-	0	2-3	-	0	2
Catterick	1001·5	+30	W	1	bc	47	85	8	3	-	-	2-3	2-3	2500	1	
Tynemouth	999·5	+24	W	3	bc	48	75	6	2	-	-	4-6	4-6	2500	1	1
St. Abbs Head	996·0	+16	W	5	bc	47	75	8	4	-	-	2-3	2-3	2500	0	3
Leuchars	995·2	+34	SW	4	b	45	85	9	4	6	-	Tr	Tr	5700	1	*
Renfrew (Abbots I.)	998·7	+30	WSW	3	bc	45	85	8	3	-	-	2-3	2-3	1500	1	*
Eskdalemuir	999·5	+26	WSW	4	bc/pr	43	75	8	8	-	-	4-6	4-6	1500	1	*
Point of Ayre	1001·9	+26	WNW	4	bc	49	85	8	2	3	-	1	2-3	2500	1	2
Tiree	996·7	+18	WSW	4	bc	49	75	8	8	-	-	4-6	4-6	1500	0	3
Stornoway	993·0	-24	W	3	pr	45	85	8	8	-	-	7-8	7-8	2500	1	2
Dalwhinnie	995·5	+22	WSW	5	iR	42	85	7	4	-	-	2-3	2-3	2500	1	*
Aberdeen	993·7	+38	W'S	3	bc	49	65	8	5	4	-	4-6	4-6	4000	1	3
Wick																
Lerwick	984·6	+30	WNW	4	c/r	47	92	7	8	7	-	4-6	7-8	800	1	*
Blacksod Point	1002·6	+20	W	2	bc	49	85	8	9	-	-	4-6	4-6	800	1	2
Malin Head	999·7	+16	W	4	PR	47	85	7	9	6	-	4-6	7-8	2500	1	3
Aldergrove	1001·8	+26	SW'S	3	c	46	85	8	3	7	-	4-6	7-8	2500	1	*
Birr Castle	1004·5	+18	SSW	1	b	45	92	8	-	-	-	0	0	-	1	*
Valentia Obsy. †	1006·0	+14	S	3	bc	48	85	8	2	-	4	1	2-3	2500	1	2
Roches Point	1005·9	+18	W'N	3	bc	49	92	8	5	-	4	1	2-3	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)	cromoc	bcprocbcb	bmw	bbcFe
Croydon	rrpropr	bcPRmo	bmo	bmwbcpf
S. Farnborough	cirirido	bcPHRb	bbm	bmF
Boscombe Down	cmoprbcpro	bcprbc	cbcb	bcmffe
Calshot (Soton.)	prowbc	bcmob	bbcmopc	bbcwcm
Lympne	bcmopr	bcRoRRb	bmw	bcbmw
Manston	probcPR	cprbmo	bmbcm	bcmo
Shoeburyness	prtlc	cpbc	bbc	bcbmo
Felixstowe	cprpro	cmobcmo	bmwmw	bmw
Gorleston	bccprog	cbc	bcbw	bwof
Mildenhall	eprobc	bcjpb	bbmw	bmwofe
Cranwell	proirobzo	bzobbmo	bmmw	bmmo
Birmingham	cprbc	bcb	b	bfe
Upper Heyford	cprobcc	bcPRbcb	bmbfof	pfbcfpf
Ross-on-Wye	cbc	b	b	bwcomo
Hartland Point	cpbc	bcc	cbcpo	bcpoc
Bristol	bcjpcobc	bcpobcb	b	pobcjf
Portland Bill	c	bc	bcbc	bcoR
Plymouth	cprobc	bccPRc	bccjpr, b	bcPRpr
The Lizard	bc	bccpr	c	cprbc
Scilly (St. Mary's)	bcbbc	bc	mcw	bcw
Guernsey	rrPR	cprc	bcbbc	bccpr
Pembroke	cbc	bc	bcb	
Holyhead	pbc	probc	b	bwbc
Chester (Sealand)	bc	bcbmob	bcbwm	bwmbcm
Manchester	bccmoPR	bcbmo	bmo	bmwx
Spurn Head	c	cbc	bw	bbcwc
Catterick	bc	bbcb	bc	bcbcm
Tynemouth	cbc	bc	bc	bc
St. Abbs Head	bc	bcb	bbc	bbc
Leuchars	cbcb	b	bbw	bwbccw
Renfrew (Abbots I.)	cprobcjp	cprobc	bcqpro	bcprcbc
Eskdalemuir	iropo	propr	bcprb	bcrobc
Point of Ayre	bcc	cbc	bcbb	bccw
Tiree	bcpr	phrbc	prbc	be
Stornoway	cPRq	cPR	cPRqbc	bc, cPr
Dalwhinnie	cirR	ciro.		cir
Aberdeen	bc	bccir₀	bcb	bbcw
Wick	bcpo		cbc	probc
Lerwick	cprmo	cprir	cpr	cpr
Blacksod Point	proc	bc	bc	bcc
Malin Head	phrc	bcc	cbcq	circbcq
Aldergrove	bcprc	cprobc	cprobc	cbcc
Birr Castle	bc	bcb	b	bbcc
Valentia Obsy. †	proprbc	cbc	bwbc	bcprcirc
Roches Point	bc	bc	bw	bbccw

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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

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

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

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

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

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

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

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

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

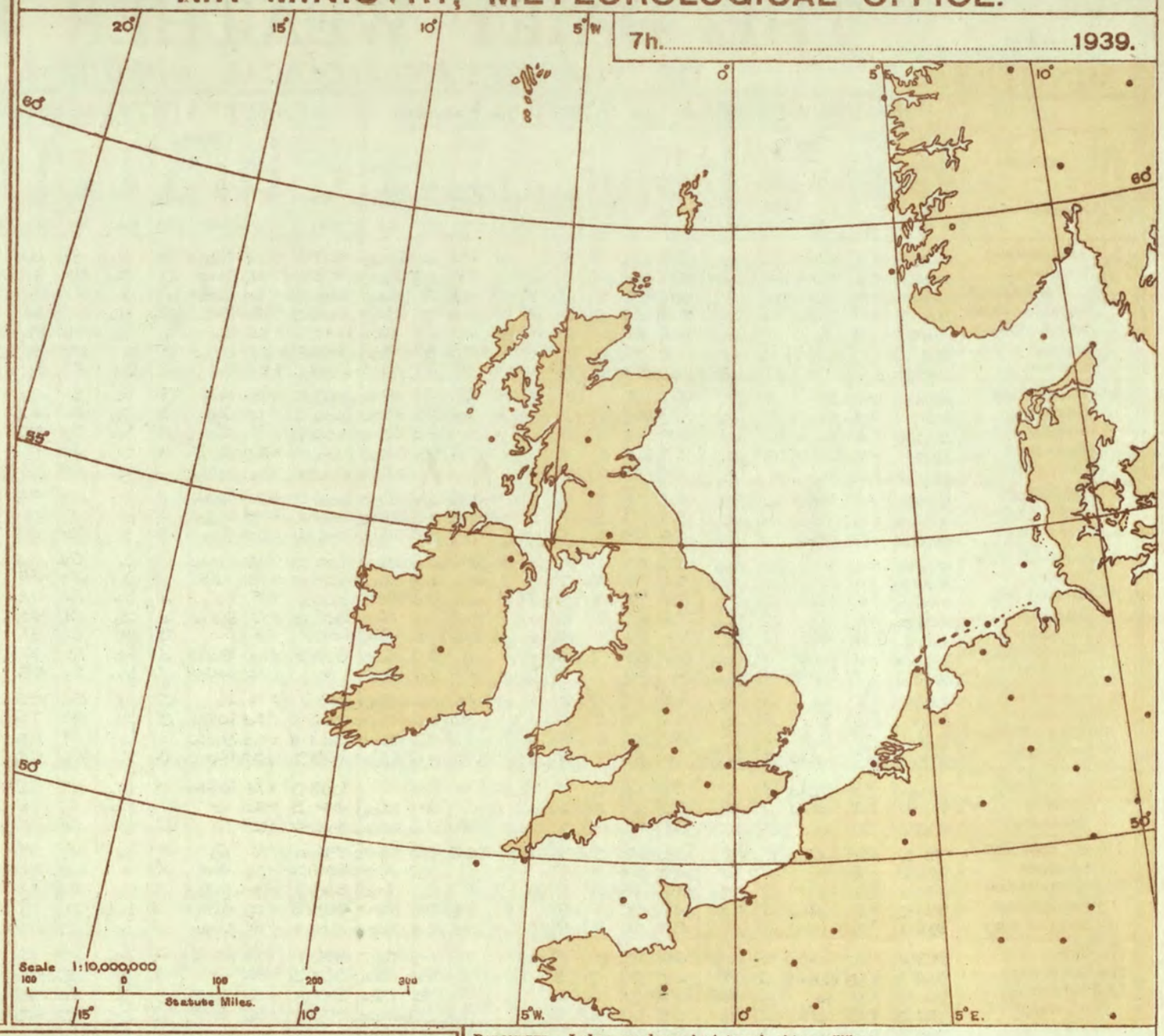
COLUMN 29.—STATE OF GROUND.

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

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

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. ..... 1939.



Districts.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. .....
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	
17 N. W. Ireland	
18 N. E. Ireland	
19 S. E. Ireland	
20 S. W. Ireland	

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.

GENERAL INFERENCE.

FURTHER OUTLOOK.

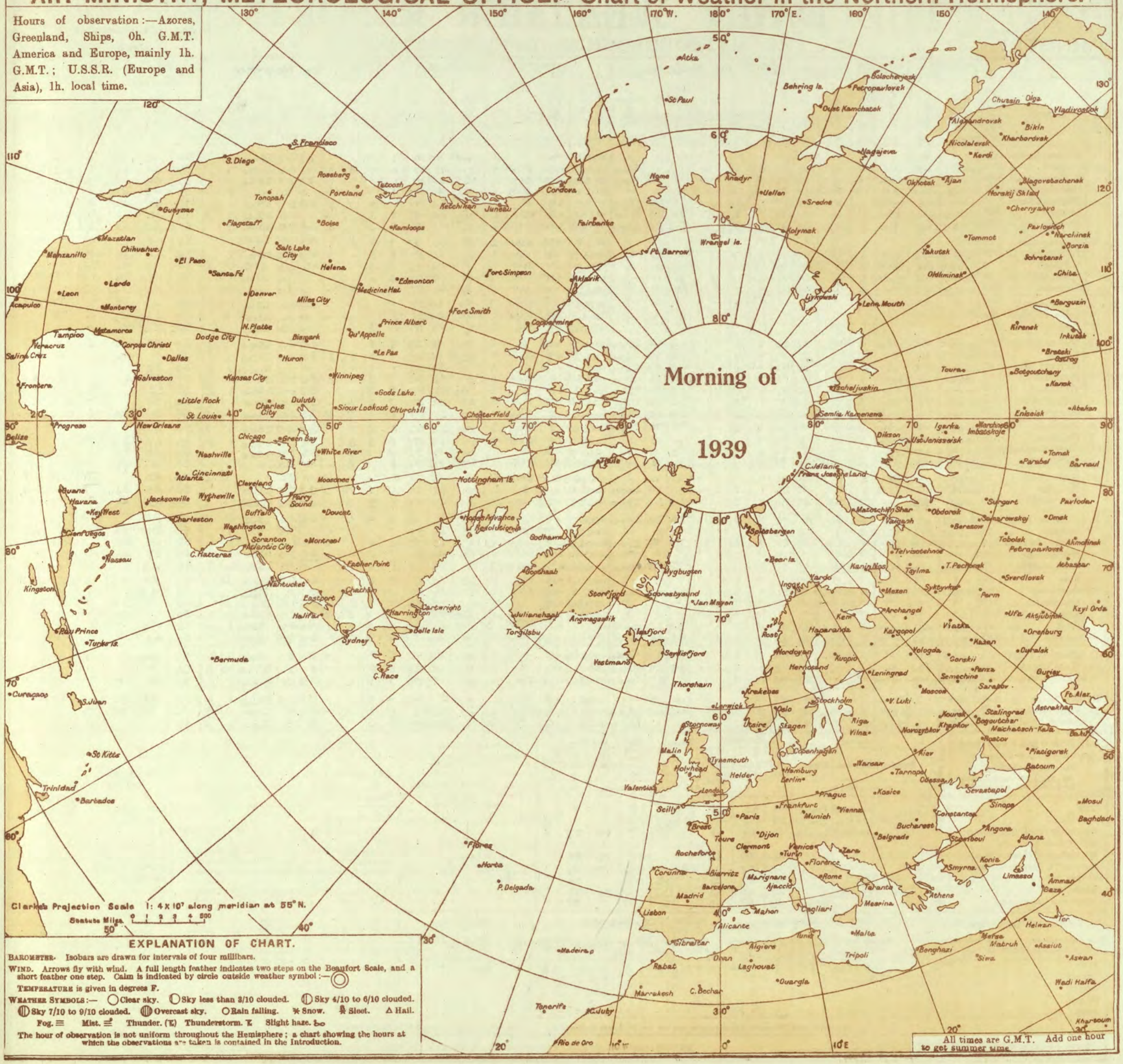
Forecasts issued at

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

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

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

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



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

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

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS :— Clear sky. Sky less than 3/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. (T) 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 10th November, 1939.

No. 28,477

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1011·7	+10	SSW	3	z	48	97	6	5	-	-	1	1	4000
	S. Farnborough	226	1011·7	+10	SSW	2	z	46	97	6	5	-	-	Tr	Tr	4000
	Boscombe Down	417	1011·6	+10	SSW	2	b	44	97	7	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1011·8	+8	SWW	2	c	52	97	7	5	-	-	7-8	7-8	2500
	Lympne ...	346	1013·2	+10	WSW	3	bc	47	97	7	5	-	-	2-3	2-3	2500
	Manston ...	154	1012·2	+12	SW	3	z	46	97	6	5	-	-	2-3	2-3	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1010·9	+18	W'S	3	m	47	97	4	-	-	-	0	0	-
	Gorleston ...	5	1009·8	+14	SW'S	2	b	45	92	6	-	-	-	0	0	-
	Mildenhall ...	19	1010·0	+10	SW'S	3	z	45	97	6	-	-	-	0	0	-
	Cranwell ...	240	1008·9	+14	SW	3	m	44	97	4	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408														
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1009·6	+4	WSW	3	bc	52	92	8	8	-	-	4-6	4-6	2500
	Bristol ...	209	1010·4	+6	S	2	bc	47	92	7	5	-	-	2-3	2-3	4000
	Portland Bill ...	32	1010·8	+18	W	4	bc	54	92	8	5	-	-	4-6	4-6	4000
	Plymouth ...	82	1011·3	+6	SW'S	3	bc	53	92	7	2	-	-	2-3	2-3	1500
	The Lizard ...	240	1011·5	+16	SW	3	c	53	97	8	8	6	-	7-8	9+	2500
	Scilly (St. Mary's)	163	1009·7	+2	S'W	3	bc	52	97	7	5	-	-	4-6	4-6	2500
	Guernsey ...	175	1012·4	+4	SW'S	2	bc	53	92	7	2	1	-	4-6	4-6	2500
6	Pembroke ...	142	1009·0	+8	WSW	3	b	52	85	8	5	-	-	Tr	Tr	2500
7	Holyhead ...	26	1007·7	+14	SW'W	3	b	49	85	8	-	-	-	0	0	-
	Chester (Sealand)	16	1008·4	+10	SSW	1	z	42	85	6	-	-	-	0	0	-
8	Manchester ...	70	1008·1	+18	SW	2	z	41	97	6	-	-	-	0	0	-
10	Spurn Head ...	29	1007·7	+18	SW	3	b	44	92	6	-	-	-	0	0	-
	Catterick ...	175	1005·7	+14	SSE	1	c	47	85	7	5	7	-	1	7-8	4000
	Tynemouth ...	108	1004·1	+16	W	2	bc	46	85	6	2	-	-	2-3	2-3	2500
11	St. Abbs Head	280	1001·4	+16	W	4	bc	55	75	8	4	6	-	2-3	2-3	2500
	Leuchars ...	36	1000·8	+18	SW	2	b	43	85	8	-	-	-	0	0	-
12	Renfrew (Abbots I.)	19	1003·3	+22	SSW	1	b/pr	45	85	7	4	-	-	Tr	Tr	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1005·6	+20	W'N	4	b	48	92	8	4	-	-	Tr	Tr	4000
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	998·2	+24	SW	4	bc/pr	43	92	7	8	-	-	4-6	4-6	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	998·7	+22	WSW	4	bc	42	97	8	5	-	-	2-3	2-3	1500
16	Lerwick ...	156	990·0	+22	NWW	4	c/pr	46	85	7	8	7	-	7-8	10	800
17	Blacksod Point	18	1005·6	+14	W	1	bc	49	85	8	2	-	-	2-3	2-3	4000
18	Malin Head ...	84	1003·7	+22	W	2	c	48	75	7	4	-	-	7-8	7-8	4000
	Aldergrove ...	268	1005·9	+18	WSW	3	c	43	92	8	2	-	-	9	9	4000
19	Birr Castle ...	173	1007·7	+12	SSW	1	b	42	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1007·3	+2	SE'E	3	bc	48	85	8	5	-	-	4-6	4-6	2500
	Roches Point	22	1008·8	+8	NW	2	b	42	97	8	5	-	-	1	1	2500

OBSERVATIONS at 7 hr. G.M.T. 10th 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)	1013·7	+10	-	0	bcf+	45	97	2	5	-	-	2-3	2-3	2500	1	*
Croydon	1013·6	+12	S'W	3	z	47	97	6	3	4	3	1	4-6	4000	1	*
S. Farnborough	1013·6	+10	SE'S	2	bcF+	44	97	1	5	-	-	2-3	2-3	2500	1	*
Boscombe Down	1012·7	+4	S'E	1	F+	44	97	1	-	-	-	0	0	-	1	
Calshot (Sthmtn.)	1013·1	+6	S	1	z	50	97	5	5	7	2	4-6	9	2500	1	§1
Lympne	1015·1	+8	SW	2	fg	46	97	7	2	-	6	1	4-6	2500	1	3
Manston	1014·2	+10	SW	2	z	47	97	6	5	-	2	2-3	4-6	2500	1	*
Shoeburyness	1013·8	+12	SSW	2	m	46	97	4	8	7	-	4-6	7-8	2500	1	*
Felixstowe	1013·0	+6	W'S	1	m	45	97	4	5	-	5	4-6	4-6	450	1	1
Gorleston	1012·7	+14	SW'S	3	f	44	92	3	5	-	-	10	10	800	0	2
Mildenhall	1013·0	+18	SW	3	f	45	97	3	-	-	-	10	10	<150	1	*
Cranwell	1011·5	+14	SW	3	z	40	97	5	-	4	-	0	2-3	-	0	
Birmingham	1012·1	+12	SSW	2	F+	44	97	1	-	-	-	10	10	<150	1	*
Upper Heyford	1013·1	+12	WSW	1	f+	44	97	2	-	-	-	10	10	<150	1	*
Ross-on-Wye	1012·2	+8	SW	2	z	45	97	6	5	-	-	10	10	800	1	*
Hartland Point	1010·7	+6	S	3	bc	49	92	8	5	1	-	4-6	4-6	2500	1	2
Bristol	1012·2	+8	SSW	3	bcjf	46	97	7	5	4	2	2-3	4-6	4000	1	
Portland Bill	1012·9	+10	SW	3	c	53	92	7	5	-	-	10	10	4000	1	3
Plymouth	1011·5	+4	SSW	3	c	53	92	7	3	-	6	4-6	7-8	1500	1	3
The Lizard	1012·2	+8	S	3	bc	53	97	8	8	-	-	2-3	2-3	2500	1	2
Scilly (St. Mary's)	1010·0	+6	S'W	4	bc	52	97	7	5	4	-	2-3	4-6	2500	1	2
Guernsey	1013·0	+6	S'W	1	bc	52	92	8	1	7	8	2-3	4-6	2500	1	3
Pembroke	1010·0	+4	SSW	2	bc	52	92	8	2	5	-	2-3	4-6	2500	1	2
Holyhead	1009·6	+8	SW'S	2	c	48	85	8	8	3	-	2-3	7-8	2500	4	2
Chester (Sealand)	1010·6	+4	S	1	m	41	92	4	5	9	-	2-3	7-8	4000	1	*
Manchester	1010·4	+10	SSE	1	bcf+	36	97	3	-	5	-	0	2-3	-	1	
Spurn Head	1010·6	+14	SWW	3	c	42	97	6	-	-	6	0	7-8	-	1	2
Catterick	1008·6	+18	S	1	c	47	76	7	5	4	6	2-3	7-8	2500	1	
Tynemouth	1008·2	+24	WSW	2	bc	47	85	6	8	3	-	4-6	4-6	1500	1	1
St. Abbs Head	1005·7	+22	WSW	3	bc	43	85	8	4	6	-	4-6	4-6	2500	0	2
Leuchars	1005·1	+22	SW	3	c	40	92	7	-	5	-	0	7-8	-	1	*
Renfrew (Abbots I.)	1006·8	+18	WSW	2	z	45	92	6	4	-	6	4-6	4-6	2500	1	*
Eskdalemuir	1007·9	+14	SW'S	1	bc	40	92	7	5	4	1	2-3	2-3	1500	1	
Point of Ayre	1008·7	+12	WSW	2	c	45	97	8	2	7	-	Tr	7-8	2500	0	1
Tiree	1004·6	+14	SSW	3	bc	48	75	8	8	-	-	4-6	4-6	2500	0	2
Stornoway	1002·3	+16	WSW	3	pr	43	85	7	8	-	-	9	9	2500	1	2
Dalwhinnie	1005·3	+18	-	0	c	38	85	7	5	3	1	4-6	7-8	2500	0	*
Aberdeen	1003·6	+24	W'S	2	bc	48	75	7	5	3	6	1	4-6	4000	0	1
Wick	1000·2	+22	WSW	3	bc	42	97	8	5	7	1	4-6	4-6	1500	1	1
Lerwick	994·6	+24	NW	6	c	46	75	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1006·5	+4	W	2	c	48	92	8	5	-	-	9	9	1500	1	2
Malin Head	1006·1	+12	S	2	c	46	85	8	8	-	-	9	9	5700	0	3
Aldergrove	1008·1	+14	S'W	2	c	42	92	7	5	-	6	2-3	9+	4000	1	*
Birr Castle	1008·1	+6	SSW	1	c	41	92	7	5	-	-	7-8	7-8	2500	1	*
Valentia Obsy.	1006·6	+2	SSE	3	c/r	52	92	8	5	-	-	9+	9+	1500	1	2
Roches Point	1008·1	-6	SW	3	c	52	97	8	5	-	-	9	9	1500	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F. (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine Hrs. (36)
London (Kew)	54	43	33	2	Tr	1·3
Croydon	55	46	43	5	0·2	1·4
S. Farnborough	57	44	36	3	0·3	3·0
Boscombe Down	57	42	37	2	0·2	3·0
Calshot (Sthmtn.)	(55)	45	42	3	0·2	3·6
Lympne	57	45	34	23	0·4	2·8
Manston	57	45	41	8	0·1	2·5
Shoeburyness	54	44	31	7	-	1·1
Felixstowe	54	44	38	0·5	0·2	1·5
Gorleston	56	43	42	Tr	-	*
Mildenhall	58	42	34	0·2	Tr	5·3
Cranwell	55	40	36	0·2	-	5·7
Birmingham	55	41	37	1	Tr	5·5
Upper Heyford	57	44	40	4	Tr	*
Ross-on-Wye	56	40	31	-	-	5·7
Hartland Point	54	47	46	6	1	4·7
Bristol	56	41	30	1	Tr	4·6
Portland Bill	56	52	*	1	4	*
Plymouth	57	(55)	46	1	3	4·1
The Lizard	57	52		Tr	0·5	6·4
Scilly (St. Mary's)	56	51	*	-	0·3	8·0
Guernsey	58	51	44	3	0·2	3·5
Pembroke	54	51	*	-	-	5·1
Holyhead	55	47	43	Tr	-	5·0
Chester (Sealand)	56	39	33	-	Tr	6·8
Manchester	55	32	26	1	-	3·2
Spurn Head	55	42	*	Tr	Tr	4·7
Catterick	53	45	36	Tr	-	5·4
Tynemouth	54	45	41	-	-	*
St. Abbs Head	52	41	*	Tr	-	*
Leuchars	53	39	34	-	-	5·7
Renfrew (Abbots I.)	52	42	35	2	0·1	2·9
Eskdalemuir	48	37	32	5	1	1·1
Point of Ayre	54	43	*	-	-	[illegible]
Tiree	52	45	40	2	21	3·8
Stornoway	49	42	*	4	4	0·6
Dalwhinnie	45	36	34	3	1	0·1
Aberdeen	55	41	31	Tr	-	3·7
Wick	52	40	*	2	Tr	*
Lerwick	51	44	*	3	1	0·0
Blacksod Point	53	44	*	3	1	*
Malin Head	52	*	*	3	1	3·5
Aldergrove	51	41	35	Tr	Tr	2·7
Birr Castle	53	37	34	0·5	-	5·2
Valentia Obsy.	54	41	33	Tr	1	4·8
Roches Point	55	41	*	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 (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	crmc	bcprcbcb	bmwF	54	43	33	2	Tr	1·3	*	*	
Croydon	217	rrpr,pr	bcPRm	bmpc	55	46	43	5	0·2	1·4	*	*	6
Greenwich (Royal Observatory)	149	rc	bcr,b	bc,w,m	55	45	32	1	Tr	1·3	80	97	4
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	56	45	42			0·0	78	99	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	56	47	39	0·3	1	0·0	77	96	*
Camden Square	110	c	bcp	*	55	47	41	-	0·5	0·0	*	96	*
Kensington	80	bcp	pcm,bc	*	57	45	35	1	0·2	0·0	91	95	*
Hampstead Observatory	450	or	or	bcp	54	47	43	1	Tr	0·0	*	99	*

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.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 9th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 10th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1014·5	SSW	4	b	54	1017·5	S	3	o/d	52	*	50	*	Tr
Brussels														
Berlin														
Zürich														
Rome	1023·0	SSE	2	b	61						*	*	-	

‡ 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 ,,	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.

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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 11th November 1939.

No. 28478

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1013·5	-10	S'E	1	z_o	53	92	6	8	-	-	4-6	9	2500
	Croydon ...	1013·9	-6	S	2	c/pr	56	85	6	2	9	-	2-3	7-8	1500
	S. Farnborough	1013·4	-10	S	2	z_o	55	85	6	8	7	1	7-8	9+	2500
	Boscombe Down	1012·7	-12	S'W	2	c	55	85	7	2	7	9	4-6	7-8	2500
	Calshot (Soton.)	1013·3	-10	SSW	4	c/pr	55	97	7	9	7	2	9	9+	1500
	Lympne ...	1014·9	-10	SW'W	3	c	56	85	8	8	6	1	4-6	9	1500
	Manston ...	1014·2	-10	SW	2	c	55	85	7	8	-	6	7-8	9+	1500
2	Shoeburyness ...	1014·1	+2	WSW	2	c	54	92	6	4	7	-	1	9+	2500
	Felixstowe ...	1013·7	-6	S'E	1	z_o	55	85	5	7	3	4	2-3	7-8	1500
	Gorleston ...	1013·8	-2	SW'S	3	c	49	85	6	5	-	-	9+	9+	2500
	Mildenhall ...	1013·6	-6	WSW	2	c	52	75	7	5	-	2	9+	9+	1500
	Cranwell ...	*	-2	WSW	3	z_o	*	85	6	5	3	4	4-6	9	1600
3	Birmingham	1012·6	0	S	2	ir_o	49	92	5	6	-	-	9+	9+	800
	Upper Heyford														
4	Ross-on-Wye ...	1012·0	-6	SSE	2	c	53	85	7	5	-	1	7-8	7-8	2500
5	Hartland Point	1010·6	-6	SW	3	bc	55	85	8	2	4	-	2-3	4-6	4000
	Bristol ...	1012·3	-6	S'W	2	c	55	75	7	8	4	8	4-6	7-8	2500
	Portland Bill ...	1013·0	+10	SW	3	bc	55	92	8	5	-	-	4-6	4-6	4000
	Plymouth ...	1011·6	-6	S'W	3	c/pr	55	92	7	8	-	-	7-8	7-8	2500
	The Lizard ...	1010·7	-10	S	3	bc	57	92	8	8	6	-	4-6	4-6	2500
	Scilly (St.Mary's)	1000·5	-10	S'E	4	bc	56	97	7	8	4	4	2-3	4-6	1500
	Guernsey ...	1012·9	-8	S'E	1	c	57	75	7	8	3	-	4-6	9	2500
6	Pembroke ...	1010·2	-2	SE'S	4	c/pr	51	92	7	8	-	-	7-8	7-8	1500
7	Holyhead ...	1010·0	-2	S	3	c	53	85	8	2	3	-	2-3	7-8	2500
	Chester (Sealand)	1011·5	-6	SE	2	bc	54	75	7	7	5	8	1	4-6	4000
8	Manchester ...	1011·8	-2	S	3	z_o	51	85	6	-	-	2	0	4-6	-
10	Spurn Head ...	1012·3	+2	SW	3	c	48	85	5	-	-	4	0	7-8	-
	Catterick ...	1010·6	-2	SW	2	bc	53	65	7	2	-	1	4-6	4-6	2500
	Tynemouth ...	1009·7	+4	W	2	bc	52	75	6	2	-	1	2-3	4-6	2500
11	St. Abbs Head	1008·2	+10	SW	3	c	49	75	8	7	7	-	4-6	7-8	2500
	Leuchars ...	1007·5	+10	SSW	2	c	49	85	8	-	7	6	0	9+	-
12	Renfrew (Abbots I.)	1008·4	0	WSW	3	bc	52	75	8	8	7	-	4-6	4-6	2500
	Eskdalemuir ...	1008·9	0	SW	3	c	47	85	8	5	3	1	4-6	7-8	1500
	Point of Ayre ...	1009·5	+2	SW'W	3	c	55	75	8	2	-	6	1	9	2500
13A	Tiree ...	1005·6	0	SW'W	4	c	51	75	8	5	7	-	4-6	7-8	2500
13B	Stornoway ...	1005·6	+4	SSW	3	c	50	75	9	6	5	9	4-6	9+	2500
15	Dalwhinnie ...	1007·0	+2	S	3	c	45	75	8	5	1	-	4-6	10	4000
	Aberdeen ...	1006·6	+14	SW'W	2	c	49	65	7	-	7	-	0	9+	-
	Wick ...	1004·2	+10	WSW	3	c	48	65	8	8	7	8	4-6	9+	1500
16	Lerwick...	1000·9	+20	W'N	5	c/pr	45	85	8	8	7	-	4-6	7-8	1600
17	Blacksod Point...	1006·4	-4	SE	1	c	50	85	8	5	-	-	9+	9+	1500
18	Malin Head ...	1007·0	+2	S	2	c	50	75	8	5	8	-	4-6	7-8	2500
	Aldergrove ...	1008·8	-2	SSW	3	c	52	75	7	2	3	2	2-3	7-8	1500
19	Birr Castle ...	1008·3	-6	SSE	2	c	52	85	8	8	3	-	7-8	7-8	1500
20	Valentia Obsy. †	1005·4	-12	SSE	4	pr	54	85	8	6	2	-	7-8	10	1500
	Roches Point ...	1007·4	-10	S	3	c	54	97	7	5	-	5	4-6	7-8	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°F. Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1012·8	-4	S	2	z_o	50	97	5	5	-	-	2-3	2-3	2500	1	*
Croydon	1014·2	+8	S'E	2	z_o	51	92	6	5	-	-	4-6	4-6	4000	1	*
S. Farnborough																*
Boscombe Down	1013·3	+10	SSE	2	z_o	46	97	6	5	-	-	1	1	4000	1	*
Calshot (Soton.)	1013·6	+2	SE'S	2	b	51	97	7	-	7	-	0	1	-	1	1
Lympne	1015·4	+6	SW	2	b	48	97	7	4	-	-	1	1	2500	1	§
Manston	1014·8	+6	S'W	2	z_o	51	97	6	5	-	-	2-3	2-3	1500	1	*
Shoeburyness	1014·2	+4	SSW	1	b	49	97	6	4	-	-	2-3	2-3	2500	1	*
Felixstowe	1013·4	+2	S	2	bc	50	97	7	4	-	-	2-3	2-3	2500	1	2
Gorleston	1013·8	0	SSE	2	bc	49	92	6	5	-	-	2-3	2-3	2500	0	2
Mildenhall	1013·4	+6	SE'S	2	z_o	49	92	5	5	-	-	1	1	2500	1	*
Cranwell	1012·6	+6	S	2	m	45	97	4	5	-	-	1	1	2500	1	*
Birmingham	1012·3	0	S	2	m	48	97	4	5	-	-	2-3	2-3	2500	1	*
Upper Heyford	1013·2	+2	S'E	1	z_o	49	92	5	4	-	-	Tr	Tr	4000	1	*
Ross-on-Wye	1012·0	0	S'E	1	z_o	49	92	6	5	-	-	4-6	4-6	2500	1	*
Hartland Point	1010·1	0	SSE	3	c	51	92	8	5	1	-	4-6	7-8	4000	1	2
Bristol	1012·2	+6	S	2	bc	51	85	7	4	4	-	2-3	4-6	4000	1	*
Portland Bill	1012·6	-10	SSE	3	bc	54	92	8	5	-	-	4-6	4-6	4000	1	3
Plymouth	1011·4	+2	S	2	c	53	92	7	8	5	1	4-6	7-8	1500	1	2
The Lizard	1010·7	0	SSE	4	c	53	97	8	5	2	-	9	10	2500	0	2
Scilly (St.Mary's)	1008·7	0	SSE	4	c	53	97	7	8	7	3	2-3	9+	1500	1	2
Guernsey	1012·4	0	SE	1	b	53	92	7	-	4	-	0	1	-	1	3
Pembroke	1008·5	0	S	3	c	53	97	7	8	-	-	7-8	7-8	1500	1	2
Holyhead	1009·2	0	SSE	3	c	52	92	7	5	-	-	9	9	2500	1	2
Chester (Sealand)	1011·3	+4	SE	2	rr	48	97	4	5	-	-	10	10	1500	1	*
Manchester	1011·4	+2	SE	1	cf+	46	97	3	5	-	-	7-8	7-8	1500	1	*
Spurn Head	1012·6	+4	SSE	2	c	47	85	6	5	-	-	9	9	4000	0	1
Catterick	1011·0	+10	SSW	1	m	43	85	4	5	-	-	0	0	-	1	*
Tynemouth	1010·3	+6	SW	1	m	49	75	4	2	-	-	2-3	2-3	2500	1	1
St. Abbs Head	1008·4	0	WSW	2	bc	46	85	8	7	4	-	2-3	4-6	2500	0	2
Leuchars	1007·8	+2	-	0	z_o	44	97	6	5	-	-	2-3	2-3	4000	4	*
Renfrew (Abbots I.)	1008·8	+2	SSW	1	m	48	92	4	4	3	-	4-6	7-8	2500	1	*
Eskdalemuir	1009·3	+2	SW'W	3	bc	44	92	8	5	3	1	2-3	4-6	1500	1	*
Point of Ayre	1009·5	0	SW'S	2	b	45	97	8	4	-	-	1	1	2500	0	1
Tiree	1006·1	+4	SW'W	2	bc	47	85	8	5	3	-	2-3	4-6	2500	0	2
Stornoway	1004·5	0	SSW	3	c	47	75	8	5	7	-	4-6	9+	2500	1	2
Dalwhinnie	1007·9	+8	S	3	f	41	85	7	4	6	-	4-6	7-8	2500	1	*
Aberdeen	1007·3	+2	SW	2	bc	45	85	6	5	4	-	4-6	4-6	4000	0	1
Wick	1005·3	+2	SSW	1	c	45	92	8	5	6	7	7-8	10	2500	1	1
Lerwick	1004·8	+16	NNW	3	c	41	65	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1005·6	0	SE	3	c	50	92	8	-	7	-	0	10	-	0	2
Malin Head	1007·4	+2	S	1	bc	46	85	7	4	-	-	4-6	4-6	4000	0	2
Aldergrove	1008·2	-2	E'S	1	b	45	92	7	5	4	1	Tr	1	1500	1	*
Birr Castle	1007·0	-2	SSE	1	o	51	85	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	1003·0	-12	NE'N	0	ojf	52	92	7	-	2	-	10	10	1500	1	2
Roches Point	1005·7	-6	S'E	5	ir	53	97	7	6	2	-	7-8	9+	800	1	4

PAST 24 HOURS.

Stations	Weather 7h.—13h. 10th (37)	Weather 13h.—18h. 10th (38)	Weather 18h. 10th to 1h. 11th (39)	Weather 1h.—7h. 11th (40)
London (Kew)	Ffcpr$_o$c	cbcm$_o$	bwFeoFe	owFeFe
Croydon	bcmofepr	ccmbcm$_o$	bcm$_o$bwf	bwFcm
S. Farnborough	bfcm$_o$ir$_o$		brmFoFe	oFboFe
Boscombe Down	bFcm$_o$bc	cbcm$_o$	bmF	bef
Calshot (Soton.)	cr$_o$r$_o$prm$_o$	cbcpr$_o$cb	bfbcf	bm$_o$wcf
Lympne	bccm$_o$c	cbcb	bbcmow	bbcw
Manston	cm$_o$pr$_o$c	cprcm$_o$	brn$_o$bcif	bFcm$_o$
Shoeburyness	bccm$_o$	bcbm$_o$		bccm
Felixstowe	bcm$_o$	bcm$_o$bcw	m$_o$W	bcm$_o$wcf
Gorleston	fcz$_o$	cbcz$_o$	bcc,z$_o$w	bcif,ffe
Mildenhall	ofeoc	ccm$_o$	bm$_o$,foF	oFomofe
Cranwell	bccm$_o$	cir$_o$pr$_o$m$_o$	bf,cf	cffm
Birmingham	Fo	or$_o$bc	bcbFF	bFo
Upper Heyford		cm$_o$bcbm$_o$	bmfo,bf	ofcfof
Ross-on-Wye	bmcm$_o$c	cbc	cbcbmw	bccw
Hartland Point	cbc	bcc	cbcc	cbcc
Bristol	bcjfcbcc	bcb	bcw	bcwcm$_o$
Portland Bill	bc	bc	bc	bcc
Plymouth	cprbc	cpr	cbcc	c
The Lizard	cbc	cbcc	cbccw	cpr
Scilly (St.Mary's)	bc	bcc	cbcw	cir$_o$rbc
Guernsey	bcc	cbcb	b	bccpr
Pembroke	bcirc	pr$_o$c	cbc	c
Holyhead	cpr$_o$c	cpr$_o$c	cpr$_o$c	cbc
Chester (Sealand)	crm$_o$⊕	bcz$_o$cr$_o$rm	bcmbcf	bcfcmw
Manchester	bcbcffcm$_o$bc	bcm$_o$crrm	fftbm,cm	cmwm$_o$
Spurn Head	cm	c	cbwf	Fd$_o$om
Catterick	bccbc	z$_o$bmw	bmfeF	oFofe
Tynemouth	bcm	bcm	bcm	bcff
St. Abbs Head	c	cbc	b	rrc
Leuchars	cwc	ir$_o$mc,bm$_o$	bwm$_o$	cr$_o$r$_o$m$_o$
Renfrew (Abbots I.)	bcid$_o$r$_o$c	bccm	bcfefe	cffRrr
Eskdalemuir	cbcc	cprbc	bcprc	crrm
Point of Ayre	c	bcb	rrcbc	r$_o$r$_o$c
Tiree	cpr$_o$c	cpr$_o$bc	bccid	ciRc
Stornoway	cPR	c	cr$_o$r$_o$	cr$_o$r$_o$
Dalwhinnie	c	cir	c	*
Aberdeen	bcc	cbcz$_o$	bcbz$_o$	bbcwc
Wick	bcc	cpr$_o$c	c	bc
Lerwick	cpr	cpr	cid$_o$rr	cirpr
Blacksod Point	c	cbc	rr	c
Malin Head	c	cbc	cr$_o$rc	cr$_o$rcdc
Aldergrove	c	cbccb	b,cir$_o$m$_o$	ir$_o$,rr$_o$r$_o$
Birr Castle	c	co	cpr	cpr
Valentia Obsy. †	cprpr$_o$	cir$_o$ir	cpr$_o$cbc	bccid$_o$
Roches Point	idrc	cir	c	crrir

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.

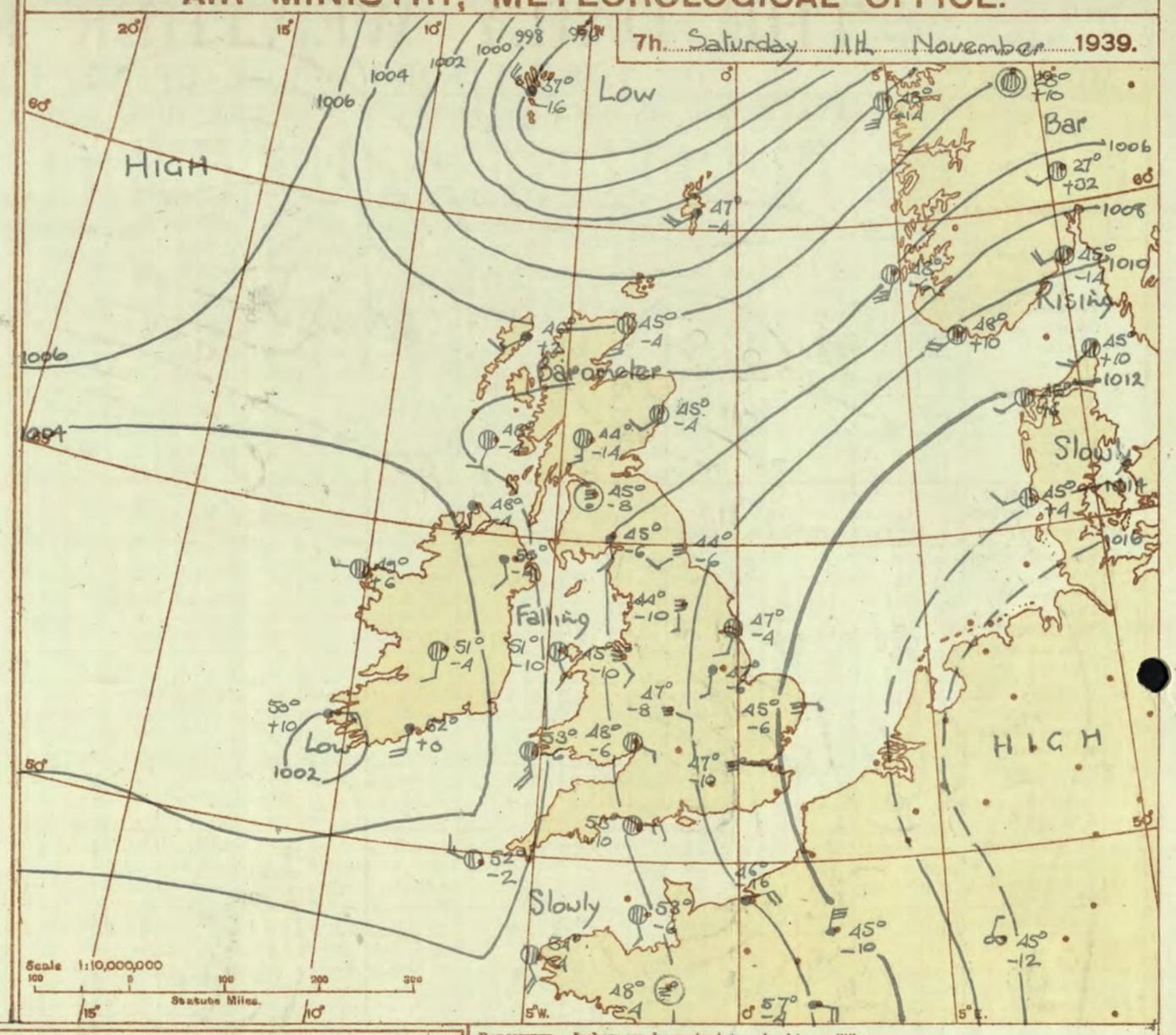
COLUMN 29.—STATE OF GROUND.

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 11th November 1939.



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

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 11th November, 1939.
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	Wind mainly southeasterly, light or moderate. Cloudy, occasional rain and mist. 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	Wind variable between southwest and northwest, fresh at times in the north. Occasional rain. Average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind variable, light or moderate. Cloudy, occasional rain. Mild.

GENERAL INFERENCE.

A trough of low pressure extends from Ireland to Southwest France and is moving slowly eastwards. A depression near Shetland is moving eastwards and pressure is high over Central Europe. The weather will be generally unsettled with occasional rain in all districts.

FURTHER OUTLOOK.

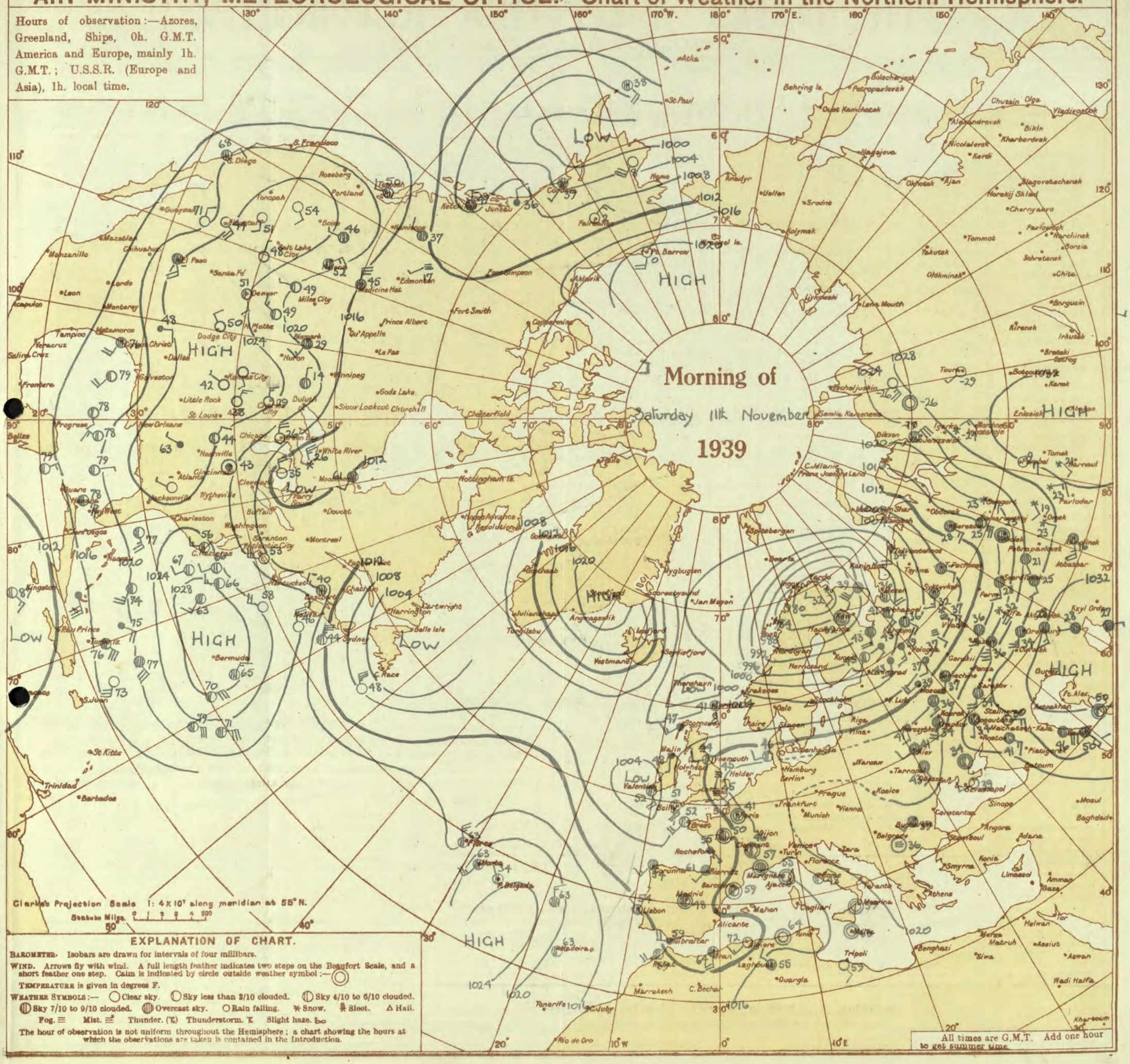
Unsettled.

Forecasts issued at 0930 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 11th November 1939.
No. 28478

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

District	Stations	Height above M.S.L. in feet.	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Cloud. Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1013·5	−4	SE'S	1	bf	45	97	3	–	–	–	0	0	–
	S. Farnborough	226	1013·2	−4	SSE	1	cf	46	97	2	–	–	–	10	10	<150
	Boscombe Down	417	1012·3	−10	SE	2	f	46	97	1	–	–	–	10	10	<150
	Calshot (Sthmtn.)	8	1012·8	−6	E	2	bcf	49	97	3	5	–	–	4-6	4-6	1500
	Lympne ...	346	1014·3	−6	SE'S	2	bc	47	97	7	5	–	–	2-3	2-3	2500
	Manston ...	154	1014·2	−6	SE	2	bc/f	47	97	5	5	–	–	4-6	4-6	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1015·2	0	S	1	z.	48	97	6	5	–	–	2-3	2-3	2500
	Gorleston ...	5	1014·0	0	SSW	2	bc	46	85	6	5	–	–	2-3	2-3	2500
	Mildenhall ...	19	1013·5	−2	S	2	F	47	97	1	–	–	–	10	10	<150
	Cranwell ...	240	1012·7	−2	S	1	cf	44	97	3	5	–	–	9	9	4000
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1013·6	+2	S	1	f	47	97	3	–	–	–	10	10	<150
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1008·6	−10	SE	3	c	52	85	8	5	1	–	4-6	7-8	2500
	Bristol ...	209	1011·8	−2	SSE	2	bc	48	92	6	5	–	–	2-3	2-3	2500
	Portland Bill ...	32	1012·5	−16	SE	3	bc	53	85	8	5	–	–	4-6	4-6	4000
	Plymouth ...	82	1010·1	−8	SE'S	3	c	54	92	7	5	–	–	9+	9+	2500
	The Lizard ...	240	1008·8	−6	S	4	c	51	97	7	5	–	–	9	9	1500
	Scilly (St. Mary's)	163	1007·0	−10	SSE	5	bc	51	97	7	5	–	–	4-6	4-6	2500
	Guernsey ...	175	1010·5	−16	ESE	1	b	51	92	7	2	–	–	1	1	2500
6	Pembroke ...	142	1008·3	−4	SE	5	bc	53	92	8	5	2	–	4-6	4-6	1500
7	Holyhead ...	26	1008·6	−6	SSE	4	c	51	92	7	8	2	–	4-6	9+	2500
	Chester (Sealand)	16	1011·1	−2	SE'E	2	cf	45	92	2	5	–	–	7-8	7-8	1500
8	Manchester ...	70	1011·3	−2	SE	1	m	47	97	4	5	–	–	7-8	7-8	4000
10	Spurn Head ...	29	1012·3	−2	S	1	bf	45	97	3	–	–	–	0	0	–
	Catterick ...	175	1011·3	−6	SW	1	f	42	97	1	–	–	–	10	10	<150
	Tynemouth ...	108	1001·7	−2	W	2	bc	44	85	5	5	–	–	2-3	2-3	1500
11	St. Abbs Head	280	1008·8	−4	WSW	4	bc	44	92	8	4	–	–	2-3	2-3	2500
	Leuchars ...	36	1008·6	−2	S	1	z.	40	92	6	5	–	–	1	1	4000
12	Renfrew (Abbots I.)	19	1009·2	−6	–	0	cf	42	97	3	5	–	–	7-8	7-8	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1009·1	−2	SSW	3	bc	51	97	7	8	–	–	2-3	2-3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1004·6	0	SW	3	r.r.	47	92	7	5	7	–	7-8	9+	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1004·9	−2	SSW	3	c	44	97	7	5	1	–	4-6	7-8	1500
16	Lerwick ...	156	1003·1	−18	SW	3	c/r	45	92	7	6	2	–	4-6	10	800
17	Blacksod Point	18	1004·0	−12	SE	1	r.r.	49	97	7	6	–	–	10	10	220
18	Malin Head ...	84	1006·6	−4	S	1	r.r.	48	92	6	8	–	–	9	9	2500
	Aldergrove ...	268	1007·4	−8	SSE	2	ir.	49	92	6	5	1	–	4-6	10	2500
19	Birr Castle ...	173	1004·8	−10	S	3	c/pr	51	92	7	3	–	–	7-8	7-8	1500
20	Valentia Obsy.	30	1002·3	−8	SE	4	bc	52	92	7	5	–	–	4-6	4-6	1500
	Roches Point	22	1004·2	−12	SE	6	c	53	97	8	5	–	–	7-8	7-8	1500

OBSERVATIONS at 7 hr. G.M.T. 11th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	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)	1011·2	−10	ENE	1	f	48	97	2	–	–	–	10	10	<150	1	*
Croydon ...	1011·6	−10	E	1	m	47	97	4	5	–	–	7-8	10	450	1	*
S. Farnborough	1010·7	−6	E	2	f	45	97	1	–	–	–	10	10	<150	1	*
Boscombe Down	1009·5	−6	ESE	2	f	46	97	2	–	–	–	10	10	<150	1	*
Calshot (Sthmtn.)	1009·7	−10	ENE	3	of	49	97	3	5	–	–	10	10	1500	1	1
Lympne ...	1012·6	−6	ESE	3	c	48	92	6	5	7	6	Tr	9+	1500	1	§2
Manston ...	1012·1	−6	SE	3	z.	48	97	6	5	–	–	10	10	2500	1	*
Shoeburyness ...	1013·6	−14	SE'S	1	m	45	97	4	–	1	–	0	10	–	1	*
Felixstowe ...	1012·1	−10	–	0	cf	46	97	2	5	7	–	2-3	9+	2500	1	1
Gorleston ...	1012·9	−6	ESE	1	f	45	97	2	–	–	–	10	10	<150	1	2
Mildenhall ...	1011·8	−6	E SE	1	F	45	97	1	–	–	–	10	10	<150	1	*
Cranwell ...	1011·3	−6	S	1	id.	47	97	4	5	–	–	10	10	1500	0	*
Birmingham ...	1009·9	−8	SE	2	of	47	97	3	5	–	–	10	10	800	1	*
Upper Heyford	1011·2	−10	–	0	of	47	97	3	5	–	–	10	10	<150	1	*
Ross-on-Wye	1009·7	−6	SE	2	c	48	92	7	5	–	–	9+	9+	1500	1	*
Hartland Point	1006·9	0	SE	2	PR	50	97	8	5	4	9	4-6	9	2500	1	2
Bristol ...	1009·8	−2	SE	3	z.	48	97	6	5	7	–	7-8	9+	800	1	*
Portland Bill ...	1009·2	−10	E	3	c	53	92	7	5	–	–	10	10	4000	1	3
Plymouth ...	1006·9	−8	SE'S	2	c	54	92	7	5	–	–	9+	9+	2500	1	2
The Lizard ...	1006·0	−16	SSE	3	pr	53	92	7	5	–	–	10	10	1500	1	2
Scilly (St. Mary's)	1004·8	−2	WN	3	bc	52	97	7	8	6	–	4-6	4-6	1500	1	3
Guernsey ...	1007·7	−6	SSE	1	c	53	97	7	5	2	–	9	10	2500	1	3
Pembroke ...	1005·8	−6	SE	5	c	53	92	8	5	–	–	9+	9+	1500	1	2
Holyhead ...	1006·7	−10	SSE	2	bc	51	85	8	5	–	–	4-6	4-6	4000	1	2
Chester (Sealand)	1009·1	−10	SE'S	2	m	45	97	4	5	–	–	9+	9+	2500	1	*
Manchester ...	1009·6	−6	E	1	z.	48	92	5	5	–	–	10	10	1500	1	*
Spurn Head ...	1011·3	−4	SSW	2	m	47	97	4	5	–	–	10	10	800	1	4
Catterick ...	1009·6	−10	S	1	f	44	97	2	–	–	–	10	10	<150	1	*
Tynemouth ...	1009·5	−6	SW	2	f	44	97	2	5	–	–	10	10	1500	1	1
St. Abbs Head	1006·3	−4	SW	4	s/r	47	92	7	8	2	–	7-8	10	1500	1	3
Leuchars ...	1006·7	−8	–	0	r.r.	41	97	5	5	2	–	9+	10	1500	1	*
Renfrew (Abbots I.)	1006·9	−8	–	0	rf	45	97	2	5	2	–	9+	10	1500	1	*
Eskdalemuir ...	1007·5	−6	SE	2	rr	45	97	4	–	2	–	10	10	<150	1	*
Point of Ayre ...	1007·0	−4	SSW	3	c	51	92	7	8	1	–	2-3	7-8	1500	1	2
Tiree	1004·3	−4	SSW	2	c	48	97	7	5	–	–	9	9	1500	1	2
Stornoway ...	1004·4	+2	SW	3	r.r.	46	92	6	5	2	–	7-8	10	1500	1	2
Dalwhinnie ...	1006·3	−14	S	3	c	44	85	7	4	7	–	4-6	10	2500	0	*
Aberdeen ...	1006·4	−4	SW	2	c	45	85	6	5	7	–	4-6	9	4000	0	1
Wick ...	1003·6	−4	SSW	3	bc	45	97	8	5	4	8	4-6	4-6	1500	1	1
Lerwick ...	1000·0	−4	SW	4	pr	47	85	8	8	7	–	7-8	9+	800	1	*
Blacksod Point	1003·9	+6	W	1	c	49	97	7	5	–	–	9	9	800	1	2
Malin Head ...	1004·5	−4	S	2	r.r.	48	92	7	8	–	–	9	9	2500	1	2
Aldergrove ...	1005·3	−6	SSE	2	ir.	50	97	6	5	2	–	10	10	4000	1	*
Birr Castle ...	1003·7	−4	S	2	c/pr	51	92	7	9	–	–	9	9	1500	1	*
Valentia Obsy.	1002·0	+10	E'N	3	id.	50	92	8	5	–	–	9+	9+	800	1	1
Roches Point	1002·8	0	S	4	ir	52	97	8	6	2	–	7-8	9+	800	1	4

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h–18h °F. (31)	Temperature. Min. Night 18h–7h °F (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 10th Hrs. (36)
London (Kew)	54	41	34	0·2	0·1	2·2
Croydon ...	57	42	36	0·3	Tr	1·7
S. Farnborough		44	37		0·1	2·5
Boscombe Down	55	44	42	0·1	0·1	3·1
Calshot (Sthmtn.)	56	47	44	3	–	2·3
Lympne ...	56	(47)	35	0·3	0·3	2·4
Manston ...	57	44	34	0·1	0·1	3·8
Shoeburyness ...	56	44	30	Tr	–	2·8
Felixstowe ...	56	41	36	–	–	2·7
Gorleston ...	51	44	43	–	–	*
Mildenhall ...	55	42	36	–	1	1·3
Cranwell ...	51	42	38	Tr	Tr	3·6
Birmingham ...	50	45	40	0·1	–	0·1
Upper Heyford	54	44	32	–	–	*
Ross-on-Wye	56	46	41	–	0·1	1·4
Hartland Point	56	50	46	–	–	6·3
Bristol ...	56	46	38	–	–	3·2
Portland Bill ...	55	52	*	1	–	*
Plymouth ...	57	52	51	3	–	3·8
The Lizard ...	58	51	*	–	0·5	5·2
Scilly (St. Mary's)	56	51	*	–	3	4·1
Guernsey ...	58	51	44	–	0·1	4·5
Pembroke ...	55	52	*	2	0·1	2·4
Holyhead ...			46	*	Tr	1·1
Chester (Sealand)	54	44	37	0·6	0·5	4·0
Manchester ...	52	42	34	1	1	4·4
Spurn Head ...	51	44	*	Tr	Tr	3·8
Catterick ...	53	35	32	–	Tr	4·2
Tynemouth ...	53	42	37	–	–	*
St. Abbs Head	50	41	*	–	1	*
Leuchars ...	*	39	31	*	0·1	0·1
Renfrew (Abbots I.)	53	38	33	Tr	4	2·2
Eskdalemuir ...	49	40	35	0·3	4	2·0
Point of Ayre ...	57	45	*	–	8	5·6
Tiree	52	40	37	0·6	3	1·0
Stornoway ...	50	46	*	0·4	3	1·1
Dalwhinnie ...	45	40	39	0·2	–	0·0
Aberdeen ...	49	40	30	–	–	0·0
Wick ...	50	43	*	0·6	–	*
Lerwick ...	48	40	*	1	2	3·0
Blacksod Point	52	45	*	–	3	*
Malin Head ...	51	44	*	–	3	0·7
Aldergrove ...	54	43	43	–	6	4·0
Birr Castle ...		49	49	–	6	2·2
Valentia Obsy.	54	50	44	3	2	0·0
Roches Point	55	52	*	1	4	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet.	Weather Morning. (24 hrs. ended 9h.)	Weather Afternoon.	Weather Night.	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day. mm.	Rainfall Night. mm.	Sunshine to Sunset. hrs. (Yesterday.)	Humidity 15h. G.M.T. % (Yesterday.)	Humidity 9h. G.M.T. % (To-day.)	Visibility 9h.
Kew ...	18	Ffcpr.c	cbcm.	owfefe	54	41	34	0·2	0·1	2·2	*	*	
Croydon ...	217	bcmfpr	m.bcm.	bwfcm	57	42	36	0·3	Tr	1·7	*	*	
Greenwich (Royal Observatory) ...	149	cd.	cb	bmwff	56	43	31	Tr	Tr	1·6	84	98	4
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	51	45	40	0·1			73	93	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	56	44	39	–	–	2·7	81	96	*
Camden Square ...	110	bc	bc	*	55	45	37	–	–	*	*	97	*
Kensington ...	80	bcp	bc	*	56	43	35	0·1	Tr		97	91	*
Hampstead Observatory ...	450	bc	bc	bcof	53	43	40	–	–		*	98	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 11th....

South Kensington. Max.	Time.	Min.	Time.
0·4	8h 9th	0·1	14h 10th

Kew Observatory. Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 10th November. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. 11th November. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris ...	1015·5	–	0	b	48	1011·4	NNE	6	rr	45	57	41	–	1
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1019·7	E	2	bc	55	1018·6	ENE	3	m	48	*	*	–	–

‡ 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 12th November, 1939.

No. 28,479

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1008·6	-18	E	3	m	53	85	4	5	7	-	7-8	9+	4000
	Croydon	1009·7	-14	NE'E	2	ir₀	51	92	9	5	7	-	7-8	9+	4000
	S. Farnborough	1008·4	-14	S'N	2	ir₀	52	92	6	5	-	-	10	10	2500
	Boscombe Down	1007·9	-14	ESE	2	z₀	51	92	6	5	-	-	10	10	1500
	Calshot (Soton.)	1007·9	-10	E'S	3	z₀	52	92	6	5	-	-	10	10	1500
	Lympne	1009·9	-14	ESE	2	ir₀	50	92	6	5	2	-	7-8	10	1500
	Manston	1009·2	-20	ESE	2	ir₀	51	92	6	5	7	-	4-6	10	1500
2	Shoeburyness	1010·5	-16	E'S	1	c	51	92	6	5	2	-	4-6	10	2500
	Felixstowe	1009·8	-18	ESE	2	c	52	92	7	5	7	-	4-6	10	4000
	Gorleston	1010·5	-16	SE'S	2	id₀	51	85	6	5	-	-	9+	9+	2500
	Mildenhall	1009·7	-26	SE	2	z₀	54	85	6	5	4	2	4-6	7-8	1500
	Cranwell	1010·0	-10	S'E	3	z₀	47	97	6	5	-	-	10	10	450
3	Birmingham	1009·2	-6	ESE	2	c	49	85	5	-	7	7	0	9+	-
	Upper Heyford	1009·5	-12	E'N	1	m	51	85	4	5	5	7	Tr	10	800
4	Ross-on-Wye	1008·3	-10	SE	2	c/r	49	92	6	5	1	-	9	10	1500
5	Hartland Point	1006·3	-2	SE	2	c	56	85	8	8	7	-	7-8	9	2500
	Bristol	1008·1	-10	E	2	z₀	50	92	5	5	-	-	10	10	1500
	Portland Bill	1007·7	-16	S	2	c	54	92	7	5	-	-	10	10	2500
	Plymouth	1006·9	-2	S'W	2	c/r	54	97	6	5	-	-	9+	9+	1500
	The Lizard	1006·2	0	S	3	c	57	92	8	8	6	-	7-8	7-8	1500
	Scilly (St. Mary's)	1005·4	+2	S'E	3	c	57	92	7	8	-	-	7-8	7-8	1500
	Guernsey	1007·3	-4	SSW	1	c	55	85	7	4	1	8	4-6	9+	2500
6	Pembroke	1006·5	+4	S'E	3	c	54	97	7	8	-	-	9+	9+	1500
7	Holyhead	1006·3	-10	S'W	3	c	54	75	8	5	-	-	9+	9+	2500
	Chester (Sealand)	1008·4	-6	SE	3	z₀	52	75	6	1	7	-	1	4-6	2500
8	Manchester	1008·8	-10	SSE	3	z₀	53	85	6	8	3	-	4-6	4-6	2500
10	Spurn Head	1009·9	-6	S'W	4	c	48	97	5	5	3	-	9	9+	1500
	Catterick	1008·8	-6	S'W	3	m	49	92	4	5	-	-	10	10	450
	Tynemouth	1007·9	-8	SW	3	c/F	53	75	6	2	3	-	4-6	7-8	1500
11	St. Abbs Head	1006·3	-8	SSW	2	c	51	85	7	5	4	-	7-8	9	2500
	Leuchars	1009·9	-14	S	1	z₀	50	92	6	5	2	-	9	10	2500
12	Renfrew (Abbots I.)	1005·5	-12	WSW	3	rr	52	92	5	6	2	-	7-8	10	1500
	Eskdalemuir	1006·3	-8	SSW	4	c	49	85	7	5	-	-	9+	9+	800
	Point of Ayre	1006·8	-4	SSW	3	c	54	85	7	8	7	-	4-6	9	2500
13A	Tiree	1004·5	0	N'W	2	id₀	50	85	8	5	-	-	9+	9+	1500
13B	Stornoway	1004·5	+2	WNW	3	c	47	75	7	5	7	-	4-6	7-8	2500
15	Dalwhinnie	1005·4	-6	SW	3	ir	44	97	7	5	2	-	4-6	10	2500
	Aberdeen	1004·6	-12	SSW	2	r₀r₀	47	97	6	6	2	-	2-3	10	1500
	Wick	1003·1	-4	SSW	2	c	47	97	8	5	3	-	7-8	10	2500
16	Lerwick	999·8	0	SW	5	c	47	65	8	8	7	-	4-6	7-8	800
17	Blacksod Point	1006·3	+12	N	1	bc	54	92	8	3	-	-	4-6	4-6	1500
18	Malin Head	1004·8	0	NW	1	c	51	92	7	9	-	-	9+	9+	2500
	Aldergrove	1005·2	-6	S'W	2	c	54	85	7	8	3	-	7-8	9	4000
19	Birr Castle	1004·8	+4	SSE	1	c	55	85	8	5	1	-	7-8	10	2500
20	Valentia Obsy. †	1005·3	+10	NW'N	3	c	54	85	8	5	-	-	9+	9+	1500
	Roches Point	1004·3	+6	S'W	2	c/d	53	97	8	5	-	-	7-8	7-8	1500

OBSERVATIONS at 18h. G.M.T. 11th November — PAST 24 HOURS

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Weather 7h.–13h. 11th (37)	Weather 13h.–18h. 11th (38)	Weather 18h. 11th–1h. 12th (39)	Weather 1h.–7h. 12th (40)
London (Kew)	1008·5	+2	—	0	m	52	92	4	5	-	-	10	10	2500	1		ofewcm	cmir₀om	omid₀f	om₀w
Croydon	1008·8	-2	—	0	z₀	50	97	5	5	-	-	10	10	1500	1	*	cmm₀m	cr₀mcm₀	cfid₀d₀f	ofcmbc
S. Farnborough	1008·0	+4	E'N	1	df	51	97	7	5	-	-	10	10	800	1	*	ofecm₀	cm₀d₀f₀	cd₀mc	cm₀p
Boscombe Down	1008·1	+4	—	0	of	50	97	2	-	2	-	10	10	1500	1	*	of cm₀m	cm₀rd₀d₀f	offeffe	Fefed₀d
Calshot (Soton.)	1008·0	+6	—	0	df	52	97	7	5	-	-	10	10	1500	1	*	cfr₀r₀m₀	cm₀fid₀	Fof	f
Lympne	1009·3	+8	SE'E	2	c/r	50	97	4	5	2	-	9	10	800	1	2	cm₀ir₀	cm₀r₀cm	cmfefe	feom₀
Manston	1008·7	+2	SE	2	f+	50	97	3	5	-	-	4-6	4-6	1500	1	§ *	ccir₀	cir₀bcf	id₀ffo	ffmo
Shoeburyness	1009·2	-2	E'S	1	c	50	97	5	5	7	-	4-6	7-8	2500	1		bcm₀	r₀cm₀	cbm₀cm	cmffmc
Felixstowe	1008·4	-4	E'S	2	z₀	49	97	6	5	-	7	2-3	9+	4000	1	1	cfcm₀c	ccm₀w	cm₀ff	omwif
Gorleston	1009·0	-2	SE'E	2	b	49	92	6	6	-	-	0	0	—	1	2	offecz₀	cbcz₀w	bbcz₀,id₀	oid₀z
Mildenhall	1008·4	-4	ESE	2	z₀	49	97	6	5	4	1	Tr	2-3	1500	1	*	ofcm₀	cm₀bcm₀	bm₀omf	offbc,ff
Cranwell	1008·8	-2	NE'E	5	z₀	46	97	5	5	2	-	2-3	9	800	1	*	odfFm₀	cm₀	cm₀,oFF	oF,cm
Birmingham	1008·8	0	S	1	m	49	92	4	-	7	-	0	10	-	1	*	foc	c	cm	cif
Upper Heyford	1008·8	+2	SSE	1	m	51	97	4	5	-	-	10	10	1500	1	*	cfofcm	cmcm₀cm	cmd₀fcf	bfof
Ross-on-Wye	1008·6	+4	W'S	1	z₀	49	92	6	5	-	-	10	10	800	1	*	ccr₀	cm₀om	om₀cmf	cfof
Hartland Point	1006·9	+6	SW	3	c	53	92	8	8	6	-	4-6	7-8	2500	1	3	cp	cbcc	cbcb	bcc
Bristol	1008·4	+8	—	0	z₀	51	97	5	5	-	-	10	10	450	1	*	cr₀m₀	cid₀cm₀	cmbcif	ofembcm₀
Portland Bill	1008·2	+14	SW	1	o	54	92	7	5	-	-	10	10	2500	1	2	co	c	b	bcc
Plymouth	1007·7	+10	—	0	bc	53	92	6	8	4	-	4-6	4-6	2500	1	2	cit₀c	ccpr₀bcb	bcbw	bcwm₀id₀
The Lizard	1007·3	+8	S	2	bc	53	97	8	8	-	-	2-3	2-3	2500	0	2	bcc	bccbc	cbcpr	cpr₀c
Scilly (St. Mary's)	1006·4	+10	SW	1	c/d	53	97	7	8	4	-	4-6	7-8	1500	1	2	bcc	cd₀	cbcw	bccw
Guernsey	1008·0	+12	—	0	c	52	92	5	5	2	-	7-8	9+	2500	1	3	c	c	cbcb	bbc
Pembroke	1007·8	+6	SW'S	2	bc	52	97	8	8	-	-	2-3	2-3	1500	1	2	cid	cbc	ifbcc	dcc
Holyhead	1006·4	+2	S'E	3	bc	53	85	7	5	4	-	2-3	4-6	2500	1	1	bcc	cbc	bcpr₀b	bcirc
Chester (Sealand)	1007·7	-2	ESE	1	z₀	48	85	5	5	-	-	4-6	4-6	4000	1	*	cmwbcm₀	bccz₀	cm₀,bfw	bbcffmw
Manchester	1007·9	0	SE'S	1	m	44	97	4	5	3	-	1	2-3	5700	1	*	cm₀ffcbcm₀	bcm₀bm	bmffwFF	oFFr₀r₀
Spurn Head	1008·8	-4	SSE	2	c	48	97	5	5	-	-	9+	9+	2500	0	1	ocm₀	cm₀	cbczw	bbczw
Catterick	1007·5	+2	SSE	1	of	43	97	3	5	-	-	10	10	450	1	4	orfofm	omofe	oFe	oFir₀m
Tynemouth	1007·5	0	SW	3	m	48	85	4	5	-	-	4-6	4-6	1500	1	1	ff	cbcm	bc	bcmoir₀
St. Abbs Head	1004·3	-6	SW	4	c	49	85	7	8	6	-	4-6	7-8	2500	0	2	ir₀c	i₀c	pr₀c	r₀rc
Leuchars	1003·6	-8	SW	2	ir	50	92	5	5	2	-	9+	10	1500	1		r₀r₀mcm₀	id₀d₀irm₀	crrm₀,bcw	bcum₀bc
Renfrew (Abbots I.)	1014·9	0	WSW	1	ir	50	92	5	5	2	-	9	10	1500	1	*	cr₀r₀ffrr	cr₀pr₀rRR	crrr₀r₀c	cbcb,c
Eskdalemuir	1005·5	-6	SSW	3	o/d	47	92	5	5	-	-	10	10	450	1	*	orrr₀r₀	cid₀cm₀	cm₀rrc	cbcbx
Point of Ayre	1006·3	-2	SW'S	2	bc	50	97	8	8	-	-	2-3	4-6	1600	1	* 1	c	c	cpr	c
Tiree	1005·6	+10	NW'N	2	c	48	75	8	5	-	-	9+	9+	2500	0	2	cid₀	c	cbc	bcc
Stornoway	1005·2	+10	—	0	c/pr	41	85	7	5	7	-	4-6	7-8	2500	1	0	cr₀r₀	cpr₀	cr₀r₀	cpr₀
Dalwhinnie	1004·8	+4	—	0	ir₀	43	97	7	6	2	-	4-6	10	2500	1		cir	cir	*	cis
Aberdeen	1014·3	-2	NW'W	2	rr	47	97	5	6	2	-	9+	10	1500	1	*1	or₀r₀	crrk	r₀r₀bc	bcbx
Wick	1003·7	+4	W	3	c	43	97	7	5	7	-	7-8	9	1500	1	1	bcc	r₀pr₀	cpr₀c	cbc
Lerwick	1002·7	+2	WNW	2	bc	37	75	8	5	2	-	4-6	4-6	1500	0	*	cpr	cbc	cph	cphpr
Blacksod Point	1007·2	+10	NW	1	bc	47	92	8	2	-	-	4-6	4-6	1500	0	3	bc	bc	bc	cbc
Malin Head	1006·1	+10	N	3	id₀	49	92	6	8	-	-	9+	9+	1500	1	2	cr₀rc	c	cid₀c	cbcc
Aldergrove	1005·6	+6	W'S	1	r₀r₀	51	92	6	6	-	-	10	10	450	1	*	ir₀m₀c	cr₀r₀m₀	r₀r₀md₀fc	cbcfcm
Birr Castle	1005·9	+12	SSW	1	c	51	92	7	5	-	-	7-8	7-8	2500	0		c	c	c	c
Valentia Obsy. †	1007·9	+14	NNW	3	bc	52	85	8	5	-	-	4-6	4-6	1500	1	2	id₀bcc	cbc	bccbcw	cwbwc
Roches Point	1006·4	+14	SW'S	2	bc	50	92	8	5	-	-	4-6	4-6	1800	1	3	idrid c	cbc	bcw	bccw

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

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

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

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

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

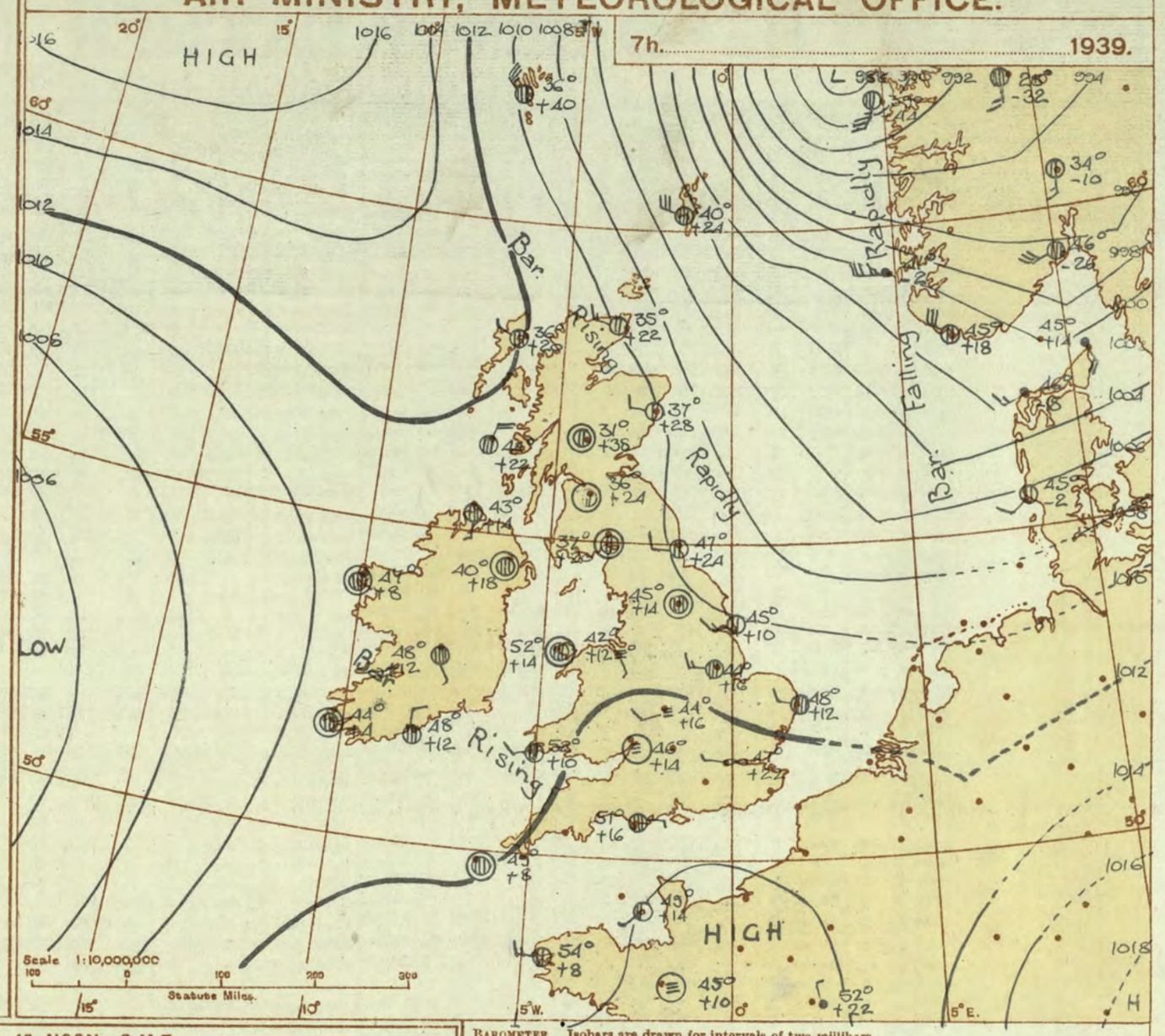
COLUMN 29.—STATE OF GROUND.

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

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

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. ..... 1939.



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. 12th November, 1939.
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.	Light variable winds, fair today apart from fog locally; widespread fog at night; average temperature.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Light or moderate northwest wind; fair; rather cold with frost at night.
~~17 N. W. Ireland~~ 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light variable wind, becoming southeast and freshening; fair today some rain tomorrow; average temperature.

GENERAL INFERENCE.

Pressure is almost uniform over the British Isles, but a depression advancing from the Atlantic will cause freshening southeasterly winds in the west and some rain tomorrow. Widespread fog will occur at night.

FURTHER OUTLOOK.

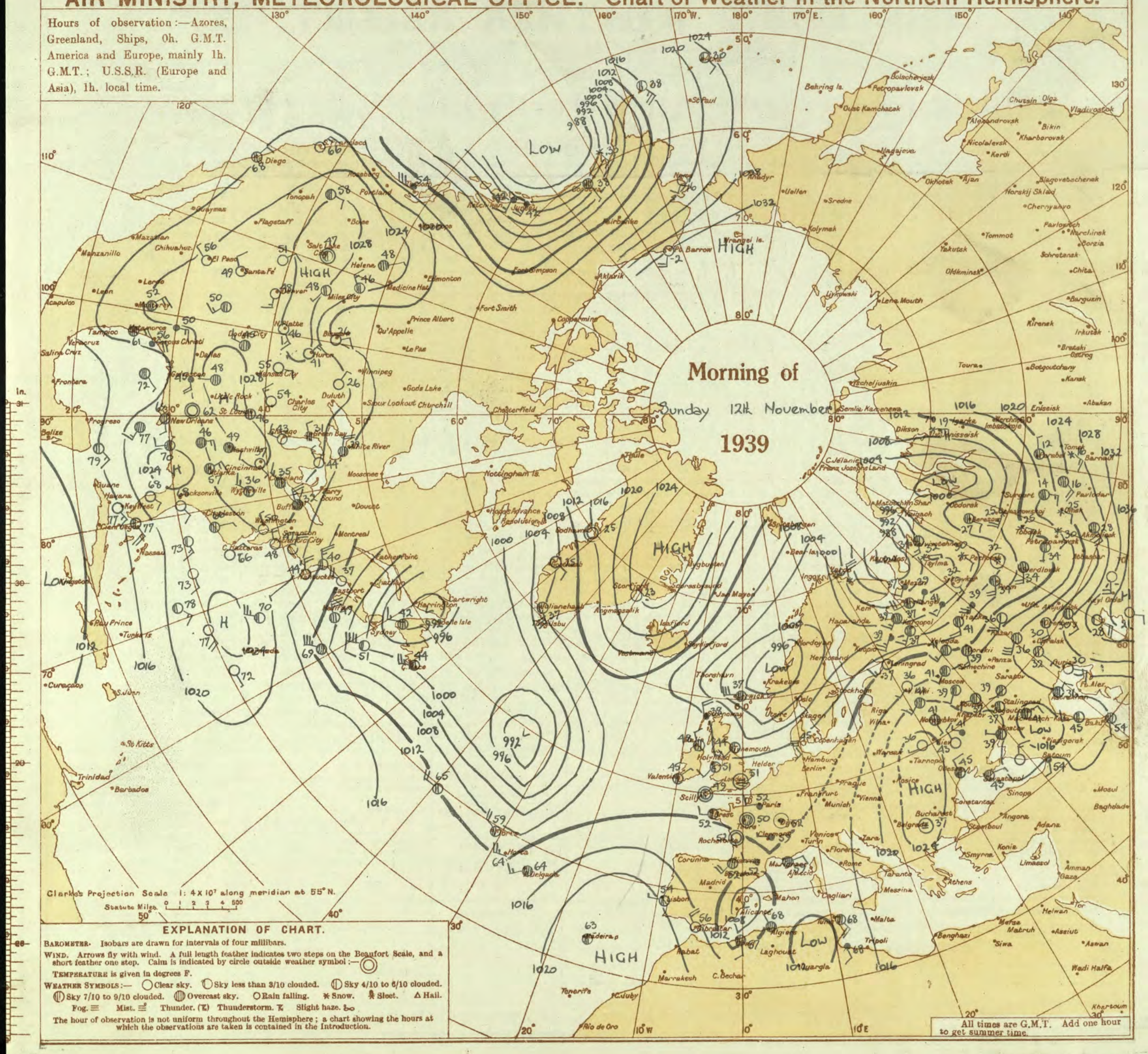
Unsettled with southeasterly winds in the South; doubtful elsewhere.

Forecasts issued at 1000 G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1.
O.472/8777. Wt. 8109. D 4626. 6p. 348. 24300. 11/39.

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 12th November 1939.

No. 28,479

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1010·2	+10	–	0	f	51	97	2	–	–	–	10	10	<150
	S. Farnborough	226	1010·4	+12	SW'W	2	m	50	97	4	5	–	–	7-8	7-8	1500
	Boscombe Down	417	1010·5	+10	–	0	F	49	97	1	–	–	–	10	10	<150
	Calshot (Sthmtn.)	8	1010·4	+8	SW	1	of	50	97	3	5	–	–	10	10	1500
	Lympne ...	346	1010·8	+10	N	2	f	50	97	3	–	–	–	10	10	<150
	Manston ...	154	1010·2	+10	WNW	1	f	50	97	2	–	–	–	10	10	<150
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1009·6	+6	SSW	1	f	49	97	2	–	–	–	10	10	<150
	Gorleston ...	5	1009·2	+2	SW	1	id.	48	92	5	6	–	–	10	10	1500
	Mildenhall ...	19	1009·5	+2	SW	2	of	49	97	3	5	–	–	10	10	450
	Cranwell ...	240	1009·0	+2	SE	1	F	46	97	1	–	–	–	10	10	<150
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1010·3	+6	SW	1	cf	49	97	3	5	–	–	9+	9+	1500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1009·4	+8	SW	3	bc	50	92	8	4	–	–	2-3	2-3	2500
	Bristol ...	209	1010·3	+8	–	0	m	49	97	4	5	–	–	10	10	450
	Portland Bill ...	32	1010·4	+14	WSW	1	b	53	92	7	–	–	–	0	0	–
	Plymouth ...	82	1010·6	+10	E'S	1	bc	45	97	6	5	–	–	2-3	2-3	2500
	The Lizard ...	240	1009·5	+8	S	1	pr	52	97	8	8	–	–	4-6	4-6	1500
	Scilly (St. Mary's)	163	1009·8	+18	–	0	bc	49	97	8	5	4	–	2-3	4-6	2500
	Guernsey ...	175	1010·4	+10	SW	1	b	51	92	6	1	–	–	1	1	2500
6	Pembroke ...	142	1009·8	+6	SW	2	c	52	97	7	8	–	–	7-8	7-8	1500
7	Holyhead ...	26	1008·3	+10	SW'S	2	c/pr	51	92	7	2	–	–	2-3	2-3	2500
	Chester (Sealand)	16	1009·3	+8	SSE	1	bf	39	92	2	–	–	–	0	0	–
8	Manchester ...	70	1009·1	+4	S'E	1	F	41	97	0	–	–	–	10	10	<150
10	Spurn Head ...	29	1009·2	0	WSW	2	b	47	92	6	–	–	–	0	0	–
	Catterick ...	175	1007·9	0	S	2	F	39	97	1	–	–	–	10	10	<150
	Tynemouth ...	108	1007·5	0	SW	2	m	44	92	4	5	–	–	4-6	4-6	1500
11	St. Abbs Head	280	1005·6	+8	NW	3	c	49	92	7	8	6	–	7-8	9+	1500
	Leuchars ...	36	1006·3	+14	–	0	bc	45	97	7	5	–	–	2-3	2-3	4000
12	Renfrew (Abbots I.)	19	1007·8	+14	WNW	2	c	46	85	7	5	7	–	7-8	9+	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1017·1	+2	W'N	3	pr	52	97	7	8	2	–	4-6	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1009·5	+24	N	4	pr	38	85	7	5	7	–	2-3	7-8	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1006·7	+8	WNW	4	c/pr	39	85	7	5	7	8	4-6	7-8	1500
16	Lerwick ...	156	1001·6	–2	W	6	c	37	65	8	8	7	–	4-6	7-8	1500
17	Blacksod Point	18	1009·1	+8	–	0	bc	44	97	8	4	–	–	4-6	4-6	2500
18	Malin Head ...	84	1008·6	+10	NW	2	c	48	75	7	5	–	–	9	9	4000
	Aldergrove ...	268	1008·7	+14	NW	2	c	47	97	7	5	–	–	10	10	2500
19	Birr Castle ...	173	1008·7	+8	SSE	1	c	49	97	7	5	–	–	10	10	2500
20	Valentia Obsy.	30	1010·1	+6	NE'E	1	bc	45	97	8	5	–	–	2-3	2-3	2500
	Roches Point	22	1009·7	+12	NNW	2	bc	46	97	8	5	–	–	2-3	2-3	2500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1013·5	+20	W'N	2	z.	48	92	5	5	–	–	10	10	1500	1	*
Croydon ...	1013·3	+22	W	1	z.	47	97	6	5	–	–	7-8	7-8	1500	1	*
S. Farnborough	1013·5	+18	W'S	2	z.	48	97	5	5	–	–	10	10	800	1	*
Boscombe Down	1013·6	+2	N	2	f	45	97	2	–	–	–	10	10	<150	1	*
Calshot (Sthmtn.)	1013·5	+18	–	0	F	47	97	1	–	–	–	10	10	<150	1	1
Lympne ...	1013·9	+22	WNW	2	z.	49	97	5	5	–	–	10	10	220	1	§2
Manston ...	1013·2	+22	NW	1	m/f	50	97	4	5	–	–	10	10	450	1	*
Shoeburyness ...	1013·1	+24	W	2	m	50	97	4	5	–	–	10	10	2500	1	*
Felixstowe ...	1012·3	+22	SW	1	f	49	97	3	–	–	–	10	10	<150	1	1
Gorleston ...	1011·4	+12	W'N	2	o	48	97	5	5	–	–	10	10	1500	1	1
Mildenhall ...	1012·2	+18	SE	1	f	47	97	2	–	–	–	10	10	<150	1	*
Cranwell ...	1011·6	+16	W'N	3	m/f	44	97	4	5	–	–	9	9	2500	0	*
Birmingham ...	1013·0	+16	WSW	2	if	44	97	5	5	7	–	7-8	9	2500	1	*
Upper Heyford	1013·0	+14	SW	1	f	47	97	2	–	–	–	10	10	<150	1	*
Ross-on-Wye	1012·6	+14	–	0	f	46	97	2	5	–	–	10	10	450	1	*
Hartland Point	1011·9	+14	SW	2	c	50	97	8	5	–	–	9	9	2500	1	2
Bristol ...	1013·0	+16	SE	1	z.	44	97	6	5	4	–	4-6	4-6	2500	1	*
Portland Bill ...	1013·8	+16	E	1	c	51	92	7	5	4	–	4-6	9	4000	1	2
Plymouth ...	1013·1	+18	E	1	z.	47	97	6	5	–	–	7-8	7-8	1500	1	1
The Lizard ...	1012·2	+10	–	0	c	51	92	8	8	2	–	7-8	9+	1500	1	1
Scilly (St. Mary's)	1011·7	+8	–	0	c	49	97	8	8	–	–	9+	9+	2500	1	0
Guernsey ...	1013·2	+14	SW	1	bc	49	97	8	2	3	–	4-6	4-6	2500	1	2
Pembroke ...	1011·5	+10	W'S	2	c	52	92	7	8	–	–	9+	9+	1500	1	1
Holyhead ...	1010·5	+14	–	0	c	52	92	7	5	–	–	9+	9+	2500	1	1
Chester (Sealand)	1011·4	+12	SSE	1	m	42	92	4	5	–	–	9+	9+	4000	1	*
Manchester ...	1011·6	+12	SE	1	df	43	97	3	5	–	–	10	10	450	1	*
Spurn Head ...	1010·3	+10	SW'N	3	bc	45	97	7	–	–	8	0	2-3	–	1	2
Catterick ...	1010·3	+14	–	0	m/f	45	97	4	5	–	–	9+	9+	2500	1	*
Tynemouth ...	1009·9	+24	W	2	c	47	85	6	8	–	–	9+	9+	1500	1	1
St. Abbs Head	1010·4	+24	NNW	2	c	45	75	8	8	3	–	4-6	7-8	1500	1	2
Leuchars ...	1011·8	+38	–	0	bc	38	85	7	2	5	6	2-3	2-3	2500	1	*
Renfrew (Abbots I.)	1012·0	+24	–	0	c	36	92	7	5	7	–	4-6	7-8	2500	1	*
Eskdalemuir ...	1011·7	+20	–	0	bc	37	85	8	5	–	–	1	2-3	2500	1	3
Point of Ayre ...	1010·5	+22	NNE	3	c	49	75	8	5	–	–	9+	9+	4000	1	2
Tiree ...	1011·0	+22	NEN	4	c	44	75	9	5	–	–	7-8	7-8	2500	0	3
Stornoway ...	1012·5	+20	NNW	1	c	36	85	9	5	7	–	7-8	9+	2500	1	1
Dalwhinnie ...	*	+38	–	0	c	31	97	8	4	4	–	2-3	4-6	4000	4	*
Aberdeen ...	1011·4	+28	WNW	2	b	37	85	8	1	4	–	Tr	Tr	4000	1	1
Wick ...	1009·5	+22	WNW	3	bc	35	92	8	5	6	–	4-6	4-6	2500	1	2
Lerwick ...	1004·7	+24	WNW	6	c/pr	40	85	7	8	7	–	4-6	7-8	1500	1	*
Blacksod Point	1010·4	+8	–	0	c	47	97	8	–	1	–	0	9	–	0	2
Malin Head ...	1011·0	+14	S	1	c	43	75	8	8	8	–	4-6	7-8	5700	0	2
Aldergrove ...	1011·7	+18	–	0	m/f	40	97	4	5	7	8	2-3	9	1500	1	*
Birr Castle ...	1010·7	+12	SSE	1	c	48	97	7	5	–	–	10	10	2500	1	*
Valentia Obsy.	1010·7	+4	–	0	c	44	97	8	5	–	–	9+	9+	2500	1	2
Roches Point	1011·4	+12	N	2	c	48	85	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 18h Hrs. (36)
London (Kew)	53	48	37	Tr	Tr	0·1
Croydon ...	52	47	39	0·2	Tr	0·0
S. Farnborough	52	51	43	0·1	0·3	0·1
Boscombe Down	51	44	43	0·2	0·3	0·0
Calshot (Sthmtn.)	53	46	46	1	–	0·0
Lympne ...	50	49	48	0·1	–	0·0
Manston ...	51	49	47	0·1	0·2	0·0
Shoeburyness ...	52	47	39	Tr	–	0·0
Felixstowe ...	53	49	45	–	Tr	0·1
Gorleston ...	51	46	45	–	0·5	*
Mildenhall ...	55	47	36	Tr	Tr	0·3
Cranwell ...	49	41	39	Tr	Tr	0·3
Birmingham ...	50	42	35	–	–	0·0
Upper Heyford	52	44	36	Tr	Tr	*
Ross-on-Wye	50	44	36	0·1	–	0·0
Hartland Point	53	46	43	0·1	–	1·9
Bristol ...	52	44	35	0·3	–	0·0
Portland Bill ...	54	50	*	–	–	*
Plymouth ...	57	43	41	0·2	Tr	1·0
The Lizard ...	58	50	*	Tr	1	6·2
Scilly (St. Mary's)	57	48	*	Tr	0·2	3·9
Guernsey ...	56	47	37	–	–	0·1
Pembroke ...	55	48	*	0·3	0·2	1·3
Holyhead ...	55	49	46	–	0·5	0·0
Chester (Sealand)	53	39	31	–	Tr	3·2
Manchester ...	54	35	30	–	0·6	1·9
Spurn Head ...	49	*	*	–	Tr	0·1
Catterick ...	49	38	37	–	3	0·2
Tynemouth ...	53	43	40	–	0·4	*
St. Abbs Head	51	44	*	Tr	0·3	*
Leuchars ...	51	36	30	1	2	0·0
Renfrew (Abbots I.)	52	35	31	18	2	0·0
Eskdalemuir ...	49	30		1	3	0·0
Point of Ayre ...	54	46	*	–	0·1	0·2
Tiree ...	51	42	39	Tr	–	0·2
Stornoway ...	47	33	*	Tr	0·1	1·9
Dalwhinnie ...	45	28	23	4	0·6	0·0
Aberdeen ...	48	36	29	6	0·6	0·0
Wick ...	48	34	*	1	0·1	*
Lerwick ...	51	35	*	Tr	1	1·1
Blacksod Point	55	44	*	Tr	–	*
Malin Head ...	52	40	*	4	0·1	0·0
Aldergrove ...	55	39	34	0·4	2	0·7
Birr Castle ...	57	46	46	–	–	1·8
Valentia Obsy.	55	40	34	Tr	Tr	3·5
Roches Point	54	45	*	4	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	ofewc	cmin.o	ofdomw	53	48	37	Tr	Tr	0·1	*	*	5
Croydon ...	217	cmom	cr.,cm.	cfdmbc	52	47	39	0·2	Tr	0·0	*	*	
Greenwich (Royal Observatory) ...	149	cm	cr.o	ocb	51	47	37	Tr	–	0·0	93	96	4
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	52	45	42	–	–	0·0	85	96	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*						0·0			*
Camden Square ...	110	0	0	*	52	47	40	–	1	0·0	*	98	*
Kensington ...	80	bcwcm	bcw	*	53	47	37	–	0·3	0·0	99	96	*
Hampstead Observatory ...	450	orf	of	of	50	46	44	0·4	–	0·0	*	83	*

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.
0·6	21-23h 11th	<0·4	5-6h 12th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 11th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 12th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1008·3	WNW	2	fo	52						54		8	
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1017·5	ESE	2	b	59	1017·2	ENE	2	m	50	*	*	–	–

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

EXPLANATION OF FIGURES, LETTERS, etc.

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

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

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

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

COLUMNS 8, 22 — Code for surface visibility.

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

COLUMN 30 — Code for State of Sea.

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

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

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

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 13th November 1939.

No. 28480.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)…	1016.7	+10	S	2	zo	50	92	5	5	-	-	10	10	1500
	Croydon …	1016.6	+12	SW	1	zo	50	92	5	5	—	-	9+	9+	2500
	S. Farnborough	1016.4	+6	S'E	2	zo	51	92	6	5	-	-	10	10	1500
	Boscombe Down	1016.2	+6	SSE	1	zo	50	97	6	5	-	-	9+	9+	800
	Calshot (Soton.)	1016.4	+10	ESE	2	zo	51	97	5	5	-	-	10	10	1500
	Lympne …	1017.1	+10	SSW	2	c	55	75	7	8	—	-	9	9	5700
	Manston …	1016.8	+14	WSW	2	zo	57	75	6	-	3	1	0	9	-
2	Shoeburyness …	1016.5	+14	W'S	2	m	53	85	4	8	-	-	4-6	4-6	4000
	Felixstowe …	1015.6	+14	SW	3	zo	54	85	5	1	-	6	Tr	2-3	1600
	Gorleston …	1016.[illegible]	+16	W	2	c	53	85	6	5	3	1	4-6	7-8	2500
	Mildenhall …	1015.7	+14	SW	2	zo	50	85	0	5	3	1	2-3	7-8	1500
	Cranwell …	1014.9	+14	WSW	2	zo	50	92	5	5	7	2	7-8	9+	2500
3	Birmingham	1015.3	+14	SSW	2	c	51	85	5	5	3	6	1	7-8	1500
	Upper Heyford	1016.2	+14	SSW	2	zo	51	92	6	5	-	-	10	10	450
4	Ross-on-Wye …	1014.0	+4	S'W	1	zo	53	85	6	5	-	-	9+	9+	2500
5	Hartland Point	1014.3	+10	WSW	3	PR	53	85	8	8	6	-	7-8	9+	2500
	Bristol …	1015.6	+2	SSE	2	c	53	85	7	5	-	-	9+	9+	2500
	Portland Bill …	1015.8	+10	SW	2	o	53	92	8	5	-	-	10	10	4000
	Plymouth …	1014.8	+8	S	1	c	56	85	6	5	3	1	7-8	7-8	2500
	The Lizard …	1014.4	+10	SW	2	ido	53	97	7	8	2	-	9	10	1500
	Scilly (St. Mary's)	1014.0	+4	SE	1	c	56	85	8	8	6	-	4-6	7-8	2500
	Guernsey …	1015.6	+4	SW'S	1	c	55	85	9	2	—	-	7-8	7-8	2500
6	Pembroke …	1014.2	+6	SW'S	2	c	52	92	8	8	-	-	9	9	1500
7	Holyhead …	1013.2	+10	E'N	3	c	52	85	8	9	-	-	9+	9+	1500
	Chester (Sealand)	1014.3	+8	SE	1	zo	53	85	6	5	-	-	9+	9+	2500
8	Manchester …	1014.2	+8	S	2	zo	52	85	5	5	-	2	4-6	7-8	5700
10	Spurn Head …	1014.4	+8	NW	2	c	49	92	4	-	-	7	0	10	-
	Catterick …	1014.9	+14	NNE	2	zo	48	85	6	8	7	-	9	10	2500
	Tynemouth …	1015.2	+12	NE	3	c	48	75	8	8	-	-	7-8	7-8	2500
11	St. Abbs Head	1016.2	+12	NNE	2	c	45	75	9	8	3	—	4-6	7-8	1500
	Leuchars …	1015.5	+14	NE	1	c	43	75	8	2	3	6	Tr	9	4000
12	Renfrew (Abbots I.)	1015.1	+10	SE'E	2	c/f	46	85	5	5	7	-	7-8	10	2500
	Eskdalemuir …	1014.8	+16	NE'E	2	c	42	85	8	7	1	-	1	9+	2500
	Point of Ayre …	1014.0	+6	ESE	2	c	50	85	8	2	3	6	Tr	9+	4000
13A	Tiree …	1013.3	+14	NE'E	3	c	45	75	9	5	-	-	7-8	7-8	4000
13B	Stornoway …	1015.7	+12	NE	1	roro	42	92	9	8	7	8	4-6	10	2500
15	Dalwhinnie …	*	+20	—	0	c	35	92	8	-	4	7	0	9+	—
	Aberdeen …	1015.8	+18	WNW	2	bc	43	65	8	5	-	6	Tr	2-3	5700
	Wick …	1014.4	+12	N	3	c	44	75	8	5	7	8	2-3	7-8	2500
16	Lerwick …	1011.9	+32	NNW	6	c/phr	42	65	8	8	7	-	4-6	7-8	800
17	Blacksod Point…	1010.1	0	SE	3	iro	49	92	8	6	-	—	10	10	450
18	Malin Head …	1012.8	+4	SE	2	c	49	75	8	6	-	8	2-3	9	5700
	Aldergrove …	1013.6	+2	ESE	1	zo	49	75	6	—	7	-	0	10	-
19	Birr Castle …	1012.4	+4	S	1	c	51	85	7	5	1	-	7-8	10	1500
20	Valentia Obsy. †	1011.2	-2	SSE	4	c	52	85	8	5	2	-	7-8	10	1500
	Roches Point …	1013.0	+6	S'E	2	c	54	97	8	8	-	9	9+	9+	1500

OBSERVATIONS at 18h. G.M.T. 12th November — PAST 24 HOURS

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°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)	Weather 7h.—13h. 12th (37)	Weather 13h.—18h. 12th (38)	Weather 18h. 12th to 1h. 13th (39)	Weather 1h.—7h. 13th (40)
London (Kew)	1018.0	+14	SSW	1	m	50	92	4	5	-	-	9+	9+	1500	1	*	cmowcmo	cm,cm	cm mo	cmow
Croydon	1018.1	+14	S'E	1	m	51	97	4	5	-	-	10	10	1500	1	*	cmo	cmocm	cm,cm	bmow
S. Farnborough	1017.9	+12	SE'S	1	zo	51	97	6	5	-	-	9+	9+	4000	1	*	cidomc	cbccmo	c	bccmobc
Boscombe Down	1017.3	+14	SE'S	1	ido	50	97	4	5	-	-	10	10	1500	1	*	ofcmo	cmo	fomoidodd	dd,idoiro
Calshot (Soton.)	1017.2	+12	S'W	1	zo	51	97	5	5	-	-	4-6	4-6	2500	1	1	ofcododmo	cmobcmo	bcmocmo	cbcmow
Lympne	1018.9	+14	SW'S	1	zo	47	97	5	5	3	-	Tr	2-3	450	1	§ 2	ocbcmo	bcbmo	bccpr.bc	bcmocmo
Manston	1018.7	+24	WSW	2	m	46	97	4	5	-	-	1	1	2500	1	*	pofbcc	cmobfg	fgbcmow	bmocmow
Shoeburyness	1017.9	+14	W'S	2	c	50	97	4	5	-	-	9+	9+	2500	1	1	ffcbcm	bcmcm	bcmcm	bcmobwm
Felixstowe	1017.1	+12	W	1	zo	48	97	5	5	-	-	2-3	2-3	2500	1	1	bcmo	bcmow	cmoifmo	cmoifw
Gorleston	1017.3	+14	SW'S	1	bc	51	85	5	5	-	-	4-6	4-6	1500	0	1	czozo	czobczo	bcczo	czo
Mildenhall	1017.0	+4	S'E	2	zo	50	92	5	5	-	-	9	9	5700	1	*	cmo	cmo	cmocmw	cmwcmo
Cranwell	1016.5	+10	-	0	m	47	97	4	5	-	-	9+	9+	1500	0	*	cmfmo	cmom	cm	cmfdf,mo
Birmingham	1016.6	+8	S	2	c	50	85	5	5	-	-	9+	9+	1500	1	*	cmbcc	c	c	proc
Upper Heyford	1017.3	+8	SE'S	1	f	48	97	3	5	3	-	7-8	10	1500	1	*	ofcmo	cmom	bcfofcm	cmbc,cmo
Ross-on-Wye	1016.0	+6	S	2	zo	52	85	6	5	-	-	10	10	1500	1	*	ofomcmo	cmo	cm	cmocdoc
Hartland Point	1014.6	+6	SE	2	c	51	92	8	5	2	-	4-6	7-8	1500	1	2	c	c	cido	cbc
Bristol	1016.4	+12	S'W	3	c/d	51	85	6	5	3	-	4-6	7-8	2500	1	*	bcfecmo	cmodo	cdoircpo	cbcbw
Portland Bill	1017.1	+12	SW	2	bc	52	92	8	5	-	-	4-6	4-6	4000	1	2	c	cbc	bc	c
Plymouth	1015.1	+6	SW	4	c/pr	52	97	7	8	3	-	4-6	9+	1500	1	2	cmjdcmoc	cbccpr	cjprbcc	cbcc
The Lizard	1015.1	+10	SW	2	c	51	92	8	8	4	-	7-8	9+	1500	1	2	cid	cidc	bc	bcc
Scilly (St. Mary's)	1014.6	+6	SSE	2	bc	48	97	8	8	4	4	4-6	4-6	1500	1	1	cbc	cpobc	bccw	croro
Guernsey	1017.1	+16	SSE	1	c	53	92	8	8	-	-	7-8	7-8	2500	1	2	bccbc	cbcc	bcciro	bcc
Pembroke	1015.3	+6	SW	2	c	50	97	7	8	-	-	9+	9+	1500	1	1	c	cid	c	cidoq
Holyhead	1014.2	+10	SSE	3	c	52	92	7	9	-	-	10	10	1500	1	1	cmoc	cproc	cproc	cPrbc
Chester (Sealand)	1015.4	+6	ESE	1	ido	51	85	5	5	-	-	10	10	4000	1	*	cmwcmo	cmdirodod	cfcm	cmfdmo
Manchester	1015.8	+10	SE'S	2	cf+	50	92	3	5	3	-	9	10	2500	1	*	odoffmcdo	cmomff	cffm	cmwmo
Spurn Head	1016.5	+8	-	0	cf+	48	92	3	5	-	-	9+	9+	2500	0	0	cm	cmf	owm	cff
Catterick	1016.9	+12	-	0	iD	46	97	6	5	-	-	10	10	2500	1	4	bccmo	c	moidodd	omofF
Tynemouth	1017.7	+12	E	2	c	48	75	8	8	-	-	9	9	2500	1	1	c	c	coiroo	om
St. Abbs Head	1017.2	+8	NE	2	c	44	65	8	5	-	-	10	10	2500	0	2	bcc	co	orrc	
Leuchars	1017.4	+20	-	0	c	40	85	7	-	7	-	0	9+	-	1	*	bcbbcc	c	cw,ciro mo	cirmorro
Renfrew (Abbots I.)	1016.4	+6	W	2	m	43	85	4	-	7	-	0	10	-	1	*	ccmffmo	cmo	cffmroro	crorofdodo
Eskdalemuir	1016.6	+10	NE'E	2	c	41	85	7	5	-	-	10	10	2500	1	*	bxbcc	c	cododo	ododo ido
Point of Ayre	1014.9	+6	E'S	3	c	50	85	7	5	1	-	7-8	10	4000	1	1	c	c	oc	roroc
Tiree	1013.5	0	ESE	3	bc	46	85	9	5	-	-	2-3	2-3	4000	0	2	c	c	bcc	Ororo
Stornoway	1017.1	+10	E	4	c	45	65	8	5	7	-	7-8	10	2500	1	2	croro	croro	c	croro
Dalwhinnie	1018.0	+8	-	0	c	33	92	8	5	-	-	10	10	4000	4	*	bcc	c	*	cjr
Aberdeen	1018.2	+12	NW'W	1	c	36	85	6	5	3	8	Tr	7-8	4000	1	1	bxb	bbcczo	cbcbw	bccroro
Wick	1017.1	+12	NW	2	c	39	75	7	5	7	-	2-3	7-8	2500	1	2	bcprc⊕	c	cbcc	cirq
Lerwick	1015.2	+10	NW'N	4	c	39	65	8	8	7	-	4-6	7-8	1500	1	*	cphr	cphr	cbc	bcc
Blacksod Point	1008.8	-10	SE	3	rr	49	97	7	6	-	-	10	10	<150	1	3	iroc	c	iro	id
Malin Head	1012.4	-4	ESE	3	roro	48	85	7	6	-	-	9	9	4000	0	2	c	crorc	crorc	cproc
Aldergrove	1013.7	-2	E	3	roro	47	85	6	5	7	-	2-3	10	1500	1	*	cmccmo	crocroro	roromocro	cromocro
Birr Castle	1012.2	+2	S'E	1	c	50	85	7	5	1	-	7-8	10	1500	1		c	c	cir	ciro
Valentia Obsy. †	1010.0	-8	SSE	4	roro	53	92	6	6	2	-	9+	10	1500	1	2	c	croro	croro	rorodd rr
Roches Point	1012.4	-2	SSW	4	c	53	92	8	8	1	-	7-8	9+	1500	1	3	c	c	ciro	rrdr

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). gale.
⊕ Solar halo. Ⓤ lunar halo. Aurora.

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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

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

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

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

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

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

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

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

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

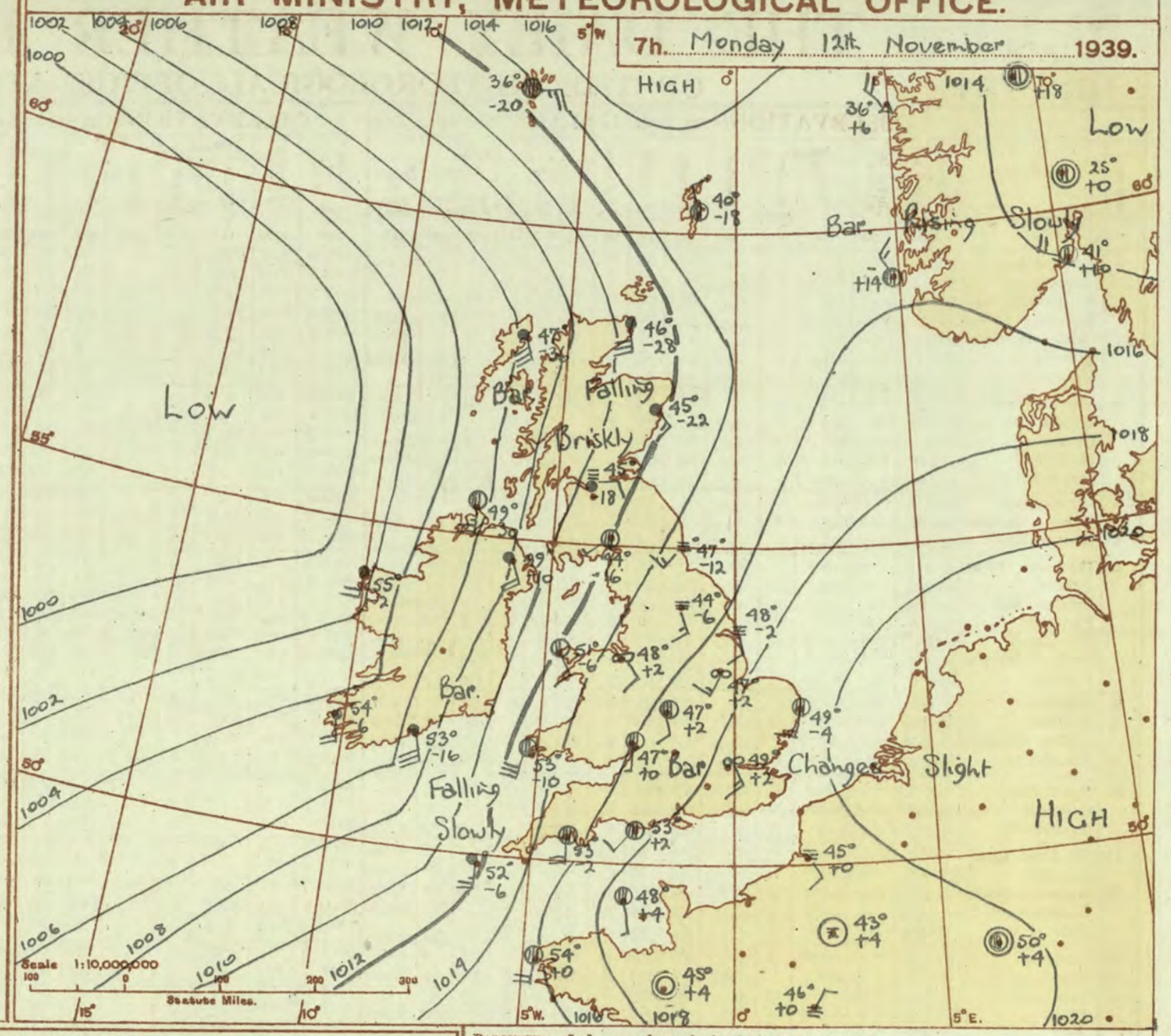
COLUMN 29.—STATE OF GROUND.

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

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

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Monday 12th November 1939.



Districts.	Forecasts for the 24 hours commencing 12 noon, G.M.T. 13th November, 1939.
1 S.E. England 2 E. England ...	Wind southsouthwest, light to moderate; fair most of today, then dull with occasional light rain or drizzle; average temperature becoming rather mild.
3 E. Midlands ... 4 W. Midlands ...	Wind south, moderate, veering southwest; becoming cloudy or dull with occasional rain; some improvement tomorrow; becoming mild.
5 S.W. England 6 South Wales ... 7 North Wales ...	Wind southerly fresh, strong locally on coast, veering southwest, moderating; dull, rain; brighter intervals tomorrow; mild.
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.	Wind southsoutheast, moderate to fresh, strong locally on west coast, veering south; becoming dull, rainy; rather mild.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Wind southeast, fresh or strong; dull; rain at times; average temperature.
17 N. W. Ireland 18 N. E. Ireland	As 8 - 13B.
19 S. E. Ireland 20 S. W. Ireland	Wind veering southwest, moderate or fresh; dull, rain at first; then brighter periods, local showers; mild.

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.

GENERAL INFERENCE.

Pressure is high on the Continent. A deepening depression to westward of Scotland is moving northwards and an associated trough will move slowly northeast across the country. Weather will be dull and rainy in western and northern districts and generally mild but it will be fair most of the day in the Southeast with an average temperature, but there will be light rain there later.

FURTHER OUTLOOK.

Unsettled and mild especially in the Westand North, but only small amounts of rain expected in the Southeast.

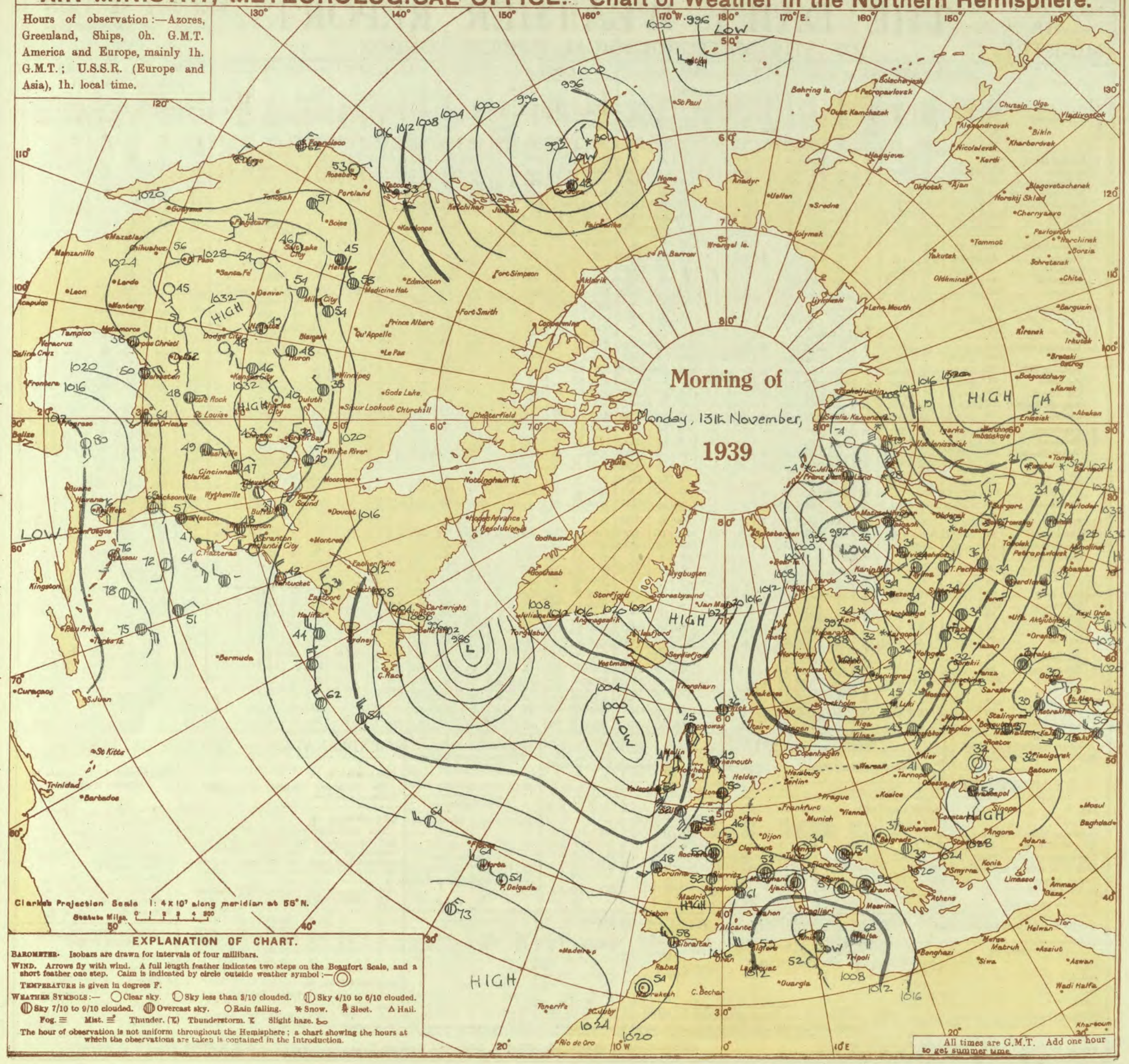
Forecasts issued at 1000 G.M.T.

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, 13th November 1939.

No. 28,480

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1018·5	−2	S'W	1	z.	50	97	5	5	–	–	1	1	2500
	S. Farnborough	226	1018·0	−2	S	1	z.	48	97	6	5	–	–	7-8	7-8	5700
	Boscombe Down	417	1017·3	−2	S'W	3	d.d.	50	97	6	5	–	–	10	10	2500
	Calshot (Sthmtn.)	8	1017·8	−2	S	3	z.	51	97	6	5	–	–	10	10	2500
	Lympne ...	346	1019·7	−2	SSW	1	bc	49	97	6	5	–	–	4-6	4-6	4000
	Manston ...	154	1019·5	0	S'W	3	z.	49	97	6	5	–	–	7-8	7-8	4000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1018·4	−2	S	1	z.	50	97	5	5	–	–	7-8	7-8	5700
	Gorleston ...	5	1018·2	0	S'W	1	c	49	92	5	5	–	–	10	10	2500
	Mildenhall ...	19	1017·7	−2	SE'S	2	m	49	97	4	5	–	–	9	9	4000
	Cranwell ...	240	1017·0	−2	SW'S	2	m	47	92	4	5	–	–	7-8	7-8	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1017·6	−2	S'E	1	m	49	97	4	5	–	–	10	10	450
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1014·9	0	SSW	3	c	50	92	8	5	–	–	7-8	7-8	1500
	Bristol ...	209	1016·4	−2	S'W	2	c	50	85	7	5	3	–	4-6	7-8	2500
	Portland Bill ...	32	1017·1	+4	SSW	2	bc	53	92	8	5	–	–	4-6	4-6	4000
	Plymouth ...	82	1016·3	+2	SSW	4	c	53	85	7	8	–	–	9	9	2500
	The Lizard ...	240	1015·5	−4	W&W	4	bc	52	92	8	8	–	–	2-3	2-3	2500
	Scilly (St.Mary's)	163	1013·3	−12	S'E	5	c	52	97	8	5	–	–	10	10	2500
	Guernsey ...	175	1017·5	0	S'E	1	bc	51	92	8	8	–	–	4-6	4-6	2500
6	Pembroke ...	142	1014·6	0	SSW	3	c	51	85	8	8	–	–	7-8	7-8	1500
7	Holyhead ...	26	1013·4	−6	SE'S	3	c	52	92	7	5	2	–	7-8	10	1500
	Chester(Sealand)	16	1015·1	−6	SE'S	3	m	49	92	4	5	–	–	10	10	4000
8	Manchester ...	70	1015·4	−6	SE	2	m	49	92	4	5	–	–	9	10	1500
10	Spurn Head ...	29	1016·6	−2	S'E	2	m	48	97	4	5	–	–	10	10	4000
	Catterick ...	175	1016·0	−10	–	0	m/d	45	97	4	5	–	–	10	10	220
	Tynemouth ...	108	1016·3	−10	SE	3	0	49	85	7	5	–	–	10	10	1500
11	St. Abbs Head	280	1015·6	−16	S	4	r.r.	46	85	7	8	2	–	7-8	10	1500
	Leuchars ...	36	1016·2	−12	ESE	3	ir.	45	85	6	5	–	–	10	10	1500
12	Renfrew (Abbots L.)	19	1015·0	−12	E	2	r.r.	43	92	4	5	–	–	10	10	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1013·5	−8	S'E	4	c	51	97	7	5	2	–	9	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1014·5	−14	SE	4	c	45	65	7	5	2	–	9	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1016·3	−8	SE	4	c	45	75	7	5	7	–	7-8	10	1500
16	Lerwick ...	156	1017·5	+4	NNW	2	bc	36	85	8	5	–	–	4-6	4-6	1500
17	Blacksod Point	18	1006·6	−12	S	3	c	48	85	7	5	–	–	10	10	450
18	Malin Head ...	84	1003·8	−12	S'E	3	r.r.	47	92	6	8	2	–	4-6	10	1500
	Aldergrove ...	268	1011·6	−10	SE'S	3	ir.	49	92	6	–	2	–	10	10	2500
19	Birr Castle ...	173	1010·2	−8	S	2	ir	50	92	7	6	2	–	7-8	10	1500
20	Valentia Obsy.	30	1006·5	−18	SSE	6	r.r.	54	92	6	6	–	–	10	10	1500
	Roches Point	22	1003·9	−14	SW	6	ir.	53	97	8	6	2	–	7-8	10	800

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount. Low 0–10 (26)	Cloud. Amount. Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
London (Kew)	1018·2	+4	SSW	2	z.	49	97	6	5	–	–	9+	9+	1500	1	*
Croydon ...	1018·3	+2	SSE	3	z.	49	97	6	3	4	9	2-3	4-6	2500	1	*
S. Farnborough	1017·7	+2	SSE	3	z.	48	92	6	5	–	–	4-6	4-6	1500	1	*
Boscombe Down	1017·0	+2	S	2	c/r	49	97	6	5	–	–	9+	9+	450	1	*
Calshot (Sthmtn.)	1017·6	+2	SE'E	2	z.	50	92	6	5	–	–	7-8	7-8	1500	1	1
Lympne ...	1019·6	+2	S'W	2	c	48	92	7	5	–	–	9+	9+	1500	1	§2
Manston ...	1019·3	+4	S	2	z.	48	97	5	5	–	–	10	10	1500	1	*
Shoeburyness ...	1018·5	0	S	3	m	47	97	4	–	4	4	0	2-3	–	1	*
Felixstowe ...	1018·1	−2	S'W	2	z.	48	97	5	8	–	1	1	2-3	1500	1	1
Gorleston ...	1018·2	+4	SSW	3	c	49	92	6	5	–	–	9+	9+	2500	0	2
Mildenhall ...	1017·5	+2	S'E	2	z.	48	97	5	5	–	–	10	10	4000	1	*
Cranwell ...	1016·4	+2	SSW	3	z.	47	97	5	5	3	–	4-6	4-6	1500	0	*
Birmingham ...	1016·1	+2	S	2	c	47	92	6	5	–	–	9	9	2500	1	*
Upper Heyford	1017·1	−2	S	1	id.	49	97	4	5	–	–	10	10	450	1	*
Ross-on-Wye	1016·1	0	S	1	c	47	92	7	5	–	–	7-8	7-8	2500	1	*
Hartland Point	1013·5	−2	SSE	3	bc	49	92	8	4	3	–	2-3	4-6	2500	1	2
Bristol ...	1016·2	−2	SSE	2	bc	48	92	7	8	–	–	2-3	2-3	2500	1	*
Portland Bill ...	1017·5	+2	SW	2	c	53	92	8	5	4	–	4-6	7-8	4000	1	2
Plymouth ...	1015·3	−2	S	4	c	53	85	8	5	–	–	9+	9+	1500	1	2
The Lizard ...	1014·3	−4	S'E	5	c	53	92	8	8	2	–	7-8	9+	1500	1	3
Scilly (St.Mary's)	1011·5	−6	S	5	r.r.	52	97	6	5	2	–	4-6	10	1500	1	3
Guernsey ...	1017·6	+4	S'E	1	c	48	97	8	5	1	–	7-8	7-8	1500	1	2
Pembroke ...	1012·3	−10	SSW	6	q	53	92	8	5	–	–	9+	9+	1500	1	3
Holyhead ...	1011·7	−6	SSE	3	c	51	85	8	8	3	–	4-6	7-8	1500	1	2
Chester(Sealand)	1014·4	+2	SE'S	2	z.	48	92	6	5	–	–	9	9	4000	1	*
Manchester ...	1014·3	−2	SSW	3	z.	49	92	6	5	–	–	10	10	1500	1	*
Spurn Head ...	1015·9	−2	S	2	of	48	92	3	5	–	–	10	10	1500	1	1
Catterick ...	1014·2	−6	SSE	3	F	44	97	1	–	–	–	10	10	<150	1	*
Tynemouth ...	1014·2	−12	SW	3	m	47	92	4	5	–	–	10	10	1500	1	1
St. Abbs Head																
Leuchars ...	1011·6	−26	SE	3	c/r	47	97	6	5	2	–	9	10	1500	1	*
Renfrew (Abbots L.)	1010·9	−18	E	2	df	45	97	3	5	–	–	10	10	1500	1	*
Eskdalemuir ...	1011·7	−16	SW'W	1	c	44	97	6	5	–	–	9+	9+	800	1	*
Point of Ayre...	1011·3	−14	SSW	3	c	49	92	7	8	7	–	2-3	9	1500	1	2
Tiree	1004·8	−24	SSE	5	o	49	92	7	6	1	–	7-8	10	1500	1	4
Stornoway ...	1006·9	−36	SSE	6	r.r.	47	85	7	5	2	–	7-8	10	2500	1	3
Dalwhinnie ...	1010·2	−36	SE	5	ir	41	92	6	8	7	–	4-6	10	1500	1	*
Aberdeen ...	1012·4	−22	SE'S	3	r.r.	45	92	6	6	2	–	9	10	800	1	2
Wick ...	1010·9	−28	SSE	6	ir	46	92	7	5	2	–	9	10	1500	1	3
Lerwick ...	1014·9	−18	NNW	2	c	40	65	8	5	7	–	4-6	7-8	1500	0	*
Blacksod Point	1001·9	−2	S	4	id	55	92	7	6	–	–	10	10	450	1	4
Malin Head ...	1004·9	−30	S	5	c	49	85	7	6	2	–	4-6	9	1500	1	4
Aldergrove ...	1008·9	−10	SSE	4	ir.	49	85	7	5	–	–	10	10	2500	1	*
Birr Castle ...	1007·2	−8	S	3	ir	52	92	7	6	2	–	7-8	10	1500	1	*
Valentia Obsy.	1004·7	−6	S'E	4	dd	54	97	7	5	–	–	10	10	800	1	3
Roches Point	1006·3	−16	S'E	6	dr	53	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)	52	47	36	–	–	0·1
Croydon ...	51	48	45	–	–	0·0
S. Farnborough	53	47	41	Tr	–	0·2
Boscombe Down	50	47	45	Tr	2	0·0
Calshot (Sthmtn.)	53	49	48	0·1	–	0·7
Lympne ...	55	47	37	–	0·1	4·2
Manston ...	59	44	*	–	Tr	5·1
Shoeburyness ...	54	46	32	–	–	3·1
Felixstowe ...	56	47	42	–	–	*
Gorleston ...	54	48	47	–	–	*
Mildenhall ...	53	47	44	–	Tr	1·4
Cranwell ...	52	45	43	Tr	Tr	1·9
Birmingham ...	54	47	45	*	0·1	4·2
Upper Heyford	51	49	41	–	Tr	*
Ross-on-Wye	53	46	40	–	Tr	0·0
Hartland Point	53	49	46	–	Tr	0·0
Bristol ...	54	48	42	Tr	0·5	0·2
Portland Bill ...	54	51	*	0·2	–	*
Plymouth ...	57	50	47	0·6	0·1	1·4
The Lizard ...	55	50	*	Tr	–	0·9
Scilly (St.Mary's)	56	47	*	Tr	0·1	3·2
Guernsey ...			45	–	Tr	3·8
Pembroke ...	55	50	*	0·2	Tr	0·4
Holyhead ...	53	49	47	Tr	1	0·1
Chester(Sealand)	53	48	42	0·1	Tr	0·0
Manchester ...	54	49	44	Tr	–	0·7
Spurn Head ...	51	47	*	–	Tr	0·8
Catterick ...	49	44	43	Tr	1	1·7
Tynemouth ...	49	47	45	–	Tr	*
St. Abbs Head			*	–		*
Leuchars ...	44	39	37	–	2	1·9
Renfrew (Abbots L.)	46	42	39	–	4	0·2
Eskdalemuir ...	44	40	40	–	2	2·5
Point of Ayre...	51	49	*	–	1	1·6
Tiree	47	45	42	–	2	0·1
Stornoway ...	45	44	*	0·3	0·3	1·0
Dalwhinnie ...	36	32	31	–	1	0·0
Aberdeen ...	43	33	27	–	1	5·5
Wick ...	44	37	*	0·1	0·3	*
Lerwick ...	42	36	*	0·3	–	2·1
Blacksod Point	55	45	*	4	0·4	*
Malin Head ...	51	44	*	0·2	2	0·0
Aldergrove ...	50	46	44	0·1	2	0·4
Birr Castle ...	51	48	47	–	2	0·0
Valentia Obsy.	53	52	50	1	9	0·0
Roches Point	54	51	*	Tr	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.	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	om.wc	cm.	cm.w	52	47	36	–	–	0·1	•	•	6
Croydon	217	com.	cm.	cmbmw	51	48	45	–	–	0·0	•	•	
Greenwich (Royal Observatory)...	149	cm	cm	cfcbcd.	51	46	34	–	Tr	0·0	90	96	6
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park) ...	27	•	•	•	52	48	42	–	–		96	92	•
Regents Pk. (Botanic Gardens)‡...	168	•	•	•	52	46	41	–	Tr		89	93	•
Camden Square	110	o	bc	•	51	47	43	–	–	•	•	94	•
Kensington	80	cz	cz	•	52	47	39	–	Tr		90	93	•
Hampstead Observatory	450	cf	bcm	o	51	45	43	–	–		•	96	•

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.
0·2	12h 12th	0·1	1-2h 13th

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 12th November. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. 13th November. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris						1020·3	–	0	F	43	43		–	
Brussels														
Berlin														
Zürich														
Rome	1015·9	ENE	2	c	55	1015·9	ENE	2	0	55	•	•	–	–

‡ 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 6, 22 —Code for surface visibility.

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

COLUMN 30 —Code for State of Sea.

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

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT
OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Tuesday 14th November 1939.
No. 28481.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1017·7	-4	SSW	2	zo	51	85	6	5	-	-	10	10	1500
	Croydon	1018·1	-6	S	3	c	51	85	6	5	-	-	10	10	1500
	S. Farnborough	1017·5	-8	S	2	c/r	51	92	7	5	-	-	9+	9+	4000
	Boscombe Down	1016·6	-10	SSW	4	c	55	75	8	8	5	-	7-8	7-8	2500
	Calshot (Soton.)	1017·5	-6	S	3	c	53	85	7	7	3	-	4-6	7-8	2500
	Lympne	1019·1	-10	SSW	3	c	49	92	6	5	-	-	10	10	800
	Manston	1018·8	-10	S'W	3	zo	49	92	6	5	-	-	10	10	800
2	Shoeburyness	1018·4	-14	S'E	3	c	51	85	7	5	-	-	10	10	2500
	Felixstowe	1018·0	-6	SW	3	zo	54	75	6	7	3	6	1	9+	2500
	Gorleston	1017·5	-10	SSW	3	c	54	85	6	5	4	-	4-6	7-8	2500
	Mildenhall	1017·3	-8	S	3	zo	53	85	6	5	2	-	7-8	10	2500
	Cranwell	1015·4	-2	S'W	4	zo	54	75	6	8	3	-	7-8	7-8	1500
3	Birmingham	1013·9	-8	SSW	4	bc	54	65	8	8	4	-	4-6	4-6	2500
	Upper Heyford	1016·7	-8	SSE	3	c	52	85	7	8	3	-	2-3	7-8	1500
4	Ross-on-Wye	1014·6	-12	S'W	3	bc	55	65	8	7	3	-	1	2-3	4000
5	Hartland Point	1012·8	-8	S	4	iro	53	92	8	6	2	-	7-8	9+	1500
	Bristol	1015·4	-10	S'W	4	bc	54	75	8	8	5	-	4-6	4-6	2500
	Portland Bill	1017·3	+6	SSW	3	c	52	92	8	5	4	-	4-6	9	4000
	Plymouth	1014·8	-6	S'W	5	c/r	54	85	6	5	2	-	9+	10	1500
	The Lizard	1013·6	-10	S'E	5	DD	54	97	5	5	-	-	10	10	1500
	Scilly (St. Mary's)	1011·5	+2	S'E	5	e	55	97	7	8	9	-	4-6	7-8	1500
	Guernsey	1017·2	-6	S	2	c	50	85	8	8	3	-	4-6	7-8	1500
6	Pembroke	1011·2	-2	SSW	6	ido	54	92	6	5	-	-	10	10	1500
7	Holyhead	1010·3	-10	S'E	6	c/r	53	85	8	6	2	-	4-6	10	800
	Chester (Sealand)	1012·9	-12	SSE	3	c	56	65	7	1	7	-	2-3	9	1500
8	Manchester	1013·4	-8	S'W	4	c	54	75	7	5	7	-	4-6	9+	2500
10	Spurn Head	1015·6	-4	SSW	3	c	52	85	6	-	5	8	0	7-8	-
	Catterick	1012·2	-14	SSW	3	zo	52	75	6	5	5	-	4-6	9+	1500
	Tynemouth	1011·9	-12	SW	3	cf	52	75	3	5	-	-	7-8	7-8	1500
11	St. Abbs Head	1008·8	-16	SSW	4	ir	50	75	8	8	2	-	7-8	10	1500
	Leuchars														
12	Renfrew (Abbots I.)	1007·8	-14	S	3	dodo	51	92	5	5	2	-	9	10	1500
	Eskdalemuir	1009·8	-10	S'W	4	roro	47	97	6	-	2	-	10	10	220
	Point of Ayre	1009·7	-12	SW'S	5	dodo	62	97	7	8	2	-	9	10	1500
13A	Tiree	1002·4	-8	S'W	5	dr	52	97	6	-	2	-	10	10	800
13B	Stornoway	1000·0	-24	S	7	rr	51	97	5	5	2	-	9	10	1500
15	Dalwhinnie	1005·5	-28	S	5	iro	47	85	6	8	7	-	4-6	10	1500
	Aberdeen	1007·6	-22	S'E	2	c/r	49	92	6	5	2	-	4-6	10	800
	Wick	1003·9	-39	SSE	6	ir	49	97	6	5	2	-	7-8	10	1500
16	Lerwick	1008·1	-52	SE	4	rr	41	92	6	6	2	-	4-6	10	800
17	Blacksod Point	1005·0	+10	SW	3	c	54	85	8	5	-	3	4-6	7-8	800
18	Malin Head	1003·6	0	S	4	c	45	85	7	6	-	-	7-8	7-8	1500
	Aldergrove	1005·8	-16	S'E	4	c/r	53	92	7	5	3	6	2-3	9	800
19	Birr Castle	1006·7	+2	S	2	c/r	57	92	7	6	2	-	4-6	10	1500
20	Valentia Obsy. †	1009·2	+22	W'S	4	c	54	92	8	2	5	-	4-6	7-8	800
	Roches Point	1008·4	+6	SSW	4	c/d	54	97	7	5	-	-	10	10	450

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°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)	1017·8	+6	SSW	2	zo	49	92	6	5	-	-	7-8	7-8	2500	1	*
Croydon	1018·0	+4	SW'S	1	z	48	92	6	5	-	-	4-6	4-6	4000	1	*
S. Farnborough	1017·8	+8	S	2	zo	49	85	6	5	3	-	7-8	10	2500	1	*
Boscombe Down	1016·7	+6	S	3	c	49	92	7	5	-	-	10	10	1500	0	*
Calshot (Soton.)	1017·4	+2	S'E	4	bc	51	85	7	5	-	-	4-6	4-6	2500	1	2
Lympne	1019·2	+8	SSW	3	c	49	85	6	5	-	-	10	10	1500	1	§ 2
Manston	1018·5	+2	S'W	2	zo	49	85	6	5	-	-	10	10	1500	0	*
Shoeburyness	1017·9	+2	S'E	3	c	50	92	6	5	-	-	10	10	2500	1	*
Felixstowe	1017·7	+2	S'W	3	zo	50	92	6	5	-	-	9+	9+	1500	1	2
Gorleston	1017·2	+2	S	3	c	50	85	6	5	-	-	9+	9+	2500	0	2
Mildenhall	1016·7	+2	S	3	zo	48	92	5	5	-	-	Tr	Tr	4000	1	*
Cranwell	1015·2	+2	S'W	2	bc	49	97	7	2	4	-	1	2-3	1500	*	*
Birmingham	1013·9	0	SSW	3	c	50	75	6	5	-	-	9+	9+	1500	1	*
Upper Heyford	1016·2	-2	S	2	bc	48	85	6	5	7	-	2-3	2-3	2500	1	*
Ross-on-Wye	1019·7	0	S	3	c	52	85	7	5	-	-	10	10	1500	1	*
Hartland Point	1012·7	+4	SW	3	c/d	54	92	8	6	2	-	7-8	9+	1500	1	3
Bristol	1015·0	-4	S'E	4	c	52	85	7	5	-	-	10	10	1500	1	*
Portland Bill	1016·0	-8	S	3	c	52	92	7	5	-	-	10	10	2500	1	2
Plymouth	1014·2	0	SW	5	c/d	55	92	6	5	-	-	9	9	800	1	3
The Lizard	1013·8	+6	S'E	4	e	54	97	7	5	-	-	10	10	1500	1	3
Scilly (St. Mary's)	1012·5	+12	W	4	c	53	97	7	8	6	-	4-6	7-8	1500	1	3
Guernsey	1016·7	+2	SSE	2	c	53	92	8	8	2	-	7-8	9	1500	1	3
Pembroke	1012·2	+2	SW'S	4	c	54	97	7	5	-	-	9+	9+	1500	1	2
Holyhead	1010·0	+6	S'W	5	roro	53	97	6	6	2	-	4-6	7-8	1500	1	3
Chester (Sealand)	1012·0	-6	SE'S	3	ir	51	85	5	-	2	-	10	10	1500	1	*
Manchester	1012·3	-8	S	4	roro	52	75	6	5	2	-	7-8	9+	2500	1	*
Spurn Head	1014·6	+2	S'W	3	bc	49	92	6	-	4	8	0	4-6	-	1	3
Catterick	1011·4	-6	SSE	2	ir	49	92	5	-	2	-	10	10	4000	1	5
Tynemouth	1009·8	-10	SSW	3	c	50	92	5	-	2	-	10	10	1500	2	2
St. Abbs Head	1006·8	+4	S	4	c	50	92	8	8	6	-	7-8	9+	1500	0	3
Leuchars	1005·4	-6	SW	5	c	53	85	7	5	-	-	9+	9+	2500	1	*
Renfrew (Abbots I.)	1005·9	-8	SSW	4	id	54	92	4	5	-	-	10	10	800	1	*
Eskdalemuir	1007·7	-6	SSW	6	dd	49	97	6	-	2	-	10	10	220	1	*
Point of Ayre	1008·0	-2	SW'W	5	ido	55	92	7	-	2	-	10	10	1500	1	3
Tiree	1001·0	-8	S	4	bc	51	92	7	8	-	-	4-6	4-6	1500	0	4
Stornoway	999·4	0	S	4	e	51	85	7	5	7	-	4-6	7-8	2500	1	3
Dalwhinnie	1003·5	-14	SW	3	roro	49	92	6	4	2	-	4-6	9+	1500	1	*
Aberdeen	1004·6	-16	S'W	4	bc	49	92	6	5	-	-	4-6	4-6	800	1	2
Wick	1001·4	+2	S	4	bc	50	97	7	5	4	-	2-3	4-6	1500	1	2
Lerwick	999·7	-24	S	7	rr	48	97	5	6	2	-	4-6	10	450	1	*
Blacksod Point	1003·3	-12	S	6	c	54	85	8	8	-	-	9+	9+	450	0	4
Malin Head	1002·5	-14	S	2	bc	51	85	8	8	-	-	4-6	4-6	5700	0	2
Aldergrove	1005·8	+2	SSW	3	ido	54	92	6	6	2	-	9+	10	800	1	*
Birr Castle	1008·0	+6	SSW	2	bc	49	92	8	5	-	-	2-3	2-3	2500	1	*
Valentia Obsy. †	1009·0	-2	S	5	c	54	92	6	5	2	-	9+	10	800	1	3
Roches Point	1010·6	+16	W'N	2	bc	51	92	8	5	-	5	1	4-6	2500	1	3

PAST 24 HOURS. — WEATHER.

Stations	7h.—13h. 13th (37)	13h.—18h. 13th (38)	18h. 13th – 1h. 14th (39)	1h.—7h. 14th (40)
London (Kew)	cmowcmo	cmo	cbcwmo	bcwbcmo
Croydon	bccmodo	cmobcmo	bccdodomo	cdodoDmo
S. Farnborough	bccmoiro	cmobcc	cmoidoc	oidobcc
Boscombe Down	cmoc	c	ororo,doomo	domoDbc
Calshot (Soton.)	bcwcmo	cbcobc	bcb	cbcbbc
Lympne	como	omo	omb,cmo	cmoc
Manston	cmo	cmo	cmobmw	
Shoeburyness	bmcmoc	cmo	bmocmb	idob,idoc
Felixstowe	bmocmo	cmo	cmobmow	cidobmw
Gorleston	czozo	czo	cbc	bcc
Mildenhall	cmo	cmobcmo	cmowb	b,cmidoc
Cranwell	bcmocmo	cmoc,bmo	bmo,cmo	
Birmingham	cbc	bcc		c
Upper Heyford	cdocmcmc	bccbc	cmo ido	idocmo
Ross-on-Wye	cbc	bcc	cido	coc
Hartland Point	ciro	irodd	idobc	bccr
Bristol	bjfbcc	bcc	cdorobcc	c,b,cbc
Portland Bill	c	c	p	c
Plymouth	c,ciroc	c,cidomo	c,bmo	cpromd
The Lizard	rrdmc	rrdmc	cbc	cpdmo
Scilly (St. Mary's)	ororoc	c	cbcbw	bccw
Guernsey	cbcc	c	bccir	ir iro
Pembroke	ciroidomo	oidomoc	cbcc	oidomoc
Holyhead	dodo cro	ororomo	roro c	rc
Chester (Sealand)	cbcmo	mcrrpirmo	bbcmo	bcmocmo
Manchester	czoc	cd,zoro,roro	czorobcmo	cmoirocmo
Spurn Head	czo	bczow	ciroc	bccw
Catterick	Fecmoz	iroirmo	oirmobc	cpro
Tynemouth	ocff	cmororo	oiroc	c
St. Abbs Head	cir	c	bcq	qrrc
Leuchars		c		cfororrbc
Renfrew (Abbots I.)	offrorrdd	cdododorod,	cmdodorr	crrroro,bc
Eskdalemuir	idocdoro	roido rrd	crorom	crorrc
Point of Ayre	dodo	co	c	rocl
Tiree	orrd	odcbc	bc iro c	prtlbc
Stornoway	crrzo (gale)	crr	ctcRR	
Dalwhinnie	ciro	cror	*	ciR
Aberdeen	roroc	crobc	cbczo	bc iroc
Wick	cirq	cbc	bcpro	prcbc
Lerwick	crorr	crrmo	crrmo	cir
Blacksod Point	bc	cq	cbcq	bcql
Malin Head	c	cbc	cidocrorc	bclbc
Aldergrove	irododomo	cir,idom	domob,ciro	iromorcmo
Birr Castle	cir	cbc	oir	bc
Valentia Obsy. †	ddddobcc	c	ido ir iro	irobcc
Roches Point	pidp	cbc	ir	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.

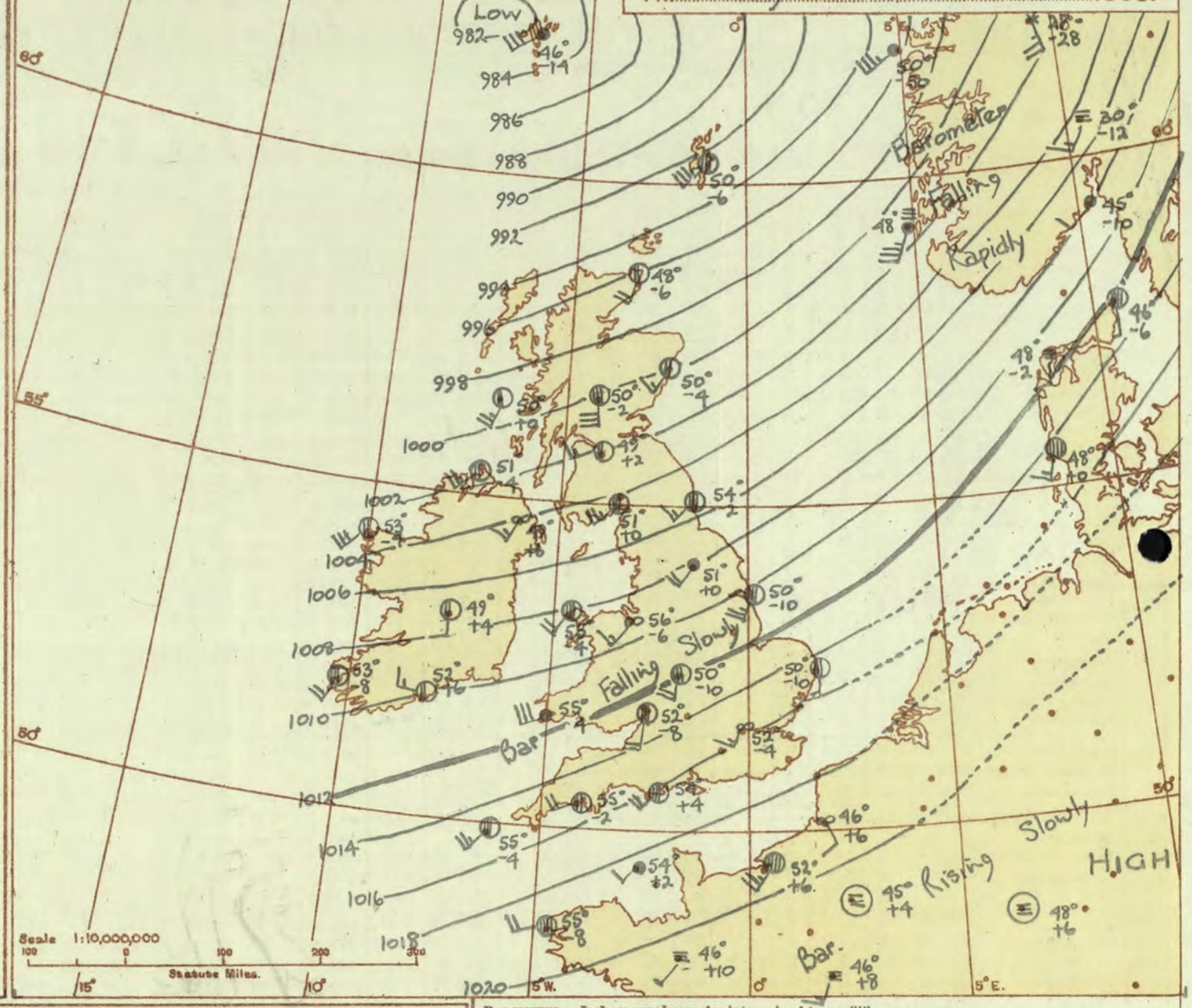
COLUMN 29.—STATE OF GROUND.

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.*

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Tuesday 14th November 1939.



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

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 14th November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind southwest, moderate or fresh; mainly cloudy; some occasional light rain or drizzle to-day; brighter intervals locally later; mild.
5 S.W. England 6 South Wales ... 7 North Wales ...	Wind southwest, fresh to strong locally on the coast; cloudy, occasional rain or drizzle, especially on coasts and on hills; mild.
8 N.W. England 9 N. Midlands ... 10 N.E. England	Wind southwest, fresh; dull; some rain early, then brighter intervals; mild.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. ▼ B.N.W.Scotland. ▼ 14 Mid Scotland 15 N. E. Scotland ▼ 16 Orkneys and Shetlands ▼ 17 N. W. Ireland ▼ 18 N. E. Ireland	Wind southwest, fresh to strong locally, gale at times off northwest coasts; fair periods, some showers at first, then cloudy, occasional rain; rather mild to mild.
19 S. E. Ireland 20 S. W. Ireland	As 5 - 7.

GENERAL INFERENCE.

Pressure is high from the Azores to Central Europe. A deep depression near the Faeroes is moving eastnortheast and further secondaries are likely to cross the British Isles. Weather will be mild and unsettled, but rainfall amounts will be small in the Southeast.

FURTHER OUTLOOK.

Mild and unsettled.

Times of Issue of Gale Warnings.

South cone hoisted at 23.30 on 13th in districts 13B, 15 and part of 16 and at 0800 on 14th in districts 13A, 17 and part of 16.

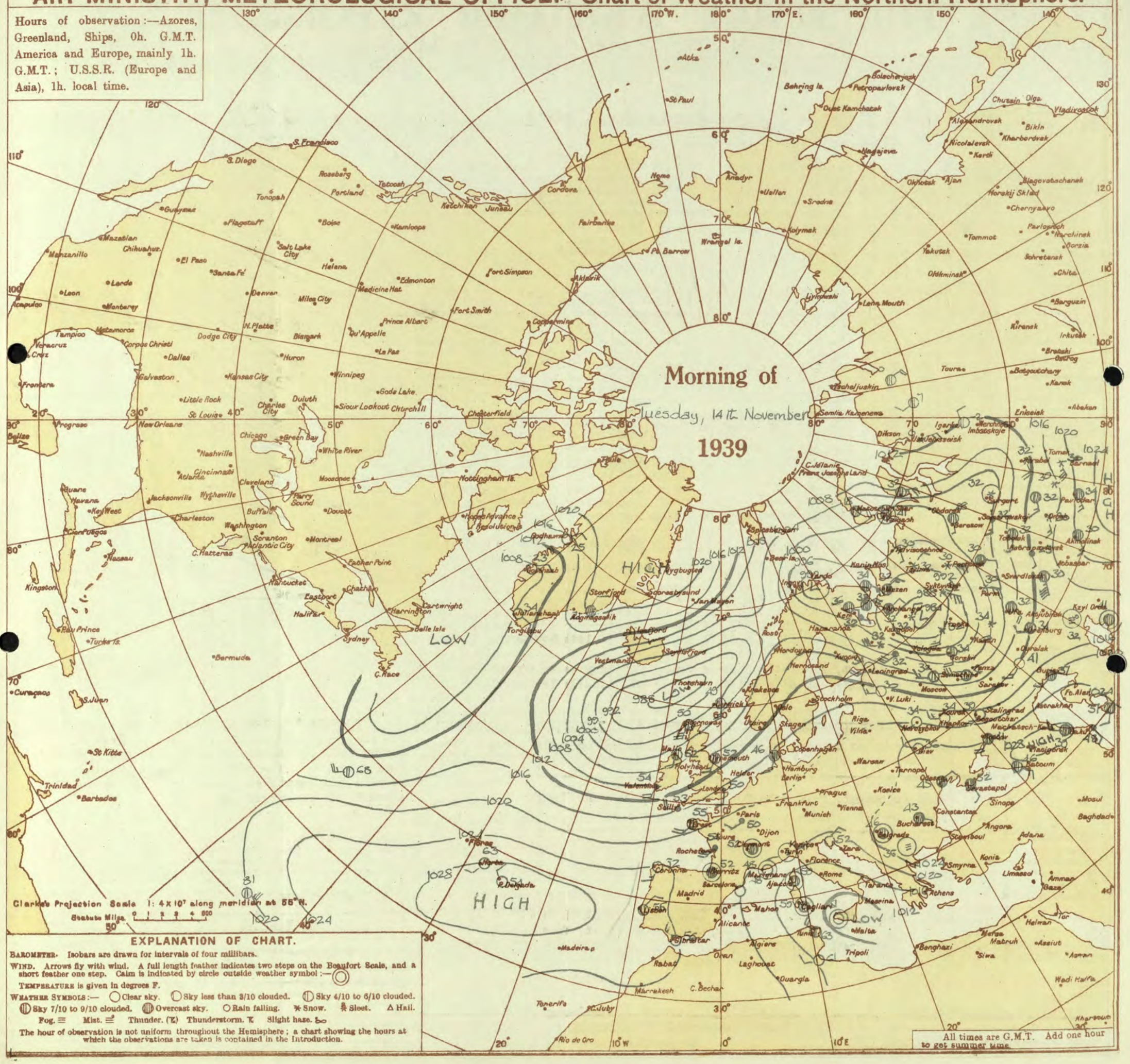
Forecasts issued at 0930 G.M.T.

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

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

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

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



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

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

TEMPERATURE is given in degrees F.

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 14th November 1939.

No. 28,481

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1017·2	−10	S	2	d.d.	50	97	5	5	–	–	10	10	450
	S. Farnborough	226	1016·0	−18	S'W	3	z.	51	92	6	5	–	–	10	10	800
	Boscombe Down	417	1015·9	−8	SW'S	4	id.	53	97	6	5	–	–	10	10	1500
	Calshot (Sthmtn.)	8	1016·3	−12	S'W	5	bc	53	97	7	5	–	–	4-6	4-6	1500
	Lympne ...	346	1018·4	−8	SSW	3	c	48	97	6	5	–	–	9	9	1500
	Manston ...	154	1018·1	−6	SSW	3	z.	46	92	6	5	–	–	Tr	Tr	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1016·6	−14	SSW	3	z.	49	85	6	5	–	–	1	4-6	2500
	Gorleston ...	5	1015·9	−14	S'W	3	bc	47	85	6	5	–	–	2-3	2-3	2500
	Mildenhall ...	19	1015·4	−14	SSW	4	bc	47	92	7	–	4	–	0	2-3	–
	Cranwell ...	240	1013·9	−6	S'W	4	id.	49	92	5	5	–	–	10	10	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1015·5	−10	S	3	id.	50	97	5	5	–	–	10	10	450
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1013·9	+6	WSW	4	bc	52	97	8	4	–	–	2-3	2-3	4000
	Bristol ...	209	1015·2	+4	S'W	3	c	52	85	6	5	–	–	10	10	2500
	Portland Bill ...	32	1015·8	+4	SW	3	0	55	92	7	5	–	–	10	10	1500
	Plymouth ...	82	1015·9	+10	W'S	2	z.	53	97	6	5	–	–	1	1	2500
	The Lizard ...	240	1016·2	+6	SW	3	bc	53	97	7	8	–	–	2-3	2-3	2500
	Scilly (St. Mary's)	163	1015·4	−4	W	4	bc	53	97	6	5	–	–	2-3	2-3	1500
	Guernsey ...	175	1017·7	+6	SW	1	ir	53	97	6	8	–	–	9+	9+	1500
6	Pembroke ...	142	1012·4	0	SW	4	c	53	97	7	5	–	–	9+	9+	1500
7	Holyhead ...	26	1009·2	+4	SSW	5	c	53	92	7	5	2	–	7-8	10	1500
	Chester (Sealand)	16	1011·1	−4	SSE	3	z.	52	85	5	5	–	–	7-8	7-8	4000
8	Manchester ...	70	1011·4	−4	S'W	4	c	52	92	7	5	3	–	7-8	9+	2500
10	Spurn Head ...	29	1012·8	−6	SSW	4	bc	48	92	6	–	3	8	0	4-6	–
	Catterick ...	175	1009·3	−12	S	3	c	52	85	7	5	–	–	9	9	1500
	Tynemouth ...	108	1008·3	−12	SW	5	c	52	85	7	8	–	–	9	9	1500
11	St. Abbs Head	280	1002·6	−26	SW	7	bcq	53	85	8	4	6	–	4-6	4-6	1500
	Leuchars ...	36														
12	Renfrew (Abbots I.)	19	1003·1	−16	SSW	4	rr	52	92	4	5	–	–	10	10	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1006·1	−8	SW'W	5	c	53	97	7	5	–	–	7-8	7-8	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	999·0	−8	SSW	5	c	50	85	7	5	2	–	7-8	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	998·0	−18	SSW	3	c/pr	51	97	7	5	1	–	7-8	9+	1500
16	Lerwick ...	156	996·8	−24	S	5	c	49	97	6	5	2	–	7-8	10	800
17	Blacksod Point	18	1003·4	+8	S	5	bcq	53	85	7	3	–	–	4-6	4-6	800
18	Malin Head ...	84	1001·4	+12	SW'W	4	c/pr	52	85	6	6	2	–	4-6	9	1500
	Aldergrove ...	268	1004·0	−14	SSW	4	ir.	52	85	6	5	–	–	10	10	1500
19	Birr Castle ...	173	1006·8	−6	S	2	ir	55	92	7	6	–	–	10	10	800
20	Valentia Obsy.	30	1008·8	+6	SSW	4	ir.	54	92	7	5	–	–	10	10	1500
	Roches Point	22	1010·0	−6	SW	3	ir	54	97	7	6	2	–	7-8	10	800

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1015·4	+4	SW	3	z.	51	92	6	5	–	1	4-6	4-6	2500	1	*
Croydon ...	1016·1	−4	SSW	3	z.	52	92	6	5	7	–	4-6	7-8	1500	1	*
S. Farnborough	1015·7	+2	SSW	3	c	50	92	7	5	–	–	9	9	1500	1	*
Boscombe Down	1015·4	0	SW'S	4	z.	49	97	6	5	7	–	7-8	10	450	1	*
Calshot (Sthmtn.)	1016·3	+4	SW	3	z.	52	97	6	6	–	–	9+	9+	1500	1	2
Lympne ...	1017·3	−2	SW	4	c	51	97	7	5	–	–	9+	9+	800	1	§ 3
Manston ...																*
Shoeburyness ...	1016·2	−4	S'W	4	id.	51	92	5	5	–	–	10	10	1500	1	*
Felixstowe ...	1015·4	−10	S'W	3	z.	50	92	6	5	4	1	7-8	9	1500	1	2
Gorleston ...	1014·4	−10	S	3	c	50	92	6	5	–	–	7-8	7-8	2500	0	2
Mildenhall ...	1014·1	−6	SSW	3	c	51	75	6	5	–	8	2-3	7-8	2500	1	*
Cranwell ...																*
Birmingham ...	1011·9	−10	SSW	4	c	50	92	7	6	7	–	9	9+	800	1	*
Upper Heyford	1014·5	−2	S'W	2	z.	49	92	6	5	3	1	2-3	7-8	2500	1	*
Ross-on-Wye	1012·8	−8	S'W	4	c	52	92	7	5	7	–	9+	10	1500	1	*
Hartland Point	1012·4	−8	W	5	c	54	97	7	6	2	–	7-8	9+	1500	1	3
Bristol ...	1014·2	−4	S	3	c	51	85	7	5	7	–	4-6	9+	2500	1	*
Portland Bill ...	1015·8	+4	SW	4	c	54	92	7	5	–	–	10	10	2500	1	3
Plymouth ...	1015·7	0	WSW	4	o/pr	55	97	6	5	–	–	10	10	2500	1	2
The Lizard ...	1013·9	−2	SW	5	c	54	97	5	5	–	–	10	10	800	1	3
Scilly (St. Mary's)	1014·7	−4	SW'S	5	c	55	97	6	5	–	–	10	10	1500	1	3
Guernsey ...	1018·2	+2	SW	2	ir.	54	97	6	4	–	–	10	10	800	1	3
Pembroke ...	1011·6	−4	W'S	6	d.d.	55	97	5	5	–	–	10	10	800	1	3
Holyhead ...	1007·4	−4	SW'S	4	c	55	97	6	5	–	–	9+	9+	1500	1	2
Chester (Sealand)	1009·3	−6	SW	3	z.	56	85	6	5	–	–	9	9	2500	1	*
Manchester ...	1009·5	−6	SSW	4	z.	53	85	6	5	–	–	9+	9+	1500	1	*
Spurn Head ...	1010·7	−10	SSW	5	c	50	92	7	–	4	–	0	7-8	–	1	3
Catterick ...	1007·6	0	SW	4	pr	51	85	7	8	3	–	4-6	9+	1500	1	*
Tynemouth ...	1006·1	−2	SW	3	c	54	75	6	8	–	–	9	9	1500	1	2
St. Abbs Head	1002·4	+8	SW	4	c	51	92	8	8	6	–	4-6	7-8	1500	1	3
Leuchars ...	1001·8	+4	SSW	2	bc	50	92	6	5	–	8	2-3	4-6	2500	1	*
Renfrew (Abbots I.)	1003·1	+2	WSW	3	bc	49	85	7	5	7	–	2-3	4-6	1500	1	*
Eskdalemuir ...	1004·1	0	SW	5	c	51	92	6	5	–	–	9+	9+	800	1	4
Point of Ayre ...	1005·8	+2	W	4	c	53	97	7	5	1	6	1	9	2500	1	3
Tiree ...	998·7	0	SSW	5	bc	50	75	8	8	–	–	2-3	2-3	2500	0	4
Stornoway ...																
Dalwhinnie ...	1000·0	−2	S	6	c	50	92	7	8	4	–	4-6	7-8	2500	1	*
Aberdeen ...	999·6	−4	SSW	3	bc	50	85	6	8	–	5	1	2-3	4000	1	1
Wick ...	995·8	−6	SSW	4	bc	48	92	7	5	4	1	2-3	4-6	2500	1	2
Lerwick ...	991·9	−6	SW	7	c	50	85	7	8	7	–	7-8	9	1500	1	*
Blacksod Point	1002·5	−4	SW	6	bcq	53	75	7	8	–	–	4-6	4-6	800	0	4
Malin Head ...	1001·4	−4	SW	5	bc	51	75	7	8	3	–	2-3	4-6	2500	0	4
Aldergrove ...	1004·6	+6	SSW	3	z.	49	85	6	5	3	–	4-6	7-8	1500	1	*
Birr Castle ...	1007·2	+4	S	2	bc	49	92	8	5	–	–	4-6	4-6	2500	1	*
Valentia Obsy.	1008·3	−8	SSW	4	c	53	92	7	2	1	–	2-3	9+	1500	1	3
Roches Point	1010·2	+6	W	3	bc	52	92	8	5	–	5	1	4-6	2500	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine Hrs. (36)
London (Kew)	52	48	42	–	–	0·0
Croydon ...	52	46	41	0·1	Tr	0·2
S. Farnborough	53	48	44	Tr	Tr	0·4
Boscombe Down	55	47	46	–	1	2·9
Calshot (Sthmtn.)	54	49	49	–	0·1	2·1
Lympne ...	49	45	39	–	–	0·0
Manston ...	51			–		
Shoeburyness ...	52	47	37	–	Tr	0·0
Felixstowe ...	55	47	42	–	Tr	3·1
Gorleston ...	54	47	46	–	–	*
Mildenhall ...	53	46	40	–	Tr	0·0
Cranwell ...	*			*		
Birmingham ...	54	49	46	*	–	3·8
Upper Heyford	53	*	41	0·2	Tr	*
Ross-on-Wye	56	50	47	–	Tr	5·0
Hartland Point	54	51	49	0·2	1	0·2
Bristol ...	55	50	46	–	1	2·1
Portland Bill ...	54	50	*	–	0·4	*
Plymouth ...	55	53	49	0·1	1·3	0·0
The Lizard ...	55	52	*	2	1	0·0
Scilly (St. Mary's)	56	52	*	2	–	2·3
Guernsey ...	53	52	44	–	1	0·5
Pembroke ...	54	52	*	0·2	0·1	0·0
Holyhead ...	53	52	50	1	2	*
Chester (Sealand)	57	50	44	2	Tr	2·7
Manchester ...	55	50	43	Tr	Tr	0·9
Spurn Head ...	54	47	*	Tr	Tr	3·5
Catterick ...	52	48	45	2	1	0·5
Tynemouth ...	53	50	46	1	0·3	*
St. Abbs Head	50	49	*	1	0·3	*
Leuchars ...	53	49	45	–	3	0·0
Renfrew (Abbots I.)	54	49	42	3	8	0·0
Eskdalemuir ...	49	48	*	5	13	0·0
Point of Ayre ...	55	52		1	1	0·0
Tiree ...	52	48	45	3	4	0·0
Stornoway ...			*	2		
Dalwhinnie ...	49	43	37	1	8	0·0
Aberdeen ...	50	49	44	–	Tr	0·0
Wick ...	51	46	*	3	0·4	*
Lerwick ...	49	47	*	10	2	0·0
Blacksod Point	57	48	*	0·5	1	*
Malin Head ...	54	45	*	–	–	0·0
Aldergrove ...	54	47	40	0·3	1	0·0
Birr Castle ...	56	47	45	2	1	0·0
Valentia Obsy.	56	52	47	1	3	3·5
Roches Point	55	50	*	2	2	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon (24 hrs. ended 9h.)	Weather Night (24 hrs. ended 9h.)	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew ...	18	cm. wc	cm.	bc wbcm.	52	48	42	–	–	0·0	*	*	6
Croydon ...	217	bc cm. d.	m. bc m.	dd. Dm.	52	46	41	0·1	Tr	0·2	*	*	
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. 14th

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
0·1	17h 13th	<0·1	1-4h 14th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 13th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 14th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1021·0	–	0	f	48	1021·8	–	0	f	45	48	*	*	*
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1013·4	NE	2	c	59						•	•	–	

‡ 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 6, 22 — Code for surface visibility.

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

COLUMN 30 — Code for State of Sea.

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

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Wednesday 15th November 1939.
No. 28482

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1014·5	-14	SW'S	4	zo	55	85	6	5	-	-	10	10	220
	Croydon	1014·9	-14	SW	4	zo	56	85	6	5	-	-	10	10	800
	S. Farnborough	1014·8	-10	SW'S	5	ido	56	92	6	6	2	-	9	10	800
	Boscombe Down	1014·4	-10	SW'S	4	ido	55	97	6	5	-	-	10	10	450
	Calshot (Soton.)	1015·3	-10	SW'S	5	ido	55	97	5	5	-	-	10	10	450
	Lympne	1017·2	-8	SW'S	5	c	54	92	6	5	-	-	10	10	450
	Manston	1016·0	-10	SW'W	5	zo	56	85	6	5	4	2	7-8	9+	1500
2	Shoeburyness	1015·4	-10	SW'S	4	c	57	85	7	5	7	-	7-8	10	1500
	Felixstowe	1014·2	-8	SW'W	4	zo	55	85	6	5	-	-	9+	9+	2500
	Gorleston	1013·3	-10	SSW	4	c	56	75	6	5	-	-	9+	9+	2500
	Mildenhall	1012·9	-12	SSW	4	zo	56	85	6	5	-	-	10	10	2500
	Cranwell	1010·3	-14	SW'S	5	zo	55	92	6	5	3	-	7-8	9+	1500
3	Birmingham	1010·7	-12	SSW	4	c	54	92	6	5	-	-	9+	9+	450
	Upper Heyford	1013·2	-12	SSW	3	zo	55	97	6	6	2	-	9+	10	450
4	Ross-on-Wye	1010·9	-20	S'W	4	c/d	56	92	7	6	-	-	9	9	1500
5	Hartland Point	1010·6	-20	WSW	5	c	54	97	6	5	-	-	10	10	800
	Bristol	1013·1	-10	S	3	c/r	56	92	7	5	7	-	7-8	10	1500
	Portland Bill	1014·7	-8	SW	4	dd	55	92	6	5	-	-	10	10	800
	Plymouth	1014·6	-12	SW	4	c	56	97	6	5	-	-	10	10	800
	The Lizard	1014·7	-12	SW	5	c	54	97	5	5	-	-	10	10	1500
	Scilly (St. Mary's)	1013·2	-18	SW'S	5	ido	55	97	4	5	-	-	10	10	800
	Guernsey	1017·7	-8	SW	3	c/pr	56	92	7	5	2	-	7-8	10	1500
6	Pembroke	1009·1	-20	SW'W	6	c/f	55	97	5	5	-	-	10	10	800
7	Holyhead	1006·1	-20	SSW	5	c	55	85	8	6	7	-	7-8	9+	1500
	Chester (Sealand)	1008·1	-18	S'W	2	c	59	65	8	8	3	-	7-8	9	2500
8	Manchester	1008·1	-16	SW	4	c	57	75	7	8	7	6	2-3	7-8	2500
10	Spurn Head	1009·2	-4	SW'S	4	c	57	85	6	5	7	-	2-3	7-8	2500
	Catterick	1006·2	-10	SW	3	c	57	65	7	8	9	-	4-6	9+	2500
	Tynemouth	1005·2	-10	SW	4	c	57	65	6	2	3	1	4-6	7-8	2500
11	St. Abbs Head	1002·2	-6	SSW	4	c	54	75	8	8	6	9	2-3	7-8	2500
	Leuchars	1000·8	-16	WSW	3	c	54	75	7	8	-	7	1	7-8	4000
12	Renfrew (Abbots I.)	1002·1	-10	SSW	3	c	52	85	7	8	7	-	7-8	9+	1500
	Eskdalemuir	1003·1	-18	SW	5	=	49	85	6	5	4	-	9	9	800
	Point of Ayre	1009·5	-16	SW	4	c	54	85	7	8	7	-	1	9+	2500
13A	Tiree	994·8	-20	SSW	6	c	51	85	7	6	2	-	7-8	9+	1500
13B	Stornoway	993·8	-14	SSW	5	pr	50	75	7	5	7	7	4-6	9	2500
15	Dalwhinnie	998·8	-20	SW	5	ir	46	85	7	8	-	8	4-6	9+	2500
	Aberdeen	999·2	-18	SW'S	3	c	52	75	7	5	9	-	Tr	7-8	1500
	Wick	995·7	-4	SSW	3	c	51	85	8	7	7	2	2-3	7-8	2500
16	Lerwick	992·2	-2	SW	8	c/prs	49	65	5	8	7	-	7-8	7-8	1500
17	Blacksod Point	997·7	-30	S	3	iR	48	92	7	6	-	-	10	10	<150
18	Malin Head	997·5	-30	W	3	tlh	49	85	7	5	-	-	9	9	2500
	Aldergrove	1001·8	-26	S	3	c	50	85	7	7	2	-	7-8	10	1500
19	Birr Castle	1001·9	-20	SSW	3	c	55	75	8	5	1	4	4-6	7-8	2500
20	Valentia Obsy. †	1000·6	-54	SSW	6	zo	56	85	6	5	7	-	7-8	9+	1500
	Roches Point	1004·9	-36	WSW	5	c	55	92	8	5	-	5	4-6	7-8	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Weather 7h.–13h. 14th (37)	Weather 13h.–18h. 14th (38)	Weather 18h. 14th to 1h. 15th (39)	Weather 1h.–7h. 15th (40)
London (Kew)	1010·9	-22	SSW	4	zo	55	92	6	5	-	-	9	9	1500	1	*	cmo	cidomocmo	cirorrmo	qv rorobc
Croydon	1012·3	-22	S	4	ido	55	97	5	5	-	-	10	10	450	1	*	bcmocmo	cmododo	cro rr RR	crrmo
S. Farnborough	1011·3	-20	SSW	4	dodo	55	92	6	5	-	-	10	10	1500	1	*	cmoido	idododoc	ciro RR	crorobc
Boscombe Down	1011·1	-18	SW'S	4	iro	54	97	6	6	-	-	10	10	450	1	*	oidomo	oidomo	roromo,lqoir	omobcmo
Calshot (Soton.)	1012·3	-22	SW'S	5	zo	55	97	6	5	-	-	10	10	800	1	3	moirododo	ododdm	iro RR rrmo	ORRmobc
Lympne	1015·0	-6	SW'S	5	dodo	53	97	5	5	-	-	10	10	<150	1	§3	cdoc	cmodo	odddoroc	cororrmo
Manston	1014·2	-6	SW	5	ido	55	92	6	5	-	-	10	10	800	1	*	cbccmo	cmo cido	dororocroro	rr roro
Shoeburyness	1013·4	-12	SW'S	3	iro	54	97	7	5	-	-	10	10	1500	1	*	idobcc	croro	roro rc	rrc
Felixstowe	1012·2	-6	SW'W	4	ido	49	97	6	6	2	-	7-8	10	450	1	3	cmo	cmo	idoiroido	ir iRroro
Gorleston	1010·7	-8	SSW	4	bc	56	85	6	5	-	-	4-6	4-6	2500	0	2	czo	cbczo	bccprzo	corc
Mildenhall	1009·0	-26	S'W	5	zo	56	92	6	5	-	1	2-3	2-3	4000	1	*	ccmo	c	cidor ro	croro oc
Cranwell	1006·9	-6	SSW	4	zo	56	85	6	5	-	-	7-8	7-8	1500	0	*	cpromo	cmo	irqRRcmo	cmo
Birmingham	1006·4	-14	SSW	4	c	55	85	6	6	-	-	9	9	450	1	*	c	ciro	coir ro	obc
Upper Heyford	1010·0	-18	SSW	4	ido	55	92	6	6	7	-	9	10	800	1	*	cidomcmo	cmocdomo	ircmo	circmobc
Ross-on-Wye	1006·2	-28	SSW	6	ido	56	85	7	6	-	-	9	9	1500	1	*	idood	dooc idoq	doqrqPc	cbcc
Hartland Point	1005·6	-20	WSW	6	c	55	97	7	5	-	-	10	10	800	1	4	cffdo	dodo o	cRrr	
Bristol	1009·9	-12	S	5	c	56	92	7	5	-	-	10	10	1500	1	*	ciro	croc	cro Rroro	cqbcbbt
Portland Bill	1012·3	-18	SW	5	c	56	92	7	5	-	-	10	10	1500	1	4	odd	o	orr	oc
Plymouth	1010·5	-22	SW	6	c/r	56	97	6	-	2	-	10	10	800	1	3	oidomomo	omodoirm	oirmoc	cbbc
The Lizard	1010·2	-12	SW	7	DD	55	97	4	5	-	-	10	10	1500	1	4	omc	cdfdd	rqcpr	bccpr
Scilly (St. Mary's)	1008·3	-14	SW'S	6	c/d	55	97	5	5	-	-	10	10	1500	1	4	iroidoo	coidom	cirbc	bcpql
Guernsey	1014·9	-12	S'W	3	c	56	97	7	5	-	-	10	10	1500	1	3	ropro	corr	iroR	RRc
Pembroke	1001·6	-32	SW	8	cq	56	97	6	8	-	-	9+	9+	800	1	4	oifprqc	idomoirqc	cbcq	bcq
Holyhead	997·0	-58	S	6	ir	54	97	6	-	2	-	10	10	800	1	4	cmobcc	rrRmoo	R roro bc	b,c
Chester (Sealand)	1001·7	-42	SSE	3	iro	55	75	6	5	-	-	10	10	1500	1	*	cmoiroc	ccmoiro	cmroro,bcmo	bbccmoiro
Manchester	1002·5	-34	d	4	zo	57	75	6	5	-	-	9	9	2500	1	*	cmoirocbcc	ccmo	croro rrR	bcb,cmo
Spurn Head	1004·7	-28	S	5	c	54	92	5	5	-	-	9+	9+	2500	0	3	c	o	Prqc	oc
Catterick	1001·1	-30	SSE	3	c/pr	59	85	6	6	7	-	7-8	9+	1500	1	5	cproc	bccpro	tlrpr	bprobc
Tynemouth	1000·4	-20	SW	3	bc	54	75	6	2	-	-	4-6	4-6	2500	1	2	c	obc	cbcp	bc
St. Abbs Head	996·3	-20	S	3	bc	50	75	8	4	3	1	4-6	4-6	2500	0	2	bcc	cbc	rriq	bbcc
Leuchars	994·6	-46	SSE	4	c	49	85	7	5	-	-	7-8	7-8	4000	1	*	cbccmoc	c, cmo c	RR,rrroro	bcpro bc
Renfrew (Abbots I.)	993·5	-54	S'W	4	iro	52	75	6	5	7	-	7-8	10	1500	1	*	bcmobcc	cmoiro	cmororoRRc	cpro,RR
Eskdalemuir	996·4	-44	S'W	6	iro	49	92	6	5	-	-	10	10	450	1	*	cmo	cmocirom	cRRqr	ororor
Point of Ayre	995·8	-28	SW	6	rr	54	92	7	8	2	-	7-8	10	1500	1	3	c	crr	prqbc	bccpr
Tiree	988·4	-30	SW'S	4	c	48	85	7	8	-	-	9	9	1500	1	4	ciRtl	crrc	ciR	bcc iR
Stornoway	989·8	-12	SSW	3	PR	49	92	7	8	2	-	7-8	9+	2500	1	2	bccpr	cPRq	croro	bcc
Dalwhinnie	992·5	-52	S	6	ir	44	85	6	6	1	-	4-6	9+	2500	1	*	cRrir	cir	*	ciR*
Aberdeen	994·9	-30	SSW	3	bc	50	75	7	5	7	-	2-3	2-3	1500	1	1	bbcc	cbc	bccrrc	cbcc
Wick	992·0	-24	SSW	3	c	49	92	8	5	7	1	4-6	9+	2500	1	2	bcc	c	rr ror	bcc
Lerwick	991·1	-8	SW	6	c	49	85	7	8	7	-	4-6	9+	1500	1	*	cpro	cpro	cprir	cirrr
Blacksod Point	992·7	-28	WSW	5	RR	49	85	7	6	-	-	10	10	450	2	4	iR	iRq	Pcq	bcq
Malin Head	989·9	-38	W'S	3	c/d	47	85	7	8	-	-	9	9	2500	0	3	c	cidoc	cprobcc	bcjpcPrc
Aldergrove	991·7	-34	S	3	roro	51	85	6	6	2	-	9	10	1500	1	*	cmoc	croromo	rrrorobbc	iro,idomo
Birr Castle	993·9	-36	SSW	1	rr	49	92	7	6	2	-	7-8	10	1500	1	*	c	crr	bcb	cprbc
Valentia Obsy. †	998·9	+10	W'S	5	c/pr	50	75	8	3	3	-	4-6	7-8	2500	1	5	cmo	crrprqc	cPrbprbcl	phrqPrbc
Roches Point	999·0	-12	W	6	rr	52	85	8	6	2	-	7-8	10	1500	1	4	c	rr	crbcb	ir

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

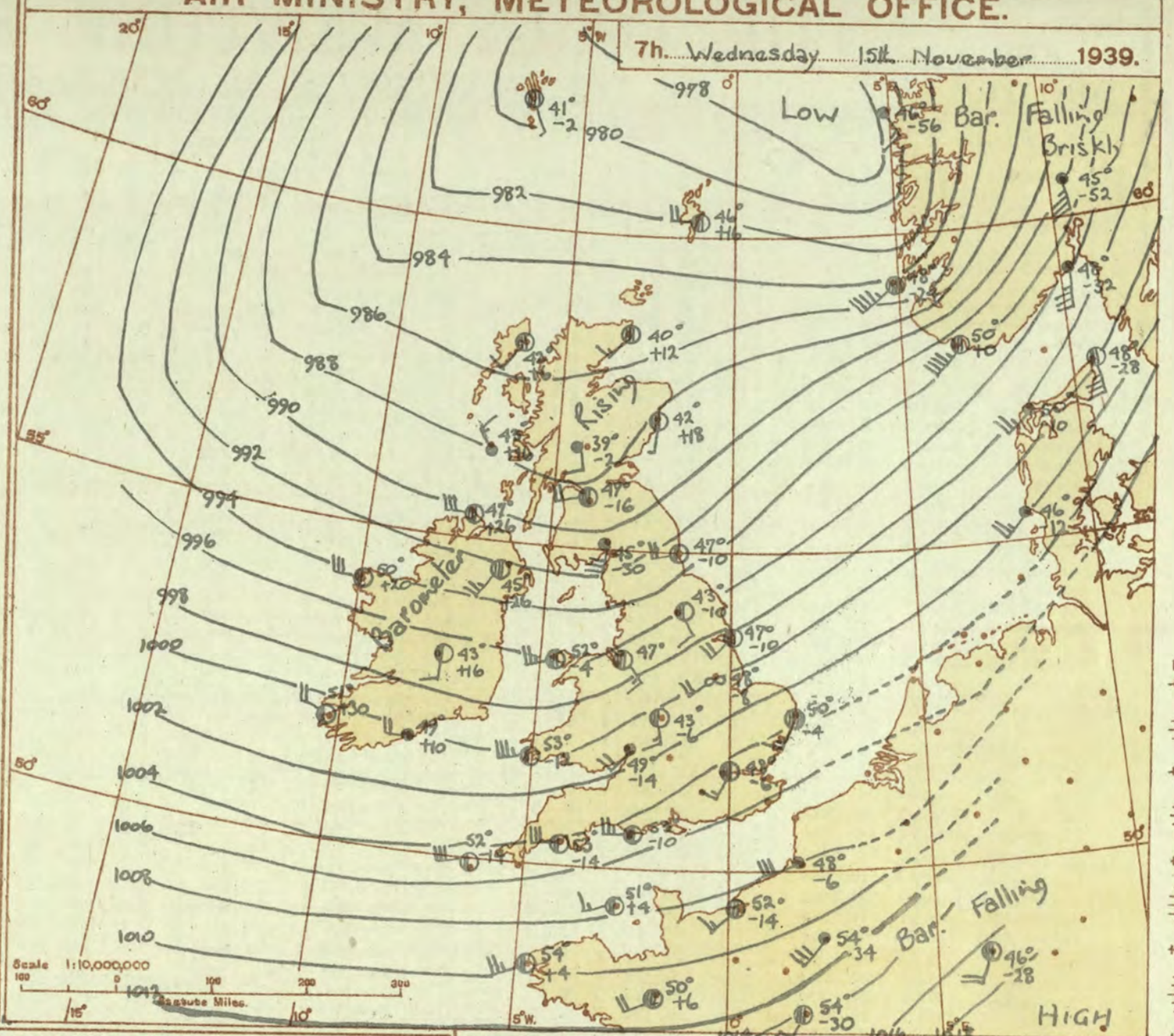
COLUMN 29.—STATE OF GROUND.

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 15th November 1939.



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

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 15th November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Winds westsouthwest, fresh to strong locally; squally; moderating slowly later; bright periods; showers; average temperature.
5 S.W. England ✝ 6 South Wales ... ✝ 7 North Wales ... ✝	Wind westerly, strong, squally, probably gale force locally on the coast, veering northwest; showers of rain and hail with possible thunder; colder than of late.
8 N.W. England ✝ 9 N. Midlands ... 10 N.E. England	Wind southwest to west, fresh, rather squally at times; showers of rain with hail locally; becoming rather cold.
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	Wind westerly fresh, veering northwest, strong and squally on north and west coasts; frequent showers with hail and local thunder and sleet or snow later; becoming cold.
17 N. W. Ireland ✝ 18 N. E. Ireland ✝ 19 S. E. Ireland ✝ 20 S. W. Ireland ✝	Wind westerly, strong, squally, gale locally on coast, veering northwest, moderating later; showers of rain, hail and local thunder; becoming colder.

GENERAL INFERENCE.

A very deep depression centred northeast of the Faeroes is moving away eastwards. Secondary troughs are crossing the British Isles and a ridge of relatively higher pressure developing on the Atlantic will extend slowly east. Weather will be characterised by bright periods and rather heavy showers. In Western and Northern districts, showers will be of hail with snow at times later in Scotland. Conditions will be cooler in the South and very much colder in the North.

FURTHER OUTLOOK.

Showers and bright periods; rather cold except perhaps in the South.

GALE WARNING.

✝ South Cone hoisted at 08.00 on 14th in Districts 13A (part of) and Districts 17, & 18(part of)

✝ South Cone hoisted at 11.10 on 14th in Districts 6,7,8,12(part of) 19 & 20.

✝ South Cone hoisted at 14.06 on 14th in Districts 5.

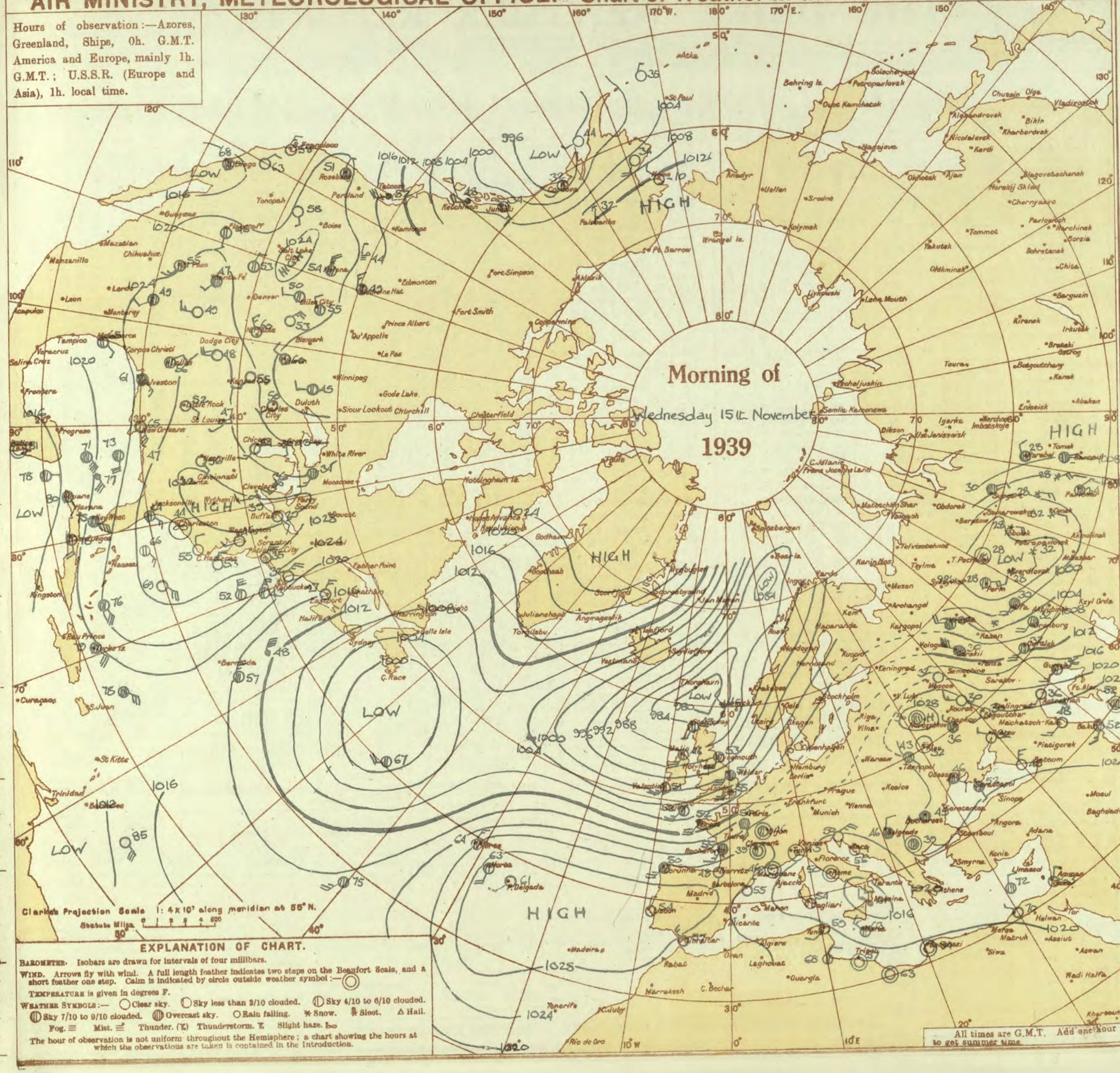
Forecasts issued at 1200 G.M.T.

NIKI JOHNSON
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

Wednesday 15th November 1939.

No. 28482

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1006·9	-20	W	5	RR	55	97	4	6	2	-	9	10	1500
	S. Farnborough	226	1006·5	-14	SW'W	4	iR	49	92	6	5	-	-	10	10	2500
	Boscombe Down	417	1006·3	-6	SW'S	3	lr	48	97	5	5	-	-	10	10	1500
	Calshot (Sthmtn.)	8	1007·2	-14	SW	3	rr	51	92	5	-	2	-	10	10	800
	Lympne ...	346	1008·7	-38	SSW	6	c	54	92	7	5	-	-	9+	9+	1500
	Manston ...	154	1007·2	-38	SSW	7	r.r.	56	85	6	5	-	-	10	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1006·0	-34	SW'S	5	ir.	53	92	6	6	-	-	9+	10	800
	Gorleston ...	5	1004·1	-28	S	6	pr	55	85	6	8	-	-	9+	9+	2500
	Mildenhall ...	19	1003·8	-14	WSW	5	r.r.	54	92	6	6	2	-	7-8	10	1500
	Cranwell ...	240	1000·6	-2	SSW	6	o/r	50	85	6	6	-	-	10	10	800
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1004·6	-4	SSW	3	lr	47	92	6	3	-	-	10	10	2500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1004·4	+2	W	6	c	51	75	8	6	2	-	4-6	9	1500
	Bristol ...	209	1005·1	0	SW	5	c/pr	49	85	6	8	7	-	4-6	10	1500
	Portland Bill ...	32	1007·3	-8	WSW	6	rr	52	92	7	5	-	-	10	10	1500
	Plymouth ...	82	1006·4	-22	W'S	7	o	53	85	7	5	-	-	10	10	1500
	The Lizard ...	240	1007·6	-10	SW	6	PR	52	92	7	5	-	-	9	9	1500
	Scilly (St. Mary's)	163	1006·7	-6	W'S	5	c	52	92	7	5	4	-	2-3	7-8	1500
	Guernsey ...	175	1009·9	-16	WSW	3	RR	50	97	6	5	-	-	10	10	800
6	Pembroke ...	142	1002·7	+2	W	7	bcq	52	75	8	8	-	-	4-6	4-6	800
7	Holyhead ...	26	997·9	+16	SW'W	6	b	49	75	8	1	-	-	1	1	2500
	Chester(Sealand)	16	999·1	+10	SW	4	z.	49	65	5	5	-	-	2-3	2-3	1500
8	Manchester ...	70	998·9	+6	SW'W	4	bc	47	75	7	5	-	-	2-3	2-3	2500
10	Spurn Head ...	29	998·0	0	SW'W	6	o	51	75	7	5	-	-	10	10	2500
	Catterick ...	175	994·3	+6	SW'W	5	pr	48	75	8	3	-	-	1	1	1500
	Tynemouth ...	108	991·9	+10	WSW	6	c/pr	53	75	7	2	-	-	4-6	4-6	2500
11	St. Abbs Head	280	987·8	+16	W	7	ir	45	75	7	3	2	-	4-6	10	1500
	Leuchars ...	36	986·1	+2	WSW	4	r.r.	45	92	6	5	2	-	9+	10	2500
12	Renfrew (Abbots I.)	19	989·4	+14	WSW	4	pr	47	85	6	8	-	-	7-8	7-8	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	994·1	+36	W'N	6	bc	47	92	8	8	-	-	2-3	2-3	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	984·7	-4	SW	1	bc	43	85	7	8	-	-	4-6	4-6	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	982·0	-38	SW	2	r.r.	43	97	6	5	2	-	9	10	800
16	Lerwick ...	156	982·9	-46	NW	2	ir	45	97	7	8	2	-	7-8	10	800
17	Blacksod Point	18	990·2	-28	W	5	cq	48	85	7	9	-	-	10	10	450
18	Malin Head ...	84	989·2	0	SW	5	bc	46	85	7	4	-	-	4-6	4-6	4000
	Aldergrove ...	268	993·0	+20	SSW	3	bc	43	92	7	5	-	-	4-6	4-6	2500
19	Birr Castle ...	173	994·7	-16	S	4	b	47	75	8	-	-	-	0	0	-
20	Valentia Obsy.	30	997·6	-26	WSW	5	bcl	51	85	8	8	-	-	4-6	4-6	2500
	Roches Point	22	999·2	-20	W	5	b	48	85	8	5	-	-	1	1	2500

OBSERVATIONS at 7 hr. G.M.T. 15th November — PAST 24 HOURS.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	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)	1004·1	-8	SSW	3	z.	49	92	6	5	7	-	Tr	4-6	4000	1	*	56	49	44	Tr	9	0·0
Croydon	1005·1	-6	SSW	3	c	48	92	7	5	7	-	2-3	7-8	1500	1	*	56	48	45	0·2	11	0·1
S. Farnborough	1004·4	-2	SSW	3	bc	45	92	7	-	7	-	0	4-6	-	1	*	56	45	40	Tr	10	0·0
Boscombe Down	1004·5	-4	SW'S	4	bc	44	92	7	5	-	-	2-3	2-3	1500	1	*	55	43	40	Tr	7	0·0
Calshot (Sthmtn.)	1005·3	0	SW	2	bc	48	97	7	2	3	-	1	2-3	800	1	2	56	47	44	0·2	14	0·0
Lympne	1006·7	-6	SW	3	ir.	46	97	7	6	2	-	2-3	10	800	1	§3	55	46	46	Tr	11	0·7
Manston	1005·1	-2	SW	3	r.r.	47	85	6	5	7	-	4-6	9+	1500	1	*	58	47	45	Tr	8	2·3
Shoeburyness	1005·2	-2	SW	3	rr	48	92	7	6	2	-	7-8	10	450	1	*	59	48	47	Tr	12	3·6
Felixstowe	1003·5	-6	SSW	3	r.r.	49	97	6	6	2	-	4-6	10	1500	1	2	56	49	47	Tr	9	2·1
Gorleston	1003·3	-4	SSW	3	c	50	85	6	5	-	-	10	10	2500	1	3	56	48	47	-	3	*
Mildenhall	1002·6	0	SSW	4	c	48	92	7	5	-	-	10	10	7200	1	*	57	48	44	-	4	0·7
Cranwell	1000·0	-8	SW'W	4	z.	46	85	6	5	7	-	4-6	9+	1500	1	*	57	45	43	-	1	0·4
Birmingham	1001·3	-6	S	3	bc	43	85	6	-	7	-	0	2-3	-	1	*	56	43	38	0·1	2	0·0
Upper Heyford	1003·3	-6	SSW	2	bc	44	92	7	5	4	-	4-6	4-6	2500	1	*	56	43	36	Tr	2	*
Ross-on-Wye	1001·5	-14	SW	4	lr.	49	85	6	6	-	-	9+	9+	1500	1	*	57	47	42	0·2	4	0·0
Hartland Point	1000·6	-18	W	7	rr	51	85	8	6	2	-	4-6	10	1500	1	4	56	50	48	0·6	3	0·0
Bristol	1003·1	-10	SSW	3	bc	46	85	8	5	3	8	4-6	4-6	4000	1	*	58	46	40	Tr	6	0·0
Portland Bill	1004·1	-10	W	5	c	53	85	7	5	4	-	4-6	10	2500	1	4	56	50	*	0·3	7	*
Plymouth	1004·4	-14	W'S	6	bc	53	75	7	8	-	-	4-6	4-6	1500	1	4	56	51	48	-	2	0·0
The Lizard	1005·9	-10	WSW	6	PR	52	92	7	8	2	-	7-8	9+	1500	1	3	55	50	*	0·5	2	0·0
Scilly (St. Mary's)	1004·4	-14	WSW	6	bc/pr	52	85	7	8	4	-	4-6	4-6	1500	1	4	55	50	*	0·3	1	0·0
Guernsey	1007·5	+4	WSW	3	bc	51	85	7	1	2	-	2-3	2-3	1500	2	4	57	50	45	-	14	0·1
Pembroke	998·6	-12	W'S	7	bcq	53	75	8	5	6	-	4-6	4-6	1500	1	4	57	51	*	2	1	0·0
Holyhead	995·5	-4	SW'W	5	c	52	75	8	9	-	-	9+	9+	1500	1	3	55	48	46	3	2	1·9
Chester(Sealand)	997·6	×	SE	3	c	47	×	6	5	3	×	4-6	7-8	4000	1	*	63	47	38	Tr	4	2·6
Manchester	997·6	-20	S'W	4	z.	46	92	6	5	-	-	9	9	1500	1	*	59	43	34	Tr	6	0·4
Spurn Head	998·1	-10	SW'S	4	c	47	85	6	5	-	-	10	10	4000	1	5	57	46	*	-	2	1·2
Catterick	995·2	-10	SSE	2	bc	43	85	8	8	-	-	4-6	4-6	1500	1	*	57	43	36	Tr	11	2·0
Tynemouth	993·0	-10	WSW	4	bc	47	73	6	2	-	-	4-6	4-6	2500	1	2	54	46	40	-	1	×
St. Abbs Head	989·8	-12	SSE	3	c	44	92	8	5	2	-	7-8	9+	2500	0	2 *	54	43	*	-	4	*
Leuchars	988·3	-8	S	1	bc/pr	44	92	8	8	-	-	4-6	4-6	1500	1	*	54	43	39	-	15	2·2
Renfrew (Abbots I.)	988·6	-16	WSW	4	c/r	47	85	7	6	-	-	9+	9+	1500	1	*	52	45	41	Tr	23	0·1
Eskdalemuir	989·9	-30	SW	6	rr	45	92	5	6	-	-	10	10	450	1·	×	51	41	40 *	Tr	19	0·3
Point of Ayre	992·2	-16	W'N	6	bc	48	85	8	8	-	-	2-3	2-3	2500	1	4	56	47		1	6	0·2
Tiree	986·7	+16	NW	3	dd	43	92	7	-	2	-	9+	9+	1500	1	3	52	42	40	8	9	0·0
Stornoway	985·4	+6	SW	2	c	42	92	8	5	7	-	4-6	7-8	2500	1	1	50	41	*	7	1	0·7
Dalwhinnie	988·4	-2	S	2	rr	39	85	6	6	1	-	4-6	10	2500	·1	*	46	38	30	13	10	0·0
Aberdeen	988·8	+18	S	1	c	42	85	6	8	3	-	7-8	7-8	2500	1	2	53	42	32	-	9	1·8
Wick	985·3	+12	SW	3	c	40	97	7	5	6	8	4-6	7-8	1500	1	2	51	39	*	-	7	*
Lerwick	980·4	+16	W'N	4	c	46	85	8	8	7	-	4-6	7-8	800	1	*	51	43	*	0·1	5	2·5
Blacksod Point	994·3	+20	W	6	bcq	50	75	8	9	-	-	4-6	4-6	1500	1	4	54	45	*	13	5	*
Malin Head	989·6	+26	W	4	cjp	47	75	7	9	-	-	7-8	7-8	2500	1	4	51	42	*	10	2	0·9
Aldergrove	992·0	+26	SW'S	5	c	45	85	7	5	-	-	7-8	7-8	1500	1	*	53	42	37	1	9	0·3
Birr Castle	997·0	+16	S	2	bc	43	97	8	3	-	-	2-3	2-3	1500	1	*	55	42	40	5	5	0·0
Valentia Obsy.	1000·4	+30	WNW	4	bc	51	75	8	8	-	-	2-3	2-3	2500	1	3	56	48	44	14	7	0·0
Roches Point	999·2	+10	W	4	lr	49	92	8	6	2	-	7-8	9	1300	1	4	56	47	*	5	2	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs.	Humidity 15h. G.M.T. %	Humidity 9h. G.M.T. %	Visibility 9h.
		24 hrs. ended 9h.								Yesterday.		To-day.	
Kew ...	18	cm.	cid.cm.	clrqv/bc	56	49	44	Tr	9	0·0	*	*	
Croydon ...	217	bcm.	cm.d.d.	cr.RRmm	56	48	45	0·2	11	0·1	*	*	
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. 15th.

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 14th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 15th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1020·1	S	3	O							*		*	
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1015·3	-	0	c	39						*	*	-	

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 Precipitous.
- 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 16th November 1939.

No. 28,483.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1002·4	-20	SW	4	bc	53	65	7	7	5	3	2-3	4-6	4000
	Croydon	1003·5	-12	SW	3	bc	54	65	7	7	3	-	2-3	4-6	4000
	S. Farnborough	1002·7	-10	SW	4	c	53	75	8	8	3	1	4-6	7-8	2500
	Boscombe Down	1003·0	-2	WNW	3	c/pr	48	92	7	8	7	3	7-8	7-8	1500
	Calshot (Soton.)	1003·2	-10	SW	4	pr	50	85	6	9	-	-	9+	9+	800
	Lympne	1005·4	-8	W'S	4	pr	47	85	6	3	-	3	7-8	7-8	2500
	Manston	1003·1	-18	SW'W	5	c	52	75	7	8	3	1	2-3	7-8	1500
2	Shoeburyness	1003·3	-16	SW'S	4	c	52	75	7	5	7	4	4-6	9	2500
	Felixstowe	1001·8	-18	SW	4	c	53	75	7	5	7	-	7-8	9+	2500
	Gorleston	1002·2	-10	SSW	4	c	51	85	6	5	-	-	7-8	7-8	2500
	Mildenhall	1000·6	-14	SW	5	c	52	75	7	7	9	1	4-6	9	4000
	Cranwell	999·5	+2	SW	4	zo	51	75	6	5	7	6	4-6	7-8	2500
3	Birmingham	1001·1	0	WSW	3	c	49	85	6	5	7	3	4-6	7-8	2500
	Upper Heyford	1002·1	-2	WSW	4	c	52	75	7	8	7	2	2-3	7-8	2500
4	Ross-on-Wye	1001·7	+4	W	3	bc	53	75	8	8	-	2	2-3	4-6	2500
	Hartland Point	1004·5	+42	NW	4	bc	52	85	8	8	6	-	2-3	4-6	2500
	Bristol	1003·1	+10	WSW	3	c/r	49	92	7	8	6	8	4-6	7-8	2500
	Portland Bill	1003·0	-10	W	5	c	53	92	8	5	4	-	4-6	9	4000
	Plymouth	1005·7	+22	NW'W	4	e	55	75	8	8	-	-	7-8	7-8	1500
	The Lizard	1007·4	+24	WSW	7	c	54	85	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	1008·0	+34	WNW	6	bc	55	85	7	8	-	-	2-3	2-3	1500
	Guernsey	1006·1	-10	W	5	bc/pr	52	85	7	8	7	8	4-6	4-6	1500
6	Pembroke	1003·4	+20	WNW	6	bcq	53	85	8	2	4	-	2-3	4-6	2500
7	Holyhead	999·4	+16	SW'W	4	c	53	65	8	8	3	-	7-8	7-8	2500
	Chester (Sealand)	999·7	+12	W	5	bc	53	55	8	8	-	-	2-3	2-3	2500
8	Manchester	998·9	+12	W	5	bc	52	75	8	2	4	-	4-6	4-6	1500
10	Spurn Head	997·9	0	WSW	4	c	51	75	6	-	3	3	0	7-8	-
	Catterick	996·0	+8	W'S	1	bc	53	65	8	1	4	-	2-3	4-6	4000
	Tynemouth	993·8	+4	WSW	4	bc	51	65	7	2	-	-	4-6	4-6	2500
11	St. Abbs Head	991·1	+8	WNW	5	cq	46	65	8	8	6	-	4-6	9	2500
	Leuchars	990·7	+20	W	3	bc	47	85	9	8	6	-	4-6	4-6	2500
12	Renfrew (Abbots I.)	993·7	+36	W'S	3	c	49	85	8	8	3	-	7-8	7-8	2500
	Eskdalemuir	994·0	+20	WSW	4	bc	45	85	8	5	3	1	4-6	4-6	800
	Point of Ayre	996·6	+14	W	5	c	53	75	8	5	-	-	7-8	7-8	2500
13A	Tiree	991·1	+12	NW'N	6	bc/pr	48	75	8	8	-	-	4-6	4-6	1500
13B	Stornoway	988·7	+14	WNW	4	pr	44	92	7	8	2	-	7-8	10	2500
15	Dalwhinnie	*	+22	SW	3	c	41	75	7	4	6	-	2-3	2-3	2500
	Aberdeen	989·4	+18	WNW	3	rr	43	85	6	9	-	-	9+	9+	1500
	Wick	987·4	+10	SSW	3	bc	46	85	8	8	6	1	2-3	4-6	2500
16	Lerwick	985·9	+14	SW	4	c	48	75	8	8	7	-	4-6	7-8	1500
17	Blacksod Point	1002·2	+50	W'N	6	bcq	50	85	8	9	-	-	4-6	4-6	800
18	Malin Head	994·2	+24	NW	5	bc	49	75	8	2	-	3	4-6	4-6	5700
	Aldergrove	995·7	+8	SW	4	c	49	75	8	8	-	-	9+	9+	2500
19	Birr Castle	1001·6	+12	W	3	c/pr	53	75	8	8	-	-	7-8	7-8	1500
20	Valentia Obsy. †	1008·1	+38	WNW	6	bc	53	75	8	2	4	-	4-6	4-6	2500
	Roches Point	1004·4	+14	W	5	c	53	75	8	3	4	-	4-6	7-8	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	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)	1016·3	+30	SW	2	z	48	85	6	-	-	1	0	2-3	-	1	*
Croydon	1006·2	+26	SW'W	3	zo	47	92	6	-	-	-	0	0	-	1	*
S. Farnborough	1006·5	+24	SW'W	3	b	47	92	7	5	-	-	Tr	Tr	4000	1	*
Boscombe Down	1007·3	+34	W'S	3	c	48	85	7	5	-	-	7-8	7-8	2500	1	*
Calshot (Soton.)	1007·9	+38	SW'W	3	zo	47	92	7	4	-	-	Tr	Tr	2500	1	2
Lympne	1007·1	+22	W	3	b	46	92	8	8	-	-	1	1	4000	1	§ 3
Manston	1005·5	+24	WSW	3	zo	47	92	6	5	-	-	2-3	2-3	1500	1	*
Shoeburyness	1005·8	+22	SW	2	b	49	97	8	-	-	-	0	0	-	1	*
Felixstowe	1004·3	+26	WSW	4	zo	48	85	6	-	-	-	0	0	-	1	3
Gorleston	1003·0	+16	SW'W	3	lb	50	75	7	-	-	-	0	0	-	0	2
Mildenhall	1003·4	+18	SW	3	zo	45	97	6	5	-	-	Tr	Tr	4000	1	*
Cranwell	1002·1	+22	WSW	2	zo	44	85	6	5	3	-	2-3	2-3	4000	0	*
Birmingham	1003·8	+10	SW	3	bc	48	75	7	5	-	-	4-6	4-6	800	1	*
Upper Heyford	1005·3	+12	SW	2	bc	44	85	7	-	6	-	0	4-6	-	1	*
Ross-on-Wye	1005·4	+16	W'S	4	bc/pr	50	75	8	8	-	-	2-3	2-3	2500	1	*
Hartland Point	1008·9	+28	WNW	5	bc/pr	51	92	8	8	-	-	4-6	4-6	1500	1	4
Bristol	1006·9	+18	W'N	5	bc/pr	49	85	7	8	3	-	4-6	4-6	1500	1	*
Portland Bill	1009·0	+18	WNW	5	e	53	85	7	5	-	-	10	10	4000	1	5
Plymouth	1010·8	+22	W	4	c	52	85	6	5	4	-	7-8	7-8	1500	1	2
The Lizard	1012·7	+16	W	6	bc	52	85	8	8	6	-	4-6	4-6	2500	1	3
Scilly (St. Mary's)	1012·6	+30	WNW	6	bc	52	85	7	8	-	-	2-3	2-3	1500	1	4
Guernsey	1011·6	+36	W'N	5	c	54	85	8	2	-	-	7-8	7-8	1500	1	5
Pembroke	1008·4	+28	NW	5	bcq	52	75	8	2	-	-	2-3	2-3	2500	1	3
Holyhead	1003·2	+38	WNW	7	bc	51	65	7	8	-	-	4-6	4-6	2500	1	4
Chester (Sealand)	1002·7	+20	WNW	7	bc/pr	51	75	6	8	-	-	4-6	4-6	1500	1	*
Manchester	1001·1	+14	WSW	3	c/pr	47	92	5	8	-	-	7-8	7-8	2500	1	*
Spurn Head	1000·8	+10	SW'S	3	bc	46	85	6	-	-	8	0	4-6	-	0	3
Catterick	998·7	+18	SW	2	c	48	85	7	8	-	-	9	9	2500	1	*
Tynemouth	997·5	+20	W	3	c	47	75	6	5	-	-	9	9	1500	1	1
St. Abbs Head	993·7	0	W	5	bc	45	85	8	7	4	-	2-3	4-6	2500	0	3
Leuchars	993·7	+16	WNW	4	b/pr	46	85	6	5	-	-	1	1	4000	1	*
Renfrew (Abbots I.)	998·2	+40	WNW	4	b	44	75	8	1	-	-	1	1	2500	1	*
Eskdalemuir	997·1	+18	WNW	6	pr	43	75	8	6	-	-	4-6	4-6	1500	1	*
Point of Ayre	1000·7	+30	NW'N	6	bc	49	85	8	8	-	-	2-3	2-3	2500	1	3
Tiree	999·2	+36	NW	5	bc	47	65	8	8	-	-	4-6	4-6	2500	0	5
Stornoway	994·3	+28	WNW	7	c/pr	42	85	7	3	-	-	7-8	7-8	2500	1	4
Dalwhinnie	994·0	+38	SW	5	bc	39	65	7	4	4	-	2-3	2-3	2500	1	*
Aberdeen	993·1	+30	W	4	ir	44	85	6	-	2	-	9+	9+	1500	1	2
Wick	989·2	+12	SW	3	c	43	97	7	5	7	-	4-6	7-8	1500	1	1
Lerwick	985·9	-2	SSW	4	c	46	85	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	1007·3	+26	W'N	5	bc	48	65	8	4	-	-	4-6	4-6	1500	0	4
Malin Head	1002·0	+44	NW	5	c	46	75	7	8	-	-	7-8	7-8	4000	0	4
Aldergrove	1003·4	+34	WSW	3	c	43	85	8	8	-	-	7-8	7-8	2500	1	*
Birr Castle	1008·6	+40	WNW	1	b	48	75	8	-	4	-	0	1	-	1	*
Valentia Obsy. †	1012·1	+22	WNW	3	c	51	75	8	5	3	-	4-6	7-8	2500	1	3
Roches Point	1010·9	+36	W'N	3	bc	49	85	8	-	7	5	0	4-6	-	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.–13h. 15th (37)	13h.–18h. 15th (38)	18h. 15th – 1h. 16th (39)	1h.–7h. 16th (40)
London (Kew)	ybmobc	beczobmo	bbc*	cror o
Croydon	cbcmocpR	becpropr	bcbbcmo	bccmo
S. Farnborough	b,c	pRprob	bidobmo	bbcco
Boscombe Down	bc procpr	cbc	cprbcm,b	bbc,m
Calshot (Soton.)	pRKq mo	cprbcb	bmobcmo	cmorRm
Lympne	crobcc PRH	cprobecpr	b	bbcc w
Manston	rorobcc	cbccprob	bmobcmo	bcmocm
Shoeburyness	rrbc	cirobcb	bmbcm	bcmoc
Felixstowe	rorobcmo	cbcmo	bmoc,bmo	bmocmo
Gorleston	cbcc	cbcbl	blbcl	bcc
Mildenhall	cbcc	ccprq c,b	b,cb	bco
Cranwell	cmoc	czobmo	b,probc	cmo
Birmingham	bcprc	bcpro	Pr bc	bc oro
Upper Heyford	bccprbc	bcprbc	b	bbccro
Ross-on-Wye	rbccPc	bbccpo	pobcbq	cor
Hartland Point	prcbc	cpbc	bcpoc	crorr
Bristol	bccrorc	cbcPR	bcb	bbccror
Portland Bill	cpr	c	bc	corr
Plymouth	bccprobc	bccprobc	b,c	corormo
The Lizard	prcq	prcbc	bcw	rridq
Scilly (St. Mary's)	cpqbc	bc	cbcc	rorocddm
Guernsey	cq PR	bcq c	cbcb	Pr rr
Pembroke	cprbcq	bcq	bcq	orrmo
Holyhead	cbcc	irmocbc	bcc	corr
Chester (Sealand)	bcciro	bccproc	bmoprbc	bcczorr
Manchester	cmoproprbc	bccmoqpr	dbcmq,pr	cmo,cm
Spurn Head	c	cbc	bcqc	c
Catterick	prcbc	bcc	prodbc	
Tynemouth	bccpoc	bcc	dbc	bcc
St. Abbs Head	bccq	bc	bq	bcc
Leuchars	bccprobc	bcmoprob	bmobw	bwx,cmo
Renfrew (Abbots I.)	cPRproc	cbccprc	bwbcqpro	cirom oroto
Eskdalemuir	cirbc	bcpr	bcprb	bbcc
Point of Ayre	bcc	cbc	bcbbc	irocr
Tiree	bc	prbc	bccpr	cPrc
Stornoway	cbcPRc	cPRq	cbcphr	bc
Dalwhinnie	cir	cir	*	ais
Aberdeen	rocrr	rocb cro	crobzox	bxzo
Wick	cbc	bccpr	cPrq	prbcb
Lerwick	evccpr	cpr	cpr	cpr
Blacksod Point	prcq	bcq	cq	irc
Malin Head	bcc	cprobcPRRc	cproc	ciroc
Aldergrove	bcc	bcc	probbcc	crorom o
Birr Castle	bccpro	bcb	c	orr
Valentia Obsy. †	bccprobc	bccprbc	ccrr roro	rorolrdd
Roches Point	bcc	bc	bciro	rrir

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

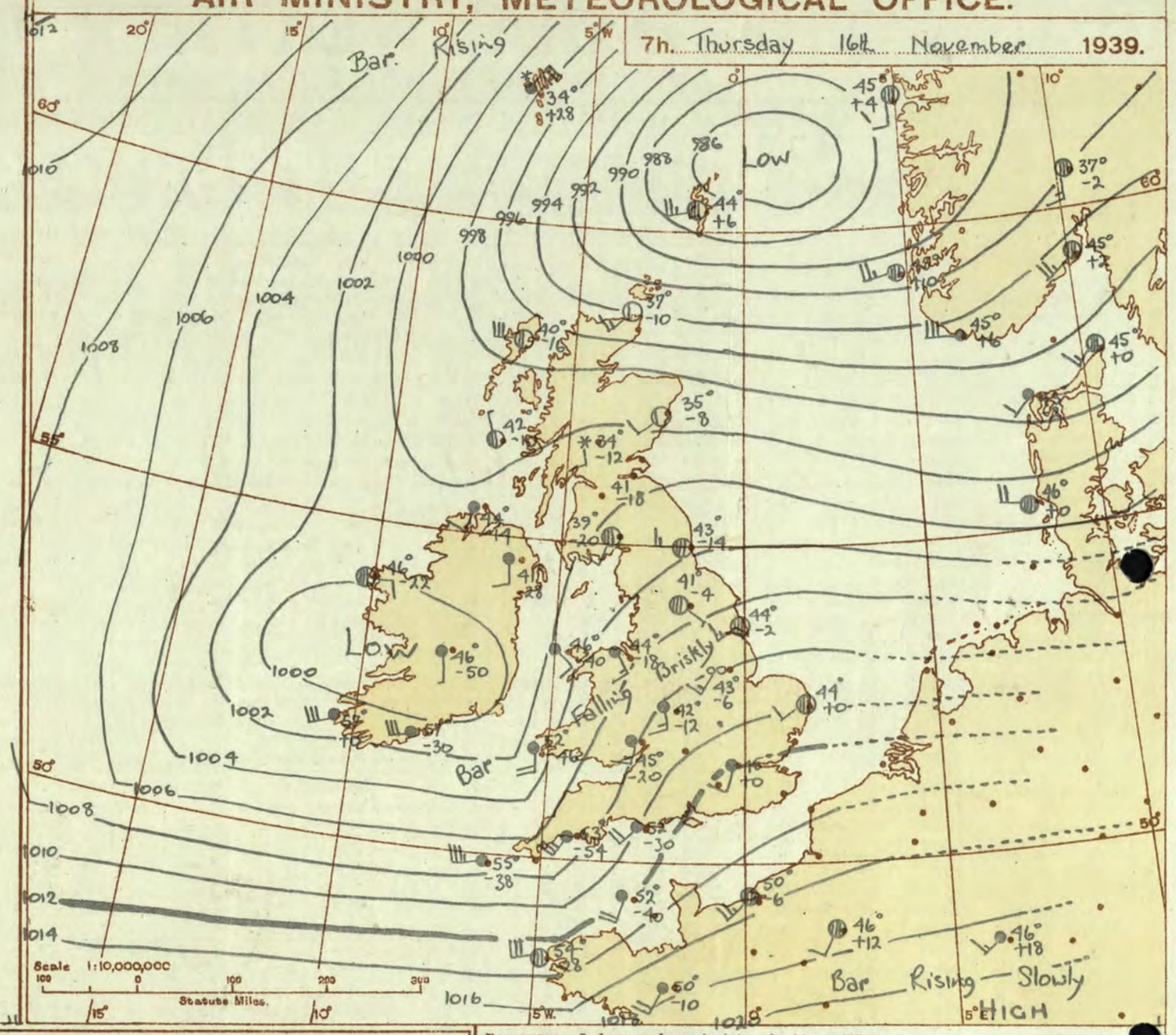
COLUMN 29.—STATE OF GROUND.

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 16th November 1939.



Districts.	Forecasts for the 24 hours commencing 12 noon, G.M.T. 16th November, 1939.
1 S.E. England 2 E. England 3 E. Midlands 4 W. Midlands	Wind west, strong to gale on coast, veering northwest, moderating; dull, rainy; some coast and hill fog; bright periods to-morrow; very mild to-day, then colder.
5 S.W. England 6 South Wales 7 North Wales	Wind variable light, finally northwest, freshening; dull, rainy, local coast fog later; bright periods to-morrow; average temperature, then colder.
8 N.W. England 9 N. Midlands 10 N.E. England	Wind west, fresh inland, strong to gale on coasts, veering northwest to north, decreasing fresh; dull, some rain early, then considerable bright periods; very mild; becoming colder.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland.	Wind variable light, becoming northwest fresh, perhaps strong on coast; dull, rainy; bright periods, local showers of wintry type in places tomorrow; becoming colder.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Wind west, veering northwest to north, light increasing fresh to strong; cloudy, some rain with sleet and snow on hills; bright periods and wintry showers; rather cold to cold.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind veering northerly, fresh to strong; bright periods, wintry showers; cold.
	Wind northwest to north, fresh, perhaps strong on coast, moderating backing southwest in the South later; cloudy early, then bright periods, local coast showers; rain in the Southwest to-morrow; becoming rather cold.

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.

GENERAL INFERENCE.

A deep depression is almost stationary near the Shetlands. A vigorous system over Southern Ireland will move quickly east across the Southern half of the Kingdom with westerly gales in the English Channel area. Following a period of general rain, bright periods will spread from the west accompanied by a fall in temperature. There will be some sleet and snow in the North, especially on the high ground.

FURTHER OUTLOOK.

A temporary fine interval in East England; rain spreading from the southwest.

Times of Issue of Gale Warnings.

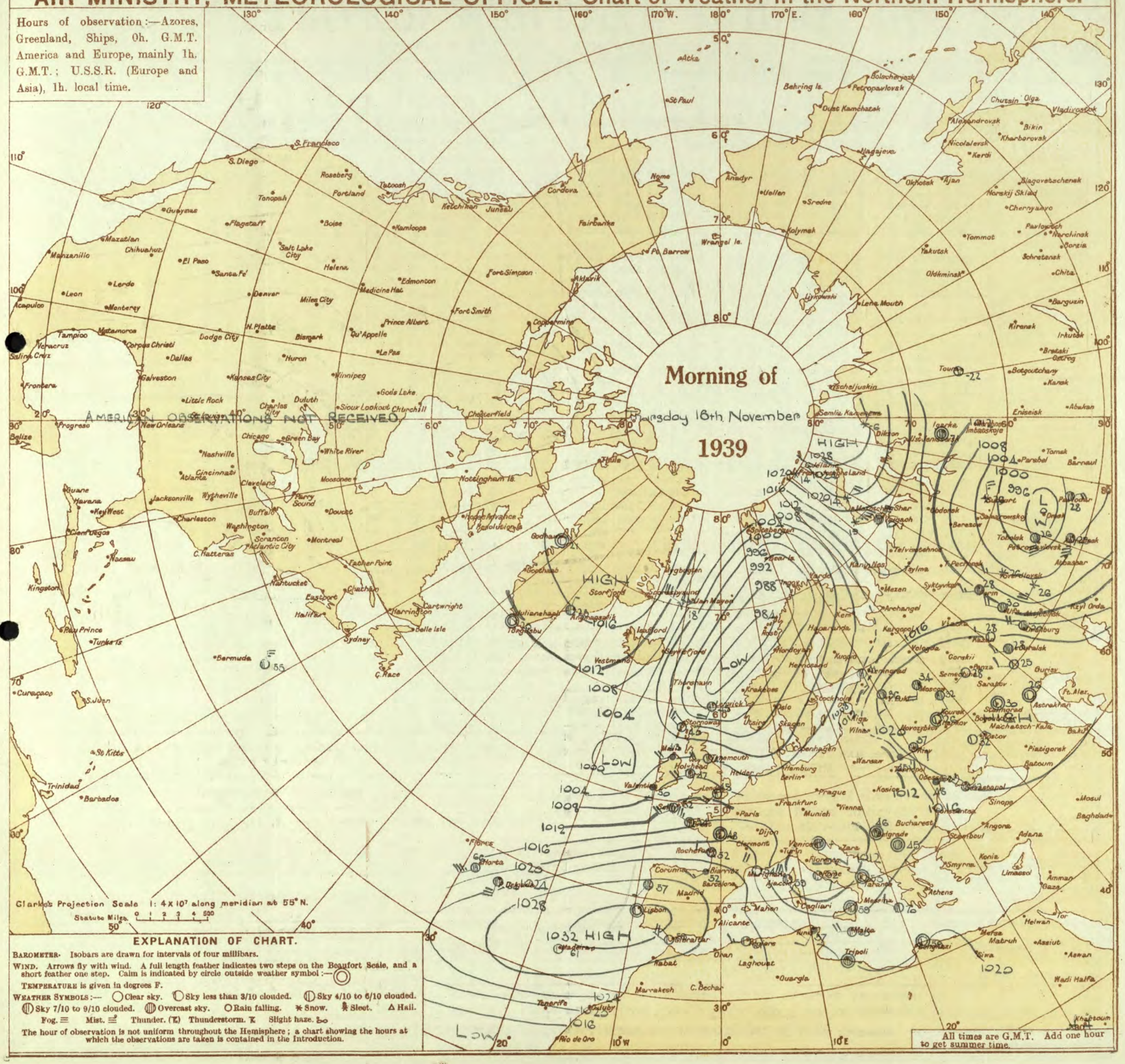
South Cone hoisted at 0145 on 16th in districts part of 5, 6, 17, 19, 20. and at 0715 on 16th in districts 1, 2, part of 5, and 7.

Forecasts issued at 0930 G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1. 0.472/3777. Wt.8109. D.4626. Gp.248. 24300. 11/39

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
Thursday 16th November 1939.
No. 28,483

OBSERVATIONS at 1 hr. G.M.T. 16th November — OBSERVATIONS at 7 hr. G.M.T. 16th November — PAST 24 HOURS.

Observations at 1 hr. G.M.T. 16th November

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1011·4	+18	W'S	4	zo	45	85	6	5	–	–	4-6	4-6	4000
	S. Farnborough	226	1011·7	+18	SW'W	3	zo	44	85	6	5	–	–	1	1	4000
	Boscombe Down	417	1013·3	+22	W'N	2	b	43	85	7	5	–	–	1	1	2500
	Calshot (Sthmtn.)	8	1013·0	+18	SW'W	3	zo	45	85	6	5	–	1	2-3	2-3	4000
	Lympne ...	346	1011·6	+20	W	3	bc	44	85	7	5	–	–	2-3	2-3	2500
	Manston ...	154	1010·2	+22	W'N	4	zo	46	85	6	5	–	–	7-8	7-8	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1008·8	+26	W'S	3	zo	46	85	6	5	–	–	4-6	9+	5700
	Gorleston ...	5	1007·6	+24	WSW	3	bc	46	85	7	5	–	–	2-3	2-3	2500
	Mildenhall ...	19	1008·3	+22	WSW	4	bc	44	85	7	–	4	1	0	2-3	–
	Cranwell ...	240	1007·9	+30	W	4	zo	43	85	6	8	–	–	7-8	7-8	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1011·1	+18	SW	2	b	43	85	7	–	4	–	0	1	–
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1012·2	0	WNW	3	c	51	75	8	5	1	–	4-6	9	2500
	Bristol ...	209	1013·0	+18	W	2	b	45	85	7	–	4	–	0	1	–
	Portland Bill ...	32	1013·8	+10	NW	5	bc	51	92	8	5	–	–	4-6	4-6	4000
	Plymouth ...	82	1014·5	+10	WSW	3	c	50	85	7	–	–	6	0	9	–
	The Lizard ...	240	1014·9	0	W	4	bc	51	92	8	8	–	–	4-6	4-6	2500
	Scilly (St.Mary's)	163	1014·1	–10	SW'W	4	c	52	92	7	5	–	–	9+	9+	1500
	Guernsey ...	175	1015·2	+12	W	3	bc	52	85	8	2	–	–	4-6	4-6	2500
6	Pembroke ...	142	1011·6	–2	W	3	bc	51	75	7	2	–	–	2-3	2-3	2500
7	Holyhead ...	26	1008·8	+6	WSW	4	c	48	75	8	5	1	–	4-6	10	1500
	Chester (Sealand)	16	1008·8	+14	W	3	zo	47	75	6	5	–	–	7-8	7-8	4000
8	Manchester ...	70	1007·9	+14	WSW	3	zo	44	85	6	8	3	–	4-6	9+	1500
10	Spurn Head ...	29	1005·4	+24	W'N	5	bc	44	75	7	–	4	3	0	4-6	–
	Catterick ...	175	1005·5	+22	W	2	bc	41	75	8	8	–	–	4-6	4-6	2500
	Tynemouth ...	108	1004·0	+28	W	4	bc	42	75	7	2	–	–	2-3	2-3	2500
11	St. Abbs Head	280	1001·3	+28	W	6	b	42	65	8	4	–	–	Tr	Tr	2500
	Leuchars ...	36	1001·4	+18	SW	2	b	37	85	8	–	4	–	0	Tr	–
12	Renfrew (Abbots I.)	19	1003·8	+14	WNW	2	c	40	85	7	8	–	–	7-8	7-8	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1006·6	+8	WNW	5	bc	46	85	8	4	–	–	1	4-6	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	999·3	+14	WNW	5	bc/phr	40	85	8	8	–	–	4-6	4-6	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	993·7	+10	W	6	PR	38	92	7	5	1	–	7-8	7-8	800
16	Lerwick ...	156	985·7	+2	SSW	4	c/pr	45	92	7	8	7	–	4-6	7-8	1500
17	Blacksod Point	18	1005·7	–20	S	3	bc	49	85	7	8	–	–	4-6	4-6	800
18	Malin Head ...	84	1003·1	–6	WSW	4	pr	43	85	6	3	–	–	7-8	7-8	1500
	Aldergrove ...	268	1006·6	–2	SW'W	3	bc	41	92	7	5	–	7	4-6	4-6	2500
19	Birr Castle ...	173	1008·9	–8	WNW	1	c	45	85	8	5	–	–	10	10	2500
20	Valentia Obsy.	30	1007·0	–42	S	4	roro	50	92	7	6	2	–	4-6	10	1500
	Roches Point	22	1010·3	–22	SW'W	3	ir	48	97	7	6	2	–	7-8	9+	1500

Observations at 7 hr. G.M.T. 16th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1011·8	+2	SW	2	roro	46	85	6	6	2	–	4-6	10	1500	1	*
Croydon	1012·8	0	SSW	2	iro	45	85	6	6	2	–	4-6	10	4000	1	*
S. Farnborough	1011·4	–14	SSE	1	iro	44	92	6	5	–	–	10	10	2500	1	*
Boscombe Down	1010·7	–26	SW	3	ir	43	97	6	5	–	–	10	10	1500	1	*
Calshot (Sthmtn.)	1011·9	–18	SW'S	2	rr	49	92	6	6	2	–	7-8	10	800	1	§2
Lympne	1013·4	+2	W'S	3	c	43	85	8	5	7	–	9+	10	5700	1	§3
Manston	1012·1	+4	SW	3	zo	43	85	6	5	–	–	9+	9+	2500	1	*
Shoeburyness	1012·2	+6	WSW	3	o	46	85	6	5	–	–	10	10	5700	1	*
Felixstowe	1011·9	+12	WSW	2	zo	45	85	6	5	–	–	9+	9+	2500	1	3
Gorleston	1009·5	0	SW	2	c	44	85	6	5	–	–	10	10	2500	0	2
Mildenhall	1010·0	–2	SW'S	3	c	43	85	7	–	2	–	0	10	–	1	*
Cranwell	1008·0	–6	SW	3	zo	43	85	6	5	2	–	10	10	2500	0	*
Birmingham	1008·8	–12	S	3	rr	42	92	5	6	2	–	2-3	10	800	1	*
Upper Heyford	1010·9	–10	S	2	roro	42	97	6	6	–	–	10	10	1500	1	*
Ross-on-Wye	1007·8	–20	S'W	3	rr	45	92	6	–	2	–	10	10	800	1	*
Hartland Point	1002·4	–82	SW	5	rr	52	97	6	6	2	–	7-8	10	1500	1	3
Bristol	1008·4	–32	S'W	3	roro	45	92	6	6	2	–	2-3	10	1500	1	*
Portland Bill	1009·9	–30	SW	4	rr	52	92	6	5	–	–	10	10	1500	1	4
Plymouth	1006·9	–54	SW	5	rr	53	97	6	–	2	–	10	10	1500	1	3
The Lizard	1007·9	–42	W	7	ido	55	97	5	5	–	–	10	10	1500	1	3
Scilly (St.Mary's)	1007·1	–38	W'S	7	dd	55	97	4	5	8	–	10	10	800	1	4
Guernsey	1011·6	–40	SSW	4	rr	52	97	5	5	–	–	10	10	800	1	5
Pembroke	1002·7	–46	S	4	rr	52	97	5	5	–	–	10	10	450	1	3
Holyhead	1002·1	–40	SE	2	rr	46	85	7	–	2	–	10	10	800	1	2
Chester (Sealand)	1006·7	–18	SSE	3	rr	44	85	6	–	2	–	10	10	1500	*	*
Manchester	1007·1	–10	S'W	3	iro	44	85	6	–	7	–	0	10	–	1	
Spurn Head	1006·9	–2	SW'W	3	c	44	85	7	–	3	–	0	10	–	0	3
Catterick																*
Tynemouth	1003·8	–14	W	3	c	43	75	6	2	–	–	7-8	7-8	2500	1	1
St. Abbs Head	1000·8	–10	W	4	c	40	85	8	5	3	–	7-8	9	2500	0	2
Leuchars	1000·3	–8	–	0	zo	36	92	6	5	3	–	7-8	9	5700	1	*
Renfrew (Abbots I.)	1001·6	–18	–	0	iro	41	97	7	5	–	–	9+	9+	1500	1	*
Eskdalemuir	1002·1	–20	SSW	2	e	39	97	7	5	5	6	4-6	9+	800	1	
Point of Ayre	1002·5	–20	SSW	3	iro	45	97	8	8	2	–	4-6	10	1500	1	2
Tiree	1000·3	–10	NNW	1	c	42	85	8	5	–	–	9	9	2500	0	2
Stornoway	997·3	–16	W	6	bc	40	65	8	5	–	–	2-3	2-3	1500	1	3
Dalwhinnie	1000·0	–12	S	2	is	34	85	6	8	6	–	7-8	9+	1500	4	*
Aberdeen	999·1	–8	SW'S	2	b	35	75	5	5	–	–	Tr	Tr	5700	1	1
Wick	994·4	–10	SW	3	b	37	85	8	8	–	–	1	1	1500	1	2
Lerwick	986·3	+6	W'S	5	pr	44	92	7	8	7	–	7-8	9+	800	1	*
Blacksod Point	1000·1	–22	E	2	c	46	92	7	5	–	–	10	10	220	1	3
Malin Head	1000·5	–14	SSW	2	iro	44	85	7	4	2	–	2-3	9+	1500	1	4
Aldergrove	1001·6	–28	S	2	roro	41	97	6	5	2	–	Tr	10	1500	1	*
Birr Castle	998·8	–50	S	1	rr	46	97	7	6	–	–	10	10	1500	1	*
Valentia Obsy.	1001·0	0	WSW	6	dd	57	97	5	5	–	–	10	10	450	1	4
Roches Point	1000·5	–30	W'S	6	ir	57	92	8	6	2	–	7-8	10	800	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 15th Hrs. (36)
London (Kew)	53	45	41	–	Tr	3·6
Croydon	55	43	41	1	Tr	3·9
S. Farnborough	54	43	39	0·5	0·3	4·6
Boscombe Down	51	41	38	1	2	3·5
Calshot (Sthmtn.)	53	44	42	5	2	3·0
Lympne	55	42	39	4	0·2	3·4
Manston	54	42	40	0·4	Tr	4·1
Shoeburyness	56	46	41	1	–	4·0
Felixstowe	55	44	41	0·1	–	2·4
Gorleston	53	43	42	–	–	*
Mildenhall	54	43	39	2	–	4·3
Cranwell	53	42	38	–	Tr	3·8
Birmingham	52	41	41	2	2	3·7
Upper Heyford	53	40	33	Tr	1	*
Ross-on-Wye	54	44	38	3	2	3·4
Hartland Point	53	46	46	2	3	2·7
Bristol	52	43	36	3	4	2·8
Portland Bill	56	50	*	1	4	*
Plymouth	56	49	45	0·4	4	2·3
The Lizard	55	50	*	2	6	5·1
Scilly (St.Mary's)	(55)	51	*	1	4	5·5
Guernsey	55	51	46	3	3	3·1
Pembroke	54	47	*	2	10	3·9
Holyhead	54	45	43	0·5	3	3·6
Chester (Sealand)	54	*	*	0·3	*	*
Manchester	53	42	31	1	0·3	2·4
Spurn Head	53	43	*	–	–	2·9
Catterick	53			0·5		
Tynemouth	52	42	36	Tr	–	*
St. Abbs Head	48	36	*	Tr	–	*
Leuchars	49	34	24	1	–	3·4
Renfrew (Abbots I.)	51	37	33	3	0·6	2·5
Eskdalemuir	47	33	29	4	0·2	1·2
Point of Ayre	53	44	*	1	1	4·6
Tiree	51	40	38	1	–	4·0
Stornoway	44	39	*	2	0·2	2·2
Dalwhinnie	42	33	28	4	0·5	1·7
Aberdeen	49	35	28	3	0·1	2·9
Wick	48	35	*	0·1	0·1	*
Lerwick	53	44	*	1	1	3·7
Blacksod Point	52	45	*	2	2	*
Malin Head	50	40	*	1	4	2·3
Aldergrove	49	38	31	0·3	0·5	2·4
Birr Castle	53	41	39	0·2	9	4·2
Valentia Obsy.	53	48	44	1	10	3·1
Roches Point	55	46	*	–	10	*

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	Temp. Day Max. °F.	Temp. Night Min. °F.	Temp. 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	ybmobc	bcc zo	bccror	53	45	41	–	Tr	3·6	*	*	
Croydon	217	cbc,cpr	bcprq	bccmo	55	43	41	1	Tr	3·9	*	*	
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.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 15th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 16th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1010·3	WSW	4	c/pr	50						55		5	
Brussels														
Berlin														
Zürich														
Rome	1014·3	WNW	3	bc	55						*	*	–	

‡ 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.

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.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 17th November 1939.

No. 28484

OBSERVATIONS at 13h. G.M.T. 16th November

District	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	999·3	-64	SW'W	2	r₀r₀	51	97	5	5	2	-	4-6	10	1500
	Croydon	1000·1	-70	SW	4	r₀r₀	54	97	6	6	2	-	4-6	10	800
	S. Farnborough	999·8	-54	WSW	4	d₀d₀	50	97	6	6	2	-	10	10	1500
	Boscombe Down	1000·7	-26	W'S	5	d₀d₀	55	97	6	6	-	-	10	10	800
	Calshot (Soton.)	1001·4	-30	WSW	4	dd	56	97	5	6	2	-	10	10	800
	Lympne	1001·6	-80	SW'S	6	rf	51	97	2	-	-	-	10	10	<150
	Manston	1000·9	-84	S	4	rr	49	97	5	6	2	-	10	10	800
2	Shoeburyness	1000·5	-90	S'E	3	rr	50	97	6	6	2	-	9	10	450
	Felixstowe	1001·6	-74	S'E	4	r₀r₀	48	97	6	6	2	-	9+	10	450
	Gorleston	1002·2	-60	SE	5	r₀r₀	43	92	6	6	-	-	10	10	800
	Mildenhall	999·7	-70	SSE	4	r₀r₀	43	97	8	6	2	-	9	10	800
	Cranwell	1000·5	-52	E'S	3	r₀r₀	42	97	5	6	-	-	10	10	2500
3	Birmingham	998·9	-34	SSW	2	rf	44	97	3	-	2	-	10	10	800
	Upper Heyford	999·0	-54	WSW	3	rr	48	97	5	-	2	-	10	10	220
4	Ross-on-Wye	998·4	-24	SW	3	ir₀	55	92	8	6	-	-	10	10	1500
5	Hartland Point														
	Bristol	1000·2	-16	W	7	ir	55	92	6	6	2	-	9	10	450
	Portland Bill	1002·9	-16	SW	5	c	56	92	7	5	-	-	10	10	2500
	Plymouth	1005·6	-2	W	5	d₀d₀	57	97	6	6	-	-	10	10	800
	The Lizard	1007·1	-4	WSW	8	rr	55	97	4	5	-	-	10	10	800
	Scilly (St. Mary's)	1006·9	-2	W'S	7	id	56	97	5	5	-	-	10	10	800
	Guernsey	1007·3	-14	W	6	r₀r₀	56	97	5	5	-	-	10	10	450
6	Pembroke	1000·1	0	W	8	cq	56	97	6	5	-	-	10	10	800
7	Holyhead	998·8	+2	NE	3	c	48	92	8	5	3	-	9+	9+	2500
	Chester (Sealand)	998·7	-30	ESE	2	dd	45	97	4	5	-	-	10	10	450
8	Manchester	999·4	-34	E'S	2	df	44	97	3	6	2	-	4-6	10	800
10	Spurn Head	1001·5	-20	SSE	4	rr	43	92	6	5	-	-	10	10	800
	Catterick	1000·3	-22	S'E	1	ir₀	43	97	4	5	2	-	7-8	10	800
	Tynemouth	1001·3	-6	SW	3	ir₀	45	92	4	-	2	-	10	10	1500
11	St. Abbs Head	998·5	-8	SW	3	c	45	75	8	8	2	-	7-8	10	2500
	Leuchars	998·3	-10	W	2	bc	46	75	8	2	3	1	2-3	2-3	4000
12	Renfrew (Abbots I.)	1000·5	0	W	2	bc	44	85	9	8	7	1	2-3	2-3	2500
	Eskdalemuir	999·2	-8	W	2	pr	44	85	8	5	-	-	9	9	800
	Point of Ayre	1000·8	-6	N'E	2	c	47	92	7	8	7	-	7-8	9+	1500
13A	Tiree	1001·4	+4	NW	5	bc	45	65	8	8	-	-	4-6	4-6	1500
13B	Stornoway	999·7	+24	N	6	rr	44	85	7	5	2	-	7-8	10	1500
15	Dalwhinnie	998·5	-18	W	6	bc	39	65	8	4	6	-	2-3	2-3	4000
	Aberdeen	996·8	-14	SW	3	b	45	65	7	7	-	-	Tr	Tr	2500
	Wick	993·6	-10	WSW	6	c	44	85	8	5	7	-	7-8	9+	2500
16	Lerwick	990·7	+20	NNE	5	ir	45	92	7	6	2	-	7-8	10	800
17	Blacksod Point	1004·2	+20	NE	3	c	48	92	8	5	-	-	7-8	7-8	800
18	Malin Head	1003·1	+20	N	3	c	47	92	8	8	-	-	4-6	7-8	2500
	Aldergrove	1001·9	+2	WNW	1	c	41	85	8	8	-	2	4-6	7-8	800
19	Birr Castle	1003·0	+24	ENE	1	c	45	97	7	6	2	-	4-6	10	1500
20	Valentia Obsy. †	1005·7	+34	W'S	5	dd	56	97	5	5	-	-	10	10	450
	Roches Point	1002·8	+14	WNW	4	c	60	85	8	6	1	-	7-8	9	1500

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

District	Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Form. Med. (24)	Form. High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1002·6	+38	W	4	z₀	58	85	6	5	-	-	10	10	1500	1	*
	Croydon	1002·2	+26	W'S	4	z₀	57	92	6	5	7	-	9	10	1500	1	*
	S. Farnborough	1002·9	+32	W	5	c.	57	85	8	5	-	-	7-8	10	4000	1	*
	Boscombe Down	1004·7	+34	W'N	5	c	55	92	7	5	-	-	9+	9+	800	1	*
	Calshot (Soton.)	1004·8	+32	W	4	c/d	52	97	7	5	-	-	9+	9+	1500	1	3
	Lympne	1001·8	+20	W	6	ir₀	55	97	8	5	-	-	9+	9+	1500	1	§4
	Manston	1000·4	+26	dr	6	c	57	85	7	6	2	-	9+	10	1500	1	*
2	Shoeburyness	1001·2	+18	SW'S	3	c	57	85	6	5	-	-	10	10	800	1	*
	Felixstowe	1000·1	+30	WNW	4	z₀	52	85	5	6	2	-	7-8	10	1500	1	3
	Gorleston	998·8	+16	WNW	4	c	48	92	6	8	-	-	9+	9+	1500	1	2
	Mildenhall	1002·5	+54	NW'W	4	z₀	45	92	5	5	-	-	10	10	450	1	*
	Cranwell	1003·4	+40	NW	3	z₀	43	97	6	6	2	-	9	10	450	1	*
3	Birmingham	1005·3	+50	NW	3	m	45	85	4	6	-	-	10	10	800	1	*
	Upper Heyford	1004·5	+50	NW'N	4	c	50	85	7	5	7	-	9	9+	1500	1	*
4	Ross-on-Wye	1005·8	+52	W'N	2	c	52	75	9	5	-	-	7-8	7-8	2500	1	*
5	Hartland Point	1007·7	+22	WNW	5	c	55	97	6	-	2	-	10	10	800	1	5
	Bristol	1005·1	+34	W'N	6	id₀	56	92	6	5	7	-	7-8	9+	450	1	*
	Portland Bill	1007·3	+36	W	5	c	57	92	7	5	-	-	7-8	7-8	4000	1	5
	Plymouth	1008·9	+22	WNW	6	d₀d₀	57	92	6	5	-	-	10	10	800	1	3
	The Lizard	1011·5	+20	W	7	DD	55	97	4	5	-	-	10	10	1500	1	4
	Scilly (St. Mary's)	1011·4	+28	W'S	3	c/d	55	97	4	5	-	-	10	10	800	1	4
	Guernsey	1011·2	+24	W	6	r₀r₀	57	97	6	5	-	-	10	10	800	1	5
6	Pembroke	1008·1	+36	NNE	3	d₀d₀	51	97	6	5	-	-	10	10	800	1	2
7	Holyhead	1006·5	+38	NW'W	4	bc	50	75	8	8	-	-	4-6	4-6	2500	1	2
	Chester (Sealand)	1005·9	+48	WNW	3	c/f	45	92	4	5	-	-	9	9	1500	1	*
8	Manchester	1005·3	+46	W	2	m	44	97	4	5	3	-	9	9+	2500	1	*
10	Spurn Head	1002·1	+18	NW	4	c	43	97	6	5	-	-	10	10	1500	1	2
	Catterick	1002·8	+28	W	2	m	44	85	4	5	-	-	4-6	4-6	1500	1	4
	Tynemouth	1002·4	+18	WSW	2	bc	44	85	6	2	3	-	2-3	4-6	2500	1	1
11	St. Abbs Head	1000·0	+12	WNW	5	bc	43	55	8	4	4	-	2-3	2-3	2500	0	3
	Leuchars	1001·3	+30	WSW	2	b	42	65	8	5	3	-	Tr	1	4000	1	*
12	Renfrew (Abbots I.)	1004·0	+38	W'S	3	id₀	43	92	7	5	-	-	9+	9+	1500	1	*
	Eskdalemuir	1002·7	+16	W	4	p	39	65	8	5	-	-	Tr	Tr	2500	1	*
	Point of Ayre	1005·4	+38	N'W	5	b	47	65	8	4	-	-	1	1	2500	1	3
13A	Tiree	1005·7	+44	N	5	bc	46	75	8	8	-	-	4-6	4-6	2500	0	4
13B	Stornoway																
15	Dalwhinnie	1004·0	+44	N	3	ir	38	92	7	4	6	-	7-8	9	2500	1	*
	Aberdeen	999·6	+30	NW'W	3	pr	43	92	6	9	-	-	10	10	1500	1	1
	Wick	999·5	+46	NNW	6	cq	44	97	7	5	6	-	4-6	7-8	1500	1	3
16	Lerwick	997·3	+32	NNE	7	c	42	92	7	8	7	-	4-6	9	1500	1	*
17	Blacksod Point	1008·9	+20	NE'E	2	c	47	85	8	5	-	-	10	10	1500	0	3
18	Malin Head	1006·9	+28	NW	4	c	47	75	7	8	-	-	7-8	7-8	4000	0	4
	Aldergrove	1007·6	+34	WNW	3	bc	41	75	8	5	3	-	2-3	4-6	2500	1	*
19	Birr Castle	1009·1	+28	S'W	1	bc	41	97	7	-	3	-	0	2-3	-	1	*
20	Valentia Obsy. †	1009·5	+22	W'S	4	iR	55	97	5	5	-	-	10	10	450	2	3
	Roches Point	1008·6	+36	WNW	3	c/pr	58	92	8	8	1	-	7-8	9	1500	1	4

PAST 24 HOURS.

District	Stations.	Weather. 7h.—13h. 16th (37)	13h.—18h. 16th (38)	18h. 16th to 1h. 17th (39)	1h.—7h. 17th (40)
1	London (Kew)	r₀r₀r₀m₀	c₀r₀r₀c₀m₀	c₀b₀c₀b₀m₀	c₀p₀b₀c₀m₀
	Croydon	c₀r₀r₀q₀m₀	r₀r₀r₀c₀m₀	c₀b₀m₀	b₀c₀r₀m₀
	S. Farnborough	r₀k₀r₀r₀	d₀r₀d₀c	c₀m₀b₀c	b₀m₀r₀
	Boscombe Down	i₀r₀m₀o₀r₀d₀	o₀i₀d₀i₀r₀m₀o	c₀b₀c₀m₀b₀c	b₀c₀m₀j₀d	
	Calshot (Soton.)	q₀c₀d₀r₀m₀	o₀m₀d₀d₀r₀d₀c	c₀m₀b₀m₀	c₀m₀d₀r₀d₀c₀f₀
	Lympne	c₀r₀r₀r	f₀o₀r₀r₀d₀	c₀r₀b₀c₀m₀	b₀c₀m₀
	Manston	c₀m₀o₀r₀r	p₀r₀a₀p	o₀b₀b₀m₀	b₀m₀w₀c₀m₀
2	Shoeburyness	r₀r₀r₀r₀c	c₀r₀r₀m₀c₀m₀	c₀m₀p₀c₀m₀	x₀c₀m₀w₀m₀
	Felixstowe	c₀m₀o₀r₀c₀i₀r₀r₀r₀r₀m₀o	o₀m₀c₀b₀m₀	b₀m₀c₀m₀	
	Gorleston	c₀o₀r₀r₀q	o₀r₀r₀c	c₀b₀c₀b	b₀c₀c
	Mildenhall	o₀c₀i₀r₀r	c₀r₀r₀m₀c₀m₀	c₀m₀b₀m₀	b₀c₀o₀c₀m₀
	Cranwell	r₀r₀	r₀r₀d₀d₀c₀m₀	c₀b₀c₀m₀w	b₀c₀c₀m₀
3	Birmingham	o₀r₀r₀r₀f	f₀r₀o₀m	o₀m₀b₀c	b₀c₀c₀i₀r₀
	Upper Heyford	r₀r DD r₀r	c₀r₀r₀c	c₀b₀c₀m₀b₀c	c₀i₀r₀d₀
4	Ross-on-Wye	r₀r₀r₀i₀r	r₀r₀c₀c	b₀c₀c	c₀r₀r₀r₀
5	Hartland Point		d₀d₀o	F d f d	F d f d
	Bristol	c₀r₀r₀d₀q	c₀r₀i₀d₀q	b₀c₀c	c₀i₀r₀i₀d₀
	Portland Bill	o₀i₀d	c	c	o₀i₀d
	Plymouth	o₀r₀r₀d₀d₀	o₀d₀d₀m₀	c₀i₀d₀d₀r₀m₀	c₀i₀d₀m₀
	The Lizard	r₀r₀q₀m	r₀r₀c₀m	r₀f₀d₀m	d₀m₀p₀r₀
	Scilly (St. Mary's)	o₀i₀d₀m	o₀d₀d₀m	o₀i₀d₀m	o₀i₀d₀m
	Guernsey	o₀k₀r₀r	q₀r₀r₀	r₀o₀r₀	o₀r₀r₀
6	Pembroke	i₀r₀r₀i₀r₀m₀q	o₀i₀r₀d₀d₀	o₀c₀i₀d₀d₀d₀m	F₀f₀o₀p₀r₀m₀
7	Holyhead	r₀r₀r₀c	c₀r₀b₀c	b₀c₀c	c
	Chester (Sealand)	c₀m₀r₀r₀d₀d	d₀d₀d₀m₀f₀m	c₀m₀b₀c₀m₀z₀c₀z₀,c₀f₀i₀r	
8	Manchester	c₀r₀r₀m₀f₀d₀d₀c₀f₀d₀r₀f₀d₀m	c₀m₀b₀c,m₀	c₀m₀c₀m	
10	Spurn Head	p₀r₀r	i₀d₀m₀o	b₀v	d₀b₀c
	Catterick	m₀o₀i₀r₀m	c₀r₀c₀m₀c₀m	m₀b₀c₀b	b₀c₀b₀x₀c
	Tynemouth	c₀m₀p₀	o₀i₀r₀b₀c₀m	b₀c	b₀c
11	St. Abbs Head	c	b₀c₀y	b₀c	d₀b₀c₀c
	Leuchars	c₀m₀w₀b₀c	b₀c₀b	b₀x₀b₀w	b₀c₀w₀b₀x
12	Renfrew (Abbots I.)	c₀m₀o₀i₀r₀c	b₀b₀c₀c₀d₀	c₀i₀d₀b₀w₀m₀c	b₀c₀m₀o₀f₀f
	Eskdalemuir	p₀r₀r₀m₀c₀p₀r	c₀p₀r₀b₀c	b₀c₀r₀b₀c	b₀c₀x
	Point of Ayre	d₀d₀o₀c	c₀b₀c	b₀c₀c	b₀c
13A	Tiree	b₀c	c₀p₀r₀b₀c	b₀c₀c	b₀c₀c
13B	Stornoway	b₀c₀r₀r		c₀p₀r	c₀p₀r
15	Dalwhinnie	c₀i₀s₀b₀c	c₀i₀r₀	*	c₀i₀r₀s₀r₀s
	Aberdeen	b₀z₀b	b₀b₀c₀p₀r	b₀c₀p₀r₀b	b₀c₀p₀r₀
	Wick	b₀b₀c₀q	p₀r₀c₀q	b₀c₀q	c₀b₀c₀p₀r
16	Lerwick	c₀p₀r₀i₀r	c₀i₀r₀r	c₀p₀r	c₀p₀h₀r₀b₀c
17	Blacksod Point	c	c	c	c₀q
18	Malin Head	c	b₀c₀c	c	c₀b₀c₀c
	Aldergrove	r₀r₀d₀d₀m₀	c₀b₀b₀c	b₀c₀b,c	c₀b₀c₀c
19	Birr Castle	o₀d₀d₀c	c₀b₀c	o₀d₀d	o₀r₀r₀d₀d
20	Valentia Obsy. †	r₀r₀d₀d	d₀d₀i₀R	i₀R₀d₀d₀d₀d	d₀d₀r₀r₀d₀d
	Roches Point	i₀r₀c	c₀p₀r₀c	d₀d₀	i₀r₀c

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 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.

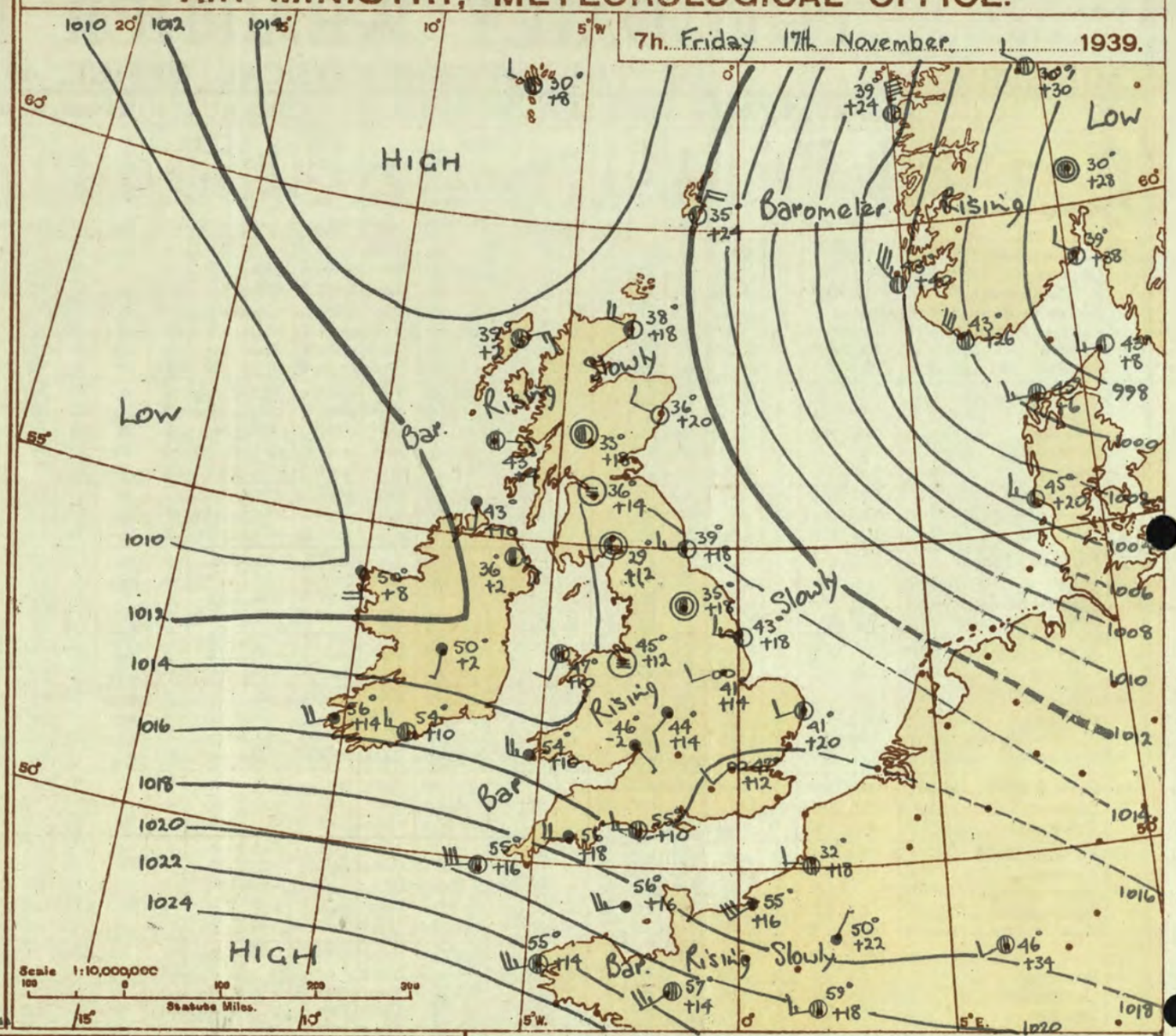
§ Sea disturbance reported from Dungeness.

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.



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 November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light variable wind; cloudy, occasional slight rain; some mist or fog; becoming milder.
5 S.W. England 6 South Wales ... 7 North Wales ...	Moderate or fresh westerly winds; cloudy, occasional drizzle; very mild.
8 N.W. England 9 N. Midlands ...	As 1-4
10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Light variable wind; fair at first, slight rain later; fog on low ground; rather cold.
13 A. W. Scotld. B.N.W.Scotland.	Light or moderate southeast wind; cloudy, some rain; becoming milder.
14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	As 10 - 12.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 5 - 7.

GENERAL INFERENCE.

An anticyclone over Portugal is spreading north and pressure is rising over Western Europe, while falling in Iceland. Mild west winds will spread slowly to all districts with slight rain or drizzle and much fog or mist.

FURTHER OUTLOOK.

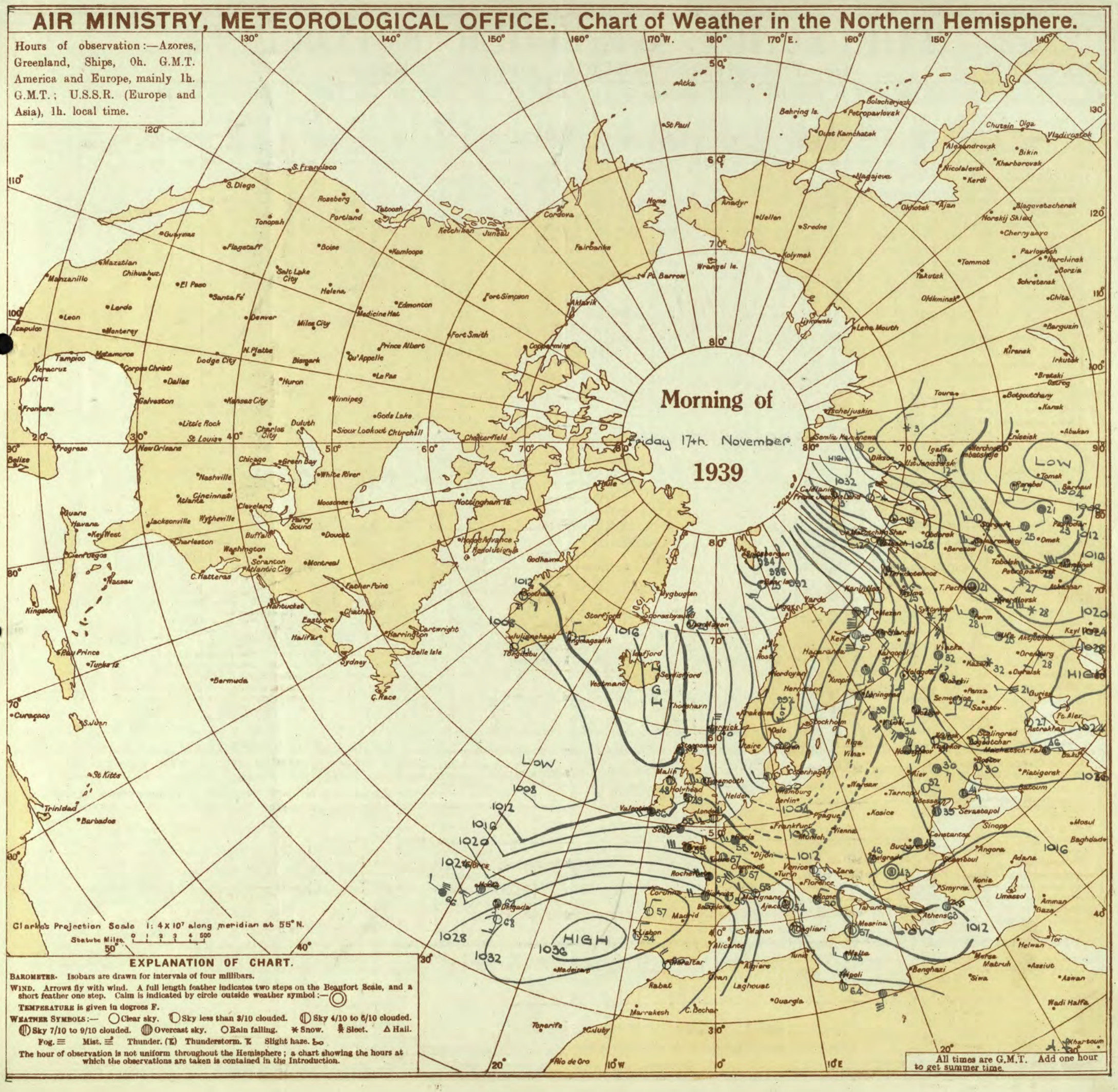
Westerly winds; cloudy generally, but little rain in the South; mild, especially in the South.

Forecasts issued at 0930 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 17th November 1939.

No. 28484

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1013·3	+30	WSW	3	z₀	41	92	6	–	3	–	0	2-3	–
	S. Farnborough	226	1013·3	+28	SW'S	1	bc	42	92	7	5	–	–	2-3	2-3	4000
	Boscombe Down	417	1013·7	+26	SW	1	z₀	46	92	6	5	–	–	7-8	7-8	1500
	Calshot (Sthmtn.)	8	1013·9	+30	–	0	z₀	49	92	6	5	3	–	4-6	9	2500
	Lympne ...	346	1013·3	+36	WNW	2	bc	42	92	6	5	–	–	4-6	4-6	4000
	Manston ...	154	1012·0	+30	W'N	2	z₀	43	92	6	–	–	–	0	0	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1010·9	+38	W	3	z₀	44	92	6	5	–	–	Tr	Tr	2500
	Gorleston ...	5	1009·5	+36	WSW	3	b	42	85	6	–	–	–	0	0	–
	Mildenhall ...	19	1011·1	+32	W	3	z₀	40	97	5	–	4	–	0	2-3	–
	Cranwell ...	240	1010·6	+34	NWW	3	z₀	40	85	6	5	–	5	1	4-6	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1013·1	+26	W	2	bc	44	92	7	5	7	–	4-6	4-6	1500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1012·7	+8	W	4	dF	53	97	1	–	–	–	10	10	<150
	Bristol ...	209	1013·8	+24	W	1	c	46	85	6	5	2	–	2-3	10	2500
	Portland Bill ...	32	1013·8	+28	NW	3	c	53	92	8	5	–	–	10	10	4000
	Plymouth ...	82	1014·5	+18	W'S	4	d.d.	56	97	6	–	2	–	10	10	800
	The Lizard ...	240	1015·6	+18	W'S	5	DD	55	97	4	5	–	–	10	10	1500
	Scilly (St. Mary's)	163	1015·5	+14	W'S	6	id.	55	97	4	5	–	–	10	10	800
	Guernsey ...	175	1015·4	+14	W	5	r.r.	56	97	6	5	–	–	10	10	1500
6	Pembroke ...	142	1013·2	+6	–	0	d.d.	50	97	5	5	–	–	10	10	800
7	Holyhead ...	26	1011·7	+12	W'S	1	c	49	65	8	5	–	–	10	10	2500
	Chester (Sealand)	16	1012·2	+22	W'S	2	z₀	46	75	5	5	–	–	4-6	4-6	2500
8	Manchester ...	70	1011·8	+22	NW	1	z₀	41	92	6	5	–	–	9	9	1500
10	Spurn Head ...	29	1009·0	+22	NW'W	6	b	42	75	7	–	4	–	0	1	–
	Catterick ...	175	1009·9	+26	NW'N	1	bc	41	85	8	5	–	–	2-3	2-3	2500
	Tynemouth ...	108	1008·6	+28	W	3	bc	40	75	7	2	–	–	4-6	4-6	2500
11	St. Abbs Head	280	1008·6	+30	WNW	4	bc	42	85	8	5	–	–	2-3	2-3	2500
	Leuchars ...	36	1009·5	+32	–	0	bc	38	85	8	–	3	–	0	4-6	–
12	Renfrew (Abbots I.)	19	1010·9	+26	SSW	1	z₀	36	97	6	5	–	–	4-6	4-6	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1010·2	+14	NW	4	c	49	85	8	5	2	–	7-8	10	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1012·0	+16	N	2	pr	38	92	6	5	2	–	7-8	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1009·2	+28	NW	6	cg	41	92	8	8	7	–	7-8	9	1500
16	Lerwick ...	156	1006·6	+34	NNE	6	c	40	85	8	5	7	–	4-6	7-8	1500
17	Blacksod Point	18	1010·9	0	SE	3	c	46	75	7	5	–	–	10	10	450
18	Malin Head ...	84	1011·0	+2	NEE	2	c	48	65	6	5	6	–	4-6	9	2500
	Aldergrove ...	268	1011·7	+10	–	0	c	42	92	7	5	–	–	10	10	5700
19	Birr Castle ...	173	1012·1	+6	SW	1	dd	44	97	7	5	–	–	10	10	2500
20	Valentia Obsy.	30	1012·6	+6	WSW	4	d.d.	56	97	5	5	–	–	10	10	450
	Roches Point	22	1012·4	+8	SE'E	3	d	49	97	7	5	–	–	10	10	1500

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	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)
1	London (Kew)	1016·3	+14	SSW	1	c/pr	47	92	5	5	7	–	4-6	10	2500	1	*	58	45	37	12	Tr	0·0
	Croydon ...	1016·2	+12	SW	2	z₀	47	85	6	5	–	–	10	10	4000	1	*	57	(41)	38	11	–	0·0
	S. Farnborough	1016·4	+16	–	0	r.r.	46	92	5	–	2	–	10	10	2500	1	*	57	42	37	11	0·3	0·0
	Boscombe Down	1016·4	+16	–	0	d.d.	47	97	5	–	2	–	10	10	800	1	*	55	44	41	9	0·3	0·0
	Calshot (Sthmtn.)	1016·5	+16	–	0	d.d.	49	97	4	–	2	–	10	10	800	1	1	58	47	45	8	1	0·0
	Lympne ...	1016·7	+14	NW	1	z₀	44	85	6	5	7	–	7-8	10	4000	1	§1	55	41	38	14	Tr	0·0
	Manston ...	1016·3	+22	W'N	3	z₀	46	75	6	5	2	–	4-6	9+	2500	1	*	57	41	39	10	Tr	0·0
2	Shoeburyness ...	1016·1	+22	W	2	m	46	85	4	5	7	–	2-3	10	5700	1	*	57	42	33	9	–	0·0
	Felixstowe ...	1014·8	+32	W	3	z₀	45	85	6	–	2	–	0	9+	–	1	2	53	42	36	6	–	0·0
	Gorleston ...	1014·5	+20	WSW	2	c	41	92	6	5	3	–	4-6	7-8	2500	1	2	48	40	36	5	–	*
	Mildenhall ...	1015·5	+20	SW'W	2	z₀	43	97	5	–	7	–	0	9+	–	1	*	48	38	33	6	–	0·0
	Cranwell ...	1014·6	+14	W'S	2	z₀	41	97	5	5	–	–	9+	9+	4000	1	*	48	39	36	4	Tr	0·0
3	Birmingham ...	1013·8	+14	SW	2	ir₀	44	92	6	–	7	–	0	10	–	1	*	48	43	37	6	0·2	0·0
	Upper Heyford	1016·6	+22	–	0	id₀	44	97	6	–	7	–	0	10	–	1	*	57	41	31	12	0·3	*
4	Ross-on-Wye	1015·7	+10	SE	1	r.r.	46	92	5	6	–	–	10	10	800	1	*	59	46	40	10	1	0·0
5	Hartland Point	1015·4	+14	W	5	dF	54	97	3	–	–	–	10	10	<150	1	4	55	52	51	5	3	0·0
	Bristol ...	1015·7	+10	W'S	1	id₀	47	97	5	5	2	–	9+	10	800	1	*	56	44	37	7	0·4	0·0
	Portland Bill ...	1015·8	+10	W	3	0	55	92	7	5	–	–	10	10	2500	1	3	57	51	*	4	10	*
	Plymouth ...	1017·7	+18	W'N	4	id₀	56	97	5	5	–	–	10	10	800	1	3	55	56	55	4	0·6	0·0
	The Lizard ...	1018·9	+28	W	5	0	55	97	7	5	–	–	10	10	1500	1	3	56	55	*	3	2	0·0
	Scilly (St. Mary's)	1018·6	+16	W'S	6	o/d	55	97	5	5	–	–	10	10	800	1	4	56	54	*	1	1	0·0
	Guernsey ...	1016·6	+16	W'S	5	r.r.	56	97	6	5	–	–	10	10	800	1	5	57	55	55	–	2	0·0
6	Pembroke ...	1014·3	+10	W'N	5	r.r.	54	97	5	5	–	–	10	10	800	1	3	56	49	*	5	2	0·0
7	Holyhead ...	1013·7	+10	SSW	2	c	47	75	7	5	2	–	4-6	10	4000	1	1	50	46	46	2	–	0·3
	Chester (Sealand)	1014·8	+12	SSE	1	c/f	45	85	5	5	–	–	9+	9+	1500	1	*	45	44	40	4	Tr	0·0
8	Manchester ...	1014·8	+14	SW'S	1	m	43	92	4	5	7	–	4-6	9+	2500	1	*	45	37	29	3	–	0·0
10	Spurn Head ...	1014·2	+18	WNW	5	bc	43	85	6	–	4	–	0	2-3	–	0	2	45	41	*	3	–	0·0
	Catterick ...	1014·2	+18	–	0	c	35	97	8	5	4	5	7-8	9	4000	1	*	44	35	27	2	–	0·0
	Tynemouth ...	1013·3	+18	W	3	bc	39	75	6	2	–	–	2-3	2-3	2500	1	1	45	39	33	0·4	–	*
11	St. Abbs Head	1013·2	+22	WNW	3	c	49	75	8	5	6	9	4-6	7-8	2500	0	2	45	42	*	Tr	–	*
	Leuchars ...	1013·4	+22	–	0	c	36	92	8	8	3	–	2-3	7-8	4000	1	*	47	35	27	–	–	3·7
12	Renfrew (Abbots I.)	1014·0	+14	–	0	cf+	36	97	2	5	–	–	9+	9+	2500	1	*	47	34	30	0·3	Tr	2·4
	Eskdalemuir ...	1014·6	+12	–	0	b	29	97	8	5	3	–	1	1	4000	3	2	44	25	*	2	–	0·9
	Point of Ayre ...	1013·2	+12	W'N	1	bc	42	92	8	8	4	6	Tr	4-6	2500	1	1	45	42		1	–	0·6
13A	Tiree ...	1012·5	+4	E	1	c	43	85	8	5	–	–	9	9	2500	0	2	47	41	36	0·3	–	3·4
13B	Stornoway ...	1013·7	+2	ENE	3	c/pr	39	75	7	5	7	–	7-8	9+	2500	1	2	46	37	*		2	0·7
15	Dalwhinnie ...	1013·5	+18	–	0	c	33	97	6	5	–	–	10	10	1500	4	*	40	32	28	0·3	1	5·0
	Aberdeen ...	1013·4	+20	NW'N	2	bc	36	92	6	8	3	–	2-3	4-6	2500	1	1	45	36	31	1	0·3	4·4
	Wick ...	1013·0	+18	NW	4	bc	38	85	8	5	4	–	2-3	2-3	2500	1	2	45	38	*	1	Tr	*
16	Lerwick ...	1011·2	+24	NNE	4	bc	35	65	8	8	–	–	4-6	4-6	1500	1	*	46	34	*	3	1	0·2
17	Blacksod Point	1010·4	+8	S	4	d	50	97	7	6	–	–	10	10	450	1	3	50	45	*	0·1	Tr	*
18	Malin Head ...	1013·5	+10	S	1	pr	43	85	7	5	–	–	9+	9+	2500	1	4	48	41	*	1	0·6	2·3
	Aldergrove ...	1013·1	+2	SE'E	2	c	36	85	8	5	7	–	7-8	7-8	4000	1	*	48	36	30	1	–	2·3
19	Birr Castle ...	1012·0	+2	S'W	1	dd	50	97	7	5	–	–	10	10	2500	1	*	47	40	38	1	4	0·0
20	Valentia Obsy.	1015·3	+14	WSW	4	dd	56	97	4	5	–	–	10	10	220	1	3	57	55	54	5	5	0·0
	Roches Point	1014·6	+10	W	3	c/r	54	97	8	6	7	–	4-6	7-8	1500	1	3	60	50	*	1	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	r.r.m₀	c.r.r.c.m₀	b.m.c.p.m₀	58	45	37	12	Tr	0·0	*	*	5
Croydon ...	217	c.r.r.q.m₀	r.r.c.m₀	b.c.c.m₀	57	43	38	11	–	0·0	*	*	
Greenwich (Royal Observatory) ...	149	r.r.	r.r.t.	o.b.c.m.	57	44	38	9	1		94	95	
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	57	45	40	10			94	96	*
Regents Pk. (Botanic Gardens)‡ ...	163	*	*	*									*
Camden Square ...	110			*						*	*		*
Kensington ...	80			*									*
Hampstead Observatory ...	450										*		*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

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

South Kensington Max.	Time.	Min.	Time.
0·2	8h 16th	<0·1	17-18h 16th

Kew Observatory Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 16th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 17th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...						1017·9	NE	1	dd	50		50		4
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1012·9	NNE	2	bc	57	1013·5	–	0	z₀	46	*	*	Tr	–

‡ 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

Saturday 18th November 1939.

No. 28.485

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1018·1	+4	S'W	1	ido	49	92	6	5	-	-	10	10	1500
	Croydon ...	1018·0	+2	-	0	ido	49	97	6	5	2	-	2-3	10	1500
	S. Farnborough														
	Boscombe Down	1017·7	+6	W'N	4	dd	55	97	5	6	2	-	7-8	10	450
	Calshot (Soton.)	1017·9	+8	W'S	1	c/d	53	97	5	6	2	-	10	10	800
	Lympne ...	1018·9	+10	WSW	1	iro	48	85	7	5	-	-	10	10	5700
	Manston ...	1018·6	+10	WSW	2	zo	49	75	6	5	7	-	7-8	10	4000
2	Shoeburyness ...	1018·4	+6	SW	2	m	50	85	4	5	7	-	7-8	10	4000
	Felixstowe ...	1017·8	+14	WNW	2	zo	49	85	6	5	7	-	4-6	9+	1500
	Gorleston ...	1017·7	+16	W	2	bc	47	85	6	5	5	-	2-3	4-6	2500
	Mildenhall ...	1017·9	+14	W'S	2	zo	50	75	6	5	7	-	2-3	9+	5700
	Cranwell ...	1016·7	+10	WSW	1	iro	49	85	6	5	7	-	9+	10	2500
3	Birmingham	1017·2	+2	-	0	ir	45	92	4	6	2	-	7-8	10	1500
	Upper Heyford	1017·6	+6	SSW	2	ido	48	97	6	5	2	-	7-8	10	450
4	Ross-on-Wye ...	1016·7	0	SW	2	zo	53	92	6	5	-	-	10	10	1500
5	Hartland Point														
	Bristol ...	1017·4	+8	WSW	4	ido	55	97	5	5	2	-	9	10	450
	Portland Bill ...	1018·6	+16	W	4	c	56	92	7	5	4	-	4-6	9	4000
	Plymouth ...	1020·2	+18	NW'W	4	c/d	58	92	6	5	-	-	10	10	800
	The Lizard ...	1022·7	+20	W	5	df	55	97	2	5	-	-	10	10	1500
	Scilly (St. Mary's)	1022·2	+18	WSW	5	f	50	97	3	5	-	-	10	10	450
	Guernsey ...	1021·4	+12	W'N	5	roro	56	97	5	5	-	-	10	10	800
6	Pembroke ...	1017·5	+10	WNW	6	F	55	97	1	-	-	-	10	10	<150
7	Holyhead ...	1015·5	+8	SSE	2	c/r	50	97	6	5	2	-	9	10	800
	Chester (Sealand)	1016·4	+14	S'E	1	zo	49	85	5	5	2	-	7-8	10	2500
8	Manchester ...	1016·5	+2	-	0	c/r	50	65	6	-	3	7	0	10	-
10	Spurn Head ...	1017·2	+14	-	0	c	49	85	4	-	4	8	0	9	-
	Catterick ...	1016·5	+8	-	0	zo	45	75	6	5	3	-	2-3	7-8	4000
	Tynemouth ...	1015·9	+12	NNW	3	bc	47	75	6	2	3	-	4-6	4-6	2500
11	St. Abbs Head	1016·0	+14	-	0	c	43	75	8	2	6	1	4-6	7-8	2500
	Leuchars ...	1015·8	+6	E	2	c	46	65	8	8	3	-	7-8	9	4000
12	Renfrew (Abbots I.)	1015·8	+6	ESE	2	cf	43	85	3	5	-	-	9+	9+	4000
	Eskdalemuir ...	1015·9	+8	-	0	c	41	75	8	-	3	-	9+	9+	4000
	Point of Ayre ...	1015·7	+10	-	0	c	50	85	8	8	2	-	2-3	10	1500
13A	Tiree ...	1012·9	-2	SSE	4	c	48	75	8	5	-	-	9+	9+	2500
13B	Stornoway ...	1014·9	0	ESE	3	c	43	65	8	5	7	-	4-6	9+	2500
15	Dalwhinnie ...	1015·7	+2	-	0	c	37	85	7	4	3	-	2-3	9	2500
	Aberdeen ...	1016·1	+10	NNW	2	b	42	65	8	1	3	-	Tr	1	4000
	Wick ...	1016·0	+10	NE	2	bc	41	65	8	5	4	1	2-3	2-3	2500
16	Lerwick...	1014·9	+10	N'W	4	bc	39	85	8	8	4	-	4-6	4-6	1500
17	Blacksod Point..	1014·5	+16	W	2	c	55	97	7	5	-	-	9+	9+	450
18	Malin Head ...	1019·3	-2	S	3	c/pr	45	92	8	8	-	-	9	9	4000
	Aldergrove ...	1015·3	+6	-	0	zo	45	92	6	5	-	-	10	10	2500
19	Birr Castle ...	1016·8	+18	SW	1	c	55	97	7	6	-	-	7-8	10	1500
20	Valentia Obsy. †	1020·1	+14	W'S	5	ido	56	97	5	5	-	-	10	10	220
	Roches Point ...	1019·0	+18	WNW	3	c	59	92	8	5	1	-	7-8	9	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	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	1019·4	+14	W	2	m	54	97	4	5	-	-	10	10	450	1	*
S. Farnborough	1019·8	+16	W'S	3	zo	55	97	5	6	2	-	9	10	450	2	*
Boscombe Down	1020·3	+18	W'N	4	c	54	97	6	5	-	-	10	10	450	1	*
Calshot (Soton.)	1020·5	+22	W	3	zo	57	92	6	6	-	-	10	10	1500	1	1
Lympne	1020·1	+10	WSW	2	f	49	97	3	-	-	-	10	10	<150	1	§ 1
Manston	1019·9	+4	-	0	dodo	48	92	4	5	-	-	10	10	800	1	*
Shoeburyness	1019·6	+12	—	0	roro	50	97	5	5	6	-	10	10	1500	1	*
Felixstowe	1019·3	+10	WSW	2	zo	48	85	5	5	7	-	9	9+	5700	1	1
Gorleston	1018·8	+4	SW	2	bc	47	85	6	5	4	-	2-3	4-6	2500	0	2
Mildenhall	1019·4	+18	S'W	2	zo	48	85	6	5	-	-	10	10	2500	1	*
Cranwell	1018·7	+18	SSW	2	zo	47	92	5	5	-	-	10	10	1500	1	*
Birmingham	1018·5	+14	WSW	3	cf	50	97	3	5	-	-	9+	9+	800	1	*
Upper Heyford	1019·3	+6	SSW	1	zo	52	97	5	5	7	-	9+	10	1500	1	*
Ross-on-Wye	1019·8	+24	SW	2	ido	57	85	7	5	-	-	10	10	1500	1	*
Hartland Point	1022·4	+22	WNW	4	f-	54	97	3	-	-	-	10	10	<150	1	4
Bristol	1021·1	+18	W	5	df	54	97	3	-	-	-	10	10	<150	1	*
Portland Bill	1021·9	+18	WNW	3	c	56	92	7	5	-	-	10	10	1500	1	3
Plymouth	1023·8	+18	NW'W	4	zo	57	92	5	5	-	-	10	10	800	1	3
The Lizard	1024·7	+20	W	5	df	55	97	1	5	-	-	10	10	800	1	3
Scilly (St. Mary's)	1024·9	+20	W	5	f	54	97	2	-	-	-	10	10	<150	1	3
Guernsey	1024·2	+16	W'N	3	c/pr	56	97	5	5	-	-	10	10	800	1	5
Pembroke	1021·2	+14	W'N	4	c	54	97	6	8	-	-	9	9	1500	1	2
Holyhead	1018·5	+14	SW'S	2	iro	53	92	6	6	2	-	9	10	800	1	2
Chester (Sealand)	1018·7	+16	SSE	1	df	50	92	3	5	-	-	10	10	1500	1	*
Manchester	1018·5	+12	S	1	roro	47	97	4	6	2	-	9	10	800	1	*
Spurn Head	1018·4	+4	-	0	f	47	92	3	-	2	-	0	10	-	0	0
Catterick	1017·8	+8	S	1	zo	43	85	6	5	2	-	4-6	10	2500	1	4
Tynemouth	1017·3	+6	SE	2	c	47	75	6	5	-	-	10	10	1500	1	1
St. Abbs Head	1016·3	0	SSE	2	c/r	43	85	7	8	2	-	4-6	10	2500	0	1
Leuchars	1016·1	-2	SE	1	zo	42	85	6	5	2	-	7-8	10	4000	1	
Renfrew (Abbots I.)	1015·5	+2	ESE	1	df	43	97	3	5	-	-	10	10	1500	1	*
Eskdalemuir	1016·7	+2	-	0	dodo	40	85	6	-	2	-	10	10	2500	1	*
Point of Ayre	1016·6	+10	W'S	2	c/d	50	97	7	8	1	-	7-8	10	1500	1	1
Tiree	1010·2	-14	SSW	4	dr	51	97	7	-	2	-	9+	9+	1500	1	4
Stornoway	1011·0	-26	SE	5	c	45	65	8	5	7	-	4-6	10	2500	1	3
Dalwhinnie	1015·3	-6	S	4	iro	38	85	7	4	2	-	4-6	10	2500	1	*
Aberdeen	1016·8	-4	-	0	f	35	85	3	5	-	-	7-8	7-8	4000	1	1
Wick	1015·3	-6	SE	3	c	41	65	8	5	5	1	4-6	7-8	1500	1	2
Lerwick	1016·0	+6	E	1	bc	37	75	7	8	3	-	4-6	4-6	1500	1	*
Blacksod Point	1017·2	+22	WSW	4	ido	54	92	7	6	-	-	10	10	450	1	3
Malin Head	1013·1	+8	WSW	4	c	53	92	7	8	8	-	4-6	7-8	4000	0	4
Aldergrove	1016·0	+6	S'W	2	iro	49	97	5	6	-	-	10	10	1500	1	*
Birr Castle	1019·7	+26	SW	2	c	55	92	7	3	-	-	7-8	7-8	1500		*
Valentia Obsy. †	1023·2	+18	W'S	4	c	55	97	6	5	7	-	7-8	9+	450	1	3
Roches Point	1022·7	+28	W'N	3	bc	56	85	8	5	5	5	2-3	4-6	2500	1	3

PAST 24 HOURS.

Stations	Weather 7h.–13h. 17th (37)	13h.–18h. 17th (38)	18h. 17th – 1h. 18th (39)	1h.–7h. 18th (40)
London (Kew)	ciro idomo		Ofidcmo	cmoW
Croydon	cidododoc	dodomd	cmodo,mo	bcmo
S. Farnborough		dodofc	omobcp	bcwcmo
Boscombe Down	ororoid,mo	odocomo	bcmo	cbcomo
Calshot (Soton.)	orrdodom	omoccmo	omobcmo	omocmo
Lympne	cmororop	orofdodo	fdoomo	dbcmofe..w
Manston	rorocz o	czoododo	midoof	ofwcmomo
Shoeburyness	iromomc	omroro	rorofefem	dbmc
Felixstowe	cmo	omoido,cmo	cmoom	cmFFcmo
Gorleston	czobc	bccbczo	bcczo	dbczow
Mildenhall	cmo	cmo	sdbc	bmocmo
Cranwell	cmoiro	irocmo	cmobmo	bmow,cmo
Birmingham	ciro	orrof	fcbc	bcc
Upper Heyford	crorido,mo	cmododo	cmidobcb	bbcmo
Ross-on-Wye	romodo cmo	c	c	c
Hartland Point		Ffdo	FFFo	odf
Bristol	crrromdo	cdodof	cdofmbc	bccido
Portland Bill	oid	c	c	c
Plymouth	cidomo	cidomo	cidomo	cidomo
The Lizard	ifFd	FFd	cFF	cidif
Scilly (St. Mary's)	oidoff	offe	ffeff	offe
Guernsey	oroir	oiro		ciroo
Pembroke	idFeFeo	fefeo	cbce	omo
Holyhead	cro rmoc	cdomoroc	cromobc	bcc
Chester (Sealand)	cmiromoroo	ccrorodomodof	cfiDirob	bmo,bcf,mo
Manchester	cmo	czomomroro		bcmo
Spurn Head	cffm	cmff	prbc	bccw
Catterick	mcmo bc	prrocmo	cmob	bbcmoc
Tynemouth	bcebc	bcco	oiroobc	bcc
St. Abbs Head	c	iroc	cbcb	bbccq
Leuchars	bcxbcmoc	ccmo	rocbcbmo	bmobbc
Renfrew (Abbots I.)	cwff	cffdodof	cffdoR,mo	bbccmo
Eskdalemuir	bcxe	ccdodomo	dd oc	c
Point of Ayre	roroc	cdd	bc	bcc
Tiree	bcc	codrdr	docbc	bcc
Stornoway	c	c	cRR	cPr
Dalwhinnie	c	ciro	*	ciR
Aberdeen	bcb	bccf	fcpr	cbc
Wick	bc	c	priR	irqcl
Lerwick	bccbc	bc	bccph	cproq
Blacksod Point	c	ido	bcq	c
Malin Head	c	circ	cbc	bcc
Aldergrove	ciromo	rododomiro	romo c,bc	bccmo
Birr Castle	oddc	c	bcc	c
Valentia Obsy. †	dddodoido	idoc	cmo	ido pro
Roches Point	c	cbc	cw	crddr

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.

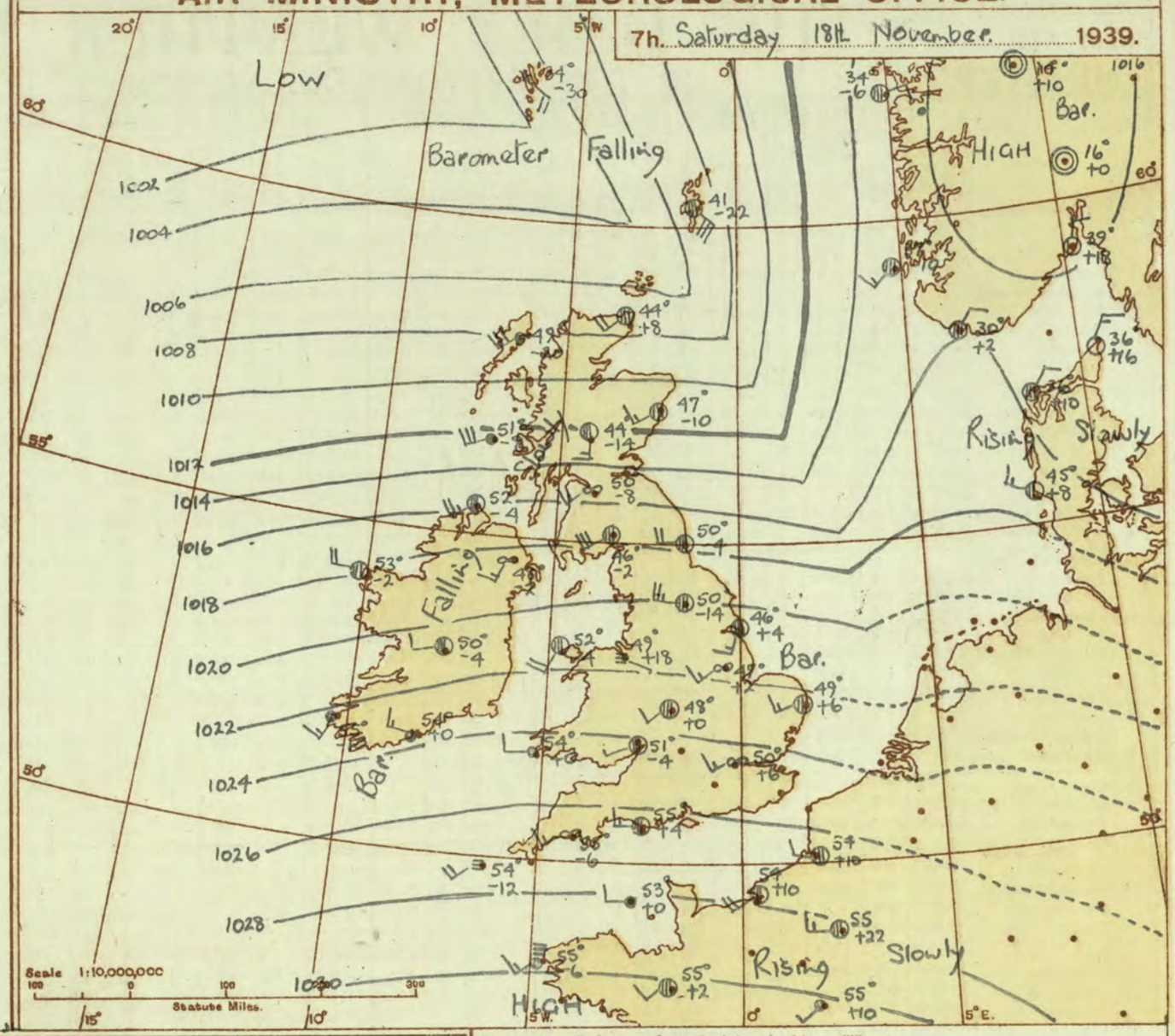
COLUMN 29.—STATE OF GROUND.

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 18th November 1939.



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

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 18th November, 1939
1 S.E. England	Moderate southwest wind; cloudy; local drizzle and coast fog; very mild
2 E. England ...	Light or moderate southwest wind; mainly cloudy, bright intervals locally; perhaps local drizzle; very mild.
3 E. Midlands ...	
4 W. Midlands ...	
5 S.W. England	Moderate or fresh southwest wind; cloudy, some drizzle; local coast and hill fog; very mild.
6 South Wales ...	
7 North Wales ...	
8 N.W. England	
9 N. Midlands ...	As 2 - 4.
10 N.E. England	
11 S.E. Scotland	
12 S.W. Scotland & Isle of Man.	As 5 - 8
13 A. W. Scotld. B.N.W.Scotland.	Wind southwest, strong at times; cloudy, rain at times; mild.
14 Mid Scotland	
15 N. E. Scotland	As 2 - 4.
16 Orkneys and Shetlands	As 13 - 14.
17 N. W. Ireland	
18 N. E. Ireland	
19 S. E. Ireland	As 5 - 8
20 S. W. Ireland	

GENERAL INFERENCE.

Pressure is high over Spain and low over Iceland. Depression will move northeast on the Atlantic. Weather will be of a mild southwest type with local drizzle chiefly in the west, and heavier rain in the extreme northwest.

FURTHER OUTLOOK.

Mild for some days, with southwest to west winds; rain at times in northwest districts, but only small amounts of rain in the southeast.

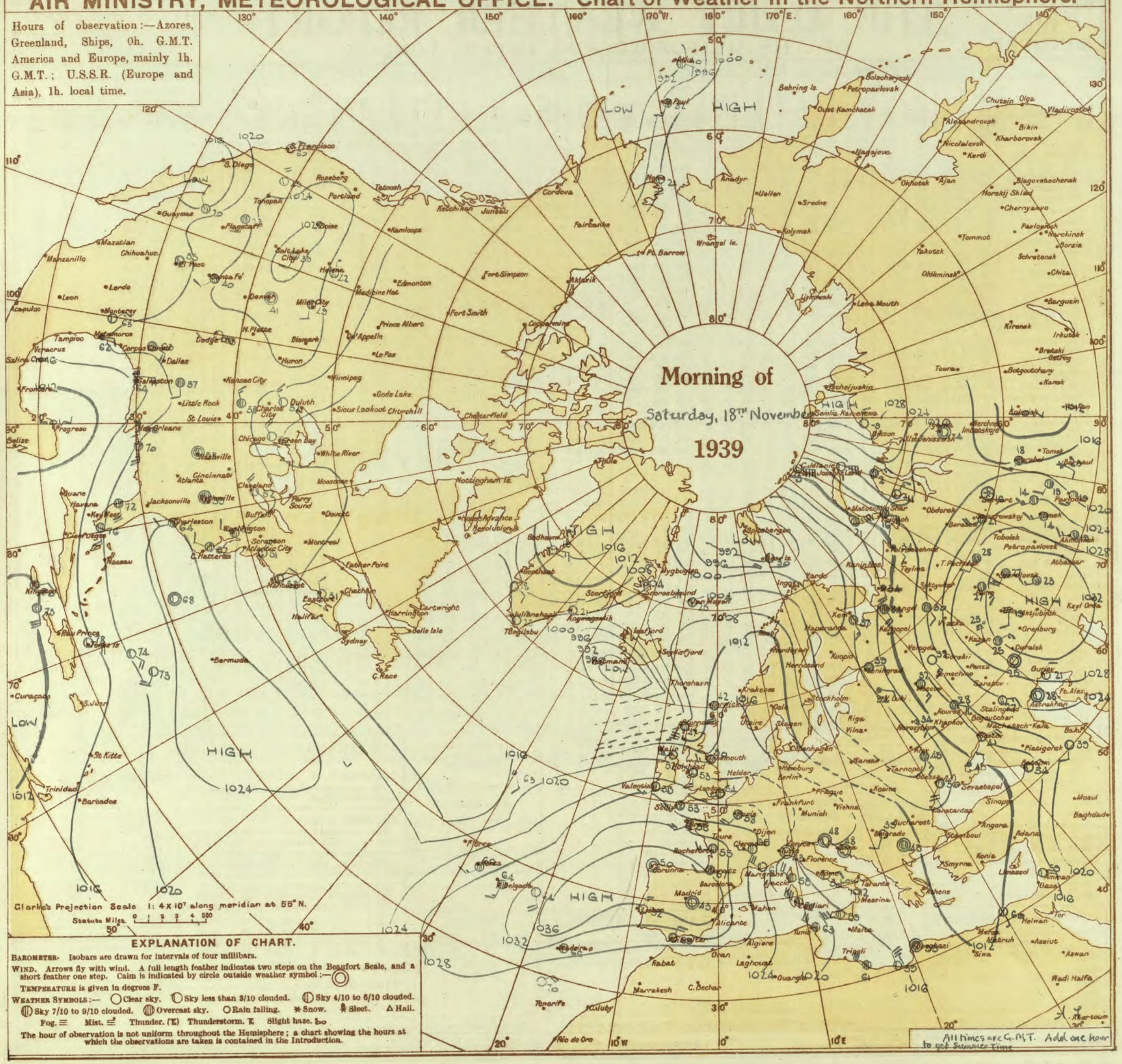
Forecasts issued at G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1. G.472/9777. Wt.8109. D.4626. 6p. 948. 24300. 11/39

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. (T) Thunderstorm. Slight haze.

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 18th November 1939.

No. 28,485

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1023·1	+18	W'S	3	Zo	54	97	6	S	–	–	4-6	4-6	2500
	S. Farnborough	226	1023·7	+14	WSW	2	Zo	52	97	6	S	–	–	4-6	4-6	2500
	Boscombe Down	417	1024·5	+16	W	3	c	53	97	7	S	–	–	9+	9+	450
	Calshot (Sthmtn.)	8	1024·3	+14	W'S	2	Zo	55	97	5	S	–	–	10	10	1500
	Lympne ...	346	1023·1	+6	WSW	3	Zo	53	97	5	S	–	–	10	10	<150
	Manston ...	154	1022·5	+10	SWW	2	of	51	97	3	S	–	–	10	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1020·9	+4	W	2	m	49	97	4	S	–	–	9	9	2500
	Gorleston ...	5	1020·0	+4	SW'W	2	c	47	92	5	S	–	–	10	10	1500
	Mildenhall ...	19	1021·3	+10	WSW	3	Zo	49	97	5	S	–	–	2-3	2-3	2500
	Cranwell ...	240	1020·0	+10	SW	4	Zo	51	92	5	S	–	–	1	1	500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1023·1	+18	W'S	1	b	49	97	7	S	–	–	Tr	Tr	2500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1025·3	+8	W	3	o	53	97	8	S	–	–	10	10	1500
	Bristol ...	209	1024·5	+10	SW'W	4	bc	52	97	7	S	–	–	4-6	4-6	800
	Portland Bill ...	32	1025·8	+14	WNW	3	c	54	92	7	S	–	–	10	10	4000
	Plymouth ...	82	1026·8	+6	WN	3	o	55	92	7	S	–	–	10	10	800
	The Lizard ...	240	1027·9	+12	W	4	df	53	97	2	S	–	–	10	10	1500
	Scilly (St.Mary's)	163	1028·1	+6	WSW	4	o/f	53	97	7	S	–	–	10	10	1500
	Guernsey ...	175														
6	Pembroke ...	142	1024·3	+12	W	4	c	54	97	7	S	–	–	7-8	7-8	2500
7	Holyhead ...	26	1022·0	+16	S	3	c	53	85	7	8	–	–	7-8	7-8	2500
	Chester (Sealand)	16	1021·7	+18	WSW	3	Zo	53	85	5	S	–	–	2-3	2-3	4000
8	Manchester ...	70														
10	Spurn Head ...	29	1019·3	+2	W'S	3	b	48	92	6	–	–	–	0	0	–
	Catterick ...	175	1017·7	+2	S	1	b	51	85	7	S	–	–	1	1	500
	Tynemouth ...	108	1016·9	+2	W	3	bc	50	85	7	2	–	–	2-3	2-3	2500
11	St. Abbs Head	280	1013·3	-14	SW	5	bc	48	85	8	4	–	–	2-3	2-3	2500
	Leuchars ...	36	1013·2	-6	W	2	Zo	42	97	6	S	–	–	1	1	1500
12	Renfrew (Abbots I.)	19	1016·0	+12	SW'W	2	Zo	49	85	6	S	–	–	2-3	2-3	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1019·5	+24	W'N	5	bc	52	85	8	4	–	–	2-3	2-3	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1007·2	+30	SSW	6	c	47	85	7	8	–	–	7-8	7-8	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1008·0	-28	S	6	ir	45	92	6	9	2	–	9	10	1500
16	Lerwick ...	156	1012·7	-28	SSE	5	c	42	65	7	8	2	–	7-8	10	1500
17	Blacksod Point	18	1019·8	0	WSW	5	bc	52	92	8	S	–	–	4-6	4-6	1500
18	Malin Head ...	84	1016·7	+12	W'S	5	bc	52	85	7	6	–	–	4-6	4-6	2500
	Aldergrove ...	268	1019·4	+10	SW	4	c	48	85	7	S	–	–	7-8	7-8	2500
19	Birr Castle ...	173	1022·5	+6	WSW	3	c	52	85	8	S	–	–	7-8	7-8	2500
20	Valentia Obsy.	30	1025·1	+2	SW	3	Zo	55	97	6	S	–	–	10	10	800
	Roches Point	22	1025·3	+8	W	3	c	53	97	8	S	–	–	9+	9+	2500

OBSERVATIONS at 7 hr. G.M.T. 18th November — PAST 24 HOURS

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temp. Max. Day 7h–18h °F. (31)	Temp. Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 17th Hrs. (36)
London (Kew)	1025·1	+6	WSW	2	Z.	49	97	6	S	–	–	9+	9+	4000	1	*		49	43		0·1	0·0
Croydon	1025·2	+6	WSW	3	Zo	50	97	6	S	–	–	9	9	4000	1	*	54	49	43	1	Tr	0·0
S. Farnborough	1025·6	+2	SSW	2	Zo	49	97	6	S	3	–	4-6	9+	2500	1	*	55	47	42	2	0·1	0·0
Boscombe Down	1025·3	0	W'S	1	c	53	92	7	S	–	–	9+	9+	1500	1	*	55	51	49	3	–	0·0
Calshot (Sthmtn.)	1025·8	+2	WSW	2	Zg	53	97	6	S	2	–	9+	10	1500	1	1	58	53	52	1	–	0·0
Lympne	1025·3	0	WSW	3	c/f	48	97	5	2	7	–	Tr	9+	2500	1	§2	49	48	43	1	0·2	0·0
Manston	1024·8	+8	W'S	2	Zo	49	92	6	S	3	–	4-6	9	1500	1	*	59	47	45	0·3	0·1	0·0
Shoeburyness	1024·5	+8	W'S	3	m	49	97	4	S	7	–	4-6	10	5700	1	*	51	49	41	Tr	0·2	0·0
Felixstowe	1023·1	+10	W	2	Zo	47	97	6	S	3	–	2-3	9	5700	1	2	51	44	41	Tr	–	0·0
Gorleston	1022·0	+6	WSW	3	bc	49	85	6	S	–	–	4-6	4-6	1500	0	2	50	45	44	–	–	*
Mildenhall	1023·2	+4	SW'W	3	Zo	47	97	6	–	9	8	0	9	–	1	*	53	46	39	–	Tr	0·6
Cranwell	1021·3	+2	SWW	3	Zo	47	97	6	–	7	–	0	7-8	–	0	*	49	45	43	Tr	Tr	0·8
Birmingham	1022·8	0	SW	2	G	48	85	6	–	7	–	0	9+	–	1	*	50	48	44	2	–	0·0
Upper Heyford	1024·4	+2	SSW	2	m	45	97	4	S	3	–	2-3	7-8	5700	1	*	52	43	30	0·6	Tr	*
Ross-on-Wye	1023·7	-4	WSW	1	c	51	85	7	S	7	–	2-3	9+	2500	1	*	58	50	43	1	Tr	0·0
Hartland Point	1024·8	-12	WSW	4	df	53	97	3	–	–	–	10	10	<150	1	3	54	53	53	2	Tr	0·0
Bristol	1025·4	+2	W'S	3	o/a	53	97	6	S	–	–	10	10	1500	1	*	55	51	47	3	0·1	0·0
Portland Bill	1025·8	+4	W	3	c	55	92	7	S	–	–	10	10	4000	1	3	57	52	*	1	–	*
Plymouth	1027·0	-6	SW'W	3	Zo	55	97	6	S	–	–	10	10	800	1	2	58	54	53	1	Tr	0·0
The Lizard	1027·3	-8	WSW	2	df	53	97	2	S	–	–	10	10	450	1	3	55	52	*	1	0·1	0·0
Scilly (St.Mary's)	1026·4	-12	SW	4	f	54	97	2	–	–	–	10	10	<150	1	2	55	53	*	0·1	0·2	0·0
Guernsey	1027·8	0	W	2	iro	53	97	7	S	–	–	10	10	1500	1	3	57	53	51	–	0·2	0·0
Pembroke	1024·5	0	W	4	d.d.	54	97	5	S	–	–	10	10	1500	1	2	55	53	*	1	–	0·0
Holyhead	1021·6	-4	SSW	4	c	52	85	7	S	–	–	10	10	1500	1	2	53	50	43	3	Tr	0·0
Chester (Sealand)	1021·9	+18	SEE	1	c/f	49	85	5	S	2	–	7-8	10	4000	1	*	50	46	38	0·3	0·3	0·0
Manchester	1021·8	-6	SW	3	Zo	45	92	6	S	7	–	7-8	9+	4000	1	*	51	40	37	1	1	0·4
Spurn Head	1020·7	+4	SSW	3	c	46	92	6	–	9	–	0	7-8	–	1	3	49	46	*	–	Tr	1·9
Catterick	1017·0	-14	W'N	5	c	50	75	8	S	5	–	Tr	9+	2500	1	*	46	43	33	Tr	–	0·6
Tynemouth	1016·0	-4	W	4	c	50	85	6	S	–	–	7-8	7-8	1500	1	2	48	44	39	–	0·2	*
St. Abbs Head	1012·4	-16	WSW	6	cq	48	75	8	S	7	–	4-6	7-8	2500	0	4	44	40	*	Tr	–	*
Leuchars	1012·7	-2	WSW	4	bc	48	85	7	S	3	–	2-3	4-6	4000	1	*	46	40	35	–	1	1·2
Renfrew (Abbots I.)	1015·9	-8	SW	3	Zo	50	85	6	S	–	–	9	9+	4000	1	*	44	42	39	0·1	3	0·0
Eskdalemuir	1017·1	-2	SW'W	6	c	46	92	6	S	2	–	2-3	10	1500	1	3	42	39		Tr	1	1·0
Point of Ayre	1018·8	-4	W	5	c	51	92	7	S	2	–	2-3	10	1500	1	3	52	48	*	1	0·4	0·1
Tiree	1009·3	-8	WSW	6	PR	51	92	7	8	–	–	7-8	7-8	1500	1	5	51	50	44	2	1	0·7
Stornoway	1006·7	-20	SW	6	pr	49	85	7	8	7	–	7-8	7-8	2500	1	3	(45)	43	*	–	10	0·3
Dalwhinnie	1012·5	-14	S	3	c	44	85	7	4	1	–	4-6	10	2500	0	*	40	35	32	Tr	5	0·9
Aberdeen	1010·4	-10	WSW	3	bc	47	65	6	–	3	–	0	4-6	–	1	1	42	35	30	–	1	2·3
Wick	1006·4	+8	SW	4	c	44	85	8	S	7	–	4-6	7-8	1500	1	3	41	41	*	–	3	*
Lerwick	1007·0	-22	SE	6	c	41	85	7	8	2	–	7-8	10	800	1	*	40	35	*	–	Tr	5·8
Blacksod Point	1018·6	-2	W	4	c	53	92	8	S	–	–	9	9	800	0	1	55	50	*	0·5	1	*
Malin Head	1015·8	-4	SW'W	5	c	52	85	7	8	7	–	4-6	7-8	4000	0	4	53	46	*	1	0·3	0·0
Aldergrove	1018·6	-2	SSW	3	Zo	48	92	6	S	–	–	10	10	2500	1	*	49	45	37	0·5	0·1	0·0
Birr Castle	1021·3	-4	WSW	2	c	50	92	7	S	–	–	10	10	2500	1	*	*	48	46	*	–	0·0
Valentia Obsy.	1022·6	-10	SSW	3	dr	55	97	4	S	–	–	10	10	<150	1	3	57	54	51	0·4	0·1	0·0
Roches Point	1023·7	0	W'S	2	dr	54	97	6	S	–	–	10	10	800	1	3	61	52	*	[illegible]	1	*

LONDON OBSERVATIONS

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

Stations	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temp. Day Max. °F.	Temp. Night Min. °F.	Temp. 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	ciro ldo	cmow	ofid,mw		49	43		0·1	0·0	•	•	
Croydon ...	217	cd.d.c	d.d.m	bd bcm.	54	49	45	1	Tr	0·0	•	•	
Greenwich (Royal Observatory) ...	149												
City (Bunhill Row) ...	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park) ...	27	•	•	•									•
Regents Pk. (Botanic Gardens)‡ ...	168	•	•	•									•
Camden Square ...	110			•						•	•		•
Kensington ...	80			•									•
Hampstead Observatory ...	450										•		•

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 18th

South Kensington.			
Max.	Time.	Min.	Time.

Kew Observatory.			
Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 17th November: Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 18th November: Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours: Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1022·5	W	5	ldo	57	1028·3	W	3	o	55	57	55	3	1
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1014·9	WNW	2	bc	59	1027·5	NE	2	b	46	•	•	–	–

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.

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

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

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

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 19th November 1939.

No. 28,486

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1022.8	-20	SW	3	z	53	92	5	5	-	-	10	10	1500
	Croydon	1023.7	-14	SW	2	zo	55	85	6	5	2	-	9	10	1500
	S. Farnborough	1022.7	-28	SSW	3	roro	55	85	7	6	2	-	4-6	10	1500
	Boscombe Down	1023.3	-20	SW'W	3	iro	53	87	6	5	2	-	4-6	10	800
	Calshot (Soton.)	1023.5	-22	SW	4	roro	54	97	6	6	2	-	10	10	800
	Lympne ...	1023.6	-20	WSW	3	c	52	97	7	5	7	-	4-6	10	800
	Manston ...	1023.1	-18	WSW	3	zo	53	92	6	5	2	-	4-6	10	2500
2	Shoeburyness ...	1022.8	-20	SW	4	c	54	85	5	5	2	-	1	10	4000
	Felixstowe ...	1021.6	-16	W'S	3	zo	53	92	5	5	-	-	10	10	4000
	Gorleston ...	1020.6	-16	SW'W	3	c	51	85	6	5	-	-	4-6	10	2500
	Mildenhall ...	1021.0	-18	SW'W	3	zo	53	92	6	5	7	-	7-8	10	5700
	Cranwell ...	1019.9	-14	SW	3	zo	52	85	6	·	7	-	0	9+	-
3	Birmingham	1020.2	-12	WSW	3	c	53	75	6	-	2	-	0	9+	-
	Upper Heyford	1021.5	-24	W	4	iro	53	92	7	5	7	-	4-6	10	450
4	Ross-on-Wye ...	1021.2	-16	S'W	2	iro	54	92	6	6	2	-	2-3	10	1500
5	Hartland Point	1021.4	-32	SSW	4	rf	54	97	3	-	-	-	10	10	<150
	Bristol	1022.7	-22	SW'S	3	rr	54	92	7	6	2	-	2-3	10	800
	Portland Bill ...	1023.6	-20	SW	2	rr	54	92	6	5	-	-	10	10	800
	Plymouth ...	1023.4	-24	SW	4	dd	56	97	5	-	2	-	10	10	450
	The Lizard ...	1024.0	-20	SW	5	rf	55	97	2	5	-	-	10	10	800
	Scilly (St. Mary's)	1024.3	-10	SW'W	5	o/r	55	97	5	5	-	-	10	10	1500
	Guernsey ...	1025.0	-26	W'S	4	iro	56	97	6	5	-	-	10	10	800
6	Pembroke ...	1021.0	-16	SW'S	4	o/r	54	97	6	5	-	-	10	10	800
7	Holyhead ...	1009.0	-14	SW'S	4	c	54	92	7	5	7	-	7-8	10	450
	Chester (Sealand)	1019.9	-8	WSW	3	c	56	75	8	5	2	-	4-6	9+	5700
8	Manchester ...	1019.4	-16	SW'W	2	zo	53	85	5	-	7	7	0	10	-
10	Spurn Head ...	1018.5	-8	SW'W	4	c	51	85	5	5	-	7	7-8	10	4000
	Catterick ...	1016.2	+4	W	4	c	53	75	8	8	-	7	4-6	10	4000
	Tynemouth ...	1014.7	-10	W	5	c	53	75	6	2	3	1	4-6	7-8	2500
11	St. Abbs Head	1013.1	+4	WSW	6	bcq	53	65	8	7	6	-	2-3	4-6	4000
	Leuchars ...	1012.3	-6	W	4	c	54	65	8	8	-	6	2-3	7-8	4000
12	Renfrew (Abbots I.)	1015.1	-2	WSW	3	c/pr	52	85	8	8	3	8	7-8	7-8	2500
	Eskdalemuir ...	1015.7	-14	SW'W	5	c	49	85	7	5	7	1	4-6	7-8	1500
	Point of Ayre ...	1018.0	-8	W	4	c	53	92	7	5	7	-	2-3	10	2500
13A	Tiree														
13B	Stornoway ...	1007.9	+14	WSW	7	pr	48	75	7	8	7	-	7-8	9	2500
15	Dalwhinnie ...	1012.5	+2	SW	4	c	46	75	7	4	4	5	2-3	9+	2500
	Aberdeen ...	1010.0	0	W	3	b	53	65	8	-	-	5	0	1	-
	Wick	1006.9	+6	WSW	4	bc/pr	49	85	8	5	7	3	4-6	4-6	1500
16	Lerwick... ...	1003.6	-14	E'S	5	c	44	92	7	8	7	-	7-8	9+	800
17	Blacksod Point...	1015.4	-22	SW	2	c	54	97	6	-	2	-	0	10	-
18	Malin Head ...	1014.7	-14	W	3	c	51	85	7	2	7	-	2-3	7-8	2500
	Aldergrove ...	1016.8	-10	SSW	3	zo	51	85	6	5	2	-	7-8	10	1500
19	Birr Castle ...	1018.3	-16	SW	2	ido	54	92	7	5	2	-	7-8	10	1500
20	Valentia Obsy. †	1017.8	-34	S'E	2	rr	55	97	6	6	2	-	4-6	10	800
	Roches Point ...	1018.8	-28	SW	2	rr	54	97	6	6	2	-	7-8	10	800

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°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)	1017.1	-38	S	2	ido	53	97	5	5	-	-	10	10	1500	1	*
Croydon	1018.2	-38	S	3	roro	53	97	5	6	2	-	7-8	10	1500	1	*
S. Farnborough	1017.2	-36	S'E	2	dodo	53	97	5	5	-	-	10	10	450	1	*
Boscombe Down	1016.8	-42	SW'S	2	ido	54	97	5	-	2	-	10	10	450	1	*
Calshot (Soton.)	1017.9	-36	SW'W	4	o/d	55	97	6	6	2	-	4-6	10	450	1	2
Lympne	1019.2	-30	SSW	3	df	52	97	2	-	-	-	10	10	<150	1	§ 2
Manston	1019.0	-22	SSW	2	rr	52	97	5	6	2	-	7-8	10	1500	1	*
Shoeburyness	1018.7	-18	SSW	2	rr	52	97	5	2	-	-	10	10	800	1	*
Felixstowe	1018.1	-22	W	4	rr	51	97	5	-	2	-	10	10	5700	1	2
Gorleston	1016.3	-16	WSW	3	c	52	85	6	5	-	-	10	10	2500	0	2
Mildenhall	1016.9	-22	SSW	2	rr	52	97	5	6	2	-	4-6	10	1500	1	*
Cranwell	1015.6	-30	S'W	2	rfo	49	97	5	6	2	-	4-6	10	800	1	*
Birmingham	1015.1	-34	SSW	2	rr	52	97	5	6	-	-	10	10	800	1	*
Upper Heyford	1016.5	-30	SW	2	dd	52	92	5	6	2	-	9+	10	220	1	*
Ross-on-Wye	1014.7	-40	S	3	ir	53	97	6	6	-	-	10	10	1500	1	*
Hartland Point	1015.3	-26	W	5	c	54	97	7	6	2	-	7-8	10	1500	1	4
Bristol	1016.1	-34	SSW	4	dr	55	97	5	5	2	-	7-8	10	800	1	*
Portland Bill	1017.5	-28	W	5	rr	55	85	7	5	-	-	10	10	1500	1	4
Plymouth	1019.0	-20	SW'W	6	o/d	55	97	6	5	-	-	10	10	2500	1	4
The Lizard	1020.1	-20	SW	5	c	54	97	8	8	2	-	7-8	9+	1500	1	3
Scilly (St. Mary's)	1018.6	-22	SW	5	c	55	97	7	5	2	-	7-8	9+	1500	1	3
Guernsey	1021.5	-18	WSW	3	c	56	92	7	8	3	-	7-8	10	2500	1	4
Pembroke	1012.7	-36	WSW	7	rr	54	97	6	5	-	-	10	10	1500	1	3
Holyhead	1012.7	-38	SSW	2	rr	53	97	6	6	2	-	9	10	800	1	1
Chester (Sealand)	1013.7	-26	SE	1	rr	53	85	6	-	2	-	0	10	2500	1	*
Manchester	1013.7	-38	SE'S	1	iro	52	85	4	5	-	-	9	10	4000	1	*
Spurn Head	1015.1	-16	SW'S	2	c	49	92	5	5	-	-	10	10	1500	0	1
Catterick	1013.2	-20	S	2	c	51	85	7	5	2	-	4-6	10	2500	1	5
Tynemouth	1012.9	-14	SW	2	c	51	75	6	5	-	-	9+	9+	1500	1	1
St. Abbs Head	1010.1	-10	W	2	c	47	75	7	5	1	-	2-3	7-8	2500	0	2
Leuchars	1008.9	-14	SW	2	bc	46	85	6	-	7	-	0	2-3	-	1	*
Renfrew (Abbots I.)	1010.8	-34	SW'W	2	zo	48	92	6	5	2	-	2-3	10	1500	1	*
Eskdalemuir	1011.4	-24	SW'S	3	c	46	92	6	5	1	-	4-6	10	1500	1	*
Point of Ayre	1011.9	-32	W	3	roro	51	97	7	-	2	-	10	10	2500	1	1
Tiree	1008.7	-18	WSW	3	c	49	85	7	5	-	-	10	10	1500	0	3
Stornoway	1007.0	-4	SSW	3	c/pr	47	85	7	5	2	-	2-3	10	2500	1	2
Dalwhinnie	1009.6	-20	S	2	c	43	75	7	4	1	-	2-3	10	2500	0	*
Aberdeen	1008.0	-14	S'W	1	c	47	65	4	-	-	6	0	7-8	-	0	1
Wick	1005.9	-10	SW	4	c	45	85	8	5	7	2	7-8	9	1500	1	2
Lerwick	1001.1	-10	SW'W	3	c/pr	45	92	7	8	7	-	7-8	9+	800	1	*
Blacksod Point	1012.3	-24	WNW	3	rr	49	92	6	6	-	·	10	10	450	1	2
Malin Head	1010.3	-28	W	2	pr	50	85	7	8	-	-	9	9	4000	0	3
Aldergrove	1010.9	-30	S	1	iro	50	92	6	6	2	-	4-6	10	1500	1	*
Birr Castle	1012.3	-28	S	1	rr	49	92	7	6	2	-	9	10	1500	1	*
Valentia Obsy. †	1013.6	-14	NW	3	pr	50	97	4	6	-	-	10	10	450	2	3
Roches Point	1011.2	-38	W	3	rr	54	97	7	6	2	-	7-8	10	800	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)	ovm wcm	croidmo		
Croydon	cm	crorormo	crorrm	cr,bcmoz
S. Farnborough	cmc	rrrocdo	cdo roro	crobmo
Boscombe Down	oiroro	ororoddido	oidocdrkq	omoprb
Calshot (Soton.)	rorom	dododdmo	ro ro rr	rrmobm
Lympne	cm	crorrfro	fdoomrr	omrr,mc
Manston	cm	crororr	crorof	circqc
Shoeburyness	cmmc	cmoorrmo		
Felixstowe	cmom	omoirmo	orr mo	orrq cr.r.
Gorleston	bcc	czo	corr	orrL (gale)
Mildenhall	cm	cmocrr	crr	crr ciro
Cranwell	cbcem	cm.rorm	crrmo	cirbcm
Birmingham	c	coror	or ro	roobc
Upper Heyford	cmefmc	crorormo	crfrrm	cprocq
Ross-on-Wye	cro	roro	crfrrmirq	cqbq
Hartland Point	FFrr	rfdFrFdf	crrr	cbcc
Bristol	cdcrr	crr roro	crroRrq	cbcp.q
Portland Bill	corr	orr	oidocromo	bc
Plymouth	iro oddm	oddd,dcm	orr	bcb, c
The Lizard	dfrf	dfrfc	rprqc	bcprc
Scilly (St. Mary's)	offir	ocdoc	cro ro c	cbcb
Guernsey	oir	oiroc	iroq rr	roroq
Pembroke	odo drrif	ifrrq	pirqc	bcq (gale)
Holyhead	c	rorrmoc	rr mdbc	bc
Chester (Sealand)	cmobc	crrcmorr	cmorrcRR	cmRRcmo
Manchester	cm ffm	cmocirom	crrRrr	crrcprbcmo
Spurn Head	cm	cmo	Rro	Rrqc
Catterick	c	c	corrmo	rrcb
Tynemouth	cbcc	c	corr	orrcbc
St. Abbs Head	bbc	bcc	rr ror	cpr
Leuchars	bc	bcbcmo	roiRciro	romoc,bw
Renfrew (Abbots I.)	cror PRpr	cjpccmo	cmocirb	bmob
Eskdalemuir	idcbc	bccmo	crbcb	ccrr
Point of Ayre	c	croro	rrcc	cbcc
Tiree		co	oR tlbc	bc
Stornoway	cpropr	cpr	cPRL	cpr
Dalwhinnie	ciR	c	*	
Aberdeen	bczb	bbcz	bezcro	rro cbc
Wick	pzbc	bcc	clc	bcprc
Lerwick	cirq	cirpr	cpr	cpr
Blacksod Point	o	iR	Prcq	cq
Malin Head	c	zo	dprcproc	bcc
Aldergrove	cm	crorociromo	rororrmo	cb,c
Birr Castle	cid	crr	cbc	cpr
Valentia Obsy. †	drrorri	rrpr	bccproc	cprobcc
Roches Point	drrr	rr	rrirbc	bc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. 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).

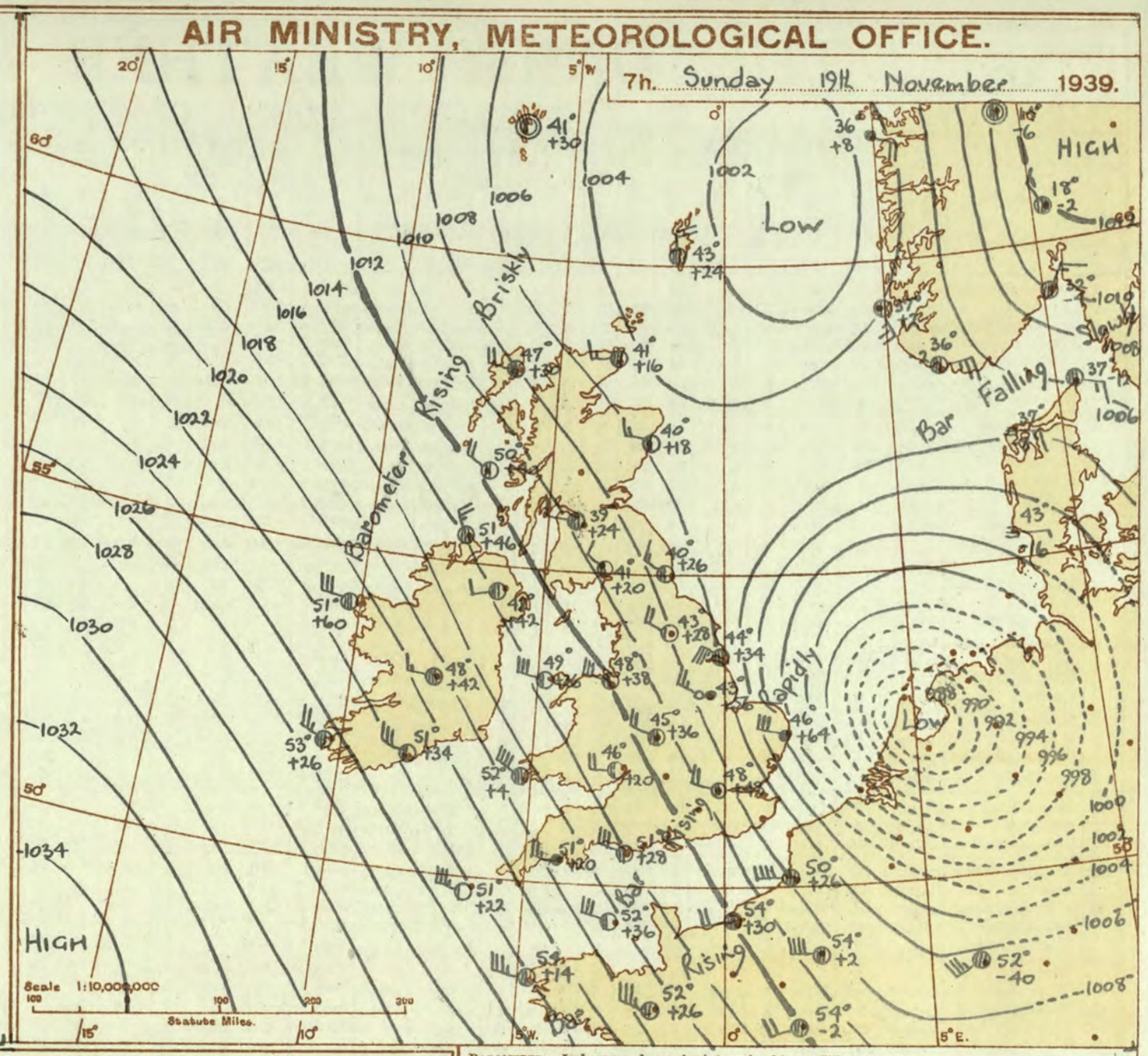
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



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

DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 19th November, 1939.
1 S.E. England	ALL DISTRICTS.
2 E. England	Fresh northwest wind, strong locally on coast, moderating; bright intervals, local showers, chiefly near coasts; average temperature.
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.

A deep depression over Northwest Germany is moving quickly eastwards. A new anticyclone is developing off our southwest coasts and small disturbances are likely to move round it. There will only be local showers in the next 24 hours but the general outlook is unsettled.

FURTHER OUTLOOK.

Increasing cloud and rather unsettled weather with northwest to west winds.

Time of Issue of Gale Warnings.

North Cone hoisted 0155 on 19/11/39 in districts 1 and 2.

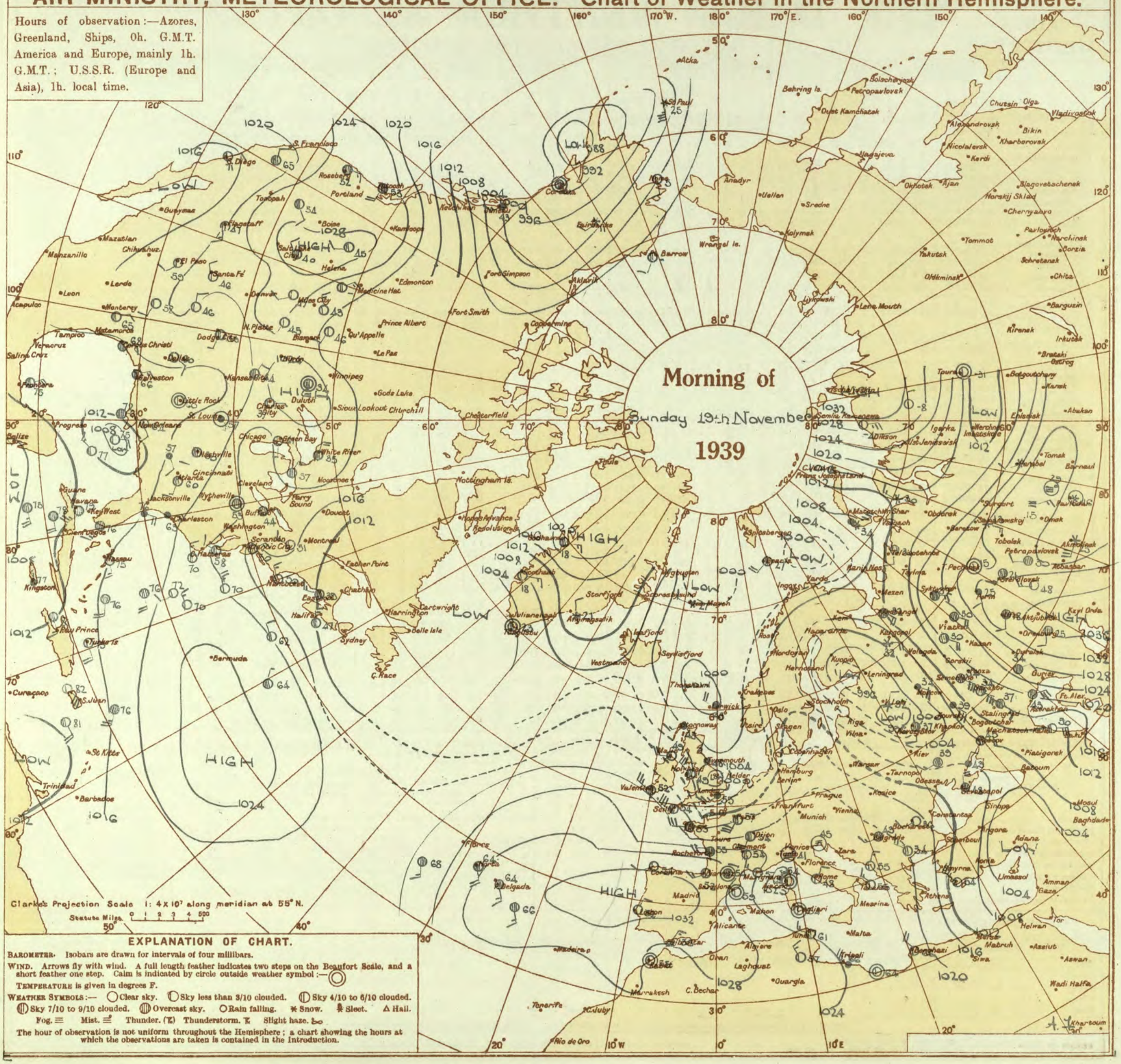
Forecasts issued at 1000 G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1.
O.472/9777. We.8109. D.4626. Gp.248. 24300 11/39

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 19th November 1939.

No. 28486

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1003·6	−82	SW	5	rr	55	92	6	6	2	–	4-6	10	800
	S. Farnborough	226	1003·6	−74	SW'S	6	r.r.	55	92	6	5	–	–	10	10	2500
	Boscombe Down	417	1006·3	−46	NW'W	3	ir.	51	85	6	–	2	–	10	10	4000
	Calshot (Sthmtn.)	8	1005·8	−62	WNW	6	rr	56	97	5	6	2	–	9+	10	800
	Lympne ...	346	1005·4	−78	SW	6	rr	52	97	4	6	–	–	10	10	1150
	Manston ...	154	1003·6	−78	SW'W	6	r.r.	53	92	3	6	2	–	9	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1002·7	−70	SSW	4	rr	52	97	5	6	2	–	7-8	10	1500
	Gorleston ...	5	1001·7	−80	SSE	2	rr	50	92	6	6	–	–	10	10	1500
	Mildenhall ...	19	999·3	−94	SSW	5	rr	53	97	5	6	2	–	9+	10	1500
	Cranwell ...	240	997·8	−50	SW	4	rr	51	97	4	6	–	–	10	10	1500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1002·8	−58	WNW	7	bc/r	50	85	8	9	–	–	4-6	4-6	1500
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1011·4	+36	NNW	5	c	51	92	8	6	2	–	4-6	9	1500
	Bristol ...	209	1007·5	−14	W	4	c/r	50	85	6	3	2	–	4-6	9+	1500
	Portland Bill ...	32	1003·0	−30	NNW	5	c	54	85	7	5	–	–	7-8	7-8	1500
	Plymouth ...	82	1012·3	+6	NW'N	4	c/r	53	97	7	5	–	–	7-8	7-8	800
	The Lizard ...	240	1016·0	+28	W'N	7	c	53	92	8	8	2	–	7-8	10	1500
	Scilly (St. Mary's)	163	1017·6	−46	NW'W	6	c	54	85	7	8	7	–	4-6	9+	1500
	Guernsey ...	175	1012·1	−46	W	6	r.r.	56	97	6	5	–	–	10	10	1500
6	Pembroke ...	142	1011·4	+18	NW'N	8	cq	52	85	8	8	–	–	9+	9+	1500
7	Holyhead ...	26	1008·8	+22	NW'W	6	bc	49	75	7	2	–	–	2-3	2-3	2500
	Chester (Sealand)	16	1005·6	+20	NW'W	5	RR	49	92	4	9	2	–	2-3	10	1500
8	Manchester ...	70	1004·2	0	NW	4	rr	47	97	4	6	2	–	4-6	10	800
10	Spurn Head ...	29	999·2	−72	E	2	RR	49	97	5	5	–	–	10	10	800
	Catterick ...	175	1004·0	−28	NW	1	rr	45	97	5	–	2	–	10	10	2500
	Tynemouth ...	108	1005·3	−20	NW	3	rr	48	92	6	–	2	–	10	10	1500
11	St. Abbs Head	280	1005·6	−20	WNW	1	r.r.	43	92	7	3	2	–	7-8	10	1500
	Leuchars ...	36	1005·2	−10	W	1	ir.	44	97	6	5	2	–	9	10	2500
12	Renfrew (Abbots I.)	19	1007·5	−4	–	0	bc	40	92	7	5	–	–	2-3	2-3	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1007·4	+6	N'W	4	c	47	85	8	8	7	–	4-6	9+	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1004·0	−2	SW	3	pr	43	92	7	5	2	–	7-8	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1003·9	−4	SW	3	c	43	85	8	5	2	–	7-8	9+	1500
16	Lerwick ...	156	1000·0	−2	W'N	4	pr	43	92	7	8	7	–	7-8	9	800
17	Blacksod Point	18	1010·9	−16	WNW	6	PR	49	92	7	6	–	–	10	10	450
18	Malin Head ...	84	1008·2	−6	W'N	4	c	49	75	7	5	6	–	4-6	4-6	4000
	Aldergrove ...	268	1009·6	+10	WSW	2	c	43	92	7	5	–	–	7-8	7-8	4000
19	Birr Castle ...	173	1014·1	+16	SSW	2	bc	46	85	8	5	–	–	2-3	2-3	2500
20	Valentia Obsy.	30	1020·6	+24	WNW	5	c/pr	52	65	8	8	–	–	7-8	7-8	2500
	Roches Point	22	1017·2	+38	WNW	4	bc	50	92	8	5	–	–	4-6	4-6	2500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)																*
Croydon ...	1009·6	+48	WNW	4	bc	48	75	7	5	3	–	4-6	4-6	1500	1	*
S. Farnborough	1010·8	+50	W	4	z.	47	75	6	5	3	–	2-3	2-3	4000	1	*
Boscombe Down	1012·6	+38	WNW	5	bc	45	85	8	–	–	3	0	2-3	–	1	*
Calshot (Sthmtn.)	1012·2	+44	WNW	5	b	48	75	7	2	–	1	Tr	1	1500	1	2
Lympne ...	1006·4	+34	NW'W	6	c	48	65	8	5	–	–	9+	9+	2500	1	4
Manston ...	1004·3	+40	NW'W	7	c/pr	48	75	6	5	–	–	10	10	1500	1	*
Shoeburyness ...																*
Felixstowe ...	1002·5	+56	WNW	8	ir.	45	97	5	6	2	–	9	9	1500	1	5
Gorleston ...	1000·0	+64	NW'W	6	rr	46	92	6	6	–	–	10	10	1500	1	3
Mildenhall ...	1005·5	+64	WNW	6	c/r	45	85	7	5	–	–	10	10	1500	1	*
Cranwell ...	1007·7	+56	NW'N	5	z.	43	85	6	–	7	–	0	2-3	–	1	*
Birmingham ...	1011·4	+36	NW	4	c	45	75	8	9	7	–	7-8	7-8	800	1	*
Upper Heyford	1011·2	+48	WNW	5	bc	45	75	8	9	4	–	4-6	4-6	2500	1	*
Ross-on-Wye	1012·9	+20	W	4	bc	46	75	8	5	–	1	1	2-3	2500	1	*
Hartland Point	1015·3	+4	NNW	5	c	51	75	8	6	–	–	7-8	7-8	1500	1	4
Bristol ...	1014·0	+22	W	5	c	46	85	7	5	3	–	9	9	2500	1	*
Portland Bill ...	1013·8	+28	NW	6	bc	51	85	8	5	–	–	4-6	4-6	4000	1	5
Plymouth ...	1018·4	+20	NW'W	5	ir.	51	75	6	5	–	–	10	10	1500	1	3
The Lizard ...	1021·0	+22	W'N	7	c	51	65	8	8	6	–	7-8	7-8	2500	1	4
Scilly (St. Mary's)	1022·3	+22	NW'W	7	b	51	75	8	4	–	–	1	1	1500	1	4
Guernsey ...	1017·6	+36	NW'W	6	bcq	52	65	7	1	7	–	2-3	2-3	2500	1	5
Pembroke ...	1015·4	+4	NW'N	8	cq	52	85	8	8	–	–	9+	9+	800	1	3
Holyhead ...	1013·4	+26	WNW	6	c	49	85	8	5	–	–	7-8	7-8	2500	1	3
Chester (Sealand)	1012·2	+38	WNW	6	c/pr	48	85	6	8	2	–	7-8	9	1500	1	*
Manchester ...	1010·6	+34	WNW	3	c/pr	45	85	6	8	–	–	7-8	7-8	1500	1	*
Spurn Head ...	1004·8	+34	NW'N	7	cq	44	92	6	5	–	–	9	9	2500	0	4
Catterick ...	1008·2	+28	NW	4	b	43	85	5	–	4	–	0	1	–	1	*
Tynemouth ...	1008·0	+26	NW	3	bc	40	85	6	2	4	–	2-3	4-6	1500	1	2
St. Abbs Head	1007·4	+18	WNW	4	pr	45	75	8	6	2	–	4-6	7-8	1500	1	2
Leuchars ...	1007·6	+18	W	2	b	40	85	8	5	4	–	1	1	4000	1	*
Renfrew (Abbots I.)	1010·5	+24	WNW	2	c/r	39	92	7	5	–	–	9	9	2500	1	*
Eskdalemuir ...	1009·5	+20	NW	2	bc	41	85	8	5	–	–	2-3	2-3	1500	1	*
Point of Ayre ...	1011·7	+28	NW	5	c	48	92	8	4	6	–	4-6	7-8	1500	1	3
Tiree	1011·3	+40	NW'N	4	bc	50	85	8	8	–	–	4-6	4-6	1500	0	4
Stornoway ...	1008·0	+30	WNW	4	c	47	92	7	8	–	–	7-8	7-8	2500	1	2
Dalwhinnie ...																*
Aberdeen ...	1006·5	+18	WNW	3	bc	40	85	7	5	3	–	1	2-3	4000	1	1
Wick ...	1005·1	+16	W	3	c	41	97	8	5	7	8	4-6	7-8	1500	1	2
Lerwick ...	1002·9	+24	N	4	c/pr	43	97	7	8	7	–	7-8	10	800	1	*
Blacksod Point	1021·4	+60	WNW	6	cq	51	75	7	9	–	–	9	9	450	0	4
Malin Head ...	1014·0	+46	NNW	5	c	51	85	7	9	–	–	7-8	7-8	4000	1	4
Aldergrove ...	1014·2	+42	W'S	2	c	42	92	7	2	–	–	9	9	4000	1	*
Birr Castle ...	1018·9	+42	WNW	3	c/pr	48	85	8	8	–	–	7-8	7-8	1500	1	*
Valentia Obsy.	1025·3	+26	NW	5	c	53	75	8	8	–	–	7-8	7-8	1500	1	4
Roches Point	1021·2	+34	NW	6	bc	51	85	8	5	–	–	4-6	4-6	2500	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 18h.–18h. Hrs. (36)
London (Kew)	54			2		
Croydon ...	55	48	45	3	5	0·0
S. Farnborough	52	46	43	2	3	0·0
Boscombe Down	54	45	42	5	6	0·0
Calshot (Sthmtn.)	55	47	46	5	8	0·0
Lympne ...	52	47	46	4	6	0·0
Manston ...	53	47	45	4	11	0·4
Shoeburyness ...				3		
Felixstowe ...	53	43	43	1	14	0·0
Gorleston ...	52	46	45	–	30	*
Mildenhall ...	54	45	43	2	17	0·0
Cranwell ...	52	43	39	1	28	0·4
Birmingham ...	53	45	41	2	13	0·0
Upper Heyford	53	45	40	3	8	*
Ross-on-Wye	55	45	41	4	4	0·0
Hartland Point	55	49	47	7	7	0·0
Bristol ...	55	46	42	3	10	0·0
Portland Bill ...	56	50	*	6	3	*
Plymouth ...	56	51	47	5	5	0·0
The Lizard ...	55	50	*	2	2	0·0
Scilly (St. Mary's)	55	51	*	1	1	0·0
Guernsey ...	57	51	45	0·3	2	0·0
Pembroke ...	55	50	*	19	7	0·0
Holyhead ...	54	48	45	2	6	0·0
Chester (Sealand)	57	47	42	0·5	18	0·3
Manchester ...	55	45	38	0·3	24	0·1
Spurn Head ...	51	49	*	Tr	39	0·0
Catterick ...	54	42	36	–	15	0·0
Tynemouth ...	54	40	36	–	26	0·0
St. Abbs Head	53	43	*	–	7	*
Leuchars ...	54	37	31	–	1	4·9
Renfrew (Abbots I.)	53	37	32	1	Tr	0·0
Eskdalemuir ...	49	38	33	Tr	3	0·0
Point of Ayre ...	53	46	*	Tr	12	0·0
Tiree	53	43	38	–	2	1·2
Stornoway ...	61	43	*	1	4	1·3
Dalwhinnie ...	47			5		
Aberdeen ...	53	38	30	–	1	4·0
Wick ...	50	39	*	4	2	*
Lerwick ...	46	42	*	1	4	0·0
Blacksod Point	55	45	*	2	0·2	*
Malin Head ...	53	44	*	0·1	1	0·0
Aldergrove ...	52	40	31	0·2	6	0·0
Birr Castle ...	54	44	42	7	10	0·0
Valentia Obsy.	56	49	46	17	6	0·0
Roches Point	55	49	*	17	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.
Kew ...	18										*	*	6
Croydon ...	217	cm.	cr.r.o.m.	cr.r.o.r.r.z.	55	48	45	3	5	0·0	*	*	
Greenwich (Royal Observatory) ...	149	c	cdrr	rrcq	54	47	42	2	5	0·3	92	72	6
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	56	43	43	8			93	71	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*									*
Camden Square ...	110	bcr	cr	*	55	47	43	2	6	*	*	74	*
Kensington ...	80	cor	or	*	55	47	42	2	7		93	71	*
Hampstead Observatory ...	450	o	orf	orbc	53	48	46	1	8		*	81	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

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

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
0·2	17h 18h	<0·1	7h 19th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 18th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 19th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1021·9	SSW	4	c/r	55	1010·5	W	8	C	54	61	*	10	*
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.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 20th November 1939.

No. 28487

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	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)...	1017·7	+34	NW	4	zo	51	65	6	8	-	-	4-6	4-6	2500
	Croydon ...	1017·4	+36	NW'W	4	c	50	65	6	2	-	-	9+	9+	4000
	S. Farnborough	1018·1	+30	WNW	4	bc	52	65	8	1	-	-	4-6	4-6	4000
	Boscombe Down	1019·9	+34	NW	4	bc	51	65	8	2	-	-	4-6	4-6	2500
	Calshot (Soton.)	1018·8	+28	NW	5	bc	53	75	8	1	-	-	4-6	4-6	2500
	Lympne ...	1015·2	+34	NW'N	5	bc	50	65	9	1	-	1	4-6	4-6	2500
	Manston ...	1014·4	+38	NW	6	bc	50	65	7	1	-	1	4-6	4-6	2500
2	Shoeburyness ...	1028·4	+40	NW	4	bc	51	65	9	1	-	-	2-3	2-3	1500
	Felixstowe ...	1013·2	+48	NW	5	bc	50	75	8	7	-	-	2-3	2-3	2500
	Gorleston ...	1011·8	+52	NW'W	5	c/r	46	85	6	8	-	-	7-8	7-8	2500
	Mildenhall ...	1014·9	+36	NW	5	bc	51	75	7	7	-	-	2-3	2-3	2500
	Cranwell ...	1015·1	+30	NW	4	zo	51	75	6	9	3	-	4-6	7-8	4000
3	Birmingham	1017·8	+20	NW	4	c	50	65	7	8	7	-	9	9	2500
	Upper Heyford	1017·8	+24	WNW	5	bc	51	65	8	8	-	-	2-3	2-3	2500
4	Ross-on-Wye ...	1020·0	+26	W	4	bc	53	65	8	7	-	-	4-6	4-6	2500
5	Hartland Point	1024·4	+44	NW	5	c	52	85	8	8	6	-	4-6	7-8	1500
	Bristol ...	1019·4	+24	WNW	5	bc	52	65	8	8	-	-	4-6	4-6	2500
	Portland Bill ...	1021·2	+28	NW	6	c	53	85	8	5	4	-	4-6	7-8	4000
	Plymouth ...	1024·4	+30	NW'N	5	c	54	75	8	2	-	-	7-8	7-8	2500
	The Lizard ...	1026·7	+20	WNW	6	c	53	85	8	8	6	-	7-8	9+	2500
	Scilly (St. Mary's)	1027·9	+22	NW	6	bc	55	65	8	5	-	2	2-3	4-6	2500
	Guernsey ...	1022·2	+32	NW	6	bcq	53	75	8	2	7	-	4-6	4-6	2500
6	Pembroke ...	1024·3	+28	NW	6	cq	52	92	8	8	-	-	9+	9+	1500
7	Holyhead ...	1020·6	+30	WNW	7	c/pr	51	85	7	9	-	-	9+	9+	1500
	Chester (Sealand)	1018·9	+30	WNW	6	bc	58	75	8	8	-	-	4-6	4-6	2500
8	Manchester ...	1017·4	+26	WNW	5	c/pr	50	85	7	8	-	-	9+	9+	2500
10	Spurn Head ...	1013·0	+26	NW'W	5	bcq	48	75	7	-	4	8	0	4-6	-
	Catterick ...	1014·8	+22	NW	4	bc	51	65	8	8	3	-	2-3	4-6	2500
	Tynemouth ...	1013·7	+22	W	3	bc	50	75	6	2	3	-	2-3	4-6	2500
11	St. Abbs Head	1013·4	+36	WNW	5	bc	50	75	8	8	6	-	2-3	4-6	2500
	Leuchars ...	1014·0	+30	W	4	bc	51	75	9	8	7	-	2-3	4-6	4000
12	Renfrew (Abbots I.)	1015·8	+30	NW'N	6	bc	52	75	8	8	-	-	2-3	2-3	2500
	Eskdalemuir ...	1015·2	+20	NW'W	5	bc	49	65	8	7	3	-	2-3	4-6	2500
	Point of Ayre ...	1018·9	+32	N'W	6	c	52	85	8	8	-	-	9	9	1500
13A	Tiree ...	1020·2	+36	NNW	5	c	50	65	8	4	-	-	7-8	7-8	2500
13B	Stornoway ...	1017·6	+36	NW	5	c/pr	49	85	7	8	-	-	7-8	7-8	1500
15	Dalwhinnie ...	1017·3	+36	N	3	c	45	75	8	8	6	-	7-8	9	4000
	Aberdeen ...	1013·3	+38	NW	4	o/pr	48	85	7	8	-	-	7-8	7-8	2500
	Wick ...	1012·5	+34	WNW	4	c/pr	48	85	8	5	7	-	4-6	9	1500
16	Lerwick...	1010·4	+34	NNW	4	c	44	75	8	8	7	-	4-6	9	800
17	Blacksod Point..	1028·7	+24	NW	5	bc	50	65	8	2	-	-	4-6	4-6	800
18	Malin Head ...	1023·0	+64	N	5	c	49	75	7	8	-	-	7-8	7-8	4000
	Aldergrove ...	1021·7	+34	NW'W	5	bc	49	75	8	8	3	-	2-3	4-6	2500
19	Birr Castle ...	1026·9	+24	WNW	2	c	51	75	8	5	-	-	7-8	7-8	2500
20	Valentia Obsy. †	1031·1	+14	N'W	5	c	52	65	8	7	-	2	2-3	9+	2500
	Roches Point ...	1028·7	+32	NW'N	5	c	59	65	8	8	-	-	9	9	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	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)	1021·8	+24	NW'W	4	zo	51	76	6	5	-	-	4-6	4-6	2500	1	*
Croydon	1021·7	+22	W'N	3	z	50	75	6	5	3	-	7-8	9	5700	1	*
S. Farnborough	1022·7	+24	WSW	4	c/r	50	75	8	5	-	-	9+	9+	4000	1	*
Boscombe Down	1024·3	+34	NW	4	bc	49	75	7	5	-	-	4-6	4-6	2500	0	*
Calshot (Soton.)	1023·1	+32	NW'W	4	z	51	75	6	7	-	-	2-3	2-3	4000	1	3
Lympne	1020·0	+28	NW	4	c	49	75	6	5	-	-	9	9	4000	1	§3
Manston	1019·3	+26	WNW	5	z	50	85	6	5	-	-	9	9	800	*	*
Shoeburyness	1020·3	+26	NW	4	c	50	75	7	7	-	-	7-8	7-8	1500	1	*
Felixstowe	1018·4	+22	NW'W	3	ir	49	85	6	6	3	-	9	9+	1500	1	4
Gorleston	1017·4	+20	WNW	3	c/r	48	85	6	8	-	-	9+	9+	2500	1	2
Mildenhall	1019·8	+30	W'N	4	z	49	85	6	8	-	-	9+	9+	4000	1	*
Cranwell	1020·8	+34	WNW	4	z	50	85	6	8	-	-	9+	9+	2500	1	*
Birmingham	1028·1	+34	NW	5	c/r	47	85	7	6	-	-	9+	9+	800	1	*
Upper Heyford	1022·9	+32	NW	5	c/pr	48	85	8	4	6	-	7-8	7-8	2500	1	*
Ross-on-Wye	1025·1	+30	WNW	3	b	48	76	8	5	-	-	1	1	2500	1	*
Hartland Point	1028·1	+8	NNW	5	c	51	75	8	8	-	-	7-8	7-8	2500	1	4
Bristol	1025·5	+30	NNW	4	b	49	75	7	4	4	-	Tr	1	2500	1	*
Portland Bill	1024·9	+20	NW	5	bc	51	92	8	5	-	-	4-6	4-6	4000	1	5
Plymouth	1028·1	+28	NW	5	z	52	65	6	5	-	1	4-6	4-6	2500	1	3
The Lizard	1029·2	+20	WNW	5	c	51	75	8	8	6	-	7-8	7-8	2500	0	3
Scilly (St. Mary's)	1031·3	+18	NW'N	4	c	51	65	8	5	6	-	7-8	9+	2500	1	3
Guernsey	1027·0	+20	NW	4	bc	53	78	8	2	1	-	4-6	4-6	2500	1	5
Pembroke	1025·1	+14	NW'N	5	bcq	51	75	8	8	-	-	4-6	4-6	2500	1	3
Holyhead	1025·9	+34	NW	6	bc	51	75	8	8	3	-	2-3	4-6	4000	1	4
Chester (Sealand)	1024·1	+30	NW	5	c/pr	50	85	8	8	-	-	9	9	1500	1	*
Manchester	1023·2	+36	NNW	5	z	49	85	6	8	-	-	9	9	1500	1	*
Spurn Head	1020·4	+26	NW	5	pr	48	85	6	5	-	-	10	10	1500	1	3
Catterick	1020·3	+36	NW	3	bc	49	75	8	5	-	-	2-3	2-3	4000	1	5
Tynemouth	1019·4	+28	W	3	c	49	85	6	8	-	-	7-8	7-8	2500	1	1
St. Abbs Head	1019·0	+32	NW	4	bc	48	76	8	7	-	-	2-3	2-3	2500	0	2
Leuchars	1020·5	+40	WNW	2	c	48	75	9	8	-	-	7-8	7-8	4000	1	*
Renfrew (Abbots I.)	[illegible]	+34	WNW	5	bc	47	75	8	8	-	-	4-6	4-6	2500	1	*
Eskdalemuir	1021·6	+30	NW'W	5	bc	45	75	8	5	3	-	2-3	2-3	1500	1	*
Point of Ayre	1025·1	+40	N'W	6	bc	51	75	8	4	3	-	2-3	4-6	2500	1	4
Tiree	1024·8	-24	NNW	4	c	49	75	8	5	-	-	7-8	7-8	2500	0	4
Stornoway	1022·4	+24	WNW	4	ir	45	92	7	8	7	-	4-6	7-8	2500	1	2
Dalwhinnie	1022·0	+26	N	3	bc	41	85	7	4	4	-	2-3	4-6	2500	0	*
Aberdeen	1019·5	+40	NW	4	bc	46	85	7	4	-	-	4-6	4-6	2500	1	2
Wick	1018·9	+22	NW	5	c	46	92	7	5	7	-	4-6	7-8	1500	1	2
Lerwick	1017·0	+28	NNW	4	c	40	75	8	5	3	-	4-6	7-8	1500	0	*
Blacksod Point	1030·7	+16	NW	3	c	48	75	8	4	-	-	7-8	7-8	1500	0	2
Malin Head	1026·8	+24	N'W	4	c	50	55	7	8	-	-	7-8	7-8	5700	1	4
Aldergrove	1027·3	+26	NW'W	3	c	46	75	7	5	-	-	7-8	7-8	2500	1	*
Birr Castle	1030·7	+20	WNW	2	bc	47	75	8	-	-	8	0	2-3	-	1	*
Valentia Obsy. †	1033·4	+10	NNE	2	c	49	85	8	5	-	7	4-6	10	2500	1	3
Roches Point	1031·8	+16	NNW	4	bc	49	85	8	5	-	5	2-3	4-6	2500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—18h. 19th (37)	13h.—18h. 19th (38)	18h. 19th to 1h. 20th (39)	1h.—7h. 20th (40)
London (Kew)	cprobczo	bccpz bc	bczob	bbmox
Croydon	bcczo	bccz	czo,bmo	bmow
S. Farnborough	bccbbc	bccidir	cbcbmo	bbcbmo
Boscombe Down	bc	bc	bcb	bbmow
Calshot (Soton.)	bbc	bcbmo	bmocmo	bmo
Lympne	cbcq bc	bccz	bccprobcb	bw
Manston	czocbc	bccz PR	cmobmo	bmocmo
Shoeburyness	bcq	bcqc	bc	bc
Felixstowe	crorogc	b,cmo	cprobmo	bmow
Gorleston	orrirc	cbcoiro	cprbcc	cprobcc
Mildenhall	cbc	b,cpzc	cciro bmo	bmow
Cranwell	bcbbczo	bccz mo	bmow	bccbmo
Birmingham	cbcc	cbcoro	crob	b
Upper Heyford	bc	ccpro	bcb	bmobbc
Ross-on-Wye	bcbbc	bccb	bccbc	bcc
Hartland Point	cp	c	c	c
Bristol	cbcq	bcc,bq	bqbcc	bcc,bczo
Portland Bill	bcpr	bcbc	bc	bcc
Plymouth	cprbcc	cbc	bcmo	bcmoc
The Lizard	cq	bcc	cbc	bccw
Scilly (St. Mary's)	bbc	bcc	bcc	cbccl
Guernsey	bcqpr	bccbc	bcb	bbcc
Pembroke	cq	cbcq	c	bcc
Holyhead	bcproc	cbc	cbc	bccy
Chester (Sealand)	cmoprobc	cprmo	cbcmo	bcmozo
Manchester	bcmocpromo	ccmo	cmo,bbmo	bmowxfgmf
Spurn Head	bcq	cpcq		bcw
Catterick	bbc	bcb		bw
Tynemouth	bc	bcc	cbc	bc
St. Abbs Head	bc	bc	bc	bbc
Leuchars	vcbwbc	bccbcw	bcbw	bwbxbc
Renfrew (Abbots I.)	cbc	bcb,cbc	bcbbw	bwmoxbc
Eskdalemuir	bbc	bcb	b	bbcx
Point of Ayre	bcc	cbc	bc	bcc
Tiree	c	c	cbc	bcc
Stornoway	cpr	ir	cirbc	bcc
Dalwhinnie	cir	c		c
Aberdeen	cPRbcpro	bc	bc	bcprobbc
Wick	propr	cprc	prbcc	bcpro
Lerwick	c	c	cbcc	cbc
Blacksod Point	bc	cbc	c	c
Malin Head	cprc	cyc	c	c
Aldergrove	ccprobc	bcc	cprobcc	c
Birr Castle	c	cbc	bcb	c
Valentia Obsy.	c	c	cwidoc	cwidocbc
Roches Point	bcc	bc	bcc	bccw

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.

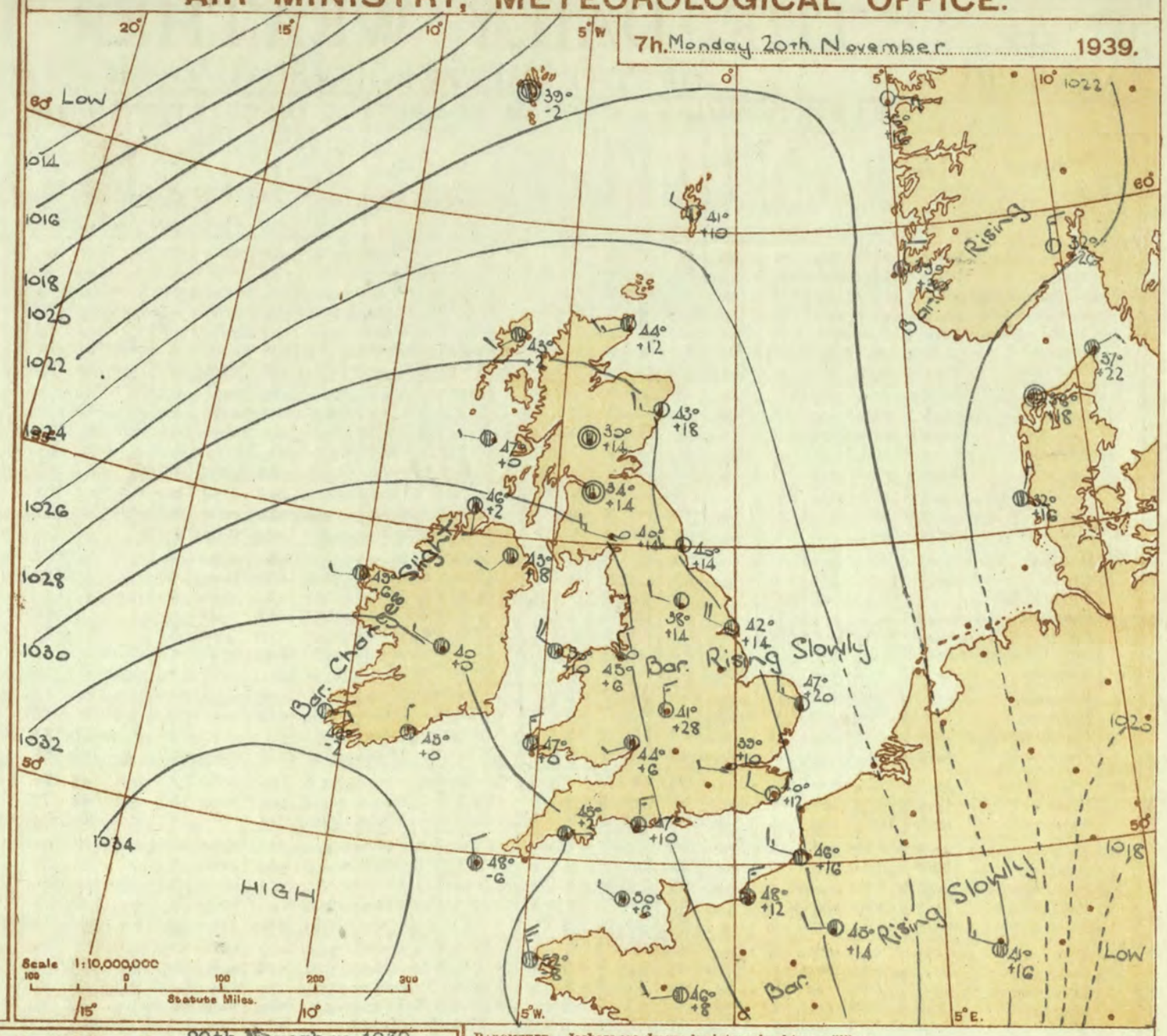
COLUMN 29.—STATE OF GROUND.

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. Monday 20th November 1939.



Districts.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 20th November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light northwest wind; fair; more cloud later; local fog later; average day temperature, ground frost at night.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ...	Light northwest wind; cloudy; average temperature.
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. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Light west to southwest wind, freshening somewhat later; mainly cloudy, slight local rain, especially in west; milder.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light or moderate southwest wind; cloudy, slight rain spreading east later; becoming milder.

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.

GENERAL INFERENCE.

An anticyclone off our southwest coasts is spreading east and a depression off Northwest Iceland is likely to move east. Weather will be quiet and dry over most of the country. The clouds now covering western districts are likely to spread slowly eastward.

FURTHER OUTLOOK.

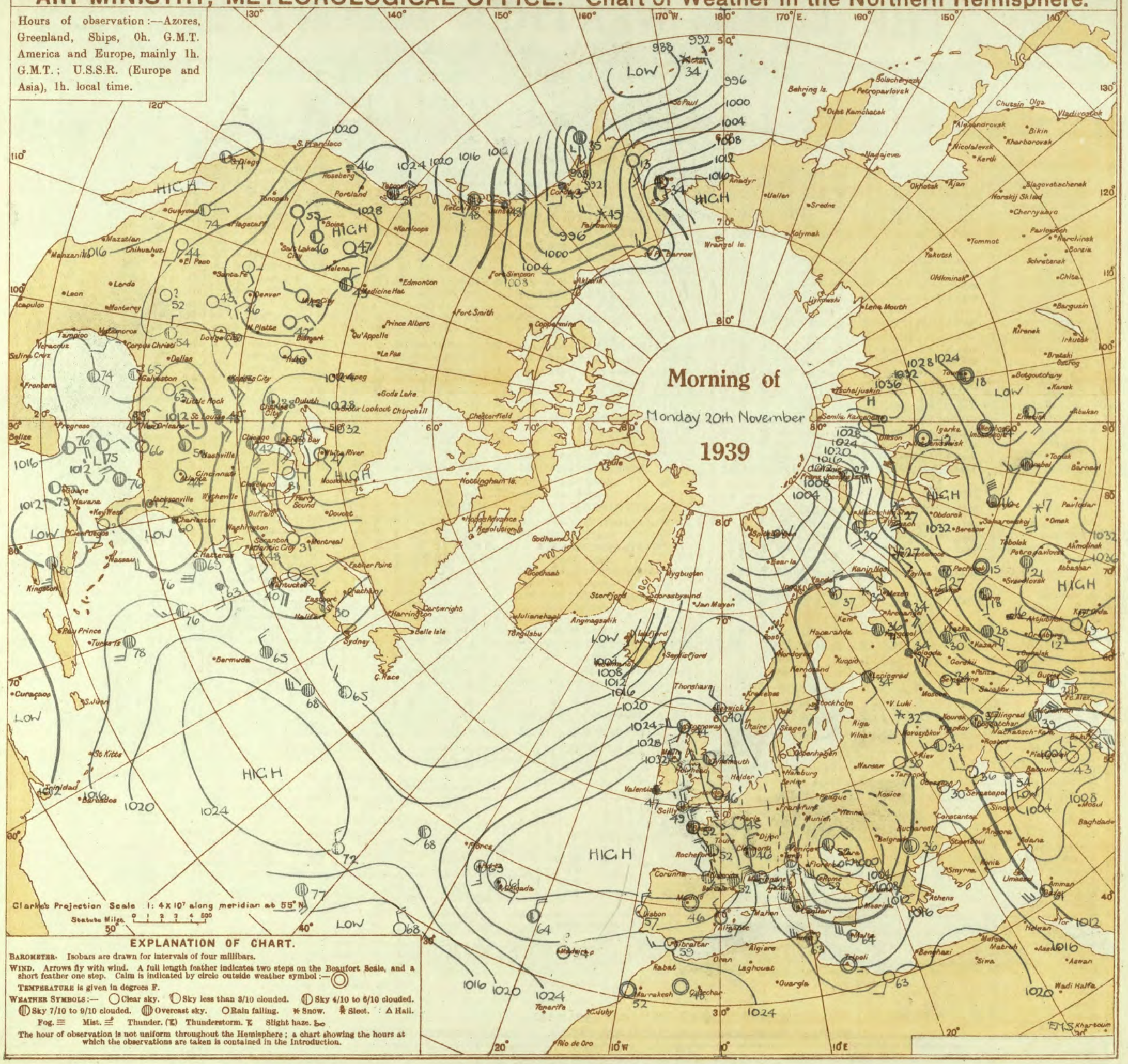
Mainly cloudy; occasional rain in the northwest; slight rain probably spreading to most districts.

Forecasts issued at 1000 G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1.
G. 472/3777. Wt. 8109. D. 4626. Gp. 248. 24300. 11/39

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 20th November 1939.

No. 28487

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1027·0	+26	NW	2	2o	46	85	6	-	-	-	0	0	-
	S. Farnborough	226	1028·0	+20	W	2	2o	49	85	6	-	-	-	0	0	-
	Boscombe Down	417	1029·2	+20	WNW	3	b	44	85	7	5	-	-	Tr	Tr	4000
	Calshot (Sthmtn.)	8	1028·2	+18	WNW	3	2o	44	85	6	-	-	-	0	0	-
	Lympne ...	346	1025·5	+28	NNW	4	b	45	85	7	5	-	-	Tr	Tr	4000
	Manston ...	154	1025·1	+18	NNW	5	2o	47	85	6	5	-	-	1	1	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1024·0	+18	NN'N	3	2o	46	85	6	-	-	-	0	0	-
	Gorleston ...	5	1023·3	+24	W	2	c	46	85	7	8	-	-	7-8	7-8	2500
	Mildenhall ...	19	1026·0	+22	WNW	3	2o	43	97	6	5	-	-	Tr	Tr	4000
	Cranwell ...	240	1026·1	+32	NW	3	2o	42	92	5	-	-	-	0	0	-
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1027·7	+14	NNW	3	b	43	85	7	-	3	-	0	Tr	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1030·6	+6	NNW	3	c	50	65	8	5	2	-	4-6	7-8	2500
	Bristol ...	209	1029·5	+14	WNW	2	bc	46	85	7	4	7	-	4-6	4-6	4000
	Portland Bill ...	32	1030·3	+16	NW	3	bc	49	85	8	5	-	-	4-6	4-6	4000
	Plymouth ...	82	1031·1	+6	-	0	bc	46	85	7	5	-	8	2-3	4-6	2500
	The Lizard ...	240	1032·2	+2	W'N	2	bc	46	85	7	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	1032·9	+6	NNW	2	c	49	75	8	5	4	-	4-6	7-8	2500
	Guernsey ...	175	1030·0	+16	NW	2	bc	50	75	7	1	-	-	2-3	2-3	2500
6	Pembroke ...	142	1031·0	+6	N	3	c	49	75	8	8	-	-	7-8	7-8	1500
7	Holyhead ...	26	1029·5	+14	NW	5	c	50	65	8	8	-	-	7-8	7-8	2500
	Chester (Sealand)	16	1028·9	+14	NW'W	2	2o	45	85	6	8	-	-	7-8	7-8	2500
8	Manchester ...	70	1028·3	+18	WSW	1	2o	40	92	6	5	-	-	1	1	4000
10	Spurn Head ...	29														
	Catterick ...	175														
	Tynemouth ...	108	1025·5	+16	W	3	bc	44	75	6	2	-	-	2-3	2-3	2500
11	St. Abbs Head	280	1025·2	+18	WNW	4	bc	45	75	8	4	-	-	2-3	4-6	2500
	Leuchars ...	36	1026·0	+18	W	2	b	40	85	8	-	-	-	0	0	-
12	Renfrew (Abbots I.)	19	1027·9	+6	W'S	3	b	40	85	7	5	-	-	Tr	Tr	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1028·5	+12	N'W	4	bc	49	75	8	4	-	-	4-6	4-6	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1027·0	+14	W	4	bc	44	85	7	5	-	-	2-3	2-3	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1024·3	+18	WNW	3	c	42	97	7	5	7	-	7-8	9+	800
16	Lerwick ...	156	1023·4	+28	NW	4	c	40	75	8	5	7	-	4-6	7-8	1500
17	Blacksod Point	18	1031·4	+2	W	2	c	47	85	8	-	7	-	0	9	-
18	Malin Head ...	84	1029·8	+8	N'W	3	c	50	55	7	8	-	-	7-8	7-8	4000
	Aldergrove ...	268	1030·3	+12	W'N	1	c	45	85	7	5	-	-	10	10	4000
19	Birr Castle ...	173	1031·5	+4	NW	1	b	40	92	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1033·7	+2		2	c/d	47	92	7	5	1	-	7-8	10	2500
	Roches Point	22	1033·8	+8	W	3	c	46	92	8	5	-	-	9	9	1500

OBSERVATIONS at 7 hr. G.M.T. 20th November

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1029·9	+10	WSW	2	2o	41	85	6	5	-	1	Tr	1	2500	1	*
	Croydon ...	1029·5	+10	W'N	1	2o	39	97	6	5	4	-	4-6	4-6	4000	1	*
	S. Farnborough	1030·2	+10	WNW	2	2o	38	97	6	-	3	1	0	2-3	-	1	*
	Boscombe Down	1031·2	+14	NW'N	2	2o	41	92	6	5	-	4	Tr	2-3	5700	1	*
	Calshot (Sthmtn.)	1030·0	+10	NW	3	2o	43	92	6	-	4	6	0	7-8	-	1	1
	Lympne ...	1028·7	+12	NW'N	2	b	40	92	6	5	-	-	1	1	4000	1	§2
	Manston ...	1028·6	+18	NW	3	2o	44	85	6	5	3	-	4-6	7-8	1500	1	*
2	Shoeburyness ...	1028·6	+18	NW	3	b	41	92	6	-	-	-	0	0	-	1	*
	Felixstowe ...	1027·1	+14	NW'N	3	2o	42	92	6	5	-	-	2-3	2-3	2500	1	3
	Gorleston ...	1026·8	+20	NW	3	c	47	92	6	8	-	-	7-8	7-8	2500	1	2
	Mildenhall ...	1028·8	+18	W'N	3	2o	35	97	5	5	4	5	1	2-3	4000	1	*
	Cranwell ...	1028·7	+14	WNW	3	2o	40	92	5	5	-	1	4-6	4-6	2500	0	*
3	Birmingham ...	1030·1	+8	NNW	3	b	41	85	5	-	-	5	0	2-3	-	1	*
	Upper Heyford	1030·6	+14	NW'W	3	bc	41	85	7	5	4	5	2-3	4-6	5700	1	*
4	Ross-on-Wye	1030·6	+6	WSW	1	c	44	85	8	5	-	-	10	10	2500	1	*
5	Hartland Point	1031·6	+2	NNW	3	c	49	65	8	5	1	-	4-6	7-8	2500	1	3
	Bristol ...	1031·5	+10	W	1	2o	43	85	6	5	-	-	4-6	4-6	4000	1	*
	Portland Bill ...	1031·0	+10	N	3	c	47	92	8	5	-	-	10	10	4000	1	3
	Plymouth ...	1032·2	+2	E	1	c	45	85	7	5	-	-	9	9	2500	1	2
	The Lizard ...	1032·6	0	-	0	c	44	85	8	8	2	-	7-8	9+	1500	0	1
	Scilly (St. Mary's)	1032·8	-6	NNW	2	c	48	75	8	5	3	-	4-6	9+	2500	1	2
	Guernsey ...	1030·9	+6	NW	1	c	50	75	8	8	3	-	7-8	9+	2500	0	3
6	Pembroke ...	1031·8	0	N'W	3	c	47	75	8	2	7	-	2-3	7-8	2500	1	2
7	Holyhead ...	1030·7	+10	NW	4	c	50	55	8	5	-	-	9+	9+	2500	1	3
	Chester (Sealand)	1030·3	+6	NNW	2	2o	45	75	6	5	3	-	4-6	7-8	2500	1	*
8	Manchester ...	1030·3	+6	SW	1	f	32	97	3	5	4	-	2-3	2-3	4000	1	*
10	Spurn Head ...	1028·2	+14	NW'W	3	bc	42	92	6	-	4	1	0	4-6	-	1	3
	Catterick ...	1029·3	+14	WNW	3	bc	38	85	9	-	-	1	0	2-3	-	1	*
	Tynemouth ...	1027·6	+14	W	3	bc	40	75	6	2	-	-	2-3	2-3	2500	1	1
11	St. Abbs Head	1028·0	+10	WNW	2	c	44	65	8	4	5	1	4-6	7-8	2500	0	1
	Leuchars ...	1028·4	+12	W	2	bc	38	85	8	5	-	4	1	4-6	4000	1	*
12	Renfrew (Abbots I.)	1029·8	+14	-	0	bc	34	92	7	5	4	6	1	4-6	4000	1	*
	Eskdalemuir ...	1030·3	+8	-	0	bc	28	92	8	-	3	6	0	4-6	-	3	*
	Point of Ayre...	1030·2	+8	N'E	3	c	49	75	8	5	-	-	9+	9+	2500	1	2
13A	Tiree	1028·7	0	W	1	c	47	75	8	5	-	-	9	9	2500	0	2
13B	Stornoway ...	1027·7	+2	SW	2	c	43	85	8	5	-	-	9+	9+	4000	1	1
15	Dalwhinnie ...	1029·0	+14	-	0	c	30	97	7	4	7	-	2-3	10	2500	0	*
	Aberdeen ...	1028·1	+18	W'N	3	bc	43	85	7	5	3	-	4-6	4-6	4000	1	1
	Wick ...	1026·8	+12	WSW	3	c/pr	44	97	8	5	7	-	7-8	9+	1500	1	2
16	Lerwick ...	1025·7	+10	NW	1	bc	41	75	8	5	3	-	4-6	4-6	1500	0	*
17	Blacksod Point	1030·8	-6	W	1	c	49	92	7	5	-	-	10	10	800	0	2
18	Malin Head ...	1030·3	+2	S	1	c	46	85	7	5	-	-	7-8	7-8	4000	0	3
	Aldergrove ...	1031·4	+8	SW	2	c	43	92	7	5	-	-	9+	9+	4000	1	*
19	Birr Castle ...	1032·9	0	NW	1	c	40	92	7	5	-	-	9	9	2500	1	*
20	Valentia Obsy.	1033·1	-2	ENE	2	bc	46	97	8	5	-	-	2-3	2-3	4000	1	2
	Roches Point	1033·2	0	N	1	c	45	97	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)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 19th Hrs. (36)
1	London (Kew)	52	41	31	Tr	-	5·7
	Croydon ...	51	39	35	-	-	3·3
	S. Farnborough	53	37	31	0·2	Tr	5·0
	Boscombe Down	52	41	36	-	Tr	5·2
	Calshot (Sthmtn.)	54	40	37	-		7·9
	Lympne ...	50	40	34	-	Tr	6·8
	Manston ...	*	42	40	*	0·1	4·7
2	Shoeburyness ...	52	40	44	-	-	3·2
	Felixstowe ...	51	41	*	Tr	-	3·4
	Gorleston ...	48	44	43	"	4	*
	Mildenhall ...	51	35	29	Tr	Tr	4·6
	Cranwell ...	52	39	35	-	-	4·4
3	Birmingham ...	51	41	32	0·1	0·1	3·6
	Upper Heyford	51	39	32	Tr	-	*
4	Ross-on-Wye	53	42	32	-	-	5·2
5	Hartland Point	54	48	46	1	-	1·9
	Bristol ...	53	42	38	-	-	3·7
	Portland Bill ...	55	46	*	1	-	*
	Plymouth ...	54	44	39	0·4	-	5·1
	The Lizard ...	54	44	*	-	-	3·8
	Scilly (St. Mary's)	55	47	*	-	-	6·0
	Guernsey ...	56	50	43	Tr	-	4·1
6	Pembroke ...	53	46	*	-	-	1·9
7	Holyhead ...	52	49	46	Tr	-	2·6
	Chester (Sealand)	53	39	39	3	Tr	3·6
8	Manchester ...	51	32	21	1	-	0·3
10	Spurn Head ...	*	41	*	Tr	0·2	4·7
	Catterick ...	52	37	30	-	-	6·7
	Tynemouth ...	52	39	3·4	-	-	*
11	St. Abbs Head	50	43	*	-	-	*
	Leuchars ...	53	36	29	-	-	4·7
12	Renfrew (Abbots I.)	52	33	30	-	-	3·1
	Eskdalemuir ...	50	22		-	-	2·9
	Point of Ayre...	52	48	*	1	-	2·3
13A	Tiree	51	45	41	0·4	-	0·3
13B	Stornoway ...	49	43	*	3	Tr	1·9
15	Dalwhinnie ...	47	29	24	0·5	-	0·1
	Aberdeen ...	49	40	34	1	Tr	3·0
	Wick ...	49	39	*	2	2	*
16	Lerwick ...	45	39	*	-	-	3·1
17	Blacksod Point	52	45	*	-	0·1	*
18	Malin Head ...	51	43	*	1	-	0·0
	Aldergrove ...	49	43	35	0·1	Tr	2·5
19	Birr Castle ...	51	37	33	0·1	-	1·0
20	Valentia Obsy.	53	45	38	-	Tr	2·1
	Roches Point	55	43	*	-	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.	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	cpr.bcz.	bcc pr.bc	bcz.bmx	52	41	31	Tr	-	5·7	•	•	3
CROYDON	217	bcz.	bcz.	cz.bmx	51	39	35	-	-	3·3	•	•	
GREENWICH (Royal Observatory)...	149	bcc	c	cbxf	51	38	30	-	Tr	3·6	68	90	3
CITY (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
WESTMINSTER (St. James' Park) ...	27	•	•	•	53	40	38	-	-		71	87	•
REGENTS PK. (Botanic Gardens)‡...	168	•	•	•	51	40	31	-	-		79	84	•
CAMDEN SQUARE	110	bc	bc	•	52	41	35	-	-	•	•	90	•
KENSINGTON	80	bcc	bmx	•	52	39	29	-	Tr		80	90	•
HAMPSTEAD OBSERVATORY	450										•		•

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.
0·1	7h 20th	<0·1	13h 19th

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 19th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 20th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
PARIS	1021·9	WNW	5	c	50	1027·8	W	2	c	45	54	*	Tr	*
BRUSSELS														
BERLIN														
ZÜRICH														
ROME						1002·7	N	2	c	48	*	*		·6

‡ 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 21st. November 1939.

No 28,488

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1031·1	0	NW'N	2	zo	49	65	6	5	-	1	2-3	4-6	2500
	Croydon	1030·8	+2	W'N	1	zo	48	75	5	-	4	1	0	1	-
	S. Farnborough	1031·3	-6	NNW	3	bc	50	65	7	1	-	1	Tr	2-3	4000
	Boscombe Down	1031·7	-2	NNW	2	z	47	85	6	5	-	4	2-3	2-3	5700
	Calshot (Soton.)	1031·1	0	N'W	2	bc	50	65	7	1	4	1	Tr	2-3	4000
	Lympne ...	1029·9	+2	N'W	3	bc	48	65	8	1	3	1	Tr	4-6	2500
	Manston ...	1029·9	+2	NNW	4	zo	49	75	6	5	3	1	7-8	7-8	4000
2	Shoeburyness ...	1030·4	+2	NNW	3	b	50	75	6	-	4	-	0	1	-
	Felixstowe ...	1028·4	+6	NW	3	zo	50	85	6	5	5	5	7-8	7-8	4000
	Gorleston ...	1029·3	+6	N'W	1	c	49	85	6	8	-	-	7-8	7-8	2500
	Mildenhall ...	1030·6	-8	NNW	2	zo	48	85	6	5	-	6	4-6	7-8	4000
	Cranwell ...	1030·6	+2	NNW	3	zo	48	75	6	-	3	2	0	4-6	-
3	Birmingham	1031·7	0	NNW	3	c	47	65	6	-	-	6	0	7-8	-
	Upper Heyford	1031·5	+4	NW	2	bc	47	75	6	1	-	9	Tr	2-3	5700
4	Ross-on-Wye ...	1032·1	+4	NW	2	o	48	75	8	5	-	-	10	10	2500
5	Hartland Point	1032·6	-2	N	6	e	50	65	8	5	4	-	4-6	7-8	2500
	Bristol	1032·4	+2	NW	2	c	48	75	6	5	-	-	9+	9+	4000
	Portland Bill ...	1032·1	+6	N	2	c	50	85	7	5	-	-	10	10	2500
	Plymouth ...	1032·7	-2	N'W	1	zo	50	65	8	5	-	-	9	9	4000
	The Lizard ...	1033·4	0	N'W	3	c	51	75	8	8	6	-	7-8	9+	2500
	Scilly (St. Mary's)	1033·6	-2	N'E	1	c	51	75	8	8	6	-	4-6	9	2500
	Guernsey ...	1031·5	-2	N'W	1	c	51	75	9	8	2	-	7-8	9+	2500
6	Pembroke ...	1032·9	+2	N'E	2	c	51	75	8	5	6	-	4-6	9+	1500
7	Holyhead ...	1032·4	+6	NW	3	c	51	65	8	8	2	-	4-6	9+	4000
	Chester (Sealand)	1032·2	+6	WNW	2	zo	49	65	6	5	7	-	9+	9+	4000
8	Manchester ...	1031·8	0	NW'W	2	c/f	47	65	8	7	-	4	2-3	7-8	4000
10	Spurn Head ...	1030·6	+8	NW'N	2	bc	47	85	6	-	8	2	0	4-6	-
	Catterick ...	1031·2	+6	WNW	1	c	47	75	7	5	-	-	9+	9+	4000
	Tynemouth ...	1030·6	+6	W	3	c	45	75	6	8	-	-	9+	9+	2500
11	St. Abbs Head	1030·4	+6	WNW	2	c	45	85	9	5	6	-	7-8	9	2500
	Leuchars ...	1030·2	0	SW	2	c	44	85	8	5	7	-	2-3	9+	4000
12	Renfrew (Abbots I.)	1031·5	+4	-	0	cf	43	92	3	5	1	-	7-8	10	4000
	Eskdalemuir ...	1031·5	+6	-	0	c	37	85	8	5	7	-	2-3	9	4000
	Point of Ayre ...	1031·9	+2	-	0	c	50	75	8	8	2	-	4-6	10	2500
13A	Tiree	1028·9	0	SW	3	pr	49	92	8	8	-	-	7-8	7-8	1500
13B	Stornoway ...	1027·4	+4	SW	4	c	49	85	8	5	7	-	7-8	9+	4000
15	Dalwhinnie ...	1030·0	+2	-	0	c	42	75	7	5	7	-	1	10	2500
	Aberdeen ...	1029·8	+2	W'N	2	c	45	75	6	5	7	8	2-3	9	5700
	Wick	1027·8	-2	WSW	3	c	45	85	8	5	7	8	4-6	10	2500
16	Lerwick... ...	1026·3	-2	SW	3	id	45	92	7	8	2	-	7-8	9+	800
17	Blacksod Point..	1031·4	0	W'S	2	bc	53	85	8	-	6	-	0	4-6	-
18	Malin Head ...	1030·8	-2	W	3	ido	48	85	7	5	-	-	9	9	1500
	Aldergrove ...	1032·3	-2	SSW	1	c	45	85	7	5	3	-	7-8	9+	2500
19	Birr Castle ...	1033·3	-2	SW	1	c	51	85	8	5	7	-	4-6	7-8	2500
20	Valentia Obsy. †	1033·8	-2	S'E	3	c	51	85	8	5	-	-	10	10	2500
	Roches Point ...	1033·9	-2	WSW	2	c	51	92	8	5	-	-	9	9	2500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°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)	1032·7	+12	NNW	1	zo	44	85	5	-	-	6	0	4-6	-	0	*
Croydon	1032·4	+14	-	0	fo	41	92	2	-	-	1	0	Tr	-	*	*
S. Farnborough	1032·9	+12	-	0	m	40	85	4	-	-	8	0	7-8	-	1	*
Boscombe Down	1033·3	+10	N'W	1	zo	42	85	6	-	7	2	0	7-8	-	0	*
Calshot (Soton.)	1032·3	+10	NW'W	2	zo	43	92	6	-	-	1	0	2-3	-		
Lympne	1032·0	+6	NNW	2	zo	45	85	6	5	-	-	9+	9+	4000	1	§2
Manston	1031·9	+10	NNW	3	zo	47	85	6	5	-	-	9+	9+	2500	1	*
Shoeburyness	1031·9	+16	NW	1	c	47	85	6	5	-	-	10	10	4000	1	*
Felixstowe	1031·4	+14	N	1	zo	45	92	6	5	-	-	9+	9+	4000	1	2
Gorleston	1031·2	+10	N	4	c	46	85	7	5	-	-	9+	9+	2500	1	2
Mildenhall	1032·4	+14	NW	2	zo	45	97	5	5	-	-	10	10	4000	1	*
Cranwell	1032·6	+14	NNW	1	cf+	42	92	3	-	7	2	0	9	-	0	*
Birmingham	1033·3	+6	NW	2	m	44	65	4	-	-	7	0	9+	-	1	*
Upper Heyford	1033·0	+12	NW'N	2	zo	42	85	6	-	3	-	0	9	-	1	*
Ross-on-Wye	1033·1	+6	NNW	1	zo	45	85	6	5	3	-	1	9+	2500	1	*
Hartland Point	1033·4	+2	NNE	3	c	49	65	8	5	2	-	4-6	9+	2500	1	2
Bristol	1033·8	+6	-	0	m	45	85	4	5	3	-	9+	10	4000	1	*
Portland Bill	1033·2	+10	N	2	c	48	85	7	5	-	-	10	10	2500	1	3
Plymouth	1033·6	+10	N	2	m	48	75	4	5	-	-	9+	9+	4000	0	1
The Lizard	1034·3	+8	-	0	c	47	75	8	8	6	-	7-8	9+	2500	0	2
Scilly (St. Mary's)	1033·7	+2	N	2	c	48	92	8	5	7	-	4-6	9+	1500	1	1
Guernsey	1032·4	+8	N'W	1	c	50	65	8	8	7	:	7-8	10	2500	0	3
Pembroke	1034·0	+6	N'E	2	c	47	75	8	5	6	-	4-6	9+	1500	1	2
Holyhead	1033·4	+10	WNW	3	c	50	75	8	5	-	-	10	10	4000	1	2
Chester (Sealand)	1033·6	+6	W'N	1	zo	45	85	6	5	-	-	10	10	4000	1	*
Manchester	1033·5	+14	NW	1	bc fo	35	92	2	-	3	-	0	4-6	-	1	*
Spurn Head	1032·1	+8	NW'W	2	c	46	92	5	5	-	-	10	10	2500	0	1
Catterick	1033·0	+14	-	0	zo	37	92	6	-	-	6	0	4-6	-	1	*
Tynemouth	1032·1	+6	W	3	bc	43	75	6	8	3	-	2-3	4-6	2500	1	1
St. Abbs Head	1031·3	+2	WNW	2	bc	42	75	7	5	4	9	4-6	4-6	2500	0	2
Leuchars	1031·3	+6	-	0	zo	39	92	6	-	7	-	0	1	-	1	*
Renfrew (Abbots I.)	1031·6	+2	-	0	c/d	44	85	2	5	-	-	9+	9+	4000	1	*
Eskdalemuir	1032·9	+6	-	0	c	36	92	8	5	-	-	10	10	2500	1	*
Point of Ayre	1032·5	+2	NW	2	c	50	85	7	5	7	-	7-8	9+	2500	0	1
Tiree	1029·4	+2	SW	3	dr	49	97	5	-	2	-	10	10	800	1	2
Stornoway	1026·8	-4	SSW	5	c/pr	49	92	7	5	7	-	7-8	10	2500	1	2
Dalwhinnie	1031·4	+2	SW	1	c	41	85	7	5	-	-	9+	9+	2500	0	*
Aberdeen	1030·5	+6	WSW	1	b	39	85	6	5	-	8	1	1	5700	1	1
Wick	1028·3	0	SSW	8	bc	43	85	8	5	4	-	2-3	4-6	1500	1	1
Lerwick	1025·9	-4	WSW	3	bc	45	85	8	5	7	-	4-6	4-6	1500	1	*
Blacksod Point	1031·7	0	SW	2	d	51	97	7	6	-	-	10	10	450	1	2
Malin Head	1031·4	+4	SW'W	2	c	49	85	7	5	-	-	7-8	7-8	4000	0	3
Aldergrove	1033·0	+6	S'W	2	c	46	92	7	5	-	-	9	9	4000	1	*
Birr Castle	1033·8	+4	SSW	1	c	48	92	7	5	1	-	9	10	2500	1	*
Valentia Obsy. †	1034·2	+6	SE'S	2	c	50	85	8	5	-	-	10	10	4000	1	2
Roches Point	1034·3	0	S'E	2	c	49	92	8	5	-	-	7-8	7-8	2500	1	2

PAST 24 HOURS.

Stations	Weather 7h.—13h. 20th (37)	Weather 13h.—18h. 20th (38)	Weather 18h. 20th to 1h. 21st (39)	Weather 1h.—7h. 21st (40)
London (Kew)	bexfbzo	bez bcmo	beFe	bff
Croydon	bcmobz	bz bczfbfw	bfcfw	cffw
S. Farnborough	cmbbc	bc ⊕ zcm	cmbFwx	bFxfcmf
Boscombe Down	cmo bcmo	bcmo	cmobcmocm	cmo
Calshot (Soton.)	bcmo	bccmo	cmocm	cmcmo
Lympne	bmo bbc	bccz	cbccmo	cmoc
Manston	cmo bcz	bczcmo	cmoczo	czoc
Shoeburyness	bc	bccmo		bcmo
Felixstowe	bmo cmo	cmoprocmo	cmow	cmow
Gorleston	ciroc	c	c	bcw
Mildenhall	bcmo	cmo	cmo	cmoido
Cranwell	cbcz	b,czf	cfbfcf	cf,bf,cf
Birmingham	bcc	bcc	cmb	bbcxm
Upper Heyford	bc	bcmo	cmo	cmomf
Ross-on-Wye	c	c	cmo	cmo
Hartland Point	c	c	cbc	bcc
Bristol	bccz	czom	cmfbcmmo	cmowbcmx
Portland Bill	c	c	bcc	cbc
Plymouth	czzz	ccz	cmoc	bmowbw
The Lizard	c	c	c	cbc
Scilly (St. Mary's)	bcc	c	c	c
Guernsey	c	cbcc	c	cbc
Pembroke	c	c	bwc	c
Holyhead	cyc	c	c	c
Chester (Sealand)	bczcmozy	czycz	cmomff	cffmf
Manchester	bxfFFF	bccmomff	bcfwFF	cFFwff
Spurn Head	c	cb	cmo	bcwm
Catterick	bwbcc	cbcmo	bcmox	xcmowc
Tynemouth	bcc	cbc	bcm	bcc
St. Abbs Head	bcc	bc	bc	bbc
Leuchars	bcc	c,bw		bmoxbcmow
Renfrew (Abbots I.)	bcxfgcff	cfidoff	cidoffm	cmo
Eskdalemuir	bcxc	c	c	cbcf
Point of Ayre	c	c	c	c
Tiree	cpro	codo	oidoc	c
Stornoway	c	cpro	cpr	cpr
Dalwhinnie	c	c	*	cir
Aberdeen	bccz	cbcb	bzow	bwbcx
Wick	dodc	cbc	bcc	cproc
Lerwick	bccid	cidobc	bccir	cir
Blacksod Point	bc	c	iro	iro
Malin Head	c	c	c	cproc
Aldergrove	cmoc	cbcc	ccmoc	ccdomo
Birr Castle	c	c	c	bcc
Valentia Obsy. †	bcc	c	c	ocido
Roches Point	bcc	c	cw	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.

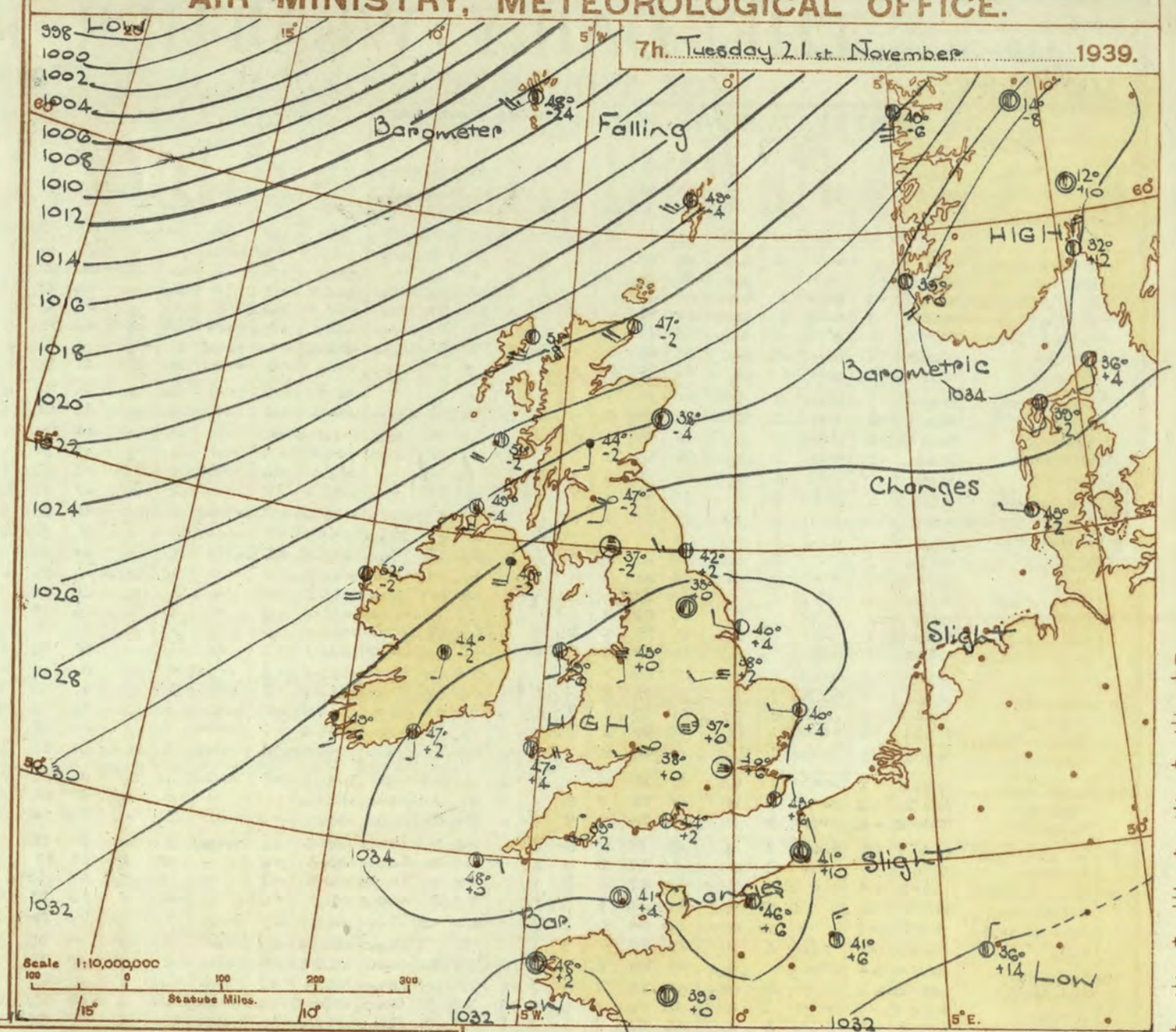
COLUMN 29.—STATE OF GROUND.

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. Tuesday 21st November 1939.



Districts.	Forecasts for the 24 hours commencing 12 noon, G.M.T. 21st November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Light variable wind; fair, much fog, becoming dense locally; rather cold, ground frost at night.
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.	Light or moderate southwest wind, freshening; cloudy, slight local rain or drizzle later; local fog at first, becoming milder.
13 A. W. Scotld. B.N.W.Scotland.	Fresh or strong southwest wind; cloudy, some rain; mild.
14 Mid Scotland	
15 N. E. Scotland	As 7 - 12.
16 Orkneys and Shetlands	As 13 - 14.
17 N. W. Ireland	
18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 7 - 12.

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.

GENERAL INFERENCE.

An anticyclone covers England while a depression over Iceland is moving northeast or eastnortheast and extending its influence. Weather will become less settled in the North but will be fair in the South apart from fog.

FURTHER OUTLOOK.

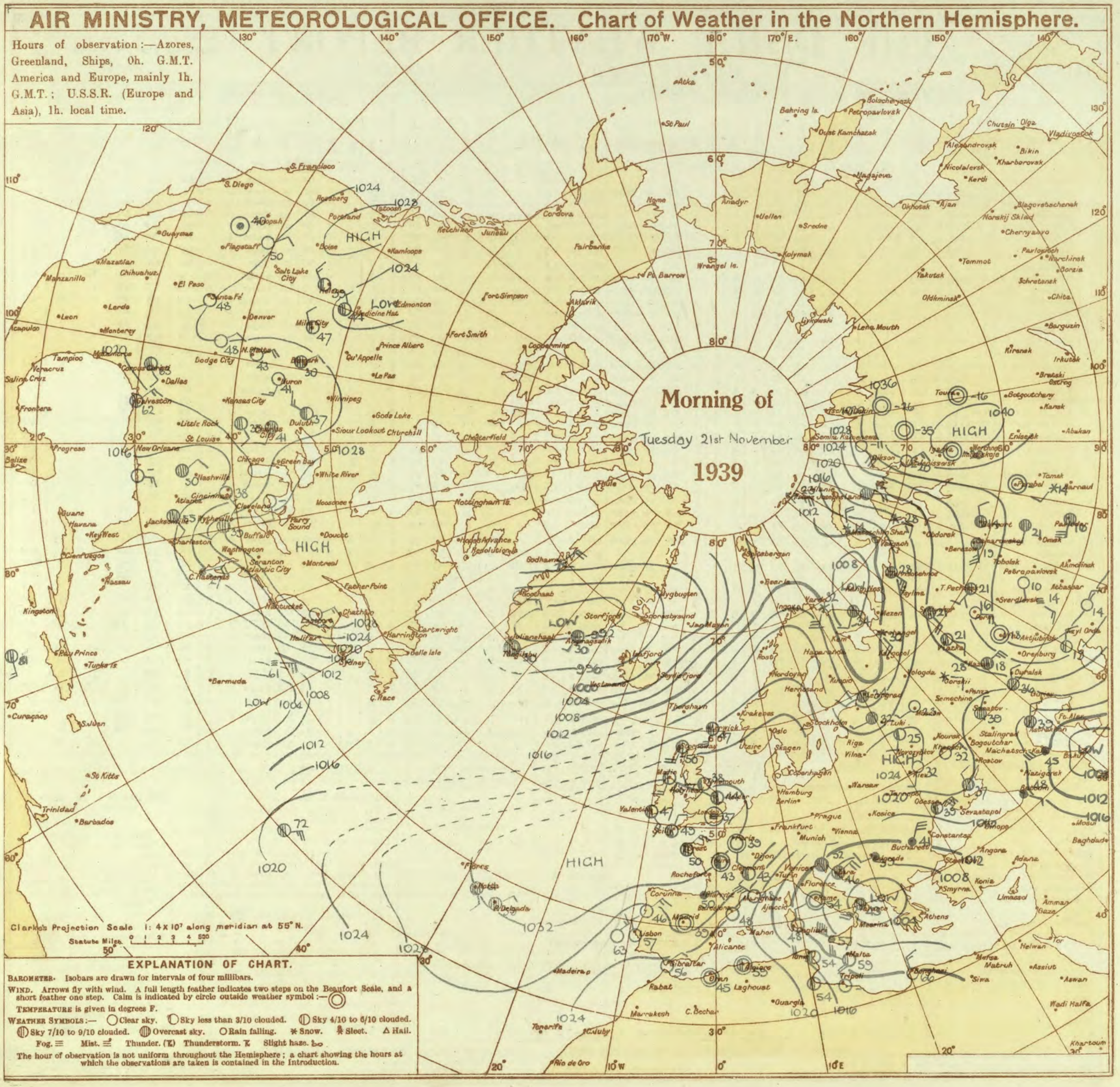
Unsettled in the North; fair in the South, with more cloud and less fog.

Forecasts issued at 4000 G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1. C.472/3777. Wt.8109. D.4626. Gp.548. 24300 11/39

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 21st November 1939.

No. 28488

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	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	1034.4	+6	-	0	cf	37	97	2	5	-	-	10	10	800
	S. Farnborough	226	1035.1	+8	WNW	1	bF	29	97	1	-	-	-	0	0	-
	Boscombe Down	417	1035.1	+6	NNW	1	zo	37	85	6	-	7	-	0	9	-
	Calshot (Sthmtn.)	8	1034.3	+6	NNW	2	m	41	92	4	5	-	-	9+	9+	2500
	Lympne ...	346	1033.8	+4	NNW	2	c	43	92	6	5	-	-	9	9	4000
	Manston ...	154	1033.7	+6	N'E	2	zo	46	75	6	5	-	-	10	10	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1033.3	+2	N	1	zo	44	85	6	5	-	-	9+	9+	4000
	Gorleston ...	5	1032.9	+2	N'E	3	c	44	85	6	5	-	-	7-8	7-8	2500
	Mildenhall ...	19	1034.4	+6	W'S	2	zo	42	97	5	5	-	-	10	10	2500
	Cranwell ...	240	1034.1	+6	WNW	2	f	38	97	2	5	-	-	10	10	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1034.8	+10	-	0	zo	40	85	5	5	-	-	10	10	4000
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1034.6	+6	NNE	2	bc	47	75	8	5	3	-	2-3	4-6	2500
	Bristol ...	209	1035.4	+6	-	0	zo	37	92	5	5	3	-	7-8	9	4000
	Portland Bill ...	32	1034.2	+2	NE	2	c	44	92	7	5	-	-	10	10	4000
	Plymouth ...	82	1034.8	+2	N	1	c	47	85	7	5	-	-	9	9	4000
	The Lizard ...	240	1035.1	0	N	2	c	46	75	8	8	6	-	7-8	9+	2500
	Scilly (St. Mary's)	163	1034.4	-2	N'E	2	c	49	65	8	5	-	-	10	10	2500
	Guernsey ...	175	1033.5	+2	N'E	1	c	49	65	7	2	2	-	4-6	10	2500
6	Pembroke ...	142	1034.3	+2	NE'E	1	c	47	85	8	5	-	-	9+	9+	2500
7	Holyhead ...	26	1034.2	+2	W'S	2	c	50	75	8	5	2	-	9	10	2500
	Chester (Sealand)	16	1034.6	+2	SE	1	cf	43	85	3	5	-	-	9+	9+	1500
8	Manchester ...	70	1034.8	+4	SE	1	F-	39	85	1	5	-	-	10	10	4000
10	Spurn Head ...	29	1034.1	+4	NW'W	2	c	44	92	5	5	-	-	9	9	2500
	Catterick ...	175	1034.3	+2	-	0	zo	30	97	6	5	3	-	2-3	4-6	4000
	Tynemouth ...	108	1026.4	-2	W	2	bc	38	85	5	2	-	-	4-6	4-6	2500
11	St. Abbs Head	280	1031.6	0	WNW	2	bc	43	85	8	4	6	1	2-3	4-6	2500
	Leuchars ...	36														
12	Renfrew (Abbots I.)	19	1032.1	0	-	0	zo	46	97	6	5	-	-	9+	9+	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1033.8	+2	W	2	c	48	85	8	5	-	-	10	10	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1026.6	-4	SSW	4	c	50	97	7	8	7	-	7-8	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1027.6	-4	SSW	3	c	45	92	7	5	7	-	4-6	9+	1500
16	Lerwick ...	156	1024.1	-10	SW'S	5	c/r	47	92	7	8	7	-	7-8	10	800
17	Blacksod Point	18	1031.6	-2	NW	2	pr	51	97	7	6	-	-	10	10	450
18	Malin Head ...	84	1031.3	-2	SSW	3	bc	48	92	8	4	-	-	4-6	4-6	5700
	Aldergrove ...	268	1033.4	0	S'W	2	c	46	92	7	5	-	-	10	10	2500
19	Birr Castle ...	173	1034.2	-2	SSW	2	c	47	75	7	5	-	-	7-8	7-8	2500
20	Valentia Obsy.	30	1034.6	0	SSE	3	c	49	85	8	5	-	-	9	9	4000
	Roches Point	22	1034.8	-4	N	2	c	47	97	8	5	-	-	9	9	2500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1035.4	+4	-	0	f	42	92	3	5	-	-	10	10	1500	1	*
Croydon	1035.2	+6	-	0	f	40	97	2	5	-	-	10	10	1500	1	*
S. Farnborough	1035.6	+2	-	0	f	38	92	3	5	-	-	9+	9+	4000	1	*
Boscombe Down	1035.4	+2	N	1	m	38	92	4	5	-	-	10	10	4000	0	*
Calshot (Sthmtn.)	1034.7	+2	N	1	zo	44	85	5	5	1	-	9+	10	4000	1	1
Lympne	1034.6	+6	NNE	2	c	43	75	8	5	-	-	9+	9+	4000	1	§
Manston	1034.6	+4	N	2	c	45	75	7	5	-	-	10	10	4000	1	*
Shoeburyness	1034.9	+2	NW'N	1	m	43	97	4	5	-	-	9	9	450	1	*
Felixstowe	1033.9	+2	NNW	1	zo	44	92	6	5	-	-	7-8	7-8	4000	1	2
Gorleston	1034.7	+4	WNW	1	bc	40	92	6	5	-	-	2-3	2-3	2500	0	2
Mildenhall	1035.1	+4	W'N	1	m	40	90	4	5	-	-	10	10	4000	1	*
Cranwell	1034.8	+2	W'S	2	f	38	92	3	5	-	-	9	9	2500	0	*
Birmingham	1035.5	0	-	0	m	37	85	4	5	-	-	4-6	4-6	4000	1	*
Upper Heyford	1035.8	+6	NW	1	f	40	85	3	5	-	-	9+	9+	4000	1	*
Ross-on-Wye	1035.1	0	WSW	1	fg	38	92	5	5	-	-	9	9	2500	1	*
Hartland Point	1034.6	+4	ESE	2	c	45	65	8	5	2	-	9+	10	2500	0	2
Bristol	1035.7	+2	SSE	1	m	33	97	4	5	-	-	4-6	4-6	4000	1	*
Portland Bill	1034.5	+2	NE	3	bc	44	85	7	5	-	-	4-6	4-6	4000	1	3
Plymouth	1035.1	+2	NNE	1	zo	39	92	6	-	4	-	0	1	-	1	1
The Lizard	1034.9	+4	NNE	2	bc	44	85	8	8	-	-	2-3	2-3	2500	0	1
Scilly (St. Mary's)	1034.0	0	E	2	c	48	75	8	5	4	-	7-8	9	2500	1	1
Guernsey	1033.8	+4	-	0	bc	41	85	7	-	1	-	0	2-3	-	0	2
Pembroke	1035.0	+4	E'N	2	c	47	92	8	8	2	-	7-8	10	1500	1	2
Holyhead	1034.0	0	SSE	2	c	49	85	8	5	2	-	7-8	10	4000	1	1
Chester (Sealand)	1034.9	0	SSE	1	f	43	92	3	5	-	-	9+	9+	2500	1	*
Manchester	1035.1	+2	ESE	1	f	40	92	2	5	-	-	9+	9+	4000	1	*
Spurn Head	1034.8	+4	WNW	2	bc	40	97	4	-	3	-	0	2-3	-	1	.
Catterick	1034.5	0	-	0	c	35	92	8	5	-	-	9+	9+	1500	1	*
Tynemouth	1032.9	+2	W	3	c	42	85	6	8	-	-	9+	9+	2500	1	1
St. Abbs Head	1031.4	0	SW	3	bc	43	85	8	4	6	1	2-3	4-6	2500	0	2
Leuchars	1031.0	-2	SW	2	zo	39	97	6	5	3	6	1	4-6	4000	1	*
Renfrew (Abbots I.)	1031.8	-2	SSW	2	zo	47	85	6	5	-	-	7-8	7-8	4000	1	*
Eskdalemuir	1033.2	-2	-	0	bcf+	37	97	2	5	-	-	4-6	4-6	1500	1	*
Point of Ayre	1033.6	0	SW	2	c	46	85	8	5	-	-	10	10	4000	0	1
Tiree	1027.9	-2	SW'S	4	c	51	92	7	8	-	-	9+	9+	1500	0	3
Stornoway	1025.2	-8	SSW	5	c	51	85	7	5	-	-	7-8	7-8	2500	1	2
Dalwhinnie	1030.0	-2	S	3	ir	44	97	6	4	2	-	4-6	9+	1500	1	*
Aberdeen	1028.8	-4	-	0	bc	38	92	6	5	-	5	1	2-3	4000	0	1
Wick	1026.2	-2	SW	4	c/pr	47	92	7	5	7	-	7-8	9+	1500	1	2
Lerwick	1023.7	-4	SW	5	c	49	92	7	8	2	-	7-8	10	800	1	*
Blacksod Point	1030.5	-2	S	4	c	52	85	7	5	-	-	7-8	7-8	800	1	3
Malin Head	1030.3	-4	S	3	c	49	85	7	8	-	-	7-8	7-8	4000	0	3
Aldergrove	1032.8	-2	S'W	2	id₀	45	92	6	5	-	-	10	10	2500	1	*
Birr Castle	1033.9	-2	SSW	1	c	44	85	8	5	-	-	9	9	2500	1	*
Valentia Obsy.	1033.2	-6	S'E	3	id₀	49	85	8	5	-	-	9	9	2500	1	2
Roches Point	1034.4	+2	S	1	c	47	92	8	5	-	-	9+	9+	1500	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 20th Hrs. (36)
London (Kew)	49	39	27	-	Tr	0.0
Croydon	*	34	30	*	-	5.6
S. Farnborough	51	28	25	-	-	5.1
Boscombe Down	48	36	32	-	-	2.7
Calshot (Sthmtn.)	51	39	38		-	6.1
Lympne	49	40	35	-	-	6.0
Manston	49	44	41	-	-	4.6
Shoeburyness	50	43	*	-	-	7.2
Felixstowe	*	41	40	Tr	-	3.2
Gorleston	49	35	35	1	-	*
Mildenhall	49	39	39	-	Tr	4.8
Cranwell	50	35	27	-	-	5.7
Birmingham	48	36	19	*	-	2.7
Upper Heyford	48	39	35	-	-	*
Ross-on-Wye	48	37	32	-	-	0.0
Hartland Point	50	45	41	-	-	0.3
Bristol	49	32	25	-	-	0.1
Portland Bill	55	42	*	-	-	*
Plymouth	51	39	30	-	-	0.0
The Lizard	53	42	*	-	-	1.5
Scilly (St. Mary's)	52	43	*	-	-	0.5
Guernsey	52	41	31	-	-	1.6
Pembroke	52	44	*	-	-	0.1
Holyhead	51	48	46	-	-	0.3
Chester (Sealand)	49	43	40	-	-	0.0
Manchester	47	35	32	-	-	0.5
Spurn Head	48	39	*	-	Tr	3.6
Catterick	47	30	23	-	-	1.3
Tynemouth	46	38	33	-	-	*
St. Abbs Head	45	40	*	-	-	*
Leuchars	45	36	25	-	-	0.0
Renfrew (Abbots I.)	45	43	41	Tr	-	0.3
Eskdalemuir	38	35	32	-	-	0.3
Point of Ayre	50	45	*	-	-	0.0
Tiree	51	49	47	1	0.2	0.5
Stornoway	49	49	*	Tr	1	0.3
Dalwhinnie	44	34	29	-	0.4	0.3
Aberdeen	45	33	26	-	-	0.4
Wick	46	42	*	0.2	Tr	*
Lerwick	46	44	*	0.3	2	0.0
Blacksod Point	54	48	*	Tr	0.3	*
Malin Head	50	45	*	Tr	Tr	0.1
Aldergrove	47	44	36	+	Tr	0.4
Birr Castle	51	42	36	-	-	0.3
Valentia Obsy.	52	48	44	-	-	0.9
Roches Point	53	47	*	-	Tr	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
Kew ...	18	bcxfbz₀	bczobca	bc Fobff	49	39	27	-	Tr	0.0	*	*	
Croydon ...	217	bcmobzo	bzobcfofo	bfc ffw	*	34	30	*	-	5.6	*	*	
Greenwich (Royal Observatory)...	149	bf	bmcf	cowf	48	38	31	-	Tr	0.3	75	94	2
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park) ...	27	*	*	*	52	42	36	-			70	91	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	50	39	27	-	-		77	91	*
Camden Square ...	110	b	bc	*	51	39	31	-	-	*	*	91	*
Kensington ...	80	bcz	bcm	*	51	39	27	-	-		84	91	*
Hampstead Observatory ...	450	bc	bc	o	43	39	34	-	-		*	94	*

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. 20th November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 21st November Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1030.7	NNW	3	c	46	1033.4	NNW	3	c	41	50	37	-	-
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1006.3	NNW	4	b	55	1009.5	NNW	5	bc	46	*	*	-	-

‡ 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.

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.

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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 22nd November 1939.

No 28,489

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1036.0	-6	SSW	2	of	45	92	2	5	-	-	10	10	1500
	Croydon	1035.7	-6	-	0	of+	43	92	2	3	.	-	10	10	2500
	S. Farnborough	1036.2	-6	-	0	m	44	85	4	5	-	-	10	10	4000
	Boscombe Down	1036.9	-2	E'S	1	bc	47	55	7	5	3	-	2-3	4-6	5700
	Calshot (Soton.)	1035.3	-6	E'N	2	z	49	75	6	1	3	-	2-3	4-6	4000
	Lympne	1035.4	-4	N'E	2	z	46	75	5	8	-	-	9+	9+	4000
	Manston	1035.6	-2	N	3	c	47	65	8	7	-	-	9+	9+	1500
2	Shoeburyness	1035.7	-2	N'W	1	m	47	85	4	5	-	-	9+	9+	4000
	Felixstowe	1035.1	-2	NNE	2	c	48	65	7	5	-	-	9	9	4000
	Gorleston	1035.9	+2	E	2	bc	47	75	7	5	3	-	4-6	4-6	2500
	Mildenhall	1036.3	-2	-	0	of	43	85	3	5	-	-	10	10	4000
	Cranwell	1035.2	-6	WSW	2	m	45	75	4	5	-	-	9+	9+	2500
3	Birmingham	1035.6	-2	SSW	1	c	46	56	6	1	3	-	Tr	7-8	2500
	Upper Heyford	1036.9	-2	SW	1	c	46	65	8	5	-	-	9+	9+	4000
4	Ross-on-Wye	1035.5	0	NE	1	bf+	45	75	3	-	8	1	0	Tr	-
5	Hartland Point	1034.7	-6	SE	2	c	48	65	8	5	-	-	9+	9+	2500
	Bristol	1036.0	-6	SE'S	2	z	43	75	5	-	-	-	0	0	-
	Portland Bill	1036.3	+4	NE	3	c	48	85	7	5	-	-	10	10	4000
	Plymouth	1035.5	-2	E'S	1	b	51	65	8	4	-	-	Tr	Tr	4000
	The Lizard	1035.4	+4	E	2	c	49	75	8	8	6	-	7-8	7-8	2500
	Scilly (St. Mary's)	1034.8	-4	ESE	2	c	50	65	8	8	6	-	7-8	9+	2500
	Guernsey	1034.2	-6	E'S	1	z	52	65	6	2	7	-	7-8	7-8	4000
6	Pembroke	1035.2	0	SE'S	3	c	49	65	8	5	-	-	10	10	2500
7	Holyhead	1034.2	-2	SSE	2	c	50	75	8	5	2	-	9	10	2500
	Chester (Sealand)	1035.0	-2	SSE	1	z	50	75	6	5	-	-	10	10	4000
8	Manchester	1035.4	-2	S'W	1	z	46	75	5	5	-	-	10	10	4000
10	Spurn Head	1035.3	+2	-	0	m	47	75	4	-	-	8	0	4-6	-
	Catterick	1034.3	-6	SSE	1	z	40	97	6	5	-	-	[illegible]	10	4000
	Tynemouth	1033.1	-4	SW	2	bcf	50	75	3	8	-	-	4-6	4-6	2500
11	St. Abbs Head	1030.9	+6	SW	4	c	48	75	8	4	4	7	2-3	7-8	2500
	Leuchars	1030.5	-10	W	1	z	50	85	6	5	7	6	2-3	7-8	4000
12	Renfrew (Abbots I.)	1031.0	-10	SW'S	4	z	51	85	6	5	-	8	9	9+	1500
	Eskdalemuir	1032.5	-6	SSW	3	c	45	85	6	5	-	-	9+	9+	1500
	Point of Ayre	1033.2	-4	SW'S	2	c	50	75	8	8	6	-	7-8	9+	4000
13A	Tiree	1026.3	-10	SW'S	6	c	51	85	7	5	7	-	4-6	7-8	1500
13B	Stornoway	1022.7	-16	SSW	8	c/pr	52	85	7	8	7	-	9	9+	2500
15	Dalwhinnie	1029.0	-14	SW	4	c	47	85	6	4	6	-	2-3	9+	1500
	Aberdeen	1028.5	-8	SW	1	c	51	75	7	5	-	2	1	7-8	5700
	Wick	1025.3	-6	SSW	4	c	50	92	9	5	7	2	4-6	9	2500
16	Lerwick	1022.1	-8	SSW	5	c/d	50	92	7	8	2	-	7-8	10	800
17	Blacksod Point	1028.8	-14	S	6	c	51	97	8	9	-	-	9+	9+	450
18	Malin Head	1029.2	-10	SSW	4	c	61	75	8	5	4	4	2-3	7-8	4000
	Aldergrove	1032.3	-10	S	3	c	44	75	8	5	-	1	9	9	4000
19	Birr Castle	1032.9	-8	SSE	1	c	50	65	7	5	-	-	9+	9+	2500
20	Valentia Obsy. †	1032.3	-10	S	5	c/pr	51	85	8	5	-	-	9+	9+	2500
	Roches Point	1033.7	-6	SW	3	c	51	75	8	5	-	-	9+	9+	2500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1036.1	0	-	0	of	44	92	3	5	-	-	10	10	2500	1	*
Croydon	1037.5	-2	-	0	of	43	97	2	5	-	-	10	10	1500	1	*
S. Farnborough	1036.9	0	-	0	m	43	92	4	5	-	-	9+	9+	4000	1	*
Boscombe Down	1035.9	+2	SE'E	1	z	43	75	6	5	-	-	9+	9+	2500		*
Calshot (Soton.)	1035.3	0	NE'N	2	z	47	75	6	5	3	-	4-6	9	4000	1	2
Lympne	1035.9	+4	N	2	c	42	65	6	5	-	-	7-8	7-8	7200	1	§ 1
Manston	1035.9	+2	N	2	c	44	73	7	5	-	-	9+	9+	4000	1	*
Shoeburyness	1036.0	+6	NE	1	c	45	85	8	3	-	-	9+	9+	4000	1	*
Felixstowe	1035.3	+2	NE	1	c	45	65	7	5	-	-	9+	9+	4000	1	1
Gorleston	1035.9	0	-	0	c	46	75	6	5	-	-	9+	9+	2500	0	1
Mildenhall	1035.8	-2	-	0	cf+	42	97	3	5	-	-	9+	9+	4000	1	*
Cranwell	1035.1	-4	W	3	z	39	85	5	5	-	-	4-6	4-6	4000	0	*
Birmingham	1035.6	0	SSW	2	f+	40	75	3	-	-	-	0	0	-	1	*
Upper Heyford	1036.2	+4	-	0	z	41	75	6	5	-	-	7-8	7-8	5700	1	*
Ross-on-Wye	1035.0	-4	S	1	bf+	39	85	3	-	-	-	0	0	-	1	*
Hartland Point	1034.4	-4	E	2	bc	45	65	8	4	-	-	2-3	2-3	2500	0	1
Bristol	1035.2	-2	S'E	2	z	43	75	5	-	3	-	0	2-3	-	1	*
Portland Bill	1034.6	-4	SE	3	c	49	85	8	5	2	-	4-6	9	4000	1	3
Plymouth	1034.9	0	E'N	1	z	44	75	5	5	-	-	2-3	2-3	4000	0	1
The Lizard	1034.6	-4	E	2	bc	46	85	8	8	-	-	2-3	2-3	2500	0	1
Scilly (St. Mary's)	1033.7	-4	SE	3	bc	48	75	8	8	3	-	2-3	4-6	2500	1	1
Guernsey	1034.4	+4	ESE	1	bc	49	65	7	2	-	-	4-6	4-6	4000	0	2
Pembroke	1033.6	-4	S'W	4	c	49	65	7	8	-	-	9+	9+	1500	1	1
Holyhead	1032.5	-10	S	4	c	50	75	7	5	-	-	10	10	4000	1	2
Chester (Sealand)	1034.3	-4	S'E	1	m	47	75	4	5	-	-	10	10	4000	1	*
Manchester	1034.2	-2	S'W	3	m	46	75	4	5	-	-	10	10	4000	1	*
Spurn Head	1034.6	-2	SW	3	m	45	85	4	-	3	-	0	7-8	-	1	2
Catterick	1033.3	-8	S'E	1	f	42	97	3	-	-	-	10	10	<150	1	*
Tynemouth	1032.3	-2	W	3	cf	45	85	3	8	-	-	7-8	7-8	2500	1	1
St. Abbs Head	1029.2	-8	WSW	4	bc	45	92	7	2	6	-	2-3	4-6	2500	0	3
Leuchars	1029.0	-6	S	4	z	46	85	6	5	3	-	2-3	9	4000	1	*
Renfrew (Abbots I.)	1029.4	-10	SSW	3	z	49	85	6	5	-	-	9+	9+	1500	1	*
Eskdalemuir	1030.8	-8	S'E	2	m/d	43	92	4	5	-	-	10	10	450	1	*
Point of Ayre	1031.5	-8	SWW	4	c	49	75	8	5	6	-	7-8	9+	4000	0	2
Tiree	1023.6	-12	SSW	5	c	51	85	7	5	-	-	9+	9+	2500	0	4
Stornoway	1019.4	-16	SSW	8	ir_o	51	85	7	8	7	-	9	10	2500	1	4
Dalwhinnie	1027.7	-14	S	5	ir_o	45	85	6	4	6	-	7-8	7-8	1500	1	*
Aberdeen	1027.0	-6	SW	3	bc	47	85	6	5	-	-	4-6	4-6	4000	0	1
Wick	1023.0	-2	SSW	5	c	49	85	7	5	7	1	4-6	7-8	1500	1	3
Lerwick	1019.2	-18	S'W	6	c	51	85	8	8	7	-	7-8	9+	800	1	*
Blacksod Point	1025.8	-12	S	6	ir	50	97	6	6	-	-	10	10	<150	1	4
Malin Head	1026.0	-20	S'W	5	bc	48	75	8	4	-	4	2-3	4-6	4000	0	3
Aldergrove	1029.6	-2	S'E	3	c	46	75	7	5	-	-	9+	9+	4000	1	*
Birr Castle	1031.2	-6	SSE	2	c	47	75	7	5	-	-	9	9	2500	1	*
Valentia Obsy. †	1029.6	-18	S'E	5	c/d	49	85	8	5	-	-	9	9	1500	1	2
Roches Point	1032.0	-10	SSW	4	c	50	75	8	5	-	-	9+	9+	2500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—13h. 21st (37)	13h.—18h. 21st (38)	18h. 21st to 1h. 22nd (39)	1h.—7h. 22nd (40)
London (Kew)	cff	off	ofbcffx	offx
Croydon	cf	cf	cfbfwcf	cfbmwcm
S. Farnborough	fmc	cmfmfm	cmf bwF	bFfxfbcc
Boscombe Down	cmbcm	cmo	cmobmo	bmoxcmxbcm
Calshot (Soton.)	cmbcbm	bcem	bmfm	bmbcm,cm
Lympne	cmo	czbc	czoc	c
Manston	ccmzc	ccz	ccmoczo	czocmo
Shoeburyness	cm	cmcv		ccm
Felixstowe	cmze	bec	cmo	cmo
Gorleston	bccmbc	bccz	czozo	czoc
Mildenhall	fmcff	cf	cfbmo	bcmobmx
Cranwell	dfcm	cmbcm	bcmoom	bbcm
Birmingham	bc	bcbz	fb	bbc
Upper Heyford	cmcfcm	ccz	bzobmbcfx	bcfcfm
Ross-on-Wye	cmbcmbm	bcfcbm	bfcf	cfbmx
Hartland Point	c	cbc	bcb	bcbc
Bristol	bmfez	bzbcz	bcczobc	bbczoc,b
Portland Bill	c	c	c	c
Plymouth	bmzb	xbz	bzo cmbmw	b,cmcmow
The Lizard	bcc	bccbc	bc	bcc
Scilly (St. Mary's)	cbcc	cbc.	bcc	cbcc
Guernsey	bcz	czbc	bcc	c
Pembroke	c	c	c	cq
Holyhead	c	c	c	c
Chester (Sealand)	cmmo	cz cz	cmmow	c,b,cmow
Manchester	cffz	czz	cm, bmcm	bmo,cmo
Spurn Head	bcff	cfmw	bczow	bcewz
Catterick	cwcm	cmfof	fcmobc	bcccmo
Tynemouth	cbcff	bccff	cff	c
St. Abbs Head	bcc	cbc	c	bcq
Leuchars	bcmjwoj	cmo	cmoc	obcc
Renfrew (Abbots I.)	cmidoj	cmo	cmozoc	czoiromo
Eskdalemuir	bcfcmo	cidom	c	ceroro
Point of Ayre	c	c	c	c
Tiree	c	c	c	corr
Stornoway	ciro	ciro	cpr	cRR
Dalwhinnie	cir	cir		crr
Aberdeen	bc	bcwz	bcwc	cqzoc
Wick	cpoc	c	cq	cproq
Lerwick	cirid	ciropr	cpr	crrbm
Blacksod Point	irocq	ircq	cq	iRq
Malin Head	c	c	c	ciroc
Aldergrove	do moc	cbcc	c	c
Birr Castle	c	c	bcc	
Valentia Obsy. †	cidoproc	cidoc	dododd	ddcirroro
Roches Point	c	c	c	iro

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.

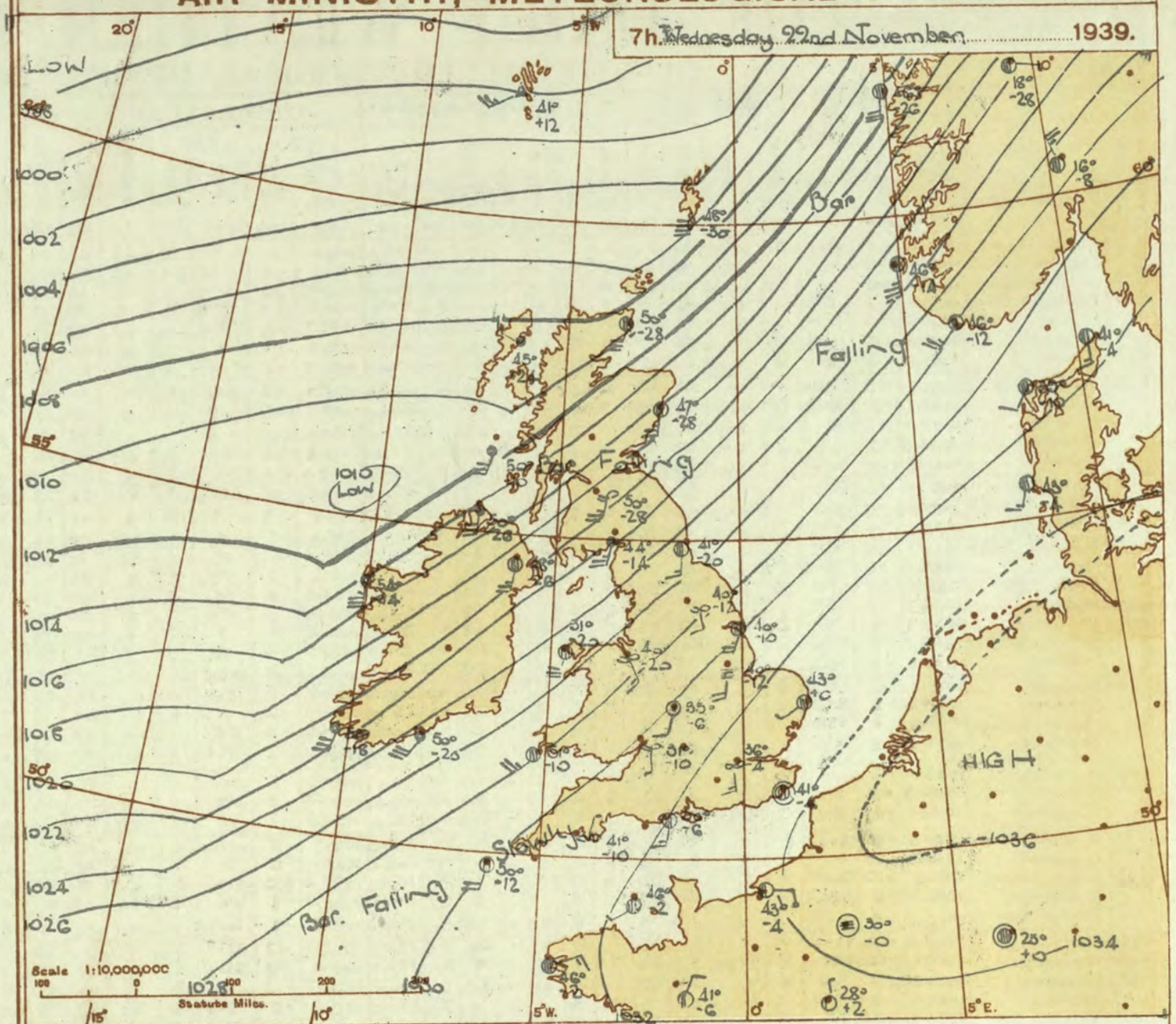
COLUMN 29.—STATE OF GROUND.

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 22nd November 1939.



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 November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light or moderate south wind; cloudy, brighter later except for high clouds; rather cold; ground frost at night.
4 W. Midlands ... 5 S.W. England	Moderate or fresh south to southwest winds; cloudy, occasional slight rain locally later; milder.
6 South Wales ... 7 North Wales ... 8 N.W. England ▼	Fresh or strong southwest wind, veering somewhat and moderating; cloudy or dull, rain at times; mild.
9 N. Midlands ... 10 N.E. England	As 4 - 5.
11 S.E. Scotland ▼ 12 S.W. Scotland & Isle of Man. ▼ 13 A. W. Scotld. ▼ B.N.W.Scotland. ▼ 14 Mid Scotland	As 6 - 8.
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.

Pressure is high over Central Europe, while a secondary off Northwest Ireland is moving northeast. Weather will be unsettled in the West and North, but fair in the Southeast.

FURTHER OUTLOOK.

Unsettled in the North and West, fair in the Southeast.

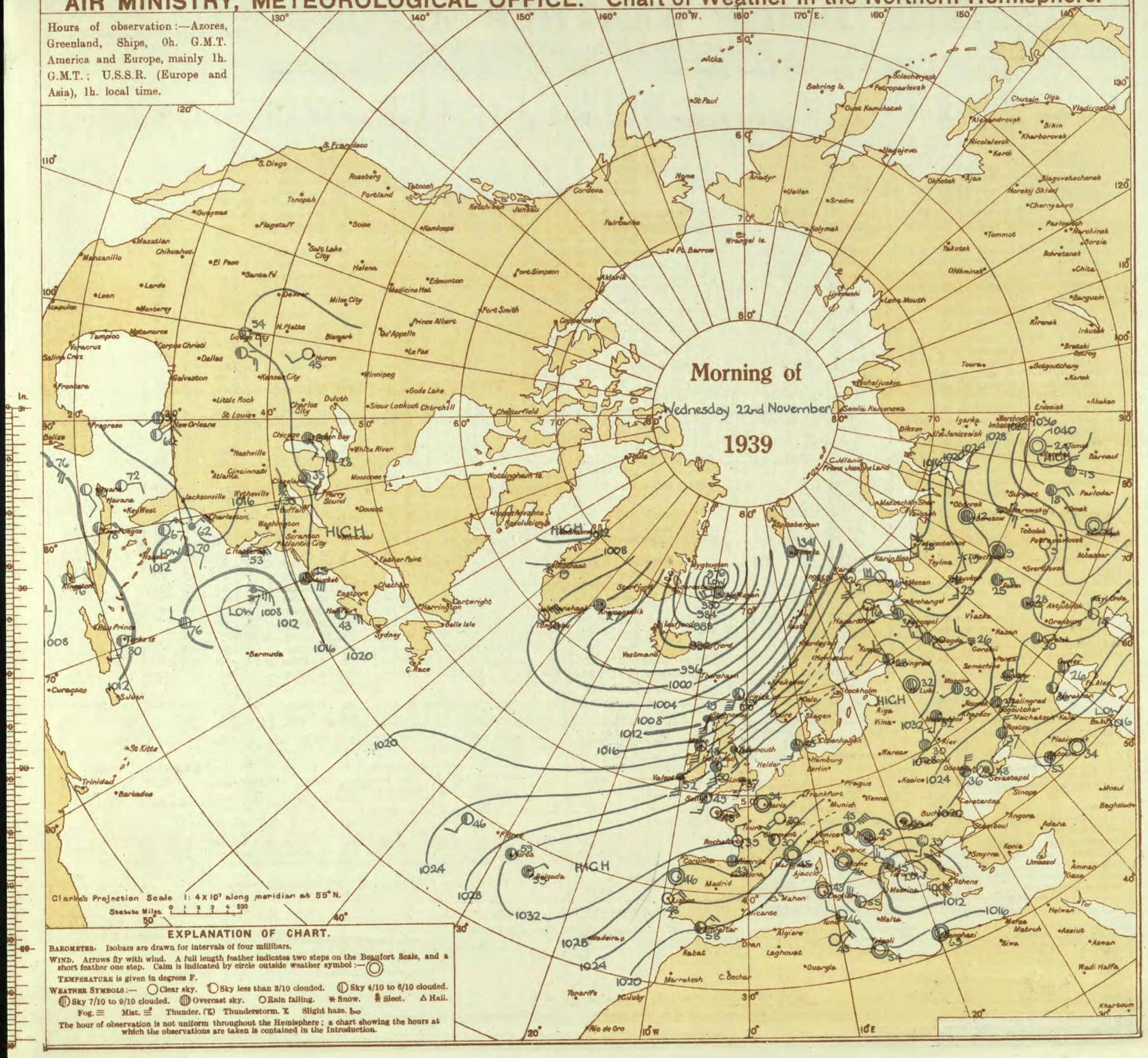
▼ South Cone hoisted at 1435 on 21st in districts 13B, 15 and 16 and at 0520 on 22nd in districts 8, 11, 12, 13A, 17 and 18.

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

Forecasts issued at 0930 G.M.T.

H.M.S.O. Press, Cornwall House. G.472/3777. Wt. 8109. D.4626. Gp. 249. 24300. 11/39

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 22nd November 1939.

No. 28489.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1035·2	+2	SW'S	1	cf	37	97	3	5	-	-	9+	9+	4000
	S. Farnborough	226	1035·2	-2	-	0	bF	36	97	1	-	-	-	0	0	-
	Boscombe Down	417	1034·8	-6	SE	2	Zo	37	85	5	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1034·8	-2	-	0	m	48	92	4	-	-	4	0	0	-
	Lympne ...	346	1034·8	-2	N'W	2	c	44	65	8	5	-	-	9+	9+	4000
	Manston ...	154	1035·1	-2	N'W	1	Zo	45	75	6	5	-	-	10	10	4000
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1034·5	-4	NNW	1	Zo	44	75	6	5	-	-	9+	9+	4000
	Gorleston ...	5	1034·9	-4	W	1	c	41	75	6	5	-	-	10	10	2500
	Mildenhall ...	19	1034·9	-4	S	2	Zo	38	85	5	-	3	-	0	4-6	-
	Cranwell ...	240	1033·7	-6	S'W	3	m	36	85	4	5	-	-	9	9	4000
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1035·0	-2	-	0	cf+	34	97	3	-	3	-	0	7-8	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1032·5	-12	S	3	b	41	75	8	-	-	-	0	0	-
	Bristol ...	209	1033·9	-10	S'E	3	b	41	75	6	5	-	-	1	1	4000
	Portland Bill ...	32	1034·0	-4	SE	3	c	50	85	8	5	-	-	10	10	4000
	Plymouth ...	82	1033·4	-10	-	0	m	40	92	4	-	-	-	0	0	-
	The Lizard ...	240	1033·3	-6	SE	2	bc	48	75	8	4	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	1032·8	-2	S'W	3	c	49	65	8	5	-	-	9+	9+	2500
	Guernsey ...	175	1034·3	0	-	0	c	43	85	7	7	1	-	7-8	9	4000
6	Pembroke ...	142	1030·9	-14	SW'W	4	c	50	65	8	8	-	-	10	10	2500
7	Holyhead ...	26	1029·4	-14	S	5	c	50	75	8	5	2	-	9	10	1500
	Chester (Sealand)	16	1032·3	-14	SE'S	2	Zo	39	85	5	8	-	-	10	10	4000
8	Manchester ...	70	1032·1	-18	SE	2	m	36	85	4	5	-	-	7-8	7-8	4000
10	Spurn Head ...	29	1033·6	-4	SSW	3	b	39	85	6	-	-	-	0	0	-
	Catterick ...	175	1030·7	-14	S'W	3	c	43	75	7	8	3	-	4-6	7-8	2500
	Tynemouth ...	108	1029·5	-10	S	3	cf	44	75	5	8	-	-	9+	9+	2500
11	St. Abbs Head	280	1026·0	-22	S	3	c	45	85	8	8	6	-	7-8	10	2500
	Leuchars ...	36	1024·2	-22	SW	4	c	46	85	7	5	-	-	9+	9+	4000
12	Renfrew (Abbots I.)	19	1024·9	-22	SSW	5	c	48	75	8	5	2	-	7-8	9	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1028·5	-10	SW'W	4	c	49	75	8	8	1	-	9	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1011·5	-36	S	8	rr	49	97	6	5	2	-	2-3	9	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1015·6	-32	SSW	7	cq	49	95	7	5	7	-	7-8	9+	1500
16	Lerwick ...	156	1013·9	-40	S'W	8	c/pr	49	85	7	8	7	-	7-8	9	800
17	Blacksod Point	18	1019·3	-20	S	7	cq	53	92	7	9	-	-	10	10	450
18	Malin Head ...	84	1019·5	-32	S	6	c	48	75	8	8	-	-	9	9	2500
	Aldergrove ...	268	1025·2	-22	S	4	c	46	75	7	5	-	-	10	10	1500
19	Birr Castle ...	173	1025·9	-20	SE	4	c	47	85	8	5	-	-	9	9	2500
20	Valentia Obsy.	30	1025·8	-22	S	5	dd	52	97	6	5	-	-	10	10	800
	Roches Point	22	1028·7	-18	SSW	5	c	51	85	8	5	-	-	9	9	2500

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1033·4	-6	-	0	F	33	97	1	-	-	-	10	10	<150	1	*
	Croydon ...	1033·4	-4	S'E	3	Zo	36	85	6	5	-	-	9	9	4000	1	*
	S. Farnborough	1033·1	-6	SE'S	2	cf-	35	97	3	5	3	-	4-6	7-8	4000	1	*
	Boscombe Down	1031·8	-18	SSE	3	Zo	*	85	5	5	-	-	7-8	7-8	5700	1	*
	Calshot (Sthmtn.)	1032·8	-6	ENE	1	m	42	92	4	5	-	-	9+	9+	4000	1	2
	Lympne ...	1033·7	-4	-	0	c	41	85	7	5	-	-	9	9	4000	1	§0
	Manston ...	1033·9	-2	-	0	Zo	42	85	5	5	-	-	9+	9+	4000	1	*
2	Shoeburyness ...	1033·5	-6	S'W	2	b	35	92	4	5	-	-	1	1	*	1	*
	Felixstowe ...	1032·7	-18	N'E	1	Zo	43	75	6	5	-	-	9+	9+	4000	1	1
	Gorleston ...	1033·4	0	SW'W	1	c	43	75	6	5	-	-	9+	9+	2500	0	1
	Mildenhall ...	1032·7	-6	S'E	3	m	36	92	4	5	-	-	2-3	2-3	4000	1	*
	Cranwell ...	1030·7	-12	S	4	m	40	75	4	5	3	-	2-3	4-6	2500	0	*
3	Birmingham ...	1031·0	-6	SSW	2	bc	35	85	6	-	-	6	0	4-6	-	1	*
	Upper Heyford	1032·6	-10	-	0	m/f	35	92	4	5	-	-	7-8	7-8	4000	1	*
4	Ross-on-Wye	1031·2	-10	SSE	1	Zo	31	97	5	-	-	2	0	4-6	-	1	*
5	Hartland Point	1029·8	-14	SW	3	c	43	85	8	5	-	-	7-8	7-8	2500	0	2
	Bristol ...	1031·7	-6	SSE	3	bc	42	85	6	5	-	-	2-3	2-3	4000	1	*
	Portland Bill ...	1031·4	-6	SSW	3	c	51	85	8	5	-	-	10	10	4000	1	3
	Plymouth ...	1031·5	-10	NNE	1	Zo	41	92	5	5	-	-	9+	9+	4000	1	1
	The Lizard ...	1031·5	-6	SSW	4	c	49	65	8	8	2	-	7-8	10	2500	0	3
	Scilly (St. Mary's)	1030·3	-12	SSW	4	c	50	65	8	8	7	-	4-6	9+	2500	1	2
	Guernsey ...	1033·2	-2	SW'W	1	c	46	65	7	8	-	-	10	10	2500	0	2
6	Pembroke ...	1028·2	-10	SW'W	5	cq	51	75	8	8	2	-	7-8	9+	1500	1	3
7	Holyhead ...	1025·3	-20	SSW	6	c	51	75	8	5	2	-	4-6	10	2500	1	3
	Chester (Sealand)	1028·4	-20	SE'S	3	Zo	40	85	5	5	-	-	10	10	1500	1	*
8	Manchester ...	1028·7	-18	SSE	3	Zo	41	85	5	5	-	-	10	10	4000	1	*
10	Spurn Head ...	1030·9	-10	SSW	5	c	40	85	6	-	3	-	0	7-8	-	1	3
	Catterick ...	1026·8	-12	SSE	2	Zo	40	85	6	5	-	-	9+	9+	2500	0	*
	Tynemouth ...	1024·8	-20	S	3	c	41	85	6	8	-	-	9	9	1500	1	1
11	St. Abbs Head	1017·6	-54	SW	7	bcq	46	85	8	8	6	-	4-6	4-6	1500	0	4
	Leuchars ...	1018·3	-30	SSW	5	c	49	85	8	5	7	-	7-8	9+	2500	1	*
12	Renfrew (Abbots I.)	1018·2	-28	SSW	5	Zo	50	75	6	5	-	-	10	10	2500	1	*
	Eskdalemuir ...	1021·9	-14	S'W	5	ro	44	97	4	-	2	-	10	10	450	1	
	Point of Ayre...	1022·6	-22	SW'S	5	c	50	85	8	5	1	-	7-8	10	2500	0	3
13A	Tiree	1011·6	-10	SSW	6	RR	50	97	6	-	2	-	10	10	1500	1	5
13B	Stornoway ...	1005·3	-24	WNW	3	ro	45	92	6	5	2	-	9	10	1500	1	2
15	Dalwhinnie ...	1014·1	-22	S	6	rr	44	92	5	6	1	-	4-6	10	1500	1	*
	Aberdeen ...	1015·8	-28	SSW	5	c	47	85	7	5	3	-	7-8	7-8	4000	0	1
	Wick ...	1010·0	-28	SSW	6	c	50	85	7	5	7	-	7-8	9+	1500	1	3
16	Lerwick ...	1005·5	-30	S'W	8	rr	48	92	6	6	2	-	4-6	10	800	1	*
17	Blacksod Point	1014·3	-14	S	7	iR	54	97	7	6	-	-	10	10	220	1	5
18	Malin Head ...	1013·1	-26	S	6	ir	50	92	7	8	-	-	9	9	2500	0	4
	Aldergrove ...	1019·5	-26	S'W	5	c	48	85	7	5	-	-	10	10	1500	1	*
19	Birr Castle ...																*
20	Valentia Obsy.	1021·6	-18	S'W	6	ro	53	97	6	5	-	-	10	10	800	1	4
	Roches Point	1024·3	-20	SW'S	6	ir	52	97	7	6	2	-	7-8	10	800	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 21st Hrs. (36)
1	London (Kew)	46	32	26	-	-	0·0
	Croydon ...	44	34	31	-	-	0·0
	S. Farnborough	45	29	25	-	-	0·0
	Boscombe Down	49	34	31	-	Tr	2·2
	Calshot (Sthmtn.)	51	40	31	-	-	4·0
	Lympne ...	46	40	39	-	-	0·0
	Manston ...	48	42	40	-	-	0·2
2	Shoeburyness ...	48	34	30	-	-	0·0
	Felixstowe ...	48	41	40	-	-	2·6
	Gorleston ...	48	41	40	-	-	*
	Mildenhall ...	45	33	26	-	Tr	0·0
	Cranwell ...	47	33	30	-	-	0·5
3	Birmingham ...	47	34	26	*	-	2·7
	Upper Heyford	48	32	20	-	-	*
4	Ross-on-Wye	46	31	23	-	-	2·6
5	Hartland Point	48	41	37	-	-	0·0
	Bristol ...	47	37	29	-	-	2·7
	Portland Bill ...	52	45	*	-	-	*
	Plymouth ...	53	39	33	-	-	7·1
	The Lizard ...	52	44	*	-	-	2·8
	Scilly (St. Mary's)	53	47	*	-	-	4·6
	Guernsey ...	52	42	32	-	-	1·4
6	Pembroke ...	50	48	*	-	-	0·0
7	Holyhead ...	51	49	47	-	-	0·0
	Chester (Sealand)	50	36	31	-	-	0·0
8	Manchester ...	47	35	28	-	-	0·0
10	Spurn Head ...	47	37	*	Tr	Tr	3·4
	Catterick ...	42	35	33	-	-	0·0
	Tynemouth ...	50	41	39	-	-	*
11	St. Abbs Head	48	44	*	-	-	*
	Leuchars ...	51	45	42	-	-	1·5
12	Renfrew (Abbots I.)	51	46	32	0·1	0·1	1·3
	Eskdalemuir ...	46	42	41	Tr	1	0·0
	Point of Ayre...	50	48		-	-	0·0
13A	Tiree	53	49	47	-	7	0·2
13B	Stornoway ...	52	43	*	0·3	15	0·2
15	Dalwhinnie ...	48	44	37	0·1	1	1·5
	Aberdeen ...	52	45	41	-	-	1·5
	Wick ...	49	48	*	Tr	Tr	*
16	Lerwick ...	52	47	*	1	1	*
17	Blacksod Point	54	49	*	0·2	9	*
18	Malin Head ...	52	44	*	-	Tr	3·4
	Aldergrove ...	50	45	41	Tr	-	1·2
19	Birr Castle ...	52			-		
20	Valentia Obsy.	52	49	48	0·4	3	0·5
	Roches Point	52	47	*	-	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. (To-day.)
Kew...	18	off	off	cfbcffx	46	32	26	-	-	0·0	•	•	-
Croydon	217	cf	cf	cfbmwcm	44	34	31	-	-	0·0	•	•	
Greenwich (Royal Observatory)...	149	cf	cfcnf	cfbxcm	45	32	25	-	Tr	0·0	79	91	4
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park) ...	27	•	•	•	42	36	33				91	80	•
Regents Pk. (Botanic Gardens)‡...	168	•	•	•	46	35	25	-	-		84	75	•
Camden Square	110	cf	o	•	46	36	29	-	-	•	•	92	•
Kensington	80	cf	cfbcm	•	46	35	27	-	-		94	81	•
Hampstead Observatory	450	o	of	bc	45	39	31	-	-		•	83	•

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.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 21st November Barom. mb.	Wind Direc.	Wind Force	Weather.	Temp. °F.	7h. G.M.T. 22nd November Barom. mb.	Wind Direc.	Wind Force	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1034·1	NNE	2	bc	46	1034·1	-	0	F	30	46	*	6	*
Brussels														
Berlin														
Zürich														
Rome	1012·5	NE'N	5	c	48	1016·6	NNE	3	c	48	•	•		-

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 23rd November 1939.
No. 28,490

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1030·1	-14	SSW	3	z₀	48	75	5	5	3	-	4-6	9	2500
	Croydon ...	1030·6	-18	S'E	3	c	50	65	6	5	3	1	7-8	7-8	5700
	S. Farnborough	1030·6	-18	S'W	3	z₀	46	75	5	5	-	-	9+	9+	5700
	Boscombe Down	1030·2	-18	S	3	z₀	44	85	6	5	-	-	10	10	4000
	Calshot (Soton.)	1030·9	-12	S'E	3	z₀	50	75	7	5	2	-	7-8	10	4000
	Lympne ...	1032·0	-14	S'W	2	c	49	65	8	1	-	6	Tr	7-8	4000
	Manston ...	1031·7	-18	SSW	3	c	49	65	7	-	-	6	0	7-8	-
2	Shoeburyness ...														
	Felixstowe ...	1030·7	-14	WSW	3	c	48	75	6	-	-	6	0	7-8	-
	Gorleston ...	1030·5	-16	S'W	3	c	48	65	6	5	-	-	9	9	2500
	Mildenhall ...	1029·4	-24	S	3	z₀	47	65	5	5	-	2	4-6	9+	4000
	Cranwell ...	1026·8	-28	SSW	4	z₀	45	75	6	5	7	1	4-6	9+	2500
3	Birmingham	1026·9	-26	SSW	4	c	46	65	7	-	2	-	0	10	-
	Upper Heyford	1029·1	-26	S'W	3	z₀	47	75	6	-	7	-	0	9	-
4	Ross-on-Wye ...	1027·4	-24	SW	4	c	48	65	7	-	2	-	0	10	-
5	Hartland Point	1027·0	-20	WSW	5	c	51	65	8	5	2	-	9	10	2500
	Bristol ...	1029·3	-20	S'W	3	c	49	65	7	5	7	-	7-8	10	4000
	Portland Bill ...	1030·1	-18	SW	4	c	51	85	8	5	-	-	10	10	4000
	Plymouth ...	1029·4	-20	SSW	5	c	51	75	8	5	-	-	10	10	4000
	The Lizard ...	1029·6	-20	S	5	c	50	85	8	8	2	-	9	10	2500
	Scilly (St. Mary's)	1028·3	-18	SSW	5	c	52	75	8	5	-	-	10	10	2500
	Guernsey ...	1031·2	-18	SSW	1	c	48	65	9	8	1	-	7-8	9+	2500
6	Pembroke ...	1025·4	-14	SW'W	7	cq	53	85	7	8	2	-	7-8	10	1500
7	Holyhead ...	1020·8	-26	SSW	6	r₀r₀	51	92	6	6	2	-	7-8	10	800
	Chester (Sealand)	1024·1	-22	SSE	8	c	51	65	8	5	7	-	7-8	10	2500
8	Manchester ...	1024·2	-28	S	4	z₀	46	85	6	5	7	1	9	9+	4000
10	Spurn Head ...	1025·9	-26	S'W	5	m	45	75	4	5	8	-	4-6	9	2500
	Catterick ...	1022·5	-2	SE'S	3	z₀	46	75	6	5	7	-	7-8	9+	1500
	Tynemouth ...	1020·0	-24	S	4	c	45	75	5	8	-	-	9+	9+	1500
11	St. Abbs Head	1014·3	-20	SW	7	ir₀	48	92	8	8	2	-	7-8	9+	1500
	Leuchars ...	1013·3	-22	SW	5	rr	50	92	6	6	-	-	10	10	800
12	Renfrew (Abbots I.)	1013·7	-24	SSW	5	RR	51	92	6	6	-	-	10	10	800
	Eskdalemuir ...	1015·9	-32	SSW	7	RR	47	97	6	6	-	-	10	10	450
	Point of Ayre ...	1017·3	-22	SW'W	6	rr	50	97	7	8	2	-	9	10	1500
13A	Tiree ...														
13B	Stornoway ...	1011·4	+4	SW	3	c/pr	44	85	8	8	7	-	4-6	7-8	2500
15	Dalwhinnie ...	1013·2	0	SW	4	rr	42	85	7	6	1	-	4-6	10	2500
	Aberdeen ...	1012·3	-28	SW	4	c/r	50	85	6	6	2	-	9	10	800
	Wick ...	1011·0	+16	SW	3	d₀d	45	92	8	5	7	-	7-8	9+	2500
16	Lerwick...	1008·4	+34	W'N	5	c/r	44	92	7	6	2	-	4-6	10	800
17	Blacksod Point..	1018·3	+8	W	4	c	48	85	8	9	-	-	9	9	800
18	Malin Head ...	1015·5	+8	NW	3	c	46	92	7	5	-	-	9+	9+	2500
	Aldergrove ...	1016·5	-4	NW'W	3	r₀r₀	47	92	6	6	2	-	9+	10	800
19	Birr Castle ...	1018·0	-14	S	2	ir	54	92	7	6	2	-	7-8	10	1500
20	Valentia Obsy. †	1020·9	+2	NW	3	rr	50	97	6	5	-	-	10	10	450
	Roches Point ...	1021·0	-20	SW'S	6	dr	53	97	6	5	-	-	10	10	450

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. (20)	Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)...	1028·5	-4	SSW	3	z₀	47	75	5	5	-	-	10	10	2500	1	*
Croydon ...	1028·4	-10	S'W	2	m	46	85	4	5	-	-	9+	9+	4000	1	*
S. Farnborough	1028·4	-4	SW'S	3	z₀	47	75	6	5	1	-	10	10	4000	1	*
Boscombe Down	1028·1	-6	SSW	4	z₀	45	75	6	5	-	-	9+	9+	2500	0	*
Calshot (Soton.)	1028·3	-6	SW	3	c	45	75	7	5	-	-	10	10	4000	1	2
Lympne ...	1030·0	-8	SW	2	c	42	85	7	1	-	2	Tr	7-8	4000	1	§ 1
Manston ...	1029·9	-6	S'W	2	z₀	41	85	6	-	7	-	0	9+	-	0	*
Shoeburyness ...	1028·7	-4	S	4	c	46	85	7	5	1	-	4-6	10	4000	1	*
Felixstowe ...																
Gorleston ...	1027·7	-8	S'W	4	c	45	85	6	5	-	-	9+	9+	2500	0	2
Mildenhall ...																*
Cranwell ...	1025·9	-16	S	5	z₀	44	85	5	5	1	-	4-6	10	2500	0	*
Birmingham	1025·9	-20	SSW	4	ir	45	85	6	6	2	-	4-6	10	1500	1	*
Upper Heyford	1026·6	-8	S'W	3	z₀	45	85	6	5	7	-	4-6	10	4000	1	*
Ross-on-Wye ...	1024·9	-12	SSW	4	id	47	75	6	5	2	-	4-6	10	1500	1	*
Hartland Point	1028·5	-14	WSW	5	c	50	85	8	5	2	-	7-8	10	1500	0	3
Bristol ...	1026·6	-14	SW'S	4	c	47	75	7	5	7	-	9+	10	2500	1	*
Portland Bill ...	1028·3	-18	SW	5	c	50	85	7	5	-	-	10	10	4000	1	3
Plymouth ...	1028·6	-14	SSW	5	c	52	75	7	5	-	-	10	10	2500	1	4
The Lizard ...	1027·4	-16	S	5	c	51	85	8	8	2	-	7-8	10	1500	0	3
Scilly (St. Mary's)	1025·6	-8	SW'S	5	c	52	75	7	5	-	-	10	10	1500	1	2
Guernsey ...	1029·8	-4	S	1	bc	45	75	7	8	1	-	4-6	4-6	4000	0	2
Pembroke ...	1021·9	-10	WSW	7	dd	51	97	6	8	2	-	7-8	10	1500	1	4
Holyhead ...	1019·3	0	W	5	RR	49	97	6	6	2	-	9	10	450	1	3
Chester (Sealand)	1020·7	-8	SSW	4	c/r	51	75	6	5	7	-	4-6	10	1500	1	*
Manchester ...	1021·1	-16	S	4	rr	46	92	5	6	2	-	2-3	10	1500	1	*
Spurn Head ...	1022·8	-12	S'W	5	c	45	85	6	5	1	-	9+	10	4000	0	3
Catterick ...	1018·6	-20	SSW	5	ir₀	48	75	6	6	7	-	4-6	10	1500	1	*
Tynemouth ...	1016·6	-14	S	5	c	48	75	6	8	-	-	9+	9+	1500	1	1
St. Abbs Head	1014·0	+4	W	4	c/r	47	85	7	8	2	-	7-8	10	1500	1	3
Leuchars ...	1014·5	+22	W	3	c	45	92	8	8	-	-	9	9	2500	1	*
Renfrew (Abbots I.)	1016·2	+16	W'S	1	c	44	92	8	5	1	-	2-3	7-8	1500	1	*
Eskdalemuir ...	1015·8	+10	W	3	c/r	45	85	7	5	2	-	4-6	10	800	2	*
Point of Ayre ...	1017·7	+16	NW'N	4	c/r	48	85	7	8	1	-	4-6	10	1500	1	3
Tiree ...	1014·7	+4	WSW	2	bc	45	75	8	8	-	-	4-6	4-6	1500	0	3
Stornoway ...	1013·0	+10	WSW	3	c/pr	45	86	7	8	7	-	7-8	9+	2500	1	2
Dalwhinnie ...	1015·0	+20	S	2	bc	38	92	7	8	6	-	2-3	4-6	2500	1	*
Aberdeen ...	1013·7	+14	NW'W	2	bc	42	92	6	-	-	6	0	4-6	-	1	1
Wick ...	1011·8	+4	SSW	2	bc	37	92	8	5	1	-	Tr	2-3	2500	1	1
Lerwick...	1009·6	+6	SW'W	2	c/pr	42	92	8	8	7	-	4-6	7-8	800	1	*
Blacksod Point..	1018·8	+6	W	2	bc	46	75	8	-	-	7	0	4-6	-	1	3
Malin Head ...	1017·1	+8	NW'W	3	bc	47	65	6	6	-	6	2-3	4-6	5700	1	3
Aldergrove ...	1018·6	+14	WSW	2	c	43	92	8	5	7	1	Tr	7-8	2500	1	*
Birr Castle ...	1020·1	+4	S'W	1	c	47	85	7	5	-	-	9	9	2500	1	*
Valentia Obsy. †	1021·2	0	NW'W	2	c	49	75	8	7	-	6	7-8	10	2500	1	2
Roches Point ...	1020·6	+4	W'S	3	ir₀	51	97	8	6	2	-	7-8	10	1500	1	4

PAST 24 HOURS.

Stations	Weather 7h.—13h. 22nd (37)	Weather 13h.—18h. 22nd (38)	Weather 18h. 22nd – 1h. 23rd (39)	Weather 1h.—7h. 23rd (40)
London (Kew)...	bf₀cz₀	cz₀	cm₀cr₀	r₀cr₀cr₀r₀
Croydon ...	cm₀bcm₀	cz₀cm₀	cmm₀m₀	ir₀ir₀m₀
S. Farnborough	cfcm₀	cm₀	cm₀r₀r₀	cid₀d₀d₀
Boscombe Down	cm₀	cm₀	cm₀or₀r₀m₀	odr₀r₀r₀m₀
Calshot (Soton.)	cm₀cm₀	cm₀g		cm₀d₀d₀r
Lympne ...	cbcbbc	bcc	c	cr₀
Manston ...	cm₀bc	bccm₀	cm₀	cm₀cr₀r₀
Shoeburyness ...		bcc₀		cpr₀c
Felixstowe ...	cm₀bbcm₀			cor₀r₀m₀
Gorleston ...	cbcc	c	c	cor₀r₀
Mildenhall ...	cm₀		cm₀r₀r₀	cr₀r₀m₀
Cranwell ...	bcmcm₀	cm₀	ir₀cm₀	cr₀r₀m₀
Birmingham	bcc	cor₀	orir₀r	orr
Upper Heyford	cmz₀	cm₀	cdd₀r₀r₀	cr₀r₀rr₀
Ross-on-Wye ...	bcmcz₀	ceqc	r₀c	cor₀
Hartland Point	c	cr₀	r₀r₀r	rr
Bristol ...	bcc	c	cr₀d₀r₀q	corrRq
Portland Bill ...	c	c	orr	orr
Plymouth ...	cm₀wcz₀	c	crrm₀	crrr₀r₀m₀
The Lizard ...	c	c	prrrc	ciddd
Scilly (St. Mary's)	c	cir₀c	r₀oddo	oddrr
Guernsey ...	c	cbc	bcc	c
Pembroke ...	cq	qddm₀c	crrm₀	crrm₀
Holyhead ...	cr₀r₀m	r₀rrRc	RRr₀r₀c	rr₀r₀c
Chester (Sealand)	cm₀c	cm₀cm₀ir₀	m₀ir₀rrm	rr₀Rrr₀m
Manchester ...	cm₀	cm₀r₀r₀	cm₀r₀r₀	cm₀rrmf
Spurn Head ...	cm	cm	orr	orr
Catterick ...	cm₀	m₀cir₀	om₀ir₀	m₀ir₀om₀
Tynemouth ...	c	cpc	bc	co
St. Abbs Head	cqir₀	irc	c	
Leuchars ...	cm₀ir₀r₀r₀r	rrm₀cr₀c	c,bm₀bcqcw	cbccm₀
Renfrew (Abbots I.)	cm₀rrRr	cm₀rrir₀c	cir₀m₀m₀fef	cfefebcm₀
Eskdalemuir ...	cir₀rRR	RRir₀	ir₀cbc	coFe
Point of Ayre ...	crr	rr	c	c
Tiree ...		bc	bcpr	bccpr
Stornoway ...	crrpr	cPRq	cbcq,prq	bcpr
Dalwhinnie ...	crrRr	cir	*	cir₀
Aberdeen ...	ccr₀	coRr₀	bcbx	bxbccx
Wick ...	rrd₀d	ddbc	bbc	bcd
Lerwick...	crr	cpr	cbccpr	cPRpr
Blacksod Point..	ir	bc	bc	prc
Malin Head ...	cir₀c	ccbc	c	cpr₀c
Aldergrove ...	r₀rr₀r₀m₀	r₀r₀m₀c	cb,cof	om₀cwc
Birr Castle ...	cir	c	c	cid
Valentia Obsy. †		rrdqc	c	cr₀r₀rrr₀r₀
Roches Point ...	dddrdr	rrir₀	idrr₀r₀	r₀r₀

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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

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

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

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

§ Sea disturbance reported from Dungeness.

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

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

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

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

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

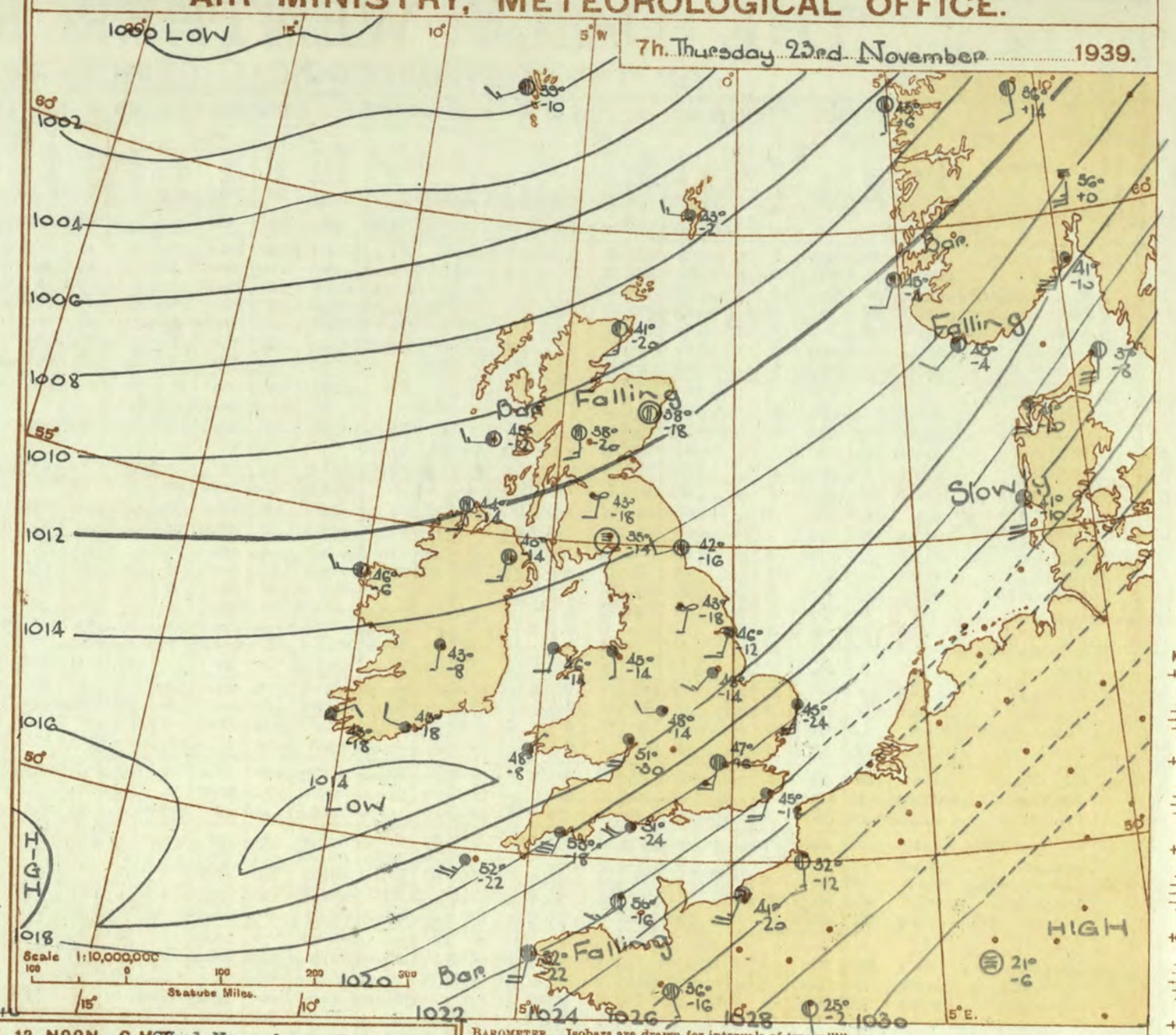
COLUMN 29.—STATE OF GROUND.

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

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

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h. Thursday 23rd November 1939.



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. 23rd November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England	Fresh or strong southwest wind, veering later; rainy at first, probably bright intervals tomorrow; mild.
6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Light variable wind, becoming northwest, backing west fresh locally; rain at first, bright intervals and local showers tomorrow; mild.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands 17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind southwest to west, mainly moderate or light, fresh locally later; occasional rain or showers but fair intervals; local fog; average temperature.

GENERAL INFERENCE.

A complex shallow depression over the British Isles is moving northeast and growing deeper. It will give general rain except in Scotland and North Ireland but a temporary improvement is to be expected behind it.

FURTHER OUTLOOK.

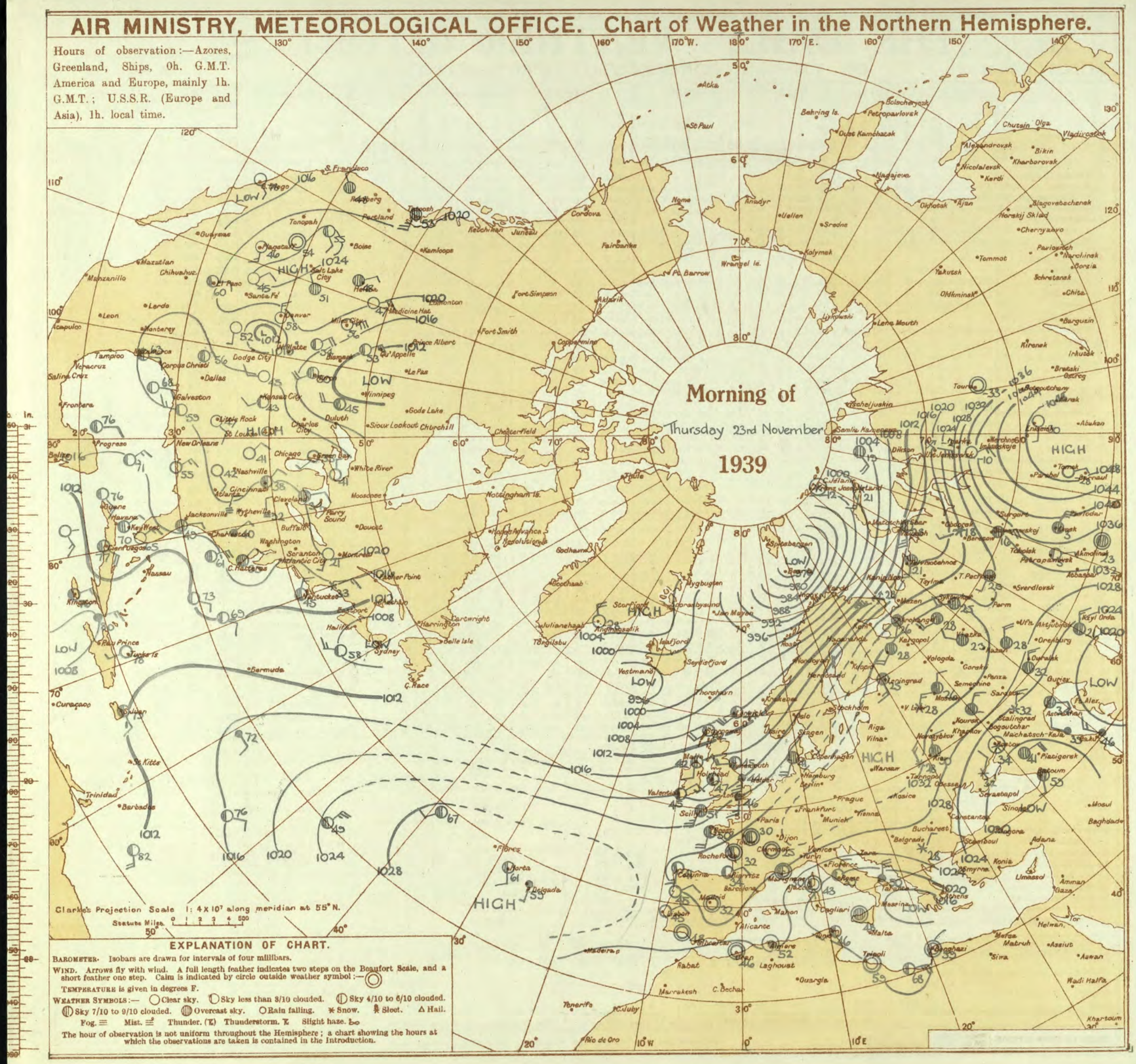
Changeable, with alternating rainy and fairer periods.

Forecasts issued at 1030 G.M.T.

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

H.M.S.O. Press, Cornwall House. G.472/9777. Wt 8109. D 4626. Gp 248. 24300 11/39

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 23rd November 1939.

No. 28,490

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	% Humid. (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Cloud. Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1025·2	-22	S'W	3	ir.	46	75	6	5	2	-	7-8	10	4000
	S. Farnborough	226	1024·7	-18	SSW	4	r.r.	45	85	6	5	-	-	10	10	2500
	Boscombe Down	417	1023·5	-22	SSW	4	r.r.	46	97	5	-	2	-	10	10	450
	Calshot (Sthmtn.)	8														
	Lympne ...	346	1025·9	-18	SW'S	3	c	46	75	8	5	-	7	7-8	10	2500
	Manston ...	154	1025·8	-22	S'W	3	Zo	46	85	6	5	-	-	10	10	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15														
	Gorleston ...	5	1023·3	-22	S	4	c	46	75	6	5	-	-	9+	9+	2500
	Mildenhall ...	19	1022·8	-30	S	4	r.r.	45	85	6	-	2	-	10	10	4000
	Cranwell ...	240	1019·9	-20	SSW	5	c/r	45	92	6	6	-	-	10	10	1500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1022·5	-22	SW	3	r.r.	44	97	6	5	2	-	9	10	450
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1020·3	-16	WSW	5	r.r.	50	97	6	6	-	-	10	10	800
	Bristol ...	209	1022·0	-20	SSW	4	r.r.	49	92	7	5	1	-	7-8	10	1500
	Portland Bill ...	32	1023·6	-12	SW	5	rr	50	92	7	5	-	-	10	10	1500
	Plymouth ...	82	1022·3	-22	SW'S	6	rr	52	97	6	6	-	-	10	10	1500
	The Lizard ...	240	1022·9	-20	SSW	5	c	52	97	8	5	-	-	10	10	1500
	Scilly (St. Mary's)	163	1021·5	-18	SW	5	o	51	97	6	5	-	-	10	10	1500
	Guernsey ...	175	1026·3	-16	SW	2	c	48	75	8	8	-	-	9+	9+	4000
6	Pembroke ...	142	1018·1	-16	W	4	rr	53	97	6	8	2	-	7-8	10	1500
7	Holyhead ...	26	1017·7	-10	WSW	1	c	47	92	8	5	2	-	7-8	10	2500
	Chester (Sealand)	16	1018·1	-14	NNW	1	rr	46	97	4	-	2	-	10	10	800
8	Manchester ...	70	1018·2	-8	WSW	1	r.r.	45	97	5	6	2	-	9	10	800
10	Spurn Head ...	29	1018·4	-14	SSW	5	rr	44	97	6	5	-	-	10	10	2500
	Catterick ...	175	1017·1	-14	-	0	ir.	45	92	6	6	2	-	7-8	10	800
	Tynemouth ...	108	1016·7	-4	W	3	c	45	92	6	8	-	-	7-8	7-8	2500
11	St. Abbs Head	280	1015·5	0	W	2	c	42	85	8	5	1	-	4-6	10	2500
	Leuchars ...	36	1015·2	-4	W	2	c	38	92	7	-	1	7	0	10	-
12	Renfrew (Abbots I.)	19	1016·3	-4	-	0	cf	37	97	3	5	2	-	9	10	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1017·6	-4	NW'N	3	c	47	75	8	8	-	7	2-3	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1010·8	-8	SW	4	bc/pr	42	85	8	8	-	-	4-6	4-6	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1012·2	+2	SSW	3	bc	42	85	8	5	1	1	2-3	4-6	2500
16	Lerwick ...	156	1008·3	-8	WSW	5	c/pr	44	85	8	8	7	-	4-6	7-8	1500
17	Blacksod Point	18	1016·3	-14	W	1	bc	47	85	8	5	-	-	4-6	4-6	1500
18	Malin Head ...	84	1015·0	-16	S'W	2	c	42	85	8	2	-	6	2-3	7-8	5700
	Aldergrove ...	268	1017·2	-10	SSW	2	c/f	39	97	6	-	1	-	0	10	-
19	Birr Castle ...	173	1018·7	-10	S	1	c	43	97	7	5	-	-	10	10	2500
20	Valentia Obsy.	30	1018·7	-18	NE'E	2	c	45	92	8	5	1	-	2-3	10	2500
	Roches Point	22	1018·6	-16	W	3	r.r.	47	97	8	6	2	-	7-8	10	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force. 0–12 (18)	Weather. (19)	Temp. °F. (20)	% Humid. (21)	Visibility. 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount. Low 0–10 (26)	Cloud. Amount. Total 0–10 (27)	Cloud. Height of Base. (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
London (Kew)	1019·6	-20	SW'S	4	r.r.	47	92	6	6	2	-	7-8	10	1500	1	*
Croydon ...	1020·7	-16	S'W	4	c/r	47	92	6	5	-	-	10	10	1500	1	*
S. Farnborough	1019·8	-18	SSW	4	d.d.	47	97	5	5	-	-	10	10	800	1	*
Boscombe Down	1018·7	-22	S'W	4	r.r.	48	97	6	-	2	-	10	10	800	1	*
Calshot (Sthmtn.)	1020·4	-18	SSW	5	rr	50	97	5	6	2	-	7-8	10	1500	1	2
Lympne ...	1022·1	-18	SSW	4	ir.	45	85	7	5	7	-	7-8	10	2500	1	§3
Manston ...	1021·9	-14	SSW	4	r.r.	46	85	6	5	2	-	2-3	10	4000	1	*
Shoeburyness ...	1021·1	-16	N'E	4	pr	47	85	5	5	-	-	10	10	800	1	*
Felixstowe ...	1020·4	-16	SW'S	4	r.r.	46	85	6	-	2	-	10	10	1500	1	3
Gorleston ...	1018·6	-24	S	5	r.r.	45	92	6	6	-	-	10	10	1500	1	3
Mildenhall ...	1017·9	-22	S'W	4	r.r.	47	92	6	6	2	-	7-8	10	1500	1	*
Cranwell ...	1015·3	-14	SW'S	3	r.r.	48	97	6	6	-	-	10	10	1500	1	*
Birmingham ...	1015·2	-14	W	2	rr	48	97	4	6	-	-	10	10	800	1	*
Upper Heyford	1017·6	-24	S'W	4	r.r.	48	97	6	6	2	-	9	10	450	1	*
Ross-on-Wye	1015·1	-30	S'W	4	i.d.	51	92	7	6	-	-	10	10	1500	1	*
Hartland Point	1014·2	-22	WSW	5	rr	51	97	6	-	2	-	10	10	800	0	3
Bristol ...	1017·2	-18	SSW	4	ir	51	92	7	5	2	-	9	10	1500	1	*
Portland Bill ...	1019·4	-24	SW	5	rr	51	92	7	5	-	-	10	10	1500	1	4
Plymouth ...	1017·8	-18	SSW	6	r.r.	53	97	6	6	-	-	10	10	1500	1	4
The Lizard ...	1017·9	-30	SW	6	JD	52	97	7	5	-	-	10	10	1500	1	3
Scilly (St. Mary's)	1016·3	-22	SW'S	5	rr	52	97	6	5	-	-	10	10	1500	1	3
Guernsey ...	1021·7	-16	SW'S	3	c	50	85	7	8	-	-	10	10	2500	0	2
Pembroke ...	1014·3	-8	NE'N	1	rr	48	97	7	8	-	-	9+	9+	1500	1	2
Holyhead ...	1014·2	-14	SSW	2	r.r.	46	92	6	6	2	-	9	10	800	1	1
Chester (Sealand)	1015·3	-14	SSE	1	r.r.	45	97	4	5	-	-	10	10	450	1	*
Manchester ...	1014·8	-18	S'W	2	rf	44	97	3	6	2	-	9	10	800	1	*
Spurn Head ...	1014·7	-12	SSW	3	rr	46	97	6	5	-	-	10	10	1500	2	2
Catterick ...	1014·0	-18	S'W	1	Zo	43	97	5	5	-	-	10	10	2500	1	*
Tynemouth ...	1014·3	-16	WSW	2	o	42	92	6	5	-	-	10	10	1500	1	1
St. Abbs Head	1011·9	-14	W	4	c	41	85	8	4	6	-	4-6	7-8	2500	0	2
Leuchars ...	1011·5	-22	WSW	2	Zo	38	97	6	5	3	-	2-3	4-6	4000	1	*
Renfrew (Abbots I.)	1012·7	-18	S'W	2	Zo	43	85	6	5	7	-	7-8	9+	2500	1	*
Eskdalemuir ...	1013·7	-14	-	0	F	35	97	1	-	-	-	10	10	<150	1	*
Point of Ayre...	1013·6	-16	WSW	2	c	39	92	8	5	1	-	2-3	10	2500	1	1
Tiree	1009·1	-12	W'S	3	c/pr	45	85	7	8	-	-	7-8	7-8	1500	1	3
Stornoway ...	1008·0	-14	SW	4	bc	43	85	8	8	-	-	4-6	4-6	2500	1	1
Dalwhinnie ...	1010·7	-20	S	3	c	38	85	6	6	2	-	4-6	10	2500	0	*
Aberdeen ...	1010·7	-18	-	0	c	38	85	6	5	7	-	2-3	7-8	4000	1	1
Wick ...	1008·2	-20	SSW	3	c	41	85	8	5	7	8	4-6	9	1500	1	2
Lerwick ...	1007·8	-2	W'N	3	pr	43	85	8	8	7	-	7-8	9	800	1	*
Blacksod Point	1012·8	-6	W	3	c	46	85	7	9	-	-	10	10	800	1	3
Malin Head ...	1011·2	-14	S	2	c	44	85	7	8	-	-	7-8	7-8	4000	0	3
Aldergrove ...	1013·5	-14	S'W	3	c	40	92	7	-	7	-	0	10	-	1	*
Birr Castle ...	1014·6	-8	S	1	id	43	97	7	5	-	-	10	10	2500	1	*
Valentia Obsy.	1015·1	-18	NE'E	2	r.r.	45	97	7	6	2	-	10	10	1500	1	3
Roches Point	1014·9	-18	NW	2	r.r.	45	92	8	6	2	-	7-8	10	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 22nd Hrs. (36)
London (Kew)	49	46	42	-	1	2·3
Croydon ...	50	45	43	-	Tr	3·8
S. Farnborough	48	45	42	-	1	0·4
Boscombe Down	47	45	42	-	3	0·0
Calshot (Sthmtn.)	50	48	46	-	3	0·0
Lympne ...	50	42	37	-	Tr	6·3
Manston ...	49	40	34	-	0·2	5·4
Shoeburyness ...	49	46	41	-	0·4	4·4
Felixstowe ...	50	45	41		1	3·9
Gorleston ...	49	43	42	-	2	*
Mildenhall ...		44	39		3	1·0
Cranwell ...	46	44	41	-	5	0·3
Birmingham ...	46	43	41	0·3	7	0·1
Upper Heyford	47	43	*	-	3	*
Ross-on-Wye	49	46	43	Tr	0·3	1·5
Hartland Point	51	49	47	Tr	17	0·0
Bristol ...	49	46	44	-	6	0·2
Portland Bill ...	51	48	*	-	4	*
Plymouth ...	52	50	48	-	11	0·0
The Lizard ...	51	50	*	-	3	0·0
Scilly (St. Mary's)	52	50	*	Tr	7	0·0
Guernsey ...	49	45	36	-	-	0·0
Pembroke ...	55	46	*	2	19	0·0
Holyhead ...	54	45	43	13	9	0·0
Chester (Sealand)	51	45	43	1	9	0·0
Manchester ...	47	43	41	2	9	0·0
Spurn Head ...	45	43	*	-	11	0·0
Catterick ...	48	42	40	0·1	0·3	0·0
Tynemouth ...	48	42	38	0·4	-	0·0
St. Abbs Head	49	40	*	1	-	*
Leuchars ...	51	37	30	3	-	0·0
Renfrew (Abbots I.)	50	34	39	11	0·1	0·0
Eskdalemuir ...	48	31	29	29	Tr	0·0
Point of Ayre...	53	38	*	7	-	0·0
Tiree	50	41	37	6	3	1·4
Stornoway ...	47	41	*	2	12	2·7
Dalwhinnie ...	46	33	25	10	0·1	0·0
Aberdeen ...	50	38	30	3	-	0·0
Wick ...	50	36	*	6	-	*
Lerwick ...	51	41	*	4	2	0·0
Blacksod Point	55	44	*	5	1	*
Malin Head ...	50	39	*	6	1	0·0
Aldergrove ...	50	38	30	6	-	0·0
Birr Castle ...	54	42	35	4	Tr	0·0
Valentia Obsy.	56	44	43	5	4	0·0
Roches Point	54	45	*	8	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.
KEW...	18	bf×czo	czo	cm.r.r.	49	46	42	-	1	2·3	•	•	6
CROYDON	217	cm.bcm.	czo.cmo	cm.f.ir.m.	50	45	43	-	Tr	3·8	•	•	
GREENWICH (Royal Observatory)...	149	cb	bc	c.d.r	50	45	39	-	1	3·7	72	93	6
CITY (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
WESTMINSTER (St. James' Park) ...	27	•	•	•	51	46	43	2			64	90	•
REGENTS PK. (Botanic Gardens)‡...	168	•	•	•	50	43	35	-	3		62	92	•
CAMDEN SQUARE	110	c	or	•	49	39	33	-	3	•	•	95	•
KENSINGTON	80	c	cr	•	50	45	38	-	2		74	95	•
HAMPSTEAD OBSERVATORY	450	bc	c	corr	48	43	41	-	3		•	99	•

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.
0·8	9h 22nd	<0·1	0-7h 23rd

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 22nd November. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. 23rd November. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
PARIS	1031·7	-	0	Zo	34	1027·9	-	0	m	27	41	27	-	-
BRUSSELS														
BERLIN														
ZÜRICH														
ROME	1018·0	NNE	3	bc	46	1024·7	NE	b	3	37	•	•	-	-

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

EXPLANATION OF FIGURES, LETTERS, etc.

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

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

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

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

COLUMNS 8, 22 —Code for surface visibility.

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

COLUMN 30 —Code for State of Sea.

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

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday 24th November 1939.

No. 28,491

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

District	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low. (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)...	1014.7	-20	SSW	4	roro	49	45	5	6	-	-	10	10	800
	Croydon	1016.3	-12	S'W	4	roro	48	97	6	6	2	-	9	10	800
	S. Farnborough	1015.8	-22	SSW	4	dodo	50	92	6	6	2	-	9	10	800
	Boscombe Down	1014.7	-22	SSW	4	rr	50	97	6	6	2	-	9+	10	450
	Calshot (Soton.)	1016.2		SSW	6	roro	51		6	6	-	-	10	10	800
	Lympne ...	1018.7	-24	SSW	5	c	47	85	7	5	7	-	7-8	10	800
	Manston ...	1018.0	-26	SSW	5	roro	47	85	6	6	2	-	7-8	10	800
2	Shoeburyness ...	1017.3	-20	N	5	roro	48	92	5	5	-	-	10	10	1500
	Felixstowe ...	1016.5	-22	SSW	5	roro	47	97	6	6	2	-	10	10	800
	Gorleston ...	1015.0	-20	S	5	roro	47	92	6	6	-	-	10	10	1500
	Mildenhall ...	1013.7	-26	S'W	5	roro	50	92	5	6	2	-	9	10	800
	Cranwell ...	1011.6	-18	NW	2	roro	46	97	4	6	2	-	9	10	800
3	Birmingham	1011.8	-10	NNW	2	rf	44	97	3	6	-	-	10	10	450
	Upper Heyford	1013.5	-24	S'W	4	roro	50	97	7	6	2	-	9	10	800
4	Ross-on-Wye ...	1011.4	-20	SW'S	5	roro	51	92	7	6	-	-	10	10	1500
5	Hartland Point	1009.9	-24	WSW	6	rr	52	97	7	6	2	-	7-8	10	800
	Bristol	1013.2	-22	SSW	4	roro	51	92	7	6	2	-	4-6	10	800
	Portland Bill ...	1015.2	-20	SW	5	rro	51	92	7	5	-	-	10	10	1500
	Plymouth ...	1013.5	-26	SW	6	rr	51	97	6	6	-	-	10	10	800
	The Lizard ...	1013.8	-20	SSW	7	RR	52	97	6	5	-	-	10	10	1500
	Scilly (St. Mary's)	1012.2	-18	SW'S	5	roro	53	97	6	5	-	-	10	10	1500
	Guernsey ...	1018.0	-24	SW	3	c/d	50	85	7	8	2	-	7-8	10	2500
6	Pembroke ...	1011.9	-12	NE'N	4	roro	46	97	7	5	-	-	10	10	1500
7	Holyhead ...	1012.5	-10	-	0	roro	44	92	7	-	2	-	10	10	800
	Chester (Sealand)	1012.4	-16	NW	1	roro	45	85	6	6	2	-	7-8	10	1500
8	Manchester ...	1012.7	-14	NW	1	roro	44	97	4	6	2	-	7-8	10	1500
10	Spurn Head ...	1011.4	-22	N'W	3	rr	44	97	5	5	-	-	10	10	800
	Catterick ...	1011.4	-14	-	0	c/r	44	85	7	5	2	-	2-3	10	4000
	Tynemouth ...	1011.6	-10	SW	2	of	45	92	3	5	-	-	10	10	1500
11	St. Abbs Head	1009.8	-12	SW	4	c	41	85	8	5	2	-	4-6	10	2500
	Leuchars ...	1009.0	-14	WSW	1	zo	42	92	6	5	2	-	4-6	10	4000
12	Renfrew (Abbots I.)	1010.8	-10	W	3	pro	45	92	8	8	7	-	7-8	9+	1500
	Eskdalemuir ...	1010.4	-14	SW'W	3	c	41	92	6	5	2	-	4-6	9+	1500
	Point of Ayre ...	1011.1	-16	WNW	4	c	48	85	8	8	1	-	4-6	10	2500
13A	Tiree	1008.9	-2	W'S	2	bc/pr	43	85	8	8	-	-	4-6	4-6	1500
13B	Stornoway ...	1007.3	-8	SW	3	c/pr	42	85	8	3	-	-	7-8	7-8	2500
15	Dalwhinnie ...	1008.0	-10	SW	3	iro	39	85	7	4	1	2	4-6	9	2500
	Aberdeen ...	1007.8	-20	SW	1	m/r	41	85	4	5	2	-	1	10	1500
	Wick	1006.1	-16	SSW	3	bc	43	85	8	5	4	1	4-6	4-6	2500
16	Lerwick... ...	1004.6	-16	SW	3	c	43	85	8	8	3	-	4-6	7-8	1500
17	Blacksod Point..	1018.4	0	WNW	3	bc	47	75	8	3	-	3	2-3	4-6	2500
18	Malin Head ...	1010.2	-4	W	4	c	47	85	8	2	-	4	4-6	7-8	5700
	Aldergrove ...	1012.1	-8	SW	2	iro	42	92	6	5	-	-	9+	9+	1500
19	Birr Castle ...	1018.9	-6	SSW	1	c	45	85	8	5	1	-	7-8	10	2500
20	Valentia Obsy. †	1014.4	-2	NNE	3	roro	45	92	8	5	2	-	2-3	10	1500
	Roches Point ...	1013.8	-6	N	3	roro	45	92	8	6	2	-	4-6	10	1500

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

District	Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	°F. Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Cloud. Form. Med. (24)	Cloud. Form. High (25)	Cloud. Amount Low 0–10 (26)	Cloud. Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)...	1012.5	-16	SW'S	4	roro	49	92	6	6	-	-	10	10	1500	1	*
	Croydon	1014.1	-12	SSW	3	rr	48	97	6	6	-	-	10	10	800	1	*
	S. Farnborough	1012.8	-12	SSW	4	roro	48	97	6	6	2	-	9	10	800	1	*
	Boscombe Down	1011.3	-18	SSW	5	rr	49	97	6	6	-	-	10	10	450	1	*
	Calshot (Soton.)	1013.4	-16	SSW	5	rr	50	97	6	6	2	-	7-8	10	800	1	4
	Lympne ...	1016.3	-10	SW'S	4	roro	45	97	6	5	2	-	9	10	1500	1	§4
	Manston ...	1015.6	-6	SSW	5	roro	47	85	6	6	2	-	7-8	10	800	1	*
2	Shoeburyness ...	1014.2	-32	S'W	4	roro	48	92	5	6	2	-	9+	10	1500	1	*
	Felixstowe ...	1013.4	-16	SSW	6	roro	47	92	6	6	2	-	4-6	10	1500	1	4
	Gorleston ...	1012.0	-8	S	5	roro	48	92	6	6	-	-	10	10	1500	1	4
	Mildenhall ...	1011.3	-14	S	5	rr	49	92	5	6	2	-	4-6	10	1500	1	*
	Cranwell ...	1011.4	+6	NNE	2	roro	43	97	4	6	2	-	9	10	450	1	*
3	Birmingham	1012.0	+2	NNW	2	roro	42	97	5	6	-	-	10	10	450	1	*
	Upper Heyford	1011.2	-6	SSW	3	roro	49	97	6	6	2	-	9	10	450	1	*
4	Ross-on-Wye ...	1011.4	+6	NE'N	3	rr	44	97	5	6	-	-	10	10	450	1	*
5	Hartland Point	1010.8	+2	NE	3	roro	47	97	7	6	2	-	7-8	9	1500	0	3
	Bristol																*
	Portland Bill ...	1012.3	-12	SW	5	rr	51	92	6	5	-	-	10	10	1500	1	5
	Plymouth ...	1010.7	-10	SSW	7	rr	52	97	6	6	-	-	10	10	800	1	5
	The Lizard ...	1010.5	-16	SSW	5	RR	52	92	6	5	-	-	10	10	1500	1	4
	Scilly (St. Mary's)	1010.0	-2	SW'W	4	rr	52	97	6	6	-	-	10	10	1500	1	3
	Guernsey ...	1015.3	-18	SSW	3	rr	48	92	6	8	2	-	9	10	1500	1	3
6	Pembroke ...	1012.4	+6	NE'N	3	roro	45	97	7	5	-	-	10	10	1500	1	2
7	Holyhead ...	1011.9	+2	NW	4	c	48	75	8	6	2	-	7-8	10	1500	1	2
	Chester (Sealand)	1012.4	+2	-	0	roro	43	92	5	6	8	-	4-6	10	800	1	*
8	Manchester ...	1012.2	+2	SW'W	1	df	42	97	3	-	2	-	10	10	2500	1	*
10	Spurn Head ...	1011.2	0	N'W	3	rr	42	97	6	5	-	-	10	10	800	2	2
	Catterick ...	1010.0	0	-	0	zo	42	85	6	5	2	-	2-3	10	4000	1	4
	Tynemouth ...	1010.4	-2	SW	2	of	45	85	3	5	-	-	10	10	1500	1	1
11	St. Abbs Head	1008.5	0	WNW	2	c	43	85	8	5	3	-	7-8	9	2500	0	2
	Leuchars ...	1008.1	-2	W	2	b	39	85	7	-	3	-	0	1	-	1	*
12	Renfrew (Abbots I.)	1010.4	+6	W'S	3	bc	39	85	7	8	4	1	1	4-6	1500	1	*
	Eskdalemuir ...	1010.3	+6	W'S	3	c	39	85	8	5	3	-	2-3	7-8	1500	1	*
	Point of Ayre ...	1011.1	+2	NW'N	5	c	47	75	8	2	-	9	1	9+	1500	1	2
13A	Tiree	1008.6	+4	WNW	4	bc	45	75	8	8	-	-	4-6	4-6	1500	0	3
13B	Stornoway ...	1006.9	+2	WSW	4	pr	40	92	7	8	7	-	7-8	9	2500	1	2
15	Dalwhinnie ...	1008.9	-2	W	4	iro	35	85	7	4	-	-	4-6	4-6	2500	1	*
	Aberdeen ...	1007.6	+4	-	0	m	38	85	4	-	3	-	0	2-3	-	1	1
	Wick	1005.6	+2	SW	3	bc	36	97	8	5	6	-	1	2-3	2500	1	2
16	Lerwick... ...	1002.7	-12	SW	3	c/pr	42	85	7	8	7	-	7-8	9	800	1	*
17	Blacksod Point..	1014.8	+12	NW	3	bc	45	65	8	3	-	-	2-3	2-3	4000	0	3
18	Malin Head ...	1011.3	+8	NW	4	bc/pr	44	75	7	2	-	-	4-6	4-6	4000	0	4
	Aldergrove ...	1012.5	+6	SW'W	2	bc	39	92	8	5	3	-	Tr	2-3	2500	1	*
19	Birr Castle ...	1014.8	+8	NNW	1	bc	40	92	8	-	-	8	0	4-6	-	1	*
20	Valentia Obsy. †	1015.9	+18	N'E	4	c/pr	47	75	8	2	7	-	4-6	7-8	2500	1	3
	Roches Point ...	1014.3	+12	N'E	3	c	45	92	8	5	-	-	9	9	2500	1	3

PAST 24 HOURS.

District	Stations.	Weather. 7h.–18h. 23rd (37)	Weather. 13h.–18h. 23rd (38)	Weather. 18h 23rd to 1h. 24th (39)	Weather. 1h.–7h. 24th (40)
1	London (Kew)...	crorom	crorromo	croro	croro
	Croydon	cmrroiro	crorormo	rrroro	crorormo
	S. Farnborough	rododoe	rorrroroc	roro Rrc	rrrororc
	Boscombe Down	ororom	orrmo	orrcroromo	crorormo
	Calshot (Soton.)	crrromo	crorrmo	crrmo	crrroromo
	Lympne ...	croc	ccromo	omororor	omo rrro
	Manston ...	crocro	rorocroro	roro rr	rr roro
2	Shoeburyness ...	croro	prorrc	cmororo	crr
	Felixstowe ...	orogm	ororomo	prorom o	ororomo
	Gorleston ...	ororo	ororoq	croro	ororo
	Mildenhall ...	cgromm	crorrr	rrroromo	crorobr
	Cranwell ...	crorommm	crorom	roro cmof	cfofcf
3	Birmingham	ororrf	forro	oro r iro	obcf
	Upper Heyford	cmgroro	crorom o	crr rorom o	crorocmo
4	Ross-on-Wye ...	dororoq	rrmo	oc	rrm
5	Hartland Point	rr	rroro	croro	roroc
	Bristol	cRqroro		c rroro	crorom o
	Portland Bill ...	orr	orrzo	orrzo	orr
	Plymouth ...	crrmo	crrrorrm o	RRrrm o	crorom oc
	The Lizard ...	rr	rr	orr	rrc
	Scilly (St. Mary's)	orr	rorrr	orr	crrc
	Guernsey ...	cid	idorr	r	orrR
6	Pembroke ...	crrmo	roroc	c	cbc
7	Holyhead ...	rrroro	roroiroc	cbc	bcc
	Chester (Sealand)	crorodom	crrroromo	rorododomo	cbcmo
8	Manchester ...	cffrrogm	cmrorodf	dd ffroFF	FF b
10	Spurn Head ...	orrm	orr	c mo	czow
	Catterick ...	cirom c	cirocmo	cmobcc	cbcbx
	Tynemouth ...	off	o	pffbc	bc
11	St. Abbs Head	c	c	bc	b
	Leuchars ...	cm	cmoproc,b	bbx	bcxbx
12	Renfrew (Abbots I.)	cmoepr	cprproboc	bcq pr	cprobcbx
	Eskdalemuir ...	Feofc	cmoc	cbcbx	bx
	Point of Ayre ...	c	c	bc	b
13A	Tiree		bcpr	bcpr	bcpr
13B	Stornoway ...	cPR	cPR	cbcphr	bcphr
15	Dalwhinnie ...	ciro	ciro	*	cis
	Aberdeen ...	cffiro	cbcz	bczbx	bx
	Wick	bcc	bccbc	bc	Pr pr
16	Lerwick... ...	cphrc	cpr	cprph	cphphr
17	Blacksod Point..	bc	prcq	bc	bc
18	Malin Head ...	c	cprbc	cphrc	cbccprcbc
	Aldergrove ...	ciro	irocbc	bmobcb	bw
19	Birr Castle ...	cidc	cbc	bcb	bx
20	Valentia Obsy. †	croro	roroproc	bcby	bcprobc
	Roches Point ...	roro	c	bc	b

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).

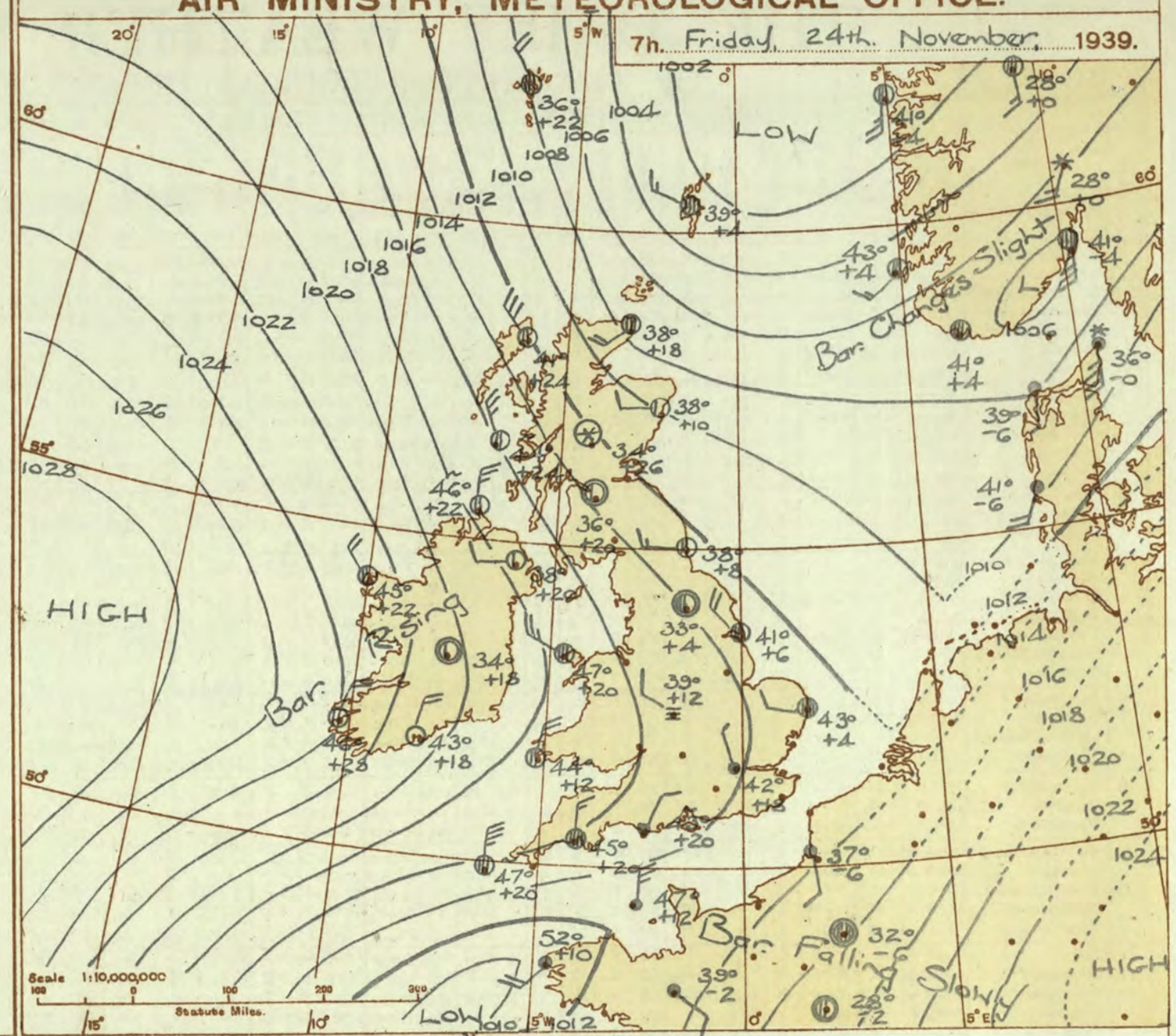
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



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. 24th November, 1939.
1 S.E. England 2 E. England ...	Light to moderate northeast wind, fresh locally; occasional rain at first, fair later; local morning fog; rather cold, frost locally at night.
3 E. Midlands ... 4 W. Midlands ...	Light to moderate northwest wind, fresh locally on coasts; mainly fair; local morning fog; rather cold, frost locally at night.
5 S.W. England	Fresh or strong north wind, decreasing; mainly fair; rather cold.
6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands	As 2 - 4.
10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Fresh northwest wind, decreasing; mainly fair; rather cold, frost locally at night.
13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Fresh northwest wind, strong locally on coasts, decreasing and backing southwest; bright intervals and wintry showers at first, fair later; rather cold, frost at night.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light to moderate northwest wind, backing southwest; mainly fair; rather cold, frost at night.

GENERAL INFERENCE.

A wedge of high pressure west of Ireland is spreading east and a depression over the Bay of Biscay is moving slowly southeast. There will be occasional rain in the extreme southeast and wintry showers in the North but elsewhere weather will be mainly fair.

FURTHER OUTLOOK.

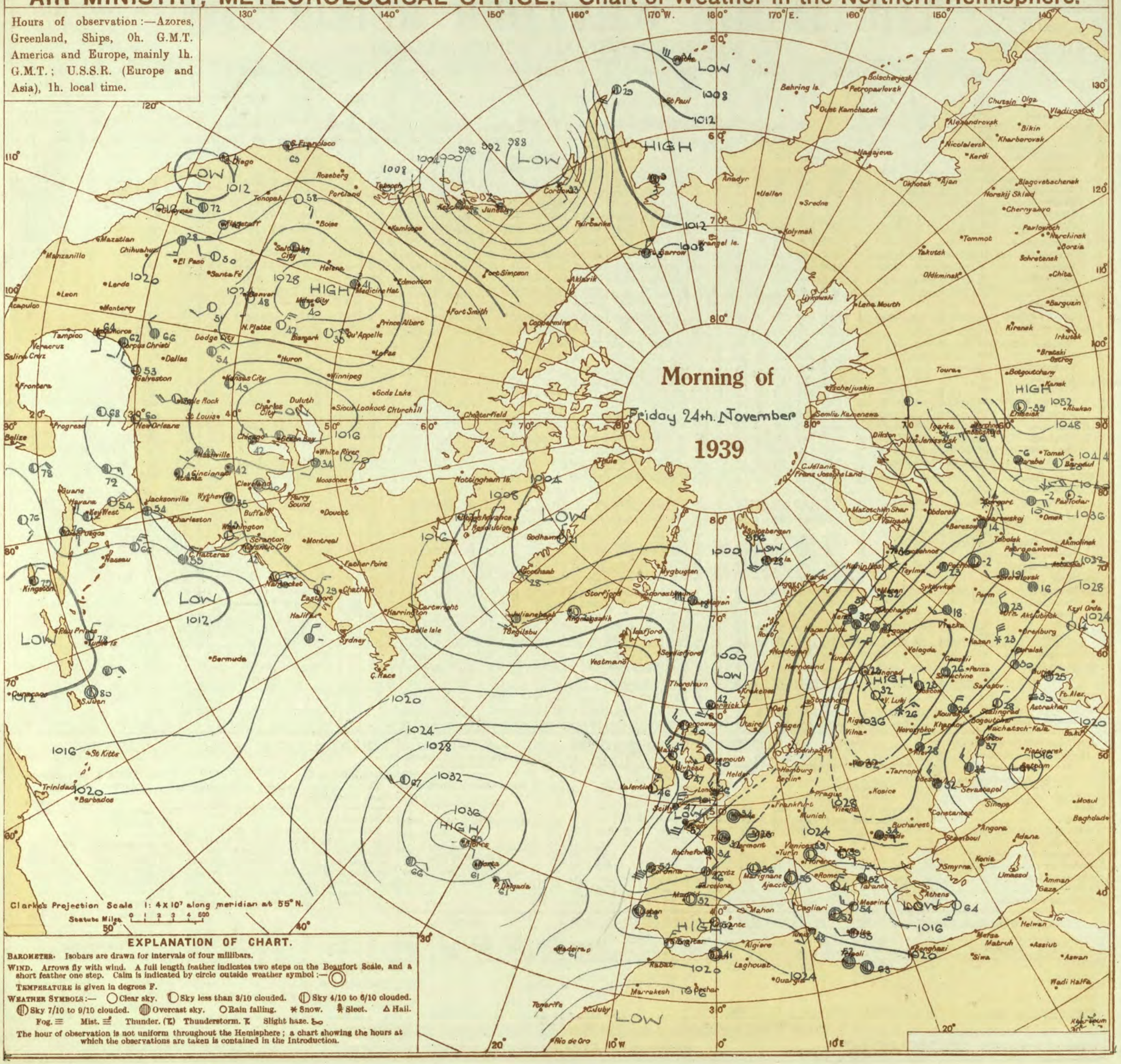
Rain in the Northwest; mainly fair elsewhere.

Forecasts issued at 1000 G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1.
O.478/9777. No.8109. O.4626. Gp.348. 84300 11/39

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 24th November 1939.

No. 28,491

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1012·1	−6	NW	3	roro	46	97	6	6	2	−	9	10	450
	S. Farnborough	226	1012·5	+10	NW	3	rr	43	97	5	6	2	−	10	10	1500
	Boscombe Down	417	1012·9	+18	N	3	roro	42	97	5	6	2	−	9+	10	800
	Calshot (Sthmtn.)	8	1011·5	−8	NNW	4	rr	47	97	5	6	−	−	10	10	450
	Lympne	346	1013·6	−14	SW	4	rr	46	97	5	6	2	−	9+	10	220
	Manston	154	1012·5	−12	SWS	4	rr	47	92	6	6	2	−	9	10	800
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1011·0	−10	SSW	5	roro	47	97	5	6	2	−	9	10	800
	Gorleston	5	1010·8	+4	WNW	3	roro	46	92	6	6	−	−	10	10	1500
	Mildenhall	19	1012·1	+12	NWN	3	roro	42	97	6	6	2	−	9+	10	450
	Cranwell	240	1012·6	+2	WN	2	cf	40	97	3	−	1	−	0	10	−
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1013·6	+10	NNE	2	roro	41	97	6	−	2	−	10	10	450
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1013·2	+10	NE	3	roro	45	85	7	6	2	−	7·8	10	1500
	Bristol	209	1014·1	+14	NEN	3	roro	42	97	5	6	2	−	7·8	10	800
	Portland Bill	32	1011·7	+6	NNE	5	rr	45	92	6	5	−	−	10	10	1800
	Plymouth	82	1012·1	+8	NNE	4	roro	45	97	6	6	2	−	7·8	10	1500
	The Lizard	240	1011·8	+8	NNW	5	rr	44	97	6	5	−	−	10	10	1500
	Scilly (St. Mary's)	163	1012·7	+14	NNE	5	rr	47	97	7	8	2	−	7·8	10	1500
	Guernsey	175	1012·9	−4	SSW	2	rr	49	92	6	8	2	−	9	10	1500
6	Pembroke	142	1014·7	+6	NEN	4	c	45	85	7	8	7	−	4-6	7-8	2500
7	Holyhead	26	1014·4	+10	NW	4	c	47	65	8	1	3	8	2-3	7-8	4000
	Chester (Sealand)	16	1014·0	+6	WNW	2	c	43	85	7	5	7	7	4-6	10	2500
8	Manchester	70	1013·7	+6	NWW	1	F	37	97	0	−	−	−	10	10	150
10	Spurn Head	29	1011·9	0	NWW	4	c	43	92	4	5	1	−	4-6	10	1500
	Catterick	175														
	Tynemouth	108	1011·8	+4	WSW	3	bc	40	85	6	2	3	−	2-3	4-6	2500
11	St. Abbs Head	280	1009·5	0	W	4	b	41	75	8	4	−	−	Tr	Tr	2500
	Leuchars	36	1009·9	+6	SW	1	b	34	92	8	−	−	−	0	0	−
12	Renfrew (Abbots I.)	19	1011·7	+6	−	0	c/pr	35	92	7	8	6	−	7-8	7·8	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1013·2	+8	NW	4	b	45	75	8	4	−	8	Tr	1	4000
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	986·0	+12	WNW	3	bc	40	85	8	8	−	3	4-6	4-6	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1006·1	+4	SSW	4	bc	37	85	8	2	4	1	2-3	4-6	2500
16	Lerwick	156	1002·5	−2	SW	4	c	42	75	8	8	7	−	4-6	7·8	1500
17	Blacksod Point	18	1018·9	+18	NW	4	bc	45	65	8	3	−	−	4-6	4-6	800
18	Malin Head	84	1013·8	+18	NW	5	c	47	65	8	2	−	−	7-8	7-8	3700
	Aldergrove	268	1014·4	+6	WSW	3	bc	37	92	7	5	4	−	Tr	2-3	4000
19	Birr Castle	173	1017·7	+12	NNW	1	b	34	92	8	−	−	−	0	0	−
20	Valentia Obsy.	30	1020·5	+18	NE	4	b	46	55	8	3	−	−	1	1	2500
	Roches Point	22	1018·3	+6	NE	4	bc	43	85	8	5	−	−	2-3	2-3	2500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1014·5	+16	NNW	2	roro	42	92	6	6	2	−	7·8	10	1500	1	*
Croydon	1014·4	+18	NNW	1	roro	42	97	5	6	2	−	7·8	10	450	1	*
S. Farnborough	1014·5	+16	NWN	2	rr	41	97	5	6	2	−	10	10	2500	2	*
Boscombe Down	1015·2	+18	NW	2	c/r	41	97	4	6	2	−	9	10	1500	1	*
Calshot (Sthmtn.)	1014·3	+20	N	3	roro	42	97	5	6	2	−	10	10	600	1	2
Lympne	1013·4	+10	NE	4	iro	42	97	6	5	−	−	10	10	1500	1	§3
Manston	1013·4	+22	NE	4	roro	43	92	6	6	2	−	9+	10	800	1	*
Shoeburyness	1014·9	+20	NNW	2	rr	42	97	4	6	−	−	10	10	1500	1	*
Felixstowe	1012·5	+10	NNW	3	roro	42	97	6	−	2	−	10	10	4000	1	3
Gorleston	1012·2	+4	WN	2	o	43	92	6	6	−	−	10	10	1500	1	2
Mildenhall	1013·9	+12	NWW	2	m	40	97	4	5	−	−	4-6	4-6	4000	1	*
Cranwell	1014·1	+10	NWW	3	f	38	97	3	−	7	−	0	7-8	−	1	*
Birmingham	1015·5	+12	NW	2	cf	39	92	3	5	−	−	9+	9+	1500	1	*
Upper Heyford	1015·7	+14	NW	1	m	40	97	4	5	−	−	10	10	2500	1	*
Ross-on-Wye	1016·1	+10	NW	1	e	40	92	8	−	7	−	0	10	−	1	*
Hartland Point	1016·2	+22	NNE	4	c	46	65	8	8	2	−	7·8	9+	1500	1	3
Bristol	1016·8	+22	WNW	2	zo	41	92	6	5	7	−	4-6	9+	2500	1	*
Portland Bill	1014·9	+20	NE	3	rr	43	92	7	5	−	−	10	10	1500	2	4
Plymouth	1015·5	+20	N	3	c	45	85	7	5	−	−	10	10	2500	1	2
The Lizard	1016·0	+24	WNW	3	c	44	92	8	5	2	−	9	10	1500	1	2
Scilly (St. Mary's)	1015·9	+20	N	7	e	47	65	8	8	6	3	4-6	9+	1500	1	4
Guernsey	1012·1	+12	N	5	roro	47	97	6	8	−	−	10	10	1500	1	4
Pembroke	1017·6	+12	NE	4	bc	44	85	8	8	4	−	2-3	4-6	2500	1	2
Holyhead	1017·0	+20	WNW	5	c	47	75	8	3	−	−	7-8	7-8	1500	1	3
Chester (Sealand)	1015·4	+10	NW	3	zo	43	85	6	2	7	−	1	4-6	2500	1	*
Manchester	1015·0	+8	W	1	F	31	97	1	7	−	−	4-6	4-6	2500	1	*
Spurn Head	1013·0	+6	NWW	4	c	41	92	6	−	9	−	0	9	−	1	3
Catterick	1013·4	+4	−	0	b	33	92	8	−	3	4	0	2·3	−	1	*
Tynemouth	1012·0	+8	W	3	bc	38	85	6	2	−	−	2-3	2-3	2500	1	1
St. Abbs Head	1011·0	+10	WNW	5	b	41	75	8	4	−	−	1	1	2500	1	1
Leuchars	1012·1	+18	W	3	b	35	92	9	5	−	−	Tr	Tr	5700	3	*
Renfrew (Abbots I.)	1014·5	+20	−	0	b	36	92	7	5	−	−	Tr	Tr	−	1	*
Eskdalemuir	1013·0	+10	NW	4	b	36	85	8	−	3	−	0	Tr	−	3	*
Point of Ayre	1015·4	+20	N	5	b	46	75	8	4	−	−	1	1	4000	0	3
Tiree	1015·4	+24	NNW	5	c/pr	44	75	8	8	−	−	4-6	4-6	1500	0	4
Stornoway	1013·0	+24	NW	6	bc/prh	41	75	8	8	−	−	4-6	4-6	2500	1	3
Dalwhinnie	1013·8	+26	−	0	is	34	92	7	5	7	−	9	10	2500	4	*
Aberdeen	1009·7	+10	W	2	b	38	75	7	8	3	−	1	1	2500	3	1
Wick	1007·5	+18	WSW	4	c/pr	38	97	7	5	2	−	7·8	10	1500	1	2
Lerwick	1002·9	+4	WNW	3	c/phr	39	85	7	8	7	−	4-6	7·8	800	1	*
Blacksod Point	1022·4	+22	NW	4	bc	45	65	8	4	−	−	4-6	4-6	1500	0	3
Malin Head	1017·7	+22	N	5	bc	46	75	7	2	−	−	4-6	4-6	4000	0	4
Aldergrove	1017·5	+20	W	2	b	38	85	8	3	−	−	Tr	Tr	2500	1	*
Birr Castle	1021·5	+18	−	0	b	34	92	8	−	4	−	0	1	−	1	*
Valentia Obsy.	1024·3	+28	NNE	4	bc/pr	46	65	8	3	−	−	4-6	4-6	2500	1	3
Roches Point	1021·4	+8	NE	4	b	43	85	8	−	−	−	0	0	−	1	3

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 23rd Hrs. (36)
London (Kew)	49	41	40	5	10	0·0
Croydon	48	41	40	6	10	0·0
S. Farnborough	47	41	40	5	11	0·0
Boscombe Down	50	41	39	9	12	0·0
Calshot (Sthmtn.)	51	42	42	11	16	0·0
Lympne	47	42	41	1	11	0·0
Manston	48	43	42	4	11	0·0
Shoeburyness	49	42	*	6	10	0·0
Felixstowe	48	42	41	5	9	0·0
Gorleston	48	43	42	8	8	*
Mildenhall	50	39	38	5	7	0·0
Cranwell	50	37	35	13	2	0·0
Birmingham	50	38	31	18	4	0·0
Upper Heyford	50	39	36	9	9	*
Ross-on-Wye	52	39	34	13	6	0·0
Hartland Point	52	43	43	19	4	0·0
Bristol		40	38		11	0·0
Portland Bill	52	42	*	9	17	*
Plymouth	53	43	41	17	19	0·0
The Lizard	53	43	*	11	18	0·0
Scilly (St. Mary's)	53	45	*	13	28	0·0
Guernsey	51	47	46	4	11	0·0
Pembroke	48	43	*	9	2	0·0
Holyhead	48	46	42	7	−	0·0
Chester (Sealand)	45	39	33	5	0·5	0·0
Manchester	45	31	31	6	0·2	0·0
Spurn Head	47	40	*	11	1	0·0
Catterick	45	32	24	0·3	−	0·0
Tynemouth	46	36	31	−	−	*
St. Abbs Head	46	36	*	−	−	*
Leuchars	48	33	20	Tr	−	0·0
Renfrew (Abbots I.)	45	35	*	1	1	0·5
Eskdalemuir	42	30	25	Tr	−	0·0
Point of Ayre	48	43	*	3	−	0·0
Tiree	46	40	37	1	1	1·8
Stornoway	43	38	*	2	1	2·3
Dalwhinnie	39	31	22	0·2	0·4	0·1
Aberdeen	42	33	23	0·2	−	0·0
Wick	45	34	*	−	2	*
Lerwick	45	37	*	2	3	1·8
Blacksod Point	*	42	*	0·4	0·5	*
Malin Head	47	40	*	1	1	2·4
Aldergrove	44	35	26	0·5	−	0·3
Birr Castle	45	31	28	1	−	0·0
Valentia Obsy.	47	45	38	3	0·3	0·0
Roches Point	47	39	*	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.	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	croromo	crorromo	croro	49	41	40	5	10	0·0	•	•	
Croydon	217	cmororoir	croro mo	rrroromo	48	41	40	6	10	0·0	•	•	
Greenwich (Royal Observatory)	149	rro	ro rr	rrdm	49	41	40	7	9	0·0	95	93	4
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park)	27	•	•	•	50	42	42	15			93	91	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	49	41	38	5	11		92	91	•
Camden Square	110	or	crorr	•	49	41	40	5	13	•	•	95	•
Kensington	80	cr	cmrc	•	50	41	41	5	11		94	95	•
Hampstead Observatory	450	or	or	or	48	39	39	5	13		•	99	•

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 23rd November: Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 24th November: Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours: Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1021·4	−	0	c	36						*		*	
Brussels														
Berlin														
Zürich														
Rome	1019·1	NE	3	c	46						•	•	*	

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.

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

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

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

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 25th November 1939.

No 28492

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1016·6	+2	NWN	3	z₀	45	75	5	-	1	2	0	9+	-
	Croydon	1016·7	+10	NW	2	z₀	44	85	5	5	-	-	10	10	2500
	S. Farnborough	1017·0	+4	NW'W	6	z₀	44	85	6	-	7	-	0	10	-
	Boscombe Down	1017·9	+6	NNW	3	c	43	75	7	-	7	-	0	7-8	-
	Calshot (Soton.)	1016·9	+4	NNW	3	z₀	45	85	6	5	7	-	Tr	9	2500
	Lympne ...	1016·0	+4	N'W	3	z₀	43	85	5	5	-	-	10	10	800
	Manston ...	1015·4	+4	NW'N	4	z₀	44	85	6	6	2	-	4-6	10	800
2	Shoeburyness ...	1015·7	+2	NNW	3	m	44	85	4	-	2	-	0	10	-
	Felixstowe ...	1015·2	+10	NW'N	3	z₀	44	85	5	5	2	-	4-6	10	2500
	Gorleston ...	1014·5	+2	WNW	3	c	44	85	6	5	-	-	9+	9+	1500
	Mildenhall ...	1015·4	+4	WNW	3	z₀	43	92	5	-	1	-	0	10	-
	Cranwell ...	1016·0	+6	NNW	4	z₀	45	65	6	-	7	2	0	2-3	-
3	Birmingham	1017·9	+4	NNW	3	bc	45	65	6	8	-	-	2-3	2-3	1500
	Upper Heyford	1017·4	+2	NW	3	z₀	42	85	6	5	4	-	2-3	4-6	4000
4	Ross-on-Wye ...	1018·4	+6	NW	3	b	47	65	8	1	-	-	1	1	4000
5	Hartland Point	1019·9	+8	NNE	4	c	47	65	8	7	-	-	7-8	7-8	4000
	Bristol	1019·1	+8	NW	3	bc	46	75	7	1	7	2	1	2-3	4000
	Portland Bill ...	1018·6	+4	N	3	c	45	92	8	1	4	-	4-6	7-8	2500
	Plymouth ...	1019·6	+10	N'E	3	bc	49	65	8	1	7	-	1	2-3	2500
	The Lizard ...	1020·5	+10	N	3	bc	50	75	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1021·1	+14	N'E	6	bc	48	65	8	8	6	-	2-3	4-6	2500
	Guernsey ...	1017·3	+12	N'E	3	c	47	75	7	2	2	-	4-6	7-8	1500
6	Pembroke ...	1021·1	+4	N'E	4	c	49	75	8	8	-	-	7-8	7-8	2500
7	Holyhead ...	1020·0	+10	NW	6	c	48	65	8	3	-	-	7-8	7-8	2500
	Chester (Sealand)	1018·6	+12	NW'W	5	PHR	46	75	7	8	-	-	9	9	1500
8	Manchester ...	1017·9	+10	NW	3	bc	46	75	7	2	-	-	2-3	2-3	4000
10	Spurn Head ...	1014·7	+6	NW	4	bc	43	75	6	-	-	8	0	2-3	-
	Catterick ...	1016·2	+2	NW	3	b	45	65	8	-	2	-	0	1	-
	Tynemouth ...	1015·1	+10	W	3	bc	44	65	6	2	-	-	2-3	2-3	2500
11	St. Abbs Head	1014·3	+14	WNW	4	b	43	65	7	1	-	-	1	1	2500
	Leuchars ...	1014·8	+6	W	2	b	43	75	9	2	-	-	1	1	5700
12	Renfrew (Abbots I.)	1017·4	+6	W'N	3	bc	45	65	9	8	-	-	2-3	2-3	2500
	Eskdalemuir ...	1016·3	+10	NW'W	4	bc	40	65	8	5	-	-	2-3	2-3	2500
	Point of Ayre ...	1019·0	+16	N	5	b	47	65	8	4	-	-	1	1	2500
13A	Tiree	1018·7	+6	NW	4	pr	45	65	8	8	-	-	4-6	4-6	1500
13B	Stornoway ...	1016·3	+10	NW	5	bc	43	55	8	8	-	-	4-6	4-6	2500
15	Dalwhinnie ...	1016·6	+2	W	3	bc	36	85	8	4	6	-	2-3	2-3	4000
	Aberdeen ...	1012·7	+8	NW'W	5	b	41	75	8	8	-	-	1	1	4000
	Wick	1011·6	+20	NW	6	rs	39	85	7	5	7	-	7-8	10	1500
16	Lerwick... ...	1005·2	+10	NNW	4	c/phr	39	92	7	8	7	-	7-8	9+	800
17	Blacksod Point...	1025·1	+8	NW	3	bc	48	65	8	2	-	-	2-3	2-3	800
18	Malin Head ...	1020·3	+2	N'W	5	c	46	65	8	2	-	-	7-8	7-8	5700
	Aldergrove ...	1021·1	+10	NW'W	4	bc	45	65	8	2	-	-	2-3	2-3	2500
19	Birr Castle ...	1024·5	+6	NW	2	bc	46	75	8	5	-	-	2-3	2-3	2500
20	Valentia Obsy. †	1027·1	+6	N'W	4	pr	47	75	8	8	-	-	9	9	2500
	Roches Point ...	1024·4	0	N	5	b	47	75	9	-	-	-	0	0	-

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°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)	Weather 7h.—13h. 24th (37)	Weather 13h.—18h. 24th (38)	Weather 18h. 24th to 1h. 25th (39)	Weather 1h.—7h. 25th (40)
London (Kew)...	1020·4	+26	NW	2	z₀	42	85	5	-	-	-	0	0	-	1	*	cr₀r₀mcz₀	bcbz₀bm₀	bm₀x	bm₀x
Croydon	1020·0	+26	WNW	1	bf+	41	92	2	5	-	-	1	1	4000	1	*	cr₀r₀mf₀fm	om₀bzbf	bfbmwx	bm₀wxb
S. Farnborough	1020·6	+24	W	1	z₀	39	85	5	-	-	-	0	0	-	1	*	cd₀cm₀	cm₀bm₀w	bm₀wx	bm₀x
Boscombe Down	1021·6	+30	NW'N	3	z₀	41	85	6	1	-	-	2-3	2-3	2500	0	*	cm₀c	bcb	bm₀bw	bm₀x
Calshot (Soton.)	1020·4	+26	NW'N	3	z₀	42	92	6	-	-	-	0	0	-	1	1	cr₀r₀om₀	cm₀bc b	bm₀b	bbm₀
Lympne ...	1018·8	+22	NNW	3	z₀	39	85	5	-	-	-	0	0	-	1	§	om₀r₀r₀g	obcm₀	bm₀wm x	bmbm₀x
Manston ...	1018·6	+26	NNW	4	z₀	45	85	6	5	-	-	7-8	7-8	1500	1	*	r₀r₀om₀	cm₀bcm₀	bcm₀bz₀	bz₀fbmx
Shoeburyness ...	1020·1	+48	NW	3	b	39	85	5	-	-	-	0	0	-	1	*	r₀r₀mo	cbcm₀	bo	bm₀
Felixstowe ...	1017·7	+22	NNW	3	m	40	85	4	-	-	-	0	0	-	1	1	or₀r₀om₀	om₀bmw	bmwbm₀	bmow
Gorleston ...	1017·1	+12	W'N	3	bc	40	85	6	2	-	-	4-6	4-6	2500	1	2	bcz₀	cbcz₀ z₀	bcbz₀	bbcxz₀
Mildenhall ...	1019·0	+18	WNW	3	z₀	35	92	5	-	-	-	0	0	-	1	*	bcmcmcm₀	bm₀	bmxbm₀	bm₀x
Cranwell ...	1019·0	+26	NW	3	z₀	40	75	6	-	-	-	0	0	-	1	*	cmcm₀	cz₀bm₀	bm₀mxf	bfbmxm₀
Birmingham	1021·5	+26	NW	2	b	41	75	6	-	-	-	0	0	-	1	*	fcbc	bcb	b	bx
Upper Heyford	1021·0	+30	NW'N	3	z₀	41	75	6	-	-	-	0	0	-	1	*	cmcm₀	bcm₀bz₀	bm₀b	obx
Ross-on-Wye ...	1021·7	+20	WNW	2	b	41	75	8	-	-	-	0	0	-	1	*	cb	bcb	b	bxbc
Hartland Point	1023·2	+16	NNE	4	c	47	75	8	5	-	-	7-8	7-8	2500	1	3	c	c	cbc	bccbc
Bristol	1022·6	+24	NNW	2	bc	41	75	6	4	-	-	2-3	2-3	4000	1	*	cm₀bcb	bcbbc	bm₀	bbcbbc
Portland Bill ...	1022·9	+28	N	3	b	46	85	8	-	-	-	0	0	-	1	3	c	bcb	b	bcc
Plymouth ...	1023·2	+30	NNW	4	z₀	46	75	6	4	-	-	Tr	Tr	4000	1	1	cbc	bcb	bm₀	bm₀cbm₀x
The Lizard ...	1024·3	+20	N	3	bc	43	85	8	8	-	-	4-6	4-6	2500	0	1	bc	bc	bc	bc
Scilly (St. Mary's)	1024·9	+28	N'E	5	bc	47	65	8	8	6	-	4-6	4-6	2500	1	4	cbc	bc	bc	bc
Guernsey ...	1022·2	+28	N	2	bc	47	65	7	2	-	-	4-6	4-6	1500	1	3	rrc	cbc	bcb	bbc
Pembroke ...	1024·8	+24	N'E	4	bc	45	75	8	8	-	-	4-6	4-6	2500	1	2	bcc	cbc	bc	bcc
Holyhead ...	1022·4	+22	NW	5	bc	47	65	8	2	-	-	4-6	4-6	2500	1	3	cbc	bc	bc	bc
Chester (Sealand)	1021·5	+20	WNW	4	bc	42	75	7	8	-	-	2-3	2-3	2500	1	*	bbccphR	cPRHbc	bcpr	bcprcm₀
Manchester ...	1021·0	+22	NW	2	z₀	38	85	5	8	-	-	Tr	Tr	4000	1	*	FFmm₀b	bbm₀w	bm₀bmxm₀	bm₀xcmpr
Spurn Head ...	1017·8	+18	NW	4	b	43	75	6	-	-	-	0	0	-	0	3	cmbc	b	b	bc
Catterick ...	1019·3	+20	NW	2	b	35	75	8	-	-	-	0	0	-	1	4	b	b	bbx	bxbcc
Tynemouth ...	1017·9	+20	WNW	3	bc	39	75	6	5	-	-	2-3	2-3	2500	1	1	bc	bc	bc	
St. Abbs Head	1016·4	+10	NW	4	b	48	55	8	4	4	-	Tr	1	2500	0	3	b	bcby	b	
Leuchars ...	1017·9	+18	W	2	b	37	75	8	-	-	1	0	1	-	1	*	bxb	bbcb	bbx	bxcwcr₀r₀
Renfrew (Abbots I.)	1019·4	+14	WSW	3	c	39	75	7	5	-	-	7-8	7-8	1500	1	*	bxbc	bcbbc	bcbbccx	cr₀m₀jr₀r₀r₀
Eskdalemuir ...	1019·3	+16	SE'S	3	b	35	75	8	5	-	-	Tr	Tr	2500	1	*	bxb	b	b	bbccs₀s₀r₀r₀m₀
Point of Ayre ...	1021·3	+16	N'W	4	bc	45	75	8	8	-	-	4-6	4-6	1500	1	3	bcb	prbc	cbcb	c
Tiree	1019·6	+2	NW'N	4	bc	43	75	8	8	6	-	4-6	4-6	2500	0	4	bcprq	bccprq	bccir	cir
Stornoway ...	1018·0	+8	WNW	3	c	37	85	8	8	4	-	7-8	7-8	2500	1	2	bcphrq	bccphrq	bcpr	bcrr
Dalwhinnie ...	1018·0	+6	NW	2	c	43	75	8	4	6	-	4-6	7-8	5700	1	*	cis	bcc	cissrs	
Aberdeen ...	1015·3	+14	WNW	3	b	38	75	7	8	3	-	1	1	4000	1	2	bcpr₀b	b	bbx	bxbccr₀
Wick	1013·6	+12	WNW	4	bc	36	92	8	3	7	3	2-3	4-6	2500	1	2	PHR	bcphr	PSbc	bcc
Lerwick... ...	1008·9	+20	N	6	c/r	38	92	7	8	2	-	7-8	10	800	1	*	cprphr	cprirq	cbcc	cbc
Blacksod Point...	1025·1	+6	NW	3	bc	46	75	8	2	-	3	2-3	4-6	2500	0	2	bc	bc	prc	1Rcq
Malin Head ...	1021·7	+10	N	4	c	46	65	8	2	8	-	4-6	7-8	4000	0	4	c	cbcc	bcprc	cpr₀c
Aldergrove ...	1022·9	+10	WSW	2	bc	39	85	8	8	-	-	4-6	4-6	2500	1	*	cpr₀bcb	bbc	bcc	ccr₀m₀
Birr Castle ...	1026·0	+16	NW	1	b	39	92	8	-	4	-	0	1	-	1	*	bc	bcb	b	cx
Valentia Obsy. †	1028·6	+12	N	2	bc	45	75	8	4	-	-	4-6	4-6	4000	1	3	bcbcpr₀	prcbbc	bbcc	cprbccr₀r₀
Roches Point ...	1027·1	+22	N	3	b	47	85	8	5	-	-	1	1	2500	1	3	b	B	bbc	bccir

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).

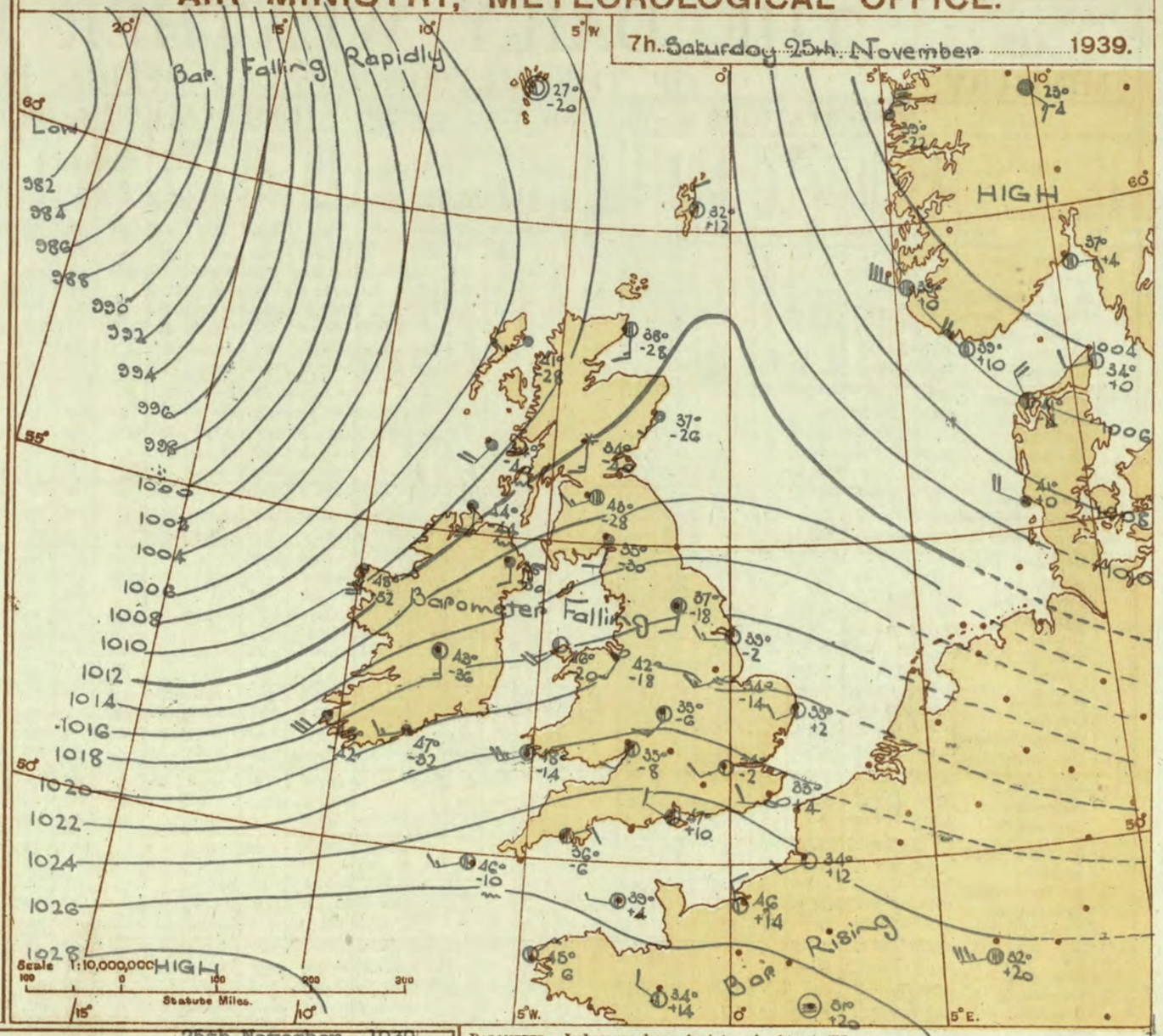
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



DISTRICTS.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 25th November, 1939.
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	Fresh or strong southwest wind, a gale at times at exposed places; cloudy, rain at times; rather mild.
11 S.E. Scotland ↓ 12 S.W. Scotland & Isle of Man. ↓ 13 A. W. Scotld. ↓ B.N.W.Scotland. ↓ 14 Mid Scotland 15 N. E. Scotland ↓ 16 Orkneys and Shetlands ↓ 17 N. W. Ireland ↓ 18 N. E. Ireland ↓	Fresh or strong southerly wind, probably a gale at exposed places, veering later; rain at first, showery later; brighter intervals locally; rather mild.
19 S. E. Ireland ↓ 20 S. W. Ireland ↓	As 1 - 10.

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.

GENERAL INFERENCE.

A deep depression off Southwest Iceland is moving eastwards. Rain will spread quickly over the British Isles with strong southwest winds, reaching gale force locally.

FURTHER OUTLOOK.

Stormy and changeable.

Times of issue of Gale Warnings.

↓ South cone hoisted at 0705 on 25th in districts 17, 19, 20, and at 0800 25th in districts 6,7,8, 11,12,13A,13B,15,16,18.

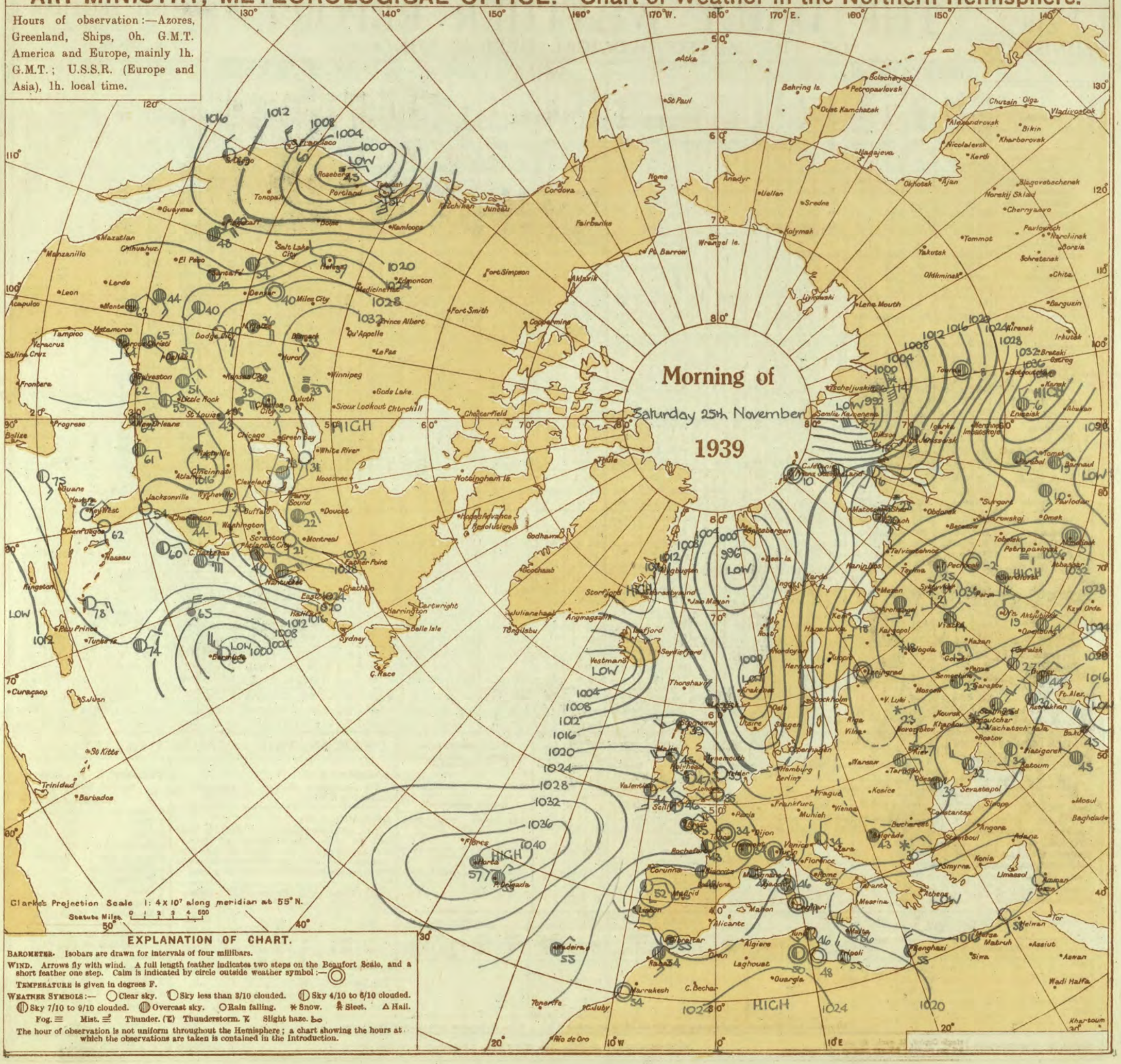
Forecasts issued at 1030 G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1.
0.472/9777. Wt. 8109. D 4826 Gp. 249. 24300 11/39

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 25th November 1939.

No. 28492

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	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	1023·4	+14	WSW	2	zo	35	92	5	-	-	-	0	0	-
	S. Farnborough	226	1024·7	+8	WNW	2	zo	35	92	6	-	-	-	0	0	-
	Boscombe Down	417	1024·7	+8	WNW	2	zo	35	92	6	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1024·4	+12	-	0	b	35	97	7	-	-	-	0	0	-
	Lympne	346	1022·4	+10	NNW	3	m	34	92	4	-	-	-	0	0	-
	Manston	154	1021·4	+10	NW	4	zo	40	75	5	-	-	-	0	0	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1020·5	+8	NNW	3	zo	37	92	5	-	-	-	0	0	-
	Gorleston	5	1019·4	+4	W'S	2	b	34	92	6	-	-	-	0	0	-
	Mildenhall	19	1021·1	+6	SW	3	zo	32	97	5	-	-	-	0	0	-
	Cranwell	240	1021·0	+6	W	2	bf+	33	92	3	-	-	-	0	0	-
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1023·3	+6	WNW	2	b	37	92	8	-	-	-	0	0	-
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1025·4	+4	N	3	bc	46	65	8	2	-	-	4-6	4-6	2500
	Bristol	209	1024·9	+8	NN	2	zo	36	92	6	-	3	-	0	0	-
	Portland Bill	32	1025·0	+16	N	2	b	45	85	8	-	-	-	0	0	-
	Plymouth	82	1026·7	+12	-	0	zo	39	92	6	5	-	-	Tr	Tr	4000
	The Lizard	240	1027·5	+10	N	2	bc	42	85	8	8	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	1027·4	+6	NW'N	3	bc	46	75	8	2	-	-	2-3	2-3	2500
	Guernsey	175	1025·2	+8	N'W	1	bc	45	65	8	2	-	-	2-3	2-3	2500
6	Pembroke	142	1025·0	0	NW'N	3	bc	46	75	8	8	-	-	4-6	4-6	2500
7	Holyhead	26	1022·7	-2	W'N	4	c	47	75	8	2	-	-	7-8	7-8	2500
	Chester (Sealand)	16	1022·5	-2	W'S	3	c/pr	44	75	7	8	6	-	4-6	7-8	2500
8	Manchester	70	1021·8	0	SW'S	1	zo	35	97	5	5	-	-	1	1	4000
10	Spurn Head	29	1019·4	+4	NW'W	5	b	39	75	6	-	-	-	0	0	-
	Catterick	175	1019·9	+2	WNW	3	bc	38	75	8	-	3	-	0	2-3	-
	Tynemouth	108	1018·6	+6	W	3	bc	36	85	7	2	-	-	2-3	2-3	2500
11	St. Abbs Head	280	1017·7	+10	WNW	4	b	40	65	8	5	-	-	1	1	2500
	Leuchars	36	1018·2	0	WSW	2	b	34	85	9	-	3	-	0	0	-
12	Renfrew (Abbots I.)	19	1019·6	-2	-	0	c	34	92	7	5	7	-	4-6	9+	4000
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1021·2	-2	NW'W	4	b	45	92	8	2	-	-	1	1	4000
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1017·3	-20	WSW	3	c	39	85	7	5	7	-	2-3	7-8	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1015·2	+2	W	2	bc	33	97	8	8	7	-	2-3	4-6	1500
16	Lerwick	156	1012·3	+6	NNW	4	c	35	65	8	8	3	-	4-6	7-8	1500
17	Blacksod Point	18	1021·0	-26	W	4	c	47	75	8	3	-	-	9+	9+	7200
18	Malin Head	84	1018·7	-20	WSW	4	c	45	85	8	8	-	6	4-6	7-8	5700
	Aldergrove	268	1021·0	-14	S'W	3	c	37	92	7	-	7	-	0	9+	-
19	Birr Castle	173	1024·9	-14	NNW	1	b	34	97	8	-	-	-	0	0	-
20	Valentia Obsy.	30	1026·2	-18	S	3	c	44	85	8	8	3	-	7-8	7-8	2500
	Roches Point	22	1027·0	-10	NNW	2	bc	41	85	8	-	-	5	0	2-3	-

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)
London (Kew)	1023·4	0	WNW	2	zo	35	97	6	-	-	-	0	0	-
Croydon	1023·3	-2	WSW	2	b	34	92	7	-	4	1	0	Tr	—
S. Farnborough	1023·5	-6	-	0	zo	33	92	6	-	-	-	0	0	-
Boscombe Down	1024·4	-2	SW	1	zo	33	92	6	-	-	-	0	7-8	-
Calshot (Sthmtn.)	1024·4	-2	NW'W	2	zo	35	97	6	2	3	-	0	Tr	-
Lympne	1023·4	+4	W'N	2	zo	33	92	6	-	-	-	0	0	-
Manston	1023·1	+8	W	3	bc/f	34	97	4	5	-	-	2-3	2-3	800
Shoeburyness	1022·8	+2	WSW	2	bm	35	92	4	-	-	-	0	0	-
Felixstowe	1021·4	+6	WNW	2	zo	36	92	5	-	-	-	0	0	-
Gorleston	1020·7	+2	WSW	2	bc	33	92	5	5	-	-	4-6	4-6	1500
Mildenhall	1021·4	-4	SW'W	3	zo	32	97	6	6	-	1	Tr	1	4000
Cranwell	1019·6	-14	W'S	3	zo	34	92	6	5	-	1	Tr	2-3	2500
Birmingham	1022·0	-6	SW	3	bc	35	92	6	-	-	6	0	4-6	-
Upper Heyford	1023·4	-6	W'S	1	bc	32	92	8	-	-	5	0	2-3	-
Ross-on-Wye	1022·6	-8	SW'S	2	c	35	92	7	-	-	6	0	9	-
Hartland Point	1023·3	-14	WNW	3	bc	47	75	8	2	-	-	4-6	4-6	2500
Bristol	1024·2	-6	SW	1	zo	38	92	6	-	7	8	0	2-3	-
Portland Bill	1025·7	+10	NW	2	c	47	85	8	5	4	-	4-6	7-8	4000
Plymouth	1025·3	-6	ENE	2	bc	36	92	8	5	-	2	2-3	2-3	5700
The Lizard	1026·2	-4	WSW	2	bc	45	75	8	8	-	-	2-3	2-3	2500
Scilly (St. Mary's)	1025·5	-10	WSW	3	bc	46	75	8	8	-	-	4-6	4-6	2500
Guernsey	1025·6	+4	WNW	1	bc	39	85	8	1	7	-	1	2-3	2500
Pembroke	1022·4	-14	W'S	5	c	48	75	8	8	-	-	7-8	7-8	2500
Holyhead	1019·4	-20	SW	4	bc	46	75	8	1	7	-	2-3	4-6	2500
Chester (Sealand)	1020·2	-18	SW'S	1	zo	42	85	6	5	3	-	1	9+	4000
Manchester	1020·2	-14	SSW	3	zo	38	97	6	5	4	-	2-3	2-3	1500
Spurn Head	1018·9	-2	W	3	bc	39	85	6	-	-	-	0	2-3	-
Catterick	1017·6	-18	S'W	2	c	37	85	9	5	7	-	4-6	9+	2500
Tynemouth														
St. Abbs Head														
Leuchars	1013·1	-34	-	0	ir0	36	97	7	5	-	-	10	10	1500
Renfrew (Abbots I.)	1013·5	-28	WSW	3	c/r	43	92	6	5	2	-	4-6	10	2500
Eskdalemuir	1015·5	-30	SSW	2	ir0	35	97	5	-	2	-	10	10	450
Point of Ayre	1016·9	-20	WSW	3	c	45	85	8	9	-	-	9+	9+	2500
Tiree	1007·9	-40	SW'S	4	rr	44	92	7	-	2	-	10	10	1500
Stornoway	1008·1	-28	SW	3	rr	41	85	6	8	-	-	10	10	1500
Dalwhinnie	1011·7	+8	S	3	s	34	92	5	6	-	-	10	10	1500
Aberdeen	1012·4	-26	SW	1	ir0	37	75	6	5	2	-	2-3	9	2500
Wick	1010·5	-28	S	3	c	38	85	7	5	2	-	7-8	9+	1500
Lerwick	1010·3	-12	NNW	2	bc	32	75	8	5	1	-	4-6	4-6	1500
Blacksod Point	1010·0	-52	S	7	iR	48	85	7	6	-	-	10	10	<150
Malin Head	1010·6	-44	S	4	r	44	85	7	6	-	-	9	9	4000
Aldergrove	1015·6	-30	S'E	2	ir0	38	92	6	6	2	-	4-6	10	2500
Birr Castle	1017·3	-36	S	3	c	43	85	8	5	1	-	7-8	10	2500
Valentia Obsy.	1018·3	-42	SW'S	6	r0r0	48	85	7	6	2	-	10	10	2500
Roches Point	1020·7	-32	W'S	3	ir	47	85	8	6	2	-	7-8	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 24th Hrs. (36)
London (Kew)	1	*	45	34	23	-	Tr	0·3
Croydon	1	*	44	34	27	0·6	Tr	0·0
S. Farnborough	1	*	45	30	23	0·1	Tr	0·7
Boscombe Down	1	*	45	33	30	-	7	2·6
Calshot (Sthmtn.)	1	1	46	33	29	0·3	-	1·7
Lympne	1	§2	43	32	28	1	-	0·0
Manston	1	*	45	34	30	2	Tr	0·0
Shoeburyness	1	*	44	34	28	1	-	0·0
Felixstowe	1	3	44	35	31	0·2	-	0·0
Gorleston	3	2	44	32	31	-	-	*
Mildenhall	1	*	43	30	25	-	Tr	0·9
Cranwell	0	*	45	32	27	-	-	3·5
Birmingham	1	*	45	34	29	*	-	3·7
Upper Heyford	1	*	45	31	30	Tr	-	*
Ross-on-Wye	1	*	47	34	26	-	-	4·7
Hartland Point	1	2	48	46	40	-	-	4·0
Bristol	1	*	47	35	25	-	-	4·1
Portland Bill	1	2	51	43	*	0·5	-	*
Plymouth	1	1	50	35	27	-	-	6·7
The Lizard	0	1	50	39	*	-	-	4·2
Scilly (St. Mary's)	1	2	49	44	*	-	-	6·2
Guernsey	1	3	50	39	29	1	-	1·4
Pembroke	1	2	49	44	*	-	-	5·7
Holyhead	1	3	48	44	41	-	-	5·6
Chester (Sealand)	1	*	49	40	34	2	0·6	5·1
Manchester	1	*	47	31	21	47	0·2	6·0
Spurn Head	0	2	44	38	*	-	-	3·8
Catterick	0	*	45	35	24	-	-	6·7
Tynemouth								
St. Abbs Head					*	-		*
Leuchars	1	*	44	32	25	-	2	6·2
Renfrew (Abbots I.)	1	*	46	33	29	0·5	2	4·5
Eskdalemuir	1	*	41	30	26	-	0·4	6·8
Point of Ayre	1	2	48	41	*	0·3	1	5·5
Tiree	1	3	46	41	37	1	4	2·8
Stornoway	1	2	43	35	*	0·3	3	3·8
Dalwhinnie	4	*	38	30	23	0·2	1	3·1
Aberdeen	3	1	42	33	25	Tr	Tr	5·7
Wick	4	1	43	31	*	4	2	*
Lerwick	3	*	41	32	*	4	-	0·1
Blacksod Point	1	5	55	42	*	Tr	5	*
Malin Head	1	4	47	41	*	1	2	2·7
Aldergrove	1	*	47	35	29	0·3	Tr	5·1
Birr Castle	1	*	*	33	29	-	-	5·9
Valentia Obsy.	1	3	56	39	33	0·4	1	3·8
Roches Point	1	3	49	49	*	-	‡	*

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	cror0m0cz	bcbz0b,n0	bm0x	45	34	23	—	Tr	0·3	•	•	5
Croydon	217	cror0m0fofm	om0bzbf	bfbmoxm0b	44	34	27	0·6	Tr	0·0	•	•	6
Greenwich (Royal Observatory)	149	cmb	bcm	bcbm	44	32	26	—	—	0·0	75	85	4
City (Bunhill Row)	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park)	27	•	•	•	46	32	30	—	—		75	91	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	44	34	26	—	—		75	90	•
Camden Square	110	o	o	•	44	33	27	—	—	•	•	94	•
Kensington	80	bc	bz	•	45	32	21	—	—		91	90	•
Hampstead Observatory	450	bc	bc	bc	42	32	28	—	—		•	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.
0·4	18h 25th	<0·1	3h [illegible]

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 24th November: Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 25th November: Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	Past 24 Hours: Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome											•	•		

EXPLANATION OF FIGURES, LETTERS, etc.

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

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

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

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

COLUMNS 8, 22.—Code for surface visibility.

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

COLUMN 30.—Code for State of Sea.

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

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

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Sunday 26th November 1939.
No. 28493

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1019.9	-34	SW	3	zo	43	85	6	5	-	-	10	10	1500
	Croydon	1020.9	-22	SSW	3	zo	43	85	6	5	7	-	2-3	10	3700
	S. Farnborough	1020.2	-30	SW	4	c	46	65	7	-	7	7	0	10	-
	Boscombe Down	1019.7	-34	SW	4	c	45	85	7	5	1	-	2-3	9+	4000
	Calshot (Soton.)	1020.5	-32	WSW	4	c	48	75	8	5	2	7	9	10	1500
	Lympne ...	1021.4	-22	SWW	2	c	42	85	8	2	7	7	Tr	10	4000
	Manston ...	1020.9	-22	SW	3	c	43	85	7	2	7	6	1	9+	2500
2	Shoeburyness ...	1020.7	-20	SW	2	m	43	75	4	-	1	-	0	10	-
	Felixstowe ...	1019.2	-22	WSW	4	m	42	92	4	-	1	-	0	10	-
	Gorleston ...	1018.2	-20	SW'S	2	c	40	85	6	5	-	-	10	10	2500
	Mildenhall ...	1017.5	-34	SWS	4	zo	41	85	6	5	-	-	10	10	4000
	Cranwell ...	1015.2	-42	SW	4	c	42	85	7	5	2	-	4-6	10	2500
3	Birmingham	1016.0	-34	SSW	3	o	41	85	6	6	2	-	2-3	10	1500
	Upper Heyford	1018.7	-36	SW	4	c	42	85	7	5	2	-	4-6	10	2500
4	Ross-on-Wye ...	1016.5	-40	SSW	3	c	45	75	7	6	2	-	2-3	10	1500
5	Hartland Point														
	Bristol	1018.9	-30	SSW	4	c	44	75	7	5	2	-	7-8	10	2500
	Portland Bill ...	1020.0	-28	SW	4	c	50	75	8	5	-	-	10	10	2500
	Plymouth ...	1019.9	-42	WSW	6	c	50	65	8	8	2	-	9	10	1500
	The Lizard ...	1021.9	-30	WSW	6	c/pr	49	85	8	8	6	-	9	10	2500
	Scilly (St. Mary's)	1020.4	-42	SW	6	r	49	75	7	5	2	-	7-8	10	1500
	Guernsey ...	1023.1	-24	SW	3	c	49	65	8	2	1	-	2-3	10	2500
6	Pembroke ...	1013.7	-38	SSW	9	roro	49	92	6	8	-	-	10	10	1500
7	Holyhead ...	1008.0	-68	SWS	7	rr	47	97	6	6	2	-	7-8	10	800
	Chester (Sealand)	1012.4	-50	S'W	3	roro	44	85	7	5	2	-	4-6	10	2500
8	Manchester ...	1012.9	-50	S'W	4	roro	42	92	6	5	2	-	9	10	2500
10	Spurn Head ...	1014.3	-28	SW	4	c	41	85	5	5	-	-	10	10	1500
	Catterick ...	1009.7	-58	SSW	4	zo	42	85	6	6	2	-	4-6	10	1500
	Tynemouth ...	1008.6	-38	SW	3	c/r	44	92	5	-	2	-	10	10	1800
11	St. Abbs Head														
	Leuchars ...	1003.2	-58	SSW	3	roro	42	92	6	6	2	-	4-6	10	1500
12	Renfrew (Abbots I.)	1001.7	-36	SSW	5	rr	43	85	6	6	2	-	9	10	800
	Eskdalemuir ...	1004.8	-60	SSW	4	roro	40	92	6	-	2	-	10	10	800
	Point of Ayre ...	1004.8	-74	SW'W	6	rr	45	92	7	6	2	-	4-6	10	2800
13A	Tiree	991.6	-72	SSW	6	rr	45	97	5	-	2	-	10	10	450
13B	Stornoway ...	983.6	-88	S	8	rr	44	85	6	5	2	-	9	10	1500
15	Dalwhinnie ...	999.3	-80	S	4	s	36	85	5	6	-	-	10	10	1500
	Aberdeen ...	1002.5	-58	SSW	3	roro	39	97	6	6	2	-	4-6	10	800
	Wick	999.8	-60	S	4	roro	41	97	7	5	2	-	7-8	10	1500
16	Lerwick... ...	1003.9	-44	SE	3	c	37	75	8	5	7	-	7-8	9	1500
17	Blacksod Point..														
18	Malin Head ...	995.5	-72	S	5	s/pr	45	65	7	6	-	-	9	9	4000
	Aldergrove ...	1000.1	-98	S'W	4	roro	43	92	6	6	-	-	10	10	450
19	Birr Castle ...	1004.2	-66	S	7	ir	49	85	7	6	2	-	4-6	10	1500
20	Valentia Obsy. †	1007.7	-50	SWW	6	roro	54	97	6	6	-	-	10	10	800
	Roches Point ...	1010.7	-50	SWW	6	rr	50	97	6	6	2	-	7-8	10	800

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1013.0	-36	SW	4	roro	45	85	5	6	2	-	7-8	10	1500	1	*
Croydon	1014.3	-38	SSW	4	roro	45	85	6	6	2	-	4-6	10	1500	1	*
S. Farnborough	1013.0	-40	SSW	5	roro	45	85	7	5	2	-	4-6	10	2500	1	*
Boscombe Down	1012.4	-40	SSW	5	roro	45	92	6	6	-	-	10	10	800	1	*
Calshot (Soton.)	1014.3	-38	SW'W	6	roro	49	85	6	6	2	-	7-8	10	800	1	3
Lympne	1016.0	-22	SW	5	roro	45	92	7	5	2	-	7-8	10	1500	1	§ 4
Manston	1015.2	-38	SW	5	roro	45	85	6	6	2	-	9	10	1500	1	*
Shoeburyness	1014.2	-70	S	5	roro	45	92	6	6	2	-	Tr	10	2500	1	*
Felixstowe	1013.4	-38	SW'S	5	roro	45	85	6	-	2	-	10	10	4000	1	3
Gorleston	1012.3	-24	S'W	5	iro	42	85	6	6	-	-	10	10	1500	1	3
Mildenhall	1010.4	-42	S'W	5	roro	43	92	5	-	2	-	10	10	1500	1	*
Cranwell	1006.1	-58	SSW	6	iro	43	92	6	5	2	-	2-3	10	800	1	*
Birmingham	1005.9	-50	SSW	4	roro	43	92	7	6	-	-	10	10	800	1	*
Upper Heyford	1010.7	-30	SSW	4	roro	44	85	7	5	2	-	7-8	10	1500	1	*
Ross-on-Wye	1007.6	-34	SW'S	6	roro	46	92	6	6	-	-	10	10	1500	1	*
Hartland Point	1007.1	-28	W	8	rr	48	97	8	6	2	-	9+	10	800	1	5
Bristol	1010.3	-42	SW	6	roro	46	85	6	6	2	-	10	10	1500	1	*
Portland Bill	1013.0	-20	SW	6	rr	51	92	7	5	-	-	10	10	1500	1	5
Plymouth	1012.5	-42	SW	8	iro	52	85	6	9	-	-	10	10	800	1	4
The Lizard	1013.6	-20	WSW	7	roro	49	97	7	5	-	-	10	10	1500	1	4
Scilly (St. Mary's)	1012.7	-38	SW	7	roro	50	97	5	5	2	-	7-8	10	1500	1	4
Guernsey	1017.8	-20	SW'S	5	c	49	65	7	2	1	-	7-8	10	2500	1	3
Pembroke	1004.9	-30	W'S	9	rr	52	92	5	8	-	-	10	10	1500	1	4
Holyhead	999.6	-38	SW'W	5	c/r	51	97	6	6	2	-	7-8	10	800	1	4
Chester (Sealand)	1001.2	-58	SSW	4	iro	51	85	7	5	2	-	2-3	10	2500	1	*
Manchester	1001.4	-66	SSW	4	rr	45	97	5	6	2	-	7-8	10	800	1	*
Spurn Head	1004.1	-54	S'W	6	roro	42	97	6	5	-	-	10	10	800	1	4
Catterick	999.3	-60	S'E	4	iro	42	92	6	6	-	-	9+	9+	1500	1	*
Tynemouth	997.6	-74	SSW	5	c/r	42	85	6	6	-	-	10	10	1500	1	2
St. Abbs Head	991.3	-40	SW	7	c/r	43	92	8	8	2	-	7-8	10	2500	1	4
Leuchars	991.4	-70	SSW	1	c/r	44	97	6	8	2	-	7-8	10	1500	1	*
Renfrew (Abbots I.)	992.2	-36	SSW	4	roro	49	97	6	5	2	-	9+	10	800	1	*
Eskdalemuir	993.8	-60	SW	5	RR	46	97	6	-	2	-	10	10	220	2	*
Point of Ayre	995.7	-44	W	6	c/r	51	97	7	6	2	-	2-3	10	1500	1	4
Tiree	989.2	-12	WSW	4	c	50	97	7	5	-	-	9	9	1500	1	4
Stornoway	985.6	-34	WSW	5	c/r	49	92	7	8	6	-	4-6	7-8	1500	1	3
Dalwhinnie	990.1	-46	S	2	ir	40	92	6	4	2	-	4-6	10	1500	1	*
Aberdeen	989.9	-70	SSW	4	c/r	43	92	6	6	2	-	7-8	9+	800	1	1
Wick	987.4	-48	S	5	RR	42	97	6	5	2	-	9	10	800	1	2
Lerwick	992.1	-44	SE	6	roro	39	92	6	6	2	-	4-6	10	800	1	*
Blacksod Point	996.5	-20	W	5	dr	53	97	6	6	-	-	10	10	<150	2	4
Malin Head	992.8	-18	W	4	c	51	97	7	8	-	-	9	9	2500	1	3
Aldergrove	995.0	-24	SW'S	4	c/d	50	97	6	6	-	-	10	10	800	0	*
Birr Castle	1000.8	-20	SW	2	c/r	54	92	7	6	2	-	7-8	10	1500	1	*
Valentia Obsy. †	1004.6	-20	SW'W	6	id	55	97	5	6	-	-	10	10	450	1	5
Roches Point	1004.4	-24	W	5	c	55	92	8	6	2	-	7-8	9	1500	1	4

PAST 24 HOURS.

Stations	Weather 7h.—13h. 25th (37)	Weather 13h.—18h. 25th (38)	Weather 18h. 25th 1h. 26th (39)	Weather 1h.—7h. 26th (40)
London (Kew)	bmoxcmo	cirocro	crorrmo	crormoc
Croydon	bxbcmocmo	cmororo	crorrm	crorrm
S. Farnborough	bmoc⊕	ciroro	rororrc	
Boscombe Down	cmo	oiroro	croroido	croroiro
Calshot (Soton.)	bbcmocmo	cirroro	orrrorm	ororoeddm
Lympne	bmoxc⊕	cprorr	orrmo	fdrorr
Manston	bmobcc	comroro	rororrmo	roroiro
Shoeburyness	bmoc	roromoc	crr	errro
Felixstowe	bmocmo	omororo	ororomp	ororoc
Gorleston	beczo	cozoiro	oroiroq	proroq
Mildenhall	bycmo	cororo	orrciro	cmiroc
Cranwell	cmoc⊕	ciro	ciromo	ciromoq
Birmingham	bcco	oror	oro	ororoRc
Upper Heyford	bxbccmo	crorocc	crorocc	crrmoro
Ross-on-Wye	c	cqroroq	roqdq	rqcq
Hartland Point		err	rrorr	rrddr
Bristol	c	croroq	croRqrr	crrqRr
Portland Bill	c	orr	orr	orr
Plymouth	bccmoc	ciromo	cirorrm	ororomo
The Lizard	bcprc	crrq	rrqm	cddmq
Scilly (St. Mary's)	r	croro	croido	oidoc
Guernsey	bcc	c	qddo	qdorr
Pembroke	orrqc	rrmoq	ormqirc	qmp
Holyhead	Rrrmroc	RRrorc	crorome	roromo
Chester (Sealand)	bccmororo	crrromo	cirrrmo	crrmopqr
Manchester	bcmroro	cmororocrr	cmororr	crrrqpr
Spurn Head	como	irorr	qiro	qpr
Catterick	cproc	ciromo	omroro	roromoc
Tynemouth	comoiro	oiro	pcpoc	cproboc
St. Abbs Head		roreq	cq	cq
Leuchars	crororrroro	roromoc	cmoiromo	kqprb, kqPR
Renfrew (Abbots I.)	cmoiro rr	crrroromo	cmddroro	cmoiroboc
Eskdalemuir	crrmo	cRR	oiR	oirbc
Point of Ayre	rorr	rr	roro	cprcq
Tiree	orrR	orrcir	cirro	p
Stornoway	cRR	crr	cRRq	cPHRql
Dalwhinnie	cs rs	csrsir	csrs	
Aberdeen	croro	crrc	cciro	cirb
Wick	croro	roRr	Rcro	RPR
Lerwick	bcc	cproro	croirir	cRrr
Blacksod Point		drq	irq	cq
Malin Head	c	cproc idc	c	cphrc
Aldergrove	ro, rororr	rorоddmc	dodocir	irproqc
Birr Castle	cir	crrir	cirrr	c
Valentia Obsy. †	rrroro	rorodd id	dod iroid	idiroc
Roches Point	rr	circ	iro	iroc

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.

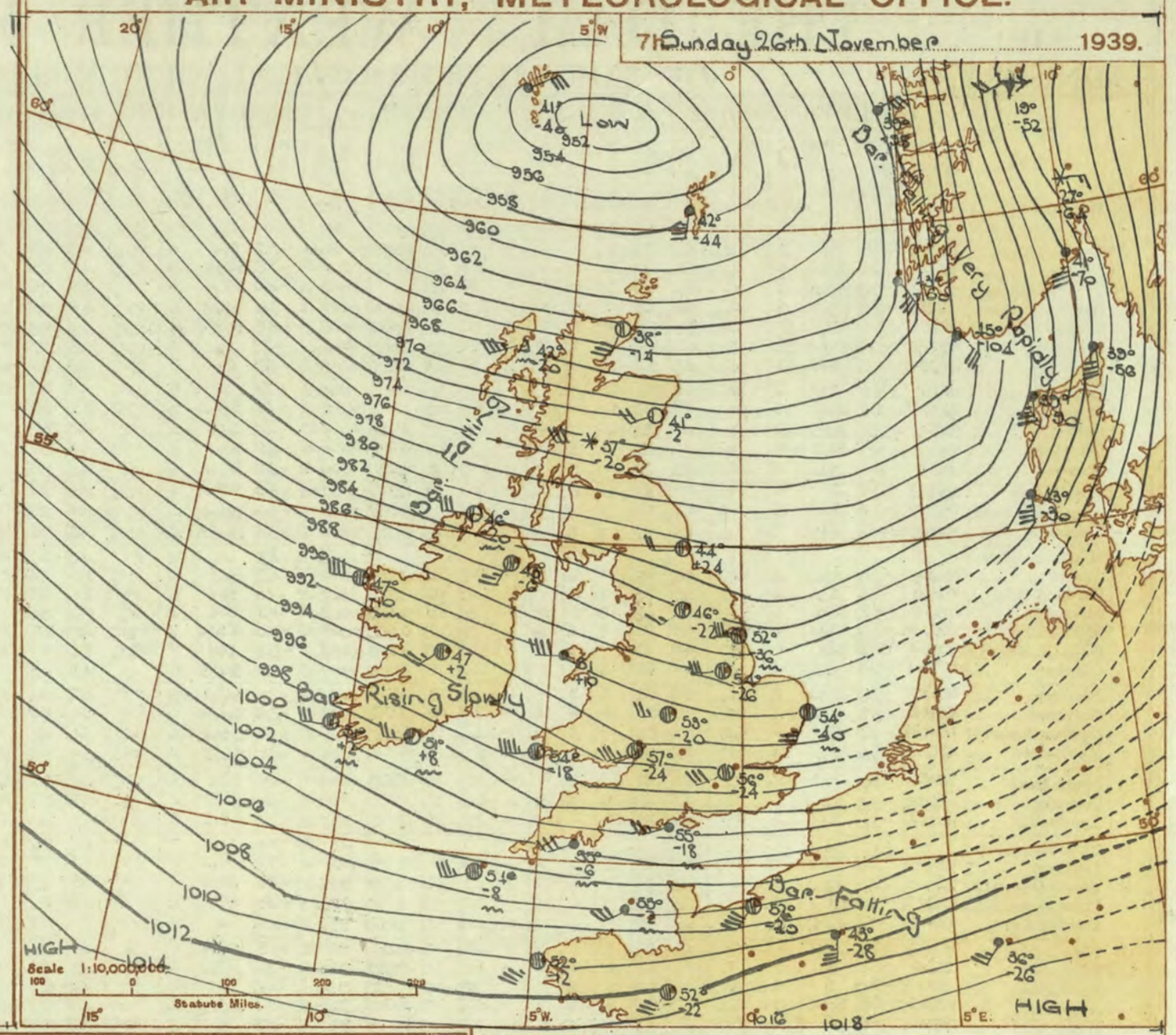
COLUMN 29.—STATE OF GROUND.

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. Sunday 26th November 1939.



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 November, 1939.
1 S.E. England V 2 E. England V 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England V 6 South Wales V 7 North Wales V 8 N.W. England V 9 N. Midlands ... 10 N.E. England V	Strong westerly wind, a gale at exposed places with some heavy squalls; showers with local hail, but bright intervals; colder.
11 S.E. Scotland V 12 S.W. Scotland & Isle of Man. V 13 A. W. Scotld. V B.N.W.Scotland. V	Strong squally westerly winds; a gale at first at exposed places; showers of rain, hail, or sleet, chiefly in the west; snow on hills; brighter intervals; rather cold.
14 Mid Scotland 15 N. E. Scotland V 16 Orkneys and Shetlands V	
17 N. W. Ireland V 18 N. E. Ireland V 19 S. E. Ireland V 20 S. W. Ireland V	As 1 - 10.

GENERAL INFERENCE.

An intense depression near the Faeroes is still growing deeper and moving slowly eastward. It will soon become stationary or drift slowly northeast. Weather will be squally and showery with bright intervals.

FURTHER OUTLOOK.

Unsettled, but bright intervals. Wind decreasing slowly.

Times of Issue of Gale Warnings.

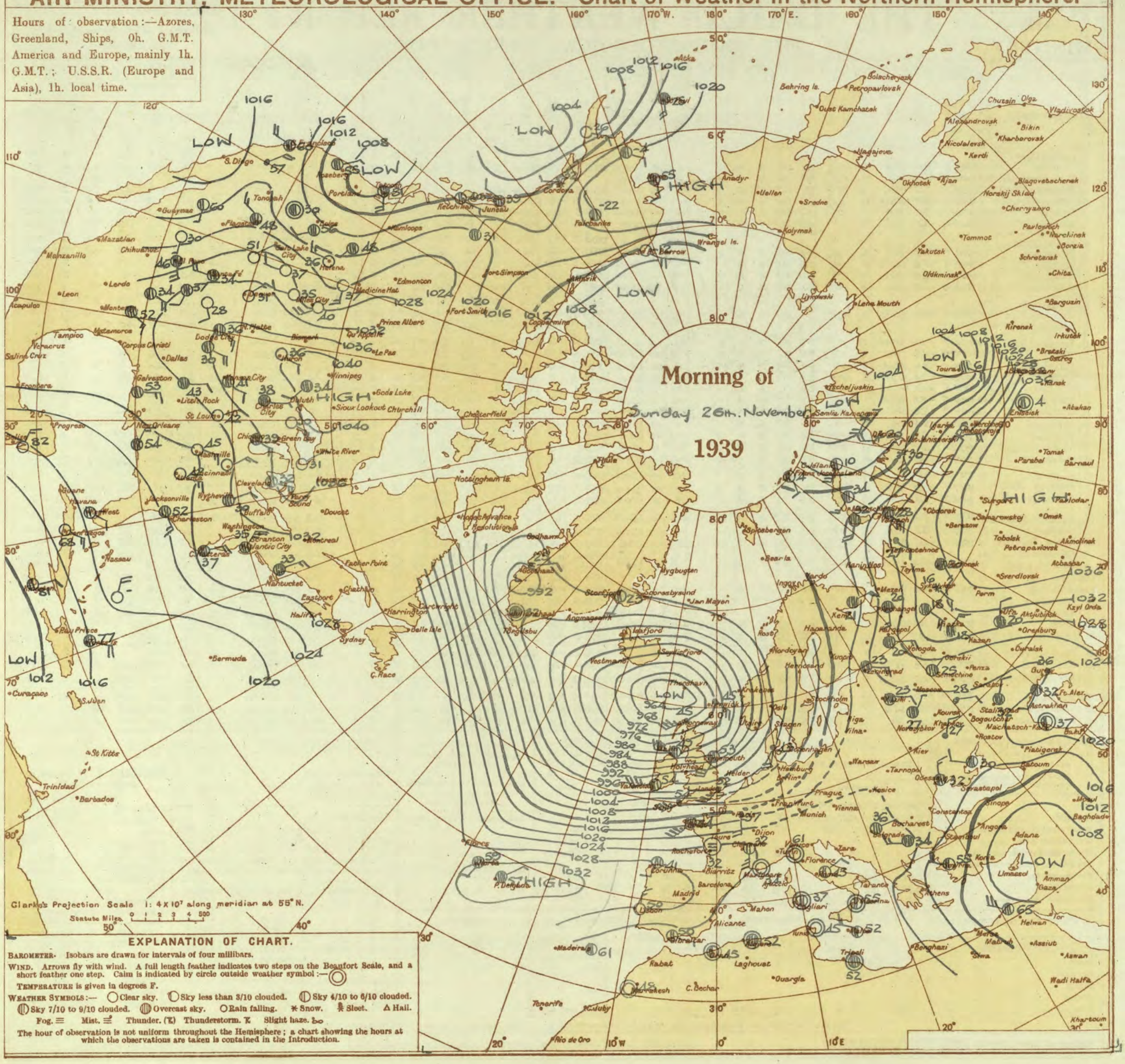
South cone hoisted at 0805 on 25th in districts 6, 7, 8, 11, 12, 13A, 13B, 15, 16, 17 and 18, and at 1105 on 25th in districts 1, 2, 5, 10, 19 and 20

Forecasts issued at 1100 G.M.T.

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

H.M.S.O. Press, Cornwall House. 0.472/9777. Wt. 5109. D.4626. Gp. 248. 24300. 11/39

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 26th November 1939.
No 28493

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1003.0	-50	SW	5	r_0r_0	52	97	6	6	2	-	9	10	1500
	S. Farnborough	226	1002.5	-46	SW	6	r_0r_0	52	92	6	5	2	-	9	10	800
	Boscombe Down	417	1002.1	-46	SW	5	r_0r_0	52	97	6	6	2	-	9	10	800
	Calshot (Sthmtn.)	8	1004.6	-38	WSW	6	r_0r_0	52	97	5	6	2	-	10	10	800
	Lympne ...	346	1005.1	-50	SW	7	df	48	97	3	-	-	-	10	10	<150
	Manston ...	154	1003.0	-46	SW	6	rr	49	97	6	6	-	-	10	10	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1001.0	-42	SW	6	r_0r_0	48	92	7	6	2	-	9	10	1500
	Gorleston ...	5	998.1	-58	SW'S	6	ir_0	48	92	6	6	-	-	10	10	1500
	Mildenhall ...	19	997.5	-46	SW	6	rr	50	97	8	5	2	-	7-8	10	1500
	Cranwell ...	240	993.5	-46	SW	6	ir_0	51	92	6	6	-	-	10	10	1500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	999.5	-42	SW'S	5	r_0r_0	51	97	6	5	-	-	10	10	450
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1000.5	-36	WSW	8	rr	53	97	5	-	2	-	10	10	800
	Bristol ...	209	1000.7	-46	SW	5	rr	52	97	6	5	2	-	7-8	10	1500
	Portland Bill ...	32	1004.0	-30	WSW	7	rr	54	92	7	5	-	-	10	10	1500
	Plymouth ...	82	1005.2	-34	WSW	8	rr	54	92	5	-	2	-	10	10	800
	The Lizard ...	240	1007.1	-18	WSW	7	r_0r_0	53	97	5	5	-	-	10	10	800
	Scilly (St.Mary's)	163	1006.6	-22	SW'W	7	id_0	54	97	6	5	-	-	10	10	1500
	Guernsey ...	175	1010.3	-28	SW	6	d_0d_0	51	92	5	5	-	-	10	10	800
6	Pembroke ...	142	998.5	-24	W	8	ir_0	55	97	6	8	-	-	10	10	1500
7	Holyhead ...	26	991.2	-42	SW	6	r_0r_0	54	92	6	6	2	-	7-8	10	450
	Chester(Sealand)	16	992.1	-42	SW'W	4	rr	56	85	6	5	2	-	Tr	10	1500
8	Manchester ...	70	992.0	-40	SW	4	rr	53	97	6	5	2	-	7-8	10	1500
10	Spurn Head ...	29	991.5	-52	SW	6	cq	50	92	6	5	-	-	10	10	1500
	Catterick ...	175	987.1	-62	SW	4	r_0r_0	55	85	6	6	2	-	9	10	1500
	Tynemouth ...	108	984.9	-44	SW	4	c	53	75	7	8	-	-	9	9	1500
11	St. Abbs Head	280	978.5	-84	SW	6	cq	53	92	8	8	2	-	4-6	10	1500
	Leuchars ...	36	976.9	-82	SW	8	c/r	53	85	7	8	-	-	10	10	1500
12	Renfrew (Abbots I.)	19	980.7	-62	SW'W	5	r_0r_0	53	92	6	5	2	-	9	10	800
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	986.5	-60	W'S	7	r_0r_0	54	97	7	6	2	-	7-8	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	969.5	-84	WSW	7	ir	45	85	7	8	-	-	10	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	970.9	-84	SSE	5	r_0r_0	47	97	7	5	7	8	7-8	9+	1500
16	Lerwick ...	156	972.7	-122	SE	6	r_0r_0	45	97	6	6	2	-	7-8	10	450
17	Blacksod Point	18	990.4	-12	W	7	cq	50	85	7	8	-	-	10	10	220
18	Malin Head ...	84	982.0	-38	W'S	7	c/pr	49	85	6	9	-	-	9+	9+	2500
	Aldergrove ...	268	985.3	-42	SW'W	5	ir	52	92	7	6	-	-	10	10	1500
19	Birr Castle ...	173	993.9	-20	SW	4	rr	53	92	7	6	2	-	7-8	10	1500
20	Valentia Obsy.	30	999.3	-22	W'S	7	id	54	97	5	5	-	-	10	10	450
	Roches Point	22	998.4	-26	W	5	ir_0	55	97	8	6	2	-	7-8	9+	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	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)	995.1	-26	SW'W	5	c	55	92	8	5	2	-	9	10	1500	1	*
Croydon	996.4	-24	SW'W	6	z_0	56	92	6	6	2	-	9	10	1500	1	*
S. Farnborough																*
Boscombe Down	996.5	-18	WSW	6	c	56	85	7	5	7	-	7-8	10	800	1	*
Calshot (Sthmtn.)	998.8	-18	WSW	5	d_0d_0	55	97	6	5	2	-	7-8	10	800	1	4
Lympne	997.5	-30	WSW	6	dd	53	97	6	6	2	-	9+	10	450	1	§5
Manston	995.5	-30	SW'W	7	ir_0	54	92	6	6	-	-	10	10	800	1	*
Shoeburyness	994.7	-32	S'W	6	dr	55	92	4	6	-	-	9+	9+	5700	1	*
Felixstowe	991.7	-42	SW	6	c/r	54	92	7	6	2	-	9+	10	800	1	5
Gorleston	989.3	-40	SW'S	5	c/r	54	92	6	6	-	-	10	10	1500	1	4
Mildenhall	989.5	-38	SW'W	6	c	56	85	8	6	2	-	9+	10	1500	1	*
Cranwell	987.1	-26	W	6	c/r	54	85	6	8	7	-	4-6	10	1500	1	*
Birmingham	991.2	-20	W	5	c/r	53	92	8	6	7	-	4-6	10	800	1	*
Upper Heyford	993.1	-30	SW	6	c/r	65	85	7	6	2	-	9+	10	800	1	*
Ross-on-Wye	992.7	-24	WSW	7	cq	57	75	8	6	1	-	7-8	10	1500	1	*
Hartland Point	997.4	-2	WSW	8	id	54	97	6	-	2	-	10	10	1500	1	5
Bristol	996.6	-18	W	7	ir_0	55	92	7	6	2	-	7-8	10	800	1	*
Portland Bill	999.4	-6	WSW	7	rr	53	92	7	5	-	-	10	10	1500	1	6
Plymouth	1002.3	-6	WSW	6	ir	55	92	6	-	2	-	10	10	800	1	4
The Lizard	1004.4	0	WSW	7	d_0d	54	97	5	5	-	-	10	10	800	1	4
Scilly (St.Mary's)	1003.7	-8	WSW	7	o/d	54	97	6	5	-	-	10	10	1500	1	4
Guernsey	1005.8	-2	WSW	6	dd	55	97	6	5	-	-	10	10	800	1	4
Pembroke	994.5	-18	W'N	9	cq	54	85	6	5	-	-	10	10	1500	1	4
Holyhead	989.4	-10	W	8	ir_0	51	65	7	6	2	-	7-8	10	800	1	4
Chester(Sealand)	989.2	+10	W'N	5	pr	50	85	7	5	2	-	7-8	10	1500	1	*
Manchester	988.3	-6	W	5	pr	49	85	7	8	2	-	9	10	1500	2	*
Spurn Head	983.4	-36	W'S	7	cq	52	92	7	9	9	-	4-6	10	1500	2	4
Catterick	983.7	-22	WSW	3	c/r	46	75	7	5	7	-	4-6	9	1500	1	*
Tynemouth	981.2	+24	W	4	bc	44	75	7	2	-	-	4-6	4-6	2500	1	2
St. Abbs Head	976.7	0	W	6	bcq	42	75	8	4	-	-	2-3	2-3	2500	0	4
Leuchars	975.4	0	WSW	6	bc/pr	40	92	7	3	6	-	2-3	4-6	800	1	*
Renfrew (Abbots I.)	978.5	-10	WSW	6	bcpr	44	65	7	8	-	-	4-6	4-6	1500	1	*
Eskdalemuir	980.6	0	SW'W	5	ir	41	65	8	5	-	-	4-6	4-6	2500	1	.
Point of Ayre	985.1	+10	WNW	7	c	47	75	8	8	2	-	2-3	7-8	2500	1	4
Tiree	974.8	-20	W	7	cPR	45	75	7	3	-	-	7.8	7.8	1500	1	*
Stornoway	966.6	-20	WSW	7	PHR	42	75	6	8	-	-	10	10	1500	1	4
Dalwhinnie	974.5	-20	W	6	s	37	75	6	6	-	-	10	10	2500	4	*
Aberdeen	971.0	-2	WSW	4	b	41	65	7	5	-	-	Tr	Tr	4000	1	2
Wick	964.5	-14	SW	6	bcq	38	85	7	3	7	8	2-3	4-6	1500	1	3
Lerwick	956.0	-44	SSW	7	rr	42	85	6	6	2	-	4-6	10	800	1	*
Blacksod Point	990.2	-10	W	8	cq	47	75	7	8	-	-	10	10	450	0	4
Malin Head	980.1	-20	W	6	bc	46	65	7	9	-	-	4-6	4-6	4000	0	5
Aldergrove	985.2	-6	SW'S	5	c	43	75	7	2	7	8	1	9	1500	1	*
Birr Castle	993.0	+2	SW	5	c	47	65	8	5	-	-	9	9	2500	1	*
Valentia Obsy.	998.8	+2	W'S	6	c	51	75	7	5	-	-	10	10	1500	1	5
Roches Point	997.3	+8	W	5	c/r	51	92	8	6	2	-	7-8	9+	1500	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 25th. Hrs. (36)
London (Kew)	45	45	43	1	10	0.0
Croydon	45	44	42	0.6	11	0.1
S. Farnborough	46			3		
Boscombe Down	45	44	43	1	3	0.0
Calshot (Sthmtn.)	49	48	46	0.5	7	0.0
Lympne	44	44	42	1	14	1.7
Manston	45	44	42	Tr	8	1.6
Shoeburyness	45	45	38	0.5	8	0.0
Felixstowe	45	44	42	0.5	8	0.0
Gorleston	54	42	42	0.2	5	*
Mildenhall	43	43	41	1	5	0.0
Cranwell	44	43	41	Tr	1	0.0
Birmingham	43	43	42	6	6	0.0
Upper Heyford	44	43	41	0.6	5	*
Ross-on-Wye	46	45	43	1	3	0.0
Hartland Point	49	51	49	2	5	0.0
Bristol	46	46	44	1	16	0.0
Portland Bill	52	44	*	2	5	*
Plymouth	52	51	49	2	10	0.0
The Lizard	50	48	*	3	3	0.0
Scilly (St.Mary's)	50	50	*	3	1	0.0
Guernsey	50	49	46	—	5	1.6
Pembroke	52	44	*	10	6	0.0
Holyhead	52	49	47	17	1	0.0
Chester(Sealand)	51	50	47	3	5	0.0
Manchester	45	44	44	7	13	0.0
Spurn Head	42	41	*	1	2	0.0
Catterick	43	41	40	0.3	2	0.0
Tynemouth				0.2	1	
St. Abbs Head	43	38	*	5	0.6	*
Leuchars	44	39	37	4	2	0.0
Renfrew (Abbots I.)	49	43	37	12	5	0.0
Eskdalemuir	46	40	43	17	7	0.0
Point of Ayre	51	46	*	12	3	0.0
Tiree	52	40	37	9	6	0.0
Stornoway	49	38	*	9	7	0.0
Dalwhinnie	40	34	31	6	6	0.0
Aberdeen	43	39	35	4	1	0.0
Wick	43	36	*	7	7	*
Lerwick	40	37	*	1	11	0.0
Blacksod Point	55	42	*	13	3	*
Malin Head	52	40	*	3	2	0.0
Aldergrove	50	42	36	6	1	0.0
Birr Castle	54	45	44	6	6	0.0
Valentia Obsy.	55	49	47	16	3	0.0
Roches Point	55	47	*	8	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 (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.
Kew ...	18	bm_0xcm_0	$dir_0cr_0r_0$	cr_0r_0mc	45	45	43	1	10	0.0	•	•	
Croydon ...	217	$bxbcmcm_0$	$cm_0r_0r_0$	cr_0r_0m	45	44	42	0.6	11	0.1	•	•	
Greenwich (Royal Observatory)...	149	bcxcm	cdr	cr	47	46	30	1	12	0.0	75	76	5
City (Bunhill Row) ...	—	•	•	•	•	•	•	•	•		•	•	•
Westminster (St. James' Park) ...	27	•	•	•	48	46	42	13			77	79	•
Regents Pk. (Botanic Gardens)‡...	168	•	•	•									•
Camden Square ...	110	orr	oro	•	54	42	*	1	14	•	•	84	•
Kensington ...	80	odcrr	c	•	58	44	41	0.5	12		81	81	•
Hampstead Observatory ...	450	or	orr	o	56	45	44	4	9		•	91	•

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.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 25th November: Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 26th November: Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours: Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris ...	1023.0	—	0	m	39	1009.7	S	7	r_0r_0	43	45	36	—	4
Brussels ...														
Berlin ...														
Zürich ...														
Rome ...	1002.0	ENE	2	c	45	1022.0	ENE	3	bc	43	•	•	*	-

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 27th November 1939.

No. 28,494

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	994·1	-6	WSW	5	p°	55	85	6	5	2	-	7-8	10	1500
	Croydon ...	995·6	-4	WSW	6	c/r	55	85	7	6	2	-	7-8	10	800
	S. Farnborough	995·5	-6	WSW	6	id₀	54	85	7	5	2	·	9	10	1500
	Boscombe Down	996·3	-10	W'S	6	id₀	53	85	6	6	2	-	7-8	10	800
	Calshot (Soton.)	997·7	-4	WSW	5	d₀d₀	56	92	6	6	-	-	10	10	800
	Lympne ...	996·7	-2	WSW	5	dr	53	97	8	6	2	-	9+	10	450
	Manston ...	994·2	-4	WSW	6	z₀	56	85	6	8	-	-	10	10	800
2	Shoeburyness ...	993·5	+2	SW	6	c	55	85	6	8	-	-	10	10	2500
	Felixstowe ...														
	Gorleston ...	990·8	+14	W	4	c/r	50	75	6	6	-	-	9	9	2500
	Mildenhall ...	991·6	+10	W	7	c/r	50	65	8	5	-	2	9+	9+	2500
	Cranwell ...	989·8	+6	W'N	6	bc	49	65	7	5	-	5	4-6	4-6	4000
3	Birmingham	993·4	+4	W	4	c	53	55	7	5	7	-	4-6	9	1500
	Upper Heyford	994·2	+6	W	4	r₀r₀	49	85	7	6	2	-	7-8	10	800
4	Ross-on-Wye ...														
5	Hartland Point	998·6	+18	WNW	8	d	50	97	6	-	2	-	10	10	1800
	Bristol ...	996·6	+4	WSW	7	d₀d₀	50	92	7	6	2	-	4-6	10	800
	Portland Bill ...	999·2	0	WSW	7	rr	54	92	7	5	-	-	10	10	1800
	Plymouth ...	1000·9	-4	W	6	dd	54	92	5	-	2	-	10	10	800
	The Lizard ...	1002·5	-12	WSW	7	dd₀	53	97	5	5	-	-	10	10	800
	Scilly (St. Mary's)	1002·0	-6	W'S	6	d₀d₀	52	97	5	5	-	-	10	10	1500
	Guernsey ...	1003·9	-16	WSW	5	d₀d₀	55	97	6	5	-	-	10	10	800
6	Pembroke ...	996·0	+6	W'N	8	cq	52	75	7	8	2	-	7-8	10	1500
7	Holyhead ...	990·1	-6	WNW	7	pr	49	65	7	9	-	-	9+	9+	1500
	Chester (Sealand)	990·7	-6	W'S	4	bc	49	55	8	8	3	-	4-6	4-6	2500
8	Manchester ...	989·5	+2	WSW	6	c	48	65	8	7	3	-	4-6	7-8	2500
10	Spurn Head ...	986·6	+8	W'S	6	bcq	48	65	6	-	8	3	0	4-6	-
	Catterick ...	984·1	-12	WSW	6	bc	47	65	8	8	-	-	4-6	4-6	1500
	Tynemouth ...	981·8	0	W	6	bc/pr	45	65	6	2	-	-	4-6	4-6	2500
11	St. Abbs Head	974·9	-14	W	7	p°	42	85	8	8	6	-	4-6	4-6	2500
	Leuchars ...	973·0	-6	WSW	5	c/pr	43	75	7	9	7	-	7-8	7-8	2500
12	Renfrew (Abbots I.)	977·6	+2	W'S	7	pr	44	75	7	9	6	3	9	9	1500
	Eskdalemuir ...	980·0	-4	SW'W	7	pr	40	75	8	6	-	-	9+	9+	800
	Point of Ayre ...	988·0	-10	WNW	8	bc	47	75	8	8	4	-	4-6	4-6	2500
13A	Tiree ...														
13B	Stornoway ...	965·3	+2	W	8	c/phr	43	75	6	8	-	-	7-8	7-8	2500
15	Dalwhinnie ...	972·0	-2	SW	5	s	35	85	5	8	7	·	7-8	10	1500
	Aberdeen ...	968·9	-26	WSW	5	bc	41	75	8	3	-	3	2-3	2-3	2500
	Wick ...	961·0	-12	SW	7	p°	41	92	8	5	7	1	7-8	9+	2500
16	Lerwick...	945·1	-70	SW	9	rr	43	92	6	6	2	-	4-6	10	800
17	Blacksod Point..	989·9	-2	W	8	cq	45	65	7	9	-	-	9	9	450
18	Malin Head ...	980·7	+4	W	8	bc	45	75	6	8	-	2	4-6	4-6	1500
	Aldergrove ...	985·1	-2	WSW	6	pr	43	75	7	8	-	-	9	9	1500
19	Birr Castle ...	993·3	-2	W'S	4	c/p°	45	75	8	8	-	-	7-8	7-8	1500
20	Valentia Obsy. †	998·8	0	W'S	6	c/pr	50	65	8	8	-	-	7-8	7-8	2500
	Roches Point ...	997·2	-8	W'N	4	c	51	75	8	3	-	5	4-6	7-8	2500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	°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)	996·3	+100	WSW	4	bc	50	75	7	5	3	1	2-3	4-6	1500	1	*
Croydon	996·5	+4	WSW	5	z₀	50	85	6	5	7	-	7-8	9	1500	1	*
S. Farnborough	996·8	+2	WSW	5	c/d	49	85	7	5	-	-	9	9	1500	1	*
Boscombe Down	997·2	+4	W	5	b/d	47	85	6	6	2	-	1	4-6	800	1	*
Calshot (Soton.)	997·9	+6	WNW	4	dr	51	92	6	6	2	-	9	10	800	1	3
Lympne	997·8	+24	W	4	c/d	48	85	7	5	7	-	4-6	9+	4000	1	§ 4
Manston	996·5	+16	W'S	4	d₀d₀	49	85	6	5	-	-	9+	9+	1500	1	*
Shoeburyness	996·1	+14	WSW	4	c	51	75	6	5	-	-	9+	9+	4000	1	*
Felixstowe	994·1	+12	W'S	4	c	48	65	7	-	7	-	0	9	-	1	2
Gorleston	992·1	+6	SW'W	4	c	47	75	6	5	5	-	4-6	9	2500	1	3
Mildenhall	992·8	+10	SW'W	5	c	45	75	8	-	4	2	0	7-8	-	1	*
Cranwell	990·5	+10	W'S	4	bc	44	85	7	5	3	2	1	4-6	2500	1	*
Birmingham	994·7	+12	W	4	pr₀	46	65	8	8	7	-	7-8	9	1500	1	*
Upper Heyford	995·1	+8	W'N	4	bc	47	65	7	5	-	1	tr	2-3	2500	1	*
Ross-on-Wye	995·8	+4	WSW	6	bcq	49	65	8	7	-	2	1	4-6	2500	1	*
Hartland Point	999·0	+8	NW	6	c	50	75	8	8	-	1	7-8	7-8	1600	1	4
Bristol	997·6	+10	W'N	7	bc	49	75	7	5	7	-	1	2-3	1500	1	*
Portland Bill	999·9	-16	WNW	6	rr	52	92	7	5	-	-	10	10	1500	1	6
Plymouth	1001·9	+16	W'N	5	id₀	50	92	5	6	2	-	4-6	10	800	1	4
The Lizard	1003·2	+10	S	6	d₀d₀	54	97	5	5	-	-	10	10	1500	1	4
Scilly (St. Mary's)	1002·8	+18	W'N	5	d₀d₀	51	97	6	5	-	-	10	10	1500	1	4
Guernsey	1003·4	+8	W	5	r₀r₀	55	97	5	5	-	-	10	10	800	1	4
Pembroke	997·5	+12	WNW	7	bcq	51	75	7	8	-	-	4-6	4-6	2500	1	4
Holyhead	991·5	+18	W'S	6	c	47	65	8	2	3	-	7-8	7-8	2500	1	4
Chester (Sealand)	991·9	+14	W	6	c	47	55	7	8	3	-	2-3	7-8	1500	1	*
Manchester	990·1	+12	W'S	6	c/pr	45	75	7	8	8	-	4-6	7-8	1500	1	*
Spurn Head	987·3	-4	WSW	5	bcq	45	75	7	-	8	3	0	4-6	-	0	4
Catterick	985·3	+10	W'N	6	bc	43	65	8	3	3	-	2-3	4-6	1500	1	4
Tynemouth	981·0	+4	W	6	c/pr	44	65	6	2	-	-	7-8	7-8	2500	1	2
St. Abbs Head	997·3	-4	W	8	b/r	41	75	8	-	-	-	0	0	-	0	5
Leuchars	973·3	+2	WSW	7	b	40	85	9	3	-	3	1	1	2500	1	*
Renfrew (Abbots I.)	979·2	+14	W'S	7	pr₀	42	75	6	9	-	3	9+	9+	1500	1	*
Eskdalemuir	981·3	+14	SW'W	6	PR	36	85	8	9	-	-	9	9	800	4	*
Point of Ayre	986·0	+10	WNW	8	b	44	75	8	2	-	-	tr	tr	2500	0	4
Tiree																
Stornoway	968·5	+20	W	8	c	45	75	7	5	3	-	7-8	9+	2500	1	4
Dalwhinnie	973·7	+6	WSW	6	c	37	85	7	6	7	-	7-8	10	1500	4	*
Aberdeen	968·8	+4	W'S	5	bc	41	75	8	5	3	-	2-3	2-3	4000	1	2
Wick	959·8	0	WSW	8	c/pr	43	85	7	5	7	8	7-8	9	1500	1	3
Lerwick	948·8	+18	W'N	5	c/pr	42	92	7	8	7	-	4-6	7-8	800	1	*
Blacksod Point																
Malin Head	982·3	+10	W	6	bc	45	65	7	2	-	-	4-6	4-6	4000	0	5
Aldergrove	986·3	+14	WSW	5	b	40	85	8	5	-	1	tr	tr	2500	1	*
Birr Castle	993·9	+2	W'S	6	pr₀	43	85	8	8	7	-	7-8	9	1500	1	*
Valentia Obsy. †	998·6	+2	W	6	c/pr	50	65	8	2	3	-	7-8	9+	2500	1	5
Roches Point	998·0	+8	W'N	3	bc	47	75	8	5	-	-	2-3	2-3	2500	1	3

PAST 24 HOURS.

Stations	Weather 7h.—18h. 26th (37)	13h.—18h. 26th (38)	18h. 26th to 1h. 27th (39)	1h.—7h. 27th (40)
London (Kew)	cicpr₀m₀	cpr₀cm₀bc	bcb bc	becr₀rr₀m₀
Croydon	ocir₀m₀	cr₀m₀	cm₀bc	becir₀d₀d₀d
S. Farnborough	d₀cr₀d₀	d	cr₀bc⊕	bcr₀d₀irc
Boscombe Down	cicigm₀	d₀d₀cbcm₀	bc	oddr₀r₀
Calshot (Soton.)	cr₀R	cd₀d₀d₀dr	dr₀m₀c	orrcir₀m₀
Lympne	om₀m₀rd	cm₀d₀r₀d₀	c⊕c	cr₀irf₀
Manston	omigcm	cm₀d₀d₀	d₀d₀cm₀	cm₀r₀r₀
Shoeburyness	cm₀	ir₀m₀c	cm₀bc	crr
Felixstowe		cir₀c	cbc	becor₀r₀
Gorleston	oirc	cbcc	cbcq	becor₀
Mildenhall	cir₀c	c	cbcb	becoir₀
Cranwell	irkq bc	becpr₀bc	bcqb	bcr₀r₀m₀
Birmingham	c	cpr₀	co	ocrr
Upper Heyford	ecr₀ccc	cr₀cbcb	bcbc	cdcor₀m₀cr₀m₀
Ross-on-Wye		c	r₀qcq	orr
Hartland Point	iddro	oddc	cr	crro
Bristol	cr₀od₀q	cd₀cbcq	bcqbc	r₀rrRq
Portland Bill	orr	corr	c	oir
Plymouth	oicddm₀	ocid₀m₀	cid₀bco	or₀r₀m₀
The Lizard	cddm	cddm	c	crrmq
Scilly (St. Mary's)	r₀d₀d₀o	od₀d₀	oid₀r	r₀ddo
Guernsey	odd	oddr₀	orrr₀c	r₀crr
Pembroke	opcqmc	cpr₀q	cir₀q	crrm₀
Holyhead	oicc	cpr₀c	cpr₀	irc
Chester (Sealand)	cprbcy	bcpr₀bcy	bcycpr₀m₀bc	cr₀r₀m₀rr
Manchester	cprqPRq	cpr₀ph₀PRq	cpr₀qbcq	prr₀r₀
Spurn Head	cq	cq	bcc	bco
Catterick	cbcprq	cprbc	bbcpr₀	pr₀bcc
Tynemouth	pcRq	bccpoq	cbc	bcq
St. Abbs Head	cqpr	cRrb	bq	pr₀bc
Leuchars	cPRPHRpc	prbcPRbcb	bcpr₀bcq	bcbr₀bcb
Renfrew (Abbots I.)	bccpcbc	cpr PHR	cPHRbcprq	cqpr₀
Eskdalemuir	cpshprs	bcPHRc	PHR	pr₀c
Point of Ayre	cbc	cbcb	cbcc	c
Stornoway	cPHRq	cPHR	cpr cPHR	cprbc cPHR
Dalwhinnie	csrs	csrs	b *	csrs b
Aberdeen	cPRhqbc	bcb	b	b
Wick	bcprq	cprcq	rrq	crrq
Lerwick	cirrr	crrirpr	cpr	cpr
Blacksod Point	PRcq c	cphrc	cphrc	ccphrc
Aldergrove	prpr₀bc	pr₀prb	bpr₀cpr₀qc	pr₀cor₀bc
Birr Castle	cpr	cpr	cpr	orrc
Valentia Obsy. †	cpr₀c	cpr₀bcc	cr₀r₀	r₀r₀rr₀r₀pr
Roches Point	c	bccbc	ir₀ir	rrirc

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).

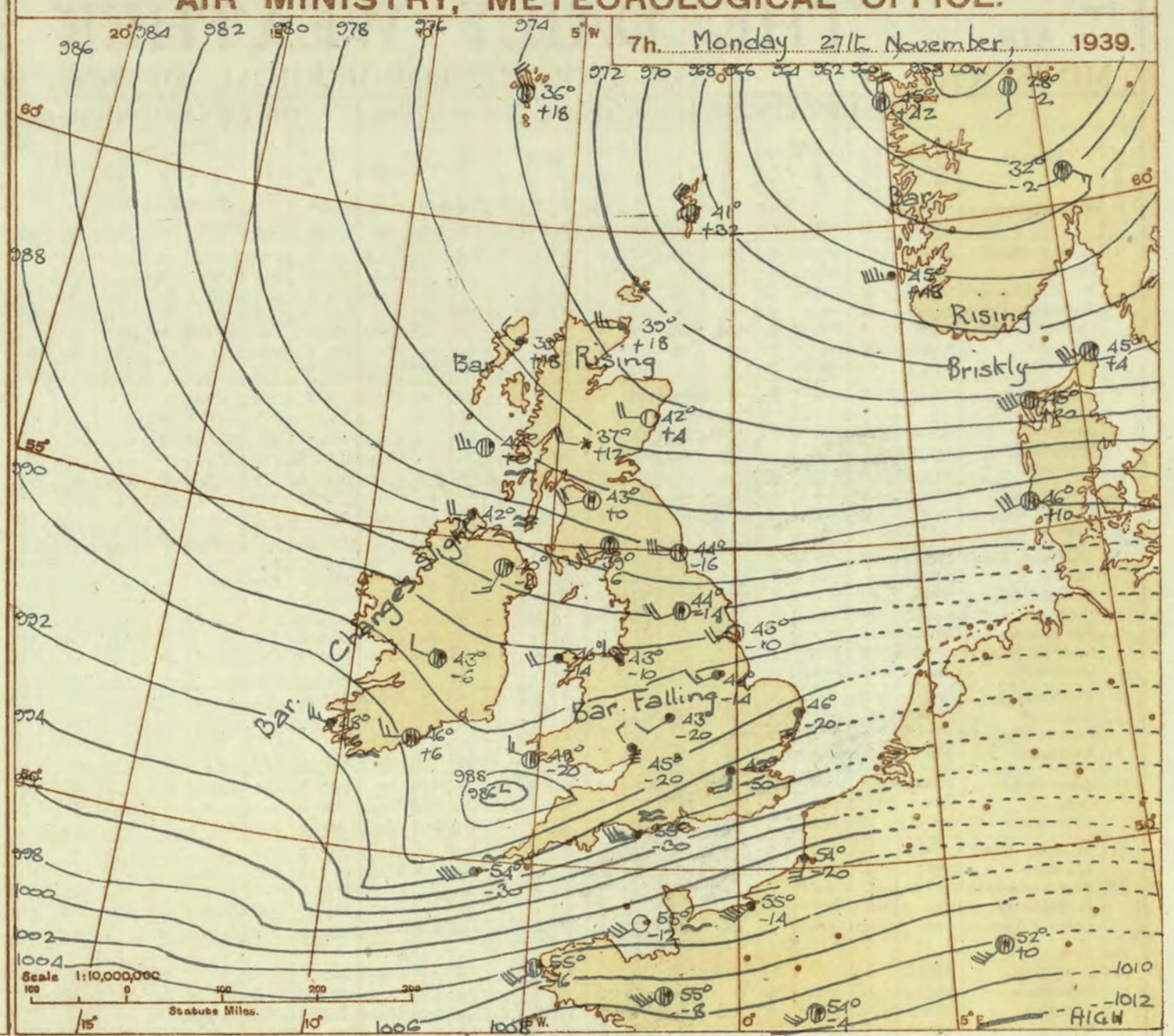
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



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 November, 1939.
1 S.E. England ↓	Southwest gale on coast at first, then moderate northwest to west wind; rain, then mainly fine; mild then somewhat colder.
2 E. England ...	Wind variable to west, mainly light or moderate; rain at first, becoming fine apart from a few local showers; somewhat colder.
3 E. Midlands ...	
4 W. Midlands ...	
5 S.W. England ↓	Moderate or fresh northwest to west wind; showers and bright intervals; somewhat colder.
6 South Wales ...	
7 North Wales ...	Wind west or northwest, fresh or strong locally at first but mainly moderate; local showers of rain, hail or sleet, chiefly in the West, with snow on hills; bright intervals; rather cold.
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	As 5 - 6.
20 S. W. Ireland	

GENERAL INFERENCE.

A large depression centred over Norway is becoming less deep. A secondary over the Bristol Channel is moving quickly eastward. There is a good chance that the next secondary may pass further south. After rain in the South and a gale in the English Channel, there will be bright periods generally but showers locally chiefly in the West.

FURTHER OUTLOOK.

Unsettled but bright periods. Perhaps local fog. Night frosts, especially in the North.

Times of issue of Gale Warnings.

South cone hoisted 0800 and 1105 25/11 and renewed 0800 27/11.

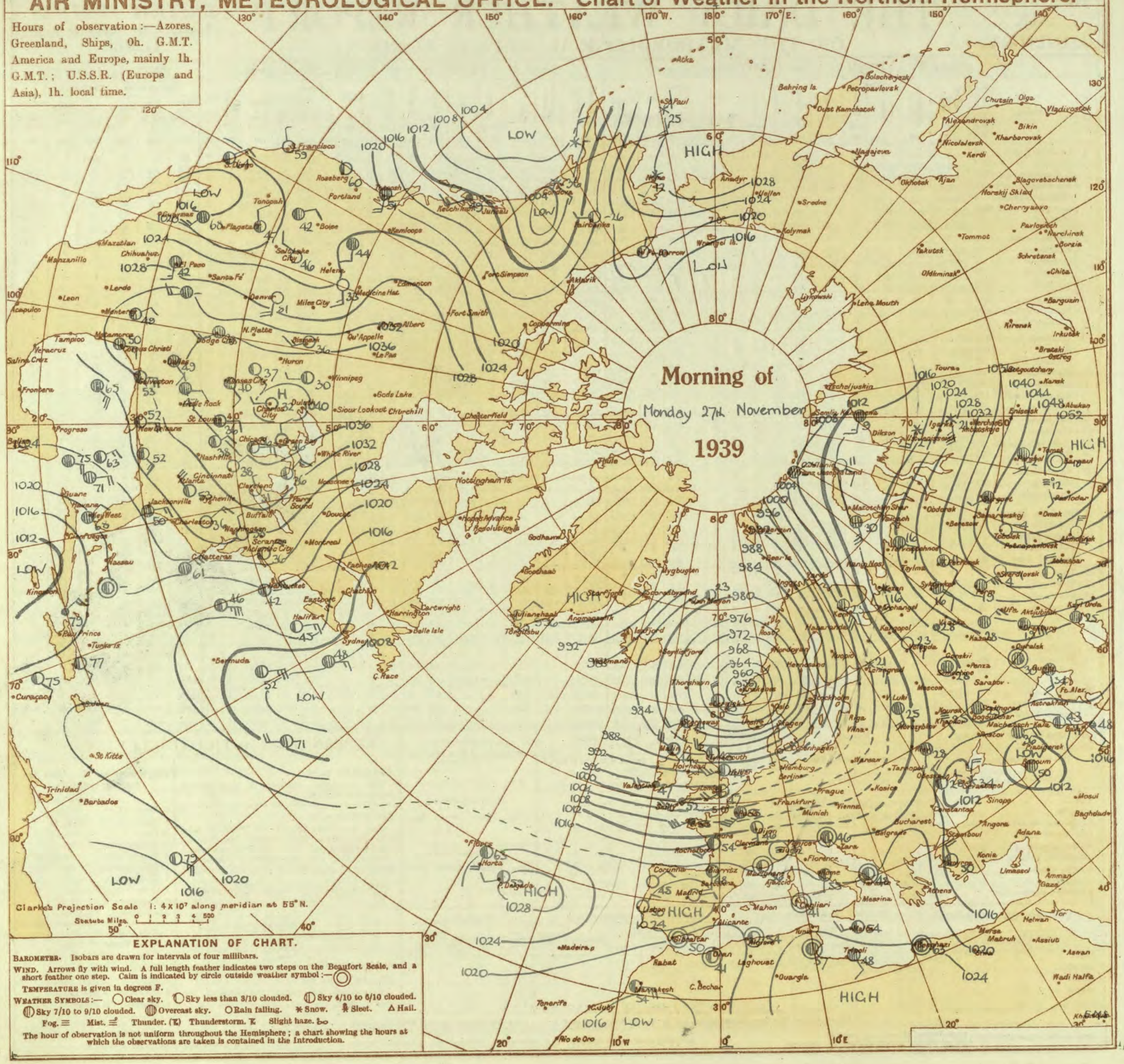
Forecasts issued at 1100 G.M.T.

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

H.M.S.O. Press, Cornwall House, S.E.1.
C.472/9777. We.8109. D.4626. Gp.348.24500. 11/39

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, 27th. November 1939.

No. 28434

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	998.9	+4	SW'W	4	c	47	85	7	5	5	6	1	7-8	2500
	S. Farnborough	226	998.8	+2	SW	4	c	46	85	7	–	7	–	0	7-8	–
	Boscombe Down	417	999.3	0	SW	3	bc	45	95	7	–	7	8	0	4-6	–
	Calshot (Sthmtn.)	8	999.8	-2	W'S	5	c	50	85	7	5	1	8	2-3	7-8	2500
	Lympne	346	1000.4	+8	W'S	3	c	45	85	8	–	3	8	0	9	–
	Manston	154	999.1	+6	WSW	4	z₀	45	75	6	–	9	–	0	9	–
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	996.9	+12	W	5	bc	46	85	7	–	3	–	0	4-6	–
	Gorleston	5	994.8	+14	SW	4	bc	45	75	6	5	–	–	2-3	2-3	2500
	Mildenhall	19	995.1	+6	SW	4	bc	44	75	8	5	7	–	Tr	2-3	4000
	Cranwell	240	992.7	+8	WSW	4	bc	43	85	6	5	–	1	2-3	2-3	2500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	997.2	+6	WSW	3	bc	44	85	7	–	4	–	0	4-6	–
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	997.6	-16	NW	6	r	50	85	7	5	2	–	7-8	9+	1500
	Bristol	209	998.6	0	WN	4	c	48	85	8	7	3	–	4-6	7-8	2500
	Portland Bill	32	1000.4	-4	W	6	e	52	92	7	5	2	–	7-8	10	2500
	Plymouth	82	1001.6	-6	WSW	5	id₀	51	85	7	5	–	–	10	10	1500
	The Lizard	240	1001.6	-20	W	6	c	52	97	8	8	2	–	9	10	1500
	Scilly (St. Mary's)	163	1000.3	-30	SW	5	id₀	52	97	5	5	–	–	10	10	1500
	Guernsey	175	1014.1	0	SW'W	4	c	53	92	8	8	1	–	7-8	10	1500
6	Pembroke	142	996.6	-6	W	7	roro	51	92	7	8	2	–	4-6	10	1500
7	Holyhead	26	992.3	+2	SW	5	c/pr	48	75	8	6	2	–	7-8	10	1500
	Chester (Sealand)	16	992.7	0	W	2	c/pr	44	92	7	8	–	–	9	9	2500
8	Manchester	70	992.1	+6	W'S	5	c	45	75	7	8	3	–	7-8	9+	2500
10	Spurn Head	29	990.3	+10	W'S	5	c	44	75	6	5	–	–	9+	9+	4000
	Catterick	175	987.5	+12	W	4	bc/pr	44	65	8	8	–	–	4-6	4-6	2500
	Tynemouth	108	984.5	+16	W	5	bc	43	65	7	2	–	–	4-6	4-6	2500
11	St. Abbs Head	280	978.7	+20	W	7	q	41	85	8	1	–	–	Tr	Tr	2500
	Leuchars	36	977.7	+14	WSW	8	bq	41	65	9	3	5	–	Tr	1	2500
12	Renfrew (Abbots I.)	19	982.4	+2	WSW	6	cq	44	75	7	8	–	7	4-6	10	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	988.5	+8	WN	6	c	45	75	8	8	6	3	4-6	9+	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	973.5	+12	WSW	4	c/pr	41	85	8	8	–	–	7-8	7-8	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	970.8	+42	W	6	rr	42	92	6	5	2	–	7-8	10	1500
16	Lerwick	156	961.1	+64	NNW	6	c	43	85	7	8	7	–	7-8	9	800
17	Blacksod Point	18														
18	Malin Head	84	983.8	+6	W	6	c/pr	44	75	7	9	–	2	4-6	7-8	2500
	Aldergrove	268	987.2	+2	SW	5	c/pr	41	85	7	2	–	7	2-3	10	1500
19	Birr Castle	173	992.9	-6	WSW	2	c/pr	45	85	7	5	–	–	10	10	2500
20	Valentia Obsy.	30	994.3	-28	WSW	4	roro	47	92	6	6	2	–	4-6	10	1500
	Roches Point	22	995.9	-18	W	3	r	49	92	8	6	2	–	7-8	10	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)
London (Kew)	991.6	-50	SSW	2	roro	48	97	6	5	2	–	9	10	1500
Croydon	993.1	-50	SSW	4	roro	49	97	6	6	2	–	10	10	1500
S. Farnborough	992.2	-50	SW'S	7	roro	54	92	6	6	2	–	9	10	1500
Boscombe Down	991.6	-50	SW	5	d.d₀	53	92	6	5	2	–	9	10	1500
Calshot (Sthmtn.)	994.0	-38	WSW	6	iro	54	97	5	6	2	–	10	10	800
Lympne	995.0	-48	SW'W	5	df	52	97	3	–	–	–	10	10	<150
Manston	994.2	-40	S	2	roro	47	97	4	6	2	–	9+	10	220
Shoeburyness	994.2	-38	WSW	3	rr	47	97	4	5	–	–	10	10	1500
Felixstowe	993.5	-28	W	3	ror₀	46	97	6	6	2	–	7-8	10	800
Gorleston	993.0	-20	SSW	4	roro	46	85	6	6	–	–	10	10	1500
Mildenhall	991.5	-30	SSW	3	roro	45	92	6	6	2	–	1	10	1500
Cranwell	990.3	-14	SW'W	3	roro	44	85	6	6	–	–	10	10	1500
Birmingham	990.7	-20	SW	2	rr	43	97	6	6	2	–	7-8	10	800
Upper Heyford	991.8	-46	W'S	3	rr	44	97	6	5	2	–	9	10	800
Ross-on-Wye	990.6	-45	NNW	1	rf	45	97	3	–	2	–	10	10	800
Hartland Point	986.7	-38	W	8	rr	53	97	6	–	2	–	10	10	1500
Bristol	989.7	-62	SW	6	iR	53	97	5	6	2	–	9	10	800
Portland Bill	992.7	-30	WSW	7	ir	55	92	7	5	–	–	10	10	1500
Plymouth	993.5	-30	SW'W	8	roro	54	97	5	–	2	–	10	10	800
The Lizard	994.9	-28	WSW	8	roro	54	97	6	5	–	–	10	10	800
Scilly (St. Mary's)	993.7	-30	SW'W	8	dd	54	97	5	5	–	–	10	10	1500
Guernsey	999.9	-12	SW	6	cq	55	92	7	8	1	–	7-8	10	1500
Pembroke	990.3	-20	WNW	3	c	49	97	8	8	–	–	9+	9+	1500
Holyhead	988.1	-14	WSW	4	ir	46	85	8	6	2	–	7-8	10	1500
Chester (Sealand)	989.7	-10	W	3	rr	43	75	6	5	2	–	2-3	10	1500
Manchester	989.5	-10	SW'W	3	roro	43	92	7	–	2	–	10	10	1500
Spurn Head	1007.9	-10	WSW	4	o	45	85	6	5	–	–	10	10	4000
Catterick	985.1	-14	WSW	4	c	44	85	7	5	7	–	4-6	10	2500
Tynemouth	982.9	-16	W	6	bcq	44	65	7	2	3	–	4-6	4-6	2500
St. Abbs Head	980.4	+4	W	6	bcq	39	85	8	5	4	–	2-3	2-3	2500
Leuchars	978.7	0	WSW	6	bc	40	85	8	8	3	3	1	2-3	4000
Renfrew (Abbots I.)	982.0	0	WSW	4	bc/pr	43	85	8	9	–	–	4-6	4-6	1500
Eskdalemuir	984.1	-6	SW'W	4	c	39	85	7	5	–	–	9	9	1500
Point of Ayre	985.8	-8	WN	5	c	45	75	7	8	7	3	4-6	9+	1500
Tiree	979.5	0	W'S	5	c	42	85	8	8	–	–	7-8	7-8	1500
Stornoway	976.6	+18	NW	8	ps	39	92	8	8	–	–	9	9	2500
Dalwhinnie	979.5	+12	W	4	s	37	85	5	6	–	–	10	10	1500
Aberdeen	975.8	+4	W	4	b	42	65	8	5	3	–	Tr	Tr	4000
Wick	973.5	+18	W	5	rr	39	97	7	5	7	–	7-8	9+	1500
Lerwick	969.7	+32	NW	6	c/pr	41	85	7	8	7	–	7-8	9	800
Blacksod Point														
Malin Head	982.7	-2	W	4	pr	42	75	7	3	–	1	4-6	7-8	1500
Aldergrove	985.4	-6	SW'S	3	c/pr	40	92	7	2	–	–	7-8	7-8	1500
Birr Castle	989.8	-6	WNW	2	c	43	92	8	8	7	–	4-6	9	1500
Valentia Obsy.	992.9	+6	WN	5	pr	48	85	8	9	–	–	9+	9+	2500
Roches Point	991.9	+6	W	3	c	46	97	8	5	–	5	4-6	7-8	1500

PAST 24 HOURS.

Stations	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine ..26.. Hrs. (36)
London (Kew)	1	*	58	47	43	0.1	4	0.0
Croydon	1	*	58	46	43	2	3	0.0
S. Farnborough	1	*	57	45	42	2	1	0.0
Boscombe Down	1	*	56	44	39	2	3	0.0
Calshot (Sthmtn.)	1	2	56	47	45	3	3	0.0
Lympne	1	§4	54	44	39	2	4	0.0
Manston	1	*	57	44	40	2	1	0.0
Shoeburyness	1	*	57	46	41	0.2	5	0.0
Felixstowe	1	3	58	45	41	1	1	0.0
Gorleston	1	3	57	44	43	2	0.1	0.0
Mildenhall	1	*	57	43	38	1	1	0.0
Cranwell	1	*	54	42	*	0.4	1	2.8
Birmingham	1	*	54	42	40	0.2	8	0.0
Upper Heyford	1	*	55	41	35	1	4	*
Ross-on-Wye	1	*	57	44	42	0.2	7	0.0
Hartland Point	1	5	54	47	46	8	9	0.0
Bristol	1	*	55	47	43	0.6	10	0.0
Portland Bill	1	6	54	50	*	2	1	*
Plymouth	1	5	56	50	49	5	3	0.0
The Lizard	1	5	54	50	*	3	2	0.0
Scilly (St. Mary's)	1	4	54	50	*	2	2	0.0
Guernsey	1	5	56	53	51	1	4	0.0
Pembroke	1	3	55	47	*	0.2	13	0.0
Holyhead	1	2	51	45	43	0.1	1	0.3
Chester (Sealand)	1	*	49	45	39	0.4	1	0.8
Manchester	1		50	43	37	5	3	1.0
Spurn Head	0	3	52	42	*	Tr	–	1.7
Catterick	1	*	47	42	34	3	0.1	0.9
Tynemouth	1	2	47	42	37	0.3	–	
St. Abbs Head	0	5	44	31	*	2	Tr	*
Leuchars	1	*	45	39	36	5	0.1	0.6
Renfrew (Abbots I.)	1	*	46	40	31	4	3	1.1
Eskdalemuir	1		35	36	34	6	7	1.2
Point of Ayre	0	3	48	44	*	–	–	1.0
Tiree	0	5	47	41	37	2	3	0.8
Stornoway	1	1	46	38	*	2	6	0.4
Dalwhinnie	4	*	39	34	31	11	11	0.0
Aberdeen	1	2	45	41	36	2	–	3.2
Wick	1	2	43	38	*	2	12	*
Lerwick	1	*	51	40	*	2	2	0.0
Blacksod Point					*			*
Malin Head	1	6	47	38	*	0.5	3	0.8
Aldergrove	1	*	45	39	33	2	0.2	0.3
Birr Castle	1	*	47	42	39	2	4	2.2
Valentia Obsy.	1	4	51	46	45	0.4	6	1.3
Roches Point	1	3	52	45	*	Tr	7	*

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	cicpcm	cpscmb	bcsrcm	58	47	43	0.1	4	0.0	*	*	
Croydon	217	ccirom₀	cromo	mcicdd	58	46	43	2	3	0.0	*	*	
Greenwich (Royal Observatory)	149	c	c	cbcrr	58	46	40	–	6	0.0	72	90	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*	59	47	42	7.3			72	91	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	57	46	41	–	8		70	97	*
Camden Square	110	c	crr	*	57	47	42	–	9	*	*	93	*
Kensington	80	ccd	cr	*	58	46	39	0.1	7		77	93	*
Hampstead Observatory	450	od	bc	bcor	56	44	40	–	8		*	96	*

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. 26th. November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 27th. November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1005.4	SW	8	iro	55	1005.1	SW	7	o	55	*	55	*	–
Brussels														
Berlin														
Zürich														
Rome						1019.4	SW	3	c	57	*	*		–

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.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 28th. November 1939.

No. 28,495

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	991·8	+14	WS	3	c/r	50	86	6	5	2	-	7-8	9+	1500
	Croydon	991·8	+10	WS	4	roro	50	92	6	6	7	-	4-6	10	800
	S. Farnborough	991·8	+16	W'S	4	e/r	50	97	7	5	7	-	7-8	9+	1500
	Boscombe Down	992·8	+22	WNW	5	c/r	49	85	7	5	—	-	9+	9+	1500
	Calshot (Soton.)	992·5	+6	WNW	2	c/r	52	92	8	5	7	-	4-6	9	1500
	Lympne	991·3	-12	SW'W	7	rr	54	97	6	6	2	-	9+	10	450
	Manston	990·8	-2	WNW	3	RR	49	97	6	6	2	-	7-8	10	800
2	Shoeburyness	991·1	+14	W	2	rr	49	92	5	-	2	-	10	10	1500
	Felixstowe														
	Gorleston	989·1	-2	W'S	3	c	46	85	6	8	7	-	4-6	10	2500
	Mildenhall														
	Cranwell	998·8	-2	W	3	z	46	85	6	5	7	-	7-8	9+	1500
3	Birmingham	990·8	+2	WSW	3	c/pr	45	92	6	8	7	-	7-8	9	1500
	Upper Heyford	991·4	+6	W	3	c/d	47	97	7	8	3	9	7-8	9	800
4	Ross-on-Wye	991·7	+6	W'S	1	c	50	65	8	8	-	9	7-8	7-8	2500
5	Hartland Point	994·2	+14	WNW	4	c/r	49	85	8	8	5	-	7-8	7-8	1500
	Bristol	993·1	+14	W	4	bc/d	49	85	7	8	8	4	4-6	4-6	1600
	Portland Bill	994·2	+14	NW	4	c	53	92	8	5	4	-	7-8	10	4000
	Plymouth	996·3	+26	WNW	5	c	51	85	8	8	7	-	7-8	7-8	1500
	The Lizard	997·9	+10	W	6	c/pr	51	97	7	8	6	-	7-8	9+	1500
	Scilly (St. Mary's)	998·0	+18	WN	6	bc/pr	51	92	8	8	6	-	2-3	4-6	1500
	Guernsey	997·1	-16	WSW	6	rr	56	97	6	5	-	-	10	10	800
6	Pembroke	993·2	+8	WNW	6	c/r	48	85	8	8	-	-	9	9	1500
7	Holyhead	988·5	-2	WSW	6	c	47	75	3	9	-	-	9+	9+	1500
	Chester (Sealand)	989·5	+2	W	4	pr	45	75	7	8	2	-	9+	10	1500
8	Manchester	988·1	-6	SW'W	5	pr	46	85	6	8	3	-	9	10	2500
10	Spurn Head	987·0	0	WSW	5	c	45	85	7	4	4	-	4-6	7-8	1500
	Catterick	984·9	-2	W'S	4	bc	46	95	8	2	-	-	2-3	2-3	2500
	Tynemouth	983·3	+2	W	4	bc	46	65	6	2	3	-	2-3	4-6	2500
11	St. Abbs Head	979·6	-8	W	6	c/pr	41	85	8	8	6	-	4-6	9	2500
	Leuchars	979·6	+2	WSW	5	c	41	85	8	8	6	1	4-6	7-8	2500
12	Renfrew (Abbots I.)	983·0	+6	WSW	2	c/pr	42	85	8	8	7	3	4-6	7-8	2500
	Eskdalemuir	982·7	-6	WSW	4	rr	40	75	8	6	2	-	9	10	800
	Point of Ayre	985·6	0	WNW	6	c	46	75	8	8	6	-	7-8	9+	2500
13A	Tiree	980·6	+4	NW	4	c/pr	44	75	8	8	-	-	7-8	7-8	1500
13B	Stornoway	979·2		NNW	3	rr	40	85	7	5	2	-	2-3	10	1600
15	Dalwhinnie	*	+6	SW	4	c	36	85	7	8	6	-	4-6	7-8	2500
	Aberdeen	976·4	+4	SW'S	1	c	43	65	7	6	9	-	4-6	7-8	4000
	Wick	976·2	+8	WNW	4	pr	39	92	6	5	7	8	7-8	9+	1600
16	Lerwick	973·8	+20	NW	4	c	40	75	8	8	7	-	4-6	9	1500
17	Blacksod Point	988·7	+8	W	6	cq	47	85	7	9	1	-	9	9	800
18	Malin Head	982·8	0	W	6	phr	45	86	6	6	-	-	9	9	1500
	Aldergrove	985·9	+4	SW'W	4	c/pr	41	85	7	3	7	3	4-6	7-8	2500
19	Birr Castle	991·6	+6	SSW	3	pr	45	75	8	3	7	-	4-6	7-8	1800
20	Valentia Obsy. †	996·6	+16	W	6	c	48	65	8	2	-	-	7-8	7-8	2500
	Roches Point	995·1	+12	W'N	4	bc	46	75	8	3	4	-	2-3	4-6	800

OBSERVATIONS at 18h. G.M.T. 27th. November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	995·5	+20	W	4	z	47	73	6	5	-	-	4-6	4-6	1500	1	*
Croydon	995·8	+26	W'S	4	d/pr	46	85	6	4	3	-	7-8	7-8	2500	1	*
S. Farnborough	996·1	+28	WSW	4	bc	45	65	7	5	-	-	4-6	4-6	2500	2	*
Boscombe Down	997·1	+20	W	5	bc	43	65	6	5	4	-	2-3	2-3	1500	1	*
Calshot (Soton.)	997·0	+30	WNW	4	qjp	49	85	7	8	-	-	7-8	7-8	1500	1	3
Lympne	998·1	+30	W	3	pr	46	85	8	8	-	-	9	9	4000	1	§ 4
Manston	994·6	+18	W	4	c	47	85	7	5	3	-	7-8	9+	1500	1	*
Shoeburyness	995·1	+30	W	4	c/pr	44	85	5	8	-	-	9+	9+	1500	1	*
Felixstowe	992·4	+6	W'S	4	pr	47	85	7	2	6	-	7-8	9+	4000	1	2
Gorleston	989·8	+4	SW'W	4	c	45	85	6	5	-	-	9+	9+	2500	1	2
Mildenhall	992·1	+18	W'N	5	pr	46	75	7	8	7	-	7-8	9	2500	1	*
Cranwell	991·4	+26	W	4	b	40	92	6	5	-	-	1	1	4000	1	*
Birmingham	993·7	+20	W	4	b	43	65	7	5	-	-	1	1	2500	1	*
Upper Heyford	995·5	+32	W'N	5	b/pr	42	75	9	8	6	-	Tr	Tr	2500	1	*
Ross-on-Wye	995·8	+20	W'S	3	b	45	65	8	8	-	-	1	1	2500	1	*
Hartland Point	998·9	+30	WNW	5	c	49	65	8	8	-	-	7-8	7-8	2500	1	4
Bristol	997·3	+32	W	6	b	44	75	8	3	-	-	1	1	2500	1	*
Portland Bill	998·2	+14	W	5	c	50	92	8	5	-	-	10	10	2500	1	5
Plymouth	1001·7	+38	WNW	4	b	49	65	6	5	-	-	1	1	1500	1	4
The Lizard	1003·1	+20	W'N	7	bc	49	75	8	8	-	-	4-6	4-6	2500	1	4
Scilly (St. Mary's)	1002·6	+32	W'N	7	bc	49	65	8	8	-	-	2-3	2-3	1500	1	4
Guernsey	1002·2	+40	W'N	5	pr	50	75	7	8	7	-	9	10	1500	1	5
Pembroke	997·2	+26	WNW	8	cq	49	65	7	8	-	-	7-8	7-8	1500	1	4
Holyhead	990·9	+14	W'S	7	bc	47	75	8	2	-	-	4-6	4-6	2500	1	4
Chester (Sealand)	991·8	+30	WSW	3	bc	44	65	7	8	3	-	4-6	4-6	1500	1	*
Manchester	990·6	+18	W'S	4	bc	43	85	7	8	3	-	4-6	4-6	2500	1	*
Spurn Head	988·0	+8	W'S	4	c/pr	43	85	6	5	9	-	4-6	7-8	1500	1	3
Catterick	987·4	+18	NW'W	2	bc/pr	40	85	8	3	3	-	2-3	4-6	1500	1	*
Tynemouth	984·9	+16	W	3	bc/pr	41	75	6	8	-	-	4-6	4-6	2500	1	1
St. Abbs Head	983·0	+18	W	5	c	41	85	8	8	2	-	7-8	9+	1500	0	3
Leuchars	983·5	+20	W	4	bc	38	85	8	4	4	2	2-3	4-6	2500	1	*
Renfrew (Abbots I.)	986·5	+22	W'N	2	pr	38	92	7	9	-	3	7-8	7-8	1500	1	*
Eskdalemuir	986·0	+22	W'S	4	rs	35	92	5	9	-	3	7-8	9+	800	*	*
Point of Ayre	987·8	+14	WNW	6	pr	45	85	8	8	-	-	9	9	2500	1	4
Tiree	989·1	+6	N'W	5	bc	43	75	8	8	6	-	4-6	4-6	1500	0	4
Stornoway	986·8	+32	NW	4	c	40	65	7	8	7	-	4-6	7-8	1500	1	2
Dalwhinnie	985·9	+42	W	3	Rs	35	97	5	6	-	-	10	10	1500	1	*
Aberdeen	982·1	+30	NW	5	pr	39	92	6	8	-	-	7-8	7-8	2500	1	2
Wick	981·6	+24	NW	3	bc	38	75	7	5	7	-	2-3	4-6	1500	1	2
Lerwick	977·5	+28	NW	4	c/ps	36	85	8	8	7	-	4-6	7-8	1500	1	*
Blacksod Point	996·8	+20	NW	4	c	45	85	7	9	-	-	7-8	7-8	800	1	4
Malin Head	990·3	+48	N	6	pr	46	75	7	9	-	-	7-8	7-8	4000	1	5
Aldergrove	990·5	+38	W	2	b/pr	38	92	7	8	-	-	1	1	1500	1	*
Birr Castle	997·4	+42	WNW	1	bc	41	92	8	5	4	4	2-3	4-6	2500	1	*
Valentia Obsy. †	1000·5	+34	WNW	6	pr	50	75	8	3	-	-	9	9	2500	1	5
Roches Point	999·8	+34	W'N	4	bc/p	45	92	8	3	-	3	2-3	2-3	1500	1	3

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 27th. (37)	13h.—18h. 27th. (38)	18h. 27th to 1h. 28th. (39)	1h.—7h. 28th. (40)
London (Kew)	crorm o	bceprobc	bcmob	b
Croydon	crororRmo	rorobcepr	cmob	b
S. Farnborough	rrRc	crobcepr	b	b
Boscombe Down	dgmgir	cpmgbcg	bcprob	bw
Calshot (Soton.)	oddrrm	cpgbc	cprbmob	b
Lympne	froDDrr	omrrbc	bcpgb	bw
Manston	rororr	RRbcc	cdbbzo	bzob
Shoeburyness	orr	orrcpm	bcmo	bmo
Felixstowe		oiroc pro	cprob	bcb
Gorleston	ocgc	cbcc	cbdcq	bcq
Mildenhall		cm cbc	bbccbc	bcb
Cranwell	rorocm	PRkq b	b,cqpc,bm	bmo
Birmingham	orgc	cprobc	bbcb	b
Upper Heyford	crrcdro	bcprb	b	b
Ross-on-Wye	rfcbc	cpbcb	bcpobq	b
Hartland Point	pric	cpo	cpobc	cbcc
Bristol	cRrdrd	bcc Pobq	bprqb	b
Portland Bill	oIR	oirc	bc	bcc
Plymouth	orrocm	cprobc	bcbbcpc	bbc
The Lizard	roprc	cprbc	cprbc	bc
Scilly (St. Mary's)	oddrcp	cpqbc	cpqbc	bc
Guernsey	qdrr	orcpr	cprbc	bc
Pembroke	cprq	prqc	cbcq	bcq
Holyhead	irroprc	cbc	becbc	bc
Chester (Sealand)	crrroropro	cprojpbc	cproPHRb	bbc
Manchester	mroropro	cm prqbc	bcepr qb	bcb, cprqbc
Spurn Head	cq	cpro	qprcq	bqbcq
Catterick	cbc	cprbc	cprob	bbcpr
Tynemouth	bcq	bcpo	bc	bc
St. Abbs Head	proc	c	bcprb	bbc
Leuchars	b,c	cbccbc	bbw	b
Renfrew (Abbots I.)	cbcprcp	rcprPRq	cprobcb	qprpropro
Eskdalemuir	cbccr	crrsrs	b	b, prb
Point of Ayre	cprc	c	prcbc	b
Tiree	bccphr	rprqbc	bcprq	bcq
Stornoway	cphrrr	cPRphr	PHRprs	cbcprs
Dalwhinnie	csrs	csrs.	*	cis
Aberdeen	bbc	bcbcpr	bcprbx	bx
Wick	cproc	rrpro	ph sbc	Rrhr
Lerwick	cpr	cps	crs [aurora]	crsrrphr
Blacksod Point	cq	prcq	bc	bcc
Malin Head	c	cprc	bc	cproc
Aldergrove	bccprcpr	cprobcb	proprq	bbcc
Birr Castle	cpr	cbc	cprb	bcc
Valentia Obsy. †	procyc	bceprq	probcb	bbcc
Roches Point	Rcbc	prbc	b	bc Ⓤ

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

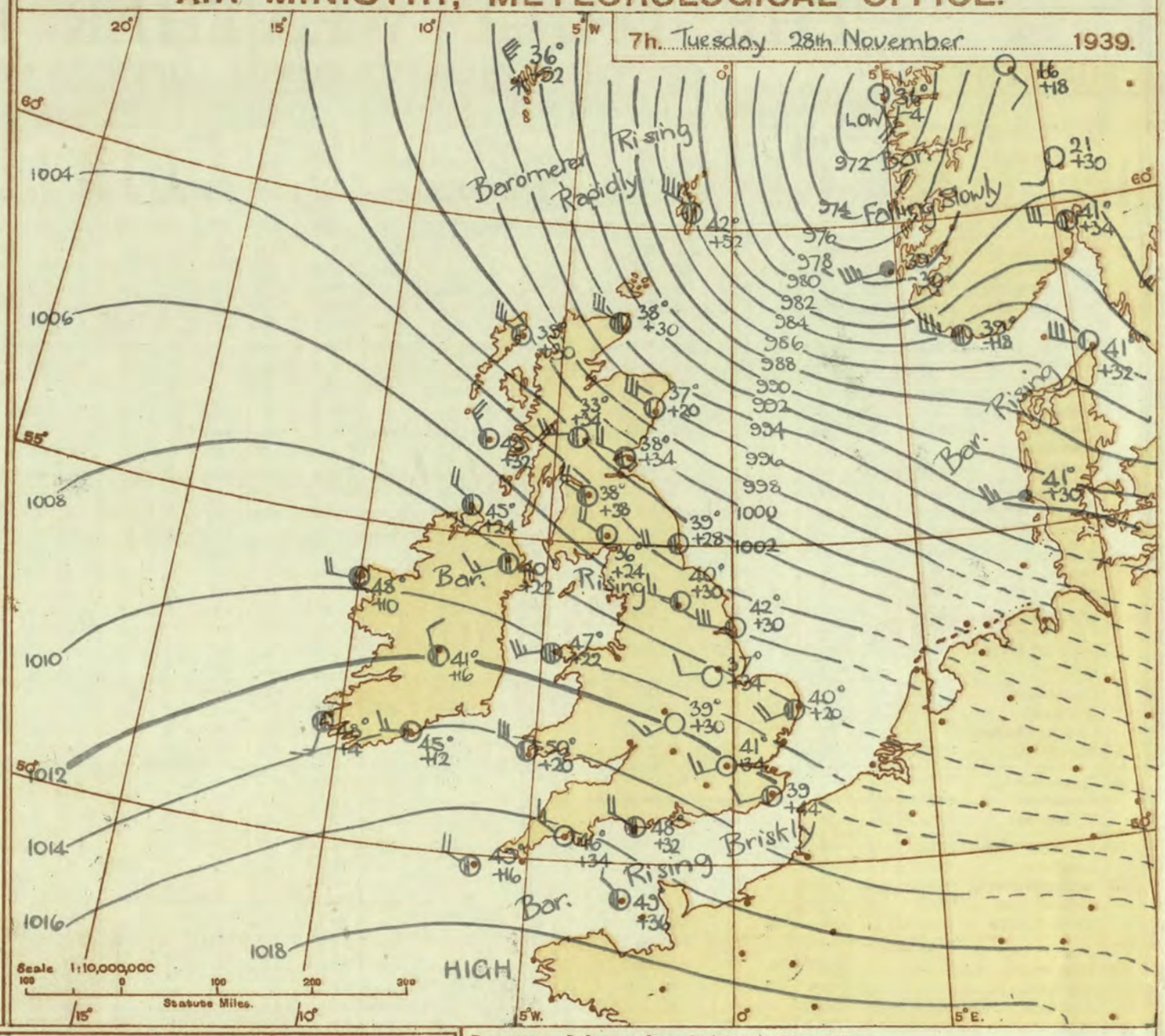
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



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 November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind west, moderate, backing southwest to south, increasing, perhaps strong to gale tomorrow; fine today; dull, rainy tomorrow; rather cold today, becoming milder.
5 S.W. England 6 South Wales ... 7 North Wales ...	Wind backing southwest to south, moderate, increasing strong to gale on coast; fair today, cloud increasing then rain; becoming milder again
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland A 12 S.W. Scotland & Isle of Man.	Wind southwest, fresh, squally locally, decreasing moderate to light southwest; considerable bright periods; some local rain or hail showers; becoming cloudy, occasional rain tomorrow; rather cold.
13 { A. W. Scotld. B. N.W. Scotland.	
14 Mid Scotland 15 N. E. Scotland A 16 Orkneys and Shetlands A 17 N. W. Ireland	Wind northwest, fresh or strong, squally, moderating decidedly; bright periods; wintry showers with snow on the hills; cold.
18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind south to southwest, fresh to strong, gale probable in the South; becoming dull, rain at times; becoming mild.

GENERAL INFERENCE.

Pressure is very low over Scandinavia and the Baltic. A ridge of relatively high pressure over Ireland will move quickly east and be followed by a new disturbance from the Atlantic. Weather will be fine to fair and rather cold over England and Wales today but unsettled conditions with rain will then spread quickly from the West with gales probable in the South. In Scotland there will be bright periods with wintry showers.

FURTHER OUTLOOK.

Mild and unsettled.

Times of issue of Gale Warnings.

A North Cone hoisted at 0130 on 28/11. in districts 11, 15, and 16.

Forecasts issued at 1100 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

Tuesday 28th November 1939.

No. 28, 495.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1004.5	+42	N'S	4	b	43	85	7	–	–	–	0	0	–
	S. Farnborough	226	1004.9	+38	NSW	5	b	43	85	7	–	–	–	0	0	–
	Boscombe Down	417	1006.0	+38	W	4	b	42	85	7	–	–	–	0	0	–
	Calshot (Sthmtn.)	8	1006.4	+36	N'N	3	b	45	85	7	1	–	–	Tr	Tr	1500
	Lympne ...	346	1004.6	+36	W	4	b	42	75	8	–	–	–	0	0	–
	Manston ...	154	1002.5	+30	W	5	bc	43	75	6	–	–	–	0	0	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1000.3	+26	W	5	bc	44	85	8	2	–	–	4-6	4-6	4000
	Gorleston ...	5	997.5	+28	W	5	c	43	75	7	8	–	–	9+	9+	2500
	Mildenhall ...	19	1000.4	+42	W	5	bc	42	75	8	–	4	–	0	4-6	–
	Cranwell ...	240	999.8	+56	N'N	3	bc	41	85	6	5	–	–	Tr	Tr	2500
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1003.9	+48	N'N	4	b	41	85	8	–	4	–	0	Tr	–
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1008.1	+42	NW	3	bc	49	75	8	7	–	–	4-6	4-6	2500
	Bristol ...	209	1006.6	+38	W	4	b	43	85	7	–	–	–	0	0	–
	Portland Bill ...	32	1006.6	+32	NW	4	bc	50	92	8	1	–	–	2-3	2-3	4000
	Plymouth ...	82	1009.5	+38	N'N	4	bc/pr	48	85	6	3	–	–	4-6	4-6	2500
	The Lizard ...	240	1010.6	+36	W	6	bc	49	85	8	8	6	–	4-6	4-6	2500
	Scilly (St. Mary's)	163	1012.1	+40	NW'W	5	bc	49	65	8	8	–	–	4-6	4-6	2500
	Guernsey ...	175	1009.8	+28	W	3	bc	51	75	7	7	1	–	4-6	4-6	2500
6	Pembroke ...	142	1008.2	+30	NW'N	6	bcq	48	75	8	7	–	–	4-6	4-6	2500
7	Holyhead ...	26	1004.4	+58	NNW	6	c	47	75	8	2	–	–	7-8	7-8	2500
	Chester (Sealand)	16	1003.0	+52	NNW	5	b	45	65	8	3	–	–	1	1	2500
8	Manchester ...	70	1002.3	+46	N'N	4	bc/pr	41	85	7	8	–	–	4-6	4-6	2500
10	Spurn Head ...	29	996.4	+40	NW'W	7	bq	41	92	7	–	8	–	0	1	–
	Catterick ...	175	999.0	+62	NNW	4	b	40	65	8	–	–	–	0	0	–
	Tynemouth ...	108	997.3	+68	W	3	bc	38	85	7	2	–	–	2-3	2-3	2500
11	St. Abbs Head	280	995.0	+68	W	5	b	38	85	8	2	–	–	1	1	2500
	Leuchars ...	36	995.0	+38	NNW	3	b	37	75	8	5	–	–	Tr	Tr	4000
12	Renfrew (Abbots I.)	19	998.8	+36	NSW	3	b	37	85	8	8	–	–	1	1	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1001.1	+40	NNW	5	bc	46	65	8	2	–	–	2-3	2-3	4000
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	994.5	+24	NNW	6	prs	38	75	8	8	–	–	7-8	7-8	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	983.0	+24	W	4	bc/ps	34	97	7	3	7	–	4-6	4-6	1500
16	Lerwick ...	156	975.8	−28	W	8	rs	36	85	6	8	7	–	4-6	10	450
17	Blacksod Point	18	1007.1	+26	W	3	bc	45	75	8	3	–	–	2-3	2-3	1500
18	Malin Head ...	84	1001.7	+30	NW	5	bc	45	75	8	2	–	–	4-6	4-6	4000
	Aldergrove ...	268	1003.8	+36	SW'W	3	bc	38	85	8	5	–	–	2-3	2-3	4000
19	Birr Castle ...	173	1008.8	+38	NNW	1	b	38	92	8	–	–	–	0	0	–
20	Valentia Obsy.	30	1012.3	+34	NW'W	4	b	45	75	8	1	–	–	Tr	Tr	2500
	Roches Point	22	1010.9	+52	W'N	4	b	46	85	8	–	–	–	0	0	–

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1012.7	+32	W	2	b	42	85	8	–	–	–	0	0	–	1	*
	Croydon ...	1012.7	+34	W'S	3	bc	41	85	6	–	–	–	0	0	–	1	*
	S. Farnborough	1015.2	+38	NSW	3	bc	40	85	6	–	–	–	0	0	–	1	*
	Boscombe Down	1014.2	+42	W	3	b	39	92	7	1	7	–	Tr	1	2500	1	*
	Calshot (Sthmtn.)	1014.3	+42	W	3	b	41	92	8	8	–	–	Tr	Tr	2500	1	2
	Lympne ...	1015.3	+44	W'S	2	b	39	85	8	2	–	–	Tr	Tr	4000	1	§4
	Manston ...	1011.9	+50	WNW	4	b	41	85	7	2	–	–	Tr	Tr	1500	1	*
2	Shoeburyness ...	1012.1	+24	S	2	b	41	85	5	–	–	–	0	0	–	1	*
	Felixstowe ...	1009.6	+46	W	4	b	41	85	7	2	–	–	Tr	Tr	2500	1	2
	Gorleston ...	1008.1	+20	NSW	4	bc	40	75	7	5	–	–	2-3	2-3	2500	1	2
	Mildenhall ...	1010.1	+46	SW	3	b	37	75	8	–	–	–	0	0	–	1	*
	Cranwell ...	1008.6	+34	W	2	bc	37	92	5	–	–	–	0	0	–	1	*
3	Birmingham ...	1011.9	+30	NSW	3	b	39	75	8	–	–	–	0	0	–	1	*
	Upper Heyford	1012.6	+36	W'S	3	b	37	85	8	4	–	–	Tr	Tr	5700	1	*
4	Ross-on-Wye	1013.2	+32	SW'W	2	b	42	75	8	–	–	1	0	Tr	–	1	*
5	Hartland Point	1016.1	+40	NW	3	c	49	65	8	5	1	–	4-6	7-8	2500	1	3
	Bristol ...	1014.0	+36	W'N	3	bc	41	85	6	–	–	5	0	2-3	–	1	*
	Portland Bill ...	1014.8	+32	WNW	4	c	48	92	8	5	–	–	7-8	7-8	4000	1	4
	Plymouth ...	1016.6	+34	WNW	3	bc	46	75	8	5	–	6	Tr	4-6	2500	1	2
	The Lizard ...	1017.5	+30	W	4	bc	46	85	8	8	6	–	4-6	4-6	2500	1	2
	Scilly (St. Mary's)	1016.5	+16	WNW	4	bc	49	75	8	4	4	2	1	2-3	2500	1	3
	Guernsey ...	1016.5	+36	NW	1	bc	49	75	8	2	–	–	4-6	4-6	2500	1	4
6	Pembroke ...	1012.5	+20	WNW	6	bcq	50	75	8	2	4	–	2-3	4-6	2500	1	3
7	Holyhead ...	1010.4	+22	W'S	5	c	47	75	8	8	–	–	7-8	7-8	2500	1	3
	Chester (Sealand)	1009.8	+28	W	4	bc	45	65	8	8	–	–	2-3	2-3	2500	1	*
8	Manchester ...	1008.2	+22	W	5	bc	42	85	7	8	–	–	2-3	2-3	1500	1	*
10	Spurn Head ...	1005.2	+30	W'N	6	bq	42	75	7	–	4	–	0	1	–	1	4
	Catterick ...	1005.3	+30	W'N	3	bc/pr	40	85	8	6	–	–	4-6	4-6	1500	1	*
	Tynemouth ...	1003.0	+28	W	4	bc	39	75	7	2	–	–	2-3	2-3	2500	1	1
11	St. Abbs Head	1000.5	+32	W	6	bc	39	75	8	2	–	–	2-3	2-3	2500	0	4
	Leuchars ...	1000.3	+34	WNW	4	b	38	75	8	2	–	–	Tr	Tr	4000	1	*
12	Renfrew (Abbots I.)	1004.5	+38	WNW	4	bc	38	85	8	8	–	–	4-6	4-6	2500	1	*
	Eskdalemuir ...	1003.8	+24	WNW	4	b	36	75	8	5	–	–	1	1	2500	5	*
	Point of Ayre ...	1007.3	+32	NW'W	6	b	44	85	8	–	6	–	0	Tr	–	0	4
13A	Tiree	1005.0	+32	NNW	5	bc	43	65	8	8	3	–	4-6	4-6	1500	0	4
13B	Stornoway ...	1001.4	+30	WNW	5	bc	39	65	8	8	–	–	2-3	2-3	1500	1	2
15	Dalwhinnie ...	*	+40	W	5	bc	33	85	7	8	6	–	2-3	4-6	2500	7	*
	Aberdeen ...	997.0	+20	WNW	6	b	37	65	8	5	–	–	Tr	Tr	4000	3	3
	Wick ...	993.9	+30	WNW	6	c/pr	38	92	7	8	7	–	4-6	9+	1500	6	2
16	Lerwick ...	983.5	+52	NW	8	c/pr	42	85	6	8	7	–	4-6	10	800	1	*
17	Blacksod Point	1005.4	+10	W	4	c	48	75	8	–	1	–	0	10	–	1	3
18	Malin Head ...	1007.1	+24	NW	4	c	45	75	8	8	–	4	4-6	7-8	4000	1	5
	Aldergrove ...	1008.0	+22	NSW	3	c	40	85	8	5	–	–	9	9	2500	1	*
19	Birr Castle ...	1012.0	+16	NNW	2	c	41	92	8	8	–	–	7-8	7-8	1500	1	*
20	Valentia Obsy.	1013.8	+4	S'W	3	c	48	75	8	5	7	–	2-3	9+	2500	1	4
	Roches Point	1014.7	+12	W	3	bc	45	92	8	–	–	6	0	4-6	–	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 27th Hrs. (36)
London (Kew)	55	41	34	6	–	0.7
Croydon ...	56	40	37	9	–	0.3
S. Farnborough	56	39	35	5	Tr	1.1
Boscombe Down	55	39	33	7	0.2	0.7
Calshot (Sthmtn.)	56	40	36	7	Tr	0.3
Lympne ...	54	39	35	8	0.1	0.0
Manston ...	56	41	37	9	Tr	0.0
Shoeburyness ...	57	40	33	10	–	0.1
Felixstowe ...	52	40	35	6	–	0.1
Gorleston ...	45	40	39	5	–	*
Mildenhall ...	47	37	31	6	Tr	0.6
Cranwell ...	47	36	32	3	0.3	1.0
Birmingham ...	47	37	33	8	–	1.2
Upper Heyford	51	36	28	8	–	*
Ross-on-Wye	51	41	36	2	0.2	1.1
Hartland Point	54	43	42	2	1	0.8
Bristol ...	54	40	31	8	0.1	1.3
Portland Bill ...	56	48	*	2	–	*
Plymouth ...	56	46	42	4	0.2	0.6
The Lizard ...	57	47	*	5	2	1.3
Scilly (St. Mary's)	54	49	*	3	0.3	2.2
Guernsey ...	56	47	42	7	0.1	0.2
Pembroke ...	50	46	*	1	–	0.9
Holyhead ...	49	45	42	0.5	–	1.2
Chester (Sealand)	49	41	34	1	0.5	0.7
Manchester ...	46	39	30	2	4	0.2
Spurn Head ...	45	40	*	0.2	2	1.0
Catterick ...	48	37	29	0.4	0.1	3.0
Tynemouth ...	47	36	30	Tr	–	*
St. Abbs Head	42	38	*	Tr	Tr	*
Leuchars ...	43	34	30	*	–	3.0
Renfrew (Abbots I.)	43	36	30	4	1	0.6
Eskdalemuir ...	41	35	32	6	3	0.4
Point of Ayre ...	48	42	*	0.1	3	1.1
Tiree	46	39	36	3	1	1.2
Stornoway ...	42	35	*	4	1	0.1
Dalwhinnie ...	(36)	31	28	9	2	0.0
Aberdeen ...	43	36	30	0.5	0.3	0.9
Wick ...	44	33	*	2	5	*
Lerwick ...	41	28	*	Tr	5	0.1
Blacksod Point	55	41	*	1	1	*
Malin Head ...	46	40	*	10	0.6	0.3
Aldergrove ...	*	37	28	2	0.1	0.6
Birr Castle ...	45	36	32	3	0.3	1.9
Valentia Obsy.	50	46	39	1	0.1	3.3
Roches Point	50	43	*	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	cbrm	bccpsbc	bcmb	55	41	34	6	–	0.7	*	*	6
Croydon	217	crsgfm	csbcps	cmb	56	40	37	9	–	0.3	*	*	
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. 28th

South Kensington. Max.	Time.	Min.	Time.

Kew Observatory. Max.	Time.	Min.	Time.
0.1	12h 27th	<0.1	1–5h 28th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 27th November Barom. mb.	Wind Direc.	Wind Force	Weather.	Temp. °F.	7h. G.M.T. 28th November Barom. mb.	Wind Direc.	Wind Force	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1000.6	SSW	8	rr	55						57		0.5	
Brussels														
Berlin														
Zürich														
Rome	1010.1	–	0	c	61	1016.7	–	0	bc	48	*	*	–	–

‡ 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.

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

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

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

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 29th November 1939.

No. 28,496

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

District.	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind Direc. (3)	Wind Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud Form Low. (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)...	1017.0	+4	W'S	3	z	48	65	6	-	-	5	0	2-3	-
	Croydon	1017.0	+14	W'S	4	bc	49	65	6	-	4	2	0	4-6	-
	S. Farnborough	1017.4	+10	WSW	4	c	48	65	8	7	4	8	tr	9	4000
	Boscombe Down	1018.8	+14	WSW	2	c/pr	49	75	7	8	7	8	4-6	9+	2500
	Calshot (Soton.)	1017.8	+6	W	3	c	51	75	7	2	7	7	1	10	2500
	Lympne ...	1017.2	+6	W'N	2	c	49	55	8	-	5	6	0	7-8	-
	Manston ...	1016.8	+14	W'N	4	bc	49	65	7	-	-	6	0	4-6	-
2	Shoeburyness ...	1016.0	+12	W'S	3	bc	48	65	5	-	-	6	0	4-6	-
	Felixstowe ...	1014.2	+14	W	5	c	48	65	8	4	7	6	tr	9	2500
	Gorleston ...	1012.9	+8	W'S	5	bc	46	65	6	5	-	-	4-6	4-6	2500
	Mildenhall ...	1014.2	+16	WSW	5	c	47	75	8	5	7	8	1	9+	4000
	Cranwell ...	1012.9	+16	W	4	zo	44	85	6	5	7	-	7-8	10	2500
3	Birmingham	1014.2	+8	WSW	4	c	47	65	8	5	7	-	4-6	10	2500
	Upper Heyford	1016.2	+10	SW'W	4	pr	48	75	7	8	7	-	2-3	9+	1500
4	Ross-on-Wye ...	1015.6	+10	WSW	3	c	50	65	8	8	7	7	1	9+	2500
5	Hartland Point	1013.8	-6	WNW	4	c	50	75	8	5	2	-	4-6	9	1500
	Bristol	1017.2	+6	SW	3	bc	49	75	8	8	6	-	4-6	4-6	2500
	Portland Bill ...	1018.4	+10	WSW	4	c	51	92	8	5	4	-	4-6	9	4000
	Plymouth ...	1018.0	-4	W'N	3	c	52	65	8	5	3	-	7-8	9+	2500
	The Lizard ...	1018.4	+10	SSW	4	bc	53	75	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1017.5	-10	SSW	4	c	52	75	7	8	8	7	4-6	10	1500
	Guernsey ...	1020.1	+6	WSW	2	c	52	65	8	8	7	-	4-6	9	1500
6	Pembroke ...	1014.7	-2	WSW	4	c	51	75	8	5	2	-	7-8	9+	2500
7	Holyhead ...	1012.7	+6	SW	4	c	49	85	8	5	2	-	7-8	10	2500
	Chester (Sealand)	1013.2	+10	W	3	c	50	65	8	8	7	-	1	10	1500
8	Manchester ...	1012.2	+14	W	3	zo	46	85	6	8	1	-	4-6	9+	2500
10	Spurn Head ...	1011.2	+22	W'N	4	bc	45	85	5	-	8	-	0	4-6	-
	Catterick ...	1010.7	+18	W	2	c	43	75	8	5	-	7	4-6	9+	2500
	Tynemouth ...	1009.1	+24	W	3	c	44	65	6	5	-	-	9	9	2500
11	St. Abbs Head	1007.1	+40	WNW	5	c	40	65	8	7	6	9	4-6	7-8	2500
	Leuchars ...	1006.6	+30	WSW	2	c	41	65	9	-	-	6	0	9	-
12	Renfrew (Abbots I.)	1009.3	+12	WSW	2	c	41	85	8	5	1	-	2-3	9	2500
	Eskdalemuir ...	1009.7	+18	-	0	c	38	85	8	5	1	7	4-6	10	2500
	Point of Ayre ...	1010.8	+12	W'N	4	c	48	85	8	8	1	-	7-8	10	2500
13A	Tiree	1017.6	+4	-	0	c	43	65	9	5	-	-	7-8	7-8	4000
13B	Stornoway ...	1006.5	+20	W	2	q	40	75	8	8	5	7	2-3	10	2500
15	Dalwhinnie ...	*	+26	S	2	c	34	85	8	4	-	7	1	9+	4000
	Aberdeen ...	1003.4	+22	WNW	5	b	41	65	8	8	-	5	1	1	4000
	Wick	1002.0	+30	WNW	7	c/pr	42	75	8	5	7	-	7-8	9	1500
16	Lerwick... ...	994.4	+50	NW	8	c/pr	41	75	8	8	7	-	7-8	9	1500
17	Blacksod Point...	1002.7	+22	SSE	1	rr	46	85	7	6	-	-	10	10	<150
18	Malin Head ...	1008.4	0	S	2	c	44	85	8	8	-	-	9	9	4000
	Aldergrove ...	1010.5	+4	SSW	1	c	43	92	7	5	1	-	2-3	10	1500
19	Birr Castle ...	1011.0	-12	WSW	2	c/d	46	85	8	5	1	-	7-8	10	2500
20	Valentia Obsy. †	1009.2	-38	SSW	5	rr	50	92	6	6	2	-	10	10	800
	Roches Point ...	1012.1	-24	SW'W	4	c	52	92	8	6	2	-	7-8	9+	1500

OBSERVATIONS at 18h. G.M.T. 28th. November — PAST 24 HOURS.

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)	Weather 7h.–13h. 28th. (37)	Weather 13h.–18h. 28th. (38)	Weather 18h. 28th to 1h. 29th. (39)	Weather 1h.–7h. 29th. (40)
1	London (Kew)...	1017.7	+6	SW	3	zo	47	75	6	5	-	-	10	10	4000	1	*	bbm	bzcz		
	Croydon	1017.7	+2	SW	2	c	47	75	6	5	-	-	10	10	5700	1	*	bbcm	bcz cz	crororom	ddrocm
	S. Farnborough	1017.6	+4	SSW	3	zo	47	75	6	5	-	-	10	10	7200	1	*	bmbcc	promc	crocdodoc	cmododoc
	Boscombe Down	1017.4	-2	S'W	3	zo	45	85	6	-	2	-	0	7-8	-	1	*	b,cmc	cmo	ororomo	ororoido
	Calshot (Soton.)	1017.9	+2	SW'W	3	zo	51	85	6	6	7	-	4-6	10	1500	1	2	cbcc	como	omrdroro	roroirocmo
	Lympne ...	1018.7	+10	W'S	3	c	45	85	7	5	7	-	4-6	10	5700	1	§ 3	bbcy	bcyc	comrrir	orofroomo
	Manston ...	1018.1	+8	WSW	3	zo	45	85	6	5	7	-	4-6	10	4000	1	*	bbzobc	bccmo	ccroro	ciro
2	Shoeburyness ...	1017.5	+6	WSW	3	c	48	75	6	-	7	-	0	10	-	1	*	bcmo	bcmoc		
	Felixstowe ...	1016.2	+6	WSW	4	zo	46	85	6	-	2	-	0	10	-	1	3	b,c	como	cmoolromo	oidoroc
	Gorleston ...	1014.6	+4	SW	3	c/pr	45	75	7	5	-	-	9+	9+	2500	0	2	bbcq	bccpro	c	oiroro
	Mildenhall ...	1015.8	+14	SW	4	o/r	46	85	6	5	-	-	10	10	5700	1	*	b,c	ccirimo	crorom.	oiroro
	Cranwell ...	1013.7	+2	SWW	3	zo	45	85	5	6	2	-	7-8	10	4000	1	*	bcmo	irocm	roromoirom	croromm
3	Birmingham	1014.5	0	SSW	3	o	45	78	6	5	-	-	10	10	1500	1	*	b,c	coco	ororo	oiro
	Upper Heyford	1016.3	-2	SSW	2	zo	45	85	6	5	7	-	1	10	1500	1	*	bc	procmo	cmocrrorodmo	roromoo
4	Ross-on-Wye ...	1014.8	-6	SSW	3	ido	48	75	7	6	2	-	2-3	10	1500	1	*	bbcc	c	doccroro	c
5	Hartland Point	1013.0	-14	WSW	5	rr	49	92	7	6	2	-	7-8	10	800	1	4	cbcc	cpror	rrffe	ffrrf
	Bristol	1016.2	-6	SSW	3	iro	47	85	6	5	2	-	7-8	10	2500	1	*	bbc	bccoc	crrrro	cddroq
	Portland Bill ...	1017.0	*	SW	4	c	52	92	7	5	-	-	10	10	4000	1	4	c	c	prr	c
	Plymouth ...	1015.7	-10	WSW	5	roro	51	92	6	-	2	-	10	10	1500	1	3	bcc	cococomo	orromoo	ododocmo
	The Lizard ...	1015.3	-10	SSW	5	rr	51	97	6	5	-	-	10	10	1500	1	3	cbc	prrr	cbm	cidmo
	Scilly (St. Mary's)	1013.6	-30	SSW	5	rr	52	97	6	5	-	-	10	10	1500	1	3	bcc	corr	orife	pife
	Guernsey ...	1018.8	-6	SW	3	c	52	75	6	8	-	-	10	10	1500	1	3	bbcc	c		ororo
6	Pembroke ...	1011.1	-24	SSW	6	rr	50	97	7	5	-	-	10	10	1500	1	4	bcqc	orrq	irqmoo	oirodoqm
7	Holyhead ...	1010.5	-12	SSW'	4	roro	*	97	6	-	2	-	10	10	800	1	2	bcproc ⊕	rrromo	orrmo	rrRmoc
	Chester (Sealand)	1012.9	0	-	0	rr	46	85	5	-	2	-	10	10	4000	1	*	bcc	iroorrmoc	crrrorom,	crr romo
8	Manchester ...	1012.6	0	SSW	3	iro	46	88	6	5	-	-	10	10	2500	1	*	bcqprcq	cmo	rocdodo,iroro	
10	Spurn Head ...	1012.9	+10	WSW	3	c	45	85	5	5	-	-	9+	9+	1500	0	2	amo	cm	iroc	orr
	Catterick ...	1011.6	+10	-	0	c	43	85	7	5	7	-	4-6	10	2500	1	*	bbcc	c	ccmoom	orrf
	Tynemouth ...	1010.9	+12	W	3	c	43	75	5	8	-	-	9	9	1500	1	1	bcc	c	cmpoc	corr
11	St. Abbs Head	1009.3	+8	W	3	c	41	55	7	5	2	-	7-8	10	2500	0	3	bbcc	cy	bcc	omrr
	Leuchars ...	1009.3	+18	WSW	2	c	37	85	7	-	7	-	0	10	-	1	*	bc	ccx	bc	excirrr
12	Renfrew (Abbots I.)	1010.1	+4	-	0	iro	39	92	4	8	-	-	10	10	2500	1	*	bcc	ccmo	crorofdof	ofrrmdodo
	Eskdalemuir ...	1010.1	0	WSW	2	dod	37	92	7	-	2	-	9+	9+	1500	1	*	bbcc	idododoc	cdodo	RRDdoo
	Point of Ayre ...	1010.3	-4	SW	1	roro	44	97	7	6	2	-	2-3	10	1500	1	1	c	cirro	dd	rrc
13A	Tiree	1006.5	-6	SSE	3	bc	43	75	7	5	-	-	4-6	4-6	2500	0	2	c	c	bcc	oRR
13B	Stornoway ...	1007.5	+14	-	0	c	37	85	7	5	1	-	4-6	10	2500	1	1	bccphrq	c	c	cPRrr
15	Dalwhinnie ...	1009.7	+6	-	0	c	31	92	7	5	-	7	10	10	2500	*	*	bcc	c	*	cRS
	Aberdeen ...	1008.0	+26	SW	1	c	38	75	5	5	-	3	4-6	7-8	4000	3	2	bxb	bbcx	bcbx	bxorr
	Wick	1005.7	+20	NW	6	bcq	40	65	7	5	7	8	2-3	4-6	1500	1	2	procq	cproq	bccbc	bcrr
16	Lerwick... ...	1002.2	+24	NW	6	c	39	85	8	8	7	-	4-6	7-8	1500	1	*	cphrpr	cpr	cprbcc	
17	Blacksod Point...	1000.6	-24	SSE	5	rr	51	92	6	6	-	-	10	10	<150	1	4	rr	rr	rr	c
18	Malin Head ...	1005.6	-14	SE	3	ir	43	92	7	8	-	6	9	9	4000	1	3	c	cprocirc	Rrc	c
	Aldergrove ...	1008.2	-16	SE	3	roro	42	92	6	-	2	-	10	10	4000	1	*	c	crorómo	6rododorr	rrdiro
19	Birr Castle ...	1005.2	-32	S	3	rr	48	92	7	5	-	-	10	10	2500	1	*	cidoc	orr	oir	pidc
20	Valentia Obsy. †	1007.2	+12	WSW	6	roro	56	97	6	6	-	-	10	10	450	1	4	cirocrr	rrdodororo	roroido	idoididoc
	Roches Point ...	1006.7	-28	W'S	3	ido	54	97	7	5	-	-	10	10	800	1	4	c	drdrid	irc	

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).

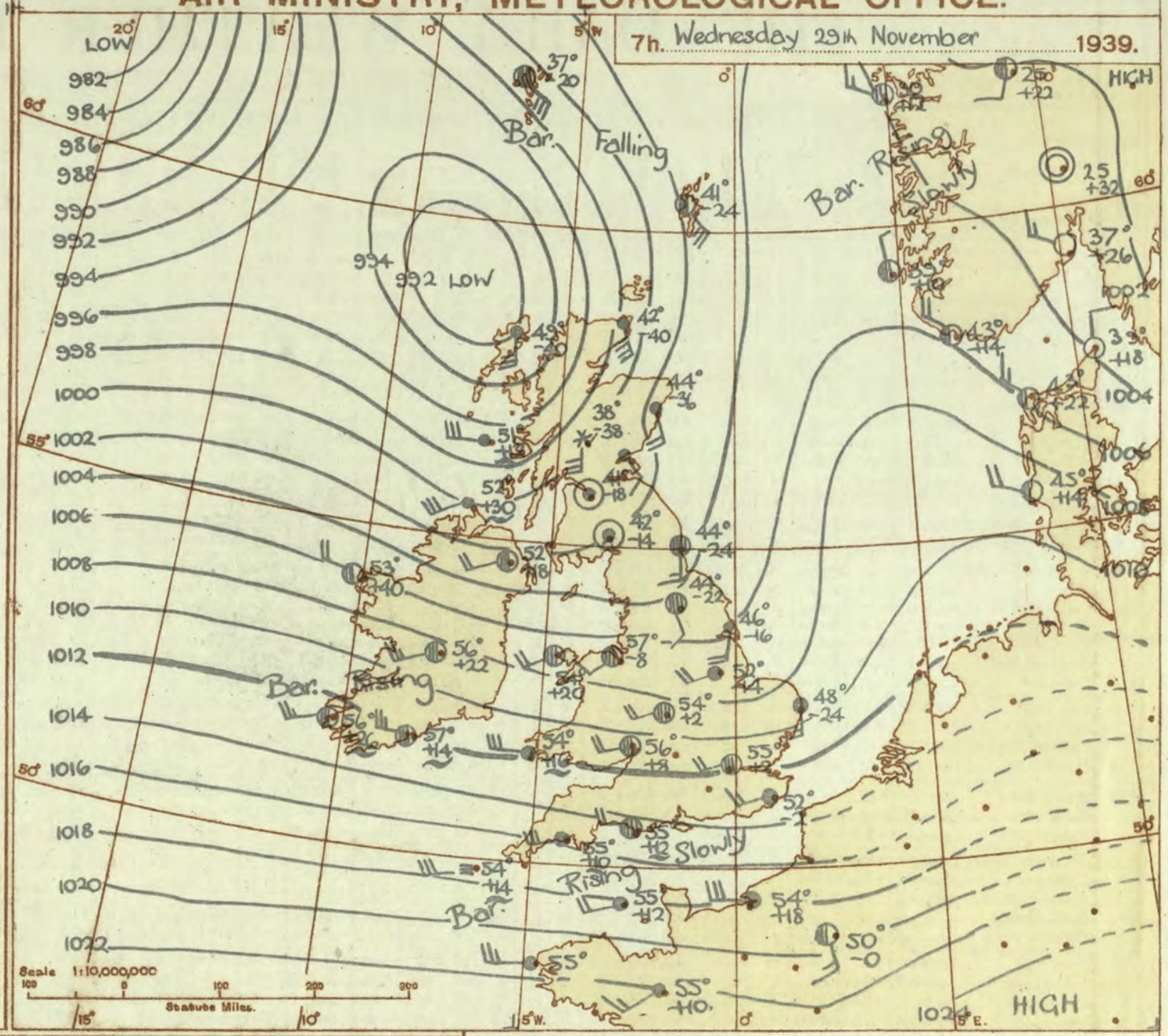
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



Districts.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 29th November, 1939.
1 S.E. England 2 E. England 3 E. Midlands 4 W. Midlands	Wind west southwest, moderate or fresh; cloudy or dull; some occasional light rain or drizzle, but amounts small; very mild.
5 S.W. England 6 South Wales 7 North Wales 8 N.W. England 9 N. Midlands	Wind west backing southwest, fresh to strong at times on the coast; dull, occasional rain and drizzle; hill fog at times, and local coast mist or fog; mild.
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	Wind south, veering southwest, moderate or fresh in the south, strong to gale off northern coasts; dull; rain at times; mild.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 5 - 9.

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.

GENERAL INFERENCE.

Pressure is high over Spain and lowest southwest of Iceland. A depression off the Hebrides is moving north-north-east and further disturbances will move northeast on the Atlantic. Weather will be cloudy and very mild generally with occasional rain or drizzle, especially in the North and West.

FURTHER OUTLOOK.

A spell of mild weather; rain at times in the Northwest half of the country.

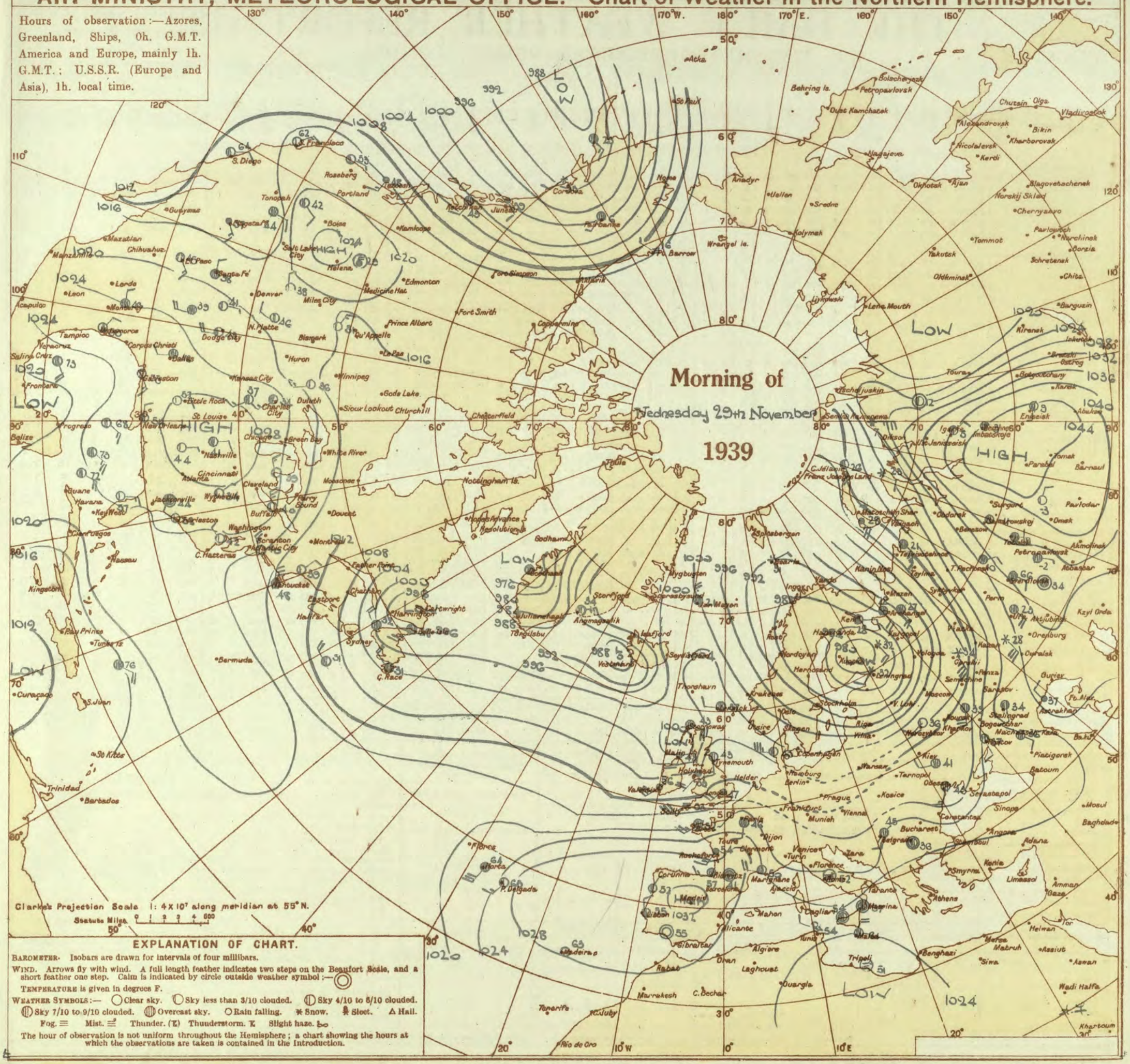
South Cone hoisted in districts 8 - 14, 18, 19. 1637h. 28/11/39
" " " " " 1 - 3, 16. 0450h. 29/11/39.

Forecasts issued at 1100 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 29th November 1939.
No. 28496

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1013.3	-30	SSW	4	d.d.	47	97	6	6	2	-	9	10	2500
	S. Farnborough	226	1012.4	-30	S	4	d.d.	48	97	5	5	2	-	7-8	10	4000
	Boscombe Down	417	1011.6	-26	S	3	d.d.	49	97	5	-	2	-	10	10	1500
	Calshot (Sthmtn.)	8	1012.1	-36	SW'W	4	roro	52	97	6	6	2	-	9	10	800
	Lympne	346	1015.9	-18	SW'S	4	roro	46	92	7	6	2	-	9+	10	800
	Manston	154	1015.1	-20	SW	4	roro	46	92	6	6	2	-	9	10	1500
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1014.7	-10	SW	3	roro	46	92	6	5	-	-	10	10	2500
	Gorleston	5	1013.7	-4	SW'W	4	c	45	75	6	5	-	-	9+	9+	2500
	Mildenhall	19	1013.0	-16	SSE	2	roro	45	92	4	-	2	-	10	10	2500
	Cranwell	240	1011.1	-18	S	3	ro	43	97	4	5	-	-	10	10	450
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1011.7	-26	SW	3	d.d.	45	97	6	5	2	-	9+	10	450
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1011.1	+6	W	6	f	53	97	3	-	-	-	10	10	<150
	Bristol	209	1010.4	-20	SW	5	id.	53	97	6	6	2	-	9	10	800
	Portland Bill	32	1011.8	-14	W	4	ir	55	92	7	5	-	-	10	10	2500
	Plymouth	82	1014.0	+14	SW'W	5	o	55	92	7	-	2	-	10	10	800
	The Lizard	240	1015.4	+20	SSW	6	id	54	97	5	5	-	-	10	10	1500
	Scilly (St. Mary's)	163	1015.2	+14	WSW	6	if	53	97	3	-	-	-	10	10	<150
	Guernsey	175														
6	Pembroke	142	1009.0	+8	W	7	oq	54	97	6	5	-	-	10	10	800
7	Holyhead	26	1005.4	-10	SW	4	rr	53	97	8	-	2	-	10	10	800
	Chester (Sealand)	16	1007.4	-10	SSE	3	roro	47	92	6	6	2	-	9	10	1500
8	Manchester	70	1008.0	-28	SSE	3	roro	46	92	4	6	2	-	9	10	1500
10	Spurn Head	29	1010.8	-10	S	3	c	44	92	6	5	1	-	2-3	10	2500
	Catterick	175	1009.4	-14	SSE	1	m	42	92	4	5	2	-	7-8	10	1500
	Tynemouth	108	1009.4	-10	S	3	c	43	85	6	8	-	-	7-8	7-8	1500
11	St. Abbs Head	280	1008.1	-16	SSE	2	c	38	85	8	5	7	-	4-6	10	2500
	Leuchars	36	1007.6	-14	—	0	c	32	97	7	-	7	-	0	10	—
12	Renfrew (Abbots I.)	19	1006.3	-24	E'N	3	of-	39	97	3	5	-	-	10	10	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1005.1	-26	S'E	6	dd	47	97	6	-	2	-	10	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1003.8	-24	SE	4	c	43	65	7	5	5	-	4-6	3	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1006.5	-6	SSW	2	bc	34	85	8	8	1	-	1	2-3	1500
16	Lerwick	156	1006.2	+8	NW'N	2	c	37	85	8	5	7	-	4-6	7-8	1500
17	Blacksod Point	18	1000.8	-2	SW	5	roro	54	97	6	6	-	-	10	10	<150
18	Malin Head	84	998.8	-22	S	3	rr	48	97	5	6	2	-	4-6	10	1500
	Aldergrove	268	1002.3	-16	S'E	2	rr	49	92	6	6	-	-	10	10	450
19	Birr Castle	173	1005.1	+4	S	3	ir	55	97	7	5	-	-	10	10	2500
20	Valentia Obsy.	30	1009.0	+2	SW'W	6	id.	56	97	6	5	-	-	10	10	450
	Roches Point	22	1009.5	+10	W	4	c/r	56	97	8	6	2	-	7-8	9+	1500

OBSERVATIONS at 7 hr. G.M.T. 29th. November — PAST 24 HOURS.

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 28th Hrs. (36)
London (Kew)																*	49			-		
Croydon	1012.2	+2	WSW	4	c	55	92	6	5	2	-	9	10	800	1	*	49	45	43	-	2	5.0
S. Farnborough	1012.3	+10	SW	4	z.	55	92	6	5	-	-	10	10	1500	2	*	49	45	44	Tr	3	5.0
Boscombe Down	1013.4	+18	WSW	5	c	54	92	7	5	-	-	10	10	1500	1	*	49	44	43	Tr	4	2.3
Calshot (Sthmtn.)	1013.9	+10	WSW	4	z.	55	97	6	5	2	-	9+	10	1500	1	2	52	48	48	-	4	3.9
Lympne	1013.0	-2	WSW	3	bb	52	97	5	6	-	-	10	10	220	1	§3	49	45	41	-	3	5.8
Manston	1011.5	-10	W	4	roro	52	92	6	6	2	-	7-8	10	800	1	*	49	44	42	-	3	5.6
Shoeburyness																*				-		
Felixstowe	1009.8	-16	SW	3	roro	48	97	6	6	2	-	9+	10	800	1	2	49	45	42	-	2	4.4
Gorleston	1008.8	-24	S	3	roro	48	92	6	6	-	-	10	10	1500	1	2	46	*	42	Tr	1	*
Mildenhall	1008.0	-16	SW	4	roro	51	97	5	5	-	-	10	10	800	1	*	48	45	42	Tr		3.9
Cranwell	1007.2	-14	WSW	4	roro	52	97	6	5	2	-	9+	10	800	1	*	45	43	40	Tr	5	2.3
Birmingham	1008.6	+2	WSW	4	o	54	92	8	6	-	-	10	10	800	1	*	47	43	41	Tr	4	2.8
Upper Heyford	1011.0	+18	W'S	3	c	53	97	8	5	7	-	9	10	800	1	*	48	40	40	Tr	6	*
Ross-on-Wye	1010.7	+8	WSW	4	c	56	85	7	5	7	-	9	9+	2500	1	*	50	46	44	Tr	2	2.2
Hartland Point	1013.5	+14	WSW	5	f	53	97	3	-	-	-	10	10	<150	1	4	51	47	47	1	11	2.1
Bristol	1012.8	+10	W	7	id	55	92	6	6	7	-	9	10	800	2	*	49	47	44	-	9	1.8
Portland Bill	1015.3	+12	W	4	c	55	92	8	5	-	-	10	10	4000	1	4	52	50	*	-	5	*
Plymouth	1016.0	+10	W'S	6	d.d.	55	97	6	6	-	-	9+	9+	500	1	4	52	50	49	0.5	6	2.8
The Lizard	1017.9	+10	W'S	7	m	54	97	4	5	-	-	10	10	800	1	3	53	50	*	3	3	2.4
Scilly (St. Mary's)	1017.4	+14	WSW	6	f.	54	92	2	-	-	-	10	10	<150	1	4	52	42	*	4	2	1.8
Guernsey	1018.0	+12	WSW	4	id.	55	97	5	5	-	-	10	10	800	1	3	54	49	47	-	8	3.5
Pembroke	1012.1	+16	W	6	d.d.	54	97	4	5	-	-	10	10	800	1	4	52	48	*	5	13	1.5
Holyhead	1007.1	+20	SW	4	c	54	97	8	5	2	-	9	10	2500	1	2	50	48	46	3	9	0.0
Chester (Sealand)	1007.0	-8	SW	2	c/r	57	75	7	6	2	-	4-6	10	2500	1	*	(50)	44	42	0.2	6	1.2
Manchester	1006.1	-2	SW'W	3	roro	53	97	4	6	2	-	7-8	10	800	2	*	47	43	41	0.6	13	0.0
Spurn Head	1005.8	-16	SW	4	rr	46	97	5	5	-	-	10	10	1500	2	1	45	43	*	-	5	1.9
Catterick	1003.9	-22	SE	2	f/r	44	97	3	5	-	-	10	10	450	1	*	45	40	38	-	5	2.3
Tynemouth	1003.8	-24	S	3	o/r	44	97	6	-	2	-	10	10	1500	1	2	*	*	*	-	6	*
St. Abbs Head	1000.2	-32	SSE	4	rr	41	97	4	3	-	-	10	10	1500	1	3	*	*	*	-	7	*
Leuchars	1000.1	-40	SE	2	rr	40	97	7	5	-	-	10	10	2500	1	*	41	31	23	-	5	3.2
Renfrew (Abbots I.)	1001.4	-18	—	0	dd	41	97	5	5	-	-	10	10	800	1	*	41	37	34	Tr	10	0.3
Eskdalemuir	1002.0	-14		0	d.d.	42	92	6	-	2	-	10	10	220	2	3	39	34		3	11	0.7
Point of Ayre	1003.4	+6	W	6	c/pr	55	97	7	8	2	-	7-8	10	1500	1	3	48	44	*	2	12	0.0
Tiree	996.6	+12	W	6	ir	51	92	7	-	2	-	9	9	1500	1	5	44	41	39	-	8	0.0
Stornoway	992.1	-40	S	6	rr	49	92	7	5	2	-	7-8	10	1500	1	3	42	36	*	0.3	4	1.5
Dalwhinnie	998.9	-38	S	6	s	38	92	6	8	-	-	10	10	1500	4	*	36	27	24	-	8	2.5
Aberdeen	1002.7	-36	S'E	4	rr	44	92	6	6	-	-	10	10	800	1	2	41	29	19	-	4	4.4
Wick	998.4	-40	SSE	8	rr	42	92	7	5	2	-	9	10	1500	1	3	42	31	*	1	2	*
Lerwick	1002.3	-24	SE	5	c	41	75	7	8	7	-	7-8	9+	1500	1	*	42	35	*	2	0.3	0.3
Blacksod Point	1006.4	+40	W'N	4	c	53	85	7	9	-	-	9+	9+	800	1	3	55	45	*	8	10	*
Malin Head	1000.7	+30	SW'W	6	id.	52	92	6	8	-	-	9+	9+	1500	1	4	47	40	*	3	17	0.0
Aldergrove	1002.7	+18	WSW	4	c/r	52	92	7	5	-	-	9+	9+	1500	1	*	43	41	40	3	12	0.0
Birr Castle	1009.0	+22	WSW	5	c	56	85	8	8	-	-	7-8	7-8	1500	1	*	48	47	45	7	7	0.0
Valentia Obsy.	1012.9	+26	WSW	5	c/d	56	92	7	5	-	-	9	9	800	1	4	56	55	54	8	10	0.0
Roches Point	1012.0	+14	W	5	c/d	57	97	8	5	-	-	9	9	1500	1	4	54	53	*	7	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. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
		24 hrs. ended 9h.											
Kew	18	bbm.	bc.cz.		49			—			*	*	
Croydon	217	bbcm.	bcz.cz.	ro.ddcm.	49	45	43	—	2	5.0	*	*	
Greenwich (Royal Observatory)	149												
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*									*
Regents Pk. (Botanic Gardens)‡	168	*	*	*									*
Camden Square	110			*						*	*		*
Kensington	80			*									*
Hampstead Observatory	450										*		*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 29th

South Kensington			
Max.	Time.	Min.	Time.

Kew Observatory			
Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 28th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 29th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris	1022.6	—	0	bc	46	1019.3	S	3	c/r	50	52	2	—	45
Brussels														
Berlin														
Zürich														
Rome	1018.7	SW	4	b	59						*	*	—	

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.

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

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

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

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday 30th November 1939.

No. 28497

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1014·5	+4	W'S	4	z0	58	85	6	5	–	–	9+	9+	2500
	Croydon ...	1015·5	+6	W'S	3	c	57	85	7	5	–	–	10	10	1500
	S. Farnborough	1015·4	+2	WSW	5	c	57	85	8	5	–	–	10	10	1500
	Boscombe Down	1016·4	+10	WSW	4	c/d	57	85	8	5	–	–	9+	9+	850
	Calshot (Soton.)	1017·0	+10	WSW	4	o	55	97	7	5	–	–	10	10	800
	Lympne ...	1016·2	+18	WSW	4	z0	54	97	6	5	–	–	10	10	220
	Manston ...	1014·1	+16	W'N	5	z0	58	85	6	5	–	–	9+	9+	800
2	Shoeburyness ...	1014·5	+8	WSW	4	c	57	92	5	5	–	–	9+	9+	1500
	Felixstowe ...	1011·4	+6	W	5	bc	59	85	8	1	–	6	4-6	4-6	1500
	Gorleston ...	1010·1	+8	W'S	4	c	57	85	6	8	–	–	9	9	2500
	Mildenhall ...	1011·6	+22	WSW	5	c	59	85	8	5	7	5	4-6	9	1500
	Cranwell ...	1009·4	+6	W	4	bc	59	85	8	8	–	4	2-3	4-6	1600
3	Birmingham	1011·8	+4	WNW	5	c	58	75	8	8	–	6	4-6	7-8	2500
	Upper Heyford	1014·1	+10	W'N	4	c	56	92	8	6	–	–	9+	9+	800
4	Ross-on-Wye ...	1014·2	+14	W'S	4	c	58	75	8	8	–	3	2-3	9	2500
5	Hartland Point	1018·1	+20	W	5	F+	53	97	1	–	–	–	10	10	<150
	Bristol ...	1017·2	+20	W	5	dd	54	97	6	6	2	–	9	10	450
	Portland Bill ...	1018·2	+6	SW	4	c	58	97	8	5	–	–	10	10	4000
	Plymouth ...	1019·9	+18	W	4	c/d	56	97	6	5	–	–	10	10	800
	The Lizard ...	1021·8	+20	W'S	6	df	54	97	2	5	–	–	10	10	1500
	Scilly (St. Mary's)	1020·9	+14	SW'W	5	c/f	54	97	5	5	–	–	10	10	800
	Guernsey ...	1021·4	+16	W	4	id0	55	97	6	5	–	–	10	10	600
6	Pembroke ...	1016·3	+16	W	6	cq	54	97	6	5	–	–	9+	9+	800
7	Holyhead ...	1013·1	+30	WSW	3	c	54	85	7	6	2	–	9	10	2500
	Chester (Sealand)	1012·9	+32	W	3	c	59	75	8	5	7	–	4-6	9+	2500
8	Manchester ...	1011·2	+26	W	5	c	56	65	7	5	–	–	9+	9+	2500
10	Spurn Head ...	1006·3	0	W'N	8	bcq	55	75	6	5	–	3	4-6	4-6	2500
	Catterick ...	1007·1	+30	WSW	1	bc	57	65	8	2	6	–	4-6	4-6	2500
	Tynemouth ...	1005·0	+18	W	5	bc	55	65	7	2	3	2	2-3	4-6	2500
11	St. Abbs Head	1003·4	+34	W	5	c	52	75	7	8	6	–	4-6	7-8	2500
	Leuchars ...	1000·9	+10	WSW	4	bc	62	75	8	8	–	2	2-3	4-6	2500
12	Renfrew (Abbots I.)	1006·0	+28	WNW	6	c/p	62	75	7	8	7	3	7-8	9	2500
	Eskdalemuir ...	1005·2	+20	W'S	6	c	49	75	7	5	–	6	4-6	7-8	1800
	Point of Ayre ...	1010·6	+42	WNW	3	c	53	85	7	8	1	–	4-6	10	2500
13A	Tiree ...	1004·4	+30	W'S	4	o	51	75	7	5	–	–	10	10	1500
13B	Stornoway ...	997·7	+50	WSW	6	ir0	50	85	7	5	7	–	7-8	9+	2500
15	Dalwhinnie ...	*	+20	SW	6	bc	48	75	8	4	6	1	2-3	4-6	4000
	Aberdeen ...	999·6	+6	S'W	2	bc	46	85	6	5	–	5	2-3	2-3	2500
	Wick ...	995·6	+10	WSW	5	c	50	92	8	5	7	8	4-6	7-8	1500
16	Lerwick...	995·3	-32	SSE	6	rr	41	92	6	6	2	–	9	10	800
17	Blacksod Point..	1006·1	-16	S	4	o	53	92	6	5	–	–	10	10	450
18	Malin Head ...	1004·6	+20	W	4	c	52	75	7	5	–	–	9	9	4000
	Aldergrove ...	1008·8	+20	WSW	3	c	51	75	7	5	2	–	4-6	10	1500
19	Birr Castle ...	1012·5	+14	WSW	2	c	55	85	8	5	1	–	7-8	10	2500
20	Valentia Obsy. †	1012·8	-18	SW'S	5	id0	56	97	5	5	–	–	10	10	450
	Roches Point ...	1015·5	+12	W'S	4	id0	55	97	7	5	–	–	9+	9+	450

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	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)	1018·4	+18	S'W	3	z0	56	85	6	5	–	–	10	10	1500	1	*
Croydon	1018·2	+14	WSW	4	z0	56	85	6	5	–	2	7-8	9	1500	1	*
S. Farnborough	1018·9	+16	SW	4	c	56	85	7	5	7	–	9	10	1500	1	*
Boscombe Down	1019·2	+10	WSW	5	o	55	92	7	5	–	–	10	10	1500	1	*
Calshot (Soton.)	1020·1	+18	WSW	3	z0	55	97	6	5	–	–	10	10	800	1	2
Lympne	1016·5	+12	WSW	4	o	53	97	7	5	–	–	10	10	800	1	§
Manston	1016·8	+12	W	5	z0	55	92	6	5	7	–	7-8	9+	1500	1	*
Shoeburyness	1016·6	+14	WSW	4	c	55	85	6	5	7	–	7-8	10	1500	1	*
Felixstowe	1015·0	+20	W'S	5	z0	55	85	6	5	–	–	9	9	4000	1	3
Gorleston	1014·1	+24	WSW	2	c	56	85	6	5	–	–	7-8	7-8	1500	1	2
Mildenhall	1014·6	+22	WSW	4	cq	55	85	7	5	7	–	1	10	2500	1	*
Cranwell	1013·3	+22	W	5	z0	53	85	6	5	–	–	10	10	2500	1	*
Birmingham	1013·9	-2	WSW	4	c	54	75	8	5	–	1	4-6	9+	2500	1	*
Upper Heyford	1016·8	+8	WSW	3	c	54	85	7	5	7	–	9	10	800	1	*
Ross-on-Wye	1016·5	+12	SW	3	o	54	92	8	5	–	–	10	10	2500	1	*
Hartland Point	1017·4	0	W	6	F	53	97	1	–	–	–	10	10	<150	1	4
Bristol	1018·1	+2	W	4	id0	55	92	6	5	2	–	9	10	800	1	*
Portland Bill	1020·6	+8	W	4	o	55	*	8	5	–	–	10	10	4000	1	4
Plymouth	1020·7	-2	W'S	5	o/d	54	97	6	5	–	–	10	10	800	1	4
The Lizard	1022·6	+10	SW	6	df	54	97	3	5	–	–	10	10	800	1	4
Scilly (St. Mary's)	1020·8	-2	SW'W	2	f+	54	97	2	–	–	–	10	10	<150	1	4
Guernsey	1023·1	+12	WSW	4	c/d	55	97	6	5	–	–	10	10	800	1	3
Pembroke	1016·3	-2	WSW	7	d/r	54	97	6	5	–	–	9+	9+	800	1	4
Holyhead	1010·0	-24	S	5	rr	53	97	5	–	2	–	10	10	1500	1	3
Chester (Sealand)	1012·5	-6	S	2	ir0	56	75	7	5	–	–	10	10	1500	1	*
Manchester	1011·8	-6	SW'W	3	c/f	51	85	6	5	7	–	7-8	10	1600	1	*
Spurn Head	1011·0	+10	W	4	o	51	85	6	5	–	–	10	10	1500	1	3
Catterick	1009·2	+18	WSW	2	c	52	75	7	5	7	–	4-6	10	1500	1	5
Tynemouth	1008·1	+16	W	5	c	52	75	6	8	–	–	9+	9+	1600	1	2
St. Abbs Head	1004·2	0	W	5	c	49	75	8	5	6	–	7-8	10	1500	0	4
Leuchars	1003·2	+6	WSW	3	c	50	75	8	5	–	–	7-8	7-8	4000	1	*
Renfrew (Abbots I.)	1003·9	-38	SW'S	5	id0	50	85	7	5	2	–	2-3	10	2500	1	*
Eskdalemuir	1005·4	-16	SW'S	5	c	47	85	7	6	–	–	10	10	800	1	*
Point of Ayre	1007·2	-24	SW'W	6	r0r0	53	92	7	–	2	–	10	10	800	1	3
Tiree	999·7	-32	SSW	4	dr	50	97	6	–	2	–	10	10	1500	1	3
Stornoway	997·8	-14	SSW	6	c	50	85	6	5	2	–	9	10	2500	1	3
Dalwhinnie	1001·3	-20	SW	6	c	44	85	7	4	6	–	4-6	7-8	2500	0	*
Aberdeen	1001·3	-2	SW	1	c	47	75	5	5	7	–	1	9	2500	1	1
Wick	998·0	-10	SW	3	c	47	85	8	5	7	–	4-6	9	1500	1	2
Lerwick	992·1	+8	W'S	7	c	49	92	6	8	2	–	4-6	10	800	1	*
Blacksod Point	1001·4	-20	SW	7	ir	55	97	6	6	–	–	10	10	<150	1	6
Malin Head	999·9	-56	S	3	RR	51	92	6	8	–	–	9+	9+	2500	1	3
Aldergrove	1004·3	-46	S'E	4	dod0	51	92	6	5	–	–	10	10	800	1	*
Birr Castle	1008·1	-14	WSW	3	rr	57	92	7	5	–	–	10	10	2500	1	*
Valentia Obsy. †	1011·6	-6	SW	7	ir	57	97	6	6	2	–	7-8	10	450	1	5
Roches Point	1013·5	-4	SW'W	5	dd	55	97	5	5	–	–	10	10	220	1	4

PAST 24 HOURS.

WEATHER.

Stations	7h.—13h. 29th (37)	13h.—18h. 29th (38)	18h. 29th to 1h. 30th (39)	1h.—7h. 30th (40)
London (Kew)	ccm0	cm0	cm0r0	r0cr0d0
Croydon	cm0c	ccm0	cd0d0m0	cid0m0
S. Farnborough	cid0ir0	c	cd0d0dd	cddcd0c
Boscombe Down	cd0	co	od0d0m0	cr0r0d0d0
Calshot (Soton.)	cid0m0	cid0m0	om0d0dm	oid0ddm
Lympne	or0m0o	cm0	cfom0	om0d0
Manston	r0r0ccm0	cm0	cir0c	ir0id0
Shoeburyness	prcbcbmc	m0c	c	cr0r0m0
Felixstowe	or0r0bc	bccm0	cir0cm0	cm0 iD
Gorleston	or0c	c	cor0r0 cq	cq d0
Mildenhall	oir0c	ccq	cir0c	cir0c
Cranwell	cm0prbc	bcc	cir0cm0	om0Pr
Birmingham	or0bc	bcc	c	cir
Upper Heyford	c	c	cddc,id0m0	cd0d0id
Ross-on-Wye	cpcbcc	c	cq id0	c
Hartland Point	ffdF	FFe	FFfid	FdrFfd
Bristol	cddq	cddm0q	cdrq	cdrrq
Portland Bill	c	c	oir	P
Plymouth	cd0d0id0m	cdddid0	oid0ddm0	Pd0ddm0
The Lizard	df	dfifd	dfidm	id mif
Scilly (St. Mary's)	ffifc	cifeo	ofid0	oid0o
Guernsey	ogid0	oid0	oid0c	cid0d
Pembroke	od0dqmc	idfqo	d0d0qm0c	dfq or0r0
Holyhead	r0ir0bcc	irrm0	rrir0c	c
Chester (Sealand)	cr0bcc	cr0	cir0rm0	cr0r0
Manchester	crr0ir0c	ccm0mfm0	r0r0ir0circ	cir0cbc
Spurn Head	cq ≡	cqo	cq	cq
Catterick	ofcm0bc	bcqcqc	d0d0m0qc	d0d0m0qc
Tynemouth	pcffbc	bcc	cpc	c
St. Abbs Head	igc	c	ir0bc	beqc
Leuchars	cbcbbc	bcb		bcbbc
Renfrew (Abbots I.)	cm0d0d0id0	cpcccid0	cm0ir0c	cbcbbc
Eskdalemuir	od0pr0	bcc	oDrc	cbc
Point of Ayre	c	cr0b	c	cbc
Tiree	circ	odr0	dor Rc	cbcpr
Stornoway	crr	igc	cRR	cbcpr
Dalwhinnie	cir	c	*	ciR
Aberdeen	orrcbc	bccz0	crr0r0	cr0bcb
Wick	Rrir	c	cpr0c	cbcq
Lerwick	rrm0	crrpr	crrm0	crrphq
Blacksod Point	c	ircq	c	c
Malin Head	c	cpr0c	cpr0c	c
Aldergrove	c	cir0d0dm0	d0d0mid	cb
Birr Castle	*		c	coid
Valentia Obsy. †	cm0id0	id0d0rir	ird0d0cr0r0	cir0r0r0
Roches Point	cid0	dd	drddir	id dr

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).

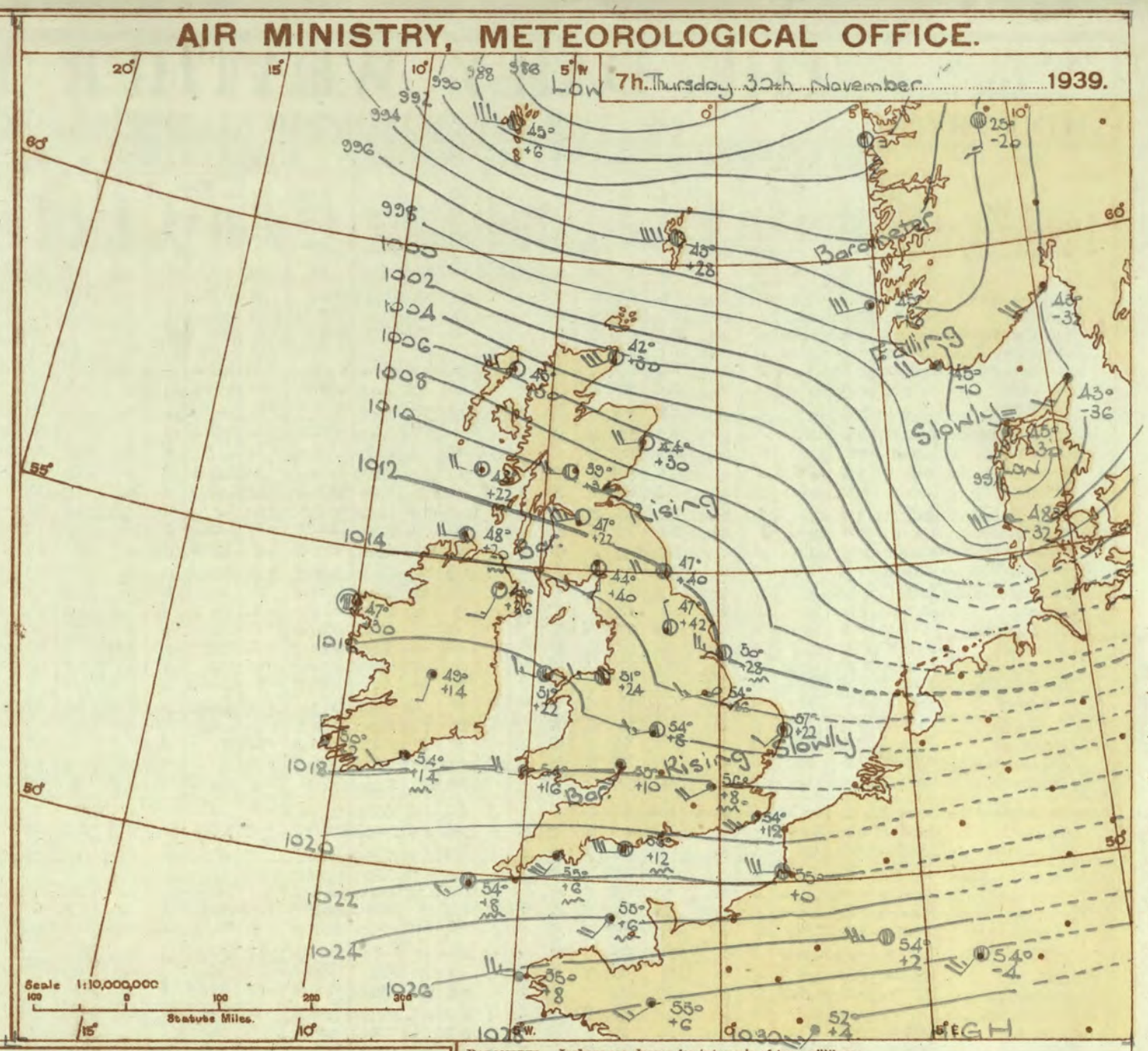
Cloud form abbreviations:—
Cirrus,–Ci: Cirrocumulus,–Cc: Cirrostratus,–Cs: Altocumulus,–Ac: Altostratus,–As: Stratocumulus,–Sc: Stratus,–St: Nimbostratus,–Ns: Cumulus,–Cu: Cumulonimbus,–Cb.

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.



Districts.	FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 30th November, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Wind southwest increasing strong to gale, especially on the coast, veering to-morrow; cloudy or dull; occasional drizzle or rain, but amounts mainly small in the Southeast; somewhat brighter and fairer to-morrow; very mild.
7 North Wales 8 N.W. England 9 N. Midlands 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Wind becoming variable, light to fresh, finally westerly strong to gale; fair periods at first, then dull, rainy; mainly fair to-morrow; very mild, then less mild.
13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkneys and Shetlands	Wind westerly, strong decreasing fresh to moderate; bright periods; showers; rather mild becoming colder.
17 N. W. Ireland 18 N. E. Ireland	Wind westerly or variable, light, becoming westerly fresh to strong on coast; cloudy or dull, occasional rain; fair periods to-morrow; rather mild.
~~19 S. E. Ireland~~ 20 S. W. Ireland	Wind southwest strong to gale, veering west; dull, rainy; fair periods to-morrow; mild.

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.

GENERAL INFERENCE.

A deepening depression over Denmark is moving away eastwards. A new depression from the Atlantic will cross the country moving rapidly eastnortheast causing an early renewal of stormy conditions with gales over the Southern half of the country. In the extreme north there will be showers and bright intervals.

FURTHER OUTLOOK.

Probably continuing stormy in the South; mainly mild generally.

South Cone hoisted in districts 6-13 and 19 1030h. 30/11/39
" " " Dogger Bank 1840h. 29/11/39

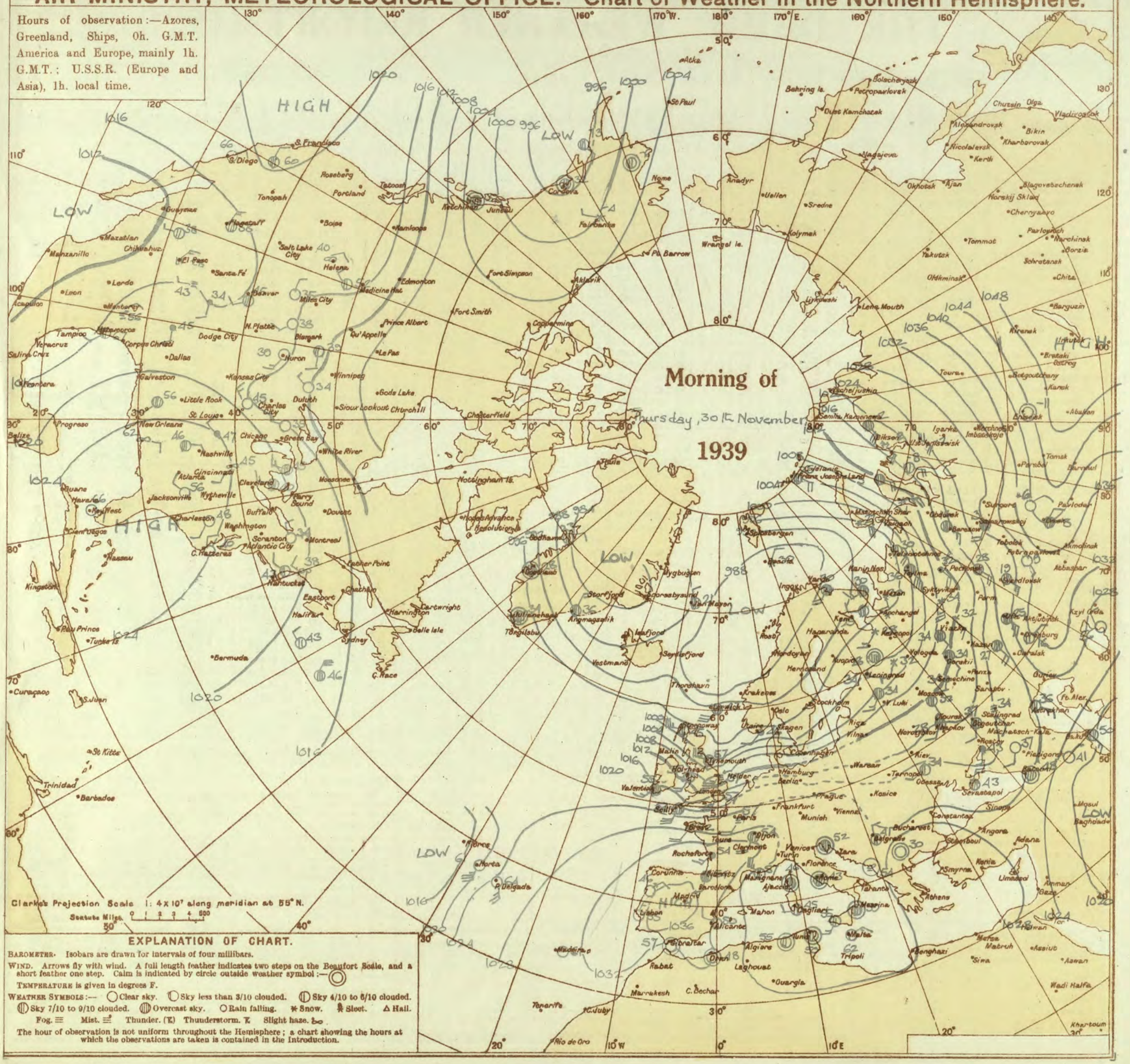
Forecasts issued at 1200 G.M.T.

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. (E) 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 30th November 1939.
No. 28497

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1017.6	-2	SW'W	5	c	57	92	6	5	–	–	10	10	1500
	S. Farnborough	226	1017.3	+6	SW'S	5	dd	55	97	5	5	1	–	9	10	800
	Boscombe Down	417	1017.9	+2	SW	3	z.	55	97	6	5	–	–	10	10	1500
	Calshot (Sthmtn.)	8	1019.2	0	WSW	5	id.	54	97	5	–	2	–	10	10	800
	Lympne	346	1018.2	-18	WSW	5	z.	53	97	6	5	–	–	10	10	450
	Manston	154	1016.6	-16	WSW	6	c/r	54	97	6	6	2	–	9	10	800
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	1014.0	-14	SW	5	z.	51	97	6	5	–	–	9+	10	1500
	Gorleston	5	1011.8	-20	SW'S	5	c	52	85	6	5	–	–	10	10	2500
	Mildenhall	19	1012.4	-14	SW'W	6	ir.	58	85	6	5	2	–	9	9	1500
	Cranwell	240	1010.0	-6	SW	5	c/r	56	92	6	5	–	–	10	10	1500
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	1015.4	0	SW'W	5	c/d	55	92	6	5	2	–	9	10	800
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1016.6	0	WSW	6	q	54	97	6	5	–	–	10	10	800
	Bristol	209	1017.2	-6	SSW	6	dr	56	92	6	6	–	–	10	10	800
	Portland Bill	32	1018.6	-6	WSW	6	ir	54	92	7	5	–	–	10	10	2500
	Plymouth	82	1020.3	0	SW	6	d.d.	55	97	6	6	–	–	10	10	800
	The Lizard	240	1021.9	0	WSW	6	m	54	97	4	5	–	–	10	10	800
	Scilly (St. Mary's)	163	1020.6	-6	SW'W	6	p/d	54	97	6	5	–	–	10	10	1500
	Guernsey	175	1023.1	+2	SW'W	5	c	55	97	6	8	1	–	9	10	1500
6	Pembroke	142	1015.8	+10	W	7	oq	55	97	6	5	–	–	10	10	800
7	Holyhead	26	1011.2	+24	SW'W	4	c	55	92	7	6	–	–	10	10	1500
	Chester (Sealand)	16	1010.0	+16	W'S	4	c/r	58	85	8	5	7	–	7-8	7-8	4000
8	Manchester	70	1010.4	+12	WSW	4	c/r	55	92	6	5	2	–	7-8	10	1500
10	Spurn Head	29	1006.3	-14	WSW	5	oq	55	85	7	5	–	–	10	10	2500
	Catterick	175	1003.8	+4	W'S	6	c/d	56	85	7	5	1	–	4-6	10	1500
	Tynemouth	108	1002.0	-14	W	5	c	57	75	7	8	–	–	9+	9+	1500
11	St. Abbs Head	280	999.0	0	W	7	bcq	55	85	8	8	6	–	2-3	4-6	2500
	Leuchars	36														
12	Renfrew (Abbots I.)	19	1004.5	+34	W	5	c/r	49	75	7	5	7	–	4-6	9	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1007.4	+32	W	5	c	55	92	8	8	1	–	7-8	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	998.1	+38	W	7	c	45	75	8	5	7	–	4-6	7-8	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	995.9	+8	WSW	4	c/pr	47	92	7	8	7	–	4-6	7-8	1500
16	Lerwick	156	991.5	-14	SW	6	rr	47	92	6	6	2	–	4-6	10	800
17	Blacksod Point	18	1012.2	+26	W	3	c	51	75	8	–	1	–	0	10	–
18	Malin Head	84	1008.0	+42	NW	5	c	49	75	8	2	8	–	2-3	7-8	5700
	Aldergrove	268	1009.0	+44	W'S	4	c	49	75	8	5	–	–	10	10	2500
19	Birr Castle	173	1013.0	+2	WSW	2	c	51	92	8	5	–	–	9	9	2500
20	Valentia Obsy.	30	1015.4	+10	WSW	3	ro.ro	55	97	6	6	2	–	7-8	10	450
	Roches Point	22	1015.2	+6	W	3	ir	55	97	8	6	2	–	4-6	9	1800

OBSERVATIONS at 7 hr. G.M.T. 30th November

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1017.9	+12	WSW	3	d.d.	55	92	6	5	2	–	7-8	10	1500	1	*
Croydon	1018.1	+8	WSW	4	id.	56	97	6	6	–	–	10	10	800	1	*
S. Farnborough	1018.1	+10	SW	4	id	56	92	5	5	–	–	10	10	1500	1	*
Boscombe Down	1018.3	+4	WSW	4	ro.ro	56	97	6	6	2	–	9	10	1500	1	*
Calshot (Sthmtn.)	1019.2	+2	WSW	5	c/r	55	97	5	6	2	–	9	10	800	1	4
Lympne	1019.2	+12	WSW	5	d.d.	54	97	5	5	–	–	10	10	220	1	4§
Manston	1018.3	+14	W	4	id.	55	97	5	6	2	–	7-8	10	800	1	*
Shoeburyness	1017.7	+18	WSW	2	ro.ro	55	97	4	5	–	–	10	10	1500	1	*
Felixstowe	1015.9	+22	WSW	3	iD	55	97	5	5	–	–	10	10	800	1	1
Gorleston	1014.3	+22	SW'W	2	c/d	57	85	6	8	2	–	7-8	10	2500	1	2
Mildenhall	1015.5	+22	WSW	4	ir.	56	92	7	9	2	–	7-8	9+	2500	1	*
Cranwell	1013.8	+26	W	3	z.	54	97	6	5	3	–	9	9+	1500	1	*
Birmingham	1016.0	+8	W	3	c	54	85	7	5	7	–	2-3	7-8	1500	1	*
Upper Heyford	1016.7	+10	W	1	c/d	54	92	8	5	7	–	7-8	10	800	1	*
Ross-on-Wye	1017.3	+10	SW	3	ir.	55	92	8	5	2	–	2-3	9+	1500	1	*
Hartland Point	1018.2	+14	W	7	df	54	97	3	–	–	–	10	10	<150	1	4
Bristol	1019.0	+12	WSW	6	rr	55	97	6	6	2	–	9	10	800	2	*
Portland Bill	1019.9	+12	W	6	o	55	92	7	5	–	–	10	10	2500	1	5
Plymouth	1021.2	+6	SW'W	6	dd	55	97	5	6	–	–	10	10	800	1	4
The Lizard	1022.7	+6	WSW	7	if	54	97	3	5	–	–	10	10	800	1	4
Scilly (St. Mary's)	1021.9	+8	SW'W	6	o	54	97	5	5	–	–	10	10	1500	1	4
Guernsey	1024.1	+6	SW'W	4	id.	55	97	6	5	–	–	10	10	1500	1	4
Pembroke	1018.0	+16	W'N	4	ro.ro	54	97	5	5	–	–	10	10	800	1	3
Holyhead	1016.2	+22	WNW	3	c	51	75	8	5	–	–	9	9	2500	1	2
Chester (Sealand)	1015.9	+24	W'N	3	c	51	75	8	5	3	–	2-3	7-8	4000	1	*
Manchester	1015.5	+38	W'S	3	bc	46	92	7	5	–	–	2-3	2-3	4000	2	*
Spurn Head	1012.4	+28	NW'W	5	cq	50	75	7	5	4	–	4-6	7-8	2500	1	4
Catterick	1013.1	+42	NNW	1	bc	47	75	8	5	7	5	Tr	4-6	2500	1	*
Tynemouth	1012.4	+40	W	4	c	47	75	7	5	2	–	4-6	7-8	2500	1	2
St. Abbs Head	1009.0	+40	WNW	5	c	47	75	8	5	1	1	4-6	7-8	1500	0	4
Leuchars	1009.5	+50	WSW	3	bc	44	75	8	5	7	–	1	2-3	4000	1	*
Renfrew (Abbots I.)	1011.7	+22	W'S	5	bc	47	73	8	5	3	–	4-6	4-6	2500	1	*
Eskdalemuir	1012.3	+40	S	2	c	44	65	8	5	–	6	2-3	7-8	1500	1	*
Point of Ayre	1014.7	+34	NW'W	3	bc	48	85	8	5	–	–	2-3	2-3	2500	1	3
Tiree	1010.9	+22	WNW	4	bc	48	85	8	8	–	–	4-6	4-6	2500	0	3
Stornoway	1005.3	+30	W	6	bc/pr	45	75	8	8	–	–	4-6	4-6	2500	1	3
Dalwhinnie	1005.0	+34	W	4	bc	39	75	8	8	6	–	4-6	4-6	4000	1	*
Aberdeen	1006.1	+30	W	4	b	44	65	7	5	3	–	Tr	Tr	4000	1	1
Wick	1002.4	+30	WSW	6	bcq	42	85	7	5	4	–	2-3	4-6	1500	1	2
Lerwick	994.2	+28	W	8	c/pr	43	85	7	8	7	–	4-6	7-8	800	1	*
Blacksod Point	1015.5	+10	–	0	c	47	85	8	5	–	–	10	10	1500	0	3
Malin Head	1013.1	+20	W	4	c	48	85	8	4	7	–	2-3	7-8	4000	1	4
Aldergrove	1014.9	+26	SW'S	3	b	48	85	7	5	–	–	1	1	4000	1	*
Birr Castle	1016.5	+14	SSW	1	id	49	92	7	5	–	–	10	10	2500	1	*
Valentia Obsy.	1017.2	+2	N'W	1	ro.ro	50	97	6	–	2	–	0	10	–	1	3
Roches Point	1017.7	+14	WSW	2	dr	54	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)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 28th Hrs. (36)
London (Kew)	58	54	54	Tr	1	0.3
Croydon	58	54	54	–	Tr	0.0
S. Farnborough	58	54	53	Tr	0.2	0.2
Boscombe Down	67	54	52	0.1	2	0.0
Calshot (Sthmtn.)	57	53	52	Tr	0.6	0.1
Lympne	54	53	52	0.1	0.1	0.0
Manston	50	54	51	0.1	0.2	1.3
Shoeburyness	57	54	50	Tr	0.6	1.0
Felixstowe	59	51	51	0.2	2	2.6
Gorleston	58	52	52	4	1	*
Mildenhall	59	54	51	0.2	0.3	2.3
Cranwell	50	62	50	0.3	4	2.7
Birmingham	59	53	50	0.1	2	2.0
Upper Heyford	56	53	49	Tr	0.5	*
Ross-on-Wye	60	54	53	0.1	0.2	1.6
Hartland Point	53	52	52	1	5	0.0
Bristol	56	54	53	2	6	0.0
Portland Bill	56	52	*	–	1	*
Plymouth	57	53	53	0.4	1	0.0
The Lizard	54	53	*	0.5	0.3	0.0
Scilly (St. Mary's)	54	53	*	0.2	Tr	0.0
Guernsey	56	54	53	0.2	1	0.0
Pembroke	55	53	*	0.4	7	0.0
Holyhead	56	51	49	4	2	0.9
Chester (Sealand)	62	51	46	0.2	1	2.3
Manchester	57	45	36	0.2	1	0.4
Spurn Head	55	50	*	1	0.4	2.1
Catterick	58	46	36	–	2	2.8
Tynemouth	56	47	40	–	0.6	*
St. Abbs Head	52	42	*	2	0.2	*
Leuchars	53	44	38	0.3	2	3.1
Renfrew (Abbots I.)	52	44	37	1	4	0.2
Eskdalemuir	51	42	*	1	7	*
Point of Ayre	55	48	*	0.4	2	2.0
Tiree	52	45	40	1	5	0.0
Stornoway	51	43	*	1	10	0.1
Dalwhinnie	48	38	33	0.5	5	1.0
Aberdeen	47	43	34	1	1	2.8
Wick	52	41	*	3	1	*
Lerwick	50	42	*	5	4	0.0
Blacksod Point	57	44	*	3	Tr	*
Malin Head	53	45	*	3	2	0.0
Aldergrove	53	41	31	1	1	1.4
Birr Castle	57	49	47	4	2	0.0
Valentia Obsy.	57	50	48	2	3	0.0
Roches Point	57	52	*	1	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.	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.	cm.	crdo	58	54	54	Tr	1	0.3	*	*	
Croydon	217	cm.	cm.	cidm.	58	54	54	–	Tr	0.0	*	*	
Greenwich (Royal Observatory)	149												
City (Bunhill Row)	—	*	*	*	*	*	*	*	*		*	*	*
Westminster (St. James' Park)	27	*	*	*									*
Regents Pk. (Botanic Gardens)‡	168	*	*	*									*
Camden Square	110			*						*	*		*
Kensington	80			*									*
Hampstead Observatory	450										*		*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 29th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 30th November Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	Past 24 Hours Max. Day °F.	Min. Night °F.	Rainfall Day mm.	Rainfall Night mm.
Paris														
Brussels														
Berlin														
Zürich														
Rome						1027.5	NNE	2	cf	45	*	*	*	*

‡ 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 Precipitous.
4 Rough.	9 Confused.

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