M.O. Form 2373

THE DAILY WEATHER REPORT

BRITISH SECTION

1st July to 30th September

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.

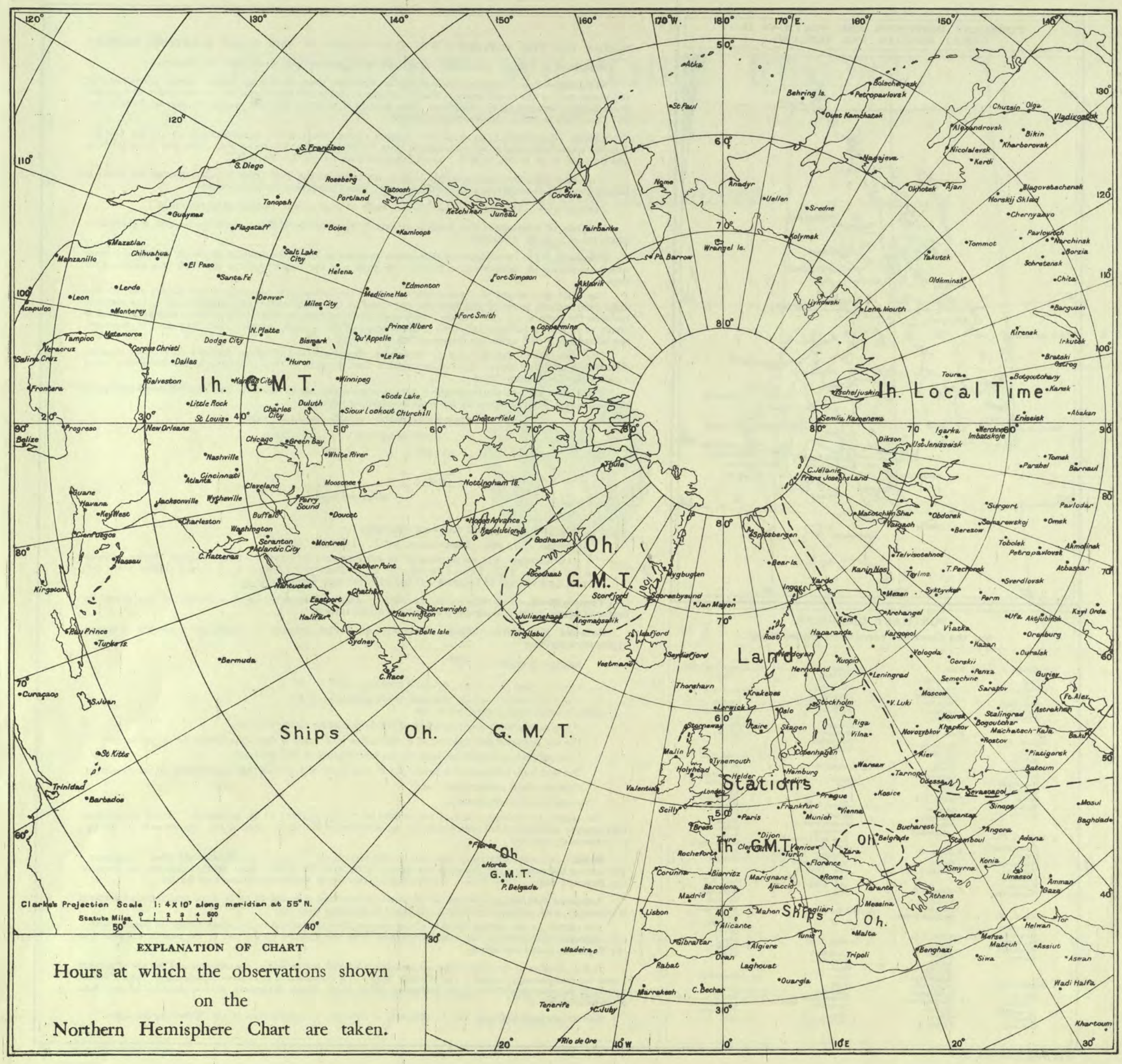
The *South Cone* (point downwards) is hoisted for gales commencing from a Southerly point. Such gales often veer, sometimes as far as Northwest.

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.

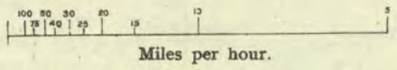
The scale below can be used to determine the theoretical wind as deduced from the pressure distribution on either chart. On the assumption that the path of the air is straight this theoretical wind is called the Geostrophic Wind.

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.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

MONTHLY SUPPLEMENT,

July. 1939. No. 271.

METEOROLOGICAL OFFICE LIBRARY

Mainly dull, rainy and cool, many thunderstorms.

A succession of low pressure systems, in the neighbourhood of the British Isles, resulted in cloudy, wet weather with average or rather low temperature over the country throughout the month. There was a fine interlude over the whole country on the 10th, and over most of England and Wales also on the 9th, 11th and 12th. Only on the 4th in East and Southeast England did temperature reach 80°F., rising to 83°F. at Camden Square (London), and 82°F. at Tunbridge Wells.

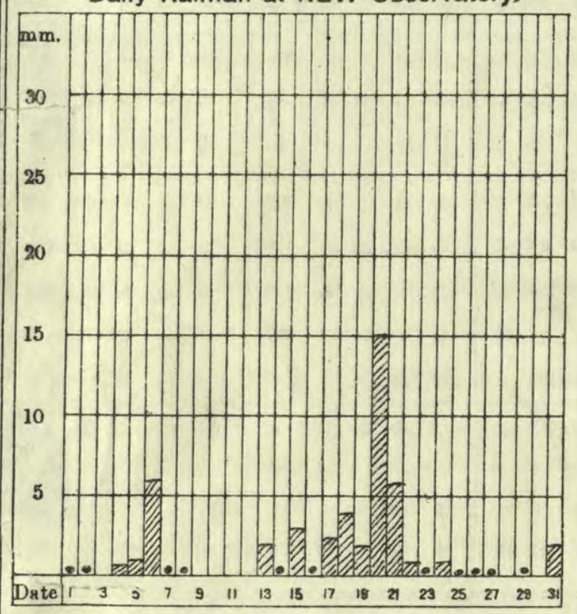
Except locally in Southeast England and East Anglia, especially in coastal areas, rainfall was above the average. At a number of places in Wales, North Ireland and Western England over twice the average amount of rain was measured. At Pembroke there were 8.01 inches, representing over 3 times the average and a record, (since 1877). At Sealand and Aldergrove it was also the wettest July on record. Except for the above mentioned fair interludes, the period 5th till the 24th was particularly wet, and thunderstorms were frequent and widespread, though not severe. Notable daily falls were 3.72 inches at Troon (Ayrshire) on the 15th, 2.83 inches at Teignmouth, and 2.32 inches at Shrewsbury on the 21st, 2.17 inches at Eskdalemuir on the 28th and 2.2 inches at Tintagel on the 5th. At Ross-on-Wye on the 21st rain fell for 6 minutes at the rate of over 3.8 inches an hour.

Everywhere sunshine records were below the average. Ross-on-Wye reports that only once during the last 25 years has such a dull July been experienced. Stornoway had 14 days without any bright sunshine, and this station, together with Aldergrove, had its dullest July on record. Even during the fine spell in England from the 10th to the 12th only moderate amounts of sunshine were registered, though 16 hours were enjoyed at Leuchars, and 15.6 hours at Dunbar and Renfrew on the 10th.

Gales were infrequent and not severe. They were experienced locally on the Western Seaboard of Scotland and Ireland on the 14th and 15th, and locally on the Welsh coast on the 28th. In gusts the wind reached 60 m.p.h. at Pembroke on the 6th.

There was local coast and sea fog in eastern districts on the 15th, 16th, 19th and 26th, and in Southwestern districts on the 27th to 29th. On a number of occasions after the 15th early morning mist or fog occurred locally inland.

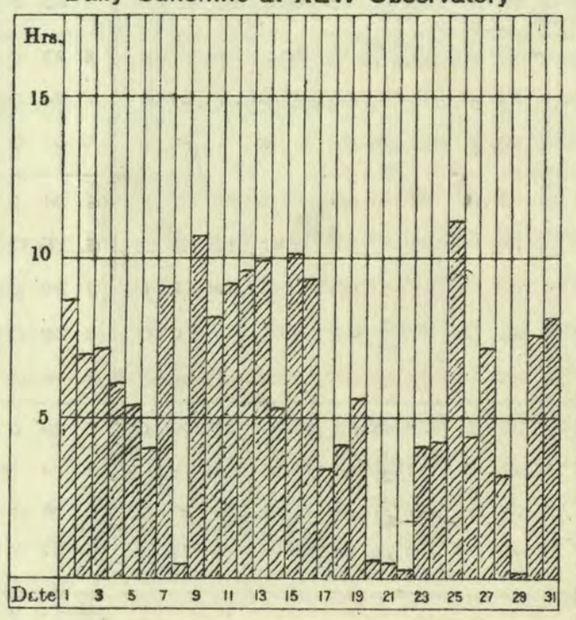
Daily Rainfall at KEW Observatory.



● = Less than 0·5 mm.

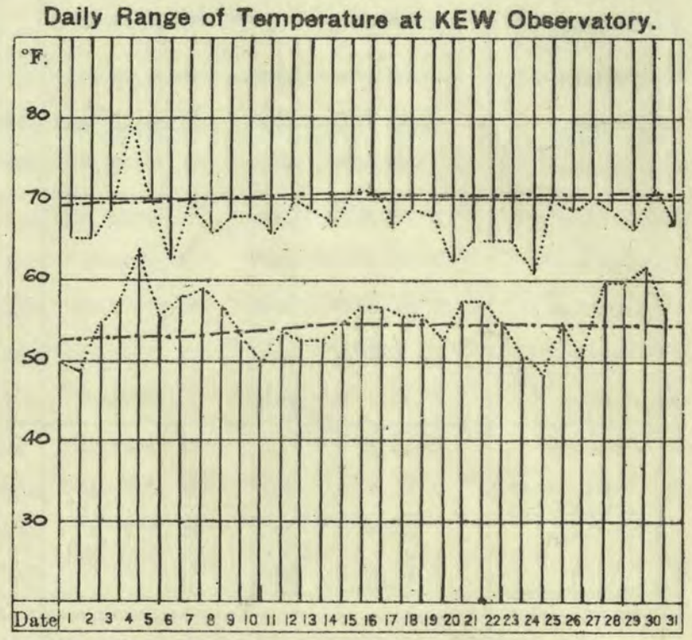
RAINFALL. Total for Month. 45 mm.

Daily Sunshine at KEW Observatory



SUNSHINE. Total for Month. 186 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.

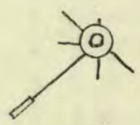
MEAN VALUES FOR THE MONTH.*

STATIONS.	PRESSURE Mean	PRESSURE Difference from average	TEMPERATURE Mean	TEMPERATURE Difference from average
	mb.	mb.	°F.	°F.
Kew	1011.9	-3.9	61.7	-2·8
Aberdeen	1006.9	-6.1	56.7	-1·2
Valentia	1010.9	-5·2	57.7	-1.5

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

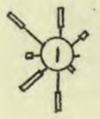
WIND FREQUENCIES AT 7 hr.

Kew



Aberdeen

Valentia



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 ...	7,012
Aberdeen ...	4,230
Lerwick ...	10,703
Valentia ...	8,958

SUMMARY OF RECORDS OF TEMPERATURE, LOW CLOUD, VISIBILITY,

† TEMPERATURE.

District.	Stations.	Number of daily readings within fixed limits. Maximum. 51°-59°	60°-68°	69°-77°	78°-86°	Average Maximum.	Minimum. 33°-41°	42°-50°	51°-59°	60°-68°	Average Minimum.	Extremes—Warmest and Coldest. Days. Highest Max.	Date.	Lowest Max.	Date.	Nights. Highest Min.	Date.	Lowest Min.	Date.	Number of Ground Frosts.
						°F.					°F.	°F.		°F.		°F.		°F.		
1	London ... (Kew Obsy).	0	17	13	1	72.8	0	4	23	4	56.2	80	4	61	24	64	5	49	2. 25.	0
	Croydon ...	0	17	13	1	71.9	0	7	21	3	54.6	79	4	60	15	64	5	45	2	0
	Calshot** ... (Southampton)	0	28	3	0	69.8	0	7	20	4	56.0	70	13	61	24	61	5. 30.	45	2	0
	Lympne ...	0	24	7	0	68.8	0	9	20	2	53.8	75	4	60	7. 24.	62	5	44	2	0
2	Shoeburyness ...	0	8	23	0	71.8	0	5	21	5	54.4	76	29	65	24	62	5. 28. 30.	45	2	0
	Gorleston ...	0	22	9	0	67.9	0	4	21	6	55.4	77	30	61	10. 11. 24.	62	28. 29. 30.	46	11	0
	Cranwell ...	0	18	13	0	71.0	0	12	16	3	52.6	76	4	62	24	63	30.	43	2	0
3	Birmingham ... (Edgbaston)	0	26	5	0	69.3	0	9	21	1	54.1	74	4	60	2. 11. 24.	62	30	47	1. 2. 24. 26.	0
4	Ross-on-Wye ...	0	28	3	0	70.6	1	8	19	3	53.7	71	4	60	24	62	30	41	25	0
5	The Lizard ...	2	29	0	0	*	0	3	28	0	*	65	10. 11. 19.	58	6	58	28. 29.	49	12.	*
7	Holyhead ...	5	25	1	0	62.9	0	5	26	0	55.1	69	4	57	2	57	16. 20. 25. 29.	48	26	0
8	Chester ... (Sealand)	3	21	7	0	68.8	0	10	19	2	53.2	74	1	58	1	61	29	44	25	0
10	Tynemouth ...	7	18	6	0	64.7	0	5	25	1	53.9	70	18	55	1	62	29	46	2	0
11	Leuchars ...	5	25	1	0	65.8	1	12	18	0	50.9	69	25	58	1. 12. 14.	57	13	40	24	0
12	Renfrew ...	2	27	2	0	66.0	2	9	20	0	51.5	72	20. 21.	58	12	59	5	36	24	0
	Eskdalemuir ...	7	21	3	0	64.0	4	11	16	0	48.8	70	4	55	12	57	5	35	21	2
13B	Stornoway	20	11	0	0	60.9	0	11	20	0	50.5	63	5. 21.	52	14	56	5. 28.	43	3	*
15	Aberdeen ..	8	22	1	0	64.1	1	10	20	0	51.7	71	29	55	12	57	29	41	24	0
18	Aldergrove ...	4	26	1	0	*	0	9	22	0	*	70	27	58	9	59	28	43	25	0
19	Dublin ... (Phœnix Park)	0	27	4	0	67.1	0	8	23	0	50.6	76	28	60	2	59	13 28	42	1	0
	Birr Castle ...	1	26	4	0	67.0	0	8	21	2	52.5	71	13	59	2	60	13. 28.	42	1	0
20	Valentia ... (Cahirciveen)	5	26	0	0	63.7	0	2	28	1	54.7	67	4	57	16	60	28	48	11	0

LOW CLOUD.

Number of observations within fixed limits.

Stations.	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.
London ... (Kew Obsy).	2	26	0	0	30	1	1	28	1
Croydon ...	5	19	4	0	29	1	1	23	7
Calshot** ... (Southampton)	11	14	3	6	24	1	7	21	3
Lympne ...	13	9	0	4	25	1	2	22	3
Shoeburyness ...	3	16	4	1	29	0	0	27	2
Gorleston ...	0	24	0	1	30	0	0	27	0
Cranwell ...	6	14	0	3	27	0	0	30	0
Birmingham ... (Edgbaston)	9	19	0	1	30	0	5	26	0
Ross-on-Wye ...	3	26	0	1	30	0	0	31	0
The Lizard ...	4	27	0	2	29	0	2	29	0
Holyhead ...	8	21	0	8	23	0	6	25	0
Chester ... (Sealand)	1	27	0	1	30	0	1	30	0
Tynemouth ...	1	30	0	0	31	0	1	30	0
Leuchars ...	10	17	1	6	24	1	6	24	0
Renfrew ...	10	19	1	6	25	0	4	27	0
Eskdalemuir ...	18	12	1	7	24	0	7	24	0
Stornoway	1	30	0	2	29	0	2	29	0
Aberdeen ..	12	16	0	13	17	0	6	24	1
Aldergrove ...	11	20	0	3	28	0	2	29	0
Dublin ... (Phœnix Park)	*	*	*	*	*	*	*	*	*
Birr Castle ...	3	27	0	3	28	0	6	25	0
Valentia ... (Cahirciveen)	6	25	0	9	22	0	9	22	0

FOG, MIST and GOOD VISIBILITY.

Number of observations within fixed limits.

Stations.	7 h. Dense fog.	Thick fog.	Fog.	Mist.	Good Visibility.	13 h. Dense fog.	Thick fog.	Fog.	Mist.	Good Visibility.
London ... (Kew Obsy).	0	0	0	0	17	0	0	0	0	30
Croydon ...	0	0	0	0	23	0	0	0	0	30
Calshot** ... (Southampton)	0	0	0	0	20	0	0	0	0	29
Lympne ...	0	1	0	0	18	0	0	0	1	28
Shoeburyness ...	0	0	0	1	26	0	0	0	0	28
Gorleston ...	0	0	0	0	20	0	0	0	0	20
Cranwell ...	0	1	1	2	11	0	0	0	0	22
Birmingham ... (Edgbaston)	0	1	1	2	13	0	0	0	0	26
Ross-on-Wye ...	0	0	0	0	24	0	0	0	0	28
The Lizard ...	0	0	4	0	26	0	0	1	0	25
Holyhead ...	0	0	1	0	24	0	0	0	0	28
Chester ... (Sealand)	0	0	0	2	16	0	0	0	1	20
Tynemouth ...	0	0	1	1	6	0	0	1	0	8
Leuchars ...	0	0	1	1	20	0	0	1	0	26
Renfrew ...	0	0	0	1	12	0	0	0	0	20
Eskdalemuir ...	0	1	0	2	19	0	0	0	0	26
Stornoway	0	0	0	0	26	0	0	0	0	25
Aberdeen ..	0	0	2	3	10	0	0	2	0	13
Aldergrove ...	0	0	0	1	18	0	0	0	0	28
Dublin ... (Phœnix Park)	*	*	*	*	*	*	*	*	*	*
Birr Castle ...	0	0	0	0	31	0	0	0	0	31
Valentia ... (Cahirciveen)	0	0	0	0	28	0	0	0	0	28

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	1,830	57.5	55.0	47	52.5	50		
850	4,840	47.3	44.2	47	43.3	50		
750	8,180	38.5	34.4	47	34.7	50		
650	11,920	27.5	24.3	47	23.6	50		
550	16,170	13.1	9.6	47	9.4	50		

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.	128	31	76	18	2	0	68	23	40	3	0	0	57	26	25	6	0	0	80	33	41	5	0	0	500 above ground.
1000 above M.S.L.	106	25	55	24	2	0	46	19	22	4	1	0	47	18	24	5	0	0	61	27	27	7	0	0	1000 above M.S.L.
2000 " "	54	14	24	15	0	0	17	6	7	4	0	0	13	7	3	3	0	0	19	9	9	1	0	0	2000 " "
3000 " "	27	4	17	5	1	0	11	4	5	1	0	0	4	2	2	0	0	0	10	3	6	1	0	0	3000 " "
4000 " "	9	2	5	2	0	0	4	2	2	0	0	0	3	3	0	0	0	0	8	1	6	1	0	0	4000 " "

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

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

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

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

SUNSHINE, RAINFALL, AND HUMIDITY ..... JULY, ... 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.	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).	0	5	10	8	8	11.1	25	1523	+54	186	-8	1880	334	1911	104	1888	12	9	7	3	0	0	14	20	640	+34	45	-10	1856	124	1880	4	1921	4	0
	Croydon ...	0	8	7	11	5	11.6	25	1500	-25	181	-39	1922	297	1928	132	1927	13	5	9	4	0	0	13	20	801	+122	58	-2	1921	105	1936	3	1921	5	0
	Calshot** ... (Southampton)	2	9	6	7	7	10.7	31	1661	-85	161	-70	1881	350	1911	116	1888	10	8	8	4	1	0	20	18	687	+41	83	+42	1871	157	1888	3	1911	2	0
	Lympne ...	1	3	8	11	8	12.8	29	1774	+9	212	-28	1921	307	1935	153	1927, 1937	13	7	10	1	0	0	9	25	742	+18	44	-10	1920	126	1927	6	1935	5	0
2	Shoeburyness ...	0	6	8	9	8	12.2	9	1692	-24	198	-29	1919	311	1928, 1935	128	1919	15	11	3	2	0	0	7	21	546	+43	26	-21	1920	81	1920	7	1921	2	0
	Gorleston ...	0	5	10	7	9	13.7	16	1636	-7	204	-7	1908	309	1935	103	1910	21	5	4	0	1	0	16	20	583	-39	31	-28	1871	150	1875	7	1897	4	0
	Cranwell ...	0	9	9	9	4	11.1	25	1450	-88	159	-47	1921	266	1935	113	1937	15	7	4	5	0	0	15	15	659	+69	62	+3	1917	251	1932	10	1921	7	0
3	Birmingham ... (Edgbaston)	2	10	10	6	3	12.6	1	1265	-39	131	-40	1887	271	1911	67	1887	7	4	15	5	0	0	13	8	844	+170	98	+39	1893	167	1936	7	1911	8	0
4	Ross-on-Wye ...	0	14	7	8	2	9.7	1	1392	-93	124	-68	1915	271	1934	122	1927	11	4	11	4	1	0	21	21	782	+65	100	+42	1859	197	1872	6	1911, 1935	6	0
5	Falmouth ... (Observatory)	5	6	10	4	6	14.6	10	1655	-55	152	-65	1881	346	1911	135	1890	8	7	10	2	4	0	24	15	1202	+95	139	+67	1871	178	1924	8	1913	2	0
7	Holyhead ...	3	6	12	5	5	13.5	26	1610	+60	158	-33	1914	255	1934	123	1920	8	4	11	5	2	1	26	18	1052	+165	119	+53	1871	197	1920	8	1935	3	0
8	Chester ... (Sealand)	1	10	12	5	3	14.6	1	1421	+45	142	-31	1923	244	1934	112	1931	8	3	12	6	1	1	31	29	868	+207	132	+72	1922	126	1924	18	1934	7	0
10	Tynemouth ...	3	9	8	4	7	13.9	24	1413	*	162	*	1935	*	*	*	*	11	7	10	3	0	0	13	9	664	+43	71	+10	1915	140	1926	13	1935	3	0
11	Leuchars ...	5	8	10	3	5	16.0	10	1442	-28	139	-33	1922	244	1935	91	1931	13	5	7	4	2	0	17	5	753	+100	80	+14	1922	135	1936	17	1928	2	0
12	Renfrew ...	6	12	8	2	3	15.6	10	1258	+65	102	-47	1921	231	1934	86	1931	11	4	7	7	2	0	19	13	1203	+264	114	+43	1921	136	1936	35	1935	2	0
	Eskdalemuir ...	3	16	3	6	3	11.9	10	1175	-26	119	-28	1910	217	1935	75	1931	10	3	7	7	3	1	55	28	1829	+400	183	+79	1910	225	1938	25	1913	7	0
13B	Stornoway .	14	10	5	1	1	10.7	19	1238	+23	57	-88	1881	227	1917	79	1916	6	7	9	8	0	1	40	12	1337	+71	144	+67	1870	175	1871	22	1913	0	0
15	Aberdeen ...	5	10	8	4	4	13.4	10	1373	+44	118	-34	1881	239	1911	83	1931	10	7	7	4	2	1	27	13	780	+32	124	+53	1871	150	1918	14	1878	2	0
18	Aldergrove ...	3	15	9	3	1	14.0	24	1335	*	87	*	1927	217	1934	97	1931	9	7	4	9	2	0	22	13	994	+156	154	+83	1926	148	1936	27	1935	2	0
19	Dublin ... (Phœnix Park)	2	17	4	6	2	10.4	24	1335	-102	105	-65	1881	235	1898	88	1938	7	9	11	4	0	0	12	18	765	+63	65	-3	1865	165	1936	16	1868, 1935	2	0
	Birr Castle ...	1	15	9	4	2	10.7	24	1245	-61	103	-46	1881	224	1911	93	1936	8	6	13	3	1	0	24	13	1021	+194	91	+16	1862	186	1880	8	1863	3	0
20	Valentia ... (Cahirciveen)	3	14	5	8	1	13.9	9	1372	+4	101	-56	1880	235	1918	71	1932	5	8	9	5	3	1	27	27	1566	+152	156	+60	1866	223	1937	22	1898	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)	0	0	1	5	3	9	12	1	0	0
Ross-on-Wye ...	0	0	6	3	7	12	3	0	0	0
Falmouth (Obsy.)	3	3	7	13	5	0	0	0	0	0
Renfrew ...	0	0	6	12	9	2	2	0	0	0
Eskdalemuir ...	0	2	0	2	12	12	2	1	0	0
Aberdeen ...	1	1	6	8	4	7	4	0	0	0
Valentia ...	0	3	7	15	5	1	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)	19	12	0	0	0	0	0	0	0	0
Ross-on-Wye	8	23	0	0	0	0	0	0	0	0
Renfrew ...	15	16	0	0	0	0	0	0	0	0
Eskdalemuir	5	26	0	0	0	0	0	0	0	0
Aberdeen ...	9	22	0	0	0	0	0	0	0	0
Valentia ...	29	2	0	0	0	0	0	0	0	0

CODE for State of Ground.

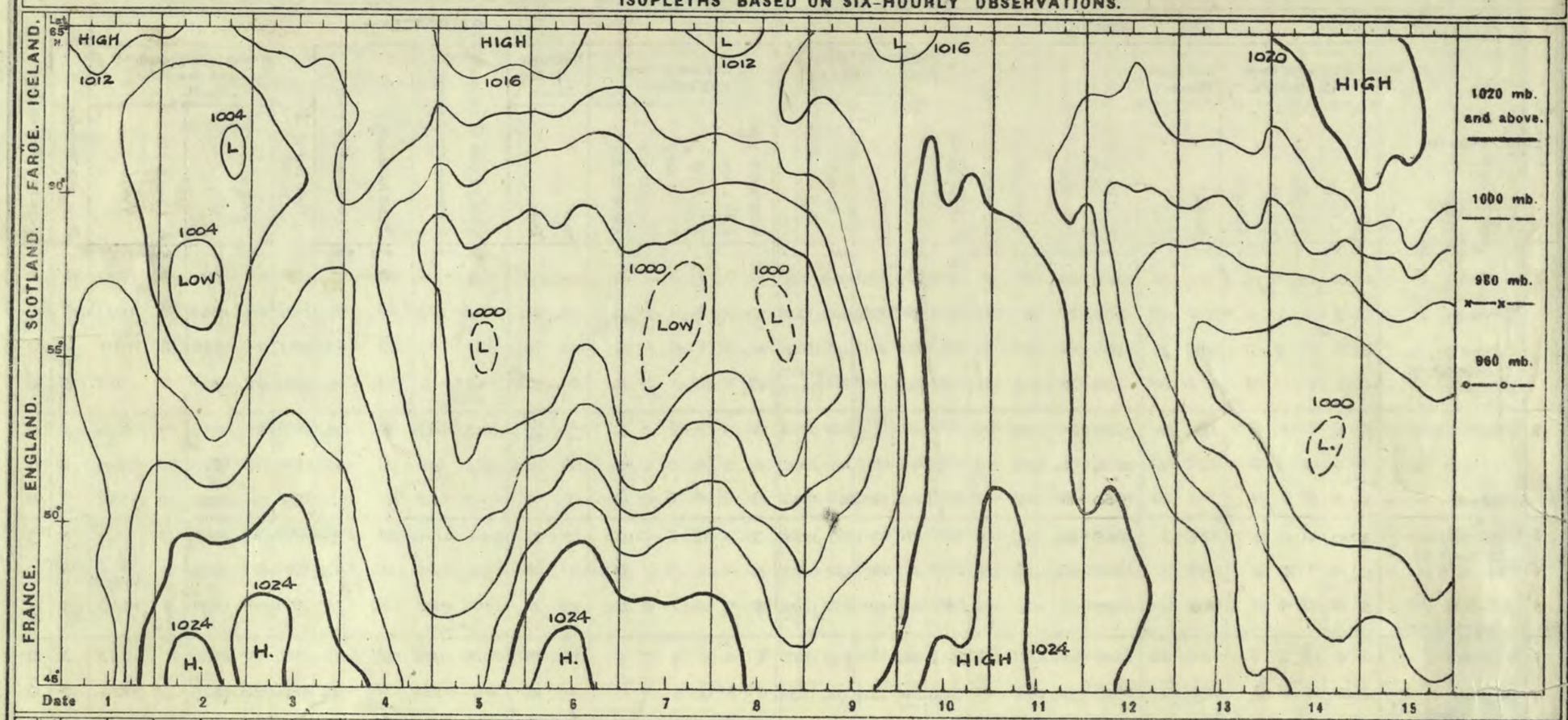
0 Dry.
1 Wet.
2 Flooded.
3 Frozen hard and dry.
4 Partly covered with snow or hail.
5 Covered with ice or glazed frost.
6 Covered with thawing snow.
7 Covered with snow, less than 6 ins., but ground not frozen.
8 Covered with snow, less than 6 ins., and ground frozen.
9 Covered with snow, greater than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

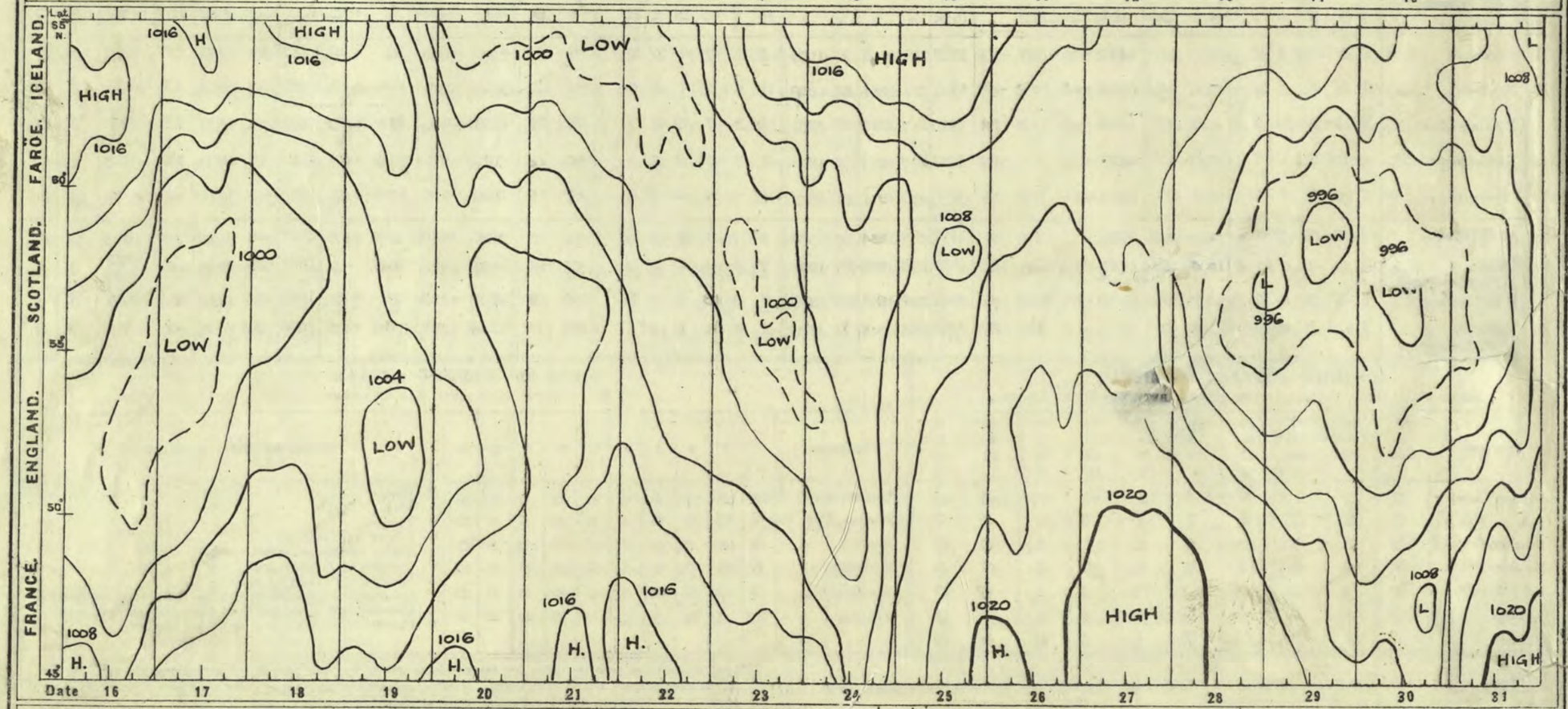
**The extremes of rainfall and sunshine from Calshot are supplemented by those from Southampton.

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

PRESSURE: ICELAND TO GULF OF LIONS ..... JULY, ... 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.

G.630/3737. Wt. 8083. D.4605. Gp. 948. 1040. 8/39.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday, 1st July, 1939.

No. 28345.

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

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)...	1011.1	-14	SW'W	3	c/p	63	65	8	9	9	3	4-6	7-8	2500
	Croydon	1011.9	-16	S'W	3	c/pr	61	75	8	9	4	-	7-8	9+	4000
	S. Farnborough	1011.2	-10	SW'S	4	c/pr	60	65	8	8	3	-	4-6	9	4000
	Boscombe Down	1010.7	-10	SW	3	c	63	55	9	2	6	-	7-8	7-8	4000
	Calshot (Soton.)	1012.2	-6	S'W	5	bc	65	65	8	8	0	-	4-6	4-6	2500
	Lympne ...	1013.8	-4	SW'W	3	pr	59	75	8	5	7	-	4-6	9+	1500
	Manston ...	1012.4	-6	SSW	4	c	62	65	8	8	7	-	7-8	9+	2500
2	Shoeburyness ...	1012.3	-6	SSW	4	c	63	65	8	7	6	3	4-6	7-8	1500
	Felixstowe ...	1012.1	-8	S	5	c	65	65	8	8	3	1	7-8	7-8	2500
	Gorleston ...	1010.6	-12	SSE	5	c/pr	62	75	7	8	-	-	9	9	2500
	Mildenhall ...	1009.7	-16	S'W	4	c	66	65	7	8	3	-	7-8	9+	2500
	Cranwell ...	1009.5	-6	WSW	4	c/p	62	75	8	8	6	-	4-6	7-8	2500
3	Birmingham ...	1010.3	-14	WSW	3	tlr	61	85	8	9	-	-	9+	9+	1500
	Upper Heyford	1010.4	-12	SW	3	c	62	65	9	8	6	-	7-8	9	2500
4	Ross-on-Wye ...	1009.6	-12	SW'W	3	pr	62	65	8	8	-	-	4-6	4-6	2500
5	Hartland Point	1011.0	0	W	4	bc	59	75	9	8	-	-	4-6	4-6	1500
	Bristol	1010.9	-6	WSW	3	c/pr	61	65	9	9	7	1	4-6	7-8	1500
	Portland Bill ...	1012.0	-12	SW	3	bc	59	85	8	5	-	-	4-6	4-6	4000
	Plymouth ...	1011.6	-6	SW	3	c	62	75	8	2	4	3	2-3	7-8	4000
	The Lizard ...	1012.4	0	W'S	3	bc	64	75	8	8	6	-	2-3	4-6	2500
	Scilly (St. Mary's)	1012.3	0	W'N	3	bc	64	85	8	8	6	3	2-3	4-6	2500
	Guernsey ...	1013.0	-8	SW'W	3	c	60	92	8	2	3	-	4-6	7-8	1500
6	Pembroke ...	1010.6	0	W'N	3	bc	58	85	8	2	6	-	2-3	4-6	2500
7	Holyhead ...	1008.9	+4	W	3	bc	57	75	9	2	-	-	4-6	4-6	1500
	Chester (Sealand)	1008.6	-2	WNW	3	c/pr	61	65	9	8	7	-	4-6	7-8	2500
8	Manchester ...	1009.1	-2	SSE	1	c/pr	57	85	6	9	-	-	9	9	1500
10	Spurn Head ...	1009.2	-6	WSW	4	pr	63	65	7	6	-	-	9+	9+	1500
	Catterick ...	1008.2	+6	SW'W	3	pr	55	85	8	8	-	-	10	10	1500
	Tynemouth ...	1007.6	0	W	2	c/pr	55	92	6	8	-	-	9	9	1500
11	St. Abbs Head...	1006.6	+4	NW	2	c	55	85	9	8	6	-	4-6	9	2500
	Leuchars ...	1006.6	+2	SSW	2	c/tlr₀	56	85	7	8	7	-	9	10	800
12	Renfrew (Abbotsl.)	1006.7	-2	W'S	3	bc	64	45	9	9	4	3	4-6	4-6	2500
	Eskdalemuir ...	1006.8	+2	SE	1	c	56	65	8	8	7	3	4-6	7-8	1500
	Point of Ayre ...	1008.3	+2	NW'W	3	bc	64	55	8	2	4	-	2-3	2-3	4000
13A	Tiree	1008.0	+8	NNW	3	bc	57	75	8	8	3	-	4-6	4-6	2500
13B	Stornoway ...	1007.6	+4	NW	5	c	55	65	8	5	4	-	4-6	7-8	4000
15	Dalwhinnie ...	1008.6	0	W	5	c	56	65	8	4	7	1	7-8	9+	4000
	Aberdeen ...	1006.7	+14	E'N	1	tlr	55	85	7	9	7	-	7-8	9	800
	Wick	1006.3	+6	SSE	2	r₀r₀	51	97	6	6	2	-	7-8	10	1500
16	Lerwick... ...	1004.7	+6	SW'S	6	c	53	75	8	5	7	-	4-6	7-8	1500
17	Blacksod Point...	1011.0	+16	NNW	4	c	51	85	8	3	-	-	7-8	7-8	1500
18	Malin Head ...	1008.9	+10	N	3	bc	65	75	8	2	-	2	2-3	4-6	5700
	Aldergrove ...	1008.0	+4	WNW	4	bc/pr	58	65	8	3	-	-	4-6	4-6	2500
19	Birr Castle ...	1008.2	-4	W	4	c/pr	58	85	8	9	2	-	7-8	10	800
20	Valentia Obsy.†	1013.0	+8	NW'N	5	c	58	65	8	8	-	6	4-6	7-8	2600
	Roches Point ...	1010.6	0	WNW	4	c/pr	61	85	9	3	-	3	4-6	7-8	2500

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

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)	1009.7	-2	WSW	3	c/pr	58	75	8	9	7	-	4-6	9	4000	0	*
Croydon	1010.8	-2	WSW	2	c/pr	57	85	7	9	6	3	4-6	9	4000	1	*
S. Farnborough	1010.0	-2	SW'S	3	c/pr	55	85	8	3	3	3	7-8	9	2500	1	*
Boscombe Down	1010.2	-2	SW	2	c/tlr₀	55	92	8	8	4	-	4-6	7-8	2500	1	*
Calshot (Soton.)	1010.7	-8	NW	3	tlr	59	75	6	9	8	-	4-6	7-8	1500	1	2
Lympne	1011.5	-12	SSW	3	c	57	85	8	8	6	-	4-6	7-8	4000	1	§2
Manston	1010.4	-18	S'W	3	c/pr	57	85	8	8	7	-	4-6	9	4000	1	*
Shoeburyness	1009.8	-14	SSW	3	bc	62	75	8	2	9	-	2-3	4-6	4000	0	*
Felixstowe	1009.6	-16	S'W	5	c	60	75	8	8	7	-	9	9+	2500	0	3
Gorleston	1009.4	-6	S'W	3	c	62	75	6	8	2	-	4-6	10	2500	0	2
Mildenhall	1008.8	-6	NNE	1	tlr	56	92	7	9	2	-	7-8	9	1500	1	*
Cranwell	1008.4	-6	WNW	3	c	62	55	8	2	6	2	2-3	7-8	4000	1	*
Birmingham	1008.7	-8	WSW	3	pr	61	65	8	3	6	-	4-6	7-8	2500	1	*
Upper Heyford	1009.6	-6	N	1	pr	59	75	9	8	-	3	9	9+	1500	0	*
Ross-on-Wye	1009.6	0	W'S	2	pr	58	75	8	8	6	3	7-8	9	2500	1	*
Hartland Point	1010.7	0	WNW	3	bc	57	75	9	2	5	3	2-3	4-6	2500	0	3
Bristol	1010.2	-2	W'N	5	bc	60	65	8	3	6	3	2-3	4-6	2500	0	*
Portland Bill	1010.3	-10	SW	4	c	57	92	8	5	4	-	4-6	7-8	4000	1	4
Plymouth	1011.2	0	WNW	4	bc	61	65	8	7	-	1	4-6	4-6	4000	1	2
The Lizard	1012.1	0	W'N	3	c/pr	58	75	8	8	6	-	4-6	7-8	1500	1	2
Scilly (St. Mary's)	1012.6	+2	NW'N	4	c	60	85	8	8	6	1	2-3	7-8	1500	0	2
Guernsey	1011.9	-8	W'S	3	bc	59	85	8	1	3	-	2-3	4-6	1500	0	2
Pembroke	1010.1	0	W	4	bc	57	85	9	5	7	-	1	4-6	2500	1	2
Holyhead	1008.9	0	SW'W	3	c	57	75	9	9	3	3	4-6	7-8	2500	1	1
Chester (Sealand)	1008.7	0	NW'N	3	bc	60	65	9	8	-	-	4-6	4-6	2500	0	*
Manchester	1008.5	+2	W'N	3	bc	60	65	8	2	3	-	4-6	4-6	4000	1	*
Spurn Head	1008.3	-4	NE	2	c	60	75	7	5	6	1	4-6	7-8	2500	0	1
Catterick	1007.5	+2	W'N	2	c	59	65	8	8	-	-	9	9	2500	1	*
Tynemouth	1007.2	-4	SE	3	c	54	85	6	8	-	-	7-8	7-8	1500	1	1
St. Abbs Head	1006.9	+6	-	0	pr	50	92	9	8	2	-	7-8	9+	1500	1	1
Leuchars	1006.0	0	W	2	c	60	65	8	8	7	9	7-8	9+	2500	0	*
Renfrew (Abbotsl.)	1007.3	+6	NW	4	bc	59	65	9	8	7	-	4-6	4-6	2500	0	*
Eskdalemuir	1006.9	0	SSW	2	c	55	75	9	8	-	6	4-6	7-8	1500	1	*
Point of Ayre	1008.9	+6	NW'W	4	c	59	65	8	5	6	-	4-6	7-8	2500	0	2
Tiree	1010.2	+12	NNW	5	bc	53	75	8	2	6	-	2-3	4-6	2500	0	4
Stornoway	1009.7	+12	NW	5	c	51	65	8	5	4	4	4-6	7-8	4000	1	2
Dalwhinnie	1009.1	+18	N	2	ir	47	85	7	8	1	-	4-6	10	2500	1	*
Aberdeen	1006.7	+2	NNW	2	c	55	85	7	9	8	3	4-6	9	1500	1	1
Wick	1006.9	+2	NW	3	c/r	53	85	8	6	7	-	4-6	9	1500	1	1
Lerwick	1005.1	-2	SW	5	c	51	75	8	5	7	-	4-6	7-8	1500	0	*
Blacksod Point	1013.1	+12	N	4	c	55	65	9	3	-	-	9+	9+	2500	0	4
Malin Head	1011.1	+14	N	4	c/pr	54	65	8	7	6	-	4-6	7-8	5700	0	3
Aldergrove	1009.5	+10	NNW	3	c	56	65	8	8	4	-	7-8	9	1500	1	*
Birr Castle	1009.9	+14	WNW	1	pr	53	92	8	8	7	-	4-6	9	1500	1	*
Valentia Obsy.†	1014.5	+6	NW'N	5	c	56	65	8	3	3	3	2-3	9	2600	1	2
Roches Point	1011.3	+6	NW	5	c	58	85	9	2	-	5	2-3	7-8	2500	0	2

PAST 24 HOURS. WEATHER.

Stations	7h.–13h. 30th (37)	13h.–18h. 30th (38)	18h. 30th to 1h. 1st. (39)	1h.–7h. 1st. (40)
London (Kew)	ccpRqc	cpr₀kqc	cpr₀bcw	bcwbc
Croydon	bccpr₀	cpr₀PR	cbcw	bcwcm₀
S. Farnborough	pr₀bccpR	bccpRpr₀	cbm₀w	bm₀wc
Boscombe Down	cprc	cprtlr₀c	cbcb	bcwbcm
Calshot (Soton.)	cpr₀c	bcc	tlrcbcw	bcwcm₀
Lympne	cpr₀	cpr₀c	cbcm₀w	bcfgwbm₀
Manston	bcir₀c	cpr	cbcm₀w	bcwbm₀
Shoeburyness	c	cp₀bc	cpbc	bcm₀
Felixstowe	bm₀c	cpr₀c	cpr₀b	bbcm₀
Gorleston	bccypr₀q	cpr₀	cpr₀c	c
Mildenhall	b,c	cprctlr	tlrcbcm₀	cbcm₀
Cranwell	bccpr₀qbc	bccpr₀bc	bcybc	bfgbcm₀
Birmingham	orrc	tlrcbc	pr₀bc	bc
Upper Heyford	ccpr₀	cpr₀ct	cTLRc	cbccm₀
Ross-on-Wye	bcRpbc	cbcc	pbcb	bwbc
Hartland Point	bc	bc	bcc	cir₀
Bristol	bccp₀P	bcy	bcb	bbcfgw
Portland Bill	bc	bcc	c	cbc
Plymouth	obc	ybc	bcpr₀	cbcc
The Lizard	bc	bcprc	cbcc	cprc
Scilly (St. Mary's)	bc	bcc	ctlrr	crcpq
Guernsey	c	cbc	cir₀	cbcc
Pembroke	bcv	bcy	bcvpr₀c	cq
Holyhead	cpr₀bc	bcvb,c	cvc	c,bc
Chester (Sealand)	cr₀PRypr₀c	cpr₀	bcbbcw	bcwbcc
Manchester	cpr₀PRtlr	cbcy	bcbw	bw,c
Spurn Head	cpq	cpr₀	cbcw	bc
Catterick	tpRpr₀	ctpr₀c	cpr₀bc	bcwcw
Tynemouth	cp₀cPtl	cPc	cbc	bccp
St. Abbs Head	c	PRc	rrc	prc
Leuchars	pr₀tlr₀c	cpr₀c	TLRrrr₀c	cir₀cbbc
Renfrew (Abbotsl.)	cpr₀bcy	cytprpr₀c	bcbcpr₀ir₀	bccbcw
Eskdalemuir	r₀trrbc	cirbc	bcprbc	bcwbc
Point of Ayre	pr₀bc	oc	cbcb	bbc
Tiree	Rcbc	bc	bc	bc
Stornoway	cpr₀	cpr₀	cPR	bccpr
Dalwhinnie	cir	cir	·	cir
Aberdeen	prhtr	tlprc	cr₀c	cr₀bc
Wick	prcr₀	r₀r₀c	cbc	bccpr
Lerwick	cpr₀	c	cbc	bccpr₀
Blacksod Point	PR₀c	pr₀c	bc	pr₀c
Malin Head	cpr₀bc	bcprbc	cbcpr₀bc	bcpr₀cbc
Aldergrove	cycpr₀	bccpr₀c	cbcb	bbccpr₀
Birr Castle	bccpr	cpr	cpr	cprc
Valentia Obsy.†	bccpr₀c	cpr₀c	cpr₀bc	bc
Roches Point	bcp₀c	cp₀cv	cvbc	bc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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.

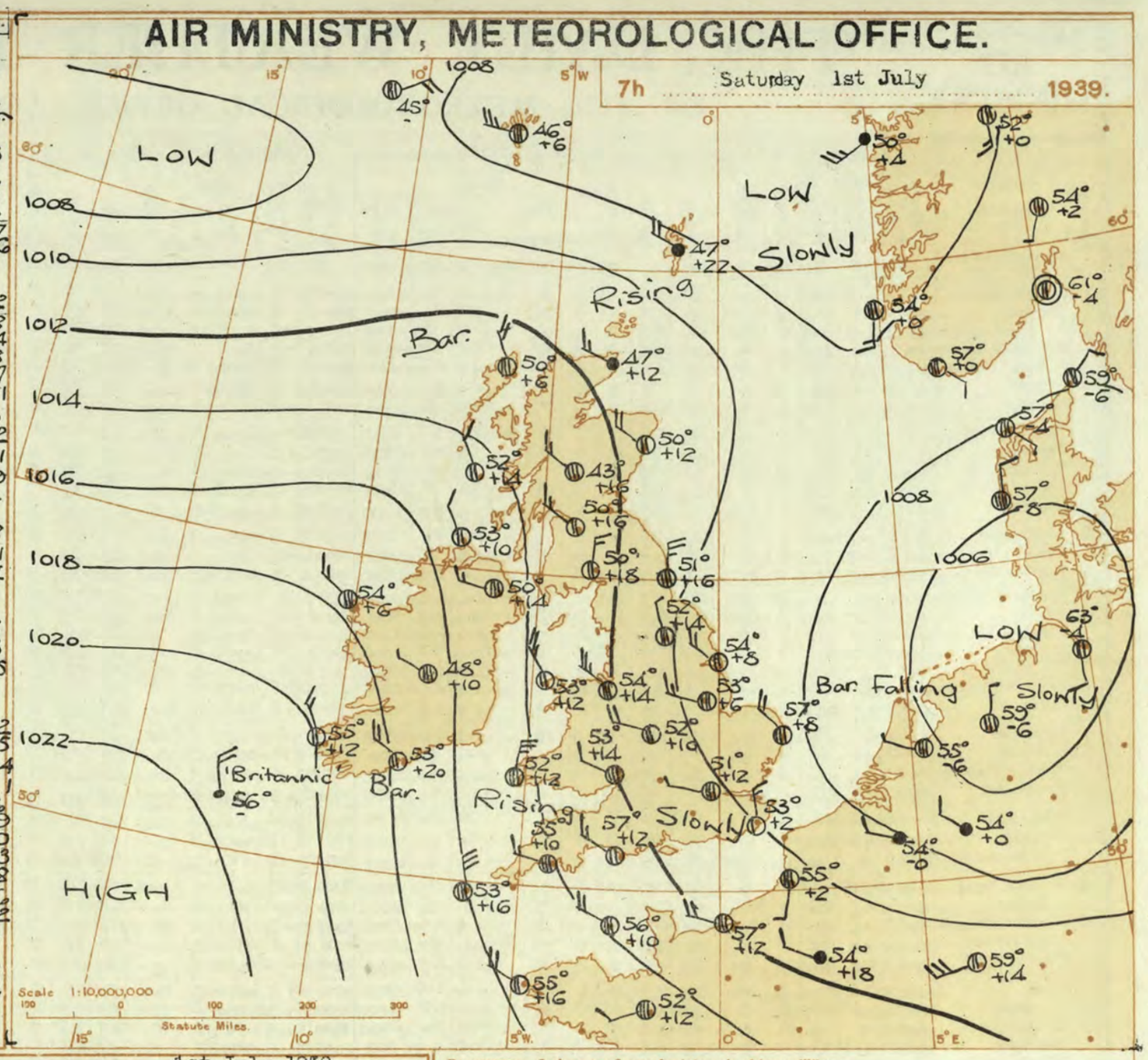
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 30th June 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 29th to 9h. 30th	Temperature. (°F) Max. 9h.—17h. 30th	Rainfall. (mm.) Night. 17h. 29th to 9h. 30th	Rainfall. (mm.) Day. 9h.—17h. 30th	Sunshine. (Hrs.) Sunrise to 17h. 30th	Sunshine. (Hrs.) Sunrise to Sunset. 29th
1	Tunbridge W.	bccop	cob	51	65	Trace	0.3	5.8	9.1
	Bournemouth	bcp.b	bbcbc	55	67	-	Trace	9.0	9.5
	Ventnor ...	pobc	bc	54	62	Trace	-	8.2	6.4
	Southsea ...	bcb	b	56	67	0.5	-	7.6	11.2
	Bognor Regis	bc	bc	55	62	Trace	-	6.8	9.2
	Littlehampton	bcc	cpcbc	54	62	-	0.3	4.7	9.7
	Worthing ...	c	cbcb	55	63	Trace	-	4.4	9.6
	Brighton ...	cbdc	cbc	56	62	-	Trace	6.1	7.8
	Eastbourne† ...	bccp	pcb	55	63	0.5	1	4.0	8.1
	Hastings† ...	cbcc	orcbc	55	64	0.3	0.5	3.5	8.2
	Folkestone ...	ccrc	corrc	53	62	Trace	1	2.8	9.8
	Dover ...	bc	bccor	55	63	0.3	1	2.8	11.4
	Deal ...	docbc	codr	54	67	-	Trace	2.8	12.8
	Ramsgate ...	bcc	or	53	65	Trace	1	3.1	11.7
	Margate ...	bc	bccr	52	67	-	2	4.0	13.1
2	Southend ...	co	pcbc	53	57	-	-	4.5	9.9
	Clacton-on-Sea	bc	bcc	53	65	-	-	4.9	8.2
	Dovercourt ...	bcv	bcoc	51	66	-	-	5.3	8.1
	Lowestoft ...	bbc	c	52	64	-	-	5.5	11.9
	Skegness ...	pbc	orbrb	48	66	-	3	6.1	6.4
	Mablethorpe...	bcor	bcp	47	68	-	Trace	6.5	6.1
	Cleethorpes ...	bc	cpbc	53	68	-	Trace	7.0	5.8
3	Leamington S.	cbc	cpbc	50	64	-	5	4.6	6.1
4	Cheltenham†	cp.bc	bccrh	50	68	-	1	7.5	8.4
5	Bath ...	bccp	cpbc	51	66	Trace	1	5.9	7.0
	Weymouth ...	pcbcb	bbcp.	56	64	0.4	Trace	6.1	10.6
	Jersey ...	pc	cbc	57	63	Trace	Trace	3.0	3.5
	Torquay ...	bcv	bccvp	53	66	1	-	7.9	11.5
	Falmouth ...	crcpc	b	52	64	4	0.3	7.9	9.5
	Penzance ...	bc	bbcc	52	66	2	-	10.6	7.0
	St. Ives ...								
	Bude... ...	bc	bc	51	62	-	-	10.5	10.2
	Ilfracombe ...	cpcbc	bcbbc	55	61	0.3	-	10.5	7.5
6	Aberystwyth	prbcc	bc	53	62	2	-	9.7	5.4
7	Llandudno ...	cir	ircbc	54	61	0.5	5	3.6	10.1
	Colwyn Bay...	cpbc	bcb	51	62	1	1	4.5	6.6
	Rhyl ...	cp.c	tbcb	53	60	2	1	4.5	6.9
8	Wallasey ...	cir	cbcb	55	61	0.3	1	6.6	5.0
	Southport ...	bcctlr	pcb	52	62	3	1	6.8	10.3
	Blackpool ...	cptR	bbcb	54	60	1	4	5.4	7.8
	Morecambe ...	tlr	pbc	52	60	13	3	5.8	8.6
9	Ilkley... ...	bc	bctpc	52	65	-	2	5.1	10.2
	Harrogate ...	bcc	pcbc	48	62	-	1	7.9	9.2
10	Berwick-on-T.	cir	crbc	51	61	Trace	0.2	4.3	6.4
11	Dunbar ...	bc	cpr	50	62	-	5	1.6	10.1
12	Troon... ...	bcbbc	bcc	53	59	Trace	-	8.2	4.7
	Douglas ...	bcpr	bc	49	60	4	3	5.1	7.0

† Max. Temp. for period 21h. yesterday to 17h. to-day; Min. Temp. 21h. 29th.



Districts.	Forecasts for the 24 hours commencing 12 noon, G.M.T. 1st July, 1939.
1 S.E. England	Wind northwest to west, moderate; bright periods but thunder in many places; cool.
2 E. England ...	Wind northwest, moderate; bright periods but thundery showers inland, some rain near the coast; cool.
3 E. Midlands ...	
4 W. Midlands ...	
5 S.W. England	
6 South Wales ...	
7 North Wales ...	
8 N.W. England	
9 N. Midlands ...	Wind northwest to west, moderate to fresh; bright periods but thunderstorms in many places, and occasional rain locally; cool.
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 Orkney and Shetland	
17 N. W. Ireland	
18 N. E. Ireland	
19 S. E. Ireland	
20 S. W. Ireland	

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

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 ridge of high pressure lies to the west of the British Isles and a secondary depression to the south of Iceland will move southeastwards. Thunder is probable today in many places.

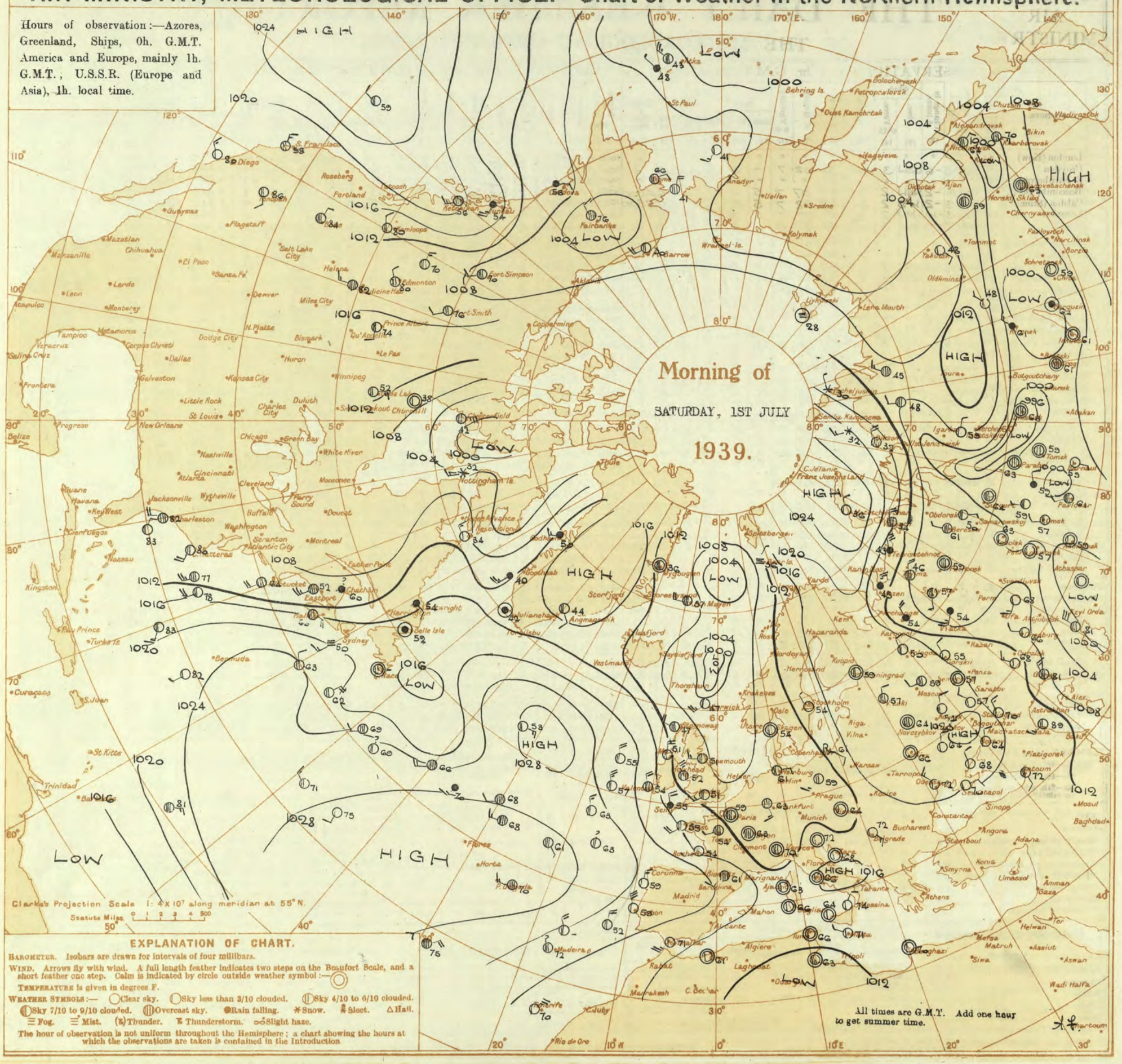
FURTHER OUTLOOK.

Cool and unsettled.

Forecasts issued at 0930 G.M.T.

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

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



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

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

TEMPERATURE is given in degrees F.

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday 1st July, 1939

No. 28345.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1009·8	−6	WSW	3	bc	51	92	7	−	4	3	0	2–3	−
	S. Farnborough	226	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	Boscombe Down	417	1010·8	−2	WNW	2	bc	47	97	7	5	−	6	Tr	4–6	4000
	Calshot (Stnmtn.)	8	1010·5	−2	W'S	2	bc	49	92	7	5	3	1	Tr	4–6	2500
	Lympne ...	346	1010·3	−10	WNW	2	Z_o	51	97	6	−	9	2	0	7–8	−
	Manston ...	154	1009·2	−10	SW	3	c	51	97	6	−	3	6	0	7–8	−
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1008·3	−4	WSW	2	c	56	85	7	5	3	−	4–6	7–8	2500
	Mildenhall ...	19	1008·4	−6	WSW	2	Z_o	50	97	6	4	6	−	1	2–3	4000
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1011·1	0	NNW	3	c	55	85	9	8	4	−	4–6	7–8	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1010·9	+6	NW	3	c	54	92	8	5	7	−	7–8	10	4000
	Plymouth ...	82	1012·0	0	W'N	2	bc/pr	53	92	8	5	4	−	2–3	4–6	5700
	The Lizard ...	240	1013·4	0	WNW	4	c	55	92	8	8	7	−	4–6	7–8	2500
	Scilly (St. Mary's)	163	1014·3	+8	N'W	4	rr	55	97	7	9	7	−	7–8	10	1500
	Guernsey ...	175	1012·3	+2	NNW	4	c	54	85	8	8	−	−	9+	9+	2500
6	Pembroke ...	142	1011·4	+4	N'W	4	c	52	97	7	8	2	−	7–8	10	1500
7	Holyhead ...	26	1011·2	+12	NNW	5	c	52	75	8	8	4	−	9	9+	2500
	Chester (Sealand)	16	1010·7	+6	NNW	2	bc	50	85	8	8	8	−	2–3	4–6	1500
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1008·3	0	NW'N	3	bc	54	85	6	−	−	3	0	2–3	−
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1008·0	+4	W	3	bc	51	92	7	8	−	−	4–6	4–6	1500
11	St. Abbs Head	280	1008·7	+12	NW	4	c	50	92	8	9	2	−	7–8	9+	800
	Leuchars ...	36	1009·6	+10	−	0	c	50	92	8	5	−	−	9+	10	1500
12	Renfrew (Abbots I.)	19	1010·7	+10	NNW	3	bc	49	75	8	8	4	−	4–6	4–6	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1010·8	+6	N	5	b	52	75	8	4	−	−	1	1	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1011·0	+2	WNW	4	c	47	75	8	5	7	−	7–8	9+	2500
15	Balwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1009·0	+8	WNW	3	bc	44	92	8	5	4	−	4–6	4–6	1500
16	Lerwick ...	156	1006·1	+2	SW'W	5	bc	47	85	8	8	−	−	4–6	4–6	1500
17	Blacksod Point	18	1016·5	+10	−	0	bc	48	75	9	4	−	4	2–3	4–6	2500
18	Malin Head ...	84	1013·9	+12	N	4	bc	51	75	8	2	6	−	2–3	4–6	5700
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1017·5	+6	NNW	4	c	54	85	8	8	−	−	7–8	7–8	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1010·8	+12	NNW	2	Z_o	55	75	6	5	−	4	4–6	7–8	2500	0	*
	Croydon ...	1010·9	+12	W'N	1	Z_o	51	92	6	3	4	−	4–6	9+	2500	1	*
	S. Farnborough	1011·3	+14	WNW	2	Z_o	51	92	6	−	3	2	0	7–8	−	1	*
	Boscombe Down	1012·1	+14	NNW	2	bc	52	85	7	1	3	2	Tr	2–3	2500	1	*
	Calshot (Stnmtn.)	1011·5	+14	NW	3	c	54	85	7	1	5	6	Tr	7–8	1500	0	1
	Lympne ...	1010·1	+2	N'W	3	b	53	92	6	−	9	−	0	1	−	1	§
	Manston ...	1009·2	+6	NW	4	bc	55	85	6	8	8	3	1	2–3	4000	1	*
2	Shoeburyness ...	1009·7	+8	NW	3	c	56	75	6	8	7	−	4–6	7–8	4000	0	*
	Felixstowe ...	1008·8	+6	N	4	Z_o	57	75	6	8	3	1	2–3	4–6	4000	0	2
	Gorleston ...	1008·4	+8	NNW	4	c	57	75	6	−	3	−	0	7–8	−	0	2
	Mildenhall ...	1009·8	+10	NW'N	3	Z_o	53	85	6	5	−	2	1	7–8	4000	1	*
	Cranwell ...	1009·5	+6	WNW	3	Z_o	53	85	6	−	−	4	0	7–8	−	0	*
3	Birmingham ...	1012·0	+10	WNW	4	bc	52	85	7	1	4	1	4–6	4–6	1500	1	*
	Upper Heyford	1011·8	+10	NW'N	3	Z_o	52	85	6	5	4	8	Tr	7–8	1500	1	*
4	Ross-on-Wye	1012·6	+14	NW	2	c	53	85	8	8	6	1	4–6	7–8	2500	1	*
5	Hartland Point	1013·2	+16	N	5	c/r	53	85	8	6	2	−	7–8	9+	1500	0	3
	Bristol ...	1012·5	+14	N	2	c	55	75	8	8	9	8	2–3	7–8	2500	0	*
	Portland Bill ...	1011·9	+12	NW	3	bc	57	85	8	5	−	−	4–6	4–6	4000	1	3
	Plymouth ...	1013·2	+10	WNW	3	c	55	85	8	9	3	−	7–8	9	1500	1	1
	The Lizard ...	1015·1	+20	WNW	4	c	55	85	8	8	6	−	7–8	7–8	2500	1	2
	Scilly (St. Mary's)	1016·0	+16	N'W	6	c/pr	53	92	8	9	6	3	4–6	7–8	1500	1	3
	Guernsey ...	1012·9	+10	NW	4	c	56	75	9	8	1	−	7–8	9	2500	1	3
6	Pembroke ...	1015·3	+12	N'E	5	cq	52	85	7	8	−	−	7–8	7–8	1500	1	2
7	Holyhead ...	1013·8	+12	NW'N	5	bc	53	75	8	1	−	5	4–6	4–6	2500	1	3
	Chester (Sealand)	1012·7	+14	NW	5	c	54	75	9	8	−	−	7–8	7–8	4000	1	*
8	Manchester ...	1011·6	+18	WNW	2	c	53	85	7	8	3	−	7–8	9	2500	1	*
10	Spurn Head ...	1009·4	+8	NW	4	bc	54	85	7	−	−	8	0	2–3	−	0	3
	Catterick ...	1010·6	+14	NNW	1	c	52	85	7	5	−	−	9+	9+	1500	1	*
	Tynemouth ...	1010·6	+16	N	5	c/pr	51	92	8	9	−	−	9+	9+	1500	1	2
11	St. Abbs Head	1011·0	+18	NW	3	c	48	75	8	8	2	−	7–8	9	1500	0	2
	Leuchars ...	1011·9	+18	NW	2	bc	50	75	9	8	7	5	2–3	2–3	2500	1	*
12	Renfrew (Abbots I.)	1013·1	+16	NW'W	3	bc	50	75	9	1	4	6	1	4–6	4000	0	*
	Eskdalemuir ...	1012·1	+18	N'E	3	bc	50	75	8	8	4	−	4–6	4–6	1500	1	*
	Point of Ayre ...	1013·2	+20	N	5	bc	53	65	8	2	7	3	1	2–3	2500	0	3
13A	Tiree	1014·4	+14	NNW	2	bc	52	65	8	8	3	−	4–6	4–6	2500	0	3
13B	Stornoway ...	1012·9	+6	NNW	4	c	50	75	8	5	5	−	4–6	7–8	4000	1	2
15	Balwhinnie ...	*	+6	NW	3	c	43	85	8	4	7	1	4–6	7–8	4000	0	*
	Aberdeen ...	1011·1	+12	NW	4	bc	50	75	8	8	3	−	4–6	4–6	2500	1	1
	Wick ...	1009·7	+12	WNW	3	pr	47	92	7	5	7	9	4–6	7–8	1500	1	1
16	Lerwick ...	1008·4	+22	NW	4	pr	47	85	8	8	7	−	7–8	9+	1500	1	*
17	Blacksod Point	1017·6	+6	NW	3	c	54	75	8	3	−	−	7–8	7–8	2500	0	3
18	Malin Head ...	1015·6	+10	NNW	2	bc	53	75	8	2	−	−	4–6	4–6	5700	0	2
	Aldergrove ...	1015·1	+14	WNW	3	c/pr	50	75	7	8	−	6	9	9+	1500	1	*
19	Birr Castle ...	1017·3	+10	WNW	1	c	48	97	8	5	4	3	4–6	7–8	2500	1	*
20	Valentia Obsy. †	1020·1	+12	NNW	3	bc	55	65	8	8	−	−	2–3	2–3	2500	1	2
	Roches Point	1018·5	+20	NW	4	bc	53	85	9	5	−	5	2–3	4–6	2500	0	2

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 30th Hrs. (36)
1	London (Kew)	67	50	40	1	0·1	7·8
	Croydon ...	64	47	39	3	Tr	3·6
	S. Farnborough	67	44	35	3	Tr	7·0
	Boscombe Down	65	46	39	1	Tr	5·8
	Calshot (Stnmtn.)	66	49	46	0·1	1	8·7
	Lympne ...	63	47	45	1	Tr	5·1
	Manston ...	67	46	42	2	−	4·9
2	Shoeburyness ...	64	49	38	Tr	0·1	5·9
	Felixstowe ...	69	51	48	Tr	0·1	6·1
	Gorleston ...	65	50	50	Tr	1	5·6
	Mildenhall ...	65	46	42	2	0·3	6·0
	Cranwell ...	66	45	43	1	−	8·4
3	Birmingham ...	64	47	42	4	0·2	4·7
	Upper Heyford	67	46	41	Tr	5	*
4	Ross-on-Wye	65	44	39	2	0·2	6·5
5	Hartland Point	60	51	51	−	Tr	13·3
	Bristol ...	63	48	39	1	−	10·4
	Portland Bill ...	59	52	*	−	Tr	*
	Plymouth ...	63	52	49	−	Tr	11·6
	The Lizard ...	65	50	*	Tr	0·5	11·7
	Scilly (St. Mary's)	64	50	*	−	3	13·1
	Guernsey ...	62	53	51	−	Tr	9·6
6	Pembroke ...	58	50	*	−	Tr	12·9
7	Holyhead ...	62	50	48	0·1	−	7·1
	Chester (Sealand)	64	49	44	1	−	8·5
8	Manchester ...	64	36	33	1	−	8·3
10	Spurn Head ...	71	52	*	0·6	Tr	6·8
	Catterick ...	63	46	38	2	Tr	4·7
	Tynemouth ...	61	50	45	8	0·2	1·7
11	St. Abbs Head	(55)	47	*	12	2	*
	Leuchars ...	62	45	40	0·4	7	3·5
12	Renfrew (Abbots I.)	64	44	36	0·6	0·4	6·9
	Eskdalemuir ...	58	45	43	8	0·2	3·0
	Point of Ayre ...	64	50	*	Tr	−	8·2
13A	Tiree	58	47	44	7	−	8·6
13B	Stornoway ...	(55)	49	*	Tr	0·6	2·7
15	Balwhinnie ...	58	37	30	2	0·5	3·0
	Aberdeen ...	63	45	42	3	0·5	3·1
	Wick ...	57	41	*	5	0·1	*
16	Lerwick ...	54	45	*	Tr	Tr	13·0
17	Blacksod Point	57	47	*	1	1	*
18	Malin Head ...	56	47	*	2	1	8·0
	Aldergrove ...	62	46	39	1	Tr	5·8
19	Birr Castle ...	60	42	35	3	3	4·4
20	Valentia Obsy. †	59	51	42	0·3	Tr	7·4
	Roches Point	62	50	*	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	ccpRqc	cpr.kqc	cpr.bcw	67	50	40	1	0·1	7·8	*	*	8
Croydon ...	217	bccpr.	cpr.PR	bcwcw	64	47	39	3	0·1	3·6	*	*	8
Greenwich (Royal Observatory) ...	149	c	c;R	cbcby	67	48	38	11	−	4·8	68	54	7
City (Gunhill Row) ...	—	*	*	*	*	*	*	*	*	4·8	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	68	50	46		1	5·3	71	65	*
Regents P. (Botanic Gardens)‡ ...	166	*	*	*	69	49	45	Tr	Tr	5·8	56	66	*
Camden Square ...	110	bc	bc	*	71	50	45	1	−	*	*	54	*
Kensington ...	80	bc	bc	*	70	50	45	1	Tr		82 At 18h	57	*
Hampstead Observatory ...	450									6·8	*	*	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 1st.

South Kensington Max.	Time.	Min.	Time.

Kew Observatory Max.	Time.	Min.	Time.
0·1	4–7h 1st.	<0·1	10–22h 30th

FOREIGN OBSERVATIONS.

18h. G.M.T. 30th June

Stations	Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.
Paris ...	1011·8	WNW	2	pr	63
Brussels ...	1010·9	NW	3	c	59
Berlin ...	1011·3	WSW	3	Hr.	73
Zurich ...					
Rome ...	1014·9	−	0	b	75

7h. G.M.T. 1st July

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 ...	1011·4	WNW	2	r.r.	54	75	52	5	22
Brussels ...	1008·6	WNW	2	ir.	54	73	54	9	3
Berlin ...	1008·1	S	1	Z_o	61	82	59	Tr	*
Zurich ...	1012·0	WNW	4	rr	57		57		18
Rome ...	1014·6	−	0	Z_o	84	*	*	−	−

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday 2nd July, 1939.

No. 28546

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

District	Stations. (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. 0–12 Force (4)	Weather. (5)	°F Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud. Form Low (9)	Cloud. Form Med. (10)	Cloud. Form High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1012.8	+10	WNW	3	c	62	45	7	8	-	-	9+	9+	4000
	Croydon	1012.4	+8	NW'W	3	c	62	55	8	2	6	-	4-6	9+	4000
	S. Farnborough	1012.9	+10	NW	2	c	62	56	8	8	3	-	4-6	9	4000
	Boscombe Down	1013.9	+6	N'W	4	bc	61	55	8	8	7	-	4-6	4-6	2500
	Calshot (Soton.)	1014.0	+16	NNW	3	pr	59	65	8	8	3	-	9	9+	1500
	Lympne	1011.6	+6	NW'N	4	c	64	55	7	3	6	3	4-6	7-8	4000
	Manston	1011.2	+6	NNW	3	c	64	53	7	8	-	6	2-3	7-8	4000
2	Shoeburyness	1011.6	+8	NW	3	c	66	45	8	2	8	-	4-6	7-8	4000
	Felixstowe	1010.9	+10	NNW	4	c	63	45	9	2	-	1	7-8	7-8	2500
	Gorleston	1010.4	+10	NNW	4	bc	64	65	7	7	4	-	4-6	4-6	2500
	Mildenhall	1011.1	+6	NNW	3	c/pr	62	75	7	8	-	-	9	9	4000
	Cranwell	1012.1	+10	E	2	tr	56	85	7	9	-	-	4-6	9+	2500
3	Birmingham	1013.8	+10	WNW	4	bc	58	55	8	8	-	-	4-6	4-6	2500
	Upper Heyford	1013.4	+6	NW'W	4	c	59	55	8	9	3	-	7-8	9+	1500
4	Ross-on-Wye	1014.4	+6	NW	3	bc	62	45	9	7	-	1	4-6	4-6	4000
5	Hartland Point	1017.8	+18	NNW	5	bc	54	76	8	3	-	3	2-3	4-6	2500
	Bristol	1014.5	+10	NW'N	5	bc	63	45	9	4	-	-	4-6	4-6	4000
	Portland Bill	1014.9	+16	W	3	c	57	92	8	3	7	-	7-8	10	2500
	Plymouth	1017.0	+14	NNW	5	c	59	55	9	2	7	-	7-8	7-8	4000
	The Lizard	1018.9	+20	NW	5	bc	58	65	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1020.0	+10	N'W	5	bc	60	76	8	2	6	-	2-3	4-6	1500
	Guernsey	1015.6	+10	NW	4	bc	58	76	8	2	-	-	4-6	4-6	800
6	Pembroke	1018.4	+4	NW	4	bc	56	86	9	2	4	-	2-3	4-6	2500
7	Holyhead	1016.5	+12	WNW	3	bc	56	65	9	2	-	2	2-3	4-6	2500
	Chester (Sealand)	1015.2	+10	WNW	5	c	57	65	8	8	7	2	4-6	7-8	2500
8	Manchester	1014.0	+14	NW'W	4	c	58	56	8	2	-	5	7-8	9+	4000
10	Spurn Head	1012.1	+12	N'E	5	bc	59	75	7	8	8	3	4-6	4-6	2500
	Catterick	1012.9	+4	N	1	c/pr	56	65	7	8	7	-	4-6	9+	1500
	Tynemouth	1012.3	+6	NNE	4	bc	53	85	8	2	-	-	4-6	4-6	2500
11	St. Abbs Head	1013.2	+8	NNW	2	c	51	65	9	8	6	-	4-6	7-8	2500
	Leuchars	1012.6	+2	ESE	3	c/pr	56	65	9	8	7	6	4-6	9	2500
12	Renfrew (Abbotsl.)	1013.6	0	NW'W	4	c	60	45	9	1	-	6	4-6	7-8	4000
	Eskdalemuir	1012.7	+4	NW	3	c	55	55	8	8	-	-	9	9	1500
	Point of Ayre	1015.0	+4	N	5	bc	61	55	8	7	4	1	2-3	2-3	4000
13A	Tiree	1015.1	+2	WNW	3	bc	56	65	8	1	-	8	2-3	4-6	4000
13B	Stornoway	1013.4	0	W	3	c/pr	53	65	9	8	7	-	7-8	9+	2500
15	Dalwhinnie	1013.7	+2	N	2	c	51	65	8	4	6	1	4-6	7-8	4000
	Aberdeen	1012.4	+4	NNW	3	pr	55	65	8	2	-	1	7-8	7-8	2500
	Wick	1011.9	+8	NW	4	c	53	55	8	8	7	8	4-6	7-8	1500
16	Lerwick	1009.9	+10	WNW	4	c	52	65	8	5	3	-	4-6	7-8	1500
17	Blacksod Point	1018.1	0	W	3	bc	59	75	9	2	-	-	4-6	4-6	2500
18	Malin Head	1016.3	+2	N	3	bc	55	65	8	7	-	5	2-3	4-6	4000
	Aldergrove	1015.8	+2	WNW	3	c	60	55	8	2	-	-	7-8	7-8	2500
19	Birr Castle	1017.9	+2	WNW	2	c	58	75	8	4	-	-	7-8	7-8	1500
20	Valentia Obsy.†	1021.2	0	WNW	3	c/p	59	65	8	8	-	-	9	9	1500
	Roches Point	1019.5	+2	NW	4	c/pr	58	85	9	3	-	3	4-6	7-8	2500

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

District	Stations.	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. 0–12 Force (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)	1015.5	+22	N'E	3	c/pr	58	75	7	8	-	-	9+	9+	2500	0	*
	Croydon	1015.0	+16	N'W	3	pr	62	45	7	9	6	-	7-8	9+	4000	0	*
	S. Farnborough	1015.0	+14	WNW	2	c	62	55	8	8	3	-	4-6	7-8	4000	0	*
	Boscombe Down	1016.2	+14	NW'N	4	bc	59	55	8	8	4	8	4-6	4-6	2500	1	*
	Calshot (Soton.)	1015.3	+8	NW'W	4	bc	65	46	8	8	-	9	2-3	2-3	4000	0	1
	Lympne	1014.4	+14	NW'N	1	pr	60	65	7	3	6	-	9	10	4000	1	§ 2
	Manston	1014.4	+20	NE'E	4	c	57	75	7	8	7	3	4-6	7-8	4000	1	*
2	Shoeburyness	1014.4	+20	N	3	c	59	75	8	8	7	-	7-8	9+	4000	0	*
	Felixstowe	1014.4	+26	N	3	c	58	75	8	6	7	3	4-6	9+	1500	1	2
	Gorleston	1013.5	+20	NW	4	c	58	75	7	8	3	-	4-6	7-8	2500	0	2
	Mildenhall	1014.9	+22	N'W	3	pr	56	65	7	9	7	-	7-8	9+	2500	1	*
	Cranwell	1015.0	+16	NW	1	c	52	92	7	8	6	-	7-8	9+	2500	1	*
3	Birmingham	1016.0	+12	WNW	4	b	59	45	8	1	-	-	Tr	Tr	2500	1	*
	Upper Heyford	1015.5	+14	NW	4	bc	61	45	9	8	-	1	2-3	2-3	2500	1	*
4	Ross-on-Wye	1016.9	+14	WNW	4	bc/pr	61	45	9	8	-	-	4-6	4-6	2500	0	*
5	Hartland Point	1019.8	+2	NW	4	bc	56	75	9	2	-	-	2-3	2-3	2500	0	3
	Bristol	1016.9	+16	NNW	4	bc	61	45	9	2	-	5	2-3	4-6	2500	0	*
	Portland Bill	1017.4	+20	NW	4	bc	60	75	8	1	-	-	4-6	4-6	4000	1	3
	Plymouth	1019.8	+14	NW	5	bcq	59	55	9	1	-	1	4-6	4-6	4000	0	2
	The Lizard	1021.6	+6	W	4	bc	58	65	8	8	6	-	4-6	4-6	2500	0	1
	Scilly (St. Mary's)	1021.3	+2	NW'W	4	bc	59	85	9	2	4	-	2-3	4-6	2500	0	2
	Guernsey	1018.4	+10	NW	6	b	57	75	8	-	3	-	0	Tr	-	0	3
6	Pembroke	1019.0	+2	W'N	5	bc	56	92	8	2	7	3	1	4-6	2500	1	2
7	Holyhead	1016.8	+2	SW'W	3	c/pr	56	75	9	8	8	2	4-6	7-8	2500	0	1
	Chester (Sealand)	1016.7	+8	WNW	4	bc	57	55	9	2	-	-	1	2-3	2500	0	*
8	Manchester	1015.8	+6	WNW	4	b	58	45	8	1	-	+	1	1	4000	0	*
10	Spurn Head	1014.4	+20	N'W	4	c	55	75	7	5	4	-	4-6	7-8	2500	0	2
	Catterick	1014.3	+6	NE'E	1	c	54	75	7	8	6	-	4-6	9	2500	1	*
	Tynemouth	1013.8	+6	NE	2	bc	53	85	8	2	6	-	4-6	4-6	2500	1	2
11	St. Abbs Head	1013.4	+2	ESE	2	c	53	65	9	8	6	-	4-6	7-8	2500	0	1
	Leuchars	1013.5	+2	ESE	2	pr	53	85	8	8	7	-	7-8	9	1500	1	*
12	Renfrew (Abbotsl.)	1014.4	+6	W'N	4	c	58	55	9	1	-	6	2-3	7-8	4000	0	*
	Eskdalemuir	1013.8	+8	WNW	4	c	55	55	8	8	3	-	7-8	9	2500	1	*
	Point of Ayre	1016.1	+2	NW'N	3	bc	59	55	8	2	4	2	Tr	2-3	4000	0	2
13A	Tiree	1014.5	-2	SW'W	3	bc	55	65	8	7	-	-	4-6	4-6	4000	0	2
13B	Stornoway	1012.3	-8	SW	4	c	56	55	9	2	5	6	2-3	9	4000	1	2
15	Dalwhinnie	1014.3	+6	SW	1	tr	50	75	8	8	6	-	7-8	10	2500	1	*
	Aberdeen	1013.7	+6	S	2	c/p	51	75	7	9	-	-	9	9	1500	1	1
	Wick	1012.4	+2	NW	3	bc	55	55	8	8	7	1	2-3	4-6	1500	1	1
16	Lerwick	1010.6	0	W'S	4	c	49	75	8	8	7	-	7-8	9	1500	0	*
17	Blacksod Point	1017.5	-6	WSW	4	c	56	85	9	5	-	-	10	10	1500	0	3
18	Malin Head	1016.9	-4	NW	4	bc	56	65	8	2	-	4	2-3	4-6	3700	0	3
	Aldergrove	1015.9	+2	-	0	c	58	65	9	2	-	-	7-8	7-8	2500	1	*
19	Birr Castle	1017.0	+2	WNW	4	bc	61	65	8	8	-	-	4-6	4-6	2500	1	*
20	Valentia Obsy.†	1021.4	0	W'N	4	pr	56	85	8	8	-	-	10	10	1500	1	3
	Roches Point	1019.3	0	NW	4	bc	60	75	9	8	-	-	4-6	4-6	2500	0	2

PAST 24 HOURS.

District	Stations.	Weather. 7h.—13h. 1st (37)	Weather. 13h.—18h. 1st (38)	Weather. 18h. 1st to 1h. 2nd (39)	Weather. 1h.—7h. 2nd (40)
1	London (Kew)	bcey	cbcypr.c	cbcbw	bwb
	Croydon	bcy	bcypr	cybwbcy	bcmwb
	S. Farnborough	cm.bcy	cybcprcy	cybcb	bbmbcv
	Boscombe Down	bcebc	bc	bcb	bbc
	Calshot (Soton.)	bcepr.	cpcby	bcb	bbc
	Lympne	bbcm.	tlrpr	pctlrbny	bnywfq
	Manston	b, cm.	cyc	ctlr bc	bcbmw
2	Shoeburyness	bcm.bc	bcprc	cpcw	cbcw
	Felixstowe	bcm.cy	CTLRc	cbc	bcbwb
	Gorleston	c	bcc	cbc	bc
	Mildenhall	bcm.cprc	ctlRHprc	bbcw	bcwbcm
	Cranwell	bcm.tlr.	ctlr prc	cbc	bcwcm
3	Birmingham	bc	bc	b	bbc
	Upper Heyford	cm.bcc	cbcyb		
4	Ross-on-Wye	cbcvy	bcypb	bcrb	bbcc
5	Hartland Point	cbc	bc	bcebc,	bcc
	Bristol	bccp.bc	bccjbcy	bcyb	bbcprbc
	Portland Bill	cpr	cbc	b	bcc
	Plymouth	cpr.cqcy	cvy bcy	b	bcvc
	The Lizard	cprbc	bc	bc	bcpr.
	Scilly (St. Mary's)	cpcbc	bc	bcc	cpc
	Guernsey	c bc	bcb	b	bbc
6	Pembroke	cqvbc	bcv	b	cbc
7	Holyhead	bbcbc	bcpr.c	cbcc	crrc
	Chester (Sealand)	cbcbc	bcby	bybc	bccr.
8	Manchester	cbcpr.	cby	byb	bmcm
10	Spurn Head	preq	c	c	c
	Catterick	cpprc	prbcc	c	c
	Tynemouth	cpc	bc	bc	bcc
11	St. Abbs Head	bcc	bcc	cbcy	cir
	Leuchars	pr.cpr.c	cprcpr.	pr.crrc	cirrc
12	Renfrew (Abbotsl.)	pcwbcy	bcy	bcybc	bcwpr
	Eskdalemuir	bccy	cbccy	cybcb	bbccrr
	Point of Ayre	bc	bcbbc	cbcbc	crr
13A	Tiree	bc	bc	bcc	oiRdr
13B	Stornoway	cpr	cpcy	cpr.	crrpr
15	Dalwhinnie	cir	cir	cir	cir
	Aberdeen	cprh.	cpr.	bcc	bccr
	Wick	pr	cbcy	prbc	bccr
16	Lerwick	cpr.	c	cpr.	cprbc
17	Blacksod Point	bc	c	prcq	prcq
18	Malin Head	cbcc	cbc	crrcrrc	circ
	Aldergrove	bccpr.y	prbcc	r.rrddm	
19	Birr Castle	c	cpr.bc	bc	bccpr
20	Valentia Obsy.†	pr.bcc	cpr	pricc	circ
	Roches Point	bcprc	cbc	cp.bc	cidc

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.

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.*

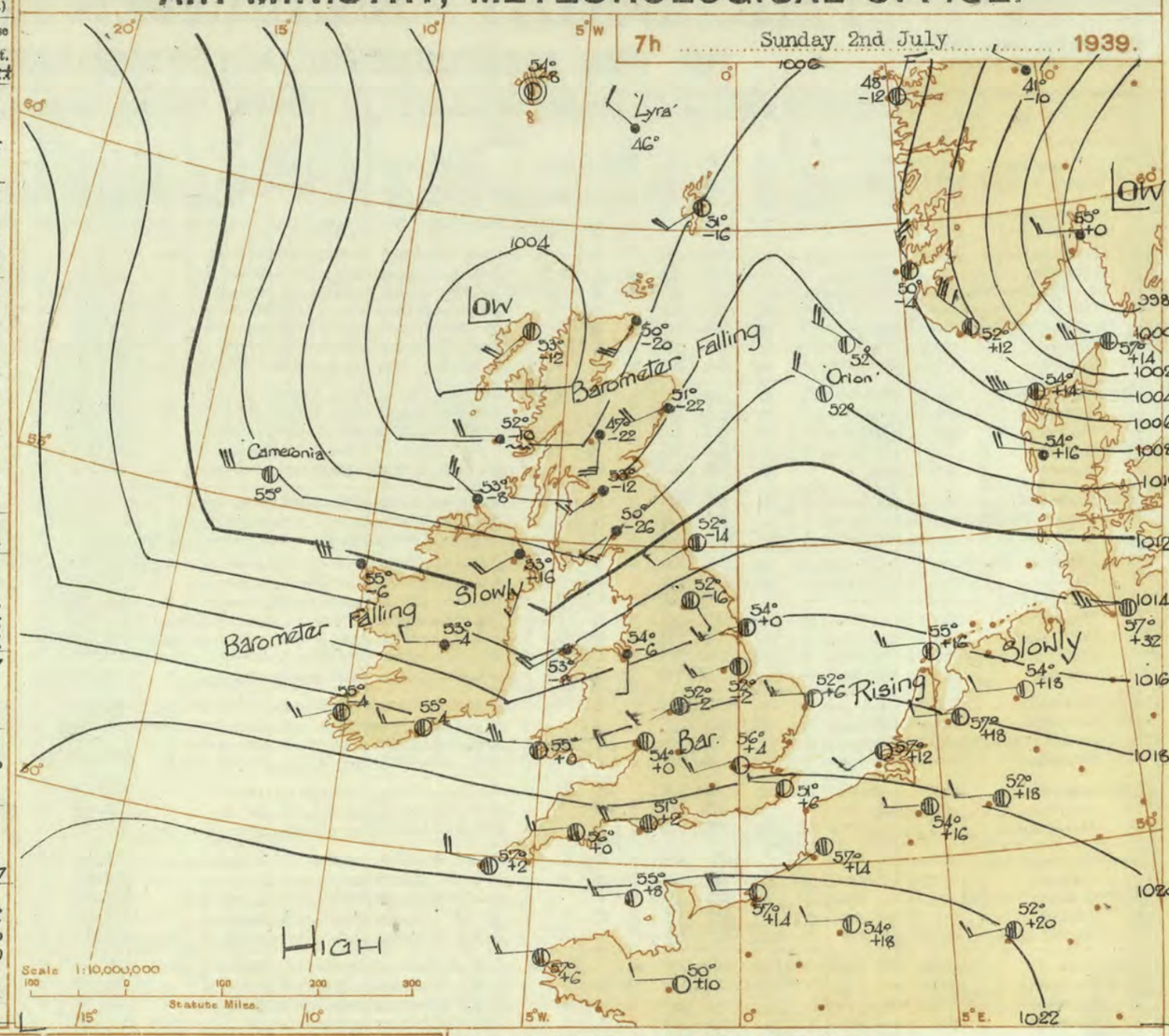
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 1st July 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 30th to 9h. 1st	Temperature. (°F) Max. 9h.—17h. 1st	Rainfall. (mm.) Night. 17h. 30th to 9h. 1st	Rainfall. (mm.) Day. 9h.—17h. 1st	Sunshine. (Hrs.) Sunrise to 17h. 1st	Sunshine. (Hrs.) Sunrise to Sunset. 30th
1	Tunbridge W.	bccp	cbcc	43	66	-	Trace	5.9	7.9
	Bournemouth	bcpc	cbc	49	66	—	Trace	7.0	9.3
	Ventnor ...	cbbt	copb	51	66	-	1	7.3	9.3
	Southsea ...	0cop	bcop	50	67	Trace	Trace	7.7	8.5
	Bognor Regis	b	bcpr	48	65	-	1	7.0	9.1
	Littlehampton	bv	bcpbc	48	67	-	0.1	8.6	6.9
	Worthing ...	bcbbc	bc	50	66	-	-	8.8	6.4
	Brighton ...	bc	bc	51	67	-	-	8.0	7.3
	Eastbourne† ...	bcycy	cytc	52	67	-	-	7.3	5.0
	Hastings† ...	cbbc	ptbcc	50	67	-	1	5.7	4.8
	Folkestone ...	bc	bccrc	51	67	-	1	6.8	3.5
	Dover ...	bc	bcpbc	50	69	Trace	Trace	9.0	3.6
	Deal	bcbbc	bbcc	54	69	-	-	10.5	4.2
	Ramsgate ...	bcc	bc	49	68	0.1	-	8.7	4.1
	Margate ...	cbc	bc	51	64	Trace	-	8.1	5.0
2	Southend ...	b	bbcc	49	69	Trace	-	8.6	5.1
	Clacton-on-Sea	cbc	bc	49	66	0.4	-	5.6	5.0
	Dovercourt ...	bc	bc	50	67	Trace	-	7.5	5.6
	Lowestoft ...	cbcb	bbcc	49	67	0.4	-	9.2	5.5
	Skegness ...	pbc	orrc	47	60	-	6	5.5	7.3
	Mablethorpe...	bcop	cbcv	45	61	1	1	5.2	7.2
	Cleethorpes ...	bcrbc	bcv	48	61	-	1	8.2	8.5
3	Leamington S.	bc	bc	49	64	-	-	9.5	5.8
4	Cheltenham†	ccy	ccy	47	67	-	-	8.6	8.4
5	Bath	cbcb	bbcc	46	66	-	-	9.3	8.6
	Weymouth ...	bc	cb	50	66	-	-	7.8	7.1
	Jersey ...	pcbc	bcc	54	62	Trace	-	4.9	3.6
	Torquay ...	bccq	bvvq	51	63	Trace	-	7.8	10.5
	Falmouth ...	crcpo	bvvq	51	61	1	Trace	9.5	10.8
	Penzance ...	rcbcb	b	50	67	6	-	9.2	12.7
	St. Ives ...								
	Bude... ...	cbc	bc	54	59	-	-	8.7	13.2
	Ilfracombe ...	bccbc	bcbbc	53	60	-	-	7.7	13.5
6	Aberystwyth	prbc	bcc	51	60	2	-	10.8	11.1
7	Llandudno ...	bcb	bbc	51	59	-	-	12.2	5.3
	Colwyn Bay...	bcb	bcb	51	59	-	-	10.2	5.4
	Rhyl	bc	bcb	52	58	-	-	10.4	6.6
8	Wallasey ...	cbcb	b	52	60	-	-	11.6	9.2
	Southport ...	bc	bcvbv	51	62	-	-	12.1	9.5
	Blackpool ...	b	bcb	52	59	-	-	12.6	8.1
	Morecambe ...	bc	bbc	50	59	-	-	11.9	8.7
9	Ilkley... ...	cbcp	cpbc	46	60	-	4	2.8	7.9
	Harrogate ...	cbc	bccp	45	58	-	1	4.0	10.8
10	Berwick-on-T.	cbc	cbc	49	55	0.2	-	6.0	4.6
11	Dunbar ...	cpr	bc	48	56	4	-	9.0	2.0
12	Troon... ...	bcbbc	bcbbc	48	58	-	-	11.3	10.1
	Douglas ...	b	bc	48	57	-	-	10.4	5.2

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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. 2nd July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England	Moderate westerly wind; mainly cloudy, occasional rain later; average temperature.
6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Moderate to fresh southwest to west wind; occasional rain at first bright periods and thundery showers later; rather cool.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland	Wind southwest to west, veering northwest later, fresh to strong, approaching gale force locally; rain at first, thundery showers later; rather cool.
15 N. E. Scotland 16 Orkney and Shetland	Wind variable becoming finally northwest fresh; rain at first, showers later; rather cool.
17 N. W. Ireland 18 N. E. Ireland	As 11 - 14.
19 S. E. Ireland 20 S. W. Ireland	As 6 - 10.

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

GENERAL INFERENCE.

A depression centred over the Hebrides will move east-southeast. In the North and Northwest weather will be dull and rainy at first followed by bright periods, showers and a chance of thunder. In the Southeast and South there will be a gradual increase of cloud and rain will extend to all parts. Temperatures will be rather below the seasonal average.

FURTHER OUTLOOK.

Unsettled

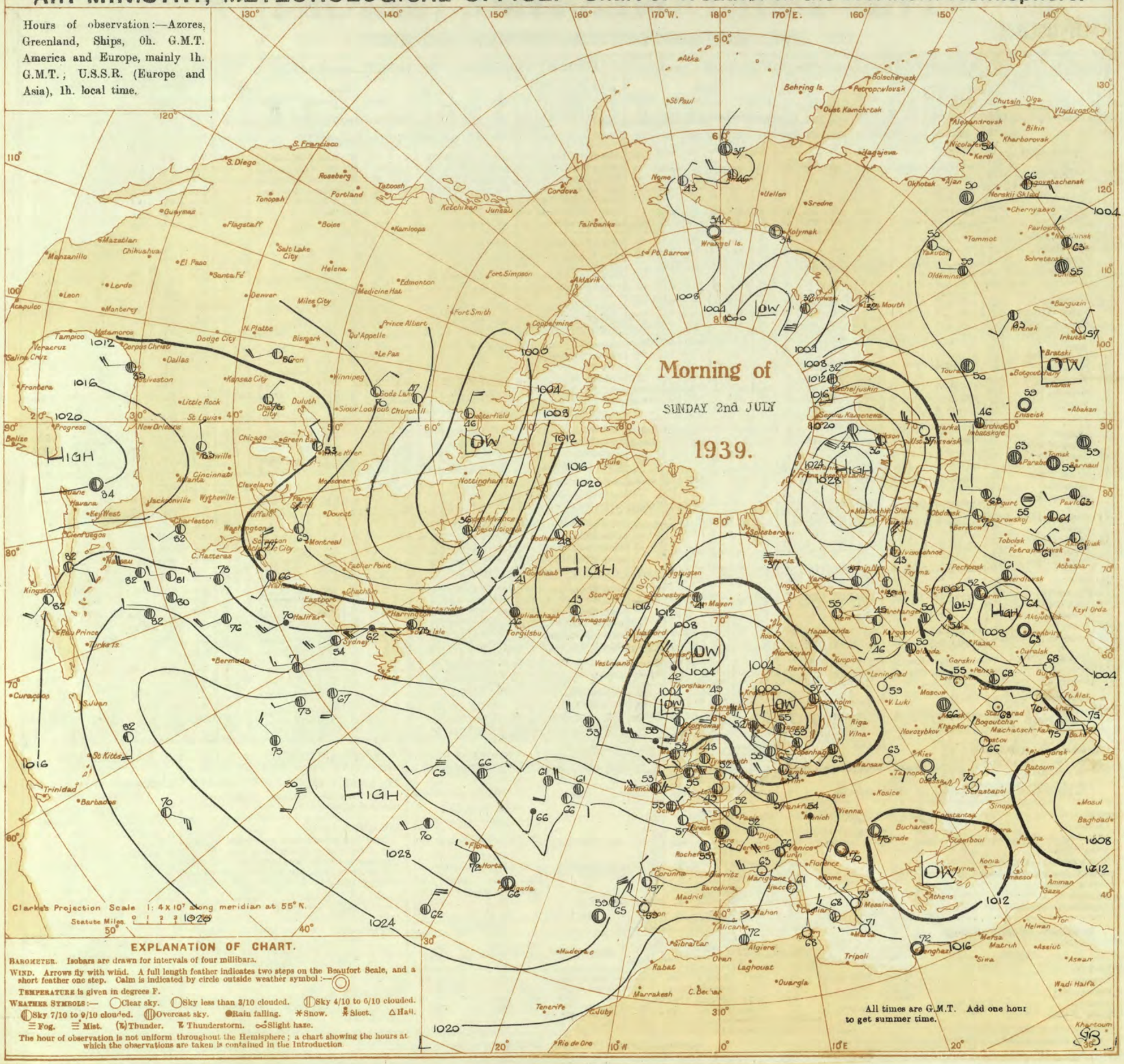
Time of Issue of Gale Warning

South Cone hoisted at 0230 on 2/7/39 in districts 13 (a and b) and 17

Forecasts issued at 1100 G.M.T.

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

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

Sunday 2nd July, 1939.

No. 28346

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

Distrct.	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	1018·5	+6	WSW	2	3	49	85	6	-	3	-	0	4-6	-
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417														
	Calshot (Sthmtn.)	8														
	Lympne ...	346	1018·4	+12	NW	2	3	48	92	6	-	3	2	0	2-3	-
	Manston ...	154	1018·0	+8	WS	2	3	47	92	6	5	3	-	2-3	4-6	2500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1016·4	+8	WSW	2	bc	52	75	7	-	4	-	0	2-3	-
	Mildenhall ...	19														
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1019·5	-2	WNW	4	bc	55	91	8	2	5	3	2-3	4-6	2500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32														
	Plymouth ...	82	1020·7	+4	NW	4	b	55	92	8	-	-	-	0	0	-
	The Lizard ...	240														
	Scilly (St. Mary's)	163	1021·9	0	WS	3	bc	54	85	8	8	4	-	2-3	4-6	2500
	Guernsey ...	175	1021·7	-4	NNW	4	c	55	91	8	8	7	-	7-8	9+	1500
6	Pembroke ...	142	1021·6	+4	NW	2	b	51	85	9	-	-	-	0	0	-
7	Holyhead ...	26	1019·1	+2	NW	3	bc	54	97	8	5	3	1	2-3	4-6	2500
	Chester (Sealand)	16	1016·2	-6	WSW	4	c	55	75	9	8	8	6	2-3	9	4000
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1015·4	-2	WN	5	bc	52	75	6	5	8	-	2-3	4-6	4000
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1014·1	-6	SW	2	bc	48	85	7	2	-		4-6	4-6	1500
11	St. Abbs Head	280	1012·0	-4	WSW	3	bc	50	92	9	2	4	2	2-3	4-6	2500
	Leuchars ...	36														
12	Renfrew (Abbotsl.)	19														
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1015·1	-10	SWN	2	bc	45	85	8	4	4	5	Tr	4-6	4000
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1007·5	-32	S	5	c/pr	51	85	8	5	7	-	4-6	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1009·8	-14	S	1	bc	47	92	8	5	1	-	2-3	4-6	2500
16	Lerwick ...	156	1007·6	-26	SSW	4	c	49	85	8	5	7	-	4-6	7-8	2500
17	Tacksod Point	18	1014·2	-14	WSW	5	c	54	92	7	8	-	-	10	10	800
18	Malin Head ...	84	1012·1	-12	SW	3	c/r	53	92	7	6	-	-	9	9	1500
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1019·9	-4	WS	4	c/pr	53	97	7	8	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1019·2	+4	WSW	2	bc	54	85	8	5	-	6	2-3	4-6	4000	0	*
Croydon ...	1019·1	+4	SWN	3	bc	56	75	8	1	4	5	Tr	4-6	4000	0	*
S. Farnborough	1019·3	+4	SWN	3	bc	56	86	8	2	3	5	Tr	4-6	2500	0	*
Boscombe Down	1019·4	+4	WS	3	bc	53	85	8	5	4	-	2-3	4-6	2500	1	*
Calshot (Sthmtn.)	1019·7	+4	WSW	3	bc	55	85	8	7	3	5	2-3	4-6	2500	0	1
Lympne ...	1019·9	+6	WNW	1	bc	51	85	7	-	-	5	0	2-3	-	1	§1
Manston ...	1019·6	+10	SW	3	2	53	75	6	-	7	5	0	2-3	-	1	*
Shoeburyness ...	1018·8	+4	SWS	2	c	56	75	7	-	3	6	0	7-8	-	0	*
Felixstowe ...	1018·8	+10	W	3	bc	52	75	8	-	3	5	0	2-3	-	0	2
Gorleston ...	1017·3	+6	W	3	bc	52	75	7	-	4	-	0	2-3	-	0	2
Mildenhall ...	1017·5	+4	SW	3	2	52	85	6	5	3	-	4-6	7-8	5700	1	*
Cranwell ...	1016·2	-2	WSW	3	2	52	85	6	-	3	6	0	9	-	0	*
Birmingham ...	1017·3	-2	SW	2	c	52	85	8	1	5	1	Tr	7-8	800	1	*
Upper Heyford	1018·3	0	SWN	3	bc	52	92	7	6	4	9	1	4-6	800	1	*
Ross-on-Wye	1018·0	0	WSW	3	c	54	75	8	5	-	6	9	9+	4000	0	*
Hartland Point	1019·1	+2	NW	4	c/p	58	85	8	3	6	-	7-8	9	1500	0	3
Bristol ...	1019·0	+2	SWS	4	pr	57	85	8	9	7	8	4-6	9	1500	0	*
Portland Bill ...	1020·3	+2	W	4	c	51	92	8	5	4	-	4-6	10	4000	1	3
Plymouth ...	1020·8	0	W	3	c	56	85	7	2	7	-	7-8	9	1500	0	1
The Lizard ...	1021·9	+2	WS	3	bc	56	92	8	8	4	-	4-6	4-6	2500	0	2
Scilly (St. Mary's)	1021·2	+2	WNW	4	c	57	85	8	8	6	2	4-6	7-8	1500	1	2
Guernsey ...	1022·3	+8	W	3	bc	55	92	8	7	2	8	1	2-3	1500	0	3
Pembroke ...	1018·4	0	WN	5	c	55	97	8	5	7	-	2-3	4-6	2500	0	3
Holyhead ...	1014·8	-4	SW	4	c	53	92	7	6	2	-	7-8	10	1500	1	2
Chester (Sealand)	1015·6	-6	S	1	c	54	85	8	5	2	-	7-8	10	4000	1	*
Manchester ...	1015·5	-6	SSW	2	2	52	85	6	5	7	-	7-8	10	5700	0	-
Spurn Head ...	1015·2	0	SWN	3	c	54	75	6	-	7	6	0	10	-	0	2
Catterick ...	1013·1	-6	SSE	1	c	52	92	7	5	7	-	4-6	10	1500	1	*
Tynemouth ...	1012·2	-14	SW	2	c	52	85	6	8	-	-	9	9	2500	1	1
St. Abbs Head	1009·0	-24	SW	4	r	47	85	8	8	2	-	7-8	10	1500	1	3
Leuchars ...	1008·5	-20	SW	2	c/r	50	85	8	5	-	-	9+	9+	1500	1	*
Renfrew (Abbotsl.)	1008·7	-12	SW	3	c	53	92	6	5	-	-	10	10	1500	1	*
Eskdalemuir ...	1009·8	-26	SSW	3	r	50	97	6	6	-	-	10	10	800	1	*
Point of Ayre...	1012·0	-18	WS	5	r	54	97	7	6	2	-	7-8	10	800	1	2
Tiree ...	1005·8	-10	W	4	r	52	97	6	-	2	-	9+	9+	1500	1	4
Stornoway ...	1002·9	-12	SW	4	c/pr	53	85	8	5	4	-	7-8	9+	1500	1	2
Dalwhinnie ...	1006·6	-22	S	5	r	47	85	6	4	6	-	7-8	10	1500	1	*
Aberdeen ...	1007·4	-22	SW	4	r	51	75	7	5	7	-	1	9	2500	1	1
Wick ...	1005·0	-20	SSW	5	r	50	75	7	5	2	-	7-8	10	1500	1	2
Lerwick ...	1005·8	-16	SWS	4	bc	51	75	8	5	3	-	2-3	4-6	1500	0	*
Tacksod Point	1013·1	-6	W	6	pr	55	85	7	6	-	-	10	10	450	1	4
Malin Head ...	1008·9	-8	NW	5	pr	53	92	6	9	-	-	9	9	1500	0	4
Aldergrove ...	1010·6	-16	SW	4	dd	53	92	5	-	2	-	10	10	450	1	*
Birr Castle ...	1015·4	-4	W	2	r	53	97	7	6	2	-	7-8	10	800	1	*
Valentia Obsy. †	1018·7	-4	SWN	3	c/p	55	85	8	5	2	-	9	10	1500	1	3
Roches Point	1018·3	-4	W	3	c/d	55	92	8	5	1	-	7-8	9+	1500	0	2

PAST 24 HOURS.

Stations.	Temperature. Max. Day 7h–18h °F. (31)	Temperature. Min. Night 18h–7h °F (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 1st Hrs. (36)
London (Kew)	65	49	35	Tr	-	8·7
Croydon ...	65	45	37	Tr	-	6·9
S. Farnborough	66	39	31	0·2	-	7·5
Boscombe Down	64	43	38	-	-	11·4
Calshot (Sthmtn.)	66	45	41	0·2	-	9·2
Lympne ...	65	44	41	1	3	8·9
Manston ...	66	43	35	-	1	8·9
Shoeburyness ...	68	45	33	0·2	Tr	7·6
Felixstowe ...	69	48	44	8	-	7·2
Gorleston ...	64	47	46	-	-	11·2
Mildenhall ...	65	41	35	3	Tr	8·0
Cranwell ...	63	43	41	7	-	8·0
Birmingham ...	61	47	42	-	-	12·6
Upper Heyford	65	42	34	Tr	-	*
Ross-on-Wye	64	47	40	0·3	-	9·7
Hartland Point	57	54	51	-	-	11·3
Bristol ...	65	49	38	Tr	0·3	10·4
Portland Bill ...	61	50	*	0·2	-	*
Plymouth ...	59	48	45	Tr	-	10·8
The Lizard ...	61	53	*	0·1	0·1	12·6
Scilly (St. Mary's)	61	53	*	-	0·5	11·9
Guernsey ...	60	50	45	-	-	12·3
Pembroke ...	58	53	*	2	-	12·1
Holyhead ...	59	52	50	Tr	2	12·2
Chester (Sealand)	58	49	39	-	Tr	14·6
Manchester ...	61	40	34	Tr	-	11·0
Spurn Head ...	68	48	*	0·1	-	9·6
Catterick ...	58	41	34	2	-	2·3
Tynemouth ...	55	46	42	0·2	-	4·3
St. Abbs Head	55	44	*	Tr	Tr	*
Leuchars ...	58	43	35	1	1	8·2
Renfrew (Abbotsl.)	62	47	37	-	1	11·7
Eskdalemuir ...	60	37	30	-	2	8·3
Point of Ayre...	62	44	*	-	3	13·5
Tiree ...	57	51	49	-	4	13·5
Stornoway ...	57	50	*	0·2	9	2·7
Dalwhinnie ...	50	40	34	0·3	0·6	3·6
Aberdeen ...	57	47	42	Tr	Tr	6·6
Wick ...	56	44	*	0·1		*
Lerwick ...	53	47	*	Tr	0·5	7·2
Tacksod Point	61	53	*	Tr	4	*
Malin Head ...	57	51	*		5	11·9
Aldergrove ...	61	50	45	0·2	4	7·8
Birr Castle ...	64	52	51	Tr	9·6	9·6
Valentia Obsy. †	59	53	51	0·1	2	6·3
Roches Point	61	53	*	0·5	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	bccy	cbcypr	cbcbw	65	49	35	Tr	-	8·7	*	*	8
CROYDON ...	217	bcy	bccyor	cybrm	65	45	37	Tr	-	6·9	*	*	9
GREENWICH (Royal Observatory)...	149	bcy	cy	cpbc	66	44	32	-	0·3	6·8	52	63	8
CITY (Bunhill Row) ...	—				*	*	*	*	*	7·4	*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*	68	47	41	0·4		7·1	65	75	*
REGENTS PK. (Botanic Gardens)‡...	168	*	*	*	67	47	40	-	-	7·7	57	74	*
CAMDEN SQUARE ...	110	bc	bc	*	69	48	42	-	-	*	*	58	*
KENSINGTON ...	80	bc	bc	*	67	47	41	Tr	2	7·7	At 18h 41	68	*
HAMPSTEAD OBSERVATORY ...	450	bc	bcp	bc	67	45	43	Tr	-	9·2		71	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 2nd

SOUTH KENSINGTON.

Max.	Time.	Min.	Time.
40·3	whole period		

KEW OBSERVATORY.

Max.	Time.	Min.	Time.
0·1	21-24h 1st.	<0·1	2-5h. 2nd

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 1st July: Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. 2nd July: 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 ...	1016·1	WNW	3	c	61	1022·1	W	2	bc	54	63	50	2	7
BRUSSELS ...	1013·6	W	3	c	52	1019·9	W	1	c	54	63	48	3	3
BERLIN ...	1006·9	SSW	5	bc	68	1014·6	WSW	4	c	59	68	54	1	-
ZÜRICH ...	1014·3	WNW	3	c	64	1021·0	W	3	c	52	66	48	-	8
ROME ...	1014·0	SSW	2	b	75	1015·8	S	2	bc	75	*	*	-	-

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 3rd July, 1939

No. 28347

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

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)...	1019.0	+2	W'S	4	cjp	62	55	8	7	7	-	7-8	10	4000
	Croydon ...	1019.1	+2	SW'W	3	c	63	55	9	4	7	-	4-6	9+	4000
	S. Farnborough	1018.8	-2	SSW	4	c/pr	63	65	8	8	7	-	4-6	9+	2500
	Boscombe Down	1019.3	0	WSW	3	c/r	60	85	8	8	2	6	7-8	9+	2500
	Calshot (Soton.)	1020.0	+4	SW'S	5	pr	61	75	8	8	3	-	4-6	9+	1500
	Lympne ...	1019.6	-2	SW	5	c	61	75	8	8	6	3	4-6	7-8	2500
	Manston ...	1019.0	-2	SW'W	5	c	62	55	8	8	6	3	4-6	9	4000
2	Shoeburyness ...	1018.2	-4	WSW	3	c	64	55	8	8	7	-	7-8	9+	4000
	Felixstowe ...	1018.0	-2	WSW	5	c	66	45	8	6	6	8	7-8	7-8	1500
	Gorleston ...	1016.5	-6	SW'W	4	c	63	55	7	7	-	1	7-8	9	2500
	Mildenhall ...	1016.7	-2	WSW	5	c	62	75	8	8	2	-	7-8	10	2500
	Cranwell ...	1015.0	-4	WSW	4	c	59	65	8	8	7	-	7-8	10	2500
3	Birmingham ...	1016.7	0	SW	4	ir₀	59	75	8	9	2	-	7-8	10	1500
	Upper Heyford	1017.9	-2	W'S	4	c/pr	59	75	9	9	7	-	2-3	9+	1500
4	Ross-on-Wye ...	1017.9	0	W'S	4	c	59	75	8	8	-	-	10	10	2500
5	Hartland Point	1019.4	+4	W	5	c/pr	56	85	8	8	2	-	7-8	9	1500
	Bristol ...	1019.1	+2	W	5	c	60	65	8	8	7	-	4-6	10	2500
	Portland Bill ...	1020.3	+6	WSW	4	c	58	85	8	5	-	-	10	10	4000
	Plymouth ...	1021.0	+2	SW	5	c	59	75	8	9	7	1	7-8	9+	1500
	The Lizard ...	1022.1	+4	WSW	3	c	59	75	8	8	2	-	7-8	9+	2500
	Scilly (St. Mary's)	1021.5	-2	W'S	4	c	62	85	8	8	4	4	2-3	7-8	1500
	Guernsey ...	1022.8	+26	W'S	4	bc	59	85	8	1	3	8	2-3	4-6	2500
6	Pembroke ...	1018.6	0	W	5	cq	57	92	7	8	-	-	10	10	1500
7	Holyhead ...	1014.3	0	SW'S	4	r₀r₀	55	92	7	5	2	-	4-6	10	800
	Chester (Sealand)	1015.0	+2	WSW	4	rr₀	58	85	7	6	2	-	7-8	10	2500
8	Manchester ...	1014.3	-2	WSW	4	r₀r₀	56	85	6	6	2	-	9+	10	800
10	Spurn Head ...	1014.0	-8	SW	4	ir₀	61	75	6	5	1	-	4-6	10	2500
	Catterick ...	1010.9	-6	W'S	4	c/r	59	75	8	5	7	-	7-8	9+	1500
	Tynemouth ...	1008.9	-8	WSW	4	c	61	75	7	8	-	-	7-8	7-8	1500
11	St. Abbs Head...	1006.1	-14	W	5	c/pr	61	65	9	8	6	-	7-8	9	1500
	Leuchars ...	1004.7	-14	WSW	5	bc	63	65	9	8	7	-	4-6	4-6	2500
12	Renfrew (Abbotsl.)	1007.7	-2	W'S	5	c	60	75	7	8	6	-	4-6	7-8	1500
	Eskdalemuir ...	1008.2	0	WSW	5	c	58	75	8	5	-	-	9+	9+	1500
	Point of Ayre ...	1011.5	+2	W'S	5	c	56	92	8	8	-	-	10	10	1500
13A	Tiree ...	1007.0	+10	W'N	4	c	59	75	8	8	-	-	7-8	7-8	2500
13B	Stornoway ...	1003.3	+14	WNW	6	c/pr	52	85	7	3	-	-	9+	9+	800
15	Dalwhinnie ...	1004.7	+2	SW	6	ir	58	75	7	4	7	1	4-6	7-8	2500
	Aberdeen ...	1003.6	-14	S'W	3	c/r	59	75	6	9	7	-	2-3	7-8	1500
	Wick ...	1001.7	-10	SSW	3	c/pr	57	85	8	9	7	-	4-6	10	1500
16	Lerwick...	1002.4	-14	S	5	c	54	85	8	5	7	-	4-6	7-8	1500
17	Blacksod Point...	1013.2	+2	W	5	c	59	75	8	9	-	-	9+	9+	800
18	Malin Head ...	1009.6	+6	W	4	c	55	85	8	8	4	-	4-6	7-8	1500
	Aldergrove ...	1010.8	+2	WSW	5	c	60	75	9	8	-	2	7-8	9+	1500
19	Birr Castle ...	1014.9	0	W	3	c	58	85	8	5	7	-	4-6	9	1500
20	Valentia Obsy.†	1018.4	-2	W'S	4	c	59	75	8	5	2	-	9	10	2500
	Roches Point ...	1017.8	-2	WNW	4	c	60	85	9	8	1	-	7-8	9+	1500

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

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)	1019.1	+6	SW'W	3	c	61	65	8	8	2	-	7-8	9+	2500	0	*
Croydon	1019.3	+4	SW	3	c	60	85	8	9	7	-	4-6	9+	4000	1	*
S. Farnborough	1019.2	+2	SW	3	c/r	62	65	8	7	3	1	7-8	9	2500	0	*
Boscombe Down	1020.0	+4	W'N	4	c	59	75	8	8	7	-	7-8	9+	2500	1	*
Calshot (Soton.)	1020.0	0	SW	5	c	63	75	8	7	3	1	4-6	7-8	1500	0	3
Lympne	1020.0	+4	SW'W	4	c	58	75	8	4	6	-	2-3	7-8	2500	0	§4
Manston	1019.4	+4	SW	5	c/pr	60	75	8	8	6	-	7-8	9	2500	1	*
Shoeburyness	1018.6	+4	SW	4	c/pr	61	75	8	8	7	-	7-8	9	4000	0	*
Felixstowe	1018.2	+4	WSW	5	c/r	60	75	8	8	6	8	4-6	7-8	1500	0	3
Gorleston	1016.5	0	SW	4	c	62	65	7	5	-	-	9	9	2500	0	2
Mildenhall	1016.7	+2	WSW	4	c	62	75	8	8	7	6	4-6	9+	2500	1	*
Cranwell	1015.2	+6	W'S	5	c	61	65	8	5	7	8	4-6	9+	2500	1	*
Birmingham	1017.0	+4	SSW	3	ir	57	85	8	6	2	-	4-6	10	1500	1	*
Upper Heyford	1018.2	+4	W'N	4	c	59	75	9	5	7	-	7-8	9+	1500	1	*
Ross-on-Wye	1018.0	+4	W'S	4	c	58	75	8	5	-	-	9+	9+	2500	0	*
Hartland Point	1018.9	-2	W	5	c	57	85	8	8	2	-	7-8	9+	1500	0	3
Bristol	1019.4	+2	W	4	c	59	65	8	5	7	8	7-8	9+	1500	0	*
Portland Bill	1020.3	+8	WSW	4	c	57	92	8	5	-	-	4-6	10	4000	1	3
Plymouth	1020.7	-2	SW'W	5	c	58	85	8	8	4	7	4-6	9+	2500	0	2
The Lizard	1022.0	-4	SW	4	c	58	85	8	8	7	-	7-8	9+	2500	0	2
Scilly (St. Mary's)	1021.0	-6	W'S	4	c	60	85	8	8	7	3	2-3	7-8	1500	0	3
Guernsey	1022.8	-2	W'N	4	bc	58	85	8	1	-	8	1	4-6	2500	0	3
Pembroke	1018.6	0	W'S	5	c	57	97	7	5	7	1	4-6	7-8	2500	1	3
Holyhead	1014.8	+4	SW'S	4	ir₀	56	85	7	6	2	-	4-6	10	1500	1	2
Chester (Sealand)	1015.3	+4	WSW	3	c/r	58	75	8	5	2	-	9	10	4000	1	*
Manchester	1014.9	+4	SW	4	r₀r₀	57	85	7	6	2	-	9	10	800	1	*
Spurn Head	1014.2	0	WSW	4	c/pr	59	75	6	6	8	7	4-6	10	1500	1	3
Catterick	1011.6	+6	SW'W	3	c	58	75	8	5	7	8	4-6	9+	1500	1	*
Tynemouth	1009.7	+8	W	4	c	61	75	8	8	-	-	9+	9+	1500	1	2
St. Abbs Head	1006.8	+4	W	6	cq	59	65	9	8	4	1	4-6	7-8	2500		
Leuchars	1006.5	+18	WSW	4	cjp	60	65	9	8	7	9	7-8	9	1500	6	*
Renfrew (Abbotsl.)	1009.6	+14	W	4	c	57	75	9	8	6	-	7-8	7-8	1500	0	*
Eskdalemuir	1010.0	+12	WSW	4	c	55	75	8	5	3	-	9	9+	1500	1	*
Point of Ayre	1012.4	+2	W	5	c	59	75	8	8	1	-	4-6	7-8	2500	1	3
Tiree	1009.4	+10	WNW	3	bc	55	75	8	8	3	-	2-3	4-6	2500	0	3
Stornoway	1007.5	+16	NW	4	c	52	65	8	5	7	-	7-8	9+	2500	1	2
Dalwhinnie	1007.6	+18	NW	5	c	54	65	8	4	6	1	4-6	9+	4000	0	*
Aberdeen	1005.1	+18	WNW	5	bc	61	45	8	8	-	9	2-3	4-6	2500	1	1
Wick	1003.5	+16	WNW	5	cq	50	85	8	8	7	-	4-6	7-8	1500	1	2
Lerwick	1001.4	-6	S	4	c	52	92	7	8	7	-	4-6	9	800	1	*
Blacksod Point	1013.6	0	W	5	c	57	75	8	3	-	-	7-8	7-8	1500	1	3
Malin Head	1010.9	+10	W	4	cjp	55	85	6	9	-	-	9+	9+	1500	0	3
Aldergrove	1011.9	+6	W'S	4	c	58	65	9	5	7	-	7-8	9+	2500	1	*
Birr Castle	1015.0	0	W	4	c	59	75	8	3	7	-	2-3	9	1500	1	*
Valentia Obsy.†	1017.8	-6	SW'W	3	c	58	75	8	8	3	-	7-8	9+	2500	0	2
Roches Point	1017.5	-2	WNW	3	c	59	85	8	8	-	-	7-8	7-8	2500	1	2

PAST 24 HOURS. — Weather.

Stations	7h.—13h. 2nd (37)	13h.—18h. 2nd (38)	18h 2nd to 1h. 3rd (39)	1h.—7h. 3rd (40)
London (Kew)	bcccy	cypr₀c	cbc	c
Croydon	bccvy	cPRqjp	c⦶ bcw	bcwc
S. Farnborough	bcvcjpr₀c	cid₀ir₀c	cir₀bc	bccbc
Boscombe Down	bcccr₀r₀c	ccpr₀c	c	cbc
Calshot (Soton.)	cbccpr₀	cpr₀cbc	bc	bcbcm₀
Lympne	bccpr₀	bccpr₀	cbcm₀w	bccm₀w
Manston	bcycpr₀	cycpr₀	cpr₀bcw	bcc m₀w
Shoeburyness	bcwcy	cyp₀c	c	c
Felixstowe	bcy	ccir₀c	cb	bc
Gorleston	bccy	cpr₀c	c	c
Mildenhall	bcmbcc	cPRc	ccm₀	ccm₀cw
Cranwell	cm₀pr₀c	cpr₀c	cpr₀c	cid₀c
Birmingham	coir	cir₀	cir₀	c
Upper Heyford	bccpr₀c	ccr₀c	c	cv
Ross-on-Wye	ccp₀c	c	cp₀c	c
Hartland Point	cp₀	p₀c	p₀c	cbcc
Bristol	cpr₀c	cpr₀cy	cm₀d₀pr₀	cwbcb
Portland Bill	oc	c	c	cbc
Plymouth	qr₀s,pr₀c	c	c,d₀df,pr	ccir₀bc
The Lizard	c	cbcc	cprbc	pr₀bc
Scilly (St. Mary's)	cp₀qc	c	cbcw	cp₀qc
Guernsey	bcc	bc	bcw	cbc
Pembroke	bccq	cq	c	c
Holyhead	r₀r₀c	cr₀irc	ir₀c	c
Chester (Sealand)	cr₀r₀rr	cr₀r₀rr	c	c
Manchester	r₀rrr₀m	rrm₀r₀r₀	c	c
Spurn Head	cir₀	cpr₀	c	c
Catterick	ocir₀c	ccir₀c	c	c
Tynemouth	cpc	c	c	c
St. Abbs Head	pr₀c	cq	c	c
Leuchars	cir₀cbc	bcycjp	cbc	bccbc
Renfrew (Abbotsl.)	mjrir₀pr	pr₀bcc	c	cm₀rdd₀
Eskdalemuir	r₀r₀Rc	cpr₀c	cpr₀c	cprc
Point of Ayre	rrr₀c	r₀r₀c	c	c
Tiree	c	cbc	bcpR	c
Stornoway	cPR	cir	c	c
Dalwhinnie	cir	ciR		cir
Aberdeen	cir₀	cPRc	bcyb	b,cbcz₀
Wick	r₀rpr	cPRc	cpr₀qc	cbc
Lerwick	bcc	cprir	cirq	cir
Blacksod Point	prcq	c	prc	pr₀c
Malin Head	cpr₀c	cprc	cpr	cpr₀c
Aldergrove	cddm₀c	c	c	c
Birr Castle	circ	c	c	c
Valentia Obsy.†	cpr₀c	cpr₀c	c	c
Roches Point	cpr₀c	cpr₀c	cbc	bcc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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.*

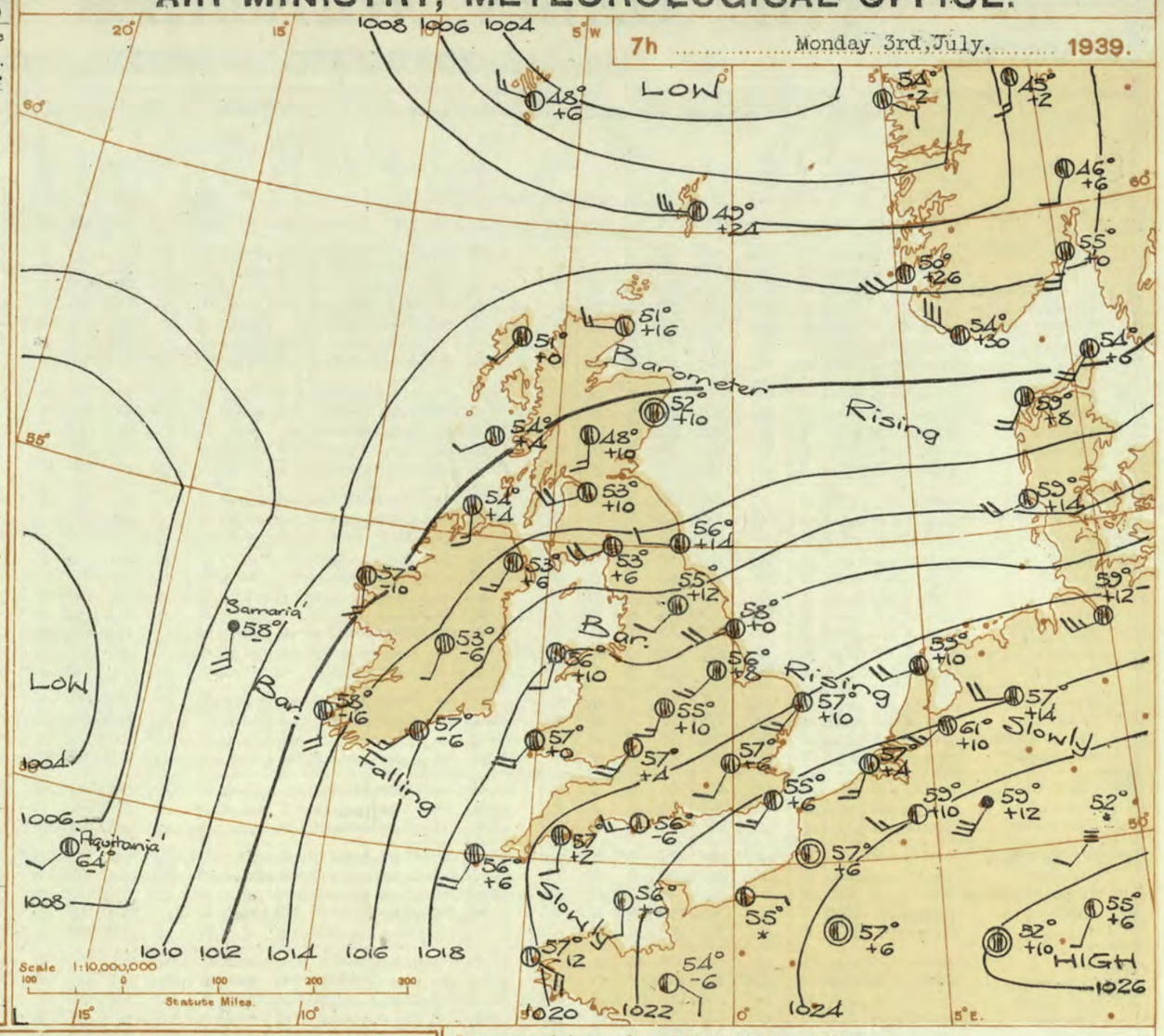
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 2nd July 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 1st to 9h. 2nd	Temperature. (°F) Max. 9h.–17h. 2nd	Rainfall. (mm.) Night. 17h. 1st to 9h. 2nd	Rainfall. (mm.) Day. 9h.–17h. 2nd	Sunshine. (Hrs.) Sunrise to 17h. 2nd	Sunshine. (Hrs.) Sunrise to Sunset. 1st
1	Tunbridge W.	bcc	copoc	39	64	Trace	Trace	6·8	6·0
	Bournemouth	bbcc	cbcc	48	65	-	-	7·0	8·5
	Ventnor ...	bbcb	bbc	50	61	-	-	11·5	9·4
	Southsea ...	bcb	bopbc	50	68	-	Trace	8·1	10·1
	Bognor Regis	bc	bc	47	61	-	-	6·7	8·1
	Littlehampton	bcc	cbc	46	62	-	-	6·3	10·6
	Worthing ...	c	c	47	64	Trace	-	6·3	11·2
	Brighton ...	bccbc	cbc	49	61	0·1	-	5·8	8·2
	Eastbourne† ...	cbc	bcc	50	63	-	-	11·4	8·7
	Hastings† ...	bc	bcc	48	63	0·5	-	9·3	6·2
	Folkestone ...	bccpc	ccrc	48	65	1	Trace	7·7	7·2
	Dover ...	bc	bc	47	63	0·3	-	7·3	5·2
	Deal	bbcc	c	40	69	3	-	7·0	11·2
	Ramsgate ...	c	rc	48	63	6	Trace	6·9	9·6
	Margate ...	bc	bccbc	49	65	4	-	6·7	9·9
2	Southend ...	cbcc	ocrc	47	67	-	Trace	5·2	9·2
	Clacton-on-Sea	bc	bccp	45	65	4	Trace	6·4	5·8
	Dovercourt ...	bc	bcc	46	65	-	-	6·7	7·5
	Lowestoft ...	bcbbc	bccpr	44	67	-	Trace	7·5	10·5
	Skegness ...	bc	ooro	42	62	-	1	2·9	5·6
	Mablethorpe...	obc	bccor	42	62	-	2	2·2	5·4
	Cleethorpes ...	bccr	rcr	44	63	-	Trace	3·3	8·3
3	Leamington S.	oc	bcco	44	63	-	-	2·2	11·9
4	Cheltenham†	c	cp	48	61	-	Trace	2·2	10·8
5	Bath	cbc	c	49	63	Trace	Trace	3·0	11·9
	Weymouth ...	bc	bc	50	63	-	-	4·2	10·3
	Jersey ...	bc	bc	52	63	-	-	8·8	7·2
	Torquay ...	wcbcp	cq	47	63	-	Trace	1·3	10·4
	Falmouth ...	bccvc	b	52	64	0·2	-	4·3	12·1
	Penzance ...	pbcc	cbcc	52	65	2	-	4·9	11·4
	St. Ives ...								
	Bude... ...	cbc	c	55	62	-	-	3·9	11·4
	Ilfracombe ...	bccbc	cpbcp	54	62	-	0·2	5·7	10·4
6	Aberystwyth	cir	cir	55	59	-	1	0·0	11·0
7	Llandudno ...	r	rc	53	58	2	1	0·0	14·2
	Colwyn Bay...	pop	popc	50	59	0·5	1	0·0	12·1
	Rhyl	cir	crr	48	59	1	1	0·0	12·2
8	Wallasey ...	ir	rrc	50	58	0·5	3	0·0	14·3
	Southport ...	orro	oiro	53	58	2	1	0·0	14·8
	Blackpool ...	orr	cop	54	58	3	2	0·0	15·4
	Morecambe ...	odr	cdr	49	58	3	4	0·0	14·4
9	Ilkley... ...	odo	odrr	42	59	+	1	0·4	3·5
	Harrogate ...	cp	cp	43	59	0·5	0·1	0·4	4·2
10	Berwick-on-T.	orc	rbc	44	64	Trace	Trace	4·0	5·1
11	Dunbar ...	cpr	cpr	45	64	0·3	Trace	4·6	9·3
12	Troon... ...	ropoc	coc	50	57	4	0·3	0·8	13·3
	Douglas ...	cr	bcir	47	58	5	1	0·2	11·8

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.

AIR MINISTRY, METEOROLOGICAL OFFICE.



Districts.	Forecasts for the 24 hours commencing 12 noon, G.M.T. 3rd July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Freshening south wind; mainly fair; somewhat warmer.
4 W. Midlands ... 5 S.W. England 6 South Wales ...	Freshening south wind, strong locally, veering southwest; fair at first; occasional rain later; average temperature.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Freshening south wind, strong locally, veering southwest; bright intervals and local showers at first; occasional rain later; rather cool.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Freshening southeast to south wind; bright intervals and local showers at first, occasional rain later; rather cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Freshening south to southeast wind, veering southwest; occasional rain; local thunder later; cool.

L.D.

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

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 centred over Switzerland is moving east, and a deepening depression west of Ireland will move northeast. Weather will be fair at first apart from local showers, but more general rain is expected later in western districts extending northeastwards.

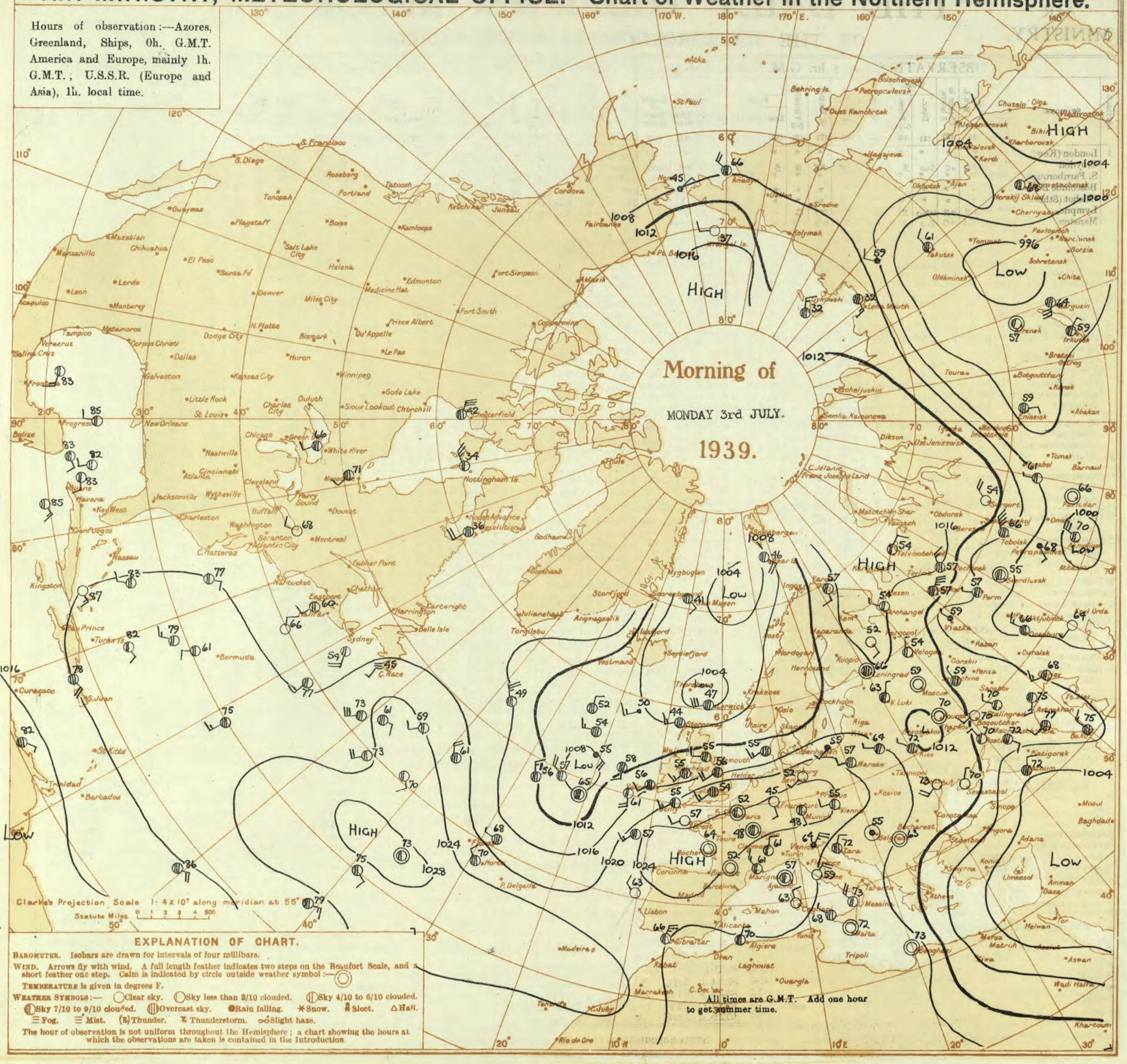
FURTHER OUTLOOK.

Unsettled, except perhaps in the Southeast.

Forecasts issued at 0930 G.M.T.

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

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

Monday 3rd July, 1939.
No 28347

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0-12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0-9 (8)	Cloud. Form. Low (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0-10 (12)	Cloud. Amount. Total 0-10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1020.6	+2	SW	3	c	54	92	8	5	3	-	2-3	7-8	4000
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Odiham (Sthmtn.)	8	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lympne ...	346	1021.7	+2	WSW	2	b	51	97	6	-	-	1	0	1	-
	Manston ...	154	1021.4	+6	SW	3	bc	51	92	7	-	4	-	0	4-6	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1018.2	+6	SW'W	2	c	56	75	6	5	-	-	9+	9+	2500
	Mildenhall ...	19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1019.7	0	WSW	5	c	56	85	8	8	2	-	7-8	9	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1021.1	-4	W	4	c	56	85	8	5	7	-	7-8	10	4000
	Plymouth ...	82	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	The Lizard ...	240	1021.7	-6	SSW	3	bc	54	85	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	1021.3	-6	SW'W	3	bc	55	92	8	3	5	-	1	2-3	1500
	Guernsey ...	175	1023.2	0	WSW	1	bc	53	97	8	-	1	8	0	2-3	-
6	Pembroke ...	142	1018.6	+2	W'S	5	c	56	92	8	8	-	-	7-8	7-8	2500
7	Holyhead ...	26	1016.1	+6	SW	3	c	55	85	7	5	7	-	4-6	9+	4000
	Chester (Sealand)	16	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1016.0	+8	SW'W	4	c	56	85	7	5	9	-	7-8	10	2500
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1013.0	+10	W	2	c	55	86	8	8	-	-	9+	9+	1500
11	St. Abbs Head	280	1011.2	+16	W	4	c	51	85	8	8	6	-	4-6	9+	2500
	Leuchars ...	36	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12	Renfrew (Abbots I.)	19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1014.4	+6	WSW	3	c	53	92	8	-	4	7	0	7-8	-
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1010.5	+6	WSW	3	c	44	85	8	5	4	-	4-6	7-8	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1008.6	+20	WSW	3	c	42	97	8	5	7	8	4-6	7-8	1500
16	Lerwick ...	156	1002.8	+14	W	6	c/r	47	92	7	8	2	-	7-8	10	800
17	Blacksod Point	18	1013.3	-4	W	3	c	54	85	8	5	-	-	10	10	1500
18	Malin Head ...	84	1012.4	+2	WSW	3	c/pr	52	92	7	4	-	-	9	9	1500
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1016.3	-6	SW	2	c	56	92	7	1	-	-	9+	9+	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1021.5	+12	SW	3	c	57	85	8	5	-	-	9	9	4000	0	*
	Croydon ...	1021.5	+6	SW'S	2	c	57	85	8	5	-	1	9	9+	5700	1	*
	S. Farnborough	1021.7	+8	SSW	3	bc	57	85	8	1	-	1	4-6	4-6	2500	0	*
	Boscombe Down	1021.5	+6	SW	3	bc	55	85	8	7	4	1	2-3	4-6	2500	0	*
	Odiham (Sthmtn.)	1021.6	+2	SSW	4	c	60	85	8	8	-	-	7-8	7-8	1500	0	2
	Lympne ...	1022.6	+6	SW	3	c	55	97	7	9	-	-	9+	9+	800	0	3
	Manston ...	1022.4	+8	SW	3	c	57	92	7	5	-	-	9+	9+	5700	1	*
2	Shoeburyness ...	1021.7	+2	SW	3	c	58	85	8	5	-	-	9+	9+	5700	0	*
	Felixstowe ...	1021.6	+8	WSW	4	c	57	85	7	5	-	-	9+	9+	5700	0	3
	Gorleston ...	1019.8	+10	SW	3	c	57	75	7	5	-	-	9+	9+	2500	0	1
	Mildenhall ...	1020.2	+8	SW'S	3	7c	57	85	6	5	-	-	10	10	5700	1	*
	Cranwell ...	1018.5	+8	SW	3	c	56	85	7	-	3	-	0	9	-	1	*
3	Birmingham ...	1019.8	+10	SSW	3	c	55	85	8	5	-	-	9+	9+	5700	1	*
	Upper Heyford	1020.5	+6	SW'S	3	c	55	85	9	5	4	5	9	10	4000	0	*
4	Ross-on-Wye	1019.5	+4	SW	4	bc	57	85	7	5	8	9	4-6	4-6	4000	0	*
5	Hartland Point	1019.3	0	SW	3	c	56	85	8	4	-	3	7-8	7-8	2500	0	3
	Bristol ...	1020.6	-2	SSW	3	bc	56	75	8	2	7	8	1	2-3	2500	0	*
	Portland Bill ...	1021.4	-6	W'S	3	bc	56	92	8	5	-	-	2-3	2-3	4000	0	2
	Plymouth ...	1020.6	+2	S'W	2	c	57	92	8	2	-	2	4-6	7-8	2500	1	2
	The Lizard ...	1020.3	-4	SSE	3	bc	56	92	8	8	7	-	4-6	4-6	2500	1	2
	Scilly (St. Mary's)	1018.8	-6	SSW	4	c	56	92	8	8	4	2	4-6	9+	1500	0	2
	Guernsey ...	1021.9	0	S	4	bc	56	97	8	2	-	1	4-6	4-6	1500	0	2
6	Pembroke ...	1018.7	0	SW	4	c	57	86	7	8	7	3	2-3	7-8	1500	0	2
7	Holyhead ...	1018.0	+10	SSW	2	c	56	85	8	5	-	-	9+	9+	2500	1	2
	Chester (Sealand)	1017.8	+6	SW	1	c	57	75	8	5	-	-	9+	9+	5700	0	*
8	Manchester ...	1017.6	+12	SW	3	c	56	85	7	8	-	-	9+	9+	4000	1	*
10	Spurn Head ...	1018.3	0	SW'W	4	c	58	85	6	5	-	-	9+	9+	2500	0	3
	Catterick ...	1016.3	+12	SW	2	c	55	85	8	9	9	9	4-6	7-8	1500	1	*
	Tynemouth ...	1014.6	+14	W	2	c	56	85	6	8	-	-	9	9	1500	1	1
11	St. Abbs Head	1013.2	+20	WNW	3	c	55	75	9	8	4	1	4-6	7-8	2500	0	2
	Leuchars ...	1012.3	+4	WSW	2	c	54	85	8	5	3	9	4-6	7-8	2500	0	*
12	Renfrew (Abbots I.)	1013.8	+10	W'S	4	c/d	53	92	6	5	2	-	9	9+	800	1	*
	Eskdalemuir ...	1014.3	+6	SW'W	4	c	53	85	7	5	3	-	9	9+	800	1	*
	Point of Ayre ...	1016.0	+6	W	4	c	57	86	8	2	3	-	1	9	2500	0	2
13A	Tiree ...	1011.4	+4	SW'W	1	c	54	85	8	5	-	-	7-8	7-8	2500	0	2
13B	Stornoway ...	1011.0	0	SW	1	c	51	65	8	2	8	-	2-3	7-8	4000	1	1
15	Dalwhinnie ...	1013.2	+10	S	3	c	48	85	8	5	6	-	7-8	10	4000	0	*
	Aberdeen ...	1012.7	+10	-	0	c	52	65	6	-	7	-	0	7-8	-	1	1
	Wick ...	1011.2	+16	W	3	bc	51	65	8	8	6	1	2-3	4-6	2500	1	1
16	Lerwick ...	1008.0	+24	W	5	c/r	49	85	8	8	7	-	4-6	7-8	800	1	*
17	Blacksod Point	1011.9	-10	S	3	c	57	86	8	*	7	-	0	9+	-	1	3
18	Malin Head ...	1012.8	+4	S'W	3	c	54	85	7	8	7	-	4-6	7-8	1500	0	3
	Aldergrove ...	1014.3	+6	SSW	3	c	53	85	8	7	7	-	9+	9+	2500	1	*
19	Birr Castle ...	1015.4	-2	SSW	1	c	53	92	8	5	-	-	2-3	10	2500	1	*
20	Valentia Obsy. †	1013.2	-6	S	4	c	58	85	8	9	7	6	4-6	9+	1500	0	2
	Roches Point	1015.7	-6	SW	3	c	57	92	8	8	3	5	4-6	9	1500	0	2

PAST 24 HOURS.

District	Stations	Temperature. Max. Day 7h–18h °F. (31)	Temperature. Min. Night 18h–7h °F (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 2nd Hrs. (36)
1	London (Kew)	65	55	48	Tr	-	7.0
	Croydon ...	65	53	47	1	-	*
	S. Farnborough	65	51	43	Tr	Tr	6.2
	Boscombe Down	61	50	47	1	-	2.0
	Odiham (Sthmtn.)	65	53	51	Tr	-	7.0
	Lympne ...	63	50	46	0.2	-	7.2
	Manston ...	66	50	47	Tr	Tr	7.3
2	Shoeburyness ...	66	55	49	Tr	-	6.2
	Felixstowe ...	67	55	52	Tr	-	7.4
	Gorleston ...	66	53	52	Tr	-	7.1
	Mildenhall ...	64	52	47	0.4	Tr	6.2
	Cranwell ...	63	52	51	Tr	0.1	2.3
3	Birmingham ...	60	52	49	1	0.1	2.2
	Upper Heyford	62	53	51	0.2	-	*
4	Ross-on-Wye	61	54	52	Tr	Tr	2.1
5	Hartland Point	59	51	50	0.1	Tr	3.6
	Bristol ...	63	52	48	Tr	0.2	5.1
	Portland Bill ...	60	54	*	-	-	*
	Plymouth ...	60	55	51	0.3	0.5	1.6
	The Lizard ...	63	53	*	-	0.4	7.3
	Scilly (St. Mary's)	63	54	*	Tr	Tr	9.0
	Guernsey ...	61	50	44	-	-	11.7
6	Pembroke ...	58	55	*	-	-	1.1
7	Holyhead ...	57	53	51	2	Tr	0.0
	Chester (Sealand)	61	54	52	0.4	-	0.2
8	Manchester ...	57	52	50	5	-	0.0
10	Spurn Head ...	63	55	*	Tr	-	2.9
	Catterick ...	60	54	50	Tr	-	0.8
	Tynemouth ...	63	54	50	1	-	2.4
11	St. Abbs Head	62	46	*	Tr	-	*
	Leuchars ...	66	51	44	-	-	4.6
12	Renfrew (Abbots I.)	61	51	48	2	1	2.4
	Eskdalemuir ...	58	49	48	3	1	1.3
	Point of Ayre ...	60	51	*	5	-	0.5
13A	Tiree ...	59	49	45	1	1	8.0
13B	Stornoway ...	58	43	*	0.6	-	4.9
15	Dalwhinnie ...	59	41	34	1	Tr	5.4
	Aberdeen ...	62	43	38	4	-	5.5
	Wick ...	62	40	*	2	Tr	*
16	Lerwick ...	55	45	*	1	0.6	8.3
17	Blacksod Point	59	51	*	0.2	2	*
18	Malin Head ...	58	50	*	3	2	1.9
	Aldergrove ...	61	51	48	Tr	-	0.4
19	Birr Castle ...	59	48	44	1	-	0.8
20	Valentia Obsy. †	60	55	48	0.1	-	0.7
	Roches Point	62	51	*	0.1	-	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet.	Weather Morning. (24 hrs. ended 9h.)	Weather Afternoon. (24 hrs. ended 9h.)	Weather Night. (24 hrs. ended 9h.)	Temperature. Day Max. °F.	Temperature. Night Min. °F.	Temperature. Min. on Grass °F.	Rainfall. Day. mm.	Rainfall. Night. mm.	Sunshine to Sunset. hrs. Yesterday.	Humidity. 15h. G.M.T. % Yesterday.	Humidity. 9h. G.M.T. % To-day.	Visibility 9h. To-day.
Kew ...	18	bccy	c/pr c	cbcc	65	55	48	Tr	-	7.0	*	*	8
Croydon ...	217	bccy	cPR c/p	c/bcwc	65	53	47	1	-	*	*	*	8
Greenwich (Royal Observatory) ...	149	cy	cpc	cbc	66	53	44	1	-	6.4	81	61	8
City (Cunhill Row) ...	—	*	*	*	*	*	*	*	*	5.9	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	64	56	50	0.5		5.9	68	71	*
Regents Pk. (Botanic Gardens)† ...	168	*	*	*	64	54	50	Tr	-	5.7	75	73	*
Camden Square ...	110	bc	c	*	65	55	50	0.3	-	*	*	60	*
Kensington ...	80	bc	c	*	65	54	50	0.4	-	*	At 18h 65	60	*
Hampstead Observatory ...	450	bcp	bc	bc	65	52	51	Tr	-	5.4	*	70	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 3rd..

South Kensington.

Max.	Time.	Min.	Time.

Kew Observatory.

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

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 2nd July Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. 3rd July 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 ...	*	W	2	c	64	1023.1	-	0	bc	57	70	48	Tr	-
Brussels ...	1020.9	WSW	3	bc	64	1024.1	WSW	3	bc	59	68	50	Tr	-
Berlin ...	1019.2	-	0	c	55	1023.8	SSW	2	7c	59	64	48	5	-
Zürich ...	1023.3	WSW	3	bc	59	1024.0	SSE	1	bc	50	64	46	Tr	-
Rome ...	1017.1	SW	2	b	72	1029.4	ENE	1	bc	68	*	*	-	-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday 4th July 1939

No.28348

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	°F. Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1021·1	−6	SW	4	c	64	55	8	7	–	6	7-8	9	4000
	Croydon	1021·0	−4	SWS	3	c	67	55	8	2	4	6	4-6	9	4000
	S. Farnborough	1020·9	−6	S	3	c	67	45	8	1	–	6	4-6	9	4000
	Boscombe Down	1020·3	−8	S	4	c	65	55	8	2	–	6	2-3	9	2500
	Calshot (Soton.)	1021·5	−2	SSE	3	c	65	65	8	1	–	6	2-3	9	1500
	Lympne	1022·7	+2	SWS	3	c	62	65	9	1	–	3	1	7-8	4000
	Manston	1022·1	0	SW	4	c	66	55	8	2	–	6	2-3	9	4000
2	Shoeburyness	1021·5	−4	SSW	3	c	67	55	8	8	7	6	7-8	9	4000
	Felixstowe	1021·7	+2	S	4	c	66	65	8	8	6	5	7-8	7-8	2500
	Gorleston	1020·7	+2	SSW	2	c	66	55	7	5	3	–	4-6	9+	2500
	Mildenhall	1020·5	−2	SSW	3	c	66	65	8	7	1	–	9	9+	2500
	Cranwell	1019·3	−2	SW	4	c	65	45	8	7	–	8	4-6	9+	4000
3	Birmingham	1019·1	−4	SSW	3	c	63	55	8	7	–	6	7-8	7-8	2500
	Upper Heyford	1020·4	−2	SSW	3	c	63	65	8	8	3	2	2-3	9+	2500
4	Ross-on-Wye	1018·9	−4	SW	4	bc	66	55	8	8	8	1	4-6	4-6	4000
5	Hartland Point	1017·7	−10	S	3	c	63	55	9	7	–	8	4-6	7-8	2500
	Bristol	1019·8	−6	S	3	c	64	55	9	2	3	8	4-6	7-8	2500
	Portland Bill	1020·5	−10	SSW	3	c	59	85	8	2	4	–	4-6	7-8	4000
	Plymouth	1019·3	−10	SE	3	c	60	75	8	8	–	4	7-8	9	2500
	The Lizard	1017·6	−12	SEE	4	c	61	85	8	8	8	–	4-6	7-8	2500
	Scilly (St. Mary's)	1016·3	−16	SES	5	c	61	85	8	8	7	–	4-6	9+	1500
	Guernsey	1020·0	−14	SE	3	c	63	85	9	1	3	–	1	7-8	1500
6	Pembroke	1017·8	−6	SE	3	c	59	85	7	2	7	1	2-3	7-8	2500
7	Holyhead	1016·8	−2	S	4	c	61	75	8	2	7	8	2-3	9	2500
	Chester (Sealand)	1017·8	−4	SSW	3	c	65	45	8	7	7	–	9	9+	2500
8	Manchester	1018·3	+2	S	3	c	61	65	7	8	–	–	9+	9+	2500
10	Spurn Head	1018·9	0	WSW	2	c	66	55	7	5	–	–	9+	9+	2500
	Catterick	1017·2	0	SW	3	c	65	55	8	7	–	8	7-8	9	1500
	Tynemouth	1016·3	+6	W	3	c	62	65	6	8	–	–	9+	9+	1500
11	St. Abbs Head	1014·5	+8	SW	3	c	60	65	9	8	2	–	7-8	10	1500
	Leuchars	1014·3	+6	WSW	2	c	59	75	7	5	2	–	7-8	10	1500
12	Renfrew (AbbotsI.)	1014·6	+2	WSW	3	c	60	65	9	8	7	–	4-6	10	1500
	Eskdalemuir	1015·3	+6	SW	5	c	58	65	8	8	3	–	9	9+	1500
	Point of Ayre	1016·1	0	SW	4	c	65	55	8	4	7	–	4-6	9+	1500
13A	Tiree	1012·5	+4	SSW	4	c	56	85	7	5	–	–	9+	9+	1500
13B	Stornoway	1012·6	+6	S	4	c/pr	51	85	8	5	4	–	7-8	9	2500
15	Dalwhinnie	1014·0	+16	SW	4	c	53	85	7	4	7	–	7-8	10	2500
	Aberdeen	1014·0	+6	SE	3	iro	56	85	6	9	–	–	9+	9+	800
	Wick	1012·7	+6	SSW	3	c/pr	53	85	8	5	7	8	4-6	7-8	1500
16	Lerwick	1010·7	+10	WSW	6	c	51	75	8	8	3	–	4-6	7-8	1500
17	Blacksod Point	1010·2	−10	SE	4	c	58	75	8	8	–	–	10	10	1500
18	Malin Head	1012·7	−2	WSW	1	pr	57	85	8	9	4	–	7-8	9	5700
	Aldergrove	1014·3	−2	SW	3	c/r	58	75	8	8	7	–	1	10	2500
19	Birr Castle	1013·3	−10	SE	4	c	60	75	8	8	1	–	7-8	10	1500
20	Valentia Obsy. †	1010·5	−14	SSE	5	roro	58	85	7	6	2	–	7-8	10	1500
	Roches Point	1013·8	−16	SW	4	c	62	85	8	3	3	5	2-3	7-8	1500

OBSERVATIONS at 18h. G.M.T. 3rd July — 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. 3rd (37)	Weather 13h.—18h. 3rd (38)	Weather 18h. 3rd to 1h. 4th (39)	Weather 1h.—7h. 4th (40)
London (Kew)	1019·3	−14	SWS	2	c	66	55	8	–	–	6	0	7-8	–	0	*	ccy	cy	cyc	c
Croydon	1019·6	−12	SSE	3	c	67	55	8	1	–	3	Tr	9	7200	1	*	cbcc⊕	c⊕y	cyc	cbcc
S. Farnborough	1018·9	−14	SE	3	c	65	55	8	–	3	9	0	7-8	–	0	*	bccv⊕cy	c⊕bccy	cy	cbc
Boscombe Down	1018·3	−14	SE	3	c	63	65	9	4	7	6	2-3	9	4000	0	*	bcc	c	c	cbc
Calshot (Soton.)	1019·1	−18	ESE	5	c	61	75	8	1	7	9	Tr	9	2500	0	3	bcc	cbcc	c	c
Lympne	1020·5	−16	ES	1	c	61	65	8	–	7	–	0	9	–	0	§ 1	cbc	bcc⊕	cbcc	c
Manston	1020·6	−10	SE	1	c	64	65	8	1	–	6	Tr	9	2500	1	*	cy	cyc	c	cbcmo
Shoeburyness	1020·0	−4	S	2	bc	65	55	8	–	9	6	0	4-6	–	0	*	cbccy	cybcy	bcc	cbc
Felixstowe	1020·3	−10	S	4	c	65	65	9	4	7	6	Tr	7-8	5700	0	3	coc	cbcc	cbcc	bccbc
Gorleston	1020·0	−6	SW	4	c	64	65	7	5	3	–	4-6	9	2500	0	2	cy.	cy	c	c
Mildenhall	1018·9	−12	SW	3	bc	66	65	8	7	–	4	2-3	4-6	5700	0	*	cmoc	cbc	bcc	cbc
Cranwell	1018·2	−6	SSW	3	c	64	55	8	7	7	6	Tr	9	4000	0	*	ccy	cbccy	cbcmo	cwpro
Birmingham	1017·4	−12	S	3	c	65	45	8	8	–	8	4-6	9	2500	1	*	•cprobcc	c	c	cbc
Upper Heyford	1018·9	−10	SW	3	c	64	55	9	4	4	6	1	9+	4000	0	*	cbcc	cy	c	c
Ross-on-Wye	1017·2	−14	SW	3	c	63	55	8	1	7	–	1	9+	2500	0	*	bcc	cybcyeyc	c	cbc
Hartland Point	1015·3	−12	SE	3	c	60	65	9	1	6	3	1	9+	4000	0	2	cvy	cv	cvpo	c
Bristol	1018·0	−12	S	3	c	62	55	9	5	3	8	2-3	9	2500	0	*	bbccbcy	bccy	cycro	cbc
Portland Bill	1017·4	−12	SE	4	c	58	85	8	5	7	–	7-8	10	4000	0	3	bcc	c	c	c
Plymouth	1016·2	−22	ESE	3	c/r	61	65	8	2	7	–	Tr	9+	2500	0	0	bcc	cbccciro	arocbc	cidoc
The Lizard	1014·7	−26	E	4	c	58	92	8	8	7	–	7-8	9+	2500	0	3	bcc	c	c	c
Scilly (St. Mary's)	1012·7	−28	SE	4	c	59	92	8	8	7	–	4-6	10	1500	0	3	c	ciroc	ciroc	oroidf
Guernsey	1017·1	−18	SE	3	c	61	75	8	5	3	–	4-6	10	5700	0	3	bcc	c	c	croc
Pembroke	1015·1	−12	S	4	c	58	75	8	8	2	–	4-6	9	1500	0	2	c	c	proqc	promo
Holyhead	1014·9	−16	S	3	c	58	75	9	1	4	7	1	9+	2500	1	1	cbcc	c⊕	⊕crororc	crororc
Chester (Sealand)	1016·0	−14	SSE	3	c	66	55	8	7	7	6	4-6	7-8	4000	0	*	proyc	cy	cy	czoro
Manchester	1016·4	−12	S	3	c	66	45	8	7	3	–	4-6	9+	4000	1	*	ccy	ccy	cyc	cmozo
Spurn Head	1018·3	−4	SE	2	c	60	85	7	5	4	1	4-6	9+	2500	0	1	c	c		c
Catterick	1016·4	−8	SSW	2	c	62	55	7	5	3	–	4-6	9	4000	0	*	ccy	cy	cycmo	cmowiro
Tynemouth	1016·0	−4	SW	3	bc	64	65	7	2	3	1	2-3	4-6	2500	0	1•	c	cbc	bcc	c
St. Abbs Head	1015·1	+4	SW	4	c/pr	59	65	9	4	6	–	4-6	7-8	2500	0	2	c	proc	c	cmopr
Leuchars	1014·8	+2	SSW	4	c	60	65	8	4	7	–	7-8	10	1500	0	*	cidoc	c	c	c
Renfrew (AbbotsI.)	1014·8	−2	SSW	3	iro	59	65	8	4	7	–	7-8	10	2500	0	*	c	cciro	ciroc	cmororoiro
Eskdalemuir	1015·5	−4	SSW	4	c	56	65	8	8	3	6	2-3	7-8	1500	1	*	c	cbc	bcc	cwciro
Point of Ayre	1015·2	−6	SWW	4	c	61	55	8	2	7	5	Tr	9+	4000	0	2	c	c	c	croro
Tiree	1011·8	−6	SSE	2	c	55	85	8	5	1	–	9	10	2500	0	2	c	c		
Stornoway	1012·7	0	S	4	c/pr	52	85	7	8	–	–	10	10	1500	1	2	cpr	cpro	croro	ciro
Dalwhinnie	1014·7	+6	SW	3	c	52	85	7	4	6	–	7-8	10	2500	0	*	c	cir	•	c
Aberdeen	1013·8	−2	SSW	3	c/r	59	65	6	8	–	–	9	9	1500	1	1	bcciro	ciR iro	czo	czo
Wick	1013·1	−2	S	1	c	53	92	7	5	7	8	7-8	9+	2500	1	1	bccpr	cproc	cproc	cdoc
Lerwick	1013·0	+2	SW	5	c	52	75	8	8	3	–	4-6	7-8	1500	0	*	cpr	c	cbc	bcc
Blacksod Point	1006·9	−22	SE	5	ir	55	97	8	6	–	–	10	10	1500	1	4	prc	iR	preq	c
Malin Head	1011·7	−8	SE	1	RR	55	92	5	9	–	–	9+	9+	800	0	1	c	crorc	cbc	
Aldergrove	1012·4	−14	SSE	3	c	58	75	7	5	7	–	7-8	10	2500	1	*	procroc	cciroc	cciroc	ccdoc
Birr Castle	1010·8	−14	SE	4	c	60	75	8	8	1	–	7-8	10	1500	1	*	c	c	c	c
Valentia Obsy. †	1008·2	−14	SSE	5	roro	56	85	7	6	2	–	7-8	10	1500	1	3	croro	croro	roroc	ciroroc
Roches Point	1011·2	−24	S	6	c	59	92	8	6	7	–	4-6	9+	1500	0	4	cprc	cproc	ciroc	oido

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.

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.*

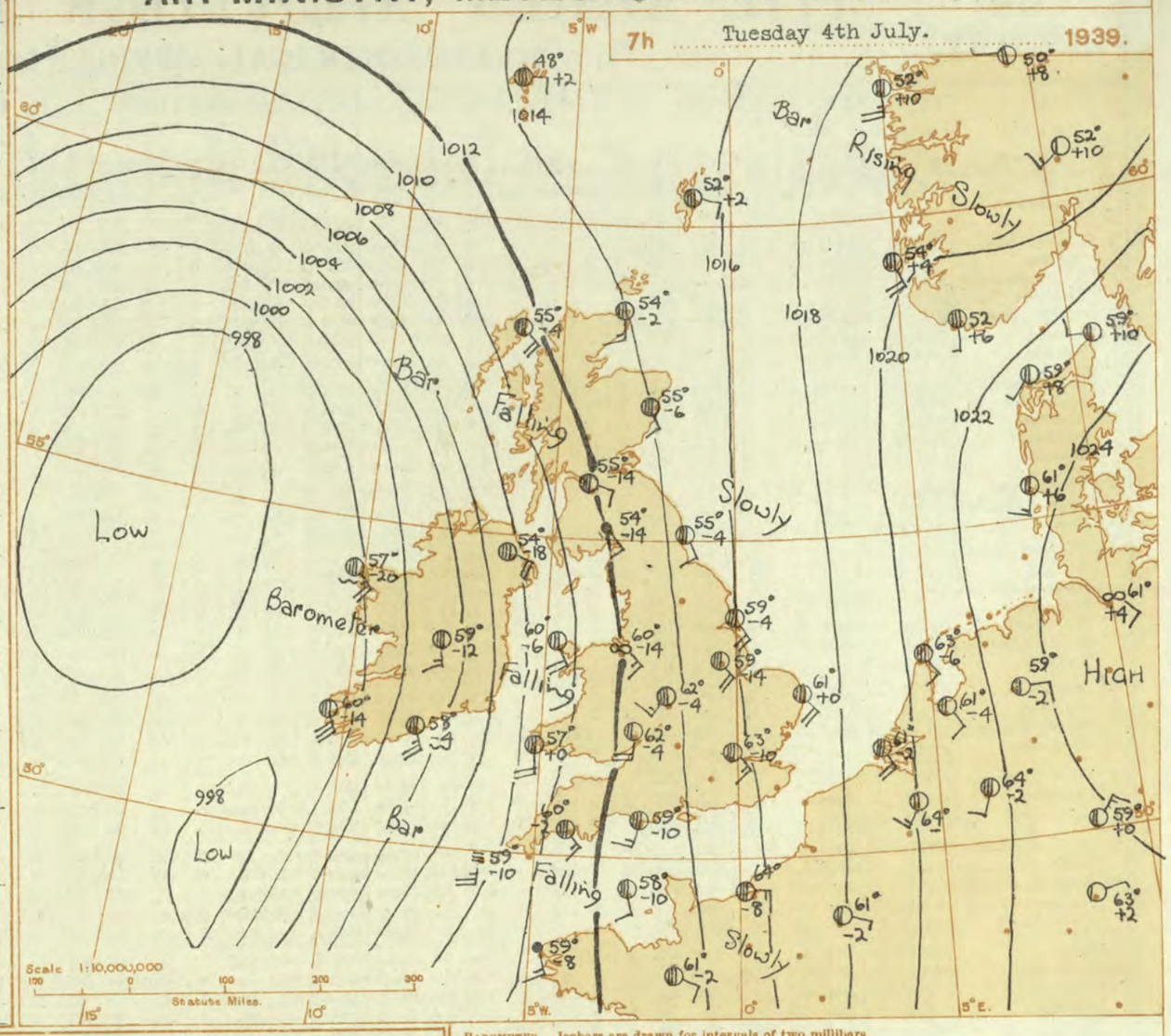
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 3rd July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 2nd to 9h. 3rd	Temperature. (°F) Max. 9h.—17h. 3rd	Rainfall. (mm.) Night. 17h. 2nd to 9h. 3rd	Rainfall. (mm.) Day. 9h.—17h. 3rd	Sunshine. (Hrs.) Sunrise to 17h. 3rd	Sunshine. (Hrs.) Sunrise to Sunset. 2nd
1	Tunbridge W.	bc	bcc	52	69	–	–	10·0	6·9
	Bournemouth	bbc	bcbbc	52	67	–	–	9·8	7·1
	Ventnor ...	cb	bbc	55	71	–	–	9·9	12·7
	Southsea ...	b	bc	56	66	–	–	11·6	9·3
	Bognor Regis	bc	bc	55	63	–	–	9·0	8·4
	Littlehampton	bc	bc	55	64	–	–	10·4	8·2
	Worthing ...	bbc	bc	56	63	–	–	10·3	8·1
	Brighton ...	b	cbbc	57	63	–	–	8·0	5·9
	Eastbourne† ...	bc	bcc	56	63	–	–	9·2	11·8
	Hastings† ...	bbc	bcc	48	64	–	–	9·3	9·6
	Folkestone ...	bc	bcc	53	66	–	–	8·0	8·0
	Dover ...	bc	bc	55	64	–	–	7·1	7·5
	Deal	cbcb	bcc	46	69	–	–	8·6	7·5
	Ramsgate ...	bc	bc	48	65	–	–	6·2	7·1
	Margate ...	bcc	bcc	53	68	–	–	5·3	7·0
2	Southend ...	c	cbcc	55	73	–	–	4·9	5·3
	Clacton-on-Sea	cbc	bccbc	55	66	–	–	2·8	6·8
	Dovercourt ...	bcc	bcc	53	67	–	–	2·8	7·3
	Lowestoft ...	c	c	52	67	–	–	0·5	7·6
	Skegness ...	bc	bc	53	67	–	–	4·5	2·9
	Mablethorpe...	cbcc	bcy	53	68	1	–	2·0	2·2
	Cleethorpes ...	bc	bc	54	68	–	–	2·7	3·3
3	Leamington S.	oc	c	53	69	–	–	4·0	2·2
4	Cheltenham†	bcqc	cbcc	54	67	–	–	6·2	2·4
5	Bath	cbcb	bbcc	54	68	Trace	–	9·6	3·2
	Weymouth ...	bbc	bbc	55	63	–	–	9·3	4·2
	Jersey ...	bc	bcc	51	69	–	–	7·5	10·6
	Torquay ...	wbc	bcc	51	62	0·3	–	9·2	1·4
	Falmouth ...	b	c	51	63	–	–	8·0	4·7
	Penzance ...	cbcbc	cqc	51	63	–	–	5·4	5·2
	St. Ives ...								
	Bude... ...	bc	bcc	47	65	0·5	–	8·2	3·9
	Ilfracombe ...	cbc	bcbbc	53	67	–	–	7·6	5·7
6	Aberystwyth	cbcc	bcc	56	67	–	–	3·3	0·0
7	Llandudno ...	bcc	cbc	54	67	Trace	–	5·3	0·0
	Colwyn Bay...	cbc	bcc	54	67	–	–	4·4	0·0
	Rhyl	cbcc	cbcc	53	68	Trace	–	4·5	0·0
8	Wallasey ...	cbcc	bcc	53	66	Trace	–	3·4	0·0
	Southport ...	c	c	54	66	Trace	–	5·2	0·0
	Blackpool ...	cbc	bccbc	54	66	–	–	6·4	0·0
	Morecambe ...	bcb	bbc	54	63	Trace	–	7·1	0·1
9	Ilkley... ...	obc	cbco	54	66	3	–	2·4	0·4
	Harrogate ...	c	c	53	64	0·3	–	1·4	0·5
10	Berwick-on-T.	c	c	52	63	–	–	3·9	4·4
11	Dunbar ...	cpr.	cpr.	49	62	0·3	Trace	1·4	4·6
12	Troon... ...	cbcoc	copo	52	58	1	Trace	1·4	0·8
	Douglas ...	bc	bc	52	61	–	–	7·0	0·7

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.-9h.



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 July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Moderate southeast wind, fresh locally; bright intervals and a few showers at first; local thunderstorms or thundery rain later; warm.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... ✝	Fresh southeast wind, strong locally, veering south to southwest and decreasing later; mainly cloudy; occasional rain; local thunder; local coast fog; rather warm and close; becoming cooler.
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 Orkney and Shetland	Fresh southeast wind, strong locally, veering south and decreasing; mainly cloudy; occasional rain; local coast fog; local thunder; rather warm and close inland.
17 N. W. Ireland ✝ 18 N. E. Ireland ✝ 19 S. E. Ireland 20 S. W. Ireland ✝	Fresh to strong southeast wind, veering south to southwest and decreasing; cloudy; occasional rain; local thunder; cool.

L.D.

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

GENERAL INFERENCE.

An anticyclone is centred over Eastern Europe and a complex depression west of Ireland. A trough of low pressure is approaching our southwest coasts. There will be occasional rain in the West and North with local thunder. In the East there will be bright intervals and some showers to-day with local thundery rain or thunderstorms to-morrow.

FURTHER OUTLOOK.

Unsettled and probably cooler.

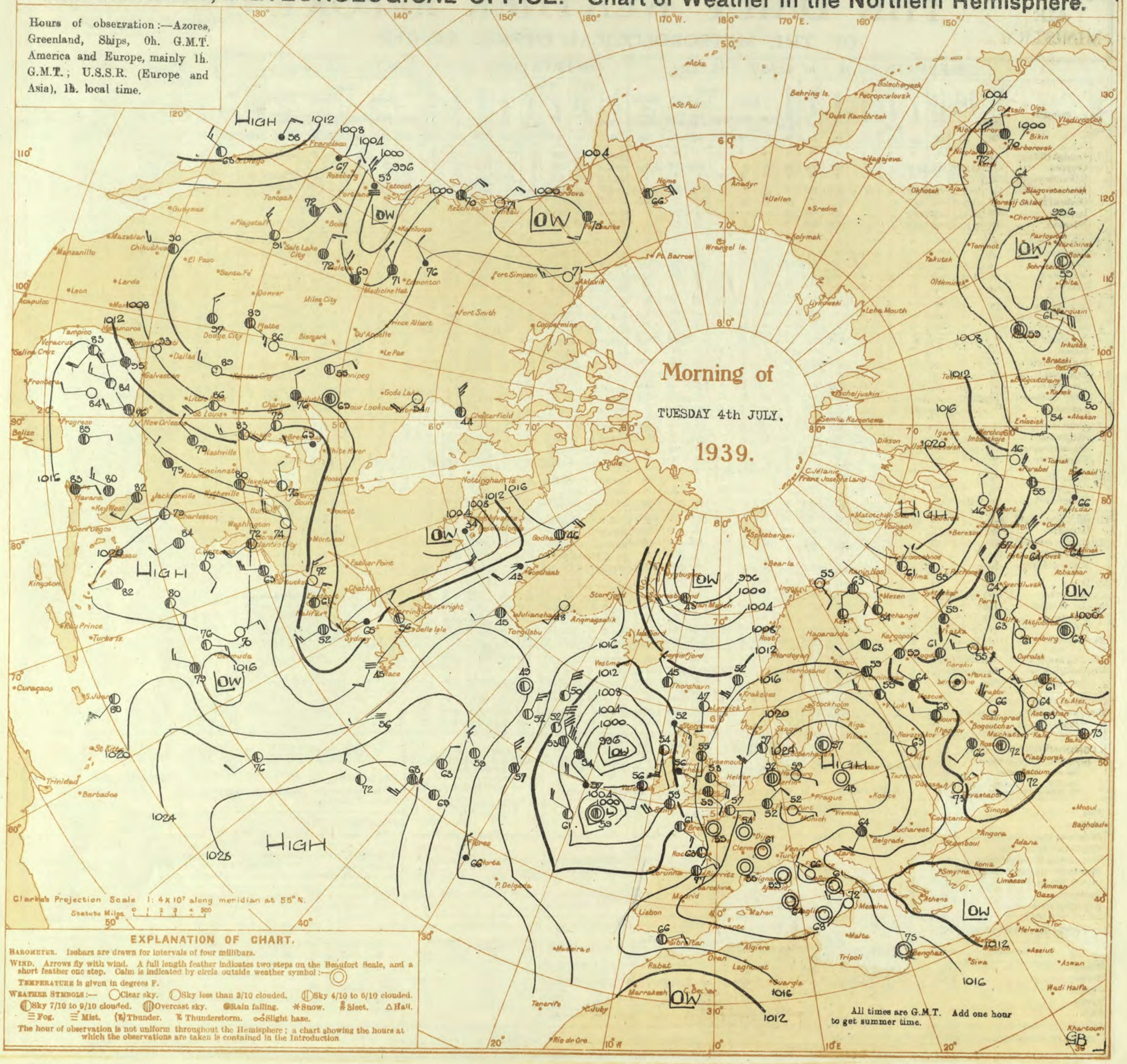
Time of Issued of Gale Warnings.

✝ South Cone hoisted at 1515 G.M.T. on 3/7/39 in districts 13A, 13B, 17, 20 and part of 18, and at 0815 G.M.T. on 4/7/39 in districts 8, 12, part of 7 and remainder of 18.

Forecasts issued at 0930 G.M.T.

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

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 4th July 1939

No. 28348

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

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	1017.7	-14	SE'E	2	c	59	75	8	6	3	-	2-3	7-8	5700
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1015.4	-18	SE'E	4	c	57	85	8	5	7	-	4-6	7-8	4000
	Calshot (Sthmtn.)	8	1015.7	-18	SE	4	c	62	75	8	5	3	-	7-8	9	4000
	Lympne ...	346	1018.6	-12	SE'E	3	c	59	75	8	-	3	-	0	9	-
	Manston ...	154	1018.6	-14	SE'E	3	c	59	85	7	-	3	-	0	9	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1019.6	-4	SE'S	4	c	60	75	8	5	3	-	4-6	9+	2500
	Mildenhall ...	19	1017.9	-10	SE	3	c	66	85	7	5	-	-	9+	9+	7200
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1010.3	-24	E	3	c	59	75	8	3	6	-	2-3	7-8	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1013.1	-20	SE	4	c	59	92	8	5	-	-	10	10	4000
	Plymouth ...	82	1011.8	-18	SE	4	c	61	75	8	5	3	-	4-6	7-8	2500
	The Lizard ...	240	1011.0	-4	SSE	5	c	58	97	8	5	2	-	7-8	10	1500
	Scilly (St. Mary's)	163	1008.1	-4	SW'S	5	c	59	97	8	8	2	-	4-6	10	1500
	Guernsey ...	175	1013.3	-28	SSE	3	c	60	75	9	-	7	8	0	7-8	-
6	Pembroke ...	142	1010.3	-20	SE	7	cq	57	85	7	8	2	-	7-8	10	1500
7	Holyhead ...	26	1012.0	-18	SE'E	3	c	56	85	8	6	2	-	2-3	10	1500
	Chester (Sealand)	16	1014.8	-8	ESE	1	c	57	75	8	-	7	-	0	10	-
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29														
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1015.7	-4	S	1	c	55	92	6	5	-	-	9	9	1500
11	St. Abbs Head	280	1015.0	-6	SE	2	c	53	92	8	8	2	-	4-6	10	2500
	Leuchars ...	36	1014.8	0	-	0	c	55	85	8	5	3	-	9	10	1500
12	Renfrew (Abbots L.)	19	1014.1	-2	SE	3	c	53	85	8	5	7	-	4-6	10	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1013.4	-14	S'E	3	c	56	85	8	4	2	-	1	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1012.4	-4	SE	3	cc	52	92	7	8	-	-	10	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1013.9	+2	SE	1	c/pr	62	97	7	5	7	8	4-6	9+	1500
16	Lerwick ...	156	1015.3	+4	S	1	bc	47	97	8	5	3	-	2-3	4-6	2500
17	Blacksod Point	18	1004.0	-18	SE	5	c	57	75	8	9	-	-	7-8	7-8	1500
18	Malin Head ...	84	1003.8	-12	S	5	bc	54	85	8	4	4	-	2-3	4-6	6700
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1003.5	-10	S	3	c	56	97	7	4	-	-	9	9	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1014.4	-10	SSE	3	c	66	65	8	5	3	1	4-6	9	4000	0	*
Croydon ...	1014.8	-10	SE	3	c	63	75	8	-	9	4	0	9	-	1	*
S. Farnborough	1014.0	-10	SE	2	bc	62	75	7	8	3	-	Tr	4-6	7200	0	*
Boscombe Down	1013.1	-4	SE'S	3	c	62	75	8	5	3	-	4-6	9	4000	0	*
Calshot (Sthmtn.)	1013.6	-2	SE'S	3	c	64	75	8	5	3	1	7-8	9+	5700	0	3
Lympne ...	1016.6	-6	SE'E	3	c	61	75	8	-	9	-	0	7-8	-	0	§2
Manston ...	1016.6	-8	SE'S	3	2_0	60	75	6	5	9	8	2-3	7-8	5700	0	*
Shoeburyness ...	1016.0	-8	SE	3	c	63	75	8	5	9	1	4-6	9	5700	0	*
Felixstowe ...	1017.0	-4	SSW	4	c	62	75	7	5	3	6	2-3	7-8	5700	0	2
Gorleston ...	1018.7	0	SE'S	4	c	61	85	7	-	3	1	0	7-8	-	0	3
Mildenhall ...	1015.4	-10	SE	4	c	63	75	7	8	7	9	4-6	7-8	4000	1	*
Cranwell ...	1014.8	-14	SE	4	c	59	75	7	5	4	-	7-8	7-8	4000	0	*
Birmingham ...	1012.6	-4	SE	3	bc	62	65	8	5	4	1	1	4-6	4000	1	*
Upper Heyford	1013.6	-12	SE'S	4	c	61	75	7	5	3	1	1	7-8	5700	0	*
Ross-on-Wye	1011.5	-4	S	4	bc	62	75	8	7	5	2	Tr	4-6	2500	0	*
Hartland Point	1009.0	-4	SSW	3	c	61	92	8	5	6	4	4-6	7-8	2500	0	3
Bristol ...	1012.1	-4	SE'S	3	c	59	85	8	-	3	8	0	7-8	-	0	*
Portland Bill ...	1012.5	-10	SSW	3	c	59	92	7	5	-	-	10	10	4000	0	3
Plymouth ...	1011.0	-2	SE	3	c	60	92	7	5	-	-	10	10	2500	0	1
The Lizard ...	1008.4	-10	SSE	4	c	59	97	6	5	-	-	10	10	1500	0	2
Scilly (St. Mary's)	1007.1	-10	S	5	f+	59	97	2	-	-	-	10	10	<150	1	3
Guernsey ...	1012.6	-10	SE	2	c	58	92	8	2	1	8	Tr	9+	4000	0	2
Pembroke ...	1008.8	0	S	4	c/pr	57	97	6	9	-	-	10	10	800	1	2
Holyhead ...	1008.1	-6	SSE	4	c	60	75	8	5	-	-	10	10	2500	1	2
Chester (Sealand)	1010.0	-14	SE	3	2_0	60	75	6	-	7	-	0	7-8	-	0	*
Manchester ...	1011.9	-14	ESE	2	2_0	60	65	6	5	4	1	9	9+	4000	1	*
Spurn Head ...	1016.1	-4	SE'S	4	c	59	75	7	5	4	-	7-8	9+	4000	0	3
Catterick ...	1014.0	-10	-	0	c/r	54	85	6	5	7	-	4-6	10	1500	1	*
Tynemouth ...	1014.5	-4	SSE	2	c	55	92	6	5	-	-	9+	9+	2500	0	0
St. Abbs Head	1013.2	-6	SSE	3	c/pr	54	85	7	5	2	-	7-8	10	1500	1	2
Leuchars ...	1013.0	-6	-	0	c	57	85	7	5	7	-	4-6	10	2500	0	*
Renfrew (Abbots L.)	1011.3	-14	E'S	2	c/r	55	85	5	5	2	-	9	10	4000	1	*
Eskdalemuir ...	1012.0	-14	SE'S	2	ir_0	54	85	7	5	2	-	4-6	10	1500	1	*
Point of Ayre ...	1009.2	-22	SSE	5	rr_0	56	92	6	6	1	-	4-6	10	800	1	3
Tiree																
Stornoway ...	1011.5	-4	SE	4	c	55	85	8	5	4	-	4-6	7-8	4000	1	2
Dalwhinnie ...	1012.5	-12	SSE	6	c	53	75	8	4	7	1	4-6	9+	4000	0	*
Aberdeen ...	1013.9	-6	SSE	2	c	55	85	6	5	1	-	Tr	10	800	1	1
Wick ...	1013.1	-2	S	3	c	54	85	7	5	7	-	4-6	7-8	1500	1	1
Lerwick ...	1015.4	+2	E'S	2	c	52	97	8	5	2	-	7-8	10	800	0	*
Blacksod Point	999.6	-20	SE	5	c	57	92	8	8	-	-	10	10	1500	1	4
Malin Head ...																
Aldergrove ...	1006.5	-18	ESE	4	c/d	54	92	6	6	2	-	9+	10	800	1	*
Birr Castle ...	1002.7	-12	S'E	3	c	59	92	8	5	1	-	7-8	10	1500	1	*
Valentia Obsy. †	999.1	-14	SSE	6	c/r	60	92	7	6	-	-	10	10	800	1	3
Roches Point	1003.2	-4	SSE	5	o	58	97	7	5	-	-	10	10	800	1	4

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 3rd Hrs. (36)
London (Kew)	68	48	47	-	-	7.2
Croydon ...	69	56	51	-	-	8.9
S. Farnborough	68	55	47	-	-	8.1
Boscombe Down	66	55	55	-	-	8.9
Calshot (Sthmtn.)	67	60	59	-	-	9.3
Lympne ...	64	55	53	-	-	8.1
Manston ...	68	57	52	-	-	7.9
Shoeburyness ...	70	59	53	-	-	6.2
Felixstowe ...	68	59	56	-	-	4.5
Gorleston ...	66	58	57	-	-	1.7
Mildenhall ...	69	54	50	-	-	2.0
Cranwell ...	67	51	48	-	Tr	3.6
Birmingham ...	66	55	52	Tr	-	3.1
Upper Heyford	68	55	49	-	-	*
Ross-on-Wye	68	58	55	-	-	6.2
Hartland Point	65	57	55	-	Tr	6.3
Bristol ...	65	55	48	-	Tr	10.5
Portland Bill ...	60	54	*	-	-	*
Plymouth ...	61	58	57	Tr	Tr	8.5
The Lizard ...	62	57	*	-	-	6.8
Scilly (St. Mary's)	63	58	*	0.1	0.3	5.3
Guernsey ...	61	56	57	-	0.1	8.1
Pembroke ...	60	55	*	-	Tr	7.1
Holyhead ...	62	55	53	-	0.5	6.8
Chester (Sealand)	68	56	52	-	0.1	2.8
Manchester ...	67	55	53	-	-	1.7
Spurn Head ...	70	57	*	-	-	2.2
Catterick ...	65	49	44	-	Tr	2.9
Tynemouth ...	64	54	48	-	-	2.4
St. Abbs Head	61	52	*	Tr	Tr	*
Leuchars ...	64	51	45	0.4	-	0.5
Renfrew (Abbots L.)	61	52	48	Tr	1	0.0
Eskdalemuir ...	58	48	45	-	Tr	2.0
Point of Ayre ...	68	54	*	-	0.4	3.6
Tiree				-		
Stornoway ...	56	50	*	0.1	1	3.8
Dalwhinnie ...	55	48	32	Tr	-	0.1
Aberdeen ...	60	54	48	4	-	2.2
Wick ...	57	51	*	Tr	0.2	*
Lerwick ...	54	46	*	Tr	-	13.2
Blacksod Point	59	53	*	2	0.6	*
Malin Head ...			*	3		
Aldergrove ...	62	53	49	0.2	0.1	0.5
Birr Castle ...	64	55	52	-	-	1.1
Valentia Obsy. †	59	56	54	4	2	0.0
Roches Point	63	55	*	0.5	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.
Kew ...	18	ccy	cy	cyc	69	58	47	-	-	7.2	*	*	7
Croydon ...	217	cbcc ⊕	cby	cyc	69	56	51	-	-	8.9	*	*	7
Greenwich (Royal Observatory) ...	149	bccy	cbcy	bc	71	55	47	-	-	6.6	50	60	7
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	6.2	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	70	59	52	-	-	6.4	55	66	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	71	58	50	-	-	7.0	47	53	*
Camden Square ...	110	bc	bc	*	72	57	49	-	-	*	*	55	*
Kensington ...	80	bc	bc	*	71	58	52	-	-	6.5	At 18h. 45	57	*
Hampstead Observatory ...	450	bc	bc	bc	68	56	52	-	-	7.7	*	82	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 4th.

South Kensington. Max.	Time.	Min.	Time.
<0.3	whole period.		

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 3rd July. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 4th July. 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	c	70	1017.5	ESE	1	bc	61	73	52	-	-
Brussels ...	1021.9	SSW	2	c	66	1019.3	SSW	3	bc	64	72	55	-	-
Berlin ...	1023.8	W	2	c	70	1022.0	S	1	b	66	73	55	-	-
Zürich ...						1022.0	NW	1	b	55		50		-
Rome ...	1018.9	SW	3	b	75	1019.8	NNE	3	b	68	*	*	-	-

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	Verygood ,,	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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday 5th July, 1939.
No. 28349

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	°F. Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1012.6	-18	SES	4	c	76	45	8	5	7	1	4-6	9	5700
	Croydon	1013.0	-18	SSE	4	c	78	45	8	-	8	3	0	9+	-
	S. Farnborough	1012.2	-18	SES	3	c	74	55	8	-	8	6	0	7-8	-
	Boscombe Down	1011.2	-18	SES	4	c	71	65	7	1	7	8	1	7-8	2500
	Calshot (Soton.)	1012.3	-14	ES	4	c	65	85	8	5	8	1	2-3	9	7200
	Lympne	1014.8	-10	SES	3	c	73	55	8	-	9	1	0	7-8	-
	Manston	1014.9	-12	ESE	3	c	71	55	6	-	9	8	0	9+	-
2	Shoeburyness	1014.4	-12	SE	3	bc	70	75	7	-	9	-	0	4-6	-
	Felixstowe	1015.2	-10	SE	4	c/pr	68	75	7	5	7	8	Tr	9	4300?
	Gorleston	1015.5	-8	SSE	4	c/pr	64	75	6	6	4	-	4-6	9	2500
	Mildenhall	1013.7	-8	SSE	3	c/pr	71	65	7	5	7	9	4-6	7-8	5700
	Cranwell	1011.7	-26	S'E	5	c	72	55	7	-	3	-	0	9	-
3	Birmingham	1010.5	-8	SSE	3	c	71	65	8	8	7	-	4-6	9+	2500
	Upper Heyford	1012.2	-10	SSE	4	c	70	65	8	5	7	5	1	9	5700
4	Ross-on-Wye	1010.4	-6	S'E	3	pr	69	75	7	1	1	[illegible]	2-3	10	2500
5	Hartland Point	1007.1	-12	S	4	cjp	65	85	8	8	2	-	7-8	9+	1500
	Bristol	1011.0	-6	SES	3	c	68	75	8	5	1	-	4-6	9	1500
	Portland Bill	1010.8	-16	ESE	3	c	61	92	8	5	-	-	10	10	4000
	Plymouth	1005.6	-8	SE	3	iro	62	85	7	6	1	-	7-8	10	800
	The Lizard	1008.2	-8	SSE	5	c	59	97	5	3	7	-	7-8	9+	1500
	Scilly (St. Mary's)	1005.9	-6	S	5	c/d	60	97	6	5	2	-	7-8	10	1500
	Guernsey	1010.7	-18	SE	3	c	68	65	8	8	3	-	7-8	9	5700
6	Pembroke	1007.1	-8	SSE	6	o/r	59	97	6	5	-	-	10	10	800
7	Holyhead	1006.7	-10	SSE	4	c/pr	68	65	8	7	-	2	7-8	9+	2500
	Chester (Sealand)	1008.8	-10	SSE	4	c	71	55	6	5	7	6	4-6	9	2500
8	Manchester	1009.4	-6	SSE	4	c	73	55	7	8	3	-	2-3	7-8	4000
10	Spurn Head	1012.2	-14	SE	5	bc	63	75	6	-	4	3	0	4-6	-
	Catterick	1009.6	-18	SSE	4	c	73	55	7	8	9	-	4-6	7-8	2500
	Tynemouth	1010.6	-16	SE	5	bc	60	85	6	2	3	-	2-3	4-6	2500
11	St. Abbs Head	1010.2	-16	SSE	6	cq	58	85	7	4	5	2	*	7-8	1500
	Leuchars	1010.4	-14	ESE	2	c	58	92	7	5	2	-	9	10	1500
12	Renfrew (Abbotsl.)	1008.9	-10	SE	3	zo	62	75	6	5	7	-	9+	10	2500
	Eskdalemuir	1008.6	-10	S'E	3	c	65	65	6	5	-	-	9+	9+	1500
	Point of Ayre	1008.0	-4	SES	3	c	61	85	7	5	7	-	Tr	9+	2500
13A	Tiree	1004.4	-12	SE	5	c	58	85	7	5	-	-	9+	9+	2500
13B	Stornoway	1010.3	-10	E	4	c	58	75	8	5	5	-	4-6	7-8	4000
15	Dalwhinnie	1009.5	-12	S	6	c	57	75	6	5	2	-	7-8	10	2500
	Aberdeen	1011.9	-12	SE'E	3	iro	57	85	6	5	7	-	7-8	9+	1500
	Wick	1010.9	-6	SE	4	c	56	85	6	5	6	9	4-6	9+	2500
16	Lerwick	1013.0	-18	SES	4	c	57	85	8	5	7	-	7-8	9+	1500
17	Blacksod Point	997.7	-14	SE	5	c	63	85	9	8	-	-	9+	9+	1500
18	Malin Head	1002.1	-10	S	5	c	65	75	8	9	8	-	4-6	7-8	5700
	Aldergrove	1004.9	-2	SES	5	c	62	85	7	5	-	-	10	10	800
19	Birr Castle	1001.6	-12	SSE	4	iro	64	86	7	6	2	-	4-6	10	1500
20	Valentia Obsy.†	997.1	-10	S'E	6	bc	65	85	8	8	-	-	4-6	4-6	1500
	Roches Point	1000.8	-10	S'E	5	c	62	92	7	5	-	-	9	9	800

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

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)	1010.0	-18	SES	4	c	76	45	8	5	8	6	4-6	9+	5700	0	*
	Croydon	1010.8	-20	SE	3	c	77	45	8	4	9	6	1	9+	7200	1	*
	S. Farnborough	1009.4	-18	SES	5	e	75	55	8	-	8	8	0	9	-	0	*
	Boscombe Down	1008.3	-30	SES	6	bc	71	65	7	5	8	6	2-3	4-6	4000	0	*
	Calshot (Soton.)	1009.2	-24	SE	4	c	69	65	8	5	8	-	4-6	9	5700	0	3
	Lympne	1013.1	-14	SSE	4	c	69	55	8	5	3	6	2-3	9+	5700	0	§2
	Manston	1012.6	-10	SE	3	c	69	55	7	5	7	-	4-6	9+	7200	0	*
2	Shoeburyness	1012.1	-12	SE	3	c	72	65	7	4	3	8	4-6	7-8	2500	0	*
	Felixstowe	1012.7	-14	ESE	4	bc	66	75	8	7	7	8	2-3	4-6	5700	0	3
	Gorleston	1013.5	-8	S'E	3	c	64	75	6	5	3	-	2-3	7-8	2500	0	5
	Mildenhall	1011.4	-10	SE	4	c	73	65	7	5	7	-	7-8	9	7200	0	*
	Cranwell	1010.4	-6	SE	4	c	71	55	8	5	7	8	4-6	9+	4000	0	*
3	Birmingham	1008.5	-10	SSE	4	bc	74	45	8	5	3	6	2-3	4-6	2500	0	*
	Upper Heyford	1009.9	-12	SE	2	c/pr	71	65	8	5	8	5	4-6	9+	4000	1	*
4	Ross-on-Wye	1008.0	-16	S'E	2	c	70	65	8	4	8	6	2-3	7-8	4000	0	*
5	Hartland Point	1005.8	-10	SSW	4	c/pr	64	92	8	8	6	-	7-8	9+	1500	0	3*
	Bristol	1007.8	-22	SSE	3	bc	71	65	8	5	7	8	Tr	4-6	4000	0	
	Portland Bill	1007.9	-18	E	2	c	63	85	8	1	4	-	4-6	7-8	4000	1	3
	Plymouth	1007.4	-18	SSE	3	c	65	75	8	5	7	-	7-8	9+	2500	1	1
	The Lizard	1006.7	-8	SSE	5	c	59	97	7	5	•	-	10	10	1500	1	3
	Scilly (St. Mary's)	1005.5	+2	SW'S	3	ir	58	97	6	5	-	-	10	10	1500	1	3
	Guernsey	1007.5	-20	SSE	3	c	70	75	8	7	7	1	4-6	7-8	4000	0	2
6	Pembroke	1005.0	-10	S	6	ir	59	97	6	8	2	-	9	10	800	1	3
7	Holyhead	1005.4	-6	SSE	4	c/r	63	85	8	6	-	-	10	10	1500	1	3*
	Chester (Sealand)	1007.7	-10	SSE	3	ic	69	75	7	5	7	-	4-6	10	2500	0	*
8	Manchester	1008.5	-6	S'E	2	c/r	70	75	6	8	7	-	7-8	10	2500	1	
10	Spurn Head	1011.3	0	SE	4	c	62	85	6	-	9	3	0	7-8	-	0	3*
	Catterick	1008.6	0	SE	2	ir	69	75	7	5	7	-	1	7-8	1500	1	
	Tynemouth	1008.8	-4	S	4	c/pr	56	97	6	8	-	-	9+	9+	1500	1	2
11	St. Abbs Head	1007.2	-10	SE	6	cq	57	85	7	8	2	-	7-8	10	1500	0	4*
	Leuchars	1007.4	-16	ENE	2	c	59	85	7	5	1	-	7-8	10	2500	0	*
12	Renfrew (Abbotsl.)	1007.0	-12	SE	1	rr	63	85	6	5	2	-	9+	10	1500	1	*
	Eskdalemuir	1006.9	-2	S'E	3	RR	63	85	6	6	-	-	10	10	1500	1	*
	Point of Ayre	1006.2	0	S'W	4	c/r	59	97	7	8	7	-	7-8	9+	1500	1	2
13A	Tiree	1002.8	-4	SES	6	o	59	85	7	5	-	-	10	10	1500	0	4
13B	Stornoway	1006.3	-10	ESE	2	c	56	85	8	5	7	-	4-6	10	2500	1	1
15	Dalwhinnie	1008.0	-8	S	5	c	60	75	6	4	2	-	7-8	9+	1500	0	*
	Aberdeen	1009.8	-12	SSE	2	c	58	75	6	5	7	-	7-8	9	1500	1	1
	Wick	1008.6	-14	SE	5	c	55	92	7	5	7	8	4-6	9+	2500	1	2*
16	Lerwick	1012.0	-4	S'E	4	c/r	55	85	7	5	2	-	4-6	10	800	0	
17	Blacksod Point	995.9	-18	-	0	c	60	92	8	8	-	-	7-8	7-8	1500	2	1
18	Malin Head	999.7	-10	S'E	6	bc	64	85	8	8	-	2	2-3	4-6	5700	0	4
	Aldergrove	1003.2	-6	SE	4	ido	60	92	7	6	-	-	10	10	800	1	*
19	Birr Castle	998.8	-22	SSE	4	c/pr	65	75	8	8	-	-	4-6	9	1500	1	*
20	Valentia Obsy.†	998.4	+26	WSW	4	c	59	85	8	8	-	1	9	9	1500	1	3
	Roches Point	998.8	-14	SW	4	c/d	59	97	8	5	-	5	4-6	7-8	800	1	4

PAST 24 HOURS. WEATHER.

District	Stations	7h.—13h. 4th (37)	13h.—18h. 4th (38)	18h. 4th to 1h. 5th (39)	1h.—7h. 5th (40)
1	London (Kew)	ccrocy	cy	cybc	croro
	Croydon	circ	bc⊕ yc	cbcyb	ctlrcroro
	S. Farnborough	bcroro⊕c	cybccy	cybbc	bcrr
	Boscombe Down	crorrbc	bcirbc	bcc	roroTLRpoir
	Calshot (Soton.)	ciro	ecirc	ebc	cTLRq
	Lympne	c	bcycy	bc	bcpoiro
	Manston	czoy	czoy	eycbc	cmoproc
2	Shoeburyness	bcpc	bcc	cbc	bccirc
	Felixstowe	bccproc	cbc	bccprobc	bcc
	Gorleston	cprobcpr	cproc	cbc	bc
	Mildenhall	cbcprbc	cy	cbc	bcpro
	Cranwell	cy	cbccy	cbc	bcidom
3	Birmingham	bcc	cprbc	bcpro	tlRR
	Upper Heyford	cprcrc	ccroPR	cbccl	ctlrir
4	Ross-on-Wye	bccpo	ccpoc	bcclt	ltroRc
5	Hartland Point	roroc	cp	rrroro	roroc
	Bristol	bcdoro	ecey	bclpo	cTLRid
	Portland Bill	c	c	c	tlrc
	Plymouth	ccirm	circ	crrcRR	RRrrc
	The Lizard	cidfc	cprc	cprrr	rrprc
	Scilly (St. Mary's)	odfido	oidor	rcorr	orrcp
	Guernsey	ciro	cbcc	cotlr	bcc
6	Pembroke	dofrc	cmoirc	irmoc	oRRmoc
7	Holyhead	doproc	roroRroc	croRRc	cRRrr
	Chester (Sealand)	cmozbcg	cyprio	cirobclmoR	ctlRRm
8	Manchester	czbccy	cyircet	cbcmo	TLRmo
10	Spurn Head	c	c	clc	c
	Catterick	cbcy	cPRiro	moRTLR	propr
	Tynemouth	cpcbc	bccp	cptlc	cbccpo
11	St. Abbs Head	oircq	cq	irc	moc
	Leuchars	brobiroc	c	roroiRiro	irocmo
12	Renfrew (Abbotsl.)	cmirc	zcorr	cmorrRiro	cmoiromo
	Eskdalemuir	ciropro	bcciroR	rorro	ccro
	Point of Ayre	roroc	cidrr	crrr	inorr
13A	Tiree	c	cid	oc	cido
13B	Stornoway	c	cdo	cPR	cpr
15	Dalwhinnie	c	co	[illegible]	cir
	Aberdeen	ciro	circ	croc	crobc
	Wick	bccm	cmc	cmo	cmo
16	Lerwick	cpro	ciro	c	cirmo
17	Blacksod Point	proc	PRtc	qrc	prc
18	Malin Head	c	cbc	c	c
	Aldergrove	idomc	dddm	cidomoc	ccdromo
19	Birr Castle	ciro	ciropr	cprc	c
20	Valentia Obsy.†	prprobc	bcirrrc	cbc	probc
	Roches Point	oidrc	cidoc	cpdoc	cbc

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.
fe, 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.

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.*

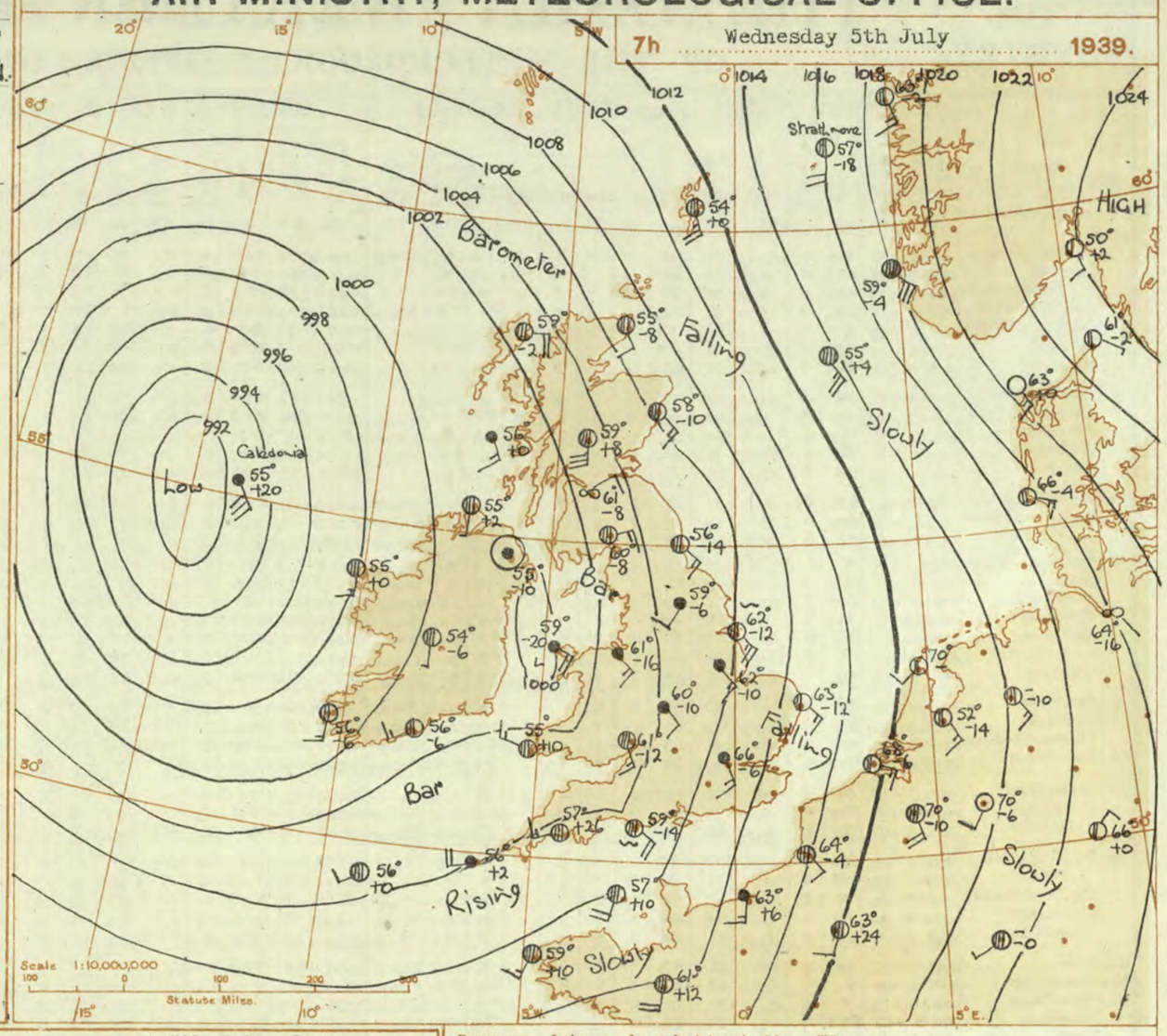
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 4th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 3rd to 9h. 4th	Temperature. (°F) Max. 9h.—17h. 4th	Rainfall. (mm.) Night. 17h. 3rd to 9h. 4th	Rainfall. (mm.) Day. 9h.—17h. 4th	Sunshine. (Hrs.) Sunrise to 17h. 4th	Sunshine. (Hrs.) Sunrise to Sunset. 3rd.
1	Tunbridge W.	ocb	bbc	55	82	-	-	7·0	10·3
	Bournemouth	rebc	bccbc	58	71	Trace	0·3	3·3	10·0
	Ventnor ...	crcb	bpbc	58	68	2	Trace	3·5	10·6
	Southsea ...	c	cbc	61	72	0·2	-	3·1	12·2
	Bognor Regis	prbc	bc	60	67	1	1	2·7	9·6
	Littlehampton	cpc	cbc	59	69	0·6	0·1	3·5	11·4
	Worthing ...	cbc	bbcc	60	68	Trace	-	4·8	11·3
	Brighton ...	rcb	bc	59	74	Trace	Trace	6·6	8·6
	Eastbourne† ...	abc	bcc	59	71	-	-	8·2	9·8
	Hastings† ...	cbc	bcbbc	58	73	-	-	8·3	9·9
	Folkestone ...	cbc	bc	57	75	-	-	6·5	8·1
	Dover ...	bc	bc	58	72	-	-	6·5	7·2
	Deal	cbcc	cbc	58	72	-	-	#	8·7
	Ramsgate ...	bc	bc	58	68	-	-	5·7	6·4
	Margate ...	bcc	bc	58	75	-	-	6·2	6·0
2	Southend ...	cp	cbc	59	76	-	Trace	6·1	6·4
	Clacton-on-Sea	bccp	cbc	59	67	-	Trace	5·9	4·5
	Dovercourt ...	bc	bc	59	71	-	-	7·3	4·6
	Lowestoft ...	cbc	cprbc	59	68	-	Trace	5·3	1·0
	Skegness ...	bc	bc	58	72	-	-	6·0	4·6
	Mablethorpe...	b	bobcc	54	76	-	-	8·0	2·3
	Cleethorpes ...	bc	bc	59	76	-	-	5·8	3·3
3	Leamington S.	c	c	56	77	-	-	4·7	5·0
4	Cheltenham†	cpc	c	56	74	Trace	Trace	2·1	6·4
5	Bath	pc	cbc	56	75	Trace	Trace	1·8	9·7
	Weymouth ...	pccb	cb	58	68	0·2	Trace	2·5	9·3
	Jersey ...	pcbc	bcc	59	76	Trace	-	6·6	7·5
	Torquay ...	op	cbcb	50	66	0·1	-	2·5	9·2
	Falmouth ...	ofdro	rromo	58	61	0·2	7	0·0	8·0
	Penzance ...	rrrc	cpr	58	63	0·3	0·3	0·0	5·4
	St. Ives ...								
	Bude... ...	cp	cp	59	68	-	0·6	1·3	8·2
	Ilfracombe ...	bcbbc	bcc	59	71	-	Trace	3·8	7·6
6	Aberystwyth	cpr	prc	57	69	-	4	0·5	3·3
7	Llandudno ...	c	cir	55	70	Trace	0·5	1·0	6·0
	Colwyn Bay...	c	cpc	54	73	0·3	1	1·4	4·4
	Rhyl	cbcc	cpr	56	78	-	0·3	2·8	4·6
8	Wallasey ...	bc	cbccp	57	75	0·3	Trace	4·1	3·6
	Southport ...	opbc	bccp	55	75	0·5	0·3	5·2	5·4
	Blackpool ...	cbc	bcpc	55	74	1	0·3	4·5	6·4
	Morecambe ...	bc	bcir	57	74	0·5	Trace	4·1	8·0
9	Ilkley... ...	obc	bcpc	52	76	Trace	Trace	5·5	2·6
	Harrogate ...	bc	bccp	52	75	Trace	Trace	5·6	1·6
10	Berwick-on-T.	ogc	bcc	54	62	Trace	0·4	3·9	3·9
11	Dunbar ...	cm	cm	52	65	-	-	1·7	1·4
12	Troon... ...	ococ	ocop	53	64	1	0·3	0·2	1·4
	Douglas ...	cirm	cmr	54	61	0·5	1	0·0	7·5

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.

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. 5th July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ...	Moderate south to southwest wind, fresh locally; bright intervals, showers, local thunderstorms; much cooler.
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 Orkney and Shetland	Fresh southeast wind, strong locally, veering south; thunderstorms or thundery rain at first, bright intervals and thundery showers later; cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate south to southwest wind, fresh locally; bright intervals, showers, local thunderstorms; cool.

L. D.

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

GENERAL INFERENCE.

A depression is centred off Northwest Ireland and another over the Irish Sea is moving north-northwest. There will be thunderstorms or thundery rain at first in the North followed by bright intervals and thundery showers. In the South there will be bright intervals and thundery showers.

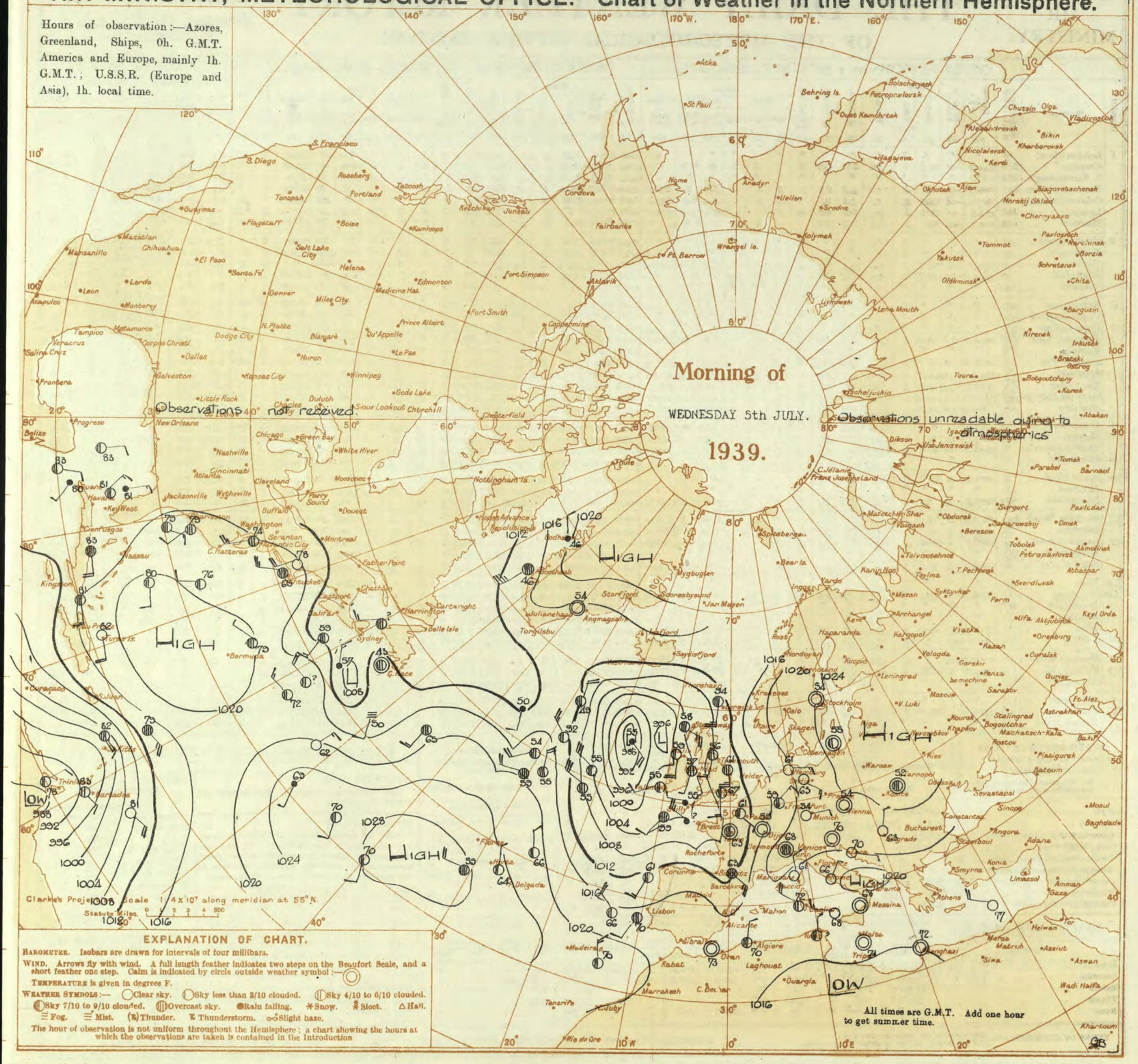
FURTHER OUTLOOK.

Unsettled; rain spreading from the Southwest.

Forecasts issued at 0930 G.M.T.

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

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



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

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

TEMPERATURE is given in degrees F.

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Wednesday 5th July, 1939
No. 28349

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

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	1008.8	-12	SE'S	3	bc	67	65	8	-	3	3	0	4-6	-
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1006.7	-10	SE	4	c	62	92	7	5	4	-	7-8	9+	2500
	Calshot (Sthmtn.)	8	1007.1	-14	SSE	2	c	64	85	7	5	3	-	4-6	7-8	5700
	Lympne	346	1010.5	-14	SE'S	4	bc	66	65	8	5	-	-	2-3	2-3	5700
	Manston	154	1010.1	-14	SE	3	bc	63	85	7	-	4	1	0	4-6	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1011.1	-8	SE'S	3	bc	62	85	8	5	4	-	2-3	4-6	2500
	Mildenhall	19	1009.1	-10	SE'S	3	bc	62	85	7	-	3	6	0	4-6	-
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1002.9	-22	SSW	2	r°r°	59	97	7	6	2	-	7-8	9+	1500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1005.9	-18	E	3	c	59	92	8	5	-	-	10	10	2500
	Plymouth	82	1004.6	-18	SSE	3	RR	60	97	6	6	2	-	9	10	800
	The Lizard	240	1002.6	-24	S'E	2	rr	57	97	4	5	-	-	10	10	800
	Scilly (St. Mary's)	163	1003.0	-18	WNW	1	rr	55	97	7	5	-	-	10	10	1500
	Guernsey	175	1006.6	-14	SSW	2	tlr	60	97	6	5	-	-	10	10	1500
6	Pembroke	142	1003.3	-10	E'S	1	c/r	55	97	6	8	-	-	10	10	800
7	Holyhead	26	1003.2	-10	S	1	c/r	57	97	7	6	1	-	7-8	10	450
	Chester (Sealand)	16	1004.7	-14	SE'E	2	c/pr	61	85	6	5	3	-	7-8	9	4000
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1009.2	-6	SE'S	5	bc	61	85	7	-	4	1	0	4-6	-
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1007.8	-12	S	3	c	56	92	6	8	-	-	7-8	7-8	1500
11	St. Abbs Head	280	1007.4	-6	SE	4	c	55	92	7	8	6	-	4-6	7-8	2500
	Leuchars	36	1007.1	-6	E	1	ir°	57	97	6	5	1	-	7-8	10	800
12	Renfrew (Abbots I.)	19	1005.7	-8	ENE	2	o/r	61	92	5	5	-	-	10	10	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1004.5	-6	S'W	3	c/r	60	97	7	8	1	-	9	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1005.2	-4	ESE	5	c	58	85	6	5	7	-	4-6	9+	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1007.7	-2	SSE	3	c	53	97	5	5	7	-	7-8	9+	1500
16	Lerwick	156	1011.8	-2	S	5	c	54	97	7	6	7	-	4-6	7-8	800
17	Blacksod Point	18	998.2	+10	S	5	bc	55	86	8	3	3	-	2-3	4-6	1500
18	Malin Head	84	1000.3	+6	S'E	4	c	59	92	8	9	-	-	7-8	7-8	5700
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1000.5	0	SSW	2	bc	55	92	7	5	-	-	4-6	4-6	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

OBSERVATIONS at 7 hr. G.M.T. 5th July — 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 4th Hrs. (36)
London (Kew)	1006.0	-4	SSE	3	r°r°	65	85	7	6	2	-	7-8	10	1500	1	*	80	64	57	0.5	0.2	6.1
Croydon	1006.8	-6	SSE	3	r°r°	66	75	7	6	2	-	4-6	10	2500	1	*	79	64	59	1	0.1	6.4
S. Farnborough	1006.0	+6	SE'E	3	ir°	61	97	7	6	2	-	7-8	10	800	1	*	78	60	59	Tr	2	7.5
Boscombe Down	1004.7	+2	SSE	4	ir°	60	97	6	6	2	-	9	10	450	1	*	73	59	56	0.1	9	3.0
Calshot (Sthmtn.)	1005.9	+10	SSE	4	c	62	92	7	5	1	-	9	9+	4000	1	2	69	61	60	0.4	9	2.6
Lympne	1009.2	-2	S'W	2	c/r	62	85	8	5	7	7	2-3	10	4000	0	§3	75	62	61	-	Tr	8.7
Manston	1008.0	-6	SSE	2	pr	62	85	7	5	9	-	4-6	9+	5700	1	*	75	61	57	-	Tr	6.5
Shoeburyness	1007.7	-4	S'E	3	c/r	66	75	8	5	7	-	9	9+	4000	0	*	73	62	57	Tr	Tr	6.1
Felixstowe	1007.7	-2	SE	3	c	64	75	7	5	4	-	9	9+	2500	0	2	71	62	59	Tr	Tr	7.1
Gorleston	1008.2	-12	SE'S	3	bc	63	85	6	-	5	-	0	4-6	-	0	2	65	61	59	Tr	-	6.4
Mildenhall	1006.2	-10	SSE	3	c/pr	67	75	7	5	2	-	4-6	9+	2500	1	*	77	61	55	Tr	Tr	5.8
Cranwell	1005.6	-10	SE	3	id°	62	85	6	5	-	-	10	10	4000	1	*	75	56	52	-	Tr	4.6
Birmingham	1003.8	-10	SE	2	d°d°	60	97	6	6	-	-	10	10	800	1	*	74	59	57	Tr	12	6.3
Upper Heyford	1004.9	-12	SSE	4	c/pr	61	92	7	9	-	-	10	10	800	1	*	75	61	54	0.3	1	*
Ross-on-Wye	1003.2	-12	S'E	3	c	61	92	7	6	1	-	9	9+	1500	1	*	71	60	55	Tr	5	6.0
Hartland Point	1003.5	+22	NW	4	c	55	92	8	8	6	-	4-6	7-8	1500	1	3	67	55	54	3	27	2.9
Bristol	1003.7	+6	SSE	3	dr	60	92	6	5	2	-	7-8	10	800	1	*	72	59	55	0.1	3	2.4
Portland Bill	1004.4	+14	SE	4	c	59	92	7	1	4	-	4-6	7-8	4000	1	4	63	58	*	3	3	*
Plymouth	1004.7	+26	WSW	3	c/r	57	92	6	6	7	-	7-8	10	800	1	1	67	56	54	1	8	0.4
The Lizard	1004.7	+16	S	3	c/pr	56	97	8	8	6	-	7-8	7-8	1500	1	3	62	53	*	4	22	0.7
Scilly (St. Mary's)	1003.6	+2	WSW	4	pr	56	97	8	9	6	-	7-8	10	1500	1	3	63	54	*	4	8	0.0
Guernsey	1007.2	+10	SSW	4	c	57	97	8	4	4	1	4-6	7-8	1500	1	3	74	*	*	Tr	14	8.5
Pembroke	1002.1	+10	WNW	3	c	55	97	8	8	6	-	4-6	7-8	2500	1	2	59	53	*	6	25	0.0
Holyhead	999.4	-20	ESE	4	rr	59	92	7	6	2	-	9	10	1500	1	2	69	55	55	1	10	1.8
Chester (Sealand)	1002.0	-16	SE	3	r/tlr	61	97	6	6	2	-	9	10	1500	1	*	73	59	54	Tr	8	5.4
Manchester	1002.9	-12	ESE	2	r°r°	61	92	5	5	2	-	9	10	1500	1	*	74	60	58	0.2	5	3.4
Spurn Head	1005.7	-12	SE	5	c	62	97	6	5	8	8	7-8	9+	4000	0	4	68	59	*	-	-	6.0
Catterick	1005.1	-6	SSW	2	pr	59	92	6	6	7	-	4-6	10	1500	1	*	75	57	52	0.4	5	5.4
Tynemouth	1005.7	-14	SE	3	c/pr	56	97	6	8	-	-	9+	9+	1500	1	2	61	55	52	2	2	5.7
St. Abbs Head	1005.1	-10	SSE	4	c	55	92	7	4	6	2	4-6	9+	1500	1	2	59	53	*	Tr	2	*
Leuchars	1004.9	-10	ENE	3	z°	58	85	6	-	3	8	0	7-8	-	1	*	62	53	48	0.2	1	0.8
Renfrew (Abbots I.)	1003.3	-8	NE'E	2	z°	61	92	5	5	2	-	7-8	10	2500	1	*	68	59	54	1	3	0.1
Eskdalemuir	1003.1	-8	ENE	3	f/r	60	92	7	5	2	-	4-6	10	1500	1	*	70	57	54	0.1	4	2.0
Point of Ayre	1001.2	-14	SE'S	2	rr	57	97	7	8	2	-	7-8	10	1500	1	2	65	56	*	1	4	1.4
Tiree	1001.3	0	SSE	3	id°	56	97	7	5	-	-	9+	9+	1500	1	2	60	54	52	Tr	Tr	0.7
Stornoway	1003.4	-2	E	4	f/pr	59	85	7	5	1	-	4-6	10	2500	1	2	60	56	*	Tr	1	2.7
Dalwhinnie	1004.6	+8	S	6	c	59	85	6	4	2	-	7-8	10	1500	0	*	60	55	52	-	0.5	0.5
Aberdeen	1007.1	-10	SE'S	3	c	58	85	6	-	7	-	0	7-8	-	1	1	59	53	48	Tr	0.5	1.2
Wick	1006.3	-8	SSE	2	c	55	92	6	5	8	2	4-6	9	1500	0	1	57	53	*	-	-	*
Lerwick	1010.9	0	S'E	5	c/r	54	97	6	8	2	-	4-6	10	800	1	*	58	53	*	Tr	0.6	2.9
Blacksod Point	998.7	0	S	3	c	55	92	8	8	-	-	10	10	800	1	3	68	50	*	8	0.1	*
Malin Head	1000.8	+2	S	1	c/r	55	85	7	5	-	-	9+	9+	2500	0	1	67	52	*	-	Tr	3.6
Aldergrove	1000.6	-10	-	0	r°r°	55	97	6	6	2	-	7-8	10	1500	1	"	65	54	52	0.1	3	1.0
Birr Castle	1000.8	-6	S	1	c	54	97	8	5	7	-	7-8	9	2500	1	*	69	51	44	Tr	2	4.9
Valentia Obsy. †	999.4	-6	S	3	bc	56	85	8	2	-	-	4-6	4-6	2500	1	3	67	51	45	5	0.2	6.4
Roches Point	1001.0	-6	SSW	3	bc	56	92	8	3	4	-	4-6	4-6	2500	1	3	63	54	*	1	0.3	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h. (To-day)
		24 hrs. ended 9h.											
Kew	18	ccr°cy	cy	cycr°r°	80	64	57	0.5	0.2	6.1	•	•	8
Croydon	217	cir°c	bc⊕yc	cbcdtlr°	79	64	59	1	0.1	6.4	•	•	9
Greenwich (Royal Observatory)	149	crcy	cy	cbcir	80	62	55	2	0.5	5.0	40	83	7
City (Bunhill Row)	—	•	•	•	•	•	•	•	•	4.8	•	•	•
Westminster (St. James' Park)	27	•	•	•	79	63	58	2		5.3	49	83	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	80	62	58	2	0.6	5.6	36	83	•
Camden Square	110	bc	bc	•	83	63	57	1	-	*	•	81	•
Kensington	80	bc	bc	•	79	64	61	1	0.3	5.1	At 18h 35	83	•
Hampstead Observatory	450	bcr	bcb	c	78	61	59	1	0.2	6.3	•	92	•

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

SOUTH KENSINGTON.			
Max.	Time.	Min.	Time.
<0.3 whole period			

KEW OBSERVATORY.			
Max.	Time.	Min.	Time.
<0.1 whole period			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 4th July Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 5th July 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	1013.1	ESE	1	c	79	1012.1	SSW	2	c/r	63	*	*	*	*
Brussels	1014.7	WSW	4	bc	77	1010.7	SSE	4	c	70	84	63	-	-
Berlin	1021.7	SE	3	b	75						79		-	
Zurich	1017.9	NE	2	bc	89						84		-	
Rome	1018.3	WNW	2	b	73	1019.3	NE	2	b	70	*	•	-	-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 9 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday, 6th July, 1939.

No. 28350.

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

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. (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)	1008.7	+2.0	SW	5	c	67	55	9	7	-	2	7-8	9	2500
	Croydon	1008.9	+1.4	SSW	4	c	68	55	8	2	4	2	7-8	9	4000
	S. Farnborough	1008.8	+2.2	SSW	5	c	68	55	8	2	-	8	7-8	7-8	2500
	Boscombe Down	1007.7	+1.4	SW	5	c/pr	63	75	8	8	3	-	7-8	7-8	2500
	Calshot (Soton.)	1008.9	+1.4	SSW	4	bc	65	75	8	2	7	3	2-3	2-3	2500
	Lympne	1010.7	+1.0	SSW	4	c	66	75	8	8	-	6	7-8	9	1500
	Manston	1010.2	+1.4	S'W	4	c	67	75	8	5	2	-	7-8	9+	1500
2	Shoeburyness	1009.4	+.8	S'W	4	c	70	65	9	2	7	6	2-3	9	4000
	Felixstowe	1009.5	+1.0	SSW	4	c	67	85	8	6	7	8	2-3	9+	800
	Gorleston	1009.0	+1.6	S'W	4	c/r	67	75	6	8	7	-	4-6	10	2500
	Mildenhall	1007.1	+.8	S'W	5	c	70	65	7	8	2	-	4-6	7-8	2500
	Cranwell	1005.4	+.2	S	4	c	69	65	8	1	1	-	7-8	9+	2500
3	Birmingham	1005.8	+1.2	SW	4	c	64	65	8	8	6	-	9	9+	1500
	Upper Heyford	1007.0	+1.6	SW'S	3	c/pr	64	66	9	8	-	5	9+	9+	1500
4	Ross-on-Wye	1006.0	+1.6	SWS	3	bc	66	65	8	8	6	-	4-6	4-6	4000
5	Hartland Point	1005.5	+1.0	SW	3	c/r	56	92	8	8	2	-	7-8	9+	1500
	Bristol	1006.6	+1.0	SW	3	c/r	64	75	9	8	7	-	7-8	9	1500
	Portland Bill	1008.1	+1.4	S	4	c	59	92	8	5	4	-	7-8	10	4000
	Plymouth	1006.3	+.6	S'E	3	ir	58	92	7	6	2	-	9	10	800
	The Lizard	1007.4	+2.0	SW	3	c	58	85	8	8	6	-	7-8	9+	1500
	Scilly (St. Mary's)	1005.9	+1.4	WSW	5	bc	62	85	8	8	6	-	2-3	4-6	1500
	Guernsey	1008.7	+.6	S'W	2	c/fr	56	97	6	8	3	-	7-8	9	1500
6	Pembroke	1004.8	+.6	SSW	4	c	58	92	8	8	-	-	7-8	7-8	1500
7	Holyhead	1003.4	+.4	S	4	bc	61	85	9	2	-	3	2-3	2-3	800
	Chester (Sealand)	1004.3	+2.8	SW'N	3	bc	66	55	9	7	7	-	4-6	4-6	2500
8	Manchester	1003.5	+1.0	WSW	4	c	67	65	7	8	3	-	9	10	2500
10	Spurn Head	1005.7	0	SSE	4	c/pr	63	92	6	5	2	-	4-6	10	2500
	Catterick	1003.4	-.2	SE	3	z	65	85	6	6	2	-	7-8	10	800
	Tynemouth	1004.4	0	SSE	4	c/pr	57	97	6	8	-	-	9+	9+	1500
11	St. Abbs Head	1002.8	-.1.4	SE	5	rr	55	97	7	8	2	-	7-8	10	1500
	Leuchars	1002.9	-.1.0	E	3	r	56	92	6	5	2	-	7-8	10	800
12	Renfrew (Abbotsl.)	1000.9	+.2	SE'S	2	c/pr	66	85	6	5	2	-	7-8	10	2500
	Eskdalemuir	1001.6	+.2	SSE	3	c/r	61	85	6	5	-	-	10	10	800
	Point of Ayre	1002.6	+2.0	W'S	4	c	60	85	8	8	4	4	4-6	7-8	2500
13A	Tiree	999.3	0	W	2	dr	55	97	7	-	2	-	9+	9+	1500
13B	Stornoway	1000.3	-2.0	E	4	c/pr	61	85	6	5	1	-	7-8	10	2500
15	Dalwhinnie	1001.1	-2.0	S	6	ir	62	85	6	9	2	-	7-8	10	1500
	Aberdeen	1005.1	-.8	ESE	3	c	59	85	6	-	7	-	0	9+	-
	Wick	1005.3	+.4	SE	4	c	56	85	6	5	7	8	4-6	9+	2500
16	Lerwick	1010.2	-.2	SE	5	c	59	92	6	5	7	-	4-6	7-8	1500
17	Blacksod Point	997.8	-.4	S	3	bc	62	65	9	2	-	-	4-6	4-6	4000
18	Malin Head	1000.0	0	N	1	bc	60	75	8	2	8	-	2-3	4-6	5700
	Aldergrove	1000.5	+.8	SW'S	3	bc	63	65	8	3	-	3	4-6	4-6	1500
19	Birr Castle	1000.2	-.2	WSW	2	c	62	85	8	2	8	-	4-6	7-8	1500
20	Valentia Obsy.†	999.5	+1.0	WSW	5	pr	57	85	8	6	-	-	10	10	1500
	Roches Point	1001.3	+.2	SW	4	bc	62	85	8	3	-	5	2-3	4-6	2500

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

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)	1009.2	+.4	S	3	c	63	75	8	8	2	-	7-8	9+	1500	1	*
	Croydon	1009.3	+.2	S	4	c/pr	62	75	9	3	7	3	4-6	9+	2500	1	*
	S. Farnborough	1009.1	+1.0	S'W	4	c	66	75	9	8	7	8	7-8	9+	1500	0	*
	Boscombe Down	1008.5	+.8	SSW	4	c/pr	57	85	7	3	3	1	2-3	7-8	1500	1	*
	Calshot (Soton.)	1009.7	+1.0	SW	5	c/p	59	85	7	5	7	-	7-8	9+	2500	1	§2
	Lympne	1011.7	+1.0	SSE	3	c/r	58	92	8	8	2	-	4-6	9+	1500	1	§2
	Manston	1011.0	+1.2	S'E	5	rr	59	92	6	5	2	-	9	9+	4000	1	*
2	Shoeburyness	1009.7	+1.4	S'W	4	c	65	75	8	7	-	-	10	10	1500	0	*
	Felixstowe	1009.8	+.2	S	4	bc	67	75	8	5	3	6	2-3	4-6	2500	0	2
	Gorleston	1009.1	+.4	S	4	bc	67	75	6	1	5	-	2-3	4-6	2500	0	3
	Mildenhall	1008.7	+.4	S'W	4	c	69	55	8	8	7	-	7-8	9	4000	0	*
	Cranwell	1006.2	+.6	SSW	3	c	67	55	8	8	7	-	4-6	7-8	2500	0	*
3	Birmingham	1006.4	+.2	SSW	4	c	61	75	7	9	7	-	7-8	9+	1500	1	*
	Upper Heyford	1007.2	+.6	S	4	c	63	65	9	2	6	4	4-6	9	1500	1	*
4	Ross-on-Wye	1006.9	+.6	S'W	4	ir	56	92	7	9	-	-	10	10	2500	1	*
5	Hartland Point	1005.2	-.4	W	5	c/pr	58	85	7	8	-	-	9+	9+	1500	1	3
	Bristol	1008.0	+1.0	SW	4	ir	55	92	8	6	2	-	2-3	9+	1500	1	
	Portland Bill	1009.0	+1.4	S	4	c	*	92	7	5	-	1	7-8	10	4000	1	4
	Plymouth	1008.0	+.6	SW	6	c/pr	58	92	7	9	7	-	9	9+	800	1	4
	The Lizard	1007.2	+1.2	SW	5	c/pr	57	85	8	8	6	-	4-6	7-8	2500	1	3
	Scilly (St. Mary's)	1008.3	+1.8	W	5	c/pr	57	92	8	8	4	3	4-6	7-8	1500	1	3
	Guernsey	1011.7	+1.6	S'W	5	bc	59	85	8	2	7	-	2-3	2-3	1500	1	3
6	Pembroke	1004.8	-.2	SW	5	c	57	92	7	6	6	-	4-6	7-8	800	1	2
7	Holyhead	1003.4	-.2	S	3	c/p	59	85	8	8	2	6	4-6	9	1500	1	2
	Chester (Sealand)	1005.1	+.6	SSW	4	*r	58	85	5	-	2	-	10	10	1500	1	*
8	Manchester	1004.4	-.4	SSE	3	bc	57	55	8	2	3	-	4-6	4-6	2500	1	
10	Spurn Head	1005.8	0	S'W	4	c	63	85	7	9	8	8	4-6	7-8	2500	0	3
	Catterick	1004.6	+.12	WSW	2	bc	64	65	8	5	4	8	4-6	4-6	2500	1	*
	Tynemouth	1004.0	+.6	SW	3	c	64	75	6	8	-	-	9	9	1500	1	2
11	St. Abbs Head	1002.8	+.4	SW	4	c	61	75	8	4	7	-	4-6	9	1500	0	2
	Leuchars	1002.0	0	SE	2	c	61	92	8	8	7	-	7-8	10	1500	1	*
12	Renfrew (Abbotsl.)	1002.6	+.10	S'W	3	bc	62	75	8	2	6	6	2-3	4-6	2500	1	*
	Eskdalemuir	1003.9	-.4	SE	3	r	57	92	5	6	7	-	4-6	10	800	1	2
	Point of Ayre	1003.3	+.6	SSW	4	c	57	85	8	8	-	1	4-6	7-8	1500	1	3
	Wick	1003.2	-.4	SE	6	c	54	97	6	5	7	8	4-6	9+	2500	0	3
16	Lerwick	1008.8	-.8	SSE	6	c	57	92	6	5	7	-	4-6	7-8	800	0	*
17	Blacksod Point	997.5	0	WSW	4	bc	58	85	8	-	9	-	0	2-3	-	0	2
18	Malin Head	999.5	-.4	SE	3	bc	58	85	8	2	-	3	2-3	4-6	5700	0	1
	Aldergrove	1000.4	-.2	SE'S	4	bc	62	75	8	1	-	-	2-3	2-3	2500	1	*
19	Birr Castle	1000.1	+.4	SSW	1	pr	56	92	8	8	1	-	7-8	10	1500	1	*
20	Valentia Obsy.†	1002.9	+2.2	W'S	5	c/p	53	92	8	6	-	-	9+	9+	1500	1	3
	Roches Point	1002.9	+1.4	W'S	4	pr	59	85	9	3	4	3	2-3	4-6	800	1	4

PAST 24 HOURS.

District	Stations	Weather. 7h.–13h. 5th. (37)	Weather. 13h.–18h. 5th. (38)	Weather. 18h. 5th. to 1h. 6th. (39)	Weather. 1h.–7h. 6th. (40)
1	London (Kew)	[illegible]	[illegible]	[illegible]	[illegible]
	Croydon	[illegible]	[illegible]	[illegible]	[illegible]
	S. Farnborough	[illegible]	[illegible]	[illegible]	[illegible]
	Boscombe Down	[illegible]	[illegible]	[illegible]	[illegible]
	Calshot (Soton.)	[illegible]	[illegible]	[illegible]	[illegible]
	Lympne	[illegible]	[illegible]	[illegible]	[illegible]
	Manston	[illegible]	[illegible]	[illegible]	[illegible]
2	Shoeburyness	[illegible]	[illegible]	[illegible]	[illegible]
	Felixstowe	[illegible]	[illegible]	[illegible]	[illegible]
	Gorleston	[illegible]	[illegible]	[illegible]	[illegible]
	Mildenhall	[illegible]	[illegible]	[illegible]	[illegible]
	Cranwell	[illegible]	[illegible]	[illegible]	[illegible]
3	Birmingham	[illegible]	[illegible]	[illegible]	[illegible]
	Upper Heyford	[illegible]	[illegible]	[illegible]	[illegible]
4	Ross-on-Wye	[illegible]	[illegible]	[illegible]	[illegible]
5	Hartland Point	[illegible]	[illegible]	[illegible]	[illegible]
	Bristol	[illegible]	[illegible]	[illegible]	[illegible]
	Portland Bill	[illegible]	[illegible]	[illegible]	[illegible]
	Plymouth	[illegible]	[illegible]	[illegible]	[illegible]
	The Lizard	[illegible]	[illegible]	[illegible]	[illegible]
	Scilly (St. Mary's)	[illegible]	[illegible]	[illegible]	[illegible]
	Guernsey	[illegible]	[illegible]	[illegible]	[illegible]
6	Pembroke	[illegible]	[illegible]	[illegible]	[illegible]
7	Holyhead	[illegible]	[illegible]	[illegible]	[illegible]
	Chester (Sealand)	[illegible]	[illegible]	[illegible]	[illegible]
8	Manchester	[illegible]	[illegible]	[illegible]	[illegible]
10	Spurn Head	[illegible]	[illegible]	[illegible]	[illegible]
	Catterick	[illegible]	[illegible]	[illegible]	[illegible]
	Tynemouth	[illegible]	[illegible]	[illegible]	[illegible]
11	St. Abbs Head	[illegible]	[illegible]	[illegible]	[illegible]
	Leuchars	[illegible]	[illegible]	[illegible]	[illegible]
12	Renfrew (Abbotsl.)	[illegible]	[illegible]	[illegible]	[illegible]
	Eskdalemuir	[illegible]	[illegible]	[illegible]	[illegible]
	Point of Ayre	[illegible]	[illegible]	[illegible]	[illegible]
13A	Tiree	[illegible]	[illegible]	[illegible]	[illegible]
13B	Stornoway	[illegible]	[illegible]	[illegible]	[illegible]
15	Dalwhinnie	[illegible]	[illegible]	[illegible]	[illegible]
	Aberdeen	[illegible]	[illegible]	[illegible]	[illegible]
	Wick	[illegible]	[illegible]	[illegible]	[illegible]
16	Lerwick	[illegible]	[illegible]	[illegible]	[illegible]
17	Blacksod Point	[illegible]	[illegible]	[illegible]	[illegible]
18	Malin Head	[illegible]	[illegible]	[illegible]	[illegible]
	Aldergrove	[illegible]	[illegible]	[illegible]	[illegible]
19	Birr Castle	[illegible]	[illegible]	[illegible]	[illegible]
20	Valentia Obsy.†	[illegible]	[illegible]	[illegible]	[illegible]
	Roches Point	[illegible]	[illegible]	[illegible]	[illegible]

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). o, 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.
"0+" signifies an overcast sky with a few small openings.

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.*

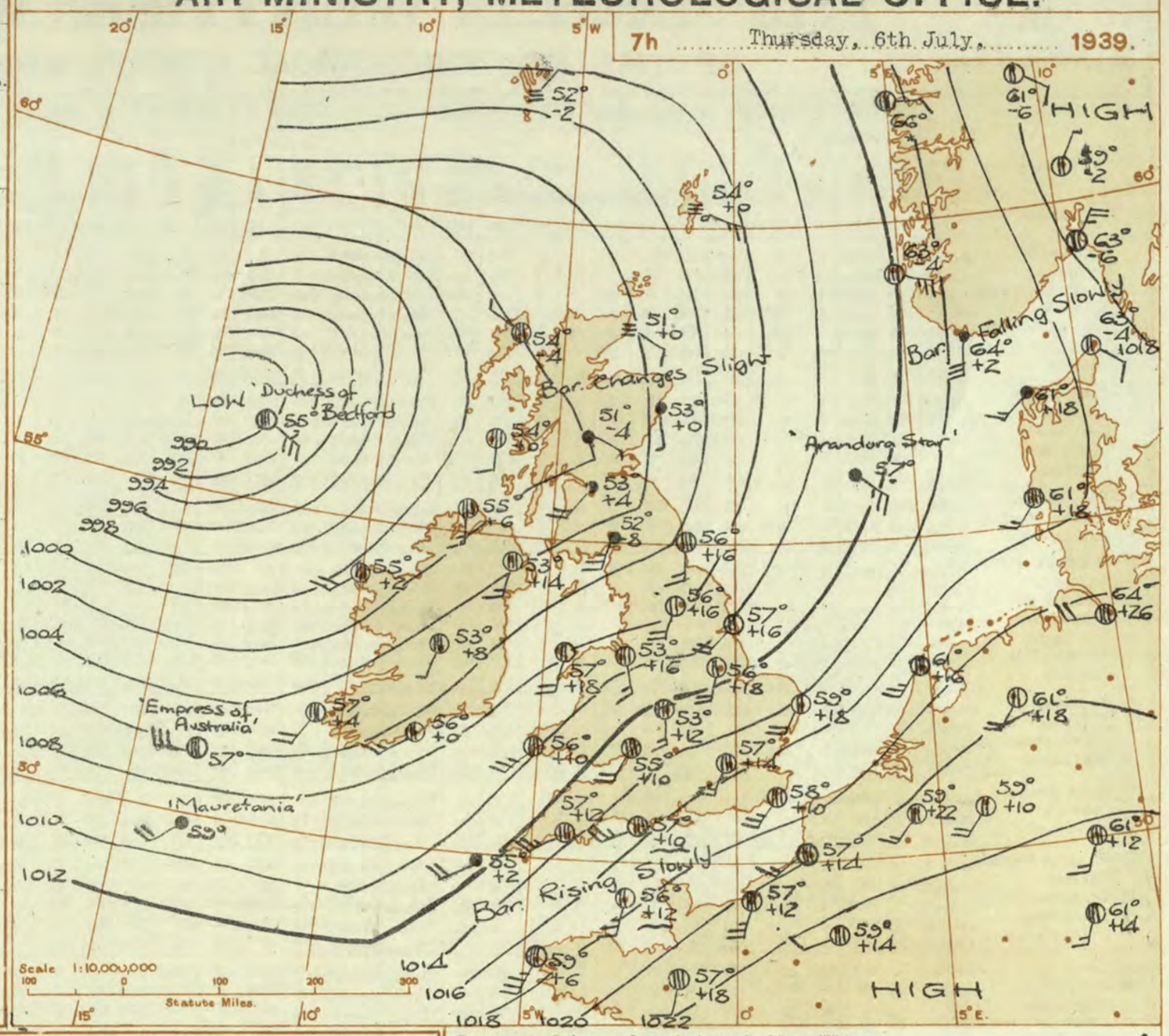
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 5th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 4th to 9h. 5th	Temperature. (°F) Max. 9h.—17h. 5th	Rainfall. (mm.) Night. 17h. 4th to 9h. 5th	Rainfall. (mm.) Day. 9h.—17h. 5th	Sunshine. (Hrs.) Sunrise to 17h. 5th	Sunshine. (Hrs.) Sunrise to Sunset. 4th
1	Tunbridge W.	obc	bbcop	61	71	2	Trace	4·5	7·4
	Bournemouth	bcb	berc	58	66	8	2	4·8	4·9
	Ventnor ...	tlrcb	bcpcu	58	64	6	1	4·8	4·1
	Southsea ...	cbcb	bcorc	60	68	5	1	5·8	3·3
	Bognor Regis	cbc	bcepr	60	64	2	Trace	5·6	3·5
	Littlehampton	bc	cpcbc	61	63	3	0·3	5·4	4·7
	Worthing ...	bcb	bbcer	60	66	2	0·3	5·5	6·1
	Brighton ...	b	ber	60	65	1	0·5	5·5	7·1
	Eastbourne† ...	cbc	bcpc	60	67	3	Trace	4·0	8·3
	Hastings† ...	ocbcc	bcbcc	59	66	2	-	4·0	8·4
	Folkestone ...	orc	ocbcc	60	67	1	Trace	3·1	6·6
	Dover ...	roc	cbcpc	62	66	0·3	0·5	3·0	6·6
	Deal	oddoc	cbcc	*	71	Trace	-	3·9	*
	Ramsgate ...	cr	bc	61	68	-	Trace	3·1	5·9
	Margate ...	cd	bc	65	*	-	Trace	3·7	6·3
2	Southend ...	orc	cbbcc	62	72	0·3	0·3	4·6	6·7
	Clacton-on-Sea	circ	cbc	62	68	Trace	0·3	3·9	6·6
	Dovercourt ...	bcc	bcv	63	69	-	-	5·9	7·7
	Lowestoft ...	bbcer	cbcb	61	68	-	Trace	4·5	5·8
	Skegness ...	bcorc	b	61	73	-	Trace	3·6	6·4
	Mablethorpe...	or	obbcy	60	72	-	1	2·8	3·2
	Cleethorpes ...	bcer	cbcv	57	73	Trace	Trace	3·3	6·1
3	Leamington S.	oc	c	61	70	4	-	4·2	4·9
4	Cheltenham†	cpbcc	cp	59	68	15	Trace	3·5	2·3
5	Bath	cbcp	bcc	61	68	7	0·3	2·4	3·6
	Weymouth ...	cb	berr	58	64	4	4	4·0	4·2
	Jersey ...	rrcpc	cpbc	59	65	11	3	5·6	7·9
	Torquay ...	bcc	corpbc	57	63	11	3	4·8	2·8
	Falmouth ...	oqcrc	cropc	54	62	16	1	3·0	0·0
	Penzance ...	rrcqc	cbcp	54	63	24	1	3·1	0·0
	St. Ives ...								
	Bude... ...	cbc	bcpc	55	62	24	7	2·3	1·3
	Ilfracombe ...	prcbc	bcrp	55	68	3	9	2·6	4·3
6	Aberystwyth	cprbc	bcpr	54	65	6	1	1·8	0·7
7	Llandudno ...	cbc	bcc	60	66	3	-	4·4	1·0
	Colwyn Bay...	pcpbc	bcbcc	59	68	4	1	3·0	1·4
	Rhyl	cprc	cbcc	60	69	5	0·6	3·0	2·8
8	Wallasey ...	cbcc	bccp	61	66	6	Trace	3·6	4·1
	Southport ...	tlrpc	bbcc	60	66	6	Trace	3·0	5·2
	Blackpool ...	cp	bcc	61	66	5	Trace	4·0	4·5
	Morecambe ...	o*	pbc	62	67	7	3	2·2	4·1
9	Ilkley... ...	orlto	rlcbc	58	70	15	3	3·1	5·5
	Harrogate ...	cp	ptbc	58	*	2	4	2·6	5·6
10	Berwick-on-T.	cor	tlrc	58	60	1	3	1·4	3·9
11	Dunbar ...	cprtl	cprtl	54	67	8	1	1·6	1·7
12	Troon.. ...	rrorr	pocbc	58	63	2	12	1·6	0·2
	Douglas ...	cirbc	b	55	60	11	0·3	5·7	0·0

† Max. Temp. for period 21h. yesterday to 17h. to-day; Min. Temp. 21h.–9h.

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. 6th July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Fresh southwest wind, strong locally on coasts; rain at first, bright intervals and showers later; perhaps local thunder; rather cool.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Moderate southwest wind, decreasing temporarily then freshening again; rain at first, bright intervals and showers later; local thunder; rather cool.
13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland	Light to moderate south wind; bright intervals, showers; local thunder; rather cool.
15 N. E. Scotland 16 Orkney and Shetland	Moderate southeast wind, fresh locally; occasional rain; cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate southwest wind, fresh locally; bright intervals, showers, local thunder; rather cool.

GENERAL INFERENCE.

A deep depression is centred to northwest of Ireland and a small depression near the Scilly Isles will move northeast. There will be bright intervals and thundery showers in the North. In the South there will be rain at first, followed by bright intervals and showers

FURTHER OUTLOOK.

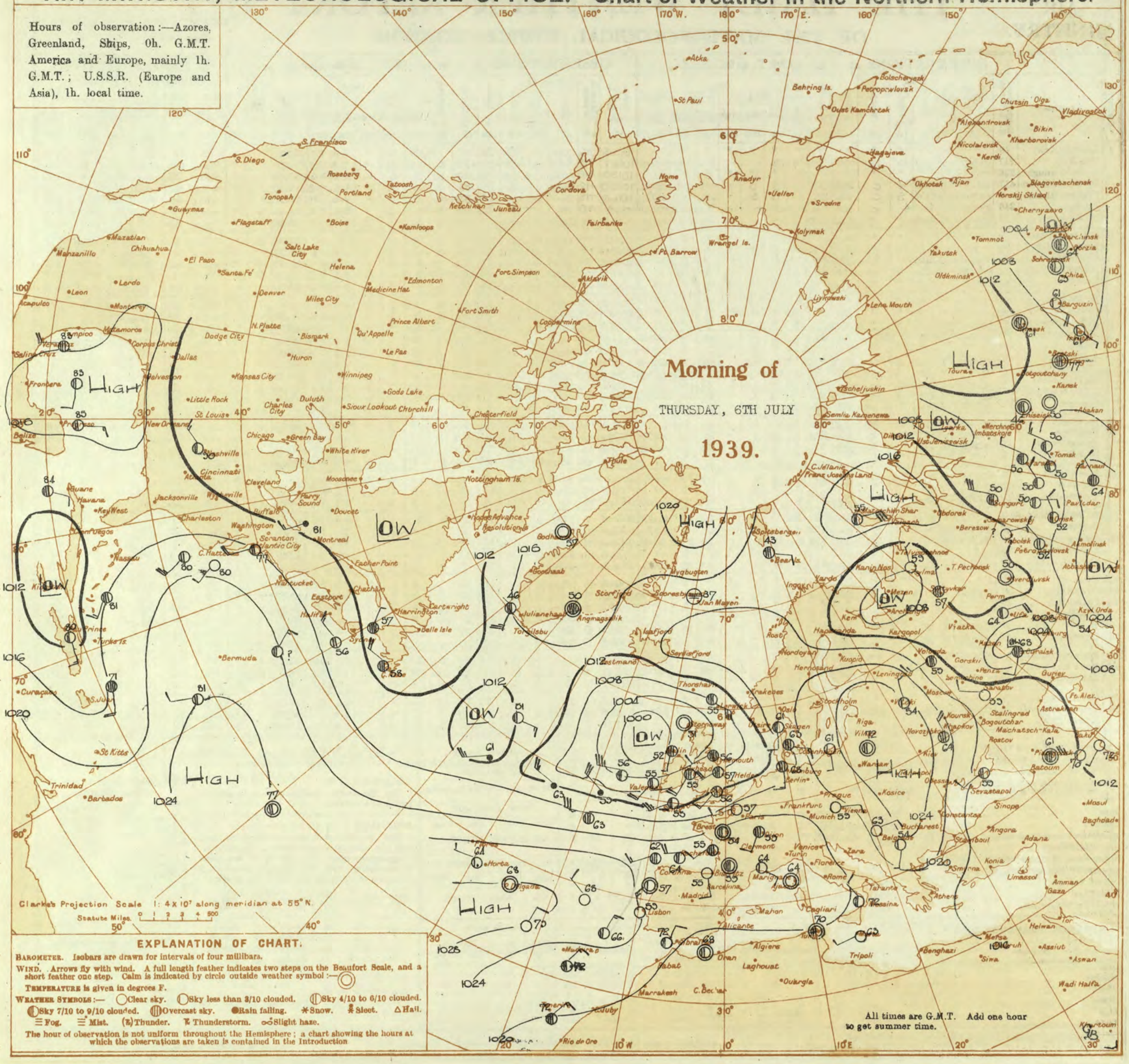
Unsettled.

Forecasts issued at 09.30 G.M.T.

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

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

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



AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday, 6th July, 1939
No. 28350.

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

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	+10	SSW	3	bc	56	85	8	5	–	–	4-6	4-6	2500
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1012.7	+6	SWS	4	c	53	97	7	5	3	–	4-6	7-8	2500
	Calshot (Sthmtn.)	8	1013.4	+6	SSW	5	c	58	85	8	6	3	–	4-6	9+	1500
	Lympne	346	1014.8	+6	SW	4	c	55	92	8	2	–	–	7-8	7-8	1500
	Manston	154	1014.8	+4	SWS	4	c	56	85	8	8	–	–	7-8	7-8	2500
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1012.1	+20	SWS	4	b	55	75	7	–	–	–	0	0	–
	Mildenhall	19	1011.3	+14	SW	4	c	55	85	8	–	3	6	0	7-8	–
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1009.6	+12	WSW	5	bc jp	55	85	8	3	–	–	2-3	2-3	1500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1013.1	+8	W	4	c	56	85	8	5	4	–	4-6	7-8	4000
	Plymouth	82	1012.5	+12	WS	5	bc	57	75	8	8	3	–	2-3	4-6	2500
	The Lizard	240	1012.2	+16	SW	5	bc	56	85	8	8	6	–	4-6	4-6	1500
	Scilly (St.Mary's)	163	1011.6	+8	WSW	5	bc	55	92	8	8	6	–	4-6	4-6	1500
	Guernsey	175	1015.8	+12	SSW	5	bc	55	92	7	–	7	–	0	2-3	–
6	Pembroke	142	1008.3	+8	WSW	5	bc	55	92	8	–	4	–	0	2-3	–
7	Holyhead	26	1004.9	+16	SSW	4	c	55	85	8	3	–	–	10	10	2500
	Chester (Sealand)	16	1006.9	+6	SSE	1	zo	54	92	6	5	–	–	9+	9+	4000
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1008.2	+6	SWS	4	c	57	75	7	3	–	–	7-8	7-8	2500
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1005.2	0	WSW	1	m/r	56	97	4	–	2	–	10	10	4000
11	St. Abbs Head	280	1004.9	+8	SW	3	rr	53	92	8	3	6	–	7-8	10	1500
	Leuchars	36	1004.2	+2	–	0	c	51	97	8	5	3→	6	4-6	9	2500
12	Renfrew (Abbots I.)	19	1004.3	+2	–	0	roro	54	85	6	5	–	–	9+	9+	2500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1003.1	−2	SW	4	c	55	92	7	8	1	–	7-8	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1003.2	+8	–	0	b	51	92	9	5	–	–	1	1	4000
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1003.7	+8	SE	2	F+	53	97	1	–	–	–	10	10	<150
16	Lerwick	156	1007.9	−8	SE	6	c	55	97	6	5	7	–	4-6	7-8	800
17	Blacksod Point	18	999.1	−8	W	4	rr	53	92	7	6	–	–	10	10	450
18	Malin Head	84	1000.8	+8	S	1	c	52	85	7	9	–	–	7-8	7-8	1500
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1004.5	+2	SSW	4	bc	55	85	7	8	–	–	2-3	2-3	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

OBSERVATIONS at 7 hr. G.M.T. 6th July — 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 5th Hrs. (36)
London (Kew)	1015.8	+16	SW	4	c/pr	58	75	7	5	2	–	7-8	9+	1500	1	*	70	56	51	1	0.1	5.5
Croydon	1016.1	+14	SWS	4	c/pr	57	83	8	3	9	–	7-8	9+	1500	1	*	70	52	50	0.4	4	5.6
S. Farnborough	1015.9	+16	SSW	4	pr	54	85	8	9	6	1	4-6	4-6	1500	1	*	69	52	47	0.3	1	7.0
Boscombe Down	1015.0	+12	SSW	4	c	55	92	8	8	4	–	4-6	7-8	2500	1	*	65	49	47	1	4	2.9
Calshot (Sthmtn.)	1016.0	+18	SW	6	ejp	59	85	8	2	7	–	7-8	9+	800	1	3	68	54	53	0.1	2	6.2
Lympne	1016.9	+10	SW	5	c	58	75	8	2	6	–	4-6	7-8	1500	0	§4	68	54	51	2	0.2	3.4
Manston	1017.3	+4	SWS	5	c/pr	58	85	7	8	3	3	4-6	7-8	1500	1	*	71	53	51	1	2	4.0
Shoeburyness	1016.5	+8	SSW	4	pr	57	85	8	8	7	–	4-6	9	2500	0	*	72	55	50	Tr	0.2	4.2
Felixstowe	1015.9	+2	SW	4	c/pr	56	85	8	9	6	2	2-3	7-8	2500	1	4	71	55	54	0.3	0.5	5.4
Gorleston	1015.0	+18	SSW	4	bc	59	75	7	1	4	–	2-3	4-6	2500	0	3	69	54	53	Tr	Tr	6.5
Mildenhall	1014.3	+18	SWS	5	c	58	75	8	7	–	6	2-3	7-8	2500	0	*	75	54	49	0.4	–	4.7
Cranwell	1012.0	+18	SSW	4	bc	56	75	8	1	4	2	4-6	4-6	2500	1	*	72	52	50	0.4	0.4	4.4
Birmingham	1012.5	+12	S	3	c	53	85	8	6	7	–	4-6	9	800	1	*	66	49	46	0.3	4	3.5
Upper Heyford	1014.0	+14	SWS	3	bc	55	85	8	8	3	–	4-6	4-6	800	1	*	68	49	36	0.5	1	*
Ross-on-Wye	1012.4	+10	SWS	4	c	55	85	7	9	4	–	9	9+	2500	1	*	67	51	47	1	3	2.6
Hartland Point	1011.8	+18	W	5	c	55	85	8	8	–	8	4-6	7-8	1500	1	4	59	49	50	7	0.6	2.7
Bristol	1013.7	+10	SSW	4	bc	56	75	8	2	3	8	2-3	2-3	2500	1	*	66	51	47	3	2	2.5
Portland Bill	1015.0	+10	WSW	5	c	57	92	7	5	7	–	7-8	10	4000	1	4	60	55	*	2	0.6	*
Plymouth	1014.2	+12	SW	5	c	57	85	7	9	–	–	10	10	1500	1	3	61	52	49	5	2	3.3
The Lizard	1013.4	+6	SSW	6	pr	55	92	7	8	2	–	9	10	1500	1	3	61	52	*	2	3	4.6
Scilly (St.Mary's)	1012.0	+2	SW	4	r'r	55	97	6	8	–	–	10	10	1500	1	3	63	52	*	1	4	8.9
Guernsey	1017.5	+12	SW	5	bc	56	92	7	–	–	8	0	4-6	–	1	4	62	54	52	15	–	8.5
Pembroke	1010.3	+10	SWW	5	c	56	85	7	8	7	–	4-6	9	1500	1	3	59	53	*	0.4	0.6	6.8
Holyhead	1008.0	+18	SSW	4	bc	57	75	8	–	3	–	0	4-6	–	1	2	62	54	52	2	–	6.9
Chester (Sealand)	1010.0	+16	SSE	3	c/pr	53	85	7	9	–	–	9	9	1500	1	*	71	50	48	3	4	2.8
Manchester	1009.7	+24	S	4	c/pr	54	85	7	8	3	–	4-6	4-6	4000	1	*	68	51	48	0.4	2	2.0
Spurn Head	1011.2	+16	SW	4	bc	57	75	7	–	8	3	0	4-6	–	0	3	71	54	*	1	Tr	3.6
Catterick	1007.9	+16	SSW	4	bc	56	85	7	8	4	3	2-3	4-6	1500	1	*	67	52	52	7	3	4.2
Tynemouth	1006.1	+16	S	3	c/pr	56	92	6	8	3	–	7-8	7-8	1500	1	2	64	54	51	7	4	1.7
St. Abbs Head	1004.2	0	SSW	3	rr	52	97	8	8	2	–	4-6	10	1500	1	3	61	51	*	3	5	*
Leuchars	1003.6	−2	ESE	2	c	53	97	7	5	2	–	9	9+	450	1	*	61	50	41	11	6	1.1
Renfrew (Abbots I.)	1003.8	+4	SWS	4	roro	53	97	5	5	–	–	10	10	860	1	*	68	52	44	3	3	4.4
Eskdalemuir	1004.8	−8	SSW	5	roro	52	92	7	6	–	–	10	10	800	1	*	63	48	44	11	9	2.1
Point of Ayre	1006.3	+18	SWW	4	c	55	85	8	8	7	–	4-6	7-8	2500	1	2	67	53	*	4	0.2	6.8
Tiree	1001.5	0	S	2	c	54	92	7	5	7	–	4-6	7-8	1500	0	2	60	53	50	9	–	4.7
Stornoway	1002.6	−4	NW	1	c	54	97	7	5	7	–	4-6	9+	2500	1	0	63	47	*	3	2	0.1
Dalwhinnie	1003.5	−4	SE	1	ir	51	92	6	4	7	–	7-8	10	1500	1	*	64	45	38	9	1	1.9
Aberdeen	1004.1	0	SE	1	roro	53	92	6	5	2	–	9	9+	1500	1	2	64	51	51	3	4	3.7
Wick	1003.3	0	SE	2	F	51	97	1	–	–	–	10	10	<150	1	2	59	51	*	–	0.4	*
Lerwick	1006.8	0	SEE	5	m	54	97	4	–	–	–	10	10	<150	0	*	59	53	*	–	Tr	5.7
Blacksod Point	1000.2	+2	SW	4	ojp	55	92	8	5	–	–	10	10	800	1	3	63	53	*	–	0.3	*
Malin Head	1002.0	+6	S	3	c	55	85	8	5	–	–	7-8	7-8	1500	0	2	60	49	*	4	–	6.5
Aldergrove	1004.2	+14	SW	3	c	53	85	8	5	–	–	10	10	1500	1	*	66	51	47	9	1	6.6
Birr Castle	1004.8	+8	SSW	1	c	53	85	8	5	7	–	4-6	9	2500	1	*	68	51	47	1	0.2	5.8
Valentia Obsy. †	1005.7	+4	SWS	4	c	57	75	8	5	–	–	7-8	7-8	4000	1	3	62	53	47	6	4	5.4
Roches Point	1007.1	0	SW	3	bc	56	92	8	3	4	–	4-6	4-6	2500	1	3	62	52	*	2	0.1	*

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.
		24 hrs. ended 9h.											
Kew	18	crorocy	bcycpro	bccproc	70	56	51	1	0.1	5.5	•	•	8
Croydon	217	ciroc	bccprov	probcPRt	70	52	50	0.4	4	5.6	•	•	8
Greenwich (Royal Observatory)	149	rc	cbyc	cbcrrcP	72	52	48	Tr	4	4.4	49	74	7
City (Bunhill Row)	—	•	•	•	•	•	•	•	•	4.9	•	•	•
Westminster (St. James' Park)	27	•	•	•	70	55	51	0.4		4.6	59	73	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	71	54	52	0.5	–	5.2	48	67	•
Camden Square	110	c	bc	•	73	55	51	0.3	–	*	•	66	•
Kensington	80	c	bc	•	72	54	51	Tr	Tr	5.1	At 18h. 60	67	•
Hampstead Observatory	450	b	bcp	bcp	68	52	50	0.1	Tr	5.1	•	71	•

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

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

South Kensington.			
Max.	Time.	Min.	Time.
<0.3 Whole period.			

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 5th July Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 6th July 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	WSW	2	c	59		54		1
Brussels						1020.9	SW	3	c	59		52		1
Berlin	1016.7	S	3	b	81	1018.3	WSW	1	c	68	84	61	–	–
Zurich	*	WNW	4	bc	77	1022.8	NW	1	c	59	*	57	*	3
Rome	1019.2	WSW	1	bc	91	1020.1	ENE	1	b	66	*	*	–	–

EXPLANATION OF FIGURES, LETTERS, etc.

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

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

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

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

COLUMNS 8, 22.—Code for surface visibility.

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

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

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

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

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 9 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday, 7th July, 1939.
No. 28551.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	°F Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud. Form. Low (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1017·0	+4	SSW	5	c/p	62	65	8	8	3	6	7·8	9+	2500
	Croydon	1017·0	+4	S	5	c/pr	63	65	8	2	6	-	9	9+	2500
	S. Farnborough	1017·2	+6	SSW	5	pr	58	85	8	9	-	-	10	10	1500
	Boscombe Down	1015·4	-2	S	5	r₀r₀	55	97	5	6	2	-	9	10	800
	Calshot (Soton.)	1017·5	+6	S	5	r₀r₀	58	92	6	6	2	-	9	10	450
	Lympne	1019·6	+8	SW	5	c	63	65	8	2	9	-	4·6	9	1500
	Manston	1018·9	+8	SSW	6	c	65	55	8	2	9	-	4·6	9+	2500
2	Shoeburyness	1017·8	+4	SSW	5	c	67	55	8	8	-	2	7·8	9	2500
	Felixstowe	1017·6	+6	SSW	6	c	66	55	8	8	6	3	4·6	7·8	2500
	Gorleston	1016·3	+4	SSW	5	c/pr	67	66	6	6	-	-	9	9	2500
	Mildenhall	1015·0	0	SSW	5	c	68	58	8	8	-	5	4·6	7·8	4000
	Cranwell	1012·8	-2	S	4	c	60	65	8	8	4	4	7·8	9	4000
3	Birmingham	1012·8	0	S	4	c	60	65	8	8	7	-	7·8	9+	2500
	Upper Heyford	1014·6	+2	SW	5	pr	59	75	7	8	7	-	4·6	10	1500
4	Ross-on-Wye	1012·5	-6	S	3	r₀r₀	58	85	6	6	1	-	7·8	10	1500
5	Hartland Point	1008·4	-32	SW	6	c	58	92	7	9	6	-	4·6	9	800
	Bristol	1013·2	-14	S	4	r₀r₀	56	92	7	6	2	-	7·8	10	800
	Portland Bill	1014·4	-16	SW	6	rr	57	92	7	5	-	-	10	10	1500
	Plymouth	1012·7	-2	SW	7	rr	58	97	6	-	2	-	10	10	450
	The Lizard	1013·3	+10	SSW	7	pr	58	97	6	5	2	-	9	10	800
	Scilly (St. Mary's)	1012·3	+16	SW	6	c/r	58	97	6	8	2	-	4·6	10	1500
	Guernsey	1018·4	+4	SW	5	c/r	59	85	8	5	3	-	7·8	10	1500
6	Pembroke	1009·7	-2	SE	3	c	57	92	8	8	6	-	7·8	9	1500
7	Holyhead	1008·2	-2	S	4	c/pr	60	85	8	8	7	-	7·8	9+	2500
	Chester (Sealand)	1010·3	-6	SSW	3	c	66	55	8	8	3	-	4·6	7·8	2500
8	Manchester	1010·8	+2	SE	4	c/pr	63	55	8	2	3	2	2·3	7·8	4000
10	Spurn Head	1012·9	+6	SW	4	c	67	55	7	8	9	8	4·6	7·8	2500
	Catterick	1010·7	+10	SW	2	pr	55	75	8	9	7	-	4·6	9+	1500
	Tynemouth	1008·8	+8	SW	5	c	64	65	6	8	-	-	7·8	7·8	1500
11	St. Abbs Head	1006·9	+14	SW	7	cq	62	55	8	2	6	-	4·6	7·8	1500
12	Renfrew (Abbotsl.)	1008·8	+12	SW	3	c/pr	59	75	8	8	7	-	7·8	9+	800
	Eskdalemuir	1006·1	+10	SW	4	c/pr	61	65	8	8	6	-	9+	9+	1500
	Point of Ayre	1007·2	+8	SW	6	c/pr	55	75	8	8	-	8	7·8	9	1500
13A	Tiree	1007·9	+8	SW	6	c	64	65	8	2	3	8	4·6	7·8	2500
13B	Stornoway	1002·2	+2	SW	5	bc	60	75	8	5	3	-	4·6	4·6	2500
15	Dalwhinnie	1003·1	+2	SSE	3	r₀r₀	52	97	7	5	2	-	4·6	10	1500
	Aberdeen	1004·4	+8	SSW	3	c	57	85	7	4	1	-	7·8	10	2500
	Wick	1005·6	+14	SE	4	ir₀	57	75	7	9	-	-	9+	9+	800
16	Lerwick	1003·6	+4	SE	3	bc	55	92	7	5	6	-	2·3	4·6	1500
		1007·1	+4	SE	5	c	58	92	8	5	7	-	7·8	9+	800
17	Blacksod Point	1001·9	+6	S	6	iR	59	97	7	6	-	-	10	10	450
18	Malin Head	1002·7	+4	S	4	c	58	75	8	8	-	-	7·8	7·8	4000
	Aldergrove	1009·9	+2	SW	3	c/pr	59	65	8	8	7	-	7·8	10	4000
19	Birr Castle	1004·5	-6	SSW	4	c	64	55	8	2	1	-	4·6	9	1500
20	Valentia Obsy.†	1004·2	-14	SSW	4	r₀r₀	56	97	6	6	-	-	10	10	800
	Roches Point	1006·6	-4	S	3	dd	56	97	6	5	-	-	10	10	450

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

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)	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)	1016·0	-8	SSW	5	r₀r₀	59	85	7	5	-	-	10	10	1500	1	*
	Croydon	1016·7	-2	SSW	5	d₀d₀	59	85	7	6	2	-	4·6	10	1500	1	*
	S. Farnborough	1016·1	-2	SSW	5	d₀d₀	58	97	6	6	2	-	9	10	800	1	*
	Boscombe Down	1019·9	+4	SSW	5	rr	57	97	6	6	2	-	9+	10	450	1	*
	Calshot (Soton.)	1016·7	-2	SSW	6	ir₀	60	85	6	6	2	-	9	10	450	1	4
	Lympne	1018·9	-8	SSW	4	c	62	65	8	5	7	-	7·8	9+	4000	0	§4
	Manston	1018·8	-6	SW	5	c	64	65	8	5	7	-	7·8	9+	4000	1	*
2	Shoeburyness	1017·5	-8	SSW	5	c	63	75	8	9	7	-	4·6	9+	1500	0	*
	Felixstowe	1017·2	-6	SSW	6	ir₀	62	75	8	5	-	-	9+	9+	1500	1	4
	Gorleston	1015·7	-2	SSW	6	c	63	75	7	6	3	-	4·6	9+	2500	1	4
	Mildenhall	1014·3	-10	SW	5	c	60	85	7	5	2	-	9	10	1500	1	*
	Cranwell	1011·9	-4	SSE	4	c	58	85	8	5	1	-	9+	10	1500	0	*
3	Birmingham	1010·7	-10	SSW	3	rr	60	85	6	6	2	-	9	10	1500	1	*
	Upper Heyford	1013·3	-6	SW	4	ir₀	59	92	7	6	-	-	10	10	800	1	*
4	Ross-on-Wye	1011·1	0	SW	4	rr	58	92	7	6	2	-	2·3	10	1500	1	*
5	Hartland Point	1009·6	-6	WSW	6	rr	58	97	7	6	2	-	9+	10	800	1	4
	Bristol	1013·2	+4	SSW	4	rr	59	92	6	6	2	-	7·8	10	800	1	*
	Portland Bill	1015·3	-12	SW	6	o	58	92	7	5	-	-	10	10	1500	1	4
	Plymouth	1013·6	0	SW	6	rr	58	97	6	6	2	-	9+	10	450	1	4
	The Lizard	1013·1	-8	SW	6	rr	57	97	5	6	2	-	9	10	1500	1	3
	Scilly (St. Mary's)	1011·2	-12	SW	6	r₀r₀	59	97	6	5	2	-	7·8	10	1500	1	4
	Guernsey	1018·1	-4	SW	5	c	60	85	8	4	3	-	4·6	10	2500	1	4
6	Pembroke	1007·5	-20	SW	7	rr	58	97	6	5	-	-	10	10	800	1	4
7	Holyhead	1005·9	-18	SSE	4	RR	57	92	7	6	2	-	9	10	450	1	2
	Chester (Sealand)	1008·1	-14	SSE	3	ir₀	59	85	7	5	2	-	7·8	10	1500	1	*
8	Manchester	1008·8	-8	SE'S	3	c	59	85	7	5	2	-	7·8	10	1500	1	*
10	Spurn Head	1011·7	-6	S	5	ir₀	58	85	6	5	-	-	10	10	1500	1	4
	Catterick	1008·2	-16	SE	3	c	62	65	7	5	7	-	9	10	1500	1	*
	Tynemouth	1009·0	-6	SSW	3	c/pr	56	92	7	2	3	-	4·6	7·8	1500	1	2
11	St. Abbs Head	1007·4	+2	SW	5	bc	59	65	9	8	4	1	4·6	4·6	2500	0	3
12	Renfrew (Abbotsl.)	1006·5	+2	S	4	c	63	65	9	8	4	4	2·3	9	2500	0	*
	Eskdalemuir	1005·9	-2	SE	3	pr	61	65	8	8	6	-	9+	9+	1500	1	*
	Point of Ayre	1006·7	-6	SSW	3	pr	57	75	8	8	-	8	7·8	9+	1500	1	*
13A	Tiree	1006·0	-18	SW	4	c	60	65	8	4	7	-	2·3	9+	2500	0	3
13B	Stornoway	1002·0	0	SSE	3	iR	54	97	6	-	2	-	9+	9+	800	1	3
15	Dalwhinnie	1003·4	+4	SE	3	c/r	54	92	7	5	7	-	7·8	10	2500	1	2
	Aberdeen	1005·9	+12	S	5	c	53	75	6	5	6	1	7·8	9+	2500	0	*
	Wick	1007·0	+6	SE	4	p	57	75	6	7	7	9	1	1	4000	1	2
16	Lerwick	1005·3	+16	S	4	c/pr	54	92	7	5	7	-	7·8	9+	1500	1	2
		1007·5	+2	SE	5	c	55	92	6	5	2	-	4·6	7·8	800	0	*
17	Blacksod Point	1000·2	-12	S	4	bc	57	85	9	2	3	9	2·3	4·6	2500	1	3
18	Malin Head	1002·0	-2	S	2	c/pr	57	85	8	8	5	-	4·6	9	4000	0	1
	Aldergrove	1002·6	-14	SSE	4	pr	58	85	7	9	2	-	9	9+	1500	1	*
19	Birr Castle	1001·8	-18	SSW	1	c/pr	58	97	8	8	7	-	7·8	9	1500	1	*
20	Valentia Obsy.†	1000·8	-14	SW	5	c/pr	59	92	6	5	-	-	9+	9+	800	1	3
	Roches Point	1002·3	-24	SW	4	rr	58	97	6	6	2	-	7·8	10	800	1	4

PAST 24 HOURS.

Stations	Weather. 7h.—13h. 6th. (37)	13h.—18h. 6th. (38)	18h. 6th. to 1h. 7th. (39)	1h.—7h. 7th. (40)
London (Kew)	cir₀c PRc	cir₀cr₀r₀	cr₀cr₀	cr₀cr₀d₀
Croydon	PHRprq pr₀	cpr₀r₀d₀	cd₀r₀r₀	r₀r₀d₀d₀dd
S. Farnborough	prPRprc	RDrrd	d₀d₀r	crr₀d₀d₀c
Boscombe Down	bccpre₀r₀	cRRrr	RRrrir₀	ir₀r₀r₀d₀d₀
Calshot (Soton.)	cpr₀crr	crrm₀	cr₀r₀idom₀	dr₀ddq
Lympne	bccbc	bcpr₀c	cir₀	ir₀cm₀d₀
Manston	cpr₀cy	cpr₀c	c	cir₀c
Shoeburyness	bccpc	cycpc	c	ir₀c
Felixstowe	bccpr	cpr₀ir₀	ccr₀r₀	cr₀r₀tr₀
Gorleston	bccpr₀q	cpr₀q	cpr₀r₀	or₀r₀ir
Mildenhall	bcvbc	bccr	cir₀rrc	Cir₀cpr₀c
Cranwell	bcc	cpr₀c	Or₀r₀	or₀r₀ir₀
Birmingham	cpr₀bc	cpr₀	orrr₀	r₀r₀c
Upper Heyford	bccpr₀	cr₀rrr₀	crrqm	crr jRr₀r₀
Ross-on-Wye	cp₀bcp₀cr₀	r₀ccr	rrrq	rrcbc
Hartland Point	crrc	crrc	crr	rrir₀
Bristol	crRr	cr₀Rr₀r	crrirq	cr₀qd₀
Portland Bill	corr	orr	orrc	co rr
Plymouth	r₀r₀rm₀	r₀rirrr	rrr₀r₀rm₀	cir₀idddd
The Lizard	prrm	prrrq	Orrm	rrc
Scilly (St. Mary's)	crrir₀	cr₀r₀	cr₀r₀	cr₀r₀c
Guernsey	cir₀	c	corr	Oldf
Pembroke	cpr	Rrm₀q₀	orrirmq	cbcq
Holyhead	bcpr₀c	rrRRc	RRrrc	c,bc
Chester (Sealand)	cprbcy	cyir₀cr₀	rrRRm₀	cr₀bc
Manchester	bccpr₀PR	c,ir₀,c	crrr₀r₀	crcbc
Spurn Head	c	pr₀c	cqrr	rrqc
Catterick	bccpr₀	pr₀cyc	omr₀r₀	cPRbc
Tynemouth	cpc	cp₀	coir	oir₀
St. Abbs Head	prcqy	cq,bc	c	fircq
Renfrew (Abbotsl.)	cr₀r₀cpr₀c	cyc	cir₀c	or₀RRrrm
Eskdalemuir	cm₀r₀r₀rc	cpr₀	cpr₀cmr₀c	cirRRrr
Dalwhinnie	cpr₀PR	cpr₀	prcirrr	r₀RRr₀
Aberdeen	cir	cir	•	clr
Wick	cm₀prcq	irbcb	bbccir₀	comir
Lerwick	pr₀bc	prm₀c	cpr₀c	pr₀m₀
	omFir	cm₀	cpr₀	c
Blacksod Point	iR	iRc	prcq	prcq
Malin Head	c	cpr₀c	bcc	cbc
Aldergrove	ccpr₀	cpr₀	pr₀rrdd	rr fbcc
Birr Castle	cy	cpr	circ	c
Valentia Obsy.	rrr₀r₀	r₀r₀pr₀c	ir₀bbcc	prpr₀c
Roches Point	bcodd	drcrr	crrbc	bc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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.

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.*

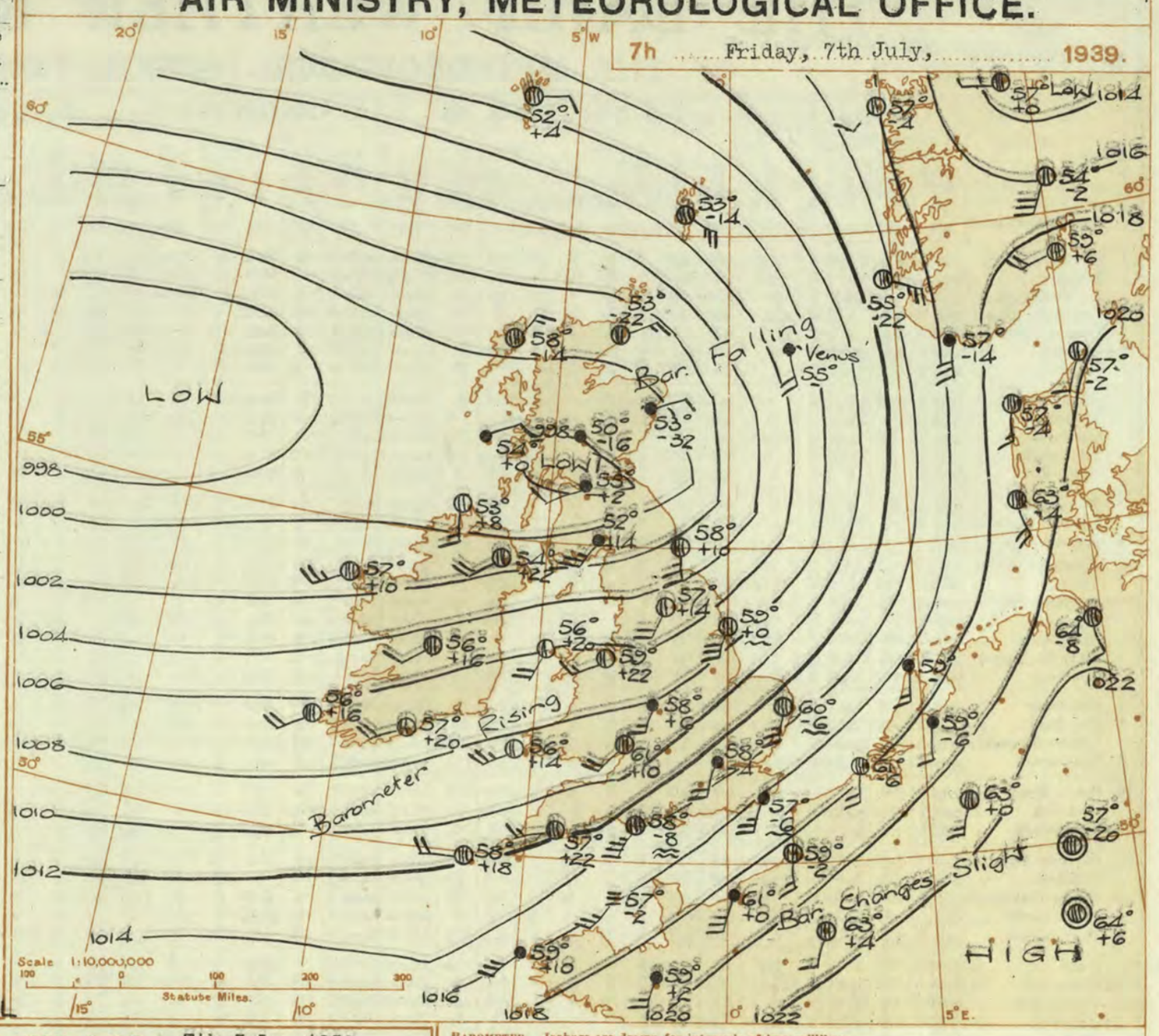
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 6th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 5th to 9h. 6th	Temperature. (°F) Max. 9h.—17h. 6th	Rainfall. (mm.) Night. 17h. 5th to 9h. 6th	Rainfall. (mm.) Day. 9h.—17h. 6th	Sunshine. (Hrs.) Sunrise to 17h. 6th	Sunshine. (Hrs.) Sunrise to Sunset. 5th
1	Tunbridge W.	bcc	copo	52	65	6	0·5	4·4	4·7
	Bournemouth	cor	r	53	63	0·3	8	2·7	4·9
	Ventnor ...	cbcop	o·o	55	62	0·3	2	3·2	5·2
	Southsea ...	c	oroc	57	63	Trace	5	3·8	6·3
	Bognor Regis	bc	crrrc	57	62	Trace	2	4·2	6·4
	Littlehampton	bcc	crc	56	62	3	2	4·8	6·4
	Worthing ...	bbcr.	cor	57	65	2	1	4·8	6·5
	Brighton ...	bbc	bcrcr	57	64	Trace	0·5	4·6	*
	Eastbourne† ...	bc	bcp.c	57	65	1	0·3	5·4	4·2
	Hastings† ...	bbcc	op.o	57	64	-	Trace	5·7	4·3
	Folkestone ...	bc	bcco	56	65	1	-	8·7	3·5
	Dover ...	bc	bcc	57	65	2	-	9·4	3·2
	Deal	bcbc	cbcco	*	67	2	-	9·4	3·9
	Ramsgate ...	cbc	c	56	64	1	-	7·3	3·3
	Margate ...	bcp	bcc	55	66	2	Trace	6·7	3·8
2	Southend ...	cp	cp	55	68	Trace	Trace	4·1	4·6
	Clacton-on-Sea	bcpbc	bccpc	55	66	0·4	1	4·8	4·9
	Dovercourt ...	pbc	bcpoc	54	67	Trace	Trace	6·1	6·8
	Lowestoft ...	bbcc	crbcc	54	66	Trace	0·6	7·8	5·8
	Skegness ...	b	bbco	54	69	-	-	9·0	5·5
	Mablethorpe...	bcy	bcod.	53	69	-	Trace	8·3	2·8
	Cleethorpes ...	bc	bcrbc	54	70	-	Trace	8·8	4·3
3	Leamington S.	cbcc	cpc	52	65	4	0·3	4·5	4·3
4	Cheltenham†	cqpc	roR	51	65	5	13	4·3	3·5
5	Bath	cir	cir	53	69	2	4	4·2	2·4
	Weymouth ...	rr	rr	59	60	6	7	0·7	4·8
	Jersey ...	rcbcc	bcc	56	66	3	-	5·9	6·6
	Torquay ...	orrq	orrq	52	60	9	9	1·1	5·2
	Falmouth ...	oqmqr	pqrrp	51	60	12	8	0·0	3·0
	Penzance ...	rqr	rqr	50	61	15	5	0·0	3·8
	St. Ives ...								
	Bude... ...	bcop	cor	52	60	2	7	2·6	2·9
	Ilfracombe ...	bcpc	rbcrr	52	62	4	9	3·8	3·2
6	Aberystwyth	cbcc	crr	55	65	-	2	3·8	2·0
7	Llandudno ...	c	bcc	54	68	0·2	-	3·2	4·4
	Colwyn Bay...	bcc	cbcc	52	67	2	-	3·1	3·0
	Rhyl	bcc	bcc	53	67	3	-	2·9	3·0
8	Wallasey ...	bcc	cbcpc	53	68	12	0·5	3·5	3·6
	Southport ...	pbcpc	bcpco	53	68	6	1	4·2	3·1
	Blackpool ...	bbcqp	cp.c	54	66	11	0·3	3·9	4·6
	Morecambe ...	bcthr	bcc	54	65	11	0·5	3·4	2·5
9	Ilkley... ...	cbcp	cpbcp	53	67	2	2	5·6	4·3
	Harrogate ...	bccp	bcc	52	64	4	0·2	6·2	3·9
10	Berwick-on-T.	cbc	bcr.c	52	69	4	Trace	5·0	2·5
11	Dunbar ...	cr.	bc	52	65	5	-	7·1	2·8
12	Troon... ...	ocbcc	coc	53	60	4	-	2·7	3·9
	Douglas ...	bcpr.	bc	52	59	1	Trace	6·0	7·3

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.

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. 7th July, 1939.
1 S.E. England V 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England V 6 South Wales ... V	Fresh southwest wind, becoming strong later, perhaps gale locally on coasts; bright intervals and local showers at first, rain later; rather cool.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Moderate to fresh southwest wind, strong locally later; bright intervals and thundery showers at first, rain later; rather cool.
13 A. W. Scotld. B.N.W.Scotland.	Moderate south wind; bright intervals, thundery showers; cool.
14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Moderate to fresh south to southeast wind; occasional rain; local thunder; cool.
17 N. W. Ireland 18 N. E. Ireland	Moderate to fresh southwest wind; bright intervals, thundery showers; cool.
19 S. E. Ireland 20 S. W. Ireland	Moderate southwest wind; rain at first; bright intervals and showers later; cool.

GENERAL INFERENCE.

A depression remains centred off Northwest Ireland and another over Scotland is moving northnorthwest. There are indications of a depression moving eastwards about 700 miles west of the Scilly Isles. There will be thundery showers and bright intervals in Scotland. In England and Wales there will be bright intervals and showers at first and probably more general rain later.

FURTHER OUTLOOK.

Unsettled.

Time of Issue of Gale Warning.

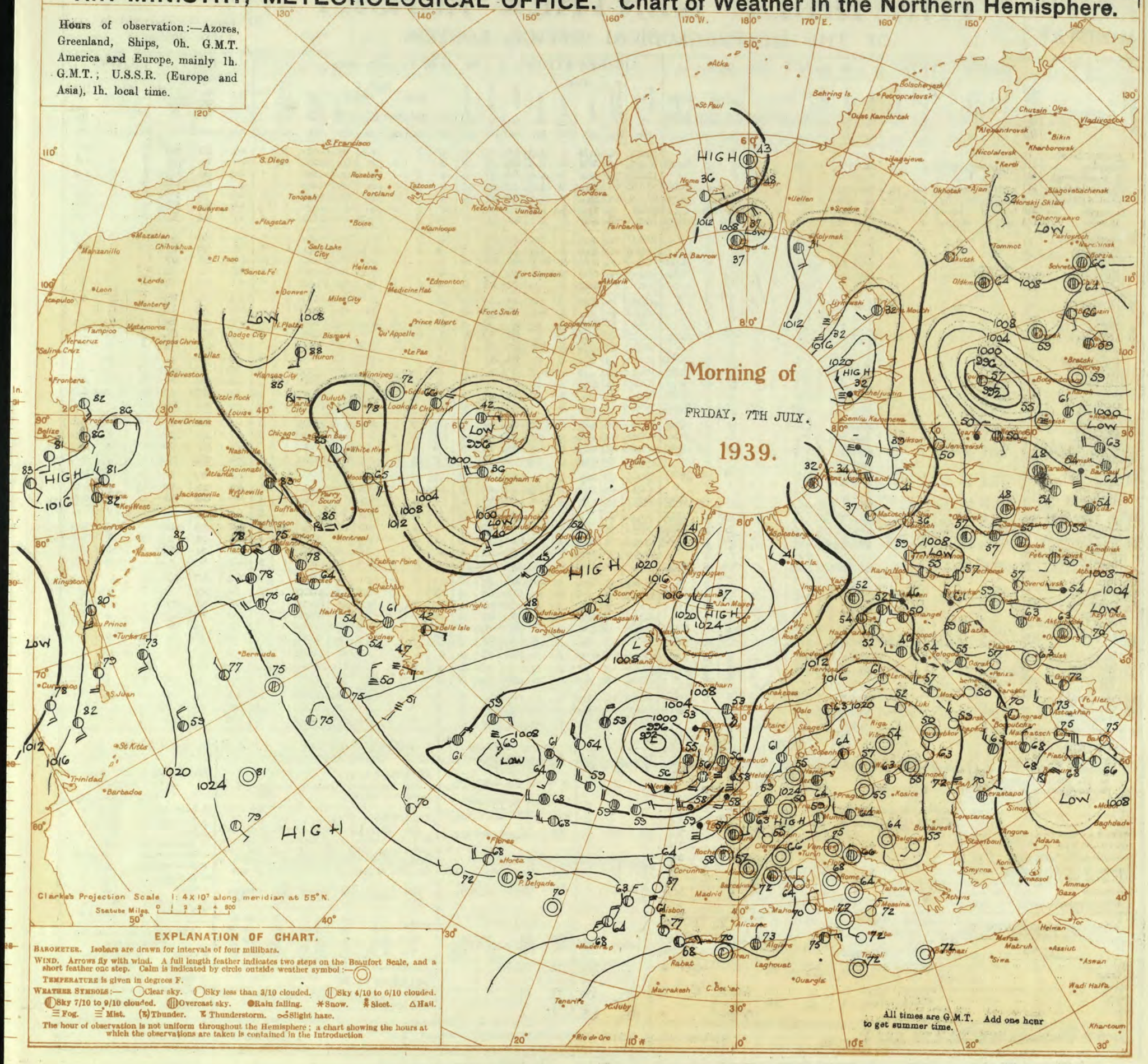
V South Cone hoisted at 0930 on 6th July in districts 1,5,6 and parts of 19 and 20.

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.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

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

TEMPERATURE is given in degrees F.

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday, 7th July, 1939.
No. 28351.

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

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	1015·7	-12	SSW	4	roro	58	85	7	6	2	-	9	10	1500
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1012·8	-14	SSW	6	iro	57	92	7	6	2	-	7-8	10	800
	Calshot (Sthmtn.)	8	1014·8	-14	SW	6	c/d	60	85	7	5	-	-	10	10	2500
	Lympne	346	1017·6	-10	SWS	5	iro	58	85	7	-	2	-	10	10	5700
	Manston	154	1016·8	-12	SSW	4	c	60	75	7	5	-	-	10	10	7200
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1015·2	-6	SW	5	roro	59	85	6	6	-	-	10	10	1500
	Mildenhall	19	1012·9	-12	SW	5	iro	59	92	7	6	2	-	4-6	10	1500
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1006·2	-14	SW	7	rr	58	97	6	6	2	-	4-6	10	800
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1012·6	-8	SW	7	c	57	92	7	5	-	-	10	10	2500
	Plymouth	82	1010·4	-18	SWS	7	roro	57	97	5	6	2	-	9	10	450
	The Lizard	240	1009·7	-16	S	7	roro	57	97	6	5	-	-	10	10	300
	Scilly (St. Mary's)	163	1008·6	-2	WSW	5	roro	58	97	6	5	-	-	10	10	1500
	Guernsey	175	1015·6	-16	SW	6	o/r	56	97	7	5	-	-	10	10	2500
6	Pembroke	142	1005·8	+6	WSW	6	oq	57	97	7	5	-	-	10	10	1500
7	Holyhead	26	1001·0	-12	SSW	4	c/d	56	92	7	6	2	-	9	10	800
	Chester (Sealand)	16	1003·5	-22	SSE	3	c/r	58	92	8	6	2	-	9	10	1500
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1008·9	-20	S	6	RR	58	97	6	5	-	-	10	10	1500
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1003·8	-32	S	5	c/r	56	97	6	-	2	-	10	10	1500
11	St. Abbs Head	280	1003·4	-24	SE	3	c	53	97	7	8	2	-	7-8	10	1500
	Leuchars	36	1003·1	-26	ESE	3	c	54	92	8	5	7	-	9	9+	2500
12	Renfrew (Abbots I.)	19	1001·5	-30	E	3	o/r	54	97	6	5	-	-	10	10	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1000·4	-26	S	2	c	56	97	7	8	2	-	4-6	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1003·1	-8	ENE	3	pr	53	92	8	5	7	-	7-8	9+	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1005·1	-6	SE	4	c	53	92	8	5	7	-	4-6	7-8	1500
16	Lerwick	156	1009·2	0	SES	5	s/pr	53	92	6	8	7	-	4-6	7-8	800
17	Blacksod Point	18	998·6	-10	S	5	c	55	92	7	9	-	-	9	9	800
18	Malin Head	84	999·4	-14	S	1	c	55	85	8	8	-	-	9	9	5700
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1003·3	0	SW	4	rr	56	97	6	6	-	-	10	10	450
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

OBSERVATIONS at 7 hr. G.M.T. 7th July — 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 6th Hrs. (36)
London (Kew)	1012·1	-6	SWS	4	dodo	59	92	6	6	2	-	7-8	10	1500	1	*	63	58	56	4	2	4·1
Croydon	1013·5	-4	SW	4	dodo	58	97	5	5	-	-	9	10	800	1	*	64	56	56	3	1	3·8
S. Farnborough	1012·3	-4	SW	5	dodo	58	97	6	6	2	-	9	10	450	1	*	64	56	55	8	4	2·9
Boscombe Down	1011·2	+2	SSW	5	dodo	58	97	5	6	2	-	9	10	220	1	*	61	56	55	7	7	2·9
Calshot (Sthmtn.)	1012·8	-2	SSW	7	dodo	59	92	6	6	2	-	9+	10	450	1	4	63	58	57	7	3	3·0
Lympne	1015·9	-6	SSW	5	ido	57	85	5	6	2	-	9+	10	450	1	§4	65	56	56	Tr	Tr	6·8
Manston	1015·1	-8	SW	6	c	60	75	7	5	7	-	7-8	9+	800	1	*	67	58	56	Tr	Tr	6·4
Shoeburyness	1014·0	-10	SW	6	iro	59	85	7	6	7	-	2-3	9+	800	0	*	68	59	56	0·2	Tr	3·8
Felixstowe	1014·0	-10	SW	6	ido	61	85	7	6	1	-	2-3	9+	800	1	4	68	59	57	0·5	1	6·4
Gorleston	1012·7	-6	SW	5	c/r	60	85	6	6	-	-	10	10	2500	1	4	68	58	57	1	3	9·1
Mildenhall	1010·7	-6	SSW	5	c/pr	60	92	7	6	2	-	7-8	10	1500	1	*	69	58	56	0·3	2	6·6
Cranwell	1007·7	+2	SSW	5	cjp	59	92	8	5	7	-	9	9+	1500	1	*	67	56	55	Tr	4	7·1
Birmingham	1008·0	+6	SSW	3	pr	58	97	8	6	-	-	9+	9+	800	1	*	62	56	54	1	11	3·7
Upper Heyford	1010·2	0	S	4	roro	57	97	5	6	-	-	10	10	450	1	*	64	55	55	5	11	*
Ross-on-Wye	1008·7	+10	SWW	4	c	61	85	8	9	-	9	4-6	7-8	2500	1	*	65	57	56	1	10	3·2
Hartland Point	1008·9	+22	WSW	5	c	58	92	8	8	3	-	7-8	7-8	1500	1	4	58	57	56	7	12	2·3
Bristol	1010·2	+10	WSW	4	PR	60	92	7	6	2	-	7-8	10	450	1	*	63	56	56	8	6	4·1
Portland Bill	1011·0	-8	SW	7	o	58	92	7	5	-	-	10	10	1500	1	6	58	54	*	5	3	*
Plymouth	1012·1	+22	WS	3	c/d	57	97	6	5	3	-	9	9+	2500	1	3	59	57	56	17	5	1·0
The Lizard	1013·0	+20	SSW	4	c	57	97	8	8	6	-	7-8	9+	1500	1	2	58	56	*	12	5	0·0
Scilly (St. Mary's)	1011·7	+18	W	4	c	58	97	8	8	8	3	2-3	9	1500	1	3	59	57	*	6	3	0·0
Guernsey	1014·8	-2	SW	5	F	57	97	0	5	-	-	10	10	<150	1	2	62	52	55	0·2	1	3·6
Pembroke	1008·6	+14	WS	5	bcq	56	92	7	7	7	-	4-6	4-6	2500	1	3	61	55	*	10	10	3·3
Holyhead	1004·8	+20	SWS	4	bc	56	85	8	5	4	-	2-3	2-3	2500	1	3	62	53	51	1	11	4·3
Chester (Sealand)	1006·3	+22	WSW	3	bc	59	75	8	8	4	-	2-3	4-6	2500	1	*	68	57	54	1	5	3·2
Manchester	1006·1	+18	SWS	4	bc	60	75	7	2	3	-	1	4-6	2500	1	*	66	56	54	1	8	3·6
Spurn Head	1006·6	0	SSW	6	c	59	85	7	5	-	-	9+	9+	800	1	4	72	57	*	Tr	3	8·4
Catterick	1003·2	+14	SWS	4	bc/pr	57	85	7	9	4	-	4-6	4-6	800	1	*	69	55	55	0·3	6	4·9
Tynemouth	1001·7	+10	S	5	c/r	58	85	6	2	6	-	4-6	7-8	1500	1	2	64	55	53	1	2	5·8
St. Abbs Head	997·8	-50	SW	6	c/r	57	65	9	8	6	-	7-8	9+	800	1	3	64	52	*	1	1	*
Leuchars	998·1	-18	-	0	rr	55	97	4	-	2	-	10	10	220	1	5	65	53	48	1	5	3·2
Renfrew (Abbots I.)	998·7	+2	WSW	2	rr	55	97	4	5	2	-	7-8	10	800	1	*	63	54	52	1	17	1·6
Eskdalemuir	1000·0	+14	SWS	5	roro	52	92	6	6	-	-	10	10	800	1	*	60	51	49	5	15	4·2
Point of Ayre	1002·1	+24	WS	5	c	55	85	8	5	3	-	4-6	9+	1500	1	3	67	53	*	-	4	4·1
Tiree	998·6	0	ENE	2	dr	54	97	7	-	2	-	9+	9+	1500	1	2	62	50	47	5	6	1·3
Stornoway	1001·3	-14	NE	3	c	58	85	8	5	-	-	7-8	7-8	4000	1	2	56	52	*	7	1	0·0
Dalwhinnie	*	-16	SE	2	ir	50	92	6	6	7	-	7-8	10	1500	1	*	59	48	47	1	1	1·3
Aberdeen	998·7	-32	ENE	2	ir	53	97	4	5	-	-	10	10	450	1	2	59	53	49	3	2	5·4
Wick	1001·5	-22	ENE	3	c	53	97	6	5	2	-	7-8	10	800	1	2	57	52	*	1	0·1	*
Lerwick	1007·3	-14	SE	5	c	53	97	7	8	7	-	7-8	9+	800	0	*	58	51	*	Tr	Tr	3·8
Blacksod Point	1000·2	+10	WSW	5	c	57	85	8	8	-	-	10	10	1500	1	3	59	53	*	5	14	*
Malin Head	999·4	+8	S	3	bc	53	75	8	4	3	-	2-3	4-6	5700	0	2	62	52	*	0·3	Tr	2·0
Aldergrove	1000·8	+22	SW	4	c	54	92	8	5	-	-	10	10	800	1	"	63	52	50	0·1	6	2·0
Birr Castle	1004·1	+16	SW	2	c	56	92	8	3	7	-	2-3	7-8	1500	1	*	65	52	48	4	1	2·0
Valentia Obsy. †	1006·3	+16	SWW	4	c/pr	56	92	8	8	3	1	7-8	9+	1500	1	3	60	54	50	6	1	3·5
Roches Point	1007·2	+20	WSW	4	bc	57	92	8	5	4	5	2-3	4-6	2500	1	3	59	52	*	9	4	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
Kew	18	circPRc	circroro	crocrodo	63	58	56	4	2	4·1	•	•	6
Croydon	217	PHRqpro	cprorodo	crorodd	64	56	56	3	1	3·8	•	•	6
Greenwich (Royal Observatory)	149	c	circ	cir	66	57	55	1	1	3·1	84	95	5
City (Bunhill Row)	—	*	*	*	*	*	*	•	•	3·4	*	*	*
Westminster (St. James' Park)	27	*	*	*	65	58	56	4		3·6	83	88	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	67	57	54	1	2	4·7	71	85	*
Camden Square	110	bc	c	*	67	58	56	2	3	*		87	*
Kensington	80	bcp	cr	*	66	58	56	2	2	3·5	At 18h 82	87	*
Hampstead Observatory	450	*	*	*	*	*	*	*	*	4·3	*	*	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

South Kensington.

Max.	Time.	Min.	Time.
<0·3 whole period.			

Kew Observatory.

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 6th July Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 7th July 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	1022·1	SW	3	bc	70	*	SSW	2	c	63	72	59	-	-
Brussels														
Berlin	1021·0	NNW	2	c	72	1021·9	SE	2	bc	64	79	55	Tr	-
Zürich	1022·6	WNW	3	c	66						72		-	
Rome						1019·0	-	0	bc	68	*	*		-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday, 8th July, 1939.
No. 28352.

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

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)...	1013·1	+4	SW	5	c	67	65	8	7	-	9	7-8	7-8	4000
	Croydon ...	1013·3	+2	SW'S	4	c	67	75	8	2	4	-	4-6	7-8	2500
	S. Farnborough	1013·6	+6	SW'S	5	c	68	65	8	1	3	2	4-6	7-8	2500
	Boscombe Down	1012·9	+10	SW	4	bc	68	65	8	2	4	9	4-6	4-6	2500
	Calshot (Soton.)	1014·6	+10	SW'S	5	bc	67	75	8	8	3	5	2-3	4-6	2500
	Lympne ...	1016·1	+6	SW'S	5	dodo	59	97	4	-	2	-	10	10	<150
	Manston ...	1015·2	+2	SSW	6	ido	63	85	6	6	2	-	9	10	450
2	Shoeburyness ...	1013·8	+2	SW'S	5	c	69	75	8	7	8	-	4-6	7-8	1500
	Felixstowe ...	1013·6	+4	SW'S	7	c	67	75	8	6	3	-	9	9+	1500
	Gorleston ...	1011·5	0	SSW	5	c	65	75	6	8	-	-	9+	9+	2500
	Mildenhall ...	1011·0	+2	WSW	4	c	70	75	8	8	4	-	7-8	9	2500
	Cranwell ...	1009·7	+10	WSW	4	c	68	55	8	8	-	-	7-8	7-8	2500
3	Birmingham ...	1010·5	+6	SW	4	c	65	55	8	8	7	-	7-8	9	1500
	Upper Heyford	1012·1	+10	WSW	5	bc	67	65	8	8	-	9	4-6	4-6	1500
4	Ross-on-Wye ...	1011·5	+6	SW'W	4	cq	65	65	8	8	-	1	4-6	7-8	2500
5	Hartland Point	1012·4	+14	WSW	5	bc	58	85	8	2	4	1	2-3	2-3	2500
	Bristol ...	1012·9	+10	W	4	bc	66	65	8	7	-	1	2-3	4-6	2500
	Portland Bill ...	1014·4	+10	SSW	5	c	59	85	7	5	-	-	10	10	4000
	Plymouth ...	1014·1	+10	SW'S	4	c	61	92	8	8	7	-	4-6	9+	2500
	The Lizard ...	1014·5	+16	SW	4	bc/pr	62	92	8	8	4	-	4-6	4-6	2500
	Scilly (St. Mary's)	1013·8	+8	W'S	4	c	64	85	8	8	4	3	4-6	7-8	2500
	Guernsey ...	1016·5	+10	SSW	4	dF	59	97	1	5	-	-	10	10	<150
6	Pembroke ...	1012·1	+12	WSW	5	cq	60	85	7	8	6	-	4-6	7-8	2500
7	Holyhead ...	1007·7	+19	SSW	5	c	59	85	8	5	3	-	4-6	9	2500
	Chester (Sealand)	1008·7	+8	SW	4	bc	66	55	8	8	3	-	4-6	4-6	2500
8	Manchester ...	1008·4	+10	SW	4	bc/pr	63	75	7	8	4	-	4-6	4-6	2500
10	Spurn Head ...	1008·4	+10	W'S	5	cq	70	55	7	9	8	8	7-8	7-8	1500
	Catterick ...	1006·5	+10	W'S	4	c	63	55	8	8	-	-	7-8	7-8	1500
	Tynemouth ...	1004·0	+12	WSW	5	bc	66	65	7	2	-	-	4-6	4-6	2500
11	St. Abbs Head...	1000·9	+16	W	6	bc	63	55	9	8	6	1	4-6	4-6	1500
	Leuchars ...	1000·6	+20	WSW	5	c	64	65	8	8	7	-	7-8	7-8	1500
12	Renfrew (AbbotsI.)	1002·8	+22	SW	4	pr	57	92	8	9	-	-	9+	9+	800
	Eskdalemuir ...	1003·3	+14	SW	6	c/pr	57	85	8	5	-	-	9+	9+	800
	Point of Ayre ...	1005·6	+14	W	5	c	67	55	8	8	3	-	4-6	9	1500
13A	Tiree ...	1000·0	+4	SSW	4	ir	57	85	8	-	2	-	7-8	7-8	1500
13B	Stornoway ...	1000·7	0	NE	4	c	56	92	6	5	1	-	4-6	10	2500
15	Dalwhinnie ...	1000·4	+12	SW	3	c	57	75	7	4	7	-	7-8	9+	4000
	Aberdeen ...	998·4	+6	SSW	3	iro	62	85	6	9	-	-	9+	9+	800
	Wick ...	997·5	-18	NNE	3	rr	53	97	5	5	-	-	10	10	450
16	Lerwick...	1001·7	-34	E	7	ir	54	97	6	8	2	-	7-8	10	800
17	Blacksod Point...	1002·4	+10	WSW	5	c	60	85	8	3	-	-	7-8	7-8	800
18	Malin Head ...	1001·4	+4	WSW	3	pr	57	85	8	8	-	-	9	9	5700
	Aldergrove ...	1002·9	+2	SW'S	3	pr	60	75	8	8	-	-	9	9	2500
19	Birr Castle ...	1006·6	+8	WSW	4	ido	60	75	7	6	1	-	4-6	10	1500
20	Valentia Obsy.†	1008·5	+8	SW'W	5	c/pr	60	85	8	5	-	-	9+	9+	1500
	Roches Point ...	1009·1	+10	WSW	5	c/pr	60	92	8	3	-	-	7-8	7-8	1500

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

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)	1013·3	+2	SW	4	bc	68	65	8	1	7	-	4-6	4-6	9000	0	*
Croydon	1013·6	0	SW'S	4	bc	67	65	8	1	4	-	2-3	2-3	2500	1	*
S. Farnborough	1013·8	+2	SSW	5	bc	65	75	8	1	3	-	2-3	2-3	4000	1	*
Boscombe Down	1013·5	+2	SW'S	5	bc	64	75	8	1	5	-	2-3	4-6	9000	1	*
Calshot (Soton.)	1014·9	+2	SW'S	4	c	63	85	8	7	3	-	7-8	7-8	1500	1	2
Lympne	1015·9	-2	SW	4	q/d	59	97	6	5	-	-	10	10	<150	0	§4
Manston	1014·9	-2	SSW	5	c	64	85	7	5	-	9	9	9+	1500	1	*
Shoeburyness	1014·8	0	SW'S	5	bc	67	75	8	1	4	9	4-6	4-6	2500	0	*
Felixstowe	1013·2	0	SW	6	bc	67	75	9	2	-	1	2-3	2-3	2500	0	4
Gorleston	1011·7	0	SSW	4	c	66	75	7	8	5	-	7-8	7-8	2500	0	3
Mildenhall	1011·7	+6	W'S	4	c	70	65	8	8	3	1	4-6	7-8	2500	1	*
Cranwell	1010·2	+2	SW'S	3	c	65	65	8	7	3	-	9	9+	4000	0	*
Birmingham	1011·6	+4	SSW	4	c	63	55	8	5	7	-	4-6	9	2500	1	*
Upper Heyford	1012·5	+2	WSW	4	c	65	85	9	8	5	-	1	7-8	2500	1	*
Ross-on-Wye	1012·1	0	SW'W	4	c	62	65	8	1	5	-	1	7-8	2500	1	*
Hartland Point	1012·9	0	W	5	bc	59	85	8	2	3	-	2-3	4-6	2500	1	3
Bristol	1013·1	0	W	4	c	64	65	8	5	3	9	4-6	7-8	2500	0	*
Portland Bill	1014·8	+4	SSW	5	c	59	92	7	5	7	-	7-8	9	4000	1	4
Plymouth	1014·8	+4	SW	5	c	60	92	8	8	3	-	4-6	7-8	2500	1	2
The Lizard	1015·4	+8	SSW	4	c	60	97	8	8	6	-	7-8	9+	2500	0	2
Scilly (St. Mary's)	1014·3	0	SW'W	4	cjp	60	97	7	5	8	-	7-8	9	1500	1	3
Guernsey	1017·2	+6	SW	4	f-	59	97	2	5	-	-	10	10	<150	1	4
Pembroke	1012·3	+6	WSW	5	cq	58	92	7	8	6	-	7-8	9+	2500	1	3
Holyhead	1007·9	+2	SSW	5	c	57	85	7	6	7	-	7-8	9+	1500	1	3
Chester (Sealand)	1009·5	0	SW	4	c	63	65	8	8	7	1	4-6	7-8	2500	1	*
Manchester	1009·2	+4	SW	4	c	62	65	8	8	7	-	4-6	9+	1500	1	*
Spurn Head	1009·8	+4	SW'W	4	c	65	65	7	5	2	-	7-8	9+	2500	0	3
Catterick	1007·5	+2	SW	3	c	60	75	8	8	-	-	9+	9+	1500	1	*
Tynemouth	1005·7	+4	WSW	4	bc	62	75	7	2	6	-	4-6	4-6	2500	1	1
St. Abbs Head	1003·1	0	WSW	6	bcq	62	65	9	8	4	9	4-6	4-6	1500	1	3
Leuchars	1002·0	+6	SW	5	c/pr	58	85	8	8	3	9	4-6	7-8	1500	1	*
Renfrew (AbbotsI.)	1002·9	0	WSW	4	pr	59	85	6	8	-	-	9+	9+	1500	1	*
Eskdalemuir	1003·9	-2	SSW	6	c	57	85	7	8	-	6	4-6	7-8	1500	1	*
Point of Ayre	1005·6	0	WSW	5	rr	63	75	8	8	7	-	7-8	9+	1500	1	2
Tiree	999·4	-6	SW'W	3	bc/r	57	92	8	8	6	-	4-6	4-6	1500	1	3
Stornoway	1000·0	-2	-	0	RR	53	97	5	5	2	-	9	10	1500	1	0
Dalwhinnie	1001·3	+2	SW	4	c	55	75	7	5	6	-	7-8	10	4000	0	*
Aberdeen	999·9	+10	SW	3	bc	65	55	7	8	3	1	4-6	4-6	2500	1	1
Wick	996·7	0	WSW	3	roro	59	97	6	5	2	-	7-8	10	450	1	1
Lerwick	999·0	-4	E'S	5	c	53	97	6	5	7	-	4-6	7-8	450	1	*
Blacksod Point	1004·7	+12	WSW	5	c	58	85	8	3	-	-	7-8	7-8	800	0	3
Malin Head	1001·1	-2	W	5	c/pr	58	85	8	9	-	4	4-6	7-8	9000	0	3
Aldergrove	1003·0	-6	SW'S	4	bc	61	75	8	8	-	-	2-3	2-3	2500	1	*
Birr Castle	1007·3	+8	W	3	pr	56	92	8	9	7	-	7-8	9	1500	1	*
Valentia Obsy.†	1010·2	+8	WSW	4	c	60	85	8	8	4	6	4-6	7-8	1500	1	2
Roches Point	1010·2	+8	W	3	c/pr	58	92	9	3	5	5	2-3	7-8	1500	1	3

PAST 24 HOURS. — WEATHER.

Stations	7h.—13h. 7th (37)	13h.—18h. 7th (38)	18h. 7th to 1h. 8th (39)	1h.—7h. 8th (40)
London (Kew)	cidomoc	cbc	bc	c
Croydon	cdodo	bc,b	bcciro	ro cdo
S. Farnborough	dodorobc	bcyb	bbcc	cidomoc
Boscombe Down	dodoRRcbc	bc	bcciro	irododF
Calshot (Soton.)	dodoc	bcc	cododo	ododofcdd
Lympne	cododom	Fdoodom	omoifom	omoFeFe
Manston	cdodomo	cdomo	cbcc	cproc
Shoeburyness	ciroc	bc	bc	bc idoc
Felixstowe	ciro oc	cbcb	b,cbc	bcciro
Gorleston	ocpro	cq	cq	cproc
Mildenhall	c	cbc	bcc	cciroc
Cranwell	cdorobc	bcc	cbcb	bccrorom
Birmingham	probc	cbcc	c	corm
Upper Heyford	cirocbc	bc	c	cdomo
Ross-on-Wye	bcc	bcqyc	c	cor
Hartland Point	cpbc	bc	rrrff	rforff
Bristol	cPRcbc	bcc	cbcc	crcR
Portland Bill	c	c	off	off
Plymouth	cbcc	cprobc	bc,oidoF	Fofdom
The Lizard	cprbc	bcc	omfdf	dFFc
Scilly (St. Mary's)	cidoc	cbcc	oFoF	Fidmo
Guernsey	oddF	oddF	oFdd	oFd
Pembroke	bqcmoq	cqmo	c	RFrr
Holyhead	bcc	cbcciro	cbcc	rrroroc
Chester (Sealand)	bccropr	bccyc	c	cirorrmo
Manchester	bccPR	bccyc	cpr	ccrrmo
Spurn Head	qprc	c	cbc	bcc
Catterick	bccy	yc	cprobc	bcc
Tynemouth	cbc	bc	bc	bcc
St. Abbs Head	cbcy	PRbc	probc	cbc
Leuchars	orcRc	bccprc	PRcprocbc	bc
Renfrew (AbbotsI.)	rrrobccPR	cpropr	cprprobc	cbcc
Eskdalemuir	crorpr	cprc	pr PR	cprc
Point of Ayre	c	ciroc	rrcbc	c
Tiree	ciroid	cir	bc	bcc
Stornoway	c	CRRmo	crr	crr
Dalwhinnie	cir	c	·	cir
Aberdeen	omRcr	irobc	bc	bcc
Wick	Forr	orrro	rorr	prcro
Lerwick	cpriv	crrmo	crrmo	cirmo
Blacksod Point	proc	probc	proc	proc
Malin Head	cproc	cprc	c	cbcc
Aldergrove	probc	cprobc	cprobcc	c
Birr Castle	cido	cidopr	cprc	cprc
Valentia Obsy.†	proprc	cproc	ccr	crrc
Roches Point	cprc	cPRc	cir	RRrr

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. 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.

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.*

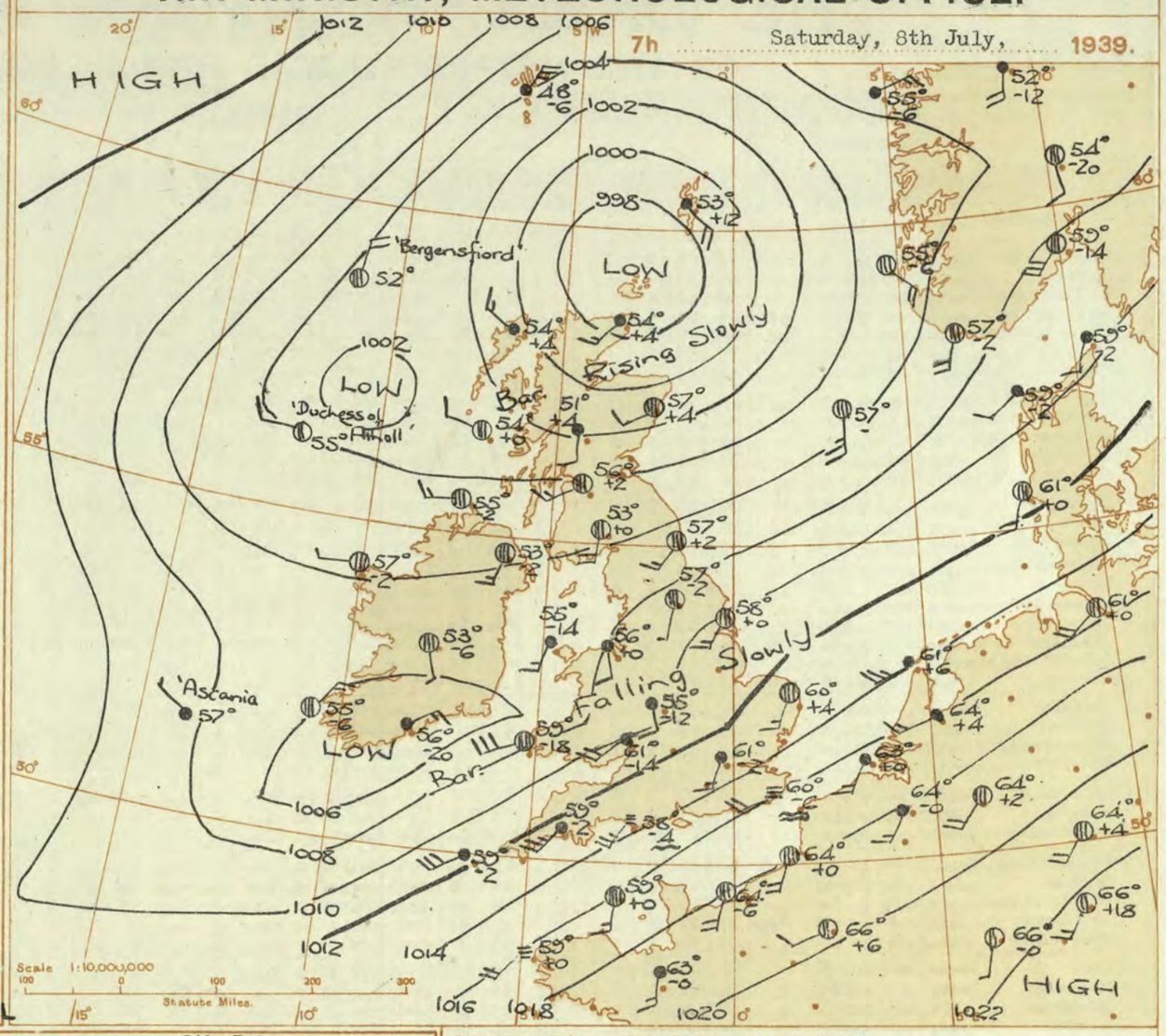
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 7th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 6th to 9h. 7th.	Temperature. (°F) Max. 9h.—17h. 7th.	Rainfall. (mm.) Night. 17h. 6th to 9h. 7th.	Rainfall. (mm.) Day. 9h.—17h. 7th.	Sunshine. (Hrs.) Sunrise to 17h. 7th.	Sunshine. (Hrs.) Sunrise to Sunset. 6th.
1	Tunbridge W.	ordo	odbcc	56	67	4	0·5	1·4	4·4
	Bournemouth	o	bcc	56	66	7	-	1·3	2·7
	Ventnor ...	ormo	dcof	55	61	2	0·5	0·2	3·2
	Southsea ...	or.oc	eoc	57	67	2	Trace	2·5	3·8
	Bognor Regis	roo c	bcr.	57	62	2	Trace	1·7	4·2
	Littlehampton	orodo	ocbcc	57	68	2	0·1	1·0	4·8
	Worthing ...	oid	cdbcc	58	69	1	0·3	0·8	4·8
	Brighton ...	ccd	dc	58	62	1	0·1	0·2	4·6
	Eastbourne† ...	d.d.	d.d.	58	61	1	0·4	0·0	5·4
	Hastings† ...	od.d.	d.dm	57	62	1	0·3	0·0	5·7
	Folkestone ...	oido	oidm.	58	62	Trace	Trace	0·0	8·7
	Dover ...	oid	oid	58	61	Trace	Trace	0·0	9·4
	Deal	codd	ddodo	*	63	Trace	Trace	0·5	9·5
	Ramsgate ...	c	oc	58	63	-	-	0·6	7·4
	Margate ...	cd.	c	59	66	-	Trace	1·4	7·0
2	Southend ...	odc	cbcb	59	71	Trace	Trace	4·1	4·1
	Clacton-on-Sea	c	cbc	59	67	1	-	4·5	4·8
	Dovercourt ...	roc	bcv	56	70	3	-	3·3	6·1
	Lowestoft ...	cdrcr	cbc	58	67	2	0·2	2·7	7·8
	Skegness ...	orocb	bcc	57	71	5	-	4·7	9·0
	Mablethorpe...	obc	bcco	57	71	7	-	4·8	8·3
	Cleethorpes ...	bcRbc	bc	57	71	3	2	6·1	9·0
3	Leamington S.	c	cbcc	57	70	13	-	7·2	4·5
4	Cheltenham†	cbc	bc	51	68	27	-	7·0	4·3
5	Bath	cbc	cbcb	56	70	5	-	6·6	4·2
	Weymouth ...	cb	bcb	55	65	6	-	5·2	0·7
	Jersey ...	pcdc	cr	59	63	0·6	3	0·0	5·9
	Torquay ...	eqcbc	bqv	56	68	9	*	7·0	1·1
	Falmouth ...	ocvco	r.ovc	55	66	11	Trace	6·7	0·0
	Penzance ...	b,c	bcb,c	57	65	6	-	5·6	0·0
	St. Ives ...								
	Bude... ...	bc	bc	59	64	7	-	8·7	2·6
	Ilfracombe ...	rroc	bcbbc	57	65	31	-	8·9	3·8
6	Aberystwyth	prbcc	bcc	57	63	16	-	6·5	3·8
7	Llandudno ...	c	bc	56	66	5	-	4·0	3·2
	Colwyn Bay...	bccbc	bcc	56	66	6	-	4·9	3·1
	Rhyl	bccbc	bcc	55	65	7	-	5·6	2·9
8	Wallasey ...	bccp	bccbc	*	66	7	1	2·5	3·5
	Southport ...	cbc	bccbc	57	67	14	-	4·1	4·2
	Blackpool ...	cbcb	bbcc	55	64	12	-	3·7	3·9
	Morecambe ...	cbc	bcc	55	63	13	Trace	4·5	3·4
9	Ilkley... ...	orcp	bcpc	55	65	5	0·2	5·3	5·6
	Harrogate ...	bccp	c	53	62	7	0·3	3·0	6·2
10	Berwick-on-T.	cbc	bc	53	65	6	-	7·0	5·6
11	Dunbar ...	cpr	cpr.	53	66	8	2	6·1	7·7
12	Troon... ...	bccpo	pocbc	54	60	13	0·3	3·6	2·7
	Douglas ...	bcir.	c	52	62	7	Trace	6·7	6·0

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.

AIR MINISTRY, METEOROLOGICAL OFFICE.



Districts.	Forecasts for the 24 hours commencing 12 noon, G.M.T. 8th July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Fresh southwest wind, strong locally on coast, decreasing later; dull, occasional rain or drizzle; local coast fog; rather warm and close inland.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man	Moderate to fresh south wind veering northwest later; rain at first, bright intervals and showers later; cool.
13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Moderate northwest wind, fresh locally; bright intervals, showers, local thunderstorms; cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate northwest wind; bright intervals, showers; cool.

L.D.

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

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 depression is centred off North Scotland and another south of Ireland is moving northeast. Weather will be unsettled generally with some rain in most districts.

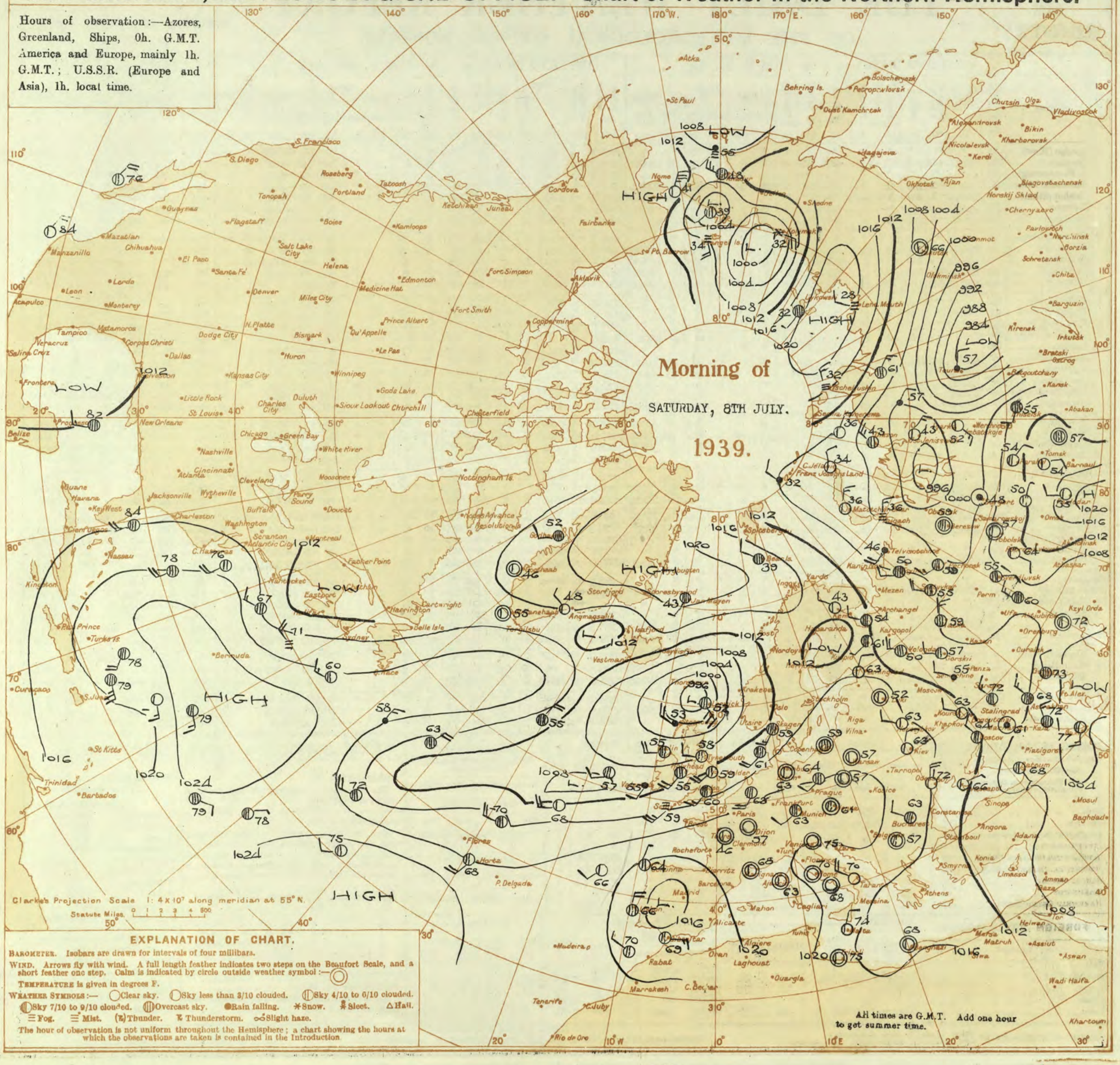
FURTHER OUTLOOK.

Bright intervals and showers in the North; occasional rain in the South.

Forecasts issued at 0930 G.M.T.

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

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 8th July, 1939.

No. 28352.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1015·2	+2	SW3	3	c/r	60	85	8	5	7	-	2-3	10	1500
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1015·1	-2	SSW	2	ir.	58	92	7	5	3	-	7-8	10	1500
	Calshot (Sthmtn.)	8	1015·9	-2	SW	3	d.d.	59	97	5	-	2	-	10	10	<150
	Lympne ...	346	1016·6	+2	SW	3	zo	58	92	6	5	-	-	10	10	450
	Manston ...	154	1015·5	-2	SW3	5	c	59	92	7	-	3	-	0	9+	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	1014·6	+6	WSW	5	bc	60	85	8	5	3	-	4-6	4-6	4000
	Gorleston ...	5	1013·2	+6	SW	3	c	60	85	8	8	-	-	9+	9+	2500
	Mildenhall ...	19	1013·6	+6	SW	3	c	59	92	8	5	3	-	7-8	9	4000
	Cranwell ...	240	1012·0	+6	SSW	3	bc	55	85	7	5	3	1	Tr	2-3	4000
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1012·2	-8	W	3	rf	59	97	3	-	-	-	10	10	<150
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1015·7	-6	WSW	4	f	58	92	2	5	-	-	10	10	<150
	Plymouth ...	82	1014·5	-10	SW	3	F	59	97	1	-	-	-	10	10	<150
	The Lizard ...	240	1014·6	-8	SSW	5	df	59	97	2	3	-	-	10	10	450
	Scilly (St. Mary's)	163	1013·0	-12	SWW	5	F	59	97	1	-	-	-	10	10	<150
	Guernsey ...	175	1017·4	-6	SSW	5	dF	59	97	1	-	-	-	10	10	<150
6	Pembroke ...	142	1012·2	0	SWW	4	c	57	97	7	8	2	-	7-8	10	1500
7	Holyhead ...	26	1009·0	0	SW3	4	c	55	92	7	8	4	6	4-6	9+	2500
	Chester (Sealand)	16	1010·8	+2	WSW	2	c	59	75	8	5	2	-	9	10	2500
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1010·4	+4	SWW	4	bc	59	75	7	-	4	-	0	2-3	-
	Catterick ...	175	1007·8	+6	SW	3	bc	58	85	8	5	*	*	4-6	4-6	2500
	Tynemouth ..	108	1006·2	+2	W	2	bc	58	92	7	2	6	-	4-6	4-6	2500
11	St. Abbs Head	280	1003·2	-2	SW	5	bc	55	85	8	4	4	-	4-6	4-6	2500
	Leuchars ...	36	1001·7	-4	SW	5	bc	54	92	8	8	-	-	2-3	2-3	1500
12	Renfrew (Abbotsl.)	19														
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1007·4	+18	WSW	4	bc	55	92	8	4	7	1	Tr	2-3	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1001·0	0	WNW	4	rr	53	92	7	5	2	-	9	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	997·5	+4	SW	3	rr	52	97	6	8	2	-	7-8	10	800
16	Lerwick ...	156	996·0	-6	SSE	6	c/r	52	97	6	6	2	-	4-6	10	450
17	Blacksod Point	18	1006·5	+4	-	0	bc	55	92	8	3	-	-	2-3	2-3	1500
18	Malin Head ...	84	1004·6	+10	W	4	c	55	92	8	8	-	-	7-8	7-8	5700
	Aldergrove ...	268	1006·5	+10	SWW	3	c	54	85	8	5	-	-	8	9	2500
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1008·7	-10	SSW	2	ro.ro.	55	97	7	5	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1013·3	-6	SW	4	c	62	85	7	5	-	-	10	10	2500	0	*
	Croydon ...	1014·0	-2	SSW	3	id.	61	92	8	5	2	-	9	10	800	1	*
	S. Farnborough	1013·4	0	SW	4	id.	60	97	6	5	-	-	10	10	450	1	*
	Boscombe Down	1012·8	-6	SSW	4	df	59	97	3	5	-	-	10	10	220	1	*
	Calshot (Sthmtn.)	1014·3	-2	SW3	5	ir.	60	97	6	-	2	-	10	10	<150	1	2
	Lympne ...	1015·5	-6	SWW	4	F	60	97	1	-	-	-	10	10	<150	0	§6
	Manston ...	1014·7	-2	SW3	4	c	62	92	7	5	-	-	9+	9+	800	1	*
2	Shoeburyness ...	1014·2	-4	SSW	4	id.	63	92	8	5	-	-	10	10	800	0	*
	Felixstowe ...	1014·0	-2	SSW	4	o/r	62	92	8	5	-	-	10	10	1500	0	3
	Gorleston ...	1013·5	+4	SSW	3	c	60	85	7	5	-	-	9+	9+	2500	0	2
	Mildenhall ...	1011·9	-10	SW	3	c	62	92	7	5	-	-	10	10	1500	1	*
	Cranwell ...	1010·7	-8	SSW	2	dr	56	92	5	-	2	-	0	10	-	1	*
3	Birmingham ...	1009·8	-12	SSE	2	rr	55	97	4	6	-	-	10	10	450	1	*
	Upper Heyford	1011·4	-16	SW	4	o/d	60	97	7	5	-	-	10	10	450	1	*
4	Ross-on-Wye	1009·8	-14	SWW	4	ro.ro.	61	97	6	6	-	-	10	10	800	1	*
5	Hartland Point	1010·2	-6	W	6	rf	59	97	3	-	-	-	10	10	<150	1	4
	Bristol ...	1011·4	-8	SSW	4	c/f	62	92	8	5	7	-	9	9+	800	1	*
	Portland Bill ...	1014·2	-4	SW	5	of	58	92	3	5	-	-	10	10	<150	1	4
	Plymouth ...	1013·1	-2	SW	5	id.	59	97	5	-	-	-	10	10	<150	1	3
	The Lizard ...	1013·6	0	SW	5	c	58	97	7	5	2	-	9	10	1500	1	3
	Scilly (St. Mary's)	1011·7	-2	SW	6	id.	59	97	6	5	-	-	10	10	1500	1	3
	Guernsey ...	1016·5	0	SW	3	o	59	97	8	5	-	-	10	10	450	1	3
6	Pembroke ...	1008·0	-18	WSW	6	og	59	97	6	5	-	-	10	10	1500	1	3
7	Holyhead ...	1007·1	-14	SSW	3	ro.ro.	55	97	7	6	2	-	9	10	450	1	2
	Chester (Sealand)	1008·6	0	SSE	2	rr	56	92	6	6	2	-	4-6	10	2500	1	*
8	Manchester ...	1008·8	-6	S	3	rr	55	92	6	6	2	-	2-3	10	1500	1	*
10	Spurn Head ...	1010·5	0	SW3	3	c	58	85	7	5	2	-	7-8	10	2500	0	2
	Catterick ...	1007·6	-2	SW	1	c	57	85	8	5	2	-	7-8	10	1500	1	*
	Tynemouth ..	1006·3	+2	SW	3	c	57	85	6	8	-	-	9+	9+	1500	1	1
11	St. Abbs Head	1003·5	+2	SW	5	bc	55	85	9	4	4	1	4-6	4-6	2500	0	3
	Leuchars ...	1002·3	+2	SW	4	c	58	85	8	8	4	2	2-3	7-8	2500	1	*
12	Renfrew (Abbotsl.)	1004·6	+2	SWW	3	c	56	85	8	8	-	3	9	9+	1500	1	*
	Eskdalemuir ...	1005·1	0	SSW	4	c	53	85	7	5	3	-	9	9	1500	1	*
	Point of Ayre...	1006·5	-4	WS	3	c	56	92	8	5	4	7	Tr	9+	2500	0	2
13A	Tiree ...	1002·8	0	WNW	2	c	54	92	7	5	-	-	9+	9+	2500	0	1
13B	Stornoway ...	1000·7	+4	NW	3	ro.ro.	54	97	7	5	2	-	9	10	1500	1	2
15	Dalwhinnie ...	*	+4	S	2	ir	51	85	6	6	6	-	7-8	10	2500	1	*
	Aberdeen ...	1000·3	+4	SWW	2	c	57	75	8	5	3	-	9	9	4000	1	1
	Wick ...	997·3	+4	SW	3	ro.ro.	54	97	5	5	2	-	9	10	800	1	1
16	Lerwick ...	998·6	+12	SES	4	ir	53	97	6	8	2	-	4-6	10	450	1	*
17	Blacksod Point	1005·6	-2	W	1	c	57	85	8	2	3	-	7-8	7-8	1500	1	2
18	Malin Head ...	1004·7	-2	W	3	cjp	55	92	7	8	-	-	9	9	2500	0	2
	Aldergrove ...	1006·0	-2	SW3	3	c	53	85	7	5	-	-	9+	9+	1500	1	*
19	Birr Castle ...	1006·1	-6	SSE	1	c	53	97	8	5	-	-	9	9	2500	1	*
20	Valentia Obsy. †	1006·0	-6	NE	3	cjp	55	97	8	5	2	-	7-8	10	1500	1	2
	Roches Point	1005·4	-20	ENE	3	rr	56	97	7	6	2	-	7-8	10	800	1	3

PAST 24 HOURS.

District	Stations	Temperature. Max. Day 7h–18h °F. (31)	Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Night 18h–7h mm. (35)	Sunshine 7th Hrs. (36)
1	London (Kew)	70	59	56	Tr	-	9·1
	Croydon ...	70	58	56	0·3	Tr	7·8
	S. Farnborough	70	57	54	0·1	Tr	8·3
	Boscombe Down	69	55	54	1	0·1	9·0
	Calshot (Sthmtn.)	67	59	59	0·2	1	4·3
	Lympne ...	60	58	58	0·2	Tr	0·0
	Manston ...	65	58	56	Tr	Tr	2·1
2	Shoeburyness ...	70	59	53	Tr	Tr	5·8
	Felixstowe ...	69	59	57	Tr	0·1	6·2
	Gorleston ...	71	58	56	0·1	Tr	5·4
	Mildenhall ...	74	57	53	-	Tr	5·7
	Cranwell ...	70	53	52	0·2	0·6	4·8
3	Birmingham ...	67	55	52	Tr	3	6·7
	Upper Heyford	69	55	52	1	0·1	*
4	Ross-on-Wye	67	56	54	-	2	6·8
5	Hartland Point	60	57	56	Tr	0·5	9·8
	Bristol ...	68	56	52	0·1	1	8·8
	Portland Bill ...	60	55	*	1	Tr	*
	Plymouth ...	62	58	58	Tr	0·6	7·6
	The Lizard ...	63	57	*	0·5	1·0	6·2
	Scilly (St. Mary's)	64	59	*	0·1	1	7·8
	Guernsey ...	60	58	55	1	2	0·0
6	Pembroke ...	60	54	*	-	9	8·4
7	Holyhead ...	61	54	53	Tr	1	6·4
	Chester (Sealand)	67	56	54	0·3	2	5·3
8	Manchester ...	67	55	52	0·6	2	3·7
10	Spurn Head ...	72	55	*	0·4	-	6·0
	Catterick ...	65	56	52	-	Tr	4·2
	Tynemouth ..	67	56	51	-	-	8·4
11	St. Abbs Head	66	53	*	3	Tr	*
	Leuchars ...	66	54	49	3	2	4·6
12	Renfrew (Abbotsl.)	63	53	49	6	2	3·7
	Eskdalemuir ...	60	51	50	2	2	1·8
	Point of Ayre...	70	53	*	Tr	0·4	9·6
13A	Tiree ...	60	52	49	2	-	4·9
13B	Stornoway ...	58	52	*	7	4	1·4
15	Dalwhinnie ...	60	49	44	4	2	1·9
	Aberdeen ...	65	54	50	7	-	5·0
	Wick ...	56	52	*	10	15	*
16	Lerwick ...	56	51	*	3	4	0·0
17	Blacksod Point	60	52	*	0·2	0·6	*
18	Malin Head ...	62	52	*	1	-	5·6
	Aldergrove ...	64	53	49	0·4	Tr	4·7
19	Birr Castle ...	63	53	46	1	0·3	4·2
20	Valentia Obsy. †	61	53	50	1	14	1·7
	Roches Point	60	55	*	2	20	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet.	Weather. Morning. (24 hrs. ended 9h.)	Afternoon.	Night.	Temperature. Day Max. °F.	Night Min. °F.	Min. on Grass °F.	Rainfall. Day. mm.	Night. mm.	Sunshine. to Sunset. hrs. (Yesterday.)	Humidity. 15h. G.M.T. % (Yesterday.)	9h. G.M.T. % (To-day.)	Visibility 9h. (To-day.)
Kew ...	18	cidomo	cbc	bcc	70	59	56	Tr	-	9·1	*	*	7
Croydon ...	217	cd.d.	bc,b	bcir.d.	70	58	56	0·3	Tr	7·8	*	*	7
Greenwich (Royal Observatory) ...	149	cir.	by	bcrc	73	58	52	Tr	Tr	7·2	51	87	7
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	8·0	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	72	60	57	Tr		8·1	58	88	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	72	59	54	Tr	Tr	8·3	53	89	*
Camden Square ...	110	c	bc	*	74	59	57	-	-	*	*	86	*
Kensington ...	80	cp	bc	*	73	60	56	Tr	-	8·0	At 18h		*
Hampstead Observatory ...	450	od	bc	o	70	57	55	Tr	-	7·7	*	93	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 8th.

South Kensington. Max.	Time.	Min.	Time.
<0·3 Whole period.			

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

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 7th July. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. 8th July. 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 ...						1015·7	WSW	2	bc	66		63		-
Brussels ...	1018·9	SSW	3	c/r	63	1017·5	SSW	3	id.	64	73	*	0·2	2
Berlin ...	1019·0	S	1	c	73	1018·8	WSW	3	c	68	79	59	-	-
Zürich ...						1022·4	SE	1	b	61		55		-
Rome ...	1017·1	WNW	3	b	75	1019·1	ENE	1	b	73	*	*	-	-

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday, 9th July, 1939.
No. 28353

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

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. (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)	1012.0	+8	SW	5	c	65	75	8	5	-	-	10	10	2500
	Croydon	1012.9	-6	SW'S	5	c	65	75	8	5	-	-	9	10	1500
	S. Farnborough	1012.3	-16	SSW	5	c	64	75	8	5	-	-	10	10	1500
	Boscombe Down	1011.8	-10	SW'S	6	d.d.	60	92	6	5	-	-	10	10	800
	Calshot (Soton.)	1013.7	-6	SW'S	5	ir	61	92	7	5	2	-	9	10	800
	Lympne	1014.8	-6	SW	5	o/d	63	92	8	5	-	-	10	10	450
	Manston	1013.4	-12	SSW	5	o/d	66	85	7	5	-	-	10	10	800
2	Shoeburyness	1012.6	-10	SW'S	5	c	69	75	8	5	-	-	9+	9+	1500
	Felixstowe	1011.8	-2	SW'W	6	c	68	75	8	5	-	-	10	10	800
	Gorleston	1009.8	-10	SW'S	4	c/pr	68	75	6	6	2	-	4.6	10	2500
	Mildenhall	1009.9	-2	SW	5	c/d	66	92	7	5	-	-	10	10	1500
	Cranwell	1007.2	-12	SW	5	r.r.	64	92	7	5	-	-	10	10	800
3	Birmingham	1007.6	-10	SSW	4	ir.	61	97	6	6	-	-	10	10	450
	Upper Heyford	1010.2	-10	SSW	5	c	65	75	8	5	-	-	10	10	1500
4	Ross-on-Wye	1008.8	-10	SW	4	rr	61	92	5	6	-	-	10	10	800
5	Hartland Point	1007.7	-10	W	6	rr	59	97	6	6	2	-	7.8	10	800
	Bristol	1010.4	-10	SW'S	4	ir	63	85	7	5	2	-	9	10	1500
	Portland Bill	1013.1	-10	SW	5	o	58	92	7	5	-	-	10	10	1500
	Plymouth	1012.2	-6	SSW	5	o/r	59	97	6	5	-	-	10	10	450
	The Lizard	1012.0	-10	SSW	5	c	60	97	6	5	-	-	10	10	1500
	Scilly (St. Mary's)	1010.1	-8	SW'W	6	id.	60	97	5	5	-	-	10	10	800
	Guernsey	1015.2	-8	SW	3	c	62	92	8	5	3	-	7.8	9	1500
6	Pembroke	1007.0	-2	WSW	7	d.d.	59	97	5	5	-	-	10	10	800
7	Holyhead	1009.1	-22	SE	1	c/r	58	97	8	6	2	-	7.8	10	800
	Chester (Sealand)	1009.9	-20	-	0	rr	60	92	4	6	-	-	10	10	450
8	Manchester	1005.4	-18	SSW	1	r.r.	58	92	5	6	2	-	7.8	10	450
10	Spurn Head	1006.7	-14	-	0	c	60	97	6	5	-	-	10	10	1500
	Catterick	1005.1	-14	SSW	1	ir.	60	85	6	6	2	-	4.6	10	1500
	Tynemouth	1004.7	-12	SW	3	c	62	75	6	8	-	-	9+	9+	1500
11	St. Abbs Head	1002.7	-6	SW	5	c	62	65	9	2	9	-	4.6	7.8	2500
	Leuchars	1001.1	-12	SW	4	c/pr	61	75	8	8	6	-	7.8	9	1500
12	Renfrew (Abbotsl.)	1003.3	-10	SW	4	c	61	75	8	8	-	-	9+	9+	1500
	Eskdalemuir	1003.4	-6	SW	4	c	59	65	8	8	-	-	9+	9+	1500
	Point of Ayre	1005.0	-6	NW'W	3	c	61	75	8	8	7	-	1	9+	1500
13A	Tiree	1003.0	0	WNW	3	bc	59	75	7	8	6	-	4.6	4.6	2500
13B	Stornoway	1000.3	-2	W	4	r.r.	53	97	6	5	2	-	9	10	1500
15	Dalwhinnie	1001.5	0	SW	6	c	60	55	7	4	7	1	7.8	9+	4000
	Aberdeen	999.9	-6	SW	3	c/pr	65	55	7	8	3	-	9	9	2500
	Wick	997.5	0	WSW	4	c	60	85	7	5	7	8	4.6	9+	800
16	Lerwick	998.8	+2	ESE	4	ir	53	97	6	6	2	-	7.8	10	450
17	Blacksod Point	1006.7	+4	WNW	3	c	59	85	9	3	-	-	7.8	7.8	1500
18	Malin Head	1004.0	-4	WNW	3	c	59	85	8	2	8	2	4.6	7.8	1500
	Aldergrove	1003.9	-12	SW'S	3	c	62	65	8	8	7	-	7.8	9+	9000
19	Birr Castle	1005.6	0	SW	1	c/r	58	92	7	6	1	-	4.6	9	1500
20	Valentia Obsy.†	1008.0	+16	NW	3	c	61	85	8	8	3	-	7.8	7.8	1500
	Roches Point	1005.3	-2	NW	3	c/r	59	97	9	3	7	-	4.6	7.8	1500

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	°Temp. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud. Form Low. (23)	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)	1009.8	-16	SW	5	c/pr	63	85	8	5	2	-	7.8	10	1500	1	*
	Croydon	1011.2	-10	SW'S	5	c	64	65	9	5	3	-	9	9+	1500	1	*
	S. Farnborough	1010.3	-10	SSW	5	id.	62	85	7	5	-	-	10	10	1500	1	*
	Boscombe Down	1009.9	-14	SW'S	5	c/r	60	97	6	6	2	-	9	10	450	1	*
	Calshot (Soton.)	1011.9	-14	SSW	5	ir.	62	85	7	5	7	-	7.8	10	800	1	3
	Lympne	1012.8	-16	WSW	5	c	63	75	9	5	3	-	4.6	7.8	2500	0	§ 3
	Manston	1011.5	-8	SW'W	5	c	66	75	8	5	3	-	4.6	9+	1500	1	*
2	Shoeburyness	1010.8	-16	SW	4	c	66	75	8	5	3	-	2.3	9	1500	0	*
	Felixstowe	1009.9	-10	WSW	6	c	66	75	8	5	3	-	4.6	7.8	1500	0	4
	Gorleston	1008.0	-18	SSW	5	c	65	75	7	8	2	-	4.6	7.8	2500	1	3
	Mildenhall	1007.5	-10	SW'S	5	c/r	65	85	8	5	-	-	9+	9+	2500	1	*
	Cranwell	1004.3	-22	SSW	5	bc	65	85	8	8	6	-	2.3	4.6	1500	1	*
3	Birmingham	1005.7	-8	SSW	3	c/pr	61	97	6	6	-	-	9+	9+	800	1	*
	Upper Heyford	1008.1	-12	SSW	5	c	62	85	8	5	2	-	9	10	800	1	*
4	Ross-on-Wye	1006.8	-10	SW	4	c/r	62	92	8	6	-	-	9+	9+	1500	1	*
5	Hartland Point	1007.9	+6	W	5	c	59	97	6	6	2	-	7.8	10	800	1	4
	Bristol	1008.6	-8	SW	4	ir	62	92	6	6	-	-	10	10	450	1	*
	Portland Bill	1011.8	-12	SW	5	o	58	92	7	5	-	-	10	10	1500	1	4
	Plymouth	1010.5	-4	SSW	5	2.	60	97	6	5	-	-	9	9	450	1	3
	The Lizard	1011.6	+6	SSW	5	c	59	97	6	5	2	-	9	10	1500	1	3
	Scilly (St. Mary's)	1010.8	+6	W'S	5	c	61	97	7	5	-	-	9+	9+	1500	1	3
	Guernsey	1013.9	-10	WSW	5	c	60	85	8	5	3	-	7.8	10	1500	1	4
6	Pembroke	1007.2	-2	W'N	5	cq	58	97	6	8	6	-	4.6	7.8	1500	1	3
7	Holyhead	1005.5	+14	WSW	3	c/d	56	92	8	9	-	-	4.6	7.8	450	1	2
	Chester (Sealand)	1004.9	+14	W	2	c/r	58	85	8	8	3	-	7.8	9	2500	1	*
8	Manchester	1004.1	+6	WSW	3	c/r	58	97	7	5	7	-	4.6	9+	2500	1	*
10	Spurn Head	1002.3	-16	SW'S	6	bc/pr	64	85	7	5	8	-	2.3	4.6	800	1	3
	Catterick	1002.4	-10	-	0	c	57	92	8	5	2	-	7.8	10	4000	1	*
	Tynemouth	1002.1	-12	W	2	c/pr	57	85	6	8	-	-	9+	9+	1500	1	1
11	St. Abbs Head	1000.4	-6	SW	4	c	59	75	8	8	2	-	7.8	10	1500	0	2
	Leuchars	999.9	-8	SW	4	ir.	56	85	7	5	2	-	9+	10	1500	1	*
12	Renfrew (Abbotsl.)	1002.2	-6	S	3	c	58	75	8	8	3	-	7.8	7.8	2500	1	*
	Eskdalemuir	1002.1	-6	SW	4	ir	53	85	6	6	2	-	4.6	10	800	1	*
	Point of Ayre	1004.4	0	NW	4	rr	54	97	7	8	2	-	4.6	10	800	1	2
13A	Tiree	1002.2	-4	WNW	4	r.r.	52	92	7	-	2	-	10	10	1500	1	3
13B	Stornoway	998.8	-10	NW	4	id	59	92	7	5	2	-	7.8	10	1500	1	2
15	Dalwhinnie	*	+2	SW	4	c	55	75	7	5	6	-	7.8	10	4000	0	*
	Aberdeen	998.6	-10	N'E	1	c	59	85	6	5	7	-	9	9+	2500	1	1
	Wick	997.5	0	SW	3	pr	56	92	8	5	7	8	7.8	10	1500	1	1
16	Lerwick	999.2	+2	E'S	3	c	53	97	6	9	2	-	7.8	10	450	1	*
17	Blacksod Point	1007.7	+10	WNW	3	bc	58	85	9	2	-	-	4.6	4.6	2500	0	2
18	Malin Head	1004.3	+4	W	3	pr	55	92	7	9	2	-	7.8	10	1500	0	1
	Aldergrove	1004.4	+6	WSW	2	pr	56	97	8	9	3	-	7.8	9	1500	1	*
19	Birr Castle	1007.2	+8	W	1	c/pr	57	92	8	3	7	-	4.6	9	800	1	*
20	Valentia Obsy.†	1010.9	+18	WNW	4	bc	61	75	8	2	-	-	2.3	2.3	1500	1	2
	Roches Point	1008.7	+18	NW	4	c	62	85	9	8	-	-	7.8	7.8	2500	1	3

PAST 24 HOURS.

District	Stations	Weather. 7h.–13h. 8th (37)	13h.–18h. 8th (38)	18h. 8th to 1h. 9th (39)	1h.–7h. 9th (40)
1	London (Kew)	c	cpr.c	cpr.c	bc
	Croydon	cid.d.d.	cid.ir.v	cvid.c	cbc
	S. Farnborough	cid.c	rir.d.c	cd.cb	bw
	Boscombe Down	dfr.r.id.	c.r.r.ir.c	cir.bc	bc
	Calshot (Soton.)	cir.ir	cir.c	cr.r.m.c	cb
	Lympne	Fed.m.	ocpr.c	cpr.id.m.	cm.c.b
	Manston	cid.m.	c	cbc	bcwbc
2	Shoeburyness	id.c	pr.c	c	c.b
	Felixstowe	cid.ir.	cir.c	cir.bccd.	cd.ir.b
	Gorleston	cpr.	cpr.q	cpr.q	cbcb
	Mildenhall	cd.c	cc.ir.	cd.ir.b	bbv
	Cranwell	ocr.r.m.	or.r.cbc	bcm.	bm.w
3	Birmingham	oRrir	r.ir.c	cpr.bc	bcb
	Upper Heyford	crd.d.c	cir.ir.c	cdir.d.bc	cbbfmb
4	Ross-on-Wye	r.r.d.r.r	rrd.r.r.	cp.b	bbc
5	Hartland Point	ffrr	rrrfc	ddcbc	bc
	Bristol	cd.cr.	cr.rcR	cRcdR	cbc
	Portland Bill	o	opr	orc	cbc
	Plymouth	oid.m.ir.	oirrddcn	cirid.c	cbcwc
	The Lizard	errc	crrc	c	cbcw
	Scilly (St. Mary's)	rr.oid.m.	oid.c	cp.bc	bcw
	Guernsey	oc	c	crfiD	c
6	Pembroke	pr.d.d.o.m.	pr.m.cq	bcb	bcw
7	Holyhead	RRrrc	rr.r.d.c	cbcb	bbc
	Chester (Sealand)	cm.d.r.r.m	d.d.m.r.	cbbcw	bcwbc
8	Manchester	cm.r.r.r.	mriRm.r.	cbcc	c
10	Spurn Head	corr	cirq	PRc	bc
	Catterick	ir.ir.ir.	irr.r.r	r.bbc	pr.cbc
	Tynemouth	c	cp.cp	corrc	cbc
11	St. Abbs Head	c	c	c	cq
	Leuchars	bccpr.c	cir.	ir.ir.bcc	c
12	Renfrew (Abbotsl.)	cpr.c	cpr.PRc	cpr.c	cm.pr.
	Eskdalemuir	c	pr.cir	errirc	cprc
	Point of Ayre	cpr.c	cr.r.r	rrcbc	cpr
13A	Tiree	bc	bccrr	or.ir	oid.
13B	Stornoway	crr	cr.r.	cidir	crrir
15	Dalwhinnie	cir	c		cir
	Aberdeen	ccpr	cpr	tlPRcpr	cpr.c
	Wick	rompr	pr.	pr.r.	cir.
16	Lerwick	cirr.r.	cirr.r.	ofdd	cirif
17	Blacksod Point	cbc	pr.c	bc	pr.c
18	Malin Head	bccc	bcr.c	cPRcprc	cpr.c
	Aldergrove	c	rrm.pr.	cpr.c	cpr.c
19	Birr Castle	cir	cirpr	cprc	cbc
20	Valentia Obsy.†	r.r.ir.c	cbc	bc	bcwbc
	Roches Point	drdrc	cpr.c	cbc	cpbc

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 1100–2260 yds.
h, hail. i, intermittent.
jf, fog at a distance, but not at station.
jp, precipitation within sight of station.
ks, storm of drifting snow.
k/s$_o$, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s$_o$/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r$_o$, slight rain. rr, continuous rain.
<, less than (for cloud height). ⚡ gale.
⊕ Solar halo. ◐ lunar halo. ⌓ Aurora.
With present weather is combined, whenever possible, the general character of the weather.
A "solidus" divides actual existing weather from preceding conditions thus:—bc/r, fair weather after rain; —, has decreased; +, has increased.

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

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

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

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

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

COLUMNS 12, 13, 26, 27.

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

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.

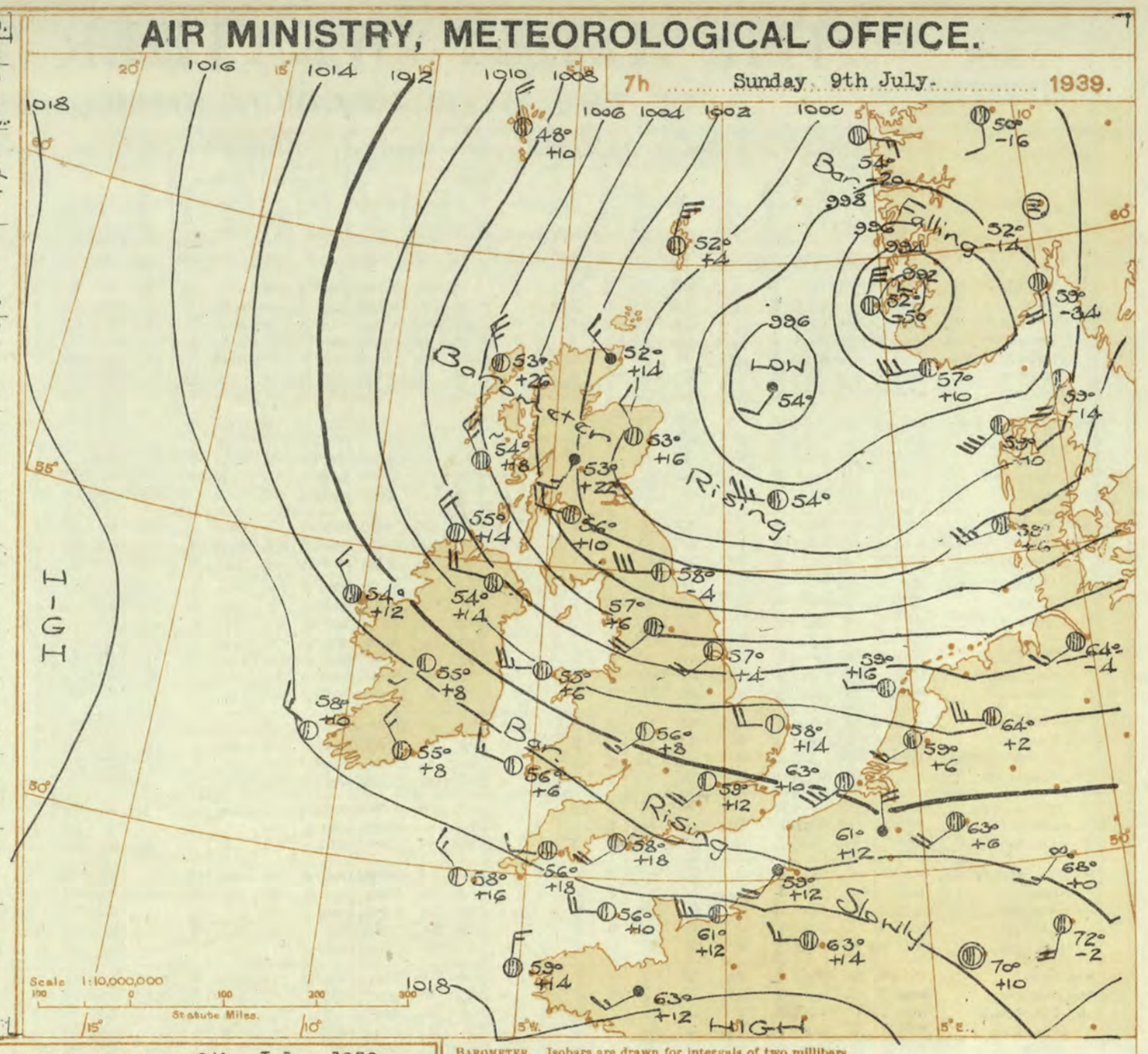
NOTE.—*The accuracy of individual entries in this Report cannot be guaranteed. Corrections and additions can be obtained, if necessary, on application to the Meteorological Office, London, W.C.2.*

§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 8th July 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 7th to 9h. 8th	Temperature. (°F) Max. 9h.—17h. 8th	Rainfall. (mm.) Night. 17h. 7th to 9h. 8th	Rainfall. (mm.) Day. 9h.—17h. 8th	Sunshine. (Hrs.) Sunrise to 17h. 8th	Sunshine. (Hrs.) Sunrise to Sunset. 7th
1	Tunbridge W.	o	oc	58	65	0·5	-	0·5	1·7
	Bournemouth	o	roo	58	63	0·3	0·5	0·0	2·3
	Ventnor ...	odf	fo	57	62	1	Trace	0·0	0·2
	Southsea ...	o	oc	59	64	Trace	-	0·0	3·4
	Bognor Regis	oir.	ocbc	57	63	0·3	Trace	0·5	1·7
	Littlehampton	odoc	cbc	59	64	0·3	Trace	0·8	1·1
	Worthing ...	o	oc	60	63	0·3	-	0·0	1·0
	Brighton ...	c	cdc	59	63	0·2	Trace	0·0	0·2
	Eastbourne† ...	od.	oc	58	65	1	Trace	1·1	0·0
	Hastings† ...	oc	bc	58	67	1	-	1·1	0·0
	Folkestone ...	m.o	od	58	66	Trace	Trace	0·8	0·0
	Dover ...	odo	ocbc	59	65	Trace	Trace	1·4	0·0
	Deal	dd	dooc	*	*	*	*	1·6	0·9
	Ramsgate ...	oc	c	58	67	-	-	0·3	1·7
	Margate ...	c	c	59	69	-	Trace	0·8	3·2
2	Southend ...	oco	oc	58	69	-	-	0·2	6·2
	Clacton-on-Sea	c	cr.c	59	67	-	Trace	0·0	6·0
	Dovercourt ...	oc	bcc	58	69	-	-	0·1	4·7
	Lowestoft ...	cdrir	circr	57	69	Trace	1	0·0	3·5
	Skegness ...	orro	or	54	67	9	5	0·0	5·0
	Mablethorpe...	orr	orcp	54	66.	4	2	0·0	4·8
	Cleethorpes ...	oirc	crbc	55	66	2	3	0·2	6·3
3	Leamington S.	or	or	56	64	4	9	0·0	7·2
4	Cheltenham†	op.c	cor.r	56	64	Trace	4	0·0	8·1
5	Bath	rc	rc	59	66	1	1	0·1	6·7
	Weymouth ...	fmc	cir.	58	62	0·1	0·3	0·0	6·5
	Jersey ...	pc	cbcc	60	67	Trace	-	1·4	0·0
	Torquay ...	copq	ordqm.	60	64	2	2	0·2	7·8
	Falmouth ...	rromo	orroq	59	61	3	2	0·0	6·7
	Penzance ...	mcpc	cqpc	59	64	1	2	0·7	6·0
	St. Ives ...								
	Bude... ...	cdor	orbcc	59	63	3	6	0·3	10·0
	Ilfracombe ...	orr	rro	59	62	16	6	0·0	9·3
6	Aberystwyth	crr	rrpr	54	63	16	7	0·0	6·5
7	Llandudno ...	crr	rrbc	56	60	2	17	0·0	4·3
	Colwyn Bay...	rorrr	rropc	55	61	3	14	0·0	4·9
	Rhyl	prcr	prrcr	56	61	4	17	0·0	5·6
8	Wallasey ...	ror	Rhc	56	60	3	18	0·1	2·5
	Southport ...	or	orror	56	61	1	11	0·0	4·1
	Blackpool ...	orc	Ror	57	61	1	9	0·1	3·7
	Morecambe ...	cbcp	cdr	57	61	1	5	0·4	4·7
9	Ilkley... ...	cot	rr	56	64	0·2	9	0·1	5·3
	Harrogate ...	cir	corr	56	62	0·2	5	0·0	3·1
10	Berwick-on-T.	cbc	c	54	63	-	-	2·2	8·0
11	Dunbar ...	bc	cpr.	53	66	-	Trace	6·3	8·0
12	Troon... ...	cbcco	copo	54	58	Trace	Trace	2·2	3·7
	Douglas ...	cir	c	53	58	4	0·5	0·0	7·1

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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 July, 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 ♠	Wind west veering northwest moderate to fresh; occasional showers, local thunderstorms, bright periods during day; becoming fine in most places tonight; average temperature or rather cool
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 Orkney and Shetland ♠ 17 N. W. Ireland 18 N. E. Ireland	Wind northwest to north, fresh to strong, moderating tonight; mainly cloudy and showery, some bright periods; rather cool
19 S. E. Ireland 20 S. W. Ireland	As 1 - 10

GENERAL INFERENCE.

A complex depression covering the North Sea and Southern Norway is moving east-northeast and an anticyclone is spreading in from the Atlantic. Weather will be rather cool and showery but with considerable bright periods in the southern half of the country.

FURTHER OUTLOOK.

Showers and bright periods in the North; mainly fine in the South.

Time of Issue of Gale Warning

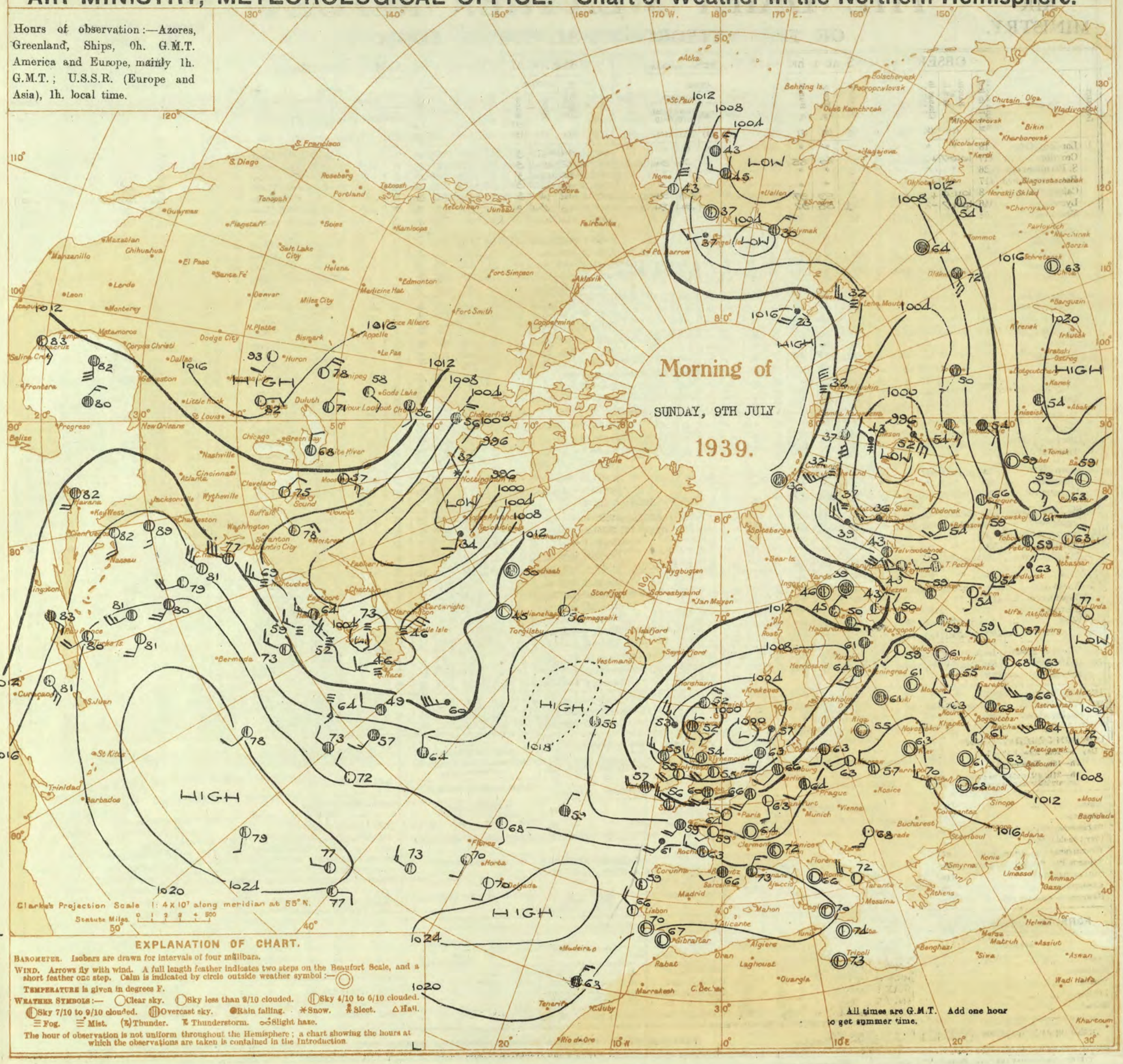
♠ North Cone hoisted at 0830 G.M.T on 9/7/39 in districts 10, 11, 15 and 16

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 2/10 clouded. Sky 4/10 to 6/10 clouded. Sky 7/10 to 9/10 clouded. Overcast sky. Rain falling. Snow. Sleet. Hail. Fog. Mist. Thunder. Thunderstorm. Slight haze.

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

Page 4.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday, 9th July 1939.
No. 28353.

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

District.	Stations.	Height above M.S.L. in feet.	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1010.7	+2	SWW	4	c	60	85	8	5	-	-	9+	9+	1500
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Calshot (Sthmtn.)	8	1011.4	+2	WSW	4	c	59	97	7	5	7	-	7-8	9+	800
	Lympne ...	346	1011.7	-2	WSW	3	c/d	58	92	6	5	-	-	9+	9+	800
	Manston ...	154	1009.9	-6	SW	4	bc	59	85	7	-	3	-	0	4-6	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1007.5	+4	WNW	3	c/pr	57	92	8	8	-	-	10	10	2500
	Mildenhall ...	19	1008.3	+10	SWW	2	bc/r	55	92	8	5	-	-	2-3	2-3	4000
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1011.8	+10	NW	3	bc	56	97	8	4	-	-	2-3	2-3	2500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1011.8	+6	WSW	5	c	57	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1013.0	+14	W	4	c	57	92	7	5	-	-	9+	9+	1500
	The Lizard ...	240	1012.2	+8	W	3	c	56	97	6	8	2	-	7-8	9+	1500
	Scilly (St.Mary's)	163	1014.1	+8	NW'W	5	bc	56	92	8	2	6	-	2-3	4-6	2500
	Guernsey ...	175	1014.3	0	WSW	4	ido	57	97	7	8	-	-	10	10	2500
6	Pembroke ...	142	1011.3	+10	WNW	3	b	56	85	8	-	-	-	0	0	-
7	Holyhead ...	26	1008.1	+10	W'S	4	b	55	85	8	2	4	-	Tr	Tr	2500
	Chester (Sealand)	16	1008.2	+6	SW	1	bc	51	85	7	6	3	-	1	2-3	4000
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1006.3	+8	W	4	bc	55	85	7	-	-	8	0	2-3	-
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1003.0	+4	W	3	c	54	85	7	8	-	-	7-8	7-8	1500
11	St. Abbs Head	280	999.9	-2	W	5	c	53	85	8	4	6	-	4-6	7-8	2500
	Leuchars ...	36	999.4	-4	WSW	4	c	52	85	7	5	-	-	9+	9+	1500
12	Renfrew (Abbots I.)	19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1005.8	+4	WNW	5	bc	54	92	8	-	2	8	0	4-6	-
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1000.4	+8	NNW	5	ir	53	97	6	5	2	-	7-8	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	997.5	+4	SE	2	c	52	97	7	5	2	-	7-8	10	800
16	Lerwick ...	156	1000.2	+2	NE	4	c/d	52	97	6	5	2	-	7-8	10	450
17	Blacksod Point	18	1011.0	+12	WNW	3	c	56	85	8	5	-	-	10	10	1500
18	Malin Head ...	84	1005.0	+6	WNW	5	cjp	55	92	6	9	-	-	9+	9+	1500
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1013.8	+4	W	4	c	57	97	8	8	-	-	9+	9+	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1012.8	+14	WSW	3	bc	60	75	8	1	-	-	2-3	2-3	2500	0	*
Croydon	1012.6	+12	WSW	3	bc	59	85	8	1	4	-	2-3	2-3	1500	1	*
S. Farnborough	1012.9	+14	WSW	3	b	59	75	9	1	-	-	Tr	Tr	1500	1	*
Boscombe Down	1013.5	+10	W'S	3	bc	57	92	8	8	-	-	4-6	4-6	2500	1	*
Calshot (Sthmtn.)	1013.4	+12	W	3	b	60	85	8	1	4	-	1	1	2500	1	2
Lympne	1013.1	+10	W'N	3	bc	59	85	8	2	4	-	2-3	2-3	2500	0	§2
Manston	1012.1	+14	WSW	3	bc	61	75	8	5	-	-	4-6	4-6	1500	0	*
Shoeburyness	1012.1	+12	WSW	3	bc	62	75	7	1	-	-	2-3	2-3	2500	0	*
Felixstowe	1011.0	+10	W	4	b	59	75	8	1	4	-	Tr	Tr	2500	1	3
Gorleston	1010.6	+14	W	4	b	58	75	8	1	-	-	Tr	Tr	2500	0	1
Mildenhall	1010.6	+10	W'S	4	bc	58	85	9	1	-	4	2-3	2-3	2500	1	*
Cranwell	1009.0	+8	WSW	4	b	55	85	7	1	-	6	1	1	2500	1	*
Birmingham	1011.2	+8	WSW	3	bc	56	85	8	5	4	-	4-6	4-6	1500	1	*
Upper Heyford	1012.0	+6	WSW	3	bc	56	85	8	2	4	1	1	2-3	2500	1	*
Ross-on-Wye	1012.3	+10	WSW	3	bc	57	75	8	7	-	1	4-6	4-6	4000	1	*
Hartland Point	1014.6	+14	WNW	3	bc	58	85	8	2	3	-	2-3	4-6	2500	1	2
Bristol	1013.5	+20	W'S	4	bc	56	85	8	5	-	1	4-6	4-6	1500	1	*
Portland Bill	1015.2	+18	WSW	4	bc	58	92	7	5	-	-	4-6	4-6	2500	1	4
Plymouth	1015.4	+18	W	2	c	56	92	8	1	3	-	1	9	1500	1	2
The Lizard	1016.3	+16	W	2	bc	57	97	8	8	6	-	4-6	4-6	2500	1	2
Scilly (St.Mary's)	1016.6	+16	NW'W	3	bc	58	92	8	8	-	-	2-3	2-3	2500	1	3
Guernsey	1016.1	+10	W	4	bc	56	97	8	8	6	-	4-6	4-6	450	1	3
Pembroke	1014.2	+6	WNW	3	bc	56	92	8	7	4	1	2-3	4-6	2500	1	2
Holyhead	1010.0	+6	W	5	c	55	85	8	5	3	-	1	7-8	4000	1	3
Chester (Sealand)	1009.7	+6	W	4	c	57	75	8	8	3	-	4-6	7-8	4000	1	*
Manchester	1008.4	+4	WSW	5	c	56	85	7	5	2	-	7-8	10	1500	1	*
Spurn Head	1007.4	+4	WSW	4	bc	57	85	6	5	4	-	2-3	4-6	2500	1	3
Catterick	1004.9	+6	WSW	4	c	57	75	8	8	3	-	4-6	7-8	1500	1	*
Tynemouth	1002.4	-4	W	6	bc	58	85	7	2	3	-	4-6	4-6	2500	1	2
St. Abbs Head	999.6	0	W	7	cq	56	85	9	5	3	-	4-6	7-8	1500	0	3
Leuchars	999.2	+2	WSW	4	c	57	85	9	5	-	-	9+	9+	2500	1	*
Renfrew (Abbots I.)	1003.0	+10	W'N	4	c/pr	56	85	7	9	-	-	9+	9+	800	1	*
Eskdalemuir	1003.1	+8	W'S	3	c	52	85	7	5	-	-	10	10	1500	1	*
Point of Ayre	1007.1	+10	WNW	6	pr	55	92	6	8	1	-	9	10	800	1	3
Tiree	1006.2	+18	NW	5	o	54	92	7	6	-	-	10	10	1500	0	4
Stornoway	1005.4	+26	NNW	5	c/r	53	97	7	5	2	-	9	10	2500	1	3
Dalwhinnie	1002.5	+22	SW	3	ir	53	75	6	4	6	-	7-8	10	1500	1	*
Aberdeen	1000.0	+16	NNW	2	c	53	92	7	5	-	-	9+	9+	2500	1	1
Wick	1000.1	+14	NW	3	iro	52	97	6	5	2	-	9	10	800	1	1
Lerwick	1000.6	+4	NNE	5	c/f	52	97	6	5	2	-	7-8	10	220	1	*
Blacksod Point	1013.3	+12	NW	3	c	54	97	8	5	-	-	10	10	800	0	2
Malin Head	1008.3	+14	NW	4	c	55	85	8	9	-	-	9	9	1500	0	2
Aldergrove	1008.4	+14	WNW	4	c/pr	54	92	8	9	-	-	10	10	1500	1	"
Birr Castle	1012.7	+8	WSW	1	bc	55	92	8	5	4	-	2-3	2-3	2500	1	*
Valentia Obsy. †	1015.9	+10	NW'W	3	bc	58	85	8	2	-	6	2-3	2-3	1500	1	2
Roches Point	1014.9	+8	NW	3	bc	55	92	8	3	4	-	4-6	4-6	2500	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 8th Hrs. (36)
London (Kew)	66	57	52	0.2	0.2	0.5
Croydon	67	55	53	Tr	Tr	0.3
S. Farnborough	65	52	48	Tr	0.1	0.1
Boscombe Down	65	52	48	1	0.6	0.0
Calshot (Sthmtn.)	66	55	53	0.1	0.3	0.0
Lympne	66	57	55	Tr	Tr	1.6
Manston	69	57	53	Tr	-	0.9
Shoeburyness	70	58	54	Tr	-	1.1
Felixstowe	70	56	53	Tr	1	0.8
Gorleston	69	54	51	1	1	1.1
Mildenhall	69	50	45	Tr	3	0.5
Cranwell	65	50	48	8	4	1.4
Birmingham	63	51	46	13	1	0.3
Upper Heyford	65	49	41	1	1	*
Ross-on-Wye	62	51	44	14	0.2	0.1
Hartland Point	59	54	51	7	0.6	0.0
Bristol	65	54	50	2	2	0.0
Portland Bill	59	55	*	1	1	*
Plymouth	60	55	52	5	0.2	0.1
The Lizard	60	55	*	3	-	0.2
Scilly (St.Mary's)	63	55	*	0.6	0.6	1.4
Guernsey	63	55	55	-	7	2.5
Pembroke	60	54	*	3	-	1.7
Holyhead	58	53	50	7	-	1.5
Chester (Sealand)	62	50	44	16	Tr	0.5
Manchester	61	50	45	18	-	0.0
Spurn Head	64	52	*	4	5	0.2
Catterick	62	51	44	4	0.4	0.3
Tynemouth	62	53	48	1	2	0.0
St. Abbs Head	65	51	*	-	3	*
Leuchars	63	51	47	0.1	0.6	5.5
Renfrew (Abbots I.)	62	52	50	3	0.3	3.3
Eskdalemuir	60	48	45	0.3	3	1.1
Point of Ayre	62	52	*	6	0.6	0.4
Tiree	60	51	50	1	2	3.8
Stornoway	54	52	*	1	4	0.0
Dalwhinnie	60	47	46	4	8	7.4
Aberdeen	66	51	49	1	6	3.9
Wick	60	51	*	1	2	*
Lerwick	54	51	*	4	1	0.0
Blacksod Point	70	53	*	0.5	0.2	*
Malin Head	61	51	*	1	2	6.2
Aldergrove	63	53	50	5	1	2.4
Birr Castle	61	50	47	1	0.1	2.7
Valentia Obsy. †	61	56	51	2	Tr	8.1
Roches Point	62	49	*	7	0.2	*

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

Station	Height above M.S.L. in feet.	Weather Morning (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	c	cpoc	cpocbc	66	57	52	0.2	0.2	0.5	•	•	8
Croydon	217	cdodod	cidoiror	cidcbc	67	55	53	Tr	Tr	0.5	•	•	8
Greenwich (Royal Observatory)	149	c	crc	c	67	57	54	0.3	-	0.3	79	60	7
City (Bunhill Row)	—	•	•	•	•	•	•	•	•	0.2	•	•	•
Westminster (St. James' Park)	27	•	•	•	72	57	54	Tr		0.2	79	71	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	67	57	54	Tr	Tr	0.1	77	63	•
Camden Square	110	c	c	•	68	57	54	0.3	0.3	•	•	61	•
Kensington	80	c	cpc	•	68	57	54	0.2	0.1	0.0	At 18h 83	59	•
Hampstead Observatory	450									0.1	•		•

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

South Kensington. Max.	Time.	Min.	Time.
<0.3 Whole period			

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

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 8th July Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 9th July 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	1014.1	WSW	3	b	81	1017.0	W	3	c	63	82	61	-	-
Brussels	1013.0	WSW	3	c	73	1013.2	N	4	ido	61	77	59	0.2	-
Berlin	1015.1	WSW	1	c	77	1009.9	SW	3	c	73	79	64	-	-
Zürich	1017.5	SW	1	b	81	1017.0	S	1	bc	70	84	63	-	-
Rome	1019.1	WSW	1	b	79	1019.9	-	0	b	73	*	*	-	-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday, 10th July, 1939.
No. 28354

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

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)	1014.1	+10	NSW	4	c	67	45	8	7	–	4	7-8	9	2500
	Croydon	1014.4	+10	W	4	c	67	45	8	4	–	4	4-6	7-8	4000
	S. Farnborough	1014.5	+8	W	4	c	66	55	8	8	–	1	9	9+	4000
	Boscombe Down	1015.3	+6	WN	5	c	65	55	8	1	–	6	4-6	7-8	4000
	Calshot (Soton.)	1015.3	+12	SWS	4	c	65	75	8	8	6	6	7-8	9	2500
	Lympne	1013.9	+4	NSW	4	c	69	55	8	1	–	1	7-8	7-8	2500
	Manston	1013.0	+2	WS	4	c	71	45	8	2	–	6	7-8	9	2500
2	Shoeburyness	1013.4	+4	NSW	4	c	69	45	8	8	–	2	4-6	7-8	2500
	Felixstowe	1012.1	+6	WN	6	c	68	55	8	7	3	–	7-8	9	2500
	Gorleston	1011.2	+6	WS	4	c	65	55	7	8	–	–	9	9	2500
	Mildenhall	1011.7	+6	WN	5	c	65	55	7	7	–	–	7-8	7-8	2500
	Cranwell	1010.8	+12	NSW	4	c	64	65	7	8	6	–	7-8	7-8	2500
3	Birmingham	1013.3	+14	NSW	4	bc	61	55	8	8	7	–	2-3	4-6	2500
	Upper Heyford	1014.1	+10	W	5	c	63	65	8	8	–	1	9	9+	2500
4	Ross-on-Wye	1014.3	+8	WNW	4	c	62	65	8	7	–	1	7-8	7-8	4000
5	Hartland Point	1016.9	+2	WNW	4	c	59	85	8	7	6	–	4-6	7-8	1500
	Bristol	1015.4	+6	W	5	bc	64	65	8	8	3	8	4-6	4-6	2500
	Portland Bill	1016.4	+10	NSW	4	c	60	85	7	4	–	1	4-6	9	4000
	Plymouth	1017.3	+10	WN	3	c	62	75	9	8	–	3	7-8	9	1500
	The Lizard	1018.7	+10	WS	3	bc	62	85	8	8	6	–	4-6	4-6	2500
	Scilly (St. Mary's)	1018.5	+12	WNW	3	c	64	85	8	8	6	2	2-3	9+	1500
	Guernsey	1017.5	+10	W	5	c	60	85	7	8	4	8	4-6	7-8	800
6	Pembroke	1016.2	0	WN	4	c	58	85	8	8	7	–	7-8	9	2500
7	Holyhead	1012.8	+16	NSW	5	c	60	75	8	8	–	–	9+	9+	2500
	Chester (Sealand)	1012.4	+14	WN	5	c/pr	61	75	8	8	–	–	7-8	7-8	2500
8	Manchester	1011.4	+18	W	5	c/pr	59	75	7	8	3	–	7-8	9+	1500
10	Spurn Head	1008.3	+2	W	6	cq	65	65	7	8	8	–	7-8	9	1500
	Catterick	1007.5	+14	W	3	c	60	65	8	8	–	–	9	9	1500
	Tynemouth	1004.9	+14	W	5	c/pr	59	92	6	8	–	–	9+	9+	1500
11	St. Abbs Head	1005.1	+24	NW	2	iR	57	85	8	8	6	–	7-8	9+	1500
	Leuchars	1004.9	+26	NNW	2	c/pr	59	85	8	9	–	–	9+	10	1500
12	Renfrew (Abbotsl.)	1007.4	+18	NW	5	c	64	75	8	8	6	–	7-8	9	2500
	Eskdalemuir	1006.8	+20	NNW	4	bc/pr	56	75	8	8	–	–	4-6	4-6	1500
	Point of Ayre	1011.0	+16	NW	6	bc	61	75	8	2	6	–	1	2-3	2500
13A	Tiree	1010.9	+20	NNW	4	bc	59	85	8	5	3	–	2-3	4-6	4000
13B	Stornoway	1011.8	+20	N	6	c	58	92	7	3	2	–	9	10	2500
15	Dalwhinnie	1007.9	+36	NW	2	ir	52	85	6	6	7	–	7-8	10	1500
	Aberdeen	1005.0	+30	NNW	4	ir	55	92	6	6	2	–	9	10	800
	Wick	1005.5	+24	NNW	5	c	55	85	7	5	2	–	7-8	10	1500
16	Lerwick	1003.1	+12	NE	6	rr	50	97	6	6	2	–	7-8	10	800
17	Blacksod Point	1016.7	+20	NW	3	c	59	85	8	5	–	–	10	10	2500
18	Malin Head	1013.1	+18	NNW	4	pr	55	92	7	9	–	–	9	9	1500
	Aldergrove	1012.0	+16	NW	4	pr	58	75	8	8	–	–	9+	9+	2500
19	Birr Castle	1015.3	+12	WNW	1	c	61	75	8	5	8	–	4-6	7-8	2500
20	Valentia Obsy.†	1018.7	+14	NNW	3	bc	61	75	8	8	–	1	2-3	4-6	2500
	Roches Point	1017.1	+12	NNW	3	bc	63	75	8	2	–	3	4-6	4-6	2500

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

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)	1014.9	+8	W	4	c	65	55	8	7	–	4	7-8	9+	2500	0	*
	Croydon	1014.9	+6	WN	3	c	65	55	9	4	6	2	4-6	9+	5000	1	*
	S. Farnborough	1015.3	+8	WS	4	c	65	55	8	7	1	2	4-6	9+	5000	0	*
	Boscombe Down	1016.0	+6	WN	5	c⊕	62	55	9	1	4	8	7	9	4000	1	*
	Calshot (Soton.)	1015.9	+2	WS	4	c	65	75	8	4	–	8	2-3	9	2500	0	2
	Lympne	1014.9	+6	NSW	4	c	65	65	8	1	6	6	1	7-8	2500	0	4
	Manston	1014.3	+8	WS	3	c	67	45	8	8	6	8	4-6	9	4000	0	*
2	Shoeburyness	1013.9	+4	NSW	3	c	67	55	8	8	3	6	2-3	9+	2500	0	*
	Felixstowe	1013.4	+6	WNW	5	c	68	45	8	7	4	6	4-6	9+	2500	0	3
	Gorleston	1011.6	+4	W	4	c	65	55	7	8	–	–	7-8	7-8	2500	0	2
	Mildenhall	1013.2	+14	NWW	4	id.	61	75	7	8	–	–	9+	9+	2500	0	*
	Cranwell	1012.0	+12	NSW	3	c	63	65	7	8	6	–	7-8	7-8	2500	1	*
3	Birmingham	1014.2	+6	W	3	bc	63	55	8	7	4	–	4-6	4-6	4000	1	*
	Upper Heyford	1014.8	+8	WNW	4	c	65	55	8	8	4	2	4-6	7-8	4000	1	*
4	Ross-on-Wye	1015.2	+6	WNW	3	bc	64	55	8	7	7	4	2-3	4-6	4000	1	*
5	Hartland Point	1017.5	+4	NW	3	c	59	92	8	8	6	2	4-6	7-8	1500	1	2
	Bristol	1016.5	+6	W	5	c	60	75	8	9	3	8	7-8	9	2500	1	*
	Portland Bill	1017.1	+8	NSW	4	c	59	85	7	5	–	–	10	10	4000	1	4
	Plymouth	1018.0	+2	WN	3	c	61	75	9	2	–	3	2-3	9+	2500	1	1
	The Lizard	1019.7	+4	WS	3	c	58	92	8	8	6	–	7-8	9+	2500	0	1
	Scilly (St. Mary's)	1019.2	+2	NWW	4	c	60	92	8	8	7	3	4-6	9	1500	1	2
	Guernsey	1018.9	+2	W	4	c	58	85	8	9	1	–	2-3	9+	800	1	3
6	Pembroke	1017.1	+2	WNW	4	c	58	92	8	8	6	–	4-6	7-8	2500	1	2
7	Holyhead	1015.1	+14	W	4	c	60	75	8	8	3	–	7-8	9	2500	1	2
	Chester (Sealand)	1014.2	+10	WNW	4	c	62	65	8	8	3	–	7-8	9	2500	1	*
8	Manchester	1013.3	+14	WNW	4	c/pr	59	75	7	8	3	–	7-8	9	2500	1	*
10	Spurn Head	1009.7	+6	WNW	7	cq	63	65	7	8	8	8	4-6	7-8	2500	0	4
	Catterick	1010.5	+20	WNW	4	pr	59	75	8	8	–	–	10	10	1500	0	*
	Tynemouth	1009.0	+20	WNW	3	rr	56	97	6	6	–	–	10	10	800	1	2
11	St. Abbs Head	1009.4	+20	WNW	3	c	55	85	8	5	5	8	4-6	7-8	2500	0	2
	Leuchars	1008.9	+14	NNW	3	c	64	65	8	8	6	–	7-8	7-8	2500	1	*
12	Renfrew (Abbotsl.)	1011.3	+18	NNW	4	c	61	75	8	8	–	–	9	9+	2500	1	*
	Eskdalemuir	1009.3	+22	NNW	4	c/r	53	85	7	6	7	–	9	9+	1500	1	2
	Point of Ayre	1009.6	+20	NNW	6	c/pr	50	85	7	5	2	–	7-8	10	800	1	2
13A	Tiree	1014.3	+14	NNW	4	c	55	85	8	5	–	–	9+	9+	2500	0	4
13B	Stornoway	1014.5	+16	NNW	4	c	52	85	7	5	2	–	9	10	2500	1	2
15	Dalwhinnie	1011.8	+18	N	1	c	53	85	7	6	7	–	7-8	10	4000	1	*
	Aberdeen	1009.3	+22	NNW	4	c/r	53	85	7	6	7	–	9	9+	1500	1	2
	Wick	1009.6	+20	NNW	6	c/pr	50	85	7	5	2	–	7-8	10	800	1	2
16	Lerwick	1004.7	+6	NE	6	c	50	92	7	8	2	–	7-8	10	800	1	*
17	Blacksod Point	1010.0	+6	NW	3	c	57	85	8	5	–	–	10	10	1500	0	2
18	Malin Head	1016.2	+18	NNW	3	c/pr	55	85	7	8	–	–	9	9	1500	0	3
	Aldergrove	1015.3	+18	NNW	3	c	55	85	8	8	–	–	9+	9+	1500	1	*
19	Birr Castle	1016.6	+6	NNW	2	c/pr	60	85	8	3	7	–	4-6	9	1500	1	*
20	Valentia Obsy.†	1020.5	+10	NNW	4	b	61	85	8	2	–	–	1	1	2500	1	2
	Roches Point	1018.0	+6	NNW	4	bc	64	75	9	7	–	–	4-6	4-6	2500	1	2

PAST 24 HOURS.

District	Stations.	Weather. 7h.–13h. 9th (37)	Weather. 13h.–18h. 9th (38)	Weather. 18h. 9th to 1h. 10th (39)	Weather. 1h.–7h. 10th (40)
1	London (Kew)	bcy	cy	cybc	bc
	Croydon	bcy	bccvy	cyb	bbcm.
	S. Farnborough	b,c bcy	cy⊕	cyb	bwbc
	Boscombe Down	bc	bcc	c,b	bbz.
	Calshot (Soton.)	bbcc	c	cbw	bw
	Lympne	bcy	bcy⊕	cbcb	bwm.
	Manston	bcy	cy	cybcb	bcwbc
2	Shoeburyness	bbcy	bcy	cybcb	bbcb
	Felixstowe	bbcy	cy	cyc	cbc
	Gorleston	bccy	cy	cbc	bcc
	Mildenhall	b,cr.	cycid.	cid.cb	b,cm,prc
	Cranwell	bbccprm	cprbcc	cbc	bccm.
3	Birmingham	bcprc	bc	bccpr.	c
	Upper Heyford	bc	cbc	bccb	bbcc
4	Ross-on-Wye	bcc	cbccbc	cbcbbc	bcc
5	Hartland Point	bcc	c	cbc	bcc
	Bristol	bccbc	bccq	cp.cbc	bcbw
	Portland Bill	bcc	c	bc	bc
	Plymouth	cprbcc	c	cbcb	bwb
	The Lizard	bc	c	cbcw	bc
	Scilly (St. Mary's)	bcc	c	cbcbw	bbcbw
	Guernsey	c	c	bcc	cbc
6	Pembroke	c	bcc	cbcc	c
7	Holyhead	bcc	cbcc	c	c
	Chester (Sealand)	bccprPR	cbcc	c	c
8	Manchester	cpr.	ccpr	cprbcc	cpr.
10	Spurn Head	cqpr.	cqpr.	cq	c
	Catterick	cprpr.	cprbc	r.rirc	c
	Tynemouth	bccprtl	cP	orrcp	cp
11	St. Abbs Head	ciR	irc	cirbc	bc
	Leuchars	PRcPRc	c	cbc	bcb
12	Renfrew (Abbotsl.)	cprc	c	cw	cbcw
	Eskdalemuir	r.rpr.	bccRtir	cir.	cbc
	Point of Ayre	prcbc	bc	bcc	c
13A	Tiree	cbc	bcid.	c	c
13B	Stornoway	c	c	cid.pr	cd.
15	Dalwhinnie	ciR	ciR	c	c
	Aberdeen	cir.	cir.	circ	cz.c
	Wick	irdrc	cpr.	cpr.c	c
16	Lerwick	cirrr	crrir.	cq	cprq
17	Blacksod Point	c	c	c	c
18	Malin Head	cprc	c	cpr.c	c
	Aldergrove	ccpr.	cprc	cprc	ccidomc
19	Birr Castle	bcc	cpr	cprc	c
20	Valentia Obsy.†	bccbc	bcb	bbcb	bwbcc
	Roches Point	bccbc	bc	bcbw	bwbc

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., slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s./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., 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).

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.

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.*

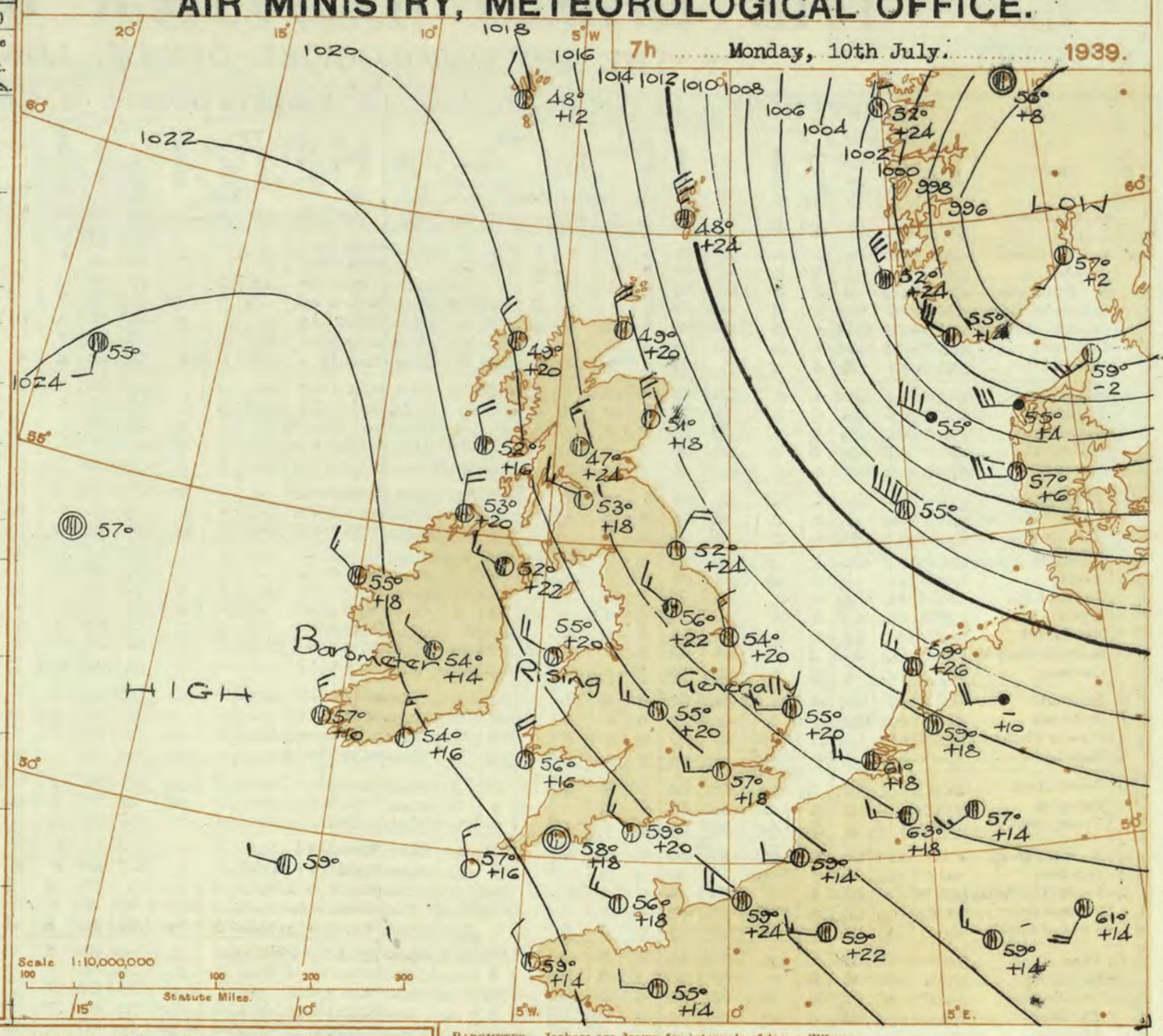
* Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 9th July 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 8th to 9h. 9th	Temperature. (°F) Max. 9h.—17h. 9th	Rainfall. (mm.) Night. 17h. 8th to 9h. 9th	Rainfall. (mm.) Day. 9h.—17h. 9th	Sunshine. (Hrs.) Sunrise to 17h. 9th	Sunshine. (Hrs.) Sunrise to Sunset. 8th
1	Tunbridge W.	bc	bc	55	70	—	—	10.9	1.4
	Bournemouth	bbc	bcc	55	67	0.5	—	7.5	0.0
	Ventnor ...	b	b	57	64	1	—	11.5	0.0
	Southsea ...	bc	bcpc	58	69	Tr.	Tr.	10.1	0.0
	Bognor Regis	b	bbcc	56	68	Tr.	—	11.4	1.1
	Littlehampton	bc	bc	56	67	—	—	11.5	1.7
	Worthing ...								
	Brighton ...	b	bbcb	59	65	Tr.	—	9.0	0.1
	Eastbourne† ...	b	bbcc	59	65	Tr.	—	9.4	1.1
	Hastings† ...	bcbbc	bcbbc	58	69	0.3	—	10.8	1.9
	Folkestone ...	bc	bc	59	69	Tr.	—	9.2	2.2
	Dover ...	bc	bc	59	67	—	—	10.5	3.5
	Deal	bbc	bcc	*	73	—	—	11.1	2.8
	Ramsgate ...	bc	bc	58	71	—	—	11.5	0.5
	Margate ...	bc	bc	59	69	—	—	11.5	0.8
2	Southend ...	bcb	bbcc	57	73	—	—	11.0	0.8
	Clacton-on-Sea	bc	bc	56	70	—	—	8.8	0.4
	Dovercourt ...	bcv	bcv	55	69	2	—	10.5	1.0
	Lowestoft ...	bcbbc	bcc	52	69	0.6	—	6.7	0.8
	Skegness ...	bbcb	corcb	50	60	5	Tr.	10.8	1.6
	Mablethorpe...	bbc	cbc	48	66	4	—	9.1	1.0
	Cleethorpes ...	bc	bcbc	50	65	3	—	8.3	0.8
3	Leamington S.	bc	bc	51	66	1	—	9.2	0.0
4	Cheltenham†	bc	bcc	51	68	0.5	—	8.8	0.5
5	Bath	bcb	bbc	54	66	1	—	9.7	0.1
	Weymouth ...	b	bc	56	65	0.3	—	9.7	0.0
	Jersey ...	cbc	bc	58	64	Tr.	—	10.4	1.5
	Torquay ...	cobc	bccv	52	66	1	—	8.7	0.2
	Falmouth ...	bcvbc	b	56	66	Tr.	—	8.9	0.0
	Penzance ...	bccbc	bcc	55	65	Tr.	—	6.2	0.7
	St. Ives ...								
	Bude... ...	bbc	bc	57	62	0.3	—	8.3	0.4
	Ilfracombe ...	obc	bcbbc	56	62	—	—	7.5	0.0
6	Aberystwyth	cbc	bcc	55	61	1	—	4.7	0.1
7	Llandudno ...	cbc	pocbc	54	63	—	Tr.	4.5	1.0
	Colwyn Bay...	cbcc	cbc	54	63	—	—	0.8	0.3
	Rhyl	cbcc	bc	54	63	0.1	—	4.4	0.7
8	Waliasey ...	c	cbcc	54	63	Tr.	—	4.3	0.7
	Southport ...	obco	bcobc	54	62	0.3	—	3.5	0.5
	Blackpool ...	cpbc	c	55	62	0.3	Tr.	2.7	0.6
	Morecambe ...	ircbc	cbc	55	61	1	—	2.6	1.1
9	Ilkley... ...	opo	c	54	62	1	0.6	1.2	0.1
	Harrogate ...	cbcp	c	52	61	1	0.1	2.6	0.2
10	Berwick-on-T.	ocro	cirs	52	61	0.2	1	3.1	2.2
11	Dunbar ...	cpr	cpr	50	62	2	5	1.1	6.3
12	Troon... ...	ococ	bcc	53	60	2	—	3.0	2.2
	Douglas ...	bcir	cirs	52	60	1	Tr.	1.3	1.1

* Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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. 10th July, 1939.
1 S.E. England 2 E. England ...	Wind northwest, moderate; fair but considerable cloud today; rather cool.
3 E. Midlands ... 4 W. Midlands ...	Wind northwest fresh to moderate; mainly cloudy; local coastal showers; cool.
5 S.W. England 6 South Wales ...	As 1.
7 North Wales ... 8 N.W. England 9 N. Midlands ...	Wind northwest, moderate to light; fair to fine; temperature rather below average.
10 N.E. England 11 S.E. Scotland	As 1.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland.	Wind northerly, fresh, moderating slowly; cloudy; occasional showers, chiefly near the coast; cool.
14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Wind northwest, moderate; fair; rather cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 10 - 11.
	Wind northwest, moderate to light, becoming variable later; fair; temperature a little below the seasonal average.

GENERAL INFERENCE.

Pressure is low over Southern Scandinavia. An anticyclone to west and southwest of the British Isles will tend to move in over the country with fair weather generally, apart from some showers near the northeast coasts today. Temperatures will be mainly below the seasonal average.

FURTHER OUTLOOK.

Fair for a day or two over most of England and Wales; doubtful elsewhere.

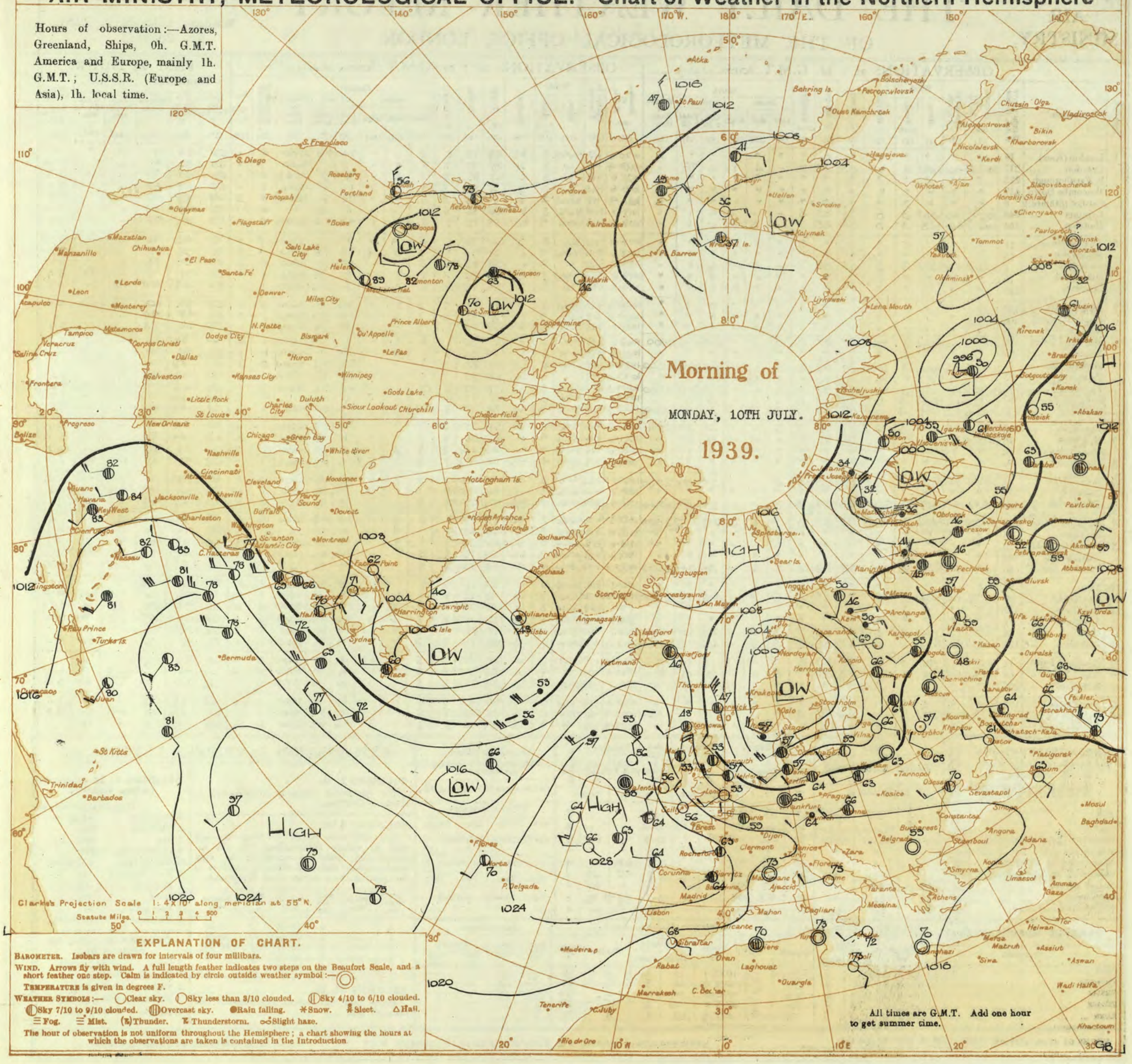
Forecasts issued at 0930 G.M.T.

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

Monday, 10th July, 1939.
No. 28354.

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

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	1017·7	+10	WSW	2	b	53	92	7	–	4	1	0	Tr	–
	S. Farnborough	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Calshot (Sthmtn.)	8	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lympne ...	346	1017·6	+10	WNW	3	b	53	85	8	–	–	1	0	1	–
	Manston ...	154	1016·7	+6	W'S	3	b	54	85	7	–	5	1	0	1	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1014·2	+6	WSW	3	b	55	85	7	–	3	–	0	1	–
	Mildenhall ...	19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1019·9	+8	WNW	3	bc	57	97	8	5	3	–	2-3	4-6	2500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1019·2	+6	NW	3	bc	57	92	8	5	–	–	4-6	4-6	4000
	Plymouth ...	82	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	The Lizard ...	240	1021·7	+6	W	3	bc	55	97	8	8	–	–	2-3	2-3	2500
	Scilly (St. Mary's)	163	1022·0	+6	NNW	3	b	56	97	8	–	–	–	0	0	–
	Guernsey ...	175	1020·6	+2	W'N	4	c	55	97	7	8	–	–	9+	9+	800
6	Pembroke ...	142	1020·1	+6	W'N	3	c	57	92	8	8	–	–	9+	9+	2500
7	Holyhead ...	26	1018·4	+6	W	3	c	56	92	*	*	*	–	10	10	*
	Chester (Sealand)	16	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1014·1	+14	NW'N	4	c	57	85	6	5	–	–	9+	9+	2500
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1013·4	+10	NW	2	c/pr	53	97	8	8	–	–	9+	9+	1500
11	St. Abbs Head	280	1013·9	+16	NNW	1	bc	52	92	9	7	4	9	2-3	4-6	2500
	Leuchars ...	36	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12	Renfrew (Abbots I.)	19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1017·1	+16	NW'N	5	c	55	92	8	5	8	–	9+	9+	2500
13A	Tiree ...	22	*	*	*		*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1017·8	+16	SW	2	c	48	85	8	5	7	–	4-6	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1012·7	+8	NW	5	c	47	92	7	5	2	–	7-8	10	800
16	Lerwick ...	156	1009·1	+22	N'W	7	c	47	85	8	5	2	–	4-6	7-8	800
17	Blacksod Point	18	1021·9	+12	NW	3	c	55	85	8	5	–	–	10	10	2500
18	Malin Head ...	84	1019·4	+14	N	4	c/pr	53	92	7	8	–	–	9	9	1500
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1023·6	+6	WNW	3	b	56	97	8	7	–	–	1	1	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1020·6	+18	NW'W	3	bc	58	75	8	7	-	-	4·6	4·6	2500	0	*
	Croydon ...	1020·4	+18	W	3	bc	57	85	8	5	4	-			4000	1	*
	S. Farnborough	1021·0	+18	W	3	c	58	85	8	1	3	-	Tr	9	2500	0	*
	Boscombe Down	1021·6	+20	W	2	2o	57	85	6	1	-	-	1	1	4000	1	*
	Calshot (Sthmtn.)	1021·4	+18	WNW	2	b	58	85	7	1	4	-	Tr	Tr	2500	0	2
	Lympne ...	1019·9	+14	NW'W	3	b	56	85	6	-	-	-	0	0	-	0	§1
	Manston ...	1019·3	+18	WNW	4	bc	58	75	7	5	-	1	4·6	4·6	2500	0	*
2	Shoeburyness ...	1019·4	+16	NW	3	b	60	75	8	5	4	-	Tr	1	5700	0	*
	Felixstowe ...	1018·6	+16	NW'W	4	c	57	75	8	5	3	4	2·3	7·8	5700	0	2
	Gorleston ...	1017·2	+20	W	2	c	55	85	6	5	-	-	10	10	2500	0	2
	Mildenhall ...	1018·5	+20	NW'W	3	c	56	85	7	5	7	-	9	9+	2500	1	*
	Cranwell ...	1018·3	+10	W	2	c	56	85	6	5	-	-	9	9	2500	1	*
3	Birmingham ...	1020·6	+20	WNW	3	c	55	85	6	5	7	-	4·6	10	2500	1	*
	Upper Heyford	1020·5	+18	WNW	4	c	57	75	8	7	3	-	4·6	9	4000	1	*
4	Ross-on-Wye	1021·1	+20	W'N	3	c	58	75	8	5	-	-	9+	9+	4000	1	*
5	Hartland Point	1022·5	+18	N	3	c	57	85	8	2	3	-	1	7·8	2500	1	2
	Bristol ...	1021·4	+18	W'N	3	b	58	85	8	1	4	-	Tr	1	4000	1	*
	Portland Bill ...	1022·0	+20	NW	3	bc	59	85	8	1	-	-	2·3	2·3	4000	0	3
	Plymouth ...	1023·0	+18	-	0	bc	58	85	7	5	-	-	2·3	2·3	1500	1	0
	The Lizard ...	1024·3	+20	WNW	2	bc	58	92	8	8	-	-	2·3	2·3	1500	0	1
	Scilly (St. Mary's)	1024·1	+16	NNW	3	b	57	97	8	-	-	-	0	0	-	0	2
	Guernsey ...	1023·0	+18	NW'W	3	bc	56	97	8	4	-	-	4·6	9·6	450	1	2
6	Pembroke ...	1023·2	+16	N'W	4	c	56	85	8	7	-	-	7·8	7·8	2500	1	2
7	Holyhead ...	1021·6	+20	NW'W	4	c	55	85	8	7	-	-	9+	9+	4000	1	2
	Chester (Sealand)	1020·6	+22	NW'W	4	c	56	75	8	8	2	-	9	10	1500	1	*
8	Manchester ...	1019·6	+18	WNW	4	c/pr	55	75	7	8	7	-	4·6	10	2500	1	*
10	Spurn Head ...	1017·9	+20	N'W	3	c	54	85	7	5	2	-	7·8	10	2500	0	2
	Catterick ...	1017·7	+22	NW'W	3	c	56	75	8	5	-	-	9+	9+	1500	1	*
	Tynemouth ...	1017·5	+24	NE	4	c/pr	52	85	8	8	-	-	9+	9+	1500	1	3
11	St. Abbs Head	1017·2	+20	NNW	2	bc	52	75	9	8	6	-	2·3	4·6	2500	0	2
	Leuchars ...	1016·0	+18	WNW	3	b	54	65	9	-	4	-	0	Tr	-	1	*
12	Renfrew (Abbots I.)	1018·6	+18	WNW	3	b	53	75	9	1	4	-	Tr	Tr	2500	0	*
	Eskdalemuir ...	1018·2	+18	NW'N	2	bc	50	75	8	5	-	-	4·6	4·6	1500	1	*
	Point of Ayre ...	1020·2	+22	N'W	5	c	54	75	8	5	-	-	9+	9+	2500	0	3
13A	Tiree ...	1021·1	+16	NNW	4	c	52	75	8	5	-	-	9+	9+	2500	0	3
13B	Stornoway ...	1020·8	+20	NW	4	c	49	85	8	5	7	-	9	10	2500	1	2
15	Dalwhinnie ...	*	+24	NNW	3	c	47	75	7	4	6	-	7·8	9+	4000	0	*
	Aberdeen ...	1016·2	+18	NNW	5	bc	51	75	8	7	3	-	4·6	4·6	1500	1	1
	Wick ...	1016·3	+20	NNW	4	c	49	85	8	5	7	-	7·8	9+	800	1	2
16	Lerwick ...	1012·3	+24	NNW	7	c	48	85	8	8	7	-	7·8	10	1500	1	*
17	Blacksod Point	1024·3	+18	NW	3	c	55	75	8	5	-	-	10	10	4000	0	2
18	Malin Head ...	1022·4	+20	N	4	c	53	75	8	5	-	-	9	9	5700	0	2
	Aldergrove ...	1021·5	+22	NW'W	3	c	52	85	8	5	-	-	10	10	2500	1	*
19	Birr Castle ...	1023·3	+14	NW	1	c	54	92	8	5	-	-	9+	9+	1500	1	*
20	Valentia Obsy. †	1025·4	+10	N'W	3	c	57	75	8	5	-	-	7·8	7·8	4000	1	1
	Roches Point	1024·4	+16	N	3	bc	54	92	8	5	-	-	4·6	4·6	2500	1	2

PAST 24 HOURS.

Stations	Temperature Max/Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 9th Hrs. (36)
London (Kew)	68	53	47	–	-	10·7
Croydon ...	69	51	49	–	-	10·0
S. Farnborough	69	47	39	–	-	11·3
Boscombe Down	67	49	49	–	-	11·3
Calshot (Sthmtn.)	68	49	46	–	-	9·9
Lympne ...	70	48	45	–	-	10·6
Manston ...	72	51	47	–	-	11·0
Shoeburyness ...	72	53	46	–	-	12·2
Felixstowe ...	71	54	51	–	-	11·7
Gorleston ...	67	54	53	–	-	8·1
Mildenhall ...	68	51	47	Tr	Tr	8·4
Cranwell ...	64	52	50	Tr	-	10·8
Birmingham ...	64	52	50	Tr	0·2	10·0
Upper Heyford	67	49	42	–	-	*
Ross-on-Wye	66	53	48	–	-	9·4
Hartland Point	61	56	53	–	-	9·3
Bristol ...	64	49	39	–	Tr	12·0
Portland Bill ...	61	55	*	–	-	*
Plymouth ...	64	53	46	Tr	-	3·3
The Lizard ...	63	54	*	–	-	8·6
Scilly (St. Mary's)	64	54	*	–	-	9·2
Guernsey ...	61	54	53	–	-	8·7
Pembroke ...	60	54	*	–	-	12·1
Holyhead ...	62	54	51	–	-	5·0
Chester (Sealand)	64	55	52	0·1	-	6·9
Manchester ...	62	51	47	Tr	Tr	2·9
Spurn Head ...	65	53	*	Tr	-	9·4
Catterick ...	63	53	48	0·1	2	4·9
Tynemouth ...	60	52	49	7	6	4·4
St. Abbs Head	58	50	*	3	1	*
Leuchars ...	65	45	36	2	-	2·3
Renfrew (Abbots I.)	64	48	42	Tr	-	2·1
Eskdalemuir ...	62	47	44	10	0·2	2·2
Point of Ayre ...	63	53	*	0·5	-	9·2
Tiree ...	59	51	48	Tr	-	3·1
Stornoway ...	56	48	*	Tr	0·1	0·0
Dalwhinnie ...	56	43	40	12	*	1·1
Aberdeen ...	57	48	44	0·6	Tr	0·4
Wick ...	56	47	*	1	Tr	*
Lerwick ...	53	47	*	1	Tr	0·0
Blacksod Point	60	53	*	–	-	*
Malin Head ...	56	48	*	0·3	Tr	0·0
Aldergrove ...	58	50	50	Tr	0·1	0·0
Birr Castle ...	64	53	48	1	Tr	3·7
Valentia Obsy. †	62	52	42	–	Tr	13·9
Roches Point	66	51	*	–	Tr	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon (24 hrs. ended 9h.)	Weather Night (24 hrs. ended 9h.)	Temperature Day Max. °F.	Temperature Night Min. °F.	Temperature Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
KEW ...	18	bccy	cy	cybc	68	53	47	-	-	10·7	*	*	8
CROYDON ...	217	bccy	bccy	cvybm	69	51	49	-	-	10·0	*	*	8
GREENWICH (Royal Observatory) ...	149	cy	cr.cy	cbc	71	52	45	Tr	-	10·3	46	60	8
CITY (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	10·4	*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*	69	53	47	–		10·8	62	71	*
REGENTS PK. (Botanic Gardens)‡ ...	168	*	*	*	70	52	48	-	-	11·9	45	59	*
CAMDEN SQUARE ...	110	bc	bc	*	71	53	49	-	-	*	*	65	*
KENSINGTON ...	80	bc	bc	*	71	53	48	-	-	10·7	At 18h. 64%	46	*
HAMPSTEAD OBSERVATORY ...	450	bc	bc	bc	69	50	46	-	-	11·6	*	44	*

Atmospheric Pollution. Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 10th

South Kensington Max.	Time.	Min.	Time.
<0·3	whole	period	

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

FOREIGN OBSERVATIONS.

18h. G.M.T. 9th July — 7h. G.M.T. 10th July

Stations	18h. Barom. mb.	18h. Wind Direc.	18h. Wind Force	18h. Weather	18h. Temp. °F.	7h. Barom. mb.	7h. Wind Direc.	7h. Wind Force	7h. Weather	7h. Temp. °F.	Past 24 Hours Max. Day °F.	Past 24 Hours Min. Night °F.	Past 24 Hours Rainfall Day mm.	Past 24 Hours Rainfall Night mm.
PARIS ...	1017·5	WSW	1	c/pr	66	1022·1	W	3	c	59	72	55	4	-
BRUSSELS ...	1014·3	W	4	bc	64	1018·3	W	3	c	61	75	52	-	-
BERLIN ...	1010·4	NW	4	bc	72	1012·0	W	4	c	69	82	59	-	-
ZURICH ...	1016·8	NW	2	bc	75	1018·0	NW	2	c	64	81	61	Tr	-
ROME ...	1019·0	W	2	b	77	1017·9	SE	3	b	75	*	*	-	-

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday, 11th July, 1939.

No. 28355

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	°Temp. F. (6)	%Humid. (7)	Visibility 0–9 (8)	Cloud. Form. Low (9)	Cloud. Form. Med. (10)	Cloud. Form. High (11)	Cloud. Amount. Low 0–10 (12)	Cloud. Amount. Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1023.2	+10	NW'N	3	c	64	65	8	7	3	-	7-8	9+	4000
	Croydon	1022.8	+10	NW	2	c	62	65	8	8	-	-	4-6	9+	4000
	S. Farnborough	1023.0	+10	NW	2	c	64	65	8	8	-	-	9+	9+	4000
	Boscombe Down	1023.8	+12	NW	3	c	62	65	7	7	7	-	4-6	9+	4000
	Calshot (Soton.)	1023.1	+8	WNW	3	c	66	65	8	8	-	-	9	9	4000
	Lympne	1022.6	+18	WNW	3	c	61	55	8	7	3	-	7-8	10	4000
	Manston	1021.9	+12	W'N	4	c	62	65	7	8	2	-	7-8	9+	4000
2	Shoeburyness	1021.5	+10	NW	3	c	67	55	8	7	6	-	4-6	7-8	2500
	Felixstowe	1021.1	+14	NW	4	c	66	55	8	8	6	-	9	9+	2500
	Gorleston	1020.3	+14	NNE	3	c/pr	59	75	7	8	3	-	4-6	7-8	2500
	Mildenhall	1021.3	+14	WNW	4	c	63	55	7	1	3	-	4-6	7-8	4000
	Cranwell	1020.9	+14	W'N	3	z_o	64	55	7	8	-	-	7-8	7-8	4000
3	Birmingham	1023.0	+10	NW	3	c	60	65	8	8	-	-	7-8	7-8	2500
	Upper Heyford	1023.1	+12	NW'W	3	c	60	65	8	8	8	-	7-8	9+	2500
4	Ross-on-Wye	1023.4	+8	W'N	4	c	62	65	9	7	-	-	9	9	4000
5	Hartland Point	1025.4	+10	NNW	3	bc	59	85	9	2	4	-	2-3	4-6	2500
	Bristol	1024.0	+10	WNW	4	c	63	55	8	7	3	-	4-6	7-8	4000
	Portland Bill	1024.4	+6	W	3	c	61	85	8	5	4	-	4-6	9	4000
	Plymouth	1024.7	+6	N	2	c	66	55	9	7	-	-	7-8	7-8	4000
	The Lizard	1026.3	+4	W'S	3	bc	64	85	8	8	4	-	2-3	4-6	2500
	Scilly (St. Mary's)	1026.6	+8	NNW	3	bc	62	85	9	2	4	-	2-3	4-6	2500
	Guernsey	1025.4	+10	NW	3	bc	62	85	8	1	1	-	2-3	2-3	800
6	Pembroke	1026.2	+10	NW	3	c	59	75	8	8	6	-	4-6	7-8	2500
7	Holyhead	1024.4	+14	NW	3	c	57	75	8	8	-	-	7-8	9+	2500
	Chester (Sealand)	1023.9	+16	WNW	5	c	57	65	8	6	-	-	9+	9+	2500
8	Manchester	1022.7	+14	WNW	4	c	58	65	8	8	-	-	9+	9+	4000
10	Spurn Head	1021.0	+10	NNE	4	bc	61	75	7	5	8	-	2-3	4-6	4000
	Catterick	1020.4	+10	WNW	3	c	63	55	8	7	-	-	7-8	7-8	2500
	Tynemouth	1019.8	+10	E	3	bc	57	85	8	2	-	-	2-3	2-3	2500
11	St. Abbs Head	1019.4	+14	NE	1	b	58	75	9	1	-	-	1	1	2500
	Leuchars	1019.5	+8	WNW	2	b	65	65	9	1	-	-	1	1	4000
12	Renfrew (Abbotsl.)	1020.8	+10	NW'W	4	b	64	55	9	1	3	-	Tr	Tr	4000
	Eskdalemuir	1019.8	+8	WNW	2	bc	63	55	8	1	-	-	2-3	2-3	4000
	Point of Ayre	1022.7	+6	NW	6	bc	60	65	8	7	-	-	4-6	4-6	4000
13A	Tiree	1024.2	+16	NW'N	5	c	56	75	8	5	-	-	9	9	4000
13B	Stornoway	1023.3	+10	WNW	4	c	53	75	8	5	7	-	9	10	4000
15	Dalwhinnie	1022.0	+12	SW	1	bc	60	55	8	5	5	-	4-6	4-6	4000
	Aberdeen	1019.0	+12	NW	5	bc	60	65	8	1	-	-	4-6	4-6	2500
	Wick	1019.8	+16	NW	5	c	61	85	8	6	7	-	7-8	10	1500
16	Lerwick	1015.3	+16	NNW	6	c	50	86	8	5	7	-	7-8	10	1500
17	Blacksod Point	1026.9	+8	N	3	c	58	65	9	5	-	-	10	10	4000
18	Malin Head	1025.1	+12	N'W	3	c	56	65	8	8	6	-	4-6	9	7200
	Aldergrove	1024.3	+14	NW'W	4	c	56	65	8	8	-	-	9	9	2500
19	Birr Castle	1025.6	+8	WNW	2	c	61	75	8	5	-	-	9+	9+	2500
20	Valentia Obsy.†	1027.8	+8	NW'W	3	c	61	75	9	6	-	-	9+	9+	1500
	Roches Point	1025.7	+10	N'W	3	c	59	85	9	8	-	-	9+	9+	1500

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

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)	1023.3	-2	NW'N	2	c	66	55	8	7	-	-	9	9	4000	0	*
	Croydon	1022.9	0	NW	3	c	64	55	8	2	6	-	7-8	9+	4000	1	*
	S. Farnborough	1023.4	+2	WNW	2	c	65	55	8	8	-	-	7-8	7-8	4000	0	*
	Boscombe Down	1024.2	+2	NW'W	2	c	62	65	7	7	3	-	2-3	7-8	4000	1	*
	Calshot (Soton.)	1023.7	+2	WNW	3	bc	65	65	8	8	3	-	4-6	4-6	4000	0	1
	Lympne	1023.4	+6	NNW	2	c	62	65	8	8	-	-	7-8	7-8	4000	0	§ 2
	Manston	1022.8	+4	WNW	3	bc	63	55	7	2	-	-	4-6	4-6	4000	0	*
2	Shoeburyness	1022.9	+4	WNW	3	bc	64	55	7	1	-	-	2-3	2-3	5700	0	*
	Felixstowe	1022.1	+2	NW	3	bc	66	55	8	1	5	-	Tr	4-6	4000	0	2
	Gorleston	1022.2	+10	NE'N	2	c	67	75	7	5	3	-	4-6	9+	2500	0	2
	Mildenhall	1022.4	+6	NW'W	4	bc	63	55	7	8	-	-	4-6	4-6	4000	0	*
	Cranwell	1022.2	+6	W	4	z_o	61	55	6	-	4	-	0	Tr	-	0	*
3	Birmingham	1024.3	+6	NW	3	bc	58	65	8	5	-	-	4-6	4-6	4000	1	*
	Upper Heyford	1023.3	+2	NW	3	c	63	65	9	8	6	-	4-6	7-8	4000	1	*
4	Ross-on-Wye	1024.2	+6	W'N	4	bc	62	55	8	7	-	-	2-3	2-3	4000	0	*
5	Hartland Point	1026.3	+2	NNW	2	c	58	85	9	2	6	-	2-3	9	2500	0	2
	Bristol	1024.9	0	NW'N	3	c	60	65	9	5	-	-	7-8	7-8	2500	0	*
	Portland Bill	1024.9	+4	NW	3	bc	63	85	8	5	-	-	4-6	4-6	4000	0	3
	Plymouth	1026.0	+6	N	4	c	62	55	9	7	-	-	7-8	7-8	4000	0	0
	The Lizard	1026.6	+2	W'N	2	bc	61	75	8	8	-	-	2-3	2-3	2500	0	1
	Scilly (St. Mary's)	1027.2	+2	N'W	4	bc	60	85	8	2	4	-	4-6	4-6	2500	0	2
	Guernsey	1025.5	-2	WNW	3	bc	61	85	8	-	1	-	0	2-3	-	0	2
6	Pembroke	1026.5	+6	NW	2	c	58	85	8	8	-	-	9+	9+	2500	1	2
7	Holyhead	1025.2	+2	W	2	bc	60	65	8	7	4	-	1	4-6	2500	1	2
	Chester (Sealand)	1024.6	+4	W'N	4	bc	58	65	8	8	-	-	2-3	2-3	2500	0	*
8	Manchester	1024.0	+6	W'N	3	c	57	65	8	7	-	-	7-8	7-8	4000	1	*
10	Spurn Head	1022.1	0	SE'S	3	b	57	75	7	-	-	1	0	1	-	0	2
	Catterick	1021.0	+2	W'N	2	bc	66	55	8	7	-	9	4-6	4-6	2500	1	*
	Tynemouth	1021.1	+8	SE	2	bc	56	85	7	2	-	1	2-3	2-3	2500	1	2
11	St. Abbs Head	1020.2	+4	SSE	3	bc	55	85	9	1	4	4	2-3	4-6	2500	0	2
	Leuchars	1020.6	+10	ESE	3	bc	60	75	9	1	4	9	1	4-6	4000	0	*
12	Renfrew (Abbotsl.)	1022.4	+10	NW'W	4	bc	62	65	9	1	-	6	Tr	2-3	4000	0	*
	Eskdalemuir	1020.8	+6	NW'W	5	b	62	65	8	7	-	1	1	1	4000	1	*
	Point of Ayre	1023.9	+2	NW'N	5	b	57	75	8	4	4	2	Tr	1	2500	0	4
13A	Tiree	1024.7	+2	NW'N	3	c	55	75	8	5	-	-	7-8	7-8	4000	0	3
13B	Stornoway	1023.5	0	W	4	c	57	75	8	5	7	-	7-8	9+	4000	1	2
15	Dalwhinnie	1022.9	+14	NW	2	bc	57	55	8	5	5	2	2-3	4-6	4000	0	*
	Aberdeen	1020.4	+12	NNW	5	b	55	55	8	1	-	9	Tr	1	2500	0	2
	Wick	1021.2	+10	NW	5	c	52	85	8	5	7	-	7-8	9+	1500	1	2
16	Lerwick	1017.8	+4	NNW	5	c	49	85	8	5	7	-	7-8	10	1500	1	*
17	Blacksod Point	1026.8	0	W	3	c	58	75	9	5	-	-	7-8	7-8	4000	0	2
18	Malin Head	1026.0	+4	NNW	3	c	55	75	8	-	7	-	0	7-8	-	0	2
	Aldergrove	1025.2	+6	NW'N	3	bc	57	65	8	7	-	-	2-3	2-3	4000	1	*
19	Birr Castle	1026.1	+2	NW	2	c	60	75	8	6	-	-	9+	9+	2500	1	*
20	Valentia Obsy.†	1028.2	-2	NW	3	c	61	75	9	8	3	-	7-8	7-8	2500	0	1
	Roches Point	1026.7	-2	N	3	c	60	85	9	5	-	-	9+	9+	2500	1	1

PAST 24 HOURS.

District	Stations	Weather. 7h.—13h. 10th (37)	Weather. 13h.—18h. 10th (38)	Weather. 18h. 10th to 1h. 11th (39)	Weather. 1h.—7h. 11th (40)
1	London (Kew)	bcc	bcycy	cyc	bczo
	Croydon	bcc	cbcy	bccycz$_o$	bbm$_o$bc
	S. Farnborough	bccpr$_o$c	cybc	bcycb	bwcbc
	Boscombe Down	b c	cbc	b	cwbjfcm$_o$
	Calshot (Soton.)	bbcyc	cbc	bcbbw	bm$_o$cm$_o$m
	Lympne	bm$_o$bcy	cy	cbczo	bcbzo
	Manston	bcc	cBcy	bbcmow	bcmow
2	Shoeburyness	bccbcy	bccby	bybcb	bw
	Felixstowe	bccy	cybcy	bcycb	bbm$_o$w
	Gorleston	cpr$_o$	cpr$_o$	cbcb	bbccz$_o$
	Mildenhall	ccm$_o$c	cybcy	bbm$_o$	bm$_o$wbf§
	Cranwell	cm$_o$cbcz	cbzy	bz$_o$	bz$_o$m$_o$
3	Birmingham	cpr$_o$	cbc	bcb	bbc
	Upper Heyford	c	c	bc	bcbc
4	Ross-on-Wye	cb	bcy	bbw	bwbcb
5	Hartland Point	cbc	bc	c	c
	Bristol	bbccy	cbcyc	cbc	bcwc
	Portland Bill	bcc	cbc	c	c
	Plymouth	b,ccy	bccbcy	bcycbc	c
	The Lizard	bc	bc	bcw	bccw
	Scilly (St. Mary's)	bbc	bc	bcw	bcc
	Guernsey	bc	b	c	cbc
6	Pembroke	c	c	c	c
7	Holyhead	pr$_o$c	cbc	bcc	cd$_o$c
	Chester (Sealand)	pr$_o$c	cbc	bcbw	bbccw
8	Manchester	cpr$_o$c	c	bm$_o$	bm$_o$bcm$_o$w
10	Spurn Head	cbc	bc	bcz$_o$	bc
	Catterick	bcy	bcy	bcybw	bwcw
	Tynemouth	cbc	bc	bco	oc
11	St. Abbs Head	b	bbc	bcc	c
	Leuchars	b	bbcybc	bccbc	bcwc
12	Renfrew (Abbotsl.)	bwbby	bvybc	bcbbc	bccw
	Eskdalemuir	bcby	bcyb	b	bbccw
	Point of Ayre	cbc	bcb	b	bcc
13A	Tiree	c	c	c	cbc
13B	Stornoway	c	c	c	cpr$_o$
15	Dalwhinnie	bc	bc		c
	Aberdeen	bc	bcby	bybc	bbcc
	Wick	c	c	c	c
16	Lerwick	c	c	c	c
17	Blacksod Point	c	c	c	pr$_o$c
18	Malin Head	cbcc	cbcc	c	c
	Aldergrove	c	cbc	bcc	c
19	Birr Castle	c	c	c	c
20	Valentia Obsy.†	cbcc	cbcc	bc	bwbcc
	Roches Point	bcc	c	c	c

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

!, 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.

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.*

§ Sea disturbance reported from Dungeness.

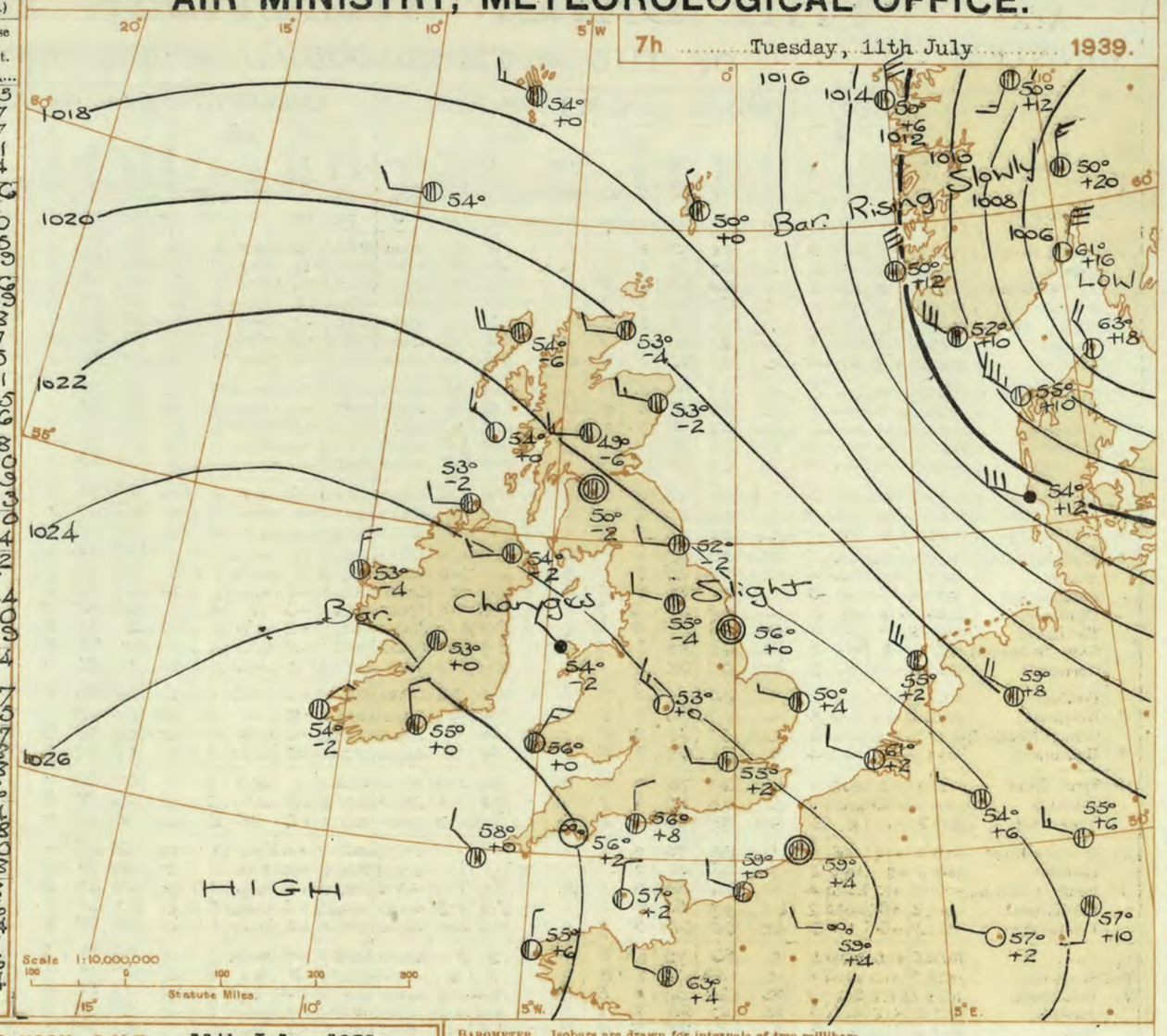
REPORTS from HEALTH RESORTS for July 10th 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 9th to 9h. 10th	Temperature. (°F) Max. 9h.—17h. 10th	Rainfall. (mm.) Night. 17h. 9th to 9h. 10th	Rainfall. (mm.) Day. 9h.—17h. 10th	Sunshine. (Hrs.) Sunrise to 17h. 10th	Sunshine. (Hrs.) Sunrise to Sunset. 9th
1	Tunbridge W.	bco	oc	48	66	-	-	5.8	11.3
	Bournemouth	b	b	51	70	-	-	11.2	7.7
	Ventnor ...	bbc	bc	52	68	-	-	9.3	11.7
	Southsea ...	bcc	cbc	53	68	-	-	8.4	10.1
	Bognor Regis	bbc	bc	51	69	-	-	6.5	11.4
	Littlehampton	bc	bc	50	69	-	-	6.9	11.6
	Worthing ...	bbc	bcc	52	70	-	-	7.5	*
	Brighton ...	bcc	bc	53	69	-	-	5.1	9.0
	Eastbourne† ...	bcbc	c	55	65	-	-	5.9	9.5
	Hastings† ...	bbcc	cbc	51	69	-	-	6.3	10.9
	Folkestone ...	cco	oco	53	68	-	-	5.8	9.6
	Dover ...	bcc	cbcc	54	68	-	-	6.3	10.9
	Deal	bbco	cbcc	*	70	-	-	8.7	11.8
	Ramsgate ...	bcco	obc	54	68	-	-	8.7	11.7
	Margate ...	bc	bc	56	67	-	-	9.3	11.5
2	Southend ...	bcb	b	52	69	-	-	10.2	12.1
	Clacton-on-Sea	bc	bcy	53	66	-	-	6.1	9.5
	Dovercourt ...	bcc	bc	53	66	-	-	6.7	11.6
	Lowestoft ...	ccorc	cbccu	52	62	Trace	Trace	1.7	6.8
	Skegness ...	ccbc	cb	53	59	-	-	5.2	12.0
	Mablethorpe...	obc	pbc	53	58	-	-	4.2	10.9
	Cleethorpes ...	ccbc	bcv	54	60	Trace	-	4.7	10.3
3	Leamington S.	oc	c	51	65	-	-	4.7	11.0
4	Cheltenham†	c	cbcy	53	68	-	-	4.1	11.4
5	Bath	cbc	bcc	52	67	-	-	6.7	11.2
	Weymouth ...	bbc	cb	54	69	-	-	9.7	9.7
	Jersey ...	bc	bcb	56	66	-	-	10.4	10.4
	Torquay ...	wbc	cbcbw	51	68	-	-	9.4	9.0
	Falmouth ...	b	b	55	67	-	-	11.9	9.9
	Penzance ...	bcb	bbcb	54	66	-	-	11.7	6.4
	St. Ives ...								
	Bude... ...	bc	bc	58	62	-	-	7.8	9.7
	Ilfracombe ...	bcbc	bcco	57	63	-	-	6.7	9.5
6	Aberystwyth	c	cbc	56	61	-	-	1.5	4.7
7	Llandudno ...	c	bcb	55	59	-	-	4.5	4.8
	Colwyn Bay...	cbc	bcb	54	60	-	-	2.2	0.8
	Rhyl	crc	cbcb	54	60	-	Trace	3.7	4.6
8	Wallasey ...	cp	bc	55	61	-	Trace	4.7	4.4
	Southport ...	cbccv	cvbc	54	62	Trace	-	4.1	4.8
	Blackpool ...	c	cbcb	55	60	Trace	-	5.1	4.0
	Morecambe ...	bcb	b	55	61	-	-	9.2	2.8
9	Ilkley... ...	obc	bc	53	65	0.2	-	4.4	1.8
	Harrogate ...	cbc	bcb	50	65	0.1	-	7.6	3.6
10	Berwick-on-T.	b	b	50	60	0.4	-	12.0	3.4
11	Dunbar ...	bc	bc	47	65	Trace	-	13.0	2.1
12	Troon... ...	bcbbc	bbc	51	61	-	-	12.1	4.6
	Douglas ...	b	b	51	58	-	-	8.6	2.4

† Max. Temp. for period 21h. yesterday to 17h. to-day; Min. Temp. 21h.–9h.

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h Tuesday, 11th July 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.

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 11th July, 1939.

Districts.	Forecasts
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Wind northwest to west, light; fair; average temperature.
7 North Wales ... 8 N.W. England	Wind backing slowly west to southwest, light, freshening tomorrow; fair today, more cloud tomorrow, perhaps coastal drizzle; average temperature.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	As 1 - 6.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland.	Wind variable light, becoming fresh from south to southwest; fair today, cloudy with rain spreading from the West tomorrow; average temperature.
14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Wind northwest, moderate to light, freshening from south tomorrow; variable cloud; a few showers; cloud increasing tomorrow; rain probable late in period; rather cool.
17 N. W. Ireland 18 N. E. Ireland	Wind variable light, becoming southerly moderate or fresh; fair at first; cloud increasing; occasional light rain or drizzle by tomorrow; average temperature.
19 S. E. Ireland 20 S. W. Ireland	Wind variable light; fair; average temperature.

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

GENERAL INFERENCE.

An anticyclone is centred just off our southwest coasts and will decrease in intensity as a depression, southeast of Greenland, moves east. Weather will be fair in most districts today but rain will spread to Scotland and North Ireland tomorrow with freshening south to southwest winds. Temperatures will be about average.

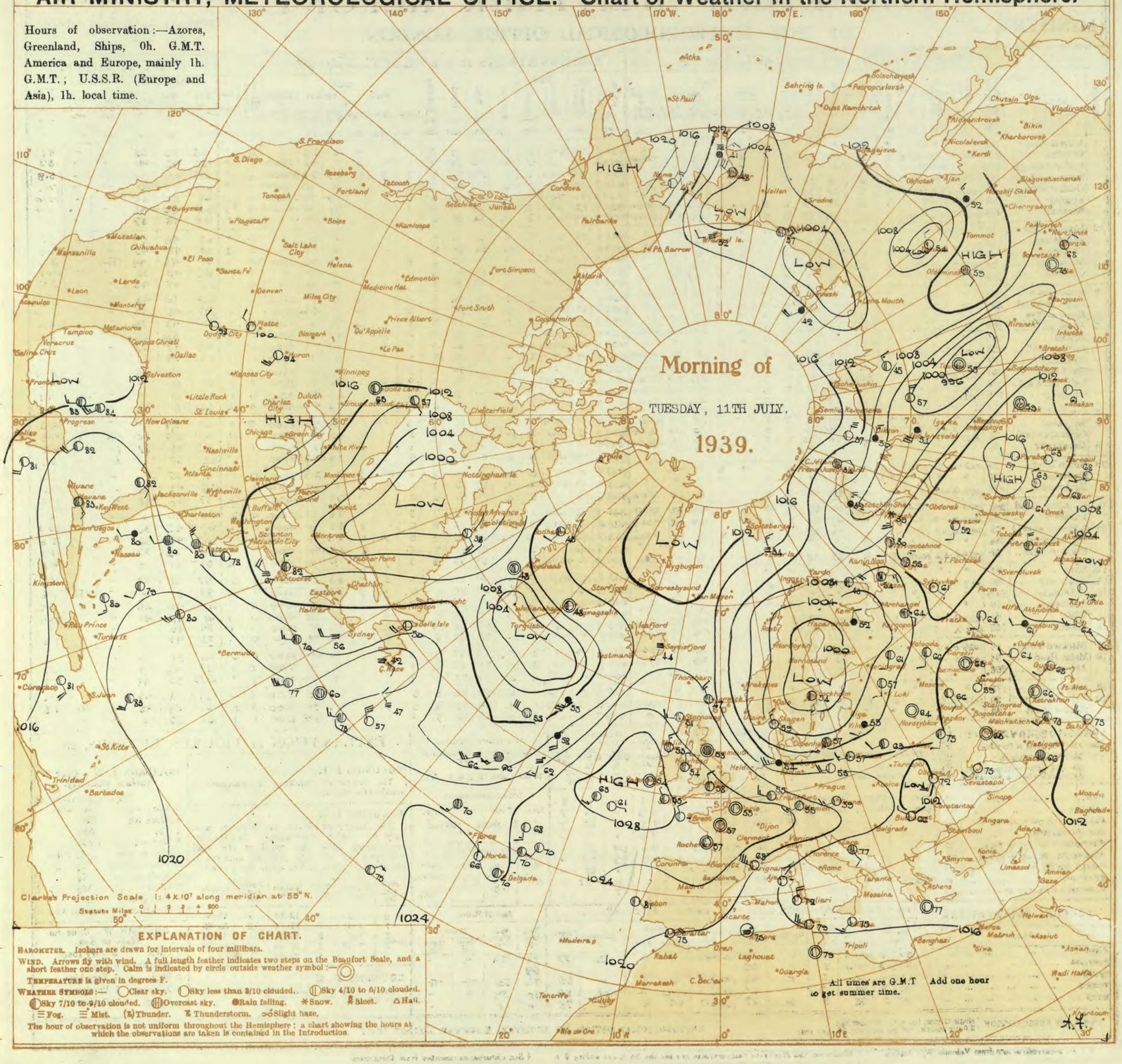
FURTHER OUTLOOK.

Fair in southern districts; unsettled elsewhere.

Forecasts issued at 0930 G.M.T.

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

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, 11th July, 1939
No. 28355

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0-12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0-9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0-10 (12)	Cloud Amount Total 0-10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1024.5	+6	NW'N	2	bc	58	65	6	5	4	-	2-3	4-6	4000
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1025.8	0	NW	2	b	48	85	7	-	-	-	0	0	-
	Calshot (Sthmtn.)	8	1025.0	+2	W'N	2	b	51	85	7	-	-	-	0	0	-
	Lympne ...	346	1024.6	+4	N	3	bc	54	75	6	5	-	-	4-6	4-6	4000
	Manston ...	154	1024.3	+2	NW	1	bc	54	85	6	5	-	-	4-6	4-6	1500
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1022.8	-2	WSW	3	b	52	85	7	-	-	-	0	0	-
	Mildenhall ...	19	1023.8	0	W'S	2	Zo	43	97	6	-	-	-	0	0	-
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1025.8	-6	NNW	2	c	57	92	9	2	6	-	2-3	7-8	2500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1025.2	-2	NNW	2	c	56	85	8	5	-	-	9	9	4000
	Plymouth ...	82	1026.7	0	-	0	c	53	92	8	5	-	-	7-8	7-8	4000
	The Lizard ...	240	1027.2	+6	NW	2	bc	53	97	8	8	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	1027.8	-2	NW	1	bc	55	97	8	4	-	-	4-6	4-6	2500
	Guernsey ...	175	1026.0	-2	N	2	c	55	97	7	2	1	-	4-6	7-8	800
6	Pembroke ...	142	1026.4	-2	N'W	2	c	56	97	8	8	-	-	7-8	7-8	2500
7	Holyhead ...	26	1025.4	0	N'W	1	c	54	85	8	5	-	-	10	10	2500
	Chester (Sealand)	16	1025.2	-2	WNW	1	b	46	92	8	5	4	-	Tr	1	4000
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1022.4	0	NW	5	bc	55	85	6	-	4	8	0	4-6	-
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1022.9	+4	-	0	o	53	92	6	5	-	-	10	10	1500
11	St. Abbs Head	280	1022.5	0	SSW	2	c	52	85	8	4	6	-	4-6	10	2500
	Leuchars ...	36	1022.6	-2	W	1	c	47	97	8	5	7	-	4-6	7-8	4000
12	Renfrew (Abbots I.)	19	1023.6	+2	W'N	3	b	46	85	8	4	5	8	1	1	4000
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1024.8	+2	NW'N	5	b	52	75	8	4	7	-	Tr	1	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1023.0	-2	W	3	c	51	92	8	5	7	7	2-3	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1020.9	-4	W	3	c	48	97	8	5	7	-	4-6	7-8	1500
16	Lerwick ...	156	1018.2	-4	NW	3	c	47	92	7	5	7	-	4-6	7-8	800
17	Blacksod Point	18	1026.8	-6	-	0	c	53	85	8	5	-	-	10	10	2500
18	Malin Head ...	84	1025.5	-8	NNW	3	c	53	65	8	4	-	-	7-8	7-8	5700
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1028.6	0	-	0	b	54	97	8	5	-	-	1	1	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

OBSERVATIONS at 7 hr. G.M.T. July 11th — 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 10½ Hrs. (36)
London (Kew)	1025.1	+4	WNW	2	bc	54	75	6	-	-	4	0	2-3	-	0	*	68	50	35	-	-	8.1
Croydon	1024.6	+2	W	2	bc	58	75	7	1	4	3	1	4-6	2500	1	*	66	48	41	-	-	5.3
S. Farnborough	1025.0	+4	WNW	2	c	54	75	8	7	3	2	2-3	7-8	4000	0	*	68	42	35	Tr	-	5.8
Boscombe Down	1025.7	+4	-	0	Zo	49	92	7	5	-	-	10	10	4000	1	*	65	44	41	-	-	7..
Calshot (Sthmtn.)	1024.9	+2	NW'W	2	Zo	54	85	6	5	-	-	9+	9+	4000	0	§1	68	50	46	-	-	10.0
Lympne	1024.2	+2	N'W	2	b	54	75	6	1	-	-	Tr	Tr	4000	0	1	65	50	46	-	-	6.4
Manston	1024.2	+4	W'N	3	Zo	56	75	6	-	-	-	0	0	-	0	*	68	48	37	-	-	11.1
Shoeburyness	1023.9	+4	W'N	3	b	55	75	7	-	-	-	0	0	-	0	*	69	46	34	-	-	9.7
Felixstowe	1023.6	0	NW	3	Zo	52	85	6	-	-	-	0	0	-	0	2	68	48	45	-	-	6.8
Gorleston	1022.9	+4	W'N	1	c	50	85	6	5	-	-	10	10	2500	0	1	61	46	44	Tr	-	2.0
Mildenhall	1023.7	+2	WSW	2	Zo	49	92	5	-	-	1	0	Tr	-	1	*	66	40	32	-	Tr	6.4
Cranwell	1023.1	+2	NW	1	Zo	52	85	6	-	-	-	0	0	-	0	*	65	45	43	-	-	8.5
Birmingham	1024.6	0	NW	3	b	53	85	6	1	-	1	Tr	1	2500	1	*	63	50	42	Tr	-	5.5
Upper Heyford	1024.7	+2	NW'W	3	bc	53	85	8	5	-	2	1	4-6	1500	1	*	65	45	38	-	-	*
Ross-on-Wye	1024.9	0	SW	1	b	53	85	8	8	-	3	Tr	1	4000	0	*	65	43	36	-	-	6.9
Hartland Point	1024.9	0	WNW	2	c	58	92	9	2	6	-	4-6	9+	1500	0	2	61	56	55	-	-	6.1
Bristol	1025.4	-2	WNW	1	c	54	85	7	5	4	1	7-8	7-8	4000	0	*	65	47	37	-	-	8.7
Portland Bill	1026.1	+8	N	2	c	56	85	8	5	-	-	9	9	4000	0	3	63	54	*	-	-	*
Plymouth	1026.0	+2	-	0	Zo	56	92	6	5	-	-	10	10	4000	0	0	67	53	45	-	-	10.0
The Lizard	1026.3	0	WSW	2	c	56	97	8	8	2	-	7-8	9+	2500	0	1	65	51	*	-	-	14.6
Scilly (St. Mary's)	1026.6	0	NW'W	2	c	58	92	8	2	7	-	2-3	9+	2500	0	1	63	53	*	-	-	15.1
Guernsey	1025.6	+2	N	2	bc	57	97	8	4	-	-	4-6	4-6	4000	0	2	62	51	47	-	-	14.8
Pembroke	1025.6	0	NE'N	3	c	56	85	8	5	-	-	9+	9+	2500	0	1	60	54	*	-	-	9.2
Holyhead	1024.8	-2	NW	2	pr	54	85	8	5	-	-	10	10	2500	1	1	61	54	50	Tr	Tr	4.9
Chester (Sealand)	1024.5	-2	W	3	c	54	75	8	8	-	-	9	9	4000	1	*	59	45	37	Tr	-	6.8
Manchester	1024.2	-4	W'N	2	Zo	51	92	5	5	3	-	7-8	7-8	4000	1	*	60	37	33	Tr	-	3.3
Spurn Head	1022.8	0	-	0	bc	56	85	6	5	8	8	1	2-3	2500	0	1	61	55	*	-	-	5.6
Catterick	1022.4	-4	WNW	2	c	55	85	7	1	-	7	1	7-8	2500	1	*	66	43	38	-	-	10.1
Tynemouth	1022.6	-2	W	2	c	52	85	6	5	-	-	9+	9+	1500	1	2	57	52	48	-	-	11.2
St. Abbs Head	1021.4	-12	WNW	2	c	51	85	7	5	1	-	4-6	9+	2500	0	2	59	50	*	-	-	*
Leuchars	1021.6	-2	WNW	2	c	52	75	8	5	-	9	4-6	9+	4000	0	*	67	45	36	-	-	15.2
Renfrew (Abbots I.)	1022.7	-2	-	0	c	50	85	8	5	7	6	2-3	9+	4000	0	*	66	43	36	-	-	15.6
Eskdalemuir	1022.2	-2	-	0	c	45	92	8	5	-	8	2-3	9+	1500	1	*	68	36	32	-	-	11.9
Point of Ayre	1024.0	0	NW'W	4	c	54	75	8	2	7	-	Tr	9+	1500	0	2	61	51	*	-	-	8.1
Tiree	1023.1	0	NW'W	3	bc	54	85	8	5	3	-	2-3	4-6	4000	0	2	57	51	49	-	-	0.6
Stornoway	1021.8	-6	W	4	c/pr	54	85	8	5	7	7	2-3	10	2500	1	2	57	51	*	-	Tr	1.6
Dalwhinnie	1022.8	-6	W	3	c	49	75	7	5	6	-	7-8	10	4000	0	*	62	40	26	-	-	13.6
Aberdeen	1020.9	-2	W'N	3	c	53	65	8	5	4	7	Tr	7-8	4000	0	1	61	47	41	-	-	13.4
Wick	1019.8	-4	W	2	c	53	92	8	5	2	-	7-8	10	1500	1	1	54	46	*	-	-	*
Lerwick	1017.5	0	NNW	1	c	50	92	8	5	7	-	4-6	9+	800	0	*	53	46	*	-	-	1.3
Blacksod Point	1025.3	-4	N	3	c	53	92	8	5	-	-	10	10	2500	0	2	60	51	*	-	1	*
Malin Head	1023.8	-2	W	2	c	53	85	8	9	-	-	9	9	5700	0	1	57	48	*	-	-	2.7
Aldergrove	1024.0	-2	W'S	2	c	54	75	8	6	-	-	9+	9+	4000	1	*	59	52	48	-	-	4.8
Birr Castle	1025.7	0	SW	1	c	53	92	8	5	1	-	7-8	10	2500	1	*	61	51	49	-	-	1.2
Valentia Obsy. †	1026.9	-2	NE'E	1	c	54	92	8	5	7	-	4-6	9+	4000	0	0	62	51	48	-	Tr	7.8
Roches Point	1026.3	0	N'W	3	c	55	92	9	5	-	-	7-8	7-8	2500	1	1	61	52	*	-	-	.

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	bcc	bcycy	cycbczo	68	50	35	-	-	8.1	*	*	8
Croydon	217	bcc	cbccy	cyczobmbc	66	48	41	-	-	5.3	*	*	7
Greenwich (Royal Observatory)	149				69	50	36	-	-	8.3	49	63	7
City (Bunhill Row)	—	*	*	*	*	*	*	*	*	7.3	*	*	*
Westminster (St. James' Park)	27	*	*	*	68	50	42	—		7.3	64	71	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	69	50	48	-	-	7.8	53	70	*
Camden Square	110			*	68	50	43	-	-	*	*	67	*
Kensington	80	bc	bc	*	68	49	40	-	-	*	At 18h 67	53	*
Hampstead Observatory	450									7.8	*		*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

SOUTH KENSINGTON.

Max.	Time.	Min.	Time.
<0.3 whole period			

KEW OBSERVATORY.

Max.	Time.	Min.	Time.
0.1	5-6h 11th	0.1	10-20h 10th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. July 10th Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. July 11th 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	1023.8	WNW	2	c	70	1024.7	W	2	Zo	59	72	52	-	-
Brussels	1022.2	NW	5	c	63						68		-	
Berlin	1013.4	WNW	5	c	63	1015.8	W	5	o	55	72	55	Tr	Tr
Zürich	1021.9	NW	2	c	63	1022.3	WNW	2	bc	59	70	54	3	-
Rome	1015.5	SE	3	b	77	1013.1	SE	4	c	75	*	*	-	-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday, 12th July, 1939.
No. 28356.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force 0–12 (4)	Weather. (5)	°F Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud. Form. Low (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1023.2	−14	NNW	3	c	64	45	8	4	–	6	7-8	9	4000
	Croydon	1023.3	−8	W'S	2	c	64	55	8	4	–	1	7-8	7-8	4000
	S. Farnborough	1023.4	−10	WSW	2	c	63	55	8	7	–	–	9+	9+	4000
	Boscombe Down	1023.8	−10	W'N	2	c	64	55	7	7	–	3	7-8	9	4000
	Calshot (Soton.)	1024.0	−6	N'W	2	bc	64	55	8	5	3	4	4-6	4-6	4000
	Lympne	1022.9	−8	SW	3	bc	67	65	7	2	–	1	4-6	4-6	2500
	Manston	1022.6	−6	NW	3	z_o	65	55	6	1	–	–	9+	9+	4000
2	Shoeburyness	1022.5	−6	WSW	3	z_o	68	45	6	1	–	1	2-3	2-3	4000
	Felixstowe	1022.3	−6	S'W	4	bc	67	55	7	8	–	–	4-6	4-6	2500
	Gorleston	1022.0	−4	SE'E	3	bc	60	75	6	5	1	–	2-3	4-6	2500
	Mildenhall	1022.0	−10	W	2	z_o	66	55	6	1	–	–	4-6	4-6	4000
	Cranwell	1021.9	−8	W	3	z_o	62	65	6	8	–	–	7-8	9	2500
3	Birmingham	1023.4	−4	WNW	2	c	57	65	8	7	–	–	9+	9+	4000
	Upper Heyford	1023.4	−6	WNW	3	c	61	55	8	7	3	8	7-8	7-8	4000
4	Ross-on-Wye	1023.5	−6	W'N	3	c	61	55	9	7	–	–	10	10	4000
5	Hartland Point	1024.7	−4	NNW	2	c	60	75	9	2	3	–	2-3	7-8	2500
	Bristol	1023.7	−12	WNW	3	c	64	55	8	7	7	8	4-6	9	4000
	Portland Bill	1024.5	−4	WSW	3	c	60	85	8	2	–	–	7-8	7-8	4000
	Plymouth	1024.6	−6	SW	3	c	61	85	8	8	–	–	9	9	2500
	The Lizard	1025.3	−4	W	3	c	62	85	8	8	6	–	7-8	9+	2500
	Scilly (St. Mary's)	1026.3	0	N'W	3	c	62	85	8	8	7	3	2-3	7-8	2500
	Guernsey	1025.3	−4	WNW	3	bc	60	65	9	2	3	–	4-6	4-6	1500
6	Pembroke	1025.7	0	NNW	3	c	56	75	8	5	–	–	9	9	2500
7	Holyhead	1023.9	−2	WNW	3	c	56	65	9	8	–	–	2-3	9	2500
	Chester (Sealand)	1024.0	−2	NW	3	c	57	65	8	7	–	–	10	10	4000
8	Manchester	1023.1	−4	W'S	4	c	57	65	8	8	–	–	10	10	4000
10	Spurn Head	1022.1	−6	SE'S	3	c	60	75	7	5	2	8	2-3	9+	2500
	Catterick	1021.4	−2	WNW	3	c	57	65	8	5	–	–	10	10	2500
	Tynemouth	1020.7	−8	W	3	c	56	75	6	6	–	–	9+	9+	1500
11	St. Abbs Head	1020.3	−4	NW	2	c	56	75	8	8	6	–	4-6	7-8	2500
	Leuchars	1020.5	−6	W	1	c	62	55	9	8	7	–	4-6	9	2500
12	Renfrew (Abbotsl.)	1021.6	−6	NW'W	4	c	60	55	9	7	4	–	9	9	4000
	Eskdalemuir	1021.0	−2	N'W	3	c	56	55	8	5	–	–	7-8	7-8	2500
	Point of Ayre	1023.1	−2	NNW	4	c	62	65	8	1	8	–	7-8	9+	2500
13A	Tiree	1022.7	0	WNW	3	c	59	65	8	5	7	–	2-3	7-8	2500
13B	Stornoway	1021.4	−4	NW	4	c	56	75	8	5	5	4	4-6	7-8	4000
15	Dalwhinnie	1021.5	−10	NW	2	c	54	65	7	4	7	–	7-8	10	4000
	Aberdeen	1019.3	−8	NW	3	c	61	55	8	7	–	–	9+	9+	1500
	Wick	1018.9	−8	WNW	3	c/pr	55	92	8	8	7	1	7-8	9+	1500
16	Lerwick	1016.6	−4	E	1	i_o	51	92	8	8	7	–	4-6	10	800
17	Blacksod Point	1024.5	−4	SW	2	c	61	85	8	5	–	–	10	10	2500
18	Malin Head	1023.9	+2	N	2	c	57	65	8	7	–	6	2-3	7-8	4000
	Aldergrove	1023.6	−2	WNW	2	c	56	75	8	8	–	–	10	10	2500
19	Birr Castle	1025.2	0	W	1	c	57	85	8	5	1	–	7-8	10	2500
20	Valentia Obsy.†	1026.0	−8	S	3	c	64	75	8	5	7	–	7-8	9+	2500
	Roches Point	1025.9	−2	WSW	3	c	60	85	9	8	–	–	7-8	7-8	2500

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

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)	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)	1021.2	−10	NW'N	2	c	64	46	8	3	–	–	9+	9+	4000	0	*
	Croydon	1021.2	−16	NW	2	c	65	55	8	4	–	–	9+	9+	5700	0	*
	S. Farnborough	1021.2	−12	WNW	2	c	63	55	8	7	–	–	9+	9+	5700	0	*
	Boscombe Down	1022.2	−8	NW'W	2	c	60	65	7	5	7	–	7-8	10	4000	0	*
	Calshot (Soton.)	1021.8	−16	WNW	3	c	63	65	7	5	–	–	9	9	4000	0	2
	Lympne	1021.3	−10	SW'W	3	bc	63	65	7	1	4	1	2-3	4-6	4000	0	§2
	Manston	1020.7	−8	W'N	2	c	64	55	6	2	–	1	9	9	4000	0	*
2	Shoeburyness	1020.9	−8	WNW	2	c	65	56	8	5	–	–	9+	9+	4000	0	*
	Felixstowe	1020.2	−10	W'N	3	bc	66	55	6	4	6	9	1	4-6	4000	0	2
	Gorleston	1019.8	−12	SE'S	3	c	60	85	6	5	–	–	9+	9+	2500	0	3
	Mildenhall	1020.5	−2	NW'W	3	c	61	65	7	4	–	–	9+	9+	4000	0	*
	Cranwell	1021.0	−6	WNW	2	z_o	59	65	6	5	–	–	9+	9+	4000	0	*
3	Birmingham	1022.2	−6	NW	2	c	54	75	6	5	–	–	9+	9+	4000	1	*
	Upper Heyford	1022.2	−6	WNW	3	c	59	65	9	5	7	–	9	10	4000	1	*
4	Ross-on-Wye	1022.4	−4	NW	3	c	57	65	9	7	–	–	9+	9+	4000	0	*
5	Hartland Point	1023.7	−6	NNW	2	c	59	65	9	2	3	2	2-3	7-8	2500	0	*
	Bristol	1022.8	−6	WNW	4	c	60	55	8	5	7	–	4-6	9	2500	0	
	Portland Bill	1023.1	−12	WNW	2	c	61	85	8	5	–	–	10	10	4000	0	2
	Plymouth	1023.2	−6	NW	3	c	62	55	9	9	3	–	7-8	9+	4000	0	0
	The Lizard	1023.9	−10	WNW	3	bc	60	75	8	8	6	–	4-6	4-6	2500	0	1
	Scilly (St. Mary's)	1024.9	−10	NW'N	4	c	61	85	9	8	3	–	4-6	9	2500	0	2
	Guernsey	1023.7	−16	W	3	bc	60	75	9	2	1	–	Tr	2-3	1500	0	2
6	Pembroke	1024.5	−4	NW	2	c	57	85	9	8	–	–	9	9	2500	0	1
7	Holyhead	1022.8	−8	SW	3	c	57	75	8	5	3	1	9	9+	2500	1	2
	Chester (Sealand)	1022.7	−6	WNW	3	c	56	75	8	7	3	–	7-8	9+	4000	0	*
8	Manchester	1022.1	−4	W'N	3	c	56	65	8	7	–	–	10	10	4000	1	*
10	Spurn Head	1020.0	−6	WNW	5	c	60	65	6	5	2	8	4-6	9+	2500	0	3
	Catterick	1020.0	−8	WNW	3	c	57	65	8	5	–	–	9+	9+	4000	1	*
	Tynemouth	1019.8	−6	N	2	c	54	92	6	8	–	–	9	9	1500	1	2
11	St. Abbs Head	1019.5	−4	–	0	c	57	65	8	4	3	9	4-6	7-8	2500	0	1
	Leuchars	1018.9	−8	WNW	3	c	62	65	9	8	6	–	4-6	7-8	4000	0	*
12	Renfrew (Abbotsl.)	1021.0	−2	NW'W	4	c	58	75	9	4	7	6	7-8	9+	4000	0	*
	Eskdalemuir	1019.8	−6	W'N	3	c	57	65	7	5	5	6	4-6	7-8	2500	1	*
	Point of Ayre	1022.0	−8	WNW	4	c	57	75	8	8	3	6	Tr	9	2500	0	2
13A	Tiree	1021.7	−6	WNW	2	c	57	85	8	1	4	7	1	9+	2500	0	2
13B	Stornoway	1020.8	−6	WSW	4	c	57	75	8	5	7	–	7-8	9+	4000	1	2
15	Dalwhinnie	1021.2	−6	W	3	c	51	85	7	4	7	–	7-8	10	2500	0	*
	Aberdeen	1018.6	−6	NNW	3	c/p	57	75	8	9	–	–	9+	9+	1500	0	1
	Wick	1018.4	−2	NW	3	c/q	54	85	8	8	7	8	4-6	9+	800	1	2
16	Lerwick	1016.4	0	NNE	1	c	51	92	8	8	7	–	4-6	9	800	1	*
17	Blacksod Point	1022.8	−10	W	2	c	60	85	8	5	–	–	10	10	2500	0	2
18	Malin Head	1022.9	−10	NNW	1	c	57	75	8	1	8	4	2-3	7-8	5700	0	1
	Aldergrove	1022.7	−6	WNW	2	c	57	75	9	8	–	–	9	9	4000	1	*
19	Birr Castle	1023.6	−8	WSW	2	c	61	75	8	5	7	–	7-8	9	2500	0	*
20	Valentia Obsy.†	1024.7	−8	W'N	3	bc	62	75	9	8	4	4	2-3	4-6	2500	0	1
	Roches Point	1024.0	−12	W	3	c	60	85	9	8	1	–	7-8	9+	2500	1	1

PAST 24 HOURS.

District	Stations	Weather. 7h.—13h. (37)	13h.—18h. (38)	18h. 11th to 1h. 12th (39)	1h.—7h. 13th (40)
1	London (Kew)	bcz$_o$cy	cy	cy	cz$_o$
	Croydon	bccy	cy⊕	q/mcyc	bcm$_o$
	S. Farnborough	cbccy	cybcc	cyc	c
	Boscombe Down	cm$_o$c	c	c	cbc
	Calshot (Soton.)	cbcy	bcycbcc	cbcc	cbc
	Lympne	bcz$_o$y	bc	bcm$_o$	cm$_o$⊕
	Manston	bcz$_o$y	cbcbcy	cz$_o$ybc	cbcz$_o$
2	Shoeburyness	bbcz$_o$y	bcz$_o$mcy	cyc	c⊕
	Felixstowe	bm$_o$bcy	bcy	bcyc⊕	cm$_o$c
	Gorleston	cbcz$_o$	bcz$_o$	cz$_o$	cbcz$_o$
	Mildenhall	bm$_o$bm$_o$	cz$_o$y	c⊕	ccm$_o$
	Cranwell	bm$_o$bcz$_o$	cycz$_o$	bcz$_o$m$_o$	bcm$_o$z$_o$⊕
3	Birmingham	bc	c	c	c
	Upper Heyford	bcc	cyc	cz$_o$c	c
4	Ross-on-Wye	bbccv	cvycv	c	c
5	Hartland Point	c	c	c	c
	Bristol	cbccy	cyc	cyc	c
	Portland Bill	c	c	bc	bcc
	Plymouth	c	ccy	cy,b	cbc
	The Lizard	c	bc	bcw	bc
	Scilly (St. Mary's)	c	cbcc	cbc	bwcw
	Guernsey	bcbc	bc	bcbw	bwbcc
6	Pembroke	c	cv	c	cbc
7	Holyhead	cpr$_o$c	c	c,bc	bcwc
	Chester (Sealand)	cwy	c	cbcbw	bfgcw⊕
8	Manchester	cm$_o$c	c	c	cm$_o$
10	Spurn Head	bcc	c	cbc	bcc
	Catterick	cwc	c	cbc	bcc
	Tynemouth	c	c	c	c
11	St. Abbs Head	c	bcc	c	cir$_o$
	Leuchars	ccy	cybcc	pr$_o$cbcbw	bccr$_o$r$_o$
12	Renfrew (Abbotsl.)	cwcbcc	cyc	c	cir$_o$r$_o$r$_o$
	Eskdalemuir	cwcy	cbccy	c	ccir$_o$
	Point of Ayre	c	cbcc	cbc	c
13A	Tiree	bcc	c	cor$_o$r	orr
13B	Stornoway	cpr	c	cpr$_o$	crr
15	Dalwhinnie	c	c		cir
	Aberdeen	cbcc	cpr$_o$	cpr$_o$bc	bccir$_o$
	Wick	cpr$_o$c	cpr$_o$cq	c	idr$_o$r
16	Lerwick	clr$_o$	clr$_o$c	c	c
17	Blacksod Point	c	c	bc	c
18	Malin Head	cbcc	cbcc	cbcc	c
	Aldergrove	pr$_o$c	c	c	c
19	Birr Castle	c	c	c	c
20	Valentia Obsy.†	cyc	cbc	bcbw	bwbcc
	Roches Point	c	c	cw	cq,bcw

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.

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.*

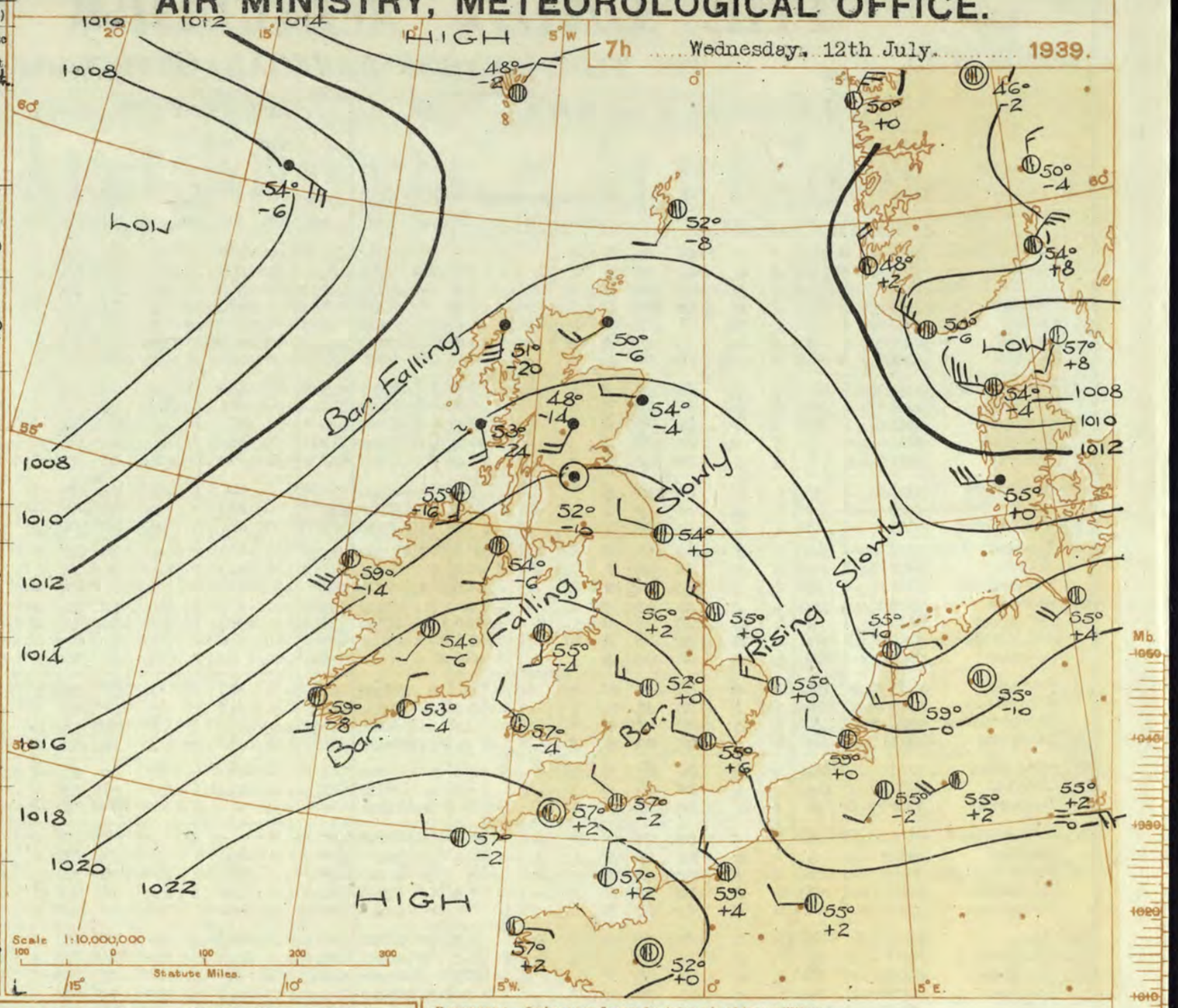
§ Sea disturbance reported from Dungeness

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for July 11th 1939.

Districts	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 10th to 9h. 11th	Temperature. (°F) Max. 9h.—17h. 11th	Rainfall. (mm.) Night. 17h. 10th to 9h. 11th	Rainfall. (mm.) Day. 9h.—17h. 11th	Sunshine. (Hrs.) Sunrise to 17h. 11th	Sunshine. (Hrs.) Sunrise to Sunset 10th
1	Tunbridge W.	bc	bc	43	67	–	–	10.7	6.1
	Bournemouth	bc	bcc	49	67	–	–	5.5	13.1
	Ventnor ...	oc	cbbc	50	64	–	–	4.5	10.8
	Southsea ...	cbc	bbc	51	67	–	–	4.6	10.4
	Bognor Regis	bcbc	bcb	49	66	–	–	3.4	7.0
	Littlehampton	bcc	cbc	49	67	–	–	3.6	7.2
	Worthing ...	c	cbcb	53	68	–	–	3.4	8.0
	Brighton ...	bc	bcb	52	65	–	–	3.3	5.5
	Eastbourne† ...	cbc	bcybc	51	66	–	–	3.6	6.0
	Hastings† ...	bbc	bc	51	66	–	–	9.1	7.3
	Folkestone ...	bc	bc	52	68	–	–	11.5	6.4
	Dover ...	bc	bc	52	67	–	–	11.9	6.3
	Deal	bbc	cbc	*	71	–	–	10.0	10.0
	Ramsgate ...	bcc	bcc	54	65	–	–	9.2	10.7
	Margate ...	bc	bc	55	67	–	–	10.8	11.0
2	Southend ...	b	bbcc	50	75	–	–	10.5	11.7
	Clacton-on-Sea	bcby	bbcy	46	68	–	–	10.8	7.3
	Dovercourt ...	bz	bcz	47	69	–	–	9.6	7.7
	Lowestoft ...	cbcb	bbcc	44	63	Tr.	–	6.1	1.7
	Skegness ...	bc	bco	45	66	–	–	6.0	7.3
	Mablethorpe...	bcc	cz.	46	66	–	–	2.4	6.1
	Cleethorpes ...	bcc	cbcc	49	63	–	–	4.1	7.2
3	Leamington S.	bcc	c	45	62	–	–	4.4	6.4
4	Cheltenham†	cbc	c	45	64	–	–	4.4	6.0
5	Bath	bcc	bcc	46	66	–	–	3.4	6.8
	Weymouth ...	bcb	bcc	48	65	–	–	5.7	12.5
	Jersey ...	bcc	cbc	55	64	–	–	6.5	13.0
	Torquay ...	cvybc	cov	55	66	–	–	1.4	11.8
	Falmouth ...	c	b	53	66	–	–	3.5	14.6
	Penzance ...	c	bcb	45	67	–	–	5.2	12.8
	St. Ives ...								
	Bude... ...	cbc	bc	57	64	–	–	4.6	7.8
	Ilfracombe ...	bcco	cbc	57	63	–	–	4.6	6.7
6	Aberystwyth	cbc	bcc	50	61	–	–	2.6	2.1
7	Llandudno ...	c	d.c	53	53	–	Tr.	0.2	6.8
	Colwyn Bay...	coc	co	52	60	–	–	0.4	4.3
	Rhyl	cpr.c	cbcc	54	60	–	Tr.	0.8	6.6
8	Wallasey ...	c	cbcc	52	60	–	–	2.4	7.4
	Southport ...	cvc	bcvc	51	61	Tr.	–	0.8	6.4
	Blackpool ...	c	c	53	53	–	–	0.2	7.3
	Morecambe ...	c	c	51	58	–	–	0.0	11.8
9	Ilkley... ...	bc	bc	46	60	–	–	3.5	7.2
	Harrogate ...	cbcc	c	47	60	–	–	5.7	10.4
10	Berwick-on-T.	co	bcb	50	58	–	–	5.4	14.1
11	Dunbar ...	cm.	bc	48	62	–	–	5.2	15.6
12	Troon... ...	ocbcc	ocbcc	50	60	–	–	0.3	14.6
	Douglas ...	c	bc	48	57	–	–	0.7	11.7

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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 July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Wind westerly, light to moderate, freshening slowly in the West; fair but considerable cloud at times; temperature average or rather below.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Wind southwest, light to moderate, freshening slowly; cloudy; light rain or drizzle probable later chiefly near the coast; becoming rather close.
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 Orkney and Shetland	Wind south to southwest, fresh to strong at times on the west and north coasts; cloudy or dull; occasional rain; rather cool.
17 N. W. Ireland 18 N. E. Ireland	Wind south to southwest; cloudy or dull; local coast fog in the west; occasional rain or drizzle by tomorrow; rather close.
19 S. E. Ireland	Wind southwest, moderate to fresh later; mainly cloudy; rather close.
20 S. W. Ireland	As 17 – 18.

GENERAL INFERENCE.

An anticyclone centred off the mouth of the English Channel is slowly giving way and drifting southeast whilst a depression on the Northeast Atlantic is spreading east and secondaries are expected to develop and move northeast. Weather will continue fair over most of England and Wales but there will be occasional rain in Scotland, and the unsettled conditions will slowly spread to North Ireland and tend to extend southwards.

FURTHER OUTLOOK.

Unsettled in the North and West; probably becoming less settled in the South and East.

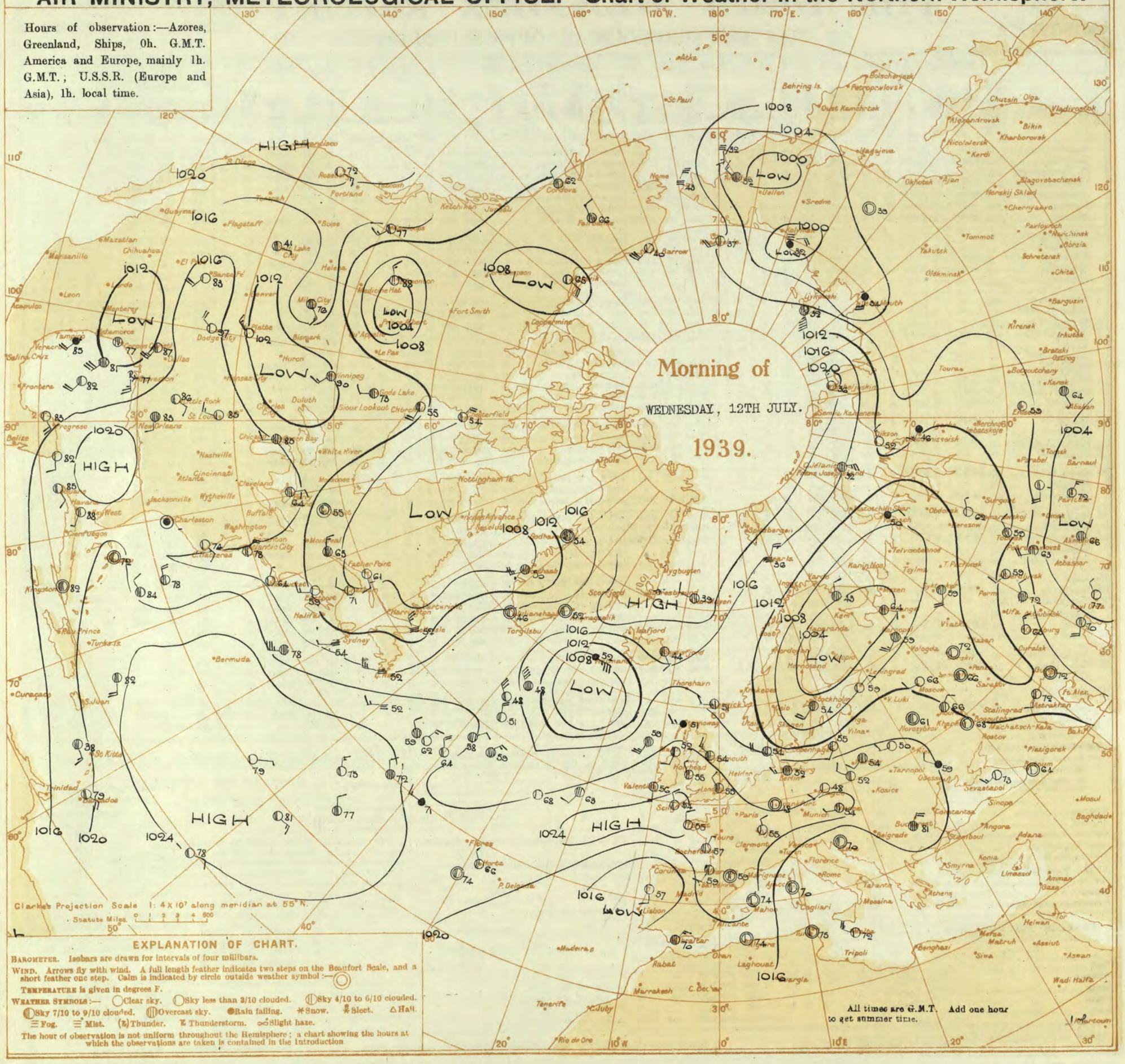
Forecasts issued at 0930 G.M.T

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, 12th July, 1939
No. 28356.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1020·9	-4	NW'W	2	c	55	65	8	5	3	-	4-6	7-8	5700
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1021·9	+4	WNW	2	c	51	85	7	5	-	-	9+	9+	5700
	Calshot (Sthmtn.)	8	1021·7	-2	WNW	2	c	53	75	7	-	-	6	0	7-8	-
	Lympne ...	346	1020·0	-10	NNW	3	c	54	85	6	5	-	-	9	9	4000
	Manston ...	154	1019·8	-2	NW'N	2	z	57	65	6	5	-	-	10	10	5700
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1018·8	-6	W'S	2	c	54	75	6	5	-	-	9+	9+	2500
	Mildenhall ...	19	1019·6	-6	W'N	2	c	52	85	7	5	-	-	10	10	5700
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1022·8	-4	NNW	2	c	56	85	9	5	2	-	4-6	9+	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1022·5	+2	N	2	bc	56	92	8	5	-	-	4·6	4-6	4000
	Plymouth ...	82	1023·3	-6	NW	1	b	52	85	8	-	-	-	0	0	-
	The Lizard ...	240	1024·0	-4	NW	1	bc	50	97	8	8	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	1024·3	-6	N'W	2	bc	54	92	8	5	4	-	2-3	4-6	2500
	Guernsey ...	175	1022·7	-8	NNW	2	b	54	92	9	-	-	-	0	0	-
6	Pembroke ...	142	1022·5	-2	NNW	2	c	56	92	8	5	-	-	9+	9+	2500
7	Holyhead ...	26	1021·5	-4	NW	1	bc	55	92	8	5	-	-	4·6	4-6	4000
	Chester (Sealand)	16	1021·5	-6	WNW	1	b	47	92	8	5	-	-	1	1	4000
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1018·5	-4	NW'W	4	bc	55	85	7	-	2	-	0	2-3	-
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1018·9	-6	NW	3	c	54	85	7	8	-	-	7-8	7-8	1500
11	St. Abbs Head	280	1019·0	-4	WNW	2	c	54	85	8	8	2	-	4-6	9+	1500
	Leuchars ...	36	1019·0	-6	WSW	2	c	52	85	8	5	3	-	4-6	7-8	5700
12	Renfrew (Abbots I.)	19	1019·9	-10	W'S	2	c	50	92	7	5	7	6	4-6	7-8	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1021·0	-2	NW	3	bc	53	92	8	-	4	5	0	4-6	-
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1019·4	-8	W	3	pr	51	92	7	5	2	-	9	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1017·0	-6	SW	3	c	50	92	8	5	7	8	4-6	10	1500
16	Lerwick ...	156	1015·7	-4	W	2	c	51	92	8	8	7	-	7-8	10	1500
17	Blacksod Point	18	1020·2	-14	SW	2	bc	57	85	8	4	-	-	4-6	4-6	2500
18	Malin Head ...	84	1020·3	-16	S'W	2	c/r	52	85	7	4	2	-	4-6	9	2500
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1023·3	-6	S	3	bc	56	97	8	8	-	-	4-6	4-6	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1020·6	+4	NW	2	z	56	75	6	5	-	6	2-3	9+	4000	0	*
Croydon	1020·7	+6	WNW	2	c	55	75	7	5	-	-	9+	9+	5700	0	*
S. Farnborough	1020·8	+2	W'N	2	c	55	75	8	1	-	6	Tr	7-8	2500	0	*
Boscombe Down	1021·4	0	NW	2	c	55	85	7	1	4	8	Tr	7-8	2500	1	*
Calshot (Sthmtn.)	1021·4	+2	WNW	2	c	55	75	7	-	6	2	0	7-8	-	0	2
Lympne	1020·1	+2	NW'N	2	z	53	75	5	-	-	7	0	10	-	0	§1
Manston	1019·8	+4	NW'W	3	c	55	75	6	5	-	7	2-3	9+	4000	0	*
Shoeburyness	1019·8	0	NW	3	c	55	75	7	-	7	8	0	9+	-	0	*
Felixstowe	1019·2	-2	NW	3	c	55	75	7	-	-	7	0	10	-	0	2
Gorleston	1019·2	0	WNW	3	bc	55	75	6	5	1	-	2-3	4-6	2500	0	1
Mildenhall	1019·3	+2	WSW	2	z	53	85	6	-	-	6	0	7-8	-	1	*
Cranwell	1019·7	-2	WNW	3	z	55	75	6	-	-	7	0	9+	-	0	*
Birmingham	1021·0	0	WNW	3	c	52	85	6	-	-	7	0	10	-	1	*
Upper Heyford	1021·1	0	NW	2	c	52	85	8	-	-	8	0	9+	-	0	*
Ross-on-Wye	1021·1	0	W'S	2	bc	55	85	8	1	-	2	Tr	4-6	2500	0	*
Hartland Point	1021·7	0	NW	2	c	58	92	9	6	6	-	4-6	9+	1500	0	2
Bristol	1021·6	+2	WNW	1	c	56	75	8	-	-	6	0	7-8	-	0	*
Portland Bill	1021·7	-2	NW	1	c	57	85	8	5	-	-	7-8	7-8	4000	0	2
Plymouth	1022·5	+2	-	0	bc	57	85	8	5	7	2	2-3	4-6	4000	0	0
The Lizard	1023·5	-10	W'S	2	bc	56	92	8	8	-	-	2-3	2-3	2500	0	1
Scilly (St. Mary's)	1023·0	-2	W	2	c	57	97	8	8	3	3	4-6	7-8	1500	0	1
Guernsey	1022·2	+2	N	2	bc	57	75	8	-	1	-	0	4-6	-	0	2
Pembroke	1021·7	-4	NW'W	2	bc	57	92	8	7	6	2	2-3	4-6	2500	0	1
Holyhead	1020·2	-4	S	2	c	55	92	9	5	7	-	4-6	9+	4000	1	0
Chester (Sealand)	1021·0	+2	-	0	c	53	85	8	5	7	7	1	9+	4000	1	*
Manchester	1020·6	0	WSW	1	z	53	92	5	5	3	9	7-8	7-8	2500	1	*
Spurn Head	1018·8	0	NW	3	c	55	85	6	-	-	8	0	7-8	-	0	3
Catterick	1018·9	+2	WNW	1	c	56	75	8	-	3	9	0	7-8	-	1	*
Tynemouth	1018·6	0	WNW	2	c	59	85	6	8	-	-	9+	9+	1500	1	2
St. Abbs Head	1017·7	-6	WNW	2	iro	54	85	8	8	2	-	7-8	10	1500	1	2
Leuchars	1017·5	-4	SW	2	roro	52	92	8	5	2	-	7-8	10	2500	1	*
Renfrew (Abbots I.)	1018·3	-10	-	0	roro	52	92	7	5	2	-	4-6	10	4000	1	*
Eskdalemuir	1018·7	-4	W	1	iro	49	92	8	-	1	-	0	10	7200	1	*
Point of Ayre	1019·3	-6	W'S	3	c	55	75	8	-	3	-	0	9+	-	0	1
Tiree	1014·5	-24	SSE	4	rr	53	97	6	-	2	-	10	10	800	1	4
Stornoway	1015·2	-20	S	6	rr	51	97	7	5	2	-	4-6	10	2500	1	3
Dalwhinnie	1017·5	-14	SSW	4	ir	48	92	6	6	6	-	7-8	10	2500	1	*
Aberdeen	1016·6	-4	W	1	iro	54	85	6	5	-	-	10	10	2500	1	1
Wick	1015·6	-6	WSW	3	roro	50	92	7	5	1	-	7-8	10	1500	1	1
Lerwick	1013·7	-8	SW	2	c	52	92	8	8	7	-	4-6	7-8	800	1	*
Blacksod Point	1016·9	-14	SW	5	c	59	85	8	8	-	-	10	10	800	0	3
Malin Head	1016·2	-16	S	3	c	55	85	8	8	8	-	4-6	9	1500	0	1
Aldergrove	1018·6	-6	SSW	2	c	54	85	8	5	7	-	Tr	9+	1500	1	*
Birr Castle	1020·0	-6	SW	1	c	54	97	3	5	-	-	9	9	2500	0	*
Valentia Obsy. †	1020·6	-8	S	3	c	59	92	8	5	-	-	7-8	7-8	800	0	1
Roches Point	1021·3	-4	N	2	bc	53	97	8	-	-	5	0	4-6	-	1	1

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 11th Hrs. (36)
London (Kew)	66	54	47	–	-	9·2
Croydon	69	52	49	–	-	10·6
S. Farnborough	67	51	49	–	–	6·0
Boscombe Down	64	47	44	–	-	3·1
Calshot (Sthmtn.)	66	51	48	–	-	3·4
Lympne	67	50	46	–	-	11·6
Manston	68	53	49	–	-	8·4
Shoeburyness	70	49	42	–	-	10·6
Felixstowe	70	52	50	–	-	10·7
Gorleston	61	52	50	–	-	4·5
Mildenhall	69	48	44	–	-	8·1
Cranwell	64	48	46	–	-	6·8
Birmingham	60	49	47	–	-	4·0
Upper Heyford	63	49	45	–	–	*
Ross-on-Wye	63	48	45	–	-	4·2
Hartland Point	62	56	53	–	-	4·5
Bristol	65	50	45	–	-	5·1
Portland Bill	62	55	*	–	-	*
Plymouth	64	51	45	–	-	1·5
The Lizard	65	49	*	–	-	6·2
Scilly (St. Mary's)	64	51	*	–	-	6·3
Guernsey	63	52	49	–	-	12·9
Pembroke	60	54	*	–	-	0·3
Holyhead	59	50	42	Tr	Tr	1·7
Chester (Sealand)	59	47	41	–	-	1·5
Manchester	59	49	39	–	-	0·9
Spurn Head	62	51	*	–	-	3·6
Catterick	60	50	46	–	-	3·3
Tynemouth	59	52	46	–	-	0·3
St. Abbs Head	60	52	*	–	Tr	*
Leuchars	65	51	45	–	0·6	3·6
Renfrew (Abbots I.)	62	48	45	–	1	1·6
Eskdalemuir	59	45	42	–	Tr	1·1
Point of Ayre	64	49	*	–	-	3·9
Tiree	60	50	49	–	6	4·9
Stornoway	61	50	*	0·3	8	2·4
Dalwhinnie	58	46	44	–	3	1·5
Aberdeen	62	47	38	Tr	0·2	3·4
Wick	58	47	*	0·5	0·4	*
Lerwick	56	49	*	1	–	0·2
Blacksod Point	62	51	*	–	-	
Malin Head	58	49	*	–	0·2	3·9
Aldergrove	59	46	41*	0·1	-	0·2
Birr Castle	61	46	38	–	-	0·0
Valentia Obsy. †	65	51	45	–	Tr	6·5
Roches Point	62	52	*	–	Tr	*

LONDON OBSERVATION

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.	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	bczocy	cy	cyczo	66	54	47	-	-	9·2	*	*	8
Croydon ...	217	bccy	cy⊕	gmcyclcm	69	52	49	-	-	10·6	*	*	7
Greenwich (Royal Observatory) ...	149	bcy	cy	c	69	53	48	-	-	8·1	42	57	7
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	6·4	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	69	54	51	–		9·0	62	68	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	68	53	51	-	-	9·7	50	65	*
Camden Square ...	110	bc	bc	*	68	54	51	-	-	*	*	62	*
Kensington ...	80	bc	bc	*	69	54	50	-	-	8·2	At 18h 63	75	*
Hampstead Observatory ...	450	bc	bc	bc	61	50	47	-	-	9·9	*	66	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

South Kensington.

Max.	Time.	Min.	Time.
<0·3	whole period		

Kew Observatory.

Max.	Time.	Min.	Time.
0·2	4h 12th	<0·1	12-20h 11th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. July 11th Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. July 12th 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 ...	1021·7	W	2	bc	72	1020·9	W	2	c	55	73	50	-	-
Brussels ...	1020·4	NNE	2	c	66	1018·9	SW	2	z	55	73	52	-	-
Berlin ...	1016·6	W	3	c	63	1017·7	W	2	bc	59	63	54	Tr	-
Zurich ...	1019·2	NW	3	c	68						73		-	
Rome ...						1013·9	NE	2	b	72		*		-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday, 13th July, 1939.
No. 28357.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	°F. Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1020.0	−6	WN	1	c	66	45	8	7	–	2	7-8	9	4000
	Croydon	1020.0	−8	W	1	c	66	55	8	4	–	2	4-6	9+	5700
	S. Farnborough	1019.8	−8	SW	2	c	65	45	8	7	–	2	7-8	9	4000
	Boscombe Down	1020.4	−8	WNW	2	c	64	55	8	1	–	8	7-8	7-8	4000
	Calshot (Soton.)	1020.6	−4	WNW	2	c	65	45	8	4	–	8	4-6	7-8	4000
	Lympne ...	1019.8	−4	W'N	2	c	63	55	7	1	–	2	4-6	7-8	4000
	Manston ...	1019.7	−2	NW'N	3	c	63	45	6	2	–	8	4-6	9+	4000
2	Shoeburyness ...	1019.5	−6	NW	2	c	66	55	8	2	–	6	7-8	9+	4000
	Felixstowe ...	1019.1	−6	NW	3	c	68	45	6	2	–	6	4-6	9+	5700
	Gorleston ...	1018.5	0	NNE	4	c	64	55	7	1	1	–	2-3	9	2500
	Mildenhall ...	1016.9	−6	NW	2	c	64	55	7	4	–	8	7-8	9+	4000
	Cranwell ...	1018.4	−10	WNW	2	zo	65	55	6	8	1	–	7-8	10	4000
3	Birmingham ...	1019.4	−6	SW	2	c	65	55	8	7	–	9	4-6	7-8	4000
	Upper Heyford	1019.8	−6	WNW	2	c	65	55	8	4	–	6	4-6	7-8	4000
4	Ross-on-Wye ...	1019.5	−8	W'N	3	c	66	55	8	7	–	1	9	9+	4000
5	Hartland Point	1021.1	−6	W	3	c	61	75	8	7	–	–	4-6	7-8	2500
	Bristol	1020.5	−10	W	3	c	66	55	8	8	9	8	4-6	7-8	4000
	Portland Bill ...	1021.2	−10	W	3	c	59	85	8	5	–	–	4-6	7-8	4000
	Plymouth ...	1021.7	−6	SW'W	4	c	60	85	8	8	–	–	9+	9+	4000
	The Lizard ...	1022.4	−6	SW	2	c	62	85	8	8	6	–	7-8	9+	2500
	Scilly (St. Mary's)	1022.3	−8	WSW	5	bc	64	85	8	8	6	4	2-3	2-3	2500
	Guernsey ...	1022.3	−2	NW	2	bc	61	65	9	1	7	1	tr	4-6	1500
6	Pembroke ...	1020.5	−2	WSW	3	bc	62	92	8	2	4	–	2-3	4-6	2500
7	Holyhead ...	1017.8	−14	SSW	4	bc	62	75	9	1	4	–	2-3	2-3	2500
	Chester (Sealand)	1018.5	−14	SW	2	c	68	55	8	7	4	–	7-8	7-8	4000
8	Manchester ...	1018.3	−14	SW	3	c	65	55	7	7	3	–	7-8	9	4000
10	Spurn Head ...	1018.6	−4	ESE	3	c	59	75	6	5	1	–	4-6	10	4000
	Catterick ...	1017.3	−6	W'S	3	iro	61	65	8	7	3	–	2-3	9+	2500
	Tynemouth ...	1016.7	−10	W	2	c/pr	60	85	6	8	–	–	9+	9+	2500
11	St. Abbs Head...	1015.3	−10	SW	4	rr	55	92	7	3	2	–	9	10	1500
	Leuchars ...	1013.9	−22	SSW	2	rr	56	97	6	5	2	–	7-8	10	800
12	Renfrew (AbbotsI.)	1014.3	−26	SW	3	roro	57	85	6	5	2	–	4-6	10	800
	Eskdalemuir ...	1015.5	−14	SSW	4	roro	54	85	7	6	–	–	10	10	800
	Point of Ayre ...	1016.6	−12	W'S	4	c	69	55	8	8	6	–	4-6	7-8	2500
13A	Tiree	1009.7	−10	SW'W	6	c/r	58	92	6	6	–	–	9+	9+	800
13B	Stornoway ...	1009.4	−24	SSE	4	rr	52	97	6	5	2	–	9	10	1500
15	Dalwhinnie ...	1012.7	−24	SSW	5	ir	50	92	6	6	6	–	7-8	10	1500
	Aberdeen ...	1012.7	−20	SSW	3	roro	55	85	6	6	–	7	4-6	10	800
	Wick	1011.7	−20	SSE	4	roro	51	97	6	5	2	–	7-8	10	1500
16	Lerwick... ...	1011.7	−12	S	2	c	53	85	8	8	7	–	4-6	9	800
17	Blacksod Point...	1013.7	−12	SW	5	c	64	85	7	7	–	–	7-8	7-8	800
18	Malin Head ...	1013.0	−6	SW'W	5	c	64	75	8	8	5	–	4-6	7-8	5700
	Aldergrove ...	1014.8	−18	SSW	4	c	62	75	8	5	7	–	9+	9+	4000
19	Birr Castle ...	1017.3	−16	W'S	3	c	66	65	8	5	1	–	7-8	9	2500
20	Valentia Obsy.†	1018.7	−10	SSW	5	c	62	85	8	5	–	–	10	10	1500
	Roches Point ...	1019.5	−8	SW'W	3	bc	63	85	9	5	–	3	2-3	4-6	2500

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

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)	1018.0	−10	WSW	1	c	68	45	8	7	–	1	7-8	7-8	4000	0	*
Croydon	1018.2	−10	W'S	2	c	67	45	8	4	3	2	4-6	7-8	7200	0	*
S. Farnborough	1018.0	−12	SW'W	2	c	67	45	8	7	3	1	4-6	9	5700	0	*
Boscombe Down	1018.3	−14	W'N	2	bc	66	55	7	7	7	–	4-6	4-6	5700	0	*
Calshot (Soton.)	1018.9	−12	SW'S	4	c	63	75	7	4	–	–	9	9	5700	0	2
Lympne	1018.9	−4	SW	2	bc	61	75	7	4	9	–	2-3	4-6	4000	0	§3
Manston	1018.3	−10	S	3	c	63	65	7	–	3	5	0	7-8	–	0	*
Shoeburyness	1018.0	−12	S'E	2	c	65	65	8	4	7	–	2-3	7-8	4000	0	*
Felixstowe	1017.8	−10	S'W	4	c	65	65	7	4	4	–	7-8	7-8	4000	0	2
Gorleston	1017.8	−4	S'E	3	c	60	65	7	5	3	–	2-3	7-8	2500	0	1
Mildenhall	1017.0	−14	WSW	3	bc	67	55	7	7	7	–	2-3	2-3	4000	0	*
Cranwell	1016.5	−12	WSW	2	bc	66	55	7	5	4	9	4-6	4-6	4000	0	*
Birmingham	1017.0	−14	SW	3	c	64	65	8	7	–	–	7-8	7-8	4000	1	*
Upper Heyford	1018.0	−10	SW	2	c	65	65	8	4	4	–	7-8	7-8	4000	0	*
Ross-on-Wye	1017.6	−10	W	3	c	63	65	8	5	4	1	7-8	7-8	4000	0	*
Hartland Point	1016.8	−8	W	3	c	61	85	8	7	8	–	4-6	7-8	1500	0	2
Bristol	1018.7	−10	W	3	bc	65	65	8	1	3	8	1	2-3	4000	0	*
Portland Bill	1020.3	−10	WSW	3	c	59	92	8	1	4	–	4-6	7-8	4000	0	2
Plymouth	1019.6	−10	WSW	3	c	60	75	8	8	–	–	9+	9+	1500	0	2
The Lizard	1020.5	−18	SW	2	bc	61	85	8	2	3	–	2-3	4-6	2500	0	1
Scilly (St. Mary's)	1020.3	−14	WSW	3	b	61	85	8	–	–	–	0	0	–	0	2
Guernsey	1020.4	−12	W'N	2	bc	60	75	9	–	–	8	0	2-3	–	0	2
Pembroke	1018.1	−8	W'S	4	bc	60	85	8	8	–	–	4-6	4-6	2500	0	2
Holyhead	1015.2	−22	SSW	5	bc	59	85	8	2	4	–	2-3	2-3	2500	0	3
Chester (Sealand)	1016.4	−10	WSW	4	bc	66	55	8	1	7	–	2-3	4-6	4000	0	*
Manchester	1015.8	−18	W	3	bc	66	65	8	7	3	–	4-6	4-6	4000	1	*
Spurn Head	1015.8	−20	SSE	3	c	61	85	6	–	9	–	0	9	–	0	2
Catterick	1014.3	−22	SW'W	2	c	61	65	8	5	7	–	4-6	9	1500	1	*
Tynemouth	1013.2	−20	SW	2	c/pr	60	85	6	5	–	–	9+	9+	1500	1	2 *
St. Abbs Head	1009.3	−20	SW	6	roro	57	92	7	3	2	–	7-8	10	1500	1	3
Leuchars	1009.0	−34	SW	3	c/r	58	97	7	5	2	–	9+	10	800	1	*
Renfrew (AbbotsI.)	1010.8	−14	SW'S	3	o/r	58	92	6	5	–	–	10	10	800	1	*
Eskdalemuir	1012.2	−20	SSW	5	c	54	92	7	5	–	–	10	10	800	1	*
Point of Ayre	1013.5	−22	WSW	4	c	65	65	8	5	–	–	9+	9+	4000	0	2
Tiree	1007.8	−10	SW'W	5	rr	57	97	6	–	2	–	10	10	450	1	5
Stornoway	1007.0	−8	W	1	rr	58	97	4	5	–	–	10	10	800	2	2
Dalwhinnie	1008.8	−18	S	2	ir	55	97	6	6	7	–	7-8	10	1500	1	*
Aberdeen	1008.2	−34	S'W	3	rr	54	97	6	6	–	–	10	10	800	1	1
Wick	1008.3	−20	SE	3	rr	51	97	6	5	2	–	7-8	10	800	1	1
Lerwick	1010.2	−8	S'E	2	c/pr	51	97	8	8	7	–	4-6	9	800	1	*
Blacksod Point	1003.8	−24	S	6	rr	60	97	6	6	–	–	10	10	<150	1	4
Malin Head	1009.9	−18	SSW	4	c	63	85	8	8	–	–	9	9	4000	0	2
Aldergrove	1011.7	−24	SW'S	4	c	65	65	8	5	3	–	4-6	7-8	2500	1	*
Birr Castle	1013.8	−26	WSW	3	c	67	65	8	5	7	–	7-8	9+	2500	0	*
Valentia Obsy.†	1014.6	−26	SSW	5	zo	62	92	6	5	–	–	10	10	450	1	3
Roches Point	1016.5	−22	WSW	3	c	61	92	8	5	–	–	9+	9+	1500	1	2

PAST 24 HOURS. — WEATHER.

Stations	7h.—13h. 12th (37)	13h.—18h. 12th (38)	18h. 12th to 1h. 13th (39)	1h.—7h. 13th (40)
London (Kew)	czocy	cy	cybc	bcwbczo
Croydon	c⊕	cy	bcybmow	bmowbfg
S. Farnborough	cbccy	cbc⊕cy	cbcb	bwbcb,c
Boscombe Down	bcc	cbc	bccbc	bcjf
Calshot (Soton.)	ccy	cyc	cbbw	bmocbc
Lympne	c⊕zocy	cyc	bc	bwfcmo
Manston	czoy	czoc	bcbmobw	bw,cmo
Shoeburyness	ccy	cybc	bccb	bw
Felixstowe	ccmocy	cyc	cb	bmow
Gorleston	bccy	cy	cbcb	bbcb
Mildenhall	cmocmocy	cybcy	bcyb	bbw
Cranwell	czoy	czobcy	bcybmo	bmow
Birmingham	cbc	bc	cbc	bcb
Upper Heyford	cbc	bccbcc	cb	bmmofcf
Ross-on-Wye	bcc	c	bcb	bbc
Hartland Point	c	c	cbc	bcc
Bristol	cbccy	bcybc	bcbbc	bcbw
Portland Bill	c	c	bcc	cbc
Plymouth	bcc	cbcc	cbcb	bwmbcb
The Lizard	bcc	cbc	bcbw	bbccw
Scilly (St. Mary's)	cbc	bcb	bcbbc	croido
Guernsey	bc	bc	b	bwbcc
Pembroke	bc	bc	bccq	iromopq
Holyhead	c,bc	bc	bcdo,o	dro,dfo
Chester (Sealand)	cw⊕ybc	cbcy	bcbbcw	bccwc
Manchester	bcmoc	cybc	b	bbcc
Spurn Head	c	c	cbc	bczo
Catterick	ccyc	cciroc	cbc	bcq
Tynemouth	cpo	cp	c	cbc
St. Abbs Head	crr	ocrr	iroc	cq
Leuchars	irororr	rrroromoc	c,iroc	croro
Renfrew (AbbotsI.)	cmororo	cmoroodoiro	cmoiroido	cmoiroro
Eskdalemuir	cprororo	ormmoc	c	crrorofm
Point of Ayre	c	c	c	cproc
Tiree	oRro	orrod	orrR	odF
Stornoway	cRR	cRRmo	crrfe	cRRmo
Dalwhinnie	cir	cir	[illegible]	cir
Aberdeen	croro	crorr	orrro	orrcro
Wick	roro	rorr	rrcro	roro
Lerwick	c	cpro	cprrr	crr
Blacksod Point	c	iroq	Drq	idr
Malin Head	cproc	cproc	cidoc	cproc
Aldergrove	c	cbc	bcciroc	cciroc
Birr Castle	c	c	c	coir
Valentia Obsy.†	cbcc	cidomo	iriro	ciroc
Roches Point	bc	bcc	iddfdf	rrdd

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.

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.*

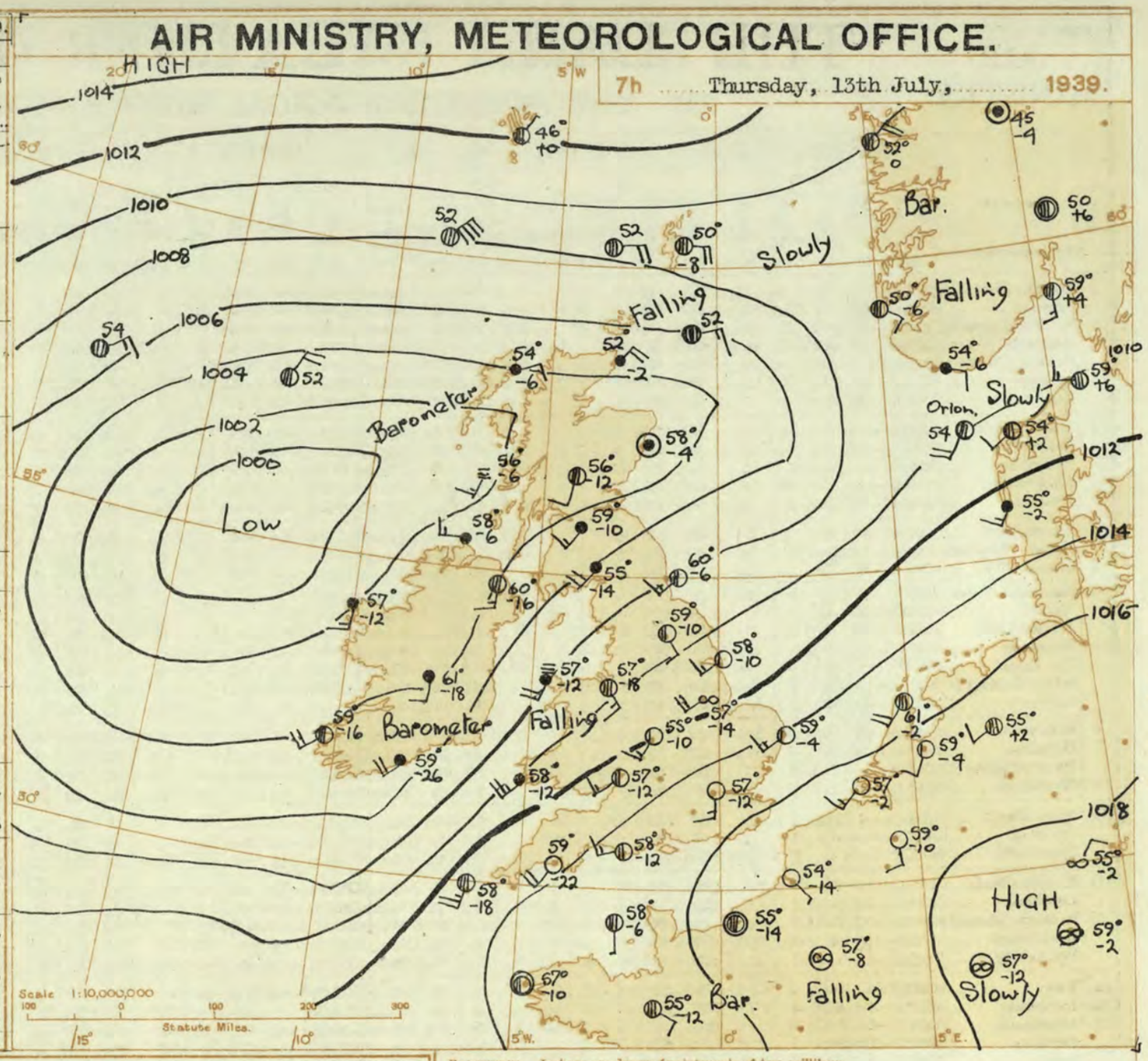
§ S. a disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for July 12th 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 11th to 9h. 12th	Temperature. (°F) Max. 9h.—17h. 12th	Rainfall. (mm.) Night 17h. 11th to 9h. 12th	Rainfall. (mm.) Day. 9h.—17h. 12th	Sunshine. (Hrs.) Sunrise to 17h. 12th	Sunshine. (Hrs.) Sunrise to Sunset. 11th
1	Tunbridge W.	cbc	cbc	50	65	–	–	6.0	11.7
	Bournemouth	bbc	bc	50	70	–	–	7.6	5.5
	Ventnor ...	bbc	bc	53	64	–	–	8.7	5.1
	Southsea ...	bcb	bbc	53	65	–	–	7.2	4.6
	Bognor Regis	bbc	bc	52	65	–	–	6.5	4.4
	Littlehampton	bcc	cbc	53	68	–	–	7.2	4.7
	Worthing ...	bc	bc	54	67	–	–	5.9	5.0
	Brighton ...	bc	bc	53	67	–	–	3.4	4.7
	Eastbourne† ...	bcyc	cbcc	54	65	–	–	4.7	11.6
	Hastings† ...	bcc	bcc	53	68	–	–	4.2	10.8
	Folkestone ...	bcc	cbc	53	67	–	–	5.1	12.3
	Dover ...	bc	bc	53	67	–	–	5.3	12.9
	Deal	ocbc	bcc	*	68	–	–	6.9	10.8
	Ramsgate ...	bcm	bcm	55	67	–	–	5.2	9.3
	Margate ...	cbc	bc	55	67	–	–	6.5	11.0
2	Southend ...	bbc	bcc	51	74	–	–	7.2	10.5
	Clacton-on-Sea	bc	bc	50	68	–	–	3.8	10.9
	Dovercourt ...	bcz	bcc	50	68	–	–	5.7	9.9
	Lowestoft ...	cbc	cbcb	51	66	–	–	4.9	6.1
	Skegness ...	bbc	cocbc	48	63	–	–	4.5	6.0
	Mablethorpe...	bcc	obcz	46	63	–	–	3.9	2.4
	Cleethorpes ...	bc	cbc	48	65	–	–	5.1	4.1
3	Leamington S.	bc	bcc	49	69	–	–	6.8	4.4
4	Cheltenham†	bcqy	bccbc	49	68	–	–	7.9	4.4
5	Bath	bc	bcb	50	69	–	–	10.0	3.4
	Weymouth ...	cbc	b	51	66	–	–	5.3	5.7
	Jersey ...	bc	bc	55	65	–	–	10.4	9.0
	Torquay ...	wbbcc	ocbcc	52	66	–	–	2.0	1.4
	Falmouth ...	c	c	52	64	–	–	4.4	6.1
	Penzance ...	bccbc	bcb	51	68	–	–	6.2	6.3
	St. Ives ...								
	Bude... ...	bc	bc	50	63	–	–	9.8	7.0
	Ilfracombe ...	cbc	bcb	57	63	–	–	11.0	6.0
6	Aberystwyth	cbc	bcc	50	65	–	–	8.4	2.6
7	Llandudno ...	bcb	b	50	67	–	–	7.5	0.2
	Colwyn Bay...	cbcb	bcb	49	68	–	–	6.3	0.4
	Rhyl	cbc	bcb	46	69	–	–	7.0	0.8
8	Wallasey ...	cbc	bcbbc	54	68	–	–	7.4	2.4
	Southport ...	cbc	cbcb	53	66	–	–	5.4	0.8
	Blackpool ...	c	cbcb	55	66	–	–	5.3	0.4
	Morecambe ...	cpbc	bc	48	65	–	Tr	3.6	0.1
9	Ilkley... ...	obc	bc	47	68	–	–	1.8	3.5
	Harrogate ...	c	cbc	49	64	–	–	2.2	5.7
10	Berwick-on-T.	orbo	robo	51	57	0.2	4	0.0	6.3
11	Dunbar ...	crmo	crmo	51	57	0.3	4	0.0	5.3
12	Troon... ...	rococ	rroco	50	53	1	1	0.0	1.7
	Douglas ...	bc	bc	49	63	–	–	4.2	2.3

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 13th July, 1939.

Districts.	Forecasts
1 S.E. England 2 E. England ... 3 E. Midlands ..	Wind southerly, moderate to light; fair to fine most of to-day; then thunderstorms or thundery rain; rather warm and close.
4 W. Midlands ... 5 S.W. England	Wind south, moderate to fresh, veering southwest to-morrow; becoming cloudy with occasional rain and local thunderstorms; close.
6 South Wales ... 7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Wind southerly, moderate, fresh locally on coast; cloudy or dull; occasional rain or drizzle; local thunderstorms likely later; local coast and hill fog; close.
11 S.E. Scotland 12 S.W. Scotland & Isle of Man.	Wind variable to southerly, light; dull; rain at times; close, then cooler.
13 A. W. Scotld. / B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Wind becoming easterly, moderate or fresh; cloudy or dull; coast fog in the East; occasional rain at first; rather cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind southerly, becoming variable to northwesterly later, mainly light; cloudy; occasional rain, perhaps thunder locally; bright periods, thunder showers to-morrow; becoming rather cool.

GENERAL INFERENCE.

A depression off Northwest Ireland will move east-south-east over the British Isles and a shallow depression over the Bay of Biscay is likely to move northeastwards. Weather will be fair in southeast districts temporarily, but there will be occasional rain or drizzle in many other areas, and thunderstorms or thundery rains will develop widely during the period.

FURTHER OUTLOOK.

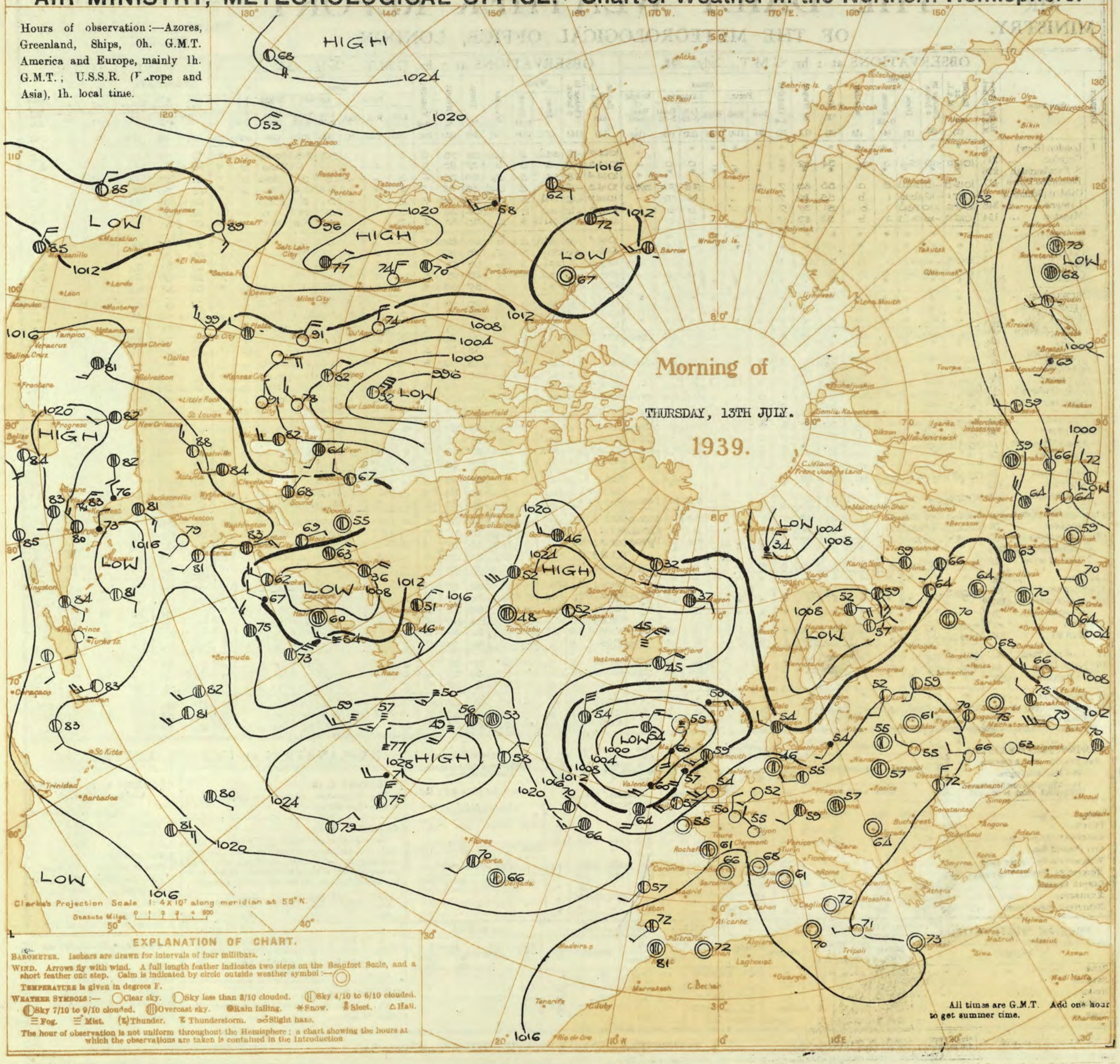
Unsettled with thunderstorms or thundery showers, but some bright periods.

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, 13th July, 1939.
No. 28357.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours. (2)	Wind. Direc. (3)	Wind. Force. 0–12 (4)	Weather. (5)	Temp. °F. (6)	Humid. % (7)	Visibility. 0–9 (8)	Cloud. Form. Low (9)	Form. Med. (10)	Form. High (11)	Amount. Low 0–10 (12)	Amount. Total 0–10 (13)	Height of Base. (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1017.0	-1.0	SW	3	b	54	92	6	–	–	–	0	0	–
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1016.5	-1.0	SW	2	c	55	85	7	5	-	-	7.8	7.8	5700
	Calshot (Sthmtn.)	8	1017.1	-1.0	NSW	1	b	55	92	7	–	–	1	0	Tr	–
	Lympne ...	346	1017.6	-1.0	SSW	1	b	51	97	7	-	-	-	0	0	–
	Manston ...	154	1016.9	-1.0	SW'S	3	b	52	85	7	–	-	-	0	0	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1015.6	-1.0	SW'S	3	b	55	75	7	–	–	–	0	0	–
	Mildenhall ...	19	1015.2	-1.0	SW'S	2	b	52	85	7	–	-	–	0	0	–
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1016.7	-1.2	NSW	4	bc	57	85	8	4	–	-	2-3	2-3	2500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1017.4	-8	W	3	c	59	92	7	5	-	-	9	9	4000
	Plymouth ...	82	1017.5	-1.4	E	1	b	52	92	7	–	–	–	0	0	-
	The Lizard ...	240	1017.2	-2.0	S	2	b	56	97	8	–	–	–	0	0	–
	Scilly (St. Mary's)	163	1016.7	-2.0	SW'S	4	bc	57	92	8	8	3	–	4-6	4-6	1500
	Guernsey ...	175	1016.3	-4	W	1	b	53	97	8	–	–	–	0	0	–
6	Pembroke ...	142	1014.7	-1.2	SW	4	cq	57	97	6	8	-	-	9+	9+	2500
7	Holyhead ...	26	1011.8	-1.8	SSW	4	d	57	92	7	5	–	–	10	10	2200
	Chester (Sealand)	16	1013.4	-1.6	S	2	c	55	75	8	5	7	-	4-6	7.8	4000
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1013.7	-.6	SSW	3	bc	57	85	7	–	4	–	0	4-6	–
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1009.5	-1.4	SW	3	c	59	92	7	8	–	–	7.8	7.8	1500
11	St. Abbs Head	280	1006.0	-1.8	SW	6	c	58	85	8	8	6	-	7.8	9+	1500
	Leuchars ...	36	1006.5	-1.4	NSW	3	c	59	92	7	5	–	-	9	9	2500
12	Renfrew (Abbots L)	19	1008.0	-1.0	SW'S	3	ic	59	85	6	5	7	–	7-8	10	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1010.1	-1.4	NSW	3	c	61	75	8	5	-	-	9+	9+	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1005.9	-.8	–	0	f	55	97	2	–	–	–	10	10	<150
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeer ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1005.4	-1.0	E	3	fog	51	97	6	5	2	–	9	10	800
16	Lerwick ...	156	1005.5	-2	E	3	rr	50	97	8	6	2	–	9	10	800
17	Blacksod Point	18	1004.4	-2.0	W	5	Dr	57	97	6	6	–	–	10	10	<150
18	Malin Head ...	84	1005.1	-2.2	S	4	rr	60	92	6	6	2	–	7.8	10	800
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1007.9	-1.0	SSW	4	ir	60	97	6	5	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)
London (Kew)	1014.7	-1.2	SSW	2	bc	59	75	6	5	–	1	2-3	2-3	4000	0	*
Croydon ...	1014.9	-1.2	S	3	b	57	85	7	1	4	–	1	1	2500	0	*
S. Farnborough	1014.4	-.8	S	2	Zo	55	92	6	5	–	–	9	9	800	0	*
Boscombe Down	1014.3	-1.6	S	2	bcf	55	92	7	5	4	–	2-3	4-6	<150	0	*
Calshot (Sthmtn.)	1014.7	-1.2	SW	3	c	60	85	7	2	–	-	9	9	2500	0	§1
Lympne ...	1013.2	-1.0	SW	2	c	56	92	7	5	-	-	9+	9+	800	0	§2
Manston ...	1015.2	-1.2	SW'S	3	c	59	85	6	5	-	-	7-8	7.8	800	0	*
Shoeburyness ...	1014.7	-1.0	SSW	2	b	59	85	7	–	–	-	0	0	–	0	*
Felixstowe ...	1015.1	-.6	SW'S	3	Zo	59	85	6	–	4	-	0	Tr	–	0	2
Gorleston ...	1013.9	-.4	SW'W	3	b	59	75	7	–	4	-	0	1	–	0	2
Mildenhall ...	1013.8	-1.0	SW	3	b	59	75	8	–	4	-	0	Tr	–	1	*
Cranwell ...	1012.0	-1.4	SW	4	Zo	57	85	6	1	4	–	Tr	1	2500	0	*
Birmingham ...	1012.6	-1.0	SSW	3	b	55	85	6	5	–	5	Tr	1	1500	1	*
Upper Heyford	1014.6	-1.4	SW'S	3	bc/f	53	97	6	5	4	5	4-6	4-6	2200	1	*
Ross-on-Wye	1012.9	-1.2	SW	3	bc	57	75	7	1	4	9	1	2-3	2500	0	*
Hartland Point	1011.7	-1.4	SW	4	c	58	85	8	8	4	–	7-8	9	1500	0	2
Bristol ...	1013.8	-1.6	SSW	3	bc	58	75	8	–	4	–	0	2-3	–	0	*
Portland Bill ...	1015.5	-1.2	NSW	3	bc	58	92	8	5	–	-	4-6	4-6	4000	0	2
Plymouth ...	1013.7	-.22	SW'S	4	b	59	85	7	2	3	–	Tr	1	4000	0	2
The Lizard ...	1013.5	-1.4	SE	3	c	57	92	8	8	2	–	7-8	9+	2500	0	2
Scilly (St. Mary's)	1012.4	-1.8	SSW	5	c/d	58	97	6	5	2	–	7-8	10	1500	1	3
Guernsey ...	1015.3	-.6	S	1	c	58	75	8	8	–	-	7-8	7.8	2500	0	0
Pembroke ...	1010.6	-1.2	SW	5	fog	58	97	5	5	–	–	10	10	1500	1	3
Holyhead ...	1007.9	-1.2	SSW	4	df	57	92	3	5	–	–	10	10	2200	1	2
Chester (Sealand)	1009.8	-1.8	SSE	3	bc	57	85	7	8	3	9	4-6	4-6	2500	0	*
Manchester ...	1010.5	-1.4	S	4	Zo	57	85	6	5	7	–	9	10	2500	1	*
Spurn Head ...	1011.2	-1.0	SW'W	3	b	56	85	6	–	4	–	0	1	–	0	2
Catterick ...	1008.7	-1.0	SSE	2	bc	59	85	7	5	4	4	4-6	4-6	800	1	*
Tynemouth ...	1007.8	-.6	SW	3	bc	60	85	6	2	3	–	4-6	4-6	2500	1	1
St. Abbs Head	1005.2	-1.0	NSW	6	cq	59	92	8	4	9	1	4-6	7.8	1500	0	2
Leuchars ...	1004.1	-1.0	NSW	2	fog	59	97	7	5	2	–	9+	10	1500	1	*
Renfrew (Abbots L)	1005.0	-1.0	SW'S	3	fog	59	97	6	5	2	–	7-8	10	800	1	*
Eskdalemuir ...	1005.9	-1.4	SW'S	4	fog	55	97	4	–	2	–	10	10	<150	1	*
Point of Ayre...	1006.1	-1.8	SW'W	5	c	61	85	7	9	3	–	4-6	9+	1500	0	3
Tiree	1001.6	-.6	SSW	3	F	58	97	1	–	–	–	10	10	<150	1	3
Stornoway ...	1004.0	-.6	ENE	2	fog	54	97	5	5	2	–	9+	10	800	1	1
Dalwhinnie ...	1004.1	-1.2	SSW	2	c	56	92	6	4	6	–	7-8	10	1500	0	*
Aberdeer ...	1003.7	-.4	–	0	ifog	58	97	6	5	2	–	Tr	10	1500	1	1
Wick ...	1004.6	-.2	NE	4	fog	52	97	6	5	2	–	9	10	800	1	2
Lerwick ...	1008.4	-.8	E	4	c	50	92	8	8	7	–	7-8	10	800	1	*
Blacksod Point	1001.9	-1.2	S	3	dr	57	97	6	6	–	–	10	10	<150	1	3
Malin Head ...	1002.5	-.6	W	3	pr	58	92	6	6	–	–	9	9	800	0	2
Aldergrove ...	1003.9	-1.6	S	3	c/r	60	97	8	6	2	–	9	10	800	1	*
Birr Castle ...	1003.8	-1.8	S	2	ir	61	97	7	5	–	–	10	10	2500	1	*
Valentia Obsy. †	1004.0	-1.6	SW	4	c	59	92	8	5	7	6	2-3	9+	1500	1	2
Roches Point	1005.4	-2.6	SW	4	dd	59	97	5	5	–	–	10	10	450	1	3

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h–18h °F. (31)	Min. Night 18h–7h * °F (32)	Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 18h Hrs. (36)
London (Kew)	70	53	42	–	–	3.6
Croydon ...	70	50	47	–	–	8.7
S. Farnborough	69	47	38	–	–	3.7
Boscombe Down	68	50	46	–	–	3.7
Calshot (Sthmtn.)	68	53	49	–	–	3.6
Lympne ...	66	50	44	–	–	6.0
Manston ...	67	51	47	–	–	7.9
Shoeburyness ...	69	54	44	–	–	6.1
Felixstowe ...	69	54	50	–	–	5.7
Gorleston ...	65	52	50	–	–	5.7
Mildenhall ...	69	51	44	–	Tr	6.3
Cranwell ...	68	48	43	–	–	7.5
Birmingham ...	67	50	46	–	–	6.8
Upper Heyford	69	48	42	–	–	*
Ross-on-Wye	67	51	43	–	–	7.8
Hartland Point	62	54	53	–	–	12.1
Bristol ...	68	51	42	–	–	13.8
Portland Bill ...	61	55	*	–	–	*
Plymouth ...	63	46	45	–	–	3.7
The Lizard ...	64	54	*	–	–	11.8
Scilly (St. Mary's)	65	57	*	–	0.2	12.4
Guernsey ...	63	49	47	–	–	13.9
Pembroke ...	62	57	*	–	2	13.1
Holyhead ...	62	55	54	–	1	10.8
Chester (Sealand)	69	55	51	–	–	3.6
Manchester ...	68	50	45	–	–	5.8
Spurn Head ...	63	53	*	–	–	3.5
Catterick ...	63	54	48	Tr	–	1.4
Tynemouth ...	62	57	52	1	–	0.1
St. Abbs Head	57	56	*	6	Tr	*
Leuchars ...	58	57	55	6	1	0.0
Renfrew (Abbots L)	58	57	56	3	4	0.0
Eskdalemuir ...	55	53	53	3	4	0.0
Point of Ayre...	56	58	*	–	Tr	1.5
Tiree	58	54	54	20	10	0.0
Stornoway ...	56	53	*	19	21	0.0
Dalwhinnie ...	55	53	52	10	7	0.0
Aberdeer ...	58	57	56	3	4	0.0
Wick ...	55	53	53	7	13	0.0
Lerwick ...	52	51	*	8	2	*
Blacksod Point	56	49	*	Tr	3	3.4
Malin Head ...	64	53	*	0.2	6	*
Aldergrove ...	67	57	*	Tr	2	0.9
Birr Castle ...	66	58	57	–	1	3.7
Valentia Obsy. †	69	60	59	–	2	6.3
Roches Point	65	58	57	Tr	3	3.4
Aberdeen ...	64	53	*	–	10	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet.	Weather Morning.	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.	Humidity. 15h. G.M.T. %	Humidity. 9h. G.M.T. %	Visibility 9h.
		24 hrs. ended 9h.								Yesterday.		To-day.	
Kew...	18	czcy	cy	cybcwZo	70	53	42	–	–	3.6	•	•	
Croydon	217	c⊕	cy	bcymwf	70	50	47	–	–	8.7	•	•	8
Greenwich (Royal Observatory)...	149	cy	cy	cbw	69	50	37	–	–	5.0	44	64	8
City (Gunhill Row)	—	•	•	•	•	•	•	•	•	6.8	•	•	•
Westminster (St. James' Park) ...	27	•	•	•	69	53	46	–	–	6.5	68	54	•
Regents Pk. (Botanic Gardens)‡...	108	•	•	•	70	53	47	–	–	8.4	48	68	•
Camden Square	110	bc	bc	•	70	54	48	–	–		•	72	•
Kensington	80	bc	bc	•	71	52	45	–	–		46 at 18h	75	•
Hampstead Observatory	450	bc	bc	bc	68	51	45	–	–	8.0	•	76	•

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

South Kensington. Max.	Time.	Min.	Time.
Less than 0.3 whole period			

Kew Observatory. Max.	Time.	Min.	Time.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. July 13th. Barom. mb.	Wind. Direc.	Wind. Force.	Weather.	Temp. °F.	7h. G.M.T. July 13th. 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	1013.5	WNW	2	c	64	1016.9	–	0	Zo	57	66	46	–	–
Brussels	1018.3	NNW	3	c	66	1016.9	S	2	b	59	64	*	–	*
Berlin	1015.6	SSW	2	c	57	1013.5	SSW	1	Zo	54	66	52	2	–
Zürich	1017.4	WNW	4	bc	68	1017.6	S	1	Zo	57	73	52	–	–
Rome	1013.9	WNW	2	bc	77						*	*	–	

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	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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday, 14th July, 1939.
No. 28358.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	°F. Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1011·3	-16	SWS	3	c	65	55	8	7	-	-	7-8	7-8	4000
	Croydon ...	1012·4	-10	S'W	3	c	67	45	8	4	6	9	7-8	7·8	4000
	S. Farnborough	1011·6	-14	SW	3	c	67	45	8	7	-	-	7-8	7-8	4000
	Boscombe Down	1011·5	-12	SWS	4	c	64	55	8	4	4	-	7-8	7-8	4000
	Calshot (Soton.)	1012·6	-10	S'W	3	bc	67	55	8	7	5	9	2-3	4-6	2500
	Lympne ...	1013·4	-14	SSW	3	bc	65	55	8	1	-	6	1	4-6	2500
	Manston ...	1012·6	-10	S	4	bc	67	55	8	1	-	6	2-3	4-6	2500
2	Shoeburyness ...	1012·1	-24	SSW	3	c	71	55	8	8	5	-	4-6	7-8	4000
	Felixstowe ...	1012·1	-16	S'W	4	b	69	65	8	1	4	9	1	1	4000
	Gorleston ...	1011·2	-14	SSE	5	bc	65	65	7	8	1	-	4-6	4-6	2500
	Mildenhall ...	1010·7	-12	SSW	4	c	68	55	7	8	3	6	4-6	7-8	4000
	Cranwell ...	1009·3	-14	SSW	3	c	68	45	8	5	4	-	7-8	9	4000
3	Birmingham ...	1009·3	-12	SSW	3	bc	65	55	8	7	3	-	2-3	4-6	5700
	Upper Heyford	1010·8	-18	SSW	3	c	67	45	9	7	-	-	7-8	7-8	4000
4	Ross-on-Wye ...	1009·5	-16	S	4	bc	69	55	8	7	9	-	2-3	4-6	4000
5	Hartland Point	1008·6	-16	SSW	4	dr	60	85	7	6	2	-	7-8	10	800
	Bristol ...	1010·5	-18	S	4	bc	67	55	8	7	3	8	2-3	4-6	4000
	Portland Bill ...	1011·7	-12	S	2	c	62	75	8	1	4	-	4-6	7-8	4000
	Plymouth ...	1011·2	-10	S	4	c	60	75	8	7	1	-	7-8	10	1500
	The Lizard ...	1010·0	-16	S	4	pr	58	97	6	5	-	-	10	10	1500
	Scilly (St.Mary's)	1007·8	-28	SSW	5	roro	60	97	8	5	-	-	10	10	1500
	Guernsey ...	1012·0	-16	S'E	2	c	63	75	8	7	3	8	2-3	9	2500
6	Pembroke ...	1007·4	-20	SSW	6	roro	58	97	6	5	-	-	10	10	1500
7	Holyhead ...	1005·1	-10	S	5	c	60	92	8	5	-	-	9+	9+	800
	Chester (Sealand)	1007·3	-10	S'E	4	c	67	65	8	8	-	-	7-8	7-8	4000
8	Manchester ...	1008·0	-10	S'W	4	c	67	65	7	7	3	-	7-8	9	2500
10	Spurn Head ...	1009·1	-6	SW	3	c	74	85	7	-	4	2	0	7-8	-
	Catterick ...	1006·5	-6	SSW	4	c	68	65	6	5	4	-	4-6	7-8	1500
	Tynemouth ...	1005·8	-4	SW	4	c/pr	66	85	6	2	-	-	9	9	1500
11	St. Abbs Head...	1004·2	-4	SW	5	iro	63	85	8	8	2	-	7-8	10	1500
	Leuchars ...	1003·5	-4	S	2	c	65	85	7	6	1	-	9+	10	1500
12	Renfrew (AbbotsI.)	1003·8	-2	SWS	3	ido	64	85	6	5	2	-	9	10	800
	Eskdalemuir ...	1004·8	-2	SWS	4	dd	58	97	5	-	2	-	10	10	220
	Point of Ayre ...	1004·6	-10	SW	5	c	63	85	7	8	1	-	9	10	1500
13A	Tiree ...	1001·4	0	SW	1	c	60	85	8	5	-	-	7-8	7-8	2500
13B	Stornoway ...	1004·7	+4	NE	4	roro	56	92	7	5	2	-	9	10	1500
15	Dalwhinnie ...	1003·5	-4	SSW	2	c	63	85	7	4	7	-	7-8	10	4000
	Aberdeen ...	1004·3	+8	NE	2	iro	55	97	5	6	2	-	9+	10	800
	Wick ...	1005·2	+8	ENE	4	roro	52	97	6	5	2	-	9	10	800
16	Lerwick...	1007·6	-6	ENE	5	c	53	85	8	5	7	-	4-6	7-8	1500
17	Blacksod Point...	1000·7	-4	SW	2	c	60	85	9	8	-	-	10	10	1500
18	Malin Head ...	1001·3	-2	NE'E	2	c	58	85	8	5	-	-	7-8	7-8	2500
	Aldergrove ...	1001·7	-6	S	1	c/r	62	97	8	9	-	-	9+	9+	1500
19	Birr Castle ...	1001·7	-8	SW	2	c	68	75	8	2	7	3	2-3	9	1500
20	Valentia Obsy.†	1002·0	-6	SWS	3	ojp	59	75	8	5	-	-	10	10	1500
	Roches Point ...	1002·7	-16	WSW	3	bc	61	92	9	3	8	5	2-3	4-6	1500

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

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)	1009·2	-12	SSW	3	c	66	55	8	5	6	1	7-8	7-8	2500	0	*
Croydon	1009·9	-14	S'W	3	c	65	55	8	4	3	2	4-6	9	4000	1	*
S. Farnborough	1009·1	-12	S'W	3	c	63	65	8	7	9	-	tr	9+	4000	0	*
Boscombe Down	1008·7	-14	S'W	4	bc	61	75	8	1	-	9	2-3	4-6	2500	0	*
Calshot (Soton.)	1009·8	-14	SSE	3	bc	64	65	8	5	5	9	2-3	4-6	4000	0	2
Lympne	1011·9	-6	SSE	2	bc	62	75	8	1	4	2	tr	4-6	2500	0	§ 1
Manston	1010·5	-10	S'W	3	bc	63	65	8	-	4	6	0	4-6	-	0	*
Shoeburyness	1010·1	-8	SSW	3	c	65	65	8	-	4	6	0	9	-	0	*
Felixstowe	1009·6	-14	S'W	5	c	65	65	8	-	7	9	0	7-8	-	0	3
Gorleston	1009·1	-8	S	5	c	66	65	7	-	5	-	0	7-8	-	0	3
Mildenhall	1008·0	-14	SSW	3	c	68	45	8	4	6	-	7-8	9	4000	0	*
Cranwell	1007·4	-6	SSW	3	bc	65	65	8	1	5	-	tr	4-6	4000	0	*
Birmingham	1006·8	-14	SSE	3	bc	65	55	8	7	8	9	2-3	4-6	4000	0	*
Upper Heyford	1008·2	-16	SW'S	3	c	66	55	8	1	3	-	1	7-8	4000	0	*
Ross-on-Wye	1007·1	-12	S'W	4	c	65	65	8	5	7	-	4-6	9+	2500	0	*
Hartland Point	1004·5	-24	SSW	5	roro	58	97	6	6	2	-	9+	10	800	1	3
Bristol	1008·2	-12	SSW	4	c	61	65	8	5	7	-	2-3	9+	2500	0	*
Portland Bill	1009·0	-20	S	2	c	59	85	8	5	-	-	7-8	9	4000	0	2
Plymouth	1007·3	-26	S	4	roro	59	97	5	-	2	-	10	10	220	1	2
The Lizard	1006·3	-12	S	5	rr	58	97	5	5	-	-	10	10	1500	1	3
Scilly (St.Mary's)	1003·9	-22	SW'S	5	c/d	60	97	6	5	2	-	7-8	10	800	1	3
Guernsey	1009·7	-12	S	1	bc	63	55	8	-	4	8	0	2-3	-	0	0
Pembroke	1003·4	-14	SSW	6	roro	58	97	5	5	-	-	10	10	800	1	3
Holyhead	1002·9	-14	SSE	4	dodo	58	97	6	5	2	-	7-8	10	220	1	3
Chester (Sealand)	1005·0	-20	SSE	3	c	65	65	8	5	7	-	7-8	7-8	4000	0	*
Manchester	1005·7	-14	S'W	3	c	67	65	7	7	3	-	4-6	7-8	4000	0	
Spurn Head	1007·0	-6	SW'S	2	c	67	55	7	4	4	8	tr	7-8	4000	0	2
Catterick	1004·9	-10	SW'S	3	c	67	65	7	8	3	9	7-8	7-8	1500	1	*
Tynemouth	1004·9	-10	SW	3	bc	68	75	6	2	6	-	4-6	4-6	1500	1	1.
St. Abbs Head	1004·2	+2	ESE	2	c/r	61	85	9	8	2	-	7-8	9+	1500	1	1
Leuchars	1003·3	-2	SSW	1	ir	61	97	6	6	2	-	9+	10	800	0	*
Renfrew (AbbotsI.)	1003·4	0	-	0	rr	61	92	5	5	-	-	10	10	800	1	*
Eskdalemuir	1003·8	-6	S'W	5	dd	57	97	6	6	-	-	10	10	220	1	*
Point of Ayre	1003·5	-2	SSW	4	ido	59	97	7	8	1	-	9	10	1500	1	3
Tiree	1001·0	-2	NNE	2	c	56	92	7	5	-	-	9+	9+	1500	0	2
Stornoway	1004·6	+2	NE	4	pr	55	97	6	5	7	-	7-8	10	1500	1	2
Dalwhinnie	1002·7	-4	NNE	3	c	60	92	6	4	2	-	7-8	10	2500	0	*
Aberdeen	1004·1	0	NNE	2	iro	55	97	4	6	-	-	10	10	<150	1	1
Wick	1006·0	+4	ENE	5	c	52	92	7	5	2	-	7-8	10	1500	1	2
Lerwick	1008·6	+6	ENE	4	c	52	85	8	8	7	-	4-6	7-8	1500	0	*
Blacksod Point	999·7	-6	NW	2	c	60	75	8	8	-	-	10	10	800	1	2
Malin Head	1000·6	-6	N'E	2	c	57	92	8	4	-	-	7-8	7-8	4000	0	2
Aldergrove	1000·1	-10	SE	3	c	63	85	8	5	7	8	4-6	9+	1500	1	*
Birr Castle	1000·0	-10	SW	1	c/pr	62	85	8	8	7	-	7-8	9	1500	1	*
Valentia Obsy.†	1000·0	-8	W'N	3	cjp	58	92	8	5	2	-	9+	10	1500	1	3
Roches Point	1000·4	-14	WSW	3	c	61	92	8	3	5	-	4-6	7-8	1500	1	3

PAST 24 HOURS

Stations	Weather 7h.—13h. 13th (37)	Weather 13h.—18h. 13th (38)	Weather 18h. 13th to 1h. 14th (39)	Weather 1h.—7h. 14th (40)
London (Kew)	bczey	cy	cyc	crorocpoc
Croydon	bbcey	bcyvcy	cbcbw	bccir0
S. Farnborough	cm cbcr	bcyc	cbcc	cirordomo
Boscombe Down	bcbc	cbc	bccroro	crrRR
Calshot (Soton.)	cbbcy	bcyc	cpocir0	crrirmo
Lympne	cbc	bcy⊕by	bccbc	bcc
Manston	cmobcy	bccybc	cbczo	bcmocbc
Shoeburyness	bwcy	bcyc	c	c
Felixstowe	bmob	bbcc	cbc	bcb,c
Gorleston	bbcq	bccq	cbc	bcc
Mildenhall	bcy	bccy	cycbc	bbccir0
Cranwell	bccy	cbcybc	cbc	bcciromo
Birmingham	bbc	bc	bco	oir
Upper Heyford	bcbcy	bcycy	c	croRcr
Ross-on-Wye	bbccbc	bcyc	crc	rrc
Hartland Point	cd	roroc	irorr	cpc
Bristol	bcbbcy	bcyc	ciro	croRdocbc
Portland Bill	bcc	c	orr	orrc
Plymouth	bcc	coddroro	crororrc	ciropro
The Lizard	cpr	crrm	rrmc	rrcbc
Scilly (St.Mary's)	cidorr	crrRd	crroqc	bcpoc
Guernsey	cbc	bc	iro	oRr
Pembroke	oiroqmo	Rrm	orifc	irc
Holyhead	ffdodoc	doRdodoc	dodordoc	RRrrc
Chester (Sealand)	c	c	errroc	crromo
Manchester	cmoc	ccpro	cro	crorc
Spurn Head	bcc	cproc	c	c
Catterick	bccz	czc	cbcmo	mooddf
Tynemouth	bccp	cbc	bcc	c
St. Abbs Head	cir	irc	prc	cmorr
Leuchars	cirroc	riRcror	rRroRrr	iRroirfo
Renfrew (AbbotsI.)	crroidd	iriRRRr	rrrodorri	cmoirorr
Eskdalemuir	oifRdd	oddmo	ddrr	rrir
Point of Ayre	cidoc	irrrcq	dd	rr
Tiree	od fmc	cid	c	c
Stornoway	cror0	cror	crr	cpr
Dalwhinnie	cir	ciR		ciR
Aberdeen	crrciro	orrir	oRorr	RRof
Wick	ifro	roroc	cdoc	roro
Lerwick	c	c	cbc	bcc
Blacksod Point	idr	c	prc	iRq
Malin Head	c	cbcc	cbczzc	c
Aldergrove	ido,+R	crmoc	cbcmo	idororrm
Birr Castle	oirc	cprtf	cprrr	crrir
Valentia Obsy.†	iOpc	cprc	circ	c
Roches Point	ddrbc	bcc	croro	cido

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.
c, 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.

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.*

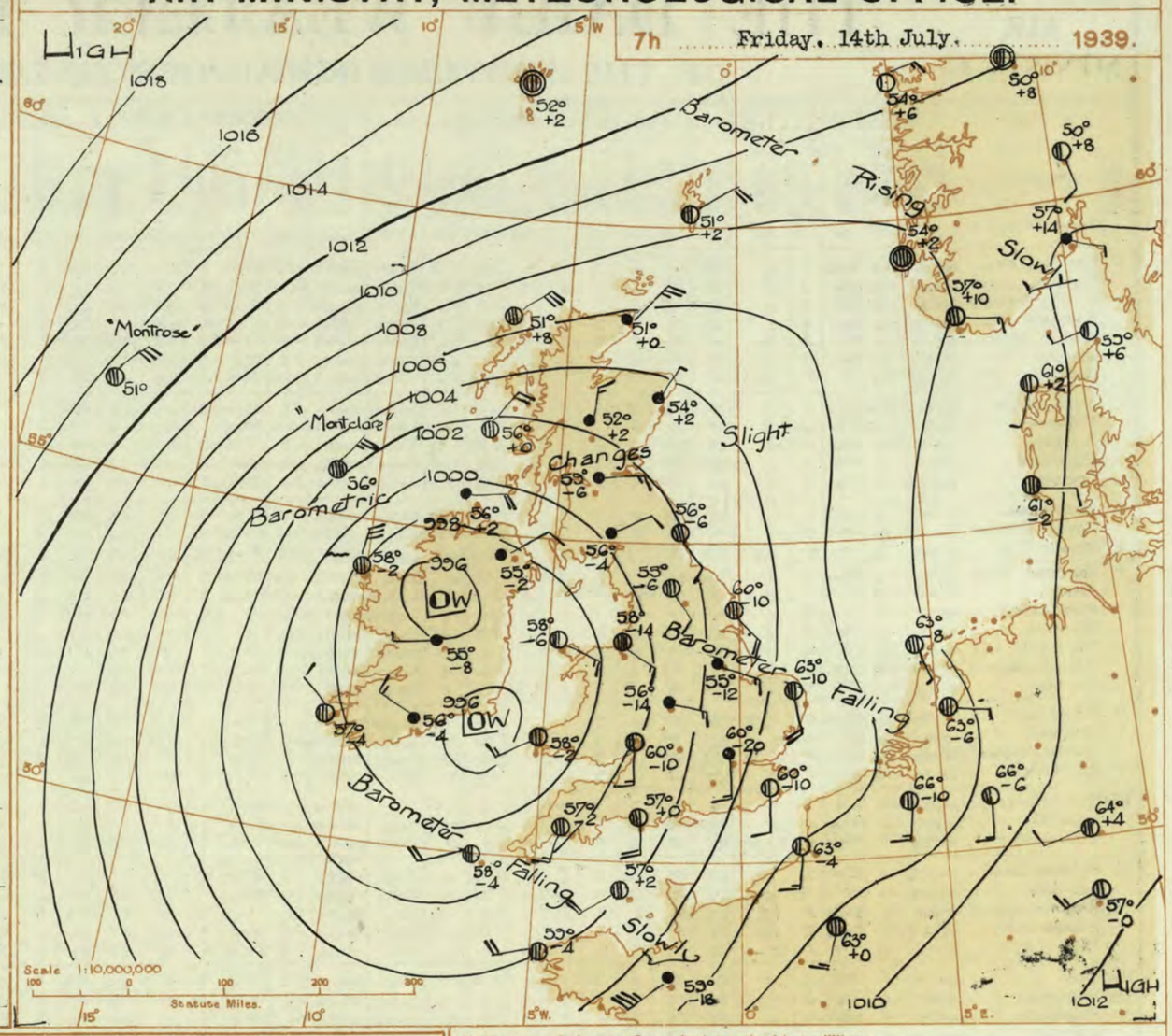
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 13th July 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 12th to 9h. 13th	Temperature. (°F) Max. 9h.—17h. 13th	Rainfall. (mm.) Night. 17h. 12th to 9h. 13th	Rainfall. (mm.) Day. 9h.—17h. 13th	Sunshine. (Hrs.) Sunrise to 17h. 13th	Sunshine. (Hrs.) Sunrise to Sunset. 12th
1	Tunbridge W.	bcc	bcb	47	69	-	-	8·6	7·7
	Bournemouth	b	b	50	68	-	-	11·1	7·7
	Ventnor ...	cb	bbc	55	71	-	-	8·3	10·0
	Southsea ...	b	bbc	55	69	-	-	9·5	8·2
	Bognor Regis	bcbc	bcbc	51	65	-	-	8·2	7·3
	Littlehampton	bcb	bbc	50	64	-	-	8·9	8·7
	Worthing ...	b	bbcc	53	65	-	-	9·2	7·6
	Brighton ...	b	bcb	54	66	-	-	7·4	4·7
	Eastbourne† ...	bc	bc	57	66	-	-	10·3	6·7
	Hastings† ...	bcbb	bcbc	54	67	-	-	9·8	5·3
	Folkestone ...	b	bbc	52	65	-	-	7·2	5·9
	Dover ...	bc	bc	56	68	-	-	8·4	5·8
	Deal	bcb	bccbc	*	69	-	-	10·6	7·3
	Ramsgate ...	bc	bc	55	66	-	-	8·8	5·8
	Margate ...	bc	bc	54	69	-	-	9·6	9·5
2	Southend ...	bbc	bbc	54	75	-	-	10·3	7·6
	Clacton-on-Sea	b	bbc	54	67	-	-	11·0	4·3
	Dovercourt ...	bz	bc	52	68	-	-	11·7	6·4
	Lowestoft ...	b	b	52	66	-	-	10·8	6·2
	Skegness ...	bbco	ocb	50	71	-	-	10·3	6·3
	Mablethorpe...	bbcbc	bcbbcy	50	72	-	-	9·8	4·9
	Cleethorpes ...	bbc	bc	51	73	-	-	9·4	5·9
3	Leamington S.	bc	c	49	70	-	-	6·2	7·1
4	Cheltenham†	bcqy	bccbc	52	69	-	-	10·1	8·8
5	Bath	b	bbcc	48	69	-	-	10·5	12·7
	Weymouth ...	b	b	52	65	-	-	11·8	6·4
	Jersey ...	cbc	bc	52	69	-	-	8·4	13·1
	Torquay ...	wbv	bco	49	64	-	-	7·8	2·2
	Falmouth ...	bccor	corro	52	61	-	3	0·9	7·4
	Penzance ...	crrir	rqrr	53	60	1	8	0·0	8·5
	St. Ives ...								
	Bude... ...	bbcc	or	50	64	-	2	0·5	11·9
	Ilfracombe ...	bccbc	bccpo	53	67	-	0·1	3·7	13·2
6	Aberystwyth	c	cir	56	64	-	0·3	0·0	11·3
7	Llandudno ...	bc	c	56	69	-	-	4·7	9·9
	Colwyn Bay...	bcb	bcbcc	56	68	-	-	4·0	8·8
	Rhyl	cbc	bcc	57	68	-	-	3·5	9·7
8	Wallasey ...	cbcc	c	56	68	-	-	2·7	10·6
	Southport ...	cbcc	cpc	52	68	-	0·1	1·1	6·8
	Blackpool ...	c	cpc	55	69	-	Trace	0·6	7·3
	Morecambe ...	o	cdro	54	67	Trace	Trace	0·1	3·8
9	Ilkley... ...	bc	bc	51	73	-	-	3·6	2·3
	Harrogate ...	bcc	cbc	52	72	-	-	6·7	2·3
10	Berwick-on-T.	c	oic	55	65	Trace	0·3	0·8	0·0
11	Dunbar ...	cpr	cpr	53	67	0·3	0·3	0·2	0·0
12	Troon... ...	rrorr	rrorr	54	60	3	8	0·0	0·0
	Douglas ...	cmir	cm	55	57	3	5	0·0	4·9

† Max. Temp. for period 21h. yesterday to 17h. to-day; Min. Temp. 21h.-9h.

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. 14th July, 1939.
1 S.E. England	Wind south, veering toward southwest, moderate or fresh; dull, rainy at first; bright intervals, heavy showers, local thunder later; becoming rather cool.
2 E. England	
3 E. Midlands ...	Wind southeast, fresh, veering south, moderate; dull; thundery rain; brighter intervals tomorrow but with thundery showers; close at first, then cooler.
4 W. Midlands	
5 S.W. England	Wind southwest, moderate to fresh perhaps strong later on the coast; frequent showers, heavy at times with local thunderstorms; rather cool.
6 South Wales ...	
7 North Wales ...	
8 N.W. England	Wind southeast to east, light to moderate; dull; rainy; heavy rain at times; cool.
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 northeast, mainly moderate, but strong at times on the north and northwest coasts; cloudy; occasional rain; coast fog in the east; fairer conditions spreading slowly from the north; cool.
14 Mid Scotland	
15 N. E. Scotland	
16 Orkney and Shetland	
17 N. W. Ireland	As 19-20.
18 N. E. Ireland	As 12-16.
19 S. E. Ireland	Wind northwest to north, moderate inland, fresh perhaps strong on the coast; frequent showers, heavy at times; local thunder; cool.
20 S. W. Ireland	

GENERAL INFERENCE.

A deep complex depression centred over Ireland will move slowly east and maintain very unsettled weather generally with considerable rainfall in many districts.

FURTHER OUTLOOK.

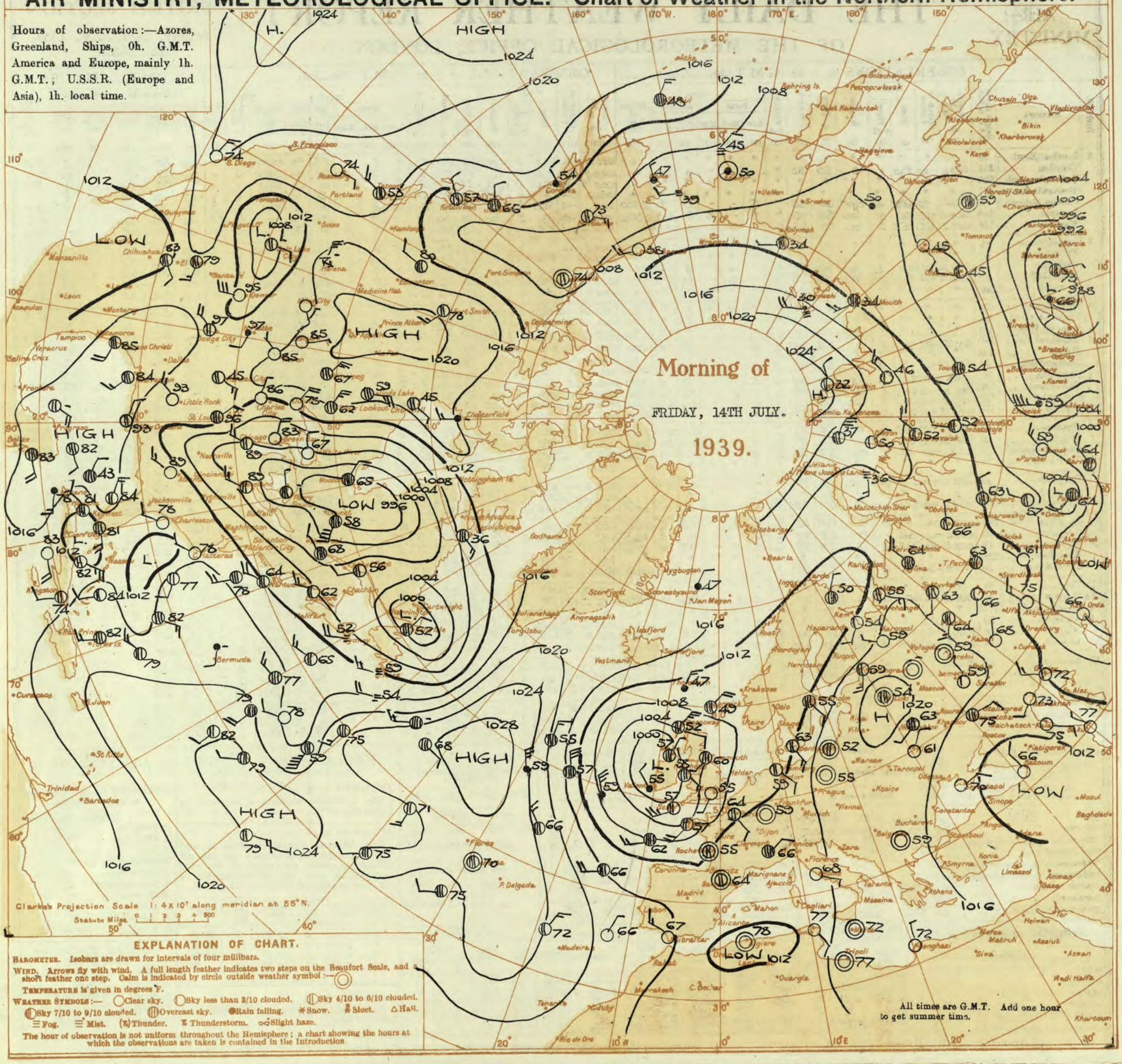
Very unsettled except in the Northwest.

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.



EXPLANATION OF CHART.

Barometer. Isobars are drawn for intervals of four millibars.

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

Temperature is given in degrees F.

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday, 14th July, 1939.
No. 28358.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1007.0	-20	S'W	1	b	55	85	7	-	-	-	0	0	-
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Calshot (Sthmtn.)	8	1006.0	-20	SE'S	4	c/pr	60	85	7	5	-	-	9	9	2500
	Lympne	346	1008.0	-22	SE	3	bc	59	75	7	5	-	6	Tr	2-3	2500
	Manston	154	1007.2	-22	SE'E	3	bc	59	75	6	-	7	-	0	4-6	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1006.9	-10	SSW	3	bc	56	85	7	-	4	-	0	4-6	-
	Mildenhall	19	1006.3	-14	S'W	2	bc	56	75	7	-	9	-	0	2-3	-
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	999.8	-22	SSW	3	c	53	92	8	8	-	-	7-8	7-8	1500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1004.1	-28	S	4	rr	57	92	7	5	-	-	10	10	2500
	Plymouth	82	1001.8	-20	SW'S	4	o/r	58	97	6	5	-	-	10	10	800
	The Lizard	240	1001.7	-14	SSW	4	c	57	97	8	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	163	1000.9	-14	WSW	5	bc	57	92	8	8	-	-	4-6	4-6	1500
	Guernsey	175	1004.5	-10	SW	4	o	58	97	6	5	-	-	10	10	800
6	Pembroke	142	999.3	-12	SSW	3	bc	58	97	7	5	-	-	4-6	4-6	2500
7	Holyhead	26	999.3	-18	SE	3	c/r	58	97	8	5	7	8	4-6	9+	800
	Chester (Sealand)	16	1002.1	-18	SE	2	o/r	57	92	6	5	-	-	10	10	1500
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1005.0	-10	S'W	3	bc	58	75	7	-	7	-	0	4-6	-
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1003.8	-10	SW	1	c	60	85	6	8	-	-	9	9	1500
11	St. Abbs Head	280	1003.8	-4	-	0	c	59	92	8	5	2	-	7-8	10	1500
	Leuchars	36	1003.0	-6	SE	1	rr	58	97	5	6	-	-	10	10	800
12	Renfrew (Abbots I.)	19	1002.5	-6	ENE	2	zo	59	97	6	5	7	-	7-8	10	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1000.9	-6	S'E	4	rr	57	97	7	6	1	-	9	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1005.4	+4	NE	5	c	52	97	7	5	2	-	7-8	10	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1006.0	-4	NE	5	c	51	92	8	5	2	-	7-8	10	1500
16	Lerwick	156	1010.2	+4	ENE	4	bc	49	85	8	5	4	-	4-6	4-6	1500
17	Blacksod Point	18	999.8	-8	-	0	ir	55	97	7	6	-	-	10	10	450
18	Malin Head	84	999.3	-10	N'E	1	fs	57	92	6	5	4	-	4-6	7-8	2500
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	999.1	-4	W'N	2	pr	55	97	7	5	-	-	10	10	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

OBSERVATIONS at 7 hr. G.M.T. 14th July — 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 13th Hrs. (36)
London (Kew)	1002.8	-16	SSE	3	c/pr	60	85	7	5	2	-	7-8	9+	2500	1	*	69	53	44	-	2	9.9
Croydon	1003.7	-20	S'E	3	ir	60	85	8	5	7	-	7-8	9+	5700	0	*	70	53	47	-	0.1	9.0
S. Farnborough	1002.5	-8	SE	3	d,d,	58	97	6	5	-	-	10	10	1500	1	*	70	52	46	-	1	9.6
Boscombe Down	1001.0	-14	S	4	RR	58	97	6	6	2	-	9	10	800	1	*	67	54	52	-	8	11.1
Calshot (Sthmtn.)	1002.1	-14	SSE	5	rr	60	97	6	6	2	-	9	10	800	1	3	70	58	56	-	8	9.7
Lympne	1005.6	-10	S	2	bc	60	92	7	-	9	1	0	4-6	-	0	§2	66	56	50	-	-	8.6
Manston	1004.4	-14	SSE	3	c	63	75	7	-	9	9	0	7-8	-	0	*	69	55	52	-	-	9.6
Shoeburyness	1004.5	-14	S	3	c	62	85	8	5	9	-	4-6	9	5700	0	*	72	58	52	-	-	11.1
Felixstowe	1004.7	-8	S'W	4	c	63	85	8	-	3	4	0	9+	-	0	2	70	58	57	-	-	11.8
Gorleston	1005.0	-10	S'E	4	c	63	75	6	-	-	8	0	7-8	-	0	2	68	56	53	-	-	11.1
Mildenhall	1003.5	-10	SSE	2	c/r	60	75	7	5	7	-	4-6	9+	4000	1	*	71	49	43	-	Tr	8.8
Cranwell	1002.8	-12	SE	3	ir	55	92	6	-	7	-	0	9+	-	0	*	71	54	48	-	Tr	10.7
Birmingham	1000.6	-14	SE	3	rr	56	97	6	6	-	-	10	10	450	1	*	69	53	52	-	4	8.4
Upper Heyford	1001.9	-18	SE'S	3	ir	56	97	6	6	2	-	7-8	10	800	1	*	69	54	52	-	3	*
Ross-on-Wye	999.5	-10	S	3	bc	60	85	8	9	7	2	4-6	4-6	2500	1	*	70	56	54	-	4	8.1
Hartland Point	998.1	-4	SW	4	c	57	85	8	9	6	-	4-6	7-8	800	1	3	62	55	54	1	8	1.1
Bristol	1000.4	-6	S	3	c	59	85	8	5	3	8	4-6	7-8	1500	1	*	68	56	54	-	3	11.2
Portland Bill	1001.2	0	S	4	c	57	92	7	5	4	-	7-8	10	2500	1	3	63	55	*	-	5	*
Plymouth	1000.0	-2	S'W	3	c/pr	57	92	8	9	-	-	9	9	1500	1	1	65	57	55	2	6	4.2
The Lizard	999.9	-10	SSW	4	bc	58	92	8	8	6	-	4-6	4-6	2500	1	2	59	55	*	6	14	0.0
Scilly (St. Mary's)	999.0	-4	WSW	4	c/pr	58	97	8	8	6	-	4-6	9+	1500	1	3	61	56	*	5	1	0.0
Guernsey	1002.3	+2	SW	4	c/r	57	97	8	8	3	-	7-8	9	800	1	3	63	54	55	-	12	11.9
Pembroke	997.2	-2	SW	3	c	58	92	8	8	-	-	9	9	1500	1	2	59	55	*	7	5	0.0
Holyhead	996.9	-6	SE	3	c/r	58	97	8	8	-	-	7-8	7-8	2500	1	2	62	56	55	2	14	0.0
Chester (Sealand)	998.8	-14	SE'S	3	zo	58	92	6	5	2	-	9	10	1500	1	*	68	56	55	-	6	2.6
Manchester	1000.1	-10	SE	4	c	59	85	7	5	2	-	7-8	10	800	1	*	69	56	55	Tr	2	2.1
Spurn Head	1002.2	-10	SSE	4	c	60	75	7	-	9	3	0	9+	-	0	3	76	56	*	Tr	-	9.8
Catterick	1001.6	-6	SSE	2	c/d	55	92	6	5	2	-	7-8	10	450	1	*	69	52	50	-	0.4	6.2
Tynemouth	1002.2	-6	SSE	2	c	56	92	5	5	-	-	9+	9+	1500	1	1	68	56	52	1	-	3.3
St. Abbs Head	1002.2	-2	SE	2	c	56	97	5	8	2	-	7-8	10	800	0	1	64	55	*	0.2	0.1	*
Leuchars	1002.1	0	ENE	2	o/f	55	97	5	5	-	-	10	10	220	1	*	66	55	54	5	12	0.0
Renfrew (Abbots I.)	1000.9	-6	E	3	,°,°	59	97	5	5	2	-	7-8	10	800	1	*	64	58	57	7	12	0.0
Eskdalemuir	1000.3	-4	NE'E	2	ir	56	92	6	6	-	-	10	10	800	1	*	58	54	53	9	6	0.0
Point of Ayre	998.0	-14	SSE	4	rr	57	97	5	-	2	-	10	10	450	1	3	65	56	*	2	7	0.0
Tiree	1000.3	0	NE'N	4	c	56	92	8	5	-	-	9	9	2500	0	3	61	55	53	Tr	-	0.7
Stornoway	1006.2	+8	NE	6	c/pr	51	92	8	5	7	-	4-6	10	2500	'	3	57	51	*	5	6	0.0
Dalwhinnie	*	+2	NNE	3	ir	52	97	5	6	-	-	10	10	800	1	'	64	51	51	2	7	0.1
Aberdeen	1003.6	+2	NNE	1	df	54	97	2	-	-	-	10	10	450	1	1	62	53	52	10	17	0.0
Wick	1005.8	0	NE	5	,°,°	51	92	6	5	2	-	7-8	10	800	1	2	53	51	*	2	0.4	*
Lerwick	1009.3	+2	ENE	4	c	51	75	8	5	7	-	4-6	7-8	1500	0	*	54	48	*	-	-	7.0
Blacksod Point	997.7	-2	N'E	6	cq	58	97	7	8	-	-	10	10	450	2	4	64	54	*	1	11	*
Malin Head	998.4	+2	E	4	pr	56	97	7	9	-	-	9+	9+	1500	0	2	62	54	*	-	Tr	3.4
Aldergrove	997.7	-2	NE'E	2	rr	55	97	6	6	2	-	7-8	10	1500	1	*	66	55	51	19	3	0.4
Birr Castle	996.5	-8	W	1	ir	55	97	7	6	2	-	7-8	10	800	1	*	71	53	51	5	12	3.3
Valentia Obsy. †	998.1	-4	NW'N	2	c	57	85	8	5	-	-	10	10	1500	1	1	61	54	51	1	1	0.5
Roches Point	996.8	-4	NW	3	id.	56	97	8	5	7	-	7-8	9+	1500	1	2	63	55	*	3	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	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	bczocy	cyc	cr₀r₀pp…	69	53	44	-	2	9.9	•	•	7
Croydon	217	bbccy	bcyrcbw	bccir	70.	53	47	-	0.1	9.0	•	•	8
Greenwich (Royal Observatory)	149	cy	cy	cbcid	72	50	*	-	0.3	8.0	41	86	8
City (Bunhill Row)	—	•	•	•	•	•	•	•	•	8.3	•	•	•
Westminster (St. James' Park)	27	•	•	•	69	56	48		1	8.0	55	90	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	71	56	46	—	1	8.9	44	94	•
Camden Square	110	bc	bc	•	72	56	48	-	1	*	•	90	•
Kensington	80	bc	c	•	71	56	47	-	1	8.1	At 18h 46	94	•
Hampstead Observatory	450	bc	bcor	od	70	55	48	-	1	9.2	•	95	•

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 14th

South Kensington. Max.	Time.	Min.	Time.
<0.3 whole period			

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 13th July Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 14th July 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	1011.0	—	0	bc	73	1008.5	SSW	5	c	63	75	61	-	-
Brussels	1011.4	WSW	2	bc	70	1007.4	S	3	c	66	75	54	-	-
Berlin	1016.2	S'E	2	bc	68	1012.7	SSE	3	zo	64	72	57	-	-
Zurich	1013.1	E	2	c	75	1013.9	SSE	1	c/r	63	81	61	-	1
Rome	1016.9	WNW	1	b	79	1016.6	ESE	2	zo	73	*	*	-	-

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.

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 9 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday, 15th July, 1939.
No. 28359.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	•London (Kew)	1002.1	-2	SW'S	4	c	65	65	8	8	3	1	9	9+	2500
	Croydon	1002.9	-4	S'E	4	c	66	75	8	2	6	-	4-6	7-8	4000
	S. Farnborough	1001.9	+4	S	4	c/pr	62	75	8	8	7	-	7-8	9+	1500
	Boscombe Down	1001.0	+2	S'W	5	e	62	75	7	8	3	-	4-6	9	2500
	Calshot (Soton.)	1002.3	+4	SSW	4	c	64	85	8	2	7	-	9	9+	1500
	Lympne	1005.2	-4	S	4	r₀r₀	59	92	6	6	2	-	9+	10	800
	Manston	1004.3	0	S'E	5	ir₀	62	85	6	6	2	-	2-3	10	1500
2	Shoeburyness	1004.2	+2	S	4	r₀r₀	61	97	7	6	2	-	9	10	800
	Felixstowe	1004.3	+4	S'W	5	c/d	62	85	8	6	7	-	9	10	800
	Gorleston	1003.7	-6	S	5	pr	65	85	6	8	-	-	9+	9+	2500
	Mildenhall	1002.0	-4	S'W	5	c/r	65	75	7	5	2	-	9	10	2500
	Cranwell	1000.6	-10	SE	5	c/r	63	92	6	8	-	-	9+	9+	1500
3	Birmingham	999.2	-4	S	3	PR	65	65	8	8	-	1	7-8	9	2500
	Upper Heyford	1000.7	+2	S	4	c	65	75	8	8	3	-	7-8	9	1500
4	Ross-on-Wye	999.0	0	S	4	cjp	65	75	8	8	3	1	7-8	9	2500
5	Hartland Point	1002.8	+4	WSW	4	bc/pr	59	85	8	8	6	-	4-6	4-6	1500
	Bristol	999.8	+2	SSW	4	c/pr	64	65	8	8	7	-	7-8	9	1500
	Portland Bill	1002.6	0	SSW	4	c	60	92	7	1	4	-	4-6	7-8	2500
	Plymouth	999.8	+2	SW	4	e	62	85	8	8	7	1	4-6	7-8	2500
	The Lizard	1000.3	+10	SW'S	4	bc	63	85	8	8	7	-	4-6	4-6	2500
	Scilly (St. Mary's)	999.4	+4	WSW	4	cjp	63	85	8	8	8	3	4-6	7-8	1500
	Guernsey	1003.1	+4	SSW	4	bc	62	75	8	2	7	-	2-3	4-6	1500
6	Pembroke	997.7	0	WSW	3	bc	60	85	8	2	3	-	4-6	4-6	2500
7	Holyhead	997.0	+2	S	3	bc	63	85	9	8	4	-	4-6	4-6	2500
	Chester (Sealand)	998.1	-2	SSE	2	z₀	66	65	6	3	7	-	4-6	7-8	1500
8	Manchester	998.7	-6	WSW	1	PR	60	85	7	8	3	-	7-8	9	2500
10	Spurn Head	1001.7	-4	SE	3	c/r	61	92	6	5	-	-	10	10	1500
	Catterick	1000.2	-6	SE'E	3	ir₀	63	85	6	5	2	-	4-6	10	800
	Tynemouth	1001.7	0	SE	2	c/pr	56	97	6	8	-	-	9+	9+	1500
11	St. Abbs Head	1001.9	+4	SE	3	c/r	57	92	7	5	7	-	7-8	9+	2500
	Leuchars	1002.4	+26	ENE	2	ir₀	58	92	6	5	-	-	10	10	450
12	Renfrew (Abbotsl.)	1000.6	+2	E	4	c	60	85	6	5	2	-	9	10	450
	Eskdalemuir	999.7	0	E'S	3	id₀	59	85	7	6	-	-	10	10	800
	Point of Ayre	997.9	0	S	3	c/r	60	97	7	2	7	-	4-6	9+	1500
13A	Tiree	1000.6	+2	NE'N	4	rr	56	97	7	-	2	-	10	10	1500
13B	Stornoway	1007.2	+4	NE	7	r₀r₀	52	92	7	5	2	-	7-8	10	2500
15	Dalwhinnie	1003.7	+4	NNE	4	ir	52	97	5	6	-	-	10	10	800
	Aberdeen	1003.9	+2	NE'N	2	o	55	97	6	6	-	-	10	10	800
	Wick	1006.4	+4	NE	6	c	51	92	7	5	2	-	7-8	10	800
16	Lerwick	1009.4	0	NE	5	c	53	85	8	8	7	-	7-8	9	800
17	Blacksod Point	998.7	+4	N	5	RR	58	97	7	6	-	-	10	10	<150
18	Malin Head	998.5	0	NE	3	c	57	92	7	5	-	8	4-6	7-8	2500
	Aldergrove	996.8	-2	E'S	3	c	64	75	7	8	-	-	9	9	1500
19	Birr Castle	995.7	-2	SSW	2	c	61	85	8	8	7	-	7-8	9+	800
20	Valentia Obsy.†	997.7	+2	NNW	4	c	61	85	8	8	7	-	7-8	9	1500
	Roches Point	996.8	+2	SW	1	PR	57	97	8	9	-	3	4-6	7-8	800

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

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)	1002.2	-2	SSW	4	bc	65	65	8	8	-	1	4-6	4-6	2500	0	*
Croydon	1002.7	-2	S'W	4	c	65	65	8	2	6	2	2-3	7-8	4000	0	*
S. Farnborough	1001.9	+2	SSW	3	bc	62	65	8	2	-	1	2-3	4-6	4000	1	*
Boscombe Down	1001.1	+2	SSW	5	c	62	75	7	8	-	1	4-6	7-8	1500	0	*
Calshot (Soton.)	1002.5	+2	SSW	5	cjp	61	85	8	2	-	-	7-8	7-8	1500	1	2
Lympne	1004.8	-2	SSW	3	bc	63	75	9	8	5	1	2-3	4-6	4000	0	§ 2
Manston	1003.7	+2	S'W	4	c	66	65	8	8	5	3	1	7-8	2500	1	*
Shoeburyness	1003.2	-4	SSW	3	bc	67	75	8	2	4	1	1	4-6	4000	0	*
Felixstowe	1003.0	-4	S	4	bc	64	85	8	3	3	4	1	4-6	2500	0	3
Gorleston	1003.2	-2	S	5	bc	66	75	7	1	3	8	2-3	4-6	4000	0	3
Mildenhall	1001.3	+2	SSW	3	c	67	55	8	8	7	2	2-3	7-8	4000	0	*
Cranwell	1000.4	+2	SSW	2	c	63	85	8	8	3	2	2-3	7-8	2500	1	*
Birmingham	1000.2	+2	SSE	3	c	59	85	8	8	6	1	7-8	9	2500	1	*
Upper Heyford	1000.9	+2	S	4	c	62	75	8	8	3	1	7-8	7-8	2500	1	*
Ross-on-Wye	999.8	0	~~SW~~	3	pr	59	85	8	8	6	-	9	9+	2500	1	*
Hartland Point	998.3	-2	WSW	4	bc	60	85	8	8	4	-	2-3	4-6	1500	1	3
Bristol	1000.5	+6	S	2	pr	57	92	8	8	7	-	4-6	9	1500	1	*
Portland Bill	1001.9	+8	WSW	4	bc	59	92	8	5	-	-	4-6	4-6	4000	1	3
Plymouth	1000.0	+2	SW	4	cjp	60	85	8	9	3	-	7-8	9	1500	1	3
The Lizard	1000.1	-4	SSW	4	bc	61	85	8	8	6	-	4-6	4-6	2500	1	3
Scilly (St. Mary's)	999.3	-2	W'S	4	c/pr	60	92	8	8	4	3	4-6	7-8	1500	1	3
Guernsey	1003.1	0	SW	4	c	59	85	8	5	3	-	4-6	9	1500	1	3
Pembroke	998.2	0	WSW	3	c	60	85	8	8	6	-	4-6	7-8	2500	1	2
Holyhead	997.5	+6	SSW	2	c	61	75	9	9	3	-	4-6	7-8	4000	1	2
Chester (Sealand)	998.0	0	SE	2	c	66	65	8	8	3	-	7-8	9	2500	1	*
Manchester	998.6	-2	-	0	z₀	63	85	5	8	3	-	9	9+	2500	1	*
Spurn Head	1000.2	-6	SSE	4	c	63	85	6	-	9	-	0	9+	-	1	3
Catterick	999.1	-2	-	0	z₀	59	97	6	8	-	-	10	10	800	1	*
Tynemouth	1000.6	-4	N'E	3	c/pr	56	97	6	5	-	-	9+	9+	1500	1	2
St. Abbs Head	1001.8	0	ESE	2	F+	55	97	1	-	-	-	10	10	<150	1	1
Leuchars	1002.6	+2	ENE	2	c/r	56	97	6	5	-	-	10	10	450	1	*
Renfrew (Abbotsl.)	1000.6	+2	E'N	4	c	59	85	6	5	3	-	9	10	800	1	*
Eskdalemuir	999.6	+4	E'N	4	rr	58	92	6	6	-	-	10	10	800	1	*
Point of Ayre	998.4	0	SSE	2	bc	61	85	8	2	4	-	1	2-3	4000	1	1
Tiree	1001.1	0	NNE	5	d₀d₀	54	92	7	5	-	-	10	10	1500	1	4
Stornoway	1007.7	+8	NE	7	rr	51	92	7	5	2	-	9	10	1500	1	3
Dalwhinnie	1004.3	0	NNE	5	ir	51	97	5	6	-	-	10	10	800	1	*
Aberdeen	1004.6	+4	NE	2	c	56	92	6	5	-	-	10	10	2500	1	1
Wick	1006.9	-2	NE	6	c	51	92	7	5	2	-	9	10	450	1	3
Lerwick	1009.4	+2	NE	6	c	52	92	8	8	7	-	7-8	10	800	0	*
Blacksod Point	999.0	+4	N	8	ir	57	97	7	6	-	-	10	10	450	2	5
Malin Head	999.7	+4	NE	4	rr	56	97	6	3	-	-	9+	9+	800	0	3
Aldergrove	997.3	+2	E	3	bc	63	75	8	2	3	2	2-3	4-6	2500	1	*
Birr Castle	995.8	0	NW	1	pr	60	85	8	8	7	-	7-8	9	800	1	*
Valentia Obsy.†	998.6	+6	N'W	5	pr	59	85	8	6	2	-	7-8	9+	800	1	3
Roches Point	996.6	0	W	1	PR	58	97	8	9	7	-	4-6	7-8	1500	1	2

PAST 24 HOURS. Weather.

Stations	7h.—13h. 14th (37)	13h.—18h. 14th (38)	18h. 14th to 1h. 15th (39)	1h. 7h. 15th (40)
London (Kew)	cid₀c	cpr₀cbc	bcbbc	cpr₀c
Croydon	d₀d₀ ir₀id	cbc	cbccw	cpr₀
S. Farnborough	r₀rd₀pr	cpr₀bc	bcb	bcpcpr₀
Boscombe Down	r₀r₀ir₀c	cbc	bccbc	bcpcrcr
Calshot (Soton.)	crrid,cir₀	cpr₀bc	cpr₀bc	cr₀rprc
Lympne	bccbcm₀	cm₀r₀r bc	bcpr₀	cpr₀c
Manston	cir₀d₀r₀	cir₀id₀pr	cbcm₀w	bccm₀pr₀
Shoeburyness	ccir₀c	cr₀rbc	bcb	bwc
Felixstowe	cir₀r₀r₀	ir₀dd,bc	bcpr₀b	bbc
Gorleston	cpr₀	cpr₀bcq	bcpr₀	bccpr₀
Mildenhall	cir₀	cpr₀cbcy	bcybcb	bbc
Cranwell	cr₀r₀irm₀	cir₀prc	cbc	bcfgwf₀
Birmingham	orcpr	cPR	cbcc	cpr₀bcc
Upper Heyford	crr₀Rc	ccprc	bcb	bccir₀ir
Ross-on-Wye	d₀bccpbc	cp₀Pcp	cp₀Pc	c
Hartland Point	bcp	bcp	bcc	cp
Bristol	bcd₀cp₀	cPRp₀	cp₀bcc	crRR
Portland Bill	c	cbc	cpr	cir
Plymouth	pr₀c, prc	bcc	bccpr₀	cPRc
The Lizard	cbc	bc	bcprc	cpr₀c
Scilly (St. Mary's)	bccp₀	bcp₀cp₀	cpbc	bcc
Guernsey	cprbc	c	bcco	ocbc
Pembroke	pr₀bc	bcc	ciRo	oiRc
Holyhead	rrd₀bc	bccy	c	c
Chester (Sealand)	cm₀PR	m₀z₀tlrpr	cprrbcm	bccm₀w
Manchester	cr₀rm₀pr₀	PRtlRqc	c	ccm₀
Spurn Head	ir₀c	prc	cbc	bccw
Catterick	id₀ir₀	mRRcm₀	m₀ir₀cm₀	cm₀of
Tynemouth	cmp₀	cp₀cp	cpc	cpbc
St. Abbs Head	m₀irc	rrF	rFfc	Ffem
Leuchars	om₀ir₀	irr₀r₀crr₀c	cr₀rRRm₀	RRcff
Renfrew (Abbotsl.)	r₀r₀rrcm₀	iRir₀idcm	cm₀ffir₀	cm₀ir₀r₀r₀
Eskdalemuir	cd₀d₀id₀	bctorr	orrcrm₀	r₀r₀om₀
Point of Ayre	rr	cbc	bccw	cr₀t
Tiree	od₀rr	orrd	od₀R	cd₀r
Stornoway	crr	crr	crr	cr₀r₀
Dalwhinnie	cir	cir	·	cir
Aberdeen	ffr₀om	ocz₀	cr₀rf	oRRff
Wick	r₀r₀c	rrr₀r	cm₀f	fm₀f₀
Lerwick	c	cpr₀	cir₀	cirfe
Blacksod Point	R	iRq	iRq (gale)	Rrq (gale)
Malin Head	crrc	cir₀c	ciRcrrc	crrc
Aldergrove	rr₀r₀m₀c	cbc	bc	bccm₀
Birr Castle	circ	cpr	cpr	cprc
Valentia Obsy.†	ciRir₀c	cpr₀	PRirr₀r	irpr
Roches Point	idPR	cPR	cprc	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.
if, 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.

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.*

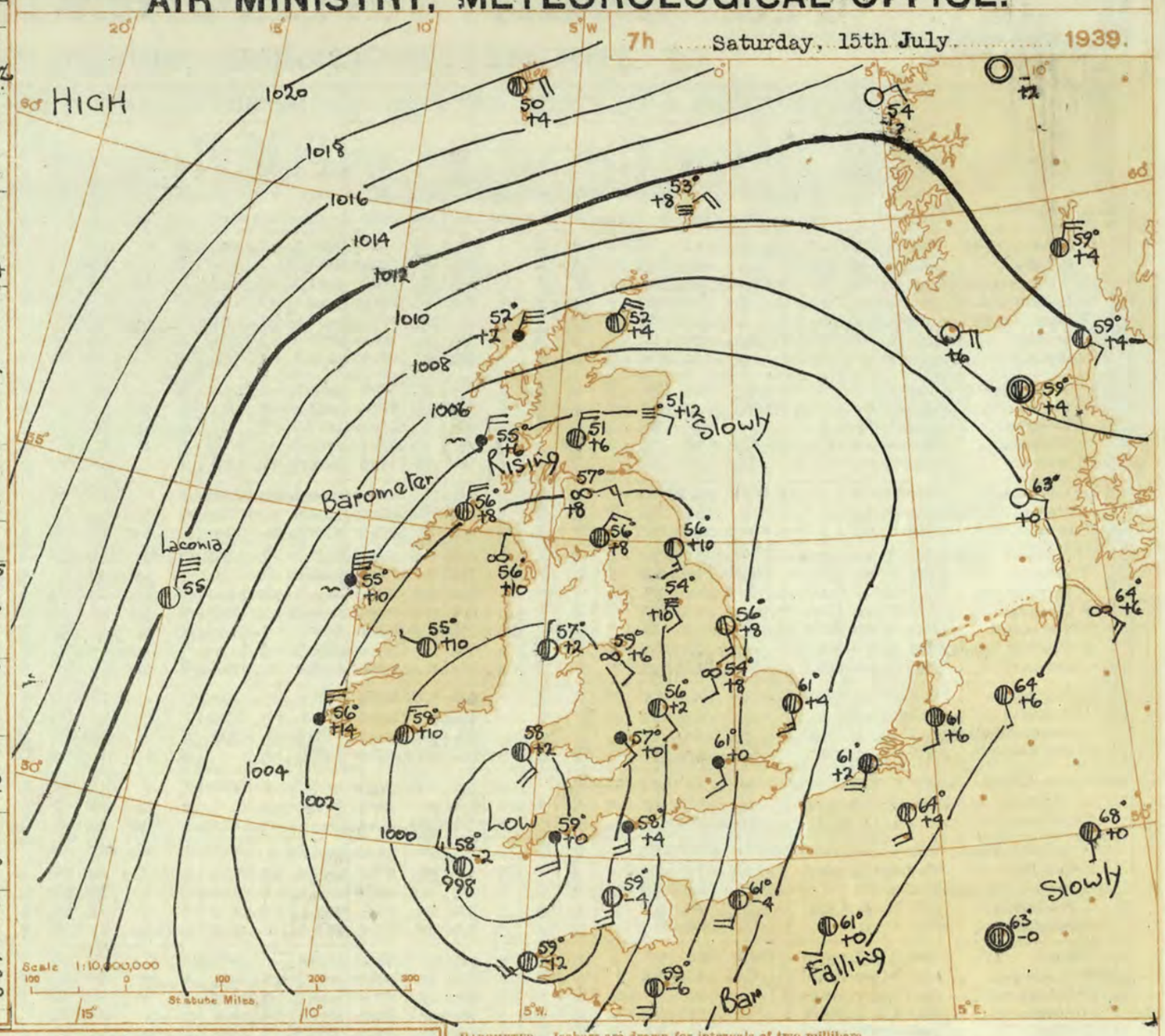
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 14th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 13th to 9h. 14th	Temperature. (°F) Max. 9h.—17h. 14th	Rainfall. (mm.) Night 17h. 13th to 9h. 14th	Rainfall. (mm.) Day. 9h.—17h. 14th	Sunshine. (Hrs.) Sunrise to 17h. 14th	Sunshine. (Hrs.) Sunrise to Sunset 13th
1	Tunbridge W.	odop	ocbc	53	69	Trace	1	3·4	8·8
	Bournemouth	co	opc	55	63	9	0·5	1·9	12·3
	Ventnor ...	rofc	cbbc	58	64	5	Trace	3·5	9·6
	Southsea ...	copo	ocbc	59	66	6	0·3	3·4	10·5
	Bognor Regis	rocbc	bc	59	64	4	Trace	4·4	8·2
	Littlehampton	cpcbc	bc	59	64	4	Trace	4·8	9·2
	Worthing ...	c	bcbbc	59	65	3	-	3·9	9·4
	Brighton ...	c	bcb	59	64	1	0·1	3·3	7·4
	Eastbourne† ...	rodo	ocbcc	58	66	0·4	1	3·1	10·3
	Hastings† ...	orod	rcbc	58	64	-	3	3·7	10·4
	Folkestone ...	ccror	ircbc	57	70	-	1	4·8	8·6
	Dover ...	bcoro	orobc	59	66	-	1	5·1	9·2
	Deal	bcbcc	ocrbc	57	67	-	2	5·4	11·4
	Ramsgate ...	bcod	dcrc	59	65	-	Trace	3·7	9·0
	Margate ...	bc	cpbc	57	69	-	1	4·4	10·2
2	Southend ...	copoc	cpbcb	57	70	-	Trace	3·0	10·8
	Clacton-on-Sea	bccir	cirbc	60	66	-	0·3	2·1	11·5
	Dovercourt ...	bc	bcroc	59	66	-	Trace	3·7	12·1
	Lowestoft ...	bcbbc	cprbc	56	67	-	Trace	6·6	11·4
	Skegness ...	ocbco	rorcb	58	68	-	Trace	2·0	12·1
	Mablethorpe...	cop	cbcc	52	69	-	Trace	1·4	11·2
	Cleethorpes ...	bccr	irobc	51	66	-	2	1·9	10·5
3	Leamington S.	rc	c	49	68	4	-	2·3	6·7
4	Cheltenham†	copoc	bccpo	55	69	4	Trace	5·1	10·7
5	Bath	bccpo	cbcpo	57	68	5	0·3	6·2	10·5
	Weymouth ...	ccb	b	57	65	6	-	7·0	11·8
	Jersey ...	rcbcc	cpcr	56	65	5	1	3·1	10·6
	Torquay ...	copobc	bcp	57	65	11	0·8	5·4	7·8
	Falmouth ...	cucor	cpbcp	56	65	21	0·3	7·4	0·9
	Penzance ...	poc	bcc	54	66	8	Trace	4·8	0·0
	St. Ives ...								
	Bude... ...	bbcp	bc	56	64	8	0·4	4·9	0·5
	Ilfracombe ...	rrcbc	pcbc	53	65	15	1	6·0	3·7
6	Aberystwyth	prcbc	prbc	57	64	8	1	3·8	0·0
7	Llandudno ...	c	ircbc	57	66	4	1	3·4	4·7
	Colwyn Bay...	cbcc	pbc	57	69	3	0·3	3·6	4·0
	Rhyl	prcbc	cpro	57	67	4	0·3	4·0	3·5
8	Wallasey ...	coR	pcbcc	56	67	5	8	3·7	2·9
	Southport ...	pocP	bcpc	55	69	7	3	2·8	1·1
	Blackpool ...	orc	gPc	55	69	10	2	3·2	0·6
	Morecambe ...	cdrp	pbcdr	57	66	5	3	1·5	0·1
9	Ilkley... ...	o	otor	54	69	1	3	0·0	4·6
	Harrogate ...	c	tIR	53	62	1	7	0·4	7·7
10	Berwick-on-T.	omoro	roro	54	57	Trace	2	0·0	0·8
11	Dunbar ...	crrmo	crrmo	59	57	11	3	0·0	0·2
12	Troon... ...	rrorr	rroco	57	65	9	1	1·0	0·0
	Douglas ...	bcpr	b	50	62	12	Trace	4·7	0·0

† Max. Temp. for period 21h. yesterday to 17h. to-day; Min. Temp. 21h.-9h.



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

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 15th July, 1939.

Districts.	Forecasts
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind southerly, backing towards east, moderate to light: variable sky; showers with local thunder; some morning fog: warm and close.
5 S.W. England 6 South Wales ...	Wind variable light, becoming northwest moderate; showery; local thunder likely; some brighter periods; close.
7 North Wales ... 8 N.W. England 9 N. Midlands ...	Wind easterly, light; variable sky; showery; local thunderstorms; some bright intervals; rather warm and close.
10 N.E. England 11 S.E. Scotland	Wind becoming easterly light; foggy on east coast; fairer periods inland but local thundery rain; cool on the coast, warmer inland.
12 S.W. Scotland & Isle of Man	Wind northeast, moderate or fresh; mainly dull at first, somewhat brighter later; becoming rather warm and close.
13 { A. W. Scotld. ▲ B. N.W. Scotland. ▲	Wind northeast to east, fresh to moderate; mainly cloudy or dull; rather persistent coast fog; cool on the coast.
14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Wind north to northeast, moderate inland, fresh or strong on west coast; cloudy and brighter periods; showery; perhaps thunder locally; rather close.
17 N. W. Ireland ▲ 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland ▲	

GENERAL INFERENCE.

A belt of high pressure lies to the northwest of the British Isles. A depression centred over Cornwall and shallow disturbances from the Continent are expected to maintain low pressure over most of Western Europe. Warm, close, thundery weather will occur over England and Wales, but conditions will become mainly fair over most of Scotland and Northwest Ireland.

FURTHER OUTLOOK.

Mainly fair in the Northwest; close thundery weather in England and Wales.

Times of issue of Gale Warnings.

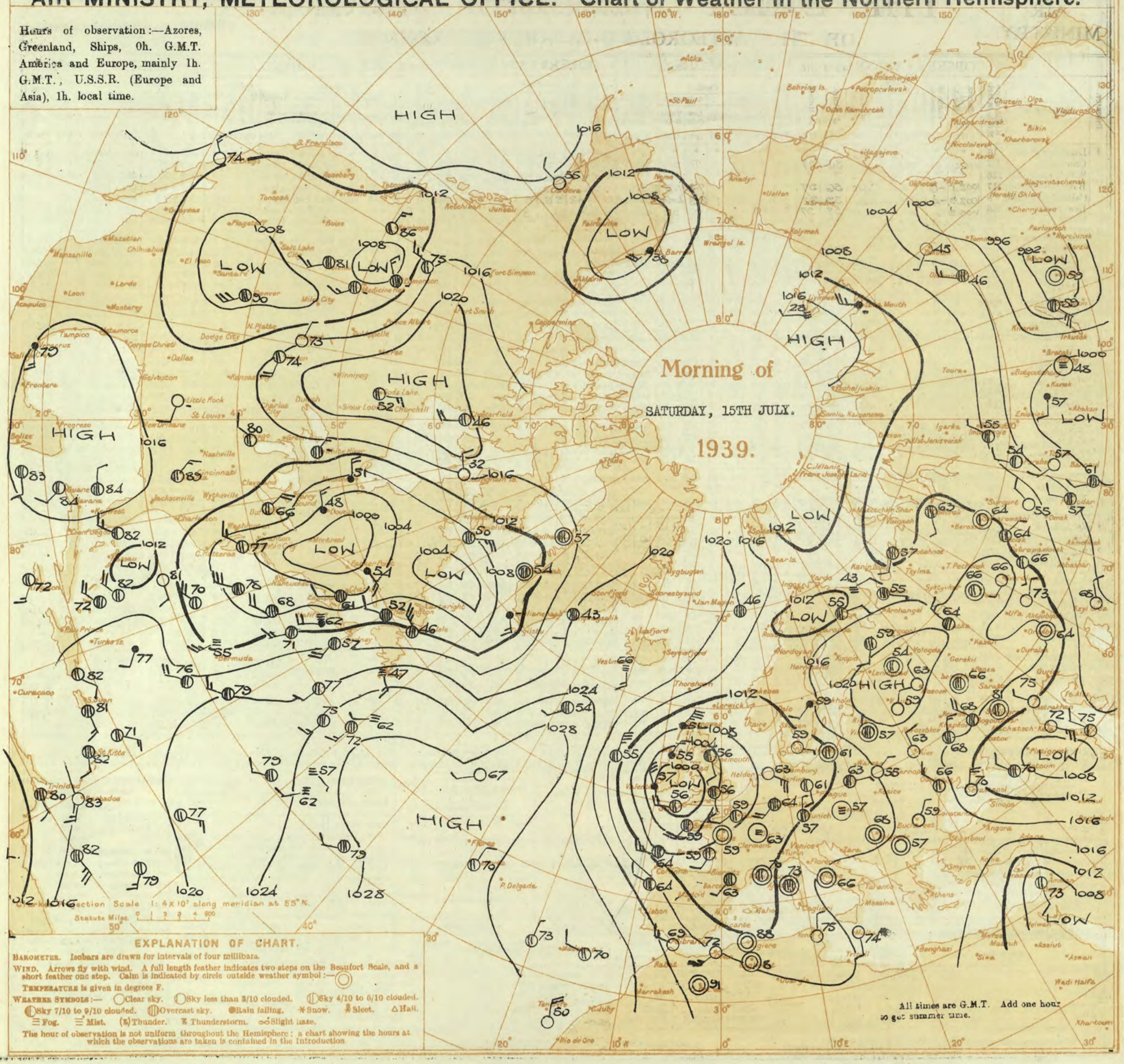
▲ North Cone hoisted at 1405 G.M.T. on 14/7/39 in districts 13A, 13B, 17, and part of 20.

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.



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, 15th July, 1939.
No. 28359.

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

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	1004.2	0	SSE	1	c	56	97	8	5	7	-	Tr	9+	1500
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1002.1	-6	S	3	c/pr	56	97	7	5	-	-	7-8	7-8	800
	Calshot (Sthmtn.)	8	1002.9	-4	SSE	4	bc	59	92	7	6	4	1	2-3	4-6	1500
	Lympne	346	1005.9	0	SSE	2	pr	57	97	8	8	-	-	9	9	4000
	Manston	154	1005.1	+2	S'E	2	bc	56	97	6	-	4	-	0	2-3	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1004.4	+4	S'W	3	bc	60	85	8	5	4	-	4-6	4-6	2500
	Mildenhall	19	1003.5	+6	S'E	2	b	54	85	7	-	-	-	0	0	-
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	998.2	-8	SSE	3	c	56	92	8	5	4	-	4-6	7-8	2500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1001.1	-8	S	4	c	58	92	8	5	-	-	10	10	2500
	Plymouth	82	999.4	-10	S	4	pr	58	92	7	9	-	-	9	9	1500
	The Lizard	240	998.8	-16	S	4	c	56	97	8	8	2	-	7-8	9+	2500
	Scilly (St. Mary's)	163	998.0	-12	W	4	bc/pr	56	97	8	8	-	-	2-3	2-3	1500
	Guernsey	175	1002.6	-8	S	4	o	57	92	8	5	-	-	10	10	800
6	Pembroke	142	997.6	-2	S'E	3	ir	58	92	7	8	-	-	10	10	1500
7	Holyhead	26	998.6	0	SE	1	c	57	92	8	7	-	-	9+	9+	4000
	Chester (Sealand)	16	1000.0	+6	SE'E	1	z	55	92	6	5	-	-	2-3	2-3	2500
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1001.8	+6	S'E	3	bc	57	85	7	-	4	8	0	2-3	-
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1001.4	+6	SSE	2	c	56	97	6	5	-	-	9	9	1500
11	St. Abbs Head	280	1001.6	-4	SE	2	F	55	97	1	-	-	-	10	10	<150
	Leuchars	36	1002.3	-6	NE	2	RR	55	97	5	6	-	-	10	10	<150
12	Renfrew (Abbots I.)	19	1001.8	+2	E'S	2	c/r	56	92	6	6	3	-	7-8	10	800
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	999.6	+4	E	2	c	57	97	7	5	-	-	7-8	7-8	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1007.9	-2	NNE	7	r°r°	51	92	7	5	2	-	4-6	10	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1006.8	-4	NE	4	f	52	97	2	-	-	-	10	10	<150
16	Lerwick	156	1010.1	0	NE	5	c/r	52	97	7	8	2	-	7-8	10	800
17	Blacksod Point	18	1001.9	+10	N	8	ir	55	97	7	6	-	-	10	10	<150
18	Malin Head	84	1001.1	+4	N'E	3	rr	55	97	5	9	-	-	9+	9+	800
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1000.5	+4	N'W	6	iR	57	97	6	8	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1002.9	+2	SSW	3	c	61	85	6	5	-	-	9+	9+	2500	1	*
Croydon	1003.6	0	S'E	3	pr	61	85	8	9	3	-	7-8	9+	1500	1	*
S. Farnborough	1002.4	+4	SSE	3	c/pr	58	92	7	5	-	-	9+	9+	800	1	*
Boscombe Down	1000.9	0	S'E	4	ir	57	97	7	6	7	-	7-8	9	1500	1	*
Calshot (Sthmtn.)	1002.1	+2	S'E	5	c	60	85	8	8	3	9	7-8	9+	1500	1	2
Lympne	1005.4	+2	S	3	c	59	92	8	5	-	6	7-8	9+	800	0	§3
Manston	1004.5	0	S	3	c	60	85	8	8	-	-	9+	9+	1500	1	*
Shoeburyness	1004.1	0	S'W	4	c	61	85	8	8	-	2	9+	9+	1500	0	*
Felixstowe	1004.0	+2	SSW	3	bc	63	85	8	8	7	9	4-6	4-6	1500	0	2
Gorleston	1004.6	+4	S	3	c/pr	61	85	7	5	3	-	4-6	9	2500	1	2
Mildenhall	1003.2	+2	SSE	3	c	61	85	8	1	3	-	1	7-8	2500	1	*
Cranwell	1003.3	+8	SSE	2	z	54	97	6	5	-	-	10	10	220	0	*
Birmingham	1001.6	+2	SE	2	c	56	92	6	5	7	-	7-8	9+	2500	1	*
Upper Heyford	1002.1	+2	SE	2	c	57	92	7	6	4	1	9	9+	800	1	*
Ross-on-Wye	1000.4	0	SE	2	PR	57	92	7	6	7	-	9+	10	1500	1	*
Hartland Point	997.0	0	S	2	c	58	92	8	8	4	-	7-8	9	1500	1	2
Bristol	1000.2	-2	SE	3	r°r°	56	97	6	6	2	-	7-8	10	800	1	*
Portland Bill	1001.4	+4	S	4	ir°	58	92	7	5	-	-	10	10	2500	1	3
Plymouth	997.9	0	S'E	4	pr	59	92	6	9	-	-	10	10	800	1	2
The Lizard	997.2	-2	-	0	bc	56	97	8	8	7	-	4-6	4-6	2500	1	2
Scilly (St. Mary's)	997.0	-2	NW'W	3	c/p	58	97	8	8	6	-	7-8	9+	800	1	3
Guernsey	1000.8	-4	S	5	c/p bc	59	85	8	8	3	-	2-3	4-6	1500	1	3
Pembroke	997.3	+2	SE	4	c/r	58	97	7	8	-	-	9+	9+	1500	1	2
Holyhead	999.4	+2	N	1	c	57	97	7	5	1	-	7-8	9+	2500	1	0
Chester (Sealand)	1000.6	+6	SE	2	z	59	85	6	5	2	-	9+	10	4000	1	*
Manchester	1001.1	+8	SE'E	2	z	59	85	6	5	3	-	7-8	9	4000	1	*
Spurn Head	1003.7	+8	S'E	3	bc	56	92	6	-	4	8	0	4-6	-	0	1
Catterick	1002.0	+10	SSE	2	f+	54	97	3	-	-	-	10	10	<150	1	*
Tynemouth	1001.8	+10	SSE	3	bc	56	97	6	2	-	1	4-6	4-6	2500	1	2
St. Abbs Head	1002.7	+12	SE	2	m	54	97	4	5	2	-	7-8	9+	2500	1	1
Leuchars	1002.9	+10	NE	2	f-	55	97	3	-	-	-	10	10	<150	1	*
Renfrew (Abbots I.)	1002.5	+8	E'N	3	z	57	97	6	6	2	-	9	10	450	1	*
Eskdalemuir	1001.3	+8	NE	3	o	56	92	6	5	-	-	10	10	800	1	*
Point of Ayre	1000.7	+8	ESE	2	r°r°	58	97	6	8	2	-	7-8	10	1500	1	1
Tiree	1003.6	+6	NNE	4	Dr	55	92	7	-	2	-	9+	9+	1500	1	3
Stornoway	1008.4	+2	NNE	6	r°r°	52	97	6	5	2	-	7-8	10	1500	1	3
Dalwhinnie	1005.0	+6	NNE	4	c	51	97	5	6	-	-	10	10	800	0	*
Aberdeen	1004.9	+12	ESE	2	m/f	*	97	4	5	-	-	10	10	<150	1	1
Wick	1007.[illegible]	+4	NE	4	o	52	97	5	5	-	-	10	10	220	1	2
Lerwick	1010.8	+8	NE'E	4	F+	53	97	1	-	-	-	10	10	<150	1	*
Blacksod Point	1004.7	+10	N	8	ir	55	97	6	6	-	-	10	10	<150	2	5
Malin Head	1002.5	+8	NNE	4	c	56	92	7	9	-	-	9+	9+	1500	0	3
Aldergrove	1001.0	+10	NNE	1	z	56	97	6	5	-	-	10	10	800	1	"
Birr Castle	1000.2	+10	WNW	1	c	55	97	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	1001.7	+14	N	5	pr	56	92	7	6	-	-	10	10	1500	2	3
Roches Point	999.0	+10	N'E	3	c	58	97	8	5	-	-	7-8	7-8	1500	1	1

PAST 24 HOURS.

Stations.	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 14th Hrs. (36)
London (Kew)	67	55	50	0.2	Tr	5.3
Croydon	69	55	51	0.3	Tr	6.2
S. Farnborough	66	54	49	3	0.4	4.2
Boscombe Down	65	54	52	0.2	3	5.5
Calshot (Sthmtn.)	65	58	56	1	2	2.9
Lympne	65	55	49	3	0.3	5.7
Manston	69	55	51	1	0.5	5.3
Shoeburyness	69	57	53	1	-	4.8
Felixstowe	68	58	55	0.1	Tr	3.5
Gorleston	67	56	55	Tr	Tr	6.8
Mildenhall	69	52	47	0.1	-	3.7
Cranwell	67	46	42	1	Tr	1.2
Birmingham	66	53	50	3	Tr	3.2
Upper Heyford	66	53	50	7	2	*
Ross-on-Wye	67	55	53	3	1	3.0
Hartland Point	60	55	54	0.1	Tr	10.3
Bristol	65	54	50	6	5	5.2
Portland Bill	60	56	*	-	1	*
Plymouth	62	56	55	1	9	9.3
The Lizard	64	55	*	-	2	10.1
Scilly (St. Mary's)	64	55	*	0.1	6	7.1
Guernsey	63	55	54	0.3	-	6.9
Pembroke	61	56	*	0.2	14	8.0
Holyhead	66	56	51	1	-	9.3
Chester (Sealand)	68	54	51	9	1	3.7
Manchester	66	54	52	20	0.1	2.0
Spurn Head	66	54	*	10	Tr	2.0
Catterick	65	53	47	19	0.1	0.0
Tynemouth	58	55	51	1	1	0.3
St. Abbs Head	58	53	*	0.3	7	*
Leuchars	58	54	54	1	7	0.0
Renfrew (Abbots I.)	61	56	55	4	2	0.0
Eskdalemuir	64	53	53	2	7	0.7
Point of Ayre	63	55	*	1	0.2	4.7
Tiree	57	53	52	9	8	0.0
Stornoway	52	50	*	4	3	0.0
Dalwhinnie	53	50	50	3	9	0.0
Aberdeen	58	53	52	1	22	0.0
Wick	52	51	*	5	Tr	*
Lerwick	53	51	*	Tr	1	0.2
Blacksod Point	64	53	*	8	11	*
Malin Head	58	54	*	11	9	0.4
Aldergrove	65	52	48	7	-	4.9
Birr Castle	63	54	50	5	3	1.2
Valentia Obsy. †	63	56	56	3	9	1.3
Roches Point	59	56	*	8	0.6	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet.	Weather Morning. (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	cidc	cpr°cbc	bccprc	67	55	50	0.2	Tr	5.3	•	•	8
Croydon	217	d°d°ir°id	cbc	cbcawcpr°	69	55	51	0.3	Tr	6.2	•	•	8
Greenwich (Royal Observatory)	149	cid°	cbcy	bc	70	54	44	Tr	-	5.5	63	68	8
City (Bunhill Row)	—	•	•	•	•	•	•	•	•	5.0	•	•	•
Westminster (St. James' Park)	27	•	•	•	70	56	51	+		5.0	67	68	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	70	56	52	Tr	-	4.8	60	73	•
Camden Square	110	c	c	•	69	57	51	-	-	*	•	67	•
Kensington	80	bc	bc	•	69	57	52	-	Tr	5.[illegible]	At 18h. 63	63	•
Hampstead Observatory	450	bc	bcp	bc	68	55	51	-	Tr	5.0	•	71	•

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

South Kensington. Max.	Time.	Min.	Time.
<0.3 whole period			

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

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 14th July Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 15th July 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	1007.5	WSW	3	ir°	64	1007.7	SSW	2	c	61	73	59	0.6	0.2
Brussels	1006.0	SW	3	c	72	1007.3	S	4	c	64	81	59	-	1
Berlin	1009.9	SSW	1	z°	75	1010.4	S	1	z°	70	79	61	Tr	-
Zurich	1011.0	SE	1	ir°	68	1010.2	ESE	1	bc	61	82	59	1	5
Rome	1015.3	SE	4	bc	79	1013.5	SE	6	b	79	*	*	-	-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § See disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday, 16th July, 1939.
No. 28360

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	°F. Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1002.4	-8	S	4	c	69	55	8	8	-	3	7-8	7-8	2500
	Croydon ...	1003.0	-6	S	3	c	67	65	8	2	4	-	7-8	7-8	4000
	S. Farnborough	1001.8	-6	SSE	4	c/pr	64	75	8	9	-	3	9	9+	2500
	Boscombe Down	1000.7	±2	S	5	c/pr	60	85	7	8	7	-	4-6	9	1500
	Calshot (Soton.)	1001.9	0	SSE	4	c/pr	63	85	8	2	3	-	9	9+	1500
	Lympne ...	1005.2	-2	SSE	3	c	67	75	8	8	6	1	2-3	7-8	1500
	Manston ...	1004.4	-2	SE'E	3	c	66	75	8	2	-	3	4-6	7-8	2500
2	Shoeburyness ...	1003.8	-6	SSE	4	bc	71	75	9	8	7	3	2-3	4-6	4000
	Felixstowe ...	1004.5	+2	S'E	4	bc	67	65	8	2	6	8	1	4-6	2500
	Gorleston ...	1004.5	0	SSE	5	bc	65	75	7	2	-	1	2-3	4-6	2500
	Mildenhall ...	1002.7	-6	SSE	4	c/pr	66	65	8	8	7	-	7-8	7-8	2500
	Cranwell ...	1002.6	-6	E	1	pr	65	75	7	9	3	-	9	9+	1500
3	Birmingham ...	1001.3	0	SSE	2	pr	61	85	8	6	7	-	4-6	9+	1500
	Upper Heyford	1001.9	+2	SSE	3	PR	60	92	7	8	-	-	9	10	1500
4	Ross-on-Wye ...	1000.2	+4	SE'E	2	ir	59	85	7	9	-	3	9+	10	2500
5	Hartland Point	997.7	+6	NE	3	c	61	85	8	8	6	3	4-6	7-8	1500
	Bristol ...	1000.1	+2	SE	3	c/r	62	85	8	5	2	-	7-8	10	1500
	Portland Bill ...	1000.6	-4	S	4	c	60	85	7	5	4	-	7-8	9	4000
	Plymouth ...	998.2	+10	SW	3	c	62	85	8	9	7	1	4-6	7-8	1500
	The Lizard ...	998.5	+8	SW	3	bc	62	85	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	999.0	+10	NW	3	c	65	85	8	8	6	3	4-6	7-8	1500
	Guernsey ...	1000.3	0	S	3	iro	60	97	7	8	3	-	7-8	9	1500
6	Pembroke ...	998.7	+4	NNW	1	c/pr	60	92	7	8	4	-	7-8	9	1500
7	Holyhead ...	999.4	-2	N	3	bc	64	75	8	2	8	4	4-6	4-6	4000
	Chester (Sealand)	1000.8	-2	ESE	3	c/pr	66	65	6	8	-	-	9+	9+	2500
8	Manchester ...	1001.3	-2	SSE	4	c/pr	65	65	7	8	3	-	9	9+	2500
10	Spurn Head ...	1003.5	0	ESE	4	c	64	85	7	4	4	8	2-3	7-8	4000
	Catterick ...	1002.4	-6	SE'E	3	c	66	65	8	8	-	-	7-8	7-8	2500
	Tynemouth ...	1003.5	+4	SE	3	bc	59	85	6	2	3	-	4-6	4-6	2500
11	St. Abbs Head...	1004.1	+6	SE	2	bc	60	92	6	7	4	4	4-6	4-6	1500
	Leuchars ...	1004.9	+6	NE	2	f	57	97	3	-	-	-	10	10	<150
12	Renfrew (Abbotsl.)	1003.1	-2	E	4	c	67	65	7	9	3	-	4-6	7-8	1500
	Eskdalemuir ...	1001.5	0	ESE	3	c	64	65	7	8	4	1	7-8	9	2500
	Point of Ayre ...	1001.9	0	E	2	c	63	85	6	2	3	-	1	7-8	1500
13A	Tiree ...	1003.8	0	N'E	4	c	56	85	8	5	4	-	4-6	7-8	2500
13B	Stornoway ...	1009.0	0	NNE	5	roro	54	97	6	5	2	-	9	10	1500
15	Dalwhinnie ...	1005.7	+4	NNE	3	ir	58	92	6	4	6	-	7-8	10	1500
	Aberdeen ...	1006.0	+2	NNE	2	F	55	97	2	-	-	-	10	10	<150
	Wick ...	1008.1	+4	NNE	3	m	53	97	4	5	-	-	10	10	450
16	Lerwick...	1011.1	-2	NE	4	c	54	97	6	5	2	-	7-8	10	450
17	Blacksod Point...	1005.9	+8	N	8	iD	56	97	7	6	-	-	10	10	<150
18	Malin Head ...	1003.8	0	N'E	2	roro	55	92	6	6	2	-	4-6	10	1500
	Aldergrove ...	1001.9	+2	NNE	1	zo	61	85	6	5	1	-	7-8	10	1500
19	Birr Castle ...	1001.9	+2	NW	2	c	66	75	8	8	7	3	4-6	9	1000
20	Valentia Obsy.†	1004.4	+14	N'W	5	c	57	92	7	5	-	-	10	10	800
	Roches Point ...	1000.8	+6	N'E	4	c/pr	61	85	8	9	-	-	7-8	7-8	1500

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

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)	1001.4	-8	S	4	bc	67	55	8	8	6	1	4-6	4-6	4000	0	*
Croydon	1001.8	+10	S	3	c	68	55	8	2	6	1	4-6	7-8	4000	0	*
S. Farnborough	1000.9	-6	SSE	4	c/pr	65	65	8	8	6	3	4-6	7-8	2500	0	*
Boscombe Down	1000.2	-6	SE'S	3	pr	62	85	7	8	7	9	4-6	9	1500	1	*
Calshot (Soton.)	1000.9	-6	SSE	4	bc/pr	63	85	8	9	8	3	2-3	4-6	1500	1	§2
Lympne	1003.8	-6	SE'E	2	PR	62	85	8	8	-	1	7-8	7-8	1500	0	§2
Manston	1002.9	-10	E	3	bc	65	75	8	3	6	3	1	2-3	2500	0	*
Shoeburyness	1003.0	-8	ESE	4	bc	66	85	9	8	7	3	2-3	4-6	4000	0	*
Felixstowe	1003.3	-10	SE	3	b	65	75	8	2	-	3	tr	1	2500	0	2
Gorleston	1004.1	-2	SE	4	b	63	85	7	-	4	-	0	1	·	0	3
Mildenhall	1001.8	-6	SSE	4	bc	68	55	8	7	6	-	2-3	4-6	4000	0	*
Cranwell	1002.2	-2	N	1	c	59	92	6	9	3	-	7-8	9	1500	1	*
Birmingham	1001.5	-4	E	1	pr	58	92	8	9	7	-	9	9+	1500	1	*
Upper Heyford	1001.3	-2	S	1	c/pr	60	92	8	9	6	-	9	9+	1500	1	*
Ross-on-Wye	999.5	-6	SSE	2	c	63	85	8	8	-	-	7-8	7-8	2500	1	*
Hartland Point	998.6	+4	NNE	1	bc	60	85	8	3	-	3	2-3	4-6	1500	0	2*
Bristol	999.6	0	S	3	bc	62	75	8	8	4	1	4-6	4-6	2500	1	
Portland Bill	1000.5	+2	SSW	4	c	61	85	7	1	4	-	4-6	7-8	4000	1	3
Plymouth	998.8	+4	SWW	2	c	60	85	8	2	7	3	4-6	7-8	1500	1	2
The Lizard	999.3	0	WSW	3	bc	62	85	8	8	6	-	4-6	4-6	2500	0	1
Scilly (St. Mary's)	999.5	+2	NWW	5	cjp	61	92	8	8	8	3	7-8	9+	1500	1	3
Guernsey	1000.7	0	SSW	3	c	59	97	7	4	1	-	7-8	9	1500	1	4
Pembroke	998.9	+2	NNE	1	rr	59	92	8	8	-	-	9+	9+	1500	1	1
Holyhead	999.8	0	N'E	4	c	60	85	9	2	9	8	2-3	9	4000	1	2*
Chester (Sealand)	1000.7	-2	SSE	2	c	64	75	8	8	7	-	7-8	9	2500	1	*
Manchester	1001.3	0	E'S	3	c	66	65	7	8	3	-	4-6	9	4000	1	
Spurn Head	1002.5	-4	E	3	c	59	92	6	6	4	-	4-6	7-8	2500	0	2
Catterick	1002.6	-2	-	0	pr	61	85	8	8	7	-	7-8	9	1500	1	*
Tynemouth	1003.4	+2	SSE	3	bc	59	92	7	2	6	-	4-6	4-6	1500	1	2
St. Abbs Head	1004.9	+6	ESE	2	bc	57	97	6	5	4	1	2-3	4-6	1500	0	1
Leuchars	1005.4	+2	ENE	2	m	56	97	4	-	2	-	10	10	220	1	*
Renfrew (Abbotsl.)	1004.1	+6	ESE	1	c/r	61	85	7	8	3	-	9	9+	1500	1	*
Eskdalemuir																*
Point of Ayre	1001.9	+2	NE	2	c	60	85	7	8	8	-	4-6	7-8	1500	0	1
Tiree	1004.3	0	N	3	c	57	92	8	5	-	-	9	9	2500	0	2
Stornoway	1009.1	0	NNE	5	c	54	97	6	5	-	-	10	10	1500	1	3
Dalwhinnie	1005.4	0	NNE	4	c	61	85	6	6	2	-	7-8	10	1500	0	*
Aberdeen	1006.4	0	NE	2	wYd	55	97	4	5	-	-	10	10	<150	1	1
Wick	1007.4	-4	NE	3	roro	53	97	3	-	-	-	10	10	<150	1	2
Lerwick	1011.0	0	ENE	3	c/r	53	97	7	8	7	-	7-8	10	800	1	*
Blacksod Point	1006.4	+4	N	8	iD	55	97	7	6	-	-	10	10	<150	2	5
Malin Head	1003.7	+4	N	2	zo	57	92	6	8	7	-	4-6	7-8	1500	0	3
Aldergrove	1002.3	+6	NE	2	bcE	60	85	6	8	-	-	4-6	4-6	2500	1	*
Birr Castle	1002.2	+8	NW	2	c/pr	61	85	8	9	-	-	7-8	7-8	1500	1	*
Valentia Obsy.†	1006.0	+6	N'W	6	iro	56	92	7	6	-	-	10	10	1500	1	3
Roches Point	1002.0	+4	N	5	ir	59	92	8	6	2	-	7-8	10	1500	1	2

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 15th (37)	13h.—18h. 15th (38)	18h. 15th to 1h. 16th (39)	1h.—7h. 16th (40)
London (Kew)	cpobcy	cybcy	bcyc	crocrorc
Croydon	cPRbc	cbcy	bcprobcc	cWpro
S. Farnborough	cproprbc	cprobcy	bccir	irocbcpro
Boscombe Down	cir prc	cprpro	cproc	cprc
Calshot (Soton.)	c pr	iR pro	bcproc	proPR
Lympne	cbc ⊕	bccpro	cPRbw	bw,c
Manston	cbc	bcb	bcb	bbcw
Shoeburyness	cbc	bc	cpobc	cpbc
Felixstowe	bcebc	bcb	bbc	bcw
Gorleston	cbc	bc	bcc	cbc
Mildenhall	bccpr	cprobcy	cPRc	cbc
Cranwell	cprotlro	ctlRqcm	cmo	cbcfwm
Birmingham	cPR	ciR+	cpr	c
Upper Heyford	cprcrR	c PR	procPR	ccw
Ross-on-Wye	cPcir	cirbcc	ccpbcc	c
Hartland Point	croc	cbc	bcrr	rrc
Bristol	cropocr	cpobc	bcc	cprc
Portland Bill	cpr	c	bc	orrc
Plymouth	roroirc	cbc	bcc	ccrrmo
The Lizard	cprbc	bc	bcprc	cprc
Scilly (St. Mary's)	cpc	cpc	c	clp
Guernsey	ciro	qircf	bcb	bcc
Pembroke	bcprc	crr	oRriroc	c
Holyhead	croc	bcproc	cpromoc	cmoroc
Chester (Sealand)	bczopro	cprzot	crmo	crrmo
Manchester	bccpro	cprc	cproPRprc	cproprcm
Spurn Head	bcc	cprot	prc	cmopr
Catterick	oRcmoc	tprpro	proirc	ciRcmo
Tynemouth	bc	bc	bcoir	oiroff
St. Abbs Head	mocbc	mobc	mmoc	Ffe
Leuchars	f	ff mido	cm	cmo
Renfrew (Abbotsl.)	cbcmobc	bccirо	cbcc	c
Eskdalemuir	omoczo			
Point of Ayre	roroc	c	c	c
Tiree	cDc	bcc	cw	cw
Stornoway	cror о	crorom	crfffe	cfferf
Dalwhinnie	cir	cir	·	cir
Aberdeen	odofefe	fefed	oFFido	oFFdo
Wick	orod	orоr	rrror	rrFF
Lerwick	oFR	ciro	cocrr	crrmo
Blacksod Point	iDrq	iDrq	iDrq	idrq
Malin Head	crrc	cproc	cprozoc	cifc
Aldergrove	cmo	cbcmot	bccmo	cmo
Birr Castle	c	cprtl	cpr	cprc
Valentia Obsy.†	prproe	idiro	ciroc	DDdd
Roches Point	cproe	PRiro	crrc	coc

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. 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.

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 A 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.*

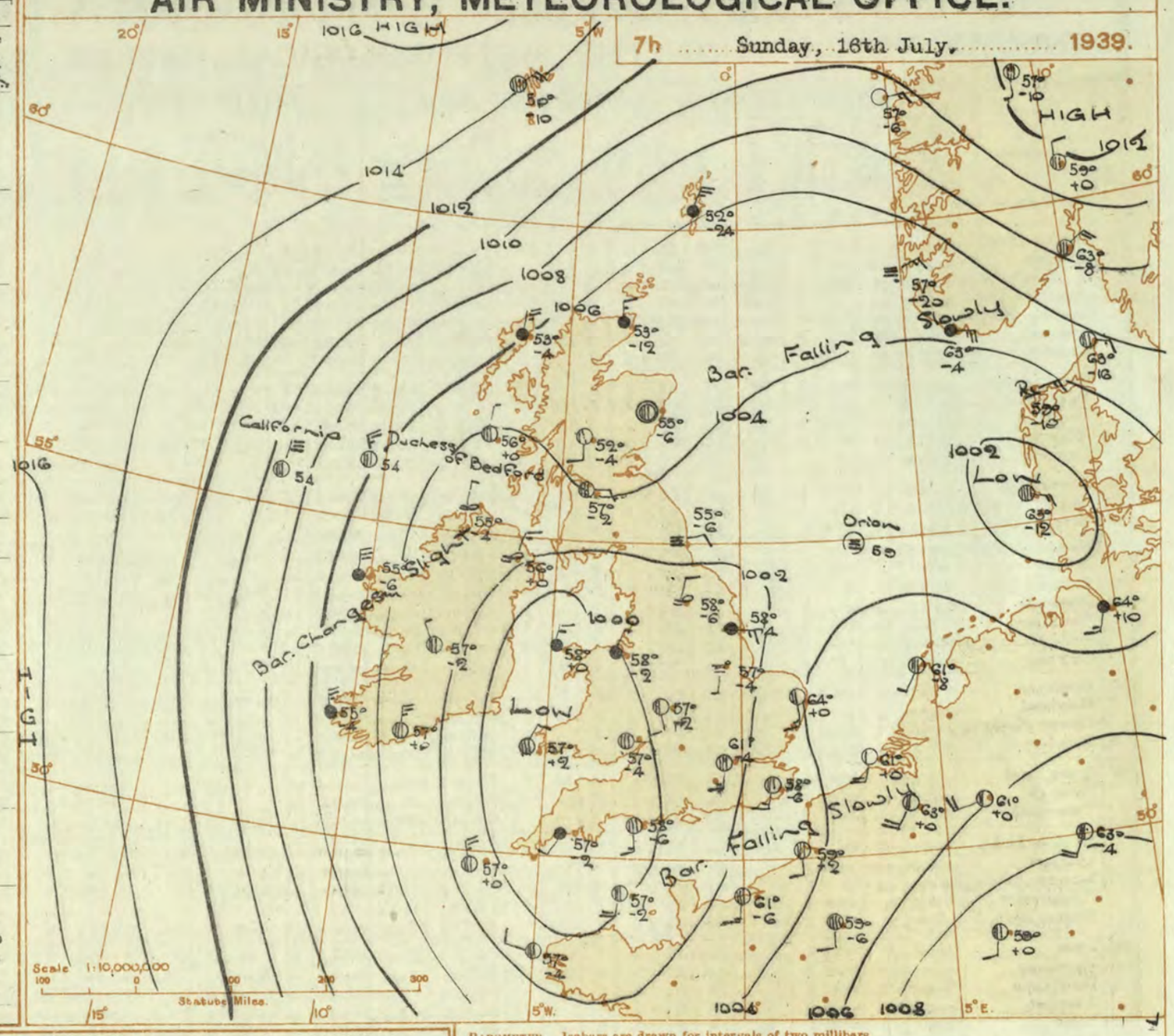
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 15th July 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 14th to 9h. 15th	Temperature. (°F) Max. 9h.—17h. 15th	Rainfall. (mm.) Night. 17h. 14th to 9h. 15th	Rainfall. (mm.) Day. 9h.—17h. 15th	Sunshine. (Hrs.) Sunrise to 17h. 15th	Sunshine. (Hrs.) Sunrise to Sunset. 14th
	Tunbridge W.	c	c	55	72	Trace	-	8·6	5·4
	Bournemouth	cop	roc	56	65	3	3	0·5	2·4
	Ventnor ...	pbcc	bcopc	60	70	1	2	3·3	4·1
	Southsea ...	cbc	cpc	58	68	1	1	4·3	4·2
	Bognor Regis	bc	bccpr	58	65	-	0·5	7·6	6·2
	Littlehampton	bc	bvpbc	59	68	-	0·1	7·9	6·8
	Worthing ...	b	bbcb	59	66	-	-	8·4	6·2
	Brighton ...	b	bcb	59	69	-	-	8·0	5·5
	Eastbourne†...	b	b	58	69	0·1	-	11·3	4·5
	Hastings† ...	bbcc	bcbbc	58	67	0·5	-	8·1	5·2
	Folkestone ...	bcbc	bcbc	57	70	0·5	-	7·9	6·7
	Dover ...	b c	bc	58	67	1	-	10·0	6·8
	Deal	bccbc	b	57	71	1	-	10·5	7·0
	Ramsgate ...	cbc	bc	53	66	Trace	-	8·0	5·4
	Margate ...	bc	bcb	57	70	0·5	-	9·5	5·7
2	Southend ...	bcb	b	57	73	-	-	10·2	4·8
	Clacton-on-Sea	bc	bc	59	66	-	-	10·4	5·3
	Dovercourt ...	bc	bc	58	68	-	-	11·2	5·5
	Lowestoft ...	bcebc	b	56	66	Trace	-	9·8	8·1
	Skegness ...	bcoro	corcb	55	72	-	3	7·1	2·2
	Mablethorpe...	bc	bcp	51	65	-	0·3	7·2	1·4
	Cleethorpes ...	bc	bcpbc	49	67	-	Trace	6·2	2·1
3	Leamington S.	orc	orbc	55	65	0·5	8	1·3	3·0
4	Cheltenham†	corrc	circ	54	65	2	6	1·0	5·2
5	Bath	cir	cirbc	56	67	4	4	2·6	6·2
	Weymouth ...	rip	cb	57	65	2	1	3·8	8·9
	Jersey ...	rcbc	cpr	58	66	0·6	4	3·7	5·3
	Torquay ...	PRpcbc	bcyR	58	65	8	5	5·1	5·8
	Falmouth ...	cvqpr	ptlrc	55	66	1	11	3·6	7·8
	Penzance ...	cpcbc	bcbcc	55	57	5	-	7·2	6·0
	St. Ives ...								
	Bude... ...	bccp	cpbc	56	64	0·6	0·2	2·8	6·5
	Ilfracombe ...	pocc	rrcbc	53	63	0·5	4	2·0	8·2
6	Aberystwyth	prcpr	prcbc	55	65	1	3	0·7	4·4
7	Llandudno ...	cpcbc	cpcbc	53	66	Trace	Trace	3·3	3·5
	Colwyn Bay...	cbcbc	bcc	51	68	1	-	3·1	3·8
	Rhyl	cbc	cprbc	52	70	3	0·2	3·6	4·0
8	Wallasey ...	cbcc	pbccp	57	68	7	1	5·7	4·7
	Southport ...	bcpc	cpctp	53	71	4	1	4·4	3·3
	Blackpool ...	cbc	bcbcp	54	70	2	0·3	3·5	3·5
	Morecambe ...	cbv	bcdr	57	69	0·3	2	2·6	2·4
9	Ilkley... ...	bcpbc	opotc	54	66	2	4	2·2	0·2
	Harrogate ...	cbc	tlR	52	65	-	5	3·6	0·5
10	Berwick-on-T.	bc	bcbbc	53	60	3	-	8·9	0·0
11	Dunbar ...	bcm	bcm	53	60	4	-	8·7	0·0
12	Troon... ...	oro	rr	55	63	15	*	*	1·0
	Douglas ...	bcz	bcz	56	66	-	-	6·1	6·4

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.

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. 16th July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ...	Moderate south to southeast wind; bright periods; showers; local thunderstorms; fog patches on coast; average temperature.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ...	Light variable wind, becoming northerly, moderate to fresh; bright periods, local thunderstorms; rather cool.
8 N.W. England 9 N. Midlands ...	Moderate northeast winds; bright intervals; local thunderstorms; average temperature.
10 N.E. England 11 S.E. Scotland	Light easterly winds; cloudy; local thundery rain; fog on coast; rather cool.
12 S.W. Scotland & Isle of Man.	As 8 - 9.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Fresh to strong north to northeast wind; cloudy, occasional rain; local coast fog; rather cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Fresh to strong northerly wind; bright periods; local thundery rain; rather cool.

GENERAL INFERENCE.

A depression covering Wales and Southwest England will probably move slowly southeast, while another over Denmark will move northwest. There will be rain in North Scotland and West Ireland, and rather persistent fog near the east coasts of Scotland and England. Elsewhere there will be bright periods, with thundery showers or thunderstorms in most places.

FURTHER OUTLOOK.

Unsettled.

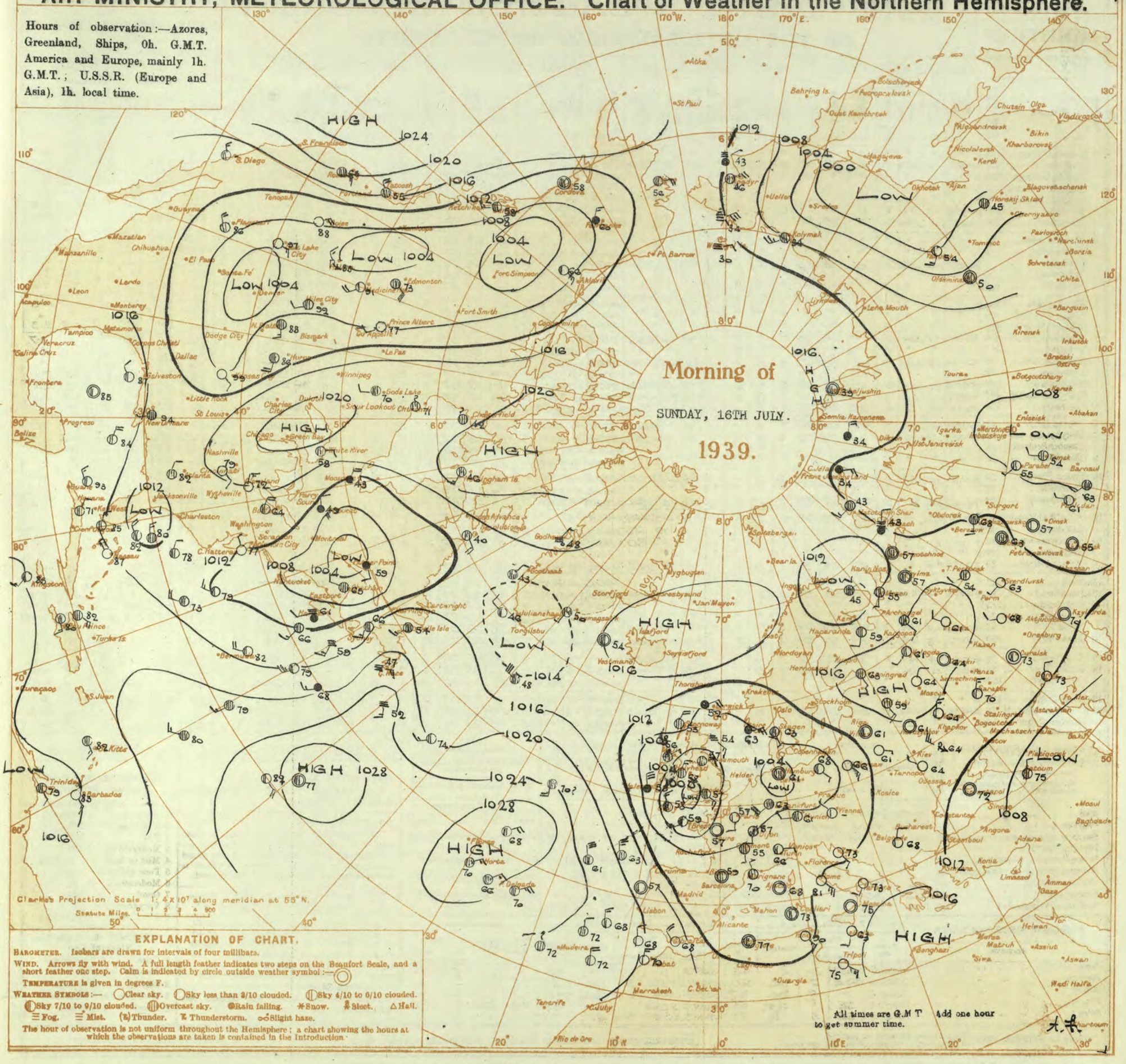
Forecasts issued at 1100 G.M.T.

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.

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

Sunday, 16th July, 1939.
No. 28360.

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

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	1002.3	-6	SE'S	3	c	57	92	8	5	3	-	4-6	9	7200
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417														
	Calshot (Sthmtn.)	8														
	Lympne	346	1003.8	-2	S'E	2	b	57	97	8	-	4	-	0	1	-
	Manston	154	1002.9	0	S'E	2	b	56	92	7	-	3	-	0	1	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1003.2	-6	S'E	4	c	60	85	7	5	-	-	9+	9+	2500
	Mildenhall	19														
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	999.4	+2	SW	2	rr	56	92	7	6	2	-	7-8	10	800
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1000.1	+2	SSW	3	bc	58	92	8	5	-	-	4-6	4-6	4000
	Plymouth	82														
	The Lizard	240	1000.6	0	W'N	3	c	57	97	8	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	163	1001.2	-8	NW'N	3	c	58	97	8	8	6	-	4-6	7-8	1500
	Guernsey	175	1001.1	-2	S	4	bc	56	97	7	2	-	-	4-6	4-6	1500
6	Pembroke	142	999.3	-4	N'E	3	c/r	56	97	7	8	-	-	7-8	7-8	1500
7	Holyhead	26	1000.3	-2	NE'N	3	c	58	92	6	8	-	-	10	10	2500
	Chester (Sealand)	16														
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1002.4	0	SE'E	3	bc	59	92	6	9	-	-	4-6	4-6	2500
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1004.2	+4	E	2	c/r	57	97	7	-	2	-	10	10	1500
11	St. Abbs Head	280	1005.1	-4	-	0	c	55	97	5	5	2	-	7-8	9	2500
	Leuchars	36														
12	Renfrew (Abbots I.)	19														
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1002.5	+6	E	2	c	58	97	7	5	-	-	10	10	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1008.8	-6	NNE	4	m	53	97	4	5	-	-	10	10	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1007.6	-4	NE	2	rf	52	97	3	-	-	-	10	10	450
16	Lerwick	156	1010.2	-6	NE	4	rr	52	97	7	6	2	-	4-6	10	800
17	Blacksod Point	18	1006.3	-4	N	7	ir	55	97	7	6	-	-	10	10	<150
18	Malin Head	84	1004.5	0	NE	1	c	56	92	7	9	-	-	7-8	7-8	1500
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1007.0	0	NNW	6	dr	55	92	7	8	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1000.8	-4	SSE	2	zo	60	85	6	8	-	-	9	9	2500	1	*
Croydon	1001.6	-4	S	3	c/pr	61	85	8	8	-	-	7-8	9	2500	0	*
S. Farnborough	1000.5	-2	SE	2	bc/pr	58	92	8	8	6	-	4-6	4-6	2500	1	*
Boscombe Down	999.8	-4	S'E	3	c	57	97	7	8	3	1	4-6	7-8	2500	1	*
Calshot (Sthmtn.)	1000.5	-2	S'E	3	bc	60	85	8	3	6	-	2-3	4-6	1500	1	2
Lympne	1003.0	-6	SSW	3	c	58	92	8	8	6	-	9	9+	800	0	§2
Manston	1002.2	-6	S	3	c	60	85	7	6	4	6	9	9+	1500	0	*
Shoeburyness	1002.2	-2	S	3	bc	62	85	8	3	-	1	4-6	4-6	4000	0	*
Felixstowe	1001.9	-4	SW	4	bc	62	85	8	1	-	1	4-6	4-6	1500	0	3
Gorleston	1004.0	0	SSE	3	bc	64	75	7	1	-	1	2-3	4-6	2500	0	2
Mildenhall	1000.7	-6	SSE	2	c	60	85	7	1	3	3	2-3	7-8	1500	1	*
Cranwell	1001.2	-4	S'W	1	m	57	97	4	5	7	1	4-6	7-8	220	0	*
Birmingham	1000.7	-2	SSE	2	bc	57	92	8	8	6	-	4-6	4-6	1500	1	*
Upper Heyford	1001.2	0	SE	3	c	58	92	8	5	-	-	9+	9+	800	1	*
Ross-on-Wye	999.9	-4	E	2	c	57	92	7	5	-	-	9+	9+	2500	1	*
Hartland Point	999.4	0	SE	2	c	57	92	8	8	6	-	4-6	7-8	800	1	2
Bristol	999.8	-4	SE	3	c	58	92	7	5	3	8	4-6	9	1500	1	*
Portland Bill	998.8	-6	SSE	3	c	58	92	7	5	-	-	10	10	4000	1	3
Plymouth	998.9	-2	SW	1	rr	57	97	6	9	2	-	4-6	10	800	1	0
The Lizard	999.6	-12	W	4	c	57	97	7	8	2	-	7-8	9+	1500	1	2
Scilly (St. Mary's)	1000.4	0	NNW	5	c/pr	57	97	7	8	7	-	7-8	10	1500	1	3
Guernsey	1000.1	-2	SSW	4	c	57	92	7	8	3	-	9	9+	450	1	3
Pembroke	999.4	+2	NE'E	2	c	57	92	7	8	-	-	9	9	1500	1	0
Holyhead	999.8	0	NE'N	3	r°r°	58	92	6	5	2	-	4-6	10	450	1	2
Chester (Sealand)	1000.0	-2	NE	1	ir	58	92	4	-	2	-	10	10	800	1	*
Manchester	1000.8	0	ENE	3	zo	59	92	6	5	3	-	4-6	9+	4000	1	*
Spurn Head	1001.4	-4	E'S	3	pr	58	92	6	5	2	-	7-8	10	1500	1	2
Catterick	1001.8	-6	NNE	2	zo	58	97	6	5	7	-	9	9+	800	1	*
Tynemouth	1002.7	-6	ENE	2	of	55	97	2	5	-	-	10	10	800	1	1
St. Abbs Head	1004.2	-6	-	0	F	53	97	1	-	-	-	10	10	<150	1	0
Leuchars	1004.3	-2	NE	2	zo	54	97	6	5	-	-	10	10	450	1	*
Renfrew (Abbots I.)	1004.2	-2	E	2	c	57	85	7	5	3	-	7-8	9	1500	1	*
Eskdalemuir																*
Point of Ayre	1001.6	-2	E'N	4	c	58	92	7	5	3	-	4-6	9+	2500	0	2
Tiree	1003.8	0	NNE	1	c	56	92	8	5	-	-	7-8	7-8	2500	0	1
Stornoway	1007.7	-4	NNE	5	r°r°	53	97	5	5	-	-	10	10	1500	1	3
Dalwhinnie	1005.8	-4	S	2	bc	52	92	6	4	6	4	2-3	4-6	1500	0	*
Aberdeen	1004.6	-6	-	0	c/f	55	97	6	6	-	-	10	10	450	1	1
Wick	1004.7	-12	N	3	dd	53	97	3	-	-	-	10	10	<150	1	1
Lerwick	1006.8	-24	NE	5	rr	52	97	6	6	2	-	4-6	10	450	1	*
Blacksod Point	1005.5	-6	N	6	id	55	97	7	6	-	-	10	10	<150	2	4
Malin Head	1003.7	-4	N	1	zo	55	92	5	5	5	-	2-3	7-8	1500	0	3
Aldergrove	1002.7	0	NE'N	3	zo	56	92	5	5	3	-	4-6	9+	2500	1	*
Birr Castle	1002.8	-2	NW	1	c	57	97	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	1005.8	-4	N'W	5	dd	55	97	5	5	-	-	10	10	450	1	3
Roches Point	1002.2	0	N	5	c	57	92	8	5	-	-	9+	9+	1500	1	2

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–13h mm. (34)	Night 18h–7h mm. (35)	Sunshine 15th Hrs. (36)
London (Kew)	72	57	54	Tr	3	10.1
Croydon	71	57	55	0.4	Tr	10.5
S. Farnborough	68	55	51	0.6	0.5	5.3
Boscombe Down	65	54	52	3	0.4	3.0
Calshot (Sthmtn.)	65	58	57	3	1	3.2
Lympne	68	55	52	1	0.1	9.4
Manston	68	55	51	-	-	9.9
Shoeburyness	72	57	53	-	0.6	10.6
Felixstowe	69	59	56	-	-	13.4
Gorleston	65	59	56	-	-	12.1
Mildenhall	72	55	51	0.4	0.4	7.4
Cranwell	67	54	52	15	Tr	1.9
Birmingham	62	56	54	10	0.6	0.8
Upper Heyford	66	55	52	7	1	*
Ross-on-Wye	64	55	52	8	0.5	2.3
Hartland Point	64	54	53	Tr	7	5.7
Bristol	65	53	48	2	0.2	4.5
Portland Bill	62	55	*	0.6	3	*
Plymouth	64	55	52	3	0.6	7.0
The Lizard	64	55	*	1	3.1	10.2
Scilly (St. Mary's)	65	57	*	1	0.3	6.4
Guernsey	61	56	54	3	-	5.7
Pembroke	63	55	*	4	7	2.5
Holyhead	66	57	56	Tr	0.2	4.8
Chester (Sealand)	67	57	56	1	4	3.5
Manchester	69	57	56	Tr	3	4.1
Spurn Head	65	57	*	Tr	1	8.1
Catterick	68	55	54	1	2	3.2
Tynemouth	60	55	54	-	1	11.2
St. Abbs Head	62	52	*	-	Tr	*
Leuchars	59	45	43*	Tr	-	0.0
Renfrew (Abbots I.)	68	56	55	0.3	-	1.3
Eskdalemuir						
Point of Ayre	64	56	*	0.2	-	4.9
Tiree	59	55	53	1	-	4.2
Stornoway	54	52	*	3	0.5	0.0
Dalwhinnie	62	42	33	1	0.1	1.6
Aberdeen	57	53	53	0.1	0.2	0.0
Wick	54	52	*	2	14	*
Lerwick	54	51	*	Tr	5	2.0
Blacksod Point	56	53	*	2	1	*
Malin Head	57	50	*	4	Tr	0.4
Aldergrove	66	52	46	-	-	1.6
Birr Castle	67	55	54	1	4	3.1
Valentia Obsy. †	61	55	53	2	2	0.8
Roches Point	62	56	*	4	5	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	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	cpr°bcq	eybcy	bcer°r°c	72	57	54	Tr	3	10.1	*	*	8
Croydon	217	cPRbc	ebcy	bcorpr	71	57	55	0.4	Tr	10.5	*	*	8
Greenwich (Royal Observatory)	149	cvy	cpvy	circv	72	56	49	Tr	0.3	7.3	51	64	8
City (Bunhill Row)	—	*	*	*	*	*	*	*	*	8.5	*	*	*
Westminster (St. James' Park)	27	*	*	*	72	59	59		1	8.1	67	83	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	71	58	53	=	Tr	8.8	53	46	*
Camden Square	110	bc	bc	*	73	59	54		0.3	*		78	*
Kensington	80	bc	bc	*	71	59	54	-	Tr	8.9	At 18h 51	69	*
Hampstead Observatory	450	*	*	*	*	*	*	*	*	8.3	*	*	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 16th

South Kensington.

Max.	Time.	Min.	Time.
<0.3 whole period			

Kew Observatory.

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 15th July: Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 16th July: 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	1004.9	SW'S	3	c	68	1005.3	S	2	o	59	*	55	Tr	-
Brussels	1005.4	SSE	2	bc	66	1004.7	SSW	3	bc	63	72	55	-	1
Berlin	1006.6	-	0	bc	82	1008.7	NE	1	bc	63	84	55	-	2
Zurich	1007.8	SE	1	d°d°	68	1008.3	WSW	1	c	61	81	55	2	6
Rome	1012.5	SE	5	b	77	1010.9	SSE	5	b	81	*	*	-	-

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday, 17th July, 1939.
No. 28361.

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

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)...	999.9	-6	S	4	c	67	65	8	8	3	3	7-8	9	4000
	Croydon ...	1001.0	-4	S	4	c	67	65	9	2	6	3	4-6	7-8	4000
	S. Farnborough	999.9	-2	S	3	c/pr	63	75	8	8	-	-	9+	9+	2500
	Boscombe Down	998.9	-6	S	4	c	64	75	7	8	7	-	4-6	7-8	2500
	Calshot (Soton.)	1000.2	-4	S'W	4	bc	63	75	8	3	-	3	4-6	4-6	2500
	Lympne ...	1002.8	-2	S	3	c	63	75	8	2	6	3	2-3	7-8	2500
	Manston ...	1001.5	-6	S'E	4	c	69	55	7	2	6	-	7-8	9	1500
2	Shoeburyness ...	1001.6	-12	S'E	4	c	67	75	8	8	6	3	2-3	7-8	4000
	Felixstowe ...	1001.5	-6	S	4	bc	70	65	8	2	-	3	1	2-3	1500
	Gorleston ...	1001.9	0	SSE	6	bc	65	75	7	2	5	-	2-3	4-6	2500
	Mildenhall ...	1000.3	-6	SSE	2	pr	62	85	7	8	-	-	9+	9+	800
	Cranwell ...	999.9	-6	S'E	3	c/pr	67	65	8	8	7	1	7-8	9	2500
3	Birmingham ...	999.6	-4	ESE	2	bc	64	55	8	3	6	-	2-3	4-6	2500
	Upper Heyford	999.2	-10	SE	3	c	67	65	8	8	6	-	9	9	2500
4	Ross-on-Wye ...	998.6	-8	NNW	2	bc	66	65	8	2	4	1	4-6	4-6	4000
5	Hartland Point	999.0	+2	N	2	bc	60	92	7	5	4	3	4-6	4-6	1500
	Bristol ...	999.1	-2	SE'S	2	pr	60	85	7	9	2	-	4-6	9	1500
	Portland Bill ...	999.0	+4	S	3	c	60	92	7	5	-	-	10	10	4000
	Plymouth ...	999.0	+2	NW	1	pr	60	85	6	9	2	-	7-8	10	800
	The Lizard ...	1000.0	+6	W'N	4	bc	63	85	7	8	7	-	4-6	4-6	2500
	Scilly (St. Mary's)	1001.2	+4	NNW	5	cjp	60	92	6	8	-	-	10	10	1500
	Guernsey ...	1000.2	+2	SW	4	o	59	97	6	5	-	-	10	10	450
6	Pembroke ...	999.6	+2	NW	3	c	62	85	6	8	6	-	4-6	7-8	1500
7	Holyhead ...	999.4	-4	N	3	c	61	92	7	5	9	8	4-6	9	450
	Chester (Sealand)	999.3	-4	N'E	1	c/pr	63	92	5	8	-	-	9	9	4000
8	Manchester ...	999.7	-6	SE'E	3	pr	62	75	5	8	1	-	4-6	10	2500
10	Spurn Head ...	999.7	-10	SE'E	4	ct	63	85	6	9	8	3	4-6	7-8	450
	Catterick ...	1000.9	-6	NE'N	3	r₀r₀	58	97	4	6	-	-	10	10	450
	Tynemouth ...	1002.1	-6	NE	3	o	56	97	6	5	-	-	10	10	1500
11	St. Abbs Head...	1003.1	-6	NE	1	o	54	92	6	5	-	-	10	10	2500
	Leuchars ...	1002.3	-8	ESE	2	bc	61	85	8	1	4	-	1	4-6	2500
12	Renfrew (Abbotsl.)	1002.3	-12	E	2	z₀	64	75	6	8	-	-	9	9	1500
	Eskdalemuir ...	1000.9	-10	NE	3	c	61	75	7	5	-	-	10	10	1500
	Point of Ayre ...	1000.9	-6	ENE	2	c	62	85	8	1	7	-	Tr	9	2500
13A	Tiree ...	1003.4	-2	NNE	2	bc	59	85	7	5	4	-	4-6	4-6	2500
13B	Stornoway ...	1005.6	-8	NNE	4	c	54	92	7	5	2	-	9	10	1500
15	Dalwhinnie ...	*	-16	S	1	c	65	65	7	4	6	-	7-8	9+	4000
	Aberdeen ...	1002.5	-6	ESE	2	cjf	59	85	6	5	-	-	9+	9+	<150
	Wick ...	1002.4	-10	N	2	o/f	54	97	5	5	-	-	10	10	450
16	Lerwick...	1003.2	-12	NE'E	5	c/r	53	97	5	5	2	-	7-8	10	220
17	Blacksod Point...	1004.7	-4	N	5	id	56	97	7	6	-	-	10	10	<150
18	Malin Head ...	1002.8	-6	N	1	z₀	59	85	7	3	-	-	2-3	2-3	4000
	Aldergrove ...	1001.3	-12	NE	2	c	65	75	7	2	-	-	7-8	7-8	2500
19	Birr Castle ...	1002.3	-6	NW	2	c	61	85	8	5	7	-	7-8	9	2500
20	Valentia Obsy.†	1006.0	+2	N'W	4	z₀	56	97	6	5	-	-	10	10	800
	Roches Point ...	1002.0	0	N	4	c	63	85	8	5	-	-	7-8	7-8	1500

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

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)	999.0	-6	SSW	3	bc	67	65	8	7	-	4	4-6	4-6	4000	0	*
Croydon	999.7	-10	S'W	3	bc	65	65	9	2	6	2	2-3	4-6	4000	0	*
S. Farnborough	999.1	-4	S	4	bc	63	75	8	8	6	1	2-3	2-3	4000	0	*
Boscombe Down	998.6	0	S	4	c	60	85	7	7	3	-	2-3	9	2500	1	*
Calshot (Soton.)	999.4	-8	S'E	4	c	62	85	7	9	-	-	9+	9+	2500	1	2
Lympne	1002.3	-6	SSE	2	c	60	85	8	1	6	3	2-3	7-8	1500	0	§ 2
Manston	1000.8	+2	S'E	3	c	63	75	8	8	6	3	4-6	7-8	1500	0	*
Shoeburyness	1000.5	-6	S'E	4	c	67	75	8	8	6	3	4-6	7-8	2500	0	*
Felixstowe	1000.4	-4	S	4	c	65	75	8	2	5	8	1	7-8	2500	0	3
Gorleston	1000.7	-2	SSE	4	bc	65	75	7	2	4	-	1	2-3	2500	0	3
Mildenhall	998.9	-8	S	3	c	68	55	8	2	6	-	1	7-8	2500	0	*
Cranwell	998.9	-8	ESE	2	c/pr	64	75	8	8	7	3	4-6	7-8	2500	1	*
Birmingham	998.7	-4	SE	2	bc	64	75	8	3	6	3	2-3	4-6	2500	1	*
Upper Heyford	999.1	-2	S'E	3	c	64	75	8	9	6	5	7-8	9	1500	1	*
Ross-on-Wye	998.3	-4	SE	2	c/pr	61	85	8	8	-	3	4-6	7-8	2500	1	*
Hartland Point	999.0	-2	NNW	2	c	61	92	6	5	4	-	4-6	7-8	1500	1	2
Bristol	998.5	+4	W	2	rr	61	85	6	9	2	8	4-6	9	1500	1	*
Portland Bill	999.6	+8	W	3	c	59	92	7	5	4	-	4-6	9	4000	1	3
Plymouth	999.5	+2	SSW	1	c/pr	61	85	8	3	7	-	4-6	9	2500	1	0
The Lizard	1001.4	+4	W	4	c/pr	58	97	7	8	2	-	7-8	9+	1500	1	2
Scilly (St. Mary's)	1001.8	0	NW	5	c	60	92	7	8	2	-	4-6	10	1500	1	3
Guernsey	999.9	-2	WSW	4	c	60	92	6	8	3	-	7-8	9	450	1	3
Pembroke	999.4	-4	N	3	c	60	85	6	8	6	2	4-6	7-8	1500	1	1
Holyhead	998.7	-4	N'E	3	c	58	92	7	7	9	-	2-3	9	2500	1	2
Chester (Sealand)	998.4	-4	N'W	1	z₀	62	85	5	8	-	-	9	9	4000	1	*
Manchester	998.5	-6	NE'E	3	pr	62	85	5	9	3	-	7-8	9+	2500	1	*
Spurn Head	999.1	-4	NE'E	2	c	60	92	6	-	9	-	0	9+	-	2	1
Catterick	999.6	-4	NE'N	2	rf	57	97	2	-	-	-	10	10	<150	1	*
Tynemouth	1000.6	-6	NNE	3	o	55	97	6	5	-	-	10	10	1500	1	1*
St. Abbs Head	1000.4	-4	SE	2	o	55	92	6	5	-	-	10	10	1500	0	1
Leuchars																*
Renfrew (Abbotsl.)	999.4	-20	ESE	1	bc	67	65	7	3	3	3	2-3	4-6	2500	0	*
Eskdalemuir	999.0	-6	E'S	2	c	59	85	8	5	7	8	7-8	9	800	1	*
Point of Ayre	999.5	-8	NE'N	1	c	61	85	7	5	7	-	1	9	1500	0	1
Tiree	1000.4	-8	NNW	2	c	57	92	8	5	3	-	4-6	7-8	2500	0	2
Stornoway	1002.5	-16	NNE	4	d₀d₀	53	97	6	5	2	-	9	10	800	1	2
Dalwhinnie	999.4	-12	N	1	c	62	75	7	8	6	-	7-8	10	4000	0	*
Aberdeen	1000.0	-10	S'E	2	o	57	85	6	6	-	-	10	10	800	1	1
Wick	999.5	-20	WNW	3	c	55	97	5	5	2	-	9	10	800	1	1
Lerwick	1000.3	-12	NE	4	rf	54	97	2	-	-	-	10	10	<150	1	*
Blacksod Point	1004.8	-12	N	4	c	55	97	7	8	-	-	10	10	<150	1	3
Malin Head	1001.4	-8	W	3	z₀	57	85	5	4	5	-	2-3	7-8	1500	9	2
Aldergrove	999.5	-6	E	2	bc/pr	63	85	7	3	-	3	4-6	4-6	1500	1	*
Birr Castle	1002.0	-6	NW	3	c/pr	60	85	8	9	2	-	7-8	10	1500	1	*
Valentia Obsy.†	1005.2	-6	NW'N	4	id	55	97	5	5	-	-	10	10	450	1	3
Roches Point	1001.5	-4	N	5	bc	62	85	8	5	4	-	4-6	4-6	2500	1	2

PAST 24 HOURS.

Stations	Weather 7h.—13h. 16th (37)	Weather 13h.—18h. 16th (38)	Weather 18h. 16th to 1h. 17th (39)	Weather 1h.—7h. 17th (40)
London (Kew)	cm₀cpr₀c	cbc	bcc	cm₀
Croydon	cprv	bcv	bcpr₀bc	pr₀cm₀
S. Farnborough	pr₀prbcc	cpr₀bc	bccpr	ctlm₀
Boscombe Down	cprcpRc	cprc	clm₀jf	cmwcm₀
Calshot (Soton.)	pr₀bc	bcc	c	cilcir
Lympne	cbc	bcpr₀c	bccpr₀o	cpr₀mirR
Manston	cy	cyc	bcpr₀	bccpr₀m₀
Shoeburyness	cp₀bc	bcc	c	c
Felixstowe	bccpr₀bc	bcc	c	cbccPR
Gorleston	bcq	bcq	bclbc	bccprbc
Mildenhall	cpRpr	cprcy	cyebcc	bccm₀
Cranwell	bccprc	cprbc	cp₀bcz	bcfm₀wb
Birmingham	bcpr₀	bccpr₀t	bcc	cof
Upper Heyford	cpr₀c	cprtc	cbcc	ccm₀m
Ross-on-Wye	cp₀cpbc	bccRcp	cbbl	bcc
Hartland Point	cbc	bcc	c	cp
Bristol	crcprPR	cPR+lPR	rcpctl	cm₀c
Portland Bill	c	c	co	oc
Plymouth	rrpr₀cPR	cpr₀c	ccPRc	cpr₀r₀r₀
The Lizard	cprbc	bcprc	cprc	cprbc
Scilly (St. Mary's)	crcpc	cp₀c	c	cRbc
Guernsey	cir₀o	oc	cpr₀	olrrc
Pembroke	opr₀cm₀	cm₀	cm₀	c
Holyhead	cr₀r₀Rc	c	cm₀c	cm₀wc
Chester (Sealand)	orrmprm₀	cm₀pr₀t	cm₀	cm₀wr₀
Manchester	cm₀prcz	cz₀prm₀	c	cmw
Spurn Head	prctl	PRtl	c	cw
Catterick	r₀omr₀r₀	frrr₀r₀	ir₀irf	ofom
Tynemouth	offo	o	oddo	o
St. Abbs Head	m₀o	m₀o	cm₀bc	bc
Leuchars	cm₀cbc		bcm₀	ofecm₀
Renfrew (Abbotsl.)	cbccm₀	cm₀bc	bccm₀	ofirwcm₀
Eskdalemuir	oc	ct	cbcc	com₀
Point of Ayre	crrc	cbcc	cbcbc	fo
Tiree	cbc	bc	c	com₀
Stornoway	rfr₀r₀	cd₀d₀	cdd	cddrr
Dalwhinnie	c	c	[illegible]	c
Aberdeen	om₀cjf	cofo	oz₀oir	ir₀om₀
Wick	dFfo	ocm₀	m₀frr	omcrr
Lerwick	crrm₀	ofcrfrf	orfcrr	ofcrr
Blacksod Point	id₀	id₀	od₀	iD
Malin Head	bczbc	bczc	czzc	c
Aldergrove	cm₀bc	bccpRbc	ccm₀	cm₀
Birr Castle	c	cprtl	cprc	crr
Valentia Obsy.†	ddidm₀	idm₀id	oidc	c
Roches Point	c	cbc	bc	bcc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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.*

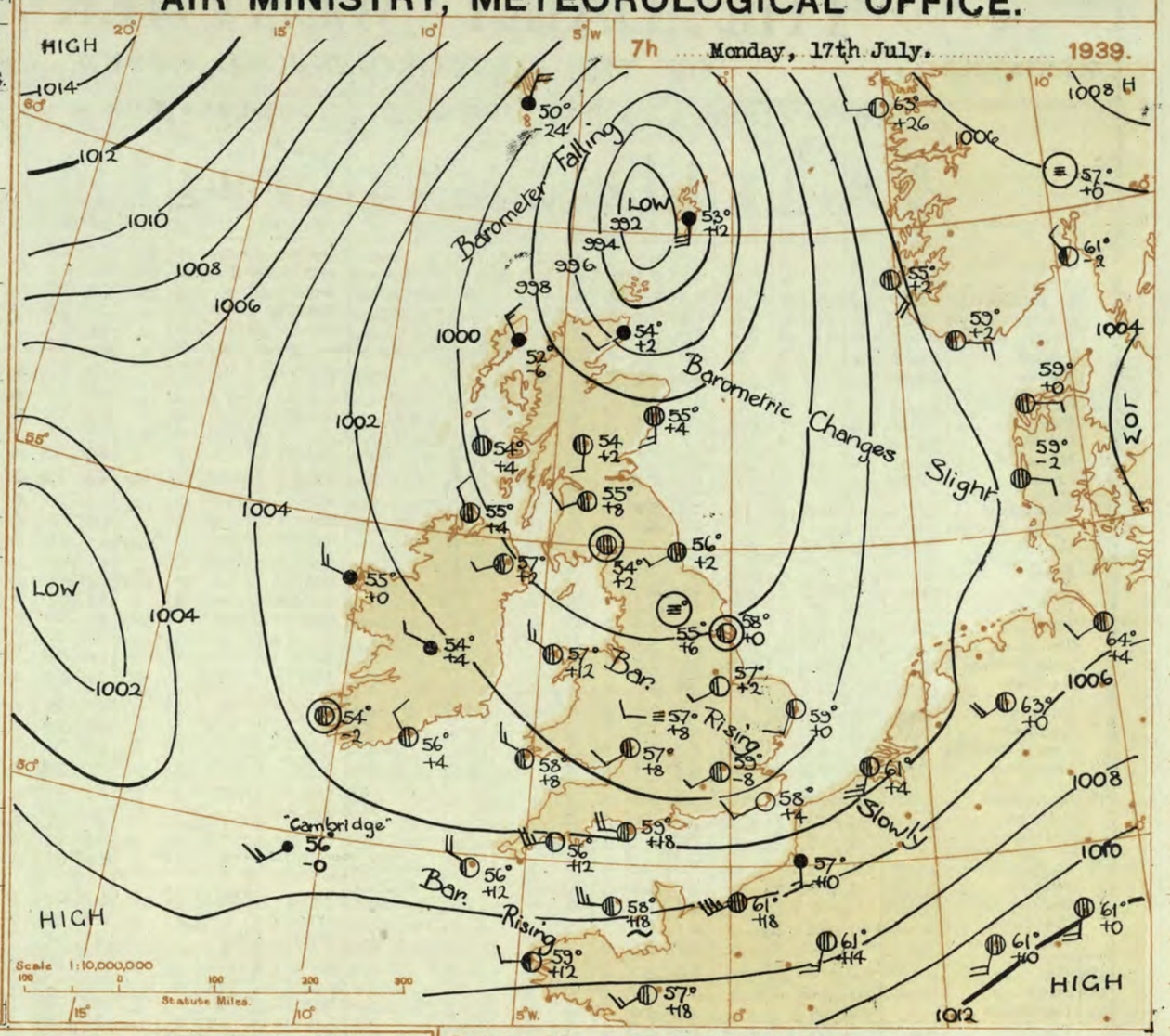
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 16th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 15th to 9h. 16th	Temperature. (°F) Max. 9h.—17h. 16th	Rainfall. (mm.) Night. 17h. 15th to 9h. 16th	Rainfall. (mm.) Day. 9h.—17h. 16th	Sunshine. (Hrs.) Sunrise to 17h. 16th	Sunshine. (Hrs.) Sunrise to Sunset. 15th
1	Tunbridge W.	c	c	55	69	0·3	-	5·5	10·1
	Bournemouth	cbcb	bbcc	57	66	1	-	5·1	1·3
	Ventnor ...	bcopc	bcou	60	66	1	-	4·6	3·6
	Southsea ...	bcco	cbcc	58	66	Trace	-	7·4	5·2
	Bognor Regis	bc	bc	59	65	-	-	7·7	8·1
	Littlehampton	bc	bc	58	65	0·4	-	7·1	9·2
	Worthing ...	cbc	b	59	64	-	-	5·5	10·3
	Brighton ...	cb	b	59	65	-	-	4·6	9·2
	Eastbourne† ...	cbcc	cbc	59	66	1	-	5·9	12·2
	Hastings† ...	cbc	bcbbc	58	69	-	-	5·8	9·6
	Folkestone ...	cbc	bcc	56	69	-	-	6·4	8·8
	Dover ...	cbc	bcpbc	59	68	-	Trace	6·8	11·6
	Deal	cbcc	bbc	57	70	-	-	5·8	11·5
	Ramsgate ...	c	bc	53	68	1	-	5·8	9·3
	Margate ...	bc	bc	57	70	0·3	-	8·6	10·8
2	Southend ...	cp	cbc	57	71	Trace	Trace	6·1	11·5
	Clacton-on-Sea	pbc	bc	59	69	Trace	-	7·5	12·9
	Dovercourt ...	bc	bc	59	69	-	-	10·2	6·4
	Lowestoft ...	b	b	60	66	-	-	11·7	12·1
	Skegness ...	bbc	otlrp	59	69	-	1	7·4	7·6
	Mablethorpe...	bbc	bcd	59	69	4	0·3	7·0	7·7
	Cleethorpes ...	bcr	bctlrc	56	67	1	17	3·3	6·2
3	Leamington S.	crc	crct	55	66	5	11	1·9	1·3
4	Cheltenham†	c	cir	55	68	1	Trace	0·0	1·9
5	Bath	cpbc	ctlr	56	66	0·3	7	1·4	4·7
	Weymouth ...	rcb	cbcc	58	65	1	-	3·7	4·8
	Jersey ...	rcbc	cbc	58	64	9	-	3·7	4·0
	Torquay ...	Wcoir	coRr	53	63	-	13	1·8	6·4
	Falmouth ...	gocbc	bcpog	56	66	13	0·1	3·4	5·7
	Penzance ...	pcbc	bcccp	56	65	7	1	3·8	8·1
	St. Ives ...								
	Bude... ...	cpc	cbc	53	63	3	1	3·8	5·2
	Ilfracombe ...	pcbc	bccbc	57	64	0·1	-	2·0	3·9
6	Aberystwyth	prc	bcc	56	65	0·3	-	1·4	0·9
7	Llandudno ...	cir	rroc	58	61	2	3	0·1	3·9
	Colwyn Bay...	popop	pocbc	58	61	2	12	0·5	3·4
	Rhyl	orcbc	tlrpr	58	64	6	5	1·2	3·6
8	Wallasey ...	otr	rc	58	64	6	2	0·6	6·5
	Southport ...	ocp	tp	56	64	1	5	0·2	4·4
	Blackpool ...	cp	ctpcp	57	67	2	2	1·1	3·5
	Morecambe ...	drcp	bctp	57	67	4	14	1·2	3·3
9	Ilkley... ...	oroc	ortlc	56	65	8	24	0·3	3·8
	Harrogate ...	o	otlR	55	61	2	9	0·1	4·4
10	Berwick-on-T.	om	moo	54	55	-	-	0·0	8·9
11	Dunbar ...	cm	bcm	52	57	-	-	1·8	11·2
12	Troon... ...	cbbcb	bcb	53	65	2	-	5·5	*
	Douglas ...	bcpr	bcpr	57	67	Trace	1	3·7	6·5

† Max. Temp. for period 21h. yesterday to 17h. to-day; Min. Temp. 21h.-9h.

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.

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 17th July, 1939.

Districts.	Forecasts
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 westerly, light or moderate; showery with thunder locally but bright intervals; average temperature.
13 A. W. Scotld. B. N.W. Scotland. ▲ 14 Mid Scotland 15 N. E. Scotland ▲ 16 Orkney and Shetland ▲	Wind westerly, strong; cloudy, occasional rain; rather cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 1 - 12.

GENERAL INFERENCE.

A complex depression covers the British Isles. Unsettled showery weather with local thunder will continue in all districts.

FURTHER OUTLOOK.

Unsettled.

Times of Issue of Gale Warnings.

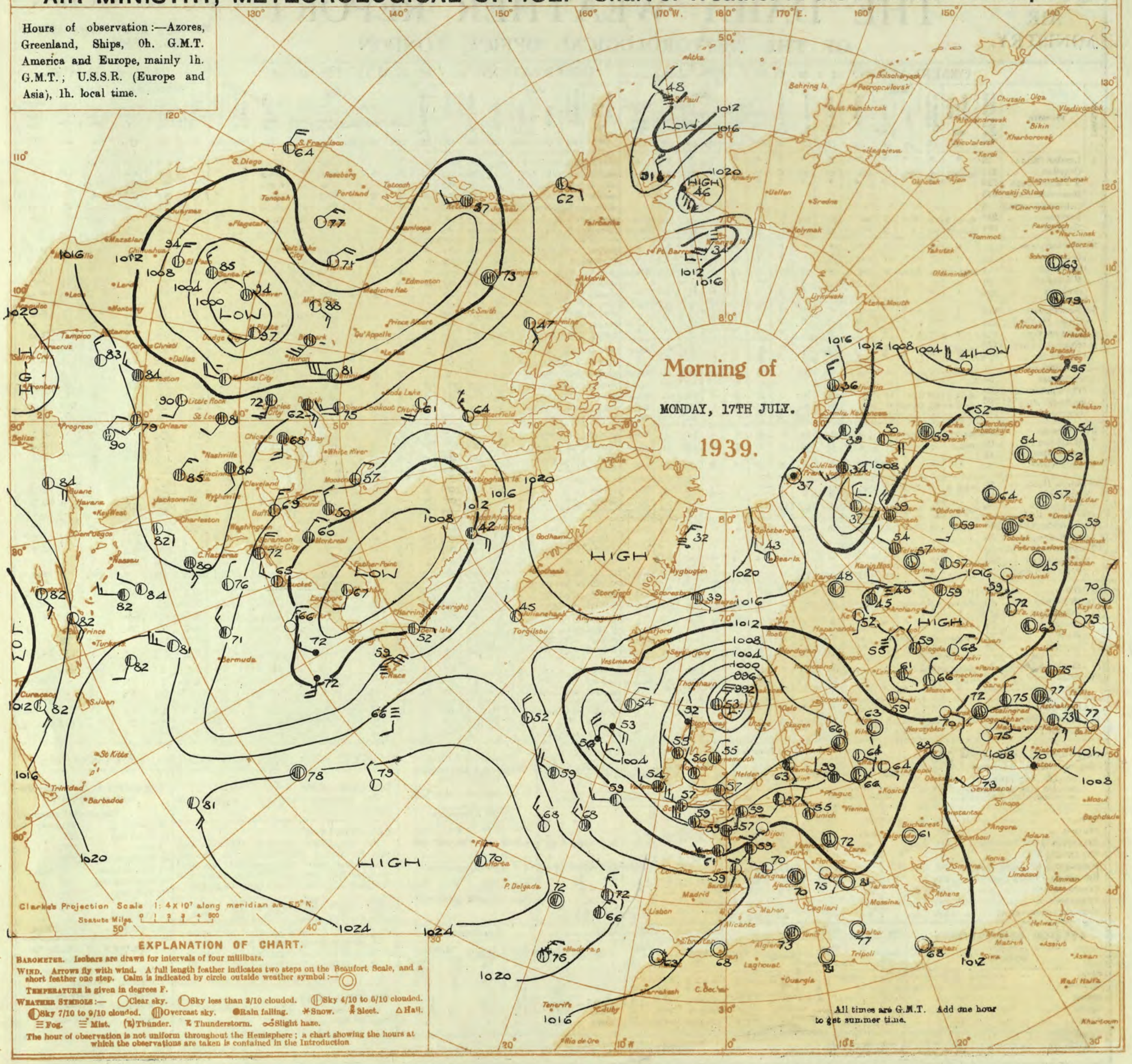
▲ North Cone hoisted at 1500 G.M.T. on 16/7/39 in part of district 16, and at 1925 G.M.T. in districts 13B, 15 and remainder of 16.

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.



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, 17th July, 1939.
No. 28361.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Med. (10)	High (11)	Amount Low 0–10 (12)	Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1000·4	-6	SSE	1	c	57	97	8	5	-	-	9+	9+	800
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417														
	Calshot (Sthmtn.)	8														
	Lympne	346	1001·8	-6	SW	3	o	57	97	7	5	-	-	10	10	450
	Manston	154	1001·2	-4	S	2	bc/pr	58	92	7	8	3	-	2-3	4-6	2500
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1001·2	0	SSW	2	bc	59	85	8	5	-	-	2-3	2-3	2500
	Mildenhall	19														
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1004·7	+14	NW	2	c	58	97	7	5	-	-	9+	9+	1500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	999·5	+6	W	4	o	58	92	7	5	-	-	10	10	2500
	Plymouth	82														
	The Lizard	240	1003·3	+8	W	4	c	56	97	7	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	163	1004·0	+6	WNW	5	c	57	92	7	5	2	-	7-8	10	1500
	Guernsey	175	1002·5	+4	WSW	4	cl	58	92	6	5	-	-	10	10	800
6	Pembroke	142	1000·7	+4	NNW	4	c	57	97	7	8	2	-	7-8	10	1500
7	Holyhead	26	998·8	0	NNW	2	c	56	97	6	5	2	-	7-8	10	800
	Chester (Sealand)	16														
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	999·3	0	SSE	2	c	59	85	7	5	2	-	4-6	7-8	2500
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1000·0	-4	NNE	2	o	55	97	6	5	-	-	10	10	1500
11	St. Abbs Head	280	998·7	-4	SW	3	bc	58	97	7	5	6	-	4-6	4-6	1500
	Leuchars	36														
12	Renfrew (Abbots I.)	19														
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	999·3	0	-	0	bc	56	92	7	5	-	-	2-3	2-3	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1001·0	-8	NNW	2	dd	52	97	6	5	2	-	9	10	1500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	996·3	-16	WNW	4	rr	53	97	4	5	-	-	10	10	450
16	Lerwick	156	992·9	-38	NE	6	c/r	53	97	6	6	2	-	4-6	10	450
17	Blacksod Point	18	1002·5	-8	W	3	id	54	97	7	6	-	-	10	10	<150
18	Malin Head	84	1000·6	-2	NW	1	c	55	92	7	6	-	-	9+	9+	4000
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1004·7	-6	WN	3	o	54	97	6	5	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	Med. (24)	High (25)	Amount Low 0–10 (26)	Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1001·3	+14	SW	1	z	60	85	6	5	-	-	10	10	2500	0	*
	Croydon	1001·6	+8	SW	1	c	59	92	6	2	9	-	4-6	9	1500	1	*
	S. Farnborough	1001·5	+16	WSW	3	z	58	92	6	6	-	-	10	10	800	1	*
	Boscombe Down	1001·9	+18	W	3	z	58	92	6	5	2	-	7-8	10	1500	1	*
	Calshot (Sthmtn.)	1002·3	+20	WSW	3	z	59	92	6	5	-	-	9+	9+	4000	1	1
	Lympne	1002·2	+4	SWW	2	z	58	97	6	5	3	-	9	9+	450	1	§3
	Manston	1001·3	+2	SW	3	c/pr	59	92	6	8	7	-	7-8	9+	2500	1	*
2	Shoeburyness	1001·6	+8	SW	3	c	61	92	7	5	3	-	4-6	9+	1500	0	*
	Felixstowe	1000·6	0	S	3	pR	60	92	6	9	7	-	9+	9+	1500	2	3
	Gorleston	1001·2	0	SWS	2	bc/pr	59	92	7	8	-	-	4-6	4-6	2500	1	2
	Mildenhall	1000·4	+6	SW	2	z	58	92	6	5	-	-	9	9	4000	1	*
	Cranwell	1000·1	+2	SW	1	z	57	97	6	-	4	-	0	2-3	-	1	*
3	Birmingham	1001·0	+8	W	2	of	57	92	3	5	-	-	10	10	800	1	*
	Upper Heyford	1001·1	+8	SW	1	z	57	92	6	5	-	-	10	10	450	1	*
4	Ross-on-Wye	1001·2	+8	SW	2	z	57	97	6	5	7	-	9+	10	2500	1	*
5	Hartland Point	1002·6	+12	NW	3	c	58	97	7	8	2	-	7-8	9+	1500	1	2
	Bristol	1001·8	+16	W	3	c	58	85	7	5	-	-	9+	9+	4000	1	*
	Portland Bill	1008·1	+18	W	4	c	59	92	7	5	-	-	10	10	2500	1	3
	Plymouth	1005·1	+26	W	2	c/r	58	97	6	6	7	-	9	9+	800	1	1
	The Lizard	1005·4	+12	WS	5	bc	56	97	8	8	7	-	4-6	4-6	2500	1	3
	Scilly (St. Mary's)	1005·2	+12	WNW	4	bc	56	92	8	8	6	9	4-6	4-6	1500	1	3
	Guernsey	1005·4	+8	W	5	c	58	92	6	4	2	-	7-8	10	800	1	4
6	Pembroke	1002·9	+8	WNW	3	c	58	85	8	5	2	-	4-6	9+	1500	1	2
7	Holyhead	1000·4	+12	WNW	3	c	57	97	7	5	2	-	7-8	10	2500	1	1
	Chester (Sealand)	1000·1	+12	WNW	1	ic	58	92	6	6	7	-	7-8	10	2500	1	*
8	Manchester	999·9	+14	-	0	m	56	97	4	-	3	-	0	9+	-	1	*
10	Spurn Head	1000·1	0	-	0	bc	58	92	6	-	4	-	0	4-6	-	1	1
	Catterick	999·7	+6	-	0	m	55	97	4	5	-	-	10	10	800	1	*
	Tynemouth	999·9	+2	SW	1	o	56	97	5	5	-	-	10	10	1500	1	1
11	St. Abbs Head	998·8	0	WSW	2	bc	56	85	7	5	7	9	4-6	4-6	2500	0	1
	Leuchars	998·5	+4	-	0	z	58	92	5	5	3	-	7-8	9+	220	1	*
12	Renfrew (Abbots I.)	999·8	+8	WSW	2	z	55	92	6	5	-	4	7-8	9	800	1	*
	Eskdalemuir	999·2	+2	-	0	o	54	97	6	5	-	-	10	10	800	1	*
	Point of Ayre	1000·3	+6	NWW	8	o	55	97	7	5	-	-	10	10	1500	0	1
13A	Tiree	999·1	+4	NNW	2	o	54	92	6	5	-	-	10	10	800	0	1
13B	Stornoway	999·4	-6	NW	8	rr	52	97	6	5	2	-	9	10	1500	1	2
15	Dalwhinnie	998·8	+2	S	1	c	54	92	6	5	7	-	7-8	9+	2500	0	*
	Aberdeen	998·4	+4	S	3	c	55	97	6	6	-	-	10	10	800	1	1
	Wick	995·2	+2	SW	2	rr	54	97	6	5	2	-	7-8	10	800	1	1
16	Lerwick	992·8	+12	S	6	rr	53	97	6	6	2	-	4-6	10	450	1	*
17	Blacksod Point	1002·0	0	W	3	id	55	97	7	6	-	-	10	10	450	1	3
18	Malin Head	1000·3	+4	NW	2	c	55	92	7	8	-	-	9	9	1500	0	3
	Aldergrove	1000·0	+2	WSW	1	z	57	85	6	5	2	-	9	10	1500	1	"
19	Birr Castle	1002·1	+4	WNW	1	rr	54	97	7	6	2	-	7-8	10	1500	1	*
20	Valentia Obsy. †	1003·7	-2	-	0	c	54	97	8	5	2	-	7-8	10	4000	1	2
	Roches Point	1003·3	+4	NW	2	c	56	92	8	5	-	-	9+	9+	1500	1	1

PAST 24 HOURS.

District	Stations	Temperature Max. Day 7h–18h °F. (31)	Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Night 18h–7h mm. (35)	Sunshine 16·4 Hrs. (36)
1	London (Kew)	71	57	54	0·2	-	5·4
	Croydon	70	56	54	0·3	0·5	9·1
	S. Farnborough	67	51	45	0·2	6	7·1
	Boscombe Down	67	54	50	2	Tr	3·2
	Calshot (Sthmtn.)	66	56	54	0·3	2	5·9
	Lympne	66	55	53	Tr	4	6·9
	Manston	71	55	52	-	2	8·2
2	Shoeburyness	70	58	55	0·2	-	9·4
	Felixstowe	70	58	55	Tr	3	10·5
	Gorleston	67	56	54	-	1	13·7
	Mildenhall	71	50	46	1	Tr	4·5
	Cranwell	70	49	45	0·2	0·1	4·0
3	Birmingham	70	55	50	0·2	-	5·2
	Upper Heyford	69	54	52	3	-	*
4	Ross-on-Wye	67	53	49	3	-	2·0
5	Hartland Point	63	57	56	-	0·3	5·8
	Bristol	66	56	52	15	0·2	2·2
	Portland Bill	61	56	*	-	0·3	*
	Plymouth	62	57	55	4	7	1·9
	The Lizard	64	55	*	3	5	5·3
	Scilly (St. Mary's)	62	55	*	3	0·1	0·6
	Guernsey	61	55	56	Tr	3	6·2
6	Pembroke	64	56	*	0·2	-	4·7
7	Holyhead	62	56	55	2	-	2·4
	Chester (Sealand)	68	55	53	3	Tr	1·4
8	Manchester	68	51	42	1	-	0·7
10	Spurn Head	66	56	*	10	Tr	5·8
	Catterick	60	55	55	10	3	3·5
	Tynemouth	58	55	58	-	Tr	0·1
11	St. Abbs Head	56	51	*	-	-	*
	Leuchars		51	47		-	7·7
12	Renfrew (Abbots I.)	68	49	44	-	-	4·7
	Eskdalemuir	66	48	43	-	-	1·1
	Point of Ayre	66	53	*	1	-	5·3
13A	Tiree	62	53	52	-	-	9·2
13B	Stornoway	55	51	*	1	3	0·0
15	Dalwhinnie	67	47	40	-	-	4·9
	Aberdeen	62	53	51	-	1·	1·0
	Wick	57	52	*	Tr	18	*
16	Lerwick	55	52	*	3	13	0·0
17	Blacksod Point	57	53	*	Tr	0·3	*
18	Malin Head	60	53	*	-	-	10·9
	Aldergrove	67	53	52	5	-	5·0
19	Birr Castle	64	53	53	3	1	0·4
20	Valentia Obsy. †	57	54	51	0·3	0·5	0·0
	Roches Point	63	55	*	-	-	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Afternoon	Night	Temperature Day Max. °F.	Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Night mm.	Sunshine to Sunset hrs. (Yesterday)	Humidity 15h. G.M.T. % (Yesterday)	9h. G.M.T. % (To-day)	Visibility 9h.
Kew	18	cmcprc	cbc	bco m	71	57	54	0·2	-	5·4	•	•	7
Croydon	217	cprv	bcv	bcp m	70·	56	54	0·3	0·5	9·1	•	•	6
Greenwich (Royal Observatory)	149	cy	cy	cbe	73	56	51	-	Tr	8·2	54	79	6
City (Bunhill Row)	—	•	•	•	•	•	•	•	•	8·0	•	•	•
Westminster (St. James' Park)	27	•	•	•	71	60	57	Tr		8·2	65	87	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	71	58	54	-	-	7·1	52	83	•
Camden Square	110	bc	bc	•	73	58	55	-	-	*	•	81	•
Kensington	80	bc	bc	•	72	58	55	-	-	7·6	At 13h. 56	83	•
Hampstead Observatory	450	bc	bc	c	70	56	54	-	-	8·7		87	•

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 17th

SOUTH KENSINGTON.

Max.	Time.	Min.	Time.
<0·3 whole period			

KEW OBSERVATORY.

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 16th July Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 17th July 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	1003·1	SSW	2	c	66	1007·8	SSW	3	c	61	72	59	3	0·3
Brussels	1003·3	S	3	c	63	1005·4	*	*	c	59	75	*	2	*
Berlin	1005·0	WNW	2	c	77	1006·1	WS	4	bc	66	82	63	-	11
Zürich	1009·2	SE	1	c/r	55	1013·4	SE	2	bc	55	77	52	12	0·2
Rome	1010·3	SE	5	c	79	1014·6	WSW	2	bc	75	*	*	-	-

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.

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday, 18th July, 1939.
No. 28362.

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

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)	1004.3	+22	WSW	2	c/tlr	65	75	7	9	9	3	7-8	9+	2500
	Croydon	1004.8	+14	SW'S	4	pr	68	75	7	9	6	3	7-8	9	4000
	S. Farnborough	1004.8	+18	SSW	4	b/TLR	62	85	7	3	-	3	4-6	4-6	2500
	Boscombe Down	1005.5	+20	W	4	r/tlr	57	92	7	9	7	-	4-6	9+	1500
	Calshot (Soton.)	1005.6	+16	SW'S	5	c	65	75	7	3	3	-	4-6	7-8	1500
	Lympne	1005.2	+14	WSW	4	pr	65	75	7	9	-	-	9	9	1500
	Manston	1003.9	+16	SW	5	cq	72	55	7	8	6	3	7-8	7-8	2500
2	Shoeburyness	1003.6	+8	SW	4	bc	72	65	8	8	3	3	2-3	4-6	2500
	Felixstowe	1002.8	+12	SSW	3	c	71	65	7	3	6	-	7-8	7-8	2500
	Gorleston	1002.6	+12	N'W	2	c	67	65	7	8	-	-	9+	9+	2500
	Mildenhall	1002.1	+10	W'S	3	bc	73	55	7	8	3	3	4-6	4-6	2500
	Cranwell	1001.9	+10	S	1	ct	66	85	6	3	-	-	9+	9+	1500
3	Birmingham	1003.4	+12	WSW	3	c	64	75	8	9	-	-	9	9	1500
	Upper Heyford	1003.4	+12	W	3	c	68	65	7	8	3	1	4-6	7-8	1500
4	Ross-on-Wye	1003.6	+10	WS	4	c	65	75	8	8	6	-	4-6	7-8	4000
5	Hartland Point	1005.2	+10	WNW	4	c	60	85	8	8	4	2	2-3	7-8	1500
	Bristol	1004.8	+14	WSW	5	bc	65	75	8	8	3	-	4-6	4-6	2500
	Portland Bill	1006.6	+14	WSW	4	c	60	85	7	2	4	-	4-6	7-8	4000
	Plymouth	1006.6	+10	SW	3	c	60	75	8	8	7	-	7-8	9	1500
	The Lizard	1007.3	+4	SSW	3	c	58	92	8	8	2	-	7-8	9+	2500
	Scilly (St. Mary's)	1006.5	+8	WSW	3	c	59	92	8	8	7	-	4-6	10	1500
	Guernsey	1008.9	+12	WSW	5	bc	60	75	8	2	1	-	1	2-3	800
6	Pembroke	1005.3	+8	W	3	c/pr	58	92	7	8	8	-	4-6	7-8	1500
7	Holyhead	1002.8	+10	SW	3	c	61	85	8	7	8	-	9	9	2500
	Chester (Sealand)	1002.9	+14	NNW	3	pr	68	65	6	9	7	-	7-8	9	1500
8	Manchester	1002.3	+12	W	3	c	66	75	7	8	3	-	4-6	9+	4000
10	Spurn Head	1001.3	+2	SE'S	3	c	64	85	6	4	4	8	4-6	7-8	2500
	Catterick	1000.7	+6	E'N	1	pr	60	85	7	9	7	-	7-8	9+	1500
	Tynemouth	1000.8	+10	SE	2	c	62	75	6	8	-	-	7-8	7-8	1500
11	St. Abbs Head	1000.2	+8	SE	1	ir	57	92	7	3	2	-	7-8	10	1500
	Leuchars	999.3	+4	WSW	2	c	66	65	7	8	-	6	4-6	9	2500
12	Renfrew (Abbotsl.)	1001.1	+6	WSW	3	c	61	75	8	5	-	-	10	10	1500
	Eskdalemuir	999.8	+4	SW'S	4	c	65	65	8	2	-	1	4-6	7-8	1500
	Point of Ayre	1002.2	+6	WNW	3	bc	64	75	8	1	-	5	4-6	4-6	2500
13A	Tiree	1001.1	+8	NNW	3	c	57	85	8	5	7	-	4-6	9	1500
13B	Stornoway	999.8	+8	NW	3	rr	53	92	7	5	2	-	9	10	1500
15	Dalwhinnie	999.9	+8	W	4	c	58	75	7	4	7	-	7-8	10	4000
	Aberdeen	999.0	+6	S'E	4	bc	63	85	6	2	-	1	4-6	4-6	1500
	Wick	998.3	+4	SW	2	c	59	85	8	5	7	8	4-6	9	1500
16	Lerwick	999.4	+38	SSE	6	o	53	97	6	5	-	-	10	10	450
17	Blacksod Point	1003.8	+4	NW	2	c	58	85	9	5	-	-	10	10	800
18	Malin Head	1002.1	+4	NW	2	c	57	92	7	6	-	-	9+	9+	800
	Aldergrove	1001.8	+6	SSW	1	c	62	75	7	8	-	-	9	9	2500
19	Birr Castle	1003.9	+4	NW	2	c	65	75	8	8	1	-	7-8	9	1500
20	Valentia Obsy †	1003.0	+2	SSW	2	c	60	75	8	5	7	-	7-8	10	1500
	Roches Point	1004.5	+2	SW	2	bc	61	85	8	3	-	5	2-3	4-6	1500

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

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours. (16)	Wind. Direc. (17)	Wind. Force 0–12 (18)	Weather. (19)	°Temp. F. (20)	°Humid. (21)	Visibility 0–9 (22)	Cloud. Form. Low. (23)	Form. Med. (24)	Form. High. (25)	Amount. Low 0–10 (26)	Amount. Total 0–10 (27)	Height of Base (feet) (28)	State of Ground. 0–9 (29)	Sea. 0–9 (30)
1	London (Kew)	1007.2	+16	SW	4	pr	62	75	8	8	-	-	9+	9+	2500	1	*
	Croydon	1007.3	+16	SSW	3	c/pr	60	85	8	3	9	-	2-3	7-8	4000	1	*
	S. Farnborough	1007.2	+12	SSW	4	b/pr	61	75	8	8	4	-	2-3	2-3	4000	1	*
	Boscombe Down	1007.4	+10	SW	3	c	60	75	8	5	7	-	4-6	7-8	2500	1	*
	Calshot (Soton.)	1007.9	+12	SW	5	bc	62	75	8	2	5	-	4-6	4-6	1500	0	3
	Lympne	1008.2	+16	WSW	5	b	63	65	8	2	6	3	Tr	1	2500	0	§4
	Manston	1007.0	+18	SW	5	bc	65	65	8	2	-	1	4-6	4-6	2500	1	*
2	Shoeburyness	1007.0	+18	WSW	3	bc	64	85	8	8	7	-	1	4-6	2500	0	*
	Felixstowe	1005.8	+16	W'N	4	c/pr	63	85	9	8	7	-	4-6	9	2500	1	2
	Gorleston	1004.7	+18	SW	3	c/pr	64	85	6	8	4	-	7-8	9	2500	1	2
	Mildenhall	1004.9	+14	SW'S	3	c/r	62	85	7	8	7	3	2-3	9	4000	1	*
	Cranwell	1004.3	+12	WSW	1	c/r	61	92	5	4	7	1	4-6	9+	4000	1	*
3	Birmingham	1005.2	+10	WSW	2	c/pr	60	75	7	3	7	-	4-6	7-8	2500	1	*
	Upper Heyford	1006.3	+14	W'S	3	c	64	65	7	8	3	-	2-3	9	2500	1	-
4	Ross-on-Wye	1005.8	+8	W'S	3	bc	65	55	8	8	4	9	1	2-3	4000	1	*
5	Hartland Point	1006.4	+4	W	3	c	58	85	8	8	2	-	4-6	9	1500	0	2
	Bristol	1006.5	+10	W'N	3	bc	64	65	8	5	3	-	4-6	4-6	2500	1	*
	Portland Bill	1008.0	+8	WSW	4	c	59	85	7	2	4	-	7-8	9	4000	1	4
	Plymouth	1007.5	+2	SW	3	r.r	60	85	8	6	7	-	9	10	1500	1	1
	The Lizard	1006.6	-8	SSE	3	rr	58	97	6	5	-	-	10	10	1500	1	2
	Scilly (St. Mary's)	1004.7	-16	S	4	c/d	59	97	8	8	6	-	7-8	9+	1500	1	3
	Guernsey	1009.2	+2	S	2	c	59	75	8	8	3	-	4-6	9	2500	1	2
6	Pembroke	1008.2	0	SW'W	3	c	59	85	8	8	6	-	4-6	7-8	1500	1	2
7	Holyhead	1003.8	+2	SW'S	3	bc	60	85	8	8	4	1	2-3	4-6	2500	1	2
	Chester (Sealand)	1004.6	+6	NW	1	c	63	85	7	8	-	-	7-8	7-8	2500	1	*
8	Manchester	1004.5	+10	WNW	2	c	63	75	7	8	6	-	4-6	7-8	4000	1	*
10	Spurn Head	1003.6	+8	W'N	3	m	63	85	4	-	2	-	0	10	-	0	2
	Catterick	1003.1	+10	SSE	2	c	61	85	8	8	-	-	7-8	7-8	1500	1	*
	Tynemouth	1001.9	+8	W	3	c	59	85	7	2	6	-	4-6	7-8	2500	1	1
11	St. Abbs Head	1001.8	+2	S	2	rr	58	97	6	8	2	-	4-6	10	2500	1	1
	Leuchars	1000.8	+6	SSW	3	c	64	75	8	7	7	6	4-6	9+	2500	0	*
12	Renfrew (Abbotsl.)	1002.6	+6	W	2	c	60	85	8	5	6	-	9+	10	2500	0	*
	Eskdalemuir	1001.9	+10	W'S	3	c	62	65	8	8	-	1	7-8	7-8	2500	1	*
	Point of Ayre	1003.5	+2	E	1	c	63	85	8	8	6	-	4-6	7-8	2500	0	1
13A	Tiree	1002.4	-4	WNW	2	c	55	85	7	5	-	-	10	10	1500	0	2
13B	Stornoway	1000.8	+4	SW	2	pr	53	85	8	8	7	-	7-8	10	1500	1	1
15	Dalwhinnie	1001.5	+10	SSW	3	c	55	85	6	4	2	-	7-8	10	2500	0	*
	Aberdeen	1000.0	+6	S'E	3	bc	63	75	6	2	7	6	Tr	4-6	2500	1	1
	Wick	1000.1	0	S	2	c	55	85	8	5	7	8	4-6	9	1500	1	1
16	Lerwick	1001.5	+4	S	3	c	54	97	6	5	2	-	7-8	10	800	1	*
17	Blacksod Point	1004.8	+6	NW	3	c	57	85	9	5	-	-	9+	9+	800	0	3
18	Malin Head	1004.6	+4	NNW	3	c	55	85	7	6	2	-	4-6	9	1500	0	2
	Aldergrove	1003.0	+6	NNW	2	c	61	75	8	8	1	-	9	9+	2500	1	*
19	Birr Castle	1003.7	+2	W	1	c	64	65	8	2	7	3	4-6	7-8	1500	1	*
20	Valentia Obsy †	1004.5	+2	N'W	3	pr	58	85	8	5	1	-	9	9+	1500	1	2
	Roches Point	1004.7	-2	SW	2	c	60	85	8	2	3	-	2-3	7-8	2500	1	2

PAST 24 HOURS.

District	Stations	Weather. 7h.—13h. 17th (37)	13h.—18h. 17th (38)	18h. 17th to 1h. 18th (39)	1h.—7h. 18th (40)
1	London (Kew)	cprtqc	cprtcpr	cprcbc	crc
	Croydon	cmTLR	cTLRmpr	bcbbc	bcebc
	S. Farnborough	cprtlR	prPRcb	bcbcpr	clRid
	Boscombe Down	cmpr	cPRc	cid	cidddd
	Calshot (Soton.)	cmcpr	cbccbc	bcirc	crrir
	Lympne	ctlrpr	cprbc	bc	cbc
	Manston	cprcq	cqybr	bbc	bcc
2	Shoeburyness	cpbc	tlpcpbc	bcc	clrc
	Felixstowe	cPRc	TLRcpr	ccm	cmc
	Gorleston	bccprt	ctlpr	cbcb	bbcc
	Mildenhall	tlrt	ctbcicb	bccn	
	Cranwell	ctlrct	ctlrcm	cmw	cmc
3	Birmingham	fcctlR	ctlpr	cbc	bcc
	Upper Heyford	cmc	ctlrpr	cbcc	ccdc
4	Ross-on-Wye	c	cbccbcy	bcc	cc
5	Hartland Point	cp	cbccp	cid	cd
	Bristol	cmcbc	bc	bccd	cdcd
	Portland Bill	c	c	crr	crr
	Plymouth	cmpr	bcc	rrddid	cidlRr
	The Lizard	bcc	cprrr	comdf	dfrf
	Scilly (St. Mary's)	bccpc	cpcdd	cirid m	rrrrfrf
	Guernsey	cqbc	bcc	coir	cirr
6	Pembroke	prc	c	ddc	icc
7	Holyhead	c	cbbc	bccbc	bcw
	Chester (Sealand)	crmprprthrRbc	bcbmw	cbmwc	
8	Manchester	cmPRfc	c	cbcbm	bmwbcm
10	Spurn Head	ct	ctpr	cmw	czw
	Catterick	tlrPR	tlrPR	cbcb	cwbcw
	Tynemouth	oct	c	cbc	bcc
11	St. Abbs Head	crr	cmrr	cbc	bcc
	Leuchars	cmc	cmc	c	cbc
12	Renfrew (Abbotsl.)	cmc	c	c	cwc
	Eskdalemuir	ocbc	cbcc	cbccm	c
	Point of Ayre	ocbc	bcc	cbcbc	c
13A	Tiree	oidc	c	c	c
13B	Stornoway	crr	cpr	cprd	cir
15	Dalwhinnie	c	c	c	
	Aberdeen	ocjfbc	bczc	bccz	czcr
	Wick	rrc	c	c	c
16	Lerwick	crrmc	ocm	cofF	bFFec
17	Blacksod Point	idc	c	c	pc
18	Malin Head	cprc	cidc	c	cidc
	Aldergrove	crmc	cbc	cbc	bccmc
19	Birr Castle	crrc	c	c	c
20	Valentia Obsy †	crrc	cprc	prirc	c
	Roches Point	cpbc	cprc	cbcw	circ

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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.*

§ Sea disturbance reported from Dungeness.

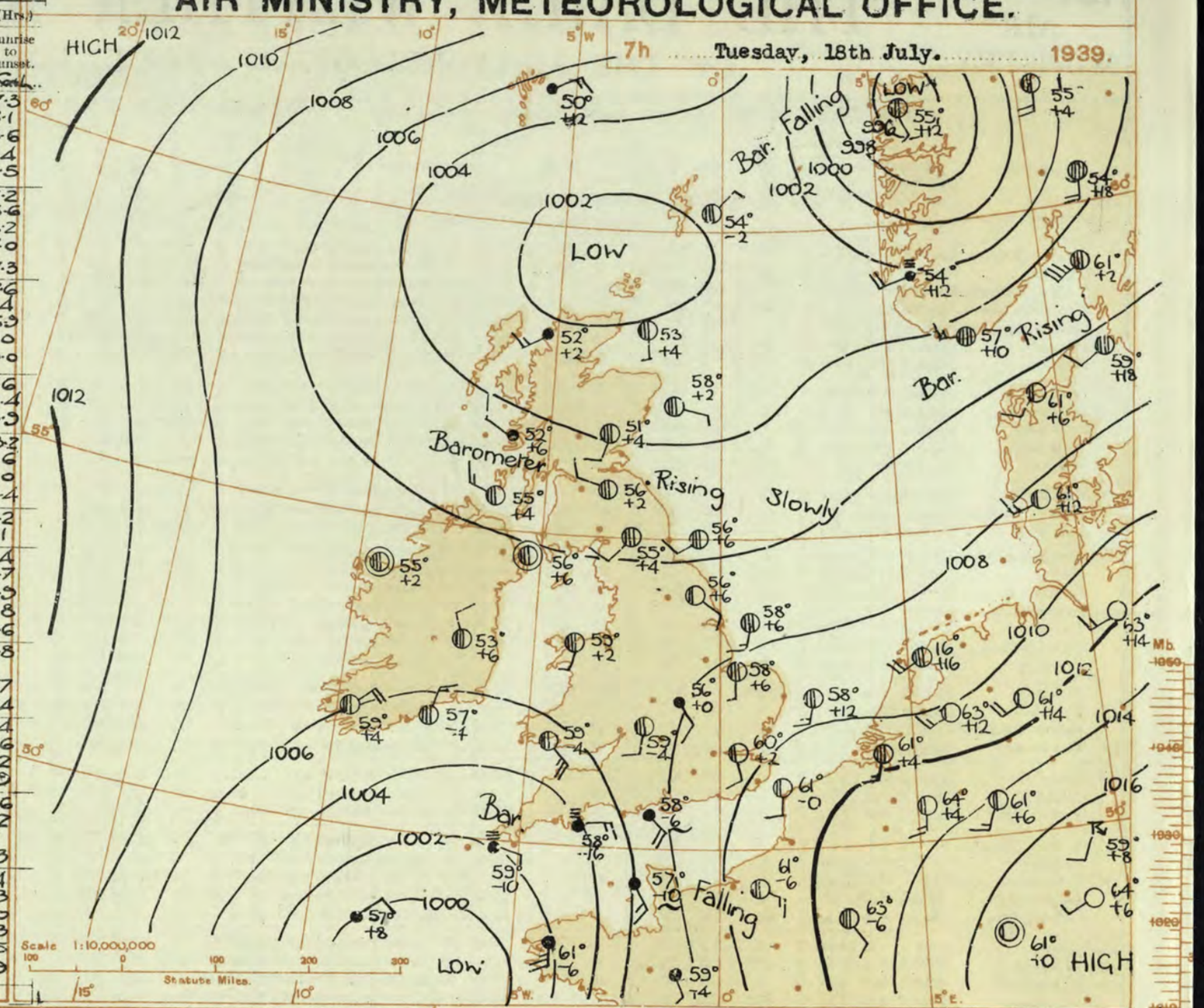
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h ..... Tuesday, 18th July. ..... 1939.

REPORTS from HEALTH RESORTS for ...17th July... 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 17th to 9h. 18th.	Temperature. (°F) Max. 9h.—17h. 17th.	Rainfall. (mm.) Night. 17h. 17th to 9h. 18th.	Rainfall. (mm.) Day. 9h.—17h. 17th.	Sunshine. (Hrs.) Sunrise to 17h. 17th.	Sunshine. (Hrs.) Sunrise to Sunset. 17th.
1	Tunbridge W.	opco	ctebc	56	69	3	Trace	4·4	7·3
	Bournemouth	ocbc	bbc	57	67	3	-	5·9	5·1
	Ventnor ...	rcb	bbc	59	63	8	-	6·6	4·6
	Southsea ...	ctc	cbcb	58	67	2	-	5·0	7·4
	Bognor Regis	bcpr	bcb	58	64	12	0·5	5·5	8·5
	Littlehampton	bcpbc	bc	58	65	8	0·1	6·1	8·2
	Worthing ...	cbcb	bbc	58	68	15	-	7·4	6·6
	Brighton ...	bc	bbc	57	65	17	-	6·7	5·2
	Eastbourne† ...	cbc	bcb	58	65	7	-	7·4	7·0
	Hastings† ...	ocbc	bcb	57	67	8	-	7·2	7·3
	Folkestone ...	cptlc	cptbc	58	67	2	3	5·0	7·6
	Dover ...	cortc	crtbc	58	65	14	3	5·0	7·4
	Deal	rcorc	cbc	57	69	3	2	4·5	6·9
	Ramsgate ...	c	cpbc	58	67	3	Trace	4·4	7·0
	Margate ...	bc	cptbc	56	71	0·5	Trace	5·3	10·0
2	Southend ...	cbcc	ctlrc	58	75	-	2	5·2	7·6
	Clacton-on-Sea	ctlr	ctlrc	59	68	-	8	5·9	9·4
	Dovercourt ...	bc	bdtrc	58	70	0·3	4	2·8	10·9
	Lowestoft ...	bccR	crtl	57	70	3	6	3·5	13·2
	Skegness ...	bbc	otrco	56	70	-	Trace	5·7	7·6
	Mablethorpe ...	bc	bcotz	55	72	-	-	6·4	7·0
	Cleethorpes ..	bc	ctlrc	54	68	Trace	0·3	5·2	3·4
3	Leamington S.	oc	cotr	52	68	0·2	1	1·7	2·2
4	Cheltenham†	cRtl	c	55	68	-	4	2·1	1·1
5	Bath	cbcb	bbcc	57	68	0·3	-	5·2	1·4
	Weymouth ...	cb	bcb	58	66	1	-	5·6	3·7
	Jersey ...	rc	bcc	57	65	1	-	3·2	3·9
	Torquay ...	bcb	bbccq	57	66	10	-	4·8	1·8
	Falmouth ...	c	cpcor	56	64	3	Trace	4·4	3·6
	Penzance ...	pbbcc	cid	56	64	2	0·3	3·4	3·8
	St. Ives ...								
	Pude... ...	c	cr	58	63	2	Trace	4·2	4·7
	Ilfracombe ...	rocbc	opbc	58	64	2	2	5·9	2·4
6	Aberystwyth	oprc	bcc	56	63	1	0·5	3·8	1·4
7	Llandudno ...	occbc	cbc	57	64	2	-	3·5	0·6
	Colwyn Bay...	ro	bcb	56	65	1	-	3·2	1·2
	Rhyl	cprc	bcc	56	64	1	1	3·0	1·9
8	Wallasey ...	cbc	bccb	57	64	Trace	-	3·3	0·6
	Southport ...	ozcbc	bcbbc	54	66	0·1	-	4·2	0·2
	Blackpool ...	cm.c	cbcb	56	64	-	-	4·5	1·1
	Morecambe ...	cbc	b	55	68	0·3	-	6·7	1·3
9	Ilkley... ...	ocot	bc	56	69	Trace	-	2·5	1·4
	Harrogate ...	oc	cp.	55	67	1	0·2	1·8	0·3
10	Berwick-on-T.	cbc	orco	51	63	-	0·6	4·7	0·0
11	Dunbar ...	bcm.	cm.	49	65	-	-	4·6	3·3
12	Troon... ...	bbcb	bbc	53	58	-	-	1·2	5·5
	Douglas ...	bc	bc	54	64	Trace	-	4·1	3·9

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. ...18th July, 1939...

Districts.	Forecasts
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Wind southeast, becoming westerly to-morrow, moderate or fresh; cloudy with rain to-day; brighter intervals to-morrow; rather cool.
7 North Wales ... 8 N.W. England	Wind light, west to northwest; mainly fair; average temperature.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Wind light, variable, freshening from northwest to-morrow. Fair to-day; some rain or showers to-morrow; average temperature.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland 17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind light or moderate, west to northwest; mainly fair, but some local showers; average temperature.

RAW

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

GENERAL INFERENCE.

A complex depression remains over the north of Scotland and Southern Norway and a depression off the mouth of the Channel will move east and then northeast. Rain and low cloud will spread over the southern half of England and Wales, but further north and west there will only be showers with bright intervals.

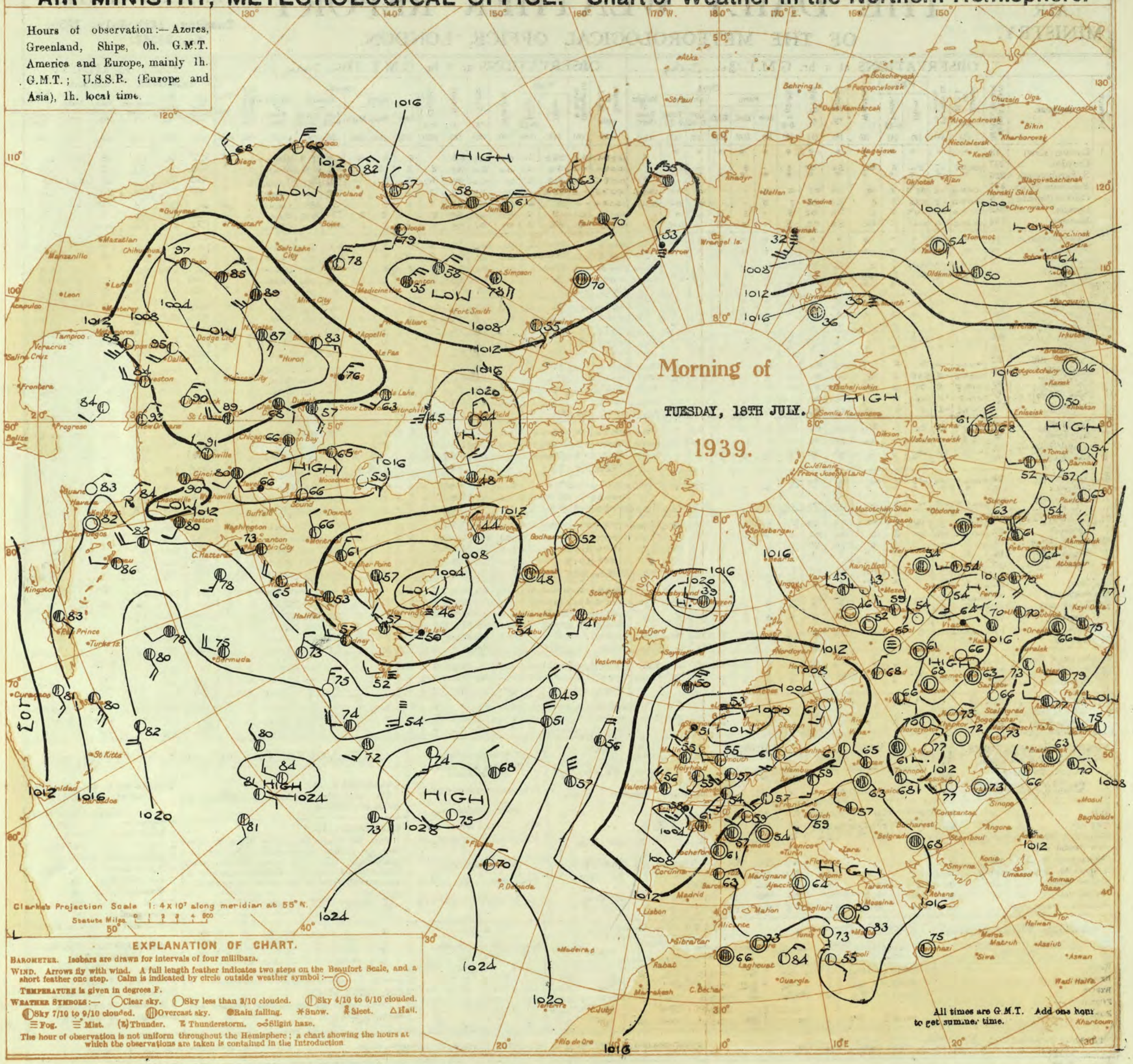
FURTHER OUTLOOK.

Unsettled.

Forecasts issued at 0930 G.M.T.

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

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, 18th July, 1939.
No. 28362.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1009.6	+2	S'W	3	bc	54	97	8	-	3	-	0	2-3	-
	S. Farnborough	226	"	"	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1009.0	-2	SE'S	2	id	55	97	6	5	-	-	10	10	1500
	Calshot (Sthmtn.)	8	1008.6	-2	SSE	3	d	60	86	7	5	-	-	9+	9+	1500
	Lympne ...	346	1011.4	+2	SW'S	2	d	58	92	8	-	3	6	0	9	-
	Manston ...	154	1010.6	+6	SW'S	2	bc	58	92	8	-	3	6	0	4-6	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1008.3	+12	SW'W	3	b	58	86	7	5	-	-	1	1	2500
	Mildenhall ...	19	1008.4	+12	SW	3	bc	54	92	7	5	-	-	2-3	2-3	4000
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1005.7	-8	SSE	3	c	58	97	8	5	2	-	4-6	7-8	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1008.0	-10	S	4	rr	57	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1006.8	-6	SSE	2	id	60	97	6	5	2	-	7-8	9+	450
	The Lizard ...	240	1005.6	-8	SE	3	df	58	97	3	5	-	-	10	10	800
	Scilly (St. Mary's)	163	1004.2	+4	SSW	3	id	58	97	6	5	2	-	7-8	10	1500
	Guernsey ...	175	1008.8	-2	S	4	c	58	92	8	5	-	-	7-8	7-8	1500
6	Pembroke ...	142	1005.7	0	SE	3	c/d	57	97	8	8	-	-	9+	9+	1800
7	Holyhead ...	26	1005.6	+2	S'W	3	bc	56	92	8	5	4	-	2-3	4-6	4000
	Chester (Sealand)	16	1006.9	+6	SE	1	z	53	85	6	5	-	-	↓	↓	4000
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1006.8	+12	W'S	3	bc	58	92	5	5	-	-	2-3	2-3	2500
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1004.9	+8	W	2	bc	55	92	6	5	-	-	2-3	2-3	1500
11	St. Abbs Head	280	1003.9	+8	WSW	3	bc	54	85	8	5	4	1	2-3	4-6	2500
	Leuchars ...	36	1003.2	+6	SW	2	c	56	92	7	5	2	-	7-8	9	2500
12	Renfrew (Abbots I.)	19	1005.1	+10	W'S	2	c	54	85	7	5	7	-	9	9+	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1005.0	+4	W	1	bc	54	97	8	-	7	-	0	4-6	-
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1002.4	+6	SW	2	d	51	97	7	5	7	-	7-8	10	1500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1002.0	+2	E	1	c	52	97	8	5	7	8	4-6	9+	1500
16	Lerwick ...	156	1003.1	+10	E	1	F	53	97	1	-	-	-	10	10	<150
17	Blacksod Point	18	1006.8	+4	N	2	c	54	92	7	5	1	-	10	10	800
18	Malin Head ...	84	1005.8	+2	NW	2	c	55	85	7	9	-	-	9	9	4000
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1005.6	0	NNW	3	c	56	92	7	5	-	-	9+	9+	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1005.1	+2	SSE	2	c	61	85	7	5	3	4	4-6	7-8	4000	1	*
Croydon ...	1009.4	+2	S'E	2	bc	60	92	8	5	3	8	2-3	4-6	2500	1	*
S. Farnborough	1008.6	0	S'E	2	c	60	85	8	5	3	-	7-8	9	1500	1	*
Boscombe Down	1007.8	-2	SSE	3	c	59	97	7	5	7	-	7-8	10	1500	1	*
Calshot (Sthmtn.)	1008.4	-4	SE	4	ir	62	85	7	5	5	-	9	9+	4000	1	§2
Lympne ...	1011.0	0	S	2	bc	61	85	8	1	8	9	Tr	4-6	1500	0	2
Manston ...	1010.6	-2	S'E	3	c	62	75	7	5	3	-	4-6	9+	2500	1	*
Shoeburyness ...	1010.4	+2	SSW	2	c	62	85	8	5	9	-	4-6	9	4000	0	*
Felixstowe ...	1010.5	+6	SSW	4	c	61	85	8	5	7	-	4-6	9+	4000	0	2
Gorleston ...	1010.5	+12	SSW	3	c	58	85	7	5	5	-	7-8	7-8	2500	1	2
Mildenhall ...	1009.6	+10	S	2	z	58	85	6	5	2	-	9+	10	4000	1	*
Cranwell ...	1008.5	+6	S	1	c	58	85	7	-	7	-	0	9+	-	1	*
Birmingham ...	1008.0	0	SE	2	id	56	92	6	5	-	-	10	10	800	1	*
Upper Heyford	1008.5	0	S'E	2	z	57	97	6	5	-	-	10	10	450	1	*
Ross-on-Wye	1007.3	-4	S'W	2	c	59	92	7	5	3	-	9+	10	1500	1	*
Hartland Point	1008.8	-8	E	2	c	59	97	8	5	2	-	7-8	9+	1500	1	1
Bristol ...	1007.1	-2	SSE	2	c	59	92	7	5	7	-	7-8	9+	1500	1	
Portland Bill ...	1006.4	-6	SE	4	rr	58	92	7	5	-	-	10	10	2500	1	4
Plymouth ...	1003.9	-14	ESE	3	rr	59	97	6	-	2	-	10	10	220	1	2
The Lizard ...	1002.6	-16	E	3	rf	58	97	3	5	-	-	10	10	800	1	1
Scilly (St. Mary's)	1001.8	-10	E'S	1	rf	59	97	2	-	-	-	10	10	<150	1	2
Guernsey ...	1006.2	-10	S'E	3	rr	57	97	6	5	-	-	10	10	<150	1	4
Pembroke ...	1005.0	-4	SE	5	c/d	59	92	8	8	6	-	7-8	9+	1500	1	2
Holyhead ...	1006.0	+2	SSW	1	c	59	85	8	-	3	-	0	7-8	-	1	↓
Chester (Sealand)	1007.1	+2	SE	1	z	57	85	6	5	7	-	2-3	9	4000	0	*
Manchester ...	1007.4	+6	SE	1	z	57	85	5	-	3	3	0	4-6	-	1	
Spurn Head ...	1007.7	+6	SSW	3	c	58	85	6	5	4	-	4-6	7-8	2500	1	2
Catterick ...	1006.5	+6	SE'E	2	bc	56	85	7	5	3	-	2-3	4-6	4000	1	*
Tynemouth ...	1005.4	+6	SW	2	c	56	85	5	8	-	-	9+	9+	1500	1	1
St. Abbs Head	1005.3	+10	WNW	2	c	56	85	8	8	7	-	4-6	7-8	1500	0	2
Leuchars ...	1004.1	+4	SW	3	bc	56	85	8	8	-	2	2-3	4-6	4000	1	
Renfrew (Abbots I.)	1005.6	+2	W'N	2	c	56	85	8	5	7	-	7-8	10	1500	0	*
Eskdalemuir ...	1005.3	+4	SW'S	2	c	55	85	8	5	5	1	Tr	7-8	800	1	*
Point of Ayre ...	1006.5	+6	N	1	c	57	85	7	5	7	-	4-6	7-8	1500	0	1
Tiree ...	1004.3	+6	WNW	2	ic	52	92	6	5	-	-	10	10	1500	1	2
Stornoway ...	1002.6	+2	SW	3	ir	52	97	8	5	7	-	4-6	10	1500	1	2
Dalwhinnie ...	1004.0	+4	SSW	2	c	51	92	6	4	6	-	7-8	10	1500	0	*
Aberdeen ...	1003.3	+2	ESE	1	c	58	85	6	8	-	2	7-8	9	1500	1	1
Wick ...	1002.4	+4	S	1	c	58	92	8	5	7	8	4-6	9	1500	1	1
Lerwick ...	1002.5	-2	NE'N	1	c	54	97	6	5	2	-	7-8	10	800	1	
Blacksod Point	1006.8	+2	*	0	c	55	92	8	5	-	-	7-8	7-8	800	0	3
Malin Head ...	1005.8	+4	W'N	3	c	55	85	7	9	-	-	9+	9+	1500	0	2
Aldergrove ...	1006.1	+6	*	0	c	56	85	7	8	-	-	9+	9+	2500	1	*
Birr Castle ...	1006.6	+6	NNW	2	c	53	97	8	5	3	-	4-6	7-8	2500	1	*
Valentia Obsy. †	1005.6	+4	N'N	4	c	59	85	8	5	3	-	7-8	7-8	1500	1	1
Roches Point	1004.3	-4	NNE	3	c	57	92	8	5	7	-	7-8	9	1500	1	1

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 17th hrs. (36)
London (Kew)	67	56	52	2	0.4	3.5
Croydon ...	68	52	52	5	-	2.6
S. Farnborough	68	54	50	3	0.6	3.3
Boscombe Down	65	54	53	12	1	0.8
Calshot (Sthmtn.)	67	58	55	0.3	0.1	7.2
Lympne ...	68	52	48	1	-	7.3
Manston ...	72	52	49	0.4	-	5.2
Shoeburyness ...	73	57	53	1	Tr	4.6
Felixstowe ...	72	55	52	4	-	2.7
Gorleston ...	70	54	52	1	-	4.5
Mildenhall ...	74	54	50	2	Tr	3.7
Cranwell ...	69	52	49	3	Tr	4.0
Birmingham ...	66	54	49	3	Tr	2.6
Upper Heyford	69	54	55	1	0.1	*
Ross-on-Wye	68	55	52	-	-	4.7
Hartland Point	61	56	55	0.6	Tr	4.4
Bristol ...	66	55	54	-	0.2	7.3
Portland Bill ...	61	56	*	0.2	6	*
Plymouth ...	62	56	56	Tr	8	2.6
The Lizard ...	62	57	*	3	6	3.6
Scilly (St. Mary's)	62	58	*	1	5	3.1
Guernsey ...	62	57	57	-	5	4.1
Pembroke ...	62	55	*	0.2	0.1	4.4
Holyhead ...	63	54	52	-	-	6.0
Chester (Sealand)	(63)	51	45	4	-	3.1
Manchester ...	61	49	43	2	-	3.3
Spurn Head ...	68	55	*	Tr	Tr	5.1
Catterick ...	65	49	43	39	Tr	2.8
Tynemouth ...	69	52	48	-	-	7.0
St. Abbs Head	61	53	*	9	0.2	*
Leuchars ...	68	50	46	-	-	4.9
Renfrew (Abbots I.)	62	53	51	-	-	0.1
Eskdalemuir ...	67	50	47	-	-	7.9
Point of Ayre ...	68	53	*	-	-	9.6
Tiree ...	59	51	50	Tr	Tr	1.3
Stornoway ...	54	51	*	6	0.1	0.0
Dalwhinnie ...	60	49	33	-	-	1.4
Aberdeen ...	65	55	53	-	0.1	7.7
Wick ...	60	51	*	3	-	
Lerwick ...	54	52	*	1	-	0.0
Blacksod Point	58	52	*	0.5	Tr	*
Malin Head ...	58	51	*	Tr	1	0.0
Aldergrove ...	63	51	47	Tr	-	0.2
Birr Castle ...	67	48	39	0.6	-	3.3
Valentia Obsy. †	61	55	53	0.4	0.5	0.3
Roches Point	62	53	*	0.2	0.2	*

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.
Kew ...	18	cpr tqc	cpr bcpr	cpr bcp	67	56	52	2	0.4	3.5	*	*	8
Croydon ...	217	cm TLR	cTLRpr	bc bbc	68	52	52	5	-	2.6	*	*	7
Greenwich (Royal Observatory) ...	149	cu	ctlrc	cbc	72	54	48	2	-	2.8	69	60	7
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	4.8	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	69	57	53	Tr		4.3	67	65	*
Regents Pk. (Botanic Gardens)† ...	168	*	*	*	70	56	52	-	-	4.7	70	69	*
Camden Square ...	110	c	bc	*	70	56	52	Tr	-	*	*	65	*
Kensington ...	80	bcc	ct	*	70	56	51	0.1	0.1	6.4	At 18h 73	65	*
Hampstead Observatory ...	450	bcor	bcp	bc	69	54	50	0.8	0.2	3.5	*	72	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 18th

South Kensington. Max.	Time.	Min.	Time.
0.3 whole period			

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 17th July Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 18th July 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 ...	1011.5	WSW	4	bc	68	1012.6	SE	2	c	63	72	55	Tr	-
Brussels ...	1009.4	SW	3	bc	68	1013.4	[illegible]	3	bc	64	70	54	3	—
Berlin ...	1009.7	SW	3	bc/pr	68	1015.5	SW	3	b	66	*	57	*	-
Zurich ...				-	-	1016.7	SW	1	b	59		57	7	-
Rome ...	1016.2	W	1	c	75	1010.1	NSE	6	c	55	*	*	*	*

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 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.

† 1 hr. observations are from Valentia W/T Station. ; Maximum and Minimum Temperatures are for the 24 hours ending 8 a. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Wednesday, 19th July, 1939.
No. 28363.

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

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)...	1008.9	-6	SSE	3	c	64	75	8	5	2	-	9+	10	1500
	Croydon ...	1008.9	-2	SSE	2	iro	62	85	8	6	7	-	4-6	10	2500
	S. Farnborough	1008.2	-2	SE'S	4	roro	60	92	7	6	2	-	9+	10	800
	Boscombe Down	1006.8	-12	SE'S	4	rr	60	97	6	6	2	-	9	10	800
	Calshot (Soton.)	1007.5	-8	ESE	4	roro	60	92	6	6	2	-	9+	10	800
	Lympne ...	1010.6	-6	WSW	2	c/pr	66	75	8	5	7	-	2-3	9+	5700
	Manston ...	1010.0	-2	SE'E	3	c	67	65	8	5	7	-	4-6	9+	4000
2	Shoeburyness ...	1009.6	-12	S'E	3	ir	67	85	8	6	2	-	2-3	10	1500
	Felixstowe ...	1010.1	-4	S	4	c/r	66	75	8	5	7	8	4-6	9	2500
	Gorleston ...	1009.7	-4	SSE	4	bc	66	75	7	2	7	-	2-3	4-6	2500
	Mildenhall ...	1008.3	-6	S	3	c	69	55	8	7	7	-	7-8	10	2500
	Cranwell ...	1008.0	-6	SE'E	2	c/d	66	85	6	9	7	-	7-8	10	800
3	Birmingham ...	1007.2	-2	SSE	3	pr	61	85	6	6	1	-	7-8	10	1500
	Upper Heyford	1008.2	+2	SSE	2	roro	59	92	6	6	2	-	4-6	10	800
4	Ross-on-Wye ...	1006.1	-6	SE	3	iro	60	85	7	6	1	-	9+	10	1500
5	Hartland Point	1002.4	-6	S	3	c	65	85	8	8	2	-	7-8	9+	1500
	Bristol ...	1005.9	-8	SSE	3	c/r	61	92	7	5	2	-	7-8	10	1500
	Portland Bill ...	1005.2	-12	SSE	5	o	58	92	7	5	-	-	10	10	2500
	Plymouth ...	1003.1	-6	SE	4	c/r	61	97	5	6	7	-	7-8	10	450
	The Lizard ...	1001.0	-12	SE'E	5	c	59	97	7	5	2	-	9	10	1500
	Scilly (St. Mary's)	999.9	-10	E	2	o/r	60	97	7	5	-	-	10	10	800
	Guernsey ...	1004.9	-8	ESE	4	c	61	92	8	8	7	-	7-8	9	1500
6	Pembroke ...	1003.4	-8	SE'E	4	c/r	60	97	7	8	2	-	7-8	9+	1500
7	Holyhead ...	1005.3	-6	N	4	bc	61	85	8	1	3	6	1	4-6	2500
	Chester (Sealand)	1006.2	-4	SE'S	2	c	67	65	7	8	7	8	7-8	9	2500
8	Manchester ...	1006.8	-2	SE	2	c	65	75	7	8	3	-	9	9+	4000
10	Spurn Head ...	1008.1	0	S	3	c	65	75	6	5	-	-	9+	9+	2500
	Catterick ...	1006.2	-2	SE'S	2	zo	66	65	6	8	-	-	9	9	1500
	Tynemouth ...	1006.0	+4	SSE	2	c	62	75	6	2	-	-	9	9	1500
11	St. Abbs Head...	1005.7	+6	ENE	1	c	60	85	8	3	4	-	4-6	7-8	1500
	Leuchars ...	1004.8	+4	SW	3	c	62	75	8	4	7	-	9	10	2500
12	Renfrew (Abbotsl.)	1006.1	+2	SW	3	q/r	59	85	8	5	-	-	10	10	1500
	Eskdalemuir ...	1005.6	+2	SW	3	c/pr	60	65	8	8	-	-	7-8	7-8	2500
	Point of Ayre ...	1006.7	0	ESE	1	c	62	75	7	5	-	-	7-8	7-8	1500
13A	Tiree ...	1004.7	0	WSW	2	c/d	53	92	7	5	2	-	4-6	9	1500
13B	Stornoway ...	1002.9	0	S	5	c	55	92	8	5	7	-	7-8	9+	2500
15	Dalwhinnie ...	1004.6	+4	SSW	3	c	56	75	7	4	6	-	4-6	10	4000
	Aberdeen ...	1003.8	+2	SSE	2	c	64	65	7	7	-	3	9	9+	1500
	Wick ...	1003.4	+12	S	2	c	57	85	8	5	7	2	4-6	7-8	1500
16	Lerwick...	1002.7	0	SW'W	2	c	55	97	6	5	2	-	7-8	10	800
17	Blacksod Point...	1008.5	+8	N	3	c	58	75	8	5	-	-	10	10	1500
18	Malin Head ...	1006.6	0	W	2	c/pr	54	92	7	9	-	-	9	9	1500
	Aldergrove ...	1006.6	+2	NNW	2	c/pr	58	85	8	8	2	-	4-6	10	2500
19	Birr Castle ...	1006.3	-4	NNW	1	c	63	65	8	8	2	-	7-8	10	1500
20	Valentia Obsy.†	1006.4	+2	NE'N	4	bc	61	75	8	8	8	-	4-6	4-6	4000
	Roches Point ...	1004.0	-2	ENE	3	ir	62	92	8	6	2	-	7-8	10	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low. (23)	Cloud Form Med. (24)	Cloud Form High. (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Weather 7h.–13h. 18th (37)	Weather 13h.–18h. 18th (38)	Weather 18h. 18th to 1h. 19th (39)	Weather 1h.–7h. 19th (40)
London (Kew)	1005.9	-22	SE	3	c/r	64	85	8	9	3	3	7-8	9+	1500	1	*	ciroc	crroqc	bccrRrc	c
Croydon	1006.9	-14	ESE	2	c/r	63	92	7	9	4	-	4-6	9	4000	1	*	c⊕roroiro	ciroirpro	cpro bc	cbcmoc
S. Farnborough	1005.3	-18	SE'E	3	c/r	62	92	7	8	6	-	9	9+	1500	1	*	crroro	croRiro	cbcc	ciRc
Boscombe Down	1004.9	-14	E	2	iro	60	97	7	6	7	-	7-8	9	800	1	*	crr	rrroiro	iro cm bcf	pfcpfcro
Calshot (Soton.)	1005.1	-14	SE'E	2	c	64	92	8	8	3	-	2-3	9	1500	1	1	cirocrr	crorrc	cbw	bwrriR
Lympne	1008.1	-8	SE	3	c	64	75	8	5	7	-	4-6	9+	5700	0	§2	bccpro	ciro	crrol	cmflocm
Manston	1007.2	-20	SE'E	4	c/r	67	65	8	5	7	-	7-8	9+	4000	1	*	cbdjc	cirom	orrbc	bcwbc
Shoeburyness	1007.5	-16	ESE	3	c/r	65	97	8	5	7	-	4-6	9+	4000	0	*	cbcbpr	circ	cprcc	clPRc
Felixstowe	1007.8	-16	SE	3	c/r	65	85	8	5	7	8	7-8	9+	4000	0	3	cbccir	circ	ciroc	c
Gorleston	1008.6	-6	SE'S	4	c/pr	64	85	6	6	2	-	4-6	9	2500	1	3	cbc	bccpr	copro	ocpro
Mildenhall	1007.1	-8	ESE	2	c	65	75	7	5	7	6	4-6	9+	4000	1	*	ccy	crriroc	ccrcm	cbciro bc
Cranwell	1007.0	-2	S'E	3	ido	62	92	6	5	2	-	7-8	10	4000	1	*	cddidm	cddidm	crro	cmfbcm
Birmingham	1005.7	-2	SE	3	roro	60	92	6	6	2	-	9	10	800	1	*	dciro	oiro	ro c	cbc
Upper Heyford	1006.6	-8	SE	1	iR	60	97	5	6	2	-	9	10	450	1	*	ccrorcir	rocmciro	RR cbcm	cmbcfcm
Ross-on-Wye	1004.6	-8	SE	2	c	62	89	7	5	-	-	9+	9+	1500	1	*	ccorr	rocdoc	ccbc	bccoc
Hartland Point	1001.7	-4	SSE	3	bc	62	85	8	8	4	-	4-6	4-6	1500	1	2	crriro	ciroP	bcpo	bcc
Bristol	1004.4	-10	SE'S	3	c	62	85	8	5	3	-	4-6	7-8	1500	1	*	cdrorR	cdocroc	cbc	bccrRR
Portland Bill	1004.2	-16	ESE	4	c	59	92	8	5	-	-	4-6	9	4000	1	3	orr	opr	bcc	orrc
Plymouth	1003.2	+2	SSW	4	c/r	60	92	7	6	7	-	9	9+	800	1	3	rrcddiro	rrciro	cbccpro	bcucprc
The Lizard	1003.6	+6	S	4	bc	60	92	8	8	6	-	4-6	4-6	2500	1	3	rrdfc	cbc	bcw	bcw
Scilly (St. Mary's)	1000.3	+6	SW	3	c/d	59	97	8	8	7	-	7-8	9+	800	1	2	frrciro	crocdm	crocbc	bcw c
Guernsey	1004.6	-2	WSW	3	c	61	85	8	8	3	-	4-6	7-8	1500	1	3	oroc	circ	circr	orcir
Pembroke	1002.3	-4	SE	4	rr	59	97	7	8	-	-	9+	9+	800	1	2	rrc	rrc	c	cbc
Holyhead	1004.1	-8	NNE	3	roro	57	85	7	9	2	-	7-8	10	2500	1	1	bcc⊕	crroroc	RroRRc	RRrrc
Chester (Sealand)	1004.5	-10	SE'S	2	c/r	63	85	6	8	7	-	4-6	9+	1500	1	*	cmo	zoRromo	roiRdomo	dirmmbc
Manchester	1005.4	-6	SSE	2	c/r	62	92	6	8	7	-	4-6	10	1500	1	*	bcmoc	ccrrmo	cfomcm	omofcbc
Spurn Head	1007.2	-6	SE	3	c/pr	62	92	6	6	1	-	2-3	10	800	1	2	c	cprt	iRc	cm
Catterick	1005.6	+2	S'E	2	pr	61	92	5	3	-	-	10	10	1500	1	*	bcwczo	czpro	rrorm	lrfid
Tynemouth	1005.4	-6	SE	2	c	60	85	6	5	-	-	9+	9+	1500	1	1	c	c	cfoo	oiro
St. Abbs Head	1005.7	0	ESE	1	c	59	75	8	3	6	-	7-8	9	1500	0	1	c	bcc	ciro	Ferr
Leuchars	1005.0	-2	SW	3	bc	64	75	8	7	4	1	1	4-6	4000	0	*	bcc	cbc	bc	bcrcfm
Renfrew (Abbotsl.)	1006.9	0	NW'W	2	c	60	75	8	4	6	9	4-6	7-8	1500	0	*	ciroc	cirocbc	bcfgwf	bcfqcw
Eskdalemuir	1004.6	-6	SW	2	bc	64	65	8	8	3	1	4-6	4-6	2500	1	*	cbcpro	bccbc	bccdd	cdodom
Point of Ayre	1005.5	-6	N'W	3	c	61	76	8	1	-	9	Tr	7-8	2500	0	1	cbcc	cbcc	cdd	cRR
Tiree	1004.6	0	SW'W	2	ido	55	85	7	5	-	-	9+	9+	1500	1	2	crorod	cid	cid	c
Stornoway	1003.8	+6	S	4	c	54	92	8	5	7	-	4-6	10	2500	1	2	cirid	c	c	cbc
Dalwhinnie	1004.7	+2	SSW	4	c	55	75	7	5	3	-	4-6	9+	4000	0	*	c	c	*	c
Aberdeen	1004.8	+4	S'W	3	c	62	75	7	7	1	3	2-3	7-8	2500	1	0	czbcc	cbc	bcbof	offdo
Wick	1004.3	+2	S	3	c	56	92	8	5	7	8	4-6	9+	800	1	1	c	c	c	Fif
Lerwick	1003.5	+2	W	3	c	55	97	8	8	7	-	7-8	9	800	0	*	cmo	c	c	c
Blacksod Point	1008.2	-6	NW	3	c	55	92	8	5	-	-	10	10	1500	0	3	c	proc	iro	iro
Malin Head	1006.4	-2	NW	4	c	55	85	8	2	8	-	2-3	7-8	4000	0	2	cproc	cidoc	cidc	cbcc
Aldergrove	1005.8	-2	N'W	3	c	59	75	9	5	-	-	9+	9+	4000	1	*	cproc	cbcc	cboc	bcc
Birr Castle	1006.4	-4	NW	3	c	64	65	8	3	7	-	2-3	7-8	1500	1	*	c	c	cbc	bcoid
Valentia Obsy.†	1006.8	+2	NNE	4	c	59	75	8	5	-	-	9	9	1500	1	2	cbc	bcc	bccpro	cproc
Roches Point	1003.4	-4	NE'E	3	c/r	60	97	8	6	2	-	7-8	10	1500	1	1	rrir	irrrc	ciroc	c

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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.*

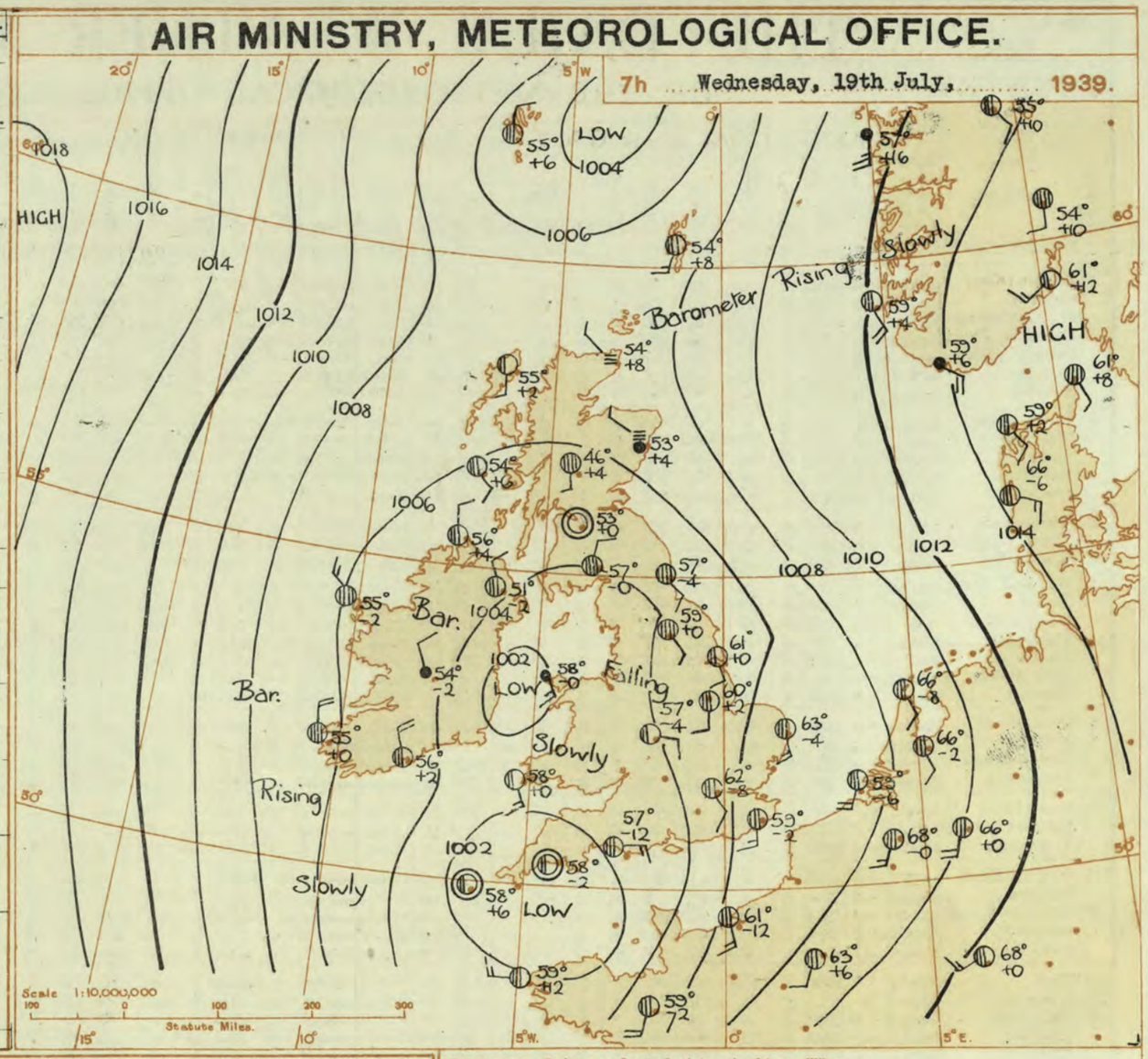
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 18th July 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 17th to 9h. 18th	Temperature. (°F) Max. 9h.—17h. 18th	Rainfall. (mm.) Night. 17h. 17th to 9h. 18th	Rainfall. (mm.) Day. 9h.—17h. 18th	Sunshine. (Hrs.) Sunrise to 17h. 18th	Sunshine. (Hrs.) Sunrise to Sunset. 17th
1	Tunbridge W.	co	orco	53	70	–	0·5	3·1	6·8
	Bournemouth	r	rrc	58	63	1	12	0·5	6·5
	Ventnor ...	cor	orbc	58	64	0·3	10	0·6	6·8
	Southsea ...	oor	oro	58	63	Trace	7	0·4	6·6
	Bognor Regis	bccrr	rirbc	59	64	–	5	1·2	7·8
	Littlehampton	crcbc	bcpbc	59	66	–	5	1·6	8·4
	Worthing ...	c	cbccr	59	65	–	4	1·7	9·7
	Brighton ...	ccr	rbcrc	59	67	–	7	1·6	8·5
	Eastbourne† ...	coroc	c	58	68	–	2	2·7	9·8
	Hastings† ...	bccor	opoco	57	66	–	1	3·1	9·6
	Folkestone ...	bcc	coir	56	69	–	Trace	4·3	7·2
	Dover ...	bcc	cp.	57	69	–	Trace	4·6	7·1
	Deal	cbc	bcp.	54	71	–	Trace	4·4	6·6
	Ramsgate ...	bcc	c	56	69	–	–	4·2	5·2
	Margate ...	bc	bccd.	55	72	–	Trace	4·8	6·5
2	Southend ...	c	coro	56	71	–	Trace	3·3	6·1
	Clacton-on-Sea	bcc	cp.c	56	66	–	Trace	4·2	1·3
	Dovercourt ...	bcc	bcpbc	53	68	Trace	Trace	5·1	3·0
	Lowestoft ...	cbcb	bbccr	53	66	–	0·2	4·1	3·5
	Skegness ...	ocbco	ocoro	53	67	–	Trace	2·0	5·7
	Mablethorpe...	bcor	bcor	53	67	–	Trace	1·1	6·4
	Cleethorpes ...	bc	borc	52	68	–	1	3·7	5·2
3	Leamington S.	opc	or	54	66	3	2	0·1	2·1
4	Cheltenham†	oor.	air.	55	64	Trace	1	0·1	3·9
5	Bath	cr	rc	56	64	0·3	3	0·0	5·2
	Weymouth ...	rrc	cp.c	57	61	14	1	0·0	6·4
	Jersey ...	rcrr	cpbc	58	68	6	2	1·2	3·3
	Torquay ...	ordm.	copq	57	60	8	2	0·2	4·9
	Falmouth ...	femrr	orrco	58	63	7	0·6	0·4	4·4
	Penzance ...	rroid	dcbcc	58	62	10	1	1·6	3·4
	St. Ives ...								
	Bude... ...	r	cpbc	58	65	3	1	0·4	4·2
	Ilfracombe ...	ror	ocirc	57	66	1	5	1·1	6·0
6	Aberystwyth	bccpr	prc	55	66	–	2	0·6	3·8
7	Llandudno ...	bc	cir.	52	65	–	0·3	3·8	5·2
	Colwyn Bay...	bcb	pcorc	53	66	–	0·5	4·1	4·0
	Rhyl	bc	bccr.	51	69	–	0·1	5·3	3·8
8	Wallasey ...	bcc	bccr	55	68	0·3	4	5·0	4·0
	Southport ...	bcbbc	bccop	50	70	–	0·5	6·0	5·9
	Blackpool ...	bbc	cqRor	53	68	–	2	4·1	6·8
	Morecambe ...	bcb	bbcdr	55	67	–	Trace	6·3	8·7
9	Ilkley... ...	bc	bcor	50	70	–	5	4·7	5·0
	Harrogate ...	bc	bccr.	48	69	–	3	6·3	4·3
10	Berwick-on-T.	bbc	r.c	50	68	1	Trace	5·5	4·7
11	Dunbar ...	bcm.	cm.	52	65	–	–	6·4	4·6
12	Troon... ...	bccb	bbc	54	57	–	–	0·7	1·5
	Douglas ...	bc	bc	53	65	–	–	5·2	6·2

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 19th July, 1939.

Districts.	Forecast
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 ...	Wind light, variable, freshening from west or northwest to-morrow. Occasional thundery rain or showers to-day with short bright intervals, improving to-morrow. Average temperature.
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 Orkney and Shetland	Wind light and variable. Thundery showers, but some bright intervals. Average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind northwest, moderate. Showery, but bright periods. Average temperature.

GENERAL INFERENCE.

A complex depression covers the British Isles. The weather will be generally unsettled with thundery showers or occasional rain in all areas.

FURTHER OUTLOOK.

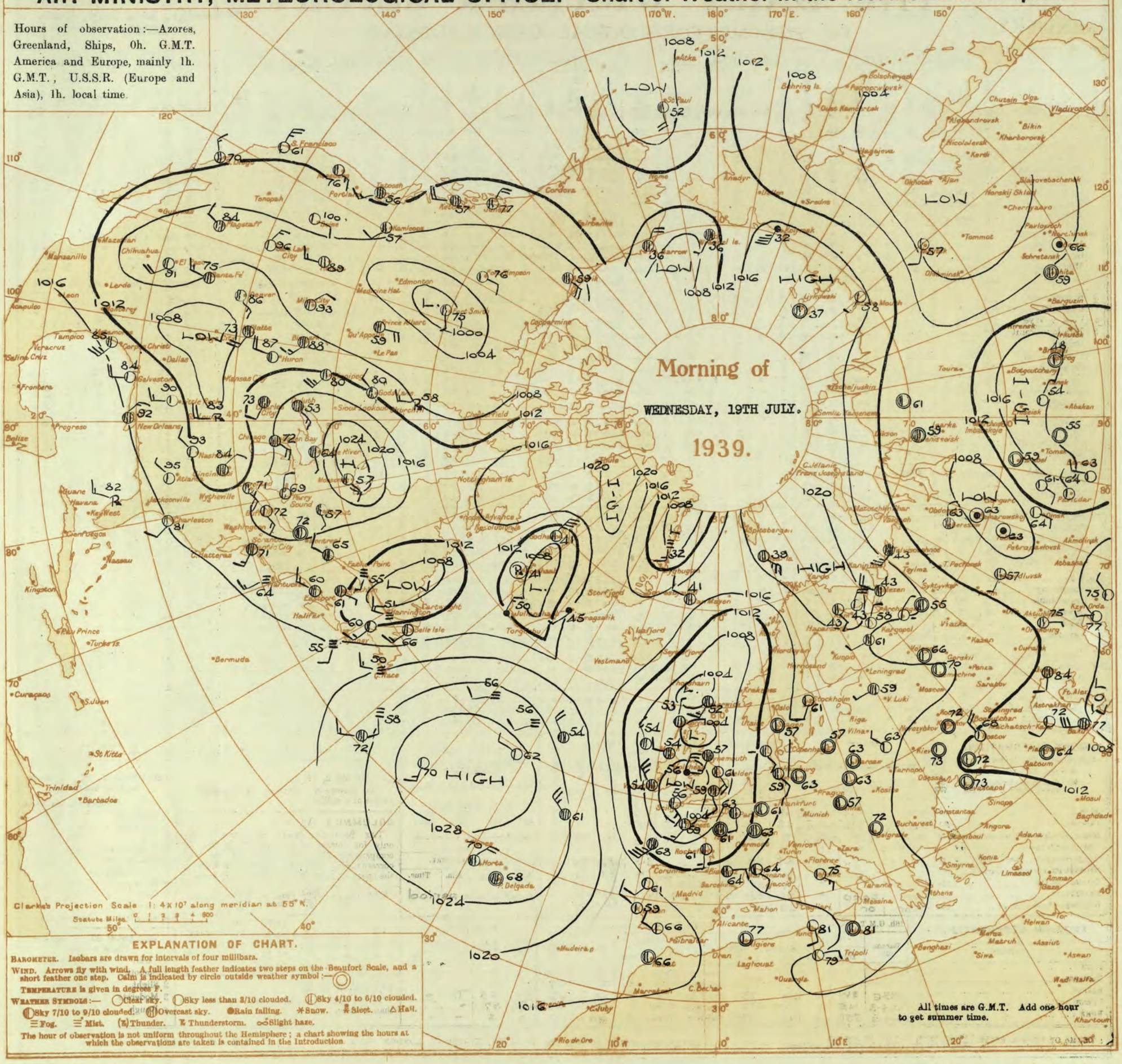
Unsettled.

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

Wednesday, 19th July, 1939.
No. 28363.

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

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	1006·2	-6	SSE	2	c	59	97	8	3	7	-	2-3	9+	4000
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1005·2	-2	SE'S	2	oF	54	97	2	5	-	-	10	10	<150
	Calshot (Sthmtn.)	8	1005·3	-6	SSE	2	b	59	92	8	-	4	3	0	Tr	-
	Lympne	346	1007·8	-10	SE	2	c/r	59	97	7	9	-	-	9	9	4000
	Manston	154	1006·6	-8	SE	1	bc	60	92	8	-	3	-	0	2-3	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1007·0	-6	S	3	c/pr	63	85	8	6	-	-	10	10	1500
	Mildenhall	19	1005·5	-8	S	3	z	62	92	6	5	1	-	4-6	9	4000
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1002·5	-2	SE	3	bc	55	92	8	4	-	-	2-3	2-3	2500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1004·3	-14	SE	3	c	58	92	7	5	-	-	7-8	7-8	4000
	Plymouth	82	1003·3	-6	S'E	2	bc/pr	58	92	7	6	-	-	4-6	4-6	1500
	The Lizard	240	1003·4	+4	SE	2	bc	56	97	8	8	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	1001·2	-2	S'E	3	bc	56	97	8	4	-	-	2-3	2-3	2500
	Guernsey	175	1004·4	-6	SSE	2	rr	57	97	6	5	-	-	10	10	1500
6	Pembroke	142	1002·8	0	S	3	e	58	97	7	8	-	-	7-8	7-8	1500
7	Holyhead	26	1002·8	-6	NNE	4	r°r°	56	97	7	6	2	-	4-6	10	1500
	Chester (Sealand)	16	1003·6	-10	E	1	id°	60	92	5	5	-	-	10	10	800
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1004·9	-16	SSE	4	bc	61	92	7	-	9	-	0	4-6	-
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1005·3	-6	S	3	o	57	97	6	5	-	-	10	10	1500
11	St. Abbs Head	280	1005·4	-4	-	0	ir°	55	92	7	3	2	-	7-8	10	1500
	Leuchars	36	1006·0	-4	-	0	bc	53	97	7	5	-	-	4-6	4-6	4000
12	Renfrew (Abbots I.)	19	1006·4	0	W	1	b/f	46	97	7	5	4	2	Tr	1	4000
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1004·6	0	NNE	1	dd	56	92	8	-	2	-	10	10	1500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1006·8	+8	N	1	c	53	97	8	5	7	-	7-8	9+	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1005·9	+2	W	1	c	52	97	7	5	7	8	4-6	9+	800
16	Lerwick	156	1006·4	+4	S'W	3	c	52	97	8	5	2	-	7-8	9+	1500
17	Blacksod Point	18	1007·0	-8	NW	3	c	52	97	7	5	-	-	10	10	800
18	Malin Head	84	1005·6	-2	W	1	c	54	92	8	8	-	-	9	9	5700
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1007·9	0	NW	5	c/or	54	97	8	8	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1004·8	-10	S'E	2	c	61	85	7	5	-	-	9+	9+	1500	1	*
	Croydon	1005·1	-8	SE'S	2	c	62	85	8	6	3	-	7-8	9	1500	1	*
	S. Farnborough	1003·8	-6	ESE	3	c	60	92	7	5	3	-	7-8	9+	1500	1	*
	Boscombe Down	1003·0	-10	E'S	1	r°r°	56	97	6	5	3	-	9	9+	800	1	*
	Calshot (Sthmtn.)	1002·7	-16	SE'E	4	r°r°	58	97	6	6	2	-	9+	10	450	1	2
	Lympne	1007·0	-2	S	3	c	59	97	8	5	-	-	7-8	7-8	450	1	§2
	Manston	1005·8	-2	S	3	bc	62	85	8	2	-	-	4-6	4-6	800	1	*
2	Shoeburyness	1005·8	-6	S	3	bc	64	92	7	2	3	-	2-3	4-6	1500	1	*
	Felixstowe	1005·8	-8	SSW	3	c	63	92	8	6	4	-	2-3	9	4000	0	2
	Gorleston	1006·2	-4	S'E	3	c/pr	63	92	7	8	3	-	4-6	9	2500	0	2
	Mildenhall	1005·5	-2	SSE	2	bc	62	85	8	8	3	-	2-3	2-3	4000	1	*
	Cranwell	1005·1	+2	S	2	c	60	92	6	5	7	2	4-6	7-8	4000	1	*
3	Birmingham	1004·1	-4	E[illegible]	2	bc	57	85	7	5	9	-	2-3	4-6	800	1	*
	Upper Heyford	1004·6	-8	ESE	[illegible]	c	58	97	7	8	7	2	2-3	7-8	2500	1	*
4	Ross-on-Wye	1003·7	-6	NE	2	[illegible]	57	92	7	6	7	-	4-6	9+	1500	1	*
5	Hartland Point	1001·9	+4	E	3	c	55	97	8	9	-	-	9	9	1500	1	2
	Bristol	1003·3	-6	SE	1	cjf	55	97	6	5	7	-	4-6	7-8	1500	1	*
	Portland Bill	1002·5	-12	E	3	c	57	92	7	5	-	-	7-8	9	4600	1	3
	Plymouth	1001·9	-2	NE	1	c	57	97	8	9	-	-	9	9	2500	1	0
	The Lizard	[illegible]	-2	-	0	bc	58	97	8	8	6	-	4-6	4-6	2500	1	2
	Scilly (St. Mary's)	1001·9	+6	-	0	c	58	97	8	8	3	3	2-3	7-8	1500	1	2
	Guernsey	1001·5	-6	S	2	c/r	57	97	8	5	3	-	7-8	9+	2500	1	3
6	Pembroke	1002·2	0	SE'S	3	be	58	97	7	8	6	1	4-6	4-6	2500	1	2
7	Holyhead	1001·9	0	SE'S	3	rr	58	97	6	6	2	-	7-8	10	450	1	2
	Chester (Sealand)	1002·8	+2	SSE	3	z°	61	85	6	8	-	-	9	9	2500	1	*
8	Manchester	1002·4	-2	SE	2	bc	61	85	7	2	5	5	4-6	4-6	4000	1	*
10	Spurn Head	1004·9	0	SSE	2	bc	61	92	5	-	8	-	0	4-6	-	1	2
	Catterick	1003·9	0	SE	1	m	59	97	4	5	-	-	10	10	220	1	*
	Tynemouth	1004·4	-4	SE	2	o	57	97	6	-	2	-	10	10	1500	1	1
11	St. Abbs Head	1004·8	-8	SSE	2	rr	56	97	7	8	6	-	7-8	9+	1500	1	1
	Leuchars	1005·4	-2	NNE	2	ir°	55	97	5	6	-	-	10	10	<150	1	
12	Renfrew (Abbots I.)	1005·8	0	-	0	c	53	92	8	5	-	-	10	10	2500	0	*
	Eskdalemuir	1004·0	0	NNE	2	o	57	92	6	5	-	-	10	10	450	1	*
	Point of Ayre	1003·1	-6	ENE	2	RR	57	97	5	8	2	-	9	10	800	1	2
13A	Tiree	1006·0	+6	SE	2	c/d	54	92	8	5	-	-	7-8	7-8	1500	1	1
13B	Stornoway	1007·9	+2	S	1	bc	55	92	8	5	5	-	1	2-3	2500	1	1
15	Dalwhinnie	*	+4	S	1	c	46	97	7	8	-	-	10	10	4000	0	*
	Aberdeen	1006·7	+4	NNW	1	dF	53	97	2	-	-	-	10	10	<150	1	1
	Wick	1007·4	+8	NW	1	iF	54	97	3	-	-	-	10	10	<150	1	1
16	Lerwick	1007·6	+8	SSW	3	c	54	92	8	8	3	-	4-6	7-8	1500	0	*
17	Blacksod Point	1005·6	-2	NW	3	ct	55	97	8	8	-	-	10	10	220	1	2
18	Malin Head	1005·9	+4	N	2	c	56	85	8	2	5	-	2-3	7-8	5700	0	2
	Aldergrove	1004·7	-2	N'W	2	c	51	92	8	5	-	-	9+	9+	4000	1	"
19	Birr Castle	1005·5	-2	NNW	2	id	54	97	7	5	-	-	10	10	2500	1	*
20	Valentia Obsy. †	1007·1	0	N	4	c	55	92	8	5	-	-	10	10	1500	1	3
	Roches Point	1004·5	+2	NW	4	c	56	92	8	5	4	5	2-3	7-8	2500	1	1

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F. (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 18th Hrs. (36)
London (Kew)	69	56	49	2	2	4·2
Croydon	68	55	55	2	0·2	3·8
S. Farnborough	65	56	52	3	0·5	1·5
Boscombe Down	61	52	51	6	1	0·0
Calshot (Sthmtn.)	64	58	56	14	6	0·9
Lympne	68	58	57	Tr	4	4·5
Manston	72	59	55	Tr	2	4·2
Shoeburyness	72	60	53	0·2	6	3·0
Felixstowe	68	61	57	0·2	0·3	4·8
Gorleston	66	60	59	0·1	Tr	4·5
Mildenhall	72	56	*	1	3	2·2
Cranwell	67	57	56	2	4	0·4
Birmingham	64	54	49	1	0·2	0·0
Upper Heyford	65	53	51	3	5	*
Ross-on-Wye	63	53	46	2	0·1	0·1
Hartland Point	65	53	51	6	0·1	1·5
Bristol	64	52	45	4	5	1·4
Portland Bill	59	56	*	6	1	*
Plymouth	62	56	53	12	1	0·6
The Lizard	62	55	*	8	-	3·2
Scilly (St. Mary's)	64	53	*	3	0·2	2·6
Guernsey	65	56	54	6	3	3·6
Pembroke	63	56	*	9	Tr	0·1
Holyhead	62	55	55	2	24	5·5
Chester (Sealand)	68	59	58	3	1	4·7
Manchester	67	59	57	3	0·2	1·3
Spurn Head	69	59	*	1	5	3·5
Catterick	69	58	58	0·2	3	5·5
Tynemouth	70	56	55	-	0·4	2·3
St. Abbs Head	62	54	*	-	0·6	*
Leuchars	65	52	43	-	0·1	9·2
Renfrew (Abbots I.)	63	44	38	Tr	-	1·3
Eskdalemuir	66	55	54	Tr	0·1	7·5
Point of Ayre	63	55	*	-	5	5·8
Tiree	56	46	41	2	Tr	0·0
Stornoway	56	49	*	Tr	-	0·0
Dalwhinnie	56	36	28	-	-	0·0
Aberdeen	66	48	44	-	Tr	3·1
Wick	58	48	*	-	-	*
Lerwick	58	51	*	-	-	0·2
Blacksod Point	59	51	*	Tr	0·3	*
Malin Head	58	52	*	0·2	Tr	0·8
Aldergrove	65	46	42	Tr	-	3·1
Birr Castle	66	50	48	-	0·1	6·2
Valentia Obsy. †	63	54	51	-	0·5	7·2
Roches Point	62	53	*	6	0·3	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning	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	circ	crrqc	bcerRc	69	56	49	2	2	4·2	•	•	7
Croydon	217	c⊕ crriq	cicircpr	cprbem	68	55	55	2	0·2	3·8	•	•	7
Greenwich (Royal Observatory)	149	cid	cir	cbcp	71	55	44	2	Tr	3·9	61	76	7
City (Bunhill Row)	—	•	•	•	•	•	•	•	•	3·7	•	•	•
Westminster (St. James' Park)	27	•	•	•	69	59	53	3		3·8	87	79	•
Regents Pk. (Botanic Gardens)‡	168	•	•	•	70	58	51	1	2	*	83	78	•
Camden Square	110			•	71	58	53	4		*	•	71	•
Kensington	80	cp	bcep	•	71	52	53	1	1	4·4	At 18h 83	71	•
Hampstead Observatory	450	bcar	or	c	69	57	55	3	0·6	3·3		81	•

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.

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

South Kensington.			
Max.	Time.	Min.	Time.
<0·3 whole period			

Kew Observatory.			
Max.	Time.	Min.	Time.
<0·3 whole period			

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 18th July Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 19th July 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						1009·1	SSW	2	c	63		61		3
Brussels						1008·3	SSW	3	c	68		61		-
Berlin	1015·6	SW	1	bc	75	1015·6	SE	2	z°	72	77	63	Tr	-
Zürich	1014·3	NE	1	c	72	1013·9	NW	1	bc	63	81	57	-	-
Rome	1014·9	SSE	2	b	79	1014·8	SE	3	bc	79	*	*	-	-

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.

† [illegible] observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday, 20th July, 1939.
No. 28364.

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

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)...	1003.4	-4	SW'S	3	c/pr	63	85	8	8	3	-	9	9+	1500
	Croydon ...	1004.0	-4	S'E	3	c/pr	62	92	8	9	6	3	9	9+	1500
	S. Farnborough	1002.6	-6	S'E	3	pr	63	92	7	8	-	1	9	9	2500
	Boscombe Down	1002.0	+2	S	3	cjp	64	85	8	9	-	-	7-8	7-8	2500
	Calshot (Soton.)	1002.8	+6	SSW	3	bc	65	85	8	2	5	1	4-6	4-6	1500
	Lympne ...	1006.2	-4	S	4	c/pr	63	85	8	8	3	3	4-6	7-8	2500
	Manston ...	1005.3	-6	S'E	5	c	69	65	7	8	7	-	7-8	9+	1500
2	Shoeburyness ...	1005.1	-4	S'E	5	c/pr	64	97	8	3	8	-	7-8	7-8	1500
	Felixstowe ...	1005.4	-6	S'E	5	c	69	65	8	8	6	1	4-6	7-8	2500
	Gorleston ...	1006.1	0	SSE	5	bc	66	85	7	2	4	-	2-3	4-6	2500
	Mildenhall ...	1003.7	-8	S'E	5	c	68	65	8	8	3	6	7-8	9	2500
	Cranwell ...	1003.5	-10	E	4	tlr	64	85	7	9	7	3	2-3	9+	450
3	Birmingham ...	1003.6	0	-	0	RR	58	92	5	6	2	-	7-8	10	800
	Upper Heyford	1002.6	-6	SE	1	c/r	63	92	7	6	7	-	7-8	9+	450
4	Ross-on-Wye ...	1002.5	-6	NNW	3	c	65	75	8	2	3	-	4-6	9+	2500
5	Hartland Point	1003.4	+12	WNW	2	c	61	85	9	8	-	3	4-6	7-8	1500
	Bristol ...	1002.8	+2	N	2	iro	59	92	6	5	-	-	9	9	1500
	Portland Bill ...	1003.2	+8	W	2	c	60	85	8	1	4	-	4-6	7-8	4000
	Plymouth ...	1003.5	+10	W'S	3	c	68	85	8	3	3	-	7-8	9	1500
	The Lizard ...	1004.0	+16	WSW	2	bc	63	85	8	8	4	-	2-3	4-6	2500
	Scilly (St. Mary's)	1004.7	+18	NNW	5	c/d	58	97	7	8	7	-	7-8	10	1500
	Guernsey ...	1004.1	+12	W	4	c	62	85	8	2	2	-	4-6	7-8	1500
6	Pembroke ...	1003.9	+4	W	2	c	59	92	7	8	6	1	4-6	9+	1500
7	Holyhead ...	1002.8	+4	SW	2	bc	65	75	8	2	6	-	2-3	4-6	2500
	Chester (Sealand)	1002.8	-4	S	1	c	71	55	8	2	7	-	4-6	9	2500
8	Manchester ...	1003.0	-4	SSW	1	c	69	55	8	8	3	-	7-8	10	2500
10	Spurn Head ...	1004.6	-4	ESE	2	bc	65	85	6	-	8	3	3	4-6	-
	Catterick ...	1003.7	-2	SSE	2	bc	69	65	8	3	4	-	4-6	4-6	2500
	Tynemouth ...	1004.8	+4	SE	3	bc	62	85	6	2	-	1	2-3	4-6	2500
11	St. Abbs Head...	1005.3	+4	SSE	1	F+	58	97	1	-	-	-	10	10	<150
	Leuchars ...	1006.2	+2	NNE	2	dodo	57	97	5	-	2	-	10	10	220
12	Renfrew (AbbotsI.)	1005.9	0	NE	2	zo	63	85	6	5	-	-	10	10	1500
	Eskdalemuir ...	1004.3	+4	NE	3	pr	62	85	8	8	-	-	10	10	1500
	Point of Ayre ...	1004.2	+2	ENE	2	c	63	92	7	1	8	-	Tr	9	2500
13A	Tiree ...	1007.0	0	NNW	4	b	59	85	8	1	4	5	Tr	1	4000
13B	Stornoway ...	1009.0	+6	NE	3	c	58	85	8	5	4	-	4-6	7-8	4000
15	Dalwhinnie ...	1007.7	-4	N	2	c	58	75	7	8	7	-	9	10	4000
	Aberdeen ...	1007.4	+2	NE	1	df	57	97	2	-	-	-	10	10	<150
	Wick ...	1008.2	+2	NE	3	bc	56	85	6	5	7	6	2-3	4-6	1500
16	Lerwick...	1007.9	-8	S'W	3	cjf	56	97	6	5	5	-	4-6	7-8	1500
17	Blacksod Point...	1007.1	+14	NW	3	bc	62	85	9	3	-	-	4-6	4-6	2500
18	Malin Head ...	1007.1	+2	N	3	c	58	85	8	2	8	-	4-6	7-8	1500
	Aldergrove ...	1005.2	+6	NNW	2	iro	59	85	7	5	2	-	7-8	10	2500
19	Birr Castle ...	1005.0	0	NNW	2	c	62	75	8	2	7	-	4-6	9+	1500
20	Valentia Obsy.†	1007.4	+6	NW	5	pr	59	92	7	5	-	-	9+	9+	800
	Roches Point ...	1006.5	+10	NW	3	c	63	85	9	8	-	-	7-8	7-8	2500

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

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)	1003.7	+4	SW	3	c	65	75	8	8	-	-	7-8	7-8	2500	1	*
Croydon	1003.9	+2	S'W	3	bc	65	75	8	2	-	3	4-6	4-6	4000	1	*
S. Farnborough	1004.0	+10	SW'S	4	bc	65	75	8	3	6	3	2-3	4-6	2500	1	*
Boscombe Down	1004.2	+6	WSW	3	c	61	75	8	8	3	3	4-6	7-8	2500	1	*
Calshot (Soton.)	1004.4	+10	SW'S	4	bc	64	85	8	3	4	3	1	2-3	1500	1	2
Lympne	1006.2	0	SW	4	c	60	97	8	9	4	3	7-8	7-8	800	0	§3
Manston	1004.8	-2	S'W	3	c/pr	63	85	7	5	3	8	7-8	9+	800	1	*
Shoeburyness	1004.8	+2	S'E	3	c	64	92	8	8	3	-	7-8	7-8	1500	1	*
Felixstowe	1004.7	-4	S	5	c/pr	62	85	8	8	4	3	7-8	9	2500	1	2
Gorleston	1005.6	0	SE	4	pr	64	85	7	6	3	-	4-6	9	2500	1	3
Mildenhall	1003.4	-2	SSE	4	bc	66	75	8	2	7	3	2-3	4-6	4000	1	*
Cranwell	1003.4	-2	E	1	r/tlr	61	92	7	9	7	3	7-8	9+	1500	1	*
Birmingham	1003.4	+2	N	2	c	62	75	6	5	3	-	4-6	9+	1500	1	*
Upper Heyford	1003.4	+6	SW	2	c	62	85	7	2	4	3	2-3	7-8	1500	1	*
Ross-on-Wye	1003.2	+6	W'S	2	ct	63	75	8	9	6	3	7-8	7-8	2500	1	*
Hartland Point	1005.1	+10	NW	3	c	59	92	8	8	6	3	4-6	7-8	1500	1	2
Bristol	1004.1	+10	W	3	c	64	75	8	8	8	8	4-6	7-8	2500	1	*
Portland Bill	1005.2	+20	WSW	3	c	60	92	8	2	4	-	4-6	7-8	4000	1	3
Plymouth	1005.3	+12	W'N	3	c	64	65	8	9	7	-	4-6	9+	1500	1	1
The Lizard	1007.2	+16	W	4	c	57	85	8	8	2	-	7-8	9+	2500	0	2
Scilly (St. Mary's)	1007.6	+10	NW'W	3	cjp	60	92	8	8	7	3	4-6	9+	1500	1	2
Guernsey	1006.9	+28	SW	4	c	60	85	8	8	3	-	4-6	7-8	800	1	3
Pembroke	1005.7	+12	NNW	3	c	57	92	7	8	-	-	9+	9+	1500	1	2
Holyhead	1003.9	+4	NW'W	1	c	60	92	7	8	8	3	4-6	7-8	2500	1	1
Chester (Sealand)	1003.7	+2	WNW	2	iro	61	85	6	5	7	-	7-8	10	1500	1	*
Manchester	1003.4	-2	NW'W	2	zo	63	85	6	8	7	-	4-6	9+	2500	1	*
Spurn Head	1003.6	0	E'S	2	c/pr	62	92	6	6	9	3	2-3	7-8	1500	1	2
Catterick	1003.4	+6	S	2	c	66	75	8	8	6	3	4-6	7-8	1500	1	*
Tynemouth	1004.8	0	NNE	2	bc	59	92	6	8	3	-	4-6	4-6	1500	0	1
St. Abbs Head	1006.2	+8	SE	1	F	58	92	1	-	-	-	10	10	<150	0	*
Leuchars	1006.7	+2	NE	1	oft	57	97	3	-	2	-	10	10	220	1	*
Renfrew (AbbotsI.)	1006.1	0	NE'N	3	c	63	85	8	5	-	-	10	10	1500	0	*
Eskdalemuir	1003.9	+2	NE'E	4	ct	65	85	6	8	-	-	10	10	1500	1	*
Point of Ayre	1004.0	0	NW	1	c	63	92	7	8	7	-	Tr	9+	2500	1	1
Tiree	1007.2	0	NW'N	4	bc	58	85	8	1	4	-	2-3	2-3	4000	0	3
Stornoway	1009.4	+4	NNW	3	c	57	85	8	5	4	5	4-6	7-8	4000	1	1
Dalwhinnie	1008.0	0	NNE	2	c	59	85	7	4	6	-	7-8	10	4000	0	*
Aberdeen	1007.4	+2	ENE	1	o	58	92	5	5	-	-	10	10	220	1	1
Wick	1008.1	-2	E	1	if	55	97	4	-	-	-	10	10	<150	1	1
Lerwick	1008.6	+6	S'W	1	m/F	55	97	4	-	-	-	10	10	<150	0	*
Blacksod Point	1009.8	+20	N	4	c	58	85	8	8	-	-	10	10	1500	0	4
Malin Head	1008.2	+6	N	5	c	56	85	7	5	-	-	9	9	1500	0	3
Aldergrove	1005.6	0	NNW	4	c	61	75	7	5	7	-	9	9+	4000	1	*
Birr Castle	1006.4	+8	WNW	1	c	61	85	8	5	2	-	7-8	10	1500	1	*
Valentia Obsy.†	1008.4	+6	N'W	4	bc	59	85	8	8	-	-	4-6	4-6	1500	1	2
Roches Point	1006.8	+4	NW	2	c	62	92	9	8	7	-	4-6	7-8	2500	1	1

PAST 24 HOURS.

Stations	Weather 7h.—13h. 19th (37)	13h.—18h. 19th (38)	18h. 19th to 1h. 20th (39)	1h.–7h. 20th (40)
London (Kew)	ccprc	cprc	cbc	cproCmo
Croydon	ciRpro	cprobc	bcbw,c	bwroro
S. Farnborough	cRRPR	cprbbc	bccprb,c	cproc
Boscombe Down	rrpRjp	tlRbcproc	cbcbbc	bcmocmo
Calshot (Soton.)	csiRpro	bcbbcb	bccbo	iroiR
Lympne	cbccpro	ctlrPR	cbcc	bcwcido
Manston	bcproc	cPRtlro	b	bbcwc
Shoeburyness	bccPc	cproc	cb	b,cPc
Felixstowe	cb,c	ccprc	cbcmo	bcbw,c
Gorleston	cbcq	bccproq	cprobc	bccw
Mildenhall	bcc	cprc	bccb	b,cmow
Cranwell	bcmocpro	cprtlr	crocbcmof	ofmbco
Birmingham	bccRorR	Rcro	ctl	co
Upper Heyford	croRR	cTLRpro	ctlrbcmo	bcmoFmo
Ross-on-Wye	rc	cctproc	ujpcbcc	coro
Hartland Point	croc	cbcc	c	cro
Bristol	croR	crotbc	bccro	cRcRR
Portland Bill	c	c	orr	orrc
Plymouth	cpruc	ctcproc	cprociro	cddmoc
The Lizard	bc	c	cprbc	bcprc
Scilly (St. Mary's)	cpido	cpoc	c	c
Guernsey	c	cbcc	ciro	cir
Pembroke	bcc	prc	c	rrmoc
Holyhead	rrirobc	bccpro	iromoc	moc
Chester (Sealand)	cmobczo	moroRroiro	ciroidoirmo	rororrrmodo
Manchester	bcc	ctlPRpro	cmom	cmPRprocmo
Spurn Head	c	PRtc	cwbc	bcffo
Catterick	ombc	bcpRtlro	moofcm	iromo
Tynemouth	ocbc	cffbc	bcoif	oifo
St. Abbs Head	Ffe	Ff	Ffe	Ffe
Leuchars	irRdodo	dffomf	offmmo	omoffcmo
Renfrew (AbbotsI.)	cmo	cmozoc	ccmow	cmowfgocmo
Eskdalemuir	cprocpr	prcbcct	tprcpro	c
Point of Ayre	rrc	c	tcbcb	c
Tiree	bcb	bbc	bc	bcc
Stornoway	bcc	bcc	c	c
Dalwhinnie	c	c		c
Aberdeen	ofrffd	dffm	omooffe	ofeomo
Wick	ifbc	bcmif	Ff	ifFf
Lerwick	cifjf	coFFe	oFFe	oFerf
Blacksod Point	bc	iro	proc	proc
Malin Head	cbcc	cbcc	c	c
Aldergrove	ciroc	croc	cbcc	iromoc
Birr Castle	oidc	c	c	c
Valentia Obsy.†	cidpr	cprbc	bcc	cidoc
Roches Point	cproc	c	cproc	c

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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

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

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

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

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.

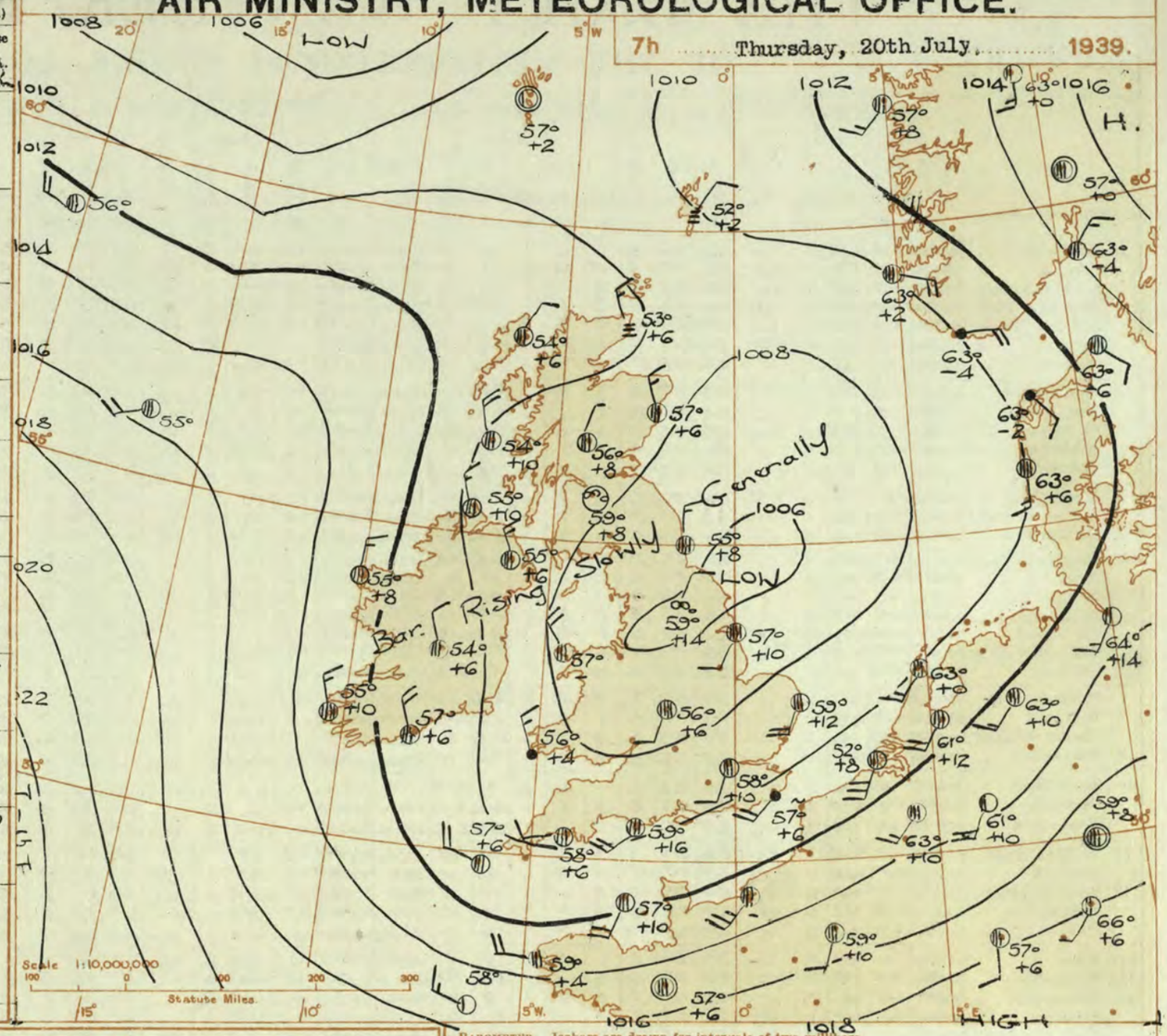
0 .. Ground dry.
1 .. ,, wet.
2 .. ,, flooded.
3 .. ,, frozen hard and dry.
4 .. ,, partly covered with snow or hail.
5 .. ,, covered with ice or glazed frost.
6 .. ,, covered with thawing snow.
7 .. Ground covered with snow, less than 6 ins., deep but ground not frozen.
8 .. ,, covered with snow, less 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.*

§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

7h ..... Thursday, 20th July, ... 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.

REPORTS from HEALTH RESORTS for 19th July 1939

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 18th to 9h. 19th	Temperature. (°F) Max. 9h.—17h. 19th	Rainfall. (mm.) Night. 17h. 18th to 9h. 19th	Rainfall. (mm.) Day. 9h.—17h. 19th	Sunshine. (Hrs.) Sunrise to 17h. 19th	Sunshine. (Hrs.) Sunrise to Sunset. 18th
1	Tunbridge W.	oroco	opcoc	56	67	6	1	3·8	3·3
	Bournemouth	ebcp	b	55	68	2	Trace	7·3	0·6
	Ventnor ...	orc	cbbc	57	65	8	1	4·2	0·7
	Southsea ...	ooro	cbcb	55	67	7	0·2	4·7	0·6
	Bognor Regis	rbcpr	bcb	59	64	8	0·5	4·1	1·5
	Littlehampton	circ	cpcbc	59	64	2	2	4·0	2·3
	Worthing ...	c	cbcb	59	65	3	-	4·2	2·0
	Brighton ...	cpc	cpbcb	59	63	1	1	2·5	1·6
	Eastbourne† ...	cro	oroc	58	65	3	5	3·7	2·8
	Hastings† ...	bccpc	oRco	59	65	3	7	3·1	3·3
	Folkestone ...	c	ctlpc	59	68	4	4	4·7	4·4
	Dover ...	bc	bcorc	60	67	6	5	4·7	4·7
	Deal	bbcc	cotlr	59	70	5	3	5·1	4·4
	Ramsgate ...	bcc	tlrc	60	66	2	3	5·7	4·3
	Margate ...	bc	bctlr	60	70	2	5	7·7	5·1
2	Southend ...	cbcc	cPc	60	70	2	1	6·4	3·3
	Clacton-on-Sea	bc	cprcw	61	67	1	2	6·4	4·2
	Dovercourt ...	bcrtc	bcroc	57	69	Trace	Trace	7·9	5·1
	Lowestoft ...	crbcb	bbcor	60	68	0·3	Trace	5·7	4·1
	Skegness ...	bbcor	oco	60	69	1	1	5·2	2·0
	Mablethorpe...	bbc	bcp	60	67	2	Trace	4·9	1·1
	Cleethorpes ...	bc	bctlrc	57	66	6	1	5·6	3·7
3	Leamington S.	cpor	orc	55	64	2	12	1·3	0·1
4	Cheltenham†	orro	ocbc	54	67	6	3	1·6	0·3
5	Bath	cbct	tlrc	54	67	6	6	1·7	0·3
	Weymouth ...	cb	b	57	65	3	-	7·3	0·1
	Jersey ...	rrcbc	bc	57	65	11	-	6·8	2·8
	Torquay ...	crpbc	cpbc	54	63	5	2	2·9	0·5
	Falmouth ...	fempc	cvpoc	54	65	0·2	Trace	4·3	1·5
	Penzance ...	b,cbc	b,cdc	56	68	-	0·5	6·6	2·4
	St. Ives ...								
	Bude... ...	bc	bccp	54	64	-	0·2	5·3	2·0
	Ilfracombe ...	oroc	cbc	55	64	1	-	3·6	2·6
6	Aberystwyth	prbcc	prc	55	65	6	0·5	2·4	0·6
7	Llandudno ...	bcc	cbccr	59	65	3	0·1	3·7	3·8
	Colwyn Bay...	cbcc	bccrr	59	65	4	2	3·2	4·8
	Rhyl	b	bccr	58	65	4	3	5·7	5·3
8	Wallasey ...	bbc	bccrg	60	72	3	5	5·6	5·0
	Southport ...	bebbc	bctLR	59	72	3	15	5·8	6·0
	Blackpool ...	bcb	tqporc	59	72	3	2	6·0	4·1
	Morecambe ...	bc	drtlr	60	67	5	11	1·8	6·3
9	Ilkley... ...	bc	otlro	60	72	4	5	4·5	4·7
	Harrogate ...	bc	bcc	58	70	6	-	5·4	6·2
10	Berwick-on-T.	o	cFo	55	60	1	-	1·4	5·5
11	Dunbar ...	cmr	cm	55	58	0·5	Trace	0·0	7·2
12	Troon... ...	bcb	bbc	49	67	-	-	2·6	3·2
	Douglas ...	bcpr	bc	55	67	12	0·5	2·6	5·9

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 20th July, 1939.

Districts.	Forecasts
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 ...	Wind between west and northwest moderate; local thundery showers but bright intervals today; cloudy, occasional drizzle tomorrow; average temperature.
10 N.E. England 11 S.E. Scotland	Wind northerly moderate backing to west and freshening; showery today, local coast fog; cloudy with drizzle tomorrow; average temperature.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland 17 N. W. Ireland 18 N. E. Ireland	Wind between west and north, freshening tomorrow; mainly fair today apart from local showers; cloudy, with occasional drizzle tomorrow; becoming warmer inland.
19 S. E. Ireland 20 S. W. Ireland	Wind northwest moderate; mainly fair today, cloudy with occasional drizzle later; rather warm.

GENERAL INFERENCE.

A depression over Yorkshire is moving northeastwards and another over Iceland will move southeastwards. Today there will be a decreasing chance of thundery showers. Tomorrow cloudy conditions with drizzle will spread from the northwest.

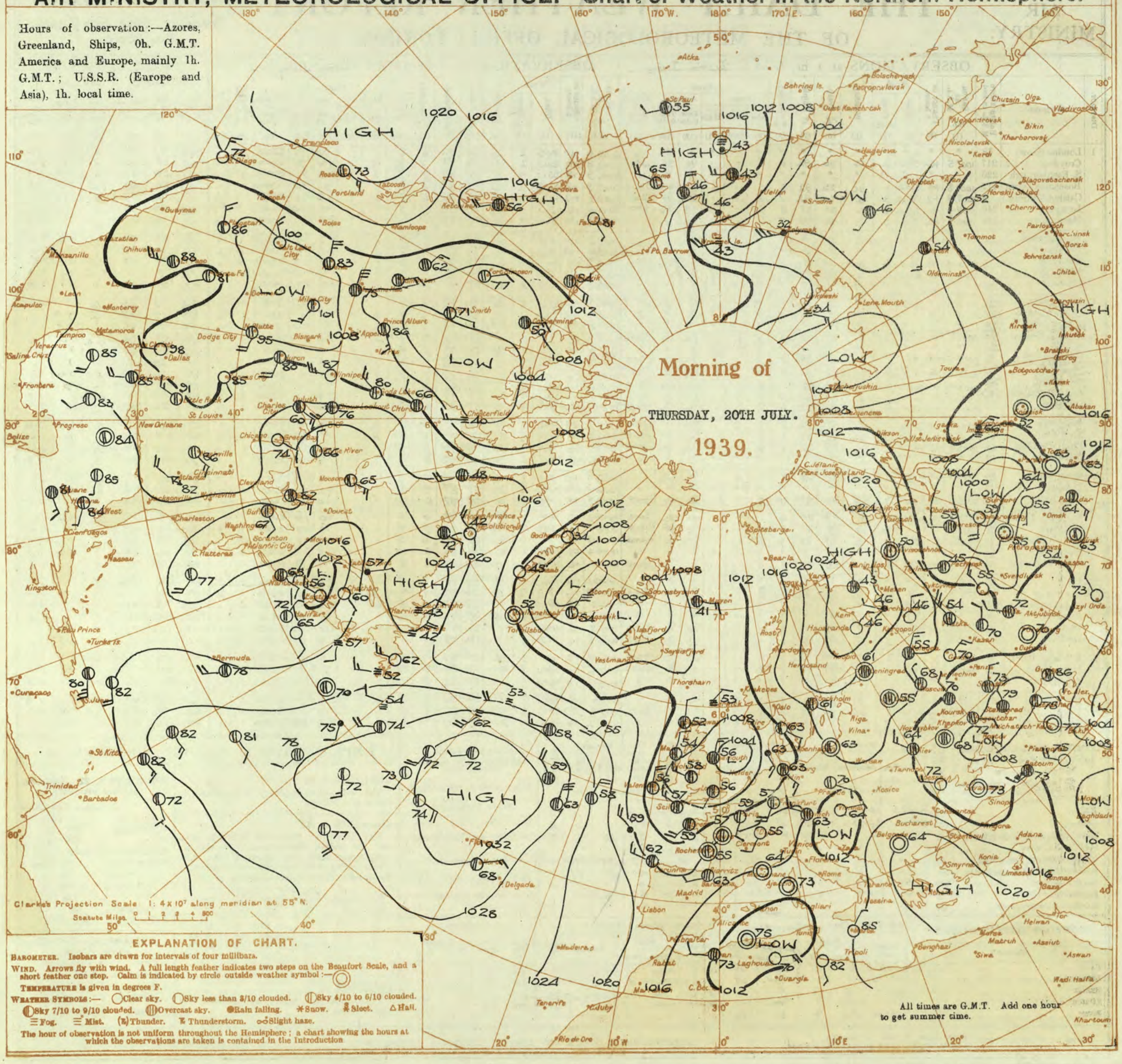
FURTHER OUTLOOK.

Unsettled.

Forecasts issued at 0930 G.M.T.

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

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

Thursday, 20th July, 1939.
No. 28364.

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

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	1007·5	+6	SSW	2	2o	56	92	6	5	-	-	9+	9+	1500
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1007·8	+4	SW'W	1	bc	55	92	8	5	-	-	4·6	4·6	2500
	Calshot (Sthmtn.)	8	1007·9	+2	SSW	3	c	60	92	7	5	-	-	9+	9+	800
	Lympne ...	346	1009·4	+6	SW'W	2	c	55	97	8	5	-	-	7·8	7·8	800
	Manston ...	154	1008·2	+12	SW	3	b	56	92	7	-	-	-	0	0	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1006·4	+6	SSW	3	bc	59	85	7	5	-	-	4·6	4·6	2500
	Mildenhall ...	19	1006·1	+10	SSW	2	b	56	92	8	5	-	-	Tr	Tr	4000
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1007·7	+4	NW	3	c	57	92	8	6	2	-	4·6	10	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1008·0	+14	NW	3	rr	58	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1009·3	+6	W'S	2	c/r	57	92	6	5	7	-	7·8	10	1500
	The Lizard ...	240	1010·0	0	SW'W	3	bc	58	97	7	8	6	-	4·6	4·6	2500
	Scilly (St. Mary's)	163	1009·7	+2	WNW	3	c	57	92	8	8	7	-	7·8	10	1500
	Guernsey ...	175	1011·6	+4	SW	4	c	58	92	6	8	-	-	9+	9+	800
6	Pembroke ...	142	1007·5	0	W'N	3	c	57	92	8	8	2	-	7·8	10	1500
7	Holyhead ...	26	1005·5	+2	WNW	3	2o	58	92	6	5	-	-	10	10	1500
	Chester (Sealand)	16	1005·2	+2	NW'W	2	r'o	59	92	6	6	-	-	10	10	2500
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1004·7	+4	SSE	2	bc	60	92	7	-	4	-	0	2-3	-
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1005·6	0	N	3	o/f	56	97	6	5	-	-	10	10	1500
11	St. Abbs Head	280	1007·0	-4	NNW	2	F	56	97	0	-	2	-	10	10	<150
	Leuchars ...	36	1007·8	-2	-	0	o	58	97	5	5	-	-	10	10	450
12	Renfrew (Abbots I.)	19	1008·0	+2	E'N	2	2o	59	92	6	5	-	-	10	10	1500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1005·7	+10	S'E	2	b	58	92	8	5	-	-	1	1	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1010·3	0	N	2	c	52	92	7	5	7	-	7·8	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1009·3	+4	NNW	2	F	55	97	1	-	-	-	10	10	<150
16	Lerwick ...	156	1010·4	+4	NE	2	F	53	97	1	-	-	-	10	10	<150
17	Blacksod Point	18	1009·8	0	N	3	c	54	92	7	8	-	-	10	10	450
18	Malin Head ...	84	1009·8	+2	NNW	3	c	54	92	7	8	-	-	9	9	4000
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1011·9	+6	N'W	4	bc	56	92	8	8	-	-	4·6	4·6	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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. (29)	Sea. 0–9 (30)	Temperature. Max. Day 7h–18h °F. (31)	Temperature. Min. Night 18h–7h °F (32)	Temperature. Min. on Grass °F. (33)	Rainfall. Day 7h–18h mm. (34)	Rainfall. Night 18h–7h mm. (35)	Sunshine 19th Hrs. (36)
London (Kew)	1008·6	+10	SW'S	2	2o	59	92	6	8	-	-	9+	9+	2500	1	*	68	53	45	2	Tr	5·6
Croydon ...	1008·8	+10	SSW	2	c/r	58	92	7	9	4	3	4·6	9	1500	1	*	68	55	52	2	1	7·2
S. Farnborough	1008·9	+8	SSW	4	c	57	85	8	5	3	-	2-3	9	1500	1	*	67	54	50	8	0·4	5·1
Boscombe Down	1008·9	+8	SW'S	2	2o	56	92	6	5	7	-	9	10	1500	1	*	65	50	48	15	Tr	3·1
Calshot (Sthmtn.)	1009·2	+12	WSW	3	PR	59	92	6	8	3	-	7·8	9+	450	1	2	67	56	55	4	4	7·7
Lympne ...	1010·0	+6	SW	4	id.	57	97	6	5	-	-	10	10	450	1	§4	66	54	51	5	Tr	3·1
Manston ...	1009·7	+10	SSW	4	c	59	85	7	5	7	-	7·8	9	800	1	*	71	54	51	9	Tr	6·4
Shoeburyness ...	1009·2	+10	S'W	3	pr	59	97	8	9	7	-	7·8	9+	1500	1	*	68	59	51	2	0·5	7·0
Felixstowe ...	1009·0	+14	SW	4	c	61	85	8	7	3	3	7·8	7·8	800	0	2	70	58	55	1	·	7·1
Gorleston ...	1008·5	+12	SW'S	4	c	59	85	7	5	-	-	7·8	7·8	2500	0	2	67	55	53	Tr	0·1	7·5
Mildenhall ...	1007·9	+12	SW	3	c	59	92	7	5	-	-	9+	9+	1500	1	*	72	55	51	0·6	Tr	7·9
Cranwell ...	1006·8	+14	SSW	2	2o	57	97	5	5	-	-	10	10	450	1	*	68	51	48	3	0·1	5·6
Birmingham ...	1006·9	+6	SSW	2	o	56	92	8	5	-	-	10	10	800	1	*	64	55	53	6	-	2·9
Upper Heyford	1008·0	+10	SSW	2	2o	56	97	6	5	3	-	7·8	9+	450	1	*	65	51	47	12	0·4	*
Ross-on-Wye	1007·2	+6	SSW	2	r'o	56	97	6	6	2	-	9	10	1500	1	*	65	54	51	1	0·4	1·2
Hartland Point	1008·3	+8	W	3	r	58	97	8	9	2	-	7·8	10	1500	1	2	64	57	56	0·6	0·6	6·6
Bristol ...	1007·9	+4	SSW	2	RR	55	97	6	5	-	-	10	10	800	1	*	67	55	53	2	7	5·9
Portland Bill ...	1009·2	+16	WSW	4	c	59	85	7	5	7	-	7·8	10	4000	1	3	61	54	*	—	1	*
Plymouth ...	1009·7	+6	W'S	2	c	58	92	7	9	7	-	7·8	10	800	1	1	65	56	54	0·1	0·6	5·1
The Lizard ...	1010·6	+6	WSW	4	c	56	97	8	8	2	-	7·8	9+	1500	1	2	65	54	*	-	2	9·3
Scilly (St. Mary's)	1010·2	+6	WNW	4	c	57	97	8	8	7	-	7·8	9+	2500	1	2	62	56	*	0·4	-	3·2
Guernsey ...	1011·0	+10	SW	4	c	57	92	8	4	7	-	4·6	9+	1500	1	3	64	54	53	-	2	7·4
Pembroke ...	1008·3	+4	NNW	3	rr	56	97	6	8	2	-	10	10	1500	1	1	62	55	*	1	14	5·6
Holyhead ...	1006·5	*	NW'N	4	c	57	92	5	5	2	-	9	10	450	1	2	65	57	52	2	Tr	6·0
Chester (Sealand)	1005·8	+6	NW	3	id.	59	92	5	6	-	-	10	10	1500	1	*	71	58	57	4	5	6·2
Manchester ...	1005·7	+12	N	1	c/pr	60	92	6	8	3	-	7·8	9+	2500	1	*	71	56	56	3	1	5·8
Spurn Head ...	1006·4	+10	SW	2	o	57	97	4	5	-	-	10	10	800	1	1	66	55	*	8	Tr	6·3
Catterick ...	1006·4	+14	NNE	2	2o	59	97	5	6	-	-	10	10	220	1	*	74	57	56	2	0·4	5·3
Tynemouth ...	1006·5	+8	N	3	o	55	97	5	5	-	-	10	10	1500	1	1	62	55	54	-	-	3·1
St. Abbs Head	1007·8	+8	NNE	2	F	55	97	0	-	-	-	10	10	<150	1	1	60	55	*	0·2	0·2	*
Leuchars ...	1008·7	+10	NE	1	o/f	56	97	5	5	-	-	10	10	220	1	*	59	55	54	3	-	0·0
Renfrew (Abbots I.)	1008·9	+8	-	0	2o	59	92	6	5	-	-	10	10	1500	0	*	65	55	51	-	-	0·1
Eskdalemuir ...	1007·4	+6	NNE	2	c	58	85	7	5	7	-	7·8	7·8	1500	1	*	70	56	56	1	0·2	2·9
Point of Ayre ...	1007·1	+6	N'E	3	c	59	92	8	5	-	-	9+	9+	1500	0	2	65	57	*	5	-	2·9
Tiree ...	1009·8	+10	NNW	4	c	54	92	8	5	-	-	7·8	7·8	2500	0	3	61	52	50	Tr	-	12·7
Stornoway ...	1010·8	+6	NE	2	c	54	92	8	5	2	-	7·8	10	2500	1	2	62	51	*	-	-	10·7
Dalwhinnie ...	1010·5	+8	NNE	1	c	56	92	6	5	6	-	4·6	10	1500	0	*	64	48	40	-	-	0·6
Aberdeen ...	1008·9	+6	NNW	3	o	57	97	6	6	-	-	10	10	800	1	1	60	56	55	2	-	0·0
Wick ...	1010·3	+6	NNW	3	F	53	97	1	-	-	-	10	10	<150	1	1	58	53	*	-	Tr	*
Lerwick ...	1010·8	+2	NE	4	F	52	97	1	-	-	-	10	10	<150	1	*	59	51	*	-	0·5	7·1
Blacksod Point	1012·5	+8	N	3	c	55	97	7	5	-	-	10	10	450	1	3	62	52	*	Tr	0·3	
Malin Head ...	1010·6	+10	NNW	3	c	55	85	7	4	-	-	9	9	1500	0	3	59	51	*	-	-	5·0
Aldergrove ...	1008·9	+6	NNW	3	c	55	92	7	5	-	-	10	10	800	1	*	63	54	54	0·4	Tr	0·3
Birr Castle ...	1011·0	+6	NNW	2	c	54	85	8	5	2	-	7·8	10	2500	1	*	65	52	49	Tr	-	0·4
Valentia Obsy. †	1012·8	+10	N'W	3	c/d	55	85	8	5	-	-	10	10	800	1	2	61	55	52	0·6	Tr	4·3
Roches Point	1010·2	+6	NNW	4	c	57	92	8	8	1	-	4·6	7·8	2500	1	2	64	55	*	0·1	0·2	

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.	Weather. Afternoon.	Weather. Night.	Temperature. Day Max. °F.	Temperature. Night Min. °F.	Temperature. Min. on Grass °F.	Rainfall. Day. mm.	Rainfall. Night. mm.	Sunshine. to Sunset. hrs.	Humidity. 15h. G.M.T. %	Humidity. 9h. G.M.T. %	Visibility 9h.
		24 hrs. ended 9h.								Yesterday.		To-day.	
Kew...	18	ccprc	cprc	cbcprcm	68	53	45	2	Tr	5·6	*	*	8
Croydon ...	217	cirpro	cprobc	bcbprcm	68	55	52	2	1	7·2	*	*	8
Greenwich (Royal Observatory)...	149	cir	c	bcbcp	68	54	45	2	-	5·9	66	73	8
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	4·7	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	68	57	52	3		4·2	72	79	*
Regents Pk. (Botanic Gardens)‡...	168	*	*	*	68	56	51	3	-	4·0	69	77	*
Camden Square ...	110	c	bc	*	68	56	52	2	-	*	*	77	*
Kensington ...	80	c	bcp	*	69	56	51	2	Tr	4·2	At 18h	71	*
Hampstead Observatory ...	450									4·5	77 *		*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 20th

South Kensington.

Max.	Time.	Min.	Time.
<0·3 whole period.			

Kew Observatory.

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

FOREIGN OBSERVATIONS.

18h. G.M.T. 19th July — 7h. G.M.T. 20th July

Stations.	18h. Barom. mb.	18h. Wind. Direc.	18h. Wind. Force.	18h. Weather.	18h. Temp. °F.	7h. Barom. mb.	7h. Wind. Direc.	7h. Wind. Force.	7h. Weather.	7h. Temp. °F.	Past 24 Hours. Max. Day °F.	Past 24 Hours. Min. Night °F.	Past 24 Hours. Rainfall. Day mm.	Past 24 Hours. Rainfall. Night mm.
Paris ...	1009·8	SW	2	b	75	1014·5	SSW	2	c	59	86	57	-	-
Brussels ...	1008·9	S	4	c/pr	68	1012·7	SW	3	c	63	82	57	0·3	-
Berlin ...	1011·4	SE	3	c	*	1014·6	SW	2	2o	64	86	*	-	5
Zürich ...	1013·1	SSW	1	c/r	72	1016·4	NNE	1	c	59	84	55	0·1	13
Rome ...	1013·6	SSE	4	bc	79						*		-	

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; 26/- per year.

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

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

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday, 21st July, 1939.
No. 28365.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1010·7	+6	SW	2	iro	62	85	8	7	–	–	10	10	1500
	Croydon	1010·5	+8	SSW	3	c/pr	62	85	8	9	6	3	7-8	9+	4000
	S. Farnborough	1010·3	+10	SSW	3	roro	60	85	7	8	7	–	7-8	10	1500
	Boscombe Down	1009·8	+8	SWS	3	rr	59	92	5	6	2	–	7-8	10	450
	Calshot (Soton.)	1010·6	+6	SSW	5	c	64	85	8	2	3	1	7-8	9	1500
	Lympne ...	1012·3	+10	SW	4	c	64	75	8	2	3	–	4-6	7-8	1500
	Manston ...	1011·3	+10	SWS	5	c	67	65	7	2	6	–	4-6	7-8	2500
2	Shoeburyness ...	1010·9	+8	SW	4	c/pr	67	75	8	8	6	3	4-6	7-8	1500
	Felixstowe ...	1010·4	+10	SSW	5	bc	69	65	8	8	6	3	2-3	4-6	2500
	Gorleston ...	1010·4	+12	SW	2	TLRS	60	92	6	6	–	–	10	10	800
	Mildenhall ...	1009·2	+10	W	2	pr	64	65	8	8	–	8	7-8	9+	2500
	Cranwell ...	1008·2	+6	S	2	c	67	65	7	8	3	3	7-8	7-8	2500
3	Birmingham ...	1007·9	+4	S	2	c	65	65	8	8	6	–	7-8	9+	2500
	Upper Heyford	1009·2	+6	S	3	iro	59	92	8	6	7	–	9	9+	800
4	Ross-on-Wye ...	1008·2	+6	WSW	2	c/r	62	85	7	9	7	–	7-8	9	1500
5	Hartland Point	1010·7	+8	NW	3	c	58	92	7	6	2	–	4-6	10	1500
	Bristol	1009·2	+10	WSW	3	c/r	61	92	7	6	2	–	4-6	10	1500
	Portland Bill ...	1010·2	+8	WSW	4	c	59	92	8	5	–	–	10	10	4000
	Plymouth ...	1010·6	+10	W	4	iro	60	92	6	9	2	–	9	10	800
	The Lizard ...	1012·0	+10	W	1	pr	57	97	8	8	2	–	9	10	1500
	Scilly (St. Mary's)	1011·8	+8	NWN	3	c	62	92	7	8	2	–	4-6	10	2500
	Guernsey ...	1012·6	+6	SW	4	c	60	85	8	8	1	1	4-6	7-8	800
6	Pembroke ...	1010·9	+4	NNW	3	c	57	92	6	8	2	–	7-8	10	1500
7	Holyhead ...	1008·7	+10	NW	3	zo	61	92	6	5	3	–	1	4-6	450
	Chester (Sealand)	1008·2	+14	NWN	2	t	61	92	6	9	–	–	10	10	1500
8	Manchester ...	1007·8	+10	–	0	pr	64	85	6	8	3	–	4-6	9+	4000
10	Spurn Head ...	1008·7	+6	SEE	3	bc	65	75	6	2	8	–	4-6	4-6	1500
	Catterick ...	1008·3	+10	NNE	3	zo	64	85	6	5	–	–	9+	9+	800
	Tynemouth ...	1009·0	+12	N	3	f	56	97	3	5	–	–	10	10	1500
11	St. Abbs Head...	1010·3	+10	N	2	f	55	97	3	–	–	–	10	10	<150
	Leuchars ...	1010·5	+12	E	2	c	61	85	7	8	–	–	9+	9+	1500
12	Renfrew (Abbotsl.)	1010·2	+4	ESE	2	zo	70	65	6	8	–	–	7-8	7-8	1500
	Eskdalemuir ...	1009·0	+10	NNE	4	c	65	75	8	8	–	–	7-8	7-8	2500
	Point of Ayre ...	1009·3	+6	NNW	3	bc	65	85	7	2	–	5	1	2-3	1500
13A	Tiree	1011·5	+8	NNW	3	bc	61	85	8	1	4	–	2-3	4-6	4000
13B	Stornoway ...	1012·7	+6	SSE	1	c	56	85	8	5	7	–	9	10	4000
15	Dalwhinnie ...	1010·1	+12	NNE	2	c	67	65	7	4	6	–	7-8	9+	4000
	Aberdeen ...	1011·0	+10	NNW	3	c	63	85	6	9	–	–	9+	9+	800
	Wick	1011·5	+4	NNE	3	c	56	92	5	5	6	–	4-6	9	800
16	Lerwick... ...	1011·7	+6	NE	2	o	55	97	6	5	–	–	10	10	220
17	Blacksod Point...	1013·9	+6	N	3	c	57	85	8	–	2	–	0	10	–
18	Malin Head ...	1012·3	+4	N	2	c	57	85	8	8	–	–	9	9	1500
	Aldergrove ...	1011·0	+10	NWN	3	c	61	75	7	7	–	–	7-8	7-8	2500
19	Birr Castle ...	1011·8	+4	NNW	2	c	63	75	8	5	2	–	7-8	10	1500
20	Valentia Obsy.†	1013·6	+4	NW	3	c	58	85	8	5	–	–	9+	9+	800
	Roches Point ...	1011·9	+8	NW	4	c	62	85	9	5	–	–	7-8	7-8	2500

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

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)	1011·3	+2	SSW	2	roro	60	85	7	5	–	–	10	10	1500	1	*
Croydon	1011·0	–2	SW	3	cjp	62	75	7	9	7	9	7-8	9+	2500	1	*
S. Farnborough	1011·0	+2	SW	3	roro	58	92	6	6	2	–	9	10	1500	1	*
Boscombe Down	1010·8	+2	WSW	3	iro	59	92	6	6	2	–	7-8	10	800	1	*
Calshot (Soton.)	1011·3	+2	SWS	4	c/r	61	92	7	6	–	–	10	10	1500	1	2
Lympne	1013·3	+2	SW	4	bc	61	75	9	2	4	1	2-3	4-6	2500	0	§3
Manston	1012·3	+2	SW	4	bc	64	65	9	1	4	9	1	2-3	2500	0	*
Shoeburyness	1012·0	+6	SSW	4	bc	63	85	8	5	4	–	2-3	4-6	1500	0	*
Felixstowe	1011·7	+6	WSW	3	c/pr	64	75	8	8	7	3	4-6	7-8	1500	0	3
Gorleston	1011·4	+4	SWS	2	c/r	60	85	7	8	3	–	4-6	7-8	2500	1	2
Mildenhall	1010·7	+6	SWS	3	c	62	92	7	8	7	–	4-6	9+	4000	1	*
Cranwell	1009·2	+6	S	3	bc	63	85	8	8	–	3	4-6	4-6	2500	1	*
Birmingham	1009·2	+4	SSE	1	c	64	75	7	8	7	–	4-6	9	2500	1	*
Upper Heyford	1009·8	+4	SW	2	zo	61	85	6	8	3	–	7-8	7-8	1500	1	*
Ross-on-Wye	1009·0	+6	W	3	c/pr	64	85	7	8	7	3	4-6	7-8	2500	1	*
Hartland Point	1011·6	+6	NW	3	c	57	97	7	8	2	–	9	10	1500	1	2
Bristol	1010·6	+6	W	4	zo	60	85	6	5	2	–	9	10	800	1	*
Portland Bill	1011·4	+8	WSW	4	c	59	92	7	5	–	–	10	10	2500	1	3
Plymouth	1013·0	+6	WN	3	c	59	85	7	5	–	–	9+	9+	1500	1	1
The Lizard	1013·1	+6	WN	2	c	57	97	8	5	2	–	7-8	10	1500	1	1
Scilly (St. Mary's)	1013·1	+4	NWN	3	bc	60	92	8	8	6	1	2-3	4-6	2500	0	1
Guernsey	1013·2	+8	SW	3	bc	60	85	8	7	3	8	1	4-6	1500	1	2
Pembroke	1011·9	+4	NW	3	c	57	92	6	5	2	–	7-8	10	1500	1	1
Holyhead	1009·9	+4	WNW	3	zo	60	85	6	8	9	–	Tr	4-6	2500	1	2
Chester (Sealand)	1009·2	+10	WNW	3	zo	63	75	6	3	3	–	4-6	7-8	2500	1	*
Manchester	1009·0	+8	N	1	f	63	85	3	8	3	–	4-6	7-8	4000	1	*
Spurn Head	1009·9	+6	SE	3	bc	63	85	6	2	8	3	2-3	4-6	2500	0	2
Catterick	1010·5	+14	NEN	2	zo	61	85	6	8	–	–	9+	9+	1500	1	*
Tynemouth	1010·7	+6	N	3	o	56	97	5	5	–	–	10	10	1500	1	1
St. Abbs Head	1011·5	+6	NNE	1	F	55	97	0	–	–	–	10	10	<150	1	*
Leuchars	1012·1	+14	ESE	3	o	60	85	6	5	–	–	10	10	450	0	*
Renfrew (Abbotsl.)	1011·5	+10	E	3	c	67	75	7	8	6	–	4-6	7-8	1500	0	*
Eskdalemuir	1010·8	+12	NEN	3	bc	62	85	7	8	–	–	4-6	4-6	4000	0	*
Point of Ayre	1010·3	+4	N	2	bc	63	85	7	2	4	6	Tr	4-6	2500	0	2
Tiree	1012·4	+8	NWN	3	bc	58	85	8	7	–	8	4-6	4-6	2500	0	2
Stornoway	1013·1	0	NE	2	c	55	92	8	5	7	–	9	10	4000	1	1
Dalwhinnie	1011·4	+8	NNE	1	bc	66	65	8	4	6	–	2-3	2-3	4000	0	*
Aberdeen	1012·2	+8	NW	2	c	61	85	7	5	–	–	9+	9+	1500	1	1
Wick	1012·0	+4	NE	1	bc	55	92	7	5	7	1	2-3	2-3	1500	1	1
Lerwick	1011·7	0	NE	1	o	56	97	6	5	–	–	10	10	220	0	*
Blacksod Point	1014·6	+10	N	3	o	55	97	7	–	2	–	0	10	–	0	3
Malin Head	1013·4	+8	NNW	2	c	57	75	7	5	–	–	9	9	1500	0	2
Aldergrove	1012·1	+10	NW	3	bc	60	85	7	1	–	–	4-6	4-6	1500	1	*
Birr Castle	1012·2	+4	NW	1	c	63	75	8	5	2	–	7-8	10	1500	1	*
Valentia Obsy.†	1014·9	+6	NNW	4	c	58	85	8	5	–	–	9	9	1500	1	2
Roches Point	1012·6	+2	N	4	c	63	85	9	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)	cqirro	cRrro	ciroRrc	croro
Croydon	cpro prmo	cpro	proroiR	ciR tlro
S. Farnborough	cpro PRc	crororro	troRRc	cmororomo
Boscombe Down	cmoirorr	crriro	ciromo	cdodomcmo
Calshot (Soton.)	cpro PRc	cPRclroc	ciroo	ororocmo
Lympne	cmod	bcbc	bbcc	cbc
Manston	cidoropro	bcybc	bcc	cbcw
Shoeburyness	bccpbc	bccbc	bcc	irorrmoc
Felixstowe	cprotbc	bcjpcpro	bccroro	croroiro
Gorleston	cbccprotlR	rotlRc	cproc	cproc
Mildenhall	cbcctc	pr PRc	crorocc RR	tlRRroro
Cranwell	omocprod	cprobc	b	b,coF
Birmingham	·oc	cpr	ctl	cF
Upper Heyford	roromociro	croc	cmo	cmomomo
Ross-on-Wye	rorocro	cpcpo	ccbc	como
Hartland Point	circ	c	cr	cir
Bristol	crRro	crcmo	crocmo	cmov
Portland Bill	c	cpr	o	oid
Plymouth	cciro	ciroprc	como	omocmo
The Lizard	cpr	cproc	cbcw	bcc
Scilly (St. Mary's)	c	cbc	bcc	c
Guernsey	c	cbc	ccw	cidor
Pembroke	c	dmoc	cido	cq
Holyhead	cbcmo	bc,bmbc	mofefeo	ffoc
Chester (Sealand)	cmoiroprtl	crorotlirbc	bczoprow	bmwffe
Manchester	cmpr,rtlro	ctprozff	bcmbcmo	bcmow
Spurn Head	c	cbc	bcwo	ocido
Catterick	omocmo	cmotcmo	cmoomw	ofmow
Tynemouth	offir	offo	ofefeodd	oidff
St. Abbs Head	Ffe	Ffe	Ffe	Ffe
Leuchars	cmocbcc	cbccomo	omo	omocmcmo
Renfrew (Abbotsl.)	cmozo	czobc	bccmoido	cmoidocmo
Eskdalemuir	c	cbc	bcemo	como
Point of Ayre	cb	bc	bc	cidoc
Tiree	cbc	bc	bc	bcc
Stornoway	c	c	c	cmo
Dalwhinnie	c	bc	·	c
Aberdeen	omoczo	cbcc	como	omodo
Wick	Fmoc	cmobc	bcFf	Ffe
Lerwick	oFmo	omo	oFerf	orfdf
Blacksod Point	o	o	o	o
Malin Head	c	c	c	c
Aldergrove	cmoc	cbbc	bccomo	omoido
Birr Castle	c	c	c	c
Valentia Obsy.†	cidoc	cidoc	c	cidoc
Roches Point	c	c	cbcw	bcwc

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.

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.

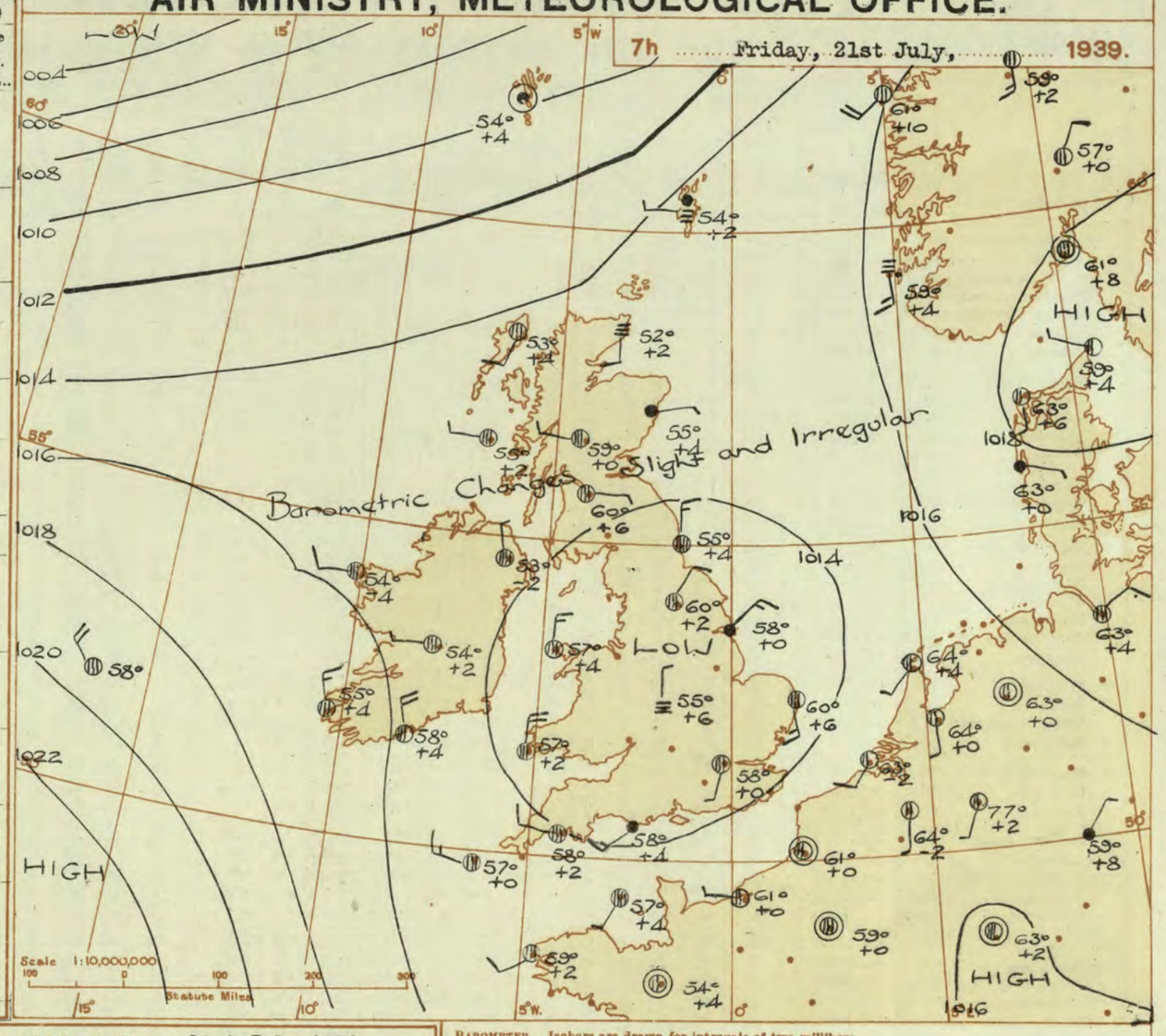
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for July 20th 1939.

DISTRICTS.	STATIONS.	WEATHER. Fore-noon.	WEATHER. After-noon.	TEMPERATURE (°F) Min. 9h. 19th to 9h. 20th	TEMPERATURE (°F) Max. 9h.—17h. 20th	RAINFALL (mm.) Night. 17h. 19th to 9h. 20th	RAINFALL (mm.) Day. 9h.—17h. 20th	SUNSHINE (Hrs.) Sunrise to 17h. 20th	SUNSHINE (Hrs.) Sunrise to Sunset. 19th
1	Tunbridge W.	oroc	ococ	55	66	6	4	4·1	6·0
	Bournemouth	cbc	cir.o	57	66	0·3	0·3	2·0	9.3
	Ventnor ...	rc bc o	bbc p	57	63	3	Trace	4·4	4·9
	Southsea ...	c	cor.o	57	64	8	Trace	1·1	6·9
	Bognor Regis	bc	bc	57	63	3	–	4·9	6·4
	Littlehampton	bcc bc	bc	58	64	3	–	5·6	6·1
	Worthing ...	cbc	bc	58	66	7	–	4·9	6·1
	Brighton ...	cpbc	b	58	64	4	1	5·1	4·3
	Eastbourne† ...	cbc	bc	58	65	0·1	–	7·0	5·6
	Hastings† ...	ocbc	bcbbc	57	64	0·5	–	6·5	4·8
	Folkestone ...	cbc	bc	57	66	Trace	–	4·2	5·3
	Dover ...	cpcbc	bc	58	65	Trace	–	6·9	5·3
	Deal	bcd bc	bcbbc	55	68	Trace	Trace	9·1	6·9
	Ramsgate ...	cbc	bc	57	67	Trace	–	6·9	7·2
	Margate ...	bcp	bc	56	69	–	Trace	9·5	9·3
2	Southend ...	cp.	c	57	70	0·3	Trace	3·1	8·1
	Clacton-on-Sea	cp.bc	bcc	58	68	Trace	Trace	6·0	7·2
	Dovercourt ...	bcoc	bcv	56	68	Trace	–	7·1	8·7
	Lowestoft ...	bccr	cr tl	55	66	0·5	21	3·3	5·7
	Skegness ...	ocb	bcb	53	67	–	–	4·3	5·2
	Mablethorpe...	oz.c	orbc	54	66	1	0·3	1·4	5·3
	Cleethorpes ...	cbc	bc	52	69	0·3	–	3·9	6·5
3	Leamington S.	co	opc	54	67	9	Trace	1·3	1·7
4	Cheltenham†	oir.o	oc	55	67	Trace	0·3	0·8	1·9
5	Bath	crr	crc	55	62	6	6	0·1	2·7
	Weymouth ...	cb	crc	57	65	0·3	2	1·4	9·3
	Jersey ...	cbc	bcc	58	65	Trace	–	4·5	7·9
	Torquay ...	b cc	o RP	56	64	1	2	1·8	2·9
	Falmouth ...	ogr.c	cor.rd	55	64	0·5	0·4	0·6	4·3
	Penzance ...	p, c	c	55	62	4	0·5	0·1	6·6
	St. Ives ...								
	Bude... ...	odo	o	57	61	3	–	0·0	5·3
	Ilfracombe ...	iro	o	57	60	1	–	0·0	5·2
6	Aberystwyth	rr prc	c pr	56	62	14	2	0·0	2·4
7	Llandudno	od.oc	cbcc	57	64	5	Trace	2·7	3·7
	Colwyn Bay...	orro	cbcc	57	67	6	1	1·3	3·2
	Rhyl	odr.c	bccpr	58	63	0·6	2	2·6	5·7
8	Wallasey ...	cir	Rtbc	58	63	3	8	0·4	5·6
	Southport ...	cp.bc	t.cTLRc	57	68	4	16	0·8	5·8
	Blackpool ...	cp.	tl Rc	58	69	0·5	14	1·4	6·0
	Morecambe ...	cp bc	bcp	59	69	0·5	0·3	3·1	1·8
9	Ilkley... ...	oroc	d.bc	56	67	11	Trace	2·4	4·5
	Harrogate ...	ctlP	c	56	65	15	3	2·4	5·4
10	Berwick-on-T.	oe Ff	mo	55	57	–	Trace	0·0	1·4
11	Dunbar ...	cmr.	cm	54	57	0·3	Trace	0·0	0·0
12	Troon... ...	bcbbc	bccbc	57	69	–	–	0·0	3·7
	Douglas ...	bc	bc	57	69	0·3	–	5·9	2·6

† Max. Temp. for period 21h. yesterday to 17h. to-day; Min. Temp. 21h.-9h.



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

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 21st July, 1939.

DISTRICTS.	FORECASTS
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Wind light and variable; thundery showers at first, mainly cloudy later; rather close.
7 North Wales ... 8 N.W. England 9 N. Midlands ...	Wind light and variable, cloudy with occasional rain or drizzle; average temperature.
10 N.E. England 11 S.E. Scotland	Wind light and variable, cloudy with occasional drizzle and mist or fog on the coast; average temperature.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Wind southwest, light at first, freshening tomorrow; cloudy, occasional rain or drizzle; average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind northwest, light or moderate; mainly fair but some drizzle or mist in the west; average temperature.

GENERAL INFERENCE.

Pressure is becoming uniform over the British Isles between anticyclones over the Azores and the Baltic and a depression is approaching Iceland from the west. Further thundery rain will occur at first in England but over most of the country the weather will be cloudy and close with occasional drizzle.

FURTHER OUTLOOK.

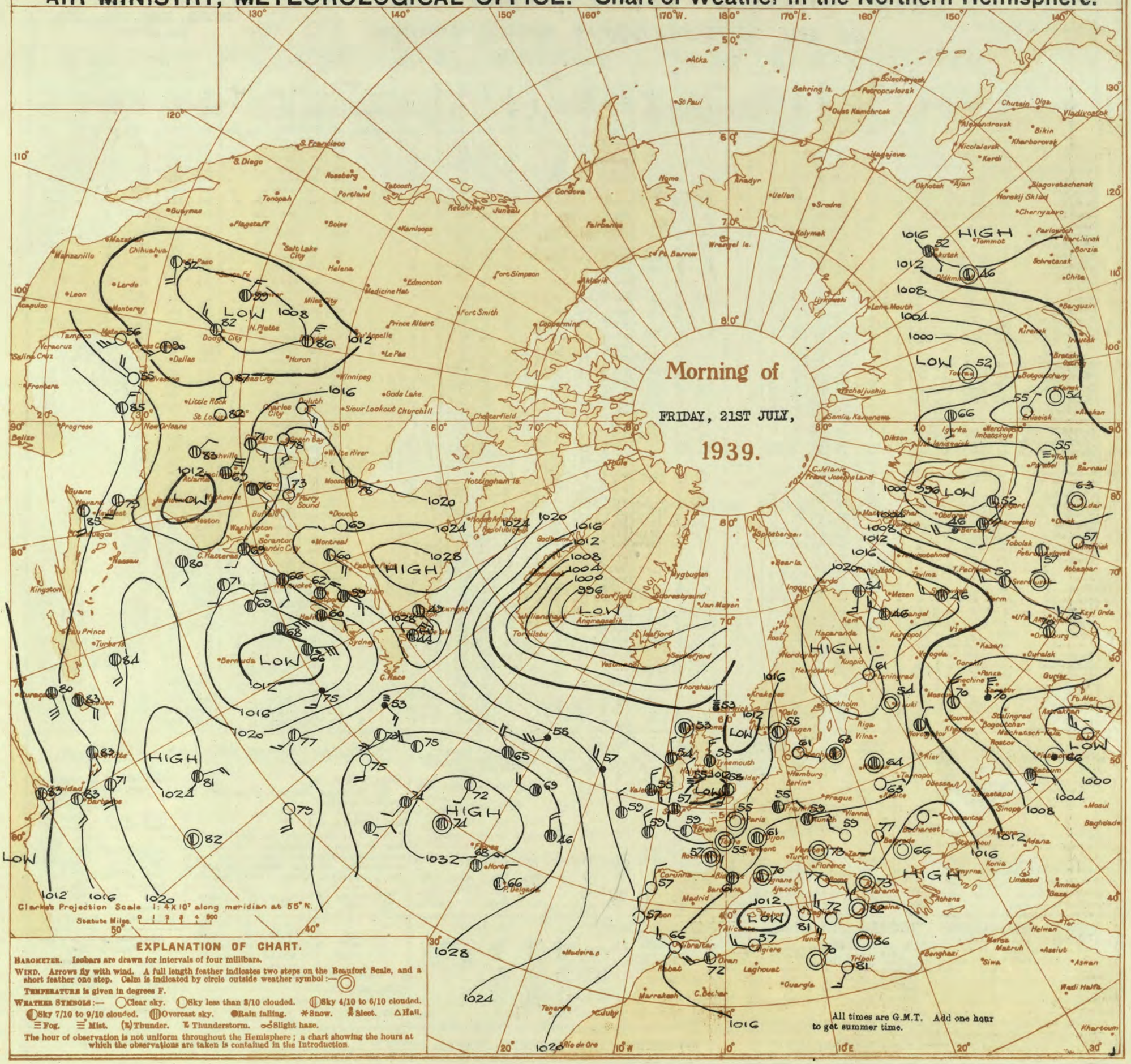
Unsettled.

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.



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

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

TEMPERATURE is given in degrees F.

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday, 21st July, 1939.
No. 28365.

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

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon ...	217	1013·1	+2	SSW	2	r₀r₀	58	97	6	6	2	-	4-6	10	800
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1012·9	-2	SW	2	z₀	57	97	6	6	2	-	7-8	10	1500
	Calshot (Sthptn.)	8	1013·1	+2	WSW	2	z₀	60	92	6	5	-	-	10	10	1500
	Lympne ...	346	1014·7	0	SSW	2	c	56	92	7	5	-	-	7-8	7-8	1500
	Manston ...	154	1014·4	-2	S	3	c	58	85	7	5	7	-	0	9	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1013·0	0	S'W	3	c	58	92	7	8	-	-	9+	9+	2500
	Mildenhall ...	19	1012·0	0	S'E	3	z₀	58	97	6	5	-	-	10	10	1500
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1013·2	0	NW	2	c	58	97	8	5	2	-	7-8	10	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1012·9	+6	W	3	o	58	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1014·0	+2	W	2	z₀	58	92	6	5	-	-	10	10	1500
	The Lizard ...	240	1014·8	+8	-	0	bc	56	97	8	8	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	1014·7	+2	NW'W	3	c	57	97	8	8	2	-	4-6	10	2500
	Guernsey ...	175	1014·6	+2	WSW	2	c	57	97	8	5	-	-	9	9	1500
6	Pembroke ...	142	1012·9	+4	NNW	3	c	58	92	7	8	-	-	9+	9+	2500
7	Holyhead ...	26	1012·7	+12	NNW	2	F	55	97	2	-	-	-	10	10	<150
	Chester (Sealand)	16	1012·3	+8	-	0	m	56	97	4	-	-	-	0	0	-
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1012·4	+6	SE'S	2	o	60	92	6	5	-	-	10	10	2500
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1012·8	+8	N	3	o/d	55	97	5	5	-	-	10	10	1500
11	St. Abbs Head	280	1013·2	+4	-	0	F	55	97	0	-	-	-	10	10	<150
	Leuchars ...	36	1014·3	+2	-	0	z₀	56	97	6	5	-	-	10	10	450
12	Renfrew (Abbots I.)	19	1014·1	+6	E'N	2	id₀	59	92	6	5	-	-	10	10	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1013·0	+6	-	0	bc	57	97	7	-	4	-	0	2-3	-
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1014·0	0	-	0	c	53	92	7	5	2	-	9	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1014·1	+4	NNE	2	F	51	97	1	-	-	-	10	10	<150
16	Lerwick ...	156	1014·1	+2	N	1	rF	53	97	1'	-	-	-	10	10	<150
17	Blacksod Point	18	1016·0	0	-	0	o	52	97	7	-	2	-	0	10	-
18	Malin Head ...	84	1015·2	0	NNW	1	c	54	92	7	8	-	-	9+	9+	4000
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1016·8	+4	N'W	3	o	55	92	7	5	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1013·0	+4	SW	2	r₀r₀	59	92	5	6	2	-	7-8	10	800	1	*
Croydon	1013·0	0	S'W	1	c/tlr	58	97	6	9	2	-	9	10	1500	1	*
S. Farnborough	1012·9	+4	S'W	2	r₀r₀	58	97	6	5	2	-	7-8	10	1500	1	*
Boscombe Down	1013·0	+2	SW'S	1	z₀	57	97	5	5	-	-	10	10	450	1	*
Calshot (Sthptn.)	1013·3	+2	WSW	2	z₀	60	85	6	8	2	-	9	10	800	1	2
Lympne	1014·3	-2	SW'W	3	bc	59	55	8	1	7	1	4-6	4-6	1500	0	§
Manston	1014·2	0	SSW	4	c	60	85	8	5	3	1	1	7-8	800	0	*
Shoeburyness	1013·7	+4	S'W	4	r₀r₀	59	97	6	6	2	-	4-6	10	800	1	*
Felixstowe	1013·5	+2	SSW	4	r₀r₀	59	97	7	6	7	-	9+	10	800	1	3
Gorleston	1013·5	+6	S'W	3	c	60	92	7	6	-	-	9+	9+	1500	1	2
Mildenhall	1012·5	+6	S'W	1	c/r	59	92	8	8	2	-	9	10	1500	1	*
Cranwell	1012·5	+8	W	1	F+	55	97	1	-	-	-	10	10	<150	1	*
Birmingham	1012·9	+6	N	1	F	55	97	1	-	-	-	10	10	<150	1	*
Upper Heyford	1012·8	+4	SW	1	z₀	58	97	5	5	-	-	10	10	450	1	*
Ross-on-Wye	1012·4	+4	SSW	1	z₀	57	97	5	5	-	-	10	10	800	1	*
Hartland Point	1013·0	0	NW	2	c/r	59	97	7	6	2	-	7-8	10	800	1	2
Bristol	1012·8	+2	WSW	1	z₀	59	92	6	5	-	-	10	10	2500	1	*
Portland Bill	1013·1	+4	WSW	3	d₀d₀	58	92	7	5	-	-	10	10	2500	1	3
Plymouth	1014·0	+2	W'N	2	z₀	58	97	6	5	-	-	9	9	1500	1	1
The Lizard	1014·9	+2	W'S	2	c	57	97	8	8	2	-	7-8	10	2500	1	1
Scilly (St. Mary's)	1014·5	0	W'N	3	c	57	97	8	8	8	-	9-6	7-8	2500	1	2
Guernsey	1014·7	+4	SW	1	c/r	57	97	6	5	-	-	10	10	450	1	3
Pembroke	1013·7	+2	N	4	cq	57	97	6	8	2	-	7-8	9+	1500	1	2
Holyhead	1013·1	+4	N	3	c	57	97	6	5	-	-	10	10	220	1	2
Chester (Sealand)	1012·8	+4	-	0	m	58	97	4	-	3	-	0	4-6	-	1	*
Manchester	1012·6	+4	NE	2	z₀	59	92	5	2	3	-	4-6	4-6	4000	1	*
Spurn Head	1012·4	0	ENE	3	r	58	97	6	5	-	-	10	10	800	1	2
Catterick	1013·4	+2	NE	2	z₀	60	85	5	5	3	-	7-8	9+	800	1	*
Tynemouth	1017·0	+4	N	3	o/f	55	97	5	5	-	-	10	10	1500	1	1
St. Abbs Head	1013·8	+4	-	0	F-	55	97	2	-	-	-	10	10	<150	1	*
Leuchars	1014·1	+2	ESE	1	z₀	57	97	6	5	-	-	10	10	450	0	
Renfrew (Abbots I.)	1014·5	+6	E	1	z₀	60	85	5	5	-	-	9+	9+	1500	0	*
Eskdalemuir	1013·8	+2	N'W	2	o	56	92	6	5	-	-	10	10	800	1	*
Point of Ayre	1013·7	+2	N'E	1	c	58	97	6	5	7	-	7-8	10	1500	1	1
Tiree	1014·1	+2	W	1	c	55	85	7	5	3	-	4-6	7-8	2500	0	1
Stornoway	1014·3	+4	SSW	2	c	53	97	7	5	2	-	9	10	1500	0	1
Dalwhinnie	1014·1	0	W	1	c	59	92	6	5	1	-	4-6	7-8	2500	1	*
Aberdeen	1014·2	+4	E'N	1	id₀	55	97	5	5	-	-	10	10	800	1	1
Wick	1013·9	+2	S	2	F	52	97	1	-	-	-	10	10	<150	1	1
Lerwick	1014·4	+2	W	1	dF	54	97	2	-	-	-	10	10	<150	1	*
Blacksod Point	1015·2	-4	W	2	o	54	85	8	-	2	-	0	10	-	0	1
Malin Head	1015·1	0	-	0	c	55	85	7	5	-	-	9	9	1500	0	1
Aldergrove	1014·3	-2	N'W	1	z₀	53	97	5	5	-	-	10	10	220	1	"
Birr Castle	1015·1	+2	W	1	c	54	92	8	5	-	-	10	10	2500	1	*
Valentia Obsy. †	1016·6	+4	NNW	3	c	55	85	8	5	-	-	10	10	1500	1	1
Roches Point	1015·2	+4	N'W	4	c	58	92	8	5	-	5	2-3	7-8	2500	1	1

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)	63	58	57	10	5	0·6
Croydon	63	57	57	0·5	13	1·3
S. Farnborough	63	57	54	8	2	0·2
Boscombe Down	60	56	55	8	0·2	0·0
Calshot (Sthptn.)	65	58	57	2	0·2	0·8
Lympne	64	55	52	0·2	-	6·5
Manston	69	55	52	Tr	-	8·6
Shoeburyness	70	58	57	0·3	3	4·6
Felixstowe	71	58	58	Tr	2	8·4
Gorleston	65	58	56	14	2	4·5
Mildenhall	70	57	55	1	8	4·9
Cranwell	68	52	48	Tr	Tr	6·3
Birmingham	67	53	52	2	-	2·0
Upper Heyford	63	57	55	2	1	*
Ross-on-Wye	67	55	52	3	-	1·0
Hartland Point	59	57	56	1	4	0·0
Bristol	63	57	55	8	Tr	0·0
Portland Bill	60	55	*	0·5	0·3	"
Plymouth	62	57	56	0·6	-	0·1
The Lizard	60	54	*	2	-	0·1
Scilly (St. Mary's)	63	56	*	-	-	2·9
Guernsey	62	56	54	-	1	7·6
Pembroke	57	56	*	1	Tr	0·0
Holyhead	61	54	54	-	Tr	6·0
Chester (Sealand)	65	52	47	2	Tr	1·6
Manchester	67	53	47	4	1	0·5
Spurn Head	65	58	*	-	Tr	5·0
Catterick	66	56	56	-	·	1·5
Tynemouth	57	55	54	2	0·4	0·0
St. Abbs Head	60	54	*	Tr	Tr	*
Leuchars	65	55	56	Tr	-	5·7
Renfrew (Abbots I.)	72	58	57	-	Tr	4·9
Eskdalemuir	69	54	54	-	-	6·5
Point of Ayre	67	55	*	-	Tr	9·2
Tiree	61	52	50	-	-	7·8
Stornoway	57	52	*	-	-	0·0
Dalwhinnie	68	51	40	-	-	9·1
Aberdeen	66	54	53	-	Tr	1·3
Wick	59	50	*	-	Tr	*
Lerwick	58	52	*	-	0·2	0·0
Blacksod Point	62	50	*	-	-	*
Malin Head	59	52	*	-	Tr	0·0
Aldergrove	64	53	53	-	Tr	6·1
Birr Castle	64	53	48	-	·	0·2
Valentia Obsy. †	60	54	52	Tr	Tr	0·1
Roches Point	64	56	*	-	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.
Kew	18	cq irr₀	cRrr₀	cir Rrcr₀r₀	63	58	57	10	5	0·6	·	·	5
Croydon	217	cpr₀pr₀	cpr₀	pr₀ziRtlr	63	57	57	0·5	13	1·3	·	·	6
Greenwich (Royal Observatory)	149				69	57	56	1	26	1·3	74	98	6
City (Bunhill Row)	—	·	·	·	·	·	·	·	·	0·7	·	·	·
Westminster (St. James' Park)	27	·	·	·	64	59	58	14		0·9	91	94	·
Regents Pk. (Botanic Gardens)‡	168	·	·	·	64	58	55	5	9	*	88	98	·
Camden Square	110	bc	c	·	65	58	57	5	9	*	·	95	·
Kensington	80	or	cp	·	69	58	55	6	6	0·6	At 18h 89	97	·
Hampstead Observatory	460	cor	or	or	62	60	52	5	8	0·5	·	99	·

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 21st

South Kensington. Max.	Time.	Min.	Time.
<0·3	whole		period

Kew Observatory. Max.	Time.	Min.	Time.
0·1	3h 21st	<0·1	rest of period

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. July 20th Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. July 21st 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	1014·2	SSW	2	c	72	1015·5	-	0	z₀	59	73	52	-	-
Brussels	1013·9	SSW	3	bc	68	1015·4	S	1	bc	64	73	54	-	-
Berlin	1015·4	-	0	c	73	1016·4	-	0	z₀	70	79	64	-	-
Zurich	1015·8	WNW	1	bc	66	1015·6	NW	2	o	61	75	59	5	0·4
Rome						1014·2	SE	3	b	84	*	*		-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday, 22nd July, 1939.

No. 28366.

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

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)	1013·3	−4	S	3	c	65	75	8	8	3	8	7-8	9+	2500
	Croydon	1013·6	0	SSW	3	u	62	85	7	9	6	3	4-6	9+	1500
	S. Farnborough	1013·1	−4	SSW	4	tlr	63	85	7	8	7	−	7-8	9+	1500
	Boscombe Down	1013·2	−2	SW'S	2	tlr	60	97	5	6	2	−	10	10	450
	Calshot (Soton.)	1013·5	+2	SSW	4	c/r	61	92	7	5	2	−	9+	10	800
	Lympne	1014·9	+2	SW'S	4	c	64	75	8	2	−	1	7-8	7-8	1500
	Manston	1014·2	−2	SSW	4	bc	69	65	7	2	−	4	2-3	4-6	2500
2	Shoeburyness	1014·3	0	SSW	3	1R	61	97	6	5	2	−	4-6	10	1500
	Felixstowe	1013·8	−4	SW	3	c	66	75	8	8	6	3	4-6	7-8	2500
	Gorleston	1013·7	0	SE'S	4	c	67	85	7	8	−	−	7-8	7-8	2500
	Mildenhall	1012·9	−2	S	2	c	66	85	7	8	3	6	2-3	7-8	2500
	Cranwell	1012·2	−6	WNW	1	z_o	67	85	6	8	−	−	9	9	1500
3	Birmingham	1012·4	−4	NE	2	c	66	65	6	8	−	−	9	9	2500
	Upper Heyford	1014·3	+4	−	0	r_o	55	92	6	9	2	−	9	10	1500
4	Ross-on-Wye	1012·0	−6	WSW	1	ct	67	75	5	3	−	−	8	9+	2500
5	Hartland Point	1013·9	+8	NNW	2	c	58	97	7	5	2	−	7-8	10	800
	Bristol	1012·7	−6	SW'S	1	ct	67	75	6	5	1	−	4-6	9+	2500
	Portland Bill	1013·5	+6	WSW	3	rr	58	92	7	5	−	−	10	10	1500
	Plymouth	1014·4	+2	W'N	1	c/r	60	92	8	9	7	−	4-6	9+	1500
	The Lizard	1016·0	+8	W'S	3	bc	62	92	8	8	6	−	4-6	4-6	2500
	Scilly (St. Mary's)	1015·6	+6	NW	3	c	64	92	7	8	6	−	4-6	10	1500
	Guernsey	1015·6	+4	W'S	3	rr	59	97	6	8	−	−	10	10	800
6	Pembroke	1014·4	+4	N'E	3	r_o	58	97	6	8	−	−	9+	9+	1500
7	Holyhead	1013·7	0	NW	3	c	60	92	6	5	3	−	4-6	7-8	450
	Chester (Sealand)	1012·9	−4	NW	2	c/pr	63	85	6	9	−	−	9+	9+	2500
8	Manchester	1012·7	−4	NE	2	bc	70	55	7	2	3	−	4-6	4-6	4000
10	Spurn Head	1012·7	0	ESE	2	bc	63	85	5	5	8	−	2-3	4-6	5700
	Catterick	1013·0	−6	NE'N	2	c	67	65	7	2	−	−	7-8	7-8	2500
	Tynemouth	1013·9	0	NE	2	bc	62	85	6	2	−	−	4-6	4-6	2500
11	St. Abbs Head	1014·3	+4	SE	1	c	59	85	7	8	6	−	7-8	9+	1500
	Leuchars	1013·8	−10	E	3	c	62	85	7	5	7	−	7-8	9+	1500
12	Renfrew (Abbotsl.)	1013·4	−8	−	0	z_o	70	65	5	2	6	−	4-6	7-8	2500
	Eskdalemuir	1013·2	−2	S'W	1	c	63	75	8	8	−	−	10	10	1500
	Point of Ayre	1014·0	0	NW	3	bc	64	85	7	1	5	1	Tr	2-3	1500
13A	Tiree	1014·0	−2	SW	2	bc	59	75	8	7	3	2	2-3	4-6	4000
13B	Stornoway	1014·0	−4	S	3	c	58	75	8	5	7	−	7-8	9	4000
15	Dalwhinnie	1013·3	−10	S	2	c	65	65	7	4	6	−	7-8	9+	4000
	Aberdeen	1014·2	−6	ESE	3	c	58	92	6	5	−	−	9+	9+	806
	Wick	1013·8	−4	SSE	3	c	54	97	5	5	−	−	10	10	450
16	Lerwick	1014·5	−2	S	1	m/F	55	97	4	−	−	−	10	10	4150
17	Blacksod Point	1015·1	−4	S	1	c	57	97	7	−	2	−	0	10	−
18	Malin Head	1014·4	−2	W	2	c	57	85	7	8	−	−	9	9	1500
	Aldergrove	1014·1	−6	−	0	z_o	61	85	6	5	−	−	10	10	800
19	Birr Castle	1015·0	0	W	1	c	59	85	8	6	2	−	7-8	10	2500
20	Valentia Obsy.†	1016·9	+2	W	1	c	57	92	8	5	−	−	10	10	800
	Roches Point	1015·6	+2	N	3	c	62	85	8	5	−	−	9+	9+	2500

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

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	−2	SW'S	3	c/p	62	85	7	8	7	8	7-8	10	1500	1	*
	Croydon	1012·0	−2	SSW	3	c/p	63	85	7	3	3	3	4-6	9+	5700	1	*
	S. Farnborough	1012·7	0	SSW	3	z_o	61	85	6	7	7	−	1	9	2500	1	*
	Boscombe Down	1013·2	+4	W'N	3	tlr	59	97	5	6	2	−	7-8	10	450	1	*
	Calshot (Soton.)	1013·2	−6	SW'W	3	r_o	60	92	6	6	−	−	10	10	800	1	2
	Lympne	1014·0	+2	SSW	3	bc	62	85	7	2	6	1	2-3	2-3	4000	0	§2
	Manston	1013·2	+2	S	3	bc	65	75	7	2	6	−	1	2-3	2500	0	*
2	Shoeburyness	1013·1	−6	SSW	3	bc	65	85	8	8	6	−	4-6	4-6	2500	1	*
	Felixstowe	1013·1	−4	S'E	3	c	63	85	8	8	3	3	4-6	7-8	1500	0	2
	Gorleston	1012·4	−4	SSE	4	bc	63	85	7	8	6	−	2-3	2-3	2500	1	3
	Mildenhall	1012·2	−2	SW'S	2	r_o	59	85	7	7	7	6	4-6	9+	4000	1	*
	Cranwell	1011·7	−2	SW	1	c	64	75	7	3	6	3	4-6	7-8	2500	1	*
3	Birmingham	1012·0	−4	−	0	c	62	75	6	5	7	−	4-6	9+	4000	1	*
	Upper Heyford	1012·8	+2	SW	1	pr_o	60	92	6	3	1	−	4-6	10	1500	1	*
4	Ross-on-Wye	1012·4	+6	W'N	1	c/TLR	55	97	7	3	6	−	7-8	9+	2500	1	*
5	Hartland Point	1014·3	+4	N	2	c	58	92	7	5	2	−	7-8	9	1500	1	2
	Bristol	1012·8	+6	W	3	r_o	61	92	6	9	7	−	4-6	9+	1500	1	*
	Portland Bill	1013·0	−2	WSW	3	o	58	92	7	5	−	−	10	10	1500	1	3
	Plymouth	1014·4	+2	NW'N	3	pr	62	85	6	9	3	−	9	9+	1500	1	1
	The Lizard	1015·6	−8	W	2	c	59	92	8	8	6	−	7-8	9+	1500	0	1
	Scilly (St. Mary's)	1015·7	+2	NNW	2	c	64	85	8	8	8	4	2-3	7-8	2500	0	1
	Guernsey	1015·2	−4	SW	4	c	59	85	7	5	2	−	4-6	10	1500	1	3
6	Pembroke	1014·3	0	NW	2	c	58	92	7	5	2	−	7-8	9+	1500	1	1
7	Holyhead	1013·1	−2	NW	3	o	58	92	6	5	−	−	10	10	450	1	2
	Chester (Sealand)	1012·4	−2	NW	3	z_o	64	75	6	3	3	−	2-3	4-6	2500	0	*
8	Manchester	1012·0	+2	W'N	1	c/r	59	97	5	8	−	−	9+	9+	4000	2	*
10	Spurn Head	1010·9	−6	E'S	2	c	62	85	6	9	−	−	7-8	7-8	1500	1	1
	Catterick	1012·0	−6	NE'E	2	bc	66	65	8	2	3	−	2-3	2-3	2500	1	*
	Tynemouth	1012·8	−10	SE	2	bc	60	92	6	2	−	−	2-3	2-3	2500	1	1
11	St. Abbs Head	1012·4	−8	SE	3	bc	59	85	7	4	−	−	2-3	2-3	2500	0	2
	Leuchars	1012·1	−6	ESE	2	b	62	85	7	−	−	1	0	Tr	−	0	*
12	Renfrew (Abbotsl.)	1011·9	−2	N	2	r/tlr	64	85	6	9	4	−	7-8	9+	1500	1	*
	Eskdalemuir	1010·9	−10	−	0	c	67	65	8	8	−	8	7-8	7-8	4000	0	*
	Point of Ayre	1012·7	−8	NW'W	3	bc	63	85	6	−	−	6	0	4-6	−	0	1
13A	Tiree	1012·3	−6	SW'S	2	c	56	85	8	5	−	−	9	9	2500	0	2
13B	Stornoway	1012·0	−6	SSW	3	pr	57	85	8	5	7	8	2-3	9+	4000	1	2
15	Dalwhinnie	*	−4	N	1	o	63	85	7	−	2	−	10	10	4000	0	*
	Aberdeen	1012·6	−6	SSE	3	b	60	85	6	5	3	−	1	1	1500	1	1
	Wick	1011·7	−12	SE	2	f+	54	97	3	−	−	−	10	10	4150	1	1
16	Lerwick	1013·8	0	S	1	F+	54	97	1	−	−	−	10	10	4150	1	*
17	Blacksod Point	1014·2	−10	WSW	3	o	58	97	7	−	2	−	0	10	−	0	2
18	Malin Head	1013·2	−10	W	1	c/r	56	92	7	6	7	−	2-3	9	1500	0	0
	Aldergrove	1012·5	−10	SW	2	c	61	85	7	5	−	−	10	10	2500	1	*
19	Birr Castle	1014·1	−4	W'S	1	c/pr	60	85	8	3	7	−	4-6	9	1500	1	*
20	Valentia Obsy.†	1015·8	−4	W	2	o	58	97	7	5	−	−	10	10	450	1	1
	Roches Point	1014·9	−6	NW	2	r_o	61	92	8	6	7	−	4-6	7-8	1500	1	1

PAST 24 HOURS.

District	Stations	Weather. 7h.–13h. 21st (37)	Weather. 13h.–18h. 21st (38)	Weather. 18h. 21st to 1h. 22nd (39)	Weather. 1h.–7h. 22nd (40)
1	London (Kew)	c r r s c t	c t l r s r o c	c t b c m o	b c m o o m o
	Croydon	c r r R)	c p r s t	c m o b c w c m o	c i r o m o
	S. Farnborough	c t R p r t	t r o p r o c	c p r o c m o	c m o
	Boscombe Down	o m o c t l r	t l r p r o t l r	t l r r c m o m o	o m o c m o c
	Calshot (Soton.)	i r o r r c	c i r o c	r o r o O	o m o b c
	Lympne	b c c b c	b c	b c o m o i r o	o p r o r o f c m o
	Manston	b c	b c b	b o m o	c m o
2	Shoeburyness	i r o i R m o	i R c P R c t o	b c c	c c m o
	Felixstowe	o r r b c	b c	b c c m o c	o i d o c m o
	Gorleston	c o p r c	c p r t b c	b c b w	b c w z o m
	Mildenhall	c r o r i r s b c	c t p r r s r o	c i r o b m o b m	b o m
	Cranwell	o f o r m o	c t l p r m o b c	b c b	b o b f
3	Birmingham	F c	c t l r c	c t l	c
	Upper Heyford	c m o d o c T Z R C r o c m o t	c r o b m o f	o f o m m o	
4	Ross-on-Wye	c m o c z o t t l R H T L R	c m o b c c	c m o o m o	
5	Hartland Point	c i r	c	c b c	b c c i r o
	Bristol	c r o m o	c t r o t c	c r o r c m o	c b c c
	Portland Bill	o r r	o t r o	c	c
	Plymouth	c r o r r i r o	c p r o c m o	c b	b w c m o c
	The Lizard	b c	c	c b c w	b c c d f
	Scilly (St. Mary's)	c	c	c w	F F d d o
	Guernsey	c i d o r	c i r o	c i r	o i r c
6	Pembroke	i r o m o	i r m o c	b c c w	c p r o m o O
7	Holyhead	c m o b c	c m o b c c	c m o	o r r m o c
	Chester (Sealand)	c b c m o p r o c	c m o p r o b c z_o	b c c m o	o m m o
8	Manchester	b c m o c b z_o y p r o t l R R	c m o b r c m o	c m o	
10	Spurn Head	P R b c	b c c	b c m w b	F f m o
	Catterick	c m o w b c	b c z o b c	b c m w	m o F f w
	Tynemouth	o f f m b c	b c	b c b c	b c o m
11	St. Abbs Head	F m o c	m o b c	b c	b c c
	Leuchars	c m o c	c b c b	b m o b c	b c o m s u o m o
12	Renfrew (Abbotsl.)	c m o z_o	c m o t l r i R i r o	c m o i r o c m o i r o	c m o i r o
	Eskdalemuir	c m o c	c b c c	c	c o d o d o m o
	Point of Ayre	c b c	b c	b c c o	c r o r o
13A	Tiree	c b c	b c c	c o i r	o R r r
13B	Stornoway	c	c r o	c r o r o	c r r
15	Dalwhinnie	c	c i R	•	c
	Aberdeen	o f f c z_o	c b c b	b b c c m	c m o m
	Wick	F c m o	o m o F	f o m	o r o m
16	Lerwick	o d f f e	o F F e	o d f d f	o F F e
17	Blacksod Point	o	i d f	i d r	i R
18	Malin Head	c	c r o r c	c i r c r r c	o d d o
	Aldergrove	i d o c m o	c m o c	o m o i r o	r r d o d o m
19	Birr Castle	c	c p r o	c p r o c	c o r r
20	Valentia Obsy.†	c	c p r o	o d f r r	r r r o r o i d c
	Roches Point	c	c c i r o	c i r o c	c i r 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.
ls, storm of drifting snow.
k/s_o, slight storm of drifting snow (generally low).
k/S, heavy storm of drifting snow (generally low).
s_o/k, slight storm of drifting snow (generally high).
S/k, heavy storm of drifting snow (generally high).
KQ, line squall. l, lightning.
o, overcast sky. p, passing showers.
q, squalls. r, rain. s, snow.
rs, sleet. t, thunder.
u, ugly, threatening sky.
v, unusual visibility. w, dew.
x, hoar frost. y, dry air.
z, dust haze: the turbid atmosphere of dry weather.
h(r), "hail" or "rain and hail."
Capital letters indicate intense; suffix o indicates slight; repetition of letters indicates continuity: thus R, heavy rain. r_o, slight rain. rr, continuous rain.
<, less than (for cloud height). ⚷ gale.
⊕ Solar halo. ☽ lunar halo. ⌓ Aurora.

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 10, 24.—FORM OF MEDIUM CLOUD.

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

COLUMNS 11, 25.—FORM OF CIRRUS CLOUD.

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

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

COLUMNS 12, 13, 26, 27.

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

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

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

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

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

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.*

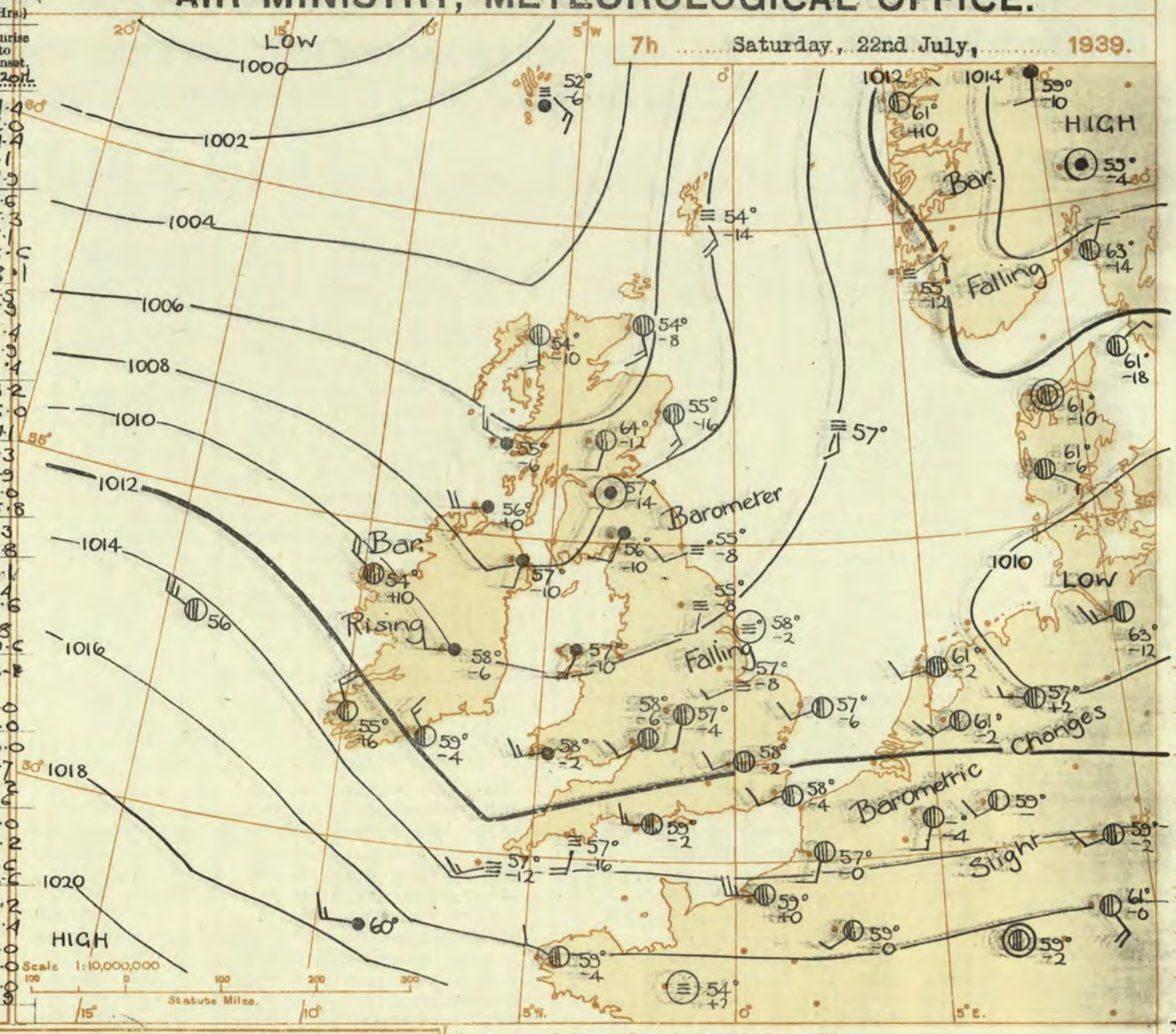
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for July 21st 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 20th to 9h. 21st	Temperature. (°F) Max. 9h.—17h. 21st	Rainfall. (mm.) Night. 17h. 20th to 9h. 21st	Rainfall. (mm.) Day. 9h.—17h. 21st	Sunshine. (Hrs.) Sunrise to 17h. 21st	Sunshine. (Hrs.) Sunrise to Sunset. 20th
1	Tunbridge W.	pro	proc	57	66	2	12	2·8	4·4
	Bournemouth	drr	op.	57	61	2	2	0·0	2·0
	Ventnor ...	pco	cspo	58	62	Trace	0·3	0·4	4·4
	Southsea ...	ocp	pro	58	64	Trace	0·4	0·1	1·1
	Bognor Regis	ocbc	bcco	59	65	3	–	1·9	4·5
	Littlehampton	dtrc	c	59	64	1	–	2·6	5·6
	Worthing ...	ocr.	cpcc	59	65	2	Trace	2·2	5·3
	Brighton ...	pc	cpcc	58	64	Trace	0·4	1·6	6·1
	Eastbourne† ...	ocbc	cbcc	58	65	Trace	Trace	3·4	8·6
	Hastings† ...	coc	bc	58	67	–	–	4·6	8·1
	Folkestone ...	pc	pcb	58	67	–	–	10·8	6·5
	Dover ...	bc	bc	59	67	–	–	11·0	8·9
	Deal	bcb	p	57	69	0·5	–	10·2	11·4
	Ramsgate ...	pc	bc	59	68	–	–	10·3	8·9
	Margate ...	bc	bc	57	71	–	–	9·7	11·4
2	Southend ...	or	orcbc	58	68	2	7	2·9	3·2
	Clacton-on-Sea	orc	crcpc	58	66	6	2	2·8	6·0
	Dovercourt ...	roc	rocpc	59	68	4	4	4·1	7·1
	Lowestoft ...	cir	dcb	57	66	2	3	5·2	3·3
	Skegness ...	ocbc	cbc	57	65	2	–	3·9	4·9
	Mablethorpe...	opo	pc	57	66	4	0·3	3·4	3·0
	Cleethorpes ...	drc	bcc	55	64	2	0·3	1·3	5·8
3	Leamington S.	oc	cotlr	56	67	–	3	0·5	1·3
4	Cheltenham†	ornoc	ortlc	57	69	Trace	6	0·9	0·8
	Bath	ctlro	ctlR	57	68	Trace	14	0·9	0·4
	Weymouth ...	c	ctlrcr	57	63	1	3	0·1	1·4
	Jersey ...	pc	cpc	58	63	Trace	0·1	0·2	5·6
	Torquay ...	oRp	tlrpc	57	65	4	5	0·5	1·8
	Falmouth ...	bc	c	55	69	–	–	3·4	0·6
	Penzance ...	b,cb,c	c	54	69	–	–	3·8	0·[illegible]
	St. Ives ...								
	Bude... ...	r	oc	58	61	3	1	0·0	0·0
	Ilfracombe ...	odopo	op	58	61	1	Trace	0·0	0·0
6	Aberystwyth	pro	cbct	58	63	6	–	1·0	0·0
7	Llandudno ...	cbcb	p	57	66	–	–	6·9	3·7
	Colwyn Bay...	obc	bcb	57	65	–	–	6·0	2·2
	Rhyl	omoc	bcb	59	65	Trace	–	7·6	2·6
8	Wallasey ...	cbc	bc	54	66	Trace	–	5·6	1·0
	Southport ...	czbcz	bczbz	53	70	0·3	–	4·7	1·2
	Blackpool ...	ccmo	pcb	54	67	–	–	4·8	2·6
	Morecambe ...	bc	pbc	58	68	–	–	6·6	3·6
9	Ilkley... ...	octc	bc	57	69	3	–	3·9	3·2
	Harrogate ...	c	cbcc	55	65	3	–	1·6	2·4
10	Berwick-on-T.	ocmmo	cbcb	55	61	Trace	Trace	3·6	0·0
11	Dunbar ...	cmro	bc	54	62	2	–	4·3	0·0
12	Troon... ...	bcb	bcb	58	63	–	–	4·5	0·0
	Douglas ...	bc	bc	55	67	Trace	–	2·1	7·3

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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 July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind light southwest becoming moderate northwest, cloudy with occasional rain or drizzle today; fair tomorrow; average temperature.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Wind light, southwest, becoming northwest moderate; rain early, mainly bright but perhaps local showers later; average temperature.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	As 1 - 4.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland.	As 5 - 8.
14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	As 1 - 4.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind northwest, moderate or fresh; mainly bright but perhaps local showers; average temperature.

GENERAL INFERENCE.

A trough of low pressure extends from Iceland to the Hebrides and across Ireland. It is moving and will clear the country by about midnight. Ahead of the trough the weather will be cloudy with occasional rain. Behind it there will be brighter conditions.

FURTHER OUTLOOK.

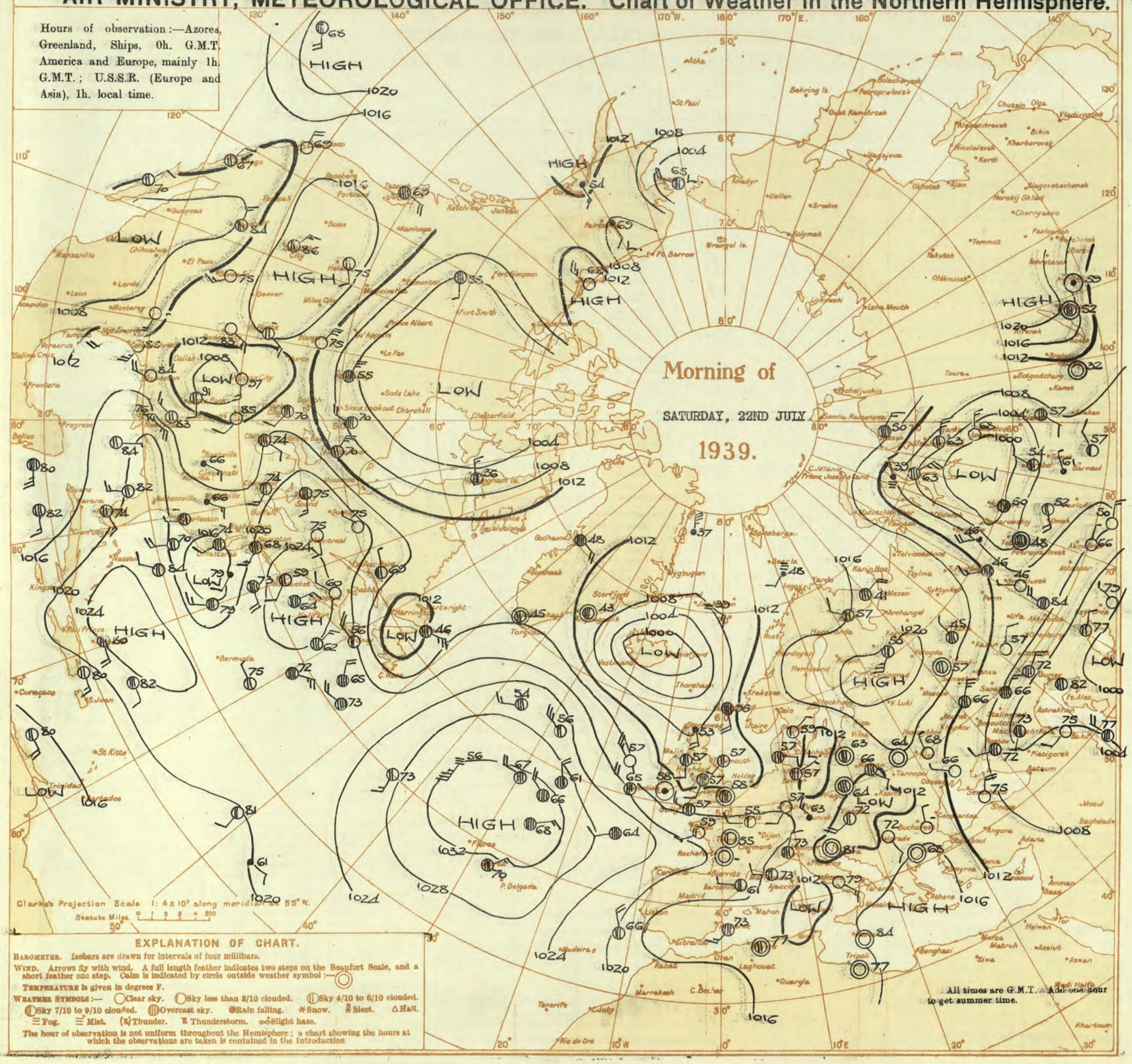
Mainly fair and bright but some local showers especially in western districts.

Forecasts issued at 1015 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

Saturday, 22nd July, 1939.
No. 28366.

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

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	+2	-	0	2o	58	97	6	5	-	-	7-8	7-8	2500
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1013·5	-4	WNW	3	2o	57	97	5	5	-	-	10	10	800
	Calshot (Sthmtn.)	8	1013·4	-2	W'S	2	2o	59	97	6	5	-	-	10	10	2500
	Lympne ...	346	1014·1	-6	SW	2	c	57	97	6	5	-	-	10	10	220
	Manston ...	154	1013·2	-6	S'W	3	2o	59	97	6	5	-	-	9	9	800
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ..	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1012·3	-4	SW'S	2	b	57	92	7	-	-	-	0	0	-
	Maldenhall ...	19	1012·2	-2	S	2	m	55	97	4	-	-	-	0	0	-
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1014·2	-4	WNW	3	bc	58	97	8	5	-	-	4-6	4-6	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1014·6	+4	WNW	4	c	59	92	7	5	-	-	7-8	9	2500
	Plymouth ...	82	1015·4	+2	WN	2	bc	57	92	7	5	-	-	2-3	2-3	4000
	The Lizard ...	240	1016·0	-4	SWW	2	bc	56	97	7	8	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	1015·6	-6	W'N	3	c	57	97	8	8	-	-	10	10	2500
	Guernsey ...	175	1015·7	+2	SW	4	ir	59	97	8	5	-	-	10	10	1500
6	Pembroke ...	142	1013·7	-2	W'S	3	c	58	97	7	8	2	-	7-8	10	1500
7	Holyhead ...	26	1012·1	-8	S'W	2	o	57	92	7	5	-	-	10	10	800
	Chester (Sealand)	16	1012·4	-6	WNW	2	2o	58	85	6	5	-	-	10	10	800
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1011·3	-4	W	2	if	58	92	4	-	-	-	0	0	-
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1011·3	-10	SW	1	bc	57	92	6	2	-	-	2-3	2-3	1500
11	St. Abbs Head	280	1010·4	-8	S	2	bc	55	92	7	5	1	1	4-6	4-6	2500
	Leuchars ...	36	1010·1	-12	-	0	bc	55	97	7	5	-	-	4-6	4-6	2500
12	Renfrew (Abbots I.)	19	1010·9	-10	SSW	2	2o	57	92	6	5	-	-	10	10	800
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1011·7	-4	W'N	2	o	58	92	7	5	-	-	10	10	800
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1008·9	-18	SSE	4	r.r.	53	97	7	5	7	-	4-6	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1008·7	-16	S	3	o	54	97	5	5	-	-	10	10	450
16	Lerwick ...	156	1011·8	-16	S'E	4	m	55	97	4	-	-	-	10	10	<150
17	Blacksod Point	18	1010·7	-14	W	3	DD	57	97	6	6	-	-	10	10	<150
18	Malin Head ...	84	1009·6	-16	S	1	c	57	97	6	8	-	-	9+	9+	1500
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1013·8	-10	-	0	df	58	97	4	5	-	-	10	10	<150
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1011·9	-2	W'S	2	2o	59	92	5	5	-	-	10	10	1500	1	*
Croydon ...	1012·3	-2	W'S	2	2o	58	97	5	5	-	-	10	10	450	1	*
S. Farnborough	1012·0	0	W'S	3	2o	58	92	6	5	3	-	7-8	9+	800	1	*
Boscombe Down	1012·8	0	W'S	3	c	58	92	7	5	7	2	4-6	9+	2500	1	*
Calshot (Sthmtn.)	1012·9	-2	W'S	3	2o	59	92	6	5	5	5	2-3	7-8	5700	1	1
Lympne ...	1012·8	-4	W'S	2	c	58	92	7	5	3	-	9	9+	220	0	§2
Manston ...	1011·6	-6	WSW	3	2o	61	85	6	5	-	-	9+	9+	1500	0	*
Shoeburyness ...	1011·8	-2	WSW	2	c	61	92	6	5	-	-	9+	9+	1500	1	*
Felixstowe ..	1011·4	-8	W'S	3	2o	60	92	6	5	-	-	9+	9+	1500	0	2
Gorleston ...	1010·8	-6	WSW	2	c	57	97	5	5	-	-	10	10	2500	1	1
Maldenhall ...	1010·6	-2	WSW	2	m	57	97	4	5	-	-	9	9	1500	1	*
Cranwell ...	1010·2	-8	WSW	1	f-	57	97	3	-	-	-	10	10	<150	0	*
Birmingham ...	1011·4	-4	SSW	2	c	57	92	6	5	2	-	7-8	10	1500	1	*
Upper Heyford	1012·1	-2	SW	1	2o	56	97	6	5	3	-	4-6	4-6	800	1	*
Ross-on-Wye	1011·4	-6	SW	2	2o	58	92	6	5	-	-	10	10	2500	1	*
Hartland Point	1011·3	-8	W	4	c	57	97	7	5	2	-	7-8	10	800	1	3
Bristol ...	1012·4	-6	SW	2	c	59	85	8	5	-	-	10	10	1500	1	*
Portland Bill ...	1013·2	-2	W	3	c	59	85	7	5	4	-	4-6	10	4000	1	2
Plymouth ...	1013·0	-14	WSW	2	c	58	85	7	5	3	-	9	9+	4000	1	1
The Lizard ...	1014·0	-16	S'W	4	df	57	97	2	5	-	-	10	10	800	1	1
Scilly (St. Mary's)	1013·6	-12	W'S	3	dF	57	97	1	-	-	-	10	10	<150	1	2
Guernsey ...	1014·7	-6	SW	2	c	58	92	8	8	7	8	4-6	9+	2500	1	3
Pembroke ...	1011·9	-2	W'S	3	d.d.	58	97	5	5	-	-	10	10	800	1	1
Holyhead ...	1009·7	-10	SSW	3	rr	57	97	6	6	2	-	9+	10	450	1	2
Chester (Sealand)	1010·1	-10	SSE	2	2o	58	85	7	5	1	-	7-8	10	4000	1	*
Manchester ...	1010·4	-6	S	1	2o	58	97	6	5	2	-	4-6	10	1500	1	*
Spurn Head ...	1010·1	-2	-	0	o	58	92	4	5	-	-	10	10	800	1	1
Catterick ...	1009·1	-8	S'W	2	F-	55	97	2	-	-	-	10	10	<150	1	*
Tynemouth ...	1009·1	-8	WSW	2	m	55	97	4	5	-	-	10	10	1500	0	0
St. Abbs Head	1007·8	-14	SW	1	c	57	92	7	5	2	-	7-8	10	1500	0	1
Leuchars ...	1007·2	-14	SW	2	2o	59	92	5	5	7	-	7-8	10	450	0	
Renfrew (Abbots I.)	1008·0	-14	-	0	ir.	57	85	6	5	7	-	7-8	9+	1500	1	*
Eskdalemuir ...	1008·0	-10	SW'S	2	d.d.	56	92	6	-	2	-	10	10	450	1	*
Point of Ayre...	1008·5	-10	WSW	1	r.r.	58	92	7	8	1	-	4-6	10	1500	1	1
Tiree	1005·4	-6	WNW	3	r.r.	55	97	5	-	2	-	10	10	450	1	2
Stornoway ...	1005·8	-10	S	3	c/r	54	97	7	5	2	-	9	10	1500	1	2
Dalwhinnie ...	1006·9	-12	SSW	2	c	64	85	7	4	6	-	7-8	10	2500	0	*
Aberdeen ...	1007·1	-16	SSE	3	o	55	97	4	5	-	-	10	10	450	0	1
Wick ...	1005·8	-8	SSE	3	o	54	97	4	5*	-	-	10	10	450	1	2
Lerwick ...	1008·6	-14	SSE	4	F+	54	97	1	-	-	-	10	10	<150	1	*
Blacksod Point	1011·3	+10	NW	4	c	54	75	8	5	-	-	10	10	800	1	3
Malin Head ...	1007·2	0	W	4	DD	56	97	3	3	-	-	10	10	800	1	2
Aldergrove ...	1007·8	-10	SSW	1	d.d.	57	97	4	-	2	-	10	10	450	1	*
Birr Castle ...	1009·7	-6	W	1	rr	58	97	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	1013·8	+6	NNW	4	c	55	85	8	5	-	-	7-8	7-8	1500	1	2
Roches Point	1011·1	-4	NW	3	c	59	97	8	8	-	-	7-8	7-8	1500	1	1

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h–18h °F.	Temperature. Min. Night 18h–7h °F	Temperature. Min. on Grass °F.	Rainfall. Day 7h–18h mm.	Rainfall. Night 18h–7h mm.	Sunshine 21st Hrs. (36)
London (Kew)	65	58	53	6	-	0·5
Croydon ...	66	56	55	3	Tr	2·1
S. Farnborough	*	54	48	11·3	Tr	0·4
Boscombe Down	64	55	53	7	5	0·2
Calshot (Sthmtn.)	63	57	55	0·6	0·4	0·0
Lympne ...	67	57	56	-	0·1	10·5
Manston ...	71	56	54	—	-	11·1
Shoeburyness ...	68	58	51	7	-	2·3
Felixstowe ..	69	57	54	2	Tr	4·3
Gorleston ...	(67)	57	54	3	-	4·7
Maldenhall ...	69	53	50	1	Tr	2·3
Cranwell ...	68	54	51	0·5	Tr	3·0
Birmingham ...	67	57	54	2	-	1·2
Upper Heyford	66	52	45	23	0·5	*
Ross-on-Wye	68	53	50	21	-	1·7
Hartland Point	60	56	55	1	0·1	0·0
Bristol ...	67	57	54	Tr	1	1·6
Portland Bill ...	59	56	*	6	-	*
Plymouth ...	64	55	51	3	Tr	0·8
The Lizard ...	63	55	*	—	0·5	4·7
Scilly (St. Mary's)	66	55	*	—	2	6·8
Guernsey ...	62	56	56	1	1	1·2
Pembroke ...	60	57	*	3	0·3	0·8
Holyhead ...	61	55	55	—	2	3·2
Chester (Sealand)	67	57	54	0·3	-	4·6
Manchester ...	72	56	56	29	0·1	3·9
Spurn Head ...	64	56	*	5	0·1	5·9
Catterick ...	67	52	49	—	-	6·0
Tynemouth ...	63	54	50	—	-	8·9
St. Abbs Head	63	53	*	—	-	*
Leuchars ...	64	53	47	—	-	3·8
Renfrew (Abbots I.)	72	54	52	7	0·1	2·1
Eskdalemuir ...	68	53	50	—	Tr	2·4
Point of Ayre...	65	57	*	—	0·3	7·0
Tiree	60	54	53	—	14	2·1
Stornoway ...	63	53	*	Tr	5	1·6
Dalwhinnie ...	69	52	38	0·2	-	2·5
Aberdeen ...	61	54	53	Tr	-	4·3
Wick ...	55	53	*	—	1	*
Lerwick ...	56	52	*	Tr	0·1	0·0
Blacksod Point	59	52	*	Tr	5	
Malin Head ...	58	55	*	1	10	0·0
Aldergrove ...	62	55	54	Tr	14	0·0
Birr Castle ...	61	57	56	0·3	4	0·6
Valentia Obsy. †	60	54	53	Tr	9	0·0
Roches Point	63	58	*	0·2	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.	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. % To-day.	Humidity 9h. G.M.T. % To-day.	Visibility 9h.
		24 hrs. ended 9h.											
Kew ...	18	crr.ct	cthr.r.c	ctbcm.om	65	58	53	6	-	0·5	*	*	6
Croydon ...	217	crrRL	cpr.t	bcwcr.p	66	56	55	3	Tr	2·1	*	*	6
Greenwich (Royal Observatory)	149												
City (Bunhill Row)	—	*	*	*	*	*	*	*	*	0·5	*	*	*
Westminster (St. James' Park)	27	*	*	*	65	58	54	5		0·9	88	89	*
Regents Pk. (Botanic Gardens)	168	*	*	*	66	57	53	1	10	0·4	98	99	*
Camden Square	110	or	c	*	65	57	54	1	1	*	*	89	*
Kensington	90	bcbc	ttr	*	68	57	54	1	3	1·2	At 18h 80	91	*
Hampstead Observatory	450									0·3			*

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. July 21st Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. July 22nd 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 ...	1014·9	E	2	c/ttr	61	1015·7	SW	1	2o	59	72	54	31	1
Brussels ...	1013·6	W'S	2	c	68	1014·0	SSW	2	c	*	77	*	-	*
Berlin ...	1012·5	ENE	1	c	75						77		Tr	
Zürich ...	1013·6	SSE	1	pr	68	1016·3	NNW	3	d.d.	59	75	*	0·1	*
Rome ...	1013·9	SE	4	bc	82	1027·2	SE	4	b	82	*	*	-	-

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 22nd

South Kensington.

Max.	Time.	Min.	Time.
<0·3	whole period		

Kew Observatory.

Max.	Time.	Min.	Time.
0·1	8h.	<0·1	21st restoffperiod

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 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.

† 1 hr. observations are from Valentia W.T. Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Sunday, 23rd July, 1939.
No. 28367

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1010·8	-6	SW'W	3	c	64	75	8	5	2	–	9	10	1500
	Croydon ...	1011·2	-6	SW'W	2	c	65	75	8	8	3	–	7-8	9+	4000
	S. Farnborough	1010·8	6	SSW	4	c	63	75	8	5	3	–	7-8	9+	2500
	Boscombe Down	1010·9	-10	SW'W	3	iro	62	85	8	5	1	–	4-6	10	1500
	Calshot (Soton.)	1011·8	-8	SW'S	4	iro	63	92	7	8	3	–	7-8	9+	1500
	Lympne ...	1011·6	-6	WSW	3	c	65	75	7	8	–	–	9+	9+	2500
	Manston ...	1010·6	-6	W'S	3	c/pr	66	75	6	8	–	–	9+	9+	1500
2	Shoeburyness ...	1010·7	-6	W'S	3	pro	66	75	6	8	3	–	9	9+	1500
	Felixstowe ...	1009·9	-6	W'N	3	zo	69	65	6	7	1	–	9	9+	1500
	Gorleston ...	1009·2	-4	SW	3	c	63	85	5	5	–	–	10	10	2500
	Mildenhall ...	1009·4	-6	SW'W	3	iro	62	85	6	6	2	–	9	10	1500
	Cranwell ...	1008·8	-8	WSW	2	zo	65	75	6	5	2	–	9	10	2500
3	Birmingham ...	1009·2	-8	SW	3	c/pr	62	75	6	8	2	–	9	10	2500
	Upper Heyford	1010·2	-6	SW	3	c	62	85	7	5	3	–	7-8	10	1500
4	Ross-on-Wye ...	1009·6	-10	SW	3	c	62	85	7	5	–	–	10	10	2500
5	Hartland Point	1010·3	-4	W	3	DR	59	97	6	5	2	–	9	10	800
	Bristol ...	1010·8	-10	SW	3	iro	60	85	8	5	2	–	4-6	10	1500
	Portland Bill ...	1012·8	-12	WSW	4	rr	58	92	7	5	–	–	10	10	2500
	Plymouth ...	1011·7	-6	WSW	2	rr	59	97	5	–	2	–	10	10	220
	The Lizard ...	1012·4	-4	WSW	3	df	59	97	3	5	–	–	10	10	800
	Scilly (St. Mary's)	1012·8	-2	NW'W	5	c	62	97	7	5	–	–	9+	9+	800
	Guernsey ...	1013·9	-4	SW	4	rr	57	97	6	8	–	–	10	10	800
6	Pembroke ...	1010·5	-6	NW	3	c	60	97	6	5	–	–	9+	9+	1500
7	Holyhead ...	1008·2	-2	W'S	4	c/d	59	97	7	5	2	–	9	10	2500
	Chester (Sealand)	1008·4	-2	SW	2	rr	62	85	6	5	–	–	10	10	1500
8	Manchester ...	1007·3	-14	SW	3	iro	65	75	6	2	2	–	4-6	10	2500
10	Spurn Head ...	1008·2	-10	–	0	m	67	75	4	5	–	–	9+	9+	2500
	Catterick ...	1007·4	-6	SW'W	2	c/r	60	85	6	5	–	–	10	10	1500
	Tynemouth ...	1007·1	-8	WNW	2	o	63	75	6	5	–	–	10	10	1500
11	St. Abbs Head...	1005·8	-12	SSW	2	c	64	75	8	3	6	–	4-6	7-8	2500
	Leuchars ...	1005·4	-10	SSW	1	roro	60	85	8	5	1	–	9	10	2500
12	Renfrew (AbbotsI.)	1006·1	-10	WNW	3	ido	61	85	6	5	7	–	7-8	9+	800
	Eskdalemuir ...	1006·4	-8	SW'S	3	roro	57	92	6	6	–	–	10	10	800
	Point of Ayre ...	1007·4	-8	NNW	4	dd	58	97	6	–	2	–	10	10	800
13A	Tiree ...	1007·0	+4	WNW	4	bc	58	65	8	2	6	–	2-3	4-6	2500
13B	Stornoway ...	1005·7	0	WNW	4	iro	54	75	7	8	–	–	10	10	1500
15	Dalwhinnie ...	1005·4	-6	S	2	ir	56	92	6	6	6	–	7-8	b	2500
	Aberdeen ...	1005·0	-14	SSE	3	c	63	75	6	5	1	–	2-3	9+	2500
	Wick ...	1003·9	-12	SSE	2	c	56	97	6	5	7	8	7-8	9+	2500
16	Lerwick...	1005·5	-18	SSE	5	c	57	97	6	5	1	–	7-8	9+	450
17	Blacksod Point...	1011·5	+4	W	4	c	59	75	7	5	–	–	10	10	1500
18	Malin Head ...	1008·5	0	W	3	bc	58	75	8	2	–	4	4-6	4-6	5700
	Aldergrove ...	1008·2	+6	WNW	5	c	61	65	8	4	–	–	9	9	2500
19	Birr Castle ...	1011·0	+4	W'N	3	c	60	65	8	5	1	–	7-8	10	2500
20	Valentia Obsy.†	1015·1	+6	NNW	4	c	59	75	8	5	–	–	9+	9+	2500
	Roches Point ...	1012·2	+2	NW	5	bc	62	75	8	5	–	1	4-6	4-6	2500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1009·7	-4	SW	3	c	62	85	7	5	–	–	10	10	1500	1	*
Croydon	1010·3	-2	SSW	3	ido	60	92	8	5	7	–	4-6	10	2500	1	*
S. Farnborough	1009·8	-2	SSW	3	ido	60	85	6	5	–	–	10	10	1500	1	*
Boscombe Down	1009·4	-10	SW'S	3	c/r	62	85	8	5	2	–	10	10	1500	1	*
Calshot (Soton.)	1010·3	-10	SW'W	4	cjp	60	97	7	6	–	–	10	10	800	1	2
Lympne	1010·9	-8	WSW	4	c	61	75	8	5	–	1	9	9	2500	0	§6
Manston	1009·5	-6	SW	4	bc	64	75	8	8	7	1	2-3	2-3	1500	1	*
Shoeburyness	1009·6	-4	SW	3	bc	65	75	8	7	4	1	2-3	4-6	2500	1	*
Felixstowe	1008·7	-6	W'S	4	bc	69	65	7	8	6	9	4-6	4-6	2500	0	2
Gorleston	1007·9	-4	WSW	2	c	63	85	6	8	–	–	9+	9+	2500	1	1
Mildenhall	1008·2	-4	WS	4	proq	65	75	7	8	7	–	4-6	9	2500	1	*
Cranwell	1007·6	-2	W'S	2	ido	61	85	6	5	7	–	4-6	10	4000	0	*
Birmingham	1008·1	-2	SW	2	id	64	92	5	6	2	–	9	10	800	1	*
Upper Heyford	1009·2	-6	SW'W	3	iro	61	85	7	5	7	–	9	10	1500	1	*
Ross-on-Wye	1008·6	-8	SW'W	3	c	62	92	7	5	7	–	9	9+	2500	1	*
Hartland Point	1011·2	+4	WNW	3	c	57	97	8	8	–	–	10	10	1500	1	2
Bristol	1009·7	-6	W	3	c	62	85	8	5	7	–	7-8	9	1500	1	*
Portland Bill	1010·7	-14	WSW	4	c	59	92	7	5	–	–	10	10	2500	1	3
Plymouth	1011·5	+2	WNW	3	c	62	85	7	5	3	–	7-8	9	1500	1	1
The Lizard	1012·7	+4	W	4	bc	59	85	8	8	–	–	2-3	2-3	1500	0	1
Scilly (St. Mary's)	1013·8	+8	NW	4	c	60	92	8	8	6	–	4-6	7-8	1500	1	2
Guernsey	1012·2	-16	SSW	3	dF	59	92	1	–	–	–	10	10	<150	1	3
Pembroke	1012·2	+6	NW	3	c	60	85	8	2	6	–	4-6	7-8	1500	1	1
Holyhead	1009·3	+6	W'N	4	c	59	75	7	5	3	4	4-6	7-8	4000	1	2
Chester (Sealand)	1009·0	+10	WNW	4	dodo	57	92	6	5	–	–	10	10	450	1	*
Manchester	1007·7	-2	WNW	4	c/r	59	97	6	5	2	–	7-8	10	450	1	*
Spurn Head	1006·7	-10	WSW	2	c	66	75	5	5	9	–	4-6	9	1500	0	0
Catterick	1006·1	-4	SW'W	2	c/r	61	85	8	8	2	-	4-6	9+	1500	1	*
Tynemouth	1005·8	-8	W	1	o/r	60	92	6	–	2	–	10	10	1500	1	0
St. Abbs Head	1004·9	-4	W	3	iro	58	92	7	8	2	–	7-8	10	1500	1	2
Leuchars	1003·9	-4	WSW	2	c	61	92	9	5	7	–	9	9+	800	1	*
Renfrew (AbbotsI.)	1006·5	0	W'N	4	bc	59	65	8	4	–	–	2-3	2-3	4000	1	*
Eskdalemuir	1006·0	+2	W'N	4	c	56	85	7	8	–	1	7-8	7-8	1500	1	*
Point of Ayre	1008·0	0	N'W	4	bc	59	75	8	2	7	4	Tr	4-6	4000	0	3
Tiree	1007·0	0	W'N	4	bc	57	65	8	8	6	–	2-3	4-6	2500	0	3
Stornoway	1005·7	0	W	3	c/pr	55	85	8	5	7	–	7-8	9+	2500	1	2
Dalwhinnie	1005·8	+2	NNW	6	c	53	75	7	4	6	–	7-8	9+	2500	0	*
Aberdeen	1003·8	-6	S	3	iro	60	85	6	6	2	–	4-6	10	1500	1	1
Wick	1003·3	+4	NW	3	rr	53	97	5	5	2	–	7-8	10	800	1	2
Lerwick	1004·6	-2	SSE	4	f+	58	97	2	–	–	–	10	10	<150	0	*
Blacksod Point	1011·6	-2	W	4	bc	58	75	8	2	–	–	4-6	4-6	1500	0	3
Malin Head	1008·6	+2	W	4	c	58	75	8	8	5	–	4-6	7-8	5700	0	3
Aldergrove	1009·0	+2	W'N	3	c	57	75	8	8	–	–	9+	9+	4000	1	*
Birr Castle	1010·8	+2	WNW	3	c	58	65	8	5	7	–	4-6	9	2500	1	*
Valentia Obsy.†	1015·5	+2	WNW	4	c/pr	59	75	8	8	–	–	7-8	7-8	2500	1	2
Roches Point	1013·1	+4	NNW	5	c	60	85	9	8	1	–	7-8	9	1500	1	2

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 22nd. (37)	13h.—18h. 22nd (38)	18h. 22nd to 1h. 23rd. (39)	1h.—7h. 23rd. (40)
London (Kew)	crmcmoc	c	cdodoc	cw
Croydon	cmoc	crodo	roroRrr	drorobcc
S. Farnborough	cmobcc	ciroido	idoiroc	cbcc
Boscombe Down	ciroirio	ciroc	cRRiRc	cbc
Calshot (Soton.)	bccciroro	crorododododc	cciroc	c
Lympne	bccmoc	cproo	cmfdoro	frromo
Manston	cmoPRc	cPRcqPR	ciroido	ciromo
Shoeburyness	cmoocmo	pmocbc	bcciroc	cbc
Felixstowe	cmocmocmo	cmobc	bccroro	cbbc
Gorleston	czo	cproc	cpro	cprocbc
Mildenhall	cmcmoiroq	cirocmoc	cproc	c
Cranwell	bfomczo	cciromo	cidodmo	cmoc
Birmingham	cpro	cidm	cdRc	c
Upper Heyford	bcmoc	cciro	croc	cbcc
Ross-on-Wye	cpocroc	cdoc	cbcb	bbcc
Hartland Point	crdr	drfdc	cbc	bcc
Bristol	cdororo	croro	cbc	bccbc
Portland Bill	corr	orr	cbc	bcc
Plymouth	crororrmo	rrmoproc	cirobc	bcc
The Lizard	crrdf	cbc	bcc	c
Scilly (St. Mary's)	dfdfc	cdobcc	cpoc	cpo
Guernsey	oro	orrdf	odfc	bccpr
Pembroke	prFcmoc	iroid	cbcq	cq
Holyhead	rrdodoc	cbc	bcc	c
Chester (Sealand)	cmorororr	morroRrododo	mododododcbc	bccw
Manchester	domcmoro	croromo	cmoroc	c
Spurn Head	ocz	cmo	iroc	c
Catterick	ofccmo	cmodroc	cbcb	bbccw
Tynemouth	qm bco	oiroir	oirobc	bc
St. Abbs Head	c	ciro	bc	bcc
Leuchars	mocroro	rocirоiRc	bcb	bbccpro
Renfrew (AbbotsI.)	irororrido	cidoirobc	bcc	crоroRbc
Eskdalemuir	cidororo	cororoc	cbcb	bbc
Point of Ayre	rrdd	ddcbc	bcc	cbc
Tiree	odcbc	bcc	bccpr	cpr
Stornoway	cpriro	cpro	cpro	c
Dalwhinnie	ciR	cir	•	cir
Aberdeen	omoczo	ciro	cRrr	crоroir
Wick	oromo	Rrr	rrroc	c
Lerwick	oiFec	coffe	oFFe	oFecrr
Blacksod Point	c	bc	proc	prc
Malin Head	cbc	cbcc	cbcc	cbcc
Aldergrove	dodomc	c	probc	bcc
Birr Castle	orrc	c	c	c
Valentia Obsy.†	cidoc	cproc	cprc	cbcc
Roches Point	cprbc	bcc	cbc	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.

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.

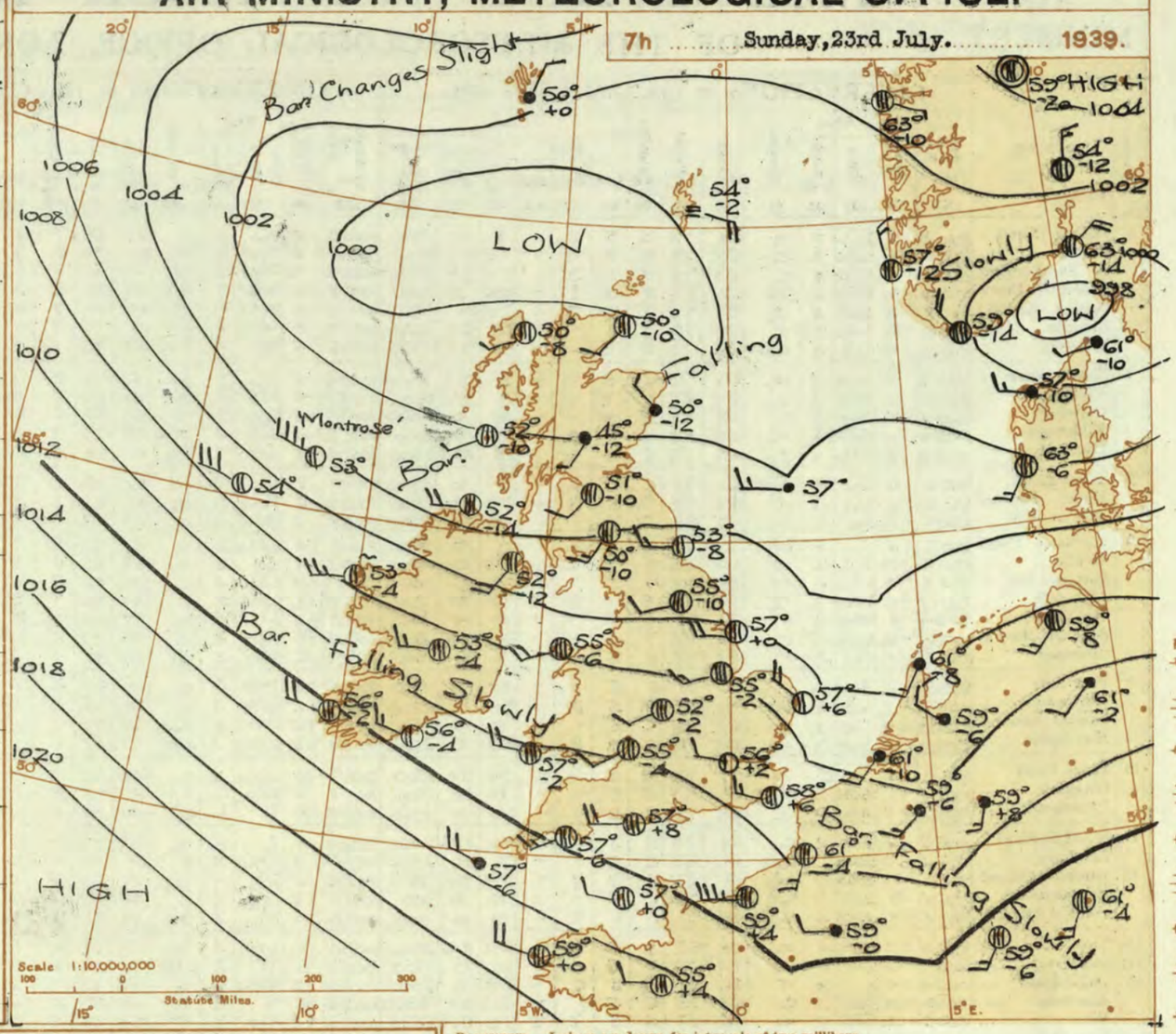
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 22nd July 1939.

Districts.	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h. 21st. to 9h. 22nd	Temperature. (°F) Max. 9h.—17h. 22nd	Rainfall. (mm.) Night. 17h. 21st. to 9h. 22nd	Rainfall. (mm.) Day. 9h.—17h. 22nd	Sunshine. (Hrs.) Sunrise to 17h. 22nd	Sunshine. (Hrs.) Sunrise to Sunset. 21st.
1	Tunbridge W.	oc	opoc	56	67	–	Trace	1·3	3·4
	Bournemouth	od	iro	55	63	2	1	0·9	0·0
	Ventnor ...	pc	codm	57	63	0·3	0·5	2·0	0·4
	Southsea ...	bcco	oro	58	66	6·4	0·2	2·1	0·1
	Bognor Regis	bc	coid	58	68	4	0·3	2·5	1·9
	Littlehampton	bcc	cred	58	65	3	Trace	2·2	2·6
	Worthing ...	bcb	bcc	58	67	7	Trace	3·3	2·2
	Brighton ...	bbc	cped	58	65	10	Trace	2·3	1·6
	Eastbourne† ...	cbc	bcc	58	65	Trace	–	4·2	3·8
	Hastings† ...	oc	bcc	58	67	2	–	2·1	5·0
	Folkestone ...	o	oroc	58	66	1	1	2·7	12·2
	Dover ...	orgc	corbc	59	66	0·5	2	2·6	11·5
	Deal	ocbcc	corbc	58	69	–	2	3·3	11·8
	Ramsgate ...	c	erbc	59	67	–	1	2·6	11·8
	Margate ...	bcc	bccpbc	58	68	–	Trace	3·0	11·2
2	Southend ...	omoc	opoc	58	70	Trace	Trace	1·1	3·4
	Clacton-on-Sea	omc	cbc	57	69	–	–	2·7	2·8
	Dovercourt ...	rocbc	rocbc	55	70	Trace	Trace	3·7	4·3
	Lowestoft ...	cmoor	ocirc	55	68	Trace	1	0·3	6·3
	Skegness ...	ocbco	cbco	53	70	–	–	2·5	3·9
	Mablethorpe...	ozoo	bccz	50	70	–	–	1·3	4·3
	Cleethorpes ...	bcc	robc	55	69	Trace	Trace	1·0	1·3
3	Leamington S.	oc	op	55	68	–	Trace	0·2	0·7
4	Cheltenham†	c	cpocp	55	66	Trace	0·3	0·1	1·3
5	Bath	cpo	cpo	57	64	Trace	Trace	0·0	0·9
	Weymouth ...	c	iro	57	62	1	1	0·2	0·1
	Jersey ...	cbccp	cr	58	63	–	1	1·8	0·2
	Torquay ...	or	orbc	57	65	0·2	7	1·2	0·6
	Falmouth ...	ororc	odco	56	66	1	2	1·2	3·4
	Penzance ...	rmido	cbcb	57	65	2	Trace	1·4	4·2
	St. Ives ...	pr	c	54	64	2	1	0·4	0·5
	Bude... ...	mor	oro	57	62	1	7	0·0	0·0
	Ilfracombe ...	orro	rrco	57	62	2	3	0·1	0·0
6	Aberystwyth	oprrr	rrprc	56	62	1	6	0·0	1·0
7	Llandudno ...	rorr	rdrc	57	64	1	5	0·0	8·6
	Colwyn Bay...	rro	rrprr	57	61	1	4	0·0	8·9
	Rhyl	orr	ordo	57	63	Trace	3	0·0	9·4
8	Wallasey ...	cor	rro	58	63	–	2	0·0	7·4
	Southport ...	orro	orr	56	64	–	3	0·0	6·6
	Blackpool ...	cpo	pood	58	61	–	1	0·0	6·8
	Morecambe ...	c	cp	59	68	Trace	0·3	0·0	7·0
9	Ilkley... ...	ocoo	opor	55	65	–	0·6	0·0	3·9
	Harrogate ...	c	cpro	55	63	–	Trace	0·1	1·6
10	Berwick-on-T.	oro	roc	53	64	–	Trace	0·4	4·8
11	Dunbar ...	cmo	cpr	55	63	0·5	2	0·8	6·2
12	Troon... ...	rrcr	rrcp	53	61	1	2	0·0	4·5
	Douglas ...	*	*	54	59	2	Trace	1·3	6·2

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 23rd July, 1939.

Districts.	Forecasts
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Wind west to northwest, moderate increasing to fresh; strong later on west coasts; bright intervals; occasional showers; local thunderstorms; average temperature.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B. N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland	Wind west to northwest moderate to fresh, strong later on west coasts; cloudy, local showers; rather cool.
16 Orkney and Shetland	Wind east to northeast, light to moderate; cloudy; rain or drizzle; fog patches; mild and close.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	As 7 - 15.

GENERAL INFERENCE.

A depression centred between Scotland and the Faeroes will move southeast to the North Sea. Weather will be showery in all districts. Local thunderstorms will probably develop in southern areas to-day.

FURTHER OUTLOOK.

Unsettled and showery.

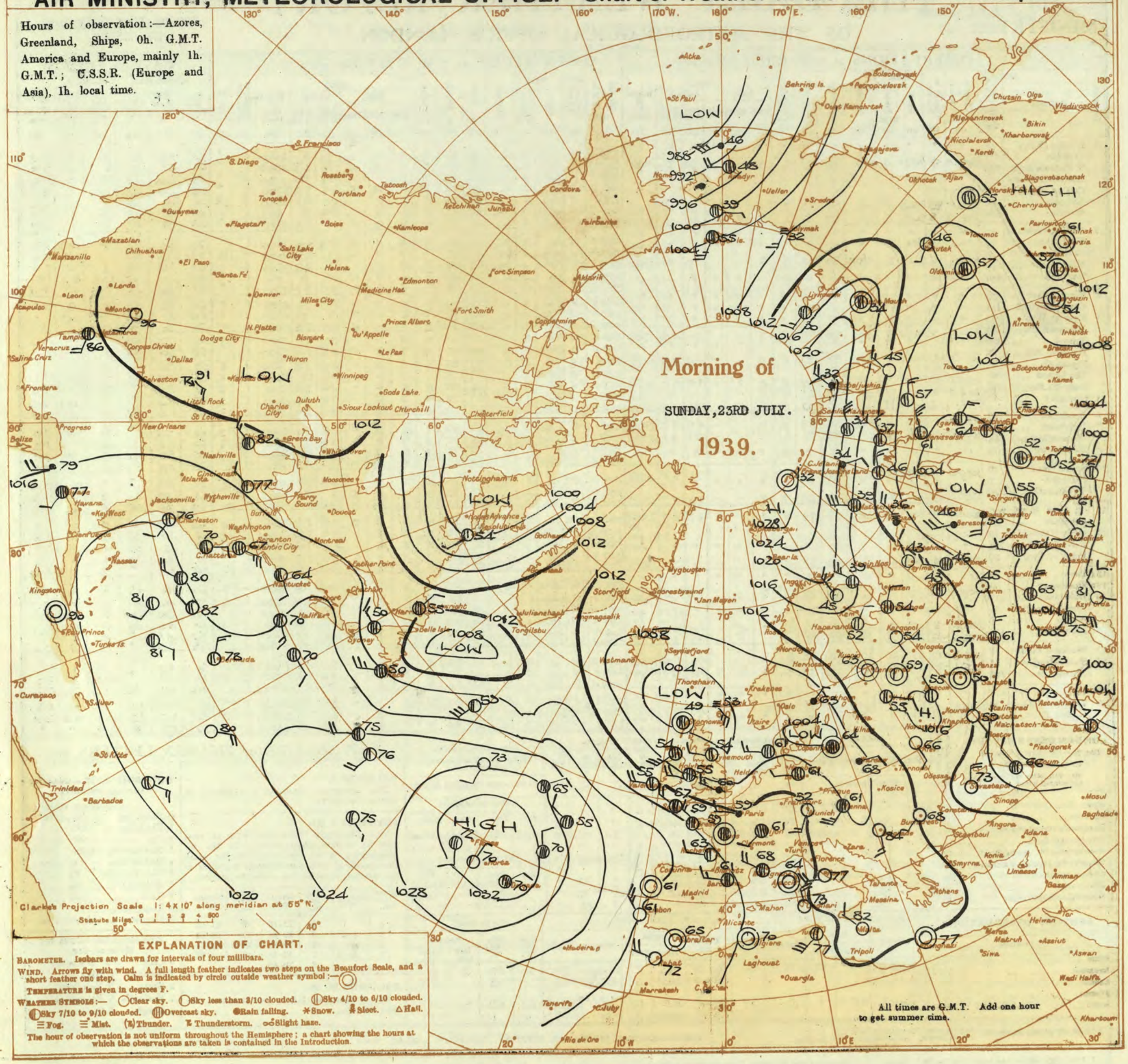
Forecasts issued at 1100 G.M.T.

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.

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

Sunday, 23rd July, 1939.
No. 28367

OBSERVATIONS at 1 hr. G.M.T. 23rd July — OBSERVATIONS at 7 hr. G.M.T. 23rd July — PAST 24 HOURS.

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)	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 22nd Hrs. (36)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1009·6	+2	W'S	2	c	56	85	8	5	3	2	1	9	2500	1	*	65	55	50	Tr	1	0·3
	Croydon	217	1009·5	0	WNW	3	dd	60	97	6	5	–	–	10	10	2500	1009·8	+2	W'N	2	c	56	85	8	1	4	6	Tr	7·8	2500	1	*	66	53	51	Tr	2	0·6
	S. Farnborough	226															1009·7	0	SW'W	3	c	55	85	7	5	–	·	9+	9+	5700	1	*	65	50	46	Tr	3	1·2
	Boscombe Down	417															1010·3	+2	W	3	c	54	92	7	–	3	8	4-6	7·8	5700	1	*	62	48	45	0·5	5	0·7
	Calshot (Sthmtn.)	8															1010·4	0	W'S	3	c	57	85	8	5	–	–	9+	9+	2500	1	§2	66	51	49	1	0·1	2·0
	Lympne	346	1009·8	+10	WSW	3	rf	58	97	2	–	–	–	10	10	<150	1009·7	+6	WNW	3	zo	58	85	5	5	3	–	7-8	9	800	1	1	67	56	55	Tr	1	2·3
	Manston	154	1008·9	-8	SW'S	3	ir₀	58	97	6	5	2	–	10	10	7200	1008·7	+6	NW'W	4	bc	58	75	6	5	3	–	1	2·3	1500	1	*	68	57	55	5	1	4·7
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008·9	+4	W	3	bc	60	75	8	8	4	2	4-6	4-6	1500	1	*	70	56	53	Tr	0·4	2·3
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008·6	+4	WNW	4	bc	59	75	7	1	4	6	1	2·3	4000	0	2	72	55	53	–	0·2	4·6
	Gorleston	5	1007·1	-6	SW'S	2	c/pr	59	92	7	6	–	–	10	10	1500	1008·1	+6	NW'W	4	bc	57	85	7	5	5	–	1	2·3	2500	1	1	67	54	53	1	6	0·8
	Mildenhall	19															1008·0	0	W	3	c	55	85	7	–	3	6	0	9	–	1	*	69	49	47	0·3	0·1	1·2
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1007·7	-2	WSW	3	c	55	85	7	5	1	8	2·3	9+	2500	1	*	67	49	46	Tr	0·1	0·3
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008·7	-2	SW	2	c	52	92	7	5	7	–	7·8	9+	2500	1	*	64	50	48	Tr	2	0·2
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008·6	-2	WSW	3	c	53	85	7	5	–	7	9	10	4000	1	*	64	47	39	Tr	0·3	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1009·2	-4	SW	2	c	55	85	6	7	–	6	2·3	7·8	2500	1	*	63	50	46	0·1	–	0·1
5	Hartland Point	299	1011·8	-2	NW	4	bc	58	75	8	5	–	–	4-6	4-6	1500	1010·5	-6	W	4	c	57	75	8	8	–	–	9+	9+	1500	1	3	60	55	52	7	–	0·2
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1010·4	0	WNW	4	c	55	85	8	7	7	1	4-6	7·8	2500	1		64	50	42	1	–	0·0
	Portland Bill	32	1011·3	+6	WNW	3	bc	58	85	8	5	–	–	4-6	4-6	4000	1011·3	+8	W	4	c	57	85	8	5	4	–	4-6	7·8	4000	1	3	59	56	*	3	–	*
	Plymouth	82															1011·9	-6	WSW	3	c	57	75	8	5	–	–	9+	9+	7200	1	1	64	55	53	7	Tr	1·1
	The Lizard	240	1013·7	+6	W	3	c	56	92	8	8	2	–	7-8	9+	1500	1013·0	-4	WSW	3	c	56	85	8	8	6	–	4-6	7·8	1500	1	2	61	54	*	3	–	2·8
	Scilly (St. Mary's)	163	1014·8	-2	NW'N	4	c	57	85	8	5	–	–	10	10	2500	1013·2	-6	NW	4	pr	57	92	8	3	6	–	7·8	9+	1500	1	2	63	54	*	1	0·1	3·9
	Guernsey	175	1013·1	-2	WNW	4	bc	56	92	8	5	1	–	2·3	4-6	2500	1012·9	0	W'N	2	c	57	92	8	8	3	–	7·8	9+	800	1	3	59	55	52	4	1	0·6
6	Pembroke	142	1011·8	0	NW	4	bcq	56	85	8	8	–	–	4-6	4-6	2500	1010·1	-2	WNW	4	cq	57	92	7	8	2	–	7·8	9+	2500	1	2	61	55	*	4	–	1·0
7	Holyhead	26	1008·9	-6	W'S	4	c	55	75	8	5	–	–	9+	9+	4000	1007·3	-6	WSW	4	c	55	75	7	9	3	–	7·8	9	1500	1	2	60	53	52	4	–	1·2
	Chester (Sealand)	16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1007·8	-6	W	3	c	55	75	7	8	7	–	4-6	9+	2500	1	*	65	53	48	3	Tr	0·1
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1007·2	-2	WSW	3	c	54	85	7	8	3	–	7·8	9+	2500	1		65	48	42	2	Tr	0·1
10	Spurn Head	29	1006·0	-4	NW'W	5	c	57	75	7	5	–	–	9+	9+	4000	1006·0	0	W	4	c	57	75	6	5	–	–	9+	9+	2500	0	3	72	53	*	–	0·1	0·8
	Catterick	175															1005·0	-10	W'S	2	c	55	75	8	1	4	6	1	9+	2500	1		64	52	40	Tr	–	0·2
	Tynemouth	108	1006·0	0	W	2	bc	54	85	7	8	–	–	2·3	2·3	1500	1004·8	-8	W	3	bc	53	75	7	2	6	–	4-6	4-6	1500	1	0	63	50	46	4	0·1	0·3
11	St. Abbs Head	280	1004·4	-6	W	5	bc	52	75	8	4	–	–	2·3	2·3	2500	1003·1	-12	W	3	c	50	75	8	3	5	9	4-6	7·8	2500	0	2	66	49	*	0·4	0·1	*
	Leuchars	36															1002·5	-6	WSW	3	pr	52	75	8	5	3	–	7·8	7·8	4000	1	*	64	44	36	2	Tr	0·8
12	Renfrew (Abbots I.)	19															1003·4	-10	SW	2	c	51	85	8	8	6	–	4-6	7·8	2500	1	*	61	46	39	4	2	3·1
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1003·7	-10	SW	3	c	50	85	7	5	–	–	7·8	7·8	800	1		59	44	38	1	–	1·9
	Point of Ayre	30	1008·0	-4	W'N	3	c	52	97	8	5	–	–	9	9	1500	1005·3	-10	W'N	5	bc	56	75	6	2	8	–	2·3	4-6	2500	0	3	60	51		3	–	2·2
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1001·5	-8	WSW	1	c	50	85	8	8	–	–	7·8	7·8	1500	1	2	60	46	45	Tr	5	4·8
13B	Stornoway	80	1004·3	-12	–	0	c	49	92	7	5	–	–	7·8	7·8	2500	1001·9	-10	WSW	1	c	52	85	8	5	7	–	2·3	7·8	2500	1	1	59	46	*	1	Tr	0·9
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1002·6	-12	SSW	1	ir	45	85	7	5	6	–	4-6	10	2500	0		60	38	31	4	0·4	3·3
	Aberdeen	79															1001·6	-12	NW	1	ir₀	50	92	8	9	9	–	4-6	4-6	1500	1	1	63	49	48	1	8	0·1
	Wick	81	1002·6	-8	WNW	2	c	47	92	8	5	6	–	4-6	7·8	1500	1000·9	-10	SW	2	c	50	92	7	5	7	8	4-6	9+	1500	1	1	57	45	*	10	4	
16	Lerwick	156	1002·2	-16	SE	5	F+	53	97	0	–	–	–	10	10	<150	1000·4	-2	E'S	4	F–	54	97	1	–	–	–	10	10	<150	1		58	53	*	–	4	0·2
17	Blacksod Point	18	1010·3	-12	W	5	bc	54	75	8	3	–	–	4-6	4-6	1500	1008·2	-4	W	5	bc	53	85	8	3	4	–	2·3	4-6	1500	1	4	61	50	*	*	1	*
18	Malin Head	84	1005·1	-20	SW	5	c	54	65	7	5	5	–	2·3	7·8	4000	1002·7	-14	W	4	c	52	75	8	9	8	–	4-6	7·8	5700	0	2	59	47	*	0·2	2	2·9
	Aldergrove	268															1004·4	-12	SW	4	c	52	75	8	8	–	–	9	9	1500	1		62	50	45	1	Tr	6·7
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1009·1	-4	W	3	c	53	85	6	5	–	–	9+	9+	2500	1	*	61	50	50	1	–	1·5
20	Valentia Obsy. †	30	1014·0	-6	W	4	bc	55	92	8	5	–	–	2·3	2·3	1500	1012·8	-2	WNW	4	c	56	75	8	5	3	–	7·8	7·8	2500	1	3	61	55	49	0·1	0·5	2·2
	Roches Point	22															1011·8	-4	WNW	3	bc	56	85	8	5	5	5	1	4-6	2500	1	1	62	53	*	0·3	–	*

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

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	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	cm₂cm₀c	c	cd₀d₀cw	65	51	51	Tr	1	0·3	*	*	7
Croydon	217	cm₀c	cr₀d₀	mcRrrbcq	66	53	51	Tr	2	0·6	*	*	8
Greenwich (Royal Observatory)	149	c	cr₀	cd₀c	67	56	53	Tr	Tr	*	74	71	7
City (Bunhill Row)	—	*	*	*	*	*	*	*	*	0·3	*	*	*
Westminster (St. James' Park)	27	*	*	*	67	56	53	0·2		0·3	58	75	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*						0·2			*
Camden Square	110	c	c	*	68	55	52	Tr	Tr	*	*	73	*
Kensington	80	c	p	*	68	55	52	Tr	0·2	0·4	73 At 18h.	75	*
Hampstead Observatory	450	bcp	bc	bc	64	53	51	Tr	–	0·3	*	81	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 23rd

South Kensington			
Max.	Time.	Min.	Time.
<0·3	the	whole	period

Kew Observatory			
Max.	Time.	Min.	Time.
0·1	8-10h 22nd	<0·1	Rest of Period.

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 22nd July Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 23rd July 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	1012·7	–	0	c	66	1011·5	W	2	id₀	59	70	59	3	1
Brussels						1008·5	SW	3	d₀d₀	59		54		0·6
Berlin														
Zurich	1011·7	SE	1	c	57	1013·4	SE	1	f	57	64	52	9	0·1
Rome						1010·2	WNW	2	b	77	*	*		–

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.

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday, 24th July, 1939.
No. 28368

OBSERVATIONS at 13h. G.M.T. 23rd July, 1939.

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) ...	1008.5	-6	W	3	c	63	55	8	8	3	8	2-3	9+	2500
	Croydon	1009.6	-2	WSW	3	c	62	55	8	4	4	5	4-6	9+	4000
	S. Farnborough	1008.6	-6	WSW	4	c	64	45	8	7	7	-	4-6	9+	4000
	Boscombe Down	1009.3	-6	WSW	4	c	60	65	8	5	7	6	4-6	9+	4000
	Calshot (Sotcn.)	1010.2	-6	WS	2	pr	58	85	8	8	3	8	9+	10	2500
	Lympne ...	1009.4	-2	SWW	4	c	62	65	8	5	-	-	9+	9+	4000
	Manston ...	1008.7	+2	SW	3	c	61	65	8	8	-	-	10	10	2500
2	Shoeburyness ...	1008.5	-6	WS	3	c	64	55	8	8	3	-	9	9+	4000
	Felixstowe ...	1007.9	-2	WNW	4	c	64	55	8	9	3	-	9	9+	2500
	Gorleston ...	1007.0	+2	WSW	3	c	62	45	7	5	3	-	4-6	9+	2500
	Mildenhall ...	1007.2	-2	WN	3	c	60	75	8	8	7	-	4-6	10	2500
	Cranwell ..	1006.6	-6	WSW	3	c	63	55	8	1	7	6	1	9+	2500
3	Birmingham ...	1007.2	-6	SW	3	c	62	45	8	8	-	-	7-8	7-8	2500
	Upper Heyford	1008.6	-6	WN	3	c/pr	60	65	8	8	-	8	9+	9+	2500
4	Ross-on-Wye ...	1008.0	-10	W	4	c	61	45	8	1	-	2	7-8	9	4000
5	Hartland Point	1010.0	-6	WNW	4	c	60	65	8	8	5	-	4-6	7-8	1500
	Bristol	1009.2	-10	W	4	bc	62	65	8	7	7	8	4-6	4-6	2500
	Portland Bill ...	1010.2	-8	WSW	4	c	58	85	8	2	4	-	7-8	10	4000
	Plymouth ...	1011.2	-4	NWW	4	c	61	65	8	8	3	-	4-6	9	4000
	The Lizard ...	1012.1	-6	WS	3	bc	61	75	8	8	6	-	4-6	4-6	2500
	Scilly (St. Mary's)	1012.6	-8	WNW	5	bc	63	85	8	2	6	9	2-3	4-6	2500
	Guernsey ...	1012.6	-6	WS	4	id.	58	85	8	8	1	-	4-6	9	2500
6	Pembroke ...	1009.6	0	WN	5	c	57	75	7	8	7	-	4-6	7-8	2500
7	Holyhead ...	1006.2	-8	SWS	3	c	58	65	8	5	-	-	7-8	7-8	4000
	Chester (Sealand)	1006.4	-6	WNW	5	pr	59	65	7	8	-	-	9	9	1500
8	Manchester ...	1005.6	-12	WS	5	bc	61	55	8	2	6	-	4-6	4-6	4000
10	Spurn Head ...	1005.2	-4	W	5	c	63	55	6	-	9	-	0	9+	-
	Catterick ...	1003.4	-10	SWW	4	e/pr	63	55	8	2	7	-	4-6	9+	1500
	Tynemouth ...	1002.9	-8	WSW	2	e/pr	59	92	6	8	-	-	7-8	7-8	1500
11	St. Abbs Head...	1001.9	-4	W	2	r/bctlr	52	75	8	8	2	-	7-8	9	1500
	Leuchars ...	1000.3	-8	SSW	4	/pr	60	55	8	8	2	-	2-3	4-6	4000
12	Renfrew (Abbotsl.)	1001.9	-6	WS	3	pr	54	75	9	8	7	2	7-8	9	2500
	Eskdalemuir ...	1002.6	0	WN	4	PHR	45	85	7	9	-	-	9+	9+	1500
	Point of Ayre ...	1004.0	-10	WN	5	pr	59	65	8	8	6	-	4-6	9+	4000
13A	Tiree	1001.4	0	WSW	3	c	51	75	8	8	-	-	7-8	7-8	1500
13B	Stornoway ...	1001.3	0	WNW	3	c	54	85	8	8	7	-	7-8	9	1500
15	Dalwhinnie ...	1000.3	-6	S	1	ir	50	92	7	4	7	-	7-8	9+	2500
	Aberdeen ...	1000.0	-10	SSE	4	bc	60	65	8	2	-	3	1	2-3	2500
	Wick	1000.0	-4	SSE	2	c	55	85	8	5	7	8	4-6	7-8	1500
16	Lerwick... ...	999.9	-4	E	4	c	53	97	6	5	2	-	7-8	10	450
17	Blacksod Point...	1006.0	-12	W	7	c	58	65	8	3	-	-	9+	9+	800
18	Malin Head ...	1002.6	-2	NW	4	c	54	65	8	9	1	-	4-6	7-8	5700
	Aldergrove ...	1002.9	-10	WSW	3	c/pr	59	65	9	3	-	-	9	9	1500
19	Birr Castle ...	1007.3	*	W	3	c	61	55	8	3	-	-	7-8	7-8	1500
20	Valentia Obsy.†	1011.6	-10	WN	4	c	59	75	8	8	3	-	4-6	7-8	2500
	Roches Point ...	1009.4	-14	NW	4	bc	62	75	8	2	5	-	2-3	4-6	2500

OBSERVATIONS at 18h. G.M.T. 23rd July, 1939.

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)	1006.9	-14	SW	3	c	61	65	8	8	-	6	4-6	9+	2500	1	*
Croydon	1007.9	-8	SW	3	c	59	75	8	3	7	8	2-3	9	4000	1	*
S. Farnborough	1007.6	-6	WSW	3	c	59	55	8	1	7	-	Tr	9+	4000	1	*
Boscombe Down	1008.0	-4	W	3	bc	58	65	8	1	7	-	Tr	4-6	2500	1	*
Calshot (Sotcn.)	1008.4	-10	WSW	3	c	60	85	8	8	7	-	7-8	9	1500	1	2
Lympne	1008.9	-2	WSW	4	c	59	75	9	5	7	8	1	9+	4000	0	§3
Manston	1007.4	-4	SWS	4	c	61	65	8	5	7	-	4-6	9+	4000	1	*
Shoeburyness	1006.9	-8	SW	3	c	62	65	8	8	7	-	7-8	9+	4000	0	*
Felixstowe	1006.7	-10	W	3	c	63	55	8	7	1	8	2-3	9+	2500	0	2
Gorleston	1006.2	-8	SWS	2	c	62	55	7	5	3	-	4-6	9+	2500	1	2
Mildenhall	1005.7	-6	WSW	3	c	61	65	8	8	7	6	4-6	9	2500	1	*
Cranwell	1005.4	-6	NW	3	c	57	75	8	8	3	-	4-6	7-8	2500	0	*
Birmingham	1005.7	-10	WSW	3	bc	61	45	8	8	6	9	4-6	4-6	2500	1	*
Upper Heyford	1006.9	-12	WS	3	c/pr	58	75	7	8	4	-	7-8	7-8	2500	1	*
Ross-on-Wye	1007.1	-10	WS	4	pr	53	92	8	8	-	-	9	9	2500	1	*
Hartland Point	1007.7	-14	WNW	4	c	58	75	8	8	6	-	4-6	7-8	1500	0	3
Bristol	1007.7	-12	W	5	bc	59	65	8	4	3	1	2-3	4-6	2500	1	*
Portland Bill	1008.5	-8	WSW	4	o	59	92	8	5	-	-	10	10	4000	1	3
Plymouth	1009.5	-12	W	3	c	58	75	8	2	7	-	2-3	9+	4000	1	1
The Lizard	1010.7	-10	WSW	4	c	57	85	8	8	2	-	7-8	9+	1500	0	2
Scilly (St. Mary's)	1010.9	-12	WNW	5	c	59	85	8	2	8	9	2-3	7-8	2500	0	3
Guernsey	1011.2	-10	W	5	c	57	85	8	8	2	-	7-8	10	2500	1	4
Pembroke	1006.5	-2	W	6	bcq	58	85	8	2	4	-	4-6	4-6	2500	1	3
Holyhead	1003.8	-16	SSW	3	e/pr	57	65	8	8	3	-	4-6	7-8	2500	1	2
Chester (Sealand)	1004.4	-12	SW	4	bcq	60	55	7	8	6	-	2-3	4-6	2500	1	*
Manchester	1004.6	-6	SSW	2	cl	56	75	8	8	6	-	7-8	7-8	4000	1	*
Spurn Head	1004.1	-8	WSW	4	c/pr	61	75	6	5	9	-	2-3	7-8	1500	0	3
Catterick	1002.7	-10	SWW	3	bc	58	55	8	8	-	8	2-3	2-3	2500	0	*
Tynemouth	1002.0	-2	WSW	3	bc	61	45	8	2	-	-	4-6	4-6	2500	1	0
St. Abbs Head	1000.5	-4	NW	1	bc/pr	54	65	9	8	6	-	4-6	4-6	1500	0	2
Leuchars	999.8	-2	SSW	3	c	56	65	8	8	2	3	4-6	7-8	4000	0	*
Renfrew (Abbotsl.)	1001.2	-2	WS	3	c	56	65	9	8	6	6	4-6	9	4000	0	*
Eskdalemuir	1000.7	-4	WSW	4	bc	54	55	8	8	-	6	4-6	4-6	2500	1	*
Point of Ayre	1002.2	-12	W	3	c	56	65	8	4	6	6	4-6	7-8	4000	0	2
Tiree	1001.0	0	NNW	2	bc	55	75	8	8	3	-	4-6	4-6	2500	0	2
Stornoway	1001.5	+4	NW	2	e/pr	52	85	8	5	7	-	7-8	7-8	4000	1	1
Dalwhinnie	1000.3	+4	NNW	1	c	49	85	7	1	7	-	4-6	9+	2500	0	*
Aberdeen	999.7	-2	SE	4	bc	55	65	7	2	3	-	2-3	2-3	2500	1	1
Wick	1000.2	+2	SE	1	bc	54	85	8	2	5	6	2-3	4-6	2500	1	1
Lerwick	1000.1	0	NE	3	c	54	97	6	5	2	-	7-8	10	800	0	*
Blacksod Point	1004.5	-14	N	6	c	52	85	8	9	-	-	9	9	800	1	4
Malin Head	1001.8	-8	NNW	4	pr	49	92	7	8	-	-	9	9	4000	0	3
Aldergrove	1001.2	-10	-	0	roro	49	92	7	6	2	-	9	10	1500	1	*
Birr Castle	1003.9	*	W	3	c	56	75	8	3	7	-	2-3	9	1500	1	*
Valentia Obsy.†	1009.5	-14	WNW	5	pr	56	85	7	5	-	-	9+	9+	1500	1	3
Roches Point	1006.6	-18	NW	5	c	60	75	8	8	-	-	7-8	7-8	2500	1	2

PAST 24 HOURS. — WEATHER.

Stations	7h.—13h. 23rd (37)	13h.—18h. 23rd. (38)	18h 23 to 1h. 24th. (39)	1h.—7h. 24th. (40)
London (Kew)	ccy	cyc	cbcb	bbccpro
Croydon	c	cyc	cbcw	crorPRpro
S. Farnborough	c	cypro c	cyb	bcpropR
Boscombe Down	bcc	cbc	bcc	circbc
Calshot (Sotcn.)	cycpro	cproc	cbcb	bcpRq
Lympne	cmoc	cyc	cproPR	cPRtlro
Manston	bmoc	cyc	clbbcw	bcwprc
Shoeburyness	bccy	cy	bc	bccr
Felixstowe	bccy	cy	cTLHR	qbcwc
Gorleston	bccy	cy	cbd	bc
Mildenhall	c	cyc	c	c
Cranwell	cy	cyc	ccdobc	bcc
Birmingham	cbcc	cbc	bcprocR	crbc
Upper Heyford	cpro	ccpro	cproc	ccrpc
Ross-on-Wye	c	cpcpro	bccprocPt	cpbc
Hartland Point	cbcc	c	clr	c
Bristol	bccbc	bccbcy	bcctlR	tlRiRro
Portland Bill	c	c	c	orrc
Plymouth	ciroc	c	cbcb,c	cprobc
The Lizard	cbc	c	cbc	cprbc
Scilly (St. Mary's)	cpobc	bcc	cbcpq	bcpoc
Guernsey	cpro	cidoc	cir	ctlrc
Pembroke	cq	bcq	cpr bcq	cprrq
Holyhead	cbcc	cprobc	tqPRc	PRprc
Chester (Sealand)	cybccpro	prbcqy	cPRproc	cprebcmo
Manchester	cproc	bcycpr	cproc	cpromo
Spurn Head	c	cpro	clbcw	bccro
Catterick	probcy	probcy	bcybc	bcproc
Tynemouth	bccpo	cpobc	bc	bc
St. Abbs Head	ctlir	prbc	bcb	bbq
Leuchars	cprobcy	bcycbc	bc	bcbw
Renfrew (Abbotsl.)	rrqprpro	cprobcc	cbc	bcbwfgb
Eskdalemuir	bcpRtk	tprobcy	bcbw	bw
Point of Ayre	cRR	prc	cRc	prc
Tiree	cpro	bccpro	bc	bc
Stornoway	cpr	cpr	bcc	bc
Dalwhinnie	ciR	ciR	•	cir
Aberdeen	irobc	bcb	bbwfe	wfefebc
Wick	c	ebc	bc	bc
Lerwick	Fdfc	me	cmo	c
Blacksod Point	rprc	PRcq	prcq	PRcq
Malin Head	cbcc	cprbcc	cprcbcc	bc
Aldergrove	PRqc	pr,rromo	rorоirc	procbc
Birr Castle	cprcy	c	cprbc	bcb
Valentia Obsy.†	cbcc	cpro	probcc	cproc
Roches Point	bccbc	bcc	cprc	cbc

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.

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.*

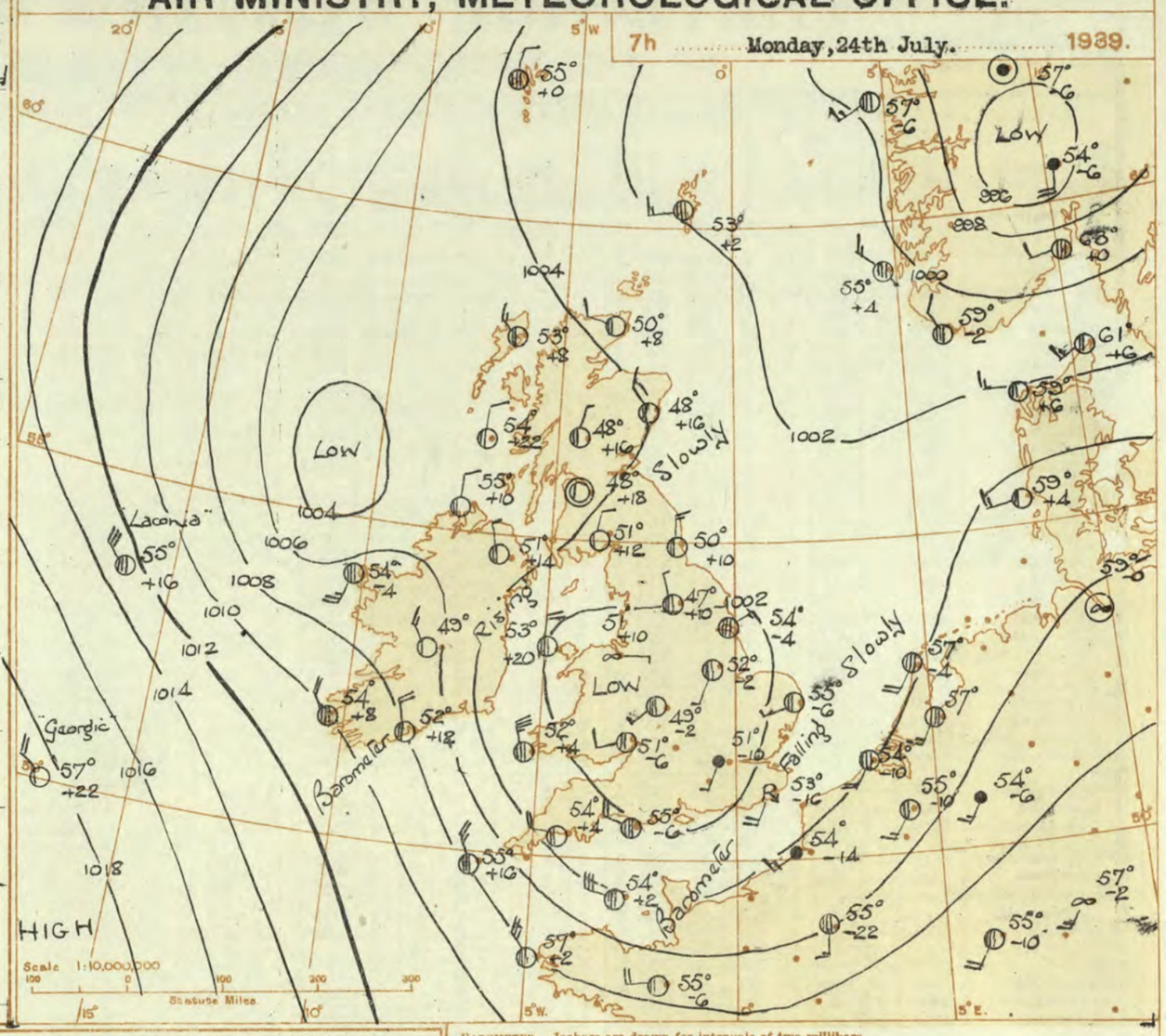
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 23rd July 1939.

Districts	Stations.	Weather. Forenoon.	Weather. Afternoon.	Temperature. (°F) Min. 9h.22nd to 9h.23rd	Temperature. (°F) Max. 9h.–17h. 23rd.	Rainfall. (mm.) Night. 17h.22nd to 9h.23rd	Rainfall. (mm.) Day. 9h.–17h. 23rd.	Sunshine. (Hrs.) Sunrise to 17h. 23rd.	Sunshine. (Hrs.) Sunrise to Sunset. 22nd
1	Tunbridge W.	ocbc	bcodc	55	65	1	Trace	4·2	1·3
	Bournemouth	c	bcc	52	66	1	–	3·2	0·9
	Ventnor ...	pcobc	cbco	57	63	Trace	–	5·3	2·0
	Southsea ...	cbcc	ord	54	65	–	1	2·5	2·1
	Bognor Regis	cbc	cir	53	64	–	0·3	3·5	2·5
	Littlehampton	bccbc	bccbc	54	64	0·2	Trace	3·9	2·2
	Worthing ...	c	cr.	54	65	0·3	Trace	3·4	3·3
	Brighton ...	cbc	bccd	55	64	4	Trace	3·4	2·3
	Eastbourne† ...	cbc	bcc	57	64	1	–	5·6	4·2
	Hastings† ...	cbcc	co	57	65	1	–	4·6	2·1
	Folkestone ...	c	c	57	69	1	–	3·9	2·9
	Dover ...	orobc	bcc	58	65	0·5	–	2·7	3·4
	Deal	c	coc	57	66	Trace	–	2·3	5·3
	Ramsgate ...	c	c	58	66	1	–	2·2	4·4
	Margate ...	cbc	c	58	65	3	–	2·3	4·8
2	Southend ...	co	oco	56	68	0·3	–	3·3	1·3
	Clacton-on-Sea	bcc	c	55	65	Trace	–	2·7	3·4
	Dovercourt ...	rocpc	bc	55	63	Trace	–	3·6	4·2
	Lowestoft ...	bbcc	c	53	66	–	–	5·1	0·6
	Skegness ...	ocbc	cbco	49	65	0·5	–	2·2	2·5
	Mablethorpe...	obcc	bccy	48	65	0·5	–	2·1	1·3
	Cleethorpes ...	bc	bc	50	65	0·3	–	4·7	1·0
3	Leamington S.	co	cbc	50	64	–	–	3·2	0·2
4	Cheltenham†	c	bcp	50	65	1	Trace	3·0	0·1
5	Bath	cbcc	bccbc	52	65	1	–	4·8	0·0
	Weymouth ...	bcc	bcc	55	63	3	–	3·2	0·9
	Jersey ...	pcbc	cbcc	57	62	1	–	3·3	2·5
	Torquay ...	wcrp	bccy	54	63	–	0·4	1·4	1·4
	Falmouth ...	b	c	54	64	–	–	3·7	3·7
	Penzance ...	cbbc	cbcc	55	66	–	–	4·6	3·4
	St. Ives ...	c	c	54	63	–	–	3·8	3·0
	Bude... ...	p.cbc	cbcc	56	61	0·2	–	3·5	0·0
	Ilfracombe ...	oco	cbc	56	62	–	–	4·8	0·1
6	Aberystwyth	cbcc	bcc	56	61	–	–	7·1	0·1
7	Llandudno ...	pcbcr	rbc	54	61	0·2	1	7·4	0·0
	Colwyn Bay...	pbccp	bcb	53	63	Trace	0·3	9·7	0·0
	Rhyl	crobc	rcbc	54	64	Trace	0·2	5·6	0·0
8	Wallasey ...	cirbc	bc	55	63	–	0·5	6·6	0·0
	Southport ...	c	cprc	54	63	–	0·2	8·0	0·0
	Blackpool ...	cbcp.	bcbbc	55	61	–	Trace	9·1	0·3
	Morecambe ...	cpbc	bcpbc	59	68	0·3	1	6·8	0·5
9	Ilkley... ...	bcp	bcp	48	63	*	0·2	6·3	0·0
	Harrogate ...	cbc	bcb	47	62	1	–	5·8	0·1
10	Berwick-on-T.	bcp	tpbc	45	60	..	2	6·8	0·4
11	Dunbar ...	bc	cprh	47	59	Trace	5	6·8	1·7
12	Troon... ...	corc	bcpco	50	57	Trace	1	3·8	0·0
	Douglas ...	b	bp	50	58	–	0·3	9·4	2·9

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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 July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate northwest to west wind, backing southwest later; bright intervals, showers; local thunderstorms; cool.
5 S.W. England 6 South Wales ...	Fresh northwest to west wind, strong locally on coasts, backing southwest temporarily; bright intervals; showers; local thunderstorms; cool.
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 variable wind, becoming north moderate later; bright intervals, showers, local thunderstorms; cool.
13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Moderate northwest to north wind; bright intervals, local thundery showers; local coast fog; average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Fresh west wind, veering northwest; strong locally on coasts; bright intervals, showers, local thunderstorms; cool.

L.D.

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

GENERAL INFERENCE.

A depression centred over the Midlands is moving southeast and there are indications of another off Northwest Ireland also moving southeast. There will be showers in most districts with local thunderstorms.

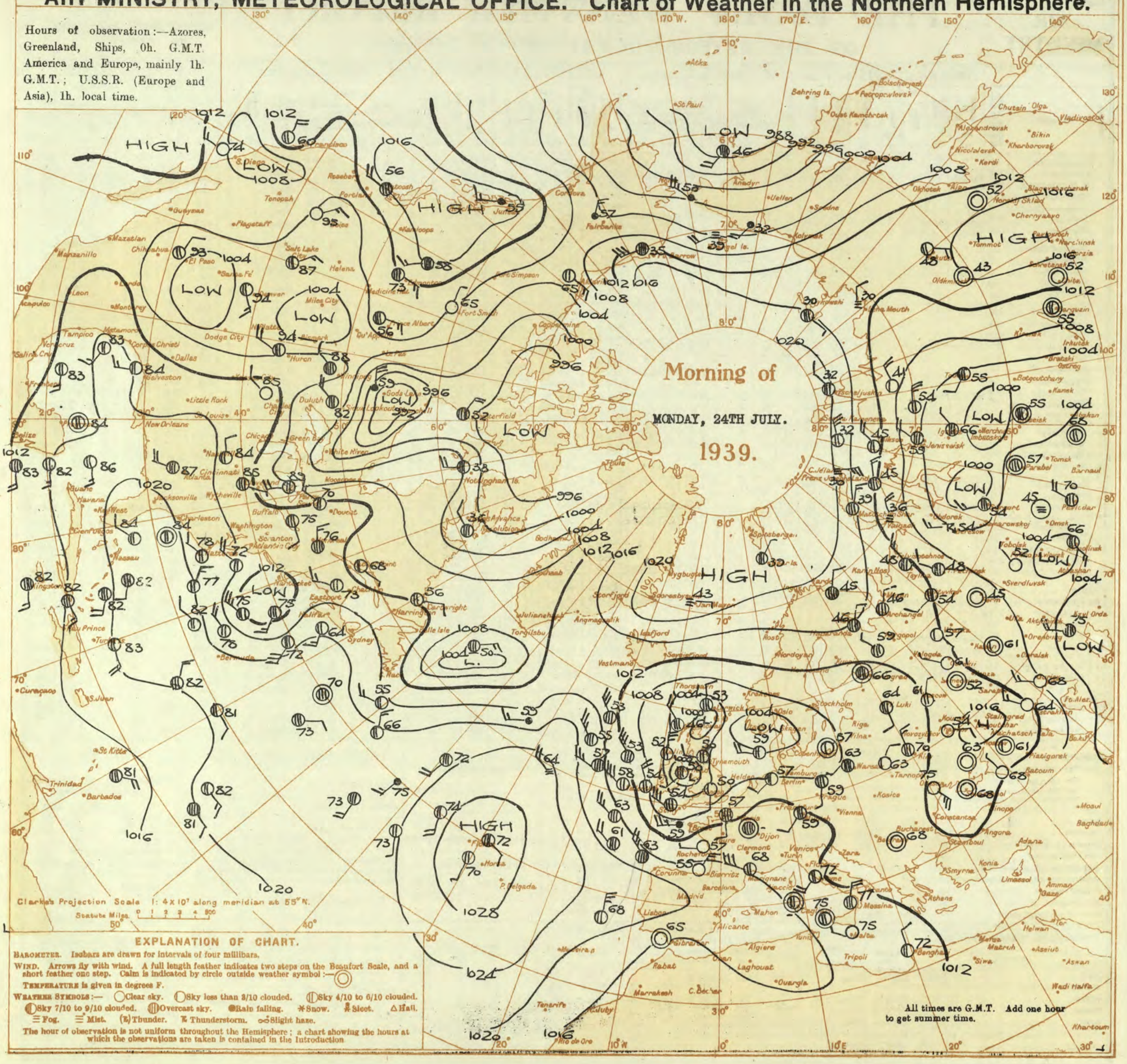
FURTHER OUTLOOK.

Unsettled and cool.

Forecasts issued at 0930 G.M.T.

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

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, 24th July, 1939.
No. 28368

OBSERVATIONS at 1 hr. G.M.T. 24th July, 1939

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	1005·6	-1·4	S	2	bc	50	92	8	5	–	–	2·3	2·3	4000
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417														
	Calshot (Sthmtn.)	8														
	Lympne	346	1006·7	-1·4	W'N	3	PR	53	85	8	5	–	–	9+	9+	1500
	Manston	154	1005·6	-1·4	SSW	2	bc	53	92	8	5	–	–	4·6	4·6	5700
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1004·4	-1·0	SW'W	3	bl	52	85	7	5	–	–	1	1	2500
	Mildenhall	19														
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1002·9	-2·6	NW	6	c/r	55	85	8	8	–	–	7·8	7·8	1500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1004·2	-2·8	W	4	c	58	92	8	5	–	–	7·8	7·8	4000
	Plymouth	82														
	The Lizard	240	1006·5	-1·6	WSW	5	bc	55	85	8	8	6	–	4·6	4·6	2500
	Scilly (St. Mary's)	163	1006·7	-1·8	NW'W	6	bcq	54	85	8	8	4	4	4·6	4·6	1500
	Guernsey	175	1006·6	-3·6	W'SW	4	c	56	92	7	8	–	–	7·8	7·8	2500
6	Pembroke	142	1002·3	-1·4	NW'N	6	bcq	53	75	8	8	–	–	4·6	4·6	1500
7	Holyhead	26	999·1	-1·8	SW'S	1	c	50	85	8	8	–	–	7·8	7·8	1500
	Chester (Sealand)	16														
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1003·0	-4	SSW	2	b	51	85	7	–	4	–	0	1	–
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1002·6	-1	W	2	bc	50	75	6	2	–	–	2·3	2·3	2500
11	St. Abbs Head	280	1001·3	0	–	0	b	49	75	8	–	–	–	0	0	—
	Leuchars	36														
12	Renfrew (Abbots I.)	19														
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	999·9	-1·2	E'N	2	c	51	85	8	8	–	–	7·8	7·8	2500
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1004·3	+1·0	NNW	3	c	46	92	7	3	7	–	4·6	7·8	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1002·6	+1·2	NW	2	bc	52	97	8	5	–	–	2·3	2·3	2500
16	Lerwick	156	1001·6	+8	N'E	1	c	53	97	6	5	2	–	7·8	10	800
17	Blacksod Point	18	1007·2	+6	N	5	bc	52	75	8	9	–	–	4·6	4·6	1500
18	Malin Head	84	1003·5	+8	N	5	bc	52	75	7	2	–	–	4·6	4·6	5700
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1009·7	+6	NNW	4	bc	54	92	8	8	–	–	2·3	2·3	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

OBSERVATIONS at 7 hr. G.M.T. 24th July, 1939

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1001·5	-1·2	SW	2	pr	55	85	6	5	1	–	7·8	9+	1500	1	*
	Croydon	1002·0	-1·0	S'W	1	pr	51	92	7	9	7	–	4·6	9+	4000	1	*
	S. Farnborough	1001·1	-4	–	0	c/pr	51	85	7	8	–	–	9+	9+	4000	1	*
	Boscombe Down	1001·4	-6	W'S	3	bc	51	92	8	8	4	3	2·3	4·6	1500	1	*
	Calshot (Sthmtn.)	1001·6	-6	W'S	3	c	53	85	8	8	7	5	2·3	10	1500	1	2
	Lympne	1002·9	+1·6	S'W	4	t/r	53	85	7	9	–	–	9+	9+	1500	1	§3
	Manston	1002·3	-1·0	S'W	2	c	56	85	7	8	7	–	4·6	9+	4000	1	*
2	Shoeburyness	1002·3	-6	S	2	r	54	85	7	6	7	–	7·8	10	1500	1	*
	Felixstowe	1002·0	-1·2	W'S	3	pr	56	85	7	9	7	6	4·6	9	1500	1	2
	Gorleston	1002·6	-6	W'SW	1	bc	55	75	6	7	–	1	2·3	4·6	2500	0	–
	Mildenhall	1001·4	-6	S	1	bc	52	85	6	8	7	6	4·6	9	2500	1	*
	Cranwell	1001·5	-2	SSW	1	c	52	85	7	5	3	–	7·8	9+	4000	1	*
3	Birmingham	1001·0	-2	SW	1	c	49	97	6	3	7	–	4·6	9	1500	1	*
	Upper Heyford	1001·3	-6	SSW	1	c	50	92	7	5	1	2	9	9+	800	1	*
4	Ross-on-Wye	1000·8	-6	W'S	2	bc	51	85	8	8	–	3	4·6	4·6	2500	1	*
5	Hartland Point	1003·0	+8	NNW	6	c	53	75	8	9	–	–	7·8	7·8	1500	1	4
	Bristol	1001·8	0	W	4	c	51	85	8	8	7	–	4·6	7·8	1500	1	*
	Portland Bill	1002·5	-6	W'NW	4	c	55	92	8	2	–	1	7·8	9	4000	1	4
	Plymouth	1004·4	+4	W'NW	4	bc	54	75	8	8	–	3	2·3	2·3	1500	1	1
	The Lizard	1006·9	+2·0	W'N	6	bc	54	75	8	8	6	–	4·6	4·6	2500	0	3
	Scilly (St. Mary's)	1008·5	+1·6	NW'N	5	c	55	85	8	2	6	3	2·3	7·8	2500	1	4
	Guernsey	1004·6	+2	W'N	6	c	54	75	7	6	4	1	2·3	7·8	800	1	4
6	Pembroke	1003·6	+4	NW'N	7	c/r	52	75	8	8	6	–	7·8	9+	1500	1	3
7	Holyhead	1001·1	+2·0	N	4	c/pr	53	75	8	9	3	–	9	9	1500	1	3
	Chester (Sealand)	1001·1	+1·0	E	1	Zo	51	85	6	8	7	3	2·3	7·8	1500	1	*
8	Manchester	1001·1	+8	–	0	Zo	51	85	6	8	3	–	7·8	9	2500	1	*
10	Spurn Head	1001·7	-4	ENE	3	c/pr	54	75	6	6	3	–	4·6	9+	1500	0	1
	Catterick	1002·7	+1·0	NNW	1	c/pr	47	92	7	5	3	2	7·8	7·8	2500	0	*
	Tynemouth	1002·9	+1·0	N	3	bc	50	85	7	2	–	1	2·3	2·3	2500	1	1
11	St. Abbs Head	1003·5	+1·0	NW	2	bc	50	92	8	2	–	–	2·3	2·3	2500	0	1
	Leuchars	1004·2	+1·8	W	1	b	50	85	9	8	–	–	1	1	4000	0	
12	Renfrew (Abbots I.)	1004·9	+1·8	–	0	b	48	92	8	–	–	–	0	0	–	0	*
	Eskdalemuir	1003·3	+1·2	N'E	2	b	51	75	8	5	–	1	Tr	Tr	1500	1	*
	Point of Ayre	1002·9	+2·2	N'E	3	c	53	85	8	8	6	–	4·6	7·8	1500	1	3
13A	Tiree	1005·2	+2·2	N	2	bc	54	75	8	2	–	–	4·6	4·6	2500	0	2
13B	Stornoway	1005·8	+8	NW	3	bc	53	85	8	2	5	–	4·6	4·6	4000	1	1
15	Dalwhinnie	*	+1·6	NNE	1	bc	48	85	7	4	–	–	2·3	2·3	4000	0	*
	Aberdeen	1004·7	+1·6	NW	2	bc/f	48	97	6	5	–	–	4·6	4·6	450	1	1
	Wick	1003·8	+8	W'NW	2	bc	50	97	8	5	4	–	2·3	2·3	2500	1	1
16	Lerwick	1002·0	+2	W'S	3	c	53	97	8	5	7	–	4·6	10	800	0	*
17	Blacksod Point	1006·9	-4	NW	5	c	54	97	6	8	–	–	10	10	220	1	3
18	Malin Head	1005·3	+1·0	N	2	bc	55	75	8	3	–	–	4·6	4·6	5700	0	2
	Aldergrove	1004·5	+1·4	NNW	1	bc	51	85	8	2	–	–	2·3	2·3	1500	1	*
19	Birr Castle	1007·1	*	NW	3	b	49	85	8	–	4	–	0	1	–	1	*
20	Valentia Obsy. †	1010·9	+8	NW	4	c/pr	54	*	8	8	–	–	9	9	1500	1	3
	Roches Point	1008·2	+1·2	NNW	4	bc	52	85	8	5	–	–	2·3	2·3	2500	1	2

PAST 24 HOURS.

District	Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 24 hrs. (36)
1	London (Kew)	65	51	42	–	0·2	4·1
	Croydon	64	45	46	–	5	4·4
	S. Farnborough	65	48	42	Tr	1	3·8
	Boscombe Down	62	48	43	–	2	4·6
	Calshot (Sthmtn.)	64	50	48	–	3	2·6
	Lympne	65	47	43	+	1	3·0
	Manston	65	51	46	–	0·2	2·6
2	Shoeburyness	67	52	42	–	0·2	3·9
	Felixstowe	66	52	45	–	2	3·3
	Gorleston	64	49	47	–	1	3·8
	Mildenhall	64	46	44	–	Tr	3·3
	Cranwell	65	45	41	–	Tr	4·9
3	Birmingham	63	47	45	–	3	5·2
	Upper Heyford	64	47	43	0·2	2	*
4	Ross-on-Wye	63	47	43	2	3	3·4
5	Hartland Point	60	50	50	Tr	0·5	5·3
	Bristol	63	48	45	–	7	7·2
	Portland Bill	60	54	*	–	5	*
	Plymouth	63	52	48	Tr	Tr	1·5
	The Lizard	61	50	*	Tr	1	5·1
	Scilly (St. Mary's)	63	53	*	0·2	9·8	6·2
	Guernsey	61	51	49	Tr	1	2·9
6	Pembroke	59	50	*	–	0·4	5·1
7	Holyhead	61	49	45	Tr	9	7·4
	Chester (Sealand)	63	46	42	1	2	8·4
8	Manchester	62	49	47	0·2	1	4·4
10	Spurn Head	66	50	*	Tr	Tr	2·9
	Catterick	63	40	37	Tr	Tr	9·0
	Tynemouth	62	47	40	2	–	8·1
11	St. Abbs Head	58	47	*	0·5	–	*
	Leuchars	61	40	33	Tr	–	9·3
12	Renfrew (Abbots I.)	59	36	33	2	–	5·8
	Eskdalemuir	57	37	32	5	–	8·2
	Point of Ayre	61	50	*	4	8	8·0
13A	Tiree	58	51	46	0·3	–	7·6
13B	Stornoway	56	44	*	4	–	3·9
15	Dalwhinnie	51	37	31	9	2	2·0
	Aberdeen	60	41	37	Tr	–	10·2
	Wick	57	41	*	–	–	*
16	Lerwick	56	52	*	Tr	–	0·0
17	Blacksod Point	61	49	*	6	3	*
18	Malin Head	56	47	*	3	1	5·3
	Aldergrove	59	46	45	9	13	3·8
19	Birr Castle	61	44	40	1	2	7·7
20	Valentia Obsy. †	59	51	46	0·1	0·3	6·4
	Roches Point	63	50	*	–	0·4	*

LONDON OBSERVATIONS

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

	Height above M.S.L. in feet.	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon (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	ccy	cyc	cbcb	65	51	42	–	0·2	4·1	*	*	8
CROYDON	217	c	cyc	cbcw	64	49	46	–	5	4·4	*	*	7
GREENWICH (Royal Observatory)	149	c	cyr	cbcRR	66	48	38	Tr	3	*	53	77	6
CITY (Bunhill Row)	—	*	*	*	*	*	*	*	*	2·8	*	*	*
WESTMINSTER (St. James' Park)	27	*	*	*	65	52	47	2		2·8	47	68	*
REGENTS PK. (Botanic Gardens)‡	168	*	*	*	65	51	45	–	0·5	3·4	63	75	*
CAMDEN SQUARE	110	c	c	*	64	52	47	–	0·5	*	*	65	*
KENSINGTON	80	c	c	*	65	51	45	–	1	3·9	52	At 18h 68	*
HAMPSTEAD OBSERVATORY	450	bcor	bc	bc	63	49	45	–	0·5	3·5	*	73	*

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 23rd July, 1939. Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 24th July, 1939. 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	1011·7	NW	2	c/pr	61	1005·8	S	3	c/r	55	68	54	Tr	4
BRUSSELS						1005·5	SSW	3	bc/r	59		52		2
BERLIN	1006·6	SSW	2	bc	72	1007·8	WSW	2	Zo	61	73	*	3	*
ZURICH	1012·3	SSW	1	r	57	1011·2	SSE	2	c	54	64	57	3	12
ROME	1011·0	W	4	bc	75						*	*	—	

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

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

South Kensington Max.	Time.	Min.	Time.
<0·3	the	whole	period

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

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Tuesday, 25th July, 1939.
No. 28369

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

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)...	1001·5	+4	NW	2	c	61	55	8	8	–	8	4-6	9	2500
	Croydon ...	1001·9	+4	W	2	c	61	55	8	3	6	3	4-6	7-8	4000
	S. Farnborough	1001·4	+6	NW	2	e	61	55	8	3	–	3	7-8	9	4000
	Boscombe Down	1002·1	+10	NW	3	cjp	57	65	7	8	–	–	9+	9+	2500
	Calshot (Soton.)	1002·0	+4	WN	4	c/pr	58	65	8	8	3	3	7-8	9	2500
	Lympne ...	1001·8	0	WSW	3	tlr	56	85	8	3	8	3	7-8	9	1500
	Manston ...	1001·5	+2	EN	2	r/tlr	52	92	6	9	–	3	9	9+	1500
2	Shoeburyness ...	1001·6	–2	WN	2	cjp	62	55	8	8	7	4	7-8	9	2500
	Felixstowe ...	1001·4	0	–	0	c	63	65	8	8	6	8	7-8	9	2500
	Gorleston ...	1002·2	0	NE	3	c	60	75	7	2	3	–	2-3	9	2500
	Mildenhall ...	1001·9	+10	–	0	r/tlr	52	85	7	9	7	3	7-8	9+	1500
	Cranwell ...	1002·6	+8	NE	3	c/tlr	60	75	7	9	7	3	4-6	9+	1500
3	Birmingham ...	1004·0	+12	N	3	c	54	75	7	8	–	–	9+	9+	1500
	Upper Heyford	1002·1	+12	NE	3	pr	58	65	8	8	7	–	9	9+	1500
4	Ross-on-Wye ...	1003·8	+20	N	4	c	57	75	8	8	7	3	2-3	7-8	4000
5	Hartland Point	1006·5	+20	NW	6	pr	53	85	8	8	2	–	9+	10	1500
	Bristol ...	1003·2	+16	N	5	pr	57	65	8	9	–	–	7-8	7-8	2500
	Portland Bill ...	1002·5	+10	NW	6	c	54	92	8	5	–	–	7-8	9	2500
	Plymouth ...	1006·9	+16	WNW	6	cq	58	65	8	8	–	–	9	9	2500
	The Lizard ...	1009·3	+14	WN	6	c	58	65	8	8	6	–	4-6	9	2500
	Scilly (St. Mary's)	1010·4	+8	WNW	5	bc	61	85	8	2	6	–	2-3	4-6	2500
	Guernsey ...	1006·7	+12	WNW	7	bc/pr	58	75	8	2	3	–	4-6	4-6	2500
6	Pembroke ...	1007·5	+20	NNW	4	c	59	65	8	8	–	–	7-8	7-8	1500
7	Holyhead ...	1005·6	+14	NWN	4	b	58	75	8	8	8	4	1	1	2500
	Chester (Sealand)	1004·6	+18	NWW	2	c/tlr	54	65	6	8	–	–	7-8	7-8	1500
8	Manchester ...	1004·0	+14	SW	1	z_o	60	65	5	8	6	–	7-8	7-8	4000
10	Spurn Head ...	1003·4	+6	NEN	3	bc	61	75	7	1	–	4	1	4-6	2500
	Catterick ...	1004·5	+10	NEN	3	c	61	55	7	2	6	6	4-6	7-8	1500
	Tynemouth ...	1004·2	+8	N	3	bc	58	75	8	3	–	2	2-3	2-3	2500
11	St. Abbs Head...	1006·3	+14	N	2	bc	54	85	9	7	–	–	2-3	2-3	2500
	Leuchars ...	1006·0	+10	ESE	2	bc	61	55	8	8	–	–	4-6	4-6	4000
12	Renfrew (Abbotsl.)	1006·2	+4	WNW	2	bc	65	45	9	8	–	–	4-6	4-6	4000
	Eskdalemuir ...	1005·2	+12	NNE	1	c	59	55	8	8	–	–	7-8	7-8	2500
	Point of Ayre ...	1006·4	+12	NWN	3	bc	63	65	8	1	–	1	1	2-3	4000
13A	Tiree ...	1007·9	+12	NWN	2	bc	60	75	8	1	4	–	2-3	2-3	4000
13B	Stornoway ...	1007·7	+2	W	3	bc	61	65	8	2	5	–	4-6	4-6	4000
15	Dalwhinnie ...	1006·2	+6	NNE	2	bc	60	55	8	–	6	–	4-6	4-6	4000
	Aberdeen ...	1006·0	+10	E	2	bc	58	65	8	7	–	–	4-6	4-6	1500
	Wick ...	1004·9	+8	NW	4	c	61	65	8	8	7	–	4-6	7-8	1500
16	Lerwick...	1001·3	–4	W	5	c	55	92	8	5	7	–	4-6	7-8	800
17	Blacksod Point...	1010·6	+12	N	3	bc	59	85	9	1	–	4	2-3	4-6	2500
18	Malin Head ...	1008·5	+10	N	3	bc	57	75	8	7	–	1	4-6	4-6	5700
	Aldergrove ...	1007·4	+16	NW	3	c	61	55	9	2	–	–	7-8	7-8	4000
19	Birr Castle ...	1008·8	+8	NW	2	c	63	55	8	4	–	–	7-8	7-8	1500
20	Valentia Obsy.†	1012·5	+10	NW	5	c	58	75	7	5	–	–	10	10	1500
	Roches Point ...	1010·0	+12	NWN	3	c/r	56	97	8	9	–	3	4-6	7-8	1500

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

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)	1005·0	+24	NNW	2	c	59	65	7	8	–	1	7-8	7-8	2500	1	*
Croydon	1004·7	+26	WNW	2	c/r	56	85	6	2	9	3	4-6	9+	4000	1	*
S. Farnborough	1004·4	+20	NWW	3	c/pr	54	85	8	8	3	3	2-3	7-8	4000	1	*
Boscombe Down	1006·2	+18	NW	3	c/tlr	57	65	7	8	–	3	4-6	7-8	2500	1	*
Calshot (Soton.)	1005·6	+26	NWW	3	c/pr	59	65	7	2	2	3	2-3	9	4000	1	1
Lympne	1004·0	+20	NW	2	c/pr	53	75	8	8	3	–	2-3	9+	2500	1	§ 1
Manston	1003·6	+18	N	1	c	56	75	8	8	6	3	7-8	9+	2500	1	*
Shoeburyness	1004·3	+18	NWN	3	pr	55	85	8	8	7	–	9	9+	2500	1	*
Felixstowe	1004·0	+20	NNW	3	$r_o r_o$	55	65	7	9	2	–	9	10	800	0	2
Gorleston	1003·5	+10	NE	2	c/p	59	75	7	8	2	–	4-6	10	1500	1	2
Mildenhall	1004·5	+20	N	2	c	58	75	8	8	7	–	7-8	9+	4000	1	*
Cranwell	1005·7	+20	NW	3	pr	59	75	7	8	1	3	2-3	9	2500	1	*
Birmingham	1007·4	+20	NW	3	c/tlr	55	75	6	8	–	–	4-6	7-8	2500	1	*
Upper Heyford	1005·8	+22	NNW	3	c	58	65	8	4	4	6	2-3	7-8	2500	1	*
Ross-on-Wye	1007·9	+16	NW	2	c	57	75	7	8	2	3	1	7-8	2500	1	*
Hartland Point	1009·6	+14	NW	5	bc	57	75	8	1	–	3	2-3	2-3	2500	0	3
Bristol	1007·5	+14	NNW	4	bc	56	65	8	8	4	3	2-3	4-6	2500	1	*
Portland Bill	1007·7	+28	NW	6	c	57	92	8	5	–	–	4-6	9	4000	1	4
Plymouth	1010·3	+26	NWN	5	bc	60	55	9	7	–	–	4-6	4-6	4000	1	2
The Lizard	1011·9	+16	WN	3	bc	58	85	8	8	4	–	2-3	4-6	2500	0	3
Scilly (St. Mary's)	1012·5	+14	NWW	5	c/pr	56	97	8	8	6	–	4-6	7-8	1500	1	4
Guernsey	1009·6	+28	WNW	7	cq	58	65	8	2	7	–	4-6	7-8	1500	1	4
Pembroke	1010·5	+20	WNW	2	bc	59	75	8	5	–	–	2-3	2-3	2500	1	2
Holyhead	1009·1	+22	NWW	3	bc	58	65	9	2	4	–	2-3	2-3	2500	1	2
Chester (Sealand)	1008·5	+14	N	2	z_o	58	75	6	8	–	–	4-6	4-6	2500	1	*
Manchester	1007·5	+20	NWW	3	bc	59	75	7	7	3	–	2-3	4-6	4000	1	*
Spurn Head	1005·5	+8	NE	3	c	61	75	7	–	9	6	0	9	–	0	3
Catterick	1007·2	+20	ENE	2	c	60	65	8	2	9	–	4-6	7-8	2500	1	*
Tynemouth	1007·3	+14	N	3	bc	58	85	8	2	–	1	2-3	2-3	2500	1	*
St. Abbs Head	1007·4	+6	–	0	b	57	65	9	1	–	–	1	1	2500	0	1
Leuchars	1006·8	+4	SE	2	b	61	55	9	8	6	–	Tr	1	5700	0	*
Renfrew (Abbotsl.)	1007·5	+6	NW	4	bc	64	55	9	7	4	–	2-3	2-3	4000	0	*
Eskdalemuir	1006·6	+8	NE	1	bc	62	55	8	8	–	–	4-6	4-6	2500	0	*
Point of Ayre	1008·5	+8	NNW	4	b	60	75	8	4	–	–	1	1	4000	0	1
Tiree	1009·0	+4	WSW	3	bc	56	75	8	1	6	–	2-3	2-3	4000	0	2
Stornoway	1007·9	+4	WSW	4	c	57	75	8	5	7	–	4-6	9+	4000	1	2
Dalwhinnie	1006·7	+6	S	1	bc	61	45	8	–	7	–	4-6	4-6	4000	0	*
Aberdeen	1006·8	+4	SW	2	b	57	75	8	4	–	5	Tr	1	1500	0	1
Wick	1005·8	+4	NW	3	c	60	75	8	5	7	8	4-6	7-8	1500	1	1
Lerwick	1001·8	+2	WN	5	$r_o r_o$	52	97	8	6	2	–	7-8	10	450	1	*
Blacksod Point	1012·3	+10	NW	3	c	57	85	9	5	–	–	10	10	1500	0	3
Malin Head	1010·2	+8	NW	4	c	56	75	8	8	–	–	7-8	7-8	5700	0	3
Aldergrove	1009·5	+10	NWW	3	bc	60	65	9	1	–	–	2-3	2-3	4000	1	*
Birr Castle	1010·5	+12	NNW	3	bc	64	55	8	2	4	1	2-3	4-6	2500	1	*
Valentia Obsy.†	1015·0	+14	NW	4	c/pr	57	85	8	5	–	–	9+	9+	800	1	3
Roches Point	1011·5	+10	NNW	5	bc	63	85	9	2	–	3	2-3	4-6	2500	1	2

PAST 24 HOURS. WEATHER.

Stations	7h.—13h. 24th (37)	13h.—18h. 24th (38)	18h. 24th to 1h. 25th (39)	1h.—7h. 25th (40)
London (Kew)	cprm_oc	ctpr$_o$c	cbc	bcbwm_o
Croydon	cpr$_o$bccy	cp$_o$Ptlr$_o$	ccr_oPRqm_o	bwbwm_ow
S. Farnborough	cpr$_o$cy	cypr$_o$prbc	bcb	bm_ob
Boscombe Down	cpr$_o$	cprcpRctlr	bcbbm_ob	b$m_o$fbcm_of
Calshot (Soton.)	bc, pr$_o$c	bcpr$_o$c	cbcb	bm_ob
Lympne	ctlr$_o$	ctlhrpr	cpr$_o$lrm_o	cbcc m_o
Manston	qrtlr$_o$m$_o$	cir$_o$$m_o$c	c$r_o r_o m_o$	cm_ocm_o
Shoeburyness	cprcy	ycp$_o$c	cp$_o$cpc	cbcm_o
Felixstowe	cprcir$_o$	cbcpr$_o$cr	c$r_o r_o$cm_o	cm_o
Gorleston	bccpr$_o$	cpr$_o$	c$r_o$pcl	cq
Mildenhall	ctlrhr	cir$_o$qcjp	cb	bbcm_ow
Cranwell	ctlr$_o$	c	cbc	bcbm
Birmingham	· cpr	cPRtlr	cbc	bcb
Upper Heyford	cpr$_o$	bccprc	ctlRcbm_o	bbw
Ross-on-Wye	bcvcvpc	bcct$_o$pq	cbcbw	bwbc
Hartland Point	pqc	cqbc	bc	bcc
Bristol	bcpr$_o$c	tlr$_o$cPR	bcb	bwbc
Portland Bill	cpr	tlrc	bc	bc
Plymouth	bc prcq	cqpr$_o$bcy	bcybbw	bcwcm_of
The Lizard	bc	bcbc	bcw	bcw
Scilly (St. Mary's)	bcpqbc	bccpq	cbc	bcWc
Guernsey	cqpr	bccir	cq,bcb	b
Pembroke	qc	cbc	bcbw	bcc
Holyhead	cpr$_o$b	bbc	bcbyw	b,cw
Chester (Sealand)	bcc$m_o$tlr	tlhrPRm_o	bcb m_ow	bbcw
Manchester	c$m_o$pr$_o$z$_o$	c$z_o$bcy	bccprbm_o	bm_ofFw
Spurn Head	Ptlr	c	cbcw	bcw
Catterick	c$z_o$pr$_o$	bcybc	bcwbw	bwbcw
Tynemouth	bc	bc	bc	bc
St. Abbs Head	bc	b	bc	bcb
Leuchars	bwbcy	bcyby	bybw	bw
Renfrew (Abbotsl.)	bc	bcb	byb	bbccwm_o
Eskdalemuir	bbccy	cbcy	bcb	bwb
Point of Ayre	cbc	bcb	b	cbc
Tiree	bc	bc	bcc	cidm_o
Stornoway	cbc	bcc	c	c$r_o r_o$
Dalwhinnie	bc	bc	·	bc
Aberdeen	bcbbc	bcb	bbcw	bcwbcz_o
Wick	bcc	c	c$r_o r_o$	$r_o r_o$
Lerwick	c	pr $r_o r_o$	cr_oFe	FiFe
Blacksod Point	bc	bc	prc	pr$_o$c
Malin Head	bcc	cbcc	cbcc	cir$_o$c
Aldergrove	bc.	bcbyb	bbc	bc,ddr$_o$b
Birr Castle	bbccy	cbcy	bc	bccpr$_o$
Valentia Obsy.†	prpr$_o$c	prpr$_o$c	cpr$_o$c	cpr$_o$c
Roches Point	pr iRc	PRbc	bc	cir$_o$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.

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.*

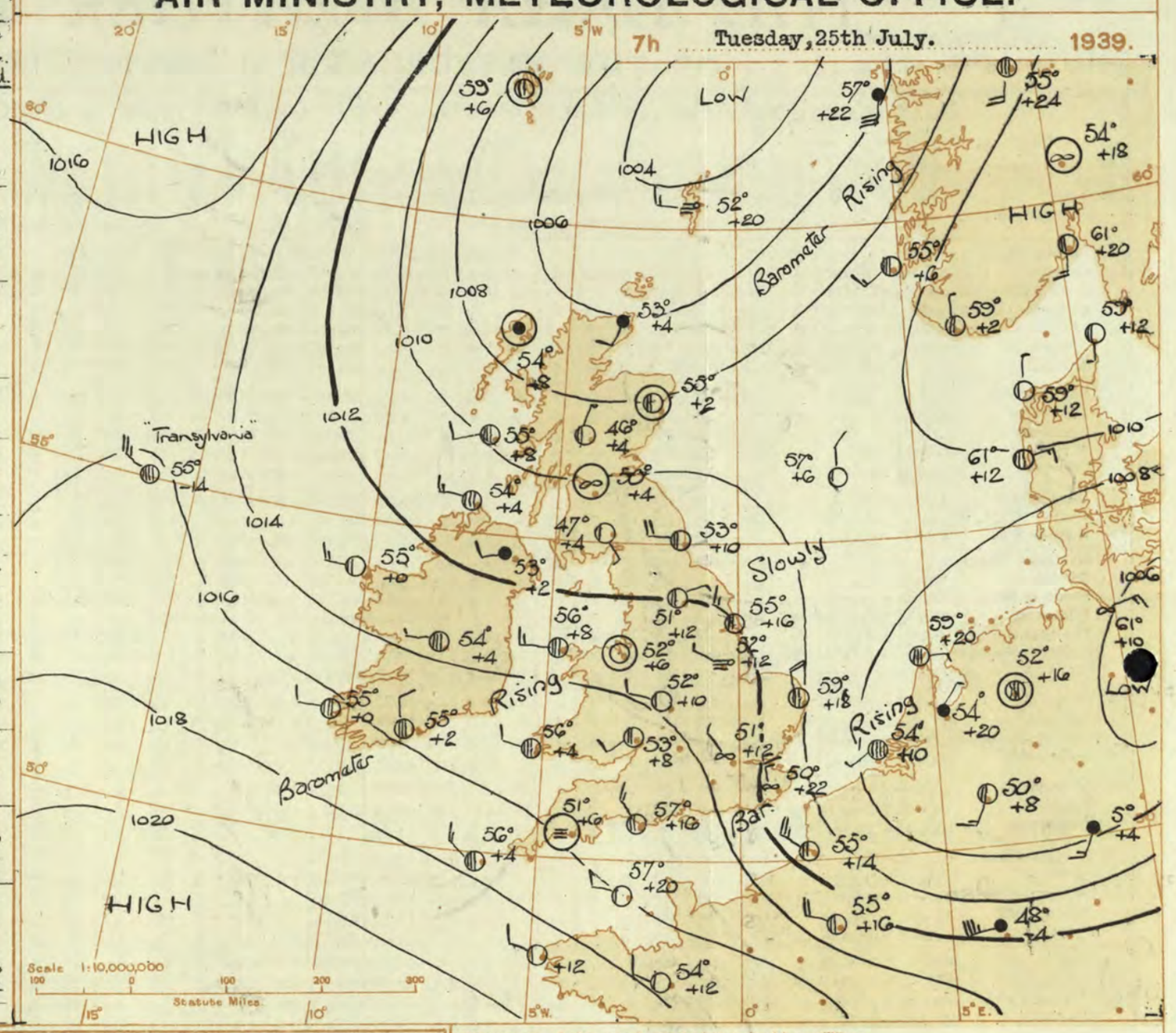
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 24th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 23rd to 9h. 24th	Temperature. (°F) Max. 9h.–17h. 24th	Rainfall. (mm.) Night. 17h. 23rd to 9h. 24th	Rainfall. (mm.) Day. 9h.–17h. 24th	Sunshine. (Hrs.) Sunrise to 17h. 24th	Sunshine. (Hrs.) Sunrise to Sunrise. 23rd
1	Tunbridge W.	cot	phtoco	46	60	2	Trace	1·0	4·2
	Bournemouth	bc	btlrh	50	60	3	12	6·9	3·2
	Ventnor ...	pbc	ortc	53	61	1	1	7·3	5·3
	Southsea ...	cbc	cptc	52	61	2	0·4	5·5	2·5
	Bognor Regis	bc	citlr	51	61	2	3	5·4	3·5
	Littlehampton	bccph	chtlr	52	61	1	4	4·7	3·9
	Worthing ...	bc	ctlR	52	60	4	4	4·1	3·4
	Brighton ...	cbc	bctlr	52	61	1	2	2·6	3·4
	Eastbourne† ...	cpc	pbct	52	63	1	2	3·2	5·6
	Hastings† ...	cvbcc	p.bcp	51	61	5	0·3	2·3	4·6
	Folkestone ...	c	ctlpt	50	64	4	2	4·1	3·9
	Dover ...	or cbc	bccpc	53	63	4	Trace	4·7	2·7
	Deal	oircc	ctlrt	51	62	Trace	15	1·6	2·3
	Ramsgate ...	rctlr	rc	53	61	Trace	6	1·5	2·2
	Margate ...	crobc	ctirbc	51	61	0·3	5	2·7	2·3
2	Southend ...	cbcc	core	52	*	Trace	0·5	2·2	3·5
	Clacton-on-Sea	pcbc	bcc	53	62	1	-	3·8	2·7
	Dovercourt ...	bcltrcc	bc	49	64	3	-	3·4	3·6
	Lowestoft ...	bbccr	cirer	48	61	Trace	2	3·1	5·3
	Skegness ...	bc	bc	50	62	-	-	5·2	2·5
	Mablethorpe...	bccbc	bbc	46	62	-	-	5·6	2·2
	Cleethorpes ...	tlR	bc	44	61	1	13	5·0	5·2
3	Leamington S.	co	cpbc	48	63	1	0·4	4·0	4·7
4	Cheltenham†	cbc	cp.bc	47	62	7	Trace	4·6	3·1
5	Bath	cbc	bctlr	50	62	4	2	5·6	7·4
	Weymouth ...	bc pc	Ptlhrc	52	62	2	10	4·8	3·4
	Jersey ...	rcbc	bcpc	52	60	8	1	6·7	3·3
	Torquay ...	crpq	cpbcqw	51	60	0·5	2	7·3	1·4
	Falmouth ...	crvhq	b	51	62	4	1	10·7	3·7
	Penzance ...	bc	bcpb	51	63	2	Trace	10·7	4·6
	St. Ives ...	b	b	53	61	1	-	10·1	3·8
	Bude... ...	bcpc	cbc	51	59	4	-	4·0	3·9
	Ilfracombe ...	carou	rrcbc	52	61	1	4	1·9	6·1
6	Aberystwyth	prcbc	prbc	49	60	7	3	4·2	7·3
7	Llandudno ...	cbc	b	47	61	3	-	6·6	8·8
	Colwyn Bay...	cbcc	bcb	47	61	3	-	8·0	9·7
	Rhyl	cgbc	bcb	46	62	2	-	6·8	7·2
8	Wallasey ...	rcbc	bcp.c	49	62	1	1	4·9	8·5
	Southport ...	cbcb	tlrbc	48	67	15	Trace	7·0	10·0
	Blackpool ...	c	bccpc	48	64	7	0·3	5·6	11·3
	Morecambe ...	cbc	bctir	50	63	8	3	2·5	8·7
9	Ilkley... ...	bco	ortbc	46	62	1	5	3·7	8·4
	Harrogate ...	cbcc	th Rb	46	60	2	3	2·5	8·1
10	Berwick-on-T.	b	b	40	58	-	-	12·4	8·7
11	Dunbar ...	bc	bc	41	60	0·5	-	11·0	7·9
12	Troon... ...	bbc	bbcb	43	62	-	-	12·1	3·8
	Douglas ...	b	b	48	61	8	-	10·4	9·4

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 25th July, 1939.

Districts.	Forecasts
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands	Light to moderate west to northwest wind, backing southwest tomorrow; fair; average temperature.
5 S.W. England 6 South Wales ...	Moderate west to northwest wind, backing southwest and freshening tomorrow; mainly fair today, rain or drizzle tomorrow with local coast fog; average temperature.
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland 12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Moderate west to northwest wind, backing southwest to south and freshening tomorrow; occasional rain locally today but also bright intervals; general rain tomorrow; cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate west to northwest wind backing south and freshening tomorrow; bright intervals and local showers today, rain tomorrow; average temperature.

L.D.

GENERAL INFERENCE.

A depression centred near Shetland is filling up and an associated trough of low pressure over northwest districts is moving slowly east-southeast. Weather will be mainly fair in the South and East. There will be local rain in the North and West today and more general rain tomorrow.

FURTHER OUTLOOK.

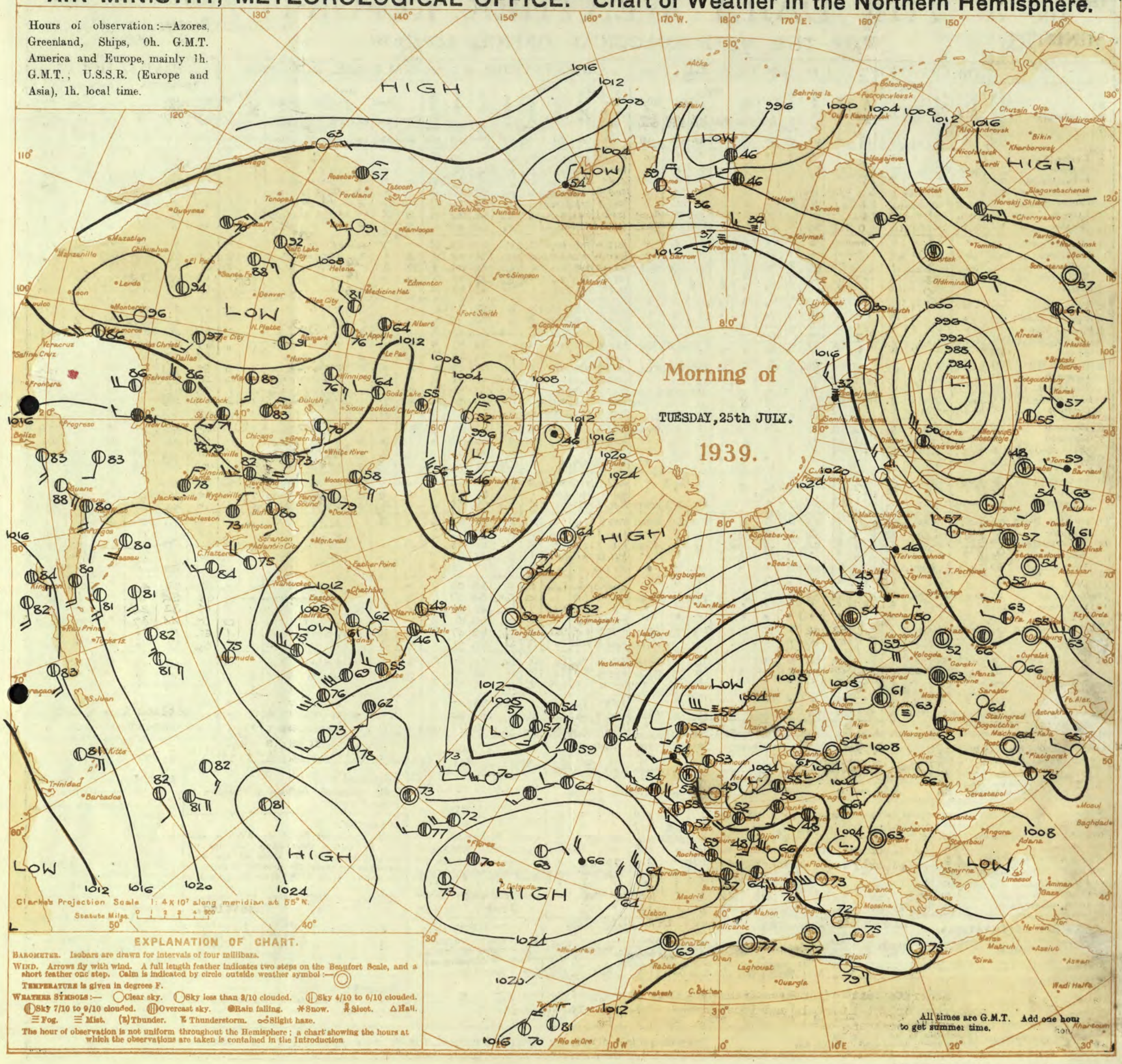
Unsettled.

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.



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, 25th July, 1939.
No. 28369

OBSERVATIONS at 1 hr. G.M.T. 25th July, 1939.

District	Stations	Height above M.S.L. in feet	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	Humid. % (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Croydon	217	1010·7	+18	W	2	Zo	49	97	6	—	—	—	0	0	—
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1012·7	+2	WNW	3	b	48	85	7	—	—	—	0	0	—
	Calshot (Sthmtn.)	8	1011·8	+20	WNW	3	Zo	51	85	6	—	—	—	0	0	—
	Lympne	346	1009·0	+14	NW	3	Zo	49	97	6	5	—	—	9	9	4000
	Manston	154	1007·5	+10	NW'W	5	c/r	55	85	6	5	—	—	7·8	7·8	7200
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1006·7	+6	NNW	4	c	57	85	7	8	—	—	10	10	2500
	Mildenhall	19	1008·9	+14	NW	3	b	50	97	7	—	1	—	0	1	—
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1014·0	+10	WNW	2	bc	56	92	8	5	—	—	4·6	4·6	1500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1012·5	+14	NNW	4	bc	56	85	8	5	—	—	4·6	4·6	4000
	Plymouth	82	1014·6	+10	W	1	b	52	97	8	—	—	—	0	0	—
	The Lizard	240	1015·4	+12	—	0	bc	54	97	8	8	—	—	2·3	2·3	2500
	Scilly (St. Mary's)	163	1015·7	+10	NW'W	4	bc	55	97	8	4	4	—	1	2·3	2500
	Guernsey	175	1014·2	+16	NW	4	b	54	85	9	—	—	—	0	0	—
6	Pembroke	142	1013·6	+8	W	3	b	56	92	8	7	—	—	1	1	4000
7	Holyhead	26	1011·9	+10	—	0	bc	53	92	8	—	4	—	0	2·3	—
	Chester (Sealand)	16	1012·1	+12	WNW	2	b	48	85	7	—	—	—	0	0	—
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1009·4	+12	NNW	4	bc	55	92	7	—	2	—	0	2·3	—
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1009·6	+6	W	2	bc	53	85	6	2	—	—	2·3	2·3	2500
11	St. Abbs Head	280	1008·8	+6	W	2	bc	52	75	9	7	6	—	2·3	2·3	2500
	Leuchars	36	1008·4	+4	SW	2	b	49	85	8	4	4	—	1	1	5700
12	Renfrew (Abbots I.)	19	1010·5	+8	W'S	2	b	46	92	9	4	—	—	Tr	Tr	4000
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1011·1	+14	NNW	3	b	54	85	8	—	—	—	0	0	—
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1008·3	+4	SSW	3	c	55	92	7	5	2	—	7·8	10	4000
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1006·8	+2	WSW	1	r₀r₀	53	92	7	5	2	—	7·8	10	1500
16	Lerwick	156	1002·7	+2	W	6	F	52	97	1	—	—	—	10	10	<150
17	Blacksod Point	18	1013·3	0	W	3	c	54	85	8	8	—	—	10	10	800
18	Malin Head	84	1011·0	0	SW	3	d₀d₀	54	97	6	9	—	—	9	9	1500
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1016·4	+2	WNW	3	o	54	97	7	5	—	—	10	10	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

OBSERVATIONS at 7 hr. G.M.T. 25th July, 1939.

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)	1013·9	+14	NW'W	2	Zo	53	75	6	—	—	1	0	Tr	—	1	*
	Croydon	1013·4	+12	NW'W	1	Zo	51	92	6	—	—	—	0	0	—	1	*
	S. Farnborough	1014·1	+14	W'N	2	b	51	85	8	—	—	1	0	1	—	1	*
	Boscombe Down	1014·8	0	WNW	2	Zo	53	85	6	—	—	3	0	2·3	—	1	*
	Calshot (Sthmtn.)	1014·4	+12	WNW	3	b	55	75	7	—	—	4	0	Tr	—	1	1
	Lympne	1012·1	+22	NNW	3	Zo	50	85	5	5	3	—	4·6	7·8	1500	0	§2
	Manston	1011·1	+24	NW'W	5	Zo	54	85	6	5	7	8	2·3	9+	800	1	*
2	Shoeburyness	1012·0	+18	NW	3	c	53	85	6	—	7	8	0	9	—	1	*
	Felixstowe	1010·8	+20	NNW	4	Zo	54	92	6	5	1	8	4·6	9+	2500	1	3
	Gorleston	1010·0	+18	NNW	4	c	59	85	7	8	3	—	4·6	7·8	2500	1	2
	Mildenhall	1012·2	+18	NW'W	2	Zo	48	97	5	—	—	9	0	7·8	—	1	*
	Cranwell	1012·7	+12	WNW	1	m	52	85	4	—	—	—	0	0	—	1	*
3	Birmingham	1014·3	+10	WNW	2	b	52	75	6	—	—	5	0	Tr	—	1	*
	Upper Heyford	1014·0	+14	SW	3	b	53	75	8	—	5	—	0	1	—	1	*
4	Ross-on-Wye	1014·2	+8	SW	2	bc	53	85	8	—	—	2	0	2·3	—	1	*
5	Hartland Point	1014·8	+10	W	3	c	57	92	8	8	2	—	7·8	9	1500	0	*
	Bristol	1014·7	+8	—	0	bc	54	85	7	—	—	4	0	2·3	—	1	
	Portland Bill	1015·7	+16	NW	3	bc	57	92	8	5	—	—	4·6	4·6	4000	1	3
	Plymouth	1015·9	+6	—	0	bcf	51	97	2	5	—	—	2·3	2·3	2500	1	0
	The Lizard	1016·7	+12	W	1	bc	56	97	7	8	7	—	4·6	4·6	2500	0	1
	Scilly (St. Mary's)	1016·5	+4	NW'W	3	c	56	97	8	8	7	—	4·6	9+	2500	1	2
	Guernsey	1016·0	+20	WNW	2	b	57	85	8	—	4	—	0	1	—	1	4
6	Pembroke	1014·8	+4	W'N	2	c	56	85	9	8	—	—	9	9	2500	1	1
7	Holyhead	1012·9	+8	W	3	c	56	85	8	7	3	6	1	9	2500	1	1
	Chester (Sealand)	1013·4	+6	—	0	c	52	85	7	5	3	2	2·3	7·8	4000	1	*
8	Manchester	1013·2	+10	S	1	m/f	49	97	4	—	—	1	0	Tr	—	1	*
10	Spurn Head	1012·1	+16	NW'W	3	bc	55	85	6	—	—	5	0	2·3	—	1	2
	Catterick	1011·9	+12	ENE	1	bc	51	85	7	4	—	4	0	4·6	—	1	*
	Tynemouth	1011·4	+10	W	4	bc	53	85	6	8	4	2	2·3	4·6	2500	6	1
11	St. Abbs Head	1010·8	+10	—	0	b	54	65	9	—	4	—	0	Tr	—	0	1
	Leuchars	1010·1	+10	SW	2	b	52	85	7	—	—	4	0	1	—	0	
12	Renfrew (Abbots I.)	1011·3	+4	—	0	Zo	50	92	6	5	—	—	9+	9+	5700	0	*
	Eskdalemuir	1011·8	+4	SE'S	1	b	47	85	7	1	—	—	Tr	Tr	1500	1	*
	Point of Ayre	1012·0	0	W	2	b	57	85	8	7	—	—	1	1	4000	0	1
13A	Tiree	1009·3	+8	WSW	2	c	55	92	7	5	—	—	9	9	1500	1	2
13B	Stornoway	1008·2	+8	—	0	r₀r₀	54	97	6	5	2	—	9	10	1500	1	0
15	Dalwhinnie	*	+4	NNE	1	bc	46	85	8	4	6	5	1	4·6	4000	0	*
	Aberdeen	1009·1	+2	—	0	bc	55	85	6	—	—	2	0	4·6	—	0	0
	Wick	1007·5	+4	SSW	2	r₀r₀	53	97	7	5	2	—	7·8	10	1500	1	1
16	Lerwick	1004·8	+20	W	3	m	52	97	4	8	3	—	7·8	9+	450	1	*
17	Blacksod Point	1012·6	0	W	3	bc	55	85	8	3	—	—	4·6	4·6	220	1	3
18	Malin Head	1010·9	+4	W	3	c	54	92	7	9	—	—	9	9	1500	0	2
	Aldergrove	1011·8	+2	W'S	2	r₀r₀	53	97	5	6	—	—	10	10	450	1	*
19	Birr Castle	1013·6	+4	W	1	c/pr	54	85	8	5	7	—	4·6	7·8	2500	1	*
20	Valentia Obsy. †	1016·2	0	W	2	c	55	85	8	5	—	—	9	9+	1500	1	2
	Roches Point	1015·5	+2	NNW	2	c	55	97	8	5	7	—	2·3	9	1500	1	1

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 24th Hrs. (36)
1	London (Kew)	61	49	42	1	—	4·2
	Croydon	63	46	44	3	0·5	3·7
	S. Farnborough	62	44	36	1	Tr	3·7
	Boscombe Down	58	44	39	2	—	7·7
	Calshot (Sthmtn.)	61	49	46	0·5	—	6·5
	Lympne	60	48	47	4	0·3	2·2
	Manston	60	51	50	6	4	1·9
2	Shoeburyness	65	50	47	0·4	0·4	2·5
	Felixstowe	63	51	50	0·4	1	2·8
	Gorleston	61	55	53	0·6	0·4	3·5
	Mildenhall	63	46	44	6	Tr	3·5
	Cranwell	62	45	43	0·1	—	3·5
3	Birmingham	60	47	42	4	—	2·1
	Upper Heyford	61	46	40	0·1	2	*
4	Ross-on-Wye	60	41	37	0·5	—	6·4
5	Hartland Point	57	55	50	1	—	5·2
	Bristol	62	43	33	1	—	5·8
	Portland Bill	59	54	*	15	—	12·2
	Plymouth	61	47	43	Tr	—	~~11·3~~
	The Lizard	60	52	*	—	—	13·8
	Scilly (St. Mary's)	63	53	*	2	0·2	10·8
	Guernsey	59	52	48	0·2	—	8·1
6	Pembroke	60	52	*	—	—	7·8
7	Holyhead	59	49	43	Tr	—	11·1
	Chester (Sealand)	61	44	37	3	Tr	5·8
8	Manchester	63	38	35	Tr	0·5	2·5
10	Spurn Head	63	53	*	2	Tr	5·5
	Catterick	64	41	36	0·2	0	9·7
	Tynemouth	58	49	46	—	—	13·9
11	St. Abbs Head	59	51	*	—	—	*
	Leuchars	62	45	37	—	—	15·1
12	Renfrew (Abbots I.)	66	40	35	—	—	12·9
	Eskdalemuir	64	35	29	—	—	11·8
	Point of Ayre	64	45	*	—	—	12·9
13A	Tiree	61	52	48	—	0·4	14·7
13B	Stornoway	62	54	*	—	1	8·3
15	Dalwhinnie	64	33	25	—	—	6·3
	Aberdeen	59	44	39	—	—	10·2
	Wick	62	51	*	—	3	*
16	Lerwick	56	51	*	0·2	3	5·0
17	Blacksod Point	61	49	*	*	0·5	*
18	Malin Head	59	50	*	—	4	13·8
	Aldergrove	63	43	40	—	4	14·0
19	Birr Castle	67	52	45	—	Tr	10·7
20	Valentia Obsy. †	60	54	52	2	0·2	3·3
	Roches Point	64	54	*	8	0·3	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon	Weather Night	Temperature Day Max. °F.	Temperature Night Min. °F.	Min. on Grass °F.	Rainfall Day mm.	Rainfall Night mm.	Sunshine to Sunset hrs. Yesterday	Humidity 15h. G.M.T. % Yesterday	Humidity 9h. G.M.T. % To-day	Visibility 9h.
Kew	18	cpr₀m₀c	ctpr₀c	cbcbwm₀	61	49	42	1	—	4·2	*	*	8
Croydon	217	cpr₀bccy	cp₀Ptlr₀	cr₀PRq m₀	63	61	44	3	0·5	3·7	*	*	7
Greenwich (Royal Observatory)	149	c	cit₀	crcbz₀	62	48	41	1	0·5	2·7	66	61	6
City (Bunhill Row)	—	*	*	*	*	*	*	*	*	2·2	*	*	*
Westminster (St. James' Park)	27	*	*	*	63	49	44	10		2·9	75	63	*
Regents Pk. (Botanic Gardens)‡	168	*	*	*	65	51	45	9	1	2·5	75	75	*
Camden Square	110	bc	c	*	61	49	46	3	1	*	*	95	*
Kensington	80	bc	cv	*	62	49	42	8	1	3·5	73 (At 18h)	66	*
Hampstead Observatory	450	bcortl	or	bcp	59	45	43	8	1	3·2	*	73	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 25th

SOUTH KENSINGTON.

Max.	Time.	Min.	Time
<0·3 the whole period			

KEW OBSERVATORY.

Max.	Time.	Min.	Time.
0·1	0-7h 25th	<0·1	9-10h 24th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 24th July, 1939. Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 25th July, 1939. 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	1006·6	*	*	c	52	1012·3	WNW	4	bc	55	59	50	11	2
Brussels														
Berlin	1005·3	NNE	1	c	68	1004·2	NNW	3	r₀r₀	57	75	57	8	—
Zürich	1001·5	SE	3	c	48						68		—	
Rome	1011·7	WSW	4	bc	75	1011·3	WSW	4	bc	75	*	*	--	—

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Wednesday, 26th July, 1939.
No. 28370

OBSERVATIONS at 13h. G.M.T. 25th July, 1939.

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	°F. Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Amount Low 0–10 (12)	Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1015·3	+6	NW	2	c	67	45	8	1	-	6	4-6	9	4000
	Croydon	1015·2	+10	W	3	c	68	45	8	1	4	5	2-3	7-8	4000
	S. Farnborough	1015·4	+6	WSW	3	c	68	45	8	1	-	6	4-6	9	4000
	Boscombe Down	1015·8	+2	W	3	c	67	65	8	1	3	7	2-3	9	4000
	Calshot (Soton.)	1016·1	+8	SW'S	4	c	68	55	8	7	7	6	4-6	7-8	2500
	Lympne ...	1014·8	+10	NW'N	3	c	66	55	7	2	-	6	4-6	7-8	2500
	Manston ...	1014·4	+12	NNW	3	c	67	55	7	1	-	6	2-3	7-8	2500
2	Shoeburyness ...	1014·6	+8	WNW	3	c	69	45	7	2	-	5	4-6	7-8	4000
	Felixstowe ...	1013·9	+10	NNW	4	bc	71	45	8	2	-	5	4-6	4-6	2500
	Gorleston ...	1013·4	+10	N'W	4	bc	65	55	7	1	4	-	1	2-3	2500
	Mildenhall ...	1013·9	+2	NW	3	bc	66	65	7	8	-	-	4-6	4-6	4000
	Cranwell ...	1013·4	0	WSW	1	z_0	67	55	6	2	-	-	4-6	4-6	4000
3	Birmingham ...	1014·3	+2	SSW	2	bc	65	45	8	1	-	4	4-6	4-6	4000
	Upper Heyford	1015·1	+4	W	2	bc	68	45	8	1	4	1	2-3	4-6	4000
4	Ross-on-Wye ...	1014·6	+4	SW	3	c	64	65	8	8	6	9	7-8	9	4000
5	Hartland Point	1016·1	0	W	3	c	58	85	8	8	7	-	7-8	9+	1500
	Bristol	1015·9	+6	W	4	bc	69	75	8	8	3	-	2-3	4-6	2500
	Portland Bill ...	1016·3	+6	WSW	3	c	59	85	8	5	7	-	7-8	10	4000
	Plymouth ...	1017·0	+4	SW'W	4	c	59	75	8	8	3	-	9	9+	4000
	The Lizard ...	1018·2	+6	WSW	2	c	59	85	8	8	2	-	7-8	9+	1500
	Scilly (St. Mary's)	1017·9	+4	W'N	3	c/pr	57	97	8	8	7	-	4-6	10	2500
	Guernsey ...	1018·6	+12	W'N	3	c	61	75	8	8	3	8	4-6	7-8	1500
6	Pembroke ...	1016·1	+4	W	3	c	58	85	9	8	6	-	7-8	9+	1500
7	Holyhead ...	1014·5	+10	WSW	2	ir_0	56	85	8	6	2	-	9+	10	1500
	Chester (Sealand)	1014·3	+4	NW'N	3	c	63	65	8	2	7	-	7-8	9	2500
8	Manchester ...	1013·8	+2	WNW	2	bc	65	55	8	1	3	1	2-3	4-6	4000
10	Spurn Head ...	1014·0	+8	ESE	2	bc	63	65	7	2	8	-	2-3	2-3	5700
	Catterick ...	1012·5	+2	SW'W	2	bc	68	45	8	1	-	-	2-3	2-3	4000
	Tynemouth ...	1012·5	+6	SE	3	bc	61	75	7	2	6	-	2-3	4-6	1500
11	St. Abbs Head...	1011·8	+4	-	0	bc	58	75	8	2	6	-	2-3	4-6	2500
	Leuchars ...	1011·2	+8	SW	4	bc	67	65	7	8	7	1	4-6	4-6	1500
12	Renfrew (AbbotsI.)	1012·8	+6	SW	3	c	61	75	8	5	3	-	7-8	9+	2500
	Eskdalemuir ...	1012·2	+2	SW'W	3	c	61	75	8	8	-	-	7-8	7-8	2500
	Point of Ayre ...	1013·6	+6	NW'W	3	id_0	60	85	7	8	3	-	7-8	9+	1500
13A	Tiree	1011·5	+8	W	2	id_0	57	92	8	5	-	-	7-8	7-8	1500
13B	Stornoway ...	1010·2	+10	W	2	c	60	85	7	5	2	-	7-8	10	2500
15	Dalwhinnie ...	1011·8	+8	SSW	2	c	58	75	8	4	6	-	7-8	10	4000
	Aberdeen ...	1010·2	+4	S	3	bc	64	55	8	1	-	6	Tr	4-6	2500
	Wick	1010·0	+12	S	1	r_0r_0	54	97	7	5	2	-	9	10	1500
16	Lerwick... ...	1007·0	+8	WSW	4	c	53	97	7	5	1	-	7-8	10	220
17	Blacksod Point...	1013·6	+6	W	3	c	60	85	9	3	-	-	7-8	7-8	1500
18	Malin Head ...	1012·6	+8	W	3	c	59	75	8	8	5	-	2-3	7-8	5700
	Aldergrove ...	1013·1	+6	SW'W	1	c	59	75	9	8	-	-	9+	9+	4000
19	Birr Castle ...	1014·0	+2	W'S	3	c/pr	57	85	8	8	7	-	4-6	9	1500
20	Valentia Obsy.†	1017·1	+6	W	3	bc	59	75	8	8	4	-	2-3	2-3	1500
	Roches Point ...	1015·3	-2	WSW	3	c	59	92	9	3	-	-	7-8	7-8	1500

OBSERVATIONS at 18h. G.M.T. 25th July, 1939. 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)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)	Weather 7h.–13h. 25th (37)	Weather 13h.–18h. 25th (38)	Weather 18h 25th to 1h. 26th (39)	Weather 1h.–7h. 26th (40)
London (Kew)	1015·4	+4	WSW	4	c	64	65	8	5	-	-	7-8	7-8	2500	0	*	bbccy	cbcy	bcyc	$coddm_0$
Croydon	1015·3	+2	SW'W	3	c	66	65	8	9	4	9	4-6	7-8	4000	1	*	mbc	cbcy	cir_0cw	$cwir_0m_0$
S. Farnborough	1015·7	+8	WSW	3	c	62	65	8	8	3	-	7-8	9+	4000	0	*	bbcc⊕y	cbcyc	lcrbcqrc	$cbccm_0$
Boscombe Down	1016·2	+4	-	0	pr	58	85	6	9	7	-	7-8	10	1500	1	*	bcm_0bcc	$ccir_0c$	cRRHRF	$Fjfcm_0$
Calshot (Soton.)	1016·4	+2	SW'S	4	c	61	85	8	5	3	-	9	9+	5700	1	2	bbccy	cyc	cidrrc	cbc
Lympne	1015·7	+2	WSW	3	bc	65	65	8	4	-	2	4-6	4-6	5700	0	§3	m_0bbc	bcy	bc	bccdrr
Manston	1015·4	+4	W'N	1	bc	66	45	7	1	-	5	2-3	4-6	2500	1	*	$cbcbm_0$	bccbcy	bcycbc	cirrr
Shoeburyness	1015·1	+2	WSW	1	bc	67	55	8	4	4	9	2-3	4-6	4000	0	*	cm_0bcby	bcy	bcyc	cp_0cp
Felixstowe	1015·3	+8	SE'E	3	bc	64	65	8	7	-	9	4-6	4-6	2500	0	1	cm_0bcy	bcybc	bcc	$ccir_0c$
Gorleston	1019·6	+4	NE'N	2	bc	61	65	7	-	-	1	0	2-3	-	0	2	cyq	bcyq	bcb	b,c
Mildenhall	1014·6	+6	WSW	2	c	68	55	7	8	3	6	4-6	7-8	5700	0	*	bcm_0bc	bcy	$cycm_0pr$	$cprcm_0$
Cranwell	1013·8	+4	SSW	1	c	65	65	7	5	9	-	7-8	9+	4000	0	*	$bbcm_0z_0y$	bcz_0bcy	$cbcm_0$	$bccirm_0c$
Birmingham	1015·1	+4	WSW	2	r_0r_0	57	85	6	9	2	-	7-8	10	2500	1	*	bbc	$bcor_0$	r_0ro	om
Upper Heyford	1015·4	+6	W	3	c	61	65	8	5	7	-	7-8	9+	4000	1	*	bbc	bcyc	cr_0cRR	$crrr_0c$
Ross-on-Wye	1015·0	+4	W	2	c	59	65	7	5	-	-	10	10	2500	1	*	bccyc	ccp_0c	P_0clbcc	c
Hartland Point	1015·3	-4	WSW	3	c	59	85	8	8	4	-	7-8	9	1500	0	2	cr_0	cp_0	crbc	bc
Bristol	1016·0	0	WSW	3	pr	59	85	8	8	7	-	4-6	9+	2500	1	*	bccbc	$bccpr_0$	cprRr	cbcwc
Portland Bill	1015·8	-4	WSW	4	c	59	92	8	2	4	-	4-6	9	4000	1	4	bcc	c	oprbc	bc
Plymouth	1016·5	-6	WSW	3	c	58	97	8	8	7	-	9	9+	2500	1	1	bFbcc	c	pr_0,rrb	bbwb
The Lizard	1017·5	-6	WSW	3	id_0	56	97	4	5	-	-	10	10	800	1	1	c	cidm	cprbc	bc
Scilly (St. Mary's)	1017·1	-6	W	2	o/d	57	97	6	5	-	-	10	10	800	1	2	cp_0c	cp_0odm	odbcb	bbcw
Guernsey	1017·8	-8	WSW	3	ir_0	58	85	8	8	2	-	7-8	10	450	1	3	bbcc	crrir	irdr	crbc
Pembroke	1015·9	-2	WNW	2	c/r	57	85	8	8	6	-	7-8	9+	1500	1	1	c	rrc	bc	bbc
Holyhead	1014·3	-2	SW	3	bc	59	75	8	7	4	8	2-3	4-6	2500	1	2	$pr_0d_0r_0c$	cr_0r_0bc	bc,bw	bwm_0
Chester (Sealand)	1014·8	+2	NNW	3	ir_0	57	85	7	9	2	-	9	10	1500	1	*	bcm_0	cpr_0r_0	$cr_0r_0rrir_0f_0b$	b_0ebcwf_0b
Manchester	1014·7	+8	W'N	2	ir_0	58	85	8	5	7	-	7-8	9+	2500	1	*	bmm_0cbc	$bcyccr_0$	cir_0c	c,Fbcfw
Spurn Head	1014·0	0	SE'S	4	c	61	75	8	-	9	4	0	9	-	0	3	bc	bcc	cbcw	cm_0
Catterick	1013·0	+4	W'S	2	c	67	55	8	1	-	5	4-6	7-8	2500	1	*	bcyb	bcy	ybcw	bwbcw
Tynemouth	1012·9	+4	SE	2	bc	59	75	6	8	-	-	4-6	4-6	1500	0	1	bc	bc	bc	bcc
St. Abbs Head	1012·0	0	SSE	2	bc	61	65	9	3	4	-	4-6	4-6	2500	0	1	bbc	bc	cbc	bcb
Leuchars	1011·3	+2	W	3	bc	66	65	9	2	9	4	Tr	4-6	4000	0	*	bwbcybc	bcybc	bcvbcbw	bccw
Renfrew (AbbotsI.)	1013·0	+2	W	3	c	63	65	9	8	6	4	4-6	7-8	2500	0	*	cwm_0id_0c	cpr_0c	bccbc	$bccwm_0$
Eskdalemuir	1012·9	+8	SW	4	bc	60	75	8	8	-	-	4-6	4-6	2500	0	*	bbcc	cbc	$bcpr_0F$	oFFbc
Point of Ayre	1014·0	+2	WNW	3	c	59	75	8	2	7	-	Tr	9+	4000	0	1	bbcc	id_0c	bcb	b
Tiree	1012·7	+4	WSW	2	c	57	85	8	5	-	-	9	9	2500	0	2	cid	c	c	cid_0
Stornoway	1011·2	0	W	3	c	59	85	8	5	7	-	7-8	10	4000	1	2	$r_0r_0d_0c$	c	c	cd_0
Dalwhinnie	1012·6	+4	N	3	c	58	75	7	5	6	-	7-8	10	2500	0	*	c	c	•	cir
Aberdeen	1011·2	+8	N	1	c	60	85	7	5	6	8	9	9+	1500	0	0	bc	bcc	cz_0bc	bcbcw
Wick	1010·9	+4	SE	1	d_0d_0	54	97	3	-	-	-	10	10	<150	1	1	cr_0r_0	r_0rdd	fd_0om	od_0F
Lerwick	1009·0	+10	SWW	2	c/r	52	97	7	5	2	-	7-8	10	220	1	*	cifc	cir	crrif	ofeir
Blacksod Point	1014·9	+4	W	3	c	59	92	8	4	-	-	9+	9+	800	0	3	cpr_0bc	cbc	r_0pc	c
Malin Head	1013·9	+4	W	3	bc	59	85	8	4	8	-	2-3	4-6	5700	0	3	cpr_0bc	cbc	bcc	cpr_0c
Aldergrove	1013·4	-2	-	0	c	62	65	9	8	-	-	9+	9+	5700	1	*	cr_0r_0c	cbcc	cbc	$befcm_0$
Birr Castle	1014·4	0	W'N	2	bc	62	65	8	2	-	-	4-6	4-6	1500	1	*	cpr	cprbc	bc	bcc
Valentia Obsy.†	1017·6	+2	WNW	3	c	58	75	8	5	-	1	9	9	1500	1	2	cprbc	bcc	c	c
Roches Point	1015·9	+6	NNW	4	bc	61	75	8	8	-	-	4-6	4-6	2500	1	2	cpr_0c	cp_0bc	pr_0bw	bcw

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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

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

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

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

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.*

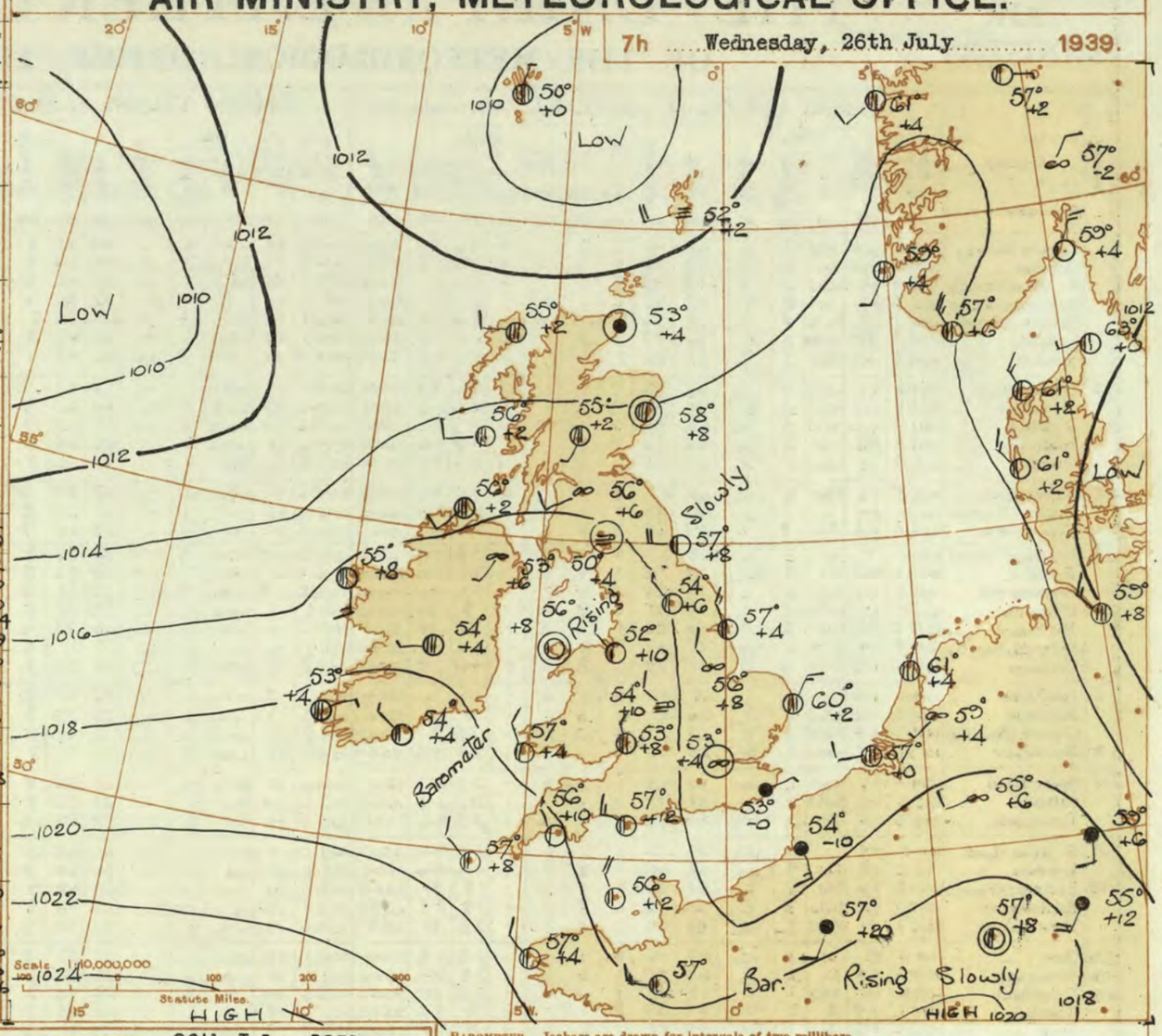
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 25th July 1939

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 24th to 9h. 25th	Temperature. (°F) Max. 9h.—17h. 25th	Rainfall. (mm.) Night. 17h. 24th to 9h. 25th	Rainfall. (mm.) Day. 9h.—17h. 25th	Sunshine. (Hrs.) Sunrise to 17h. 25th	Sunshine. (Hrs.) Sunrise to Sunset. 24th
1	Tunbridge W.	b	bbc	47	72	0·5	-	11·3	1·1
	Bournemouth	bbcc	cbcc	48	68	-	-	6·9	8·3
	Ventnor ...	b	bbcc	56	66	-	-	8·8	7·3
	Southsea ...	b	bcc	50	70	-	-	9·1	5·5
	Bognor Regis	b	bbcc	48	69	-	-	10·3	5·5
	Littlehampton	b	bbc	49	70	0·1	-	11·1	5·5
	Worthing ...	b	b	50	70	2	-	11·6	5·2
	Brighton ...	b	bbcb	50	70	Trace	-	10·9	3·3
	Eastbourne† ...	bby	byb	51	69	0·3	-	11·3	3·2
	Hastings† ...	bbc	bc	48	72	Trace	-	10·6	2·4
	Folkestone ...	bbc	bc	51	70	4	-	8·0	4·3
	Dover ...	bcb	b	52	72	3	-	9·1	4·7
	Deal	bcbb	bbcb	51	71	3	-	9·3	1·6
	Ramsgate ...	bc	bc	52	70	8	-	9·5	1·5
	Margate ...	bc	b	53	69	5	-	9·0	2·7
2	Southend ...	b	b	50	76	0·3	-	9·8	2·2
	Clacton-on-Sea	bcb	bbc	51	71	6	-	7·9	3·8
	Dovercourt ...	ocbc	bc	51	71	5	-	9·4	3·4
	Lowestoft ...	cbcb	b	53	68	1	-	10·2	3·1
	Skegness ...	bcb	bbc	50	64	-	-	10·0	5·9
	Mablethorpe...	bbcb	bbcv	49	65	-	-	10·1	7·1
	Cleethorpes ...	bc	bc	49	69	-	-	11·5	5·5
3	Leamington S.	bbc	bcc	44	70	-	-	10·1	4·2
4	Cheltenham†	bbc	bcco	45	69	-	.	7·1	5·9
5	Bath	bcc	bcc	45	68	-	-	6·5	7·2
	Weymouth ...	b	cb	49	65	0·5	-	8·4	5·0
	Jersey ...	bc	bcc	53	64	-	-	11·4	7·0
	Torquay ...	obcc	c	50	65	-	-	5·2	10·4
	Falmouth ...	cvber	r.cod	53	62	-	0·2	3·3	12·9
	Penzance ...	cp	cp	54	62	-	1	0·2	12·6
	St. Ives ...	o	c	55	63	-	0·5	1·1	11·8
	Bude... ...	c	cpc	47	62	-	0·6	1·1	6·6
	Ilfracombe ...	bcc	ocbc	53	62	-	-	3·0	4·6
6	Aberystwyth	cbcc	cprc	49	61	-	1	2·1	7·4
7	Llandudno ...	bcc	rcc	46	62	-	3	5·5	9·2
	Colwyn Bay...	bcc	cpcrc	48	63	-	1	6·4	10·8
	Rhyl	obc	bcopr	41	62	-	0·4	5·8	9·6
8	Wallasey ...	bc	bccr.	51	69	Trace	Trace	8·6	5·9
	Southport ...	bc	bccbc	51	65	0·5	-	9·9	7·8
	Blackpool ...	bcc	bcc	54	62	Trace	-	9·0	5·8
	Morecambe ...	bcb	bbc	47	63	0·5	-	10·5	2·6
9	Ilkley... ...	b	b	45	70	-	-	11·6	5·0
	Harrogate ...	b	bbc	47	68	-	-	12·2	4·7
10	Berwick-on-T.	b	bcb	45	66	-	-	12·0	14·7
11	Dunbar ...	bc	bc	46	65	-	-	12·1	13·6
12	Troon... ...	ocobc	bcbbc	49	61	-	-	5·5	14·6
	Douglas ...	bcp	b	52	59	-	Trace	3·7	13·6

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 26th July, 1939.

Districts.	Forecasts
1 S.E. England 2 E. England ... 3 E. Midlands ...	Light to moderate northwest wind, backing southwest; bright intervals and local thundery showers at first; cloudy later with perhaps slight rain; average temperature.
4 W. Midlands ... 5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Light to moderate west wind backing southwest; fair at first, slight rain or drizzle later; local coast fog later; average temperature.
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 Orkney and Shetland	Light to moderate southwest wind; cloudy, local rain or drizzle; local coast fog; average temperature. Light or moderate variable or southwest wind; cloudy, local rain or drizzle; local coast fog; average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Light to moderate southwest wind; cloudy, local rain or drizzle; local coast fog; rather warm and close.

GENERAL INFERENCE.

A shallow depression over Southeast England is moving east-southeast and a feeble trough of low pressure west of Ireland is moving east. Weather will be rather unsettled but there will be bright intervals in most districts.

FURTHER OUTLOOK.

Rather unsettled but bright intervals; becoming warmer.

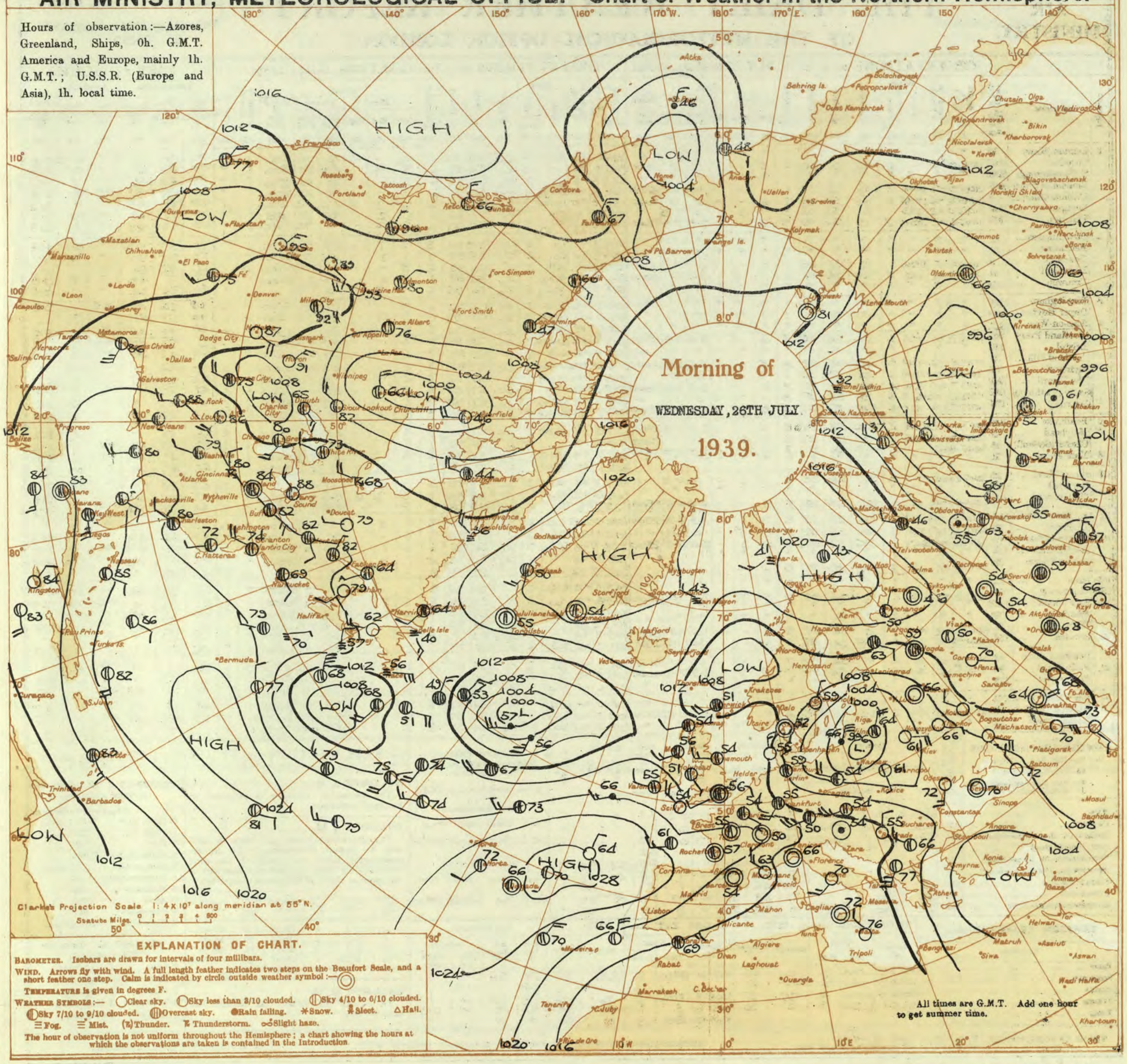
Forecasts issued at 0930 G.M.T.

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, 26th July, 1939

No. 28370

OBSERVATIONS at 1 hr. G.M.T. 26th July, 1939

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	1015.8	-4	-	0	c	56	85	7	5	-	-	9	9	1500
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1015.9	-2	WNW	2	F+	52	97	1	-	-	-	10	10	450
	Calshot (Sthmtn.)	8	1015.6	-6	NNW	2	c/r	56	85	7	6	-	-	9	9	1500
	Lympne ...	346	1017.0	+2	WS	1	c	53	97	8	-	3	2	0	7-8	-
	Manston ...	154	1016.5	-2	SSW	2	c	55	92	7	5	-	-	7-8	7-8	7200
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1015.5	0	WSW	1	b	57	85	7	5	-	-	1	1	2500
	Mildenhall ...	19	1015.9	+2	WS	2	or	55	92	6	5	-	-	10	10	4000
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1016.7	+4	NW	3	bc	55	85	9	4	-	-	4-6	4-6	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1015.3	-6	NNW	3	bc	56	92	8	5	-	-	4-6	4-6	4000
	Plymouth ...	82	1016.5	0	NW	2	b	53	92	7	-	-	-	0	0	-
	The Lizard ...	240	1017.7	+4	WN	4	bc	55	92	8	8	-	-	2-3	2-3	2500
	Scilly (St. Mary's)	163	1018.4	+4	NWN	4	b	54	97	8	-	-	-	0	0	-
	Guernsey ...	175	1015.7	-16	W	4	c/r	57	97	6	8	7	-	4-6	7-8	1500
6	Pembroke ...	142	1017.0	+2	WNW	2	bc	55	92	8	8	-	-	2-3	2-3	2500
7	Holyhead ...	26	1015.9	+4	SSE	1	b	51	97	8	5	4	-	1	1	2500
	Chester (Sealand)	16	1016.4	+2	-	0	b/f	51	97	7	5	-	-	2-3	2-3	4000
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1014.8	+4	-	0	bc	58	85	7	-	2	-	0	2-3	-
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1014.8	+4	W	3	bc	54	85	7	8	-	-	4-6	4-6	1500
11	St. Abbs Head	280	1014.0	+6	WNW	2	bc	57	75	8	7	+	-	2-3	2-3	2500
	Leuchars ...	36	1013.6	+6	SW	2	b	52	92	9	-	5	-	0	Tr	-
12	Renfrew (Abbots I.)	19	1015.2	+4	SWS	1	bc	52	97	7	4	3	-	2-3	4-6	2500
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre...	30	1015.6	+2	W	2	b	49	92	8	-	-	-	0	0	-
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1013.2	+6	WSW	2	c	54	92	8	5	7	-	7-8	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1012.1	+2	NW	1	o	54	97	5	5	-	-	10	10	800
16	Lerwick ...	156	1010.9	+6	SW	4	o/f	51	97	5	5	-	-	10	10	220
17	Blacksod Point	18	1016.6	+4	W	4	c	54	97	7	5	-	-	10	10	450
18	Malin Head ...	84	1015.5	+2	SW	3	c	56	92	7	4	7	-	2-3	7-8	4000
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1019.2	+2	WNW	2	bc	55	97	8	5	-	-	4-6	4-6	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

OBSERVATIONS at 7 hr. G.M.T. 26th July, 1939

District	Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
1	London (Kew)	1015.6	+4	N'W	2	dodo	55	92	5	5	-	-	10	10	800	1	*
	Croydon ...	1015.4	+4	-	0	Zo	53	87	6	5	2	-	4-6	9+	1500	1	*
	S. Farnborough	1015.8	+8	W	2	Zo	52	97	6	5	-	-	10	10	800	1	*
	Boscombe Down	1016.8	+10	NWN	3	o/f	51	97	6	5	-	-	10	10	800	1	*
	Calshot (Sthmtn.)	1016.0	+10	NW'W	3	bc	54	92	6	6	3	-	4-6	4-6	2200	1	§ 1
	Lympne ...	1015.5	0	E'N	1	rr	53	92	6	6	2	-	7-8	10	450	1	§ 1
	Manston ...	1015.5	+2	S'W	1	rr	56	92	6	6	2	-	5	9+	1500	1	*
2	Shoeburyness ...	1015.3	+2	S	2	pr	58	92	8	8	7	-	7-8	9+	1500	1	*
	Felixstowe ...	1015.5	+4	NE	2	c/r	55	92	7	7	7	-	4-6	9+	4000	1	1
	Gorleston ...	1016.4	+2	NE	3	c	60	85	6	5	-	-	9+	9+	2500	0	1
	Mildenhall ...	1015.8	+10	NWN	1	Zo	56	97	6	5	3	-	4-6	9	4000	1	*
	Cranwell ...	1015.7	+8	NW	2	Zo	56	85	6	-	3	-	0	7-8	-	1	*
3	Birmingham ...	1016.7	+10	NW	2	m	54	92	4	5	-	-	10	10	2500	1	*
	Upper Heyford	1016.3	+6	NW'N	3	Zo	53	97	5	5	3	-	2-3	7-8	4500	1	*
4	Ross-on-Wye	1016.9	+8	NNW	2	c	53	92	8	5	-	-	10	10	1500	1	*
5	Hartland Point	1017.7	+8	WNW	2	bc	58	85	9	8	-	-	4-6	4-6	1500	1	2
	Bristol ...	1017.0	+6	W'N	2	c	53	92	7	5	-	-	9+	9+	2500	1	*
	Portland Bill ...	1016.8	+12	WNW	3	bc	57	85	8	5	-	-	2-3	2-3	4000	1	2
	Plymouth ...	1018.1	+10	NW	1	b	56	92	8	2	-	-	Tr	Tr	4000	1	1
	The Lizard ...	1019.3	+10	W'N	3	bc	57	92	8	8	-	-	2-3	2-3	2500	0	1
	Scilly (St. Mary's)	1019.3	+8	NW'W	2	bc	57	97	8	4	-	-	2-3	2-3	2500	1	1
	Guernsey ...	1017.7	+12	NNW	4	bc	56	85	8	8	1	-	Tr	2-3	1500	1	3
6	Pembroke ...	1017.8	+4	NW'N	2	bc	57	92	8	5	-	-	2-3	2-3	2500	1	2
7	Holyhead ...	1016.8	+8	-	0	b	56	97	7	5	-	-	Tr	Tr	4000	1	0
	Chester (Sealand)	1017.3	+10	NW'W	1	bc	52	85	8	5	-	-	2-3	2-3	4000	1	*
8	Manchester ...	1016.9	+10	WSW	1	m/f	51	97	4	5	3	-	1	4-6	7200	1	*
10	Spurn Head ...	1015.7	+4	NW'N	3	bc	57	92	5	-	8	-	0	4-6	-	0	2
	Catterick ...	1016.3	+6	NW	1	bc	54	85	7	5	3	8	2-3	4-6	4000	1	*
	Tynemouth ...	1015.7	+8	W	4	bc	57	85	6	2	-	-	4-6	4-6	1500	0	1
11	St. Abbs Head	1014.9	+8	WSW	2	bc	55	85	8	4	4	-	1	2-3	2500	0	2
	Leuchars ...	1014.7	+10	SW	3	c	56	92	7	5	-	-	9+	9+	2500	0	*
12	Renfrew (Abbots I.)	1015.8	+6	SW'W	2	Zo	56	85	6	5	7	-	7-8	10	2500	0	*
	Eskdalemuir ...	1013.9	+8	-	0	c	58	92	7	5	-	6	4-6	7-8	1500	0	1
	Point of Ayre...	1012.8	+4	-	0	dodo	53	97	4	-	-	-	10	10	4150	1	0
13A	Tiree	1014.1	+2	WSW	2	c	56	92	8	5	-	-	9	9	2500	1	1
13B	Stornoway ...	1013.8	+2	W	2	c	55	92	8	5	7	-	7-8	10	2500	1	1
15	Dalwhinnie ...	1014.9	+2	SSW	1	c	55	85	6	4	6	-	7-8	10	2500	0	*
	Aberdeen ...	1013.9	+8	-	0	c	58	92	7	5	-	6	4-6	7-8	1500	0	1
	Wick ...	1012.8	+4	-	0	dodo	53	97	4	-	-	-	10	10	4150	1	0
16	Lerwick ...	1011.0	+2	SW'W	4	F	52	97	1	-	-	-	10	10	4150	1	*
17	Blacksod Point	1016.9	+8	SSE	3	c	55	85	8	8	-	-	10	10	220	0	1
18	Malin Head ...	1015.5	+2	SW	2	c	56	92	7	9	-	-	9+	9+	1500	0	2
	Aldergrove ...	1016.6	+6	SW'S	1	Zo	53	97	5	5	-	-	10	10	1500	1	"
19	Birr Castle ...	1017.6	+4	WSW	1	c	54	97	8	5	-	-	9+	9+	2500	1	*
20	Valentia Obsy. †	1019.1	+4	ENE	1	c	53	92	9	5	-	-	9+	9+	2500	1	2
	Roches Point	1018.8	+4	NW	1	bc	54	97	8	5	-	-	4-6	4-6	2500	1	1

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 25th Hrs. (36)
1	London (Kew)	70	55	51	-	0.2	11.1
	Croydon ...	70	53	51	-	0.1	11.6
	S. Farnborough	71	48	46	-	1	9.6
	Boscombe Down	67	48	*	0.1	16	6.8
	Calshot (Sthmtn.)	69	51	49	-	1	8.2
	Lympne ...	69	53	45	-	10	9.9
	Manston ...	69	53	48	-	1	10.8
2	Shoeburyness ...	71	53	45	-	0.1	8.8
	Felixstowe ...	73	54	52	-	Tr	10.1
	Gorleston ...	66	52	54	-	-	12.7
	Mildenhall ...	71	51	48	-	2	9.5
	Cranwell ...	70	54	52	-	1	10.1
3	Birmingham ...	69	52	48	0.2	1	9.8
	Upper Heyford	70	51	51	-	7	*
4	Ross-on-Wye	67	48	46	Tr	5	6.9
5	Hartland Point	61	53	45	0.5	3	1.3
	Bristol ...	65	47	40	0.1	4	6.3
	Portland Bill ...	60	54	*	-	0.1	*
	Plymouth ...	62	50	47	-	4	2.1
	The Lizard ...	61	52	*	1	1	2.4
	Scilly (St. Mary's)	61	53	*	1	Tr	1.2
	Guernsey ...	64	52	49	1	2	2.7
6	Pembroke ...	60	51	*	1	4	2.2
7	Holyhead ...	62	48	41	0.5	Tr	5.2
	Chester (Sealand)	65	47	44	0.1	3	5.8
8	Manchester ...	67	45	41	Tr	0.1	8.1
10	Spurn Head ...	63	54	*	-	Tr	12.1
	Catterick ...	69	44	40	-	-	13.0
	Tynemouth ...	66	51	48	-	-	12.7
11	St. Abbs Head	62	51	*	-	-	*
	Leuchars ...	69	50	45	-	-	13.3
12	Renfrew (Abbots I.)	66	50	43	Tr	-	1.8
	Eskdalemuir ...	65	45	43	-	0.2	10.7
	Point of Ayre...	63	46	*	Tr	-	5.5
13A	Tiree	60	55	54	0.1	Tr	0.0
13B	Stornoway ...	61	53	*	0.2	Tr	0.0
15	Dalwhinnie ...	60	52	51	-	0.2	1.7
	Aberdeen ...	66	51	45	-	-	8.2
	Wick ...	56	53	*	7	1	*
16	Lerwick ...	56	51	*	1	5	0.0
17	Blacksod Point	62	53	*	Tr	0.3	*
18	Malin Head ...	61	53	*	Tr	0.2	8.3
	Aldergrove ...	66	44	41	0.6	-	1.5
19	Birr Castle ...	63	51	45	3	-	6.7
20	Valentia Obsy. †	59	48	43	0.3	-	6.6
	Roches Point	62	51	*	0.1	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.	Humidity 15h. G.M.T. % (Yesterday)	Humidity 9h. G.M.T. % (To-day)	Visibility 9h.
KEW ...	18	bbcy	cbcy	bcycodo	70	55	51	-	0.2	11.1	*	*	6
CROYDON ...	217	mbc	cbcy	cirrwirm	70	53	51	-	0.1	11.6	*	*	5
GREENWICH (Royal Observatory) ...	149	bbcy	bcy	cbcrc	72	54	47	-	0.3	11.5			6
CITY (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	11.2	*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*	72	55	54	1		11.9	53	88	*
REGENTS PK. (Botanic Gardens)‡ ...	168	*	*	*	71	54	52	-	1	11.8	49	88	*
CAMDEN SQUARE ...	110	b	bc	*	72	56	53	-	1	*	*	85	*
KENSINGTON ...	80	bc	bc	*	72	55	52	-	0.3	11.9	45 At 18h	90	*
HAMPSTEAD OBSERVATORY ...	450	bc	bc	cor	70	53	52	-	5	11.2	*	95	*

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 26th

SOUTH KENSINGTON. Max.	Time.	Min.	Time.
<0.3	the	whole	period

KEW OBSERVATORY. Max.	Time.	Min.	Time.
<0.1	the	whole	period

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 25th July, 1939 Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 26th July, 1939 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 ...	1017.8	NW	3	c	66	1017.0	SSW	2	r.r.	57	70	54	-	1
BRUSSELS ...	1014.3	NW	3	c/r	61						66		0.3	
BERLIN ...	1006.6	NNW	4	r.r.	57	1008.2	NNW	4	Zo	66	70	55	6	1
ZURICH ...	1015.1	WSW	5	c	50	1019.0	S	1	c	54	55	50	0.1	0.3
ROME ...						1014.2	ENE	3	b	66	*	*		—

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Thursday, 27th July, 1939.

No. 28371.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	°F. Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)...	1016·7	+6	-	0	c/pr	64	65	6	8	-	-	9+	9+	1500
	Croydon	1016·6	+6	-	0	c	61	85	6	3	7	-	2-3	9+	4000
	S. Farnborough	1017·0	+6	W'N	2	c/pr	61	75	6	8	-	-	9+	9+	4000
	Boscombe Down	1017·5	+4	NW	2	bc	65	65	7	1	-	-	4-6	4-6	4000
	Calshot (Soton.)	1017·3	+6	WNW	3	c	65	65	7	8	-	-	7-8	7-8	2500
	Lympne ...	1016·6	+10	N'W	3	tr	55	92	6	6	7	-	7-8	10	1500
	Manston ...	1016·2	+6	NE'N	3	c/r	58	85	6	5	2	-	9+	10	800
2	Shoeburyness ...	1016·3	+6	ENE	2	c	64	75	8	8	7	-	2-3	10	2500
	Felixstowe ...	1016·6	+10	SE	2	c	62	85	8	5	7	-	7-8	10	1500
	Gorleston ...	1016·0	+4	ENE	2	c	62	85	6	5	3	-	4-6	9	2500
	Mildenhall ...	1016·7	+4	NW	1	c	61	75	7	6	7	-	4-6	9+	4000
	Cranwell ...	1016·2	0	SW	1	c	67	55	7	8	3	-	7-8	7-8	4000
3	Birmingham ...	1017·2	0	NW	2	bc	63	65	7	7	-	-	4-6	4-6	2500
	Upper Heyford	1016·8	+2	NW'N	2	z₀	66	65	6	8	-	-	7-8	7-8	1500
4	Ross-on-Wye ...	1017·3	0	NW	2	c	65	65	8	7	-	-	9	9	4000
5	Hartland Point	1019·2	+4	W	3	bc	60	85	9	7	-	-	4-6	4-6	1500
	Bristol	1018·2	+2	WNW	3	c	63	65	8	8	-	-	7-8	7-8	2500
	Portland Bill ...	1017·9	+10	W	3	bc	62	85	8	5	-	-	4-6	4-6	4000
	Plymouth ...	1018·9	0	SW'W	3	bc	63	75	9	7	-	-	4-6	4-6	4000
	The Lizard ...	1020·5	+4	WSW	3	bc	62	85	8	8	4	-	2-3	4-6	2500
	Scilly (St. Mary's)	1020·3	+2	SW'W	3	bc	63	85	8	2	3	-	1	4-6	4000
	Guernsey ...	1019·7	+6	WNW	3	bc	61	75	8	2	-	-	2-3	2-3	1500
6	Pembroke ...	1019·5	+4	WNW	2	bc	59	85	8	8	4	-	1	2-3	2500
7	Holyhead ...	1017·9	+6	WNW	2	bc	61	75	9	7	-	-	2-3	2-3	2500
	Chester (Sealand)	1017·8	+2	NW'N	3	bc	66	65	8	2	-	-	2-3	2-3	2500
8	Manchester ...	1017·0	+2	W'N	3	bc	66	65	8	1	-	-	4-6	4-6	4000
10	Spurn Head ...	1016·4	0	NE'N	2	bc	67	75	6	2	-	-	2-3	2-3	5700
	Catterick ...	1015·8	-4	S'W	1	c	69	55	8	8	3	-	7-8	7-8	1500
	Tynemouth ...	1015·9	0	SE	2	bc	60	85	6	-	2	-	4-6	4-6	1500
11	St. Abbs Head...	1015·0	0	NW	2	c	60	75	9	7	6	-	7-8	7-8	2500
	Leuchars ...	1015·0	+2	SW	4	c	63	75	7	8	2	-	7-8	9+	1500
12	Renfrew (Abbotsl.)	1016·2	0	WSW	3	c	61	75	8	5	7	-	7-8	10	1500
	Eskdalemuir ...	1015·7	0	WSW	4	c	61	65	8	5	-	-	9+	9+	2500
	Point of Ayre ...	1017·3	0	NWW	3	fs	62	85	7	2	-	-	2-3	2-3	4000
13A	Tiree	1015·1	+2	SW'W	3	c/d	58	92	7	5	-	-	9	9	1500
13B	Stornoway ...	1013·9	0	S	4	c	56	92	7	5	-	-	10	10	1500
15	Dalwhinnie ...	1015·1	+2	W	2	c	59	75	6	4	6	-	7-8	10	2500
	Aberdeen ...	1014·0	0	E	1	c	62	75	7	7	-	-	9+	9+	4000
	Wick	1013·6	+4	NE	2	d₀d₀	55	97	5	5	2	-	7-8	10	450
16	Lerwick... ...	1011·2	0	SW	4	c	55	95	8	5	7	-	7-8	9	1500
17	Blacksod Point...	1016·9	-4	WSW	3	bc	62	65	9	2	3	-	4-6	4-6	4000
18	Malin Head ...	1016·3	+2	W	4	c/d	57	92	7	6	7	-	4-6	9	1500
	Aldergrove ...	1016·6	-2	SW'S	2	c	62	75	8	8	-	-	10	10	4000
19	Birr Castle ...	1017·7	0	WSW	1	c	61	75	8	5	1	-	7-8	10	2500
20	Valentia Obsy.†	1018·3	-2	S	4	c	62	85	8	5	-	-	10	10	1500
	Roches Point ...	1019·4	+2	WSW	3	bc	62	85	9	7	3	8	2-3	4-6	2500

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

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)	1017·4	+2	WNW	1	c	69	55	7	8	-	-	7-8	7-8	2500	0	*
Croydon	1017·2	0	-	0	z₀	66	75	6	4	6	3	1	2-3	5700	1	*
S. Farnborough	1017·6	+4	SW	1	z₀	65	65	6	1	3	-	Tr	2-3	4000	0	*
Boscombe Down	1018·1	+2	NW'N	2	b	65	55	8	1	-	-	1	1	2500	0	*
Calshot (Soton.)	1017·8	+4	WNW	3	c	68	55	8	8	3	-	7-8	9	2500	1	1
Lympne	1017·6	+10	NNE	2	bc	60	65	9	2	6	-	2-3	2-3	4000	1	§ 2
Manston	1017·5	+10	N'E	1	bc	61	75	8	2	6	1	2-3	4-6	2500	1	*
Shoeburyness	1017·4	+4	ESE	2	bc	63	85	9	5	-	-	4-6	4-6	5700	0	*
Felixstowe	1017·1	+2	SSE	2	c	63	75	8	5	4	1	7-8	7-8	4000	0	1
Gorleston	1016·6	+2	ESE	1	bc	64	75	7	1	-	1	1	2-3	2500	0	1
Mildenhall	1017·0	0	W	1	z₀	67	65	6	-	3	-	0	9	-	1	*
Cranwell	1016·5	0	SSE	1	z₀	65	75	6	1	-	-	Tr	Tr	4000	0	*
Birmingham	1017·4	0	NNW	2	bc	65	55	8	8	-	-	4-6	4-6	2500	1	*
Upper Heyford	1017·5	+6	NW	2	bc	65	65	7	2	-	1	4-6	4-6	2500	1	*
Ross-on-Wye	1017·4	+8	SW'W	2	bc	68	55	8	1	-	-	2-3	2-3	4000	1	*
Hartland Point	1019·3	-2	WNW	3	bc	61	85	9	7	-	-	4-6	4-6	1500	0	2
Bristol	1018·9	+4	W	4	bc	61	75	8	2	3	-	1	4-6	2500	1	*
Portland Bill	1018·4	+8	W	3	bc	60	92	8	5	-	-	4-6	4-6	4000	1	2
Plymouth	1019·2	+2	WSW	3	bc	69	65	9	1	-	1	2-3	2-3	4000	0	1
The Lizard	1020·5	0	WSW	1	c	61	85	8	8	7	-	4-6	7-8	2500	0	1
Scilly (St. Mary's)	1019·7	-9	SSW	2	cjp	61	92	7	5	2	-	4-6	9+	1500	0	1
Guernsey	1020·2	+2	W'S	3	b	60	85	9	1	-	-	1	1	2500	1	2
Pembroke	1019·6	0	W'N	2	bc	59	85	8	2	7	1	1	4-6	4000	0	1
Holyhead	1018·2	-2	SSW	2	b	61	65	9	1	4	-	Tr	1	2500	1	2
Chester (Sealand)	1018·0	0	NW'W	2	bc	62	65	8	8	-	-	4-6	4-6	4000	0	*
Manchester	1017·6	+4	WNW	4	b	64	55	8	-	-	5	0	1	-	0	*
Spurn Head	1016·6	0	SE	2	bc	63	85	5	-	9	-	0	4-6	-	0	2
Catterick	1015·9	+2	W'N	2	c	69	55	8	8	3	-	4-6	7-8	1500	0	*
Tynemouth	1015·7	0	S	2	c	61	75	6	8	-	-	7-8	7-8	2500	0	1
St. Abbs Head	1015·4	0	S	2	c	59	85	9	8	6	-	7-8	9	2500	0	1
Leuchars	1015·0	0	WSW	2	c	62	75	8	8	3	-	9	9+	4000	0	*
Renfrew (Abbotsl.)	1016·2	-2	W'N	2	c	62	85	8	5	7	-	7-8	9+	1500	0	*
Eskdalemuir	1016·0	0	WSW	3	pr	59	75	9	5	-	-	9+	9+	1500	1	*
Point of Ayre	1017·2	-2	W'N	3	bc	65	65	8	1	-	5	1	2-3	4000	0	2
Tiree	1015·4	0	SW'W	3	c	58	92	8	5	-	-	9+	9+	2500	c	2
Stornoway	1014·9	+8	WSW	3	c	57	85	7	5	2	-	7-8	10	1500	1	1
Dalwhinnie	1015·7	+2	SSW	2	ir	57	85	6	4	6	-	7-8	10	1500	1	*
Aberdeen	1013·9	0	-	0	c	62	85	6	5	-	-	9+	9+	4000	0	1
Wick	1013·9	0	SE	2	d₀d₀	54	97	5	5	2	-	7-8	10	800	1	1
Lerwick	1012·3	+12	SW	4	o/d	53	97	7	5	-	-	10	10	450	1	*
Blacksod Point	1016·0	-6	SW	3	c	59	85	8	5	-	-	10	10	800	0	2
Malin Head	1016·5	0	W	2	c	57	85	7	8	-	-	7-8	7-8	2500	0	2
Aldergrove	1016·6	0	SW'W	2	c	61	75	9	5	-	-	9+	9+	4000	1	*
Birr Castle	1016·6	-8	WSW	2	c	66	75	8	5	1	-	7-8	10	1500	1	*
Valentia Obsy.†	1017·2	-4	S	4	c	64	85	8	5	-	-	10	10	450	1	2
Roches Point	1018·5	-4	WSW	3	c	60	97	8	5	-	-	9+	9+	1500	1	1

PAST 24 HOURS.

Stations	Weather 7h.—13h. 26th (37)	Weather 13h.—18h. 26th (38)	Weather 18h 26th to 1h. 27th (39)	Weather 1h.—7h. 27th (40)
London (Kew)	cm₀pr₀v	cz₀bcy	bcybw	bbcwm
Croydon	ir₀mpr₀	cm₀bcz₀	bcz₀bwm	bwm
S. Farnborough	cd₀ir₀c	cz₀ybz	bz₀bc	bcwcmF
Boscombe Down	cm₀bc	bc	bybbm	bcmwf
Calshot (Soton.)	bcm₀c	ccy	cybcbw	bcbc
Lympne	crrir₀	circmc	bcbbw	bwbm₀
Manston	crrcm₀	cm₀bc	bcbw	wm₀
Shoeburyness	cpcp₀c	cbcv	bcvb	bbwm
Felixstowe	cm₀cyc	cbc	bcb	bmw
Gorleston	c	cbc	bcb	bcz
Mildenhall	cm₀rrc	ccz₀	czbm₀	bmw
Cranwell	cbcz₀y	cypr₀c,bz₀	cm	bcbm₀
Birmingham	mbc	bc	bccbc	bc
Upper Heyford	cm₀z₀	cbcz₀yc	bc	bcbcmifm
Ross-on-Wye	c	bcyby	bcb	bmwcm
Hartland Point	bc	bc	bc	bcedc
Bristol	cbcc	cbc	bbc	bbcw
Portland Bill	bc	bc	bc	bcc
Plymouth	bbc	bcb	bbcbcw	codddd
The Lizard	bc	bcc	cm	cmdff
Scilly (St. Mary's)	bccbc	bcc	cd₀ffe	offe
Guernsey	cbc	bcc	bw₀	bwc
Pembroke	bc	bc	ccw	cwrof
Holyhead	bwbc	bc,b	bc	bccv
Chester (Sealand)	bwbcb	bybc	bcbmbw	bbcwmm
Manchester	bcmbbc	bcb	bybw	bwbfm
Spurn Head	cbc	bcz₀	bc	bcz
Catterick	bcbcy	cy	ybcbw	fcw
Tynemouth	bc	bcc	cbc	b
St. Abbs Head	bcc	bcc	c	cbc
Leuchars	cwc	c	c	cwm₀
Renfrew (Abbotsl.)	cwm₀c	c	cir₀cm₀	cmw
Eskdalemuir	bcc	cpr₀	cir₀c₀	c
Point of Ayre	bbcf	fbc	bcc	bbcc
Tiree	cid	crd₀	c	c
Stornoway	cid₀	cpr₀	cpr₀	cpc
Dalwhinnie	c	c	c	c
Aberdeen	bcc	ccz₀	cid₀c	cr₀c
Wick	od₀df	cd₀d₀	d₀d₀c	c₀
Lerwick	oFc	coid	oidc	cir
Blacksod Point	bc	ir₀c	idr	idr
Malin Head	cid₀c	c	c	c
Aldergrove	m₀cpr₀c	c	c	gdcdm
Birr Castle	c	c	c	corr
Valentia Obsy.†	c	c	igirrr	rrirrid
Roches Point	bc	bcc	ddffe	RRffe

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.

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.*

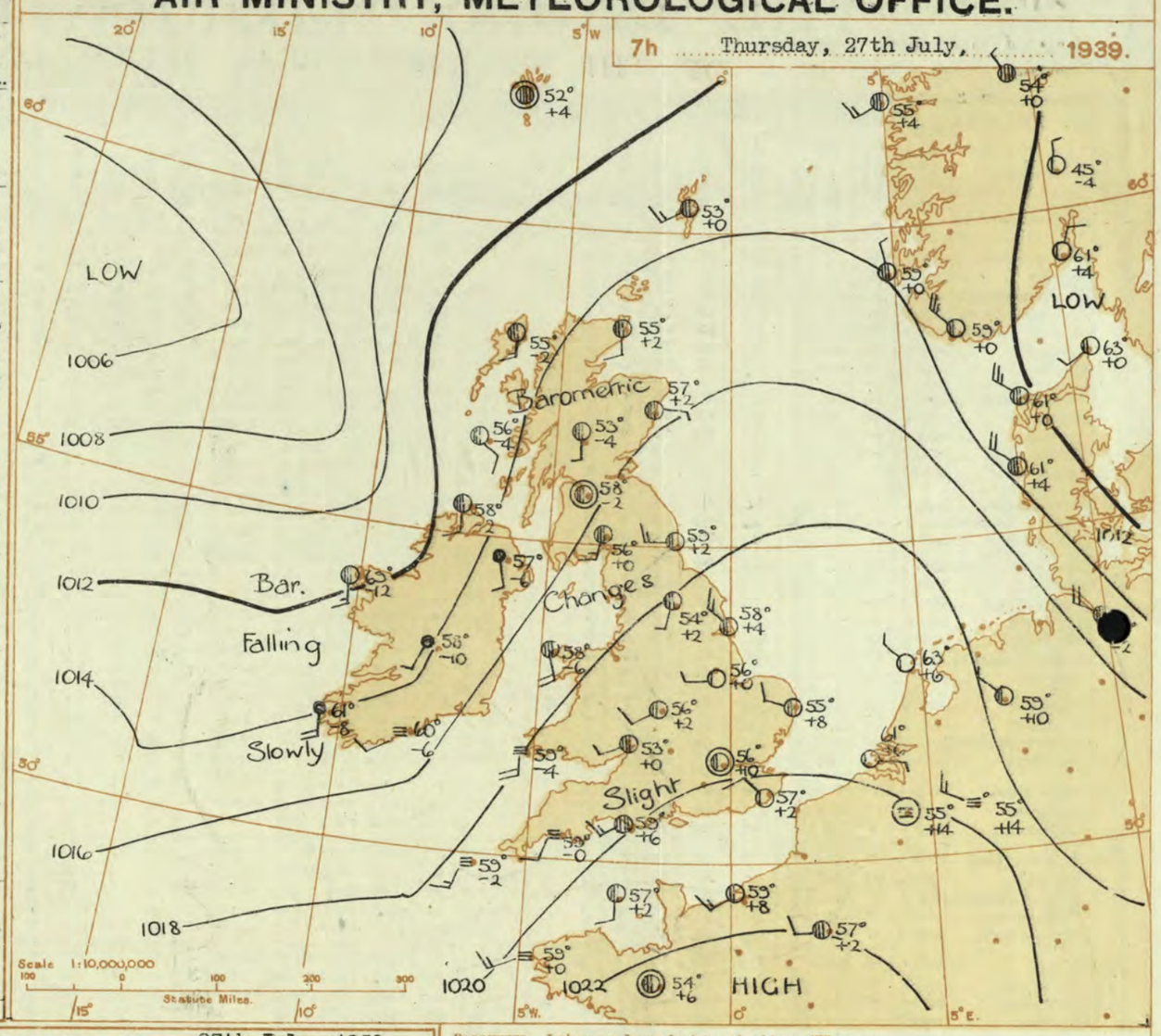
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for July 26th. 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h.25th. to 9h.26th.	Temperature. (°F) Max. 9h.-17h. 26th.	Rainfall. (mm.) Night. 17h.25th. to 9h.26th.	Rainfall. (mm.) Day. 9h.-17h. 26th.	Sunshine. (Hrs.) Sunrise to 17h. 26th.	Sunshine. (Hrs.) Sunrise to Sunset. 25th.
1	Tunbridge W.	orobc	bco	54	64	12	Trace	2·3	12·9
	Bournemouth	bbc	beb	52	68	2	-	7·3	6·9
	Ventnor ...	robc	cbbc	52	67	1	-	8·9	9·1
	Southsea ...	cbc	bc	51	71	2	-	5·9	9·1
	Bognor Regis	bbcc	bcc	52	67	3	-	5·7	10·3
	Littlehampton	bc	bcpcc	53	66	13	Trace	4·9	11·1
	Worthing ...	bc	bcc	53	65	21	-	5·2	11·7
	Brighton ...	bcc	cpbcc	53	65	27	Trace	3·3	11·5
	Eastbourne† ...	cp.c	c	54	66	11	0·2	1·8	12·4
	Hastings† ...	croc	cvbcc	54	66	8	Trace	0·4	12·2
	Folkestone ...	m.oro	oirc	54	65	19	3	1·7	9·3
	Dover ...	or	ocbc	55	69	7	2	1·7	10·0
	Deal	rr	cbc	55	65	5	3	2·9	10·6
	Ramsgate ...	r	bc	56	61	5	10	2·5	11·0
	Margate ...	cr	cbc	55	62	2	6	2·7	10·8
2	Southend ...	ocbco	ocp.b	55	68	1	Trace	2·2	10·8
	Clacton-on-Sea	c	cbc	55	69	-	-	1·8	9·1
	Dovercourt ...	oc	bc	54	66	-	-	2·8	10·4
	Lowestoft ...	cbcc	cbcb	52	68	-	-	2·7	11·9
	Skegness ...	bz.b	bbcc	54	68	-	-	7·1	10·3
	Mablethorpe...	b	bbc	52	66	-	-	8·1	10·7
	Cleethorpes ...	bc	bc	51	65	-	-	10·2	12·1
3	Leamington S.	cbc	bc	54	69	1	-	5·8	10·1
4	Cheltenham†	cbc	bcb	52	70	2	-	4·9	7·1
5	Bath	bcc	cbc	51	68	7	-	3·5	6·5
	Weymouth ...	b	bc	50	67	1	-	8·4	8·8
	Jersey ...	rcbc	bc	56	64	3	-	11·9	*
	Torquay ...	bv	buy	51	68	3	-	11·3	6·3
	Falmouth ...	b	b	52	68	0·1	-	10·7	3·3
	Penzance ...	b	bbc	51	68	0·5	-	10·3	0·2
	St. Ives ...	b	b	55	69	2	-	11·6	1·1
	Bude... ...	bc	bc	47	62	1	-	11·4	1·1
	Ilfracombe ...	rrcbc	bbc	55	63	-	-	12·2	3·6
6	Aberystwyth	cbc	bc	50	64	-	-	11·3	2·8
7	Llandudno ...	b	b	49	66	0·7	-	11·7	5·5
	Colwyn Bay...	bbcb	bcb	49	65	2	-	11·5	6·4
	Rhyl	b	b	47	65	4	-	11·5	5·8
3	Wallasey ...	bcb	b	54	66	Trace	-	10·1	8·6
	Southport ...	bcbv	bv	50	68	-	-	9·8	9·9
	Blackpool ...	b	bv	55	66	-	-	11·8	9·0
	Morecambe ...	b	b	54	65	-	-	12·2	11·5
9	Ilkley... ...	b	b	48	72	-	-	9·2	12·4
	Harrogate ...	b	bcb	49	70	-	-	6·1	12·9
10	Berwick-on-T.	bbc	cbc	49	66	-	-	8·8	13·0
11	Dunbar ...	bc	bc	50	65	-	-	6·6	14·1
12	Troon... ...	occoc	coc	51	60	-	-	0·1	7·2
	Douglas ...	b	b	46	65	-	-	11·7	5·3

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.-9h.

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 July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Light to moderate south to southwest wind; fair at first, cloudy later with occasional rain or drizzle; local coast fog; rather warm and close.
5 S.W. England 6 South Wales ... 7 North Wales ... 8 N.W. England	Moderate southwest to south winds, freshening to-morrow; cloudy, occasional rain or drizzle, coast fog; average temperature.
9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Moderate south to southwest wind; cloudy, occasional rain or drizzle; rather warm and close.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B. N.W. Scotland.	Moderate south to southwest wind; cloudy, occasional rain or drizzle; local coast fog; average temperature.
14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	As 9 - 11.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate southwest to south wind, freshening tomorrow, strong locally on coasts; cloudy, occasional rain or drizzle; local coast fog; rather warm and close.

GENERAL INFERENCE.

A wedge of high pressure over England and a trough of low pressure over Ireland are moving slowly east. A deepening depression in Mid-Atlantic is moving east-north-east. There will be occasional rain or drizzle in all western districts. Weather will be fair at first in eastern districts, but there will be occasional rain or drizzle later.

FURTHER OUTLOOK.

Unsettled.

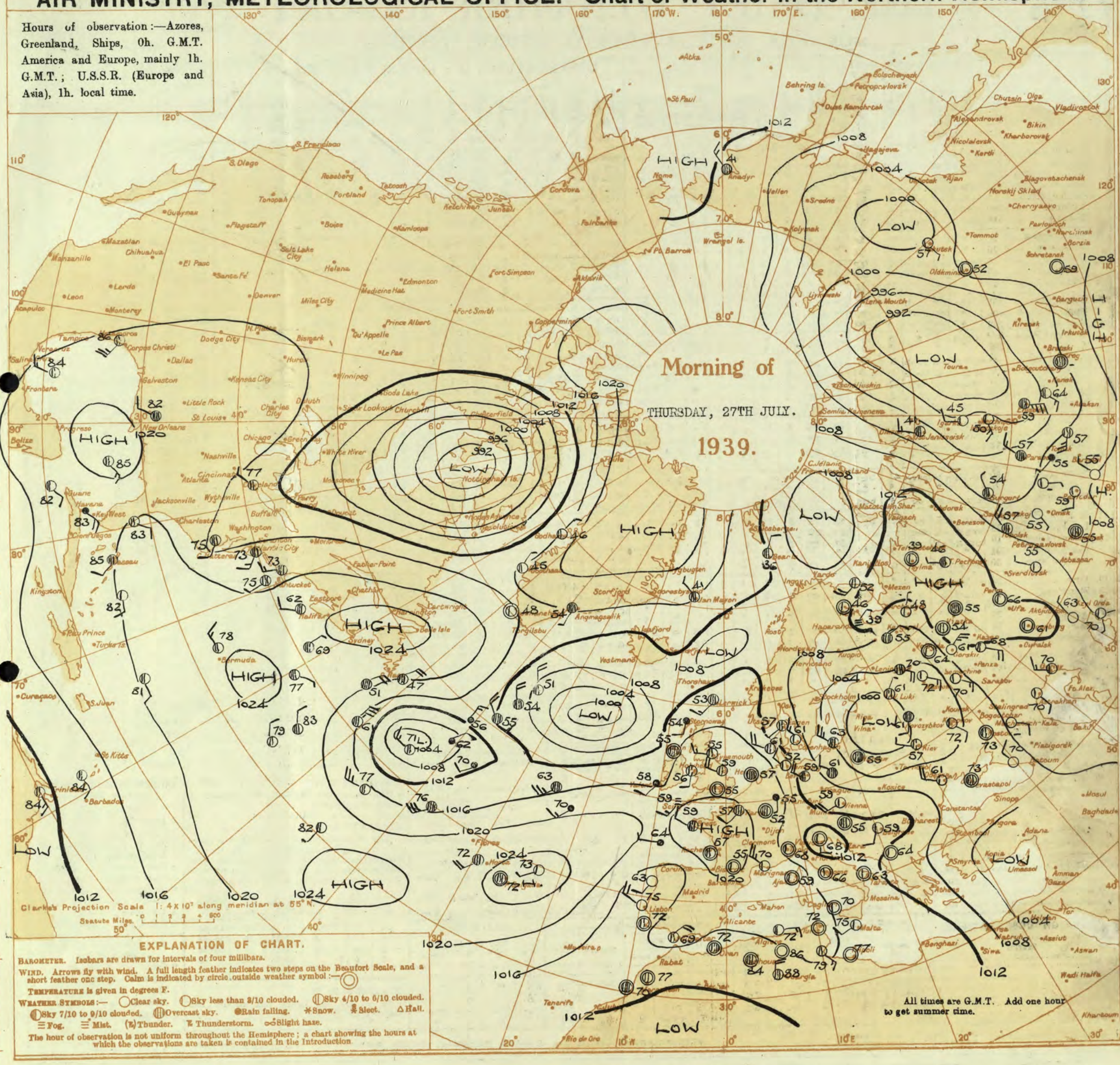
Forecasts issued at 0930 G.M.T.

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.

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



EXPLANATION OF CHART.

BAROMETER. Isobars are drawn for intervals of four millibars.

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

TEMPERATURE is given in degrees F.

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

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

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION.
Thursday, 27th July, 1939.
No. 28371.

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

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	1019·2	+6	-	0	z	55	97	6	-	-	-	0	0	-
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1020·4	+4	W	2	z₀	51	85	6	-	-	1	0	1	·
	Calshot (Sthmtn.)	8	1020·2	+6	WSW	1	b	52	92	7	-	-	5	0	Tr	·
	Lympne	346	1019·8	+6	WN	2	b	52	92	8	-	-	-	0	0	-
	Manston	154	1019·5	+6	SWW	2	b	51	85	8	-	-	-	0	0	-
2	Shoeburyness	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston	5	1018·1	+8	SWW	2	b	57	85	7	-	-	-	0	0	-
	Mildenhall	19	1018·6	+4	WSW	2	z₀	52	85	6	-	-	-	0	0	-
	Cranwell	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1019·8	-2	S	3	bc	53	97	8	5	-	8	2-3	2-3	2500
	Bristol	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill	32	1019·3	+6	NNE	3	bc	58	85	8	4	-	·	2-3	2-3	4000
	Plymouth	82	1020·6	0	ENE	1	c	53	97	8	-	5	·	0	7-8	÷
	The Lizard	240	1020·4	-2	W'S	2	m	59	97	4	5	-	-	10	10	800
	Scilly (St. Mary's)	163	1019·4	-4	SW	3	f	59	97	2	-	-	-	10	10	<150
	Guernsey	175	1021·2	+6	-	0	b	54	97	8	-	-	-	0	0	-
6	Pembroke	142	1019·5	0	SSW	2	c	58	92	8	6	1	-	4-6	7-8	2500
7	Holyhead	26	1018·1	-2	S	2	bc	56	86	8	1	-	4	2-3	4-6	2500
	Chester (Sealand)	16	1019·3	+2	-	0	bc	56	92	7	-	3	-	0	2-3	-
8	Manchester	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head	29	1017·8	+2	NWW	4	bc	59	75	7	-	2	-	0	2-3	-
	Catterick	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth	108	1017·0	0	W	3	bc	55	86	7	2	4	·	2-3	4-6	1500
11	St. Abbs Head	280	1016·1	+2	W	2	bc	59	75	8	8	6	-	7-8	9+	2500
	Leuchars	36	1015·6	+2	SW	1	c	57	92	8	5	-	-	9	9	4000
12	Renfrew (Abbots I.)	19	1016·6	-2	-	0	z₀	57	92	6	5	7	·	7-8	9+	1500
	Eskdalemuir	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre	30	1017·4	0	-	0	c	57	85	8	5	-	·	9	9	4000
13A	Tiree	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway	80	1014·7	0	S	2	pr	54	97	7	5	7	-	7-8	10	2500
15	Dalwhinnie	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick	81	1013·8	+2	ESE	2	c	54	97	6	5	2	-	7-8	10	800
16	Lerwick	156	1014·0	+4	SW	3	c	53	92	8	5	7	-	7-8	10	800
17	Blacksod Point	18	1014·6	-10	S	3	dr	58	97	6	6	-	-	10	10	<150
18	Malin Head	84	1015·9	-6	-	0	c	55	92	7	5	-	-	9	9	1500
	Aldergrove	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1015·8	-2	SW	2	rr	58	92	6	5	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1020·3	+12	SW	1	z₀	53	85	6	-	-	6	0	2-3	-	0	*
Croydon	1019·9	+10	-	0	z₀	56	92	6	-	-	2	0	4-6	-	1	*
S. Farnborough	1020·2	+4	-	0	z₀	55	92	6	-	-	2	0	9	-	1	*
Boscombe Down	1020·5	+2	-	0	f	52	87	3	5	5	8	7-8	9	<150	1	*
Calshot (Sthmtn.)	1020·4	+4	-	0	c	57	85	7	-	4	6	0	7-8	-	1	0
Lympne	1020·0	+2	NWN	2	z₀	57	85	6	-	-	1	0	Tr	-	1	§1
Manston	1020·0	+6	WN	1	z₀	58	85	5	-	-	1	0	Tr	-	1	*
Shoeburyness	1019·9	+10	W	2	m	58	92	4	-	-	-	0	0	-	0	*
Felixstowe	1019·4	+6	NW	2	z₀	57	85	5	-	-	-	0	0	-	0	1
Gorleston	1018·8	+8	W'N	2	bc	55	85	5	5	-	-	4-6	4-6	1500	9	1
Mildenhall	1019·3	+6	W'S	1	z₀	54	97	5	-	-	-	0	0	-		*
Cranwell	1018·6	0	W	1	z₀	56	85	5	-	-	6	0	Tr	-	0	*
Birmingham	1019·3	+2	SW	2	bc	56	85	6	-	-	6	0	4-6	-	1	*
Upper Heyford	1019·9	+2	SW	1	z₀	53	97	6	-	-	5	0	4-6	-	1	*
Ross-on-Wye	1019·4	0	SWW	1	z₀	53	92	6	-	7	7	0	9	-	1	*
Hartland Point	1017·9	-6	S	3	c/d	57	97	7	5	2	-	9	10	800	1	2
Bristol	1019·9	+2	-	0	c	57	85	7	-	7	8	0	7-8	-	1	-
Portland Bill	1020·3	+6	SW	3	c	59	92	8	5	-	-	10	10	4000	1	2
Plymouth	1019·8	-2	SSE	1	dd₀	59	97	5	-	2	-	10	10	~~455~~ 220	1	-
The Lizard	1019·7	0	SSW	2	cf₀	59	97	2	5	-	-	10	10	450	1	1
Scilly (St. Mary's)	1018·8	-2	SWS	3	f	59	97	2	-	-	-	10	10	<150	1	2
Guernsey	1021·2	+2	S	2	c	57	97	8	4	-	-	9	9	450	1	3
Pembroke	1017·9	-4	S	4	rf	59	97	2	-	-	-	10	10	<150	1	2
Holyhead	1016·8	-6	S'E	4	c	58	85	9	7	7	-	4-6	9+	4000	1	1
Chester (Sealand)	1018·5	-6	SE	1	z₀	54	85	5	-	7	6	0	7-8	-	1	*
Manchester	1018·8	0	SSE	2	z₀	53	92	5	-	3	4	0	7-8	-	1	
Spurn Head	1018·4	+4	NWW	3	bc	58	85	5	-	8	2	0	4-6	-	0	2
Catterick	1017·8	+2	SSW	1	c	54	85	8	5	3	-	7-8	9	2500	0	*
Tynemouth	1016·9	+2	W	3	bc	59	75	6	2	4	1	2-3	4-6	2500	0	1
St. Abbs Head	1015·8	-4	SW	2	bc	59	85	8	4	4	9	2-3	4-6	2500	0	1
Leuchars	1015·7	+2	SW	1	z₀	58	92	6	5	-	-	10	10	1500	0	*
Renfrew (Abbots I.)	1016·0	-2	-	0	z₀	58	92	6	5	7	-	9+	10	4000	0	*
Eskdalemuir	1016·4	0	SSW	3	c	56	92	7	5	-	-	9+	9+	800	1	*
Point of Ayre	1016·4	-4	S'W	2	c	60	85	8	5	6	-	4-6	9	1500	0	1
Tiree	1013·9	-4	SE'E	2	c	56	92	8	5	-	-	9+	9+	1500	0	2
Stornoway	1014·6	-2	S	3	c	55	92	8	5	7	-	7-8	10	2500	1	2
Dalwhinnie	1016·0	-4	S	1	c	53	85	7	5	6	-	4-6	10	2500	0	*
Aberdeen	1015·4	+2	E'S	1	c	57	92	6	5	-	-	9+	9+	4000	1	1
Wick	1014·5	+2	S	2	c	55	97	8	5	7	-	7-8	10	1500	1	1
Lerwick	1013·6	0	SW	3	c	53	97	8	8	7	-	7-8	9+	800	1	*
Blacksod Point	1011·9	-12	S	3	r.	60	92	8	8	-	-	10	10	450	1	2
Malin Head	1013·8	-2	S	2	c	58	92	7	8	8	-	4-6	7-8	1500	0	1
Aldergrove	1015·0	-6	S'E	1	id	57	97	6	5	-	-	10	10	800	1	"
Birr Castle	1014·4	-10	SSW	1	rr	58	97	7	5	-	-	10	10	2500	1	*
Valentia Obsy. †	1013·8	-8	S	4	id	61	97	5	5	-	-	10	10	220	1	3
Roches Point	1015·2	-6	WSW	2	p	60	97	3	5	-	-	10	10	<150	1	2

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 26th Hrs. (36)
London (Kew)	69	51	40	Tr	-	4·5
Croydon	66	50	46	0·4	-	1·9
S. Farnborough	69	43	38	Tr	Tr	2·6
Boscombe Down	65	47	41	-	-	8·5
Calshot (Sthmtn.)	63	49	46	-	-	7·2
Lympne	61	51	46	2	-	3·6
Manston	62	50	43	7	Tr	4·6
Shoeburyness	66	53	43	1	-	2·3
Felixstowe	67	53	47	·	-	2·8
Gorleston	65	53	52	-	-	5·9
Mildenhall	68	47	43	0·3	Tr	1·7
Cranwell	71	49	47	Tr	Tr	6·1
Birmingham	69	51	38	·	-	4·8
Upper Heyford	68	48	42	-	-	*
Ross-on-Wye	70	47	43	·	-	5·0
Hartland Point	63	52	51	-	0·4	13·9
Bristol	66	51	41	-	-	7·7
Portland Bill	62	57	*	-	-	*
Plymouth	65	52	47	-	0·1	13·8
The Lizard	64	57	*	-	0·1	12·0
Scilly (St. Mary's)	64	58	*	-	0·2	8·2
Guernsey	62	53	47	-	-	13·3
Pembroke	61	56	*	-	0·2	14·4
Holyhead	65	55	51	-	-	13·5
Chester (Sealand)	67	46	43	-	-	13·0
Manchester	68	40	38	-	-	11·9
Spurn Head	68	55	*	-	-	11·6
Catterick	71	43	40	-	-	9·2
Tynemouth	67	53	49	-	-	10·4
St. Abbs Head	63	55	*	-	-	*
Leuchars	65	56	55	-	-	0·3
Renfrew (Abbots I.)	62	56	55	-	Tr	0·0
Eskdalemuir	63	*	50	Tr	0·2	3·9
Point of Ayre	67	50	*	-	-	13·1
Tiree	60	51	48	Tr	-	0·1
Stornoway	58	54	*	Tr	0·4	0·0
Dalwhinnie	62	51	50	-	-	0·0
Aberdeen	64	55	54	-	0·2	1·7
Wick	57	53	*	Tr	0·3	*
Lerwick	57	51	*	Tr	0·4	0·3
Blacksod Point	62	51	*	Tr	1	*
Malin Head	58	53	*	0·3	-	0·1
Aldergrove	64	55	51	Tr	0·6	0·1
Birr Castle	68	57	56	-	1	3·2
Valentia Obsy. †	65	59	58	-	18	0·5
Roches Point	64	58	*	-	12	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning (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	cmpsv	czbcy	bcybm	69	51	40	Tr	·	4·5	·	·	8
Croydon	217	icmps	cmbcz	bczm	66	50	46	0·4	-	1·9	·	·	7
Greenwich (Royal Observatory)	149	crc	c	cbmw	66	50	38	0·3	-	0·9	70	62	7
City (Sunhill Row)	—	·	·	·	·	·	·	·	·	*	·	·	·
Westminster (St. James' Park)	27	·	·	·	68	52	47	-		2·6	75	71	·
Regents Pk. (Botanic Gardens)‡	168	·	·	·	70	52	45	-	-	3·3	69	73	·
Camden Square	110	bc	c	·	69	53	47	-	-	*	·	72	·
Kensington	80	c	bcc	·	69	51	43	-	-	2·2	At 18h. 56	67	·
Hampstead Observatory	450	c	bc	bc	65	51	51	-	-	3·7	·	75	·

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 27th.

South Kensington.			
Max.	Time.	Min.	Time.
<0·3 whole period			

Kew Observatory.			
Max.	Time.	Min.	Time.
0·1	13h 26th	<0·1	17h 26th

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 26th July Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 27th July 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	1017·8	NW	3	bc	64	1021·4	W	2	c	57	68	*	2	-
Brussels	1015·7	-	0	c	64	1020·2	-	0	f	55	64	*	6	*
Berlin	1010·3	NW	3	c	66						75		7	
Zurich	1016·4	S	2	bc	66	1013·2	N	1	bc	57	70	54	-	-
Rome						1014·8	SSW	2	bc	72		*		-

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.

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 9 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Friday, 28th July, 1939.
No. 28372.

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	°F. Temp. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew)	1020·0	-4	SW'S	4	c	69	55	8	1	3	6	4-6	9	4000
	Croydon	1019·7	-6	SW	3	o	72	55	8	1	-	5	4-6	7-8	4000
	S. Farnborough	1020·1	+2	SSW	3	c	70	65	8	1	3	1	4-6	9+	4000
	Boscombe Down	1020·1	-6	SW	4	c/d	66	65	8	5	7	8	4-6	9+	2500
	Calshot (Soton.)	1020·1	+2	SSW	4	c	68	65	8	1	7	8	1	7-8	2500
	Lympne	1020·7	0	SW'S	4	bc	70	65	8	2	-	3	2-3	4-6	4000
	Manston	1020·4	-2	SW	3	c	72	45	6	2	-	6	2-3	7-8	2500
2	Shoeburyness	1020·0	-6	SW	3	bc	74	55	8	1	-	2	2-3	4-6	4000
	Felixstowe	1019·8	-2	S	4	z_o	72	65	6	1	-	7	1	10	2500
	Gorleston	1019·3	0	SE	2	bc	65	75	6	7	-	1	2-3	4-6	2500
	Mildenhall	1018·7	-6	WSW	2	c	72	55	7	7	-	6	4-6	9+	4000
	Cranwell	1017·8	-10	SSW	3	bc	70	55	7	7	-	8	4-6	4-6	4000
3	Birmingham	1018·5	-2	SW	3	pr	66	75	8	7	7	8	2-3	7-8	2500
	Upper Heyford	1019·4	-6	SW'S	3	c	68	65	9	1	7	7	2-3	10	4000
4	Ross-on-Wye	1018·7	0	SSW	3	ir_o	63	85	7	5	-	-	10	10	1500
5	Hartland Point	1018·0	-2	SW	4	c/r	60	97	7	5	2	-	7-8	9+	800
	Bristol	1019·6	-6	S	3	ir_o	64	85	8	5	7	-	7-8	9+	1500
	Portland Bill	1020·6	+4	SW	2	of	60	92	3	5	-	-	10	10	<150
	Plymouth	1020·0	+2	S	1	f	60	97	2	-	-	-	10	10	<150
	The Lizard	1020·4	+2	SSW	3	c	61	97	7	5	2	-	9	10	1500
	Scilly (St. Mary's)	1019·2	+2	SSW	5	c	64	92	7	5	7	-	4-6	9+	1500
	Guernsey	1021·6	0	S'W	3	o	61	97	5	5	-	-	10	10	<150
6	Pembroke	1017·7	-2	SW	4	F	60	97	1	-	-	-	10	10	<150
7	Holyhead	1015·8	-10	SSE	4	r_or_o	59	97	5	6	2	-	9+	10	220
	Chester (Sealand)	1017·1	-8	SSE	3	c/r	68	65	8	5	4	-	7-8	9	4000
8	Manchester	1017·5	-8	S	3	c	69	65	7	1	3	1	Tr	7-8	4000
10	Spurn Head	1018·2	-2	SE'E	3	c	65	75	6	8	-	-	7-8	7-8	2500
	Catterick	1016·8	-10	SW	2	bc	69	55	7	4	3	-	4-6	4-6	4000
	Tynemouth	1016·4	+4	SW	2	bc	69	55	6	2	6	-	4-6	4-6	1500
11	St. Abbs Head	1015·5	-2	SSW	3	c	65	65	8	8	6	-	7-8	9+	2500
	Leuchars	1015·1	-8	SSW	1	c	66	65	7	8	3	-	4-6	9+	1500
12	Renfrew (Abbotsl.)	1015·3	-2	SW	3	d_od_o	62	85	6	5	-	-	10	10	1500
	Eskdalemuir	1015·6	-4	SSW	4	c	64	65	8	8	3	-	7-8	9+	1500
	Point of Ayre	1016·2	-4	S'W	3	c	61	85	7	8	6	-	4-6	9+	800
13A	Tiree	1012·6	-4	SE'S	4	c	62	85	8	5	-	-	9+	9+	2500
13B	Stornoway	1014·3	-8	S	3	c	57	92	8	5	7	-	4-6	9+	4000
15	Dalwhinnie	1014·8	-4	SSW	3	c	60	75	7	5	1	-	4-6	9+	4000
	Aberdeen	1014·8	+6	S	2	c	64	75	7	8	-	-	9	9	1500
	Wick	1014·3	-4	S	3	c	60	85	8	8	7	-	7-8	9	1500
16	Lerwick	1014·0	0	SW	3	c	55	97	8	5	2	-	7-8	10	800
17	Blacksod Point	1010·4	-10	S	4	rr	60	97	7	6	-	-	10	10	<150
18	Malin Head	1011·6	-10	S	4	c	67	75	8	8	-	6	4-6	7-8	5700
	Aldergrove	1013·2	-10	SE	3	bc	69	65	8	1	-	6	4-6	4-6	2500
19	Birr Castle	1013·1	-6	WSW	2	rr	67	85	7	5	-	-	10	10	2500
20	Valentia Obsy.†	1013·2	0	SW	4	z_o	60	97	6	5	-	-	10	10	220
	Roches Point	1014·6	-6	SW	3	rF	60	97	3	5	-	-	10	10	<150

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

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)	1020·0	+4	SW	3	cjp	65	75	8	5	3	-	9+	10	800	0	*
Croydon	1019·5	-2	SW	3	c/r	66	85	8	7	7	-	4-6	9+	4000	1	*
S. Farnborough	1019·9	-2	SSW	4	c	63	85	8	5	-	-	10	10	1500	0	*
Boscombe Down	1019·5	-6	SW'S	3	c	61	92	7	5	-	-	10	10	1500	1	*
Calshot (Soton.)	1020·5	-2	SSW	4	c	63	92	7	5	-	-	10	10	450	1	2
Lympne	1020·9	-2	SSW	3	c	63	75	8	-	7	9	0	9	-	0	§2
Manston	1020·0	-2	SSW	3	c	67	65	8	-	9	-	0	9	-	0	*
Shoeburyness	1019·7	0	SW'S	3	c	68	65	8	1	7	-	Tr	9+	4000	0	*
Felixstowe	1019·3	-4	SW	4	c	69	65	8	5	7	-	4-6	9+	2500	0	2
Gorleston	1017·8	-2	S'W	4	bc	68	75	6	7	4	-	2-3	4-6	2500	0	2
Mildenhall	1018·1	-2	W'S	4	c	70	65	8	7	7	1	4-6	7-8	4000	0	*
Cranwell	1017·5	0	SSW	4	c	67	75	8	4	7	-	1	9+	4000	0	*
Birmingham	1018·0	-6	S	3	d_od_o	62	92	7	6	-	-	10	10	800	1	*
Upper Heyford	1019·0	-6	SSW	3	c	64	85	8	5	7	-	4-6	10	1500	1	*
Ross-on-Wye	1017·8	-6	SW	3	id_o	63	92	7	5	2	-	9	10	1500	1	*
Hartland Point	1017·0	-6	WSW	5	ir	62	92	7	5	2	-	7-8	10	1500	1	3
Bristol	1018·9	-4	SSW	1	rr	63	92	6	6	2	-	9	10	800	1	*
Portland Bill	1020·3	-2	SW	3	if	60	92	3	5	-	-	10	10	800	1	3
Plymouth	1019·8	-2	SSW	1	z_o	60	97	6	5	7	-	9+	10	220	1	1
The Lizard	1019·7	-6	S'W	4	c/r	61	97	7	5	2	-	9	10	1500	1	3
Scilly (St. Mary's)	1018·2	-8	SSW	4	id_o	61	97	6	5	2	-	7-8	10	1500	1	3
Guernsey	1021·4	+2	SSW	2	rf	61	92	2	-	-	-	10	10	<150	1	2
Pembroke	1016·2	-8	SW	5	d	60	97	4	5	-	-	10	10	800	1	3
Holyhead	1014·3	-8	S'W	4	r_or_o	60	97	6	5	2	-	9+	10	<150	1	2
Chester (Sealand)	1015·9	-8	SSE	3	ir_o	63	92	6	5	2	-	7-8	10	4000	1	*
Manchester	1016·4	-2	SSE	2	c/r	62	97	6	5	2	-	7-8	10	1500	1	*
Spurn Head	1016·5	-8	SW'S	3	bc	69	65	6	-	7	-	0	4-6	-	0	2
Catterick	1014·8	-10	SW'S	2	c	69	65	7	5	7	-	2-3	10	1500	0	*
Tynemouth	1014·3	-8	S	4	c	62	75	7	8	-	-	9	9	1500	0	1
St. Abbs Head	1014·3	-8	S	2	c	62	75	9	5	6	-	7-8	9	2500	0	2
Leuchars	1013·8	-10	-	0	c/d	60	97	8	8	3	-	7-8	9	2500	1	*
Renfrew (Abbotsl.)	1013·6	-10	S'E	3	c	63	75	7	5	7	-	7-8	10	1500	0	*
Eskdalemuir	1014·3	-8	SW'S	3	ir_o	59	85	7	6	1	-	2-3	10	1500	0	*
Point of Ayre	1013·4	-18	SSW	4	dd	59	97	5	-	2	-	10	10	800	1	2
Tiree	1010·1	-12	SE'S	4	rr	58	97	6	-	2	-	10	10	1500	1	3
Stornoway	1012·9	-10	ESE	2	c	58	85	9	5	4	4	2-3	9	4000	1	1
Dalwhinnie	1013·8	-10	SSW	3	c	57	92	6	4	2	-	7-8	10	2500	0	*
Aberdeen	1013·5	-10	SSW	4	bc	62	75	6	5	-	-	4-6	4-6	5700	0	1
Wick	1012·9	-10	ESE	2	c	57	92	7	5	6	1	4-6	7-8	1500	1	1
Lerwick	1013·6	-2	SW	3	c	55	92	8	5	2	-	7-8	10	800	1	*
Blacksod Point	1010·4	-4	S	3	cf+	59	97	3	6	-	-	10	10	<150	1	3
Malin Head	1009·8	-10	S	1	rr	63	92	7	6	2	-	4-6	9	1500	0	1
Aldergrove	1011·2	-14	SE	3	r_or_o	63	92	7	6	2	-	4-6	10	1500	1	*
Birr Castle	1011·9	-8	WSW	2	c	67	92	8	6	7	-	4-6	9	800	1	*
Valentia Obsy.†	1013·2	+2	SSW	4	id_o	62	97	6	5	-	-	10	10	220	1	2
Roches Point	1013·7	-2	SW	3	id_o	61	97	7	5	-	-	10	10	450	1	2

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)	bcm_obccy	$cycpr_oc$	cpr_oc	e
Croydon	bcm_oc⊕	$cyir_o$	$ceir_oir$	crd_om_oc
S. Farnborough	m_ocy⊕c	c,ir_oc	cir_oid_o	cm_o
Boscombe Down	$cfcm_od_oc$	cpr_ocpr_oc	$cdr_or_ocm_o$	$cm_or_or_o$
Calshot (Soton.)	bcc	ir_oid_oc	$codfir_oo$	oc
Lympne	bm_obbc	bcc	com_o	cm_o
Manston	$bbcz_o$	bcz_oyc	ccm_o	cm_oc
Shoeburyness	bmbcm	bcycv	cvc	c
Felixstowe	bm_ocyz_o⊕	cz_ocm_oc	c	cr_or_oc
Gorleston	$bcbbcz_o$	bcz_o	$bccor_or_o$	or_or_oc
Mildenhall	bm_obcc	cyc	$cr_or_oir_o$	cir_ocm_o
Cranwell	bmmbcc⊕	bccy	$cd_or_ocm_o$	cm_oc
Birmingham	bcc	$coir_o$	r_or_o	p
Upper Heyford	bcm_oc	cir_o	cor_or_omc	$cm_occd_om_o$
Ross-on-Wye	cz_occr_o	r_occd_o	r_ooid_o	$r_od_od_o$
Hartland Point	irFc	circ	r_or_oc	dFdFc
Bristol	$bccd_or_o$	cddrr	$crrRr_o$	cld_oir
Portland Bill	oFF	ofif	o	o
Plymouth	od_od_ofmf	$offcm_o$	idcdd	$ddid_oco$
The Lizard	dffc	cpr_oc	cifdm	cid_oc
Scilly (St. Mary's)	offcc	cp_oir_o	dfdfo	oid_ocd_o
Guernsey	cdf	ofrd	odffc	ozf
Pembroke	orif	ifrro	pqffdfe	FeFeqo
Holyhead	$cr_or_om_oc$	fmr_oro	r_or_offo	ofm_or_oo
Chester (Sealand)	cir_o	cir_oddm	r_or_obcm	$bccm_or_or_o$
Manchester	bcm_owc	ccr_or_o	$m_or_or_oc$	ccm_o
Spurn Head	bcz_oc	c	cir_oo	$ocir_o$
Catterick	cbc	$bcyz_oc$	qir_ocm_o	$ir_or_or_o$
Tynemouth	bccbc	bcc	$coir_o$	$coir_o$
St. Abbs Head	c	c	r_orc	cir_o
Leuchars	cwm_ocpr_oc	$d_or_oidm_oc$	cr_or_oc	cir_o
Renfrew (Abbotsl.)	$cm_oir_od_od$	$m_oir_od_opr_oc$	cir_or_of	ofr_or_oid
Eskdalemuir	cid_oc	cir_o	ir_odff	orrFFd
Point of Ayre	c	cdd	cddc	ir_ofc
Tiree	bc	c	orRd	od_or_o
Stornoway	c	cbcc	cpr_o	cpr_o
Dalwhinnie	c	c	•	cir
Aberdeen	cz_oc	$cbcz_o$	bccz	ver_oc
Wick	c	c	cm_oc	c
Lerwick	cid_o	cid_o	c	c
Blacksod Point	iR	iDf	iRd	Rr
Malin Head	cbcc⊕	c	cfrrc	cRrc
Aldergrove	idm_obc	$m_ocr_or_o$	r_or_orriR	$r_or_or_or_om$
Birr Castle	orrcrr	crrc	c	cir
Valentia Obsy.†	$r_or_orrom_o$	oid_o	ir_orr	ir_oir
Roches Point	Ffcrrf	$rfddid_o$	idffe	drdrdd

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.

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.*

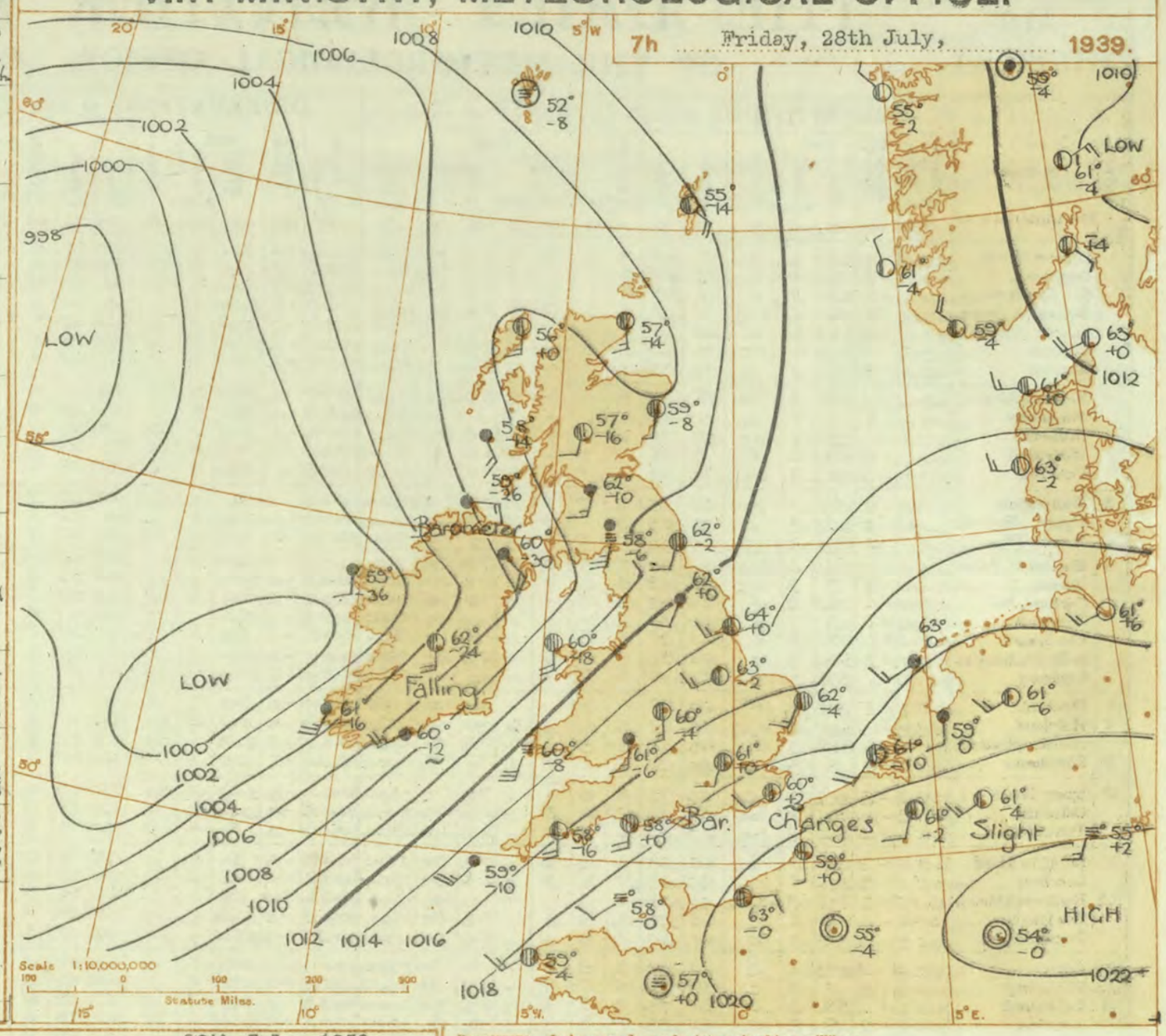
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 27th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 26th 9h. to 27th 9h.	Temperature. (°F) Max. 9h.—17h. 27th	Rainfall. (mm.) Night. 26th 17h. to 27th 9h.	Rainfall. (mm.) Day. 9h.—17h. 27th	Sunshine. (Hrs.) Sunrise to 17h. 27th	Sunshine. (Hrs.) Sunrise to Sunset. 27th
1	Tunbridge W.	b	bbcc	48	73	-	-	10·2	3·5
	Bournemouth	bcc	odro	51	68	-	1	3·7	9·1
	Ventnor ...	b	bcof	51	66	-	-	7·5	9·8
	Southsea ...	b	bcco	52	68	-	-	6·9	6·2
	Bognor Regis	b	bcc	51	66	-	-	7·4	6·0
	Littlehampton	bc	bcc	49	65	-	-	7·7	5·3
	Worthing ...	b	bbcc	52	68	-	-	9·2	5·8
	Brighton ...	b	bbc	52	67	-	-	9·0	4·2
	Eastbourne† ...	b	bbcc	52	69	Trace	-	10·2	1·8
	Hastings† ...	b	bbc	53	67	-	-	11·3	1·1
	Folkestone ...	b	bbc	53	68	-	-	10·4	3·4
	Dover ...	bcbz	bbc	51	69	-	-	10·8	3·2
	Deal	b	bbc	51	72	-	-	10·5	5·0
	Ramsgate ...	b	cbc	54	71	-	-	10·1	4·5
	Margate ...	bc	bc	54	73	-	-	9·8	4·4
2	Southend ...	bm	bbcc	53	*	-	-	9·0	2·5
	Clacton-on-Sea	bm	bbcc	52	71	-	-	8·8	3·1
	Dovercourt ...	bz	bc	52	74	-	-	10·0	3·5
	Lowestoft ...	b	bbc	51	71	-	-	9·7	4·3
	Skegness ...	bzb	bbc	52	73	-	-	11·6	8·1
	Mablethorpe...	bbc	bcbbc	50	74	-	-	11·3	9·6
	Cleethorpes ...	bc	bc	53	74	-	-	11·3	10·7
3	Leamington S.	bc	cor	49	69	-	1	4·4	6·1
4	Cheltenham†	bbc	cor	50	66	-	Trace	3·1	7·4
5	Bath	cp	cr	52	67	-	1	2·3	5·8
	Weymouth ...	c	cfm	47	63	-	-	1·0	9·6
	Jersey ...	cbc	bcc	54	67	-	-	3·3	14·4
	Torquay ...	om	ocid	52	65	Trace	Trace	0·0	12·7
	Falmouth ...	mdco	c	58	67	Trace	Trace	0·0	11·6
	Penzance ...	mc	c	58	68	0·5	Trace	0·4	10·4
	St. Ives ...	c	c	56	69	-	-	0·7	12·5
	Bude... ...	odo	odo	50	65	1	1	0·0	13·7
	Ilfracombe ...	bcdo	rocro	55	67	0·1	3	0·1	14·0
6	Aberystwyth	cprc	cpr	52	65	-	2	0·0	13·7
7	Llandudno ...	c	ird	52	68	-	0·1	1·3	14·2
	Colwyn Bay...	cbc	cpcp	54	68	-	0·5	1·7	14·2
	Rhyl	bcc	crr	49	69	-	2	2·5	14·4
8	Wallasey ...	becbc	bcorc	53	70	-	2	4·7	12·8
	Southport ...	bczcz	bczp	49	71	-	2	4·4	12·3
	Blackpool ...	cm.c	cidc	50	71	-	0·5	4·5	14·3
	Morecambe ...	bc	bcdr	54	70	-	1	5·7	14·7
9	Ilkley... ...	bc	bcc	48	74	-	-	7·1	12·1
	Harrogate ...	bbc	bbc	49	72	-	-	8·1	8·7
10	Berwick-on-T.	bcc	c	56	71	-	-	6·1	8·9
11	Dunbar ...	cm	cmr	56	66	-	Trace	1·1	7·1
12	Troon... ...	ocorr	oc	56	65	-	1	0·5	0·1
	Douglas ...	comp	om	54	*	-	-4	0·0	14·0

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.-9h.



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 July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Moderate south to southwest wind, fresh on coasts; cloudy, slight rain or drizzle locally; local coast fog; rather warm and close.
5 S.W. England 6 South Wales ... 7 North Wales ...	Fresh southwest wind, strong locally on coasts; cloudy, occasional rain or drizzle; local coast fog; rather warm and close inland.
8 N.W. England 9 N. Midlands ... 10 N.E. England 11 S.E. Scotland	Fresh south to southwest wind; some rain; average temperature.
12 S.W. Scotland & Isle of Man. 13 A. W. Scotld. B.N.W.Scotland. 14 Mid Scotland	Fresh south wind, strong on coasts, decreasing temporarily; dull, some rain, heavy locally; local coast fog; average temperature.
15 N. E. Scotland 16 Orkney and Shetland	Freshening south to southeast wind, strong locally; some rain; local coast fog; average temperature.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Fresh south to southwest wind, decreasing temporarily, probably freshening again later; cloudy, occasional rain; rather warm and close.

L. D.

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

GENERAL INFERENCE.

A vigorous depression west of Ireland is moving northeast. There will be rain at times in the West and North. In the Southeast it will be cloudy with slight rain or drizzle locally.

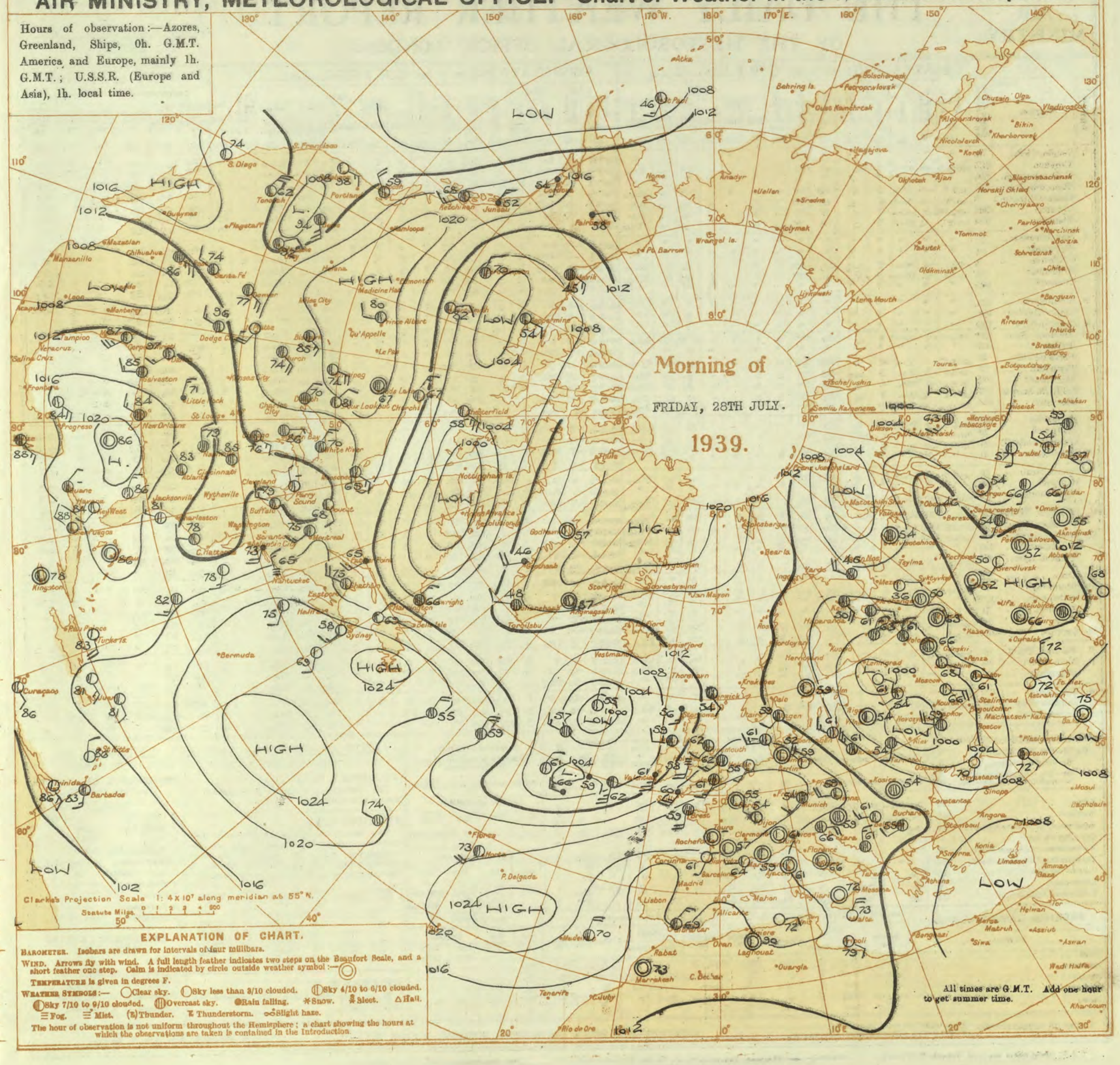
FURTHER OUTLOOK.

Unsettled.

Forecasts issued at 0930 G.M.T.

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

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, 28th July, 1939.
No. 28372.

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

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	1019.4	-4	ssw	3	c	61	97	7	5	2	-	2-3	10	800
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1018.9	-4	s'w	3	c	59	97	6	6	2	-	7-8	10	1500
	Calshot (Sthmtn.)	8	1019.7	-6	sws	4	o	60	97	7	5	-	-	10	10	450
	Lympne ...	346	1020.2	-8	wsw	2	z	57	97	6	5	-	-	10	10	450
	Manston ...	154	1019.7	-6	sws	2	c	59	97	6	5	-	-	10	10	7200
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1018.1	-4	sw	2	ror	63	85	7	6	-	-	10	10	1500
	Mildenhall ...	19	1017.6	-6	ssw	3	iro	61	97	7	5	-	-	9	9	2500
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1016.4	-2	wsw	5	c	60	97	5	5	2	-	4-6	10	800
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1019.2	-10	sw	4	o	59	92	7	5	-	-	10	10	2500
	Plymouth ...	82	1018.9	-8	sw	3	dd	59	97	5	5	-	-	10	10	450
	The Lizard ...	240	1019.0	-4	ssw	4	o	59	97	7	5	-	-	10	10	1500
	Scilly (St. Mary's)	163	1017.6	-16	ssw	5	id	60	97	5	5	-	-	10	10	800
	Guernsey ...	175	1020.4	-8	ssw	2	c	59	97	8	5	2	-	7-8	10	2500
6	Pembroke ...	142	1016.1	0	sww	5	F+	60	97	1	-	-	-	10	10	<150
7	Holyhead ...	26	1013.1	-2	s'w	4	cf+	58	97	3	5	-	-	10	10	<150
	Chester (Sealand)	16	1014.5	-4	SE	2	z	61	85	6	5	7	-	4-6	4-6	4000
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1015.9	-4	sws	3	o	62	97	7	5	-	-	10	10	2500
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1013.3	-12	sw	2	o/r	62	92	6	-	2	-	10	10	1500
11	St. Abbs Head	280	1011.1	-14	ssw	4	c	59	92	8	8	2	-	7-8	10	1500
	Leuchars ...	36	1010.8	-20	-	0	c	59	97	8	5	7	-	9	10	2500
12	Renfrew (Abbots I.)	19	1010.5	-14	SE	1	rf	60	97	2	-	-	-	10	10	<150
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1012.1	-8	s	2	q	58	97	7	5	7	6	2-3	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	1009.7	-12	s	3	pr	56	97	7	5	2	-	9	10	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	1009.8	-16	sse	3	c	56	97	7	5	7	-	7-8	9+	1500
16	Lerwick ...	156	1013.2	-4	s'e	2	c	54	97	8	5	2	-	7-8	9+	800
17	Blacksod Point	18	1008.4	-16	s	4	rr	59	97	7	6	-	-	10	10	<150
18	Malin Head ...	84	1009.1	0	w	2	c	59	92	6	8	-	-	9	9	1500
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1008.9	-20	s	5	rr	61	97	5	5	-	-	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1017.6	-2	sw	2	c	62	85	7	5	2	-	7-8	9+	2500	0	*
Croydon	1018.4	0	ssw	2	c	61	92	8	5	7	-	7-8	9+	1500	1	*
S. Farnborough	1017.8	+2	ssw	3	o/d	61	92	6	5	-	-	10	10	1500	0	*
Boscombe Down	1017.4	-2	ssw	3	iro	59	97	6	-	2	-	10	10	220	1	*
Calshot (Sthmtn.)	1018.5	0	sw's	4	c	60	92	8	5	-	-	10	10	450	1	2
Lympne	1019.3	+2	sw	2	c	60	97	7	5	3	-	9+	10	450	0	§5
Manston	1018.7	0	s'w	3	id	62	85	7	5	7	-	4-6	9+	4000	0	*
Shoeburyness	1017.9	-2	sw	3	c	64	85	8	-	7	8	0	9+	-	0	*
Felixstowe	1017.8	-4	wsw	4	c	63	85	7	5	2	-	9+	10	1500	0	2
Gorleston	1016.4	-4	sw's	3	c	62	92	7	5	-	-	10	10	2500	1	2
Mildenhall	1016.3	+2	sw	3	c	62	85	7	5	-	-	10	10	1500	1	*
Cranwell	1014.7	-2	sw	3	c	63	85	7	7	4	3	2-3	9+	1500	1	*
Birmingham	1015.5	-4	s	3	c	60	97	6	5	-	-	10	10	1500	1	*
Upper Heyford	1016.9	-2	ssw	3	o/d	60	97	7	5	-	-	10	10	450	1	*
Ross-on-Wye	1015.5	-6	s	3	id	61	92	6	6	-	-	10	10	800	1	*
Hartland Point	1014.4	-8	sw	4	c	59	97	8	6	2	-	2-3	9+	1500	1	3
Bristol	1016.6	-2	ssw	4	c	60	97	7	5	7	-	7-8	9+	800	1	*
Portland Bill	1018.0	0	s	4	o	58	92	8	5	-	-	10	10	2500	1	3
Plymouth	1017.2	-2	ssw	3	z	59	97	6	5	-	-	10	10	450	1	2
The Lizard	1017.2	-16	s	4	c	58	97	7	5	-	-	10	10	1500	1	2
Scilly (St. Mary's)	1015.2	-10	ssw	5	id	59	97	6	5	2	-	7-8	10	800	1	3
Guernsey	1019.1	0	sw	2	m	58	97	4	-	-	-	10	10	<150	1	1
Pembroke	1013.0	-8	sw's	6	F	60	97	1	-	-	-	10	10	<150	1	3
Holyhead	1010.6	-18	s	4	c/r	60	97	7	5	-	-	10	10	<150	1	2
Chester (Sealand)	1012.8	-8	sse	2	ror	62	92	6	5	7	-	7-8	10	1500	1	*
Manchester	1013.3	-4	s	3	z	63	92	6	5	7	-	4-6	9+	4000	1	*
Spurn Head	1014.2	0	sww	3	c/pr	64	85	6	5	7	-	7-8	9+	1500	1	2
Catterick	1012.1	0	sw's	2	ror	62	92	6	6	2	-	9	10	800	1	*
Tynemouth	1011.1	-2	ssw	2	o/r	62	92	6	-	2	-	10	10	1500	1	1
St. Abbs Head	1009.5	-4	s	3	iro	61	85	8	5	2	-	7-8	10	1500	1	1
Leuchars	1008.5	-6	sw	1	c	62	92	7	5	2	-	7-8	10	1500	1	
Renfrew (Abbots I.)	1008.7	-10	s'w	3	iro	62	85	6	5	-	-	10	10	800	1	*
Eskdalemuir	1010.0	-6	s'w	5	dF	58	97	1	-	2	-	10	10	<150	1	*
Point of Ayre	1009.3	-20	s'w	4	c	61	97	7	5	7	-	1	10	1500	1	2
Tiree	1006.1	-14	ses	3	dod	58	97	6	5	-	-	10	10	450	1	2
Stornoway	1008.0	0	s	3	c/pr	56	97	7	5	2	-	9	10	2500	1	2
Dalwhinnie	1008.3	+16	ssw	2	c	57	92	6	6	2	-	4-6	10	1500	0	*
Aberdeen	1008.4	+8	sw	1	c	59	97	6	5	3	-	9	9+	800	1	1
Wick	1007.2	-14	s	3	c	57	92	7	5	7	-	7-8	9+	1500	1	1
Lerwick	1009.7	-14	se's	4	c	55	97	7	8	7	-	7-8	9	450	1	*
Blacksod Point	1001.2	-36	s	2	RR	59	97	7	6	-	-	10	10	<150	1	2
Malin Head	1005.4	-26	E	3	RR	59	92	6	8	-	-	10	10	1500	1	1
Aldergrove	1006.5	-30	SEE	4	ror	60	92	6	-	2	-	10	10	1500	1	*
Birr Castle	1005.6	-24	s	4	c/r	62	97	7	6	2	-	4-6	10	800	1	*
Valentia Obsy. †	1004.6	-16	ssw	5	ir	61	97	6	6	-	-	10	10	450	1	3
Roches Point	1008.2	-12	sw	5	dod	60	97	5	5	-	-	10	10	220	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 27th Hrs. (36)
London (Kew)	70	60	59	Tr	Tr	7.3
Croydon	72	60	59	Tr	Tr	7.8
S. Farnborough	71	59	59	Tr	0.1	7.8
Boscombe Down	66	58	58	0.1	0.2	3.3
Calshot (Sthmtn.)	68	60	60	Tr	Tr	5.7
Lympne	71	57	56	-	-	10.9
Manston	73	58	58	-	-	11.0
Shoeburyness	75	62	59	-	-	9.3
Felixstowe	74	61	60	-	0.2	9.8
Gorleston	73	62	60	-	1	11.3
Mildenhall	74	61	59	-	1	6.5
Cranwell	72	60	58	-	1	9.5
Birmingham	66	59	58	0.2	3	4.4
Upper Heyford	69	59	57	Tr	2	*
Ross-on-Wye	64	60	59	0.2	1	1.1
Hartland Point	62	59	59	5	5	0.0
Bristol	66	60	58	2	4	1.0
Portland Bill	61	56	*	-	-	*
Plymouth	61	59	59	0.1	1	0.0
The Lizard	64	58	*	0.1	0.6	0.1
Scilly (St. Mary's)	65	58	*	0.2	1	0.2
Guernsey	62	58	57	0.2	Tr	0.3
Pembroke	60	58	*	9	0.6	0.0
Holyhead	61	57	57	2	0.3	0.0
Chester (Sealand)	70	60	57	1	1	4.2
Manchester	72	59	58	0.6	1	7.7
Spurn Head	74	61	*	-	0.2	9.9
Catterick	72	60	59	-	1	3.3
Tynemouth	69	58	55	-	0.5	11.6
St. Abbs Head	68	58	*	-	0.1	*
Leuchars	67	56	53	0.5	0.5	0.2
Renfrew (Abbots I.)	66	58	57	Tr	3	0.1
Eskdalemuir	66	56	56	Tr	8	2.0
Point of Ayre	64	57	*	Tr	1	0.1
Tiree	63	56	55	0.3	8	3.5
Stornoway	60	56	*	-	3	2.7
Dalwhinnie	65	55	53	-	0.6	1.5
Aberdeen	65	56	53	-	Tr	1.1
Wick	60	57	*	-	-	*
Lerwick	57	52	*	Tr	-	0.0
Blacksod Point	62	55	*	3	14	*
Malin Head	69	58	*	2	10	1.5
Aldergrove	70	59	57	0.1	14	3.1
Birr Castle	69	60	57	3	8	0.6
Valentia Obsy. †	66	60	58	4	23	0.2
Roches Point	61	58		4	6	*

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	bcmbcey	eyepgc	epgc	70	60	59	Tr	Tr	7.3	•	•	8
Croydon ...	217	bcmc⊕	cylro	ergmc	72	60	59	Tr	Tr	7.8	•	•	8
Greenwich (Royal Observatory) ...	149	by	bcv	circ	75	60	58	-	Tr	7.7	58	75	7
City (Bunhill Row) ...	—	•	•	•	•	•	•	•	•	7.3	•	•	•
Westminster (St. James' Park) ...	27	•	•	•	72	61	59	Tr		7.7	65	83	•
Regents Pk. (Botanic Gardens)‡ ...	168	•	•	•	73	52	48	-	-	*	63	87	•
Camden Square ...	110	o	c	•	73	61	59	-	-	*	•	81	•
Kensington ...	80	c	bcc	•	73	61	60	-	Tr	7.8	61 (At 18h)	80	•
Hampstead Observatory ...	450	bc	bc	op	70	58	57	-	Tr	7.6	•	87	•

Atmospheric Pollution.

Milligrams of Solid Impurity per cubic metre.

24 hrs. ended 7h. G.M.T. 28th

SOUTH KENSINGTON.			
Max.	Time.	Min.	Time.
<0.3 whole period			

KEW OBSERVATORY.			
Max.	Time.	Min.	Time.
0.1	7h 27th	<0.1 rest of period	

FOREIGN OBSERVATIONS.

Stations.	18h. G.M.T. 27th July Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 28th July 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	SSE	2	bc	70	1021.3	-	0	b	55	73	52	-	-
Brussels ...	1020.6	NWN	2	c	70	1020.6	SSW	2	c	61	75	54	-	-
Berlin ...	1024.4	NW	4	bc	70	1018.1	WNW	4	b	61	75	55	-	-
Zurich ...	1021.8	SSE	3	c	59	1021.2	ESE	1	z	52	64	46	6	0.1
Rome ...	1012.5	SW	3	bc	73						*		-	

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

Page 1.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Saturday, 29th July, 1939.
No. 28373.

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

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)	1016·6	-14	SSW	3	c	67	75	8	5	-	-	9+	9+	1500
	Croydon	1017·1	-8	SW'S	2	c	67	85	8	5	-	2	9	9+	2500
	S. Farnborough	1016·7	-12	S'W	4	c	68	75	8	5	1	-	7-8	9+	2500
	Boscombe Down	1016·5	-10	SSW	3	c	63	85	7	5	-	-	9+	9+	1500
	Calshot (Soton.)	1017·8	-6	SSW	4	c	64	85	8	5	-	-	10	10	800
	Lympne	1018·0	-10	SW'S	4	c	67	85	7	8	-	6	7-8	9+	1500
	Manston	1017·4	-6	S'W	4	c	70	75	8	5	-	8	7-8	9	2500
2	Shoeburyness	1017·3	-8	SW	4	c	72	75	8	7	7	3	4-6	9+	2500
	Felixstowe	1016·4	-10	SSW	4	c	72	65	8	5	1	-	9	9+	2500
	Gorleston	1015·1	-8	SW'S	4	c	70	75	7	5	-	-	10	10	2500
	Mildenhall	1015·0	-10	SW	4	c	71	65	7	5	2	-	7-8	9+	2500
	Cranwell	1013·5	-10	SW	4	c	69	75	8	5	7	-	7-8	10	1500
3	Birmingham	1013·8	-10	S	3	c	66	75	8	5	7	-	7-8	10	1500
	Upper Heyford	1015·6	-10	SSW	3	c	67	85	7	5	1	-	9	10	1500
4	Ross-on-Wye	1014·0	-6	SSW	4	c	67	85	7	5	9	1	4-6	9+	1500
5	Hartland Point	1013·2	-8	SW	5	c	62	85	8	8	6	-	7-8	9+	1500
	Bristol	1015·7	-6	SSW	4	c	62	85	8	5	7	-	7-8	10	800
	Portland Bill	1016·8	-12	SW	4	o	59	92	7	5	-	-	10	10	2500
	Plymouth	1016·3	-6	S'W	4	c	60	92	7	5	-	-	10	10	800
	The Lizard	1015·9	-4	S	5	c	60	97	7	5	2	-	9	10	1500
	Scilly (St. Mary's)	1013·7	-8	S'W	6	c/d	62	97	7	5	8	3	4-6	7-8	1500
	Guernsey	1017·5	-12	S	3	c	63	85	8	-	3	-	0	9	-
6	Pembroke	1012·2	-6	SW'S	7	rr	59	97	6	5	-	-	10	10	1500
7	Holyhead	1008·4	-14	S	5	roro	59	97	7	6	2	-	7-8	10	220
	Chester (Sealand)	1011·1	-10	S	3	roro	63	85	8	5	2	-	7-8	10	2500
8	Manchester	1011·9	-6	S	3	rr	64	92	5	5	2	-	7-8	10	1500
10	Spurn Head	1012·6	-30	SW'S	4	c	75	65	6	5	7	9	4-6	9+	800
	Catterick	1009·8	-14	SSW	4	iro	66	85	6	5	2	-	7-8	10	1500
	Tynemouth	1009·0	-14	SSW	4	o	66	85	6	-	2	-	10	10	1500
11	St. Abbs Head	1006·1	-24	S	5	rr	63	92	6	3	2	-	9	10	800
	Leuchars	1005·0	-28	SE	4	roro	62	97	7	5	2	-	7-8	10	450
12	Renfrew (Abbotsl.)	1004·1	-22	SSW	4	rr	63	85	6	5	2	-	7-8	10	800
	Eskdalemuir	1006·0	-22	SSW	7	rr	59	97	6	-	2	-	10	10	800
	Point of Ayre	1006·6	-12	SW	6	iro	62	92	7	6	1	-	7-8	10	800
13A	Tiree	995·6	-30	SE'S	4	rr	59	97	5	-	2	-	10	10	450
13B	Stornoway	1004·7	-18	-	0	roro	58	92	6	5	2	-	7-8	10	800
15	Dalwhinnie	1003·0	-12	S	4	ir	60	85	6	6	2	-	7-8	10	1500
	Aberdeen	1006·1	-12	S	3	ir	62	92	6	9	2	-	9	10	800
	Wick	1004·4	-12	S	2	c	59	92	6	5	7	9	4-6	9+	1500
16	Lerwick	1002·7	-12	SE	5	c	57	97	6	5	2	-	4-6	9+	800
17	Blacksod Point	1000·4	+6	WNW	3	of+	61	97	3	-	2	-	0	10	-
18	Malin Head	998·7	-16	S	5	c/r	65	85	6	6	-	-	9+	9+	800
	Aldergrove	1002·4	-14	S	4	roro	63	92	6	6	-	-	10	10	800
19	Birr Castle	1002·8	-16	S	4	c/r	66	85	7	6	2	-	7-8	10	800
20	Valentia Obsy.†	1002·6	-8	SSW	6	roro	63	97	6	6	-	-	10	10	450
	Roches Point	1005·8	-16	SW	5	dr	60	97	6	5	-	-	10	10	220

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	Humid. % (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Amount Low 0–10 (26)	Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1014·6	-14	SSW	4	c	67	75	8	1	4	9	Tr	7-8	2500	0	*
Croydon	1015·1	-16	S'W	3	c	66	85	8	5	3	4	Tr	7-8	2500	1	*
S. Farnborough	1014·6	-18	SSW	4	c	64	75	8	-	3	6	0	7-8	-	0	*
Boscombe Down	1014·4	-14	SSW	4	c	62	75	8	5	9	6	1	9	2500	1	*
Calshot (Soton.)	1015·6	-6	SSW	3	c	64	85	8	7	7	6	1	7-8	4000	1	§2
Lympne	1016·5	-12	SW	3	cjf	66	85	7	-	9	9	0	7-8	-	0	1
Manston	1015·8	-14	SW'S	4	c	69	65	8	5	4	8	1	9	1500	0	*
Shoeburyness	1015·2	-16	SW'S	4	bc	69	75	8	1	4	3	Tr	4-6	2500	0	*
Felixstowe	1014·7	-14	SSW	4	c	69	75	8	-	4	8	0	7-8	-	0	3
Gorleston	1013·7	-12	SSW	4	c	71	65	7	5	4	-	7-8	9	2500	0	2
Mildenhall	1013·2	-16	SSW	4	c	70	65	7	7	7	1	1	7-8	4000	0	*
Cranwell	1011·3	-12	SSW	4	c	67	75	8	5	7	9	7-8	9	1500	0	*
Birmingham	1011·2	-16	S	3	c	64	75	8	5	9	-	2-3	7-8	1500	1	*
Upper Heyford	1013·6	-14	SSW	4	c	65	75	8	5	4	2	2-3	9	1500	1	*
Ross-on-Wye	1011·3	-16	S'W	3	c	64	85	8	5	7	9	7-8	9	1500	1	*
Hartland Point	1010·5	-16	SW	5	c	63	85	8	5	7	-	7-8	9+	1500	0	3*
Bristol	1013·0	-16	S	3	bc	64	75	8	5	3	9	4-6	4-6	2500	1	
Portland Bill	1015·3	-14	SW	4	o	59	92	7	5	-	-	10	10	2500	1	3
Plymouth	1013·8	-18	SSW	4	o	60	92	7	5	-	-	10	10	800	1	2
The Lizard	1013·3	-20	S	5	c	60	92	7	8	2	-	7-8	9+	1500	0	3
Scilly (St. Mary's)	1011·1	-16	S'W	6	c	61	92	7	5	-	-	10	10	1500	0	3
Guernsey	1015·6	-18	-	0	bc	67	75	8	-	7	8	0	2-3	-	0	1
Pembroke	1008·3	-20	SW'S	7	oq	59	97	6	5	-	-	10	10	450	1	4
Holyhead	1005·0	-22	S	6	dodo	58	97	6	5	2	-	7-8	10	450	1	3*
Chester (Sealand)	1007·4	-24	S	3	c	66	75	8	5	7	-	7-8	9+	2500	1	*
Manchester	1008·0	-24	S	4	c	66	85	7	5	7	-	4-6	9+	1500	1	
Spurn Head	1010·4	-18	SSW	4	c/pr	67	75	7	6	9	-	4-6	9+	2500	0	3*
Catterick	1006·6	-22	S'W	4	c	66	85	7	5	7	-	9	9+	1500	1	
Tynemouth	1005·9	-18	S	4	c/r	66	85	6	8	-	-	7-8	7-8	1500	1	1
St. Abbs Head	1002·4	-8	SSW	7	iro	63	85	8	9	2	-	7-8	10	1500	1	3
Leuchars	1001·2	-18	SSW	4	c/r	63	85	8	5	7	-	7-8	9+	1500	1	*
Renfrew (Abbotsl.)	1000·9	-20	SSW	4	iro	62	92	6	5	2	-	9+	10	800	1	*
Eskdalemuir	1002·9	-24	SSW	7	DD	59	97	5	-	2	-	10	10	450	1	*
Point of Ayre	1003·3	-24	SW'S	6	dd	60	92	7	6	1	-	7-8	10	800	1	4
Tiree	996·4	+8	WSW	4	f	57	97	2	-	-	-	10	10	<150	1	3
Stornoway	998·6	+28	NE	5	rr	56	97	6	5	2	-	9	10	1500	1	3*
Dalwhinnie	998·9	-16	S	4	ir	59	92	6	6	2	-	7-8	10	1500	1	
Aberdeen	1001·0	-28	SSW	3	ido	59	92	6	6	7	-	2-3	10	1500	1	2
Wick	999·4	-32	SE	3	roro	57	97	6	5	2	-	7-8	10	800	1	1
Lerwick	1000·0	-18	SE'S	5	rf	55	97	1	-	-	-	10	10	<150	1	*
Blacksod Point	1002·2	+12	W	3	c	59	92	8	5	-	-	7-8	7-8	800	1	2
Malin Head	999·7	+10	SW	2	c	59	92	7	5	-	-	9	9	1500	0	1
Aldergrove	999·9	-14	SSW	4	iro	64	97	5	6	2	-	9+	10	800	1	*
Birr Castle	1001·7	-12	SSW	3	ir	64	92	7	6	2	-	7-8	10	800	1	*
Valentia Obsy.†	1005·1	+18	NW'W	3	c	59	92	8	5	-	-	10	10	800	1	2
Roches Point	1004·0	-6	SSW	4	DD	60	97	4	5	-	-	10	10	220	1	4

PAST 24 HOURS. — WEATHER.

Stations	7h.—13h. 28th (37)	13h.—18h. 28th (38)	18h. 28th to 1h. 29th (39)	1h.—7h. 29th (40)
London (Kew)	c	c	cbc	bcc
Croydon	c	c⊕c	bcbcbcw	cbcw
S. Farnborough	cmoc	cbcc	c	cirodoc
Boscombe Down	oiroomoc	c	cbcmocmo	omorro
Calshot (Soton.)	c	c	cbcbbc	bcododof
Lympne	c	c⊕	bcjfcbw	bwbcbc
Manston	cidoc	c	cbw	bccmow
Shoeburyness	cbcc	cbcv	bcvc	c
Felixstowe	coc	c	c,bbc	bcc
Gorleston	c	cq	cq	cprocq
Mildenhall	c	c	bcbcbc	ccprc
Cranwell	c	c	c	ciro
Birmingham	oc	c	co	oRiro
Upper Heyford	cdoroc	c	c	ccido
Ross-on-Wye	doc	c	cpoP	ir
Hartland Point	c	c	or	orrrf
Bristol	c	cbc	bccq	cqwro
Portland Bill	o	o	c	corr
Plymouth	oidmoc	o	godod o	romodof
The Lizard	dfidc	c	cidc	cdrff
Scilly (St. Mary's)	cidom	c	orfrf	rfrf F
Guernsey	ofmc	cbc	bc	bcc
Pembroke	ifiroomq	irmqo	irqrfreo	Ferriro
Holyhead	rorofdoc	rododoc	irdodoo	omoroc
Chester (Sealand)	cmroro	crociro	rmdoiro	rocidoc
Manchester	iroirmo	rrrroc	rrRrrc	ccrommo
Spurn Head	c	cpro	cq	irc
Catterick	roromoro	cmoiroc	ororomo	omocmoc
Tynemouth	ororoo	oirc	cpo	c
St. Abbs Head	rrmoc	ircq	ircq	cqbc
Leuchars	crorоirmoro	crororc	cirocirc	cbcbbc
Renfrew (Abbotsl.)	miroromo	cmorroro	cmoirododo	cmoc
Eskdalemuir	ofrRmo	orrdrD	DRRr	rridoc
Point of Ayre	rriro	rrirq	irdd	c
Tiree	orRR	orrcfe	ofmc	c
Stornoway	cro ro	crrzo	crorozo	cpro
Dalwhinnie	cir	cir	·	cir
Aberdeen	ccir	orrc	cidoc	cbc
Wick	procm	proro	roroc	cbc
Lerwick	cirmo	irrrrf	orfcrr	crrir
Blacksod Point	idrf	c	bc	proc
Malin Head	crorc	ciroc	cidoc	cproc
Aldergrove	crororr	roromo	rorododoc	c
Birr Castle	cir	cir	circ	c
Valentia Obsy.†	rrRRroro	roromoc	c	cproc
Roches Point	dddrdr	rrDD	oddbc	cbc

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.

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.*

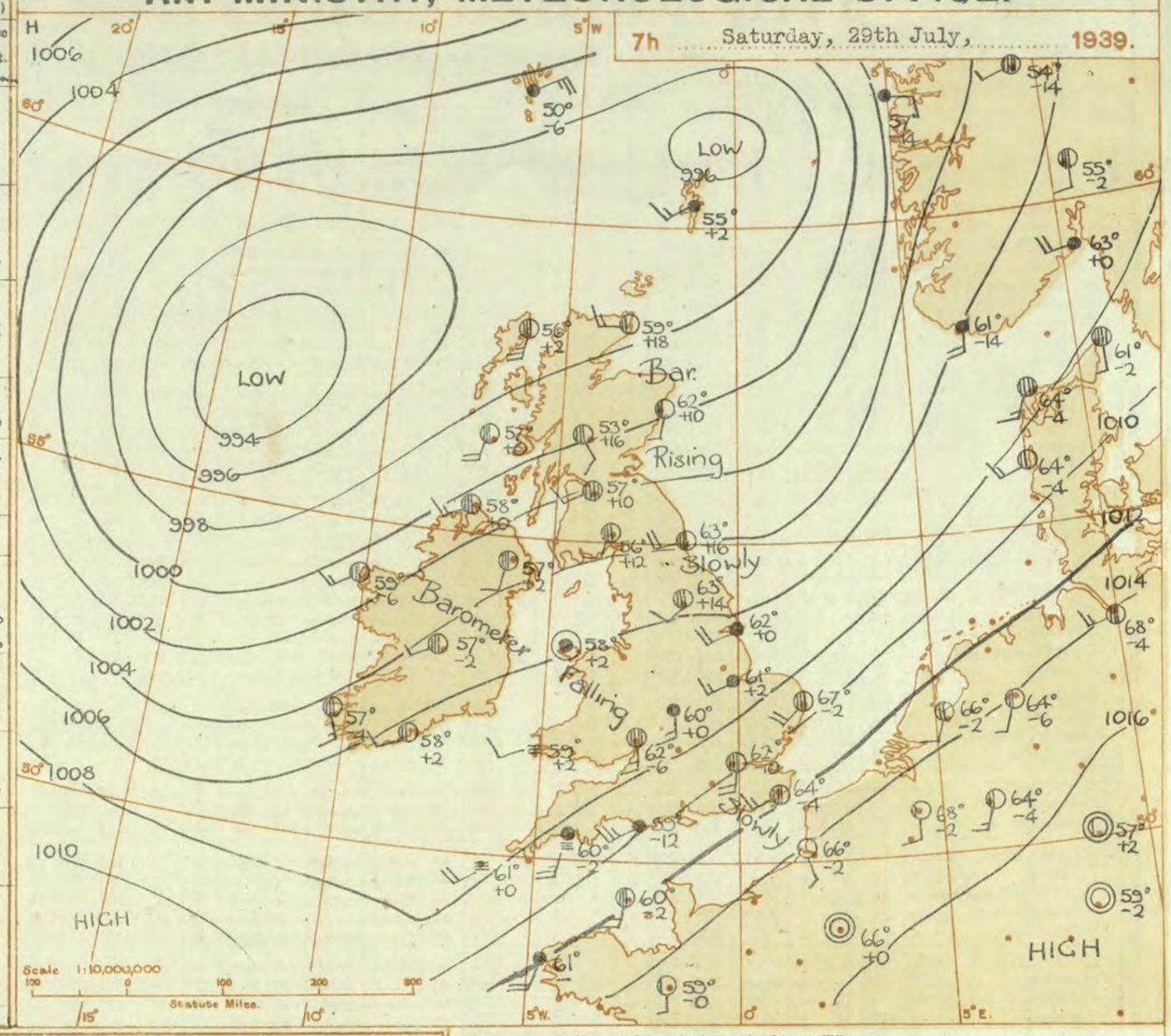
§ Sea disturbance reported from Dungeness.

AIR MINISTRY, METEOROLOGICAL OFFICE.

REPORTS from HEALTH RESORTS for 28th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 27th to 9h. 28th	Temperature. (°F) Max. 9h.—17h. 28th	Rainfall. (mm.) Night. 17h. 27th to 9h. 28th	Rainfall. (mm.) Day. 9h.—17h. 28th	Sunshine. (Hrs.) Sunrise to 17h. 28th	Sunshine. (Hrs.) Sunrise to Sunset. 27th
1	Tunbridge W.	bcco	ocbc	60	69	-	-	1·9	10·4
	Bournemouth	oc	cbc	58	65	Trace	-	1·0	3·7
	Ventnor ...	ofo	obc	60	64	-	-	0·9	7·5
	Southsea ...	pcbc	cbc	60	67	-	-	2·3	6·9
	Bognor Regis	bccoc	cvc	60	64	-	-	1·0	7·4
	Littlehampton	c	cbc	60	64	-	-	0·9	7·7
	Worthing ...	c	cbc	61	65	Trace	-	0·4	9·2
	Brighton ...	cb	bccbc	60	67	-	-	1·0	9·0
	Eastbourne† ...	c	cbc	60	67	-	-	2·2	10·2
	Hastings† ...	cbc	ocbc	60	67	-	-	3·0	11·7
	Folkestone ...	cbc	bcc	60	66	Trace	-	4·2	11·1
	Dover ...	cdc	cbccm	61	67	Trace	-	3·4	11·7
	Deal	ob	bcco	59	71	-	-	3·6	11·2
	Ramsgate ...	c	c	60	70	-	-	3·8	10·7
	Margate ...	cbc	bcc	60	73	-	-	3·5	10·1
2	Southend ...	cbcc	c	61	76	-	-	3·5	9·1
	Clacton-on-Sea	ocbc	bcc	61	71	-	-	2·0	8·8
	Dovercourt ...	oc	bcc	61	72	-	-	2·1	10·0
	Lowestoft ...	c	c	60	74	1	-	0·9	10·1
	Skegness ...	co	oco	61	72	0·5	-	1·1	12·5
	Mablethorpe...	bco	o	61	73	1	-	2·3	11·7
	Cleethorpes ...	bcc	bcrc	62	73	Trace	Trace	2·0	11·7
3	Leamington S.	oc	cbc	61	72	2	-	1·2	4·4
4	Cheltenham†	oc	cbc	60	69	3	-	1·2	3·1
5	Bath	c	cbcb	60	66	0·3	-	2·2	2·3
	Weymouth ...	mo	o	58	63	-	-	0·1	1·0
	Jersey ...	cbc	bc	59	74	-	-	7·3	3·3
	Torquay ...	oid	ocbc	60	64	0·3	Trace	1·2	0·0
	Falmouth ...	ord	docqo	59	64	1	Trace	0·8	0·8
	Penzance ...	dmc	cqc	59	64	1	Trace	0·1	0·4
	St. Ives ...	o	c	55	64	1	0·3	2·4	0·7
	Bude... ...	cbc	bc	61	65	1	-	2·4	0·0
	Ilfracombe ...	rro	ocbc	55	69	5	-	3·6	0·1
6	Aberystwyth	cpr	prc	57	65	3	3	0·0	0·0
7	Llandudno ...	cir	cp	61	67	0·2	0·3	0·0	1·3
	Colwyn Bay...	ccdc	pcddc	62	67	1	0·3	0·2	1·7
	Rhyl	cgpr	cid	62	68	1	0·1	0·1	2·5
8	Wallasey ...	ir	irc	60	66	2	3	0·0	4·7
	Southport ...	cirorr	coiro	60	66	1	4	0·1	4·4
	Blackpool ...	oir	circ	61	67	2	4	0·0	4·5
	Morecambe ...	oir	odr	61	68	5	5	0·0	5·7
9	Ilkley... ...	oro	oro	61	68	1	2	0·2	7·1
	Harrogate ...	coir	cr	60	66	0·4	2	0·0	8·1
10	Berwick-on-T.	or	oirc	59	67	0·6	2	0·0	6·3
11	Dunbar ...	omr	cr	59	66	Trace	2	0·0	1·7
12	Troon... ...	rrprr	rrprr	59	62	3	6	0·0	0·5
	Douglas ...	omr	orq	61	69	10	3	0·0	0·0

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



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. 29th July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ... 5 S.W. England 6 South Wales ...	Moderate southwest wind, fresh locally on coast; cloudy, occasional rain; local coast fog; rather warm and close
7 North Wales ... 8 N.W. England 9 N. Midlands ... 10 N.E. England	Moderate southwest wind; cloudy, some bright intervals; local rain; rather warm and close.
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 Orkney and Shetland	Moderate southwest to south wind, fresh locally; bright intervals; thundery showers later; rather warm.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate southwest wind, veering west, fresh locally; bright intervals; thundery showers; rather warm.

GENERAL INFERENCE.

A complex depression extending from northwest of Ireland to Shetland is moving slowly east and a shallow trough of low pressure over the Midlands is moving very slowly southeast. There will be bright intervals and local thundery showers in the North and some rain in the South and Midlands.

FURTHER OUTLOOK.

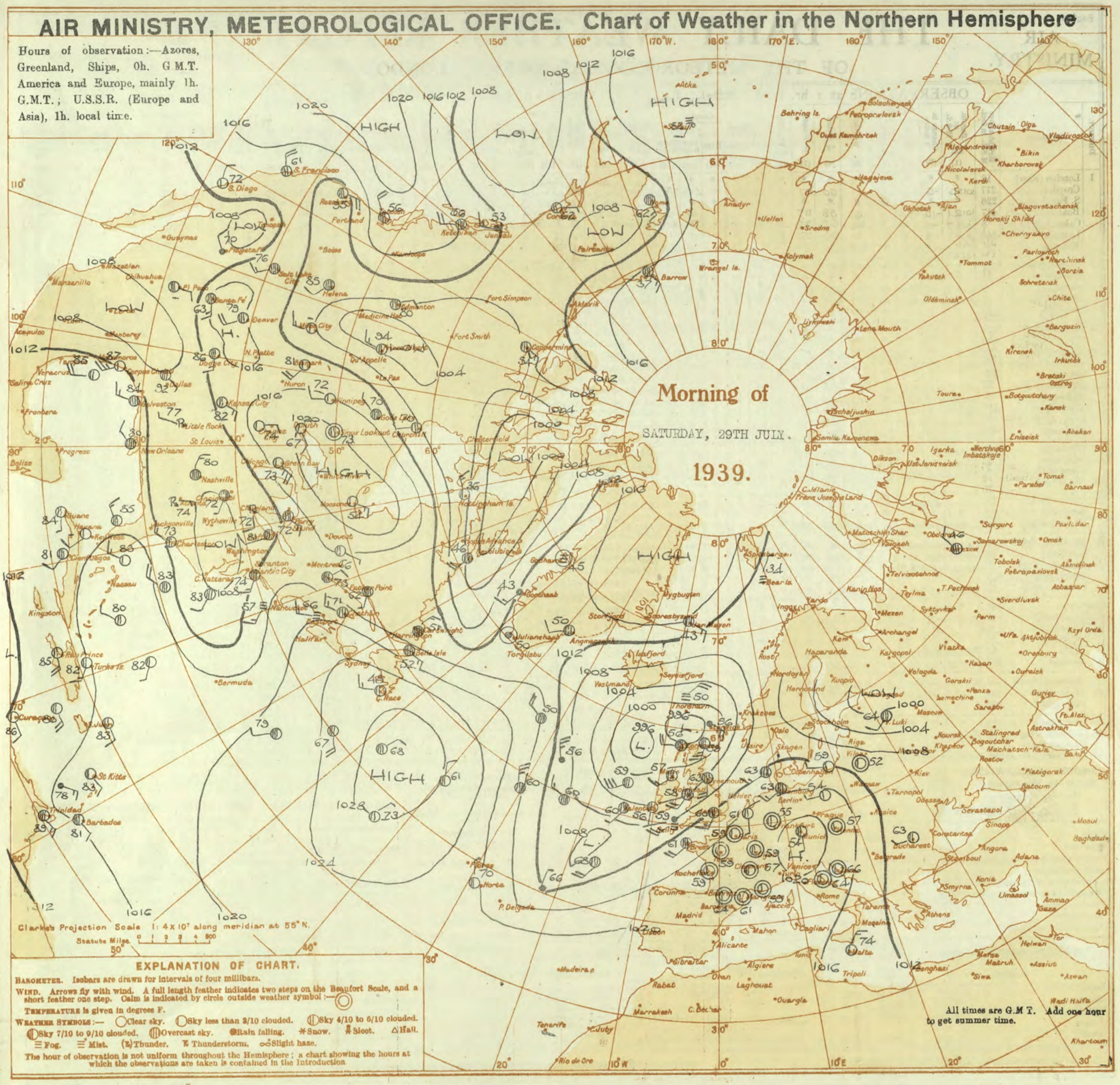
Unsettled.

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, 29th July, 1939.
No. 28373.

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

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	1013.6	-6	SW	3	c	60	97	7	5	3	-	2-3	7-8	4000
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	1012.1	-16	SSW	3	[illegible]	58	97	6	5	-	-	10	10	800
	Calshot (Sthmtn.)	8	1012.7	-18	SW	3	bc	62	92	8	5	3	-	Tr	4-6	2500
	Lympne ...	346	1014.1	-18	SE	2	b	60	92	8	-	3	-	0	1	-
	Manston ...	154	1013.2	-12	SE	3	bc	61	85	7	-	3	-	0	4-6	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1011.3	-10	SSW	4	c	63	85	8	5	3	-	4-6	7-8	2500
	Mildenhall ...	19	1010.6	-16	SSW	4	c	63	85	7	5	3	-	7-8	7-8	4000
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1007.8	-12	SW	5	r	60	97	6	5	-	-	10	10	800
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1011.9	-8	SW	4	c	58	92	7	6	-	-	10	10	4000
	Plymouth ...	82	1011.0	-14	SSW	5	id.	59	97	6	5	-	-	10	10	450
	The Lizard ...	240	1010.9	-8	S	5	c	59	97	5	5	-	-	10	10	1500
	Scilly (St. Mary's)	163	1009.1	-10	SW'S	5	[illegible]	59	97	3	-	-	-	10	10	<150
	Guernsey ...	175	1013.7	-14	SW	2	[illegible]	60	92	8	-	7	8	0	4-6	-
6	Pembroke ...	142	1006.5	0	SW'W	5	F+	60	97	1	-	-	-	10	10	<150
7	Holyhead ...	26	1004.2	+2	SW	4	o	58	97	6	5	-	-	10	10	220
	Chester (Sealand)	16	1005.4	-12	SSW	2	ir	62	92	7	5	7	-	7-8	9+	1500
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1006.2	-22	SW'S	5	c	62	75	8	5	2	-	4-6	10	2500
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1002.7	-18	S	4	c/pr	63	85	7	8	-	-	7-8	7-8	1500
11	St. Abbs Head	280	999.3	-12	WSW	6	[illegible]	60	92	8	8	2	-	7-8	9+	1500
	Leuchars ...	36	999.1	-10	SW	2	c	60	92	8	5	2	-	9	10	1500
12	Renfrew (Abbots I.)	19	1001.4	+8	WSW	3	[illegible]	58	92	6	5	-	-	10	10	800
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1002.5	+2	W	3	d.d.	60	92	7	-	2	-	10	10	1500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	996.1	+2	W	4	c	56	97	6	5	-	-	10	10	800
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	994.8	-14	SSW	5	c	59	92	8	5	7	-	4-6	7-8	1500
16	Lerwick ...	156	997.9	-30	SE	5	r	56	97	5	6	2	-	4-6	10	450
17	Blacksod Point	18	1003.0	0	SW	3	bc	57	85	8	4	3	-	2-3	4-6	800
18	Malin Head ...	84	1002.2	+10	SW	3	c	57	85	7	8	-	-	7-8	7-8	4000
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1006.1	0	S	1	b	56	97	8	5	-	-	1	1	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1010.4	-8	SW'S	3	c	63	85	7	5	-	-	10	10	1500	0	*
Croydon ...	1011.0	-10	SW	4	c	62	92	7	5	5	1	2-3	9+	450	0	*
S. Farnborough	1010.5	+2	SW	3	d.d.	61	97	6	6	-	-	10	10	450	1	*
Boscombe Down	1009.5	-10	SW	4	[illegible]	60	97	6	-	2	-	10	10	450	1	*
Calshot (Sthmtn.)	1011.1	0	SW'S	4	d.d.	61	97	5	5	-	-	10	10	220	1	§
Lympne ...	1012.7	-4	SW	3	c	64	85	8	-	9	9	0	7-8	-	0	§3
Manston ...	1011.6	-2	SW	3	c	65	85	7	5	7	-	4-6	9	4000	0	*
Shoeburyness ...	1011.1	-2	SW	4	c	66	85	8	-	9	-	0	9	-	0	*
Felixstowe ...	1010.5	-12	SSW	4	c	67	75	8	8	9	-	4-6	7-8	4000	0	3
Gorleston ...	1009.7	-2	SW'S	4	c	67	75	7	5	4	-	2-3	7-8	2500	0	3
Mildenhall ...	1008.9	-2	SW'S	4	c	64	85	7	5	7	-	4-6	9+	2500	1	*
Cranwell ...	1007.3	+2	SW	3	ir	61	92	8	5	7	-	7-8	10	800	1	*
Birmingham ...	1007.2	0	S	3	ir	60	97	6	6	-	-	10	10	800	1	*
Upper Heyford	1009.2	-4	SW	3	c	60	92	7	5	-	-	10	10	800	1	*
Ross-on-Wye	1007.5	-6	S	3	c	62	92	7	6	-	-	10	10	1500	1	*
Hartland Point	1006.8	+4	SW	6	[illegible]	60	97	3	-	-	-	10	10	<150	1	4
Bristol ...	1008.6	-6	SW	4	[illegible]	62	92	8	5	7	-	9	9+	800	1	*
Portland Bill ...	1010.7	-12	SW	5	[illegible]	59	92	7	5	-	-	10	10	1500	1	3
Plymouth ...	1009.6	-6	SW	4	[illegible]	60	97	2	-	-	-	10	10	<150	1	2
The Lizard ...	1008.7	-2	SSW	5	[illegible]	60	97	2	5	-	-	10	10	450	1	3
Scilly (St. Mary's)	1007.8	0	SW	4	F+	61	97	1	-	-	-	10	10	<150	1	3
Guernsey ...	1012.1	-2	SW	3	c	60	97	8	5	7	-	4-6	7-8	800	0	1
Pembroke ...	1006.7	+2	W'S	2	F	59	97	1	-	-	-	10	10	<150	1	2
Holyhead ...	1004.9	+2	-	0	ir	58	97	6	9	2	-	7-8	10	800	1	2
Chester (Sealand)	1005.4	+2	SSW	1	c	64	75	7	5	7	-	7-8	9+	2500	1	*
Manchester ...	1005.7	+1	S	2	c/r	61	92	5	6	2	-	9	10	800	1	*
Spurn Head ...	1006.5	0	SW	4	ir	62	92	7	5	-	-	10	10	800	1	3
Catterick ...	1004.6	+14	SW'S	2	c	63	85	8	5	9	9	7-8	9	1500	1	*
Tynemouth ...	1003.6	+16	WSW	4	c	63	75	8	2	3	-	4-6	7-8	1500	1	1
St. Abbs Head	1002.7	+20	WNW	3	bc	60	75	9	4	6	9	4-6	4-6	2500	0	2
Leuchars ...	1001.8	+18	SW	3	bc	59	85	8	5	4	9	2-3	4-6	2500	1	*
Renfrew (Abbots I.)	1003.1	+10	SW'W	2	c	57	85	8	5	-	-	10	10	1500	1	*
Eskdalemuir ...	1003.4	+12	SSW	2	c/d	56	97	6	5	2	-	4-6	10	450	1	*
Point of Ayre ...	1004.4	+8	W'S	2	c	59	92	8	-	7	-	0	9+	-	1	1
Tiree ...	999.7	0	SW'S	4	c/pr	57	85	8	5	7	-	4-6	7-8	1500	1	3
Stornoway ...	997.2	+2	SSW	5	c	56	85	7	5	7	-	4-6	9	2500	1	2
Dalwhinnie ...	*	+16	SSE	2	c	53	85	7	4	6	-	7-8	10	4000	0	*
Aberdeen ...	999.7	+10	SW	1	bc	62	75	8	7	-	9	Tr	2-3	2500	1	1
Wick ...	997.1	+18	W	3	bc	59	75	8	7	4	1	2-3	4-6	1500	1	1
Lerwick ...	996.6	+2	SW	4	ir	55	97	6	8	2	-	7-8	10	450	1	*
Blacksod Point	1001.0	-6	SW	3	c	59	85	8	3	3	-	4-6	7-8	800	0	3
Malin Head ...	1001.8	0	SW	3	c	58	85	8	9	8	-	4-6	7-8	2500	0	1
Aldergrove ...	1003.3	+2	SSW	2	c	57	85	9	5	-	-	9	9	4000	1	*
Birr Castle ...	1004.3	-2	SW	1	c	57	92	8	5	2	-	7-8	10	2500	1	*
Valentia Obsy. †	1005.4	-4	S'E	3	c	57	97	8	5	-	-	6	10	1500	1	2
Roches Point	1006.0	+2	SW	2	bc	58	92	8	5	-	5	1	4-6	1500	1	3

PAST 24 HOURS.

Stations	Temperature. Max. Day 7h–18h °F.	Temperature. Min. Night 18h–7h °F	Temperature. Min. on Grass °F.	Rainfall. Day 7h–18h mm.	Rainfall. Night 18h–7h mm.	Sunshine 28th Hrs. (36)
London (Kew)	69	60	56	-	-	3.3
Croydon ...	69	58	56	-	-	3.0
S. Farnborough	69	56	49	-	Tr	3.1
Boscombe Down	65	57	55	Tr	8	8.1
Calshot (Sthmtn.)	66	59	58	-	0.5	2.2
Lympne ...	70	59	57	-	*	6.0
Manston ...	74	59	56	-	-	4.9
Shoeburyness ...	73	61	56	-	-	3.7
Felixstowe ...	74	62	59	-	-	2.9
Gorleston ...	73	62	60	-	Tr	0.9
Mildenhall ...	72	61	57	-	Tr	1.4
Cranwell ...	72	60	58	-	0.1	1.3
Birmingham ...	67	58	54	-	3	0.2
Upper Heyford	68	58	55	0.2	Tr	*
Ross-on-Wye	67	58	56	Tr	4	0.1
Hartland Point	65	60	59	-	11	3.1
Bristol ...	65	60	57	-	Tr	3.2
Portland Bill ...	60	56	*	-	3	*
Plymouth ...	60	59	59	Tr	2	0.0
The Lizard ...	62	58	*	Tr	1	0.3
Scilly (St. Mary's)	63	59	*	Tr	9	0.2
Guernsey ...	69	57	56	-	-	7.5
Pembroke ...	60	57	*	1	10	0.0
Holyhead ...	60	57	57	5	2	0.0
Chester (Sealand)	68	61	58	2	2	0.0
Manchester ...	67	59	59	7	7	0.0
Spurn Head ...	76	59	*	Tr	3	2.0
Catterick ...	67	61	58	2	1	0.1
Tynemouth ...	69	62	58	4	0.2	0.0
St. Abbs Head	64	57	*	5	0.6	*
Leuchars ...	65	56	51	3	Tr	0.0
Renfrew (Abbots I.)	63	56	54	10	2	0.0
Eskdalemuir ...	60	54	53	27	28	0.0
Point of Ayre ...	63	56	*	4	1	0.0
Tiree ...	63	54	52	14	0.2	0.1
Stornoway ...	59	55	*	8	3	0.0
Dalwhinnie ...	62	51	49	4	1	0.0
Aberdeen ...	65	57	48	3	Tr	0.1
Wick ...	60	56	*	2	1	*
Lerwick ...	58	53	*	2	12	0.0
Blacksod Point	65	56	*	7	0.1	*
Malin Head ...	67	54	*	5	Tr	0.5
Aldergrove ...	65	55	51	8	5	0.0
Birr Castle ...	67	56	53	17	0.2	0.2
Valentia Obsy. †	63	54	49	18	Tr	0.2
Roches Point	61	56	*	9	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	c	bc	bc	69	60	56	-	-	3.3	*	*	7
Croydon ...	217	c	c	bc	69	58	56	-	-	3.0	*	*	8
Greenwich (Royal Observatory) ...	149	c	c	cbwc	72	59	52	-	-	3.0	67	82	7
City (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	2.7	*	*	*
Westminster (St. James' Park) ...	27	*	*	*	71	61	56	0.2		3.5	75	87	*
Regents Pk. (Botanic Gardens)‡ ...	168	*	*	*	71	61	55	-	Tr	2.9	71	89	*
Camden Square ...	110	c	bc	*	71	61	56	-	0.3	*	*	90	*
Kensington ...	80	c	bc	*	72	61	56	-	0.3	3.0	65 At 18h.	89	*
Hampstead Observatory ...	450									2.0	*		*

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

South Kensington.

Max.	Time.	Min.	Time.
<0.3	whole period		

Kew Observatory.

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

FOREIGN OBSERVATIONS.

18h. G.M.T. 28th July — 7h. G.M.T. 29th July

Stations	18h. Barom. mb.	18h. Wind. Direc.	18h. Wind. Force.	18h. Weather.	18h. Temp. °F.	7h. Barom. mb.	7h. Wind. Direc.	7h. Wind. Force.	7h. Weather.	7h. Temp. °F.	Past 24 Hours. Max. Day °F.	Min. Night °F.	Rainfall. Day mm.	Rainfall. Night mm.
Paris ...	1017.4	SSE	1	c	74	1015.4	-	0	c	66	*	55	*	-
Brussels ...	1017.5	SW	2	c	70	1014.4	S	2	b	68	77	57	-	-
Berlin ...	1015.7	WNW	2	bc	73	1016.3	SW	2	[illegible]	66	*	63	*	0.1
Zurich ...						1018.0	N	1	[illegible]	57		52		-
Rome ...	1015.4	WNW	3	b	77	1016.7	ENE	2	b	70	*	*	-	-

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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

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AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION
Sunday 30th July, 1939.
No. 28374

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

District	Stations (For heights see p. 4.)	Barom. at M.S.L. mb. (1)	Change in 3 hours (2)	Wind Direc. (3)	Wind Force 0–12 (4)	Weather (5)	Temp. °F. (6)	% Humid. (7)	Visibility 0–9 (8)	Cloud Form Low (9)	Cloud Form Med. (10)	Cloud Form High (11)	Cloud Amount Low 0–10 (12)	Cloud Amount Total 0–10 (13)	Height of Base (feet) (14)
1	London (Kew) ...	1010·1	-4	SW'S	4	c	65	85	8	5	-	-	9+	9+	1500
	Croydon	1010·9	-2	S'W	3	ido	67	88	8	5	-	-	9	10	1500
	S. Farnborough	1010·1	-2	SSW	4	idodo	64	92	6	5	-	-	10	10	800
	Boscombe Down	1009·3	-6	SSW	5	dodo	63	92	6	5	-	-	10	10	450
	Calshot (Soton.)	1011·2	-4	SW'S	5	o	65	92	7	5	-	-	10	10	800
	Lympne ...	1012·1	-2	SW'S	4	c	70	75	8	5	4	1	7-8	7-8	800
	Manston ...	1010·5	-6	SW'S	5	bc	74	55	8	1	4	1	1	2-3	2500
2	Shoeburyness ...	1010·4	-10	SSW	4	bc	75	65	8	7	-	-	2-3	2-3	4000
	Felixstowe ...	1008·9	-2	S'W	5	bc	76	65	8	5	9	-	4-6	4-6	2500
	Gorleston ...	1008·6	-6	SW'S	4	bc	72	75	7	7	-	-	4-6	4-6	4000
	Mildenhall ...	1008·2	-6	SW'S	4	c	72	75	7	5	-	-	9+	9+	2500
	Cranwell ...	1007·0	-6	SSW	4	c	69	85	8	5	-	-	9+	9+	1500
3	Birmingham ...	1007·1	0	S	3	iro	65	85	7	6	-	-	10	10	800
	Upper Heyford	1018·5	-8	SSW	4	c	67	85	8	5	7	-	9	10	800
4	Ross-on-Wye ...	1007·0	-4	SSW	3	c	67	85	7	5	-	-	10	10	1500
5	Hartland Point	1006·1	-10	SW	3	dF	62	97	1	-	-	-	10	10	<150
	Bristol	1008·1	-4	SSW	3	c	68	85	8	5	3	-	7-8	9	800
	Portland Bill ...	1010·3	+2	S	4	o	61	92	6	5	-	-	10	10	1500
	Plymouth ...	1008·6	-6	S	4	o/f	60	97	6	5	-	-	10	10	<150
	The Lizard ...	1008·2	-6	S	5	c	61	97	5	5	-	-	10	10	1500
	Scilly (St. Mary's)	1006·3	-14	SSW	5	of-	60	97	3	5	-	-	10	10	1500
	Guernsey ...	1011·0	-10	S	4	c	64	85	8	5	-	-	9	9	450
6	Pembroke ...	1005·7	0	S	1	id	60	97	6	5	-	-	10	10	800
7	Holyhead ...	1004·9	0	S'W	3	c	63	85	8	8	9	5	4-6	7-8	2500
	Chester (Sealand)	1005·2	-6	WS	2	c	73	55	8	8	-	-	7-8	7-8	2500
8	Manchester ...	1005·4	-2	SW'S	3	c	69	75	7	8	-	-	9+	9+	2500
10	Spurn Head ...	1006·6	0	SSW	3	c	67	85	7	5	-	-	9+	9+	450
	Catterick ...	1004·6	-2	WSW	2	c	71	65	7	5	-	8	7-8	7-8	1500
	Tynemouth ...	1004·8	0	NE	1	c/pr	62	75	7	8	-	-	9+	9+	1500
11	St. Abbs Head...	1003·4	+4	W	3	c	68	55	9	7	6	2	4-6	7-8	2500
	Leuchars ...	1002·8	+2	WSW	4	bc	67	55	8	2	7	-	2-3	4-6	5700
12	Renfrew (Abbotsl.)	1003·7	+2	SW	3	c	64	55	8	8	-	6	4-6	9	2500
	Eskdalemuir ...	1004·0	+4	SSW	4	c	61	75	8	8	-	-	9+	9+	1500
	Point of Ayre ...	1004·8	0	N'E	1	c	63	75	8	8	7	-	4-6	9+	2500
13A	Tiree	1000·4	+2	S'W	5	c	61	75	8	5	-	-	7-8	7-8	2500
13B	Stornoway ...	997·7	0	SSW	6	pr	59	85	7	8	7	-	7-8	7-8	2500
15	Dalwhinnie ...	1001·9	+8	SSW	2	c	58	85	7	4	1	-	7-8	9+	2500
	Aberdeen ...	1001·3	+4	WSW	3	bc	70	45	8	7	-	8	2-3	4-6	4000
	Wick	999·7	+6	SSW	4	c	60	75	8	5	7	1	4-6	7-8	1500
16	Lerwick... ...	997·7	+6	WSW	6	bc	57	85	8	5	7	-	4-6	4-6	1500
17	Blacksod Point...	1001·5	-2	SW	5	c	62	85	8	3	3	-	4-6	7-8	800
18	Malin Head ...	1001·6	-4	SSW	4	c|p	62	75	8	9	-	-	7-8	7-8	5700
	Aldergrove ...	1002·9	-2	S'W	3	c	65	65	9	8	-	2	7-8	9	4000
19	Birr Castle ...	1003·8	-6	WSW	2	c	64	75	8	8	1	-	7-8	10	1500
20	Valentia Obsy.†	1004·3	-6	SW'S	3	c	62	85	8	5	-	-	9+	9+	1500
	Roches Point ...	1004·7	-6	SW	3	c	59	92	8	8	7	-	7-8	9	1500

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

Stations	Barom. at M.S.L. mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1009·0	-8	SW'S	3	c	65	85	7	5	-	-	10	10	1500	0	*
Croydon	1009·9	-6	SW'S	3	ido	67	92	7	5	-	-	10	10	800	1	*
S. Farnborough	1010·0	-10	S'W	3	iro	65	97	6	6	-	-	10	10	800	1	*
Boscombe Down	1008·4	-6	SSW	4	dd	63	97	5	5	-	-	10	10	450	1	*
Calshot (Soton.)	1011·3	-10	SW'S	4	c/d	65	85	7	5	7	-	7-8	9+	800	1	2
Lympne	1010·2	-12	WSW	4	c	72	75	9	1	4	9	1	7-8	2500	0	§2
Manston	1009·5	-8	SWW	4	c	71	75	8	1	5	6	2-3	7-8	2500	0	*
Shoeburyness	1009·6	-6	SW	3	bc	70	75	8	7	9	-	4-6	4-6	2500	0	*
Felixstowe	1009·4	-4	SW'S	5	c	70	75	8	5	5	4	4-6	9	1500	0	3
Gorleston	1007·8	-6	SW'S	4	bc	74	75	7	1	4	-	1	4-6	2500	0	3
Mildenhall	1007·6	-4	SW	5	c	70	75	7	7	-	-	9+	9+	2500	0	*
Cranwell	1005·7	-14	S	4	c/pr	69	85	[illegible]	5	3	1	4-6	9+	1500	1	*
Birmingham	1005·3	-10	S	4	c/r	64	97	7	6	-	-	10	10	800	1	*
Upper Heyford	1008·0	-4	S	4	c	65	85	7	5	2	-	9+	10	800	1	*
Ross-on-Wye	1005·7	-6	S	3	c/d	66	85	7	5	7	1	9+	10	1500	1	*
Hartland Point	1004·1	-12	SW	5	c/r	63	97	7	6	2	-	7-8	10	800	1	4
Bristol	1006·8	-10	SSW	4	c	65	85	8	5	7	-	7-8	9+	800	1	*
Portland Bill	1009·0	-2	SSW	4	c	61	92	7	6	-	-	10	10	4000	1	4
Plymouth	1006·9	-14	S	4	m	60	97	4	5	-	-	10	10	<150	1	1
The Lizard	1006·1	-20	S'E	5	oF	61	97	1	5	-	-	10	10	220	1	3
Scilly (St. Mary's)	1003·9	-18	SSW	5	F	61	97	1	-	-	-	10	10	<150	1	3
Guernsey	1009·3	-10	SSW	3	c	67	92	8	8	7	-	2-3	7-8	1500	0	3
Pembroke	1003·9	-8	SSE	1	rf	60	97	3	-	-	-	10	10	<150	1	2
Holyhead	1002·5	-14	S'W	3	c/r	58	92	8	5	9	-	2-3	9+	2500	1	2
Chester (Sealand)	1003·8	-6	NNW	1	roro	62	92	6	6	-	-	7-8	10	1500	1	*
Manchester	1003·8	-6	NWN	2	rr	61	97	5	6	2	-	4-6	10	800	1	*
Spurn Head	1004·9	-12	S	3	c	67	85	7	5	8	-	4-6	9+	2500	0	3
Catterick	1003·2	-10	W	1	roro	68	75	7	6	2	-	4-6	10	1500	1	*
Tynemouth	1003·3	-8	E	2	c	62	75	8	8	-	-	9	9	1500	1	1
St. Abbs Head	1002·6	-2	SSW	2	c	64	65	9	4	7	-	4-6	9	2500	0	1
Leuchars	1001·9	-6	SW	2	c	65	55	8	4	7	-	4-6	9+	4000	0	*
Renfrew (Abbotsl.)	1002·5	-10	SW	3	c	63	65	8	5	7	8	7-8	9+	2500	1	*
Eskdalemuir	1002·8	-8	S'W	3	c	59	85	8	8	7	-	4-6	10	2500	1	*
Point of Ayre	1002·8	-6	S'W	3	c	59	92	8	8	7	-	4-6	9+	1500	0	2
Tiree	999·1	-6	S	4	c/r	58	92	7	5	-	-	9	9	1500	1	4
Stornoway	997·3	0	S	6	pr	56	92	8	8	7	-	7-8	9+	2500	1	3
Dalwhinnie	1001·4	-2	SSW	3	c	57	75	7	4	1	-	4-6	10	2500	0	*
Aberdeen	1001·5	0	SSW	3	c	65	55	7	7	-	8	4-6	7-8	4000	0	2
Wick	999·7	-2	SSW	4	c	60	75	8	4	6	!	4-6	9	1500	1	2
Lerwick	999·7	+4	SW	5	bc	58	85	8	5	3	-	2-3	4-6	2500	1	*
Blacksod Point	1001·0	-2	W	2	c	58	92	8	3	-	-	7-8	7-8	800	1	2
Malin Head	1000·3	-4	W	3	c/pr	58	85	7	6	7	-	4-6	7-8	2500	0	2
Aldergrove	1001·1	-10	S	2	c	62	75	8	8	-	8	9	9+	4000	1	*
Birr Castle	1002·1	-8	WSW	2	c	64	75	8	8	7	-	7-8	9	1500	1	*
Valentia Obsy.†	1003·2	-6	SW	3	c	61	85	8	8	-	9	7-8	7-8	1500	1	2
Roches Point	1003·1	-10	S	2	c	61	85	8	8	-	-	7-8	7-8	1500	1	2

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)	ciroc	cproc	c	cproc
Croydon	ccdo	bocoido	cidobcmow	bcido
S. Farnborough	crddo ido	cidrom	cromoc	ccroroc
Boscombe Down	omoirom	omoddom	oddidRR	oRRopr
Calshot (Soton.)	odofddo	ocide	cidoc	cciRc
Lympne	bcc	cbc	bcbw	bwbc
Manston	c,bbcy	cbcybc	cbc	bcbw
Shoeburyness	cbc	bcv	Bc	bc
Felixstowe	cbc	bcc	cbc	bcwbc
Gorleston	cpgbc	bcebcq	bccbc	bc
Mildenhall	c	c	cbc	bccpRc
Cranwell	cirogc	ccpro	cmo	crrcmo
Birmingham	ogco	oir	ciro	cir
Upper Heyford	cdc	c	ccdodo	crrcrido
Ross-on-Wye	cgc	cRodcd	ccl	pcbc
Hartland Point	rfdf	croro	idtlr	coFc
Bristol	crdc	ebcc	cdoprcr	rrRpobcc
Portland Bill	odug	omc	ctro	trc
Plymouth	Fodom	omm	omf	ofRRcbc
The Lizard	dfc	dFF	prFFo	Fprbc
Scilly (St. Mary's)	idFFc	idFF	dFFFc	cDpc
Guernsey	c	c	clpr	clprc
Pembroke	idmo	RFRFo	RifqirFdd	odfqcbc
Holyhead	iromc	crrc	proprc	cRiRc
Chester (Sealand)	c	crroRRm	cRRmo	cRRmo
Manchester	cmoiro	cgrRm	crrRmo	crRcr
Spurn Head	irc	c	c	Rrcq
Catterick	cbcc	coroто	rororn	rrpr
Tynemouth	cpo	c	cpoco	ornirif
St. Abbs Head	bccy	c	c	cRrt
Leuchars	bcy	bcycy	cybcw	bcWc
Renfrew (Abbotsl.)	c	cyc	c	cmowiro
Eskdalemuir	cigc	c	cbcc	ccrRro
Point of Ayre	c	c	c	rrroc
Tiree	bcc	c	c	cprbc
Stornoway	cpr	cpr	PRrrc	cpro
Dalwhinnie	cir	c	•	c
Aberdeen	bc	bcy	bcjc	ccro
Wick	c	cbcc	c	cbc
Lerwick	circdbc	bc	bcc	sid
Blacksod Point	pgc	pgc	bc	proc
Malin Head	cbcc	cpgc	cprocbcc	cprobcc
Aldergrove	c	c	c	c
Birr Castle	c	c	c	cbc
Valentia Obsy.†	c	cbcc	proPRc	prproc
Roches Point	bcc	circ	probc	bcw

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.

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.*

† Sea disturbance reported from Dungeness.

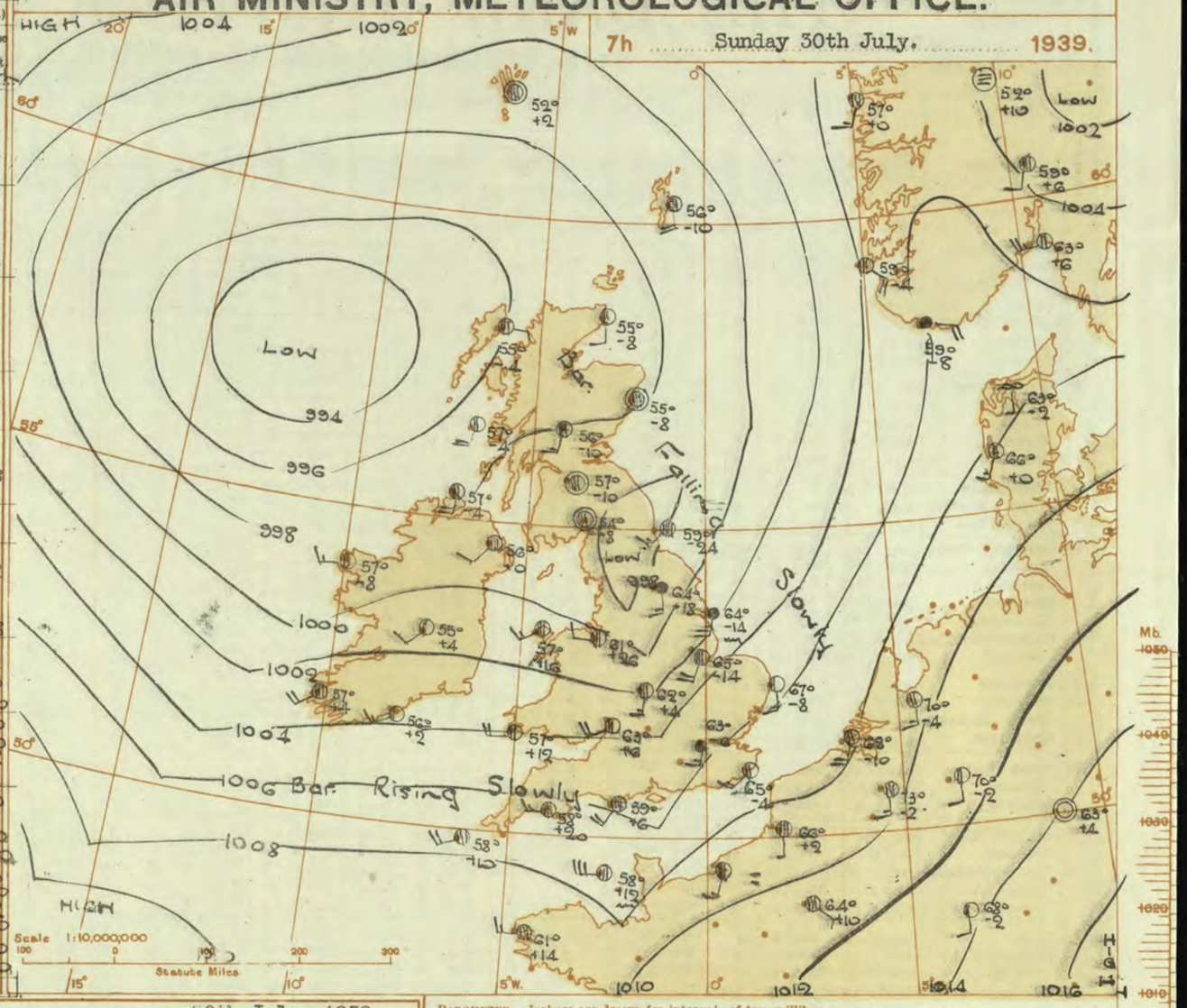
AIR MINISTRY, METEOROLOGICAL OFFICE.

7h ..... Sunday 30th July, ... 1939.

REPORTS from HEALTH RESORTS for 29th July **1939.**

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature (°F) Min. 9h. 28th to 9h. 29th	Temperature (°F) Max. 9h.—17h. 29th	Rainfall (mm.) Night. 17h. 28th to 9h. 29th	Rainfall (mm.) Day. 9h.—17h. 29th	Sunshine (Hrs.) Sunrise to 17h. 29th	Sunshine (Hrs.) Sunrise to Sunset. 28th
1	Tunbridge W.	co	odoc	59	69	-	Trace	3.5	3.2
	Bournemouth	do	or	58	65	5	0.5	0.0	1.1
	Ventnor ...	odou	ofoc	59	66	Trace	-	0.0	1.6
	Southsea ...	odo	oc	59	67	-	-	0.0	3.2
	Bognor Regis	oid	oid	60	66	Trace	Trace	0.0	1.2
	Littlehampton	cdc	cbc	59	67	-	Trace	0.0	1.4
	Worthing ...	o	oc	59	67	-	-	0.5	1.0
	Brighton ...	e	cidc	60	67	-	Trace	0.5	1.4
	Eastbourne†...	bbc	bcb	62	71	-	-	9.9	2.2
	Hastings† ...	bbc	bcbbc	60	70	-	-	9.6	4.0
	Folkestone ...	bcb	bbc	59	74	-	-	11.1	4.7
	Dover ...	cbcb	bbc	60	71	-	-	10.9	3.6
	Deal	cbcb	bbc	60	74	-	-	8.4	4.1
	Ramsgate ..	bc	bc	60	78	-	-	10.0	4.5
	Margate ...	bc	bc	61	76	-	-	9.3	4.8
2	Southend ...	bcb	bbcc	61	78	-	-	9.6	4.6
	Clacton-on-Sea	bc	bc	62	74	-	-	7.7	3.2
	Dovercourt ...	bcc	bc	61	75	-	-	7.2	3.3
	Lowestoft ...	bbccr	cbcbc	61	74	Trace	1	4.7	1.6
	Skegness ...	oro	ooc	61	71	0.3	3	6.7	1.6
	Mablethorpe...	oro	cbcc	59	72	1	Trace	0.5	2.3
	Cleethorpes ...	iobc	ocbc	59	72	2	Trace	0.7	2.6
3	Leamington S.	odo	co	59	70	4	-	0.1	2.2
4	Cheltenham†	oc	cbo	59	70	5	Trace	0.2	1.3
5	Bath	c	cbcc	61	69	-	-	1.1	3.5
	Weymouth ...	mom	m	58	65	7	-	0.0	0.2
	Jersey ...	bc	bcc	61	75	-	-	9.5	9.8
	Torquay ...	odpm	o	59	66	13	Trace	0.0	1.3
	Falmouth ...	orroq	corfd	60	66	5	1	0.0	0.8
	Penzance ...	dmid	cmidm	59	65	7	1	0.1	0.1
	St. Ives ...	d	o	57	67	11	0.5	0.0	2.4
	Bude... ...	obd	pdo	61	65	3	2	0.0	3.0
	Ilfracombe ...	rrorr	rodo	61	69	17	3	0.0	4.0
6	Aberystwyth	prde	Rr	58	63	10	15	0.0	0.0
7	Llandudno ...	cbc	cir	60	66	5	1	1.2	0.0
	Colwyn Bay...	cbcc	cberr	60	71	2	2	3.8	0.2
	Rhyl	cbc	bccrr	60	68	2	5	3.5	0.1
8	Wallasey ...	cpcbc	bcoR	61	67	7	4	3.8	0.0
	Southport ...	cdcbc	bcoP	60	70	15	3	3.7	0.1
	Blackpool ...	c	cbcR	60	69	8	1	3.2	0.0
	Morecambe ...	cbcp	bccp	60	68	11	0.3	2.6	0.0
9	Ilkley... ...	obc	cbcR	60	74	5	0.2	3.0	0.3
	Harrogate ...	cbc	bcc	61	72	2	Trace	3.0	0.0
10	Berwick-on-T.	cbc	bcc	58	70	-	-	8.9	0.2
11	Dunbar ...	bc	bc	56	69	Trace	-	8.0	0.0
12	Troon... ...	ocbc	bcc	56	63	3	-	2.0	0.0
	Douglas ...	cb	c	59	63	6	-	1.6	0.0

* Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.



Barometer. Isobars are drawn for intervals of two millibars.
Wind, Weather Symbols. For explanation see opposite page.
Sea Disturbance. Rough. High.
Barometric Change from 4h. to 7h. in tenths of millibars is entered beneath the temperature.

FORECASTS FOR THE 24 HOURS COMMENCING 12 NOON, G.M.T. 30th July, 1939.

Districts.	Forecasts
1 S.E. England 2 E. England ...	Moderate southwest winds, veering west; cloudy, bright periods; local showers with perhaps thunder; 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 ...	Moderate winds between southwest and west; cloudy, some bright periods; local showers with perhaps thunder; average temperature.
10 N.E. England 11 S.E. Scotland	Light southeast winds, veering to west; cloudy, some bright periods; showers; average temperature.
12 S.W. Scotland & Isle of Man.	Moderate winds between south and southwest, veering to northwest and freshening; cloudy, some bright periods and showers; average temperature.
13 A. W. Scotld. B.N.W. Scotland.	Light or moderate southerly winds backing to north or northwest and freshening; cloudy, some bright periods; showers; average or rather low temperature.
14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Moderate winds between southwest and west, veering northwest and freshening; cloudy and bright periods; local showers; average temperature.

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

GENERAL INFERENCE.

A depression to the west of Scotland is moving east, while a secondary depression over Northeast England with an associated trough extending southwards is moving east. In all districts there will be bright periods and local thundery showers.

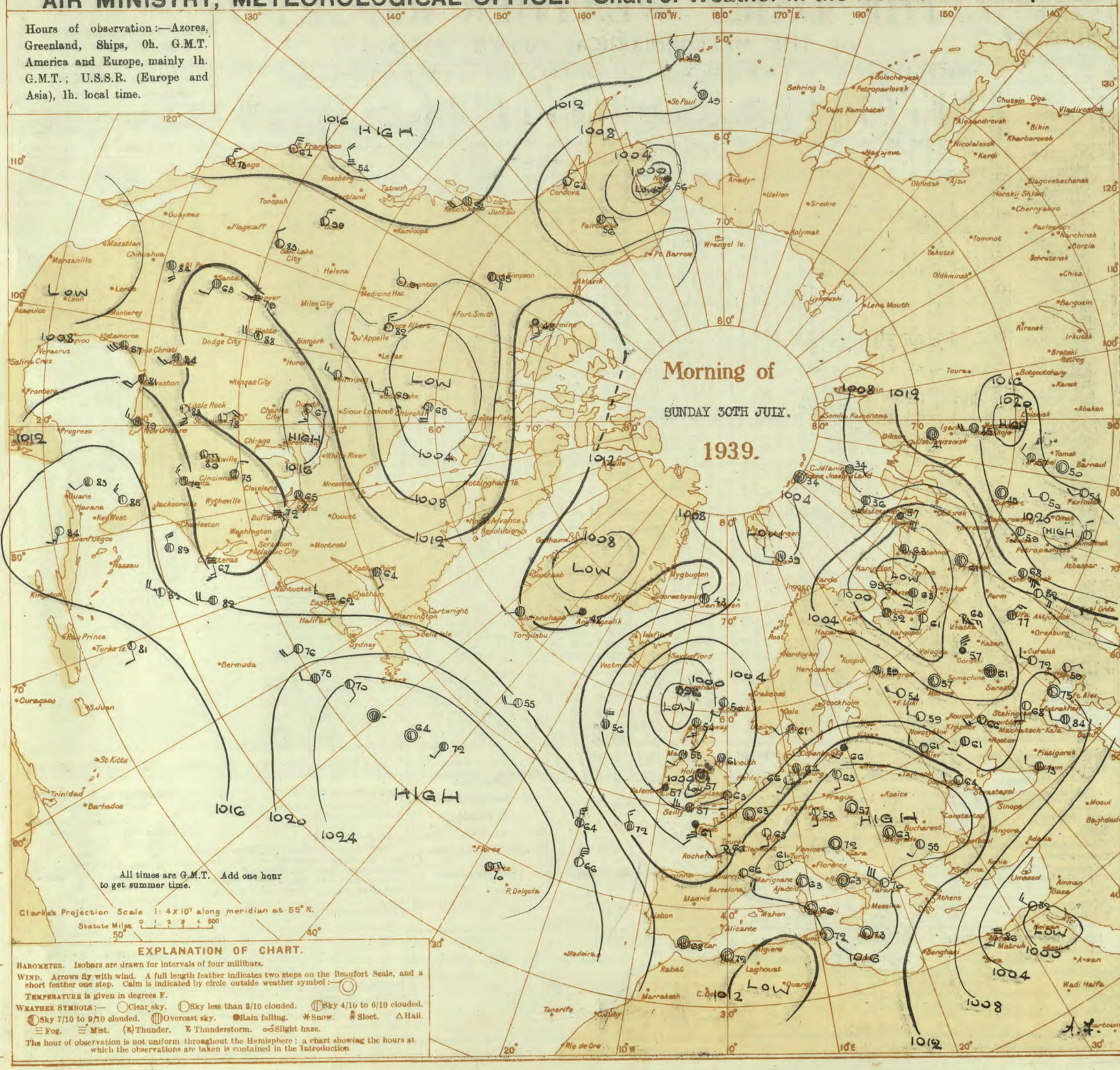
FURTHER OUTLOOK.

Rather unsettled.

Forecasts issued at 0930 G.M.T.

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

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 30th July, 1939.

No. 28374

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

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	1007·4	−1·4	S	1	c	63	97	8	5	4	–	4·6	7·8	800
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417														
	Calshot (Sthmtn.)	8														
	Lympne ...	346	1008·9	−1·6	SE'S	2	b	62	85	8	–	3	–	0	1	–
	Manston ...	154	1008·0	−1·0	SE'S	1	bc	61	92	7	–	–	1	0	2-3	–
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1007·2	−2	S'W	3	bc	64	85	8	–	4	–	0	4·6	–
	Mildenhall ...	19														
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1001·0	−1·8	SW	6	c/r	63	92	7	6	2	–	7·8	10	800
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1005·2	−2·0	SW	4	rr	60	92	7	5	–	–	10	10	2500
	Plymouth ...	82														
	The Lizard ...	240	1004·4	−0·6	WSW	4	m	58	97	4	5	–	–	10	10	1500
	Scilly (St. Mary's)	163	1004·3	+1·6	WNW	5	c	57	97	7	5	–	–	9+	9+	1500
	Guernsey ...	175	1006·9	−2·0	SSW	4	pr	61	97	8	8	3	–	7·8	10	800
6	Pembroke ...	142	1000·6	−0·6	S'W'W	4	df	60	97	1	–	–	–	10	10	<150
7	Holyhead ...	26	1000·0	−1·8	–	0	pr	57	97	8	8	2	–	2-3	9+	1500
	Chester (Sealand)	16														
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	20	1003·3	−4	S	4	c	64	92	7	–	9	–	0	7·8	–
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1001·6	−1·2	SW	1	0	61	92	6	5	–	–	10	10	1500
11	St. Abbs Head	280	1000·8	−1·4	W	3	c	59	92	8	5	3	–	7·8	10	2500
	Leuchars ...	36														
12	Renfrew (Abbots I.)	19														
	Eskdalemuir ...	704	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1000·6	−0·8	SSW	1	c	57	92	8	5	1	–	7·8	10	4000
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	997·7	−4	S	3	c	54	97	7	5	7	–	7·8	9	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	999·3	−0·6	SSW	2	c	55	92	9	5	7	–	7·8	9	1500
16	Lerwick ...	156	1001·8	+2·5	SSW	2	c	50	92	8	5	3	–	4·6	7·8	1500
17	Blacksod Point	18	1000·0	−0·8	W	3	c	56	92	8	5	–	–	9+	9+	1500
18	Malin Head ...	34	999·4	−0·4	SW	1	c	55	92	8	9	–	–	4·6	7·8	5700
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1003·1	0	SW	2	rc	57	97	8	8	–	–	10	10	800
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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)	1004·8	−0·6	S'W'S	3	c	64	92	7	5	–	–	10	10	1500	0	*
Croydon ...	1005·3	−0·6	SSW	3	id.	63	97	8	5	–	–	9+	9+	800	1	*
S. Farnborough	1004·7	0	S'W	3	c/r	63	97	8	5	–	–	9+	9+	800	1	*
Boscombe Down	1005·0	+1·0	SW	4	z.	60	92	6	5	–	–	9+	9+	800	1	*
Calshot (Sthmtn.)	1005·7	+0·8	S'W'W	4	c	62	92	7	6	–	–	9+	9+	450	1	§2
Lympne ...	1007·3	−0·4	SW	3	bc	65	85	8	–	5	5	0	2-3	–	0	2
Manston ...	1006·0	−0·2	S'W	3	bc	68	75	7	–	3	1	0	2-3	–	0	*
Shoeburyness ...	1005·6	−1·0	S'W	3	c	69	75	8	5	7	–	2-3	7-8	1500	0	*
Felixstowe ...	1005·3	−1·4	S	4	bc	68	75	7	1	9	5	Tr	4-6	5700	0	2
Gorleston ...	1005·1	−0·8	S'E	3	bc	67	75	7	–	4	1	0	4-6	–	0	2
Mildenhall ...	1003·7	*	S	3	c	65	85	8	5	7	–	4-6	7-8	4000	1	*
Cranwell ...	1002·1	−1·4	S'W	4	c	65	92	6	8	4	–	9	9+	1500	1	*
Birmingham ...	1002·1	+4	S	3	c	62	92	8	9	–	–	7-8	7-8	800	1	*
Upper Heyford	1004·0	+2	WSW	3	c/d	62	97	8	6	7	–	9+	10	800	1	*
Ross-on-Wye	1002·8	+6	WSW	4	bc	63	85	8	8	4	–	2-3	4-6	2500	1	*
Hartland Point	1004·8	+1·8	W	5	c	58	92	8	7	–	2	7-8	7-8	1500	1	4
Bristol ...	1004·7	+1·8	WSW	4	id.	59	92	8	5	–	–	9+	9+	1500	1	*
Portland Bill ...	1005·6	+6	SW	4	c	59	92	7	5	7	–	7-8	10	4000	1	3
Plymouth ...	1006·3	+2·0	W	3	bc	58	97	7	8	3	3	2-3	2-3	1500	1	1
The Lizard ...	1007·0	+1·6	SW	3	bc	57	97	8	8	6	–	4-6	4-6	2500	1	2
Scilly (St. Mary's)	1006·3	+1·0	WSW	4	c/pr	58	97	8	8	6	–	4-6	7-8	1500	1	3
Guernsey ...	1007·4	+1·2	W	6	c	58	92	8	8	3	–	4-6	7-8	450	1	4
Pembroke ...	1003·8	+1·2	W	4	bc	57	97	7	8	7	–	4-6	4-6	1500	1	3
Holyhead ...	1000·5	+1·6	S'W'W	3	c	57	97	8	7	7	–	4-6	9+	2500	1	1
Chester (Sealand)	1001·0	+2·6	W'N	2	c	61	85	8	8	–	–	9	9	2500	1	*
Manchester ...	1000·7	+1·4	W'S	3	c/r	58	92	7	5	–	–	10	10	800	1	*
Spurn Head ...	1000·7	−1·4	S'W	5	rc.	64	92	7	5	–	–	10	10	450	1	4
Catterick ...	997·7	−1·8	S'E	3	pr	64	97	6	6	–	–	10	10	800	1	*
Tynemouth ...	997·2	−2·4	SW	3	df	59	97	6	–	2	–	10	10	1500	1	1
St. Abbs Head	998·4	−1·2	WNW	1	RR	56	97	7	3	2	–	7-8	10	1500	1	1
Leuchars ...	998·0	−1·2	W	1	c	54	97	8	5	7	–	9+	10	7200	1	*
Renfrew (Abbots I.)	998·7	−1·0	–	0	c/r	57	97	5	5	7	–	9	10	2500	1	*
Eskdalemuir ...	998·2	−0·8	–	0	c/r	54	97	6	5	2	–	2-3	10	1500	1	*
Point of Ayre ...	998·8	0	W	3	c	58	97	8	5	7	–	4-6	9	2500	1	1
Tiree ...	996·4	−0·4	SSW	4	bc	57	92	8	8	3	–	4-6	4-6	2500	1	3
Stornoway ...	997·1	−0·4	ESE	1	c	56	97	8	5	7	–	7-8	9+	2500	1	1
Dalwhinnie ...	997·7	−1·0	SSW	3	c	56	85	6	8	2	–	4-6	10	2500	0	*
Aberdeen ...	997·9	−0·8	–	0	c/r	55	97	6	5	7	–	2-3	9	2500	1	1
Wick ...	997·7	−0·8	S	2	bc	55	92	8	5	7	2	1	4-6	1500	1	1
Lerwick ...	999·6	−1·0	SSE	4	c	56	97	8	5	7	–	7-8	9	800	1	*
Blacksod Point	998·6	−0·8	W	3	bc	57	92	8	3	3	–	4-6	4-6	800	0	3
Malin Head ...	997·3	−0·4	S'W	4	c	57	85	8	5	9	–	4-6	7-8	2500	0	2
Aldergrove ...	998·9	0	S'W'S	2	c	56	85	9	5	–	–	9+	9+	1500	1	*
Birr Castle ...	1001·5	+0·4	SW	2	bc	55	92	8	5	4	–	4-6	4-6	2500	1	*
Valentia Obsy. †	1003·4	+0·4	S'W'W	4	c/pr	57	92	8	5	–	–	9	9	1500	1	3
Roches Point	1003·2	+2	W'S	3	bc	56	97	8	3	4	–	2-3	2-3	2500	1	2

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F (32)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 29th Hrs. (36)
London (Kew)	67	62	59	0·2	0·2	0·2
Croydon ...	68	61	59	Tr	Tr	2·2
S. Farnborough	65	61	58	1	0·3	0·0
Boscombe Down	63	60	60	0·1	6	0·0
Calshot (Sthmtn.)	67	61	58	2	3	0·2
Lympne ...	72	60	57	–	–	12·8
Manston ...	76	60	53	–	–	11·3
Shoeburyness ...	76	62	52	–	–	10·8
Felixstowe ...	76	63	60	–	–	6·3
Gorleston ...	76	62	61	0·1	–	6·7
Mildenhall ...	74	62	58	Tr	0·3	3·7
Cranwell ...	73	63	60	Tr	2	1·2
Birmingham ...	67	62	61	1	1	0·0
Upper Heyford	69	61	60	Tr	3	*
Ross-on-Wye	68	62	61	0·1	0·2	0·2
Hartland Point	65	56	55	4	5	0·0
Bristol ...	69	58	56	Tr	5	1·5
Portland Bill ...	62	56	*	0·1	7	*
Plymouth ...	60	57	56	T	3	0·0
The Lizard ...	62	55	*	0·4	2	0·0
Scilly (St. Mary's)	63	55	*	1	2	0·0
Guernsey ...	69	57	58	–	3	5·5
Pembroke ...	61	54	*	21	18	0·0
Holyhead ...	65	55	54	2	5	3·2
Chester (Sealand)	74	59	58	12	20	2·5
Manchester ...	73	57	57	13	14	1·5
Spurn Head ...	68	62	*	1	4	0·0
Catterick ...	74	59	59	0·2	12	6·3
Tynemouth ...	69	57	56	Tr	5	5·2
St. Abbs Head	69	55	*	–	4	*
Leuchars ...	68	50	43	–	–	8·0
Renfrew (Abbots I.)	68	55	52	–	Tr	4·9
Eskdalemuir ...	65	52	49	Tr	6	2·6
Point of Ayre ...	67	55	*	–	2	1·2
Tiree ...	63	48	45	0·3	0·5	5·1
Stornoway ...	60	54	*	1	1	3·6
Dalwhinnie ...	60	51	45	0·1	–	2·4
Aberdeen ...	71	50	44	–	0·2	10·4
Wick ...	64	53	*	–	–	*
Lerwick ...	60	(50)	*	0·5	Tr	7·3
Blacksod Point	63	54	*	Tr	0·1	*
Malin Head ...	64	53	*	1	1	4·1
Aldergrove ...	65	55	54	–	–	1·3
Birr Castle ...	66	53	46	–	–	2·9
Valentia Obsy. †	64	54	51	–	2	1·3
Roches Point	62	55	*	1	0·2	*

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.
KEW ...	18	circ	cprc	cprc	67	62	59	0·2	0·2	0·2	*	*	8
CROYDON ...	217	ccid.	idc	idc	68	61	59	Tr	Tr	2·2	*	*	8
GREENWICH (Royal Observatory) ...	149	c	c	dcbcc	71	60	55	–	Tr	1·3	73	74	8
CITY (Bunhill Row) ...	—	*	*	*	*	*	*	*	*	1·2	*	*	*
WESTMINSTER (St. James' Park) ...	27	*	*	*	69	63	59	0·2		1·0	81	83	*
REGENTS PK. (Botanic Gardens)‡ ...	168	*	*	*	70	63	58	Tr	Tr	1·3	79	75	*
CAMDEN SQUARE ...	110	o	bc	*	72	63	58	–	Tr	*	*	73	*
KENSINGTON ...	80	c	c	*	71	63	59	–	Tr	1·1	At 18h. 83	73	*
HAMPSTEAD OBSERVATORY ...	450	or	bc	odbc	69	60	59	3	Tr	1·1	*	83	*

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 30th

South Kensington. Max.	Time.	Min.	Time.
Pollution defective			

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 29th July Barom. mb.	Wind Direc.	Wind Force.	Weather.	Temp. °F.	7h. G.M.T. 30th July 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	SE	1	c/+r.	64		61		2
BRUSSELS ...	1011·3	SW	2	b	79	1008·7	S	3	c	73	82	64	–	–
BERLIN ...	1013·2	S	3	bc	79						82		–	
ZURICH ...						1016·0	ESE	1	z.	61		54		–
ROME ...	1016·3	NE'N	1	b	75						*	*	–	

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.

AIR MINISTRY.

THE DAILY WEATHER REPORT

OF THE METEOROLOGICAL OFFICE, LONDON.

BRITISH SECTION

Monday 31st July, 1939.
No. 28375

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

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)	1006.8	+8	W	3	c	69	56	8	7	-	6	4-6	9	2500
	Croydon	1006.8	+6	W'S	3	c	70	75	8	2	-	-	9	9	4000
	S. Farnborough	1006.8	+8	WSW	4	c	69	65	9	8	3	6	4-6	9	4000
	Boscombe Down	1006.9	+6	W'S	3	c	69	65	8	8	-	8	4-6	9	2500
	Calshot (Soton.)	1008.0	+14	SW'S	4	c	66	75	8	8	3	2	2-3	9	2500
	Lympne	1008.4	+2	SW	4	bc	68	75	9	1	9	-	1	2-3	2500
	Manston	1006.9	+2	SSW	4	bc	72	65	8	2	4	5	2-3	4-6	1500
2	Shoeburyness	1006.8	-2	SSW	4	bc	73	65	8	1	4	-	2-3	4-6	2500
	Felixstowe	1005.7	+2	SSW	5	bc	75	53	8	2	5	1	2-3	4-6	2500
	Gorleston	1004.6	0	SW'S	4	bc	76	53	7	7	3	-	4-6	4-6	2500
	Mildenhall	1004.8	+12	WSW	5	bc	74	55	8	2	7	9	4-6	4-6	4000
	Cranwell	1004.2	+18	WSW	3	c	69	65	7	8	4	3	4-6	7-8	2500
3	Birmingham	1005.4	+6	SW	4	c	65	65	8	8	6	-	4-6	9	2500
	Upper Heyford	1006.1	+10	W'S	4	c	68	65	8	8	-	6	4-6	7-8	2500
4	Ross-on-Wye	1005.9	+10	SW'W	4	c	65	75	8	8	-	3	7-8	7-8	4000
5	Hartland Point	1006.5	+8	WSW	5	c	60	92	8	7	4	-	4-6	7-8	1500
	Bristol	1007.0	+10	WSW	4	pr	64	75	8	8	7	8	4-6	9	1500
	Portland Bill	1005.1	+22	SW	4	c	60	92	7	5	4	-	4-6	10	4000
	Plymouth	1007.7	+2	SW	4	c	61	85	8	8	7	-	2-3	9+	1500
	The Lizard	1008.6	+4	SW	4	c	63	92	8	8	6	-	4-6	7-8	2500
	Scilly (St. Mary's)	1007.9	+6	WSW	4	bc	64	85	8	2	6	4	2-3	4-6	2500
	Guernsey	1008.7	+6	W'S	4	c	63	85	8	6	4	-	4-6	7-8	800
6	Pembroke	1006.2	+8	WSW	5	c	61	85	8	8	6	1	4-6	7-8	2500
7	Holyhead	1002.5	+2	S'W	4	c	62	85	8	8	3	-	4-6	7-8	4000
	Chester (Sealand)	1003.9	+10	WSW	3	c	66	65	8	8	-	-	9	9	2500
8	Manchester	1003.3	+8	SW	4	bc/pr	68	65	7	8	3	-	4-6	4-6	2500
10	Spurn Head	1003.1	+14	W	4	c	71	65	6	8	-	-	7-8	7-8	5700
	Catterick	1001.9	+18	W'S	3	bc	67	65	8	8	-	3	4-6	4-6	1500
	Tynemouth	1000.3	+10	W	4	bc	63	55	8	2	-	-	4-6	4-6	2500
11	St. Abbs Head	998.5	+8	-	0	c	61	85	9	3	6	-	4-6	7-8	2500
	Leuchars	997.8	0	SW	3	c	65	65	8	2	3	-	4-6	7-8	4000
12	Renfrew (Abbotsl.)	999.2	+4	SSW	4	bc	66	55	9	8	6	-	4-6	4-6	2500
	Eskdalemuir	999.6	+10	SSW	5	bc	60	75	8	8	-	-	4-6	4-6	2500
	Point of Ayre	1001.1	+6	WSW	5	bc	68	55	8	2	-	-	2-3	2-3	4000
13A	Tiree	996.4	0	S	4	c/pr	60	85	7	8	-	-	7-8	7-8	1500
13B	Stornoway	997.1	0	ESE	3	c	58	92	9	5	7	-	7-8	9	2500
15	Dalwhinnie	*	+2	SSW	2	c	56	85	7	4	6	-	4-6	10	2500
	Aberdeen	997.2	0	E'S	2	pr	64	75	7	8	-	-	7-8	7-8	2500
	Wick	996.8	-4	SSE	2	c	56	92	6	5	3	-	4-6	10	2500
16	Lerwick	997.8	-10	NE	2	F+	55	97	1	-	-	-	10	10	K150
17	Blacksod Point	998.9	+2	W	5	c	60	85	8	8	-	4	7-8	7-8	800
18	Malin Head	996.9	-4	WSW	3	pr	56	92	7	8	-	-	9	9	1500
	Aldergrove	998.7	-4	S'W	4	pr	61	75	8	8	-	-	9	9	2500
19	Birr Castle	1001.5	+2	WSW	2	pr	61	75	8	3	7	-	4-6	7-8	1500
20	Valentia Obsy.†	1004.7	+6	W	5	pr	59	92	7	6	2	-	9	10	800
	Roches Point	1003.8	0	W'N	3	c/pr	63	85	9	3	-	5	4-6	7-8	1500

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

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)	1006.9	-2	SW	4	c	67	75	8	5	2	-	2-3	10	1500	0	*
	Croydon	1007.3	-2	SW'S	3	c	66	75	8	4	7	8	Tr	9+	4000	1	*
	S. Farnborough	1007.3	-2	SW'S	3	c	65	75	8	8	7	-	1	10	4000	0	*
	Boscombe Down	1007.5	+4	SW'W	4	c	68	75	7	5	-	8	2-3	9+	1500	1	*
	Calshot (Soton.)	1008.3	-2	SW'W	4	c	62	85	8	1	2	8	4-6	9+	800	1	3
	Lympne	1008.5	-4	SW'W	3	c	64	75	9	-	7	6	0	9	-	0	§3
	Manston	1006.8	-6	SW	3	c	67	75	8	8	7	3	Tr	9	4000	0	*
2	Shoeburyness	1006.8	-4	SW'S	3	c	69	75	8	8	1	-	1	7-8	2500	0	*
	Felixstowe	1006.3	-2	SW	4	c	71	75	8	8	3	8	4-6	9	4500	0	2
	Gorleston	1005.6	+2	W	2	bc	75	55	7	-	5	-	0	4-6	-	0	2
	Mildenhall	1005.6	-6	W'S	3	c	68	65	8	2	7	9	2-3	7-8	4000	0	*
	Cranwell	1004.6	0	SW'W	3	c	68	65	8	8	4	3	2-3	7-8	2500	0	*
3	Birmingham	1005.7	+2	SW	3	c	68	65	8	8	-	4	4-6	7-8	2500	1	*
	Upper Heyford	1006.9	+6	WSW	3	c	68	65	9	8	6	9	7-8	9	2500	1	*
4	Ross-on-Wye	1006.7	+8	SW'S	4	c	64	65	8	1	-	6	1	7-8	4000	1	*
5	Hartland Point	1007.1	+2	W	5	c	60	85	8	8	-	-	7-8	7-8	1500	1	4
	Bristol	1007.3	+2	W	4	c	63	75	8	8	7	8	2-3	7-8	2500	1	*
	Portland Bill	1007.8	-10	SW	4	c	60	92	8	5	4	-	4-6	10	4000	1	3
	Plymouth	1008.3	+2	WSW	4	c	61	85	8	8	3	8	2-3	7-8	1500	1	1
	The Lizard	1009.5	+10	W	4	bc	61	92	8	8	7	-	4-6	4-6	2500	1	2
	Scilly (St. Mary's)	1008.8	+4	W'S	4	pr	61	92	8	2	6	4	4-6	4-6	2500	1	5
	Guernsey	1010.1	+2	WSW	2	c	60	92	8	2	1	1	2-3	7-8	800	0	3
6	Pembroke	1007.5	+10	WSW	5	cq	60	85	8	8	4	-	4-6	7-8	2500	1	3
7	Holyhead	1002.5	-2	SSW	4	c	58	92	8	8	3	3	4-6	7-8	4000	1	3
	Chester (Sealand)	1004.5	+16	SW	4	c	66	65	8	8	-	2	4-6	7-8	2500	1	*
8	Manchester	1004.1	+6	SW	4	c	65	65	8	1	3	5	2-3	7-8	2500	1	*
10	Spurn Head	1004.5	+4	SW'W	3	c	68	65	7	-	9	3	0	9	-	0	2
	Catterick	1002.8	+4	SW'W	3	bc	64	65	8	8	-	2	4-6	4-6	1500	1	*
	Tynemouth	1001.7	+8	W	5	bc	65	55	8	2	4	1	4-6	4-6	2500	1	1
11	St. Abbs Head	999.4	+6	SW	6	bc	63	65	9	7	3	-	2-3	4-6	2500	0	3
	Leuchars	999.1	+4	SW	2	c/pr	61	85	8	8	6	3	4-6	7-8	1500	1	*
12	Renfrew (Abbotsl.)	999.3	+2	SSW	4	c/pr	62	75	8	8	7	6	7-8	9+	1500	1	*
	Eskdalemuir	1000.4	-2	SSW	5	c	57	85	8	8	-	-	9	9	800	1	*
	Point of Ayre	1000.8	-6	SW	4	c	64	75	8	4	3	-	2-3	7-8	4000	0	2
13A	Tiree	996.3	0	SSE	4	c/r	57	92	7	8	3	9	4-6	7-8	1500	1	3
13B	Stornoway	997.9	+6	SE	2	c/pr	53	75	8	5	7	-	7-8	7-8	4000	1	1
15	Dalwhinnie	998.4	+4	SSW	2	c	58	75	7	4	6	-	4-6	9+	4000	0	*
	Aberdeen	998.2	+4	S	2	bc	66	55	8	7	-	-	2-3	2-3	2500	0	1
	Wick	997.9	+4	SSE	2	c	58	92	6	5	7	-	4-6	9	1500	1	1
16	Lerwick	997.6	0	NE	1	r	54	97	6	6	2	-	7-8	10	800	1	*
17	Blacksod Point	1000.0	+6	WNW	5	c	60	85	8	8	-	-	7-8	7-8	1500	1	4
18	Malin Head	998.7	0	W	4	pr	58	85	6	9	-	-	9+	9+	1500	1	3
	Aldergrove	999.1	+2	W'S	4	PR	56	92	7	9	-	-	10	10	1500	1	*
19	Birr Castle	1001.8	+4	WSW	3	c/pr	60	85	8	8	7	-	7-8	9	800	1	*
20	Valentia Obsy.†	1006.1	+10	W'N	4	c	59	85	8	5	-	-	9+	9+	1500	1	3
	Roches Point	1004.9	+8	NW	3	c	62	75	8	3	3	-	2-3	7-8	1500	1	2

PAST 24 HOURS. — WEATHER.

District	Stations	7h.–13h. 30th (37)	13h.–18h. 30th (38)	18h. 30th to 1h. 31st (39)	1h.–7h. 31st (40)
1	London (Kew)	cbcc	c	cbc	bcbbcw
	Croydon	cid.bcc	cv	cbcbw	bcw
	S. Farnborough	cbccv⊕	cybc	cbcb	bwbc
	Boscombe Down	c	c	cbc	bcw
	Calshot (Soton.)	c	c	cbw	bwbc
	Lympne	bcbc	bcc	orrcbcw	bcwcpr
	Manston	cbc	cbybcy	bc	bcwb,c
2	Shoeburyness	bccbc	bccv	cvb	bbcw
	Felixstowe	bccbcy	bcyc	circ	cbc
	Gorleston	bccbcy	bcy	bcc	cbc
	Mildenhall	bc	bcy	bc	bc
	Cranwell	cmoc	cbc	cbv	bbcc
3	Birmingham	cpr.	cbc	bcb	b,c
	Upper Heyford	cbcc	cbcc	cbcb	bcc
4	Ross-on-Wye	bcvcc	cbcc	bcb	bcc
5	Hartland Point	c	cp.	c	cpbc
	Bristol	edcr.c	cjpcbc	bcb	bbccpr
	Portland Bill	c	c	bc	bcc
	Plymouth	bcc	cbc	bc	bcc
	The Lizard	bcc	cbc	bcpr	prbc
	Scilly (St. Mary's)	cbc	bcp	bccp.bc	bccp.p
	Guernsey	c	c	cbbcc	cbc
6	Pembroke	bcc	cpr.bccq	girc	cpr.q
7	Holyhead	c,bc	bc,b	cPR.c	cr.r.c
	Chester (Sealand)	cpr.	cbcyc	Cbcc	cpr.PR
8	Manchester	ccpr.bc	bcybc	bcc	crr.r.
10	Spurn Head	irc	c	bcb	bbc
	Catterick	m.pR.bc	bcybc	bc	m.ir.bc
	Tynemouth	oPbc	bc	bcc	coir
11	St. Abbs Head	prc	bcq	pgc	grc
	Leuchars	ir.cpr.bc	cpr.bcw	circ	cid.c
12	Renfrew (Abbotsl.)	cm.prpc	bcycpr	cpr.c	cm.pgig
	Eskdalemuir	irbccpr.bc	bcc	cprc	cpr.c
	Point of Ayre	cbc	bcc	cprc	cpr
13A	Tiree	bcc	cprrir	cbc	bccrr
13B	Stornoway	cpr.	cpr.	cpr.	cpr.
15	Dalwhinnie	cir	cir	cir	cir
	Aberdeen	cpr.	prbcb	bbc	bc
	Wick	bccm.	cm.	cm.	Ffc
16	Lerwick	iFFc	ofcro	crrm.	rrFFd
17	Blacksod Point	prcq	prcq	prc	pr.c
18	Malin Head	cpr.c	cPRbcc	cprbcc	cPRc
	Aldergrove	cbcpr.	pr.prPR	PRcpr.	prpr.cpr.
19	Birr Castle	bccpr	cpr	cprc	c
20	Valentia Obsy.†	cpr	cprc	cprPRc	cpr.c
	Roches Point	bcp.c	cprc	cbc	bcc

EXPLANATION OF FIGURES, LETTERS AND SYMBOLS.

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

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

COLUMNS 9, 23.—FORM OF LOW CLOUD.

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

COLUMNS 12, 13, 26, 27.

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

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.*

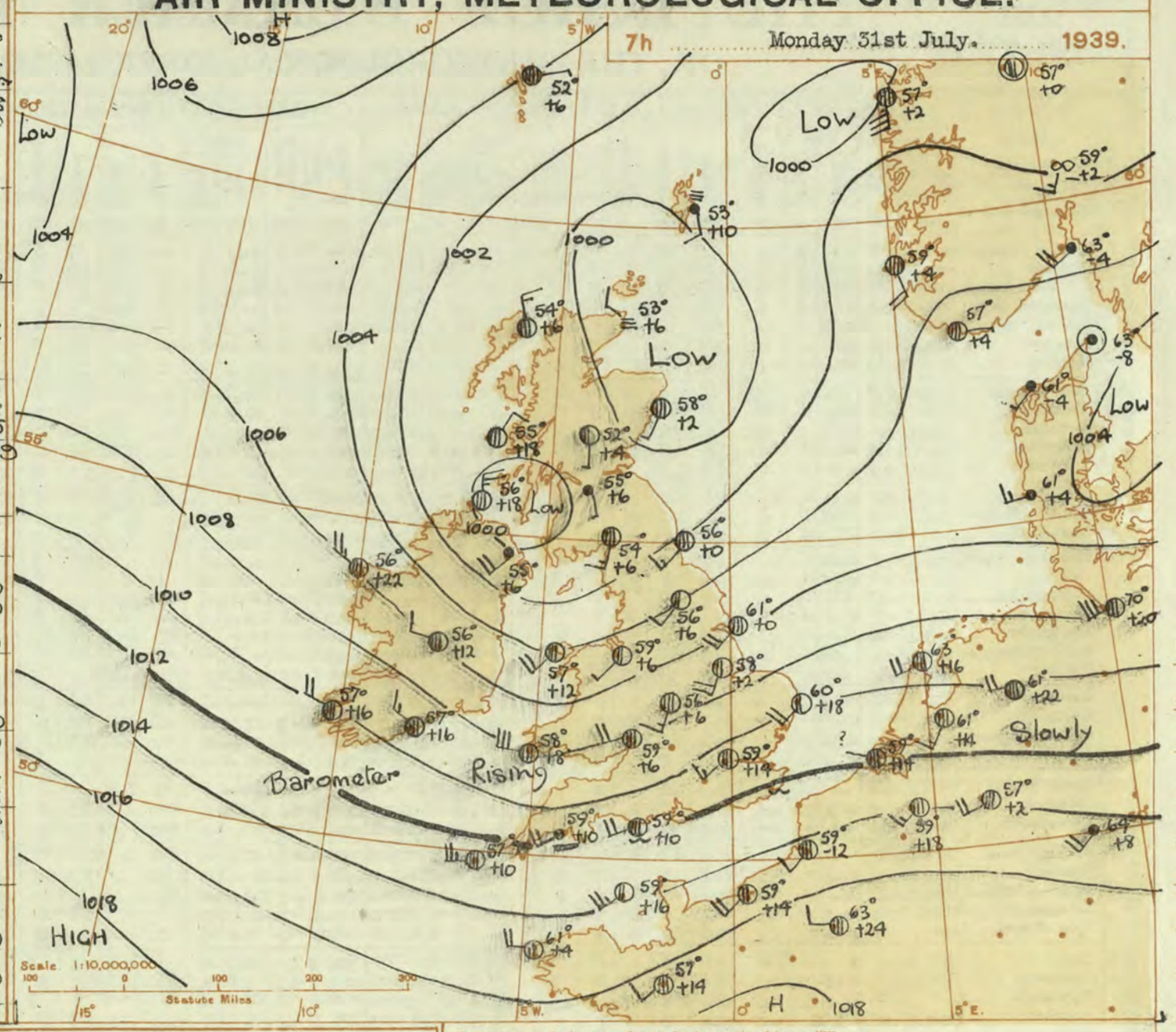
§ Sea disturbance reported from Dungeness.

REPORTS from HEALTH RESORTS for 30th July 1939.

Districts.	Stations.	Weather. Fore-noon.	Weather. After-noon.	Temperature. (°F) Min. 9h. 29th to 9h. 30th.	Temperature. (°F) Max. 9h.—17h. 30th.	Rainfall. (mm.) Night. 17h. 29th to 9h. 30th.	Rainfall. (mm.) Day. 9h.—17h. 30th.	Sunshine. (Hrs.) Sunrise to 17h. 30th.	Sunshine. (Hrs.) Sunrise to Sunset. 29th.
1	Tunbridge W.	odoc	cbcc	58	71	Trace	Trace	6.6	4.8
	Bournemouth	cbc	bcc	58	67	23	-	4.0	0.0
	Ventnor ...	rcbc	bcou	58	64	2	-	3.9	0.1
	Southsea ...	cbcb	bcbz	60	68	1	-	5.6	0.0
	Bognor Regis	bc	bcc	61	65	0.5	-	4.0	0.0
	Littlehampton	cbc	bcc	61	66	0.1	-	5.0	0.0
	Worthing ...	cbcb	bbcc	62	67	Trace	-	4.8	0.8
	Brighton ...	ccb	bbc	60	66	Trace	-	4.2	1.2
	Eastbourne† ...	ccbcc	cbcc	62	67	-	-	5.4	11.5
	Hastings† ...	ocbc	bcbcc	60	68	-	-	6.2	11.6
	Folkestone ...	coobc	bccbc	59	69	-	-	8.3	13.2
	Dover ...	pco	pbc	64	69	-	-	8.0	12.9
	Deal	bbc	bcob	59	74	-	-	10.6	10.2
	Ramsgate ...	bc	bc	62	72	-	-	9.5	12.0
	Margate ...	bc	bc	62	75	-	-	11.5	11.1
2	Southend ...	cbcb	bbcc	61	79	-	-	7.9	10.9
	Clacton-on-Sea	bc	bc	63	74	-	-	8.9	8.2
	Dovercourt ...	bcc	bc	63	75	-	-	5.9	7.5
	Lowestoft ...	bbcc	bcb	63	78	-	-	9.6	5.9
	Skegness ...	bc	bc	62	74	6	-	7.1	0.7
	Mablethorpe...	cbcbc	bcc	62	74	6	-	6.8	0.5
	Cleethorpes ...	bcv	bcv	63	72	4	-	5.9	1.1
3	Leamington S.	cbc	cbc	63	69	6	-	4.2	0.2
4	Cheltenham†	bc	bc	60	69	9	-	7.1	0.2
5	Bath	cbc	bcc	59	68	2	-	3.7	1.1
	Weymouth ...	cbb	bbc	59	66	4	-	7.2	0.0
	Jersey ...	cbc	bcc	61	65	-	-	2.3	11.0
	Torquay ...	bcc	bcc	59	66	2	-	6.2	0.0
	Falmouth ...	b	b	55	67	2	-	11.0	0.0
	Penzance ...	c	bcbbp	56	66	9	Trace	6.5	0.1
	St. Ives ...								
	Bude... ...	bcpbc	bc	57	64	1	-	10.4	0.0
	Ilfracombe ...	pcbc	bccbc	58	65	3	-	7.8	0.0
6	Aberystwyth	pcrbc	bcc	56	65	24	-	6.3	0.0
7	Llandudno ...	cbc	bc	56	68	20	-	6.1	1.2
	Colwyn Bay...	ccbcb	bcb	56	66	13	-	5.3	3.8
	Rhyl	cbc	bc	57	69	14	-	6.8	3.5
8	Wallasey ...	bcc	cbc	58	68	21	-	6.1	3.8
	Southport ...	ocbc	cvbc	57	69	13	-	5.3	3.7
	Blackpool ...	cpcb	bbc	57	67	14	-	6.5	3.2
	Morecambe ...	cbc	bc	57	66	15	-	6.4	2.6
9	Ilkley... ...	orocb	bc	60	69	29	-	7.2	3.0
	Harrogate ...	bbc	pbc	60	67	24	-	7.9	3.0
10	Berwick-on-T.	cbc	b	56	67	19	-	8.3	8.9
11	Dunbar ...	cprll	bc	55	68	9	-	6.1	8.9
12	Troon... ...	bcb	bccop	56	63	-	Trace	3.8	2.0
	Douglas ...	eir	b	54	61	2	-	6.8	1.6

† Max. Temp. for period 21h. yesterday to 17h. to-day: Min. Temp. 21h.–9h.

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. 31st July, 1939.
1 S.E. England 2 E. England ... 3 E. Midlands ... 4 W. Midlands ...	Wind southwest, veering west, moderate; cloudy with brighter periods; local thundery showers; fairer generally tomorrow; temperature rather below average.
5 S.W. England 6 South Wales ...	Wind west to northwest, moderate or fresh; bright periods; scattered local showers; temperature average to rather low.
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 southwest, moderate to light, veering west to northwest; cloudy; occasional rain or rather frequent showers with local thunder; bright periods tomorrow; rather cool.
13 A. W. Scotld. B.N.W. Scotland. 14 Mid Scotland 15 N. E. Scotland 16 Orkney and Shetland	Wind variable to northerly, light to moderate; occasional rain or frequent showers; cool.
17 N. W. Ireland 18 N. E. Ireland 19 S. E. Ireland 20 S. W. Ireland	Wind northwest, moderate; variable sky, bright periods; local showers, especially in the North; rather cool

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

GENERAL INFERENCE.

A complex area of low pressure extending from Scandinavia to Scotland is moving slowly east and becoming less deep, and will be followed by a feeble ridge of higher pressure from the Atlantic. There will be occasional rain or rather frequent showers in the northern half of the country and more localised showers and brighter periods further south. Thunder is expected locally.

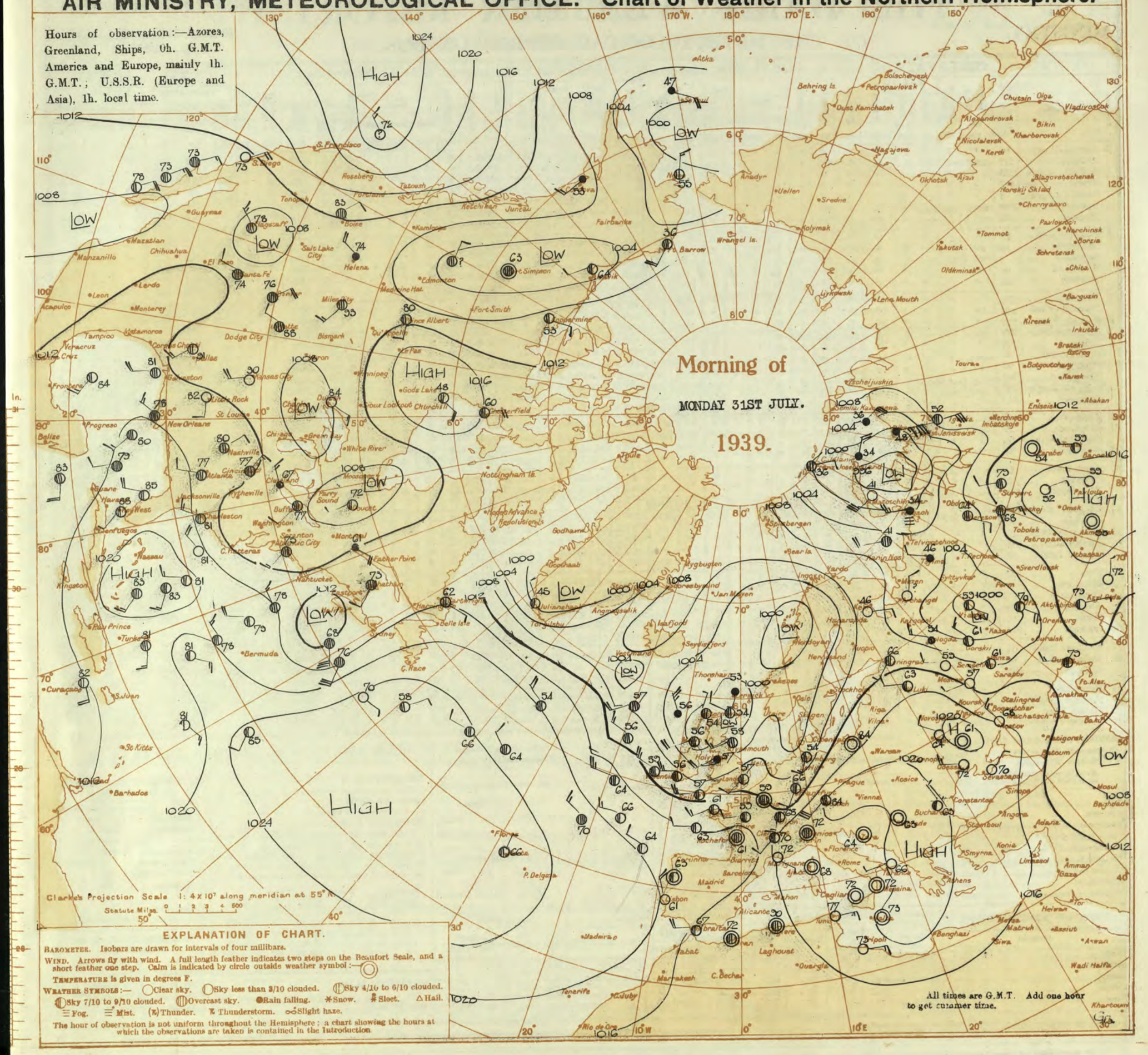
FURTHER OUTLOOK.

Unsettled.

Forecasts issued at 1000 G.M.T.

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

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 31st July, 1939.
No. 28375

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

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	1008.0	+2	SSW	2	bc	57	97	8	5	-	-	4-6	4-6	4000
	S. Farnborough	226	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Boscombe Down	417	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Calshot (Sthmtn.)	8	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lympne ...	346	1010.7	+10	SW'W	2	c	54	97	7	-	-	6	0	7-8	-
	Manston ...	154	1009.4	+14	SW'W	3	bc	56	92	8	-	3	6	0	2-3	-
2	Shoeburyness ...	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Felixstowe ...	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Gorleston ...	5	1006.6	+6	W	2	c	64	75	8	5	3	-	4-6	7-8	4000
	Mildenhall ...	19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Cranwell ...	240	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	Birmingham ...	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Upper Heyford	408	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	Ross-on-Wye	223	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	Hartland Point	299	1008.0	+6	W	5	c/p	58	85	8	8	-	-	9+	9+	1500
	Bristol ...	209	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Portland Bill ...	32	1009.6	+3	W	4	bc	59	85	8	4	-	-	2-3	2-3	4000
	Plymouth ...	82	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	The Lizard ...	240	1011.2	+3	SW'W	5	bc/pr	56	97	8	8	-	-	4-6	4-6	2500
	Scilly (St. Mary's)	163	1010.8	+6	W	5	bc	57	92	8	9	-	-	2-3	2-3	1500
	Guernsey ...	175	1012.1	+4	SW	2	c	58	92	8	2	-	-	7-8	7-8	1500
6	Pembroke ...	142	1006.8	+4	W	6	rg	58	92	7	8	2	-	7-8	10	1500
7	Holyhead ...	26	1003.0	+2	SW	4	rg	57	92	7	6	2	-	4-6	10	1500
	Chester (Sealand)	16	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	Manchester ...	70	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	Spurn Head ...	29	1008.1	+6	SW'S	2	b	57	85	6	-	-	-	0	0	-
	Catterick ...	175	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Tynemouth ...	108	1002.3	-4	SW	3	c	58	75	7	8	-	-	9	9	1500
11	St. Abbs Head	280	1000.2	-8	SW	3	c/pr	56	85	8	8	6	-	7-8	10	1500
	Leuchars ...	36	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12	Renfrew (Abbots'L)	19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Eskdalemuir ...	794	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Point of Ayre ...	30	1001.6	+4	WSW	3	c	56	97	8	8	-	-	9+	9+	2500
13A	Tiree ...	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13B	Stornoway ...	80	999.7	+4	NNE	1	c	54	97	8	6	7	-	4-6	9	2500
15	Dalwhinnie ...	1176	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Aberdeen ...	79	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wick ...	81	999.2	-2	WNW	2	c	54	92	6	5	7	-	4-6	9	1500
16	Lerwick ...	156	999.5	+10	S	1	rr	53	97	6	6	2	-	9	10	450
17	Blacksod Point	18	1003.1	+12	WNW	5	bc	55	92	8	3	-	-	4-6	4-6	800
18	Malin Head ...	84	997.9	0	WSW	4	c	56	85	7	9	4	-	4-6	7-8	1500
	Aldergrove ...	268	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	Birr Castle ...	173	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	Valentia Obsy. †	30	1008.2	+6	W	5	c	56	97	7	8	-	-	9+	9+	1500
	Roches Point	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

Stations	Barom. at M.S.L. ·mb. (15)	Change in 3 hours (16)	Wind Direc. (17)	Wind Force 0–12 (18)	Weather (19)	Temp. °F. (20)	% Humid. (21)	Visibility 0–9 (22)	Cloud Form Low (23)	Cloud Form Med. (24)	Cloud Form High (25)	Cloud Amount Low 0–10 (26)	Cloud Amount Total 0–10 (27)	Height of Base (feet) (28)	State of Ground 0–9 (29)	Sea 0–9 (30)
London (Kew)	1010.7	+12	SW	4	c	60	85	8	7	-	-	7-8	7-8	2500	0	*
Croydon ...	1011.1	+14	SW	3	c	59	85	8	5	4	1	4-6	7-8	1500	1	*
S. Farnborough	1010.9	+12	SSW	4	bc	58	85	8	7	3	1	1	4-6	2500	0	*
Boscombe Down	1010.8	+10	SW'S	3	c	57	92	8	5	3	3	7-8	7-8	1500	1	*
Calshot (Sthmtn.)	1011.6	+10	SW	4	c/p	61	85	8	2	3	1	7-8	7-8	1500	1	2
Lympne ...	1012.5	+10	SW'W	3	bc/pr	58	92	8	9	3	-	4-6	4-6	1500	0	§4
Manston ...	1011.4	+10	SW	4	c	60	85	7	5	7	-	7-8	9	2500	1	*
Shoeburyness ...	1010.7	+8	SW'S	3	bc	61	85	8	2	7	-	2-3	2-3	1500	0	*
Felixstowe ...	1010.3	+12	WSW	5	bc	60	85	7	1	-	-	2-3	2-3	1500	0	3
Gorleston ...	1009.5	+18	SW	4	bc	60	75	7	2	4	-	1	4-6	2500	1	2
Mildenhall ...	1008.7	+6	SW'S	5	bc	59	85	7	1	3	-	2-3	4-6	2500	1	*
Cranwell ...	1006.6	+2	SSW	4	bc	58	85	8	7	3	-	1	4-6	4000	1	*
Birmingham ...	1007.7	+6	SSW	3	c	56	85	8	6	7	-	4-6	9	1500	1	*
Upper Heyford	1009.0	+2	SW'W	3	c	57	85	8	5	3	-	7-8	9	4000	1	*
Ross-on-Wye	1008.4	+6	SW'W	4	c	59	85	7	8	5	-	4-6	7-8	2500	1	*
Hartland Point	1009.6	+12	NW	5	bc	58	85	8	8	4	-	4-6	4-6	1500	1	4
Bristol ...	1009.8	+8	SW'S	4	bc	58	85	8	8	4	8	2-3	4-6	2500	1	*
Portland Bill ...	1011.3	+10	WSW	4	c	59	92	8	6	-	-	4-6	7-8	4000	1	4
Plymouth ...	1011.8	+10	SW'W	4	pr	59	92	7	9	3	-	9	9+	800	1	2
The Lizard ...	1012.5	+20	WSW	5	bc	57	97	8	8	6	-	4-6	4-6	2500	1	3
Scilly (St. Mary's)	1013.4	+10	W'S	5	c/pr	57	92	8	8	6	-	4-6	7-8	1500	1	3
Guernsey ...	1013.8	+16	SW'W	5	bc	59	85	8	9	-	-	4-6	4-6	450	1	3
Pembroke ...	1008.3	+8	W'N	6	cq	58	85	8	5	2	-	1	9+	2500	1	3
Holyhead ...	1004.3	+12	SW	4	c	57	85	7	5	3	-	9	9+	4000	1	2
Chester (Sealand)	1005.1	+6	SW	1	bc	59	75	8	8	4	2	2-3	4-6	4000	1	*
Manchester ...	1005.0	+10	SSW	3	pr	57	85	7	8	3	-	7-8	9+	1500	1	*
Spurn Head ...	1005.5	0	SW	4	c	61	75	7	5	9	-	2-3	7-8	4000	0	3
Catterick ...	1003.1	+6	SW	2	bc/r	56	85	8	5	9	9	4-6	4-6	1500	1	*
Tynemouth ...	1002.3	0	SW	3	c/r	56	92	6	-	2	-	9	9	1500	1	1
St. Abbs Head	1000.5	+4	WSW	2	c/r	55	97	8	8	2	-	7-8	9+	2500	1	1
Leuchars ...	1000.1	+6	WSW	2	c	58	85	7	8	3	-	4-6	9	4000	2	*
Renfrew (Abbots'L)	1000.3	+6	S'E	1	rg	55	92	6	6	-	-	10	10	800	1	*
Eskdalemuir ...	1000.8	+6	SSW	3	c	54	92	7	5	-	-	10	10	800	1	*
Point of Ayre ...	1001.5	0	W'S	4	pr	56	97	7	8	7	-	4-6	9+	1500	1	2
Tiree ...	1000.1	+18	NE'N	2	c/r	55	97	8	5	7	-	4-6	7-8	1500	1	2
Stornoway ...	1000.8	+6	NNW	3	c	54	97	7	5	7	-	7-8	10	2500	1	2
Dalwhinnie ...	1000.4	+4	S	1	bc	52	92	7	8	6	-	4-6	4-6	4000	0	*
Aberdeen ...	999.4	+2	SSW	1	c	58	85	8	8	3	1	4-6	7-8	2500	0	1
Wick ...	999.6	+6	NW	2	F	53	97	1	-	-	-	10	10	<150	1	1
Lerwick ...	1000.3	+10	S'E	2	df	53	97	1	-	-	-	10	10	<150	1	*
Blacksod Point	1006.1	+22	WNW	4	c	56	92	8	5	-	-	7-8	7-8	800	0	3
Malin Head ...	999.7	+18	N	5	c	56	92	7	6	5	-	4-6	7-8	4000	1	3
Aldergrove ...	1000.1	+6	SW	4	rg	55	92	7	6	-	-	9+	9+	800	1	*
Birr Castle ...	1006.3	+12	WNW	2	c	56	92	8	5	7	-	7-8	9	2500	1	*
Valentia Obsy. †	1010.8	+16	NW'W	4	c	57	85	8	5	-	-	10	10	1500	1	3
Roches Point	1005.6	+16	NW	3	c	57	85	8	3	-	-	7-8	7-8	1500	1	2

PAST 24 HOURS.

Stations	Temperature Max. Day 7h–18h °F. (31)	Temperature Min. Night 18h–7h °F. (32)	Temperature Min. on Grass °F. (33)	Rainfall Day 7h–18h mm. (34)	Rainfall Night 18h–7h mm. (35)	Sunshine 30th hrs. (36)
London (Kew)	72	57	52	-	-	7.6
Croydon ...	72	55	52	Tr	-	5.3
S. Farnborough	71	53	46	-	Tr	6.9
Boscombe Down	67	51	49	-	-	4.2
Calshot (Sthmtn.)	68	56	54	-	-	3.4
Lympne ...	70	54	52	-	1	8.4
Manston ...	74	55	53	-	0.6	9.0
Shoeburyness ...	75	58	53	-	-	8.7
Felixstowe ...	77	58	55	-	Tr	9.0
Gorleston ...	77	60	59	-	-	11.3
Mildenhall ...	75	53	50	-	-	7.8
Cranwell ...	71	52	50	-	-	6.9
Birmingham ...	68	53	48	Tr	-	6.3
Upper Heyford	69	51	51	-	-	*
Ross-on-Wye	68	55	51	-	-	8.1
Hartland Point	61	57	55	Tr	0.5	8.3
Bristol ...	67	54	49	Tr	0.4	6.6
Portland Bill ...	62	57	*	-	-	*
Plymouth ...	63	57	55	-	-	8.3
The Lizard ...	63	55	*	-	0.6	12.7
Scilly (St. Mary's)	64	56	*	0.2	1	12.4
Guernsey ...	63	56	53	-	-	4.3
Pembroke ...	62	57	*	0.2	Tr	11.8
Holyhead ...	63	53	53	-	2	8.0
Chester (Sealand)	69	55	52	Tr	1	7.0
Manchester ...	69	53	49	Tr	3	6.3
Spurn Head ...	74	54	*	Tr	-	6.1
Catterick ...	68	54	50	2	1	11.1
Tynemouth ...	69	56	53	3	3	10.7
St. Abbs Head	67	54	*	7	3	*
Leuchars ...	68	54	50	1	0.3	4.1
Renfrew (Abbots'L)	67	54	51	1	0.4	6.1
Eskdalemuir ...	63	52	51	0.2	1	6.6
Point of Ayre ...	70	54	*	-	1	8.8
Tiree ...	61	52	50	4	4	3.9
Stornoway ...	61	53	*	Tr	Tr	4.2
Dalwhinnie ...	62	44	37	6	0.5	1.2
Aberdeen ...	68	56	52	2	-	6.1
Wick ...	59	49	*	-	0.5	*
Lerwick ...	57	52	*	10	4	0.0
Blacksod Point	61	53	*	1	1	*
Malin Head ...	62	53	*	8	12	4.0
Aldergrove ...	64	53	51	7	5	4.1
Birr Castle ...	65	53	49	3	1	2.6
Valentia Obsy. †	61	55	54	0.6	4	1.3
Roches Point	64	55	*	0.5	-	*

LONDON OBSERVATIONS

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

Station	Height above M.S.L. in feet	Weather Morning (24 hrs. ended 9h.)	Weather Afternoon (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	cbcc	cbc	bcbbcw	72	57	52	-	-	7.6	•	•	8
Croydon ...	217	cid bcc	cvfc	bcw	72	55	52	Tr	-	5.3	•	•	8
Greenwich (Royal Observatory) ...	149	cyv	cbcyu	cbc	75	55	47	-	-	5.1	49	66	8
City (Gunhill Row) ...	—	•	•	•	•	•	•	•	•	5.5	•	•	•
Westminster (St. James Park) ...	27	•	•	•	73	57	53	+	-	6.0	67	71	•
Regents Pk. (Botanic Gardens)‡ ...	168	•	•	•	74	56	50	-	-	6.8	54	73	•
Camden Square ...	110	bc	bc	•	75	56	53	-	-	*	•	71	•
Kensington ...	80	bc	c	•	75	56	52	-	-	6.5	At 18h 57	69	•
Hampstead Observatory ...	450	bc	bc	c	71	54	50	-	-	6.8		79	•

Atmospheric Pollution.
Milligrams of Solid Impurity per cubic metre.
24 hrs. ended 7h. G.M.T. 31st.

South Kensington. Max.	Time.	Min.	Time.
<0.3 whole period			

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

FOREIGN OBSERVATIONS.

Stations	18h. G.M.T. 30th July Barom. mb.	Wind Direc.	Wind Force	Weather	Temp. °F.	7h. G.M.T. 31st July 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 ...	1007.5	SSW	3	c	75						81	*	0.3	*
Brussels ...						1013.9	SW	3	c	77				-
Berlin ...	1011.3	SSW	4	bc	86	1001.0	SSW	4	bc	75	90	64	-	Tr
Zurich ...	1012.7	NE'E	1	b	82	1018.0	WSW	1	bc	68	88	64	-	-
Rome ...	1018.6	-	0	b	77	1019.9	NE	2	b	70	*	*	-	-

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 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.

† 1 hr. observations are from Valentia W/T Station. ‡ Maximum and Minimum Temperatures are for the 24 hours ending 8 h. § Sea disturbance reported from Dungeness.