.O. FORM 2373

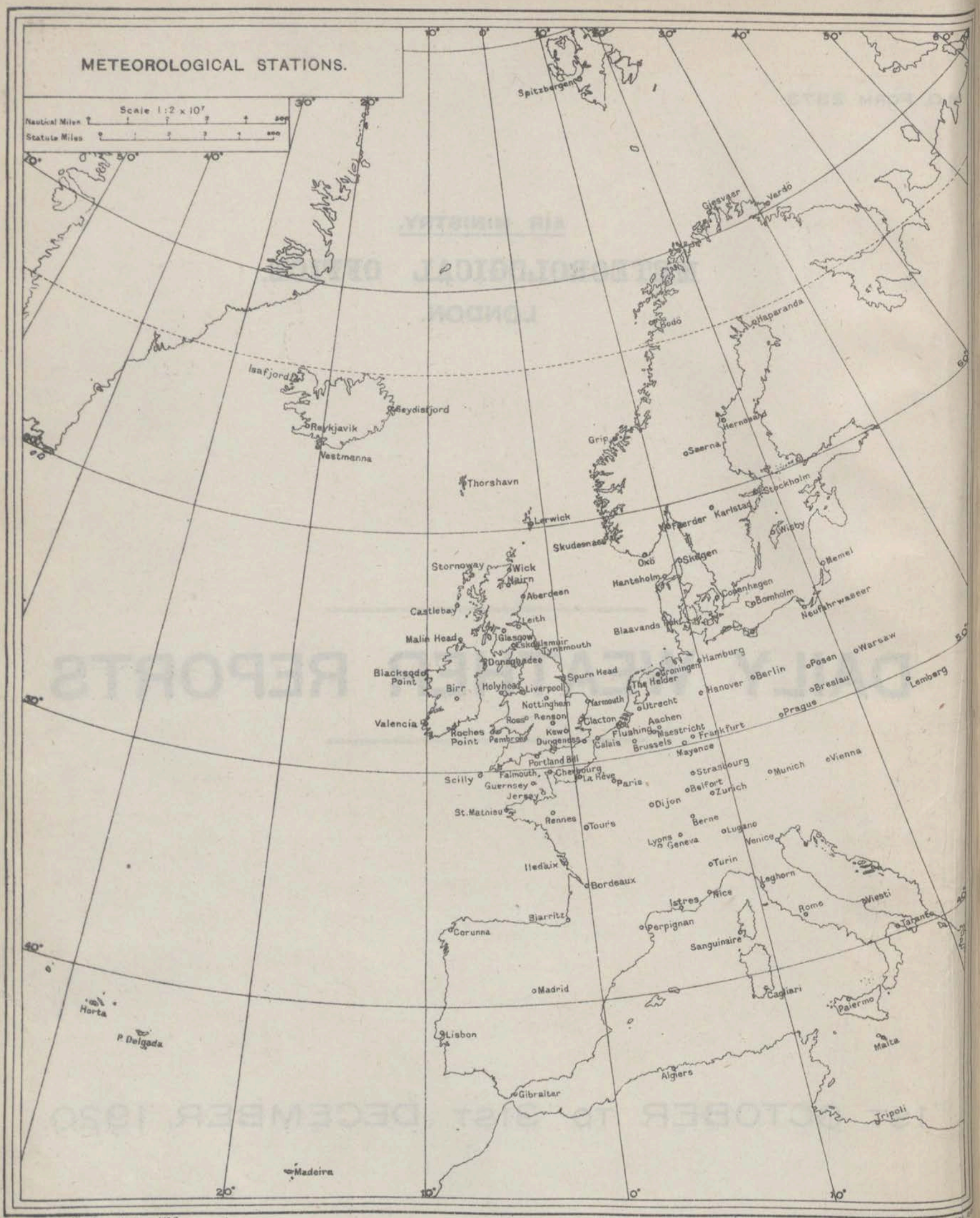
AIR MINISTRY.

METEOROLOGICAL OFFICE.

LONDON.

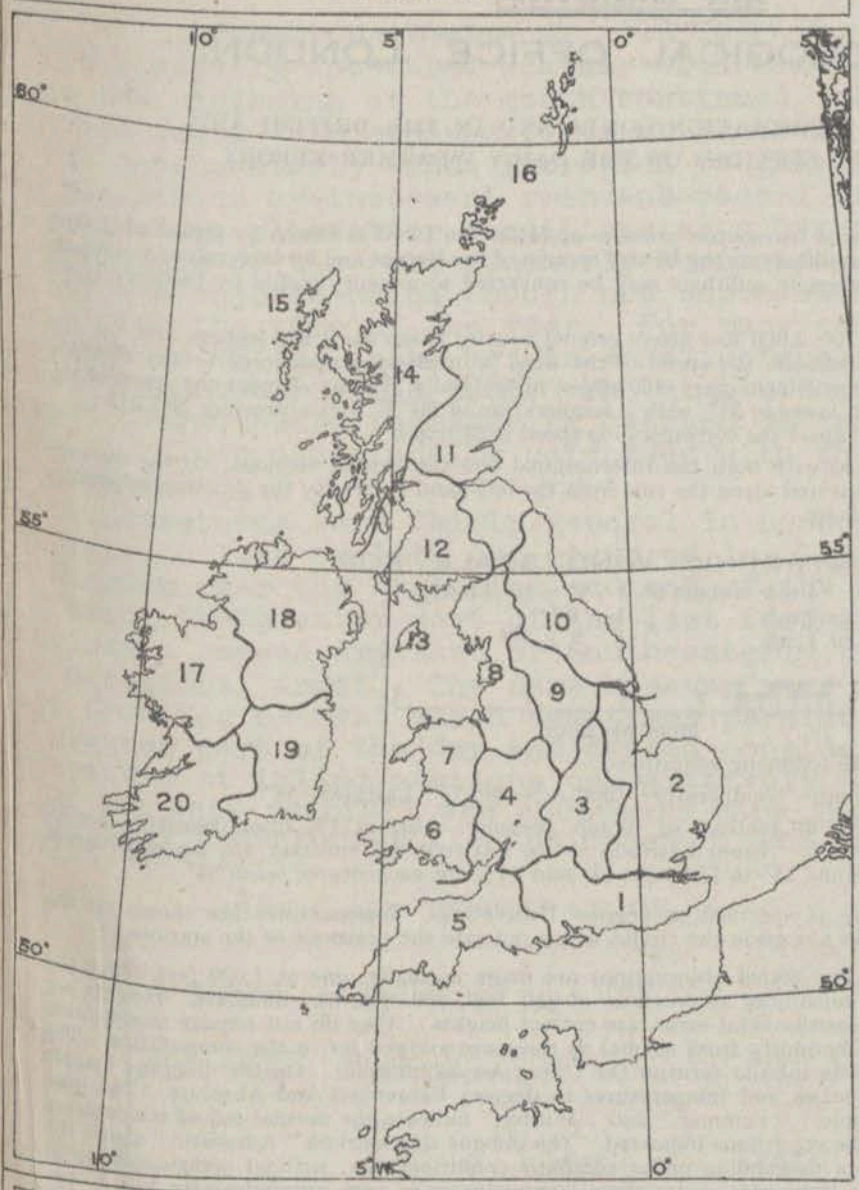
DAILY WEATHER REPORTS

1ST OCTOBER TO 31ST DECEMBER, 1920.

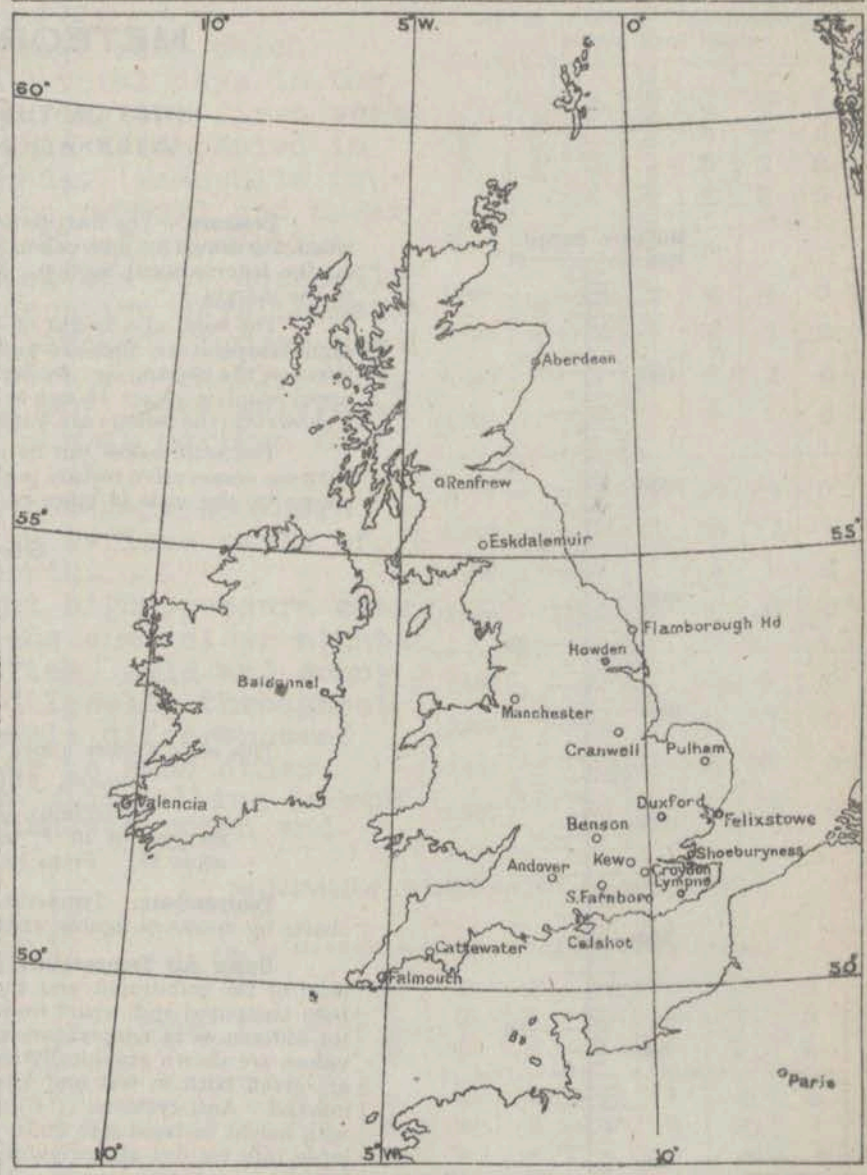


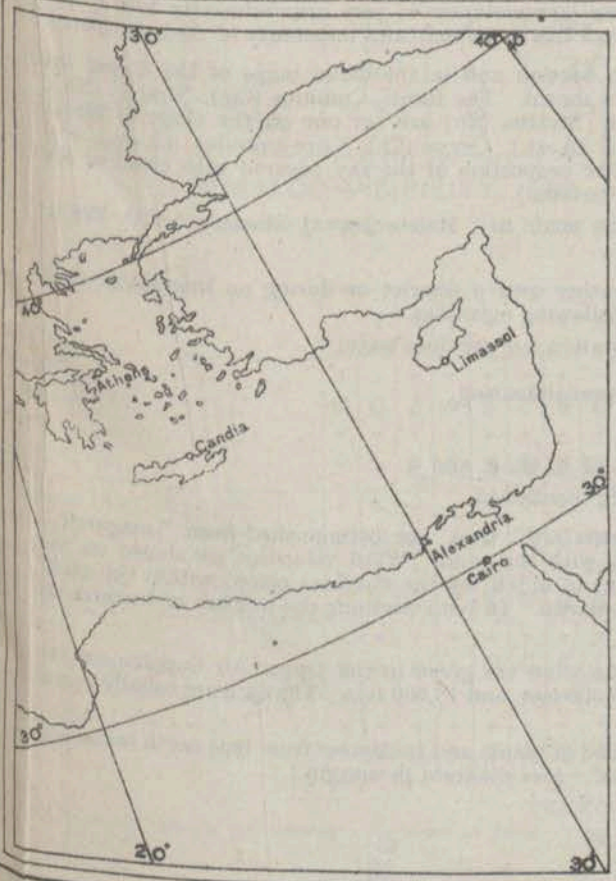
H.M. Stationery Office Press, Kingsway, W.C.2.

DISTRICTS.



STATIONS USED FOR UPPER AIR SUPPLEMENT.





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 Land Stations.	Limits of Mean Velocities Statute Miles per Hour.
0	Calm	Calm ; smoke rises 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 wind	Raises dust and loose paper ; small branches are moved ..	13–18
5	Fresh wind ..	Small trees in leaf begin to sway ; crested wavelets on inland waters	19–24
6	Strong wind ..	Large branches in motion ; whistling heard in telegraph wires	25–31
7	High wind ..	Whole trees in motion ; inconvenience felt when walking against wind	32–38
8	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	.. .. ..	Very rarely experienced ; accompanied by widespread damage	64–75
12	Hurricane ..	.. ..	Above 75

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
o overcast sky. d drizzle.
e wet air without rain falling
f fog. g gloom.
h hail. l lightning
m mist. p passing showers.

BEAUFORT NOTATION.

q squalls r rain.
rs sleet, *i.e.*, rain and snow.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air ; humidity less than 60 per cent.
z dust haze ; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:—
R=heavy rain rr=continuous moderate rain. $r_s r_s$=continuous slight rain.

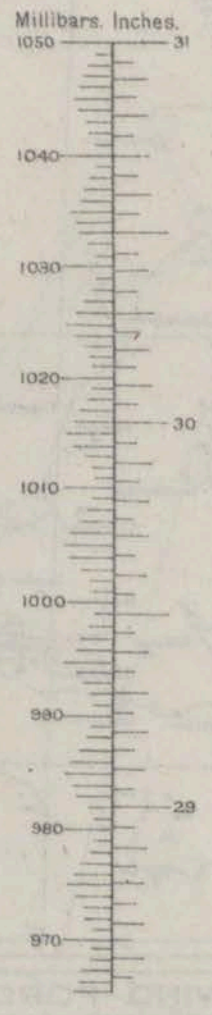
WEATHER SYMBOLS.

Clear sky	○	Sky ¼ clouded	◔
Sky ½ clouded	◐	Sky ¾ clouded	◕
Overcast sky	●	Rain falling	●
Snow	✳	Sleet	●
Fog	≡	Hail	▲
Thunder	⊤	Mist	≡
Lightning	↯	Thunderstorm	↯
Aurora	⌂	Gale	↙
Rime	⚹	Solar halo	⊕
Glazed frost	∽	Lunar halo	⊕
Glazed roads	⚹	Solar corona	⊙
Snow lying	⊠	Lunar corona	⊙

AIR MINISTRY.

METEOROLOGICAL OFFICE, LONDON.

NOTES ON THE INFORMATION CONTAINED IN THE BRITISH AND INTERNATIONAL SECTIONS OF THE DAILY WEATHER REPORT



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 the British Section of the Report and for intervals of 4 millibars on the International Section. Values in millibars may be converted to mercury inches by the scale given in the margin.

The wind at a height of 1,100–2,000 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 (160 miles) in the Daily Weather Report 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 with both the International and the British Sections. If the distance between consecutive isobars is measured along the rule from the left-hand extremity the geostrophic wind is shown by the scale in miles per hour.

GEOSTROPHIC WIND SCALE FOR

4 mb. isobars on 1 : 2×10^7 Charts
or 2 mb " " 1 : 10^7 "
or 1 mb " " 1 : 5×10^6 "

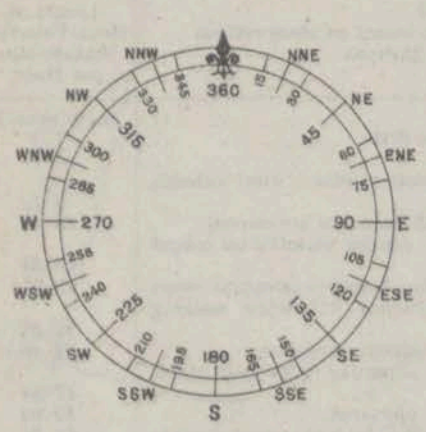
This scale applies under the following conditions —

Pressure, 1,015 mb Temperature, 283° A = 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. Temperatures are shown on the charts by means of figures written alongside the circles which indicate the positions of the stations.

Upper Air Temperature.—The actual observations are made normally, one at 1,000 feet above the level of the aerodrome, and the remainder at *pressures* of 950, 900, 850, 800, etc., millibars. Heights are then computed and, apart from instrumental error, are correct heights; they do not require modification for differences of temperature or humidity from normal as these are allowed for in the computation. The values are shown graphically and in tabular form in the Upper Air Supplement. On the diagram, heights are given both in feet and kilometres and temperatures in degrees Fahrenheit and Absolute. The lines marked "Anti-cyclonic," "Cyclonic," "Summer," and "Winter," indicate the normal fall of temperature with height or lapse rate under the conditions indicated. The oblique line marked "Adiabatic" shows the lapse rate for dry air ascending or descending under adiabatic conditions, *i.e.*, without communication of heat from external sources. The lapse rate under these circumstances is very approximately 5·5° F. per 1,000 feet, or 10a per kilometre. A lapse rate greater than this value indicates instability of the atmosphere.



Cloud Types.—In the inset maps of the British Section and in the cloud maps of the Upper Air Supplement the amounts of different types of cloud are shown. The forms, Cumulus (Cu.), Nimbus (Nb.), Strato-cumulus (St.-cu.), Cumulo-nimbus (Cu.-nb), and Stratus (St.) are set out on the chart of Lower Cloud. The forms, Alto-cumulus (A.-cu.), Alto-stratus (A.-st.), Cirrus (Ci.), Cirro-cumulus (Ci.-cu.), and Cirro-stratus (Ci.-st.) are given under Upper Cloud. The proportion of the sky covered with cloud of the different types is shown by numbers (tenths of the sky covered).

For description of Cloud Types reference may be made to "Meteorological Glossary," M.O. 225 ii, and "Cloud Forms," M.O. 233.

Weather.—In describing the distribution of weather over a district or during an interval of time such as a day, descriptive adjectives are used with the following meanings :—

Fine—mainly b and bc of the Beaufort notation (*see* previous page).
Fair or fair generally—mainly bc and c.
Cloudy—combinations of bc, c and o, c predominating.
Overcast—mainly c and o.
Dull—overcast with low heavy cloud.
Varying or variable cloud—combinations of b, bc, c, and o.

Precipitation when occurring is specifically mentioned.

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. Wind velocities are shown on the charts of the British Section and Upper Air Supplement in m.p.h. by the numbers placed within the small circles. In the International Section velocities are not shown. In both Sections the number of feathers on the arrows denotes wind force by Beaufort number.

Upper Winds.—The direction and velocity of the wind are given in the Upper Air Supplement for heights of 1,000 feet, 2,000 feet, 5,000 feet, 8,000 feet, 10,000 feet, and 15,000 feet. The data are usually based on Pilot Balloon ascents.

In the forecasts of upper wind, direction is specified in points and in degrees from true north measured through East 90°, South 180°, West 270° to North 360°. (*See* diagram in margin.)

SUPPLEMENT TO THE DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON.

SUMMARY OF METEOROLOGICAL OBSERVATIONS AT SELECTED STATIONS ISSUED ON THE 1st DAY OF EACH MONTH.

Notes on the Weather of NOVEMBER, 1920

November 1920 might perhaps be described as a dry month with many mild days, some cold ones, though less intensely so than frequently in November, and many cold nights, colder even in some localities than any during last November, memorable for its frost and snow.

There were two cold spells: one at the beginning which lasted approximately a week, the other only a few days from about 20th-24th. Reference to the table on the next page will shew that all English and Scotch stations included in this summary recorded their lowest maximum in one of these two periods. On the 22nd at Renfrew and Manchester the frost continued throughout the day owing to the persistence of fog, while at Kew Observatory, Richmond, the 1p.m. temperature was as low as 29° (the lowest reading at that hour during the past twenty-two months). During the afternoon the fog became less dense and temperature rose many degrees in the latter district. Apart from fog the day was bright and sunny: over seven hours were recorded at Eskdalemuir, Yarmouth and Calshot.

On the 16th, observations from aeroplanes reported temperatures above the normal (about 45°) at a pressure of 950mb with a rapid fall at higher levels to 4° at 650mb., indicating that the upper current, though Westerly over the British Isles, must have come from some Northerly source, in the rear of a depression passing from Iceland to Norway.

Except in the North-Western districts there was little rainfall until near the end of the month when conditions became generally unsettled.

UPPER WINDS.

No. of records of Velocity (m.p.h.) within fixed limits.

Height.	Station.	No. of Obs.	Under 10 m.p.h.	10-25 m.p.h.	25-45 m.p.h.	45-70 m.p.h.	Above 70 m.p.h.
ft.							
2,000	Valencia.	27	3	13	10	1	0
5,000		13	2	5	4	1	1
10,000		6	0	3	3	0	0
15,000		4	1	1	2	0	0
2,000	Lympne.	51	19	21	11	0	0
5,000		28	15	4	9	0	0
10,000		13	6	7	0	0	0
15,000		2	1	0	1	0	0
2,000	Eskdalemuir	22	2	16	4	0	0
5,000		11	1	4	4	2	0
10,000		5	0	2	3	0	0
15,000		3	0	2	1	0	0

UPPER AIR TEMPERATURE.

Pressure.	Normal Height.	Normal Temperature.	Baldonnel. Mean.	Baldonnel. No. of Reports.	Shoeburyness. Mean.	Shoeburyness. No. of Reports.	S. Farnboro. Mean.	S. Farnboro. No. of Reports.	Andover. Mean.	Andover. No. of Reports.
mb.	feet.	°F.	°F.		°F.		°F.		°F.	
950	1,780	40°	42°	8	44°	4	44°	8	43	31
850	4,700	34°	34°	8	37°	4	34°	8	38	31
750	7,360	26°	27°	8	22°	2	26°	6	30	31
650	11,650	16°	16°	8	-	0	12°	4	19	29

MINIMUM SURFACE HUMIDITY.

No. of Days with Minima between Fixed Limits.

Station.	95-100 %	90-94 %	80-89 %	70-79 %	60-69 %	50-59 %	40-49 %	30-39 %	20-29 %
Renfrew	1	1	13	10	4	1	0	0	0
Eskdalemuir ...	1	2	7	9	4	4	1	0	2
Valencia	0	1	5	11	9	4	0	0	0
Falmouth	0	0	5	10	6	8	1	0	0
Aberdeen	0	1	7	5	6	5	5	1	0
Leith	0	2	4	15	7	2	0	0	0
Benson	1	3	8	11	6	1	0	0	0
London (Kew Obs.)	0	2	7	14	6	1	0	0	0

SURFACE VISIBILITY. [No. of observations within fixed limits of telegraphic code (see below).]

STATIONS.	1H. 0	1	2	3	4	5	6	7	8	9	7H. 0	1	2	3	4	5	6	7	8	9	13H. 0	1	2	3	4	5	6	7	8	9	18H. 0	1	2	3	4	5	6	7	8	9
Renfrew	*	*	*	*	*	*	*	*	*	*	1	1	1	4	6	1	10	5	1	0	1	1	1	0	9	0	9	8	1	0	1	1	1	1	5	10	9	2	0	0
Eskdalemuir	0	0	1	4	4	10	10	1	0	0	0	0	0	3	2	10	10	2	3	0	0	0	0	1	0	8	7	11	3	0	0	0	0	2	5	8	10	4	1	0
Valencia	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	4	6	6	14	0	0	0	0	0	0	2	1	10	15	1	0	0	0	0	1	2	2	12	13	0
Baldonnel	0	0	0	6	13	8	1	1	1	0	0	0	0	0	6	11	6	2	5	0	0	0	0	1	3	9	3	4	8	2	0	0	0	4	7	7	2	2	8	0
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	2	0	3	10	9	2	2	0	2	0	1	0	2	4	15	5	1	2	0	0	2	0	1	10	12	2	3	0	0	0
Falmouth	0	1	0	0	0	3	9	12	4	1	0	0	0	0	2	2	8	8	8	2	0	0	0	1	0	5	8	7	8	1	0	0	0	2	2	9	7	5	4	1
Calshot	0	1	2	4	2	4	6	7	4	0	0	1	2	2	4	7	6	5	3	0	0	0	0	2	3	4	10	4	6	1	0	0	0	0	5	7	9	6	3	0
Lympne	0	1	0	1	11	7	6	3	1	0	0	0	0	4	5	15	5	1	0	0	0	0	1	0	1	10	11	4	3	0	0	0	0	2	5	12	6	2	3	0
Aberdeen	*	*	*	*	*	*	*	*	*	*	0	1	3	1	2	7	10	4	2	0	0	0	2	2	4	6	4	8	4	0	0	0	1	1	6	11	5	4	2	0
Cromwell	0	3	3	0	5	16	2	1	0	0	0	4	2	2	4	13	2	2	1	0	0	2	2	0	4	13	6	2	1	0	0	3	1	0	7	13	2	3	1	0
Benson	*	*	*	*	*	*	*	*	*	*	0	2	3	2	4	7	5	3	4	0	0	1	3	1	3	3	12	4	3	0	0	0	3	2	4	9	4	4	3	1
London (Kew Obsy.)	*	*	*	*	*	*	*	*	*	*	6	1	7	2	5	7	2	0	0	0	1	0	7	4	2	15	1	0	0	0	2	1	1	7	6	5	3	4	1	0
Croydon	2	0	1	3	6	9	7	2	0	0	2	0	3	2	11	4	6	2	0	0	0	0	1	5	7	6	8	2	1	0	0	0	2	5	9	8	4	1	1	0

TELEGRAPHIC CODE FOR SURFACE VISIBILITY.

0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad. " " 200 " "
2. Bad. " " 1,000 " "
3. Very Poor. " " 2,000 " "
4. Poor. Objects not visible at 4,000 metres (or yards)
5. Indifferent. " " 7,000 " (4·3 miles)
6. Fair. " " 12,000 " (7·5 ")
7. Good. Objects not visible at 20,000 metres (12·4 miles)
8. Very Good. Objects visible beyond 20,000 " (12·4 ")
9. Excellent. Exceptional visibility.

H.M. Stationery Office Press, Kingsway, W.C.2.

SUMMARY OF RECORDS OF TEMPERATURE, SUNSHINE AND RAINFALL. NOVEMBER, 1920

Equivalents of Temperature. A°.	F°.
268	23·0
273	32·0
274	33·8
278	41·0
283	50·0
284	51·8
288	59·0

STATIONS.	Temperature. Number of daily readings within fixed limits. Maximum. Below 278	278 — 283	284 — 288	Above 288	Minimum. Below 268	268 — 273	274 — 278	Above 278	Coldest Day and Warmest Night. Lowest Maximum. °F	Date.	Highest Minimum. °F	Date.	Number of Ground Frosts.	Sunshine. Number of days with duration. Nil.	0·1—3h.	3·1—6h.	6·1—9h.	Above 9h.	Maximum Duration. Hours.	Date.	Rainfall. Total for past 12 months. mm.	Difference from Average. mm.	Total for month. mm.	Difference from Average. mm.	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.	Days with Thunder.	Days with Snow or Sleet.
Aberdeen ...	0	20	10	0	0	2	9	19	42	23	49	20	10	16	4	10	0	0	5·8	10	754	+6	43	-32	21	4	1	3	1	0	0	0
Leith	1	19	9	1	0	2	11	17	37	22	54	9	3	*	*	*	*	*	*	*	737	+145	48	-2	15	6	5	4	0	0	1	0
Renfrew ...	2	16	12	0	0	3	11	16	32	22	54	20	4	13	15	2	0	0	4·5	5	*	*	110	*	10	3	10	6	1	0	2	0
Eskdalemuir ...	0	24	6	0	1	3	16	10	42	1, 2, 3	49	9	7	13	9	5	3	0	7·2	22	1743	*	102	*	11	7	8	2	1	1	0	0
Tynemouth ...	2	18	10	0	0	3	8	19	39	21, 22	52	9	*	*	*	*	*	*	*	*	646	+25	24	-30	19	5	4	2	0	0	0	0
Yarmouth ...	0	17	13	0	0	2	16	12	46	24	47	27, 28, 29	2	8	5	11	6	0	7·6	22	568	-54	20	-41	23	2	4	1	0	0	0	0
Nottingham ...	3	15	10	2	8	15	7	0	33	22	49	15	9	16	13	1	0	0	4·2	16	680	+82	24	-24	20	5	4	1	0	0	0	0
Benson... ...	2	12	16	0	2	10	13	5	37	22	47	10	15	*	*	*	*	*	*	*	642	*	22	*	20	6	3	1	0	0	0	0
Richmond (Kew Obsy.) ...	2	13	15	0	0	11	13	6	37	4, 22	48	10	16	11	13	2	4	0	6·7	17	641	+35	29	-27	21	4	4	1	0	0	0	0
Manchester (Alex. Pk.) ...	1	12	16	1	1	8	9	12	32	22	48	15	13	*	*	*	*	*	*	*	*	*	24	*	17	9	3	1	0	0	0	0
Bidston ...	2	15	13	0	0	2	12	16	36	22	52	15	5	9	12	7	2	0	6·6	20	913	+204	17	-47	22	3	5	0	0	0	0	0
Holyhead ...	0	6	24	0	0	0	4	26	49	1, 3	53	9	2	14	9	5	2	0	6·7	22	1280	+332	60	-45	18	4	2	6	0	0	0	0
Falmouth ...	0	3	27	0	0	0	11	19	49	21	52	15, 27	2	10	10	5	5	0	7·9	2	1271	+164	55	-67	20	2	3	5	0	0	1	0
Calshot ...	0	9	21	0	0	0	19	11	46	5, 22, 23	50	10, 15	7	8	10	2	10	0	7·6	17, 22	741	*	36	*	21	4	3	2	0	0	0	0
Dublin (Phœnix Park)	0	7	21	2	0	8	8	14	47	16, 26, 28	55	19	10	10	11	9	0	0	5·8	22	838	+193	66	-6	14	7	6	2	0	1	0	0
Baldonnel ...	0	7	23	0	0	4	12	14	46	16, 28	53	20	5	8	14	6	2	0	7·4	23	953	*	65	*	16	4	4	5	1	0	0	1
Birr Castle ...	0	8	22	0	0	3	10	17	44	24	53	19, 20	6	12	13	3	2	0	7·3	23	1015	+186	77	-2	9	8	8	5	0	0	0	0
Valencia ...	0	2	28	0	0	0	8	22	48	27	54	21	0	11	13	6	0	0	5·9	23	1637	+223	180	+41	6	4	8	9	1	2	3	0

Meteorological Office, 63, Victoria Street, S.W.1. Rainfall Office, 62, Camden Square, N.W.1. G. C. SIMPSON, F.R.S., Director.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,529 ..MONDAY, 1st NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	13H. G.M.T. 31st														18H. G.M.T. OF 31st													
Renfrew	991.6	-2	E	5	o2f	49	75	5	2,000	StCu	7	ACu	2	*	991.8	+1	ENE	5	o2f	47	85	4	2,000	St	9	-	-	*
Eskdalemuir	994.2	-1	SE	5	cz	42	75	6	3,000	St	8	-	-	*	992.5	-1	ESE	5	o	46	85	6	-	St	10	-	-	*
Valencia (Cahirc'n)	989.4	-1	W	3	o	47	75	8	3,000	StCu	4	A.St	5	4	990.6	+2	N	4	c	49	65	8	3,000	StCu	7	-	-	4
Baldonnel	988.0	0	WNW	1	o	46	92	8	2,000	St	1	A.St	9	*	987.5	0	NW	1	or2-3f	44	85	5	2,000	St	9	A.St	1	*
Manchester (Alex Pk)	992.6	-7	SE	6	o2f	45	92	4	2,000	St	10	-	-	*	989.6	-3	SE	6	o1f	51	75	6	2,000	St	10	-	-	*
Ross on Wye	989.2	-9	ESE	5	odoz	52	85	7	2,000	Nb	10	-	-	*	986.5	-4	SE	4	or	51	85	6	1,250	Nb	10	-	-	*
Falmouth	985.3	-5	WNW	4	o3fr	48	92	6	-	Nb	10	-	-	*	987.2	+2	NW	3	b	44	85	7	-	Cu	1	-	-	*
Calshot (Hants) *	991.6	-8	SSE	6	o1f	55	85	7	2,000	StCu	10	-	-	5	988.1	-4	SSE	6	orq	52	85	6	750	Nb	10	-	-	5
Lympne (Folkestone)	997.8	-8	SSE	6	cqz	52	75	6	1,250	St	4	ACu	4	*	994.5	-3	SSE	7	oqz	51	75	5	2,000	StCu	10	-	-	*
Aberdeen	998.2	-1	SSE	6	o1fq	49	65	6	3,000	Cu	9	-	-	5	998.7	+1	SE	6	oq1f	49	75	6	3,000	Cu	9	-	-	5
Howden	995.8	-6	SE	5	o1fq	46	92	7	2,000	St	10	-	-	*	993.8	-2	SE	6	o	48	92	6	2,000	StCu	10	-	-	*
Cranwell (Lincs)	995.9	-8	SE	4	o2f	47	92	5	1250	Nb	10	-	-	*	993.7	0	ESE	5	or0q	48	85	6	1,250	Nb	10	-	-	*
Felixstowe	999.4	-5	S	5	cz	52	75	6	5,700	Cu	8	-	-	5	997.4	-3	SSE	7	cr0qm	52	92	6	4,200	StCu	6	-	-	6
Shoeburyness	997.5	-4	SE	4	bc	53	75	6	-	-	-	A.St	4	*	994.5	-4	SE	5	o	50	85	6	2,000	StCu	9	-	-	*
Benson	992.3	-7	SE	5	o	51	92	4	-	St	10	-	-	*	988.8	-3	SE	4	o	51	92	4	-	St	10	-	-	*
S. Farnborough	993.2	-7	SE	4	odo	51	86	5	750	Nb	7	A.St	3	*	989.7	-4	SE	5	o1f	53	85	5	1,250	StCu	10	-	-	*
London (Kew Obsy.)	994.3	-7	SE	4	o1f	53	75	5	3,000	StCu	8	A.Cu	1	*	991.0	-3	SE	5	or	54	75	6	2,000	StCu	9	-	-	*
Croydon	995.7	-6	SE	5	o1f	53	75	7	1250	Cu	8	ACu	1	*	991.9	-3	SSE	5	o1fro	53	75	6	1250	Nb	10	-	-	*
	1H. G.M.T. OF 1st														7H. G.M.T. OF 1st													
Renfrew															999.8	+5	ENE	7	o2fq	45	85	4	750	St	10	-	-	*
Eskdalemuir	994.2	+2	ESE	6	o2f	46	85	6	<500	St	10	-	-	*	1000.0	+5	E	6	oq	41	85	5	2,000	St	10	-	-	*
Valencia (Cahirc'n)	991.9	0	NNW	5	ohq	59	*	*	*	*	*	*	*	5	993.6	+2	NW	6	ob2q	47	75	8	3,000	CuNb	10	-	-	?
Baldonnel	992.2	0	SW	2	or2-3f	42	92	4	1250	St	10	-	-	*	990.6	+6	-	0	Sc	39	94	8	2,000	StCu	4	-	-	*
Manchester (Alex Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	993.4	+4	ESE	6	orqf	45	86	4	750	Nb	10	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	991.6	+4	ENE	1	o2fo	43	94	4	<500	St	10	-	-	*
Falmouth	989.2	+1	WSW	3	bc	42	85	7	-	Cu	4	-	-	*	990.1	0	NW	2	bv	40	92	9	-	Nb	2	-	-	*
Calshot (Hants)	988.5	+2	S	2	o	49	92	8	3,000	StCu	4	A St	6	2	990.6	+4	E	2	c2f	48	92	6	2,000	StCu	8	-	-	2
Lympne (Folkestone)	991.6	-2	SSE	6	oqm	47	86	4	1250	StCu	10	-	-	*	992.8	+2	SE	5	or0 2f	44	94	5	<500	Nb	10	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1004.4	+5	SE	5	o1f	45	66	7	1250	St	10	-	-	6
Howden	993.7	+4	ESE	6	ormq	47	92	3	750	Nb	10	-	-	*	996.4	+2	ESE	6	or0mq	45	94	5	750	St	10	-	-	*
Cranwell (Lincs)	992.6	0	E	5	or0q	45	94	5	1250	Nb	10	-	-	*	995.2	+5	E	4	o2f	43	94	5	750	Nb	10	-	-	*
Felixstowe	995.2	-3	SSE	6	oq	49	92	6	5700	StCu	9	-	-	6	995.9	+2	SSE	6	or	47	97	6	2,000	Nb	7	A St	3	6
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	993.1	+2	SE	5	or0q	46	92	6	1250	St	10	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	990.8	+5	ESE	2	o	45	94	4	-	StCu	9	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	990.6	+3	E	2	c2f	45	97	4	1250	St	5	Ci	3	*
London (M.O. at 1H.)	989.7	-1	*	*	*	49	*	*	*	*	*	*	*	*	994.8	+4	E	4	od0 m	48	92	4	1250	Nb	7	A St	3	*
Croydon	990.6	-1	SE	4	o2fr	48	92	5	1250	Nb	10	-	-	*	992.1	+3	E	4	or0 2f	47	92	5	750	St	10	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours	Temperature Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather	Sea 0-9	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
	18H. G.M.T. of 31st					7H. G.M.T. of 1st									24 HOURS ENDED 7H. 1st						31st
Lerwick	1005	48	SE	8	cmq	1013.6	+4	47	-3	SE	8	SE	cr	7	-	50	46	bcmq	cmq	cmq.c	*
Stornoway	991.4	47	S	5	o	1003.6	+9	46	-5	E	6	-	oq	5	7	51	46	or	otro	oq	0.0
Castlebay (Barra Is)	990.4	45	NW	3	r	999.2	-8	52	?	E	5	-	o	6	19	52	44	opr	r	r.o	0.0
Malin Head	988.4	47	NE	1	o	991.6	+3	49	+2	ESE	4	-	o	4	4	50	44	ov	ov	or omr	0.0
Blacksod Point	988.8	47	NW	2	bc	991.3	+2	49	+2	NNW	5	-	omq	6	5	50	43	bcp	bcp	c.bcp.om	*
Roche's Point	989.1	47	NW	3	b	991.2	+1	45	-1	NW	3	-	r	3	1	53	41	bc.c.	c.bc.b	b.or	*
Birr Castle	988.2	45	NW	1	o	988.8	*	45	-1	NW	1	-	r0	*	1	48	38	c	o.c	od.r	1.8
Donaghadee	988.6	46	W	2	omr	994.1	+5	50	-6	E	7	-	omq	6	50	52	46	omr	omr	omqp	*
Liverpool (Bidston)	987.0	50	ESE	5	o	992.9	+4	44	+3	ESE	4	E	or0	4	5	51	41	o	o	or	0.0
Holyhead	984.1	50	SSE	4	or	990.2	+4	48	-3	SE	4	-	c	3	29	54	46	c.orq	orm	or.c	0.0
Pembroke (St. Ann's Head)	986.1	47	NW	3	ov	990.5	+2	46	-7	-	0	SE	cv	2	5	54	45	oqrm	or	ov.cv.o	0.0
Scilly (St. Mary's)	988.6	48	NW	4	bc	990.8	+1	45	-5	NNW	1	NW	c	4	14	57	45	orq.c	c.bcqp	c.o.cqp	2.3
Jersey (St. Aubin)	988.1	52	W	4	odp	988.4	0	46	-7	NNE	3	-	or	3	5	55	42	oqp	cqpdp	c.qp.or	0.8
Portland Bill	985.7	56	WSW	5	o	989.2	+3	48	-7	N	3	N	o	5	16	56	44	c.oq	qro	o.c.o	*
Dungeness	993.1	53	S	6	cq	991.2	+1	48	0	SSE	5	S	r	6	1	55	48	c.bc	cq	bq.cq.cp	*
Wick	997.3	49	SSE	9	omq	1006.4	+6	47	-2	SE	8	-	omq	8	-	50	46	cmq	c.omq	omqp	*
Nairn	994.7	46	SE	3	bc	1004.0	*	44	-6	ESE	1	-	c	1	-	52	43	c.bcq	bcq	bcq.c	6.9
Leith	995.4	48	E	2	o	1001.7	+3	45	+2	SE	2	-	r0	2	0.2	51	40	c.bc	bc.c.o	or.or	*
Tynemouth	995.3	50	SE	7	omq	1000.1	+2	45	+3	SE	8	-	omq	6	-	51	42	bcz	cm	omqp	*
Spurn Head	993.9	51	SSE	7	bcq	996.3	+3	46	+2	SE	7	-	oqm	6	-	51	40	cqm	bcq	bcq.cq	*
Yarmouth (Gorleston)	997.6	51	SSE	8	c	996.7	0	45	0	SSE	7	-	cq	5	0.2	52	44	oqmr	oqmr.c.	bcq.op	0.0
Clacton-on-Sea	995.4	53	ESE	7	c	994.0	+3	47	+2	ESE	6	-	oqq r0	4	2	53	44	bc.c	cq.	oq.qr0	0.9
Nottingham	991.6	50	SE	5	o	993.4	*	44	+10	SE	5	E	op	*	3	57	33	c.oe	op	or	0.6

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4.

M.O. FORM 2370.

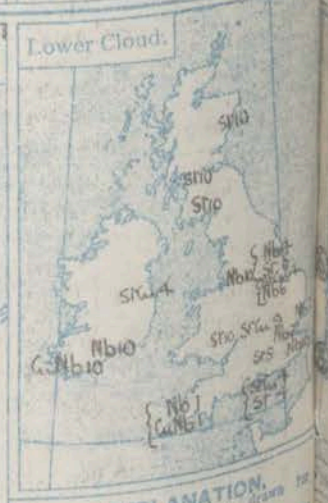
SUMMARY OF CONDITIONS AT 7 h. G.M.T. 1st. Nov. 1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, rainy, squally.	Fair.	R. Rough.
2. E. England	Cloudy to dull, squally.	Fair.	"
3. E. Midlands	Dull, misty.	Indif.	-
4. W. Midlands	Rainy, squally.	Poor	-
5. S.W. England	Fine, clear.	Exclt.	Mod.
6. South Wales	Cloudy.	"	Smooth
7. North Wales	Cloudy	Fair.	Slight
8. N.W. England	Dull, misty, local rain.	Indif.	R. Rough.
9. N. Midlands	Rainy, misty, squally.	"	-
10. N.E. England	Gale, dull.	"	Rough
11. E. Scotland	Misty, some squalls.	Good.	Rough
12. S.W. Scotland	Squally.	Indif.	R. Rough
13. Isle of Man	Misty, squally.	"	"
14. N. & N.W. Scotland	Dull, misty, gale.	Fair.	High.
15. Hebrides	Dull, squally.	Fair.	Rough
16. Orkneys and Shetlands	Cloudy.	Indif.	High.
17. N.W. Ireland	Dull, misty, drizzle.	Fair.	Rough
18. N.E. Ireland	Dull, misty, squally.	Fair.	Rough
19. S.E. Ireland	Rainy.	Good.	Slight
20. S.W. Ireland	Squally, hailstorms.	Good.	R. Rough.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F.	Air °F

Barometric change from 4 h. to 7 h. (half millibars).



EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers; mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. K thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h. GMT.

A complex depression over the British Isles and France will probably become less deep, but will maintain unsettled weather for a time with winds from some Easterly or Northerly point.

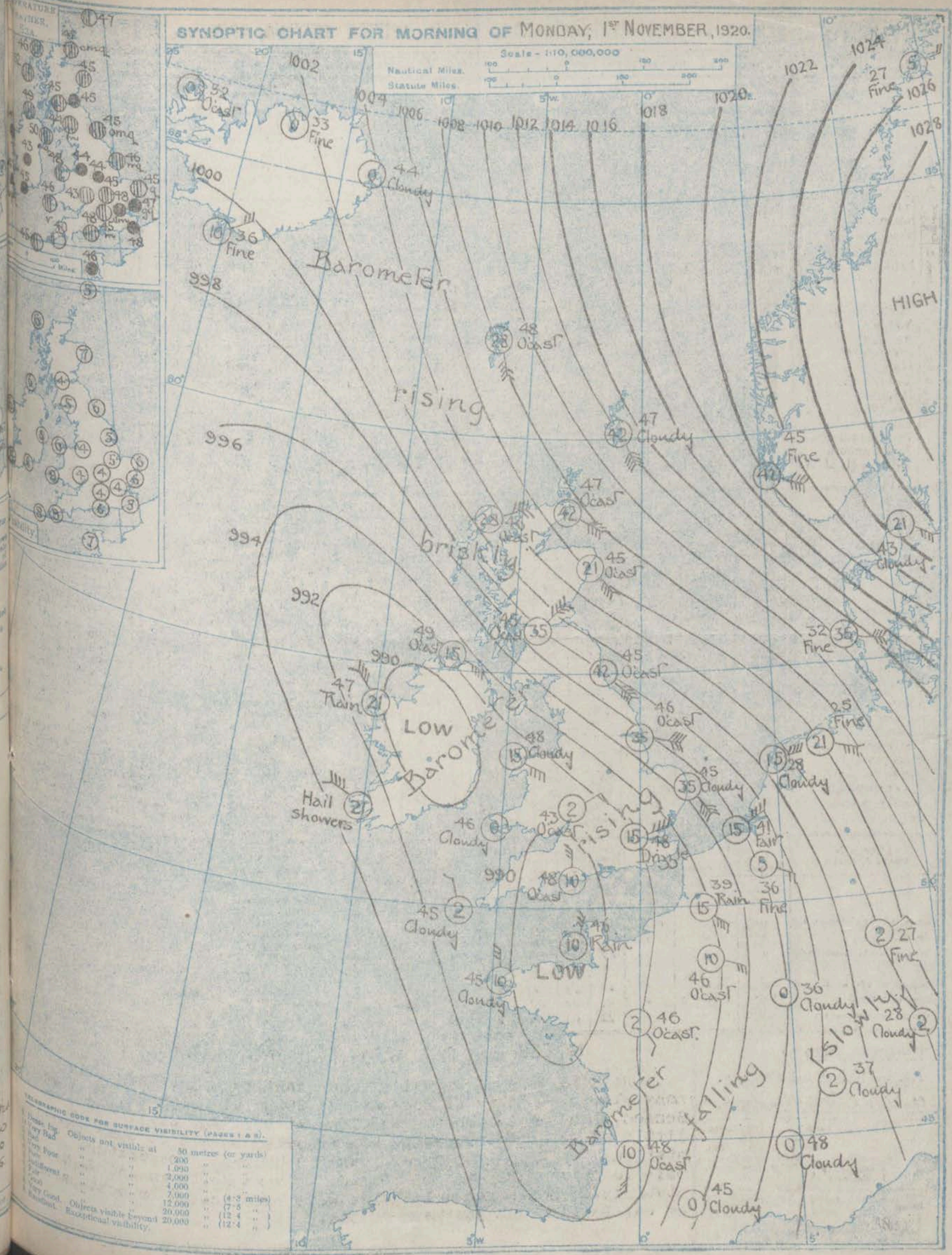
Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Monday, 1st November, 1920.	Further Outlook.
1. S.E. England	Wind from South-East or East, strong in places, moderating later; much low cloud, some rain; visibility indifferent to fair. Temperature rather low.	Continuing unsettled and rather cold.
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. E. Scotland		
12. S.W. Scotland		
13. Isle of Man		
14. N. & N.W. Scotland		
15. Hebrides		
16. Orkneys and Shetlands		
17. N.W. Ireland		
18. N.E. Ireland	Wind between North-East and North or North-West, strong to moderate. Dull, rain at times, then fairer. Visibility indifferent to fair. Temperature rather low.	
19. S.E. Ireland		
20. S.W. Ireland		

South Cons hoists
Saturday 08.30
Saturday 08.10
Sunday 08.45

R.S.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 1000

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF MONDAY, 1st NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
Barometer rising briskly
HIGH
LOW
Barometer falling
Hail showers
Rain
Drizzle
Fog
Fine
Cloudy
O'cast
Barometer rising
Barometer falling
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 3).
Very Bad. Objects not visible at 50 metres (or yards)
Bad " " 200 " "
Very Poor " " 1,000 " "
Indifferent " " 2,000 " "
Fair " " 4,000 " "
Good " " 7,000 " "
Very Good. " " 12,000 " (4·3 miles)
Excellent. Objects visible beyond 20,000 " (7·5 ")
Exceptional visibility. " " (12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 306 { Monday, 1st November

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 36h.

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 30th-31st	Rainfall. Day. 9h-18h. 31st	Sunshine. Sunrise to Sunset. 31st
Scotland.	Oban							
	Banff	cq	o	50	46	0·1	-	0·5
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	c o	o/p	46	29	-	0·1	0·0
	Scarborough							
	Skegness							
England, E.	Lowestoft	c o/p	o.c.o c b	52	42	0·4	-	0·0
	Felixstowe	o	c	52	44	-	-	1·4
	Southend-on-Sea	o	bc.c.o	54	35	-	-	3·3
England, S.E.	Tunbridge Wells	o.c	c.o	54	31	-	-	0·6
	Margate	o	bc	54	?	-	-	1·8
	Ramsgate	*	*					
	Folkestone	o	c	55	41	-	-	0·5
	Hastings	o.c	bc.co	56	43	-	-	2·6
	Eastbourne	o	c.o.	56	45	-	-	0·8
	Brighton	oq	orq	56	44	-	-	0·0
	Worthing	c o	o	57	46	-	-	0·2
	Littlehampton							
	Portsmouth (S'thsea)	*	*	56	45	-	1	0·0
	Bournemouth	*	*	54	49	-	3	0·0
	Ventnor (I. of W.)	*	*	55	47	-	3	0·0

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 30th-31st	Rainfall. Day. 9h-17h. 31st	Sunshine. Sunrise to Sunset. 31st
England, N.W.	Douglas (I.O.M.)							
	Blackpool	c	o	52	42	0·1	-	2·7
	Southport	c.o	c o	51	41	-	-	0·3
	Morecambe							
Midlands.	Buxton							
	Leamington Spa	o	or	52	38	-	1	0·0
	Malvern							
	Bath	o	or	54	40	-	5	0·1
Wales.	Rhyl	bc c.ch	ch	52	45	-	0·4	2·9
	Colwyn Bay	*	*	52	48	-	2	1·3
	Llandudno	*	*	55	47	0·2	1	2·1
	Aberystwyth							
	Tenby							
	Swansea							
England, S.W.	Weymouth	ohoq	omc	57	50	-	?	0·0
	Teignmouth							
	Torquay	or. r	o.bce	57	48	0·4	9	1·0
	Paignton							
	Penzance	or	o.c.bc	51	47	14	5	2·0
	Newquay	or	or ch	51	47	11	13	0·3
	Bude	r	r	54	43	3	27	0·0
	Ilfracombe							
	Weston-s-Mare	bcr.bc	r	56	46	-	11	0·3

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-18h 31st	Weather. 18h-18h 31st	Weather. 18h 31st-1h 1st	Weather. 1h-7h 1st	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h mm.	Rainfall.† Night. 18h-7h mm.	Sun. Hours.
Renfrew	o2fq	o2fq	c.oq	o2fq	53	45	43	-	Trace	1·9
Eskdalemuir	bbc2fbcuf	o.o1f	o. o2f	bq o2f	48	40	39	-	0·4	4·2
Valencia (Cahire'n)	co p	bc. c	c. op	c.o p ch	50	44	40	3	7	3·2
Baldonnel	o r r	o p.	o2f p	c p	48	39	31	2	-	0·0
Manchester (Alex Pk)	3f	o2fq	o2f c. p	o3f.qrrq	51	41	34	-	3	*
Ross on Wye	bcoqgpq	pd.o.c.qrr	rr.c.o	o.co2f	53	42	40	2	7	0·1
Falmouth	r r. R R	p.bc.c.b.bc	q.bc c. b. bc	b.bc	53	40	31	13	1	0·4
Calshot (Hants)	p. o1f	o1fr	orr. ro	or o. o1f	55	47	41	5	7	0·0
Lympne (Folkestone)	o1fq. co	co.q1f	gr o2f r	q.2f r o	53	44	4	-	2	0·7
Aberdeen	1fq.	o1fq	q p	q p	50	45	42	-	1	0·4
Howden	b.bc.o	o2f	R sq	r. q	50	35	29	Trace	1	0·4
Cranwell (Lincs)	o pd. o	oq	r. r r	rro. rr	51	30	41	0·3	6	0·0
Felixstowe	bc c r.	z bc.cq1f	q r c o1f	q r. r.	53	44	*	0·2	2	0·8
Shoeburyness	b.bc	bc.c* o.	q. pd	q r. r.	54	42	46	-	1	2·2
Benson	r.	r.	R R	R o	51	39	38	2	25	*
S. Farnborough	c.o p.	pd. o	dd. p	o2f.c.o	53	36	41	2	13	0·0
London (Kew Obsy.)	c. o2f	o p.	o.q	o2f pd. rr	54	35	46	Trace	7	0·2
Croydon	o2fo p.1f	co o1f r q	q. o1f r.	o2f r r 66	56	43	*	0·2	10	*

BEAUFORT-NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r,r, = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·9
1	1- 3	0·9- 1·5
2	4- 7	1·6- 3·4
3	8-12	3·5- 5·9
4	13-18	6·0- 9·9
5	19-24	10·0-13·9
6	25-31	14·0-17·9
7	32-38	18·0-20·7
8	39-46	20·8-24·4
9	47-54	24·5-28·4
10	55-63	28·5-33·5
11	64-75	33·6 or above
12	Above 75	

SYMBOLS—
Aurora ⌂ Solar halo ⊕
Rime ⌅ Lunar halo ⊕
Glazed frost ⌇ Solar corona ⊕
Glazed roads ⌇ Lunar corona ⊕

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 Hours ended 9h G.M.T. 1st							Yesterday.		To-day.
Greenwich (Royal Observatory)	or	o. or	or. o	54	43	40	5	1·6	78	90
City (Bunhill Row)	*	*	*	*	*	*	*	0·4	*	*
Westminster (St. James's Park)	*	*	*	54	43	41	-	0·9	69	91
Camden Sq. (British Rainfall)	*	*	*	55	43	42	4	*	*	97
Kensington Palace	ov. bc	o. op. o	*	55	40	43	4	*	76 (18h)	94
Hampstead Observatory	*	*	*	52	40	44	5	0·4	*	97

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total ... 558 ... Joules.

Milliwatts.
Average Rate. 12·9
Maximum Rate. 12·26

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

1st AND 2nd NOVEMBER, 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	6.50 / 6.52	11.37 / 11.37	4.24 / 4.23
Greenwich	6.55 / 6.57	11.44 / 11.46	4.31 / 4.31
Wick	7.30 / 7.32	11.56 / 11.56	4.21 / 4.20
Valencia	7.37 / 7.39	12.23 / 12.25	4.13 / 4.11

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 31st Oct. 4h. 40m. to 5th Nov. 6h. 0m. am.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	12	30	0	40	5
δ Ursae Minoris	12	30	0	15	2

NOTES ON THE WEATHER OF YESTERDAY.

Rain fell very generally, the quantity being large in many places, - 50 mm at Donaghadee, 29 mm at Holyhead, 27mm at Benson, 18mm at Castlebay, and 16mm at Portland Bill. Very little or no bright sunshine was recorded except at some Scottish stations; at Nairn the record was 6.9 hours. Temperature rose to between 50° and 55° except at some Northern and Western stations. South-Easterly gales were experienced on most parts of our Eastern and Southern coasts.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B. 21,630 TUESDAY 2ND NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 1ST Nov.														18H. G.M.T. OF 1ST Nov.													
Renfrew	1006.5	+5	ENE	7	0q	46	75	7	3000	Sr.Cu	10	-	-	*	1011.3	+4	NE	4	02f	45	75	5	3000	Sr.Cu	10	-	-	*
Eskdalemuir	1006.3	+4	ENE	4	0	41	85	5	2000	Sr.	10	-	-	*	1011.0	+7	NE	4	0d.m	41	85	5	-	Nb	10	-	-	*
Valencia (Cahire'n)	9964	+6	ENE	4	b	51	75	8	2000	Cu	3	-	-	5	1005.4	+9	-	0	b	45	85	8	3000	Sr.Cu	1	-	-	4
Baldonnel	9987	+7	E	6	01fd	50	92	6	1250	Sr.Cu	10	-	-	*	1005.8	+6	NE	3	03f	49	75	3	750	Sr.	10	-	-	*
Manchester (Alex. Pk)	9999	+5	E	6	02f	46	85	4	750	Nb	10	-	-	*	1005.6	+7	E	6	02f	45	85	6	750	Sr.	10	-	-	*
Ross on Wye	998.5	+4	NE	5	0d.	48	92	6	1250	Nb	10	-	-	*	1002.1	+7	ENE	4	0	47	85	6	1250	Sr.	10	-	-	*
Falmouth	993.3	+3	N	3	c	53	65	8	-	Cu N	4	A.Sr	4	*	999.2	+6	NNE	2	0g	47	92	7	-	Sr.	9	-	-	*
Calshot (Hants)	993.2	+2	E	5	0r	52	92	6	1250	Nb	10	-	-	5	999.7	+5	E	5	01f	49	85	7	2000	Sr.Cu	10	-	-	4
Lympne (Folkestone)	996.4	+4	E	5	0mq	47	85	6	5700	Sr.Cu	8	A.Sr	1	*	1000.6	+4	ENE	4	cmq	46	85	5	2000	Sr.Cu	8	-	-	*
Aberdeen	1011.4	+2	SE	5	01f	45	65	7	1250	Sr.	10	-	-	6	1014.4	+4	SE	4	01f	45	65	7	1250	Sr.	10	-	-	6
Howden	1001.8	+3	E	5	0r.q	54	92	5	1250	Nb	10	-	-	*	1001.9	+8	ENE	3	0q	44	92	5	2000	Sr.	9	-	-	*
Cranwell (Lincs)	1000.3	+5	ENE	4	0r.	45	92	6	750	Nb	10	-	-	*	1005.7	+6	ENE	4	02f	44	92	5	750	Sr.	10	-	-	
Felixstowe	1000.0	+2	ESE	5	0	49	92	6	5700	Sr.Cu	8	A.Cu	1	5	1004.1	+7	E	5	b	48	85	6	-	-	-	A.Sr	1	*
Shoeburyness	997.5	+3	SE	4	0	49	75	7	3000	Sr.Cu	4	A.Cu	4	*	1002.1	+5	E	4	b	47	85	7	4200	Sr.Cu	2	-	-	*
Benson	995.2	+4	ENE	4	0	49	85	4	-	Sr.	10	-	-	*	1001.3	+3	ENE	3	bc	45	85	4	-	Sr.	5	-	-	*
S. Farnborough	995.0	+4	ENE	3	0	49	85	6	1250	Nb	10	-	-	*	1000.9	+7	ENE	3	b	45	92	6	1500	Sr.	3	-	-	*
London (Kew Obsy.)	996.1	+5	ENE	5	03f	48	85	3	2000	Sr.	9	A.Sr.	1	*	1001.8	+9	NE	4	bc	48	75	4	5700	Sr.	6	-	-	*
Croydon	996.0	+4	ENE	5	0d.	48	92	4	1250	Nb	9	A.Sr	1	*	1002.2	+6	ENE	4	bc 2f	46	85	4	2000	Sr.	3	A.Cu	1	*
	1H. G.M.T. OF 2ND Nov.														7H. G.M.T. OF 2ND Nov.													
Renfrew															1015.1	+1	ENE	3	02f	44	75	4	750	Sr.Cu	10	-	-	*
Eskdalemuir	1014.4	+2	NE	3	02f	40	88	5	-	Sr	10	-	-	*	1015.3	+1	ENE	2	0	38	85	4	8,000	Sr.	10	-	-	*
Valencia (Cahire'n)	1011.6	+4	NE	3	bc	45	*	*	*	*	*	*	*	0	1012.8	+1	NE	1	cmq	40	92	4	-	-	-	A.Sr.	8	4
Baldonnel	1011.8	+1	NE	2	03f	49	85	3	750	Sr	10	-	-	*	1012.8	+0	-	0	02f	47	85	4	1250	Sr	6	Sr.Cu	4	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.1	+5	NE	2	0x	50	85	4	-	-	-	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1012.3	+3	NE	4	0q	41	75	4	2,000	Sr.	10	-	-	*
Falmouth	1006.3	+6	NNE	4	c	47	85	6	-	Sr. Cu	4	-	-	*	1010.3	+1	N	3	b 1fc	41	94	6	-	-	-	-	-	*
Calshot (Hants)	1007.8	+5	NE	3	b1f	42	92	4	-	-	-	-	-	2	1009.9	+8	NNE	3	b 2f	39	85	5	3000	Sr.	1	-	-	2
Lympne (Folkestone C)	1004.6	+3	NE	3	bm	38	85	4	-	-	-	-	-	*	1006.5	+2	NE	5	bmq	40	85	6	2000	Sr.	2	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.4	+1	SE	3	01f	46	65	4	1250	Sr.	10	-	-	5
Howden	1012.1	+3	-	0	0	43	92	4	2,000	Sr Cu	9	-	-	*	1012.8	0	-	0	0m	42	92	4	4,200	Sr Cu	10	-	-	*
Cranwell (Lincs)	1010.8	+4	NNE	3	01f	40	92	6	3,000	Sr Cu	9	-	-	*	1012.5	+1	NE	3	02f	41	94	5	2,000	Sr Cu	10	-	-	*
Felixstowe	1009.9	?	NE	3	bc	39	?	?	2,000	Sr Cu	6	-	-	4	1009.6	+2	NNE	3	bc	36	94	6	3,000	Sr.	1	-	-	3
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008.5	+3	NE	2	b	35	85	6	-	Sr Cu	1	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1010.2	+2	NNE	1	b	36	92	5	-	-	-	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1009.6	+2	N	2	b	35	92	6	750	Sr	1	-	-	*
London (M.O. at 1H.)	1006.7	+3	*	*	*	39	*	*	*	*	*	*	*	*	1010.1	+2	N	2	bw	36	85	5	-	-	-	-	-	*
Croydon	1007.2	+3	NNE	4	b2fw	40	85	*	-	-	-	-	-	*	1010.3	+2	NNE	1	b2f	36	85	4	-	-	-	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 1ST Nov.					7H. G.M.T. of 2ND Nov									24 HOURS ENDED 7H. 2ND						1ST
Lerwick	1017.7	48	ESE	8	bcm	1017.4	-1	48	+1	SSE	7	SE	0q	6	-	50	45	bc	bcm	c.0q	*
Stornoway	1011.0	46	SE	4	b	1013.1	0	43	-3	S	3	-	0	2	-	49	37	obc	bcb	b.0	6.2
Castlebay (Barra Is)	1010.5	49	E	4	b	[illegible]	0	50	-2	SSE	5	-	0	5	-	52	49	obc	bcb	b.0	4.7
Malin Head	1007.7	47	E	4	0													0	0		
Blacksod Point	1005.7	50	E	3	bc	1011.0	0	48	+1	S	2	-	0m	2	-	54	37	bc	bc	0m	*
Roche's Point	1003.2	50	NE	2	c	1012.4	+2	50	+5	NNW	1	-	0	2	0.3	53	45	pobc	bcc	0m	*
Birr Castle	1004.6	50	NE	1	0	1012.2	*	47	+4	NE	1	-	0	*	-	53	43	o.c	03	03	4.6
Donaghadee	1008.3	48	SE	7	0	1013.6	+1	46	-4	E	3	-	bcmq	3	3	51	47	omq	omq	omq	*
Liverpool (Bidston)	1005.4	46	ENE	5	*	1013.1	+2	40	-4	E	1	-	b	2	1	47	39	opm	oq	opm	0.0
Holyhead	1004.4	48	E	6	ogq	1012.6	+1	44	-4	ENE	4	-	b3	2	-	49	43	ogq	ogq	o.bc.c.b	1.3
Pembroke (St. Ann's Head)	1001.1	49	NE	3	cv	1012.0	+3	42	-4	NE	1	-	b3	2	-	54	42	cv	cv	cv.o.bc.b	1.8
Scilly (St. Mary's)	996.5	49	ENE	2	c	1009.9	+4	57	+6	NE	3	NE	c	4	1	51	45 46	cbcp	bcpc	cp.o.c	5.0
Jersey (St. Aubin)	995.2	50	NE	3	b	1005.6	+2	48	+2	NE	4	NE	c	3	4	52	45	orbo	ocb	b.or.o.c	1.0
Portland Bill	996.2	49	NE	5	cp cd	1007.0	+4	43	-5	NE	6	NE	bc	5	4	55	40	1r	oc	cp.bcm.b	*
Dungeness	999.3	50	ESE	4	b	1006.3	+3	45	-3	NE	5	NE	bc	4	0.4	52	44	cpc	cp.bc	c.b.bc	*
Wick	1013.5	47	SE	5	omq	1014.5	0	47	0	SSE	5	-	omq	5	0.2	48	42	omq	omqp	omq	*
Nairn	1013.3	40	E	1	bc	1014.6	*	29	-15	-	0	-	bc	0	-	46	28	cqgm	cbcm	bcx	1.8
Leith	1012.0	46	E	2	0	1014.7	0	45	-1	SSE	1	-	0	2	0	46	44	b.c.o	a.c.o	ogm.o	*
Tynemouth	1010.4	45	ESE	4	0	1015.0	+1	46	0	E	3	-	0m	4	-	46	42	omq	om	om	*
Spurn Head	1005.7	46	E	6	bcq	1011.2	+2	45	-1	NE	4	-	0	4	-	51	42	oqm	oq	bcq.c.o	*
Yarmouth (Gorleston)	1004.3	45	ESE	5	b	1008.2	+1	42	-3	ENE	6	-	b	3	-	47	41	cqbcq	bq	bq.bc.bq	1.1
Clacton-on-Sea	1002.3	50	ENE	4	bc	1008.2	+2	38	-9	N	3	-	bc	2	-	50	36	ogrc	cbc	bc.b.bc	1.1
Nottingham	1005.6	48	E	3	0	1012.4	*	43	-1	NNE	2	NE	0	*	1	47	42	op	0	0	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4.

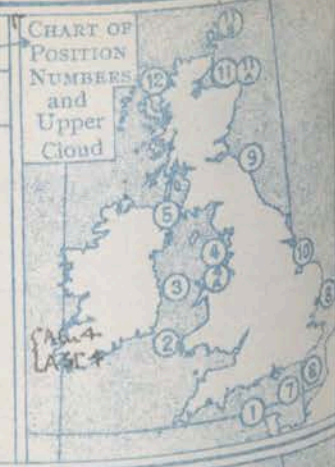
M.O. FORM 2370.

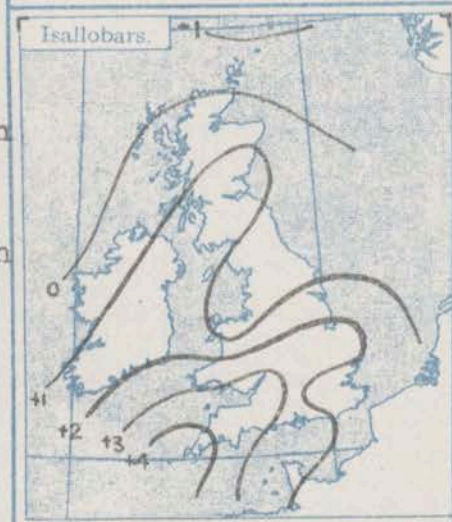
SUMMARY OF CONDITIONS AT 7 h. G.M.T. 2.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fine, frosty air.	Fair	Slight
2. E. England	Fine, frosty air.	Good	"
3. E. Midlands	Dull, misty.	Indiff.	-
4. W. Midlands	Fine, frosty.	Poor	-
5. S.W. England	Cloudy to fine, misty.	Fair	Mod.
6. South Wales	Fine, hazy.	Good	Smooth
7. North Wales	Fine, hazy.	V.Good	"
8. N.W. England	Fine, hazy.	Fair	"
9. N. Midlands	Dull, misty.	"	-
10. N.E. England	Dull, misty.	"	Mod.
11. E. Scotland	Dull, hazy.	Good	R.Rough
12. S.W. Scotland	Dull.	"	Slight
13. Isle of Man	Fair, misty & squally.	Fair	"
14. N.& N.W. Scotland	Fair to dull, squally.	"	R.Rough
15. Hebrides	Dull.	Indiff.	Mod.
16. Orkneys and Shetlands	Squally & dull.	"	Rough
17. N.W. Ireland	Dull, misty.	Poor	Smooth
18. N.E. Ireland	Fair, misty, squally.	Fair	Slight
19. S.E. Ireland	Dull.	Poor	Smooth
20. S.W. Ireland	Cloudy, hazy.	Good	Mod.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
5	1st Nov.	0910	54	48
6	1st "	1530	54	53





Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. E thunderstorm.
SEA DISTURBANCE.—Rough. High.

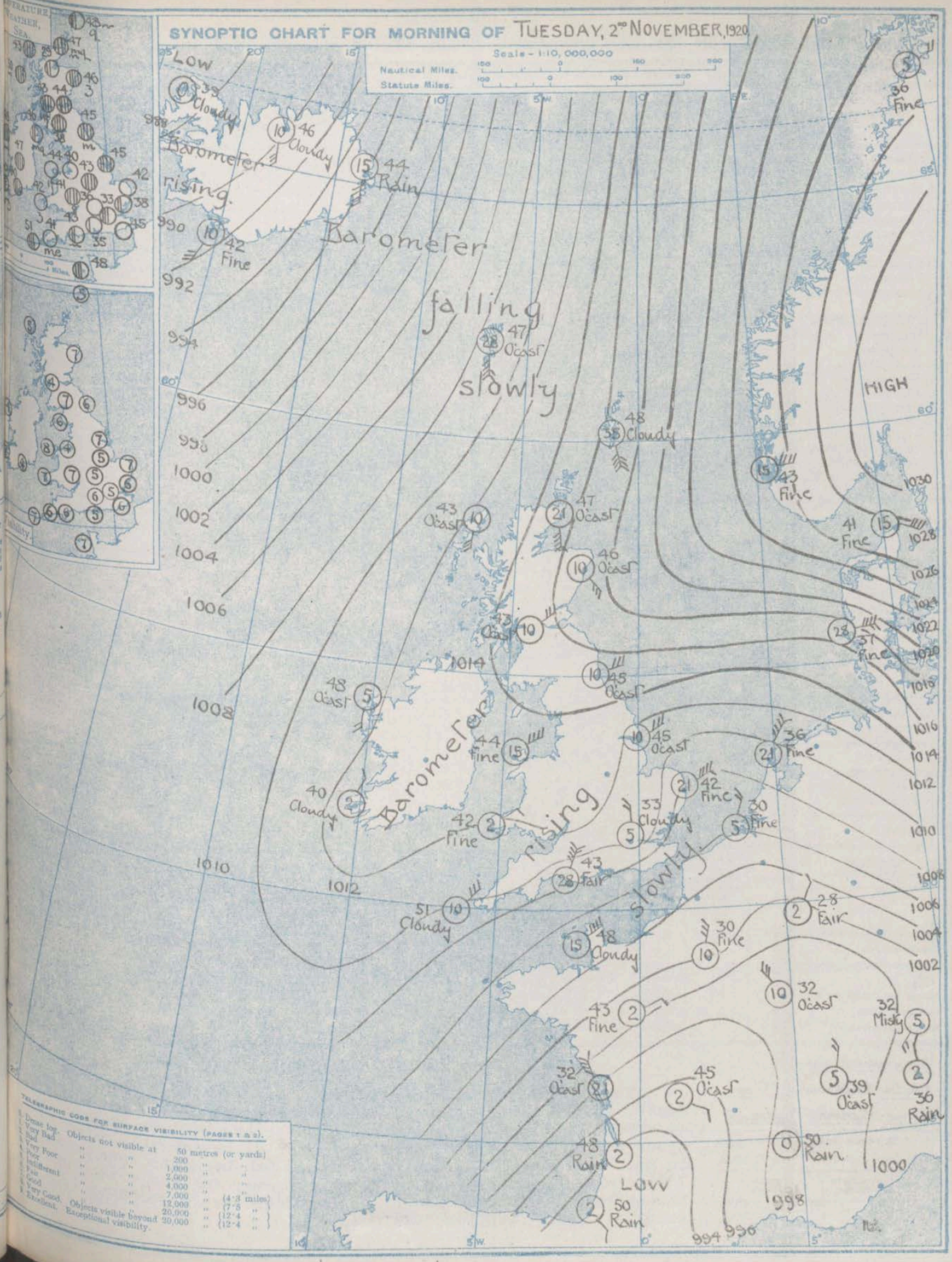
GENERAL INFERENCE from observations received up to 9h.

An anticyclone has spread over these Islands from Scandinavia while the depressions of yesterday have passed away to Southern France. Fair, rather cold weather, with the wind mainly between N.E. and S.E., is probable for a time.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Tuesday, 2nd November, 1920.	Further Outlook.
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 from N.E. or E., light or moderate, fresh locally; fair generally, cloudy at times, visibility fair or good; temperature rather low; local frost at night.	Mainly fair, cold weather continuing.
11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland	Wind mainly South-Easterly, light or moderate, stronger locally; fair or cloudy, visibility mainly fair; temperature rather low; local frost at night.	
18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind between S.E. and N.E., light or moderate; fair or cloudy, visibility fair or good; moderate or rather low temperature; local ground frost at night.	

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.00

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF TUESDAY, 2ND NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
Barometer rising.
Barometer falling slowly
HIGH
Barometer rising slowly
LOW
TELEGRAPHIC CODS FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog.
1. Very Bad. Objects not visible at 50 metres (or yards)
2. Bad " " 200 " "
3. Very Poor " " 1,000 " "
4. Poor " " 2,000 " "
5. Indifferent " " 4,000 " "
6. Fair " " 7,000 " (4·3 miles)
7. Good " " 12,000 " (7·5 "
8. Very Good. " " 20,000 " (12·4 "
9. Excellent. Objects visible beyond Exceptional visibility. 20,000 " (12·4 "

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No 307.

Tuesday 2nd November

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 1st Nov.

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 31st-1st	Rainfall. Day. 9h-18h. 1st	Sunshine. Sunrise to Sunset. 1st
Scotland.	Oban	oc	bcb	49	44	-	-	3.7
	Banff	o	o	45	44	1	-	0.0
	Montrose	o	o	46	44	1	-	0.0
	St. Andrews	o	c	47	44	1	-	0.0
England, N.E.	Harrogate	or	co	43	~~40~~ 41	13	0.1	0.0
	Scarborough	o	o	59	44	-	-	0.0
	Skegness	oc	obc	48	45	-	-	0.0
England, E.	Lowestoft							
	Felixstowe	omr	bcm	49	47	1.	1	0.9
	Southend-on-Sea							
England, S.E.	Tunbridge Wells	o	ocb	49	44	9	-	0.0
	Margate	or	ebc	50	44	4	1	1.2
	Ramsgate	*	*	51	43	4	0.3	1.0
	Folkestone	roc	o	55	45	3	-	0.2
	Hastings					*		
	Eastbourne	o	bc	52	49	17	0.2	0.0
	Brighton	od	od	51	47	17	1	0.2
	Worthing	o oc	bc	52	47	-	-	0.0
	Littlehampton	ocr	bc	56	47	10	5	0.1
	Portsmouth (S'thsea)			53	46	19	17	0.0
	Bournemouth	*	*	51	36	6	7	0.8
	Ventnor (I. of W.)	*	*	55	45	12	2	1.5

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 31st-1st	Rainfall. Day. 9h-17h. 1st	Sunshine. Sunrise to Sunset. 1st
England, N.W.	Douglas (I.O.M.)							1.8
	Blackpool	r	oc	48	46	6	-	0.1
	Southport	o	oco	47	44	3	-	0.0
	Morecambe	-	-	48	43	0.3	-	
Midlands.	Buxton							0.0
	Leamington Spa	o	o	47	34	10	-	0.0
	Malvern	o	o	47	44	2	-	0.0
	Bath	mor	ro	49	39	6	5	0.0
Wales.	Rhyl	op	o	49	48	2	0.2	0.0
	Colwyn Bay	-	-	47	46	5	-	0.0
	Llandudno	*	*	51	46	6	-	0.3
	Aberystwyth	roc	coo	51	44	4	-	
	Tenby							1.1
	Swansea	-	-	51	42	6	1	0.0
England, S.W.	Weymouth	opo	o	51	38	-	5	0.0
	Teignmouth	o	o	53	36	-	0.4	0.0
	Torquay	c	crc	50	38	0.1	1	0.0
	Paignton	cbcm	cpqbc	53	33	-	1	5.4
	Penzance	bc	bcc	54	37	8	-	4.2
	Newquay	bv	cpdo	52	44	-	-	2.1
	Bude	cbc	bpl.	54	37	9	-	0.0
	Ilfracombe	cop	op	51	43	13	1	0.1
	Weston-s-Mare	bccr	ro	50	39	1	3	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h.	Weather. 13h-18h.	Weather. 18h-1h.	Weather. 1h-7h.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h. mm.	Rainfall.† Night. 18h-7h. mm.	Sun. Hours.
Renfrew	oifq	ozf	ozf	ozf.o	47	43	40	-	-	0.0
Eskdalemuir	oif.oz	ozf.pd.	ozf	ozf.o	42	38	34	-	-	0.0
Valencia (Cahire'n)	oqpr bc	bbc.bbc	b.bc	bc.cw	60	59	35	9	-	5.2
Baldonnel	copd.	pd.ozf	ozf							
Manchester (Alex. Pk.)	ozf	oifq	b.ozf	b.bc.4-5f	48	30	18	1	-	*
Ross on Wye	ozf.qifpd	q.q	oq	a c.o	49	40	36	-	-	0.0
Falmouth	bbc.bcc	bcc.p.	b.o.c.o	c.o.b.bc	54	39	36	1	-	4.8
Calshot (Hants)	orroifRR	p.oif	b.if	bif.bbc.if	62	38	33	8	-	0.0
Lympne (Folkestone)	oifqp.r.	oifqrco	bc.c.b.bc	b.bcifq	48	36	32	1	-	0.1
Aberdeen	oifq	oif.q	oif.q	oif	47	44	42	-	-	0.0
Howden	q.p.	q.o	o.oif	o.oif	46	42	38	1	-	0.0
Cranwell (Lincs)	p.dd	roif	c.o.b.bc.c.b3	o	46	35	32	2	-	0.0
Felixstowe	r.o	bbc.bbc	b.bc	b.bc.if	49	35	*	1	-	0.9
Shoeburyness	r.o	bcc.bbc	b	bx	54	34	30	1	-	0.1
Benson	o	o	b.bc	b.bc.b	49	34	27	0.2	-	*
S. Farnborough	coifer.o	opd.bbc	c.o.b.bc	b.if	49	34	30	-	2	0.0
London (Kew Obsy.)	ozf	ozfco	b	bw	49	36	28	0.1	Trace	0.0
Croydon	ozf.oifozf	ozfpd.co bcc	b.bc2fw	b.2f	50	35	*	0.1	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:–
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1– 3	0·3– 1·5
2	4– 7	1·6– 3·3
3	8–12	3·4– 5·4
4	13–18	5·5– 7·9
5	19–24	8·0–10·7
6	25–31	10·8–13·8
7	32–38	13·9–17·1
8	39–46	17·2–20·7
9	47–54	20·8–24·4
10	55–63	24·5–28·4
11	64–75	28·5–33·5
12	Above 75	33·6 or above

SYMBOLS—
Aurora ☆ Solar halo ◎
Rime ⌶ Lunar halo ◎
Glazed frost ⌇ Solar corona ◎
Glazed roads ⌇ Lunar corona ◎

LONDON. OBSERVATIONS.

	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours. (Yesterday)	Humidity % 15 h. G.M.T. (Yesterday)	Humidity % 9 h. G.M.T. (To-day)
	24 Hours ended 9h G.M.T. 2nd									
Greenwich (Royal Observatory)	ox. or	orc.bc.b	b	49	35	21	-	0·1	85	77
City (Bunhill Row)	*	*	*	*	*	*	*	0·0	*	*
Westminster (St. James's Park)	*	*	cr.om.bm	50	37	30	-	0·0	82	72
Camden Sq. (British Rainfall)	orm.o.c	o.c	*	50	34	28	0·3	*	92	81
Kensington Palace	o	o.bc	*	49	34	30	0·2	*	85 (18h)	79
Hampstead Observatory	*	*	*	47	34	30	0·3	0·0	*	96

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total ....129..... Joules.

	Milliwatts.
Average Rate.	3·7
Maximum Rate.	15

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

2nd & 3rd Nov. 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	6.52	11.37	4.22
	6.54	11.37	4.20
Greenwich	6.57	11.44	4.31
	6.59	11.44	4.29
Wick	7.32	11.56	4.30
	7.35	11.56	4.17
Valencia	7.39	12.22	6.11
	7.41	12.20	5.9

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 1st ....17.h...30.m.
to 2nd ....6.h...0.m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	12	30	12	30	100
δ Ursae Minoris	12	30	12	25	99

NOTES ON THE WEATHER OF YESTERDAY.

Temperature failed to reach 50° in many places, even in the South, and remained below 55° except at Portland Bill. Frost occurred locally at night; at Manchester the minimum on the grass was as low as 18°. Rain fell over a considerable area in the West and South, but the largest measurements were between 7 and 9mm. The day was almost sunless over England except on the extreme South West coast. Fair records were reported from some Irish and Scottish Stations.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B. 24631 Wednesday, 3rd NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
13H. G.M.T. 2nd														
Renfrew	1014.3	-3	ESE	3	02f	46	65	4	3000	Sr.Cu	10	-	-	*
Eskdalemuir	1014.1	-1	ENE	3	0	42	85	6	3000	Sr.Cu	10	-	-	*
Valencia (Cahire'n)	1011.6	-3	SSE	1	01f	51	92	7	2000	Sr.	2	A.Sr.	8	3
Baldonnel	1012.6	0	SE	1	02f	45	95	5	2000	Sr.	10	-	-	*
Manchester (Alex Pk)	1012.0	-2	NE	3	02f	45	65	4	3000	Sr.Cu	9	-	-	*
Ross on Wye	1011.0	-2	NE	3	bz	47	75	5	4200	Cu	2	Ci	1	*
Falmouth	1010.9	0	NW	2	b	55	75	7	-	-	-	Ci.Cu	1	*
Calshot (Hants) *	1009.5	0	NE	4	c	45	75	7	4200	Sr.Cu	7	-	-	3
Lympne (Folkestone)	1006.9	0	NNE	5	029	46	75	6	2000	Sr.Cu	8	-	-	*
Aberdeen	1016.0	-1	SE	4	01f	48	55	7	2000	Sr.	10	-	-	4
Howden	1011.9	-1	N	2	02	45	75	6	3000	Sr.Cu	10	-	-	*
Cranwell (Lincs)	1011.5	-2	N	3	01f	44	85	6	3000	Sr.	4	A.Sr.	6	*
Felixstowe	1009.1	-1	NE	4	bif	47	85	7	5700	Cu	1	-	-	*
Shoeburyness	1008.3	0	NNE	3	bc	46	75	7	3000	Cu	4	-	-	*
Benson	1009.4	-2	NNE	4	0	43	75	6	-	Cu	10	-	-	*
S. Farnborough	1009.7	-2	NNE	3	0	44	75	6	2000	Sr.Cu	9	-	-	*
London (Kew Obsy.)	1009.2	-3	N	3	bcz	45	65	5	5700	Cu	5	-	-	*
Croydon	1009.6	-1	NNE	5	bc2f	45	75	4	2000	Sr.Cu	6	-	-	*
1H. G.M.T. OF 3rd														
Renfrew														
Eskdalemuir														
Valencia (Cahire'n)	1011.4	-1	ENE	2	0	39	95	6	-	Sr.Cu	10	-	-	*
Baldonnel	1006.1	-2	ESE	2	0e	57	*	*	*	*	*	*	*	3
Manchester (Alex Pk)	1009.3	-3	E	2	03f	46	92	3	<500	Sr.	Y	A.Sr.	2	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Falmouth	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calshot (Hants)	1010.2	-1	N	1	0	45	92	6	-	Sr.	10	-	-	*
Lympne (Folkestone)	1010.1	-1	N	2	6if	37	92	Y	-	-	-	Ci.Cu	2	2
Aberdeen	1008.2	-1	N	2	6m	37	92	6	-	-	-	A.Sr.	2	*
Howden	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cranwell (Lincs)	1009.2	-1	-	0	01f	41	92	5	3000	Sr.	10	-	-	*
Felixstowe	1010.1	-1	N	1	02f	41	92	5	3000	Sr.	10	-	-	*
Shoeburyness	1009.3	0	N	3	6x	34	97	6	3000	Sr.Cu	2	-	-	1
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*
London (M.O. at 1H.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Croydon	1008.9	-1	*	*	*	37	*	*	*	*	*	*	*	*
	1010.1	-1	-	0	63fx	31	97	3	-	-	-	A.Cu	3	*

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
18H. G.M.T. OF 2nd														
Renfrew	1013.1	-0	E	3	02f	44	75	4	3,000	-	-	-	-	-
Eskdalemuir	1012.6	-1	ENE	1	0	40	85	6	-	Sr.Cu	10	-	-	*
Valencia (Cahire'n)	1009.1	-2	SSE	3	0f	50	92	7	1250	Sr.	4	A.Sr.	6	3
Baldonnel	1011.1	0	SE	1	02f	46	85	5	750	Sr.	10	-	-	*
Manchester (Alex Pk)	1011.2	-1	NE	3	02f	42	75	4	2000	Sr.	10	-	-	*
Ross on Wye	1011.1	0	ENE	2	02f	39	85	4	1250	Sr.	10	-	-	*
Falmouth	1010.7	0	N	3	bife	46	97	6	-	Sr.	1	-	-	*
Calshot (Hants) *	1010.4	+3	NE	3	01f	43	75	7	1250	Sr.Cu	10	-	-	3
Lympne (Folkestone)	1008.3	0	N	4	bm	40	85	6	2000	Sr.Cu	3	-	-	*
Aberdeen	1014.7	-1	SE	4	01f	48	65	7	2000	Sr.	10	-	-	4
Howden	1010.9	0	-	0	02f	42	92	4	3000	Sr.	10	-	-	*
Cranwell (Lincs)	1011.3	0	NNE	2	02f	42	85	5	3000	Sr.Cu	10	-	-	*
Felixstowe	1010.1	+2	NNE	3	bif	37	97	5	-	-	-	-	-	*
Shoeburyness	1008.4	0	-	0	bw	36	92	7	-	-	-	-	-	*
Benson	1010.4	0	NNE	2	0	42	75	6	-	-	-	-	-	*
S. Farnborough	1010.1	+1	NNE	3	0m	40	85	5	1250	Sr.Cu	10	-	-	*
London (Kew Obsy.)	1009.6	+1	NNW	2	bz	42	75	5	-	-	-	-	-	*
Croydon	1009.9	+1	N	3	bc3f	42	85	3	3000	Sr.	6	-	-	*
7H. G.M.T. OF 3rd														
Renfrew	1011.0	0	-	0	03f	41	92	3	2000	S.	10	-	-	*
Eskdalemuir	1011.2	0	ENE	1	02f	39	95	5	2000	S.	10	-	-	*
Valencia (Cahire'n)	1006.2	0	S	3	0d3	55	97	6	<500	S.	10	-	-	3
Baldonnel	1008.4	0	-	0	03f	41	95	4	1250	S.	10	-	-	4
Manchester (Alex Pk)	1009.9	0	ESE	1	03f	40	92	3	2,000	Sr.Cu	10	-	-	*
Ross on Wye	1010.6	0	W	1	02f9	37	97	4	1,250	S.	10	-	-	*
Falmouth	1009.7	0	NNW	2	01f9	44	92	6	-	Sr.	3	A.Cu	6	*
Calshot (Hants)	1010.4	+1	NNE	2	03f	42	85	5	2000	S.	10	-	-	1
Lympne (Folkestone)	1009.2	+1	N	2	cmx	33	85	4	-	-	-	Ci.Sr.	Y	*
Aberdeen	1012.5	0	SSE	3	01f	47	65	6	2000	S.	10	-	-	4
Howden	1009.9	-1	-	0	0	41	92	6	1,200	Sr.	10	-	-	*
Cranwell (Lincs)	1010.1	0	NW	2	02f	41	92	5	2,000	Sr.Cu	10	-	-	*
Felixstowe	1009.9	+1	N	3	6c1f	34	97	5	5700	Cu	2	A.S.	3	1
Shoeburyness	1009.2	0	N	2	cmx	34	85	5	-	Sr.Cu	2	Ci	5	*
Benson	1009.7	+1	NNW	1	0	39	85	6	-	Sr.	10	-	-	*
S. Farnborough	1009.9	+1	NNW	1	01f	40	85	5	1250	Sr.	10	-	-	*
London (M.O. at 1H.)	1009.9	+1	NNW	1	02f	41	85	5	2,000	Sr.Cu	10	-	-	*
Croydon	1010.4	0	WNW	1	02f	37	92	4	2000	Sr.Cu	7	A.S.	2	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 2nd					**7H. G.M.T. of 3rd**									**24 HOURS ENDED 7H. 3rd**						**3rd**
Lerwick	1016.4	48	SSE	6	bcm	1015.4	-2	47	-1	SE	6	SE	c	5	-	48	46	cq	bcm	bcm	*
Stornoway	1010.6	48	S	4	0	1008.7	+1	46	+3	S	3	-	c	2	-	48	43	o	o	o.c	0.0
Castlebay (Barra Is)	1010.4	49	SSE	5	0	1008.9	0	49	-1	SSE	5	-	o	5	-	50	47	o	o	o	0.0
Malin Head	1008.4	45	SSE	3	om	1006.5	0	45	?	SSE	3	SE	m	3	-	46	44	om	om	o.c.o	0.0
Blacksod Point	1006.9	51	SE	2	r	1004.6	+1	46	-2	SE	1	-	3c	2	2	55	42	om	omr	omr.om	*
Roche's Point	1010.6	53	WSW	1	0	1007.8	0	53	+3	SSW	3	-	o	3	4	54	49	om	omo	o.m	*
Birr Castle	1009.5	49	SSE	1	0	1007.2	*	49	+1	SE	1	-	o	*	1	50	45	3o	3o	o3f.o	0.0
Donaghadee	1012.0	48	E	2	om	1011.5	-1	47	+1	SW	1	-	om	1	-	48	46	bcm	cm	om	*
Liverpool (Bidston)	1011.1	42	E	2	m	1010.1	0	41	+1	E	1	-	om	1	-	45	38	bcm	bm	c.o	0.3
Holyhead	1010.5	45	SSE	4	of	1009.1	0	45	+1	ENE	4	-	om	3	-	50	42	bzm	bmom	om.o3.om	5.4
Pembroke (St. Ann's Head)	1011.0	44	NE	1	bz	1009.6	-1	45	+3	ENE	1	-	om	2	-	50	42	bzb	b	bz.bc.om	6.6
Scilly (St. Mary's)	1011.1	49	-	0	c	1009.1	0	53	+2	SW	1	-	o	3	-	55	49	c.bc	bc.c	c.3.bc.o	2.0
Jersey (St. Aubin)	1008.9	48	ENE	2	o	1009.4	0	47	-4	NNW	2	-	o	1	-	50	43	cb	bo	bc.o	6.4
Portland Bill	1009.5	43	NNE	4	bc	1010.0	0	40	-3	NNE	2	N	bcm	3	-	46	35	bc	bc	bc.c.bcm	*
Dungeness	1007.2	42	NNE	3	b	1008.3	+1	33	-12	NNE	3	NE	3c	2	-	48	33	bcc	c.bc	bc.c.o3ex	*
Wick	1012.1	48	S	5	omq	1010.2	+1	49	+2	S	6	-	omq	6	-	49	46	omq	omq	omq	*
Nairn	1012.6	37	-	0	bc	1010.3	*	35	+6	-	0	-	cq	0	0.1	41	29	bc	bc	bcx.c	2.6
Leith	1013.0	45	SE	1	0	1010.5	0	43	-1	SSW	1	-	om	2	-	47	43	o	oq.o	om.o	*
Tynemouth	1012.0	46	E	2	o3	1010.7	0	46	+1	ESE	1	-	om	4	-	48	42	om	oz	omr	*
Spurn Head	1010.7	45	ENE	3	o	1008.8	0	45	0	E	3	-	o	4	-	46	42	o	o	o	*
Yarmouth (Gorleston)	1009.4	43	ENE	3	b	1008.9	0	32	-10	NW	2	-	cx	2	-	48	31	b	b	3.bcx	7.5
Clacton-on-Sea	1008.4	41	NNW	2	m	1008.5	0	44	+4	NW	2	-	3cx	1	-	47	34	bc	bc bm	3m.bcx	7.3
Nottingham	1010.7	44	NNE	2	o	1010.0	*	43	0	N	1	N	om	*	-	45	42	om	o	o	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars § For code see page 3 † See footnote p. 1

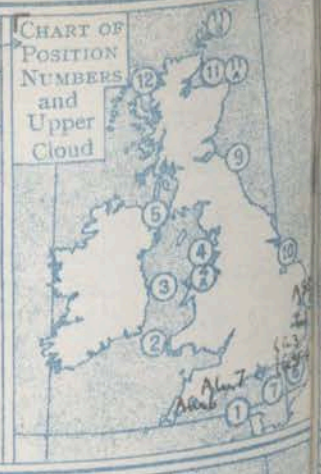
M.O. FORM 2370

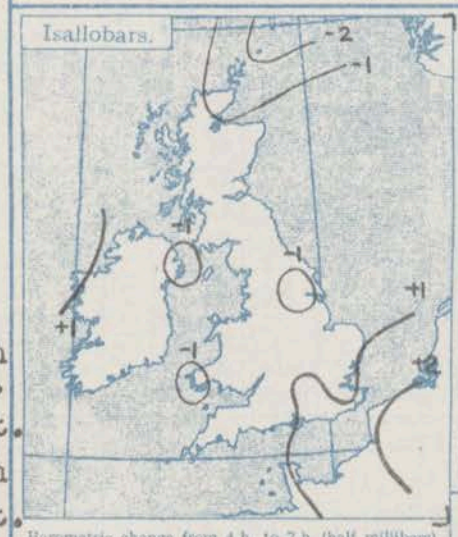
SUMMARY OF CONDITIONS AT 7 h. G.M.T. 3.11.20.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fair to dull, misty.	Indif.	Smooth
2. E. England	Fair to dull, local mist	"	"
3. E. Midlands	Dull, local mist.	Fair.	-
4. W. Midlands	Dull, misty.	Poor	-
5. S.W. England	Fair to dull, misty.	Fair	Smooth
6. South Wales	Dull, misty.	Indif.	"
7. North Wales	Dull, misty.	"	Slight
8. N.W. England	Dull, misty.	Poor	Smooth
9. N. Midlands	Dull, local mist.	Indif	-
10. N.E. England	Dull.	Fair.	Mod.
11. E. Scotland	Cloudy or dull.	Fair.	Slight
12. S.W. Scotland	Dull, misty.	Poor	Smooth
13. Isle of Man	Dull, misty.	Indif	"
14. N.&N.W. Scotland	Cloudy or dull, local mist.	Indif.	Var.
15. Hebrides	Cloudy or dull.	Fair.	Mod.
16. Orkneys and Shetlands	Cloudy.	Indif.	R. Rough
17. N.W. Ireland	Fair.	Fair.	Smooth.
18. N.E. Ireland	Dull, misty.	Indif.	Slight.
19. S.E. Ireland	Dull, local mist.	"	Smooth
20. S.W. Ireland	Dull, drizzle in West.	"	Slight.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
12	2nd	0500	57	49
4A	2nd	0680	53	47
3	2nd	0915	54	50
7	3rd	–	56	46
8	3rd	0432	54	47





Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0–12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. R thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h.

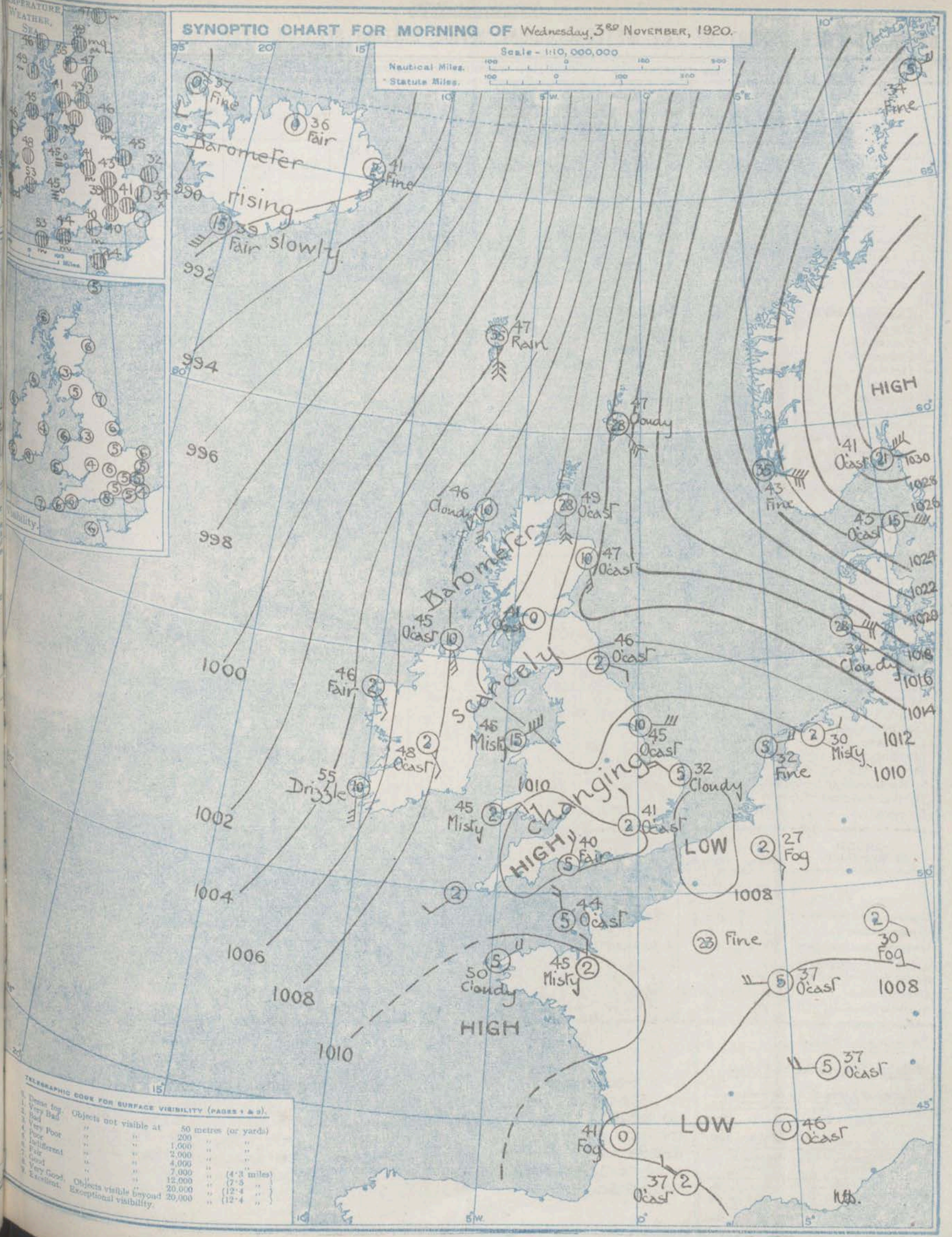
An anticyclone extends from Scandinavia across to the North of England and the barometric changes in progress are very slight. Mainly fair or cloudy weather, overcast at times, seems probable over the British Isles generally.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Wednesday 3rd November, 1920.	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands	Wind light variable to Easterly; much cloud generally, fairer intervals, local mist. Visibility indifferent to fair. Moderate temperature.	Mainly fair weather, with winds between East and South.
5. S.W. England 6. South Wales 7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England	Wind mainly between East and South-East, light or moderate, cloudy or overcast to fair, local mist. Visibility indifferent then improving. Moderate temperature.	
11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.&N.W. Scotland 15. Hebrides	Wind mainly Southerly, moderate or light, cloudy or overcast to fairer; visibility fair. Moderate temperature.	
16. Orkneys and Shetlands	Wind S or SE strong to moderate, cloudy to fair; moderate temperature.	
17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind South or South-East, moderate or light; much cloud, some showers in West; visibility indifferent to fair; moderate temperature.	

RS

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.30

G. C. SIMPSON, F.R.S., Director.



TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 9).

0. Dense fog.	Objects not visible at		50	metres	(or yards)
1. Very Bad					
2. Bad	"	"	100	"	"
3. Very Poor	"	"	200	"	"
4. Poor	"	"	1,000	"	"
5. Indifferent	"	"	2,000	"	"
6. Fair	"	"	4,000	"	"
7. Good	"	"	7,000	"	(4·3 miles)
8. Very Good.	"	"	12,000	"	(7·5 ")
9. Excellent.	Objects visible beyond		20,000	"	(12·4 ")
	Exceptional visibility.		20,000	"	(12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 308.

Wednesday 3rd Nov.r 1920

WEATHER, TEMPERATURE RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 2nd Nov.

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 1st 2nd	Rainfall. Day. 9h-18h. 2nd	Sunshine. Sunrise to Sunset. 1st 2nd
Scotland.	Oban	oc	bcc o	50	38	-	-	1.7
	Banff	o	o	47	42	-	-	0.0
	Montrose	o	o	49	45	-	-	0.0
	St. Andrews							
England, N.E.	Harrogate	o	o	43	40	-	-	0.0
	Scarborough	o	o	49	44	-	-	0.0
	Skegness	o	oc	46	43	-	-	0.1
England, E.	Lowestoft	cbc b	cdc b	46	42	-	-	5.3
	Felixstowe	bz	b	47	36	-	-	7.7
	Southend-on-Sea	b	b	48	33	-	-	7.4
England, S.E.	Tunbridge Wells	b	b	48	34	-	-	7.0
	Margate	cbc	bcc	47	37	-	-	3.3
	Ramsgate	*	*	50	42	-	-	4.5
	Folkestone	ocbc	bcc	48	41	-	-	5.0
	Hastings	bbc	bcc	47	39	-	-	5.9
	Eastbourne	b	bcb	48	39	-	-	7.1
	Brighton	b	bbc	49	38	-	-	7.4
	Worthing	b	bc	46	37	-	-	7.0
	Littlehampton	b	bm	48	37	-	-	7.6
	Portsmouth (S'thsea)			47	37	-	-	6.7
	Bournemouth	*	*	47	37	-	-	7.7
	Ventnor (I. of W.)	*	*	53	38	-	-	8.5

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 1st 2nd	Rainfall. Day. 9h-18h. 2nd	Sunshine. Sunrise to Sunset. 1st 2nd
England, N.W.	Douglas (I.O.M.)							3.9
	Blackpool	bc	o	48	36	-	-	5.8
	Southport	bbcb	bco	48	35	-	-	3.0
	Morecambe	-	-	47	34	-	-	
Midlands.	Buxton							0.0
	Leamington Spa	o	o	45	37	-	-	?
	Malvern	ocbc	bcco	45	40	-	-	5.0
	Bath	ocbcb	bcb	47	39	-	-	4.5
Wales.	Rhyl	bc	bceo	47	36	-	-	5.5
	Colwyn Bay	-	-	47	39	-	-	4.3
	Llandudno	*	*	48	38	-	-	7.5
	Aberystwyth	cbb	bco	49	37	-	-	
	Tenby							6.8
	Swansea	-	-	53	39	-	-	7.6
England, S.W.	Weymouth	bc	bcb	49	38	-	-	5.8
	Teignmouth	cbcb	b	52	40	0.2	-	5.5
	Torquay	cb	bm	50	41	-	-	5.4
	Paignton	cbcb	b	51	39	-	-	7.6
	Penzance	b	bbc	55	44	0.3	-	7.3
	Newquay	b	bo	50	42	-	-	7.0
	Bude	cbcb	b	53	37	-	-	8.0
	Ilfracombe	bcb	b	48	43	-	-	3.0
	Weston-s-Mare	bcebc	bcm	48	41	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h	Weather. 13h-18h	Weather. 18h-1h	Weather. 1h-7h	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-13h mm.	Rainfall.† Night. 13h-7h mm.	Sun. Hours.
Renfrew	o3f		o3f. o3f	0.3f	47	40	40	-	-	0.1
Eskdalemuir	o	o	o	0.3f	42	37	34	-	-	0.1
Valencia (Cabire'n)	co.o1f	o1f r₁r₁	r₁r₁	r r o	55	40	48	3	13	0.0
Baldonnel	o3f	o3f	o3f p	o3f. o2f	48	44	41	-	7.8	0.0
Manchester (Alex. Pk.)	bcc o2f	o2f	o2f o3f	o3f	47	43	38	-	-	*
Ross on Wye	oz bcebbc	bcz b2f1f2f	o.2f	9.o2f	47	38	31	-	-	4.4
Falmouth	1f bbc	bbc bbc	b 3c.c.o	o	55	40	34	-	-	7.9
Calshot (Hants)	o1f.bcc	co o1f	b1f. b 3c1f	b.3c1f.o2f	47	36	30	-	-	5.3
Lympne (Folkestone)	bbc1fcoq	coqco1f	b.3c1f b.3c	b.3cc1f1x	48	31	28	-	-	4.4
Aberdeen	o1f	o1f	o.1f	o1f	49	46	45	-	-	0.0
Howden	b.o1f	o3f 1f	o1f. o	o	46	40	39	-	-	0.0
Cranwell (Lincs)	o2f o1f	o1f.o	o	o	44	39	39	-	-	0.0
Felixstowe	1f bbc	bbc b	b.3c	b.3cx	48	32	*	-	-	7.6
Shoeburyness	bbc bbc	bbc b	3x	1fex	47	31	26	-	-	7.5
Benson	o	o	o	o	44	34	38	-	-	*
S. Farnborough	bbc bcc	o.o1f	c.o1f	c.o1f	46	31	24	-	-	4.7
London (Kew Obsy.)	w bbc2fz	z.1f	3	o2f	46	36	30	-	-	6.4
Croydon	b3f bbc2f	bbc.o2f3f	b.3c.b2f2f.b 3cw	b.o2f.3f 2fx	45	31	*	-	TRACE	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, i.e., rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r_1r_1 = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 8·0
5	19-24	8·1-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—

Aurora ⊛ Solar halo ⊕
Rime ⚹ Lunar halo ⊖
Glazed frost ~ Solar corona ⊚
Glazed roads ~R Lunar corona ⊛

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9H G.M.T.							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	3	3.c.3	c.3.o3f	46	36	28	-	5.8	70	78
City (Bunhill Row)	*	*	*	*	*	*	*	4.7	*	*
Westminster (St. James's Park)	*	*	3.3m.m	48	38	31	-	3.9	69	74
Botanic Gdns. (~~Adelaide Arch~~ (Regents Park))	*	*	*	*	*	*	*	1.4	*	*
Camden Sq. (British Rainfall)	3.3c	c	*	48	32	27	-	*	72	80
Kensington Palace	3	3.3c.3	*	47	34	26	-	*	79 (18h)	79
Hampstead Observatory	*	*	*	45	36	29	-	6.6	*	86

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total 509 Joules.

Milliwatts.
Average Rate. 14·8
Maximum Rate. 29

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

3rd & 4th Nov.r 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	6.54 / 6.56	11.37 / 11.37	4.20 / 4.18
Greenwich	6.59 / 7.1	11.44 / 11.44	4.29 / 4.27
Wick	7.36 / 7.38	11.56 / 11.56	4.17 / 4.14
Valencia	7.41 / 7.43	12.26 / 12.28	5.9 / 5.7

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 4th ....4 h....30 m.
to 5th ....6 h....0 m.

Stars.	Duration of Exposure. h.	Duration of Exposure. m.	Duration of Record. h.	Duration of Record. m.	%
Polaris	12	30	10	45	86
δ Ursae Minoris	12	30	9	8	73

NOTES ON THE WEATHER OF YESTERDAY.

Temperatures remained below 50° generally, but touched 55° at Blacksod, Scilly, and Falmouth. Slight frost occurred locally at night. In Scotland and Ireland the day was almost sunless, but in many parts of England the records were fair to good, 8.5 hours at Ventnor, 8 hours at Ilfracombe and more than 7 hours over a large area. Rain fell in Ireland - as much as 16mm at Valencia.

* Information for these columns not usually received.

† Trace - rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B.21532 Thursday 4th NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13H. G.M.T. of 3rd														18H. G.M.T. of 3rd													
Renfrew																												
Eskdalemuir	1011.4	0	-	0	02f	46	92	4	3000	St.Cu	10	-	-	*	1012.4	+2	SE	2	02f	44	85	4	3000	St.	10	-	-	*
Valencia (Cahirc'n)	1011.5	0	ESE	2	0	42	75	6	3000	St.	10	-	-	*	1012.3	+1	ENE	1	0	40	85	6	-	St	10	-	-	*
Baldonnel	1006.2	0	SSW	3	c ⊕	56	92	7	750	St.Cu	6	Ci.Cu	2	3	1006.3	+1	S	2	c	54	92	7	750	St.Cu	5	A.St	3	3
Manchester (Alex.Pk)	1009.4	-1	E	1	02f	49	92	4	2000	St.	10	-	-	*	1009.3	0	NNE	1	03f	51	92	3	4500	St.	9	A.St	1	*
Ross on Wye	1010.6	0	WSW	1	03f	42	85	2	2000	St.	10	-	-	*	1011.7	+2	W	1	03f	42	85	2	1250	St	10	-	-	*
Falmouth	1011.1	-1	NW	1	02f	44	75	5	1250	St.	10	-	-	*	1011.9	+1	-	0	02f	42	85	4	750	St	10	-	-	*
Calshot (Hants)	1010.3	0	SE	1	01f	53	85	6	-	St.Cu	10	-	-	*	1010.7	+1	SE	3	bc1f	49	85	6	-	St	6	-	-	*
Lympne (Folkestone)	1010.5	-1	NNE	2	c1f	45	75	6	3000	St.Cu	7	-	-	1	1011.9	+2	NE	3	bc	42	85	5	2000	St.	4	-	-	2
Aberdeen	1009.2	0	N	3	c1f	46	65	6	-	-	-	Ci.St	8	*	1010.6	+1	N	3	b1f	37	92	6	-	-	-	Ci.St	2	*
Howden	1012.4	-1	SSE	3	01f	47	75	6	2000	St.	10	-	-	4	1013.1	+2	SSE	2	01f	47	75	6	2000	St.	10	-	-	4
Cranwell (Lincs)	1010.8	+1	-	0	01f	45	75	6	3000	St.	10	-	-	*	1011.5	0	-	0	01f	43	85	6	3000	St.	10	-	-	*
Felixstowe	1010.1	0	NNW	2	01f	45	78	6	3000	St.	10	-	-	*	1011.9	+1	NNE	2	02f	42	85	5	3000	St.	10	-	-	*
Shoeburyness	1010.0	0	NNE	2	c	49	85	6	4200	Cu	1	Ci.St	6	*	1011.6	+2	NNE	1	b2f	40	97	5	-	-	-	-	-	0
Benson	1009.5	0	NNW	3	bc	46	75	6	4200	Cu	1	Ci.St	5	*	1010.7	+2	NW	1	b	39	85	7	-	-	-	-	-	*
S. Farnborough	1010.1	0	NNW	2	0	43	75	6	-	St.Cu	9	-	-	*	1011.1	+1	NNW	2	0	41	75	5	-	St.Cu	9	-	-	*
London (Kew Obsy.)	1010.2	0	NNW	2	0	44	75	6	1250	St.Cu	9	-	-	*	1011.5	+2	NE	2	0	41	85	7	1250	St.Cu	10	-	-	*
Croydon	1010.2	0	NNW	2	02f	44	75	5	4200	St.Cu	10	-	-	*	1011.9	+2	NNE	1	02f	43	75	5	2000	St	9	A.St	1	*
	1010.7	0	NNW	2	01f	44	75	4	2000	St.	8	Ci.St	2	*	1012.3	+1	N	1	03f	42	75	3	2000	St.	10	-	-	*
	1H. G.M.T. of 4th														7H. G.M.T. of 4th													
Renfrew															1011.6	0	ESE	1	02f	41	85	4	3000	St	10	-	-	*
Eskdalemuir	1012.2	0	-	0	0	39	85	6	-	St.	10	-	-	*	1012.4	0	-	0	02f	38	92	5	-	St	10	-	-	*
Valencia (Cahirc'n)	1006.9	0	-	0	r	64	*	*	*	*	*	*	*	2	1006.2	+2	ESE	3	0	52	92	8	4200	St.	7	A.St	3	?
Baldonnel	1008.6	0	-	0	02f	53	85	5	750	St.	10	-	-	*	1008.5	0	SSW	1	02f	51	85	5	2000	St	10	-	-	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1011.7	0	ESE	1	c1fx	31	92	2	2000	St	5	A.Cu	2	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1011.5	0	E	1	01f8	39	85	4	750	St	10	-	-	*
Falmouth	1010.1	-1	SE	4	0	50	85	6	-	St.Cu	10	-	-	*	1008.9	-1	E	4	02f	49	85	5	-	-	-	-	-	*
Calshot (Hants)	1012.0	-1	NE	2	01f	41	85	6	2000	St.	10	-	-	2	1011.1	-1	ENE	2	b2f	37	92	5	-	St.	10	-	-	1
Lympne (Folkestone)	1011.5	0	N	3	01f	36	92	6	3000	St.Cu	10	-	-	*	1010.8	0	N	3	bmx	35	97	4	-	-	-	Ci.St	3	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1012.8	0	SSE	3	01f	47	65	6	1250	St.	10	-	-	4
Howden	1012.0	0	-	0	01f	41	92	3	3000	St	10	-	-	*	1012.0	0	-	0	0m	40	92	4	3000	St.Cu	10	-	-	*
Cranwell (Lincs)	1012.1	0	N	1	02f	42	85	5	3000	St.	10	-	-	*	1012.2	0	NNE	2	02f	41	85	5	3000	St.	10	-	-	*
Felixstowe	1012.5	+1	N	3	bc2f	36	97	4	5700	St.Cu	4	-	-	2	1011.7	0	NNE	3	b2f	34	97	4	-	-	-	A.St	1	2
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1011.2	0	NW	1	cmx	33	85	5	-	St.Cu	2	Ci	6	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1010.6	0	NNE	1	bc	36	92	6	-	St.Cu	5	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1011.6	0	NNE	1	b2f	25	97	3	750	St.	13	-	-	*
London (M.O. at 1H.)	1011.7	0	*	*	*	36	*	*	*	*	*	*	*	*	1011.5	+1	-	0	bfx	30	92	1	-	-	-	-	-	*
Croydon	1012.6	-1	SSW	2	b3fx	31	92	3	-	-	-	-	-	*	1012.5	0	S	1	cx2f	30	92	3	4200	St.Cu	3	Ci.St	5	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc	Wind. Force 0-12	Weather.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 3rd					7H. G.M.T. of 4th									24 HOURS ENDED 7H. 4th						3rd
Lerwick																					*
Stornoway	1014.7	45	SE	5	omd	1013.7	-1	46	-1	SE	5	-	0	5	5	47	44	c	omr	omr	*
Castlebay (Barrals)	1010.0	48	S	1	0	1008.7	0	48	+2	S	1	-	0	0	-	50	42	bco	0	0	2.0
Malin Head	1009.7	50	SE	4	0	1008.4	0	47	-2	SE	5	-	or	5	1	50	47	0	0	or	0.0
Blacksod Point	1007.7	47	SE	3	0	1005.2	0	47	+2	ESE	3	E	om	3	3	49	44	0	c	om,omp	0.8
Roche's Point	1005.1	52	SE	2	0	1003.6	+1	50	+4	-	0	-	orm	3	4	54	46	c	0	om,omr	*
Birr Castle	1008.2	55	SSW	4	or	1008.0	0	53	0	S	3	-	or2f	4	8	56	52	ocorm	rd	d.orm	*
Donaghadee	1007.3	54	SE	1	0	1007.0	*	52	+4	SE	1	-	0	*	4	54	47	om	odul	opo	0.2
Liverpool (Bidston)	1011.4	49	SE	2	om	1010.7	0	48	+1	SE	3	-	omd	3	1	49	46	om	com	omd	*
Holyhead	1011.4	43	E	1	m	1011.2	0	40	-1	ESE	3	-	bm	2	-	44	39	ocm	om	ocm	0.0
Pembroke (St. Ann's Head)	1010.5	47	ENE	4	om	1009.7	+1	47	+2	E	4	-	or2f	2	5	49	44	ocom	om	opd.or	0.0
Scilly (St. Mary's)	1010.6	51	SE	3	om	1010.0	0	47	+2	ESE	3	-	omg	3	-	52	41	om	om	om	0.0
Jersey (St. Aubin)	1009.7	52	SSE	3	c	1007.8	-2	50	-3	ESE	4	SE	0	4	1	53	50	omd	ompc	cbo.om	0.3
Portland Bill	1010.7	49	NNE	2	0	1009.0	0	46	+2	E	2	-	0	1	-	51	43	oc	co	o	0.3
Dungeness	1010.6	42	N	3	bcm	1010.2	0	40	0	NNE	3	-	0	3	-	47	38	bcm	bcm	o	*
Wick	1009.6	40	N	2	b	1009.4	-1	33	0	N	3	-	b	3	-	48	33	bc	bcb	bbcbx	*
Nairn	1011.0	47	S	6	omq	1009.1	-2	47	-2	S	5	-	omq	5	-	48	45	omq	omq	omq	*
Leith	1011.5	44	-	0	c	1009.9	*	38	+3	-	0	-	cgm	0	-	47	36	co	cg	cgm	0.9
Tynemouth	1011.9	45	SSE	1	bc	1011.5	0	42	-1	SSE	1	-	0	1	-	47	41	omo	ogmo	omo	*
Spurn Head	1012.1	46	E	2	om	1012.1	0	45	-1	SE	1	-	om	3	-	46	44	om	om	om	*
Yarmouth (Gorleston)	1011.0	46	N	1	0	1012.9	0	45	0	N	2	-	0	3	-	47	42	0	0	0	*
Clacton-on-Sea	1010.5	43	N	1	b	1011.9	0	37	+5	NNW	1	-	bm	1	-	48	32	cmbc	bcbmf	bf	2.5
Nottingham	1010.5	40	NW	2	m	1010.7	0	35	+1	NW	3	-	bmx	2	-	47	34	bcm	bcm	bcmx	5.0
	1011.6	44	NNE	1	0	1011.5	*	42	-1	ENE	1	NE	0	*	-	45	41	om	om	0	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4

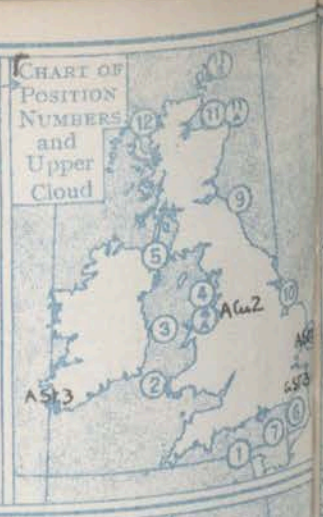
M.O. FORM 2370.

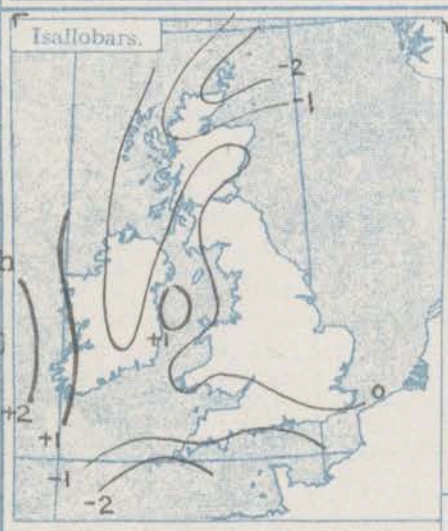
SUMMARY OF CONDITIONS AT 7 h. G.M.T. 4.11.20

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fine to cloudy mist and frost.	Poor	Smooth
2. E. England	Fine misty.	Indif.	Smooth
3. E. Midlands	Dull misty.	"	-
4. W. Midlands	Dull, misty.	V. Poor	-
5. S.W. England	Dull, misty.	Indif.	Slight
6. South Wales	Dull, misty.	"	Slight
7. North Wales	Dull, local rain.	Good	Smooth
8. N.W. England	Cloudy misty.	V. Poor	Smooth
9. N. Midlands	Dull, misty.	"	..
10. N.E. England	Dull, some mist.	Good.	Slight
11. E. Scotland	Dull.	Good.	Smooth
12. S.W. Scotland	Dull, misty.	Indif.	Slight
13. Isle of Man	Dull, misty.	"	Slight
14. N. & N.W. Scotland	Dull, misty, squalls locally.	Indif.	R. Rough
15. Hebrides	Dull, local rain.	"	Mod.
16. Orkneys and Shetlands	Dull.	Poor	R. Rough
17. N.W. Ireland	Dull, mist and rain.	Poor	Slight
18. N.E. Ireland	Dull, mist and drizzle.	Poor	Slight
19. S.E. Ireland	Dull, misty.	Indif.	Mod.
20. S.W. Ireland	Dull, local rain.	Fair.	Mod.

Temperature reported from Coastal and Cross Channel Steamers.

Position-Number.	Date	Time G.M.T.	Sea °F	Air °F
4A	3rd	0445	53	46
3	3rd	0915	55	52
5	3rd	1014	54	47
6	3rd	1530	57	48
4A	4th	0400	52	55





Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0–12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. R thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h.

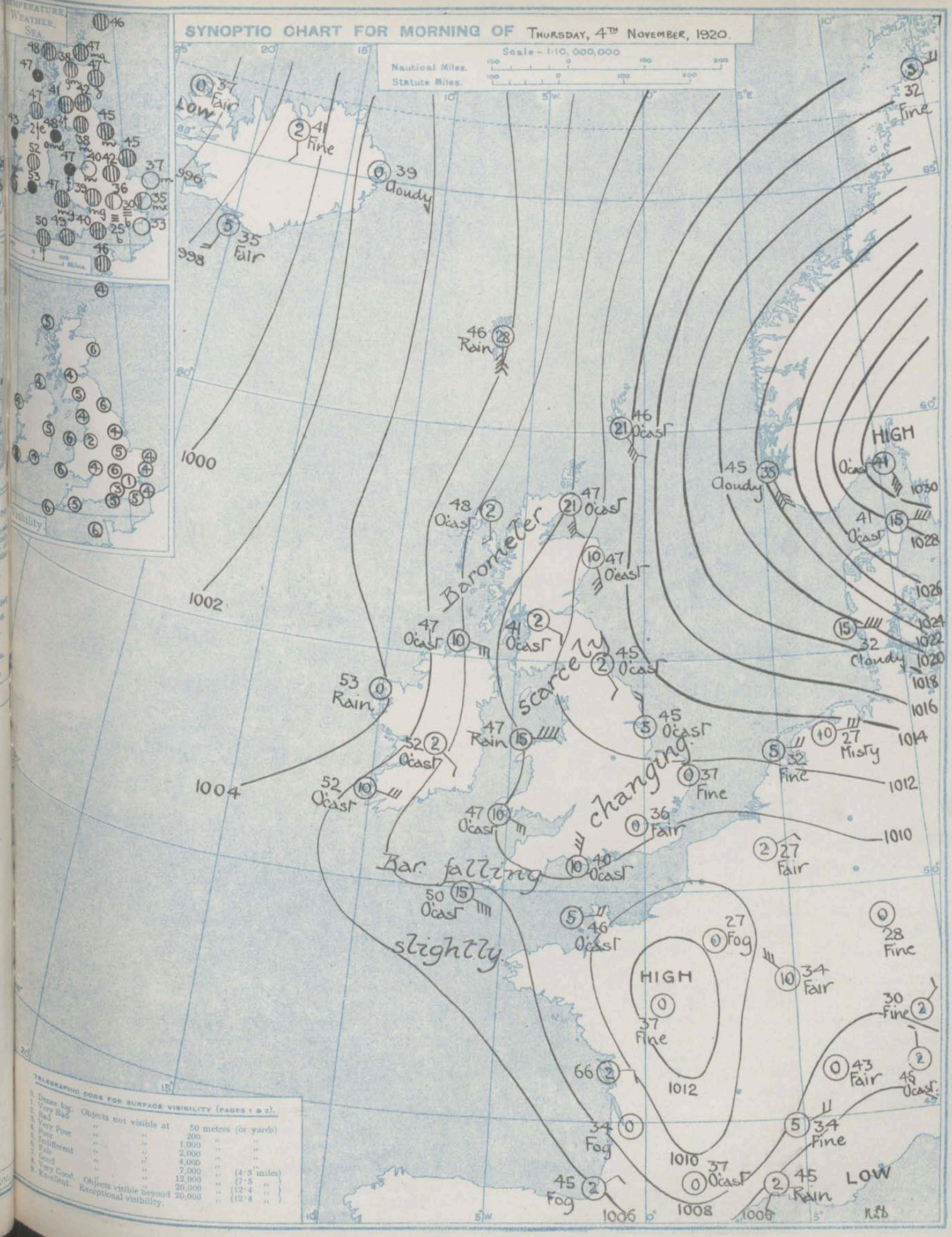
Shallow depressions will cause some rain in our Western and South-Western districts, but an anticyclone which still extends to this country from Scandinavia will maintain generally fair weather in all the Eastern districts.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Thursday 4th November 1920.	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands	Wind light between North and East, fair or cloudy, mist or fog at times. Visibility mainly indifferent or poor; cold; frost at night.	Mainly fair except in the West and South-West.
4. W. Midlands 5. S.W. England 6. South Wales 7. North Wales 8. N.W. England	Wind light or moderate, South-East or East; much low cloud, some rain or showers locally, mist at times. Visibility indifferent to fair; moderate or rather low temperature.	
9. N. Midlands 10. N.E. England 11. E. Scotland	Wind SE or S, light; fair or cloudy; visibility indifferent to fair. Moderate or rather low temperature.	
12. S.W. Scotland 13. Isle of Man 14. N. & N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind mainly from South or South-East, moderate or light; much cloud generally, some rain or showers locally; mist at times; moderate temperature.	

RS

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.30

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF THURSDAY, 4TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
TEMPERATURE, WEATHER, SEA.
Visibility
LOW
HIGH
Barometer
scarcely changing.
Bar. falling slightly.
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " (4·3 miles)
6. Fair " " 12,000 " (7·5 "
7. Good " " 20,000 " (12·4 "
8. Very Good. " " 20,000 " (12·4 "
9. Excellent. Objects visible beyond Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 309.

Thursday 4th NOVEMBER

WEATHER, TEMPERATURE RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 3rd

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 2nd-3rd	Rainfall. Day. 9h-18h. 3rd	Sunshine. Sunrise to Sunset. 3rd
Scotland.	Oban	b	b	39	33	-	-	3.4
	Banff	o	od	46	44	-	-	0.0
	Montrose							
	St. Andrews ...	o	c	46	42	-	-	0.0
England, N.E.	Harrogate	o	o	43	39	-	-	0.0
	Scarborough ...	o	o	50	48	-	-	0.0
	Skegness	o	om	48	41	-	-	0.4
England, E.	Lowestoft ...	bc	bc	47	31	-	-	3.0
	Felixstowe	bcm	bz	49	33	-	-	4.4
	Southend-on-Sea...	bc	bcb	49	33	-	-	4.5
England, S.E.	Tunbridge Wells	bmbc	bcmb	46	29	-	-	0.2
	Margate	c	cbcc	48	44	-	-	1.1
	Ramsgate	*	*	47	33	-	-	2.0
	Folkestone	ocbc	~~bc~~ -	47	36	-	-	4.5
	Hastings	cbc	bcc	47	34	-	-	3.4
	Eastbourne... ...	c	cbc	46	36	-	-	1.2
	Brighton	cf	cbc	47	35	-	-	0.3
	Worthing	b	b	46	35	-	-	4.6
	Littlehampton ...	oc	bm	48	33	-	-	3.3
	Portsmouth (S'thsea)	-	-	46	36	-	-	2.7
	Bournemouth ...	*	*	45	38	-	-	5.3
	Ventnor (I. of W.)	*	*	46	36	-	-	4.4
England, N.W.	Douglas (I.O.M.)							
	Blackpool	o	o	46	41	-	-	0.0
	Southport	o	ocbc.o	46	40	-	-	0.2
	Morecambe	-	-	46	41	-	-	0.0
Midlands.	Buxton							
	Leamington Spa...	o	o	44	39	-	-	0.0
	Malvern	ocbc	co	44	37	-	-	0.5
	Bath	mo	cbco	44	31	-	-	0.0
Wales.	Rhyl	c	o	45	34	-	-	0.0
	Colwyn Bay ...	-	-	46	38	-	-	0.0
	Llandudno	*	*	47	38	-	-	0.0
	Aberystwyth ...	ooc	coo	50	39	-	-	
	Tenby							0.0
	Swansea	-	-	48	42	-	-	5.3
England, S.W.	Weymouth	mbm	m	49	35	-	-	0.0
	Teignmouth ...	o	o	46	35	-	-	0.8
	Torquay	bcm	cbc.bm	46	37	-	-	1.6
	Paignton	mbco	om	47	33	-	-	3.0
	Penzance	cbc	bccb	56	44	-	-	5.8
	Newquay	b	b	52	42	-	-	1.9
	Bude	c	b	52	37	-	-	4.2
	Ilfracombe	ocbc	bc	52	41	-	-	
	Weston-s-Mare ...	o	om	45	33	-	-	0.0

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 3rd	Weather. 13h-18h 3rd	Weather. 18h 3rd-1h 4th	Weather. 1h-7h 4th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall † Day. 7h-18h mm.	Rainfall † Night. 18h-7h mm.	Sun. Hours.
Renfrew ...	o3f.o2f	o2f	o2f	o2f	47	41	40	-	-	0.0
Eskdalemuir	o2f.o	o o1f	o.o1f.o	o.o1f	42	37	36	-	-	0.0
Valencia (Cahirc'n) ...	coco	co.co	cor	o	56	52	50	-	4	1.1
Baldonnel	o2f.pd.	o3f.pd.	o3f.p	o2f o	53	45	47	1	0.2	0.0
Manchester (Alex. Pk.)	o3f	o3f	o3f	co3f	43	30	19	-	-	*
Ross on Wye... ...	g o2f	o1f.g	o2f.o3f	o.f g	44	39	39	-	-	0.0
Falmouth	o1f	co1f.co1fe	co1f.o	o2fe	55	43	41	-	-	0.9
Calshot (Hants)... ...	co1f	bbc.2f	b2f.o2f.o1f	o1f.b2f	47	36	31	-3	-3	2.4
Lympne (Folkestone) ...	co2f.cp.1f	bcc1f.bbc.1f	bbc bcc.1f.cb	cobcc1f.bbc	46	31	30	-	-	4.6
Aberdeen	o1f	o1f pd.	o1f pd.	o1f	49	46	44	trace	-	0.0
Howden	o1f o	o.o1f	o1f o	o.o1f	46	40	40	-	-	0.0
Cranwell (Lincs)	o2f o1f	o1f o2f	o2f	o	45	40	39	-	-	0.0
Felixstowe	bcc 2f	bcc.2f	bbc.2f	2f x	49	33	*	-	-	5.0
Shoeburyness	1fe bcc	bcc.bbc	bx	1fe x	47	31	26	-	-	3.8
Benson	o	o	o	o bbc	44	33	27	-	-	*
S. Farnborough ...	o1f o	o	co1f	bcc.2f	45	25	22	-	-	0.4
London (Kew Obsy.) ...	2f o	o2f.o	bcc	bx.1-4f	45	30	23	-	trace	1.5
Croydon	o3f o2f.co	co2f o3f.o	o3f 3f bo.b	bbcc 3fx	46	28	*	-	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—

Aurora ☆ Solar halo ⊕
Rime ⊥ Lunar halo ◎
Glazed frost ~ Solar corona ◎
Glazed roads ⚒ Lunar corona ◎

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 4th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	bcc z	oz	bz x	46	28	26	-	1.1	72	77
City (Bunhill Row)	*	*	*	*	*	*	*	0.6	*	*
Westminster (St. James's Park)	*	*	f	47	31	27	-	0.4	71	100
Camden Sq. (British Rainfall)	bbc	c.co	*	47	29	26	-	*	72	92
Kensington Palace	oc.o	o	*	46	28	22	-	*	74 (18h)	94
Hampstead Observatory ...	*	*	*	45	35	30	-	2.1	*	77

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total 366 Joules.

Milliwatts.
Average Rate. 10.7
Maximum Rate. 27

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

4th & 5th Novr 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth ...	6.56	11.37	4.18
	6.58	11.37	4.16
Greenwich	7.1	11.44	4.27
	7.3	11.44	4.25
Wick ...	7.38	11.56	4.14
	7.40	11.56	4.12
Valencia ...	7.43	12.25	5.7
	7.45	12.25	5.5

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 3rd 17 h. 39 m.
to 4th 6 h. 0 m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	12	30	9	6	73
δ Ursae Minoris	12	30	7	53	63

NOTES ON THE WEATHER OF YESTERDAY.

Temperature remained below 50° over the Kingdom generally, but rose to about 55° at some Western and South-Western stations. During the night the minimum was 25° at South Farnborough and below 32° at some other stations. At Manchester the thermometer on the grass fell to 19°. Rain occurred at many places in the North-West and West, but not in large amounts. Bright sunshine records were small generally, but moderate at some Southern stations.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21533 FRIDAY, 5th NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	13H. G.M.T. 4th														**18H. G.M.T. OF 4th**													
Renfrew	1012.3	0	ESE	2	od	43	85	4	2000	St	10	-	-	*	1012.5	0	ENE	2	od D	42	97	3	-	St	10	-	-	*
Eskdalemuir	1012.6	0	-	0	ozf	42	75	6	-	St	10	-	-	*	1013.3	+1	-	0	ozf	42	92	4	1250	St	10	-	-	*
Valencia (Cahirc'n)	1010.1	+3	-	0	oif	54	92	7	2000	St	1	A St	6	3	1013.3	+4	-	0	oif	52	92	7	2000	St Cu	8	A St	2	3
Baldonnel	1010.5	+1	SSW	2	ozf	54	85	3	750	St	7	A Cu	3	*	1012.7	+2	SW	2	ozf	50	92	5	750	St Cu	10	-	-	*
Manchester (Alex. Pk)	1012.3	0	SE	2	ozf	44	85	4	2000	St	10	-	-	*	1013.6	+2	ESE	1	ozf	41	85	3	2000	St	10	-	-	*
Ross on Wye	1012.0	-1	NE	2	bcmw	43	75	6	3000	Cu	6	-	-	*	1013.4	+2	NNW	1	~~omw~~ bcz	37	92	4	-	-	-	Ci	2	*
Falmouth	1009.0	+1	E	4	oif	51	85	6	-	St Cu	10	-	-	*	1011.2	+2	NE	4	ozf	47	85	5	-	St	10	-	-	*
Calshot (Hants)	1011.1	-1	E	1	bzf	50	75	4	-	-	-	-	-	0	1012.4 ~~1014.2~~	+2	N	1	bczf	42	92	4	2000	St	4	-	-	1
Lympne (Folkestone)	1010.6	0	N	2	bzf	49	75	5	-	-	-	-	-	*	1011.9	+2	N	1	bmw	40	97	4	-	-	-	-	-	*
Aberdeen	1012.8	-1	S	2	ozf	48	65	6	2000	St	10	-	-	4	1012.8	0	SSW	2	or₀2f	46	85	5	2000	Nb	10	-	-	4
Howden	1012.4	0	-	0	ozf	45	85	4	2000	St	10	-	-	*	1013.5	+2	-	0	ozf	43	97	4	3000	St	10	-	-	*
Cranwell (Lincs)	1012.2	0	NE	2	bc	47 ~~42~~	75	5	3000	Cu	6	-	-	*	1013.7	+2	N	2	bc	38	97	4	3000	St	6	-	-	*
Felixstowe	1011.7	0	ENE	2	bzf	51	65	5	-	-	-	-	-	1	1013.2	+3	NNE	3	bzf	40	97	5	-	-	-	-	-	*
Shoeburyness	1011.1	0	N	1	bif	49	65	6	-	-	-	-	-	*	1013.1	+2	-	0	bzfew	38	85	4	-	-	-	-	-	*
Benson	1010.5	-1	NNE	1	b	47	65	6	-	-	-	-	-	*	1012.1	+1	-	0	b	36	92	5	-	-	-	-	-	*
S. Farnborough	1011.2	0	ESE	1	bif	48	65	5	-	-	-	-	-	*	1012.5	+2	-	0	bczf	35	97	3	<500	St Cu	10	-	-	*
London (Kew Obsy.)	1011.4	-1	-	0	ozfg	37	97	2	<500	St	10	-	-	*	1012.3	+2	-	0	o7fx	31	97	0	<500	St	10	-	-	*
Croydon	1011.7	-1	-	0	bzf	48	75	3	-	-	-	-	-	*	1012.9	+2	SW	1	bzfw	35	92	2	-	-	-	-	-	*
	1H. G.M.T. OF 5th														**7H. G.M.T. OF 5th**													
Renfrew															1016.8	+4	SW	1	b2fx	36	92	4	3000	St Cu	2	-	-	*
Eskdalemuir	1014.0	0	SW	2	or₀2.3f	42	97	2	-	St	10	-			1017.4	+3	-	0	b	36	86	8	-	-	-	-	-	*
Valencia (Cahirc'n)	1019.0	+3	N	4	om	60	*	*	*	*	*	*	*	4	1021.9	+5	NE	2	c	45	85	8	3000	St	6	A Cu	1	3
Baldonnel	1016.8	+3 ~~+2~~	-	0	c	53	92	5	2000	St	4	-	-	*	1020.1	+6	-	0	b	37	97	8	5700	St	1	A St	1	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.8	+3	-	0	o3f	41	85	3	1250	St	10	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.8	+2	NNE	1	o3fgx	31	92	3	750	St	10	-	-	*
Falmouth	1013.9	+1	NNE	2	bc	44	92	6	-	-	-	St	5	*	1016.5	+5	NNE	3	bc	42	92	5	-	St	5	-	-	*
Calshot (Hants)	1014.0	+2	N	2	bzf	40	92	3	-	-	-	-	-	1	1015.8	+2	N	3	b5f	37	97	1	-	-	-	-	-	2
Lympne (Folkestone)	1013.1	+3	N	1	bm	38	97	4	-	-	-	-	-	*	1014.8	+4	N	4	czf	39	92	5	2000	St	6	A St	1	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1014.7	+4	-	0	b1fx	40	75	7	-	-	-	-	-	3
Howden	1014.1	-1	-	0	of	38	97	4	2000	St	10	-	-	*	1015.5	+2	-	0	o3f	42	97	2	2000	St	10	-	-	*
Cranwell (Lincs)	1013.3	0	SW	1	ozf	41	92	5	3000	St	8	A St	2	*	1016.3	+1	WNW	2	o3f	39	97	3	2000	St	10	-	-	*
Felixstowe	1014.5	+2	NNE	2	b7f	35	97	6	-	-	-	A St	2	1	1015.8	+2	N	2	oif	40	97	5	2000	St Cu	10	-	-	1
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1015.8	+3	-	0	ozf	37	85	5	1250	St	10	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.3	+2	-	0	5fc.o	33	97	1	-	St	10	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.6	+3	-	0	b5fx	32	97	1	<500	St	10	-	-	*
London (M.O. at 1H.)	1014.4	+3	*	*	*	32	*	*	*	*	*	*	*	*	1016.6	+3	WSW	1	o8fx	32	92	0	<500	St	10	-	-	*
Croydon	1015.1	+2	S	1	o8fx	32	97	0	<400	St	10	-			1016.8	+2	-	0	o8fe	32	97	0	<500	St	10	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours	Temperature Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather §	Sea 0-9	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
	18H. G.M.T. of 4th					**7H. G.M.T. of 5th**									**24 HOURS ENDED 7H. 5th**						**4th**
Lerwick	1012.6	46	SE	6	omd	1008.7	0	45	-1	W	3	-	bc	1	17	47	42	omp	omd	omr	*
Stornoway	1009.4	46	S	1	or	1014.5	+3	40	-8	W	2	-	bc	1	10	48	39	or	or	op bc	0.0
Castlebay (Barra Is)	1011.6	49	NW	5	b	1016.4	+1	47	0	WNW	3	W	o	3	7	51	45	r	r.o.b	bp.c	0.0
Malin Head	1010.8	52	W	3	o	1016.9	+1	48	+1	WNW	2	NW	bcv	3	1	52	45	ome	omp	bcp	0.0
Blacksod Point	1013.4	50	NW	2	bc	1019.7	+3	48	-2	NW	1	-	bc	2	3	54	48	om	o	bc	*
Roche's Point	1013.0	50	SE	3	o	1021.2	+6	45	-8	N	2	-	b	3	1	54	44	d.om	om.o	o.b	*
Birr Castle	1012.3	52	SW	1	r	1020.9	*	35	-17	N	1	-	c	*	1	53	35	om o	od.r	odr c	0.0
Donaghadee	1011.5	50	SW	2	omd	1019.0	+5	42	-6	WNW	2	W	bcv	2	3	57	42	omd	om	omd. bc	*
Liverpool (Bidston)	1013.4	43	ESE	1	o	1016.8	+3	43	+3	E	1	-	om	1	2	44	40	bc.om	ome	ofm	1.7
Holyhead	1012.6	49	SE	3	me	1016.7	+3	50	+3	NNE	5	N	c	4	9	52	46	ormoe	me	me.qbg.c	0.0
Pembroke (St. Ann's Head)	1013.0	43	ESE	2	om	1017.6	+2	51	+4	N	2	-	ov	2	0.1	51	43	om	om	om. cmp	0.0
Scilly (St. Mary's)	1009.6	51	E	2	om	1016.4	+4	51	+1	NE	3	-	om	4	-	52	50	om	om	om.c.om	0.0
Jersey (St. Aubin)	1009.4	48	E	3	o	1012.5	+1	48	+2	E	2	-	o	1	-	48	46	o.c	c.o	bc.om	0.7
Portland Bill	1011.2	45	NE	3	o	1014.2	+4	40	0	NE	4	NE	bc	4	-	47	38	om	om	om.c.bo	*
Dungeness	1010.7	43	NNE	2	b	1014.2	+3	34	+1	NNE	2	NE	bc	3	-	51	33	bc.b	b	b.bcx	*
Wick	1008.9	46	S	5	omq	1011.1	+2	37	-10	W	3	-	bcmp	4	6	48	37	omq	omq	bcmp	*
Nairn	1009.7	43	-	0	r	1014.4	*	39	+1	W	1	-	bc	1	2	47	36	cgu	udr c.o	op.cqx	0.1
Leith	1011.5	45	SW	1	r	1015.6	+1	40	-2	SW	1	-	b	1	2	47	39	om.o	odr.o	d.o.c.b	*
Tynemouth	1013.3	46	S	1	oz	1015.0	+1	44	-1	WNW	2	-	om	2	0.1	47	43	om	om	omlompd	*
Spurn Head	1013.0	47	NE	1	om	1015.2	+2	45	0	NW	3	-	ogm	2	-	48	42	o	o	ogm	*
Yarmouth (Gorleston)	1012.1	49	ENE	4	b	1014.3	+2	43	+6	NW	2	-	om	1	-	51	33	bz bcz	b	om.b.om	5.6
Clacton-on-Sea	1012.1	45	NNE	2	b	1014.9	+2	39	+4	NNW	2	-	om	1	-	50	34	bc.bm	bm	b.om	6.4
Nottingham	1013.4	44	NE	2	o	1016.1	*	37	-5	SW	1	-	om	*	-	47	33	o	o	o.c	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4.

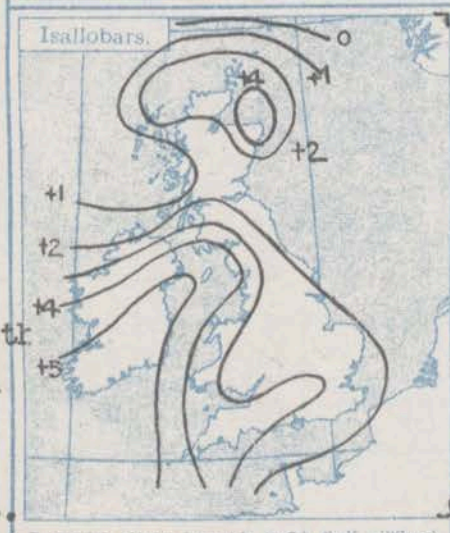
M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 5.11.20.

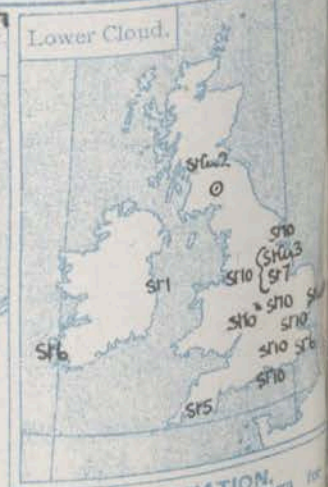
Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Foggy, frosty.	V.Poor	Smooth
2. E. England	Dull, misty.	Poor.	V.Smooth
3. E. Midlands	Dull, foggy.	V.Poor	-
4. W. Midlands	Dull, foggy.	" "	-
5. S.W. England	Dull to fair.	Fair.	Mod.
6. South Wales	Dull.	Exclt.	Smooth
7. North Wales	Cloudy.	V.Good	Mod.
8. N.W. England	Fine, misty.	Indif.	Smooth
9. N. Midlands	Dull, misty.	Fair.	-
10. N.E. England	Cloudy, misty.	Poor.	Smooth
11. E. Scotland	Fine, hazy, some frost.	Good.	"
12. S.W. Scotland	Fine.	V.Good	"
13. Isle of Man	Fair.	Indif.	"
14. N.&N.W. Scotland	Fair.	Fair.	"
15. Hebrides	Fair to cloudy.	"	"
16. Orkneys and Shetlands	Fair.	Good.	V.Smooth
17. N.W. Ireland	Fair.	"	Smooth
18. N.E. Ireland	Fair.	Exclt.	"
19. S.E. Ireland	Fine.	Good	"
20. S.W. Ireland	Cloudy.	V.Good	Slight.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
12	4th	0445	57	54
3	4th	0915	54	52
1	4th	1310	57	51
8	5th	0505	55	46
4A				



Barometric change from 4 h. to 7 h. (half millibars).



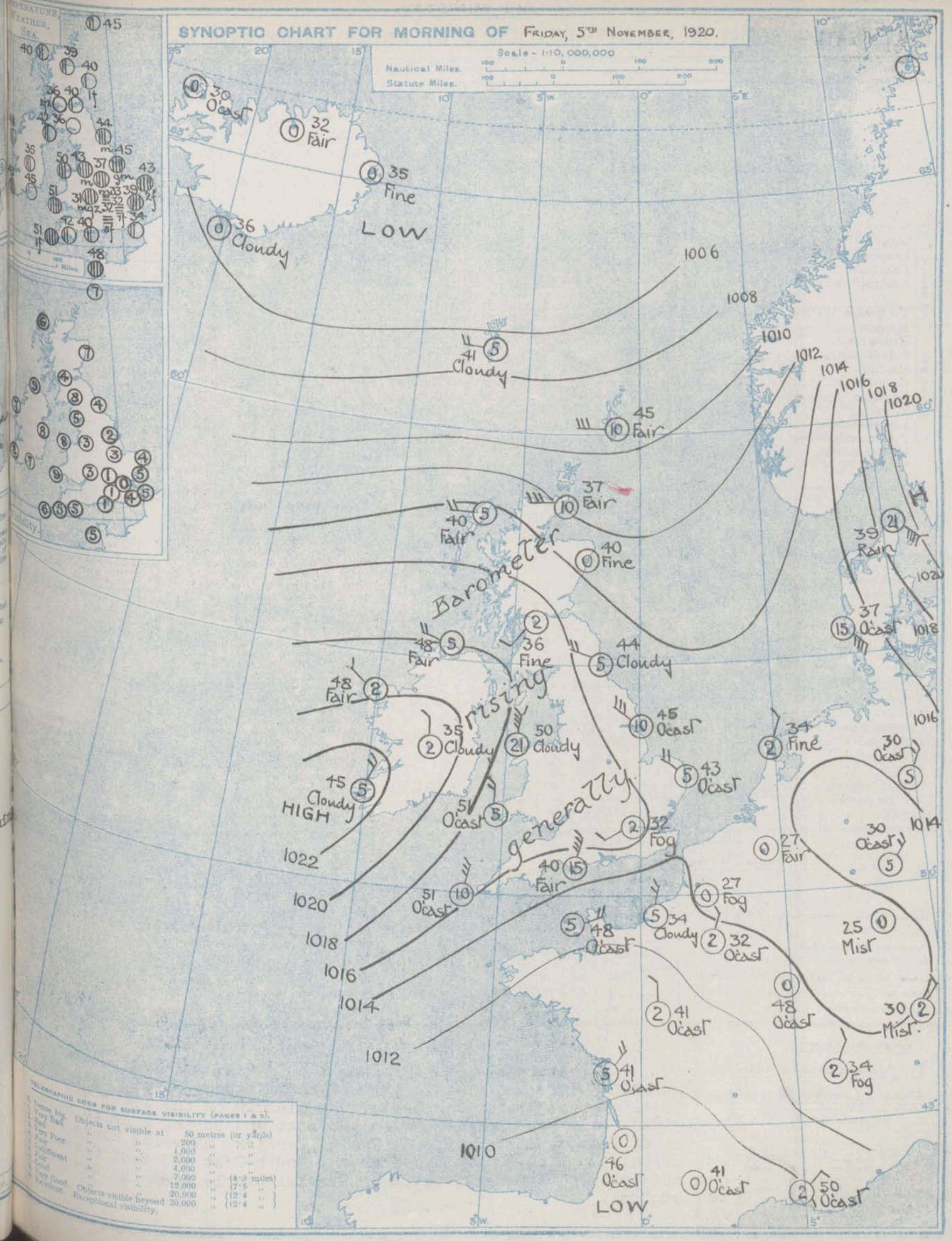
EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. thunderstorm.
SEA DISTURBANCE.— Rough High

GENERAL INFERENCE from observations received up to 9h. G.M.T.

An anticyclone is extending over the British Isles from the Atlantic, and will probably cause fair weather generally for two or three days. The foggy tendency will decrease under the influence of a light breeze from between North-East and North-West.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Friday, 5th November, 1920.	Further Outlook.
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	Wind between North and North-East, light. Mainly fair, but local mist or fog. Visibility indifferent to fair. Temperature rather low, frost at night locally.	Mainly fair weather continuing
9. N. Midlands 10. N.E. England 11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.&N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland	Wind between North and West, light or moderate. Fair or cloudy. Visibility fair to good. Moderate temperature.	
19. S.E. Ireland 20. S.W. Ireland	Wind North or North-East, light, fair. Visibility good. Moderate temperature.	

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.30 G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF FRIDAY, 5TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
HIGH
Barometer rising generally
1006
1008
1010
1012
1014
1016
1018
1020
1022
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
Dense fog Very Bad Objects not visible at 50 metres (or yards)
Bad " " 200 " "
Very Poor " " 1,000 " "
Poor " " 2,000 " "
Indifferent " " 4,000 " "
Fair " " 7,000 " (4·3 miles)
Good " " 12,000 " (7·5 "
Very Good " " 20,000 " (12·4 "
Excellent Objects visible beyond 20,000 " (12·4 "
Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 310

Friday 5th NOVR 1920

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR ....A.....

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 3rd–4	Rainfall. Day. 9h-18h. 4	Sunshine. Sunrise to Sunset. 4
Scotland.	Oban							
	Banff	0	0	47	43	-	-	0·0
	Montrose	0	0	48	41	-	-	0·0
	St. Andrews ...							
England, N.E.	Harrogate	0	0	44	39	-	-	0·0
	Scarborough ...	0	0	50	44	-	-	0·0
	Skegness	0	0.c.0	50	41	-	-	3·6
England, E.	Lowestoft ...							
	Felixstowe	bm	bm	50	34	-	-	6·7
	Southend-on-Sea...	b	b	50	33	-	-	6·6
England, S.E.	Tunbridge Wells	cm.bc	bc.b.bm	49	23	-	-	2·9
	Margate	c	b3	49	44	-	-	3·0
	Ramsgate	*	*	48	40	-	-	3·8
	Folkestone	0.c	c.0	47	38	-	-	4·5
	Hastings	0	c.bc.b	49	36	-	-	1·9
	Eastbourne... ...	0	0.c.bc	50	34	-	-	1·7
	Brighton	bc	bc	50	33	-	-	2·5
	Worthing	bc.b	b	48	34	-	-	5·4
	Littlehampton ...	b	bm	48	37	-	-	3·2
	Portsmouth (S'thsea)	*	*	48	33	-	-	4·5
	Bournemouth ...	*	*	46	33	-	-	5·8
	Ventnor (I. of W.)	*	*	48	35	-	-	1·6

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 3rd–4	Rainfall. Day. 9h-18h. 4	Sunshine. Sunrise to Sunset. 4
England, N.W.	Douglas (I.O.M.)							3·4
	Blackpool	bc.0		51	36	-	-	1·5
	Southport	b.bc	c.bc.c.0	43	34	-	-	5·2
	MORECAMBE	*	*	49	35	-	-	
Midlands.	Buxton							
	Leamington Spa...							2·8
	Malvern	0.c	bc.b	44	36	-	-	4·8
	Bath	0.b	b	46	38	-	-	0·0
Wales.	Rhyl	c	0	46	38	-	-	0·0
	Colwyn Bay ...	*	*	48	43	-	-	0·0
	Llandudno	*	*	49	43	-	-	0·0
	Aberystwyth ...	0.c.0	c.0.0	49	43	-	-	
	Tenby							0·0
	Swansea	*	*	45	42	-	-	3·7
England, S.W.	Weymouth	b	mb	48	35	-	-	
	Teignmouth ...							0·0
	Torquay	om	om	47	42	-	-	0·0
	Paignton	om	0	47	41	-	-	0·0
	Penzance	0g	0g	52	49	-	-	0·0
	Newquay	0	0	50	42	-	-	1·3
	Bude	3	c	45	37	-	-	2·0
	Ilfracombe	0	0	44	39	-	-	0·2
	Weston-s-Mare ...	0.c.bc	om	44	39	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-18h. 4	Weather. 18h-18h. 4	Weather. 18h. 4-1h. 5	Weather. 1h-7h. 5	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
								mm.	mm.	
Renfrew ...	02f.pd	03f.DD	08f.DD	c.02f.bbc	44	36	27	2	2	0·0
Eskdalemuir	01f	02f.pd	02 03f	dbl.b.bf	44	36	28	0·1	1	0·0
Valencia (Cahirc'n) ...	01	01f	pd. bc.c	bc.c	55	45	40	5	-	0·0
Baldonnel	08f.0	02f	c.0b	01f.02f.bc	54	36	29	r	0·4	0·0
Manchester (Alex Pk.)	04f.08f	02f	b.03fe	03f	44	31	20	-	-	*
Ross on Wye... ...	02f.01f.bc	3bc1f.bc2f	b. 2fx.3f	b.bc.b.0x3f	44	28	27	-	-	2·7
Falmouth	0.02f	01f	b.bc	b bc	57	40	36	-	-	0·0
Calshot (Hants)... ...	b.2f	bc.c.bbc2f	b 1fe	b3f.b.0f	49	35	31	-	-	6·4
Lympne (Folkestone) ...	b.bc2f.b2f	b1f	bw2f.b	b.bc.cw2fx	48	35	24	-	Trace	7·1
Aberdeen	01f.02f	02f.pd	02f.pd	01f.1f	48	37	28	-	Trace	0·0
Howden	02f.0	02f	c.0.02f	0.03f	45	37	30	-	-	0·0
Cranwell (Lincs)	bc.c.0	bc.c.0	bc.c.c.0	c.0.03f	47	34	31	-	-	0·5
Felixstowe	b2f	b2f	2f.1f	b.bc1f	52	34	*	-	-	6·6
Shoeburyness	x.b.bc	1fw	bx.	02f.4-6f	50	31	26	-	-	6·7
Benson		b	b	b4-5fe	48	29	24	-	-	*
S. Farnborough ...	x.bc2fe.b	b.bc3f	bc.c3f	c.04-5fe	48	24	24	-	Trace	5·7
London (Kew Obsy.) ...	x.b6f.4-6f	06-8f9	06-8fx	06-8fx	37	30	28	Trace	0·1	0·0
Croydon	x.b.bc.c3f	3fb 4-5f	b.ow.4-5f 6-8f	6-8fex.	48	30	*	Trace	Trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
$r_s r_s$ = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1– 3	0·3– 1·5
2	4– 7	1·6– 3·3
3	8–12	3·4– 5·4
4	13–18	5·5– 7·9
5	19–24	8·0–10·7
6	25–31	10·8–13·8
7	32–38	13·9–17·1
8	39–46	17·2–20·7
9	47–54	20·8–24·4
10	55–63	24·5–28·4
11	64–75	28·5–33·5
12	Above 75	33·6 or above

SYMBOLS–

Aurora ⛢ Solar halo ⊙
Rime ⊥ Lunar halo ☽
Glazed frost ∼ Solar corona ⊙
Glazed roads ⛐ Lunar corona ☽

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 5							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	b3.bf	bf.fx.	b3.bf	49	28	23	-	2·4	82	84
City (Bunhill Row)	*	*	*	*	*	*	*	0·0	*	*
Westminster (St. James's Park)	*	*	f	44	31	29	-	0·0	94	93
REGENT'S PARK (BOTANIC GDN)	*	*	*	*	*	*	*	0·6	*	*
Camden Sq. (British Rainfall)	3m.bc.b	b.bc.cm	*	46	30	28	-	*	90	93
Kensington Palace	fx	fx.fx	*	38	29	24	-	*	93 (18h)	95
Hampstead Observatory ...	*	*	*	46	36	30	-	4·1	*	88

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total ....138..... Joules.

Milliwatts.

Average Rate. 4·1

Maximum Rate. 8

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

5 & 6 November 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth...	6.58	11.37	4.16
	6.59	11.37	4.15
Greenwich	7.3	11.44	4.25
	7.4	11.44	4.24
Wick ...	7.40	11.56	4.12
	7.42	11.56	4.10
Valencia ...	7.45	12.26	5.0
	7.46	12.26	5.4

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 4 h. 17 m. 30 s.
to 5 h. 6 m. 0 s.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	12	30	8	10	65
δ Ursae Minoris	12	30	4	26	35

NOTES ON THE WEATHER OF YESTERDAY.

Temperature rose no higher than 37° at Kew and remained below 50° over the greater part of the Kingdom. Frost occurred locally at night; at Manchester the minimum on the grass was 20°. Rain was experienced in the West and North, 9 mm at Holyhead, 10mm at Stornoway and 17mm at Lerwick. Several hours of bright sunshine was recorded on the South-East and East Coasts and locally elsewhere, but over a considerable area the day was sunless.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,534 Saturday 6th November 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

13H. G.M.T. 5th / 18H. G.M.T. OF 5th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew	1019.1	+1	W	3	bc	49	65	8	3000	StCu	5	Ci	1	*	1019.6	+1	SW	2	o1f	45	85	6	1200	StCu	3	ASt	6	*
Eskdalemuir ...	1018.6	+1	WNW	3	bc	48	65	8	3000	St	2	Ci	3	*	1020.8	+2	WSW	1	bc	40	85	7	-	Cu	1	Ci St	3	*
Valencia (Cahirc'n)	1024.3	+1	NNW	2	bc	54	65	8	3000	St	4	ACu	2	3	1024.8	+1	-	0	c	52	76	8	2000	StCu	6	ASt	2	3
Baldonnel ..	1021.8	0	W	2	c	50	75	8	3000	St	1	ASt	6	*	1023.1	+1	-	0	b	44	85	9	-	-	-	ASt	3	*
Manchester (Alexa Pk)	1019.8	+1	N	2	b2fe	50	65	4	-	-	-	-	-	*	1021.2	+4	W	2	b3f	39	92	3	-	-	-	-	-	*
Ross on Wye ...	1018.7	+1	ENE	1	bm	47	85	4	-	-	-	Ci	2	*	1020.8	+3	NE	2	b	42	85	6	-	-	-	ASt	2	*
Falmouth	1019.2	+1	NNE	3	c	53	85	6	-	StCu	7	ASt	1	*	1021.1	+3	N	3	c	51	85	7	-	StCu	4	ACu	3	*
Calshot (Hants) *...	1018.4	+1	N	3	o3f	43	85	3	1250	St	10	-	-	1	1020.1	+3	NE	2	o2f	47	85	4	1250	St	10	-	-	1
Lympne (Folkestone)	1017.0	+2	NNE	3	o1f	45	85	5	1250	StCu	10	-	-	*	1019.1	+3	NNE	3	o2f	44	85	4	2000	St	10	-	-	*
Aberdeen	1016.8	0	WNW	3	b	49	45	8	-	-	-	Ci	1	3	1018.2	+2	WSW	1	b1f	43	65	7	-	-	-	ACu	1	2
Howden	1018.1	+2	NNW	2	bz	51	65	6	4200	StCu	1	ACu	1	*	1018.3	+3	-	0	b	36	92	6	4200	St	2	-	-	*
Cranwell (Lincs) ...	1018.3	+2	NW	3	o2f	46	92	4	2000	St	10	-	-	*	1020.8	+2	NNW	3	b	41	97	4	3000	St	2	-	-	*
Felixstowe ...	1017.9	+1	NNE	1	o2f	46	97	5	2000	St	10	-	-	*	1019.4	+3	N	2	o2f	46	97	5	3000	St	10	-	-	*
Shoeburyness ...	1017.9	0	N	2	o2f	46	75	5	2000	St	10	-	-	*	1019.1	+2	-	0	o2f	45	75	6	2,000	St	10	-	-	*
Benson	1018.1	+2	-	0	b3f	39	97	2	-	-	-	-	-	*	1019.9	+1	-	0	b3f	41	92	2	-	-	-	-	-	*
S. Farnborough	1018.4	+2	NNW	1	o3f	43	85	3	4600	St	10	-	-	*	1019.9	+4	NW	2	o3f	43	92	3	4600	St	10	-	-	*
London (Kew Obsy.)	1018.3	0	-	0	o3f	44	85	3	3000	St	10	-	-	*	1019.8	+3	NNW	1	o2f	44	85	4	2000	St	10	-	-	*
Croydon	1018.9	+2	NW	1	o3f	42	92	2	1250	St	8	ASt	2	*	1020.3	+3	NNW	2	o4f	44	85	2	1250	St	10	-	-	*

1H. G.M.T. OF 6th / 7H. G.M.T. OF 6th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew ...															1018.5	0	SW	3	o2f	49	92	5	3,000	StCu	9	ASt	1	*
Eskdalemuir ...	1021.4	+0	SE	1	o	38	92	6	-	-	-	ASt	10	*	1020.0	0	SW	3	o2fe	44	97	2	450	St	10	-	.	*
Valencia (Cahirc'n)	1025.0	0	WNW	2	o	53	*	*	*	*	*	*	*	2	1024.5	0	-	0	c	50	85	8	2,000	StCu	8	-	.	3
Baldonnel ...	1020.8	0	S	3	od	47	92	4	1250	St	10	-	-	*	1022.7	0	SW	2	o	48	92	8	750	StCu	4	ACu	5	*
Manchester (Alexa Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1023.0	+1	-	0	o3fe	32	97	2	750	St	10	-	-	*
Ross on Wye...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1024.1	+2	WSW	1	b4fx	34	92	2	<600	St	10	.	.	*
Falmouth ...	1023.7	+1	N	1	b	44	97	7	-	StCu	2	-	-	*	1024.6	+2	N	2	b	44	92	9	-	Cu	2	.	.	*
Calshot (Hants)...	1022.3	+2	NNW	3	b3f	40	97	3	-	-	-	-	-	/	1023.4	+1	NNE	3	b2f	39	86	4	-	-	-	-	.	/
Lympne (Folkestone)	1020.6	+1	N	2	o2f	45	97	4	2000	St	10	-	-	*	1022.0	+2	N	3	o2fw	38	97	3	<500	St	7	-	.	*
Aberdeen ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.6	-1	SW	2	o3f	43	97	2	-	.	-	ASt	10	2
Howden ...	1022.4	+3	-	0	b	29	97	5	4200	St	2	-	-	*	1022.5	0	-	0	o8f	26	97	0	<500	St	10	-	.	*
Cranwell (Lincs)	1022.7	+1	W	3	b.	34	97	4	-	-	-	-	-	*	1023.0	+1	W	3	b	33	97	4	2,000	St	1	-	.	*
Felixstowe ..	1021.1	+1	NNE	3	bo2f	45	97	5	3,000	StCu	6	-	-	/	1022.7	+2	N	3	b2f	36	97	5	4200	StCu	1	-	.	2
Shoeburyness...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1023.0	+3	N	1	b5fw	37	92	2	-	-	-	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1024.0	+2	-	0	o5fx	30	97	1	-	St	10	-	.	*
S. Farnborough	*	*	*	*	*	p	*	*	*	*	*	*	*	*	1024.1	+2	-	0	o6f	32	97	1	<500	St	10	-	.	*
London (M.O. at 1H.)	1021.9	+2	*	*	*	36	*	*	*	*	*	*	*	*	1024.1	+2	-	0	o4f	31	97	0	<600	St	10	-	-	*
Croydon ...	1022.2	+1	WNW	1	o3f	40	97	2	2000	St	10	-	-	*	1024.3	+2	W	1	o8fe	36	97	0	<500	St	10	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

Stations	18H. G.M.T. of 5th: Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	7H. G.M.T. of 6th: Barometer at M.S.L. mb.	‡ Change in 3 hours	Temperature Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather §	Sea 0-9	24 HOURS ENDED 7H. 6th: † Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours (5th)
Lerwick ...	1014.0	44	W	2	bc	1011.6	-1	47	+2	S	2	-	omr	2	3	48	44	bcph	bcp	omr.d.bcw	*
Stornoway ...	1015.3	43	WSW	1	o	1012.6	0	50	0	WSW	4	-	o	3	4	50	39	bcp	op	b.o	2.1
Castlebay (Barrals)	1017.3	49	WNW	2	bc	1016.2	0	52	+5	W	4	-	op	4	2	52	45	cop	op bc	bc.op	0.5
Malin Head ...	1018.9	49	SW	2	c	1017.7	0	50	+2	SW	3	SW	o	3	3	52	48	bc	o	c.bc.omd	2.7
Blacksod Point	1020.6	52	-	0	bc	1019.6	0	52	+1	NW	2	-	c	?	1	54	47	bc	bcp	omr.bc	*
Roche's Point...	1024.6	48	NNW	1	b	1025.0	0	46	+1	NNW	1	NW	o	1	0.4	53	43	bbc b	b	bw	*
Birr Castle ...	1022.7	45	SSW	1	c	1022.6	*	47	+2	SW	1	-	c	*	-	52	34	bc	c	c	4.5
Donaghadee ...	1020.8	47	W	2	bcm	1019.4	-1	48	-6	W	2	-	cm	2	-	52	44	bc	bcm	cm	*
Liverpool (Bidston)	1021.2	46	NNW	2	b	1022.3	0	41	-2	SSW	1	W	ob	2	-	51	41	ocm.b	bcb	bc.b	6.2
Holyhead ...	1021.6	50	NNW	4	c	1022.0	0	51	+1	WSW	4	NW	c	2	-	53	47	c	c	c.bc.oc	4.4
Pembroke (St. Ann's Head)	1022.7	46	N	1	bcv	1024.4	0	45	+6	-	0	-	bv	1	-	54	43	bcv	bcv	bcv.bv	5.9
Scilly (St. Mary's)	1021.7	51	NNE	3	bc	1023.7	0	49	-2	NNE	1	-	b	2	-	56	49	oc	cbc	bc.b	2.2
Jersey (St. Aubin)	1018.6	49	NE	3	o	1021.7	+1	47	-1	NE	2	-	o	2	-	52	45	omcb	bo	om	1.0
Portland Bill ...	1019.2	42	NE	3	om	1022.2	+4	41	+1	NE	4	-	om	3	-	47	38	bco	om	om	*
Dungeness ...	1018.3	45	NNE	3	o	1021.5	+2	37	+3	NNE	2	NE	b	3	-	49	34	cbc	bco	o.bc	*
Wick	1015.3	45	WSW	2	o	1012.1	-3	47	+10	SSW	2	-	op	2	0.2	49	37	bc	bbcco	o.b.p	*
Nairn	1016.3	41	-	0	bc	1018.6	*	50	+11	W	1	-	c	1	-	50	28	bc	bc	bc.c	5.1
Leith	1019.2	42	SW	1	bc	1017.7	0	48	+8	SW	2	-	o	1	0.1	49	39	b.bc.c	bc.c.bc	bc.op.o	*
Tynemouth ...	1019.7	45	WNW	2	bcm	1020.5	0	40	-4	W	2	-	cm	2	-	50	38	bc	bcm	bm.cm	*
Spurn Head ...	1018.6	45	N	3	b	1021.9	+1	40	-5	NW	3	-	bm	2	-	49	37	ogm	om	bm	*
Yarmouth (Gorleston)	1018.3	46	NNW	2	o	1022.0	+2	40	-3	NNW	2	-	bcm	1	-	48	39	om	omfom	ofd.bc	0.0
Clacton-on-Sea	1018.7	45	NNW	2	m	1021.9	+2	36	-3	NW	3	-	bcm	2	-	46	35	ogm	ogm	og.bm	0.0
Nottingham ...	1020.4	43	N	1	b	1023.5	*	39	-8	-	0	-	fx	*	-	50	25	om	om	bm	0.0

|-1022.7

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 3.

M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 6.11.20.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Foggy, frost inland.	Bad.	Slight
2. E. England	Fair, misty.	Poor.	Smooth
3. E. Midlands	Fine, frosty.	"	-
4. W. Midlands	Foggy, frosty.	Bad.	-
5. S.W. England	Fine.	V.Good	Smooth
6. South Wales	Fine, clear.	Exclt.	V.Smooth
7. North Wales	Dull.	V.Good	Smooth
8. N.W. England	Foggy.	Poor	"
9. N. Midlands	Foggy, sharp frost.	Dense fog.	-
10. N.E. England	Fine, misty.	Indif.	Smooth
11. E. Scotland	Foggy.	Bad.	Smooth
12. S.W. Scotland	Dull, misty.	V.Poor	"
13. Isle of Man	Dull, misty.	Fair.	"
14. N.& N.W. Scotland	Dull, showery, gloomy.	"	"
15. Hebrides	Dull, showery.	"	Slight
16. Orkneys and Shetlands	Dull, misty, rainy.	Poor.	Smooth
17. N.W. Ireland	Cloudy.	Fair.	Smooth
18. N.E. Ireland	Dull, misty.	"	"
19. S.E. Ireland	Fine.	Good.	V.Smooth
20. S.W. Ireland	Cloudy.	V.Good	Slight.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
4A	5th	0400	63	49
5	5th	0948	54	50
3	5th	0915	54	54

Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. thunder. thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

The anticyclone covering England and South Ireland will maintain fair weather for a day or two. In Scotland secondaries are likely to cause local rain or showers.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Saturday, 6th November, 1920.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands 5. S.W. England 6. South Wales	Light variable winds; fair or fine; visibility mainly poor inland with much mist or fog; rather cold.
7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England	Wind Westerly light or moderate; fair or cloudy; visibility fair, some morning mist or fog inland; moderate to rather low temperature.
11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland	Wind South-West or West, light or moderate; cloudy, local rain or showers; visibility mainly fair; moderate temperature.
18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Light Westerly or variable winds; mainly fair but some local mist; moderate to rather low temperature.

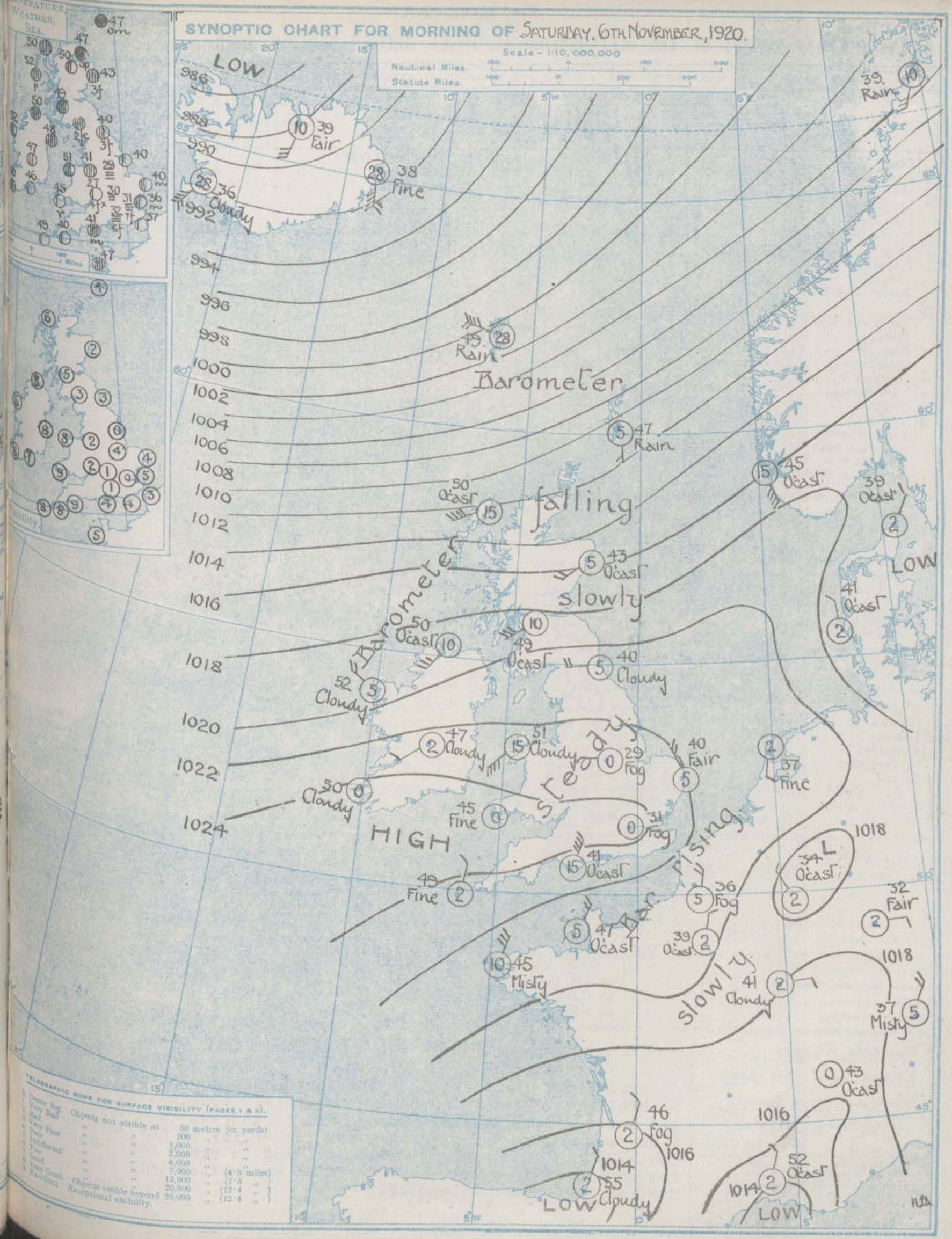
Further Outlook:

England and South Ireland. Fair or fine but rather cold, much fog locally.

Other districts. Wind Westerly, unsettled.

E.G.B.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.30 G. C. SIMPSON, F.R.S., Director.



TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).

0. Dense fog				
1. Very Bad	Objects not visible at	50 metres	(or yards)	
2. Bad	"	100	"	"
3. Very Poor	"	200	"	"
4. Poor	"	1,000	"	"
5. Indifferent	"	2,000	"	"
6. Fair	"	4,000	"	"
7. Good	"	7,000	"	(4·3 miles)
8. Very Good	"	12,000	"	(7·5 ")
9. Excellent.	Objects visible beyond	20,000	"	(12·4 ")
	Exceptional visibility.	20,000	"	(12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 311 ... { SATURDAY 6TH NOVEMBER 1920

WEATHER, TEMPERATURE RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 5TH

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 4TH-5TH	Rainfall. Day. 9h-18h. 5TH	Sunshine. Sunrise to Sunset. 5TH
Scotland.	Oban	cbc	bc	51	43	-	-	4.5
	Banff	b	bbc	50	40	1	-	6.9
	Montrose							
	St. Andrews	b	b	52	36	1	-	7.1
England, N.E.	Harrogate	b	b	49	38	-	-	6.7
	Scarborough	b	b	~~47~~ 54	43	-	-	3.6
	Skegness	om	mob	48	42	-	-	0.0
England, E.	Lowestoft							
	Felixstowe	om	ogm	47	36	-	-	0.0
	Southend-on-Sea	o	o	46	34	-	-	0.0
England, S.E.	Tunbridge Wells	bmo	como	47	28	-	-	1.2
	Margate							
	Ramsgate	*	*	48	41	-	-	0.0
	Folkestone	o	oco	50	38	-	-	0.5
	Hastings	o	obco	47	36	-	-	0.6
	Eastbourne	ocbc	co	47	36	-	-	2.8
	Brighton	b	co	47	35	-	-	1.7
	Worthing	bc	co	45	34	-	-	2.1
	Littlehampton	bc	cm	48	34	-	-	2.3
	Portsmouth (Southsea)	-	-	47	36	-	-	2.1
	Bournemouth	*	*	46	33	-	-	0.0
	Ventnor (I. of W.)	*	*	48	37	-	-	4.8

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 4TH-5TH	Rainfall. Day. 9h-17h. 5TH	Sunshine.	Sunshine. Sunrise to Sunset. 5TH
England, N.W.	Douglas (I.O.M.)								7.4
	Blackpool	b	c	52	37	0.3	-		6.0
	Southport	bc b	bbc bbc	51	38	0.4	-		5.8
	MORECAMBE	-	-	51	37	-	-		
Midlands.	Buxton								1.7
	Leamington Spa	o	cbo	44	29	-	-		?
	Malvern	zbc	bcb	50	33	-	-		0.1
	Bath	m	mcbc	45	30	-	-		5.2
Wales.	Rhyl	bc	bcc	52	44	0.1	-		3.0
	Colwyn Bay	-	-	52	46	-	-		3.5
	Llandudno	bbc	c	52	46	0.2	-		3.5
	Aberystwyth	ocb	cco	52	44	-	-		
	Tenby								2.4
	Swansea	-	-	54	~~47~~ 38	-	-		0.7
England, S.W.	Weymouth	mbcc	embc	48	35	-	-		1.3
	Teignmouth	cbcc	o	51	39	-	-		0.6
	Torquay	bcm	omf	51	37	-	-		0.3
	Paignton	bcmo	oc	51	37	-	-		3.5
	Penzance	bcc	cbc	56	43	-	-		2.5
	Newquay	ob	bob	54	38	-	-		3.2
	Bude	c	b	55	33	-	-		2.4
	Ilfracombe	o	o	54	41	-	-		1.1
	Weston-s-Mare	mobc	bcm	49	31	-	-		

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 4TH	Weather. 13h-18h. 4TH	Weather. 18h-1h. 4TH-5TH	Weather. 1h-7h. 5TH	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall.† Day. 7h-18h. mm.	Rainfall.† Night. 18h-7h. mm.	Sun. Hours.
Renfrew	bbc if	o. of	c. op.	o2f p	51	36	34	-	2	4.5
Eskdalemuir	bbcbcc	bbc bcc	bc.c.c.o	o3fc	49	35	31	-	0.1	7.0
Valencia (Cahire'n)	bcc bbc	bcc bcc	c.o.o	c.o	54	45	45	-	-	4.4
Baldonnel	bcc.bcc	bcc bcc	o2f o.o	bc.c2f	51	36	36	-	-	2.8
MANCHESTER (ALEX. PK.)	bz	bbcz	b. bo3f	b.o3fx.	51	25	18	-	-	*
Ross on Wye	o3f o2f bbc	bbcz bccw	b. bcx b. bo	bx. 3fc	50	26	21	-	-	2.3
Falmouth	o2fco.	bcc	b. bc	b. bo	55	38	29	-	-	2.3
Calshot (Hants)	bbc co 3f	o3f o2f	b 3f	b. 3f	46	35	30	-	-	1.2
Lympne (Folkestone)	o2f.	o. o1f	o2f	c. o2f w. 3f	45	37	34	-	-	0.0
Aberdeen	2f.b	bbc if	if w	2fc.3fc	49	38	28	-	-	5.2
Howden	bcc if	bcc if	b. bcx	b. bcx.	51	22	19	-	-	4.7
Cranwell (Lincs)	o3f o2f	bcc bbc	b. bc. b	x. b. bc	47	31	25	-	-	0.0
Felixstowe	o2f.o	o. o2f	bc. c2f	b. bc2f	47	36	*	-	-	0.0
Shoeburyness	w. o2f	o2f	o2f	4-5fw	46	35	33	-	-	0.0
Benson	b	b	b 3f	4-5fx	42	29	27	-	0.1	*
S. Farnborough	o4-5f o3f	o3f	o3f o4-5f	o4-5f. o6-8f	44	30	28	-	Trace	0.0
London (Kew Obsy.)	x o3f	o3f o2f	b6-8f. o6-8f	x o6-8f	46	31	29	Trace	-	0.0
Croydon	o6-8fc 4-5f 3f	o3f. o4-5f	o4-5f. o3f	o6-8fc	45	32	*	Trace	Trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r_1r_1 = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—
Aurora ☆ Solar halo ⊕
Rime ⊥ Lunar halo ⊕
Glazed frost ~ Solar corona ⊕
Glazed roads ⊸ Lunar corona ⊕

LONDON. OBSERVATIONS.

	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9H G.M.T. 6TH NOV.							YESTERDAY.		To-day.
Greenwich (Royal Observatory)	f	f. omb	b. bf	44	33	29	-	0.0	97	97
City (Bunhill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	f.o	om	bf f	47	32	28	-	0.0	98	
(REGENTS PARK BOTANICAL GRD.)	*	*	*	*	*	*	*	~~0.0~~	*	*
Camden Sq. (British Rainfall)	bcf. bc	c.o	*	48	31	27	-	*	97	100
Kensington Palace	of	o.o	*	47	30	24	-	*	85 (18h)	95
Hampstead Observatory	*	*	*	45	35	29	Trace	1.8	*	90

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total .....203..... Joules.

Milliwatts.
Average Rate. 6·0
Maximum Rate. 12

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

6TH & 7TH NOVEMBER ..... 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	6·59 / 7·0	11·27 / 11·27	4·15 / 4·14
Greenwich	7·4 / 7·5	11·44 / 11·44	4·29 / 4·33
Wick	7·42 / 7·44	11·56 / 12·26	4·10 / 4·7
Valencia	7·46 / 7·47	12·25	5·4 / 5·3

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 5TH 17h 30m to 6TH 10h 0m

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	12	30	6	20	57
δ Ursae Minoris	12	30	4	52	39

NOTES ON THE WEATHER OF YESTERDAY.

Except for light falls on the North-West coast the day was generally rainless. Sunshine was fairly abundant in the North and West, Blackpool, Eskdalemuir and St. Andrews each receiving 7 hours or more. Temperature was rather low in the East and South-East, the maximum generally failing to reach 50°. At Howden the minimum was as low as 22°, and at Manchester 25°. A good deal of fog occurred locally.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON

BRITISH SECTION. No. B21,535 ....SUNDAY, 7TH NOVEMBER. 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind Direc.	Wind Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud Form	Low Cloud Amt. 0-10.	Upper Cloud Form.	Upper Cloud Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind Direc.	Wind Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud Form	Low Cloud Amt. 0-10.	Upper Cloud Form.	Upper Cloud Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 6TH														**18H. G.M.T. OF 6TH**													
Renfrew	1017.7	-1	SW	4	od.	52	85	7	1250 (~~2,000~~)	Nb	8	ASt	2	*	1017.8	0	SW	3	o1f	50	92	7	2,000	St	10	-	-	*
Eskdalemuir	1019.0	-1	SW	4	o2f	48	92	5	1,250	St	10	-	-	*	1018.9	0	SW	4	o2f	47	97	4	1,250	St	10	-	-	*
Valencia (Cahirc'n)	1024.1	-2	WSW	2	bcv	54	75	9	2,000	Cu	2	Ci.Cu	4	4	1023.3	0	WSW	2	o	50	92	8	5,700	St.Cu	3	A.St	6	3
Baldonnel	1022.3	-1	SSW	4	c	52	85	8	1,250	St	5	Ci	2	*	1022.0	0	SW	2	o1f	50	85	7	750	St.Cu	6	A.St	4	*
Manchester (Alex.Pk)	1022.4	-1	SSW	2	o2f	49	85	4	2,000	St.Cu	10	·	-	*	1022.1	0	WSW	1	o2f	47	92	4	2,000	St	10	-	-	*
Ross on Wye	1023.4	-1	W	2	c	53	65	8	2,000	St	1	Ci.St	6	*	1023.4	0	W	1	o	46	85	6	2,000	St	9	A.St	1	*
Falmouth	1024.9	0	NNE	2	bv	55	65	9	-	Cu	2	-	-	*	1025.0	0	NNW	1	b	45	85	9	-	St	1	-	-	*
Calshot (Hants)	1024.0	-1	NNE	1	bzf	49	75	4	-	-	-	-	-	0	1024.6	+2	NNW	1	bzf	41	92	4	-	-	-	-	-	1
Lympne (Folkestone)	1022.8	+1	NNE	3	bcif	50	75	6	2,000	St.Cu	3	Ci.St	3	*	1024.4	+2	NNE	1	bmw	41	92	6	-	-	-	Ci	1	*
Aberdeen	1015.5	-1	SW	1	o3f	50 (49)	92	3	4,200	St.Cu	6	A.St	4	2	1015.5	0	SW	1	o2f	49	92	3	4,200	St.Cu	3	-	-	2
Howden	1021.9	-2	S	1	o3f	48	92	7	3000	St	10	-	-	*	1021.6	0	-	0	o2f	48	92	4	2,000	St	10	-	-	*
Cranwell (Lincs)	1023.1	-1	WSW	3	bc	50	75	4	4,200	St	2	A.Cu	3	*	1023.1	0	WSW	3	o2f	47	85	4	4,200	St	4	~~Ci.Cu~~	6	*
Felixstowe	1023.3	-1	N	2	c	50	85	6	4,200	Cu	5	Ci.St	2	0	1024.2	+1	-	0	bxf	40	97	5	-	-	-	-	-	0
Shoeburyness	1023.4	0	N	2	bc	51	66	7	3,000	Cu	3	Ci	1	*	1024.0	+1	-	0	bife	38	85	6	-	-	-	-	-	*
Benson	1024.0	0	-	0	bf	37	97	1	-	-	-	-	-	*	1024.0	0	NNE	1	b	35	97	3	-	-	-	-	-	*
S. Farnborough	1024.1	0	SSE	1	bzf	41	97	2	<500	St	2	Ci.St	1	*	1024.7	0	-	0	bif	35	92	4	1,250	St	1	-	-	*
London (Kew Obsy.)	1023.7	-3	WNW	1	bcmw	42	92	2	-	-	-	A.Cu	4	*	1024.4	+2	-	0	bmw	39	92	3	~~<500~~	~~St~~	~~1~~	-	-	*
Croydon	1024.5	+1	WSW	1	bczf	42	92	3	1,250	St	5	-	-	*	1025.0	+1	SW	2	bzf	37	97	3	-	-	-	-	-	*
	1H. G.M.T. OF 7TH														**7H. G.M.T. OF 7TH**													
Renfrew															1017.4	0	SW	4	o1f	51	92	6	1250	St	10	-	-	*
Eskdalemuir	1019.5	0	SW	3	o2f	47	92	5	2,000	St	10	-	-	*	1019.3	0	SW	4	o2fe	47	94	5	750	St	10	-	-	*
Valencia (Cahirc'n)	1022.1	0	SW	2	o	51	*	*	*	*	*	*	*	0	1021.5	0	SSW	3	o	53	92	6	2,000	St	5	A.St	6	7
Baldonnel	1022.8	0	SSW	4	o2f	49	85	5	2,000	St	10	-	-	*	1021.0	0	W	2	o2f	49	85	8	1000	St	10	-	-	*
Manchester (Alex.Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1022.7	0	SSW	1	o3fe	46	97	4	4,200	St.Cu	8	A.St	2	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1023.9	0	W	1	o	45	97	6	2,000	St	2	A.St	8	*
Falmouth	1025.5	0	SW	1	bw	44	97	7	-	St.Cu	2	-	-	*	1025.5	0	SW	1	ow	44	92	8	-	-	-	A.Cu	9	*
Calshot (Hants)	1025.5	0	N	1	bmf	34	94	2	-	-	-	-	-	1	1025.5	0	N	1	omf	39	94	2	1250	St	10	-	-	1
Lympne (Folkestone)	1025.1	+1	NNE	2	bif	40	92	6	-	-	-	Ci	2	*	1026.1	+2	-	0	bcmx	37	94	4	-	-	-	Ci	5	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1015.4	0	SSW	1	o1fe	48	92	6	3,000	St.Cu	8	-	-	2
Howden	1022.2	+1	-	0	o	47	94	6	4,200	St	10	-	-	*	1021.4	0	-	0	o3f	43	97	3	5,700	St.Cu	8	A.St	1	*
Cranwell (Lincs)	1026.5	0	WSW	3	o2f	46	92	5	3000	St	6	A.St	4	*	1023.5	0	WSW	3	o2f	45	94	5	3,000	St.Cu	4	A.Cu	2	*
Felixstowe	1025.0	+1	W	2	bzf	42	97	4	-	-	-	-	-	0	1025.3	0	SW	2	o3f	40	97	4	-	-	-	A.Cu	4	1
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1025.0	0	-	0	bfx	35	85	3	-	-	-	A.St	3	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1024.5	0	-	0	o	39	94	6	-	St	10	-	-	*
S. Farnborough	*	*	*	*	*	7	*	*	*	*	*	*	*	*	1025.0	0	ESE	1	o3fe	35	94	3	2,000	St.Cu	8	A.St	2	*
London (M.O. at 1H.)	1024.6	+1	*	*	*	36	*	*	*	*	*	*	*	*	1025.8	0	-	0	omf	31	94	2	3,000	St	10	-	-	*
Croydon	1025.8	0	SSW	2	bzfw	36	97	4	-	-	-	-	-	*	1025.5	0	SW	2	o1f	39	92	6	3,000	St	8	A.St	2	*

Margin annotations (red): Cranwell "ASt/-"; London "nil/-".

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12.	Weather	Barometer at M.S.L. mb.	‡ Change in 8 hours.	Temp. °F.	Temperature Change in 24 hours.	Wind Direc.	Wind Force 0-12.	Direc. of Upper Cloud.	Weather	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning.	Weather Afternoon	Weather Night.	Sunshine Hours.
	18H. G.M.T. of 6TH					**7H. G.M.T. of 7TH**									**24 HOURS ENDED 7H. 7TH**						**6TH**
Lerwick	1009.6	51	SSW	4	om	1009.5	0	51	+4	SW	3	SW	cm	1	4	51	46	omr	omr	bc.omp	*
Stornoway	1012.0	51	WSW	3	op	1009.8	-1	52	+2	WSW	4	-	c	3	4	52	50	op	op	op.o	0.0
Castlebay (Barra Is)	1014.6	52	WSW	4	op	1012.4	-1	54	+2	SSW	5	-	o	4	1	54	50	op	op	op.c.o	0.0
Malin Head	1017.5	52	SW	3	o	1015.4	0	51	+1	SSW	3	-	o	3	2	53	49	o	o	omd	0.0
Blacksod Point	1017.9	53	SW	3	om	1015.1	-3	54	+2	SW	2	-	omp	2	2	56	50	bcp	bc	omp	*
Roche's Point	1024.0	51	WSW	2	o	1024.0	0	51	+6	W	1	-	o	2	0.3	54	44	b.bc	bc.o.	o.bw.o	*
Birr Castle	1022.1	50	SW	1	c	1020.6	*	49	+2	SSW	1	-	r	*	1	53	46	c.o	c.o.c	or	1.1
Donaghadee	1019.6	50	W	1	cm	1019.1	0	49	+1	WSW	1	-	cm	1	1	63	48	bcm	cm	omp	*
Liverpool (Bidston)	1021.4	50	WSW	2	o	1022.1	0	48	+4	WSW	1	W	c	2	-	54	41	c	o	od.c	2.5
Holyhead	1021.8	52	WSW	3	og	1021.6	0	52	+1	WSW	4	-	og	2	Trace	56	49	c	cpd.og.	c.bc.o	1.4
Pembroke (St. Ann's Head)	1023.9	52	WSW	1	cv	1024.1	0	52	+4	SW	3	-	ov	2	-	55	43	bcv.	bcv.	cv.o4	4.2
Scilly (St. Mary's)	1024.6	50	-	0	b	1024.8	0	56	+1	WNW	1	W	bc	2	1	66	50	bv	bv	bv.b.bp	8.4
Jersey (St. Aubin)	1022.9	49	NE	3	b	1025.4	0	39	-8	NE	1	-	b	1	-	55	38	om.b	b	bw	5.5
Portland Bill	1023.6	49	N	2	bc	1023.6	0	49	+8	N	2	-	o	3	-	52	40	cm.bc.	bc	b.bc.o	*
Dungeness	1023.2	43	NE	2	b	1024.8	+1	35	-2	NNE	1	NE	bc	2	-	51	34	c.bc.	bc	bc.bcx	*
Wick	1011.3	50	WSW	2	o	1010.9	-1	48	+1	SW	2	-	bo	2	1	53	47	c	o	op.c.pc	*
Nairn	1013.6	51	W	1	c	1012.2	*	50	0	-	0	-	bc	1	-	54	46	cg	cg	cg.w	0.0
Leith	1016.4	51	SW	2	o	1016.7	0	50	+2	SW	2	-	o	1	-	52	49	o	og.o	o.cu.o	*
Tynemouth	1020.4	50	WSW	1	cm	1019.4	0	50	+10	WSW	1	-	om	1	-	53	40	f	cm	bcmpm	*
Spurn Head	1021.5	49	W	3	om	1021.6	0	47	+4	WSW	3	-	cgm	2	-	51	34	bc	c.om	om.fom	*
Yarmouth (Gorleston)	1023.2	44	WSW	1	b	1023.8	0	39	-1	WSW	3	-	bm	[illegible]	-	52	36	bc	bcm.bm	bm.bc.cm	6.0
Clacton-on-Sea	1023.9	43	WNW	1	m	1024.4	0	39	+3	W	2	NW	bcm	1	-	52	36	bcm.z.	bc.z.m	bcm	6.0
Nottingham	1022.8	45	SW	1	c	1023.3	*	43	+14	SW	1	SW	cm	*	-	57	28	fm.b	bc.cm	c.o	0.5

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.3.

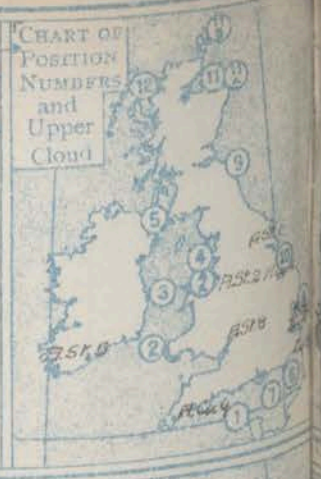
M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 7.11.1920.

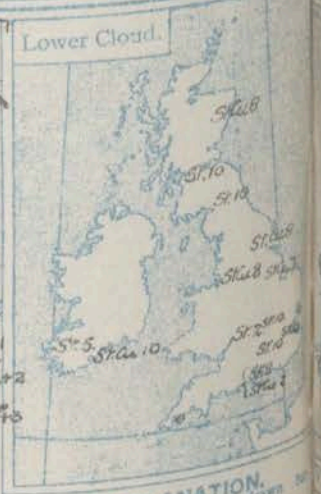
Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fair to dull, mist or fog.	Poor	Smooth
2. E. England	Fine to cloudy, misty.	"	V. Smooth
3. E. Midlands	Cloudy or dull, mist in (North.	Indiff.	-
4. W. Midlands	Mainly dull.	Fair	-
5. S.W. England	Fair to dull.	Good	Smooth
6. South Wales	Dull.	V. Good	"
7. North Wales	Dull.	Good	"
8. N.W. England	Cloudy or dull, local mist.	Poor	"
9. N. Midlands	Cloudy or dull.	"	-
10. N.E. England	Cloudy, misty.	Fair	Smooth
11. E. Scotland	Fair to dull.	"	"
12. S.W. Scotland	Dull, misty.	Indiff.	"
13. Isle of Man	Cloudy or dull, misty.	"	"
14. N. & N.W. Scotland	Fair to dull.	Fair	"
15. Hebrides	Dull.	"	Mod.
16. Orkneys and Shetlands	Cloudy, misty.	Indiff.	V. Smooth
17. N.W. Ireland	Dull, misty.	V. Poor	Smooth
18. N.E. Ireland	Cloudy or dull, local mist.	Fair	"
19. S.E. Ireland	Dull; local rain.	"	"
20. S.W. Ireland	Dull.	Good	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F.	Air °F
12	6th	0451	58	54
4A	6th	0440	53	52
5	6th	1006	54	52
3	6th	0915	55	56
4A	7th	0530	49	48
8	7th	0500	53	51
7	7th	0450	54	52
3	7th	0915	55	56



Barometric change from 4 h. to 7 a. (half millibars).



EXPLANATION.

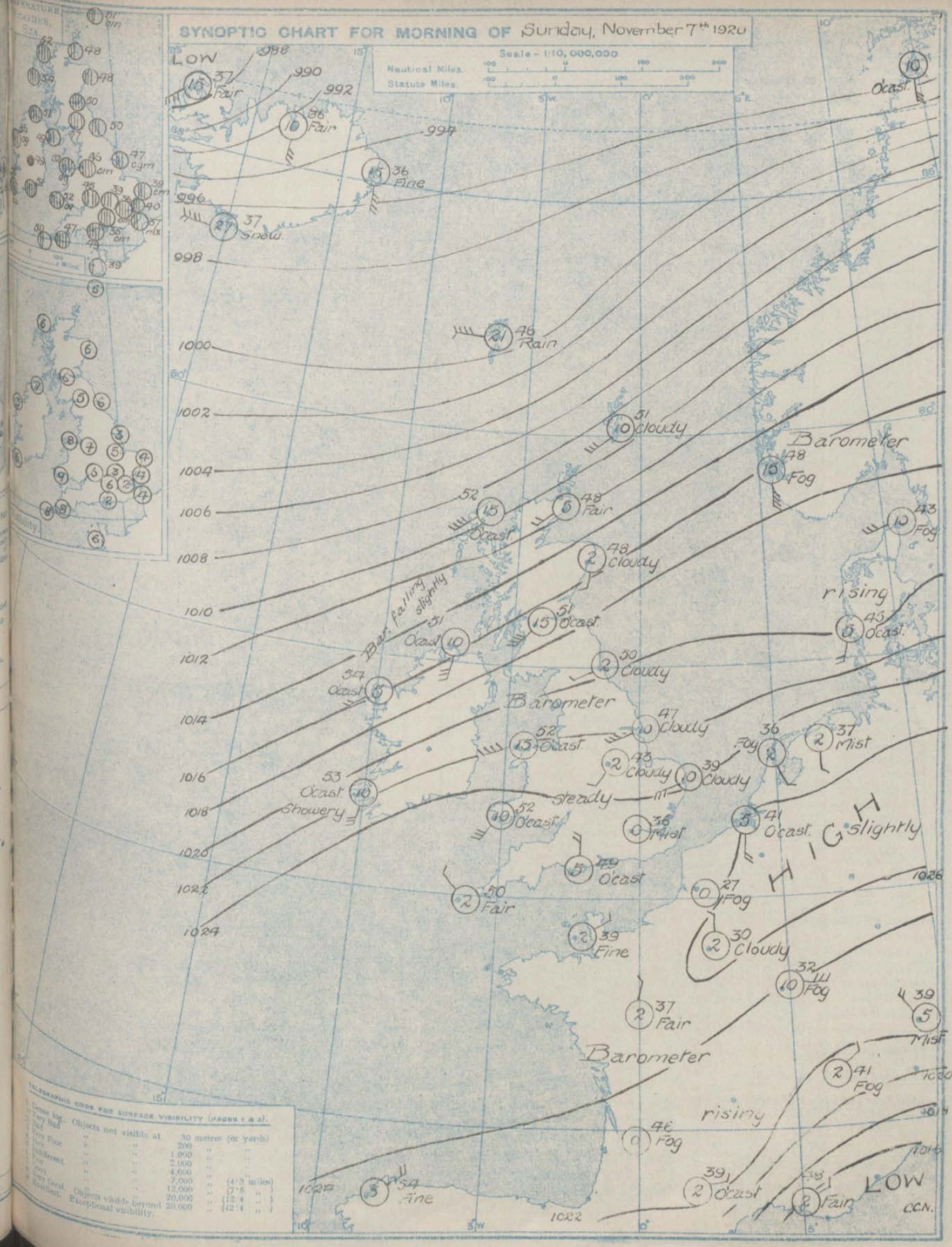
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0–12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. R thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h.

The anticyclone has receded slowly to the Southward and is now centred over the English Channel region. It appears probable that the South-Westerly wind will extend to all districts with a good deal of cloud and a higher temperature than of late. Some rain or showers may be expected in the Western and Northern Districts.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Sunday, 7th November, 1920.	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands 5. S.W. England	Wind between W. and S.W., light to moderate; cloudy or overcast, fairer intervals, mist at times locally; visibility indifferent to fair; temperature rising.	South-Westerly winds, weather becoming less stable generally. -----
6. South Wales 7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England 11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N. & N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind between S. and S.W., light or moderate; much cloud generally, some local rain or showers, mist at times in places, visibility mainly fair; moderate or rather high temperature.	

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 0900. G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Sunday, November 7th 1920
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
Low
988
990
992
994
996
998
1000
1002
1004
1006
1008
1010
1012
1014
1016
1018
1020
1022
1024
1026
1028
1030
Barometer
rising
Bar. falling slightly
steady
slightly
HIGH
LOW
Showery
Fair
Fine
Snow
Rain
Cloudy
Ocast.
Fog
Mist
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
Dense fog. Objects not visible at 50 metres (or yards)
Very Bad " " 200 " "
Very Poor " " 1,000 " "
Indifferent " " 2,000 " "
Poor " " 4,000 " "
Moderate " " 7,000 " (4·3 miles)
Very Good " " 12,000 " (7·5 ")
Excellent. Objects visible beyond 20,000 " (12·4 ")
Exceptional visibility. 20,000 " (12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 312. {Sunday, 7TH NOVEMBER

WEATHER, TEMPERATURE RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 6TH

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 5th-6th	Rainfall. Day. 9h-18h. 6th	Sunshine. Sunrise to Sunset. 6th
Scotland.	Oban	o.cp	o	54	39	3	1	0.0
	Banff	od	o	53	40	1	0.3	0.0
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	c.o	c.op	49	36	-	-	0.1
	Scarborough	b	b	52	37	-	-	1.9
	Skegness							
England, E.	Lowestoft							
	Felixstowe	bm	bm	51	35	-	-	5.9
	Southend-on-Sea	b	b.bc	51	35	-	-	5.2
England, S.E.	Tunbridge Wells	om.b.	bm	52	35	-	-	4.5
	Margate	b	b.bc	50	45	-	-	5.7
	Ramsgate	*	*	50	41	-	-	4.9
	Folkestone	c	c	52	39	-	-	1.8
	Hastings	b.bc	c.bc.b.	53	39	Trace	-	6.0
	Eastbourne	*	*	53	39	-	-	6.8
	Brighton							
	Worthing	b	b	50	37	-	-	5.4
	Littlehampton							
	Portsmouth (S'hsea)	*	*	50	35	-	-	6.2
	Bournemouth	*	*					
	Ventnor (I. of W.)	*	*	50	36	-	-	7.5

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 5th-6th	Rainfall. Day. 9h-18h. 6th	Sunshine. Sunrise to Sunset. 6th
England, N.W.	Douglas (I.O.M.)							
	Blackpool	op	op	51	34	1	-	0.0
	Southport	c.o	oc.o	52	36	0.2	-	0.4
Midlands.	Buxton							
	Leamington Spa	of	bc	49	28	-	-	2.5
	Malvern	b.bc	bc2	52	36	-	-	7.3
	Bath	m.b	bm	52	31	-	-	3.5
Wales.	Rhyl							
	Colwyn Bay							
	Llandudno	*	*	55	37	-	-	3.1
	Aberystwyth	c.bc	co	52	36	-	-	1.3
	Tenby							
	Swansea							
England, S.W.	Weymouth	b	b	55	37	-	-	7.4
	Teignmouth							
	Torquay							
	Paignton	b	bm	55	34	-	-	7.1
	Penzance	b bc	b	57	41	-	-	8.3
	Newquay							
	Bude	b	b	55	32	-	-	8.1
	Ilfracombe	bc.b.	b.bc.b	55	38	-	-	6.4
	Weston-s-Mare							

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 6th	Weather. 13h-18h. 6th	Weather. 18h-6th 7th	Weather. 18-7h 7th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
								mm.	mm.	
Renfrew	opd.	opdo	[illegible]	[illegible]	53	48	47	-	3.1	0.0
Eskdalemuir	2fe 02f	02f	c.o.o	02f 2fe	49	38	32	0.1	0.2	0.0
Valencia (Cahire'a)	bc.c.	bcc'o p.	o A	Bfo	50	49	46	-	1	1.5
Baldonnel	c.o v	c.o 14	o 2f	o 1f. 4f	54	48	45	-	-	2.4
Manchester (Alex. Pk)	o3f.bcco3f	hd. o3f.hd.mf	o2f	33fe	51	37	26	Trace	Trace	.4
Ross on Wye	3f.b.bc.b	c.bcc.o	o. bc.c.o.co	b.ow	54	37	39	-	-	6.4
Falmouth	b.bc3f.bbc	b.bc	b. bcw	b. bc.o4	56	39	32	-	-	7.8
Calshot (Hants)	bo2f	b.bc 2f	b. 4.5f	bo.5.ow5f	50	38	28	-	-	6.0
Lympne (Folkestone)	o3f bc.co3f	c.o3f bcc.o4f	b. bc/fw	b.bc/fwx.	52	37	25	Trace	-	4.4
Aberdeen	1o 3fe	3fc	3fe. 3fe	2fc.4fe	52	42	42	1	-	0.0
Howden	o. 03f	o1p.	o2f. o1f	o2f o3f	50	28	26	-	-	0.0
Cranwell (Lincs)	b.bc 2f	c.o	o2fw	bc.c.o	51	32	31	-	-	5.7
Felixstowe	2f bcc	bc.c 1f	3f. 4-5f	b 3f	52	35	[illegible]	-	-	5.7
Shoeburyness	[illegible]	b.bc 1fe	2f. [illegible]	4-5f	52	30	25	-	-	6.8
Benson	b	o6-8f	o6-8f	o	42	29	27	-	-	*
S. Farnborough	oa 1f bwo2	b.bc 4f	b.bc 4-5f	b. 3c. o3f	48	28	26	-	Trace	2.5
London (Kew Obsy.)	x.c8f 3fw	w3f.b.bco	bw o6-8f	o6-8f. o4-5f	47	31	28	Trace	-	2.6
Croydon	c.o bcs.o o3f o4-5f 3f	c.o bc.o3f bw	b3f. 2fw	2f. 1f. x. c.o	52	35	34	-	Trace	4

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r,r, = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·6
12	Above 75	32·6 or above

SYMBOLS—

Aurora ☆ Solar halo ⊕
Rime ⚌ Lunar halo ◎
Glazed frost ∽ Solar corona ◎
Glazed roads ⚒ Lunar corona ◎

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 7th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	f	f	xf. o.b.o	41	33	30	-	0.1	88	91
City (Bunhill Row)	*	*	*	*	*	*	*		*	*
Westminster (St. James's Park)	*	*	f	40	33	28	-		100	95
[illegible]	*	*	*	*	*	*	*		*	*
Camden Sq. (British Rainfall)	f	f. om	*	40	33	27	-	*	100	92
Kensington Palace	of	of. of	*	45	30	27	-	*	98 (18h)	96
Hampstead Observatory	*	*	*						*	

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total ..... Joules.

Milliwatts.

Average Rate.

Maximum Rate.

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

7th AND 8th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.0	11.37	4.14
	7.2	11.37	4.12
Greenwich	7.5	11.44	4.23
	7.7	11.44	4.21
Wick	7.44	11.56	4.8
	7.46	11.56	4.6
Valencia	7.47	12.25	5.3
	7.49	h: 25	5.1

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from.....h.....m.
to.....h.....m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris			
δ Ursae Minoris			

NOTES ON THE WEATHER OF YESTERDAY.

Temperature rose to about 55° at some stations on the South-Western and Western coasts, but only touched 39° at Croydon. Frost occurred at night in the South-East of England. Bright sunshine records were good over a large portion of England except where fog prevailed, but in Ireland and Scotland the day was mainly overcast. Some rain fell in the extreme North and West.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B. 21,536 MONDAY 8TH NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	13H. G.M.T. of 7TH														**18H. G.M.T. of 7TH**													
Renfrew	1018.0	0	SSW	5	od₀	52	85	6	1250	St	10	-	-		1018.9	+2	SSW	4	od	52	92	5	1250	Nb	10	-	-	*
Eskdalemuir	1019.4	0	SW	5	o	50	85	6	1250	St	10	-	-	*	1020.3	+1	SW	5	omc	49	97	5	1250	St	10	-	-	*
Valencia (Cahirc'n)	1022.7	0	SW	4	o	54	92	7	750	St	7	A.St	1	4	1023.5	+2	SSW	3	o	54	92	7	1250	St	10	-	-	4
Baldonnel	1021.4	0	SW	5	oq	53	85	9	2000	St	8	A.St	2	*	1022.3	0	SW	5	oq	53	92	8	1250	St	4	A.St	6	*
Manchester (Alex. Pk)	1023.1	0	SW	3	o2f	52	85	6	4200	St.Cu	6	A.Cu	3	*	1024.0	+2	SSW	2	o2f	50	92	4	4200	St.Cu	10	-	-	*
Ross on Wye	1024.5	+1	WSW	3	o1f	53	85	6	2000	St	1	A.St	9	*	1025.3	+1	SW	2	o	50	92	6	-	-	-	A.St	9	*
Falmouth	1026.5	0	WSW	1	cr₀	53	85	8	-	Cu.N	7	-	-	*	1027.1	+1	WSW	1	c	51	85	5	-	St	7	-	-	*
Calshot (Hants) *	[illegible]	0	SW	1	o2f	51	85	5	4200	St.Cu	10	-	-	0	1027.4	+2	-	0	o1f	50	97	6	4200	St	10	-	-	0
Lympne (Folkestone)	1026.0	0	SW	2	o1f	50	75	5	-	-	-	A.Cu	9	*	1027.3	+1	-	0	o2f	46	92	4	3000	St	10	-	-	*
Aberdeen	1014.8	-1	SSW	3	b1f	56	75	7	4200	St.Cu	1	-	-	2	1015.1	+1	SSW	3	c1fe	52	85	6	4200	St.Cu	7	-	-	2
Howden	1022.0	0	WSW	3	o	54	85	7	5700	St.Cu	9	-	-		1023.9	+2	SW	4	b	46	92	5	3000	St.Cu	4	-	-	*
Cranwell (Lincs)	1024.4	+1	WSW	3	o	52	85	5	4200	St	6	Ci.Cu	3	*	1025.3	+3	SW	3	o2f	49	92	5	3000	St	4	A.St	6	*
Felixstowe	1025.9	-1	SSW	3	o2f	49	92	5	5700	St.Cu	10	-	-	*	1026.9	+1	W	1	o2f	47	97	4	4200	St	10	-	-	1
Shoeburyness	1025.9	+1	SW	2	c1fe	50	68	6	-	-	-	A.Cu	8	*	1026.5	+1	-	0	o	48	75	5	2500	St	10	-	-	*
Benson	1025.2	+1	SE	1	o	49	85	6	-	St	10	-	-	*	1026.3	+1	W	1	o	49	92	5	-	St	10	-	-	*
S. Farnborough	1025.6	0	WSW	2	o	51	85	7	2000	St.Cu	10	-	-	*	1026.5	+1	WSW	1	o	47	92	7	2000	St.Cu	10	-	-	*
London (Kew Obsy.)	1025.8	-1	W	2	o3f	49	85	3	3000	St.Cu	9	-	-	*	1026.7	+2	WSW	1	o2j	48	92	4	2000	St	8	A.St	2	*
Croydon	1025.9	0	SW	2	o2f	52	75	4	4200	St.Cu	7	A.Cu	3	*	1026.9	+2	SW	2	o2f	47	95	5	2000	St.Cu	10	-	-	*
	1H. G.M.T. of 8TH														**7H. G.M.T. of 8TH**													
Renfrew															1022.9	+2	SSW	4	od2f	53	97	4	1250	St.	~~10~~	~~A.St~~	~~5~~	*
Eskdalemuir	1022.6	+2	SSW	4	o2fe	51	97	4	.	St	10	.	.	*	1024.0	+2	SSW	3	or.23f	50	97	5	750	St.	10	.	.	*
Valencia (Cahirc'n)	1024.5	0	SSW	5	ompq	53	.	*	*	*	*	*	*	6	1025.5	+2	S	3	o	55	97	6	750	St	10	-	-	o
Baldonnel	1025.0	+2	SW	3	o2f	54	92	4	750	St.	10	.	.	*	1025.5	+1	SW	4	or	52	92	7	750	St	10	-	-	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1027.0	+2	SSW	2	o2f	50	92	4	3.000	St.Cu	10	.	.	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1028.6	+2	-	0	c5few	39	97	1	<500	St.	8	-	.	*
Falmouth	1028.5	+1	W	2	c	52	85	6	-	St	7	.	.	.	1029.7	+2	-	0	o	50	92	8	-	St	9	.	.	*
Calshot (Hants)	1028.3	+1	-	0	o3f	48	97	3	2000	St	10	-	.	0	1030.3	+2	-	0	o3f	46	97	2	1250	St	10	.	.	0
Lympne (Folkestone)	1029.1	+1	-	0	o2f	46	92	5	3.000	St.Cu	10	.	.	*	1031.1	+4	S	3	o1f	47	92	6	2000	St	10	.	.	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1021.3	+2	W	1	c3fe	48	97	2	3.000	St.Cu	8	.	.	2
Howden	1025.2	+1	-	0	cm	45	97	6	4200	St	7	.	.	*	1026.7	+1	-	0	o4fe	39	97	1	<500	St	10	.	.	*
Cranwell (Lincs)	1026.5	0	WSW	3	bc	42	92	5	3000	St.	4	.	.	*	1027.8	+2	WSW	3	bc	46	97	8	2000	St	4	Ci.Cu	2	*
Felixstowe	1028.6	+2	W	1	b1f	45	97	6	.	.	.	.	.	1	1030.2	+2	WNW	1	o6f	39	97	1	<500	St	10	.	.	0
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1029.9	+2	-	0	o8fw	35	92	0	<500	St	10	.	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1028.8	+2	-	0	4fe	46	97	2	-	-	-	.	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1024.9	+3	NW	1	c4f	41	97	2	750	St.	7	-	.	*
London (M.O. at 1H.)	1028.1	+1	*	*	*	44	*	*	*	*	*	*	*	*	1030.4	+3	-	0	o7fw	39	97	0	<500	St	10	.	-	*
Croydon	1028.7	+1	S	2	b2fw	44	97	5	.	-	.	A.St	2	*	1030.2	+3	S	2	b2fo	41	97	4	2000	St	2	A.St	1	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours	Temp. °F.	Temp. Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather	Sea 0-9	† Rainfall mm.	Max. °F.	Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
	18H. G.M.T. of 7TH					**7H. G.M.T. of 8TH**									**24 HOURS ENDED 7H. 8TH**						**7TH**
Lerwick	1008.4	53	SW	6	omrq	1020.7	+3	43	-8	-	0	.	bc	0	4	53	42	omr	omrq	bc	.1
Stornoway	1012.5	53	WSW	4	c	1018.4	0	49	-3	-	0	.	o	0	2	56	48	opq	oc	c.o	0.0
Castlebay (Barrals)	1015.4	54	WSW	4	o	1019.1	0	54	0	SSW	4	.	r	4	2	54	52	or	ro	or.or	0.0
Malin Head	1016.6	55	SW	1	o													c	o		
Blacksod Point	1018.8	54	SW	2	omr	1018.3	+1	56	+2	SW	2	-	omr	3	6	56	50	omd	omr	omdomr	*
Roche's Point	1024.9	54	W	2	o	1027.0	+1	55	+4	SW	4	-	o	4	0.3	56	51	o	poco	o	*
Birr Castle	1022.3	54	S	1	r	1024.9	.	53	+4	S	1	-	o	*	3	54	49	od.c.o	odr	op.o	0.1
Donaghadee	1019.6	54	WSW	2	o	1023.4	+2	52	+3	SW	2	-	omp	1	0.4	54	48	om	om	omp	*
Liverpool (Bidston)	1023.1	51	SW	2	o	1026.8	+2	52	+4	SW	1	W	o	2	-	54	48	cop	oc	o	0.0
Holyhead	1023.0	54	SW	4	og	1026.2	+1	54	+2	SW	4	.	op	3	trace	55	51	oco	oco	op.doe	0.0
Pembroke (St. Ann's Head)	1025.5	54	WSW	3	bcv	1028.7	+2	54	+2	SW	3	-	ov	3	.	56	52	ov	ov	bbv.cv	0.2
Scilly (St. Mary's)	1026.4	53	-	0	c	1029.5	+1	53	+3	WSW	1	-	o	2	-	57	53	bcv	bcc	o.c.o	2.2
Jersey (St. Aubin)	1027.0	48	NW	1	o	1029.6	+1	50	+11	ESE	2	-	o	1	1	55	39	bo	obom	omop.o	2.0
Portland Bill	1025.4	54	W	2	c	1028.4	+1	52	+3	-	0	-	c	2	-	57	48	oc	c	c.o.p	*
Dungeness	1026.4	51	SSW	2	bc	1029.5	+2	51	+16	SW	3	SW	c	3	-	54	34	cmc	cbc	c.d.c	*
Wick	1012.5	53	SW	2	bc	1019.3	+2	50	+2	SE	1	-	c	1	-	55	45	bcc	bc	bc.c	*
Nairn	1013.6	54	W	3	c	1019.7	.	52	+2	-	0	-	og	0	-	57	49	bcq	q.bc.c	cq	4.7
Leith	1017.1	53	SW	3	c	1022.3	+1	54	+4	SW	1	.	o	1	0.1	56	50	oc.bc	c.bc.c	c.bcp.o	*
Tynemouth	1020.6	51	WSW	2	bcm	1024.3	+2	53	+3	W	1	-	cm	0	trace	55	50	bcm	bcm	omp.bcm	*
Spurn Head	1023.9	50	SW	3	ogm	1026.4	+1	46	-1	SW	3	-	bcm.w	2	.	54	43	cm	cm	bm	*
Yarmouth (Gorleston)	1025.1	46	WSW	2	b	1028.1	+2	38	-1	W	3	-	fe	1	-	53	38	cmbcm	bm	bf.bfe	0.6
Clacton-on-Sea	1026.4	49	SSW	2	m	1030.6	+3	43	+4	W	1	W	cm	1	-	50	39	bcom	ogm	o.b.bom	0.3
Nottingham	1024.9	50	SW	1	c	1028.0	.	44	+1	SW	1	SW	cm	*	-	54	41	com	om	bc.c	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3. † See footnote p. 4.

M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 8.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, foggy.	V.Poor	V.Smooth
2. E. England	Foggy.	V.Bad	"
3. E. Midlands	Fair, some fog.	V.Poor	-
4. W. Midlands	Dull, foggy.	"	-
5. S.W. England	Dull.	V.Good	Smooth
6. South Wales	Dull.	Excellent	Slight
7. North Wales	Dull, slight local rain, drizzle	Good	"
8. N.W. England	Dull, local mist.	Indiff.	Smooth
9. N. Midlands	Dull, mist or fog.	V.Poor	-
10. N.E. England	Fair, misty	Indiff.	Calm.
11. E. Scotland	Dull.	Poor	V.Smooth
12. S.W. Scotland	Slight rain, some fog.	Indiff.	"
13. Isle of Man	Dull.	"	Smooth
14. N.&N.W. Scotland	Dull.	"	"
15. Hebrides	Dull, local rain.	Fair	Moderate
16. Orkneys and Shetlands	Fair.	Good	Calm
17. N.W. Ireland	Some rain, misty.	V.Poor	Slight
18. N.E. Ireland	Dull, showery, misty.	"	V.Smooth
19. S.E. Ireland	Dull, rain.	Good	Slight
20. S.W. Ireland	Dull.	Fair	Mod.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. thunder. thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

Pressure is likely to remain high over the Continent and over England and Eastern Scotland fair weather with mist or fog will continue. A fresh fall of the barometer will probably begin to the West of the British Isles and over the Western half of the Kingdom, mild and unsettled weather is probable.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Monday 8th November, 1920
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands 5. S.W. England 6. South Wales	Light S or SW breezes; fair, mist or fog; moderate temperature.
7. North Wales 8. N.W. England	Moderate SW wind; fair to dull, some showers; visibility indifferent to fair; mild.
9. N. Midlands 10. N.E. England 11. E. Scotland	As for 1 - 6
12. S.W. Scotland 13. Isle of Man 14. N.&N.W. Scotland 15. Hebrides	As for 7 - 8
16. Orkneys and Shetlands	As for 1 - 6
17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Moderate to fres S or SW wind ; dull, some rain; visibility indifferent to fair; mild.

Further Outlook.

Fair to fogey for more than 24 hours in East and South East England; further outlook uncertain elsewhere.

E.V.N.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued 10.10

G. C. SIMPSON, F.R.S., Director.

SYNOPTIC CHART FOR MORNING OF MONDAY, 8TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
HIGH
Barometer rising
Fine
Cloudy
Fair
O'cast
Mist
Rain
Showers
Fog
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
Fogs for Very Bad Bad Very Poor Poor Indifferent Fair Good Very Good Excellent.
Objects not visible at 50 metres (or yards)
" " 200 " "
" " 1,000 " "
" " 2,000 " "
" " 4,000 " "
" " 7,000 " (4·3 miles)
" " 12,000 " (7·5 "
Objects visible beyond 20,000 " (12·4 "
Exceptional visibility. 20,000 " (12·4 "

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 313.

MONDAY 8TH Nov.r 1920

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR Y.TH

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 6h-7h	Rainfall. Day. 9h-18h. 7h.	Sunshine. Sunrise to Sunset. 7h
Scotland.	Oban							
	Banff	b	bbc	60	43	0.1	-	5.7
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	o	o	51	46	-	-	0.0
	Scarborough	*	*	54	47	-	-	0.0
	Skegness							
England, E.	Lowestoft							
	Felixstowe	of	om	50	37	-	-	0.1
	Southend-on-Sea	oc	o	53	37	-	-	0.8
England, S.E.	Tunbridge Wells	omoc	co	53	32	-	-	0.8
	Margate	c	c	55	40	-	-	1.7
	Ramsgate	*	*	53	37	-	-	4.2
	Folkestone	oc	bc.c	53	41	-	-	1.5
	Hastings	cbc	bbc o	55	45	-	-	3.6
	Eastbourne	o	bc	54	35	-	-	2.5
	Brighton	ofc	co	52	36	-	-	0.7
	Worthing	bcc	bcc	51	35	-	-	1.1
	Littlehampton							
	Portsmouth (S'thsea)	-	-	53	35	-	-	0.2
	Bournemouth	*	*	53	34	-	-	0.8
	Ventnor (I. of W.)	*	*					

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 6h-7h	Rainfall. Day. 9h-18h. 7h.	Sunshine. Sunrise to Sunset. 7h
England, N.W.	Douglas (I.O.M.)							0.0
	Blackpool	-	-	53	44	-	-	0.0
	Southport	o	oco bc	53	47	0.1	-	
	Morecambe							
Midlands.	Buxton							0.0
	Leamington Spa	o	o	54	30	-	-	
	Malvern							0.3
	Bath	oc bc	co	54	36	-	-	0.2
Wales.	Rhyl	c	cbc	55	45	-	-	
	Colwyn Bay							0.7
	Llandudno	*	*	55	49	0.1	-	
	Aberystwyth							
	Tenby							
	Swansea							0.3
England, S.W.	Weymouth	omc	co	57	37	-	-	
	Teignmouth							0.4
	Torquay	c	c	56	42	-	-	0.8
	Paignton	b.bc	cmbc.bc	57	36	-	-	0.3
	Penzance	o	c	56	44	-	-	0.2
	Newquay	opd.bc	opc	56	40	1	1	
	Bude							0.5
	Ilfracombe	ocp	op	54	45	1	1	0.5
	Weston-s-Mare	beco	crc	55	43	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-12h. 7h.	Weather. 12h-18h. 7h.	Weather. 18h 7h-1h. 8h.	Weather. 1h-7h. 8h.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
Renfrew	o1f pd.	o1f pd.op	o2f pd.	o2f. PD	54	51	50	mm.	mm. 0.4	0.3
Eskdalemuir	2fo o	o2fc	o2f. pd.	4.5f. r.	51	46	48	trace	1	0.0
Valencia (Cahire'n)	op.	op.	o	dd. pd	55	52	62	1	1	0.0
Baldonnel	ov	oq	o2f	pdo2f	56	48	50	-	0.1	0.3
Manchester (Alex Pk)	o2fe o3f	o2f	co.o2f	o2f	53	45	37	-	-	*
Ross on Wye	oco	oq	cobcobbcw	co3fe	54	38	36	-	0.1	1.5
Falmouth	o bcc p.	cobcc.co	bc.c	c.o	56	46	43	trace	-	0.6
Calshot (Hants)	o3f o2f	o.1f	o1f. o3f	o1f. o3f	53	39	41	-	-	0.0
Lympne (Folkestone)	bcc co.o1f	cobcc co2f	o.o2f	o2f. o1f	50	38	*	-	-	4.4
Aberdeen	1fe 1f	1f. 1fe	1fe. 2fe	2fe. 3fe	55	49	37	-	-	5.7
Howden	o2f o	bcc 2	bcc 3fe.	bcc 4.5fe	55	39	34	-	-	0.7
Cranwell (Lincs)	o2f o	po.bcc	bc.cw	b2fe	53	45	40	0.1	0.1	0.0
Felixstowe	bo2f	o2f	o2f. b.bc	b.o 4.5f	50	36	*	-	-	0.1
Shoeburyness	2.2fe	co.o1f	3fe. 4.5fe	6.8fe w	53	33	30	-	-	1.8
Benson	o	o	b.bc.c	bec 4.5fe	51	34	38	-	-	*
S. Farnborough	o3f pd. o	o	o1f. o3f	co 4.5f	52	34	36	-	trace	0.0
London (Kew Obsy.)	3f co	o3f pd. o2f	o2f	6.8f w	50	36	32	trace	-	0.2
Croydon	co1f o2f	o2f	co bcc bbc 2f	bbcw 2f	52	40	*	-	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 8·0
5	19-24	8·1-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—

Aurora ☆ Solar halo ⊕
Rime ⌅ Lunar halo ◎
Glazed frost ⌇ Solar corona ◎
Glazed roads ⌇ Lunar corona ◎

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity %. 15 h. G.M.T.	Humidity %. 9 h. G.M.T.
	24 HOURS ENDED 9H G.M.T. 8.							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	om	om	om. b.o	52	36	29	-	0.1	82	96
City (Bunhill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	*	*	f	51	35	29	-	0.0	82	95
Camden Sq. (British Rainfall)	-	-	*	50	36	30	-	*	-	100
Kensington Palace	of	of	*	52	36	29	-	*	89 (18h)	99
Hampstead Observatory	*	*	*	49	40	35		0.0	*	

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total ? Joules.

Milliwatts.

Average Rate. ?

Maximum Rate. ?

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

8th & 9th Nov.r 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.2 / 7.4	11.37 / 11.37	4.0 / 4.10
Greenwich	7.7 / 7.9	11.44 / 11.44	4.21 / 4.19
Wick	7.46 / 7.49	11.56 / 11.52	4.4 / 4.3
Valencia	7.49 / 7.51	12.26 / 12.23	5.1 / 4.59

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from Y.TH 17h 30m m. to 8th 6h 0m m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	12 · 30	9. 30	76
δ Ursae Minoris	12 · 30	7. 22	59

NOTES ON THE WEATHER OF YESTERDAY.

Rain fell in Ireland, Western Scotland and the Shetlands 6mm at Blacksod Point, and 4mm at Lerwick being the largest amounts. There were a few hours bright sunshine on the East Coast, but on the whole records were very poor. The maximum temperature was everywhere between 50° and 60°. Much fog formed over England at night.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B2/1337 TUESDAY, 9TH NOVEMBER ... 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	‖ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather.	Temp. °F.	Humidity. %	‖ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 8TH														18H. G.M.T. OF 8TH													
Renfrew	1023.4	0	SSW	5	0d	54	92	4	750	Nb	10	-	-	*	1023.6	+2	SSW	4	0d	55	97	5	750	Nb	10	-	-	*
Eskdalemuir ...	1024.9	-1	SSW	5	0d	52	92	6	1250	St	10	-	-	*	1025.5	+1	SSW	4	0d	51	97	3	-	St	10	-	-	*
Valencia (Cahirc'n)	1027.7	+2	S	4	0d	55	97	5	750	St	10	-	-	4	1028.7	+2	S	3	0f23f	55	97	4	750	St	7	-	-	04
Baldonnel ...	1026.5	0	SW	4	0	57	85	8	2.000	St	10	-	-	*	1027.8	+2	SW	4	0f23f	55	92	5	1250	St	8	aSt	2	*
MANCHESTER (ALEX. PK)	1028.5	+1	SSW	3	02f	56	75	5	3.000	StCu	10	-	-	*	1029.3	+2	SSW	3	02f	54	75	4	3.000	StCu	10	-	-	*
Ross on Wye ...	1030.0	+1	W	2	01f	53	92	5	2.000	St	10	-	-	*	1031.0	+1	SW	3	0	52	85	5	1250	St	10	-	-	*
Falmouth	1031.4	+1	WSW	1	0	56	75	8	-	StCu	7	aSt	2	*	1032.5	+2	-	0	0	52	92	5	-	StCu	10	-	-	*
Calshot (Hants) * ...	1031.8	+2	-	0	02f	53	85	5	2.000	StCu	10	-	-	0	1032.7	+1	-	0	02f	52	92	5	4.200	StCu	10	-	-	0
Lympne (Folkestone)	1031.7	+1	SSW	3	c1f	53	85	6	1.250	StCu	4	aCu	4	*	1033.3	+1	SSW	1	01f	47	92	6	1250	St	10	-	-	*
Aberdeen	1021.7	-2	SSW	2	02fe	54	97	4	1250	St	10	-	-	2	1020.6	-1	SSW	2	02fe	54	92	4	1250	St	10	-	-	2
Howden	1028.2	0	SSW	2	0fg.	56	92	3	3.000	StCu	9	-	-	*	1029.0	+1	SSW	1	0do	52	92	4	4200	St	10	-	-	*
Cranwell (Lincs) ...	1029.5	+1	WSW	3	bc	57	85	5	5.700	Cu	2	Ci	4	*	1030.2	+1	SSW	3	02f	51	75	4	4.200	StCu	9	-	-	*
Felixstowe ...	1031.7	0	-	0	b2f	50	97	4	-	-	-	-	-	0	1032.5	+2	-	0	06fk	46	97	1	<500	St	10	-	-	0
Shoeburyness ...	1031.1	0	-	0	b3f	58	75	4	-	-	-	-	-	*	1032.5	+2	-	0	04f	48	92	3	<500	St	10	-	-	*
Benson	1031.3	+1	-	0	0	51	92	6	-	St	10	-	-	*	1031.8	+1	-	0	0	49	92	5	-	St	10	-	-	*
S. Farnborough	1031.1	0	W	2	0	56	75	7	2.000	StCu	9	-	-	*	1032.4	+2	-	0	0	51	92	7	1250	StCu	10	-	-	*
London (Kew Obsy.)	1031.8	+1	WNW	2	c2f	51	92	4	-	-	-	aCu	7	*	1032.7	+1	-	0	03f	50	92	3	2.000	St	10	-	-	*
Croydon	1031.5	+2	NW	2	02f	54	85	4	2.000	StCu	6	aSt	3	*	1032.6	+2	SSW	2	02f	51	92	4	2.000	StCu	10	-	-	*
	1H. G.M.T. OF 9TH														7H. G.M.T. OF 9TH													
Renfrew ..															1025.1	0	SW	4	0d	56	97	4	750	Nb	10	-	-	*
Eskdalemuir ..	1026.6	+1	SSW	4	03f	52	97	3	-	St	10	-	-	*	1026.7	0	SSE	3	odm	52	97	3	750	St.	10	-	-	*
Valencia (Cahirc'n)	1029.1	+2	S	3	omd	52	*	*	*	*	*	*	*	2	1028.6	-1	S	4	0	53	85	8	2000	St.Cu	10	-	-	0
Baldonnel ..	1029.2	+1	SSW	4	0g	54	92	4	1250	St	10	-	-	*	1028.9	0	SSW	3	02f	53	92	5	750	St.	9	-	-	*
MANCHESTER (ALEX. PK).	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.0	0	S	2	bc3f	46	97	3	4200	St.Cu	6	-	-	*
Ross on Wye ..	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1031.4	0	W	1	0g	50	92	7	2000	St.Cu	10	-	-	*
Falmouth ..	1033.3	0	-	0	b	47	92	8	-	-	-	-	-	*	1033.0	-1	N	1	b	43	97	8	-	St.Cu	1	-	-	*
Calshot (Hants) ..	1033.7	0	-	0	03f	50	97	2	1250	St.	10	-	-	0	1033.7	0	E	1	02f	50	92	3	1250	St.	10	-	-	0
Lympne (Folkestone)	1033.4	+1	-	0	bcom	46	97	5	-	-	-	-	-	*	1034.0	0	-	0	02fw	43	85	6	1250	St	9	-	-	*
Aberdeen ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1021.4	+1	S	1	c1fe	52	92	6	4200	St.Cu	6	CiSt	1	2
Howden ...	1029.6	+1	SSW	2	bc	50	97	6	3.000	St.	10	-	-	*	1029.4	0	SSW	1	cfe	49	97	5	3000	St.	5	ACu	3	*
Cranwell (Lincs)	1030.7	0	NW	2	bc	51	92	5	3.000	St.	3	ASt	1	*	1030.6	0	WSW	3	bc	48	92	5	4200	St.Cu	3	ACu	2	*
Felixstowe ...	1033.4	0	-	0	03fe	47	97	2	1250	St.	10	-	-	0	1033.5	0	-	0	03fe	48	97	3	750	St	10	-	-	0
Shoeburyness...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1033.2	0	SW	1	c3f	48	85	4	1250	St.	8	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1031.8	0	-	0	0	47	92	6	-	St.Cu	10	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1033.0	0	SW	1	0	49	85	7	2000	St.Cu	10	-	-	*
London (M.O. 11a)	1033.5	+1	*	*	*	50	*	*	*	*	*	*	*	*	1033.6	+1	SW	1	02f	48	97	4	3.000	St.	10	-	-	*
Croydon ...	1033.9	0	SSW	2	02f	50	85	5	1250	St.	10	-	-	*	1033.2	-1	S	1	02f	49	92	4	2.000	St.Cu	10	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours.	Temperature. Temp. °F.	Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 8TH					7H. G.M.T. of 9TH									24 HOURS ENDED 7H. 9TH						8TH
Lerwick ...	1016.4	50	S	2	omd	1014.3	0	52	+9	WSW	4	-	omd	2	1	54	42	c	omd	odm	*
Stornoway ...	1016.5	56	S	5	0	1019.0	0	54	+5	SW	4	-	o	3	1	56	48	o	o p.o	bc.o	0.0
Castlebay (Barra Is)	1019.5	55	W	5	0	1021.9	0	56	+1	WSW	4	-	op	4	1	55	53	p	p.o	op	0.0
Malin Head ...	1021.6	56	SW	3	0	1023.4	0	55	+2	SSW	3	S	o	3	-	56	52	o	o	o	0.0
Blacksod Point	1023.7	57	SW	4	od	1023.9	0	55	-1	SW	2	-	c	3	5	58	44	op	opc	omd.om	*
Roche's Point...	1029.9	55	WSW	3	0	1030.7	-1	55	0	SW	3	-	o	3	-	58	54	o.c	o	o	*
Birr Castle ...	1027.5	56	S	1	r	1028.4	*	52	-1	S	1	-	o	*	3	56	51	od.r	od.r	odr.o	0.0
Donaghadee ...	1024.8	56	SW	1	om	1026.0	0	55	+3	SW	1	-	om	1	2	56	52	omp	omre	omp	*
Liverpool (Bidston)	1028.7	54	SW	1	0	1029.3	0	50	-2	SW	1	SW	b	2	-	57	50	c.o	o	c.bc.b	0.0
Holyhead ...	1028.1	55	SW	5	cg.	1029.2	-1	55	+1	SW	4	-	og	3	1	56	53	o.c pd.o	o.c pr	cp.o	0.0
Pembroke (St Ann's Head)	1031.2	55	SW	3	ov	1031.7	0	54	0	SW	3	-	ov	3	-	57	53	ov	ov	ov	0.3
Scilly (St. May's)	1031.8	54	-	0	0	1032.3	0	51	-2	-	0	-	b	2	-	55	50	ov.	ov	ov.bv	0.0
Jersey (St. Aubin)	1032.1	52	ESE	2	c	1032.5	0	40	-10	E	1	-	b	1	-	54	39	o.c.o	o.c m	ombw	0.0
Portland Bill ...	1031.9	55	S	1	0	1032.3	0	51	-1	NNE	1	-	bc	2	-	58	48	c.bc	bc.o	o.bc	*
Dungeness ...	1032.2	51	SW	2	b	1033.3	0	49	-2	SSW	2	SW	c	2	-	55	48	c.bc	bc.b	bc.c	*
Wick	1016.3	53	SSW	3	c	1017.8	+2	54	+4	SW	1	-	bc	1	2	57	50	c.opd	opc	c.b.bc	*
Nairn	1018.0	56	WSW	3	bc	1020.3	*	55	+3	W	1	-	bc	1	2	56	51	dp.rc	cbc	bc	0.4
Leith	1023.0	56	SW	2	c	1023.6	0	57	+3	WSW	2	W	c	2	1	58	54	o.c.bc	c.bc.u.c	cup.o.c	*
Tynemouth ...	1025.4	55	SW	2	omr	1026.2	0	55	+2	W	2	-	of	1	3	56	52	f	fp.	om.omr	*
Spurn Head ...	1028.9	52	SW	3	om	1029.4	0	50	+4	SW	3	-	oc	2	0.1	55	44	bcm	bm	opm omc	*
Yarmouth (Gorleston)	1031.4	47	SW	2	b	1032.1	0	47	+9	SW	1	-	fe	0	0.2	55	37	f.bm	bm	bfe	5.1
Clacton-on-sea	1032.2	45	NW	2	f	1032.9	0	48	+5	WSW	1	-	ogm	1	-	54	39	c.bm	bmk	f.bcom	4.9
Nottingham ...	1030.4	52	SW	1	0	1030.8	*	46	+2	SW	1	SW	cm	*	trace	56	42	cogm	om	op	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. ‖ For code see page 3 † See footnote p.4.

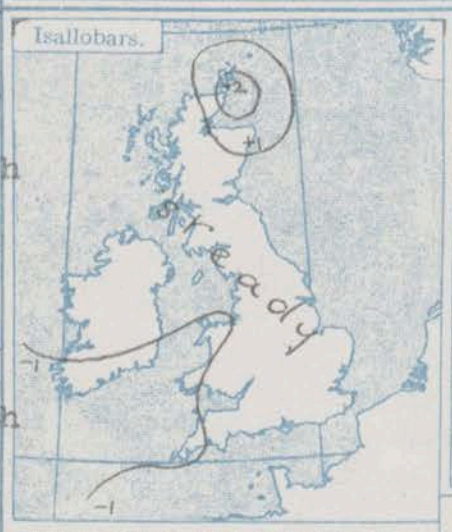
M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 9.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, misty.	Indiff.	Smooth
2. E. England	Foggy.	V.Poor	Calm
3. E. Midlands	Fair.	Indiff.	-
4. W. Midlands	Fair, foggy.	V.Poor	-
5. S.W. England	Fine.	V.Good	Smooth
6. South Wales	Dull.	Excellent	Slight
7. North Wales	Dull, gloomy.	Good	"
8. N.W. England	Foggy.	Poor	Smooth
9. N. Midlands	Dull, some fog.	"	-
10. N.E. England	Dull, misty.	"	Smooth
11. E. Scotland	Cloudy, foggy.	Fair	"
12. S.W. Scotland	Dull, misty, drizzle.	V.Poor	V.Smooth
13. Isle of Man	Dull, misty.	Fair	"
14. N.&N.W. Scotland	Fair	"	Slight
15. Hebrides	Dull, showers locally.	"	"
16. Orkneys and Shetlands	Dull, misty, drizzle.	Poor	Smooth
17. N.W. Ireland	Dull.	Good	Slight
18. N.E. Ireland	Dull, misty.	V.Good	V.Smooth
19. S.E. Ireland	Dull, misty.	Good	Slight
20. S.W. Ireland	Dull.	V.Good	Calm.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number	Date	Time G.M.T.	Sea °F	Air °F
5	8th	09 05	54	54
3	8th	09.15	55	56
6	8th	15.00	56	51
44	9th	0430	53	55
12	9th	0450	54	55



Barometric change from 4 h. to 7 h. (half millibars).

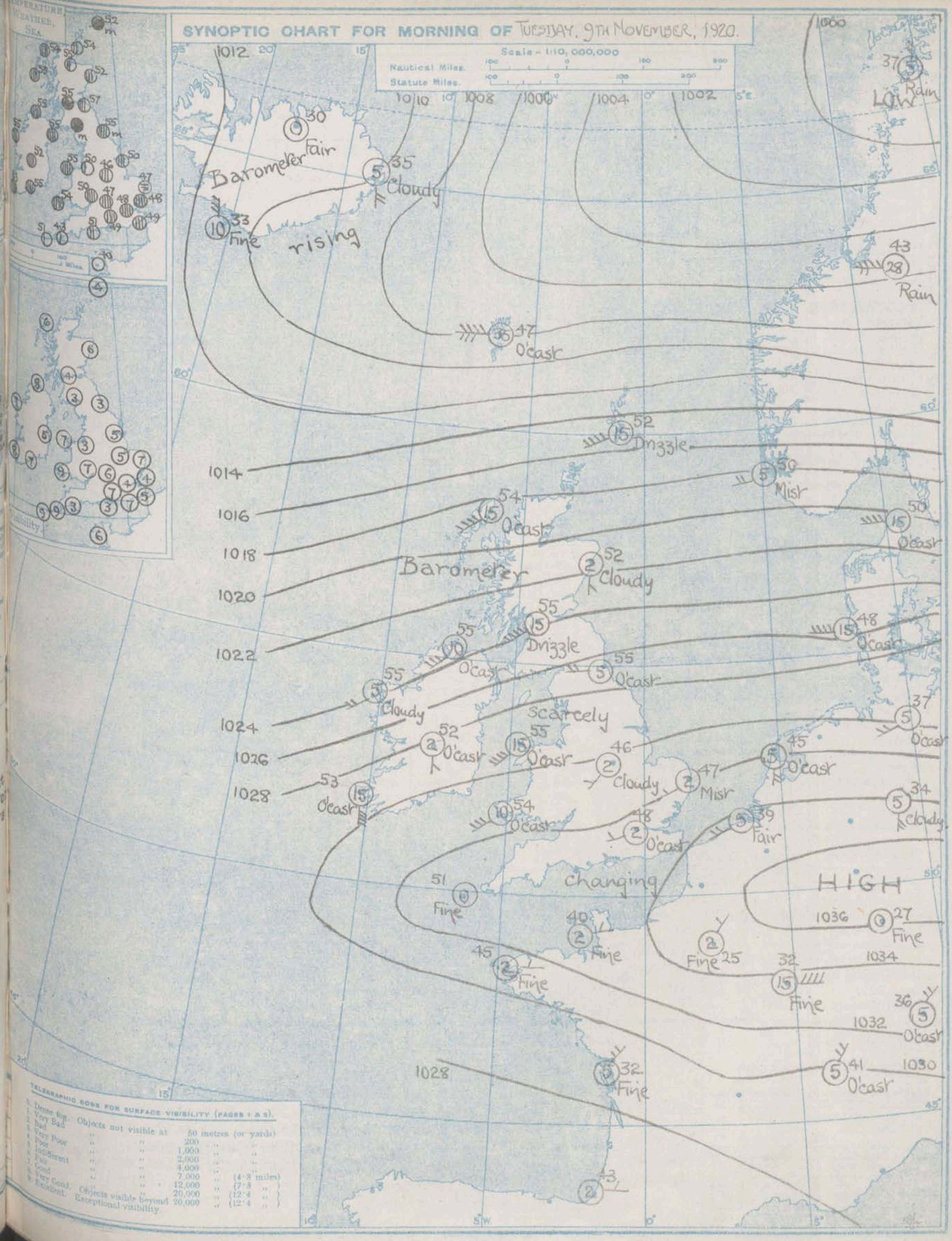
EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. ⚡ thunderstorm.
SEA DISTURBANCE.—Rough. High swell.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

A deep depression that was South of Iceland on Monday night has passed quickly away Northwards and the anticyclone over Germany and France shows no signs of giving way. Fair weather with mist or fog at times is probable for a day or two over England but in Scotland and Ireland cloudy and unsettled conditions will continue.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Tuesday, 9th November, 1920	Further Outlook.
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. E. Scotland	Light S to SW breezes; varying amount of rather low cloud; some mist or fog, especially at night; mild.	Probably fair but misty and mild for at least two days over E and S.E. England.
12. S.W. Scotland 13. Isle of Man 14. N.&N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland	Moderate SW wind, fresh at times; sky mainly overcast with rather low clouds; occasional rain; visibility fair; mild.	
19. S.E. Ireland 20. S.W. Ireland	Wind S to SW, moderate to fresh; mainly overcast with rather low clouds; occasional drizzle locally; visibility fair; mild.	

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.55 G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF TUESDAY, 9TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
Barometer rising
Barometer
Scarcely
changing
HIGH
LOW
Fair
Cloudy
Fine
O'cast
Drizzle
Mist
Rain
1012
1010
1008
1006
1004
1002
1000
1014
1016
1018
1020
1022
1024
1026
1028
1036
1034
1032
1030
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " (4·3 miles)
6. Fair " " 12,000 " (7·3 ")
7. Good " " 20,000 " (12·4 ")
8. Very Good. " " 20,000 " (12·4 ")
9. Excellent. Objects visible beyond Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 314. {TUESDAY, 9TH NOVEMBER

WEATHER, TEMPERATURE, RAINFALL, AND SUNSHINE AT HEALTH RESORTS FOR 8TH

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 7th-8th	Rainfall. Day. 9h-18h. 8th	Sunshine. Sunrise to Sunset. 8th	Sunshine. Sunrise to Sunset. 8th
						mm.	mm.	hrs.	hrs.
Scotland.	Oban	ord		57	51	4	2	0.0	0.1
	Banff	ore.o	c.bc	54	48	1	1	0.0	0.3
	Montrose								
	St. Andrews	*	*	55	51	-	1	0.0	0.0
England, N.E.	Harrogate	o	op	58	48	-	-	0.0	0.0
	Scarborough	b.	o	58	49	-	-	1.6	0.6
	Skegness	c	o.c.o	53	39	-	-	3.9	0.0
England, E.	Lowestoft								0.1
	Felixstowe	bf.	of.	54	37	-	-	5.1	0.0
	Southend-on-Sea	c.bc	bc.c.o	58	41	-	-	4.5	0.3
England, S.E.	Tunbridge Wells	omoc	c.o	36	41	-	-	1.0	0.2
	Margate	b.bc.c	c.bc.b	57	45	-	-	4.0	
	Ramsgate	*	*	53	45	-	-	4.2	
	Folkestone	o.c.bc	bc	54	46	-	-	1.6	0.1
	Hastings	w.o.c.bc	bc.c	57	43	trace	-	2.4	0.0
	Eastbourne	bc	c.bc.b	56	43	-	-	5.1	0.0
	Brighton	of.bc	bc	56	44	-	-	3.7	1.0
	Worthing	c	c	38	45	-	-	2.1	0.2
	Littlehampton	bc.w.	o.c.w	56	49	-	-	0.6	1.3
	Portsmouth (S'bsea)	*	*	55	44	-	-	0.0	0.0
	Bournemouth	*	*	58	44	-	-	0.8	0.8
	Ventnor (I. of W.)	*	*	57	49	-	-	0.0	
England, N.W.	Douglas (I.O.M.)								0.1
	Blackpool	c.om		55	51	1	1		0.3
	Southport	c.o.c	c.o.p.o	57	50	0.3	-		0.0
	MORECAMBE	*	*	54	50	2	1		
Midlands.	Buxton								0.0
	Leamington Spa	of.	o	53	43	-	-		0.6
	Malvern	b.bc	bc3	53	44	-	-		0.0
	Bath	mofd	o	55	45	-	-		0.1
Wales.	Rhyl	c	p.c	56	51	-	0.2		0.0
	Colwyn Bay	*	*	57	51	-	-		0.3
	Llandudno	*	*	58	53	0.1	0.1		0.2
	Aberystwyth	o.c	c.o	56	43	-	-		
	Tenby								0.0
	Swansea	*	*	58	48	1	-		
England, S.W.	Weymouth								0.1
	Teignmouth	m.bc.b	c.om	55	42	-	-		0.0
	Torquay	fg.	fg.o	55	44	-	-		0.0
	Paignton	cf	om	55	39	-	-		1.0
	Penzance	c.bc	c.o	59	50	-	-		0.2
	Newquay	c.o	c.o	56	50	-	-		1.3
	Bude	c	c	58	34	1	-		0.0
	Ilfracombe	o	o	56	51	1	-		0.8
	Weston-s-Mare	bc.c	o	55	46	1	-		

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 8th	Weather. 13h-18h 8th	Weather. 18h 8th-1h 9th	Weather. 1h-7h 9th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
								mm.	mm.	
Renfrew	o2f pd.w.bf	o2fg.p.d.	p.o.d.	p.o.pd	56	53	53	0.3	0.4	0.0
Eskdalemuir	d.d.3fg.p	d.d.2.3fe	d.o.d.o.3f	d.d.o.3fe	52	49	50	2	1	0.0
Valencia (Cahirc'n)	d.d.o2f	d.d.o2f	0PD	0	56	52	51	2	1	0.0
Baldonnel	0	c.o.p	o2f.g	o2fg	58	51	50	1	-	0.8
MANCHESTER (ALEX. PK).	o2f.	o2f.o1f	co2f	co3f	58	46	32	-	-	*
Ross on Wye	sf.o.2fo.1f	o2f.g	c.o.b.o.c.o.c	b.g.o.o	53	39	40	-	-	0.0
Falmouth	c.o	o.g	b.o.b	b.w	56	42	33	-	-	0.3
Calshot (Hants)	o2f.	o2f.	o2f.o3f.	o3f.o2f	54	40	46	-	-	0.0
Lympne (Folkestone)	bc.o.g	c.o1f	co1f.b.w	bo2f.bc.c	54	43	32	-	-	0.9
Aberdeen	sh.o.sh.2f	f.2fe	2fe.1fe	1fe	57	47	41	1	-	0.0
Howden	o3f.	o3f.o3f	o2f	c.o3fe	57	40	38	-	-	1.1
Cranwell (Linc)	bc.bc	bc.c.o	c.o.bc.c	bc.o2f	51	46	44	-	-	5.7
Felixstowe	o.s.1f.	2fe.5fe	6.8fe.5fe	o3fe	55	44	*	-	-	5.0
Shoeburyness	o.s.fe.el	3.5fe.bbcc	g.o.5f.o	4.5fe.3f	58	35	36	-	-	5.0
Benson	0	0	b.bc.c	bc.c	52	45	39	-	-	*
S. Farnborough	o3fc.o	0	o.o2f	o	56	41	47	-	trace	0.6
London (Kew Obsy.)	w.o.s.fo.fo	o.o3f	o.o3f	o.o2f	52	39	46	-	-	1.0
Croydon	bc.o.s.fo.f	o2f.	o2f.pd.	o2f.	58	41	*	trace	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, i.e., rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r,r, = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·6
2	4- 7	1·6- 3·4
3	8-12	3·5- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·6
12	Above 75	32·6 or above

SYMBOLS—

Aurora, Rime, Glazed frost, Glazed roads; Solar halo, Lunar halo, Solar corona, Lunar corona

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 9th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	om. b	om	om	55	45	45	-	2.1	89	84
City (Bunhill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	*	*	omf.	52	45	43	-	0.2	91	80
Camden Sq. (British Rainfall)	fe.	o.c	*	52	46	44	-	*	99	81
Kensington Palace	o	of	*	53	44	45	-	*	98 (18h)	86
Hampstead Observatory	*	*	*	51	45	42		0.6	*	89

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total 230 Joules.

Milliwatts.
Average Rate. 6·9
Maximum Rate. 23

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

9th & 10th NOVEMBER, 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.4	11.37	4.10
	7.6	11.37	4.8
Greenwich	7.9	11.44	4.19
	7.11	11.44	4.17
Wick	7.49	11.56	4.3
	7.51	11.56	4.1
Valencia	7.51	12.25	4.59
	7.53	12.26	4.57

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 8th 17h 30m. to 9th 6h 0m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	12. 30	0 0	0
δ Ursae Minoris	12 30	0 0	0

NOTES ON THE WEATHER OF YESTERDAY.

Some rain fell again in Scotland and Ireland but in no great quantity, and there were some showers in N.E.England, About 5 hours of bright sunshine were experienced in parts of E and S.E.England, but elsewhere there was practically none. The temperature rose to about 55° in all districts. Mist or fog was again of common occurrence.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,538 WEDNESDAY, 10th NOVEMBER, 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

13H. G.M.T. 9th / 18H. G.M.T. OF 9th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew	1024.0	-2	SW	4	oD	55	97	4	750	Nb	10	-	-	*	1020.4	-4	SW	6	c	53	85	6	2,000	StCu	7	-	-	*
Eskdalemuir	1025.2	-1	SSW	4	o2z3f	52	97	3	750	St	10	-	-	*	1022.8	-3	SW	5	bc	49	92	6	1250	St	6	-	-	*
Valencia (Cahirc'n)	1027.4	-2	S	4	o1f	56	75	7	3,000	StCu	6	A.St	4	4	1026.5	-1	S	5	o	55	75	7	2,000	StCu	8	A.St	2	4
Baldonnel	1027.6	-2	SW	4	c1f	56	75	7	4,200	StCu	3	A.Cu	4	*	1025.0	-4	SW	4	bcq	52	85	8	*	-	-	A.St	5	*
Manchester (Alex. Pk.)	1028.8	-2	SSW	2	o2f	56	75	5	3,000	StCu	10	-	-	*	1027.1	-1	SW	2	bc3f	50	85	3	4,200	StCu	4	A.Cu	1	*
Ross on Wye	1030.4	-2	WSW [WNW]	3	o	53	85	8	3,000	StCu	9	Ci	1	*	1028.8	-2	WSW	2	o	49	85	8	3000	StCu	9	-	-	*
Falmouth	1031.8	-3	SE	1	bc	54	85	8	-	Cu	4	-	-	*	1030.5	-2	SW	1	bw	48	92	8	-	-	-	-	-	*
Calshot (Hants)	1032.1	0	S	1	o2f	54	85	4	3,000	StCu	10	-	-	0	1030.5	-1	SW	1	o2f	52	92	5	2,000	St	10	-	-	0
Lympne (Folkestone)	1032.3	-2	S	2	b2f	53	75	5	1,250	Cu	1	-	-	*	1030.7	-2	-	0	b2f	44	92	5	3,000	StCu	3	-	-	*
Aberdeen	1020.2	-3	S	3	o2fe	57	85	5	4,200	StCu	9	-	-	2	1016.4	-6	SW	4	o1fe	56	85	6	4,200	StCu	10	-	-	2
Howden	1027.7	-4	W	2	o2f	54	85	4	3,000	St	8	A.St	2	*	1026.1	-2	-	0	o3f	53	85	2	2,000	St	10	-	-	*
Cranwell (Lincs)	1029.1	-2	WSW	4	o	58	75	5	-	-	-	Ci	9	*	1027.6	-1	SW	3	b	49	85	5	-	StCu	1	A.St	1	*
Felixstowe	1032.2	-3	SSW	2	o2f	51	92	5	2,000	St	10	-	-	1	1030.2	-1	SSW	2	o1f	49	97	6	2,000	St	10	-	-	1
Shoeburyness	1032.1	-2	SSW	1	c2fe	53	75	5	2,000	St	6	A.St	2	*	1029.9	-2	-	0	o1fe	50	85	6	1,250	St	10	-	-	*
Benson	1030.6	-2	SW	2	o	53	65	7	*	StCu	10	-	-	*	1029.2	-2	SW	1	om	50	85	6	*	StCu	10	-	-	*
S. Farnborough	1031.8	-2	WSW	2	o	54	75	7	3,000	StCu	10	-	-	*	1030.0	-1	S	2	o	51	86	7	1,250	St	10	-	-	*
London (Kew Obsy.)	1031.6	-3	SW	3	o2f	54	75	5	3,000	StCu	8	A.St	2	*	1029.7	-2	SW	1	o2f	51	85	4	2,000	St	10	-	-	*
Croydon	1032.0	-2	SSW	2	o2f	52	85	4	2,000	St	10	-	-	*	1030.3	-1	SSW	2	o2f	51	85	5	2,000	St	10	-	-	*

1H. G.M.T. OF 10th / 7H. G.M.T. OF 10th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew															1017.3	+2	SW	5	cq	48	85	7	2000	CuNb	4	Ci	4	1
Eskdalemuir	1018.5	-3	SW	6	orqm	49	92	5	-	Nb	10	.	.	*	1019.0	+2	WSW	4	c	46	75	8	-	Cu	2	Ci.St	5	*
Valencia (Cahirc'n)	1025.0	-4	SSE	4	bep	52	*	*	*	*	*	*	*	3	1025.3	+1	WNW	3	o	52	75	8	3.000	StCu	6	A.St	2	4
Baldonnel	1023.0	-1	SW	6	oD3f	52	92	3	4500	St	10	-	-	*	1023.3	0	SW	2	o1f	48	92	6	2.000	St	7	A.St	2	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1022.7	-1	SW	3	o2f	50	85	4	750	Nb	10	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1024.9	-2	SW	2	c	48	92	7	2000	St	3	Ci	4	*
Falmouth	1028.7	-2	SW	1	o	50	97	5	-	St	10	.	.	*	1027.3	-2	SW	3	o	51	92	8	-	St	10	-	-	*
Calshot (Hants)	1028.3	-2	WSW	2	o1f	62	85	6	2000	St	10	-	1	1	1026.9	-2	SW	2	o1f	51	85	7	2000	St	10	-	-	1
Lympne (Folkestone)	1028.5	-3	-	0	o2fw	46	97	5	2000	StCu	10	-	-	*	1027.3	-1	SW	1	o2f	48	92	5	2000	StCu	10	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.3	+1	SSW	1	b1fe	42	85	6	.	.	.	.	.	2
Howden	1023.3	-2	SW	3	o1f	50	85	5	3.000	St	10	-	-	*	1021.7	-1	SSW	1	o1f	48	92	4	750	St	8	A.St	2	*
Cranwell (Lincs)	1025.4	-1	SW	3	c	48	92	5	3.000	St	8	.	.	5	1024.1	-1	WSW	4	bc	48	92	5	4500	St	4	Ci	1	*
Felixstowe	1028.6	-1	SSW	3	o2f	49	92	5	2000	St	10	-	-	1	1026.1 [X1]	-2	SW	3	o2f	47	97	5	3000	St	10	.	.	1
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1027.0	-2	WSW	1	o1f	49	75	6	3000	StCu	7	A.St	3	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1025.1	-1	SW	2	b	48	92	7	.	StCu	8	Ci	1	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1026.5	-1	WSW	2	o	49	85	6	3000	StCu	10	-	.	*
London (M.O. at 1h.)	1028.0	0	*	*	*	*	*	*	*	*	*	*	*	*	1026.7	-1	SW	2	o2f	50	85	5	2000	StCu	10	.	.	*
Croydon	1028.7	-2	WSW	3	o1f	50	75	6	1250	St	10	.	.	*	1026.6	-1	WSW	3	o1f	50	75	6	2000	St	5	A.St	5	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

18H. G.M.T. of 9th / 7H. G.M.T. of 10th / 24 HOURS ENDED 7H. 10th / Sunshine 9th

Stations	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	Barometer ‡ Change in 3 hours	Temp. °F.	Temperature Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather §	Sea 0-9	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
Lerwick	1010.4	53	SW	3	omr	1000.3	-3	50	-2	SW	8	SW	cq	5	3	53	44	omd	omd	oq.omfq	*
Stornoway	1010.0	56	SW	6	cq	1007.3	0	46	-8	WSW	7	.	bcq	6	6	56	44	odpq	cpq	bcr.bcq	0.2
Castlebay (Barra Is)	1014.3	54	SW	7	op	1013.0	0	51	-4	W	7	W	c	6	1	55	47	op	op.o	qpbpc	0.0
Malin Head	1017.3	53	SSW	4	o	1017.4	0	49	-6	WSW	5	SW	oq	4	1	57	47	c	o	bqp.bcq	0.2
Blacksod Point	1018.3	53	SSW	5	omqr	1020.8	-1	51	-4	W	4	-	bc	4	2	57	50	c	cmqp	bc	*
Roche's Point	1027.6	55	SSW	4	o	1025.5	0	52	-3	WSW	2	.	o	2	-	56	51	oc	c.o.	o	*
Birr Castle	1024.2	53	S	2	c	1023.4	*	47	-5	S	1	-	o	*	1	55	45	o.c	o	cp.o	0.9
Donaghadee	1022.1	53	SSW	3	c	1020.4	+1	46	-9	W	3	NW	cm	3	-	57	47	om cm	bcv	cm	*
Liverpool (Bidston)	1026.8	51	WSW	2	o	1021.8	0	52	+2	WSW	3	W	c	3	-	58	50	bc.o	bc.o.	o	3.0
Holyhead	1026.2	54	SSW	5	oq	1022.5	-1	53	-2	WNW	4	-	c	2	0.1	56	52	o.cq.	c.oq	ocq.pq	0.0
Pembroke (St. Ann's Head)	1029.0	54	SW	3	ov	1024.9	-2	54	0	SW	4	-	o	4	-	55	52	ov	ov	op.c.o	0.1
Scilly (St. Mary's)	1030.7	53	-	0	o	1027.5	-1	63	+2	SW	2	.	o	3	-	58	57	bv	bc.ov	ov.bc.c.o	7.5
Jersey (St. Aubin)	1029.9	50	NE	2	b	1027.6	0	35	-5	ENE	1	.	c	1	-	56	34	b	b	bw.x	8.8
Portland Bill	1030.2	54	-	0	c	1024.3	-3	53	+2	W	3	-	o	3	-	57	48	b.bc	c	c.o	*
Dungeness	1030.3	49	SW	1	b	1026.5	-2	51	+2	SW	2	-	o	2	-	56	40	b	b	b.bc.o	*
Wick	1012.1	54	SW	3	cq	1005.9	-3	45	-9	WSW	4	-	bq	3	1	56	43	bc.o	c.oq	omqp.bq	*
Nairn	1013.6	55	SW	4	c	1009.3	*	46	-9	W	4	.	bcq	3	0.4	59	45	bcq.c	qcq	cqb	
Leith	1019.7	54	SW	3	c	1015.6	0	48	-9	SW	4	SW	b	3	-	59	48	c.bc.c	cucq.c	cq.c.b	*
Tynemouth	1023.2	56	SW	2	cm	1018.9	0	53	-3	W	2	-	cm	1	trace	58	49	cmp	cm	bcm.cm	*
Spurn Head	1025.7	57	SW	3	bc	1022.1	-2	48	-2	SW	4	.	bc	2	-	56	44	bcm	bc	b	*
Yarmouth (Gorleston)	1028.7	49	SW	2	c	1024.5	-2	48	+1	WSW	3	-	om	0	-	57	46	fe.bc	cm	c.o.m	0.58
Clacton-on-Sea	1029.7	50	SW	2	o	1026.2	0	48	0	WSW	2	-	og	1	-	51	48	ogm	ogm.z	og3m	0.0
Nottingham	1027.6	50	SW	2	b	1023.5	*	49	+3	WSW	2	W	o	4	-	58	45	com	o.c.b	b	1.9

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4.

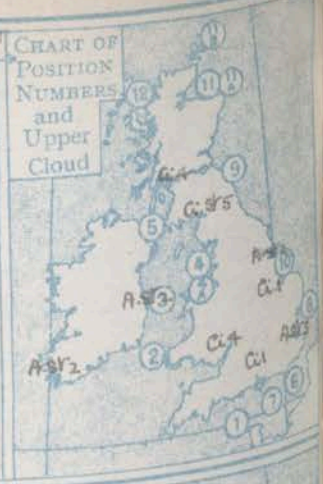
M.O. FORM 2370

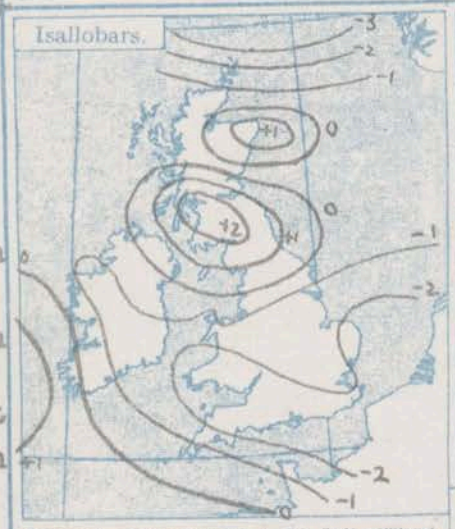
SUMMARY OF CONDITIONS AT 7 h. G.M.T. 10.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, misty.	Fair	V.Smooth
2. E. England	Dull, misty.	Indiff.	"
3. E. Midlands	Fair.	"	-
4. W. Midlands	Dull, misty.	Poor	-
5. S.W. England	Overcast.	V.Good	Slight
6. South Wales	Overcast.	"	Mod.
7. North Wales	Overcast.	Good	Smooth
8. N.W. England	Cloudy, misty.	Poor	Slight
9. N. Midlands	Dull, misty.	"	-
10. N.E. England	Dull, misty. Fair locally	Fair	Smooth
11. E. Scotland	Fine, squally.	"	Slight
12. S.W. Scotland	Cloudy.	V.Good	"
13. Isle of Man	Cloudy, misty.	Fair	"
14. N.& N.W. Scotland	Fine, squally.	Good	R.Rough
15. Hebrides	Fair to cloudy, squally	"	Rough
16. Orkneys and Shetlands	Cloudy, gale.	Indiff.	R.Rough
17. N.W. Ireland	Fair.	Good	Calm
18. N.E. Ireland	Cloudy, misty.	Fair	Slight
19. S.E. Ireland	Dull, misty.	Good	Smooth
20. S.W. Ireland	Overcast.	V.Good	Mod.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
5.	9th	08.05	56	55
3.	9th	09.15	56	56
1.	9th	12.36	56	53
7.	10th	03.25	57	53.5
4A.	10th	04.00	54	54
8.	10th	05.20	68	54





Barometric change from 4 h. to 7 h. (half millibars).

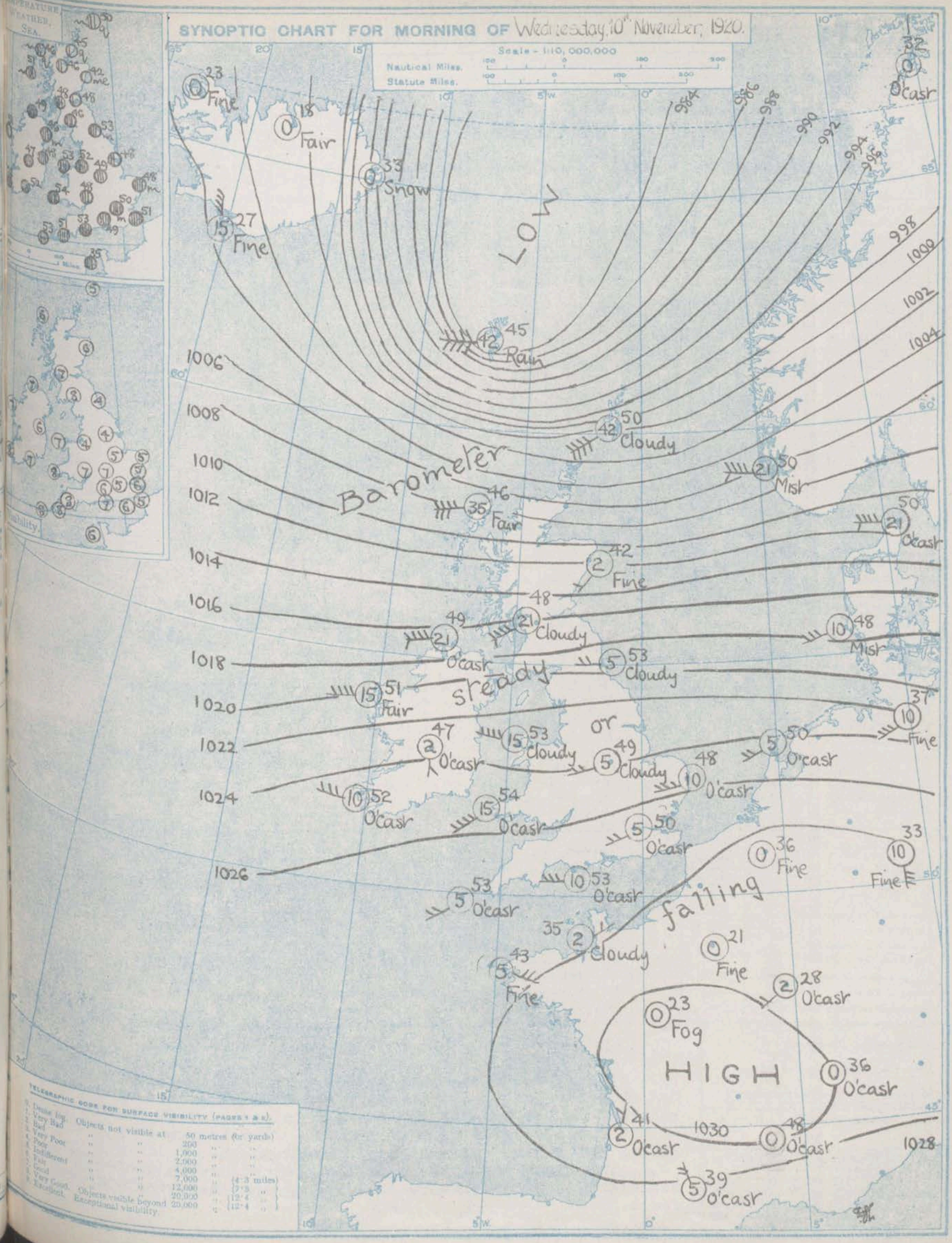
EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. R thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

A deep depression to the North of Scotland will move NE. and will cause strong Westerly winds with showery and colder weather over the Northern half of the Kingdom, but in the South the wind will be moderate and the weather mainly dull with little or no rain.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Wednesday, 10th November, 1920.	Further Outlook.
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 between SW and W, moderate; mainly dull, clouds low, visibility good; mild.	Uncertain.
11. E. Scotland 12. S.W. Scotland 13. Isle of Man	Fresh to strong Westerly wind, moderating gradually; varying amount of low cloud, passing showers; visibility good; colder than of late.	
14. N.& N.W. Scotland 15. Hebrides	As for 1 - 10.	
16. Orkneys and Shetlands	As for 11 - 12.	
17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Moderate Westerly wind; mainly dull, clouds low, occasional showers; visibility good; mild.	

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 10.15. G. C. SIMPSON, F.R.S., Director.



TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).

0. Dense fog.				
1. Very Bad	Objects not visible at	50 metres (or yards)		
2. Bad	"	"	200	" "
3. Very Poor	"	"	1,000	" "
4. Poor	"	"	2,000	" "
5. Indifferent	"	"	4,000	" "
6. Fair	"	"	7,000	" (4·3 miles)
7. Good	"	"	12,000	" (7·3 ")
8. Very Good.	Objects visible beyond		20,000	" (12·4 ")
9. Excellent.	Exceptional visibility.		20,000	" (12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 315.

Wednesday, 10th NOVEMBER

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 9th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall.† Night. 18h-9h. 8th-9th	Rainfall.† Day. 9h-18h. 9th	Sunshine. Sunrise to Sunset. 9th
Scotland.	Oban	f	o	53	52	5	2	0.0
	Banff	cm.o	c o	61	48	-	-	0.0
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	bc b	b.bc	56	50	3	-	2.5
	Scarborough	b	bc	59	52	1	-	3.2
	Skegness	bc	bc b	58	46	-	-	3.3
England, E.	Lowestoft							
	Felixstowe	of	om	52	44	-	-	0.0
	Southend-on-Sea	o	o	51	44	-	-	0.0
England, S.E.	Tunbridge Wells	o	*	52	41	-	-	0.0
	Margate	c.bc.b.	b.bc.b	53	44	-	-	3.8
	Ramsgate	*	*	56	43	-	-	4.5
	Folkestone	bc	bcf	?	45	-	-	5.4
	Hastings	w.o.bc.b	b	56	45	Trace	-	4.0
	Eastbourne	o.c.bc	bc.b.	56	40	-	-	4.5
	Brighton	of.c.	c	55	42	-	-	1.2
	Worthing	o	o	53	39	-	-	0.0
	Littlehampton	o.cm	o.cm	58	40	-	-	0.0
	Portsmouth (S'thsea)	*	*	55	46	-	-	0.0
	Bournemouth	*	*	55	46	-	-	1.6
	Ventnor (I. of W.)	*	*	56	49	-	-	0.0
England, N.W.	Douglas (I.O.M.)							2.8
	Blackpool	o	c	58	52	0.3	-	0.6
	Southport	c.o	c o.co	56	49	-	-	
	Morecambe							
Midlands.	Buxton							0.0
	Leamington Spa	c b	o	55	46	-	-	0.4
	Malvern	c.o	o	54	48	-	-	0.3
	Bath	o.c bc	o	56	46	-	-	
Wales.	Rhyl	c.bc	bc c	59	50	-	-	2.1
	Colwyn Bay	*	*	58	52	-	-	0.8
	Llandudno	*	*	57	50	0.1	-	1.4
	Aberystwyth	o c	c o	56	52	-	-	0.0
	Tenby							
	Swansea							
England, S.W.	Weymouth	cm.c	c.o	58	45	-	-	0.0
	Teignmouth	m.c.bc	o	58	49	-	-	1.8
	Torquay	bz.bc	c	61	48	-	-	4.6
	Paignton	f b	o.bcm	57	43	-	-	3.7
	Penzance	b.c.b	bc	59	44	-	-	7.8
	Newquay	b	b	58	42	-	-	7.8
	Bude	c	b	59	48	-	-	5.1
	Ilfracombe	o	o	57	52	-	-	0.0
	Weston-s-Mare	c	c	55	50	-	-	0.0

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-18h 9th	Weather. 18h-18h 9th	Weather. 18h 9th-1h 10th	Weather. 1h-7h 10th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
Renfrew	cof pdofp	co.f.	co rq	co p.	56	48	42	mm. 0.3	mm. 1	0.1
Eskdalemuir	dd 3fc	dodo.co.	p.o.xf	4R2 fccq	52	45	41	2	2	0.0
Valencia (Cahirc'ti)	o of	o	PD.o	bc.o	56	51	3x46	-	1	0.0
Baldonnel	ofq bccbd	coq	c.o3fq PD	o2fq	56	48	45	-	-	4.5
Manchester (Alex. Pk)	bc c of	of bce3f	co3f	o2fpd	58	45	39	-	-	*
Ross on Wye	cabbc.co	oc.obcco	o.o.bcoo	o.c.o	56	48	42	-	-	1.1
Falmouth	b.cfc.b.bc	b bc cq b	co.b.o.o	o	57	42	34	-	-	4.8
Calshot (Hants)	bc cifbbof	o2f	o1f	o1f	55	50	47	-	-	0.9
Lympne (Folkestone)	o2fcobbof	b bc2f	bbc2fc.o	c2fo	53	42	29	-	-	5.5
Aberdeen	2fc	2fc o1f	o1f. c2f	o2f. 1fc	58	42	29	-	-	0.0
Howden	bc.c.3f	o o3f	bo.c.o	bc c.o	57	44	41	-	-	2.4
Cranwell (Lincs)	bc.c.o.	o bc.c	o.bc.c	o.bc	58	46	42	-	-	4.7
Felixstowe	o.o2f	o o2f	oo.5f.co	o2f. c.o	52	47	8	-	-	0.0
Shoeburyness	3fc.2fc	2fc o1f	o1f	o1f	54	48	36	-	-	0.0
Benson	o	o	o	o	54	47	44	-	-	*
S. Farnborough	o. o1f	o	o.o1f	o1fo	54	48	46	-	-	0.0
London (Kew Obsy.)	o3f. o3f	o2f	o2f	o2f	54	48	47	-	-	0.0
Croydon	o1f	o2f	o2f. o1f	o1f	52	49	*	-	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·4
3	8-12	3·5- 5·9
4	13-18	6·0- 8·0
5	19-24	8·1-10·7
6	25-31	10·8-13·9
7	32-38	14·0-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—

Aurora ⊼ Solar halo ⊙
Rime ⊥ Lunar halo ☾
Glazed frost ∼ Solar corona ⊙
Glazed roads ⚲ Lunar corona ☾

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† mm.	Sunshine to Sunset. Hours. Yesterday.	Humidity % 15 h. G.M.T. Yesterday.	Humidity % 9 h. G.M.T. To-day.
	24 HOURS ENDED 9h G.M.T. 10th									
Greenwich (Royal Observatory)	o	o	o4.o	55	49	46	-	0.0	82	77
City (Bunhill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	*	*	om	55	51	45	-	0.0	75	73
Regent's Pk. (Botanical Gdns)	*	*	*	*	*	*	*	0.0	*	*
Camden Sq. (British Rainfall)	om	o.c	*	55	50	46	-	*	78	76
Kensington Palace	o	o	*	55	48	47	-	*	85 (18h)	80
Hampstead Observatory	*	*	*	52	48	46	-	0.0	*	81

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total 1.62 Joules.

Milliwatts.
Average Rate. 3.7
Maximum Rate. 14

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

10th and 11th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.6 / 7.8	11.77 / 11.57	4.8 / 4.6
Greenwich	7.11 / 7.12	11.49 / 11.44	4.17 / 4.16
Wick	7.51 / 7.53	11.56 / 11.58	4.1 / 3.59
Valencia	7.53 / 7.55	12.25 / 12.25	4.57 / 4.55

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 9th 17h 30m to 10th 6h 0m

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	12. 30	0. 0	0
δ Ursae Minoris	12. 30	0. 0	0

NOTES ON THE WEATHER OF YESTERDAY.

There was little rain except in the North where Stornoway had 61mm and Oban 7mm. Between 7 and 8 hours of sunshine were recorded in the Channel Islands and in parts of SW. England, but on the whole records were very poor. The temperature reached 61° at Torquay and also at Banff in Scotland.

The night was mild generally, but at Jersey where the sky was clear, the temperature fell to 34° and there was a ground frost.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON

BRITISH SECTION. No. B 21939 ....THURSDAY, 11TH NOVEMBER, 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 10TH														18H. G.M.T. OF 10TH													
Renfrew	1017.8	-1	WSW	4	ot	48	85	7	1250	Nb	10	-	-	*	1016.3	0	WSW	4	b	46	85	6	2,000	StCu	3	-	-	*
Eskdalemuir	1017.9	-2	WSW	6	bc	42	65	8	3000	Cu	2	Ci	2	*	1017.8	0	SW	4	bc	44	85	6	-	StCu	3	Ci	1	*
Valencia (Cahire'n)	1025.3	-1	WSW	3	o	53	75	8	3,000	StCu	4	A.St	6	4	1025.2	0	W	5	c	51	75	8	3000	StCu	7	-	-	4
Baldonnel	1023.2	-1	SW	4	o	50	75	5	3,000	StCu	4	A.St	6	*	1022.3	-1	SW	3	b	46	85	8	-	-	-	Ci.St	1	*
Manchester (Alex. Pk)	1022.3	-1	WSW	3	o2f	53	75	4	3,000	StCu	6	A.St	4	*	1022.2	0	W	3	c2f	48	75	4	2,000	StCu	6	A.St	1	*
Ross on Wye	1023.9	-2	SW	3	o	54	86	7	2,000	Nb	10	-	-	*	1023.0	-1	W	2	ogf	51	97	5	750	Nb	10	-	-	*
Falmouth	1026.3	-2	SW	3	o	56	85	8	-	St	10	-	-	*	1025.0	-1	SW	4	o	52	85	6	-	St	10	-	-	*
Calshot (Hants) *	1025.6	+2	WSW	2	o1f	54	86	7	4,200	StCu	10	-	-	1	1024.5	-1	WSW	2	o1f	52	85	6	4,200	StCu	10	-	-	1
Lympne (Folkestone)	1025.6	-4	WSW	3	o1f	51	85	76	2,000	StCu	10	-	-	*	1024.4	-2	WSW	2	o1f	49	85	6	2,000	StCu	10	-	-	*
Aberdeen	1012.6	-1	WSW	5	b	53	45	8	-	-	-	CiCu	2	2	1013.0	+1	SW	2	b2f	44	65	4	-	-	-	-	-	2
Howden	1021.3	-2	WNW	4	o1f	54	85	6	3,000	St	6	A.St	4	*	1020.9	-1	-	0	o2f	45	92	5	4,200	St	5	A.St	5	*
Cranwell (Lincs)	1023.1	-2	WSW	3	o	54	85	5	2,000	St	10	-	-	*	1022.4	0	WSW	1	o2f	49	97	4	4,200	St	10	-	-	*
Felixstowe	1024.7	-2	SW	3	o2f	53	92	5	3,000	StCu	10	-	-	1	1023.6	0	SSW	2	o2f	51	97	5	2,000	St	10	-	-	1
Shoeburyness	1025.1	-3	SW	1	o	54	75	6	3,000	StCu	9	-	-	*	1023.7	-2	-	0	o	52	75	7	2,000	StCu	10	-	-	*
Benson	1023.5	-3	WSW	3	o	55	75	7	-	StCu	9	-	-	*	1023.4	-1	WSW	1	o	52	85	7	-	StCu	10	-	-	*
S. Farnborough	1025.2	-2	WSW	4	o	54	75	7	3,000	StCu	7	A.Cu	3	*	1024.2	-1	WSW	1	o	51	85	7	1,250	St	10	-	-	*
London (Kew Obsy.)	1024.9	-3	WSW	2	o2f	54	75	5	4,200	StCu	10	-	-	*	1023.9	-1	SW	2	o2f	53	85	5	3,000	StCu	10	-	-	*
Croydon	1025.4	-2	WSW	4	o1f	54	75	7	3,000	StCu	10	-	-	*	1024.4	0	WSW	2	o1f	50	85	6	3,000	StCu	10	-	-	*
	1H. G.M.T. OF 11TH														7H. G.M.T. OF 11TH													
Renfrew															1018.3	+3	WSW	3	om	44	85	6	2,000	St	9	-	-	*
Eskdalemuir	1017.0	-1	WSW	5	bc	42	86	6	-	Cu	3	-	-	*	1019.5	+2	S	1	o	38	97	6	750	St.Cu	9	-	-	*
Valencia (Cahire'n)	1025.2	0	WSW	2	om	50	*	*	*	*	*	*	*	2	1023.1	-2	WSW	2	c	45	85	8	4200	St.Cu	6	Ci	1	3
Baldonnel	1023.3	0	SSW	4	b	44	85	5	-	-	-	-	-	*	1022.4	-1	SSW	2	b1f	43	92	6	3000	St	1	A.St	1	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1022.3	+1	SW	3	bom	38	92	4	3000	St.Cu	2	A.St	2	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1023.9	0	-	0	bx	34	97	8	-	-	-	Ci	3	*
Falmouth	1024.5	0	NNW	2	b	48	92	7	-	St.	2	-	-	*	1025.1	0	NNW	1	b	39	97	8	-	St	2	-	-	*
Calshot (Hants)	1023.9	-1	WSW	3	o1f	51	97	7	2000	St	10	-	-	1	1024.4	+1	N	2	o1f	46	92	7	4200	St	10	-	-	1
Lympne (Folkestone)	1023.4	-1	-	0	o1f	49	97	5	3000	St.Cu	10	-	-	*	1024.0	+1	-	0	o2f	47	97	5	3,000	St.Cu	10	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.2	+4	WNW	2	c2fe	39	92	5	4200	St.Cu	7	Ci	1	2
Howden	1020.9	0	SSW	1	bfe	39	97	5	-	-	-	-	-	*	1021.7	+2	-	0	bfe	39	97	4	3000	St	2	Ci.Cu	2	*
Cranwell (Lincs)	1022.7	0	W	2	bw	40	97	5	-	-	-	-	-	*	1022.8	0	W	3	c	39	97	5	4200	St	3	A.St	4	*
Felixstowe	1022.6	0	W	3	od	50	97	4	2000	St	10	-	-	1	1023.6	+1	WNW	2	c2f	45	97	5	-	-	-	A.St	8	1
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1023.6	0	NW	1	c1fe	44	85	6	4200	St.Cu	5	Ci.St	2	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1023.8	+1	-	0	o	34	97	7	-	StCu	6	Ci.St	4	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1024.5	+1	W	1	c	38	97	6	3000	St.Cu	3	A.St	5	*
London (M.O. at 1H.)	1023.1	-1	*	*	*	50	*	*	*	*	*	*	*	*	1024.3	+1	-	0	cmw	42	92	4	3000	St.	5	Ci.Cu	2	*
Croydon	1023.5	-2	WSW	3	o1f	50	97	6	750	St	10	-	-	*	1024.7	+1	SW	1	o2f	42	97	5	3000	St.Cu	3	A.St	7	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 10TH					7H. G.M.T. of 11TH									24 HOURS ENDED 7H. 11TH						10TH
Lerwick	1002.6	45	W	5	bc	1008.9	+4	43	-7	W	5	W	bc	3	2	50	42	omhq	bcq	bcbop	*
Stornoway	1007.8	44	W	5	ohq	1014.7	0	40	-6	NSW	2	-	o	1	12	48	39	bchq	ohq	op.o	0.3
Castlebay (Barra Is)	1009.4	50	WSW	7	ov	1016.8	0	47	-4	W	3	-	c	3	1	52	44	coh.c	c.bc.o	bcp.bc	2.4
Malin Head	1015.3	47	SW	5	cqh	1017.9	0	46		SSW	2	SW	c	4	4	52	43	bcqh	bcqh	bcq	1.4
Blacksod Point	1019.7	51	W	3	c	1018.9	-1	49	-2	W	1	-	bc	1	5	52	46	bch	bc	bcp.bc	*
Roche's Point	1025.2	48	W	2	b	1024.6	0	40	-12	-	0	-	b	1	0.2	54	40	o	o.c.b.	bw	*
Birr Castle	1027.7	47	SSW	1	c	1022.6	*	41	-6	SSW	1	-	c	*	-	51	40	o.c	c	c	0.7
Donaghadee	1018.9	47	W	2	bcm	1019.9	+1	40	-6	W	1	-	bmw	1	-	51	40	bcm	bcm	bm	*
Liverpool (Bidston)	1021.8	48	W	3	c	1021.5	-1	45	-7	WSW	3	W	bc	3	-	53	45	o	c	bc.b	0.0
Holyhead	1021.9	53	W	4	bc	1021.7	0	48	-5	W	4	W	bc	3	-	54	47	c	c	bc	0.2
Pembroke (St. Ann's Head)	1024.6	52	NW	2	ov	1024.3	-1	49	-5	NW	1	-	bv	2	2	54	48	odm	odm.ov	ovcv.bv	0.0
Scilly (St. Mary's)	1025.1	53	WSW	2	o	1025.4	0	46	-7	-	0	-	b	2	-	55	46	o	o	o.bc.b	0.0
Jersey (St. Aubin)	1026.0	43	E	1	b	1024.6	0	49	+14	SSW	2	-	oe	1	-	55	35	c.b.	bm	bw.oe	7.3
Portland Bill	1024.3	54	W	4	o	1024.3	0	49	-4	N	3	-	o	3	1	57	45	o	o.	opc.o	*
Dungeness	1023.7	54	SW	3	o	1023.5	-1	49	-2	NNW	2	-	o	3	0.3	54	49	o.c.o.	o.	oc.or.o	*
Wick	1008.6	42	WSW	2	bc	1013.0	+3	37	-8	WNW	3	-	bcq	3	2	49	36	bq	b.bq	bc.cqp	*
Nairn	1010.3	44	W	1	c	1015.4	*	39	-7	W	1	-	bc	1	1	50	39	bcq	hq.cq.	cp§	4.8
Leith	1015.3	47	SW	4	c	1017.3	+1	42	-6	SW	2	W	c	2	3	52	42	bpc.bc	cq.cp	p.pq.c	*
Tynemouth	1018.2	49	W	1	cm	1018.7	+3	44	-9	W	2	-	bm	2	-	51	44	cm	cm	bm	*
Spurn Head	1020.8	50	WSW	3	om	1020.4	0	44	-4	W	5	-	cgm	4	-	53	42	om	om	om.cgm	*
Yarmouth (Gorleston)	1021.7	52	WSW	2	o	1022.2	0	41	-7	WNW	2	-	bc	0	-	55	41	om.bm	o	om.bc	1.5
Clacton-on-Sea	1023.2	51	SW	2	c	1023.2	+1	44	-4	WNW	2	-	cm	1	-	54	43	o.c.ogm	og.cm.	cogcm	1.1
Nottingham	1022.2	50	W	1	omw	1022.9	*	36	-13	W	1	-	bcm	*	0.2	55	35	om	odm	o.c.b	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4.

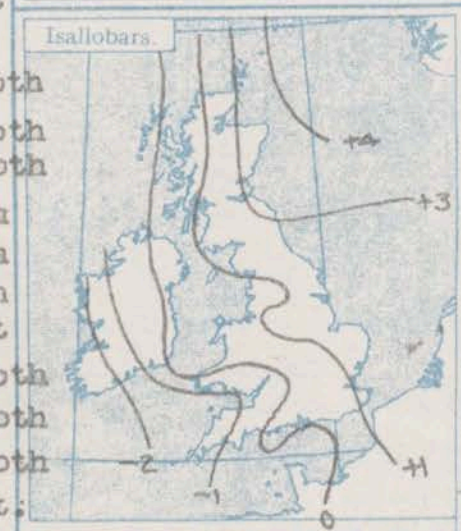
M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 11. 11. 20.

Districts	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, misty	Indif.	Smooth
2. E. England	Fair some mist	Indif	V. Smooth
3. E. Midlands	Fair	Indif	-
4. W. Midlands	Fine, frosty.	V.Good	-
5. S.W. England	Fine to dull, local mist	V.Good	Smooth
6. South Wales	Fine.	Exclt.	Smooth
7. North Wales	Fair to fine.	V.Good	Slight
8. N.W. England	Fair to fine.	Indif	Slight
9. N. Midlands	Fair to fine, local mist	Poor	-
10. N.E. England	Fine, some mist.	Indif.	V.Smooth
11. E. Scotland	Dull, misty.	Indif	V.Smooth
12. S.W. Scotland	Dull.	Fair	V.Smooth
13. Isle of Man	Fair to fine, some mist	Fair	Smooth
14. N. & N.W. Scotland	Fair, local mist.	Fair	Smooth
15. Hebrides	Dull.	Fair	Smooth
16. Orkneys and Shetlands	Fine.	Good	Slight
17. N.W. Ireland	Fair.	Good	V.Smooth
18. N.E. Ireland	Fine, some mist.	Fair	V.Smooth
19. S.E. Ireland	Cloudy.	Fair	V.Smooth
20. S.W. Ireland	Fine to cloudy.	V.Good	Slight.

Temperature reported from Coastal and Cross Channel Steamers.

Position Number	Date	Time G.M.T.	Sea °F	Air °F
5	10th	0854	54	55
3	10th	0915	55	56
6	10th	1545	55.5	52
7	11th	0320	58	55
12	11th	0406	52	54
4A.	11th	0410	48	51



Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. thunder. thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

A fresh fall of the barometer in Ireland seems to indicate that a shallow secondary depression will move Eastward over the British Isles. Some rain is consequently probable in most localities, with rather mild weather and winds from between South-West and West.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Thursday, 11th November, 1920.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands	Wind West or South-West, light; cloudy or overcast, some rain later. Visibility mainly fair; moderate or rather high temperature.
5. S.W. England 6. South Wales 7. North Wales 8. N.W. England	Wind South-West or West, light or moderate; mainly overcast, some rain. Visibility fair generally, little change of temperature.
9. N. Midlands 10. N.E. England 11. E. Scotland	Same as 1 - 4
12. S.W. Scotland 13. Isle of Man 14. N. & N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind between South and South-West, light or moderate; cloudy or overcast, some rain. Visibility mainly fair, moderate temperature.

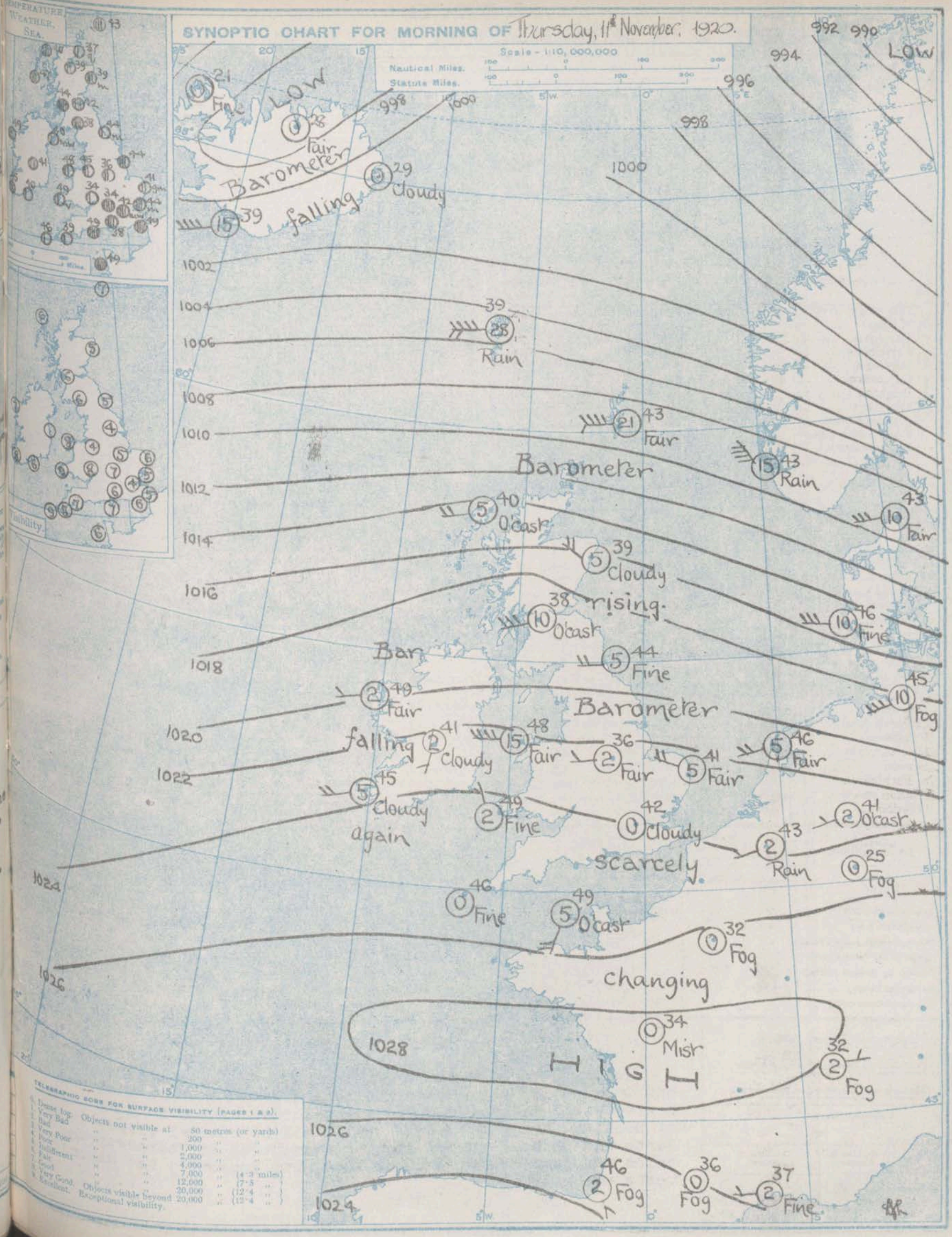
Further Outlook.

Unsettled in the West and North, less fair than of late in the South and East.

RS

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.10.

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Thursday, 11th November, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
Fine
Fair
Barometer falling
Cloudy
Rain
Fair
Barometer
Rain
O'cast
Cloudy
rising.
O'cast
Fine
Bar
Fair
Barometer
Fog
falling
Cloudy
Fair
Fair
Fair
Fair
Cloudy
again
Fine
Cloudy
Rain
O'cast
scarcely
Fog
Fine
O'cast
Fog
changing
Mist
HIGH
Fog
Fog
Fine
Temperature
Weather.
Sea.
Visibility.
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0 Dense fog. Objects not visible at 50 metres (or yards)
1 Very Bad " " 200 " "
2 Bad " " 1,000 " "
3 Very Poor " " 2,000 " "
4 Poor " " 4,000 " "
5 Indifferent " " 7,000 " (4·3 miles)
6 Fair " " 12,000 " (7·5 ")
7 Good " " 20,000 " (12·4 ")
8 Very Good. Objects visible beyond 20,000 " (12·4 ")
9 Excellent. Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 316. Thursday, 11th November

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 10th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall.† Night. 18h-9h. 9th-10th	Rainfall.† Day. 9h-18h. 10th	Sunshine. Sunrise to Sunset. 10th
Scotland.	Oban	ofc	bc	52	46	2	1	1.7
	Banff	bc	c.bcb	52	43	-	-	0.0
	Montrose							
	St. Andrews	*	*	51	45	-	-	3.5
England, N.E.	Harrogate	bc.c	c	51	46	-	-	0.5
	Scarborough	bc	bc	53	49	-	-	0.0
	Skegness	c.om	m.o.	55	44	0.3	-	0.0
England, E.	Lowestoft							
	Felixstowe	bcm	om	55	48	-	-	1.3
	Southend-on-Sea	o	o	53	47	-	-	0.0
England, S.E.	Tunbridge Wells	o	o	53	47	-	-	0.0
	Margate	o	o	54	45	-	-	0.0
	Ramsgate	*	*	52	42	-	-	0.0
	Folkestone	fo	of	53	44	-	-	0.0
	Hastings	o	o	54	44	-	-	0.0
	Eastbourne	o	o	54	39	-	-	0.0
	Brighton	o	o	55	49	-	-	0.0
	Worthing	o	o	53	48	-	-	0.0
	Littlehampton	og	o cm	58	42	-	-	0.0
	Portsmouth (S'thsea)	*	*	55	50	-	-	0.0
	Bournemouth	*	*	55	49	-	-	0.0
	Ventnor (I. of W.)	*	*	55	50	-	-	0.0
England, N.W.	Douglas (I.O.M.)							0.1
	Blackpool	c.o	c	52	50	0.2	-	0.1
	Southport	c o	o.c.o bc	52	49	-	-	0.8
	Morecambe	*	*	51	50	1	-	
Midlands.	Buxton							0.0
	Leamington Spa							
	Malvern	o	of	54	51	-	0.2	0.1
	Bath	c.bc o	o c	55	47	-	-	0.0
Wales.	Rhyl	bc	c	53	46	0.3	-	0.7
	Colwyn Bay	*	*	54	48	1	-	0.3
	Llandudno	*	*	55	48	1	-	0.0
	Aberystwyth	r of.	c.o	53	51	5	2	
	Tenby							
	Swansea							0.0
England, S.W.	Weymouth	o	o	56	50	-	-	0.0
	Teignmouth	o	o	55	46	-	-	0.0
	Torquay	o	c	59	47	-	-	0.0
	Paignton	e ogm.o	o	54	44	-	-	0.0
	Penzance	o	od	56	50	-	0.4	0.0
	Newquay	o	o od	55	47	-	0.2	0.0
	Bude	o	o	55	47	-	2	0.0
	Ilfracombe	o	of	55	50	-	0.4	0.0
	Weston-s-Mare	c	c	54	50	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 10th	Weather. 13h-18h. 10th	Weather. 18h-1h. 11th	Weather. 1h-7h. 11th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
Renfrew	c o p	c o p c o b b c	b.o.p	b.bc.c	~~54~~ 50	42	33	mm. 8	mm. 2	0.6
Eskdalemuir	bc.cq	⊕ bc.c	po. bcc	bc.c.o	49	39	31		0.3	3.7
Valencia (Cahire'n)	o	c.o. bc.c	b.bc	bcc po	54	44	41	-	1	1.2
Baldonnel	o of	c.o. b.bc	bq	m. b. bc	53	41	37	-	-	1.4
Didsbury	o 3f	o of c.o.	b.bc2f	b.bc3f.	53	37	26	-	-	*
Ross on Wye	c.o.	og.o po	pd.o.c o b p	bc.bc.b.bc	54	33	29	1	trace	0.0
Falmouth	o	o	opd.o.b.bc	b.bc	55	39	28	-	-	0.0
Calshot (Hants)	o.if	o if	o.o.if	o if.	55	45	40	-	-	0.0
Lympne (Folkestone)	o if	o if	o if	o2f. p	51	46	43	-	0.4	0.0
Aberdeen	if b.bc	b.bc if	2f.2fe	2fe	54	38	26	-	-	6.8
Howden	o.o if	o.o if	bc.c o2f	bcc 2fe	55	39	30	-	-	0.0
Cranwell (Lincs)	~~o~~ po2f		c o w	b.bc	54	39	35	0.4	-	po0
Felixstowe	o.o2f	o2f	o2f pd.	o2f.c.o	56	43	*	0.1	-	1.4
Shoeburyness	o if. o	o	c if e	c o w	56	43	37	-	-	0.0
Benson	o	o	po.o	o	56	34	24	-	0.4	*
S. Farnborough	o	o	opd.	c.o	55	38	31	-	0.3	0.0
London (Kew Obsy.)	o3f. o.	o3f. o.	o2f. p.	o2f.c.o w	56	42	33	-	0.2	0.0
Croydon	o if	o if	o if.o2f pd	o if.o2f	54	42	*	-	1	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air: humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:–
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·5
1	1- 3	0·5- 1·5
2	4- 7	1·6- 3·5
3	8-12	3·6- 5·7
4	13-18	5·8- 8·0
5	19-24	8·1- 10·7
6	25-31	10·8- 13·8
7	32-38	13·9- 17·1
8	39-46	17·2- 20·7
9	47-54	20·8- 24·4
10	55-63	24·5- 28·4
11	64-75	28·5- 32·5
12	Above 75	32·6 or above

SYMBOLS—
Aurora ⊼ Solar halo ⊕
Rime ⊥ Lunar halo ⊙
Glazed frost ⌇ Solar corona ⊙
Glazed roads ⌇ Lunar corona ⊙

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 Hours ended 9h G.M.T. 11th							Yesterday.		To-day.
Greenwich (Royal Observatory)	o	o	o.f.o.c.o	57	40	32	0.3	0.4	94	78
City (Bunhill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	*	*	o.d.o	56	42	35	0.2		70	92
Regent's Pk. (Botanical Gdns)						*				
Camden Sq. (British Rainfall)	c. bc	bc. c	*	56	41	35	-	*	73	88
Kensington Palace	c. bc	c	*	56	41	33	0.2	*	81 (18h)	94
Hampstead Observatory	*	*	*	55	42	31	trace		*	91

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total 212 Joules.

Milliwatts.
Average Rate. 6·4
Maximum Rate. 18

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

11th AND 12th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.8 / 7.10	11.37 / 11.37	4.6 / 4.4
Greenwich	7.12 / 7.14	11.44 / 11.44	4.16 / 4.14
Wick	7.33 / 7.36	11.56 / 11.56	3.59 / 3.57
Valencia	7.55 / 7.57	12.25 / 12.25	4.55 / 4.53

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 10th 17 h. 30 m. to 11th 6 h. 0 m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	12. 30	1. 46	14
δ Ursae Minoris	12. 30	0. 18	2

NOTES ON THE WEATHER OF YESTERDAY.

Temperature rose to 59° at Torquay, 58° at Littlehampton and to about 55° at some other Southern and Western stations. Scarcely any bright sunshine was recorded except in some parts of Scotland and at Jersey. Rain fell at several places in the North and North-West and locally elsewhere; at Stornoway the value was 12mm and at Renfrew 10mm, but generally the measurements were slight.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,540 .... FRIDAY, 12th NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1h, 7h, 13h AND 18h.

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	13h. G.M.T. 11th														**18h. G.M.T. of 11th**													
Renfrew	1018.9	-1	SW	5	o	50	75	7	2,000	St.Cu	9	A.St	1	*	1018.0	0	SW	4	c	48	75	6	-	-	-	A.St	7	*
Eskdalemuir	1020.4	0	SW	4	bc	46	75	7	3,000	Cu	4	Ci	2	*	1019.6	-1	SW	4	bc	44	85	6	-	St.Cu	4	-	-	*
Valencia (Cahirc'n)	1021.4	-3	S	3	o	53	75	8	3,000	Cu	4	A.Cu	5	3	1019.7	-2	S	3	o	50	65	8	3,000	St.Cu	9	-	-	3
Baldonnel	1022.0	-1	SW	3	c	50	75	8	3,000	St.Cu	2	A.Cu	6	*	1021.0	-1	SSW	4	bc	47	85	8	-	-	-	A.St	5	*
Manchester (Alex. Pk)	1022.8	-1	W	3	ouz	52	65	4	2,000	St.Cu	9	-	-	*	1022.9	+1	SSW	2	bcm	43	85	4	5,700	St.Cu	3	A.Cu	2	*
Ross on Wye	1024.0	-2	W	1	c	49	85	8	4,200	Cu	1	Ci	7	*	1024.0	0	-	0	bmw	42	92	4	1,250	St	1	A.St	1	*
Falmouth	1024.9	-1	S	1	bc	54	65	8	-	Cu	4	Ci.St	2	*	1024.3	0	SE	1	b	47	85	7	-	-	-	A.Cu	1	*
Calshot (Hants)	1024.7	-1	SSW	1	bcif	54	75	6	4,200	Cu	3	Ci	1	1	1024.9	+1	-	0	bif	42	92	7	2,000	St	2	-	-	0
Lympne (Folkestone)	1024.1	0	NNE	2	bcif	51	65	6	2,000	St.Cu	1	Ci	5	*	1025.3	+1	E	1	bif	43	85	6	-	-	-	Ci	3	*
Aberdeen	1017.2	-1	SSW	1	bcif	47	56	7	4,200	St.Cu	4	-	-	2	1016.0	-1	SW	3	bczfe	45	85	5	-	-	-	Ci.Cu	4	2
Howden	1022.3	-1	-	0	o3f	45	97	2	2,000	St	8	A.St	1	*	1022.7	+1	-	0	bcm	40	97	2	3,000	St.Cu	5	-	-	*
Cranwell (Lincs)	1023.3	0	W	2	b	50	85	5	4,200	St	2	A.Cu	2	*	1024.0	+1	SW	1	b	41	97	5	-	-	-	-	-	*
Felixstowe	1024.4	0	NW	2	bcz	53	75	6	-	-	-	A.St	5	1	1025.3	+2	-	0	bif	44	97	6	-	-	-	A.St	3	0
Shoeburyness	1024.2	0	NE	1	bcv	53	65	9	5700	Cu	2	Ci.St	3	*	1024.8	+1	-	0	bzfe	40	92	5	4,200	St.Cu	3	-	-	*
Benson	1023.2	0	-	0	o	49	78	7	-	-	-	A.Cu	10	*	1024.6	+1	-	0	bc	41	92	7	-	-	-	A.Cu	4	*
S. Farnborough	1024.5	0	WNW	2	c	53	65	7	3,000	Cu	2	Ci	6	*	1025.3	+1	-	0	bm	39	92	4	-	-	-	-	-	*
London (Kew Obsy.)	1024.4	-2	NW	1	czf	50	75	5	-	-	-	Ci	8	*	1024.8	+1	-	0	bw	43	92	5	-	-	-	-	-	*
Croydon	1024.5	-1	W	1	ozf	53	65	5	-	-	-	Ci.St	9	*	1025.2	+1	SW	3	bczf	41	92	4	2,000	St.Cu	2	A.Cu	2	*
	1h. G.M.T. of 12th														**7h. G.M.T. of 12th**													
Renfrew															1011.1	-5	S	5	org	48	85	8	2000	Nb	10	-	-	*
Eskdalemuir	1018.2	-2	SSE	3	c	44	92	6	-	St.Cu	8	.	.	*	1014.3	-4	SSW	5	or	46	97	6	750	Nb	10	-	-	*
Valencia (Cahirc'n)	1017.3	-5	SSW	4	omr	52	*	*	*	*	*	*	*	5	1013.4	-2	SSW	5	o	54	85	8	2000	St.Cu	8	Ci	1	*
Baldonnel	1019.1	-2	S	3	b	41	85	4	2,000	St.Cu	1	.	.	*	1014.0	-5	SSW	6	oq	50	85	6	2000	St	10	-	-	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1020.1	-1	S	3	ozf	43	85	4	3000	St.Cu	9	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1022.3	-2	NW	1	bcmx	30	97	3	3000	St.Cu	2	Ci	2	*
Falmouth	1023.5	-1	SSW	2	bw	46	97	7	-	St	1	.	.	*	1022.7	-1	SSW	3	b	47	97	7	-	St.Cu	2	-	-	*
Calshot (Hants)	1024.7	0	N	2	bzf	41	97	4	.	.	.	.	.	1	1023.4	-2	N	2	bzf	38	97	4	3000	St.Cu	2	-	-	1
Lympne (Folkestone)	1024.7	0	-	0	bczfe	47	97	5	-	.	.	Ci	6	*	1024.2	0	-	0	c3f	42	97	3	4200	St.Cu	8	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1010.1	-4	SSW	4	cife	47	85	6	3000	St.Cu	8	-	-	2
Howden	1022.4	-1	-	0	bcfe	36	97	3	3000	St	4	.	-	*	1020.3	-2	S	3	bo	36	97	3	3000	St	3	Ci.St	2	*
Cranwell (Lincs)	1023.9	0	SW	2	b	41	97	5	4200	St	2	-	-	*	1021.2	-2	SW	3	b	41	92	5	4200	St	1	A.St	2	*
Felixstowe	1025.2	0	-	0	bzf	?	97	5	-	.	.	.	.	0	1024.1	0	-	0	bfe	31	97	1	.	.	-	-	.	0
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1024.4	-1	-	0	bfe	32	88	1	<500	St	10	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1022.5	-1	SW	1	bx	28	97	5	-	St.Cu	1	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1024.0	-2	-	0	bafe	33	97	2	2000	St	3	-	-	*
London (M.O. at 1h)	1024.5	0	*	*	*	*	*	*	*	*	*	*	*	*	1023.8	-2	-	0	bzfx	33	97	0	-	-	-	-	-	*
Croydon	1025.2	-1	S	3	bw3f	37	97	3	-	.	.	.	.	*	1024.4	-2	SSW	3	bcif	37	97	6	1250	St	6	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7h. AND 18h.

Stations	Barom. at M.S.L. mb. (18h. G.M.T. of 11th)	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb. (7h. G.M.T. of 12th)	‡ Change in 8 hours	Temperature Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather §	Sea 0-9	† Rainfall mm. (24 hours ended 7h. 12th)	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours (11th)
Lerwick	1009.6	44	W	4	omr	1005.6	-4	48	+5	S	4	.	omr	3	6	48	41	bcp	omr	omr	*
Stornoway	1011.9	45	WSW	2	or	999.4	-8	50	+10	S	7	-	org	6	10	50	40	cp	or	op.org	1.9
Castlebay (Barra Is)	1014.0	52	SW	4	op	1002.3	-9	52	+5	SSW	7	-	or	6	4	52	47	clhc.	copc	op.cor	1.0
Malin Head	1016.5	46	SSW	3	o	1005.6	-3	48		SSW	4	SW	o	4	tr	51	42	c	cp	o	0.6
Blacksod Point	1016.9	50	SW	3	op	1004.3	-3	54	+5	SW	4	-	o	3	2	56	53	bc	omp	bc.cp	*
Roche's Point	1022.0	53	SW	2	o	1017.0	-3	55	+15	SW	3	-	r	3	2	55	40	b.o.	o	op.b.rm	*
Birr Castle	1020.4	51	SSW	1	c	1012.6	*	50	+9	SE	1	-	o	*	-	51	44	c	c	c.o	2.8
Donaghadee	1019.7	47	W	2	om	1013.2	-4	50	+10	SW	4	SW	cmq	3	-	51	40	bcm	bcm	bcm	*
Liverpool (Bidston)	1022.2	46	WSW	2	c	1018.8	-1	43	-2	SSE	2	W	o	2	-	51	40	b	bc	bc.o	5.6
Holyhead	1021.7	50	WSW	4	b	1016.6	-3	53	+5	WSW	5	-	oq	4	trace	54	47	bc	bc.b	b.bcq.pd	4.2
Pembroke (St. Ann's Head)	1023.8	48	S	2	bcv	1020.1	-2	53	+4	SSW	5	-	oq	4	1	55	49	bcv	cv	b.bcq.pr	2.4
Scilly (St. Mary's)	1023.6	53	SE	1	o	1021.8	-1	52	+6	S	4	-	b	4	-	57	51	b.bc.c.	c.o.	o.b	3.8
Jersey (St. Aubin)	1024.4	50	SSW	2	o	1024.6	0	46	-3	S	3	.	o	2	-	51	41	oe.o	o.c.o.	o	0.0
Portland Bill	1024.3	51	E	1	bc	1023.3	-2	50	+1	-	0	-	c	2	-	57	44	o.b	b.bc	bc	*
Dungeness	1024.3	50	E	2	bc	1023.6	0	40	-9	NNW	2	W	bc	3	-	52	37	bc	bc	bc	*
Wick	1011.6	44	SW	3	bc	1003.3	-8	49	+12	SW	6	-	oq	3	-	49	35	bc.bc	c.bc	bc.oq	*
Nairn	1013.6	44	W	1	bc	1006.0	*	47	+8	WSW	3	.	cq	2	-	47	37	bc	bc	bcq	5.2
Leith	1017.3	46	SW	2	c	1011.5	-2	50	+8	SW	3	-	o	2	-	50	41	c.bc	bc.c	c.bc.u.o	*
Tynemouth	1020.5	47	W	1	bcm	1016.5	-3	43	+1	SW	3	.	cm	2	-	50	42	bcm	bcm	bcm	*
Spurn Head	1023.0	45	WSW	3	bm	1021.2	-1	41	-3	SW	3	.	b	2	-	50	38	cqm	bc	bm	*
Yarmouth (Gorleston)	1024.1	44	WSW	2	b	1023.3	-1	39	-2	W	2	.	bcm	1	-	53	38	bc.b	b.	bmbw.b	5.8
Clacton-on-Sea	1024.9	46	NW	1	bc	1023.8	-1	49	+5	W	1	-	bmx	0	-	54	36	cm.bcz	bcz	b3mx	6.0
Nottingham	1023.8	41	SW	1	b	1021.6	*	32	+4	-	0	.	fe	*	-	51	30	bm	bm	bf	0.9

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4.

M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 12.11.1920

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Variable sky, mist &local fog.	v.poor	smooth
2. E. England	Fair to fine, local fog.	v.poor	v.smooth
3. E. Midlands	Fair to fine, some fog.	indiff.	-
4. W. Midlands	Fair to dull, some mist. (frost.	poor	-
5. S.W. England	Variable sky. (frost.	good	slight
6. South Wales	dull, squally.	v.good	moderate
7. North Wales	Cloudy, squally.	v.good	moderate
8. N.W. England	Dull, some fog	indiff.	slight
9. N. Midlands	Fair to dull, local fog	poor	-
10. N.E. England	Cloudy, misty.	v.poor	smooth
11. E. Scotland	Dull	indiff.	smooth
12. S.W. Scotland	Dull, slight rain	fair	moderate
13. Isle of Man	Cloudy to dull, some mist	indiff	moderate
14. N.& N.W. Scotland	Dull, squally	fair	slight
15. Hebrides	Dull, rain, squally.	fair	rough
16. Orkneys and Shetlands	Dull, mist, rain	poor	slight
17. N.W. Ireland	Dull.	good	slight
18. N.E. Ireland	Cloudy, misty, squally	fair	moderate
19. S.E. Ireland	Dull, squally	indiff	slight
20. S.W. Ireland	Dull, local rain	fair	slight

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
5.	11th	0852	53	48
7.	12th	0305	56	53
4A.	12th	0430	52	53

Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. thunder. thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

A deep depression South of Iceland will cause mild and unsettled weather to spread to all districts before long and over Scotland, Ireland, and the Irish Sea the SW wind will become strong to a gale.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands	Wind SW moderate; becoming cloudier and less settled; visibility indifferent to fair; milder.
5. S.W. England 6. South Wales	Wind SW moderate to fresh; dull, some showers, visibility fair to good; mild.
7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England 11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland	Wind SW fresh to strong, a gale in exposed places; dull, some rain; visibility fair; mild.
15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland	Wind SW strong to a gale; dull, rain at times; visibility fair; mild.
18. N.E. Ireland	Same as 7 - 13.
19. S.E. Ireland 20. S.W. Ireland	Same as 5 - 6.

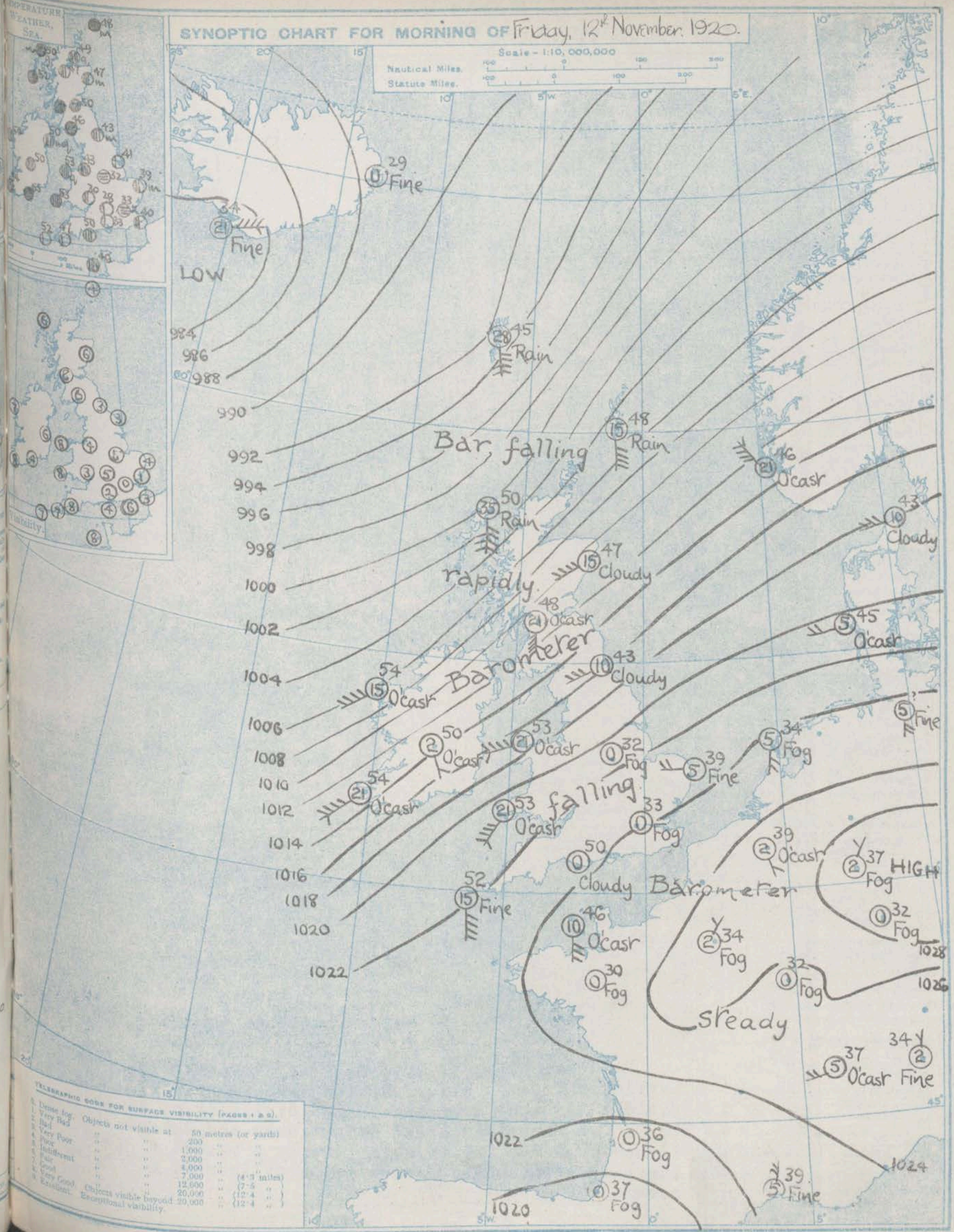
Further Outlook.

Unsettled and mild generally with SW to W winds.

South Cone Hoisted 08 40h. Nov. 12th 1920

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 10.15. 1.VN

G. C. SIMPSON, F.R.S., Director.



TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).

0. Dense fog.	Objects not visible at		50 metres (or yards)	
1. Very Bad	"	"	200	" "
2. Bad	"	"	1,000	" "
3. Very Poor	"	"	2,000	" "
4. Poor	"	"	4,000	" "
5. Indifferent	"	"	7,000	(4·3 miles)
6. Fair	"	"	12,000	(7·5 ")
7. Good	"	"	20,000	(12·4 ")
8. Very Good	"	"	20,000	(12·4 ")
9. Excellent.	Objects visible beyond			
	Exceptional visibility.			

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 317.

Friday, 12th NOVEMBER

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 11th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 10th-11th	Rainfall. Day. 9h-18h. 11th	Sunshine. Sunrise to Sunset. 11th
Scotland.	Oban	b.bc.c.o	pr	49	42	-	17	0.9
	Banff	bc	bc.b.	49	38	1	-	4.5
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	b	b.bc	50	40	-	-	3.6
	Scarborough	b	b	49	42	-	-	7.2
	Skegness	b	mb	53	36	-	-	5.8
England, E.	Lowestoft							
	Felixstowe							
	Southend-on-Sea	bc	bc	56	41	-	-	5.8
England, S.E.	Tunbridge Wells	bc.b	b.bcm	53	41	1	-	4.9
	Margate	bc.b.	b	52	46	-	-	5.3
	Ramsgate	*	*	51	45	0.3	-	4.8
	Folkestone	f.o.c.	c	55	47	-	-	3.1
	Hastings	or.c.b.	b	54	46	h	-	4.3
	Eastbourne	bc	bc.b.	53	41	-	-	5.2
	Brighton	[illegible]	[illegible]	[illegible]	[illegible]	-	-	[illegible]
	Worthing	bc.b.	b.bc	58	43	-	-	6.3
	Littlehampton	bc	bcw	54	45	-	-	5.7
	Portsmouth (S'hsea)	*	*	54	45	-	-	6.3
	Bournemouth	*	*	56	43	-	-	6.5
	Ventnor (I. of W.)	*	*	54	45	-	-	5.5
England, N.W.	Douglas (I.O.M.)							5.6
	Blackpool	c.	bch	55	48	-	0.3	4.0
	Southport	b.bc	bc.b.bc	52	47	-	-	5.9
	Morecambe	*	*	53	45	-	-	
Midlands.	Buxton							3.0
	Leamington Spa	bc	c	49	34	11	-	4.3
	Malvern	b.bc	bc.b	52	41	-	-	3.8
	Bath	c.bc.b	bc.b	54	33	-	-	5.0
Wales.	Rhyl	bc	bc	60	41	-	-	5.1
	Colwyn Bay	*	*	53	45	-	-	4.5
	Llandudno	*	*	53	46	-	-	0.3
	Aberystwyth	o.c.	r.o.c.	52	44	-	1	
	Tenby							
	Swansea							
England, S.W.	Weymouth	bc	bc.b	57	43	2	-	6.7
	Teignmouth							
	Torquay	o	b	57	42	0.1	-	6.2
	Paignton	bcmb	bm	59	38	-	-	5.9
	Penzance	b	bc.c.o.	57	40	1	-	5.1
	Newquay	b	bc.c.o.b	55	38	1	-	4.8
	Bude	o.c.bcc	c.bc.c.b	55	38	-	-	1.1
	Ilfracombe	b.bc	bc.c.o	53	45	2	-	2.8
	Weston-s-Mare	b.bc	c.bc	51	37	-	-	3.1

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 11th	Weather. 13h-18h. 11th	Weather. 18h-1h. 11th-12th	Weather. 1h-7h. 12th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
Renfrew	bc.c 2fe	ofh.c.o.u	bco.bbc	bbcogpo	51	48	39	mm. trace	mm. 0.1	3.2
Eskdalemuir	bc.c.o.	rhoc.o.	co.bc.c	coro	47	37	40	0.1	1	3.0
Valencia (Cahirc'n)	c.o.	o	copo	copo	54	44	47	-	1	0.2
Baldonnel	c.o.if	bc.ev	bozf	cog	51	41	40	-	-	3.8
Manchester (Alex. Pk)	bcfo.co	ozf.bcc	bcc2fe	b.ozfe	52	37	26	trace	-	*
Ross on Wye	b.bczfbcc	bcc.obcf	bwsf4sfx	bzf.b.bcx	50	27	26	-	-	2.7
Falmouth	2fe b.bc	bc.if.bbc	b.bc	w.b.bc	56	39	38	-	-	4.5
Calshot (Hants)	bc.c.if	b.bc.if	bif2fe3fe	b2if62f	55	38	28	-	-	6.3
Lympne (Folkestone)	co.2fbc.if	b.bc.if	bbcw.bbc2f	2f.bbcc2fw	52	39	26	-	-	4.6
Aberdeen	2fe.if	if.2f	2fe.ife	2fe.ife	48	32	35	-	-	3.7
Howden	c.o.3f.	o.c4sf.	bcc3fe	b.bcx	48	33	30	*	*	5.7
Cranwell (Lincs)	co.bc.c	b.bc	bw	b.bc	52	38	34	-	-	4.0
Felixstowe	2 bc.c	2.b.bc	b.bc2f	xb	56	30	*	-	-	6.2
Shoeburyness	co.bcc	b.bc	b.bc4sf	c-2fe x	55	29	22	-	-	5.6
Benson	bc.c	bc.c	b	b.bcx	56	27	21	-	-	*
S. Farnborough	c.o	bc.c.bbc	b.bc	b.bc4sfe	55	24	22	-	-	5.4
London (Kew Obsy.)	w.2f	bc.cbbcz	c-8f.w	c-8fx	51	30	29	trace	-	3.6
Croydon	co.2f	bc.c2f	bbc2f3fw	bocf2f3f	54	33	*	*	trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air, humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:–
R = heavy rain.
rr = continuous moderate rain.
r,r, = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 10 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1– 3	0·3– 1·5
2	4– 7	1·6– 3·3
3	8–12	3·4– 5·4
4	13–18	5·5– 7·9
5	19–24	8·0–10·7
6	25–31	10·8–13·8
7	32–38	13·9–17·1
8	39–46	17·2–20·7
9	47–54	20·8–24·4
10	55–63	24·5–28·4
11	64–75	28·5–32·6
12	Above 75	32·6 or above

SYMBOLS–
Aurora ☆ Solar halo ⊕
Rime ⚹ Lunar halo ☽
Glazed frost ⌒ Solar corona ◎
Glazed roads ⌒ Lunar corona ◎

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 12th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	bj	bj	b.o.bx	51	29	25	-	0.2	93	95
City (Bunhill Row)	*	*	*	*	*	*	*	0.3	*	*
Westminster (St. James's Park)	*	*	bc.bf	53	32	29	-	0.8	69	96
Regent's Pk. (Botanical Gdns)	*	*	*	*	*	*	*	2.2	*	*
Camden Sq. (British rainfall)	bom bc	bc.b.o.m	*	54	34	28	-	*	73	100
Kensington Palace	bc	bc.o	*	53	29	26	-	*	91 (18h)	97
Hampstead Observatory	*	*	*	50	36	26	trace	2.4	*	87

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total 348 Joules.

Milliwatts.
Average Rate. 10.7
Maximum Rate. 27

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

12th AND 13th NOVEMBER 1920.

Stations.	Sunrise G.M.T.	Noon G.M.T.	Sunset G.M.T.
Yarmouth	7.10 / 7.12	11.37 / 11.37	4.4 / 4.3
Greenwich	7.14 / 7.16	11.44 / 11.44	4.14 / 4.13
Wick	7.55 / 7.58	11.56 / 11.56	3.57 / 3.56
Valencia	7.57 / 7.59	12.25 / 12.25	4.53 / 4.52

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 11th 17h 30m to 12th 6h 0m

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	12 30	11 55	95
δ Ursae Minoris	12 30	10 39	85

NOTES ON THE WEATHER OF YESTERDAY.

Rain amounting to 10mm fell at Stornoway and 6mm at Lerwick. Under a clear sky the temperature fell very rapidly at night over the inland districts of England, to 24° at Farnborough and 27° at Ross and Benson, and in these parts fog formed. The day as a result of good sunshine records, had been mild, a maximum of 60° being recorded at Rhyl.

* Information for the columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B.21,541 ....SATURDAY, 13th NOVEMBER, 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

13H. G.M.T. ....12th....

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather.	Temp. °F.	Humidity. %	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
Renfrew	1006.6	-4	SSW	6	oq	53	85	6	1,250	StCu	10	-	-	3
Eskdalemuir ...	1009.1	-5	SSW	7	ortmq	50	92	6	1,250	Nb	10	-	-	*
Valencia (Cahire'n)	1010.9	-5	S	5	o	56	85	8	1,250	StCu	10	-	-	4
Baldonnel ...	1011.3	-4	SW	4	o	55	85	5	1,250	St	10	-	-	*
Manchester (Alex. Pk)	1017.5	-3	SSW	5	ozf	51	75	4	3,000	StCu	8	A.St	1	*
Ross on Wye ...	1020.1	-3	SW	4	c	52	75	7	4,200	Cu	3	Ci	4	*
Falmouth	1022.0	-1	SSW	4	c	52	75	7	-	StCu	3	Ci.St	5	*
Calshot (Hants) ...	1022.8	-2	WSW	4	oif	53	85	6	3,000	StCu	9	-	-	2
Lympne (Folkestone)	1023.7	-2	SW	3	odz	49	97	5	<500	Nb	10	-	-	*
Aberdeen	1004.8	-6	S	4	ozf	51	97	5	1,250	St	10	-	-	2
Howden	1017.1	-4	SW	4	o	47	85	3	2,000	St	8	A.St	2	*
Cranwell (Lincs) ...	1020.1	-3	SSW	4	o	50	85	5	4,200	St	5	A.St	5	*
Felixstowe ...	1023.6	-1	-	0	bczf	49	92	5	-	-	-	A.St	5	1
Shoeburyness ...	1022.8	-2	S	1	czfe	54	75	5	2,000	Cu	7	-	-	*
Benson	1020.8	-2	SSW	3	o	50	75	6	-	StCu	9	-	-	*
S. Farnborough	1022.4	-1	S	3	oif	53	65	6	3,000	StCu	5	A.Cu	4	*
London (Kew Obsy.)	1022.6	-2	WNW	1	ozf	47	85	2	-	-	-	A.Cu	9	*
Croydon	1022.7	-1	S	4	ozf	51	85	5	3,000	StCu	10	-	-	*

18H. G.M.T. OF ....12th....

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather.	Temp. °F.	Humidity. %	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
Renfrew	1004.1	-2	SSW	6	oq	54	85	6	1,250	StCu	10	-	-	*
Eskdalemuir ...	1005.6	-2	SSW	7	ozf	50	92	5	-	St	10	-	-	*
Valencia (Cahire'n)	1007.8	-3	SSW	6	o	54	85	7	2,000	StCu	10	-	-	4
Baldonnel ...	1008.0	-6	WSW	6	orq	54	85	6	1,250	StCu	7	A.St	3	*
Manchester (Alex. Pk)	1015.1	-1	SSW	5	ozf	52	75	4	3,000	StCu	10	-	-	*
Ross on Wye ...	1018.5	-2	SW	5	bq	48	85	8	4,200	Cu	1	A.St	1	*
Falmouth	1019.5	-2	SSW	4	bc	49	85	6	-	StCu	5	-	-	*
Calshot (Hants) ...	1021.4	-2	SSW	3	bif	50	85	7	3,000	StCu	2	-	-	2
Lympne (Folkestone)	1022.9	-1	SW	3	ozf	47	97	5	1,250	St	9	-	-	*
Aberdeen	1002.2	-2	SSW	4	ozf	53	85	5	1,250	StCu	10	-	-	3
Howden	1017.7	-3	SSW	5	ozf	49	92	4	2,000	St	10	-	-	*
Cranwell (Lincs) ...	1018.5	-1	S	3	b	45	97	6	4,200	St	4	A.St	2	*
Felixstowe ...	1021.7	-1	S	4	bcif	49	97	6	3,000	St	4	-	-	2
Shoeburyness ...	1021.7	-1	SSW	2	b	50	85	7	5,700	StCu	2	-	-	*
Benson	1020.2	-1	S	3	bc	46	92	6	-	-	-	Ci	4	*
S. Farnborough	1021.1	-2	S	3	bifw	47	92	5	-	-	-	-	-	*
London (Kew Obsy.)	1020.8	-2	SSW	2	bw	48	92	4	3,000	St	3	-	-	*
Croydon	1021.7	-2	S	4	bzfw	47	97	5	-	-	-	-	-	*

1H. G.M.T. OF ....13th....

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather.	Temp. °F.	Humidity. %	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
Renfrew ...	1000.1	-6	SSW	8	ortmq	50	92	4	-	Nb	10	-	-	*
Eskdalemuir ...	1006.2	-5	WSW	4	omr	51	*	*	*	*	*	*	*	5
Valencia (Cahire'n)	1004.4	0	S	4	orq	54	92	3	750	St	10	-	-	*
Baldonnel ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ross on Wye...	1015.5	-3	SW	7	ozq	54	92	5	-	Nb	10	-	-	*
Falmouth ...	1018.7	-2	SSW	4	oif	48	85	6	2000	StCu	10	-	-	4
Calshot (Hants)...	1020.4	-4	SSW	6	ozfq	45	92	6	1250	St	10	-	-	*
Lympne (Folkestone)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aberdeen ...	1010.1	-6	S	5	oq	48	85	6	3,000	St	10	-	-	*
Howden ...	1014.4	-4	S	6	cq	46	92	5	2,000	St	8	-	-	*
Cranwell (Lincs)	1019.5	-2	S	6	bcif	48	92	6	3,000	St	4	-	-	4
Felixstowe ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Shoeburyness...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*
London (M.O. st 1a.)	1018.9	-2	*	*	*	*	*	*	*	*	*	*	*	*
Croydon ...	1019.8	-3	SW	5	oif	46	85	6	1250	St	10	-	-	*

7H. G.M.T. OF ....13th....

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather.	Temp. °F.	Humidity. %	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
Renfrew ...	999.6	+3	SW	6	bcq	47	75	7	2000	St.Cu	3	Ci	1	*
Eskdalemuir ...	1002.0	+3	SW	5	b	45	85	6	3000	Cu	1	Ci.St	1	*
Valencia (Cahire'n)	1010.7	+3	SW	5	cp	51	75	8	3000	Cu	7	-	-	*
Baldonnel ...	1007.7	+5	SW	5	bq	46	85	5	2000	Cu	3	-	-	*
Manchester (Alex. Pk)	1007.7	-1	SW	2	orzf	49	92	4	2000	Nb	10	-	-	*
Ross on Wye...	1010.6	-3	SW	6	obtoq	53	85	7	1250	Nb	10	-	-	*
Falmouth ...	1014.1	-1	SW	6	oroq	55	97	4	-	Nb	10	-	-	*
Calshot (Hants)...	1015.4	-3	SW	5	oif	55	92	6	1250	St.Cu	10	-	-	4
Lympne (Folkestone)	1017.9	-3	SSW	6	oq	48	92	6	1250	St	10	-	-	*
Aberdeen ...	999.4	+4	SSW	4	bif	47	65	6	-	-	-	A.St	1	3
Howden ...	1000.9	0	SSW	6	orq	51	97	4	750	Nb	10	-	-	*
Cranwell (Lincs)	1009.9	-4	SSW	5	oq	49	92	7	1250	StCu	9	-	-	*
Felixstowe ...	1016.3	-3	S	6	oif	47	97	6	2000	StCu	9	A.St	1	5
Shoeburyness...	1015.8	-3	SW	7	oq	48	85	7	2000	StCu	9	-	-	*
Benson	1012.2	-2	SSW	4	o	51	92	6	-	Nb	9	-	-	*
S. Farnborough	1014.7	-3	SSW	6	odo	51	97	5	1250	Nb	10	-	-	*
London (Kew Obsy.)	1014.5	-2	SSW	3	odo	50	92	5	1250	Nb	10	-	-	*
Croydon ...	1015.7	-3	S	6	ozfdoq	49	97	4	<500	St	10	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

18H. G.M.T. of ....12th....

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.
Lerwick	996.3	50	S	4	omrq
Stornoway ...	991.7	52	S	6	oq
Castlebay (Barra'n)	994.9	54	SSW	5	op
Malin Head ...	997.8	54	SSW	4	o
Blacksod Point	999.1	52	SW	6	omr
Roche's Point...	1011.7	55	SW	4	o
Birr Castle ...	1006.2	55	SW	4	o
Donaghadee ...	1007.4	54	SW	3	omq
Liverpool (Bidston)	1013.1	52	SSW	5	o
Holyhead ...	1011.0	54	SSW	7	ohdq
Pembroke (St. Ann's Head)	1015.8	52	S	6	oq
Scilly (St. Mary's)	1018.7	54	SSW	4	o
Jersey (St. Aubin)	1023.7	43	SSE	3	o
Portland Bill ...	1020.9	53	SSW	5	bc
Dungeness ...	1022.2	52	SW	3	bc
Wick	995.6	51	SSW	4	cq
Nairn	996.4	53	W	2	c
Leith	1003.8	54	SW	3	bc
Tynemouth ...	1009.9	52	WSW	5	oqz
Spurn Head ...	1015.9	48	SW	4	bc
Yarmouth (Gorleston)	1020.5	46	SW	3	b
Clacton-on-Sea.	1021.6	50	SW	3	c
Nottingham ...	1017.4	50	SW	4	bc

7H. G.M.T. of ....13th....

STATIONS.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.
Lerwick	993.1	+2	48	0	W	6	-	cmrq	6
Stornoway ...	990.1	+1	42	-8	WSW	6	-	cpq	6
Castlebay (Barra'n)	993.5	+1	46	-6	WSW	5	-	op	6
Malin Head ...	998.6	+2	46		W	4	W	oqp	4
Blacksod Point	1002.6	+2	47	-7	W	5	-	bc	6
Roche's Point...	1011.7	+4	47	-8	WSW	3	-	b	4
Birr Castle ...	1007.3	*	45	-5	SW	2	-	c	*
Donaghadee ...	1003.7	+2	45	-5	SW	3	-	bq	3
Liverpool (Bidston)	1007.5	+3	49	+6	WSW	2	-	c	3
Holyhead ...	1007.6	+3	51	-2	WSW	4	W	bc	4
Pembroke (St. Ann's Head)	1011.1	+2	53	0	SW	5	-	b	6
Scilly (St. Mary's)	1014.6	+1	52	0	W	3	W	o	5
Jersey (St. Aubin)	1019.7	-1	52	+6	SSW	5	-	ozm	4
Portland Bill ...	1014.7	-6	54	+4	SW	6	SW	oq	6
Dungeness ...	1017.3	-5	50	0	SW	4	SW	c	5
Wick	991.0	+2	44	-5	SW	3	-	b	3
Nairn	992.9	*	45	-2	W	4	-	cq	3
Leith	998.0	+1	48	-2	SW	5	-	b	3
Tynemouth ...	1002.8	+1	51	+8	W	3	-	czm	2
Spurn Head ...	1008.3	-3	47	+6	SSW	6	-	oqmk	5
Yarmouth (Gorleston)	1014.8	-3	44	+5	SSW	5	-	bcq	4
Clacton-on-Sea.	1015.8	-3	48	-1	SSW	5	-	c	3
Nottingham ...	1008.9	*	53	+21	S	5	S	op	4

24 HOURS ENDED 7H. ....13th....

STATIONS.	Rainfall † mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon	Weather. Night.	Sunshine Hours. (12th)
Lerwick	9	51	44	omrq	omprq	cmrq	*
Stornoway ...	20	52	42	orq	ohq	or.cpq	0.0
Castlebay (Barra'n)	3	54	45	r.oh.	oh	op.cop	0.0
Malin Head ...	5	54	43	o	o	oqp	0.0
Blacksod Point	9	55	47	oq	omr	omrcp	*
Roche's Point...	8	56	47	r.oh	oh.oho.	op.b	*
Birr Castle ...	6	55	44	c	c.o	or.c	0.0
Donaghadee ...	3	56	46	cmq	omq	orq.bq	*
Liverpool (Bidston)	2	55	43	c	o	oq.r	0.9
Holyhead ...	8	55	49	ocoq	oq	opqr.c	0.0
Pembroke (St. Ann's Head)	4	55	51	oq	oq	pq.oqp	1.5
Scilly (St. Mary's)	3	54	52	bc.e	c.bc.e.o.	ocpop	3.4
Jersey (St. Aubin)	-	52	40	ob	bc.om	omk	7.1
Portland Bill ...	0.3	55	51	c.bc	bc	bc.cpo	*
Dungeness ...	-	53	39	c.ohc.	c.bc	c.o.c	*
Wick	-	52	42	o.cq	cq	coqpo2b	*
Nairn	3	55	43	bcq	q.bc cwp.	c.oqp	0.5
Leith	3	56	48	oc.bc	cq.p.bc	bcq.r.b	*
Tynemouth ...	2	53	42	cm	cmq	bcmq.omq	*
Spurn Head ...	4	49	39	ogm	bc	oq.bcm	*
Yarmouth (Gorleston)	-	52	37	bcm.bc	bc.bm	b.bmbcq	5.2
Clacton-on-Sea.	-	51	40	bf. bcz	bcz cm	om.bcc	2.5
Nottingham ...	trace	53	31	fm.c	o.c.	bc	0.4

* Information for these columns not usually received. † The barometric change is expressed in half millibars. § For code see page 3 ‡ See footnote p.4.

M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 13.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, squally, some drizzle.	Indiff.	Mod.
2. E. England	Fair to dull, squally, some mist.	Fair.	R.Rough
3. E. Midlands	Dull, showery.	"	-
4. W. Midlands	Dull, squally, drizzle.	"	-
5. S.W. England	Dull, rain, squally.	Indiff.	R.Rough
6. South Wales	Fine.	V.Good	Rough
7. North Wales	Fair to dull.	"	Mod.
8. N.W. England	Fair to dull.	Indiff.	Slight
9. N. Midlands	Dull, rain, misty.	Poor	-
10. N.E. England	Cloudy, some mist.	Indiff.	Smooth
11. E. Scotland	Fine.	"	Mod.
12. S.W. Scotland	Fine.	Fair	"
13. Isle of Man	Fair.	Indiff.	"
14. N.& N.W. Scotland	Fine to cloudy, squally.	Fair	Slight.
15. Hebrides	Cloudy to dull, showery,	"	Rough
16. Orkneys and Shetlands	Cloudy, rain & mist, squally.	Poor	R.Rough
17. N.W. Ireland	Fair.	Fair	Rough
18. N.E. Ireland	Fine, squally.	"	Slight
19. S.E. Ireland	Fine, squally.	Indiff.	Mod.
20. S.W. Ireland	Fine to cloudy, local showers.	Good	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number	Date	Time G.M.T.	Sea °F	Air °F
5	12th	0857	54	53
3	12th	0915	55	54
1	12th	1210	57	53
6	12th	1506	55.5	54.5
8	12th	1530	54	53
7	13th	0330	56	50
4A	13th	0530	53	54

Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. thunder. T, thunderstorm.
SEA DISTURBANCE.—Rough. High seas.

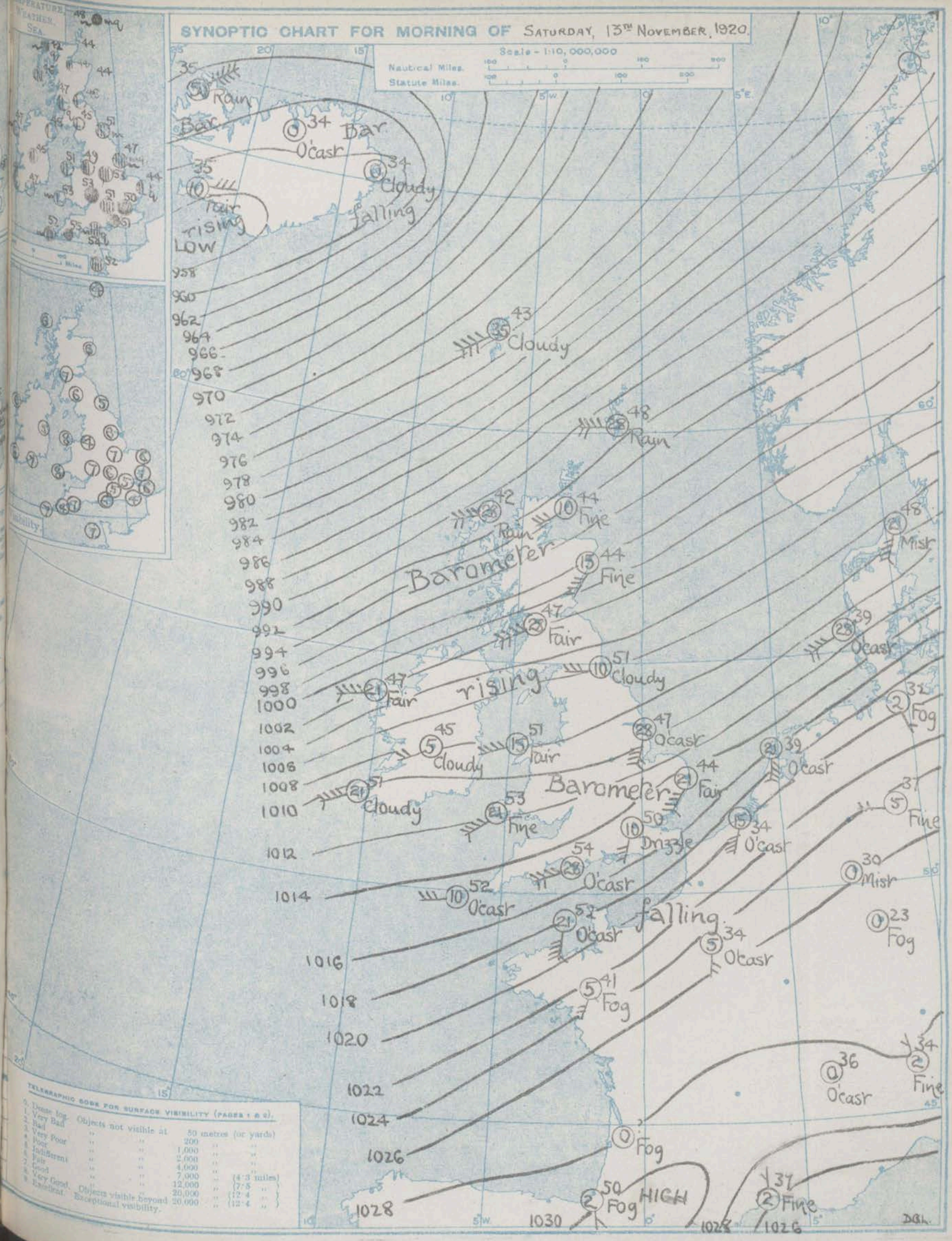
GENERAL INFERENCE from observations received up to 9h.

Depressions from the Atlantic are likely to pass over the British Isles or their vicinity and a period of unsettled weather, with winds between S.W. and W., and occasional rain, is consequently to be expected.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Saturday, 13th November, 1920.	Further Outlook.
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. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands	Wind South-Westerly, veering later, force varying between moderate and strong, squally; cloudy or variable sky, some rain or showers, visibility mainly fair; rather mild to moderate temperature.	Continuing unsettled.
17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind S.W. to W. or N.W., moderate or fresh, stronger at times; changeable, showery, visibility fair or good; moderate to rather low temperature.	

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.00.

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF SATURDAY, 13TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
Rain
Bar
O'cast
Cloudy
Fair
rising
LOW
Cloudy
Rain
Fine
Barometer
Rain
Fair
Misr
Fine
Cloudy
O'cast
Fog
Fair
Cloudy
Fair
O'cast
Barometer
Fair
O'cast
Cloudy
Fine
Drizzle
O'cast
Fine
O'cast
Misr
O'cast
falling
O'cast
Fog
O'cast
Fog
O'cast
Fine
Fog
HIGH
Fog
Fine
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " (4·3 miles)
6. Fair " " 12,000 " (7·5 ")
7. Good " " 20,000 " (12·4 ")
8. Very Good. Objects visible beyond 20,000 " (12·4 ")
9. Excellent. Exceptional visibility.
DGH.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No 318.

Saturday, 13th NOVEMBER.

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 12th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 11th-12th	Rainfall. Day. 9h-18h. 12th	Sunshine. Sunrise to Sunset. 12th
Scotland.	Oban	od	or	58	45	9	2	0.0
	Banff	o ce	c o p	55	38	-	·	0.4
	Montrose							
	St. Andrews	*	*	55	42	-	1	0.0
England, N.E.	Harrogate	o	o	51	40	-	-	0.1
	Scarborough	bc	bc	50	39	-	-	0.0
	Skegness	b.bc	c b.	49	36	-	-	3.7
England, E.	Lowestoft							
	Felixstowe	o f	bom	53	33	-	-	3.6
	Southend-on-Sea	fc.c	c bc.b	53	33	-	-	2.6
England, S.E.	Tunbridge Wells	o	o	52	30	-	-	0.0
	Margate	f o c.	c	54	41	-	-	1.2
	Ramsgate	*	*	52	40	-	-	2.3
	Folkestone	3f	or.o	52	42	-	1	0.0
	Hastings	od	o	53	42	1	0.3	0.1
	Eastbourne	owr.o	c.o.c bc	54	37	-	0.2	0.2
	Brighton	of r.o	o o b.	54	36	-	0.3	0.0
	Worthing	o	o.c bc	53	35	-	-	0.0
	Littlehampton	o.c.	bc	51	35	-	-	0.0
	Portsmouth (S'thsea)	*	*	56	37	-	-	2.0
	Bournemouth	*	*	54	33	-	-	2.5
	Ventnor (I. of W.)	*	*	55	44	1	0.3	1.3
England, N.W.	Douglas (I.O.M.)							0.9
	Blackpool	o.c.	o	54	40	-	-	1.1
	Southport	bc.c.o	o.c.o	55	40	?	?	0.4
	Morecambe	*	*	54	42	-	-	
Midlands.	Buxton							4.0
	Leamington Spa	bc	o	52	27	-	-	3.9
	Malvern	bc	bc b	52	36	-	-	4.0
	Bath	b	c bc b	54	28	-	·	0.4
Wales.	Rhyl	c	c	54	41	-	-	0.3
	Colwyn Bay	*	*	54	46	-	-	0.7
	Llandudno	*	*	56	43	-	-	0.0
	Aberystwyth	o c	c o	54	43	-	-	
	Tenby							
	Swansea							1.1
England, S.W.	Weymouth	c	c b	56	37	-	-	
	Teignmouth							4.6
	Torquay	io.bc	bc.c bc	55	40	-	-	5.1
	Paignton	b.bc	bc.b	55	33	-	-	5.0
	Penzance	bc	c.o.	54	49	-	-	5.1
	Newquay	b.o.b.	b.bc.b	54	42	-	-	5.4
	Bude	b	b	55	38	-	-	4.8
	Ilfracombe	b.bc	bc.b.bc	56	43	-	-	5.0
	Weston-s-Mare	b	b	56	38	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-12h 13th	Weather. 12h-18h 12th	Weather. 18h 12th-18h 13th	Weather. 18h-7h 13th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h mm.	Rainfall.† Night. 18h-7h mm.	Sun. Hours.
Renfrew	r q	r w r r q	o if. R	c o p b o q	55	47	42	1	9	0.0
Eskdalemuir	r r q	r r q. o if	o if * R.	* r R c b k	51	44	41	5	17	0.0
Valencia (Cahirciv)	h. o c p.	o p o	r r. c. o	r r c p o	56	49	45	-	7	0.2
Baldonnel	q	q r r	q r r o z f	c o q	56	45	42	?	8	0.8
Manchester (Alex Pk)	c o z f	o z f	o z f	o z f R R	53	43	38	-	5	*
Ross on Wye	bc.c z f	bc c o b o q	b b c q. c o q	c q p d o q	53	30	40	-	0.1	3.0
Falmouth	2 bc c	c.o.bc c	b c c o e q	o r r	55	45	44	-	2	3.5
Cahshot (Hants)	c o 3 f o 1 f	bc.c 1 f	o 1 f	g p.	56	37	44	-	0.3	10.7
Lympne (Folkestone)	b c r f g f h d	f h d. o z f	o z f g a f g	o 1 f g	50	40	41	trace	-	0.2
Aberdeen	o z f h.	o z f. o 1 f	b. o 1 f	o 1 f. 1 f	55	46	40	-	-	0.0
Howden	o z f 2 fc	o 3 f q	q. b c c	o 1 f q	51	36	35	-	1	0.0
Cranwell (Lincs)	bc c.o.	o.c.o.	o q	o q	49	44	42	-	-	3.0
Felixstowe	1-5 fc 3 f	2 f. bc c	1 f. bc c	1 f. c o	50	31	*	-	-	3.7
Shoeburyness	1-5 fc 3 fc	1 fc. b bc	b. bc *	q. f	54	31	40	trace	-	2.8
Benson	bc. c	bc. c	b. bc. c	o p.	52	29	36	-	0.1	*
S. Farnborough	1-5 fc c o b c c	c o. b. bc	b. b c. o	o d. d.	53	31	39	trace	0.4	3.2
London (Kew Obsy.)	w 1-5 f	c o. b b c f	o o. b c. c	o z f d o d o	51	32	31	trace	trace	1.0
Croydon	h b c y o z f	2 f c b k c b k k	b o z f i f w p d o q	o z f p d o q	54	37	*	-	0.1	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—

Aurora ☆ Solar halo ⊕
Rime ⌶ Lunar halo ◎
Glazed frost ~ Solar corona ◎
Glazed roads ⚒ Lunar corona ◎

LONDON OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 13th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	bm	b o b	b. o	55	37	32	-	3.3	82	92
City (Bushill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	*	*	or	54	38	35		0.2	74	85
Regent's Pk (Botanic Gar)						*		0.0		
Camden Sq. (British Rainfall)	fc. om	c.o	*	53	40	39	-	*	89	92
Kensington Palace	c	c	*	53	34	36	-	*	90 (18h)	90
Hampstead Observatory	*	*	*	51	42	38	trace	1.4	*	96

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total 195 Joules.

Average Rate. 6·0 Milliwatts.

Maximum Rate. 13

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

13th AND 14th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.12 7.14	11.37 11.38	4.3 4.2
Greenwich	7.16 7.18	11.44 11.45	4.13 4.12
Wick	7.58 8.0	11.56 11.57	3.55 3.53
Valencia	7.59 8.1	12.25 12.26	4.52 4.51

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 12th 17h 30m. to 13th 6h 0m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	12. 30	8. 10	49
δ Ursae Minoris	12. 30	5. 50	42

NOTES ON THE WEATHER OF YESTERDAY.

Temperature rose to 58° at Oban and to about 55° in many other localities. Rain fell in nearly all districts, the largest amounts being 20mm at Stornoway and 10mm at Renfrew. Bright sunshine records were slight generally, but some stations in the South West had several hours, and about 5 hours was measured at Castlebay and Great Yarmouth.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B 21,542. SUNDAY ... 14TH ... NOVEMBER ... 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 13TH														18H. G.M.T. OF 13TH													
Renfrew ...	1004.4	+1.5	WSW	5	oq	44	75	7	2000	CuN	9	-	-	*	1006.1	+1	SW	5	0	46	75	7	3000	StCu	4	A.St	6	*
Eskdalemuir ...	1006.4	+3	SW	6	bcq	45	75	8	-	Cu	4	Ci	1	*	1008.9	+2	SW	4	c	43	75	7	-	StCu	7	-	-	*
Valencia (Cahire'n)	1013.6	0	WSW	5	c	52	75	8	2000	StCu	6	ACu	2	5	1012.6	-2	SSW	4	c	51	75	7	2000	StCu	8	-	-	4
Baldonnel ...	1011.0	+3	SW	4	oif	49	75	7	2000	StCu	8	Ci	1	*	1011.7	+1	S	4	bcq	45	92	8	-	-	-	A.St	4	*
Manchester (Alex. Park)	1012.0	+4	W	5	bc2f	52	65	5	4200	Cu	3	ASt	2	*	1013.3	+2	WSW	3	b2f	46	75	4	4200	StCu	2	-	-	
Ross on Wye ...	1014.4	+3	W	4	bv	57	65	9	4200	Cu	3	-	-	*	1016.2	+2	WSW	3	b	47	85	7	-	-	-	Ci	2	*
Falmouth ...	1017.6	+2	WNW	4	bc	56	75	7	-	StCu	4	-	-	*	1018.6	+2	WSW	2	b	48	85	8	-	StCu	2	-	-	*
Calshot (Hants) ...	1015.9	+1	WNW	3	o	55	85	8	1250	St	6	ASt	3	2	1018.1	+2	~~SSW~~	3	bc.if	51	92	7	2000	St	4	-	-	2
Lympne (Folkestone)	1016.3	-2	SW	6	oqmd	52	97	4	<500	Nb	10	-	-	*	1018.3	+3	WSW	3	b3f	48	97	3	-	-	-	-	-	*
Aberdeen ...	999.8	+4	SW	4	b	48	65	8	4200	CuN	3	-	-	3	1003.3	+3	SSW	3	bif	41	85	6	4200	StCu	1	-	-	3
Howden ...	1010.6	+4	W	6	ctq	52	75	6	2000	CuNb	8	-	-	*	1012.4	+1	WSW	2	bm	41	97	7	4200	St	3	-	-	*
Cranwell (Lincs) ...	1012.7	+2	W	3	bc	54	75	8	4200	Cu	3	ASt	1	*	1015.0	+2	WSW	3	bc	48	75	7	4200	St	4	-	-	*
Felixstowe ...	1015.1	-1	SSW	5	or.3f	52	97	5	1250	St	10	-	-	*	1017.4	+3	SSW	2	bif	48	97	6	-	-	-	-	-	*
Shoeburyness ...	1014.7	-1	SW	6	o8	54	85	6	1250	St	10	-	-	*	1016.5	+4	-	0	b	42	92	6	2000	St	2	-	-	*
Benson ...	1014.9	+1	WSW	3	b	57	75	6	-	-	-	-	-	*	1017.1	+2	-	0	b	45	85	9	-	-	-	Ci	2	*
S. Farnborough	1015.4	+2	W	3	o	54	85	6	3000	St	9	-	-	*	1017.5	+3	W	1	b	42	97	5	3000	St	2	-	-	*
London (Kew Obsy.)	1015.1	+2	SW	3	o2f	53	85	5	4200	StCu	10	-	-	*	1017.2	+2	SW	1	b2f	48	85	4	-	-	-	-	-	*
Croydon ...	1016.0	+2	W	4	or2f	53	85	5	1250	Nb	10	-	-	*	1017.8	+2	SSW	2	bif	48	85	6	2000	StCu	1	-	-	*
	1H. G.M.T. OF 14TH														7H. G.M.T. OF 14TH													
Renfrew ...															998.2	+5	SW	6	ctq	44	85	7	2,000	CuNb	8	-	-	*
Eskdalemuir ...	1002.1	-10	S	7	oq	46	85	6	-	St	10	-	-	*	1000.5	+2	SW	4	o	43	85	7	2,000	Nb	9	Ci.St	*	*
Valencia (Cahire'n)	1008.1	-4	SSW	8	otq	53	*	*	*	*	*	*	*	8	1008.2	-1	SW	3	ot	53	92	5	2,000	Nb	10	-	-	*
Baldonnel ...	1005.5	-7	SSW	7	c	50	97	6	4,200	St	8	-	-	*	1005.9	+3	SW	5	oq	50	97	5	1250	Nb	9	-	-	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1007.4	-3	SW	5	or2f	48	92	5	2,000	Nb	10	-	-	*
Ross on Wye ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1012.2	0	SW	5	od.q	50	85	7	1,250	Nb	10	-	-	*
Falmouth ...	1016.8	-3	SW	4	b	49	85	7	-	St	1	-	-	*	1016.0	0	SW	4	o	52	85	7	-	StCu	10	-	-	*
Calshot (Hants) ...	1017.1	-3	-	0	bif	47	97	6	-	-	-	-	-	0	1016.2	+2	WSW	3	oif	51	85	6	4,200	St	10	-	-	2
Lympne (Folkestone)	1017.4	-2	WSW	1	c3f	50	97	3	1250	St	7	-	-	*	1013.8	-3	W	1	omd	49	97	6	<500	Nb	10	-	-	*
Aberdeen ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	992.5	+3	SW	4	b	43	75	8	-	-	-	-	-	3
Howden ...	1011.7	-3	S	4	bc	43	92	6	4,200	St	6	-	-	*	1005.5	-4	SW	5	o	49	85	7	2,000	St	6	A.St	4	*
Cranwell (Lincs)	1014.2	-1	SSW	3	b	43	97	5	2,000	St	3	-	-	*	1010.2	-2	SSW	5	o	48	92	8	2,000	St	6	A.St	3	*
Felixstowe ...	1017.3	-2	SW	2	c2f	46	97	5	3,000	St	8	-	-	2	1014.9	-2	SSW	2	c	46	97	6	5,700	StCu	8	-	-	2
Shoeburyness ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1014.8	-2	SW	1	c	48	85	6	3,000	StCu	6	A.Cu	2	*
Benson ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.8	-1	S	3	o	45	92	7	-	-	-	A.St	9	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1015.0	0	SW	3	c	47	97	5	3,000	St	8	-	-	*
London (M.O. at 1H.)	1016.4	-1	*	*	*	43	*	*	*	*	*	*	*	*	1014.4	-1	SW	3	cw	46	92	5	3,000	StCu	4	A.St	3	*
Croydon ...	1017.6	-2	SSW	2	bifw	46	97	6	-	-	-	Ci	1	*	1015.5	-1	SW	4	cifw	49	85	7	3,000	StCu	5	A.St	1	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	Rainfall † mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 13TH					7H. G.M.T. of 14TH									24 HOURS ENDED 7H. 14TH						13TH
Lerwick																					
Stornoway ...	992.0	45	SW	6	bcq	985.8	-5	44	-4	SW	5	?	c	3	16	48	38	bcpq	bcqtl	omtlptgh	*
Castlebay (Barra Is)	994.7	42	WSW	5	o	990.4	?	39	-3	WNW	5	c	cpq	4	20	45	36	cphtlq	o	otq.cpq	1.0
Malin Head ...	999.0	45	W	5	op	994.9	+5	45	-1	WNW	5	-	op	5	5	49	41	opchp	opchp	opthrh	1.0
Blacksod Point	100.29	45	SSW	4	o	997.9	+3	45	-1	WSW	8	W	c	6	17	50	43	oqp	oqp.	oqp	2.5
Roche's Point ...	1005.6	44	SW	6	c	1001.8	+8	48	+1	WSW	4	-	o	4	9	55	50	bc	bc	op.omq	*
Birr Castle ...	1014.6	50	WSW	3	b	1010.3	0	54	+7	WSW	4	NW	o	4	1	~~55~~ 54	47	bbcc	copb	b.o.	*
Donaghadee ...	1011.1	46	S	2	c	1006.3	*	51	+6	S	3	-	o	*	4	56	44	cpl	c	lcp.o.	4.1
Liverpool (Bidston)	1009.4	45	WSW	2	bc	1003.1	+2	47	+2	SW	3	SW	bcq	3	2	51	45	bq	bcqp	bcqp	*
Holyhead ...	1012.9	48	WSW	3	c	1006.7	-2	53	+4	WSW	5	W	oq	4	1	54	46	bbcp	o bc	c.oq	4.5
Pembroke (St. Ann's Head)	1012.8	51	WSW	5	cq	1006.5	+1	54	+3	W	5	-	oq	4	1	54	50	bcqpc	cpc	bccqp	3.5
Scilly (St. Mary's)	1016.5	52	WSW	3	bc	1011.3	-1	55	+2	SW	6	-	oq	5	-	55	52	bc	bc	bcv.cq	5.0
Jersey (St. Aubin)	1018.6	53	WSW	2	c	1015.9	0	54	+2	WSW	4	W	bc	5	-	55	51	oc bc	bcc	cb.bc	5.7
Portland Bill ...	1020.0	54	SSW	4	o	1018.6	0	53	+1	WSW	4	SW	c	4	7	57	50	odpo	opo	op.oc.	0.0
Dungeness ...	1017.0	55	W	4	bc	1015.4	-3	55	+1	WSW	5	SW	o	5	-	57	51	oqrbc	bc	bcb.o.	*
Wick ...	1017.4	54	SW	4	o	1014.8	-2	52	+3	WSW	4	-	r	4	1	55	49	cq	cpc	bc.cor.	*
Nairn ...	997.4	39	SW	5	cq	986.7	0	40	-4	SW	6	-	cq	4	5	45	36	bcpq	cpq1	ocqpl	*
Leith ...	999.3	39	SW	4	c	989.9	*	38	-7	WSW	3	-	ou	3	7	45	37	qcph	cphqg	qchru	1.0
Tynemouth ...	1005.8	44	SW	3	c	997.1	+1	46	-2	W	5	-	o	4	9	50	39	bq.rth	rcqc	cq.oro	*
Spurn Head ...	1009.0	47	WSW	2	bm	1001.6	+1	50	-1	SW	3	-	omr	2	2	53	45	bcmq	bcm	om.omr	*
Yarmouth (Gorleston)	1012.4	47	W	3	b	1008.1	-3	47	0	SSW	6	-	oqh	4	1	53	41	cq	b	b.bc.cq	*
Clacton-on-Sea	1015.5	47	WSW	2	b	1014.3	-1	43	-1	SW	3	-	c	1	-	55	41	cmbcm	b	b.bc	0.0
Nottingham ...	1016.6	49	NW	2	m	1014.2	-2	48	0	WSW	3	W	cc	2	-	53	45	coqz	obcmc	bcm.cc	0.0
	1015.1	47	W	1	b	1009.6	*	49	-4	SW	4	SW	o	*	0.2	55	41	opc	bcb	b	2.8

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 3.

M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Cloudy or Overcast	Fair	Slight
2. E. England	Cloudy or overcast	Fair	Smooth
3. E. Midlands	Overcast	Good	–
4. W. Midlands	Overcast, slight rain	Good	–
5. S.W. England	Fair to Overcast	Good	
6. South Wales	Overcast, squally	V. good	R.rough
7. North Wales	"	"	Moderate
8. N.W. England	" slight rain	Fair	"
9. N. Midlands	"	"	"
10. N.E. England	" some rain, local (mist.	Indiff	Smooth
11. E. Scotland	Variable	V. good	Moderate
12. S.W. Scotland	Dull, local rain & hail	Good	"
13. Isle of Man	Fair to dull	"	"
14. N. & N.W. Scotland	Dull, squally	Fair	"
15. Hebrides	Dull, showery		R.rough
16. Orkneys and Shetlands	Cloudy	Indiff	Moderate
17. N.W. Ireland	Dull	Fair	"
18. N.E. Ireland	Fair to dull	"	Slight
19. S.E. Ireland	Dull	"	Moderate
20. S.W. Ireland	Dull, some rain,	Indiff	Slight

Temperature reported from Coastal and Cross Channel Steamers

Position Number	Date	Time G.M.T.	Sea °F	Air °F
5	13th	0832	55	50
12	13th	0510	53	49
7	14th	0805	57	56

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0–12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. thunder. thunderstorm.
SEA DISTURBANCE.—Rough. High seas.

GENERAL INFERENCE from observations received up to 9h. GMT

The Icelandic depression is keeping well to the North of the British Isles but secondaries will continue to cause much cloud and rain and the wind will be strong to a gale at times from SW or W.

Districts.	Forecasts for the 24 hours commencing 15h. G.M.T. Sunday, 14th November 1920	Further Outlook.
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. E. Scotland 12. S.W. Scotland 13. Isle of Man	Wind SW to W, strong at times; much low cloud, intermittent rain; visibility mainly fair to good; rather mild.	Unsettled weather with Westerly winds for a day or two.
14. N.&N.W. Scotland 15. Hebrides	Wind mainly strong from between SW & W but veering to NW at times; much low cloud, showery, visibility fair to good.	
16. Orkneys and Shetlands	Same as 1 - 13.	
17. N.W. Ireland	Same as 14 - 15	
18. N.E. Ireland 19. S.E. Ireland	Same as 1 - 13.	
20. S.W. Ireland	Same as 14 - 15	

South Cone hoisted.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.00 G. C. SIMPSON, F.R.S., Director.

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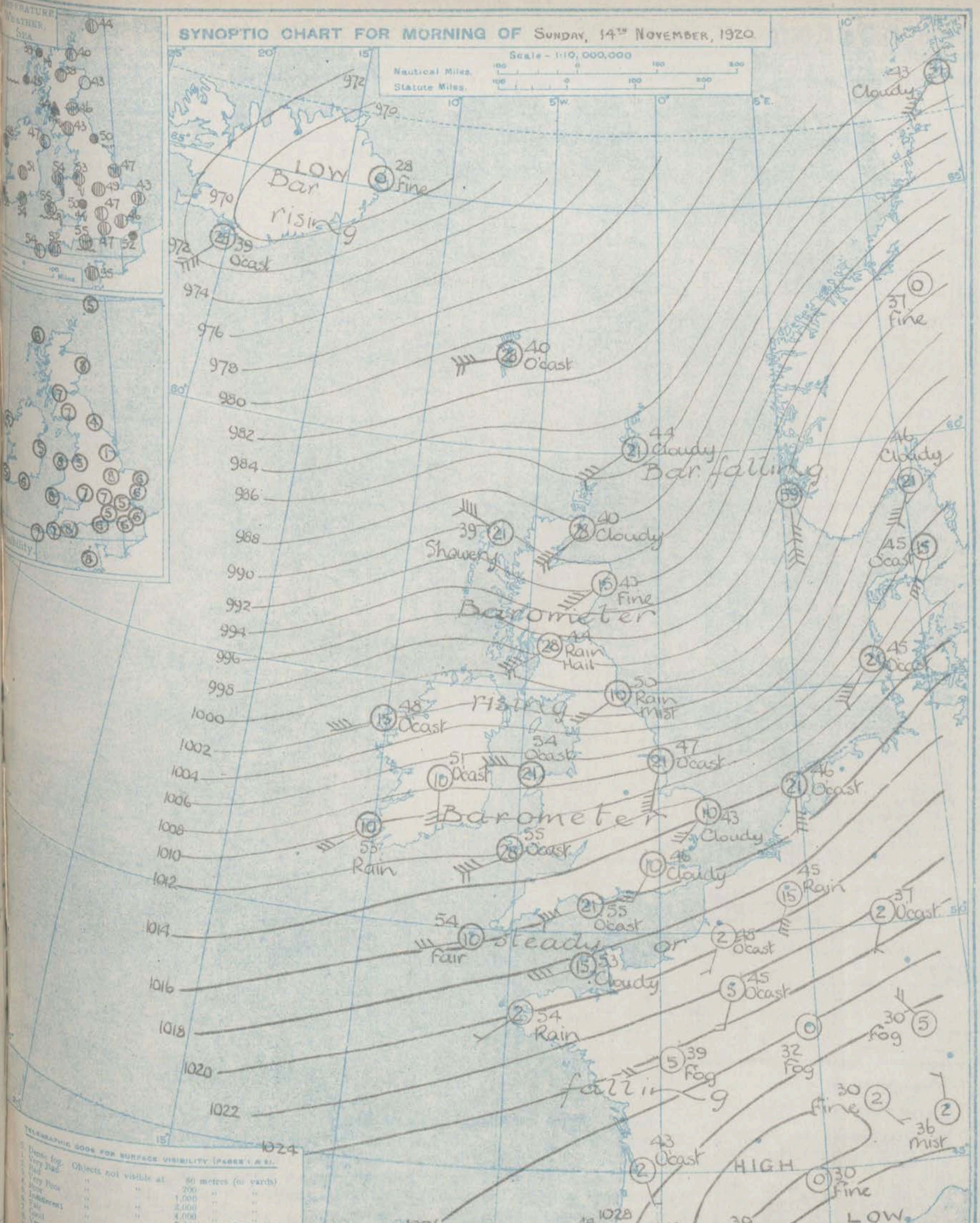


AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 319.

SUNDAY 14th NOVEMBER 1920

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 13th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 12th-13th	Rainfall. Day. 9h-18h. 13th	Sunshine. Sunrise to Sunset. 13th
Scotland.	Oban	op	cpo	49	43	20	2	1.7
	Banff	bc.b	b	48	40	1	-	5.4
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	bbco	bbco	52	44	3	1	4.8
	Scarborough	b	b	55	45	1	-	4.3
	Skegness							
England, E.	Lowestoft							
	Felixstowe	omp	b	53	47	-	0.3	0.0
	Southend-on-Sea	o	odcbc	53	36	-	1	0.0
England, S.E.	Tunbridge Wells	ood	orcb	54	43	-	3	0.4
	Margate	o	or	55	41	-	1	0.0
	Ramsgate	*	*	52	42	-	-	0.0
	Folkestone	oco	o	52	44	-	0.3	0.0
	Hastings	o	ode	55	45	-	1	0.0
	Eastbourne	o	rcbcb	55	45	0.1	1	0.0
	Brighton							
	Worthing	or	o	55	45	-	23	0.0
	Littlehampton	ocr	bc	57	45	-	1	0.0
	Portsmouth (S'thsea)	-	-	56	46	-	1	1.7
	Bournemouth	*	*					
	Ventnor (I. of W.)	*	*					

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 12th-13th	Rainfall. Day. 9h-18h. 13th	Sunshine. Sunrise to Sunset. 13th
England, N.W.	Douglas (I.O.M.)							3.1
	Blackpool	c	up	53	47	3	0.3	3.5
	Southport	bbcco	ocoro	53	45	7	1	
Midlands.	Buxton							
	Leamington Spa							6.0
	Malvern	bc	bcb	55	46	1	-	5.0
	Bath	opbcb	b	57	48	1	0.1	
Wales.	Rhyl							
	Colwyn Bay							4.3
	Llandudno	*	*	57	48	1	-	4.0
	Aberystwyth	roc	bco	54	50	5	-	
	Tenby							
	Swansea							2.1
England, S.W.	Weymouth	orc	cbcb	57	50	1	1	
	Teignmouth							3.6
	Torquay	ocbc	bccbc	59	48	4	-	3.4
	Paignton	bcpc	bcbm	60	45	3	-	5.9
	Penzance	bc	bc	59	49	4	-	
	Newquay							3.6
	Bude	r.bc	bcp	57	47	4	-	4.2
	Ilfracombe	co	oco	56	48	5	-	
	Weston-s-Mare							

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 12th	Weather. 13h-18h 12th	Weather. 18h-1h 12th-13th	Weather. 1h-7h 13th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h (mm.)	Rainfall.† Night. 18h-7h (mm.)	Sun. Hours.
Renfrew	coPRH Rrh q	coprh	corq	corh	48	40	32	7	4	2.0
Eskdalemuir	bbcborh	boqbccl	b.oq	RRcopR	47	40	38	1	7	3.4
Valencia (Cahire'n)	cop	pocebcc.o	bc.c.o	p P	54	49	46	-	8	1.2
Baldonnel	cop	beeq	bcc	zsq.cozp	51	44	41	1	3	3.5
Manchester (Alex'n)	ozfrbbcz	qpbccsf	bbczf	b.ozf	54	42	34	0.1	0.2	*
Ross on Wye	cdqbbcr	bbcbct	b.bcwo	oq	58	44	36	-	-	4.1
Falmouth	cobbcbbc	bccbbc	b.bc	b.bc.co.	57	45	39	1	-	4.9
Calshot (Hants)	p.d.d.o	obbcrf	ozfebccrf	brfw.orf	57	44	32	0.4	-	2.0
Lympne (Folkestone)	orfozfqpd	pdozfcoq	bzfbbcbcc	cozfpdd	53	47	42	0.3	1	0.0
Aberdeen	ozforfp.bc	bbcrf	rfe	p.q	48	40	34	Trace	1	4.9
Howden	coq	b.c.q	bc.c	oco	54	43	31	-	-	3.5
Cranwell (Lincs)	orp.bccq	b.bcbbc	bcc.bbc	bc.c.o	55	42	38	1	-	4.3
Felixstowe	orfp.	bbcrf	zfe b.o.	zfe co	53	44	*	-	0.2	0.1
Shoeburyness	q.o	pd.bbc	bcc.o	r.c.o.	55	40	34	1	1	0.0
Benson	b	b	bc.c.	bc.c	57	38	31	-	-	*
S. Farnborough	rr.bcc	cobbc	b.bc	bbcc	56	36	28	1	-	1.9
London (Kew Obsy.)	dd.rr.ozf	ozf zf	w.b.bc	w co.	55	39	29	1	-	1.6
Croydon	ozf.r.zf rfzf.q	bbc.rf	bbcw rf	rfwbbcc	56	44	*	1	0.1	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r,r, = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·5
12	Above 75	32·6 or above

SYMBOLS—
Aurora ⌂ Solar halo ⊗
Rime ⌅ Lunar halo ⊗
Glazed frost ~ Solar corona ⊙
Glazed roads ⌇ Lunar corona ⊙

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED ON G.M.T. 14th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	or.	bc.o	bc.o.	56	42	32	0.3	1.3	84	78
City (Bunhill Row)	*	*	*	*	*	*	*		*	*
Westminster (St. James's Park)	*	*	r.drro	56	43	35	1		80	82
Regent's Pk. (Botanical Gdns)	*	*	*	*	*	*	*		*	*
Camden Sq. (British Rainfall)	or.oqr.ro	o	*	56	42	34	?	*	92	85
Kensington Palace	or. bc	bc	*	56	38	30	1	*	82 (18h)	89
Hampstead Observatory	*	*	*	55	43	36	3	1.6	*	91

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total ..... Joules.

Milliwatts.

Average Rate.

Maximum Rate.

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

14th & 15th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.14 / 7.16	11.55 / 11.58	4.2 / 4.0
Greenwich	7.18 / 7.20	11.54 / 11.55	3.54 / 3.57
Wick	8.0 / 8.3	11.57 / 12.36	3.51 / 3.49
Valencia	8.1 / 8.3	12.23 / 12.28	4.41 / 4.39

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from.....h.....m.
to.....h.....m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris			
δ Ursae Minoris			

NOTES ON THE WEATHER OF YESTERDAY.

There were several rather heavy falls of rain, 20 mm at Stornaway and 16 mm at Lerwick being the largest. Thunder and lightning were of common occurrence in Scotland.

Sunshine records were for the most part poor. The temperature rose to nearly 60° at several places in the South, but failed to reach 50° at nearly all stations in Scotland.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B.21543 ...MONDAY, 15TH NOVEMBER, 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 14TH													
Renfrew	1002.3	+2	SSW	4	bor	47	75	6	2,000	Nb	8	A.St	2	*
Eskdalemuir	1003.8	+2	SW	5	0	44	75	7	2,000	St	3	A.St	7	*
Valencia (Cahire'n)	1002.2	-10	S	5	od₀	56	97	5	750	St	10	-	-	5
Baldonnel	1004.9	-4	SSW	4	0	52	85	8	2,000	St	10	-	-	*
Manchester (Alex'pk)	1008.5	+1	SW	2	0 r₀2-3f	49	97	3	2,000	St.Cu	10	-	-	*
Ross on Wye	1012.0	0	SW	5	o r d₀ q	54	85	7	1,250	Nb	9	A.St	1	*
Falmouth	1014.4	-5	SW	6	or₀2-3f	55	97	3	-	Nb	10	-	-	*
Calshot (Hants)	1016.0	-1	SW	4	0	55	85	8	1,250	St	10	-	-	4
Lympne (Folkestone)	1016.4	0	W	5	oq	53	85	8	1250	St	8	A.St	2	*
Aberdeen	999.3	+7	WSW	5	b	46	55	8	-	-	-	Ci.St	2	3
Howden	1007.9	+1	WSW	5	omq	52	85	5	3000	St	10	-	-	*
Cranwell (Lincs)	1010.2	0	SW	5	0	55	85	7	3000	St.Cu	5	A.St	4	*
Felixstowe	1014.9	-1	SSW	4	0	52	92	6	-	-	-	A.St	10	4
Shoeburyness	1015.2	0	SW	4	c	55	75	6	-	-	-	Ci.St	8	*
Benson	1014.0	0	SSW	4	0	55	75	7	-	Cu	5	a.St	5	*
S. Farnborough	1015.0	-1	SSW	5	0	56	75	6	2,000	St	6	A.St	4	*
London (Kew Obsy.)	1014.7	-2	SW	4	o2f	55	75	5	3000	St.Cu	4	Ci.St	5	*
Croydon	1015.9	+1	SSW	6	oq	55	75	6	3000	St.Cu	3	Ci.St	7	*
	1H. G.M.T. OF 15TH													
Renfrew														
Eskdalemuir	983.1	-6	SSW	8	oRq	54	97	3	1,250	Nb	10	-	-	*
Valencia (Cahire'n)	993.0	+3	SSW	9	orq	53	*	*	*	*	*	*	*	*
Baldonnel	989.3	-1	SSW	7	orq	57	92	3	2500	St	10	-	-	*
Manchester (Alex'pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Falmouth	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calshot (Hants)	1008.3	-2	SW	8	oq	56	97	5	-	Nb	10	-	-	*
Lympne (Folkestone)	1008.8	-1	SW	7	o r₀q	55	97	5	750	Nb	10	-	-	7
Aberdeen	1009.6	-4	SW	8	or₀2-3f	54	97	4	750	[illegible]	10	-	-	*
Howden	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cranwell (Lincs)	993.8	-5	SW	7	0	60	85	6	2500	St	10	-	-	*
Felixstowe	997.7	-4	SW	6	oq	58	85	5	2000	St.Cu	9	-	-	*
Shoeburyness	1006.7	-4	SSW	6	o.f	55	97	6	3000	St	10	-	-	4
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*
London (M.O. at 1H.)	1007.1	-2	*	*	*	57	*	*	*	*	*	*	*	*
Croydon	1008.0	-1	SSW	7	or₀q/f	56	92	6	2500	Nb	10	-	-	*

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. %	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	18H. G.M.T. OF 14TH													
Renfrew	993.1	-15	SSW	3	r2-3f	43	97	4	-	Nb	10	-	-	*
Eskdalemuir	996.5	-11	S	3	or	43	92	5	-	Nb	10	-	-	*
Valencia (Cahire'n)	996.7	-1	SW	7	od₀	59	92	5	750	St	10	-	-	5
Baldonnel	993.6	-10	SSW	7	or₀	57	85	5	750	Nb	10	-	-	*
Manchester (Alex'pk)	1002.0	-6	SW	5	oq	53	85	5	2,000	St.Cu	10	-	-	*
Ross on Wye	1006.4	-7	SW	6	or₀q	53	92	7	1,250	Nb	10	-	-	*
Falmouth	1010.1	-6	SSW	7	od₀	56	97	3	-	Nb	10	-	-	*
Calshot (Hants)	1012.9	-4	SW	6	r₀q	54	97	5	2500	St	10	-	-	5
Lympne (Folkestone)	1014.9	-2	SW	6	oq	52	92	5	1,250	St	10	-	-	*
Aberdeen	997.1	-6	S	3	o2f	45	75	5	-	-	-	a.St	10	3
Howden	1003.4	-5	S	5	orq	52	92	5	750	Nb	10	-	-	*
Cranwell (Lincs)	1006.3	-5	S	5	oq	53	85	7	2,000	Nb	10	-	-	*
Felixstowe	1013.8	-1	S	4	o.f	51	97	6	3,000	St	10	-	-	4
Shoeburyness	1013.5	-2	SW	4	o	63	85	6	3,000	St	10	-	-	*
Benson	1009.7	-4	SSW	4	o	54	85	7	-	St	10	-	-	*
S. Farnborough	1011.9	-6	SSW	7	o2f	54	85	5	2,000	St	10	-	-	*
London (Kew Obsy.)	1011.8	-5	SW	5	o2f	54	85	5	-	St.Cu	10	-	-	*
Croydon	1013.3	-4	SSW	6	or₀q	54	85	6	2500	Nb	10	-	-	*
	7H. G.M.T. OF 15													
Renfrew	980.0	0	SW	8	o	48	65	7	2000	St.Cu	9	-	-	*
Eskdalemuir	983.2	0	SW	8	oq	47	65	6	-	St	10	-	-	*
Valencia (Cahire'n)	999.0	+2	WSW	7	o	52	65	7	3000	St	3	a.St	6	*
Baldonnel	993.2	+2	SW	6	orq	50	75	4	1,250	St	7	-	-	*
Manchester (Alex'pk)	994.8	+1	WSW	6	or₀q	54	65	5	1,250	Nb	6	a.St	4	*
Ross on Wye	999.6	-2	WSW	8	ogdq	57	92	6	1,250	Nb	10	-	-	*
Falmouth	1006.2	-4	SW	8	or₀q	57	97	4	-	Nb	10	-	-	*
Calshot (Hants)	1007.0	-1	WSW	6	oq	57	92	5	1,250	St	10	-	-	5
Lympne (Folkestone)	1008.1	-2	SW	8	or₀2-3f	55	97	3	2500	Nb	10	-	-	*
Aberdeen	976.1	+1	SW	4	b, 15c	45	85	7	3000	Cu.Nb	2	-	-	3
Howden	999.5	+3	SW	9	oRq	58	97	6	2000	Cu.Nb	10	-	-	*
Cranwell (Lincs)	996.2	-1	SSW	7	o	59	85	7	1,250	St	10	-	-	*
Felixstowe	1005.7	0	SSW	5	oq	56	97	7	1,250	St.Cu	10	-	-	4
Shoeburyness	1004.9	0	SW	7	oq	57	85	7	2000	St.Cu	5	a.St	4	*
Benson	1002.5	-1	SW	6	o	57	92	8	-	Nb	10	-	-	*
S. Farnborough	1005.6	-1	WSW	7	orq	57	85	5	2000	Nb	8	a.St	2	*
London (M.O. at 1H.)	1004.6	0	SW	8	od₀q	57	85	6	1,250	Nb	10	-	-	*
Croydon	1006.6	0	SW	7	or₀q	57	92	6	750	St	10	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.
	18H. G.M.T. of 14TH					7H. G.M.T. of 15TH								
Lerwick														
Stornoway	993.4	43	SW	3	bc	962.8	-3	46	+2	SW	8	-	oq	4
Castlebay (Barra'ls)	986.7	46	S	5	o	956.0	-10	46	+7	SW	8	-	orq	6
Malin Head	985.5	47	SE	6	r.	969.5	-1	47	+2	W	10	-	op	*
Blacksod Point	984.2	46	SE	4	o	975.6	0	47	+2	W	8	W	cq	6
Roche's Point	984.9	57	SW	6	omrq	988.6	+6	49	+1	SW	5	-	c	6
Birr Castle	1000.4	58	WSW	5	dm	999.8	+2	51	-3	WSW	5	-	o	5
Donaghadee	993.1	57	SW	5	r.	994.6	*	49	-2	SW	6	-	o	*
Liverpool (Bidston)	993.0	53	S	4	omrq	988.8	+2	50	+3	SW	6	-	omq	6
Holyhead	999.5	52	S	4	r	993.0	+4	53	0	WSW	8	W	oq	7
Pembroke (St. Ann's Head)	996.8	55	SSW	6	orqm	994.3	+2	54	0	SW	7	-	ogq	6
Scilly (St. Mary's)	1003.0	56	SW	8	ormq	1000.9	+1	54	-1	SW	8	-	orq	7
Jersey (St. Aubin)	1009.7	57	SW	5	o	1006.4	-2	57	+3	SW	6	-	rm	6
Portland Bill	1018.0	56	SSW	4	o	1013.9	-1	58	+5	SW	4	-	o	4
Dungeness	1010.5	55	SSW	7	orq	1006.4	-4	56	+1	SW	9	SW	orq	7
Wick	1014.3	55	SW	6	cq	1007.3	-2	56	+4	SW	8	SW	rq	7
Nairn	992.5	44	SW	3	oq	965.8	-5	45	+5	SW	9	-	bcq	7
Leith	989.9	43	SW	2	c	968.5	*	42	+4	WSW	8	-	cgq	5
Tynemouth	995.7	45	W	1	r	979.5	0	49	+3	WSW	7	-	o	4
Spurn Head	1000.2	49	SSW	3	o	984.9	+2	53	+3	WSW	5	-	bcrq	4
Yarmouth (Gorleston)	1005.2	52	SSW	6	oq	991.4	0	57	+10	SW	7	-	oq	5
Clacton-on Sea	1011.3	52	SW	4	o	1001.3	-1	59	+16	SW	6	-	oq	4
Nottingham	1013.3	51	SW	4	o	1004.4	0	54	+6	SSW	4	SW	c	3
	1005.3	54	SW	4	op	995.8	*	60	+11	SW	6	SW	op	*

STATIONS	† Rainfall 1mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	24 HOURS ENDED 7H. 15TH						14TH
Lerwick							
Stornoway	11	50	40	c	c	oq 22h.	*
Castlebay (Barra'ls)	21	46	38	cp	c.opq	orq	1.5
Malin Head	5	56	45	op	op.r	r2bep	0.0
Blacksod Point	6	49	45	o	o.p.	cq.p2.	0.0
Roche's Point	18	59	48	omr.	omrq	omqro	*
Birr Castle	8	58	51	ogd.	jdm	d.o.	*
Donaghadee	6	58	47	or.	orq	orqo	0.0
Liverpool (Bidston)	7	60	46	bcq	om om	ompq2	*
Holyhead	3	59	52	odr	odr	opq	0.0
Pembroke (St. Ann's Head)	8	57	50	opdqm	oprqm	ogpq	0.0
Scilly (St. Mary's)	10	57	52	oq	omq	ormq	0.0
Jersey (St. Aubin)	3	57	54	bc.omd	omdq	omq	0.5
Portland Bill	0.2 trace	58	53	c.o.bc	bc.o	odpo	0.8
Dungeness	5	58	54	o.	oqr	orq	*
Wick	5	58	52	o.q.c.	cq	qrcqr	*
Nairn	9	50	37	c.bcqp	bc.oq	bcqp2	*
Leith	7	54	37	prq.bc	bcqg	cu opq	2.6
Tynemouth	6	60	44	o.cuo	omd.	rqo	*
Spurn Head	7	59	47	cm	om	omqemhq	*
Yarmouth (Gorleston)	1	57	44	oqp	oq	c.oq	*
Clacton-on Sea	7	59	41	c.bc	bc.o	of oqv	0.0
Nottingham	3	56	47	cz	cz.o	oqr.c	0.1
	1	60	49	opm	o.c	op	0.2

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4.

M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 15.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, rainy, squally.	Indiff.	High.
2. E. England	Dull, squally.	Good	Mod.
3. E. Midlands	Dull, some showers.	"	-
4. W. Midlands	Dull, squally, some drizzle.	Fair	-
5. S.W. England	Dull, rainy, squally.	Indiff.	Rough
6. South Wales	Dull, squally, some rain.	"	High
7. North Wales	Dull, squally.	"	Rough
8. N.W. England	Dull, squally, local rain.	"	High
9. N. Midlands	Dull, some showers.	Fair	-
10. N.E. England	Fair to dull, squally.	"	Mod.
11. E. Scotland	Fine to dull, squally.	Good	"
12. S.W. Scotland	Dull, squally.	"	Rough
13. Isle of Man	Dull, squally.	Indiff.	"
14. N. & N.W. Scotland	Fair to dull, squally.	Fair	"
15. Hebrides	No reports.		
16. Orkneys and Shetlands	Dull, squally.	Indiff.	Rough
17. N.W. Ireland	Cloudy, squally.	Poor	"
18. N.E. Ireland	Dull, squally.	Indiff.	Rough
19. S.E. Ireland	Dull, squally, local rain.	Indiff.	"
20. S.W. Ireland	Dull.	Good	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number	Date	Time G.M.T.	Sea °F	Air °F
8	14th	0530	56	?
4a	14th	0650	54	53
3	14th	1025	55	54

Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.

BAROMETER.—Isobars are drawn for intervals of two millibars.

WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS.— clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. ℞ thunderstorm.

SEA DISTURBANCE.— Rough High

GENERAL INFERENCE from observations received up to 9h.

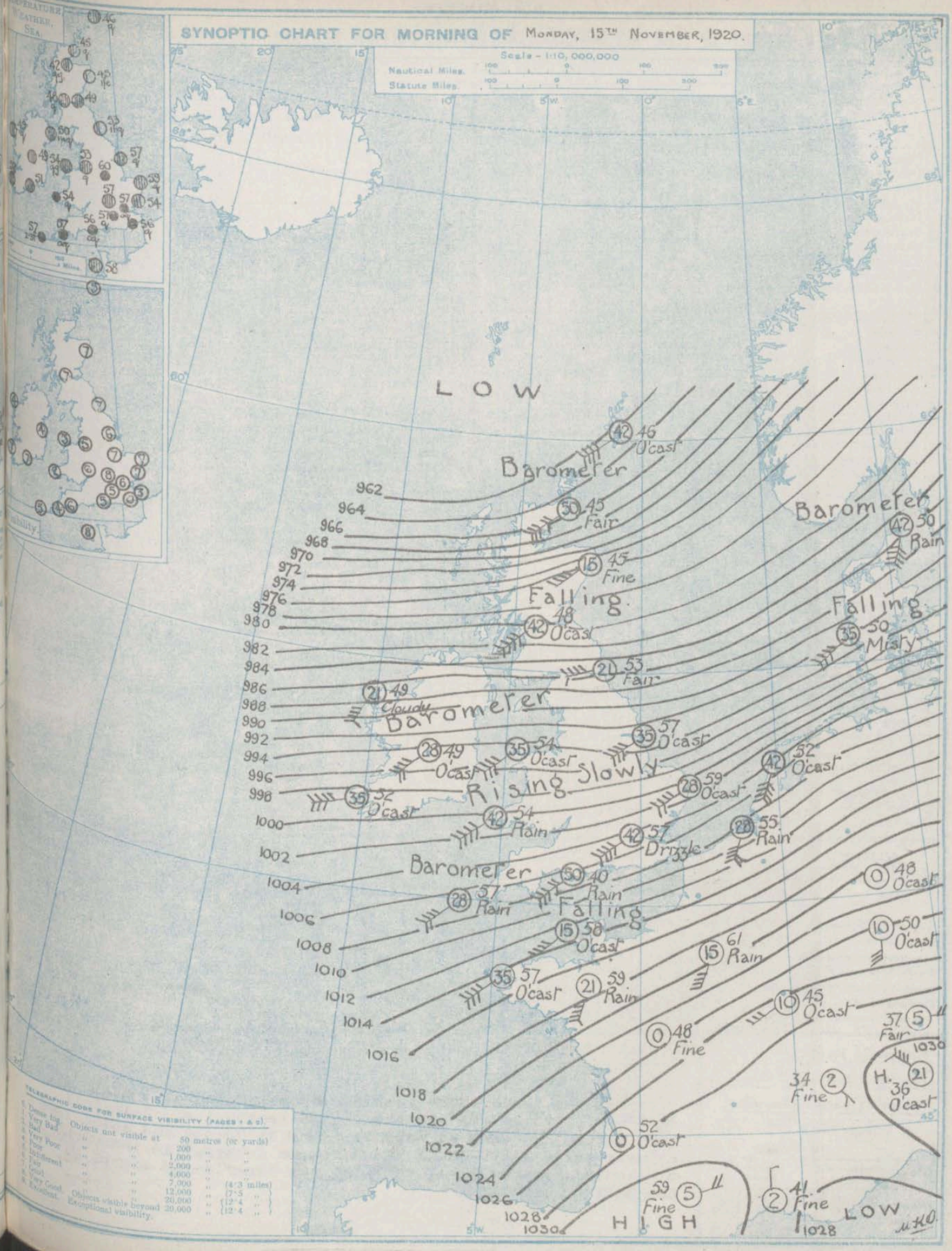
A very deep depression centred to the Northward of Scotland will probably travel away North-Eastward. A Westerly to North-Westerly wind with a lower temperature is probable over the British Isles, with occasional showers and squalls of rain or hail.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Monday, 15th November, 1920.	Further Outlook.
1. S.E. England ▼ 2. E. England ▼ 3. E. Midlands 4. W. Midlands 5. S.W. England ▼ 6. South Wales ▼	Wind veering to West, strong or a gale, then moderating; changeable, some rain or hail, visibility fair; colder.	Continuing unsettled with winds between North-West and South-West.
7. North Wales ▼ 8. N.W. England ▼ 9. N. Midlands 10. N.E. England ▼ 11. E. Scotland ▼ 12. S.W. Scotland ▼ 13. Isle of Man ▼ 14. N. & N.W. Scotland ▼ 15. Hebrides ▼ 16. Orkneys and Shetlands ▼ 17. N.W. Ireland ▼ 18. N.E. Ireland ▼ 19. S.E. Ireland ▼ 20. S.W. Ireland ▼	Wind veering to West or North-West, strong or a gale, then moderating; changeable, some rain or hail, visibility fair to good; colder.	▼ South Cone hoisted.

RS.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.00.

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF MONDAY, 15TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
Barometer
Falling.
Rising Slowly
Barometer
Falling
HIGH
LOW
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 4 & 5).
0 Dense fog. Objects not visible at 50 metres (or yards)
1 Very Bad " " 200 " "
2 Bad " " 1,000 " "
3 Very Poor " " 2,000 " "
4 Poor " " 4,000 " "
5 Indifferent " " 7,000 " "
6 Fair " " 12,000 " (4·3 miles)
7 Good " " 20,000 " (7·5 ")
8 Very Good " " 30,000 " (12·4 ")
9 Excellent. Objects visible beyond Exceptional visibility. " (12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 320.

Monday, 15th NOVEMBER

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 14th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 13th-14th	Rainfall. Day. 9h-18h. 14th	Sunshine. Sunrise to Sunset. 14th
Scotland.	Oban							
	Banff	bc.cp.	bc.c.	46	38	5	-	4.1
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	op.bc.	or.	52	39	2	1	0.7
	Scarborough	o	o	54	43	1	-	1.2
	Skegness							
England, E.	Lowestoft							
	Felixstowe	cg.	om	53	44	0.3	-	0.2
	Southend-on-Sea	op o.c.	o	54	43	0.2	-	0.1
England, S.E.	Tunbridge Wells	c.o.	o	54	44	-	-	0.0
	Margate	c	c	56	46	0.1	-	0.0
	Ramsgate	*	*	54	45	-	-	0.0
	Folkestone	*	*	54	44	3	-	0.0
	Hastings	o	c.op.c	56	48	1	0.4	0.2
	Eastbourne	bc.c.o	r.o.	56	51	1	0.1	0.4
	Brighton	o.c.	o	56	47	-	-	0.3
	Worthing	bc.o.	o	55	45	-	-	0.5
	Littlehampton							
	Portsmouth (S'thsea)	*	*	56	44	-	0.2	0.4
	Bournemouth	*	*	55	45	1	1	0.4
	Ventnor (I. of W.)	*	*	56	50	-	-	0.5
England, N.W.	Douglas (I.O.M.)							0.0
	Blackpool	or.	or	52	47	3	1	0.0
	Southport	r.or.	r.or	52	45	1	7	
Midlands.	Buxton							0.0
	Leamington Spa	o.	o	55	41	-	-	
	Malvern							0.1
	Bath	o.c.	o	56	41	-	-	
Wales.	Rhyl	po.	cp	57	43	0.2	1	0.0
	Colwyn Bay	.8.	.x	55	54	-	-	0.0
	Llandudno	or.	or	58	47	1	1	0.0
	Aberystwyth							
	Tenby							
	Swansea							
England, S.W.	Weymouth	o.	od	58	45	-	1	0.0
	Teignmouth							
	Torquay	or.	or	56	45	-	1	0.0
	Paignton	op	op. or	58	57	-	3	0.0
	Penzance	c.o.	od.r.	57	47	0.2	1	0.0
	Newquay	o.	od.	57	44	-	1	0.0
	Bude	o.	o.	58	47	-	-	0.0
	Ilfracombe	o	or.	58	47	-	4	0.2
	Weston-s-Mare	c.bc.	o.	55	46	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 14th	Weather. 13h-18h 14th	Weather. 18h 14th-1h 15th	Weather. 1h-7h 15th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h mm.	Rainfall.† Night. 18h-7h mm.	Sun. Hours.
Renfrew	coq/c.or	op o2fr	o2f RR	R o.P.	58	42	42	3	19	0.6
Eskdalemuir	o2f	o1fr.	q RR	o.R.R.	54	44	40	3	35	0.5
Valencia (Cahir'a)	o2fr	rr o2f.	o	c.op.	59	50	46	5	1	0.0
Baldonnel	rq.	o1fr.	qrr o o2f.	rrq/o2f	59	49	47	2	5	0.0
Manchester (Alex. Pk)	o2frr3f	o3fr. o2fr.	o2fRRq	qvr.	62	48	46	3	7	.x.
Ross on Wye	oq/hdoq	oq/hoq	rrq	pd coq	58	50	51	0.1	5	0.0
Falmouth	o		DD.o.	d.o.d.	57	52	55	2	2	0.0
Calshot (Hants)	o	d.o.r.q.q	o2f	rro2f r	58	50	53	0.2	13	0.3
Lympne (Folkestone)	o1fDoq	q/o q/o2f	rrq/r.o	r.o o2fq	55	49	50	1	6	0.0
Aberdeen	b.bcqr	bc.c.o1f	rrq	rq	58	42	40	-	9	4.5
Howden	q.o1f	rhoq 2f.	o1fr r.	Pq	62	48	45	-	19	0.1
Cranwell (Lincs)	q.c.o.	p.o.q.o	rrq.	opo	59	47	50	trace	3	1.0
Felixstowe	1f.c.o.	o1f.o	qrr.	oq	57	44	.x.	-	4	0.4
Shoeburyness	c.o	c.o.o	rr	qro	59	48	51	-	4	0.1
Benson	o	o	rr.	opdo	58	45	40	-	5	*
S. Farnborough	c.o	r.o.	rr.	o2frr	57	47	45	-	7	0.2
London (Kew Obsy.)	w. o2f	o2f.	oq qrrpdo	oq	57	46	47	-	5	0.0
Croydon	coq.cow.	o1fq	rrro qf1fq	o1frrq	58	49	.x.	-	5	.x.

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus –
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1– 3	0·3– 1·5
2	4– 7	1·6– 3·9
3	8–12	3·9– 5·4
4	13–18	5·5– 7·9
5	19–24	8·0–10·7
6	25–31	10·8–13·8
7	32–38	13·9–17·1
8	39–46	17·2–20·7
9	47–54	20·8–24·4
10	55–63	24·5–28·4
11	64–75	28·5–33·5
12	Above 75	33·6 or above

SYMBOLS–
Aurora ☆ Solar halo ⊕
Rime ⌶ Lunar halo ⊕
Glazed frost ∽ Solar corona ⊕
Glazed roads ⚒ Lunar corona ⊕

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9H G.M.T. 15th							Yesterday.		To-day.
Greenwich (Royal Observatory)	o	o	orq.o	59	50	47	4	0.1	78	85
City (Bunhill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	*	*	dro.	60	50	45	3	0.0	70	82
Regent's Pk (Botanical Gardens)	.x.	.x.	.x.	.x.	.x.	*	.x.	0.0	.x.	.x.
Camden Sq. (British Rainfall)	.x.	.x.	*	59	49	45	4	*	?	87
Kensington Palace	o	o.	*	59	46	?	4	*	83 (18h)	89
Hampstead Observatory	*	*	*	57	46	43	16	0.0	*	93

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total 291 Joules.

	Milliwatts.
Average Rate.	9·1
Maximum Rate.	18

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

15th AND 16th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.16 / 7.17	11.38 / 11.38	4.2 / 3.59
Greenwich	7.20 / 7.21	11.43 / 11.43	4.10 / 4.9
Wick	8.3 / 8.5	11.57 / 11.57	3.51 / 3.49
Valencia	8.3 / 8.4	12.26 / 12.26	4.43 / 4.42

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 14th 17h 15m to 15th 6h 45m

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	13. 0	0. 0.	0
δ Ursae Minoris	13. 0	0 0	0

NOTES ON THE WEATHER OF YESTERDAY.

Maximum temperature readings above 55° were general; 60° in some places and 62° at Howden and Manchester. Rain fell very generally; 22mm at Renfrew, 19mm at Howden and about 10mm at many other stations. A thunderstorm occurred in the night at Lerwick. Scarcely any sunshine was experienced except in the East of Scotland.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B.21,544 Tuesday, 16th November, 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather.	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	18H. G.M.T. of 15th													
Renfrew	994.3	+4	WSW	7	c	47	65	7	2000	CuNb	7	-	-	*
Eskdalemuir	987.8	+2	SW	8	oq	45	65	7	-	StCu	8	CiCu	1	*
Valencia (Cahire'n)	10023	+2	WSW	6	c	52	65	7	3000	StCu	7	-	-	6
Baldonnel	997.5	+2	SW	5	cq	50	65	7	4200	StCu	7	ACu	1	*
Manchester (Alex. Pk.)	997.7	+2	W	6	cif	51	65	7	3000	StCu	6	Ci	2	*
Ross on Wye	1002.7	+1	W	7	oq	54	65	8	2000	Nb	7	CiSt	2	*
Falmouth	1009.1	+1	SW	5	odq	53	92	5	-	Nb	10	-	-	*
Calshot (Hants) *	1007.0	+1	SSW	5	oif	55	92	6	2000	St	10	-	-	4
Lympne (Folkestone)	1006.2	-3	SW	8	orqm	55	97	2	4500	Nb	10	-	-	*
Aberdeen	974.5	-1	SW	8	bif	47	88	7	-	-	-	-	-	5
Howden	995.6	+2	WSW	5	orq	51	85	7	2000	Nb	5	ASr	5	*
Cranwell (Lincs)	998.4	0	WSW	6	bcq	54	75	7	4200	StCu	3	ACu	3	*
Felixstowe	1004.2	0	WSW	6	orq	56	97	6	750	Nb	10	-	-	*
Shoeburyness	1004.0	-2	SW	6	orq	56	85	5	1250	St	10	-	-	*
Benson	1003.3	0	WSW	4	o	54	85	9	-	Nb	10	-	-	*
S. Farnborough	1005.5	+1	WSW	4	o	55	92	7	2000	Nb	4	ASr	6	*
London (Kew Obsy.)	1004.0	0	SW	5	od	55	85	6	1250	Nb	1	ASr	8	*
Croydon	1006.0	-1	SW	7	crq	54	92	8	750	Nb	2	ASr	6	*
	18H. G.M.T. of 15th													
Renfrew														
Eskdalemuir														
Valencia (Cahire'n)	996.5	+8	SW	5	c	41	75	7	-	St	8	-	-	*
Baldonnel	1007.3	+2	SSW	8	bcq	47	*	*	*	*	*	*	*	6
Manchester (Alex. Pk.)	1005.0	+4	SW	8	bq	41	85	4	-	St	-	ASr	1	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Falmouth	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calshot (Hants)	1013.9	+3	WSW	4	b	47	86	7	-	StCu	8	-	-	*
Lympne (Folkestone)	1012.1	+2	W	4	b	50	85	7	2000	St	3	-	-	3
Aberdeen	1011.2	+1	SW	5	oifq	48	97	7	1250	St	10	-	-	*
Howden	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cranwell (Lincs)	1002.3	+2	WSW	6	bq	45	85	7	-	-	-	-	-	*
Felixstowe	1006.0	+1	WSW	5	bq	45	85	5	-	-	-	-	-	*
Shoeburyness	1010.1	+3	SW	4	b	50	92	7	4200	St	2	-	-	4
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*
London (M.O. at 1H.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Croydon	1010.7	+3	*	*	*	50	*	*	*	*	*	*	*	*
	1011.6	+2	WSW	3	bif	48	85	7	-	-	-	ASr	2	*

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather.	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	18H. G.M.T. of 15th													
Renfrew	994.4	+5	SW	5	oif	42	85	6	2,000	CuNb	5	ASr	4	*
Eskdalemuir	1000.4	+2	SW	4	oif	39	85	5	-	Nb	9	ASr	1	*
Valencia (Cahire'n)	1011.7	+3	W	6	bcqf	47	65	8	3,000	Cu	4	-	-	*
Baldonnel	1007.1	+3	WSW	5	crq	41	85	6	3,000	Nb	8	-	-	*
Manchester (Alex. Pk.)	1007.2	+4	W	4	b	43	75	8	3,000	StCu	1	-	-	*
Ross on Wye	1011.7	+3	W	5	bqfv	44	75	9	2,000	Nb	6	-	-	*
Falmouth	1015.8	+2	W	3	b	44	85	8	-	Nb	2	-	-	*
Calshot (Hants)	1014.4	+4	W	3	b	46	85	8	2,000	StCu	1	-	-	3
Lympne (Folkestone)	1014.4	+4	SW	3	bmw	43	85	7	2,000	StCu	2	-	-	*
Aberdeen	994.7	+6	SW	3	bo	42	65	8	4200	StCu	6	-	-	2
Howden	1005.7	+2	WSW	5	bq	42	85	8	-	-	-	-	-	*
Cranwell (Lincs)	1009.4	+4	SW	4	b	41	85	6	3,000	St	1	-	-	*
Felixstowe	1013.0	+3	SW	4	b	44	97	6	-	-	-	ASr	1	4
Shoeburyness	1013.2	+3	SW	3	c	45	85	6	3,000	St	7	-	-	*
Benson	1012.1	+2	SW	3	b	40	92	8	-	StCu	1	-	-	*
S. Farnborough	1013.8	+3	SW	2	b	39	97	6	-	-	-	-	-	*
London (M.O. at 1H.)	1013.2	+2	SW	3	bw	44	85	6	2,000	StCu	2	-	-	*
Croydon	1014.2	+3	WSW	4	bif	46	75	7	-	-	-	ASr	1	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 15th					7H. G.M.T. of 16th									24 HOURS ENDED 7H. 16th						15th
Lerwick	957.0	43	SW	5	bc	984.8	+10	44	+2	W	4	-	c	2	20	48	40	omor	omrq	omq.omf	*
Stornoway	942.0	47	WNW	7	oprqr	991.5	+5	41	?	WNW	3	-	c	3	33	47	39	orqr	oropqrqr	opkqlq.c	0.0
Castlebay (Barra Is)	980.9	47	W	6	op	994.8	+4	46	0	WNW	5		o	5	4	48	41	prq.pm	opqrmp	opbco	0.0
Malin Head	983.9	45	WSW	7	cqr	998.0	+3	43	-4	WSW	4	W	cqrp	6	8	50	40	cqrp	cqrpl	cqrph	0.9
Blacksod Point	993.4	50	W	8	cp	1001.3	+2	47	-2	W	5	-	cq	6	1	50	43	bcph	bc	oq.bcq.cq	*
Roche's Point	1005.7	49	W	4	b	1012.2	+4	43	-8	WSW	3	-	b	3	0.3	58	43	ob	bbcob	bb	*
Birr Castle	1000.4	43	SW	5	c	1007.0	*	42	-7	W	1	-	c	*	5	49	40	cphq	cqphl	cpl	2.6
Donaghadee	993.3	44	WSW	5	bq	1001.9	+2	41	-9	WSW	6	-	bcqp	4	1	51	41	bq	bcqp	bcqp.b	*
Liverpool (Bidston)	999.2	49	WSW	6	o	1006.3	+3	46	-7	SW	5	-	b	5	-	55	40	bcq	co	bc.b	4.0
Holyhead	999.6	50	W	7	bcq	1006.7	+1	46	-8	WSW	6	-	bq	5	1	53	44	cb	cq	bq	1.7
Pembroke (St. Ann's Head)	1005.5	54	WSW	8	oq	1011.6	+1	50	-4	W	5	-	cq	6	2	55	47	oqm	oqm	oqp	0.3
Scilly (St. Mary's)	1009.9	53	SW	4	o	1015.3	+3	49	-8	NW	5	NW	c	6	4	57	48	omr	o	oqp.bqp	0.0
Jersey (St. Aubin)	1012.7	57	WSW	4	o	1017.4	+1	52	-6	W	4	W	bc	3	2	60	51	o	oro	op.o.bc	0.0
Portland Bill	1009.2	56	WSW	6	oq	1012.1	+3	53	-3	W	6	W	bo	6	2	63	53	oqr	oq	oq.bc	*
Dungeness	1009.0	54	WSW	5	bc	1013.1	+3	49	-7	WSW	4	SW	b	4	2	58	48	cq	cqrbc	c.c.bc	*
Wick	968.3	43	WSW	9	omqr	989.2	+9	40	-5	W	4	-	oq	6	20	46	38	omqr	omqr	omr.c	*
Nairn	974.7	45	WSW	6	o	993.1	*	39	-3	WSW	2	-	cq	2	5	46	38	rcpr	pcqf	op.od	0.0
Leith	985.1	42	W	7	c	994.5	+2	41	-8	SW	4	-	c	3	11	50	40	o.cqp.c	cqq.c	cqqr.c	*
Tynemouth	997.0	47	W	5	bmq	1000.1	+2	43	-10	W	5	-	bcqp	3	1	53	42	bcmq	bcmq	bcmpq	*
Spurn Head	999.0	50	SW	7	bq	1006.1	+2	43	-14	WSW	5	-	bq	5	2	58	40	cqp	cqp	bcq.bq	*
Yarmouth (Gorleston)	1004.2	53	WSW	4	c	1010.7	+3	44	-15	WSW	3	-	b	1	5	59	44	oqr	oqpcq	c.bcq.b	0.0
Clacton-on-Sea	1006.8	53	SW	4	bc	1012.3	+3	45	-9	WSW	4	-	bc	3	0.4	57	44	coqqr	oqcbc	bc.c.bc	0.0
Nottingham	1002.1	47	SW	3	b	1009.3	*	41	-19	SW	2	-	bm	*	4	60	40	roc	obcp	c.op	0.7

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3. † See footnote p. 4.

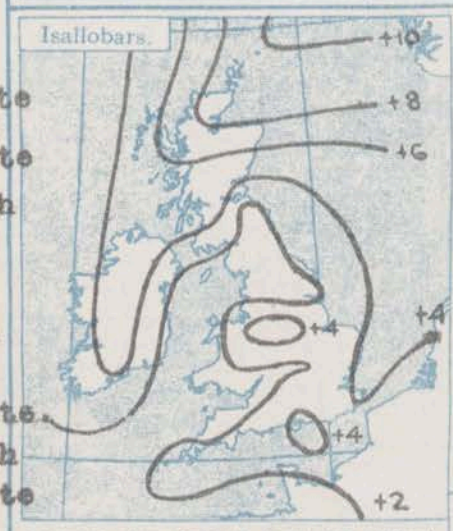
M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 16.11.20.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fine.	Fair.	Moderate
2. E. England	Fair or fine.	"	Slight
3. E. Midlands	Fine, mist in North.	Good	-
4. W. Midlands	Fair or fine, slight rain (in South	V. Good	-
5. S.W. England	Fine to cloudy	"	Rough
6. South Wales	Cloudy, squally.	"	"
7. North Wales	Fine, squally.	"	R.rough
8. N.W. England	Fine to cloudy	Good	"
9. N. Midlands	Fine	"	-
10. N.E. England	Fair or fine, showery, (squally	Fair	Moderate
11. E. Scotland	Fair or cloudy	Good	Smooth
12. S.W. Scotland	Dull, slight local rain	Fair	Moderate
13. Isle of Man	Fair or fine, some showers	"	R.rough
14. N.&N.W. Scotland	Cloudy or dull	Good	Slight
15. Hebrides	Cloudy	"	"
16. Orkneys and Shetlands	"	"	Smooth
17. N.W. Ireland	Cloudy, squally.	Fair	Rough.
18. N.E. Ireland	Fair, showery, squally.	"	Moderate.
19. S.E. Ireland	Cloudy, local rain.	"	R.rough
20. S.W. Ireland	Fair or fine, showery	Good	Moderate

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
10	15th	0545	50	49
5	15th	0809	54	50
3	15th	1025	55	52
6	15th	1509	57	58
4A	16th	0480	50	48



Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. sky ¾ clouded. rain falling. snow. sleet. hail. fog. mist. T thunder. ⚡ thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h.

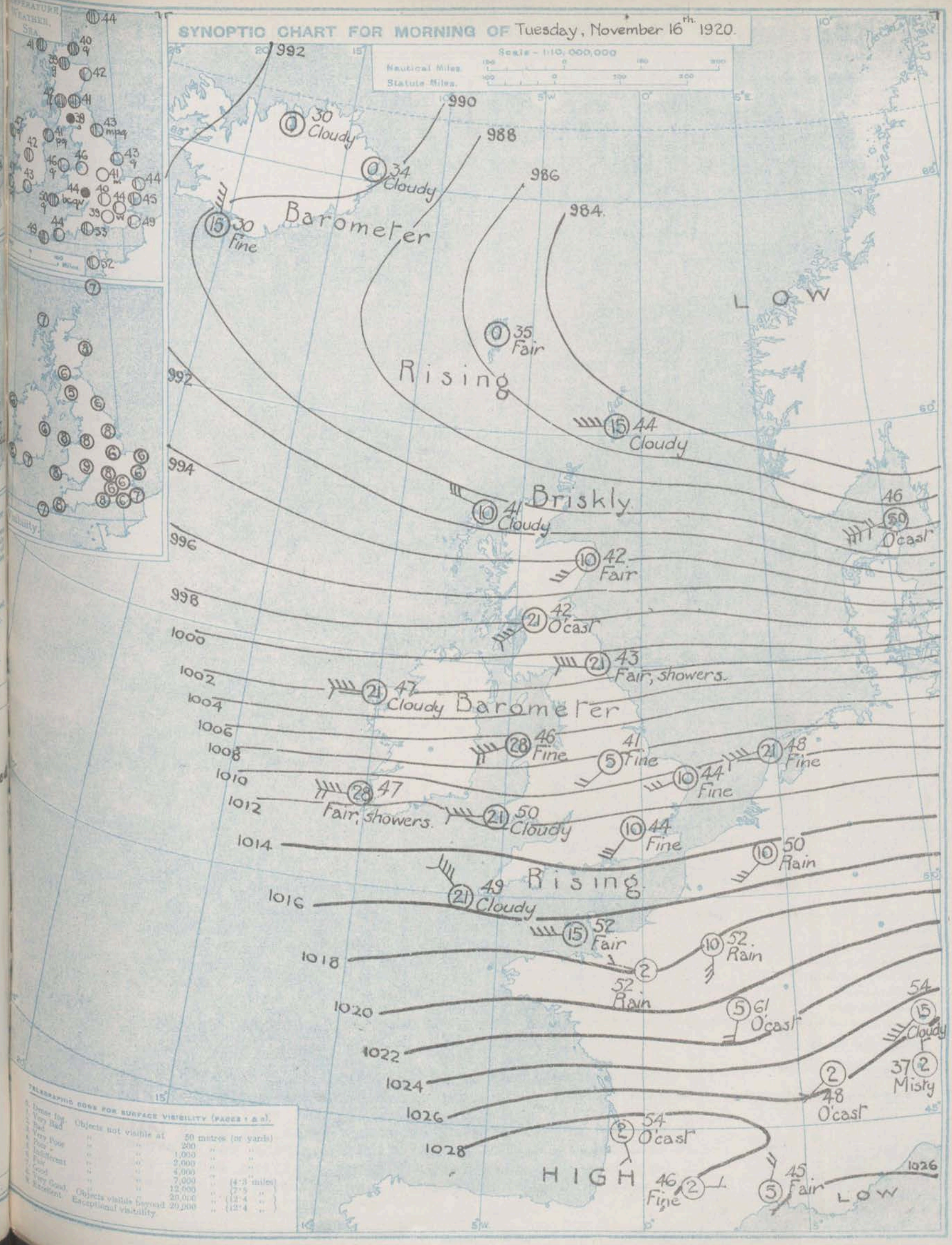
The deep depression of yesterday has travelled away North-North-Eastward and an interval of generally fair weather is probable, with winds from the Westward and a moderate temperature. It is not expected that the fair weather will continue for more than 24 hours.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Tuesday, 16th November 1920.	Further Outlook.
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. E. Scotland	Wind W or SW, light or moderate, mainly fair, but cloudy at times, local showers; good visibility, moderate temperature during day, local frost at night.	Becoming unsettled again.
12. S.W. Scotland 13. Isle of Man 14. N.&N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind between W & SW light or moderate, fresh locally, variable sky, some showers in places; good visibility, moderate temperature during day, local frost at night.	

R.S.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.00

G. C. SIMPSON, F.R.S., Director.



TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).

0. Dense fog	Objects not visible at	50 metres (or yards)		
1. Very Bad	" "	200 "	"	
2. Bad	" "	1,000 "	"	
3. Very Poor	" "	2,000 "	"	
4. Poor	" "	4,000 "	"	
5. Indifferent	" "	7,000 "	"	(4·3 miles)
6. Fair	" "	12,000 "	"	(7·5 ")
7. Good	" "	20,000 "	"	(12·4 ")
8. Very Good	" "	20,000 "	"	(12·4 ")
9. Excellent	Objects visible beyond	Exceptional visibility		

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 324 {Tuesday 16th November

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 15h

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 13-14h	Rainfall. Day. 9h-18h. 14h	Sunshine. Sunrise to Sunset. 14h
Scotland.	Oban	roc	pc	55	42	10	1	0.8
	Banff	bbc	cbcb	50	39	8	-	2.8
	Montrose							
	St. Andrews	-	-	48	41	13	2	1.5
England, N.E.	Harrogate	bbcqp	bbcqp	52	43	7	0.3	2.0
	Scarborough	bc	bc	61	48	2	-	2.5
	Skegness	goc	cobcb	55	49	4	0.4	0.8
England, E.	Lowestoft							
	Felixstowe	oucp	bc	58	52	5	1	0.0
	Southend-on-Sea	orq	oc	59	48	3	1	0
England, S.E.	Tunbridge Wells	or	oroc	57	50	7	1	0.0
	Margate	od	or	59	52	2	0.3	0.0
	Ramsgate	*	*	57	51	3	1	0.0
	Folkestone	ord	po	55	452	4	2	0.0
	Hastings	od	od	57	52	10	2	0.0
	Eastbourne	r	rocbc	58	53	8	3	0.0
	Brighton	or	or	57	53	10	1	0.0
	Worthing	or	rocr	57	53	10	2	0.0
	Littlehampton	od	oc	57	52	9	2	0.0
	Portsmouth (S'tbaca)	-	-	58	53	11	1	0.0
	Bournemouth	*	*	57	53	11	1	0.0
	Ventnor (I. of W.)	*	*	57	50	9	2	0.0
England, N.W.	Douglas (I.O.M.)							2.1
	Blackpool	-	-	55	47	11	0.2	2.6
	Southport	oqcbc	bcpqcbc	53	46	6	1	
	Morecambe							
Midlands.	Buxton							0.0
	Leamington Spa	cb	cb	53	51	5	2	0.2
	Malvern	oc	bcb	54	50	5	1	0.0
	Bath	ro	ocbc	55	52	6	1	1.1
Wales.	Rhyl	q	q	59	44	3	1	0.0
	Colwyn Bay	-	-	52	49	7	2	0.7
	Llandudno	*	*	60	49	7	3	0.0
	Aberystwyth	roc	coo	54	49	5	-	
	Tenby							
	Swansea							0.0
England, S.W.	Weymouth	orq	o	58	52	5	1	
	Teignmouth							0.7
	Torquay	or	ocr	58	50	8	1	0.3
	Paignton	odq	opbcp	56	50	6	0.3	0.1
	Penzance	or	opbc	55	50	3	0.3	0.0
	Newquay	op	copo	54	51	3	1	0.0
	Bude	r	rcoc	59	52	9	-	0.0
	Ilfracombe	orq	oq	55	54	6	0.3	0.0
	Weston-s-Mare	oc	oc	55	50	7	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h.15*	Weather. 13h-18h45*	Weather. 18h45*-1h16*	Weather. 1h-7h16*	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h. mm.	Rainfall.† Night. 18h-7h. mm.	Sun. Hours.
Renfrew	pcoprh	boprh	clrh. prh	boprh drizz	48	41	38	2	6	0.5
Eskdalemuir	bo	qrh co	prh bc.c	c.oq	47	37	35	0.2	1	1.7
Valencia (Cahirc'n)	cop.cotl.	becphr.	b.bcp.	prhq	53	45	41	1	1	1.6
Baldonnel	coq	q RR	q.b	clazq.bco	50	39	[illegible]	2	1	2.3
Manchester (Oldx Park)	qpcor	qpbccif	b.oif	b.bc.b	55	48	34	0.4	-	*
Ross on Wye	oqcopq	oqcoq	coqlp.b.bcq	b.bcq	58	41	34	1	0.1	0.5
Falmouth	dd.o	opd.bcc	b.bcp.	b.bcp.	57	43	39	3	2	0.2
Calshot (Hants)	r.r.qozq	o	b.bcif	b.bc	58	46	41	1	Xn	0.0
Lympne (Folkestone)	dd.r.r.qz	oz.r.r.qbcc	b.c oifq.r	q.oqf.bc.c	55	42	39	5	0.2	0.0
Aberdeen	q	bq	q	q.b.bc	49	42	37	-	-	1.7
Howden	pq	pd.q	q.b	bq	59	42	38	1	-	1.7
Cranwell (Lincs)	rr.qo.bcc	p.co	p.q.c.oq	bif	59	39	36	3	1	1.7
Felixstowe	qr	p.bo	b.bc	b.bc.b	58	44	*	1	-	0.0
Shoeburyness	r.r.u	r.r.co	bc.c.bc.c	c.o.bc.c	60	44	39	1	-	0.0
Benson	o	o	o	o.b.bc	59	40	34	1	0.1	*
S. Farnborough	r.r.o	r.r.o	bc.c	b.bc	57	39	32	2	-	0.0
London (Kew Obsy.)	odqrddq	pd.o	b.bc	b.bcw	58	44	37	4	Trace	0.0
Croydon	ddrrRq	r.q oq	o.c.o.b.bcif	b.bcif	59	45	*	2	Trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:–
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1– 3	0·3– 1·5
2	4– 7	1·6– 3·3
3	8–12	3·4– 5·4
4	13–18	5·5– 7·9
5	19–24	8·0–10·7
6	25–31	10·8–13·8
7	32–38	13·9–17·1
8	39–46	17·2–20·7
9	47–54	20·8–24·4
10	55–63	24·5–28·4
11	64–75	28·5–33·5
12	Above 75	33·6 or above

SYMBOLS–

Aurora ☆ Solar halo ⊕
Rime ⌶ Lunar halo ◯
Glazed frost ⌇ Solar corona ◎
Glazed roads ⚒ Lunar corona ◎

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 Hours ended 9h G.M.T. 16th							Yesterday.		To-day.
Greenwich (Royal Observatory)	0	0r.b.0	o. b	59	44	37	1	0.0	67	74
City (Bunhill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	*	*	o. bc.c.b	60	45	38	3	0.0	68	72
Regent's Pk. (Botanical Gardens)	*	*	*	*	*	*	*	0.0	*	*
Camden Sq. (British Rainfall)	o.r	o	*	59	43	37	4	*	79	78
Kensington Palace	or	or.o.c	*	59	42	37	4	*	70 (18h)	79
Hampstead Observatory	*	*	*	56	41	36	3	0.0	*	79

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total ..... 10.8 ..... Joules.

Milliwatts.
Average Rate. 3.4
Maximum Rate. 16

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

16th & 17th November 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.17	11.38	3.59
	7.19	11.39	3.57
Greenwich	7.21	11.40	4.9
	7.23	11.40	4.7
Wick	8.6	11.57	3.43
	8.7	11.57	3.47
Valencia	8.4	12.26	4.45
	8.6	12.26	4.46

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 15th ... 17h ... 15m.
to 16th ... 6h ... 15m.

Stars.	Duration of Exposure. h.	Duration of Exposure. m.	Duration of Record. h.	Duration of Record. m.	%
Polaris	13	0	9	9	70
δ Ursae Minoris	13	0	6	32	50

NOTES ON THE WEATHER OF YESTERDAY.

Temperature rose to 63° at Portland Bill, 62° at Leamington, and to about 60° in many other parts of England. Rain fell very generally, the quantity being large at various places; 33 mm. at Stornaway and 20 mm. at Wick and Lerwick, 11 mm at Leith, and 12mm at Calshot. Little or no bright sunshine was recorded except 2 to 3 hours at some North-Eastern stations and in central Ireland, 4 hrs. at Liverpool, and 4.7 hrs. at Aberdeen.

* Information for these columns not usually received.

† Trace = rain has fallen, but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,545 WEDNESDAY, 17TH NOVEMBER, 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	Humidity. % §	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	1SH. G.M.T. 16TH													
Renfrew	1003.5	+6	WSW	5	orh	44	85	7	1250	Cu N	9	-	-	*
Eskdalemuir	1004.8	+4	SW	5	o	42	86	7	-	St Cu	10	-	-	*
Valencia (Cahirc'n)	1015.3	+2	WSW	5	c	50	65	8	1250	St Cu	5	A Cu	4	5
Baldonnel	1011.8	+4	WSW	4	oq	46	76	7	2000	St Cu	9	-	-	*
Manchester (Alex Park)	1010.3	+3	W	6	cif	49	55	7	3000	Cu	8	-	-	*
Ross on Wye	1014.1	+2	WNW	6	bcqv	51	55	9	3000	Cu N.	3	Ci	1	*
Falmouth	1019.3	+3	W	5	bq	53	65	8	-	Cu	2	-	-	*
Calshot (Hants) *	1017.3	+3	WSW	5	bcv	54	65	9	4200	Cu	6	-	-	3
Lympne (Folkestone)	1016.3	+1	SW	5	bcq	51	65	8	2000	Cu	4	A Cu	1	*
Aberdeen	998.9	+3	SW	2	oif	45	65	6	4200	St Cu	9	-	-	2
Howden	1009.5	+2	W	6	c	49	75	7	2000	Cu N	7	-	-	*
Cranwell (Lincs)	1011.1	+1	WSW	5	b	49	75	6	3000	Cu	2	A St	1	*
Felixstowe	1014.8	+1	SW	4	b	52	85	6	4200	St Cu	2	A Cu	1	*
Shoeburyness	1015.4	+1	SW	4	bcz	52	65	5	3000	Cu	6	-	-	*
Benson	1014.7	+2	WSW	4	b	50	65	8	-	Cu	2	-	-	*
S. Farnborough	1016.9	+2	WNW	4	bc	49	65	8	3000	St Cu	4	A Cu	2	*
London (Kew Obsy.)	1015.8	+2	W	4	bcz	50	65	5	4200	Cu	3	A Cu	1	*
Croydon	1016.6	+2	W	4	bc if	51	65	7	3000	St Cu	5	A St	1	*
	18H. G.M.T. OF 16TH													
Renfrew	1008.7	+5	WSW	4	o R3f	41	92	5	-	Nb	10	-	-	*
Eskdalemuir	1009.4	+6	WSW	4	b	39	85	8	-	Cu N	3	-	-	*
Valencia (Cahirc'n)	1019.2	+6	WSW	5	b	47	75	8	3000	St Cu	2	-	-	5
Baldonnel	1018.1	+5	SW	5	bq	41	92	7	2000	St Cu	3	-	-	*
Manchester (Alex Park)	1014.1	+5	W	5	bc if	45	75	6	3000	St Cu	5	-	-	*
Ross on Wye	1017.8	+5	WSW	3	bv	42	75	9	3000	St Cu	1	Ci	1	*
Falmouth	1024.1	+3	WSW	5	or3fq	47	85	5	-	Nb	9	-	-	*
Calshot (Hants) *	1021.0	+5	W	3	b	46	85	8	3000	Cu	1	-	-	2
Lympne (Folkestone)	1020.7	+5	WSW	4	b	41	85	8	-	-	-	-	-	*
Aberdeen	1003.7	+6	WSW	3	b	41	75	8	-	-	-	-	-	2
Howden	1012.8	+6	W	5	orq	42	97	6	2000	Nb	10	-	-	*
Cranwell (Lincs)	1015.2	+6	W	3	b	43	85	7	-	-	-	-	-	
Felixstowe	1018.3	+5	SW	3	b	46	92	7	-	-	-	-	-	4
Shoeburyness	1018.5	+5	SW	2	b	46	75	6	-	-	-	-	-	*
Benson	1018.3	+2	SW	3	b	43	85	8	-	-	-	-	-	*
S. Farnborough	1020.0	+4	W	2	b	41	85	7	-	-	-	A Cu	2	*
London (Kew Obsy.)	1019.5	+6	WSW	3	bif	46	75	5	-	-	-	A Cu	1	*
Croydon	1019.8	+4	WSW	3	bif	45	75	7	3000	Cu	1	-	-	*
	1H. G.M.T. OF 17TH													
Renfrew														
Eskdalemuir														
Valencia (Cahirc'n)	1015.0	+4	SW	2	od	37	97	6	-	St	10	-	-	*
Baldonnel	1022.5	0	WSW	4	bc	44	*	*	*	*	*	*	*	
Manchester (Alex Park)	1020.1	+4	WSW	4	b	39	85	5	-	-	-	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Falmouth	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calshot (Hants)	1025.0	+2	W	2	b	42	92	7	-	Cu	1	-	-	*
Lympne (Folkestone)	1022.9	+3	-	0	b	41	97	8	-	-	-	-	-	0
Aberdeen	1024.4	+2	WSW	4	c	42	85	8	2,000	St Cu	7	-	-	*
Howden	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cranwell (Lincs)	1008.1	+3	S	1	b	37	92	7	3,000	St	1	-	-	*
Felixstowe	1019.8	+4	WSW	4	b	40	85	6	1,250	St	1	-	-	*
Shoeburyness	1022.1	+3	SW	3	b	42	97	7	3,000	St	2	-	-	3
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*
London (M.O. at Ie.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Croydon	1023.1	+3	*	*	*	*	*	*	*	*	*	*	*	*
	1023.5	+2	W	3	b,5	42	85	7	-	-	-	a Cu	1	*
	7H. G.M.T. OF 17TH													
Renfrew	1019.4	+5	W	3	bc	40	85	7	2,000	Cu Nb	5	-	-	*
Eskdalemuir	1021.0	+6	SW	4	or	47	92	5	-	Nb	10	-	-	*
Valencia (Cahirc'n)	1024.0	+1	ENE	2	bcp	42	92	8	3,000	Cu Nb	6	-	-	2
Baldonnel	1024.3	+4	SSW	4	bi5	39	85	6	3,000	St	1	a St	2	*
Manchester (Alex Park)	1024.1	+6	SW	2	c	38	85	8	3,000	Cu	8	-	-	*
Ross on Wye	1026.7	+7	SW	2	bx	38	85	8	-	-	-	-	-	*
Falmouth	1027.9	+4	MW	2	bcvk	40	92	9	-	Cu Nb	2	a Cu	2	*
Calshot (Hants)	1028.2	+5	MNW	2	b	38	92	8	3,000	St Cu	1	-	-	1
Lympne (Folkestone)	1027.6	+3	W	1	bmx	36	92	6	2,000	St Cu	1	-	-	*
Aberdeen	1016.4	+6	SW	2	cifz	39	85	6	4,200	St Cu	7	-	-	2
Howden	1022.6	+4	SW	2	b	36	97	6	1,250	St	1	-	-	*
Cranwell (Lincs)	1024.5	+5	W	4	b	37	97	5	4,200	St	1	-	-	*
Felixstowe	1026.3	+4	WSW	3	b	38	97	6	-	-	-	-	-	3
Shoeburyness	1027.1	+5	W	1	b25W	38	85	5	-	-	-	-	-	*
Benson	1026.3	+5	SW	1	b	32	97	8	-	-	-	-	-	*
S. Farnborough	1028.5	+6	W	1	b	36	97	6	-	-	-	-	-	*
London (M.O. at Ie.)	1027.9	+6	WSW	2	bmx	36	97	4	-	-	-	a St	1	*
Croydon	1027.6	+5	W	4	bc15	39	92	6	-	-	-	c St	5	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 16TH					7H. G.M.T. of 17TH									24 HOURS ENDED 7H. 17TH						16TH
Lerwick	995.9	40	-	0	bc	1008.2	+6	41	-3	WSW	4	-	bcmq	2	4	44	40	omp	bcp	bcmp	*
Stornoway	1002.4	40	WNW	3	cph	1015.2	+7	40	-1	W	2	-	op	1	6	43	38	cph	cph	op	0.2
Castlebay (Barra's)	1005.7	47	WNW	4	0	1014.1	+4	46	0	WNW	4		bc	4	2	47	42	opco	o.p.o.	bc p bc	1.5
Malin Head	1007.4	44	SW	3	or													oqrp	op		
Blacksod Point	1014.3	45	W	5	cph	1019.1	+2	46	-1	SW	3	-	bc	3	4	50	45	cq	cph	bcp.bc	*
Roche's Point	1019.3	45	W	3	b	1025.5	+2	37	-6	-	0	-	b	2	0.4	50	35	bcc pc	cb	bx	*
Birr Castle	1016.1	41	SW	2	c	1023.8	*	35	-7	S	1	-	c	*	3	45	33	o.cpr	cpr	c.or	0.7
Donaghadee	1011.9	40	W	3	bc	1022.0	+5	38	-3	W	3	-	bq	3	-	48	38	bcq	bcq p	bcq	*
Liverpool (Bidston)	1013.3	45	WSW	5	b	1023.3	+5	43	-3	W	4	W	bc	3	-	49	43	bcq	bc b	bc	5.8
Holyhead	1014.7	46	WSW	6	cg	1024.1	+3	46	0	WSW	4	W	bc	3	-	50	44	bcc q	cq	c.bc.b	2.2
Pembroke (St. Ann's Head)	1015.4	50	WSW	6	cqv	1027.8	+3	49	-1	W	3	-	b	4	1	52	47	cq	cq p v	cqp bv	8.6
Scilly (St. Mary's)	1022.0	47	WNW	4	c	1027.4	+2	46	-3	-	0	-	bc	3	2	53	45	bccp	cpq	b.bcp	5.4
Jersey (St. Aubin)	1023.2	52	W	4	b	1028.4	+1	43	-9	WNW	3	NW	bc	3	0.1	57	42	bc b	b.	b.op.bc	5.8
Portland Bill	1020.4	51	W	5	bc	1026.3	+3	49	-4	NW	4	-	bc	5	-	54	45	bc	bc	bc	*
Dungeness	1019.0	50	WSW	5	b	1026.5	+5	38	-11	NNW	2	-	b	4	-	56	36	bc	bcb	b	*
Wick	1000.7	39	W	3	omp	1012.8	+7	38	-2	SW	2	-	omr	2	4	45	35	cqc	comp	bc.omr	*
Nairn	1003.3	39	W	2	c	1015.3	*	37	-2	W	1	-	bc	1	4	43	35	cpr	pcq	gcpx	0.3
Leith	1003.3	43	W	3	o	1018.1	+3	40	-1	WSW	2	W	bc	2	3	45	37	c.pq c.	c.op.c.o	or.o.bc	*
Tynemouth	1008.4	45	W	2	cz	1019.3	+3	41	-2	W	3	-	b	2	1	46	39	bcmq	bcm	bcm bm	*
Spurn Head	1012.1	46	WSW	6	bcq	1021.9	+5	40	-3	WSW	4	-	b	4	-	49	37	bq	bcq	bcq.	*
Yarmouth (Gorleston)	1015.3	47	WSW	5	b	1023.7	+3	38	-6	W	2	-	bx	1	-	52	36	bcmbc	b	bz.bx	6.9
Clacton-on-Sea	1017.3	47	WSW	4	b	1025.8	+5	39	-6	W	3	-	b	2	-	52	38	bcz	bc bz	bz	7.2
Nottingham	1014.7	43	SW	3	b	1025.6	*	34	-7	SW	1	-	bm	*	-	50	32	b	b	b	4.2

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3. † See footnote p.4.

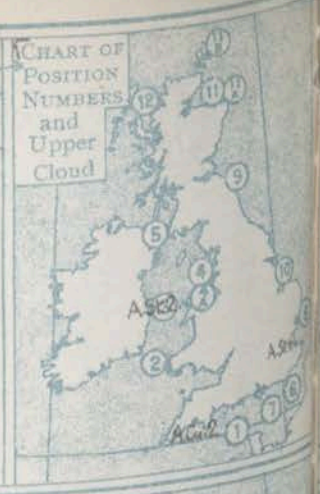
M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 17.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fine, frosty, some mist.	Indiff.	Slight
2. E. England	Fine, frosty.	Fair	Smooth
3. E. Midlands	Fine, local mist.	Indiff.	-
4. W. Midlands	Fine, frosty.	V.Good	-
5. S.W. England	Fair to fine, frost, local mist.	"	Slight
6. South Wales	Fine.	Excellent	Mod.
7. North Wales	Fine.	V.Good	Slight
8. N.W. England	Cloudy.	Good	"
9. N. Midlands	Fine to cloudy, some mist	Fair	-
10. N.E. England	Fine, some mist.	"	Smooth
11. E. Scotland	Fair.	Good	"
12. S.W. Scotland	Fine, some mist.	Fair	Slight
13. Isle of Man	Fine.	Good	"
14. N. & N.W. Scotland	Dull, mist, slight rain.	Indiff.	Smooth
15. Hebrides	Dull, slight rain.	Fair	V. Smooth
16. Orkneys and Shetlands	Fair, some mist & showers.	Poor	Smooth
17. N.W. Ireland	Fair.	V.Good	Slight
18. N.E. Ireland	Fine.	"	"
19. S.E. Ireland	Fine, local mist.	Fair	Smooth
20. S.W. Ireland	Fair to fine, slight showers.	Good	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
12	16th	0530	51	46
5	16th	0827	53	45
3	16th	1025	54	49
1	16th	1240	56	51
7	17th	0255	56	52



Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. thunder. thunderstorm.
SEA DISTURBANCE.— Rough High

GENERAL INFERENCE from observations received up to 9h. G.M.T.

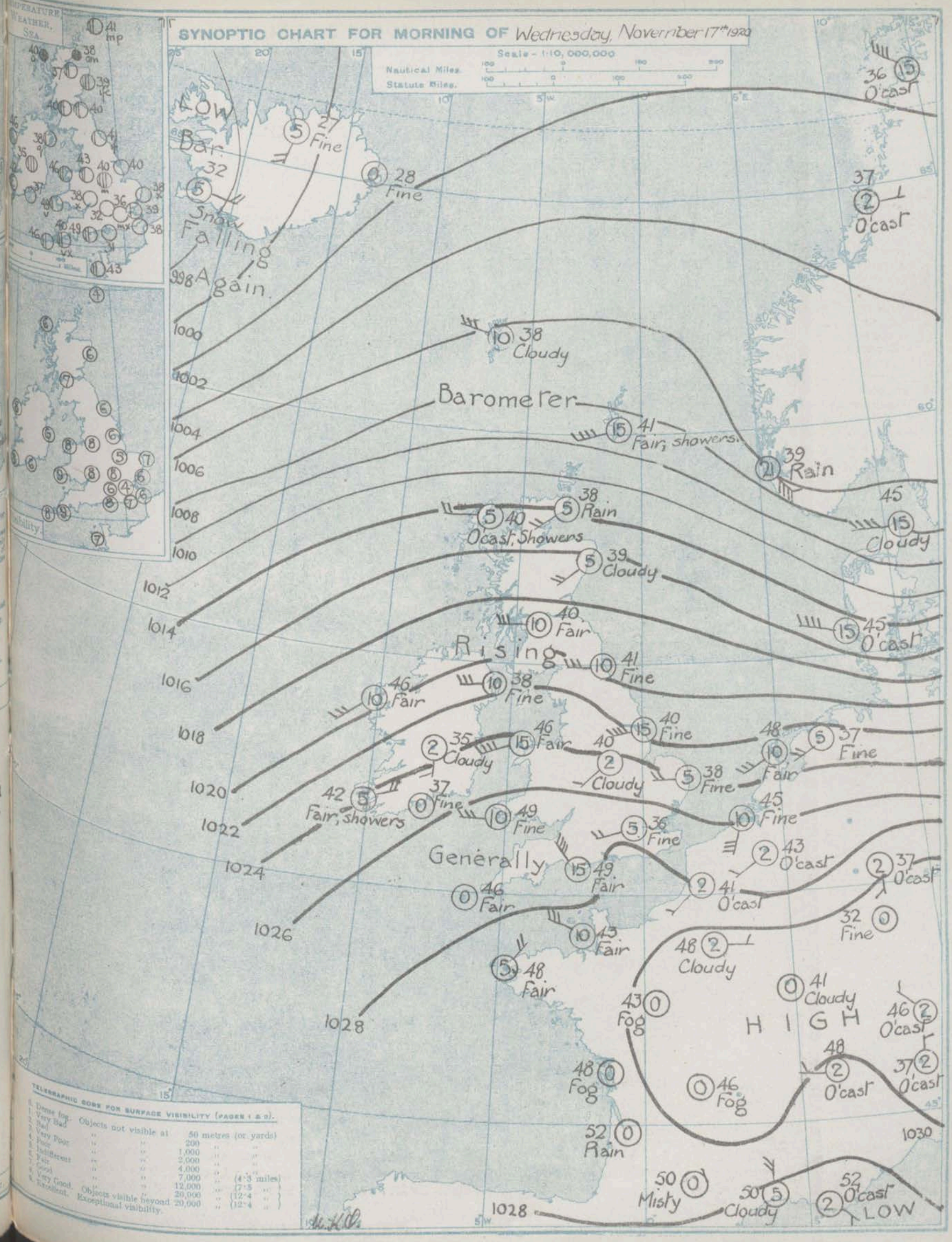
The barometer is still rising over the British Isles and their vicinity, but a fall, accompanied by an Easterly wind, has set in over the West of Iceland. Another depression is therefore likely to affect the weather in this country within the ensuing 24 hours.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Wednesday, 17th Nov: 1920.	Further Outlook.
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. E. Scotland 12. S.W. Scotland	Wind between W and SW, light, then freshening somewhat; fair today, becoming unsettled again tomorrow; visibility fair or good; moderate temperature during daytime, frost tonight.	Becoming less fair, with wind from Southwest.
13. Isle of Man 14. N. & N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind mainly Southwesterly, light or moderate, fresh or strong later; variable sky, some local showers today, showery or rainy tomorrow; visibility fair; rather cold, then milder.	

R.S.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 0905.

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Wednesday, November 17th 1920
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
Bar. 32
Snow Falling Again
Fine
Fine
O'cast
O'cast
Cloudy
Barometer
Fair, showers.
Rain
Cloudy
O'cast, Showers
Rain
Cloudy
O'cast
Fair
Rising
Fine
Fair
Fine
Fine
Cloudy
Fair
Cloudy
Fine
Fair
Fair, showers
Fine
Fine
Fine
Fine
Generally
Fair
Fair
Fair
O'cast
O'cast
O'cast
Fine
Cloudy
Fair
Cloudy
HIGH
Fog
Fog
Fog
O'cast
O'cast
O'cast
Rain
Misty
Cloudy
O'cast
LOW
1028
1030
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " (4·3 miles)
6. Fair " " 12,000 " (7·5 ")
7. Good " " 20,000 " (12·4 ")
8. Very Good. Objects visible beyond 20,000 " (12·4 ")
9. Excellent. Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 322.

WEDNESDAY 17TH NOV.R 1920

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 16TH

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 15th-16th	Rainfall. Day. 9h-18h. 16th	Sunshine. Sunrise to Sunset. 16th
Scotland.	Oban	bc	co	48	42	7	-	1.3
	Banff	bc	bcb	44	40	5	-	1.3
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	bopgt	o.b.pg	45	39	4	6	1.2
	Scarborough	b	b	50	41	-	-	4.9
	Skegness	b	b	54	39	-	-	6.0
England, E.	Lowestoft							
	Felixstowe	b	b	52	45	-	-	7.4
	Southend-on-Sea	b	b	54	42	-	-	7.1
England, S.E.	Tunbridge Wells	b	b.bc.b	54	43	-	-	6.4
	Margate	b	b	59	44	-	-	6.4
	Ramsgate	*	*	53	41	0.2	-	7.4
	Folkestone	oc bc	bc b	57	45	-	-	5.6
	Hastings	or.o bc	b	54	44	1	-	6.9
	Eastbourne	bc	bc	54	47	1	-	6.3
	Brighton	b	b	54	48	1	-	7.7
	Worthing	b	b	54	41	0.3	-	7.6
	Littlehampton	bc	bc	52	45	-	-	7.8
	Portsmouth (S'thsea)	*	*	54	47	-	-	7.9
	Bournemouth	*	*	53	44	-	-	7.5
	Ventnor (I. of W.)	*	*	57	47	0.3	-	7.1
England, N.W.	Douglas (I.O.M.)							2.7
	Blackpool	cpq	cpq	50	39	0.1	1	4.6
	Southport	bc bbc	cpq c	50	46	0.2	1	
	MORECAMBE							
Midlands.	Buxton							5.7
	Leamington Spa	bc	bc h bc	51	39	-	3	5.7
	Malvern	bbc	bcb	50	41	1	1	4.6
	Bath	bbcp	prh c b	54	42	2	2	4.3
Wales.	Rhyl	bc	cp bc	50	43	-	1	5.4
	Colwyn Bay	-	-	49	42	-	2	3.4
	Llandudno	*	*	50	44	-	2	3.0
	Aberystwyth	rc b	c co	51	48	1	-	
	Tenby							
	Swansea							6.7
England, S.W.	Weymouth	bc	bc	54	49	0.2	-	
	Teignmouth							7.1
	Torquay	b	bc	55	45	0.2	-	6.1
	Paignton	bcb	b bcp	54	39	1	-	5.7
	Penzance	bbc	bccp	56	46	3	1	6.0
	Newquay	b	b o p o	53	47	5	0.2	6.0
	Bude	p bc	b	58	48	3	1	3.6
	Ilfracombe	oc pq	cp h l o	53	49	3	0.1	5.0
	Weston-s-Mare	bcp.b	bc t.b.r	53	46	3	3	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 16th	Weather. 13h-18h. 16th	Weather. 18h-1h. 16th/17th	Weather. 1h-7h. 17th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h. (mm.)	Rainfall.† Night. 18h-7h. (mm.)	Sun. Hours.
Renfrew	ocopq	oprh oifrr	o2grr cop	b. op.	45	38	31	4	7	0.3
Eskdalemuir	r.o	cov.prHbc	b.bc cop.	2h0	43	33	29	4	1	2.5
Valencia (Cahirc'n)	bccp.prh bcc	bccprh.bcb	b.bc.b.bc	bc.cp	51	38	35	1	1	3.7
Baldonnel	prhqoifr.	bccv	bq/	b.bc2g.	46	37	34	0.2	0.1	1.3
Didsbury	bccif	qp.oif bcc	b.oig.	c.oR	51	37	30	trace	1	*
Ross on Wye	bccpqbcqf	bccvqbc	bcc.b bccqp bb	bc.c.o.b.	53	37	29	0.2	0.4	5.3
Falmouth	p.bbc	bcc.bccp	~~rrq h o b~~	b.bcx	53	39	32	1	6	6.4
Calshot (Hants)	bbc bbc	P. q	b bc. bc.c	b.bc.b.	54	37	27	-	-	7.4
Lympne (Folkestone)	if bbc bbc	bbc.b	b b bc b.bcc	bcc.b bcifg	51	35	27	-	-	7.5
Aberdeen	2f.oif	oifbbc	bifg	ifg.	45	36	26	-	-	0.1
Howden	bccq	coq	b.bcc.	b.bcifg.	50	35	27	-	-	4.4
Cranwell (Lincs)	b bbc	bbc.bbc	b.bc.b.bc	b	51	37	33	-	-	6.6
Felixstowe	2f bbc	if.bbc	b.b.bc.	bif.	53	38	*	-	-	7.4
Shoeburyness	bcc bcc	bcc.b	b.	2fg.5g.	52	38	32	-	trace	7.1
Benson	b	b	b.bc.b.bc	b.bcx	51	30	22	0.3	-	*
S. Farnborough	b.o.co	bcc.bbc	b.	b.bc.	52	30	23	-	-	3.3
London (Kew Obsy.)	w bbc	if.	b bc.b	bx.	51	36	25	-	-	6.1
Croydon	bbc if bccq	bcc p bbc if.	b. bc if.	b bc if W.	~~46~~ 53	38	*	0.2	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky parsly cloudy (one half covered).
c generaliy cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus—
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0- 10·7
6	25-31	10·8- 13·8
7	32-38	13·9- 17·1
8	39-46	17·2- 20·7
9	47-54	20·8- 24·4
10	55-63	24·5- 28·4
11	64-75	28·5- 33·5
12	Above 75	33·6 or above

SYMBOLS—
Aurora. Rime. Glazed frost. Glazed roads. Solar halo. Lunar halo. Solar corona. Lunar corona.

LONDON. OBSERVATIONS.

	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 Hours ended 9h G.M.T. 17th							Yesterday.		To-day.
Greenwich (Royal Observatory)	b	b.bc.	bmx.	53	37	29	-	6.5	64	91
City (Bunhill Row)	*	*	*	*	*	*	*	4.6	*	*
Westminster (St. James's Park)	b	bmx	m	54	35	29	-	5.3	63	96
Regents Park (Botanical Obsy.)	*	*	*	*	*	*	*	5.9	*	*
Camden Sq. (British Rainfall)	b bc.	bc cp c	*	53	35	*	1	*	63	96
Kensington Palace	b	bc	*	53	34	26	-	*	74 (18h)	96
Hampstead Observatory	*	*	*	51	35	29	-	6.4	*	94

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total ....294.... Joules.

	Milliwatts.
Average Rate.	9.3
Maximum Rate.	23

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

17th & 18th Nov.r 1920.

Stations.	Sunrise G.M.T.	Noon G.M.T.	Sunset G.M.T.
Yarmouth	7.19 / 7.20	11.38 / 11.38	3.17 / 3.16
Greenwich	7.22 / 7.24	11.40 / 11.40	3.17 / 3.16
Wick	8.7 / 8.9	11.57 / 12.16	3.45 / 3.40
Valencia	8.7 / 8.6	12.16 / 12.26	3.40 / 3.40

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 16th ...17 h. 15 m. to 17th ...6 h. 15 m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	13. 0	12. 13	92
δ Ursae Minoris	13. 0.	11. 15	87.

NOTES ON THE WEATHER OF YESTERDAY.

Temperature remained below 45° in some parts of Scotland and below 50° in some Irish and English localities. Frost occurred locally at night over England; at Benson the thermometer in the grass fell to 22° and at S.Farnborough to 23°. Several hours of bright sunshine were recorded in most parts of the Kingdom, the highest value being 8.6 hours at Pembroke. Showers were experienced in various localities, of rain generally, but of hail at some Northern Stations.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B.21,546 Thursday, 18th November 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

13H. G.M.T. 17th / 18H. G.M.T. of 17th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew	1023.5	+2	SW	2	c	45	85	7	3000	StCu	4	Ci	4	*	1024.7	+1	SSE	3	o2f	41	92	5	-	-	-	A.St	10	*
Eskdalemuir	1024.9	+3	WSW	3	c	43	75	7	-	Cu	2	Ci St	5	*	1027.1	+2	-	0	o	34	92	6	-	St	2	A.St	8	*
Valencia (Cahirc'n)	1021.3	-5	S	5	c	50	75	8	3000	StCu	5	A.St	2	4	1015.6	-6	SSE	6	o	51	75	8	2000	StCu	5	A.St	4	5
Baldonnel	1025.7	+1	SSW	3	o	47	75	8	4200	St	4	A.St	6	*	1023.0	-3	S	3	o	45	75	8	3000	St	6	A.St	4	*
Manchester (Alex Pk)	1027.3	+3	SW	4	bif	50	65	6	4200	St	2	Ci	1	*	1028.0	+1	SSE	3	b	41	85	4	-	-	-	A.St	3	*
Ross on Wye	1028.0	0	W	2	bz	51	65	6	-	-	-	Ci	2	*	1028.8	0	SSE	1	cw	42	85	7	-	-	-	Ci St	8	*
Falmouth	1028.3	-1	SSE	3	bc	55	65	8	-	Cu	2	Ci St	2	*	1027.1	-1	SSE	4	bc	49	75	8	-	Cu	4	-	-	*
Calshot (Hants) *	1030.4	+2	SSE	1	bif	52	75	7	3000	Cu	2	-	-	1	1030.5	0	ESE	3	bif	48	75	6	-	-	-	-	-	2
Lympne (Folkestone)	1029.9	+2	NW	2	bif	48	65	7	-	-	-	-	-	*	1031.5	+2	S	1	bif	44	75	7	-	-	-	Ci	1	*
Aberdeen	1022.0	+5	WSW	2	bif	46	55	7	-	-	-	-	-	2	1024.8	+4	WSW	2	bc 2fe	38	85	5	-	-	-	Ci St	4	2
Howden	1027.0	+2	WSW	1	bc 2f	45	85	4	2000	St	2	Ci St	2	*	1028.9	+2	-	0	c	37	92	4	3000	St	8	-	-	*
Cranwell (Lincs)	1027.9	+1	W	2	bc	47	75	5	-	-	-	A.St	6	*	1029.9	+2	SSW	3	b	36	97	5	-	-	-	Ci	1	*
Felixstowe	1029.5	0	W	2	b	50	75	7	-	-	-	A.St	1	1	1031.7	+3	-	0	bif	42	97	5	-	-	-	A.St	1	*
Shoeburyness	1029.2	+1	NW	1	b	49	65	7	-	-	-	-	-	*	1031.2	+3	-	0	b 2fe	36	85	6	-	-	-	-	-	*
Benson	1028.2	0	W	1	b	49	65	8	-	-	-	Ci	1	*	1030.5	+1	-	0	b	35	92	8	-	-	-	-	-	*
S. Farnborough	1029.8	+1	W	2	b	51	55	8	-	-	-	Ci St	1	*	1031.3	0	-	0	bm	34	92	4	-	-	-	-	-	*
London (Kew Obsy.)	1029.7	-1	WNW	2	bz	48	65	5	-	-	-	-	-	*	1031.2	+1	-	0	bmx	40	85	2	-	-	-	-	-	*
Croydon	1030.0	+1	WNW	3	bif	49	65	6	-	-	-	-	-	*	1031.4	+2	S	2	b2f	38	85	4	-	-	-	-	-	*

1H. G.M.T. of 18th / 7H. G.M.T. of 18th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew															1018.1 ~~1019.1~~	-4	SSE	6	o1f	47	85	6	2,000	StCu ~~St?~~	10 ~~8~~	a.St	2	*
Eskdalemuir	1025.7	-1	S	2	bc	36	92	6	-	St	6	-	-	*	1022.8	-3	SSE	4	o	43	85	6	-	St	10	-	-	*
Valencia (Cahirc'n)	997.1	-5	SSE	8	opq	52	*	*	*	*	*	*	*	6	1008.9	+1	S	7	oro	56	92	5	1,250	St	10	-	-	*
Baldonnel	~~1014.6~~	-6	SE	6	oq	49	75	7	2,000	St	10	-	-	*	1014.7	-2	SE	6	orq	55	85	5	1,250	St ~~Hb~~	6 ~~4~~	~~Ci~~	~~6~~	*
Manchester (Alex Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1025.5	0	S	5	om	45	85	6	3,000	StCu	2	Ci	5	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1026.5	-1	SE	4	o	46	75	8	-	-	-	a.St	9	*
Falmouth	1024.6	-3	SSE	7	o	51	85	7	-	St	9	-	-	*	1023.9	-1	SSE	5	o	52	85	7	-	St	9	-	-	*
Calshot (Hants)	1029.7	-2	SSE	3	b	49	74 ~~75~~	6	2,000	St	2	-	-	2	1029.6	0	S	5	c	48	92	6	2,000	StCu	4	a.St	3	4
Lympne (Folkestone)	1031.9	0	S	3	b	42	92	6	-	-	-	-	-	*	1031.4	0	S	5	omq	43	97	5	<500	St	10	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1021.6	-3	SSE	5	o1f	47	75	6	1,250	StCu	10	-	-	3
Howden	1029.6	-1	S	2	bc	34	97	4	4,200	St	4	-	-	*	1028.3	-2	SE	4	o	38	97	5	750	St	6	a.Cu	2	*
Cranwell (Lincs)	1030.3	0	S	3	gw	35	97	4	1,250	St	7	-	-	*	1029.4 ~~1029.9~~	0	S	4	o2f	33	97	4	3000	St	6	Ci St	3	*
Felixstowe	1032.6	0	-	0	b3f	32	97	2	-	-	-	-	-	0	1033.1	+2	SSE	4	bc	47	97	7	-	-	-	a.St	5	3
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1032.0	0	SSW	1	o	44	85	7	2,000	St	9	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1028.7	0	SSE	3	c	41	92	5	-	StCu	7	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.4	0	ESE	2	o3fe	40	97	4	3,000	StCu	7	a.St	2	*
London (M.O. at 1h.)	1031.2	0	*	*	*	35	*	*	*	*	*	*	*	*	1030.8	+1	SSE	2	omqw	42	97	4	2,000	St	10	-	-	*
Croydon	1031.2	-2	S	2	b2fw	40	85	5	-	-	-	Ci	1	-	1031.6	+1	S	3	o2f	43	92	5	750	St	10	-	-	*

1018.6

1.84

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

18H. G.M.T. of 17th / 7H. G.M.T. of 18th / 24 HOURS ENDED 7H. 18th / Sunshine 17th

Stations	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours	Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather §	Sea 0-9	† Rainfall mm.	Max. °F.	Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
Lerwick	1019.8	42	-	0	b	1018.4	-4	48	+7	SSE	6	W	cq	6	-	48	39	bc	bc	b bcmq	*
Stornoway	1018.9	46	SW	2	o	1006.4	-3	50	+10	S	7	-	orq	6	6	50	37	bc	o	oq orq	3.8
Castlebay (Barra Is)	1018.7	49	ESE	5	o	1006.9	-2	53	+7	SSE	7	-	od.	*	6	53	43	bc.o.bc.	bc.o.	ord	2.3
Malin Head	1018.7	42	SSW	3	c													bc	c	c	
Blacksod Point	1014.3	48	S	5	bc	1002.2	0	51	+5	SW	~~2 10~~ 7	-	oq	8	5	56	45	bcp	bc	bcmr bcoqm.	*
Roche's Point	1020.9	51	S	5	c	1014.6	-1	54	+17	S	7	-	o	6	0.4	54	35	bbccp	copc	om	*
Birr Castle	1019.7	46	SE	3	c	1011.6	*	54	+19	SE	5	-	o	*	-	54	34	o.c.	c.	cq.o	2.1
Donaghadee	1023.9	43	SW	1	bcm	1016.0	-4	52	+14	SW	5	-	oq	3	-	53	38	bc	bc	omq	*
Liverpool (Bidston)	1027.9	43	S	3	b	1023.8	-1	42	-1	SE	4	S	c	3	-	49	40	b	c bc	o.c.	5.2
Holyhead	1025.6	48	SSW	4	bc	1019.5	-2	51	+5	S	7	-	oq.	6	-	52	45	bcc	ccdpc	bcoq bcoq	2.7
Pembroke (St. Ann's Head)	1026.3	51	SE	4	bcv	1021.4	-1	53	+4	SSE	6	-	oq	5	-	53	48	bcv	bcv	bcvcvoqv	4.3
Scilly (St. Mary's)	1026.2	51	SSE	4	bc	1021.8	-1	54	+8	SSE	5	-	o	6	-	54	45	bc bv	bbcv	c.om	7.9
Jersey (St. Aubin)	1029.0	51	E	3	b	1028.6	0	49	+6	SE	5	SE	c	4	0.1	56	43	bcp b	b	bc	8.0
Portland Bill	1028.7	52	SE	3	bc	1027.6	0	50	+1	SSE	6	S	o	5	-	57	45	bc	b	bc.bc.o	*
Dungeness	1030.8	47	-	0	b	1030.9	+1	46	+8	S	4	S	c	4	-	52	35	b	b	b.b.bc	*
Wick	1022.0	38	WSW	2	b	1014.2	-4	47	+9	S	8	-	omq	6	1	47	36	omp.b	b	bcq bcomq	*
Nairn	1022.5	35	-	0	c	1014.5	*	46	+9	-	0	-	ccg	1	0.2	46	34	bc	bcc	cgp.	5.3
Leith	1024.8	41	SW	1	o	1020.1	0	46	+6	S	1	-	o	2	0.2	47	40	bc.c.	c.om.o	om.b.o	*
Tynemouth	1025.9	43	W	2	f	1024.5	-2	43	+2	S	3	-	om	3	-	47	40	bcm	f	bcm om	*
Spurn Head	1029.2	42	WSW	4	bm	1029.4	0	42	+2	S	5	-	bc	3	-	47	38	b	bc	bm. bm	*
Yarmouth (Gorleston)	1030.3	41	WSW	2	b	1032.3	+1	43	+5	SSW	3	-	bc	3	-	49	37	b	b	b.bx.b	7.4
Clacton-on-Sea	1030.7	44	WSW	1	bc	1031.7	+1	48	+9	SSE	4	W	bc	3	-	51	38	b	bbc	bcm	7.8
Nottingham	1029.8	37	E	1	b	1028.7	*	42	+8	SSE	3	S	c	*	-	49	33	bm	bm	b	1.8

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4.

M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 18.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Cloudy or o'cast, local (mist.	Indiff.	Mod.
2. E. England	Fair to o'cast, some mist (inland.	Fair.	Slight
3. E. Midlands	Cloudy.	Indiff.	-
4. W. Midlands	Cloudy or overcast.	Fair	-
5. S.W. England	Overcast, local squalls.	Good	R. Rough
6. South Wales	Overcast, local squalls.	V. Good	"
7. North Wales	Cloudy or o'cast, squally.	Good	Rough.
8. N.W. England	Cloudy or overcast.	Fair	R. Rough
9. N. Midlands	Cloudy or overcast, misty.	Indiff.	-
10. N.E. England	Mainly overcast, misty.	"	Slight
11. E. Scotland	Mainly overcast.	Fair	"
12. S.W. Scotland	Overcast.	"	Rough
13. Isle of Man	Overcast, squally.	"	"
14. N.& N.W. Scotland	O'cast, squally, local rain.	Indiff.	"
15. Hebrides	O'cast, squally, local rain.	"	"
16. Orkneys and Shetlands	Cloudy or o'cast, squally.	"	"
17. N.W. Ireland	Overcast, squally.	Fair	V. High
18. N.E. Ireland	Overcast, squally.	"	R. Rough
19. S.E. Ireland	O'cast, local rain & squalls.	Indiff.	Rough
20. S.W. Ireland	Overcast, local rain.	Indiff.	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
4a.	17th	0400	51	46
7	17th	0255	56	52
8	17th	0532	53	48
5	17th	0810	52	45
3	17th	1020	53	49
7	18th	0400	53	50

Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.

BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. R. thunderstorm.
SEA DISTURBANCE.—Rough. High sea.

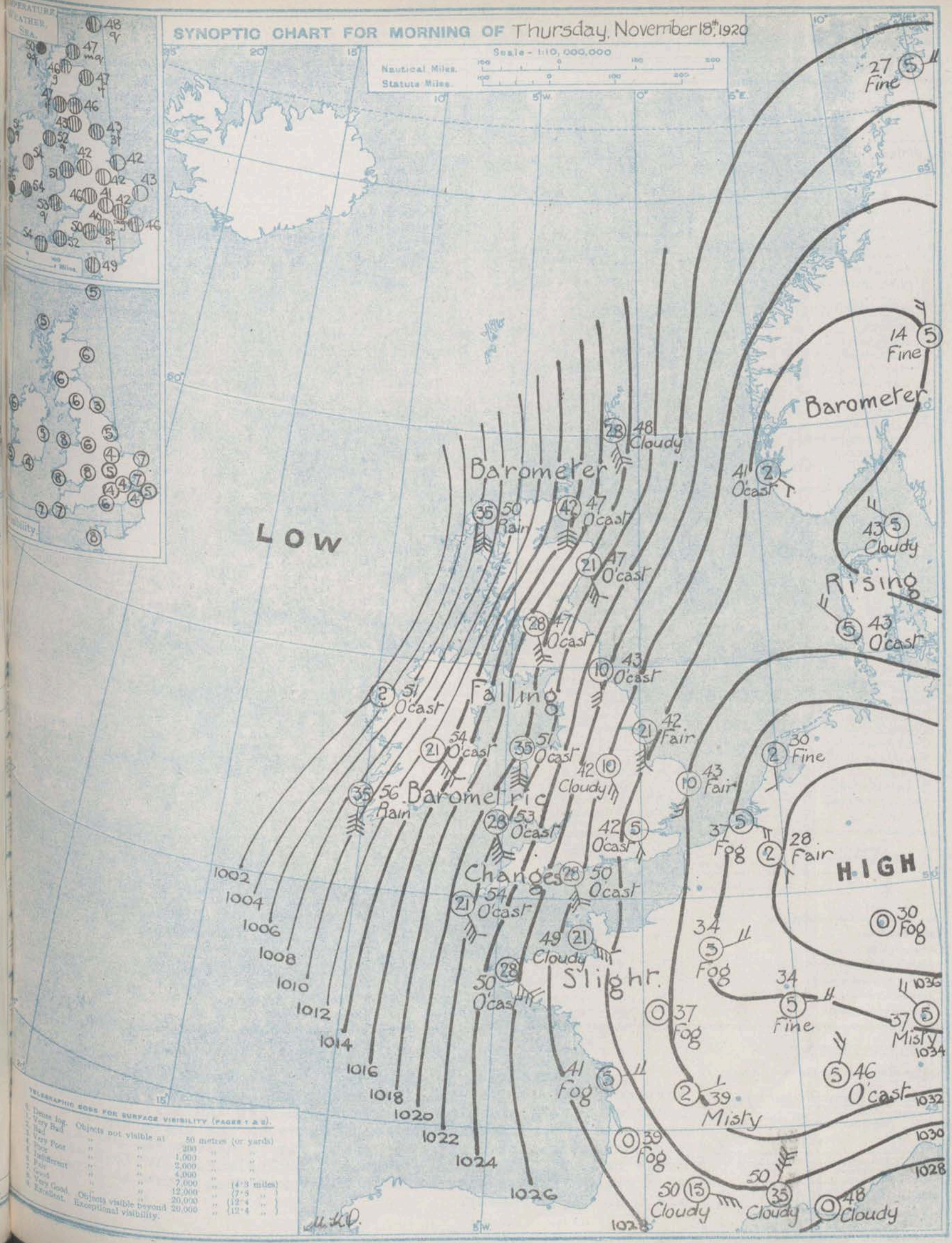
GENERAL INFERENCE from observations received up to 9h.

A large and deep depression to the Westward and North-Westward of Ireland is moving slowly North-North-Eastward. Southerly to South-Westerly winds, strong to a gale in the West and North, are probable, with occasional rain or drizzle over the whole Kingdom.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Thursday, 18th November, 1920.	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands	Wind S. to S.W., moderate or fresh; much low cloud, some rain or drizzle, fairer intervals, visibility mainly fair; temperature rising.	Continuing unsettled. -----
5. S.W. England 6. South Wales 7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England 11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind S. and S.W., strong, a gale in exposed places, moderating later; much low cloud, occasional rain or drizzle, visibility indifferent to fair; mild or moderate temperature.	South Cone hoisted.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 08.45.

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Thursday, November 18th, 1920
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
HIGH
Barometer
Falling
Barometer
Rising
Barometric
Changes
Slight.
1002
1004
1006
1008
1010
1012
1014
1016
1018
1020
1022
1024
1026
1028
1030
1032
1034
1036
27 Fine
14 Fine
43 Cloudy
43 O'cast
30 Fine
28 Fair
30 Fog
37 Misty
46 O'cast
48 Cloudy
41 O'cast
47 O'cast
50 Rain
47 O'cast
47 O'cast
43 O'cast
51 O'cast
42 Fair
54 O'cast
51 O'cast
42 Cloudy
43 Fair
56 Rain
53 O'cast
42 O'cast
37 Fog
50 O'cast
54 O'cast
49 Cloudy
34 Fog
50 O'cast
37 Fog
34 Fine
41 Fog
39 Misty
39 Fog
50 Cloudy
50 Cloudy
48 Cloudy

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 323

Thursday 18th Nov. 1920

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 17th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 16th-17th	Rainfall. Day. 9h-18h. 17th	Sunshine. Sunrise to Sunset. 17th
Scotland.	Oban	bc	bbc	49	38	2	-	3.1
	Banff	b	bcb	47	34	-	-	5.2
	Montrose							
	St. Andrews	=	=	46	36	-	-	5.1
England, N.E.	Harrogate	b	b	47	37	1	-	5.6
	Scarborough	b	b	52	38	-	-	7.0
	Skegness	b	b	50	34	-	-	5.6
England, E.	Lowestoft							
	Felixstowe	b	bm	51	39	-	-	7.8
	Southend-on-Sea	b	b	52	34	trace	-	5.8
England, S.E.	Tunbridge Wells	b	b	52	34	-	-	7.6
	Margate	b	bfm	49	38	-	-	5.9
	Ramsgate	*	*	51	37	-	-	6.1
	Folkestone	b	bbcf	55	40	-	-	7.5
	Hastings	b	b	54	39	trace	-	8.0
	Eastbourne	b	b	53	38	2	-	8.0
	Brighton	b	b	51	35	0.32	-	7.8
	Worthing	b	b	51	33	1	-	8.0
	Littlehampton	bc	bc	49	33	-	-	7.8
	Portsmouth (S'thsea)	-	-	53	38	-	-	7.4
	Bournemouth	*	*	54	35	-	-	8.0
	Ventnor (I. of W.)	*	*	54	41	5	-	8.0

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 16th-17th	Rainfall. Day. 9h-18h. 17th	Sunshine. Sunrise to Sunset. 17th
England, N.W.	Douglas (I.O.M.)							2.5
	Blackpool	cpo	cpo	52	43	1	0.3	4.0
	Southport	bbe	bcb	52	43	1	-	5.2
	Morecambe	-	-	51	42	0.3	1	
Midlands.	Buxton			53	51			6.7
	Leamington Spa	b	b	~~50~~	~~33~~		-	7.0
	Malvern	b	b	51	36	0.2	-	6.7
	Bath	b	b	52	31	10	-	5.0
Wales.	Rhyl	bc	b.bc	50	41	-	-	4.8
	Colwyn Bay	-	-	52	41	-	-	4.5
	Llandudno	*	*	52	43	-	-	4.5
	Aberystwyth	ocb	bco	51	47	0.3	-	
	Tenby							
	Swansea							7.4
England, S.W.	Weymouth	b	bbc	56	37	-	-	
	Teignmouth							7.7
	Torquay	b	bc	56	38	-	-	7.2
	Paignton	bcpb	bc	54	33	0.3	-	6.0
	Penzance	bzbc	bc	54	38	5	-	7.5
	Newquay	bv	bv	52	39	2	-	7.6
	Bude	b	b	53	36	4	-	7.3
	Ilfracombe	b.bcb	bce	52	44	0.1	-	7.5
	Weston-s-Mare	bcb	b	53	36	13	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 17th	Weather. 13h-18h. 17th	Weather. 18h-1h. 17th-18th	Weather. 1h-7h. 18th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
								mm.	mm.	
Renfrew	bccf cop	o.of	of of.	of v.	47	38	32	1	-	1.4
Eskdalemuir	bcc.bcc	co.o	c.o.bc.c	bc.c.co	44	32	30	1	-	4.2
Valencia (Cahirc'n)	bcc.bcc	co.o	orr	rrrr	56	40	50	-	7	1.8
Baldonnel	bcc.co	co v	q v.o.	oq	54	38	36	-	-	1.5
Manchester (Alex Park)	bcc p bbc of	bcc of	b bc of.	bc. c if.	51	38	31	0.2	-	*
Ross on Wye	v.bbc	bbc.bbc	c.o ⦶ bcob	b bc.c.o	51	38	30	-	-	7.4
Falmouth	ifc bbc	bbc	b.bc c.o	o	56	39	41	trace	-	7.7
Calshot (Hants)	bbc of	bif	b. bc if.	bcc.b bc if	53	36	39	-	-	7.6
Lympne (Folkestone)	if bbc bbc	bif.bbc	b bc if. bif	b.bc.bc.c q of	48	35	32	-	trace	7.9
Aberdeen	ifc if	if ifc	of z ⦶	of of.	46	35	24	-	-	4.5
Howden	⦶ b	bcc of	⦶ x	c.o of	47	31	27	-	-	1.0
Cranwell (Lincs)	bbc bbc o	bbc ⦶	b. bcx.	bc cx	48	29	26	-	-	6.4
Felixstowe	b.bbc	b bc if	b of.	bif.	52	31	*	-	-	7.6
Shoeburyness	of of of if	bifc	ifcx	wo	52	27	17	trace	trace	6.6
Benson	b	b	b. bc b bc	b bc.bc.c	52	31	25	-	-	*
S. Farnborough	b bbc	bbc.b	b.	c.o fc	52	29	23	-	-	8.0
London (Kew Obsy.)	x w of z	z of x b	b 6-8 of.	wx b bc of	49	33	24	-	trace	6.7
Croydon	bbc b of if	b bc if of	b.bc ⦶ w of	b bc of w of	51	35	*	-	trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·6
2	4- 7	1·6- 3·4
3	8-12	3·5- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·5
12	Above 75	32·6 or above

SYMBOLS-
Aurora ⦶ Solar halo ⊕
Rime ⌶ Lunar halo ⊙
Glazed frost ⌇ Solar corona ⦶
Glazed roads ⌇ Lunar corona ⦶

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours. Yesterday.	Humidity % 12 h. G.M.T. Yesterday.	Humidity % 9 h. G.M.T. To-day.
	24 Hours ended 9h G.M.T. 18th									
Greenwich (Royal Observatory)	b.	b.	oz.m	49	31	24	-	6.7	65	89
City (Bunhill Row)	*	*	*	*	*	*	*	0.8	*	*
Westminster (St. James's Park)	*	*	m	51	37	29	-	3.9	67	84
Regent's Park (Botanical Gardens)	*	*	*	*	*	*	*	4.5	*	*
Camden Sq. (British Rainfall)	bm bc	bc.c	*	50	31	27	-	*	66	91
Kensington Palace	b.bc	bc	*	51	32	24	-	*	86 (18h)	87
Hampstead Observatory	*	*	*	50	36	28	-	6.5	*	90

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total 296 Joules.

	Milliwatts.
Average Rate.	9.4
Maximum Rate.	17

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

18th & 19th Nov. 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.20	11.38	3.56
	7.22	11.38	3.55
Greenwich	7.24	11.45	4.6
	7.26	11.45	4.5
Wick	8.9	11.57	3.45
	8.12	11.57	3.43
Valencia	8.7	12.26	4.45
	8.9	12.26	4.44

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 17th 17 h. 15 m. to 18th 6 h. 15 m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	13.	0	13.	0	100
δ Ursae Minoris	13.	0	13.	0	100

NOTES ON THE WEATHER OF YESTERDAY.

Temperature rose to about 55° at some Western and South-Western stations, but remained below 50° over a wide area. Frost occurred during the night in the South-East and East of England; at Shoeburyness the minimum temperature on the grass was 17°.

Bright sunshine was very prevalent in nearly all parts of Great Britain, but there was little in Ireland. Rain fell at some places in the extreme West and North-West; 7 mm at Valencia and 6 mm at Stornoway.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B.21,547 FRIDAY, 19th November 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

13H. G.M.T. 18th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew	1016.5	-3	SSE	4	og	50	85	6	1250	StCu	5	A St	5	*
Eskdalemuir	1021.1	0	S	4	o	46	75	6	3,000	St	3	A St	7	*
Valencia (Cahirc'n)	1009.7	0	S	7	o	57	85	7	1,200	St	10	-	-	6
Baldonnel	1015.5	0	S	6	og	57	85	5	1250	Nb	5	A St	4	*
Manchester (Alex. Pk)	1025.0	-1	S	6	o2f	49	75	5	2,000	StCu	5	Ci	4	*
Ross on Wye	1026.5	-1	SSE	3	o2f	49	75	7	4,200	StCu	7	Ci	2	*
Falmouth	1023.8	0	SSE	5	o1f	54	92	6	-	St	10	-	-	*
Calshot (Hants)	1028.9	-2	SSE	5	c	53	85	8	4,200	StCu	2	A St	6	4
Lympne (Folkestone)	1031.9	-1	S	5	o1f	47	85	7	2,000	St	1	A St	8	*
Aberdeen	1019.5	-1	SSE	4	o2f	49	86	4	1250	St	3	A St	7	4
Howden	1027.9	-1	S	4	o2f	44	97	4	750	St	10	-	-	*
Cranwell (Lincs)	1029.1	-2	SSE	3	o2f	43	97	4	750	St	10	-	-	*
Felixstowe	1032.3	-2	SSE	4	o1f	48	97	6	-	-	-	A St	10	3
Shoeburyness	1031.4	-1	SE	3	c	48	86	7	4,200	St	3	Ci St	4	*
Benson	1028.2	-1	SSE	3	c	49	85	6	-	-	.	Ci St	8	*
S. Farnborough	1029.4	-1	SSE	4	o3	50	75	7	-	-	-	Ci St	9	*
London (Kew Obsy.)	1030.1	-2	SSE	4	o2f	51	75	5	-	-	-	Ci	9	*
Croydon	1030.2	0	SSE	3	o1f	50	75	6	7,200	StCu	8	A St	7	*

18H. G.M.T. OF 18th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew	1017.0	0	SSE	5	odl	51	92	6	1250	Nb	10	-	-	*
Eskdalemuir	1021.0	0	SSE	4	odm	46	92	4	2,000	Nb	10	-	-	*
Valencia (Cahirc'n)	1009.4	0	S	7	o	56	92	7	1250	St	10	-	-	6
Baldonnel	1015.2	0	S	7	c	56	85	5	750	St	8	-	-	*
Manchester (Alex. Pk)	1025.0	0	SSE	5	bc2f	48	75	5	4200	StCu	4	Ci	2	*
Ross on Wye	1025.9	-1	SE	3	bc	49	75	7	-	-	-	Ci	6	*
Falmouth	1023.3	-1	SSE	6	o	54	85	6	-	St	10	-	-	*
Calshot (Hants)	1028.1	-1	SSE	5	b	50	85	8	-	-	-	-	-	4
Lympne (Folkestone)	1031.3	-1	SSE	5	bcmq	44	85	7	-	-	-	Ci St	4	*
Aberdeen	1018.9	-1	SSE	4	o2f	50	85	4	1250	St	10	-	-	4
Howden	1027.1	-1	S	3	bc	41	97	5	3,000	St	2	A St	2	*
Cranwell (Lincs)	1028.5	0	SSE	4	c	42	97	5	-	-	-	Ci	7	*
Felixstowe	1031.9	0	SE	3	bc	46	85	6	-	-	-	A St	6	5
Shoeburyness	1030.6	-1	SE	3	bcy	45	85	7	-	-	-	Ci	2	*
Benson	1028.9	0	SSE	2	b	42	85	6	-	-	-	-	-	*
S. Farnborough	1028.8	-2	-	0	b	44	85	5	-	-	-	-	-	*
London (Kew Obsy.)	1029.4	-1	SE	2	b2f	44	85	4	-	-	-	-	-	*
Croydon	1029.6	-1	SSE	4	o1f	43	92	6	-	-	-	Ci	9	*

1H. G.M.T. OF 19th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew														
Eskdalemuir	1019.4	-2	SSE	4	om	45	85	5	-	St	10	-	-	*
Valencia (Cahirc'n)	1009.5	0	SSW	8	or	55	*	*	*	*	*	*	*	7
Baldonnel	1015.4	0	S	8	bc	54	85	4	2,000	St	4	-	-	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Falmouth	1022.4	-1	SSE	5	b	52	92	7	-	-	-	-	-	*
Calshot (Hants)	1027.0	-1	SSE	3	b	50	92	7	-	-	-	-	-	2
Lympne (Folkestone)	1029.6	-2	S	5	bmq	42	92	6	-	-	-	Ci St	2	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Howden	1026.4	-1	SSE	3	bc2fe	38	97	4	1,250	St	5	-	-	*
Cranwell (Lincs)	1026.9	0	S	5	o2f	40	97	5	3,000	St	7	a St	3	*
Felixstowe	1030.8	-0	SSE	5	bc1f	46	85	6	-	a St	6	-	-	4
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*
London (M.O. at 1H.)	1028.6	0	*	*	*	41	*	*	*	*	*	*	*	*
Croydon	1028.9	-0	SSE	1	bw1f	42	92	6	-	-	-	Ci	1	*

7H. G.M.T. OF 19th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew	1014.5	-1	S	7	o1fq	54	85	6	2,000	StCu	10	-	-	*
Eskdalemuir	[illegible]	-1	S	6	or, 2-3f	50	85	5	-	Nb	10	-	-	*
Valencia (Cahirc'n)	1013.3	+3	-	0	or	49	97	6	3,000	St	10	-	-	*
Baldonnel	1015.9	0	S	7	o	55	85	5	2,000	StCu	10	-	-	*
Manchester (Alex. Pk)	1022.7	-1	SSE	4	b	44	85	6	-	-	-	-	-	*
Ross on Wye	1024.5	-1	SE	1	bmw	41	92	5	1,250	St	1	-	-	*
Falmouth	1022.5	0	S	5	o	54	92	6	-	StCu	10	-	-	*
Calshot (Hants)	1026.3	-1	SE	5	bf	51	92	6	2,000	St	1	-	-	4
Lympne (Folkestone)	1029.7	0	S	4	o2fq	43	92	5	1,250	St	9	-	-	*
Aberdeen	1014.6	+1	S	5	bq2fe	50	85	5	1,250	St	1	-	-	4
Howden	1025.2	0	S	3	o2fe	41	97	4	750	St	10	-	-	*
Cranwell (Lincs)	1026.1	-0	S	5	o3f	40	97	3	500	St	10	-	-	*
Felixstowe	1030.0	0	SSE	4	o1f	45	92	6	750	StCu	9	-	-	3
Shoeburyness	1029.4	0	S	2	o	43	85	6	3,000	StCu	7	a St	2	*
Benson	1025.6	-1	SSE	3	o2f	45	97	4	-	St	10	-	-	*
S. Farnborough	1027.2	0	ESE	2	o2f	44	97	3	2,000	St	10	-	-	*
London (M.O. at 1H.)	1027.9	0	ESE	2	bo3fw	42	92	2	2,000	StCu	2	a St	2	*
Croydon	1028.0	-1	S	5	b2f	45	92	5	1,250	St	1	-	-	*

1018.3

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

Stations	18H. G.M.T. of 18th: Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	7H. G.M.T. of 19th: Barometer at M.S.L. mb.	‡ Change in 3 hours	Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather	Sea 0-9	† Rainfall mm. (24 hours ended 7H. 19th)	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours (18th)
Lerwick	1012.9	50	SSE	8	omq	1007.4	-2	51	+3	SSE	8	-	omq	6	1	51	48	omqp	omrq	omq	*
Stornoway	1004.6	50	SSE	6	orq	1007.9	+7	46	-4	SW	5	-	orq	4	47	57	46	or	orq	orq	0.0
Castlebay (Barra Is.)	1006.4	55	SSE	6	o	1010.5	+4	47	-6	W	4	-	r	4	25	56	46	dr	r.o.	or	0.0
Malin Head	1005.1	56	S	5	oq													oq	oq		
Blacksod Point	1001.0	55	SW	7	r	1010.6	+5	48	-3	SW	2	-	orm.	7	40	56	45	omqr	oq	omq omr	*
Roche's Point	1015.3	54	S	5	o	1015.7	0	54	0	S	5	-	o	5	0.4	55	53	odm, om	omc. o	o	*
Birr Castle	1012.3	56	S	5	o	1012.6	*	55	+1	S	4	-	o	*	0.2	58	53	opq	o	o	0.0
Donaghadee	1015.8	54	SW	4	omq	1015.1	+1	54	+2	SW	4	-	omq	4	2	55	52	oqr	oqr	omq	*
Liverpool (Bidston)	1023.2	47	SE	5	b	1021.1	-1	43	+1	SSE	5	S	bcm	4	-	50	42	o. c	bc. b	cm	1.7
Holyhead	1019.6	53	S	6	cq	1018.5	0	54	+3	S	5	-	og	4	-	54	50	o.cq	c. oqm	c.bcq.oq.	0.0
Pembroke (St. Ann's Head)	1022.0	52	S	4	o	1020.8	0	55	+2	S	4	-	cm	5	0.1	55	53	oq	oq. c	o	0.0
Scilly (St. Mary's)	1021.1	55	SSE	4	cm	1020.8	0	54	0	SSE	4	S	c	6	-	57	54	o. bcm	bc. cm	o.bc. c.	2.7
Jersey (St. Aubin)	1026.8	53	ESE	4	b	1025.5	0	51	+2	SE	4	-	b	3	-	53	48	b	b	bm. bw	6.7
Portland Bill	1025.9	51	SSE	5	bc	1024.7	-2	51	+1	SE	5	SE	b	5	-	54	46	o. bc	bc	b	*
Dungeness	1029.9	47	S	4	b	1028.4	-1	45	-1	S	4	S	b	4	-	49	45	c	c. bc	bc. b. bc	*
Wick	1009.9	50	S	9	omq	1007.0	+1	54	+7	SSW	8	-	omq	6	0.3	54	47	omqp	omq	omq.	*
Nairn	1010.7	54	S	5	c	1008.5	*	56	+10	SSW	4	-	cw.	3	-	56	45	cqg	qcu	q. cu	1.2
Leith	1018.0	51	S	2	c	1016.2	0	52	+6	SW	3	SW	c	2	-	54	46	o. cq. c.	oq. ou. c	c. oq/q/c	*
Tynemouth	1023.1	45	SSW	4	bcm	1020.3	0	42	-1	SW	4	-	om bcm	3	-	45	40 (4.7)	omq	om	bcm. bcm	*
Spurn Head	1029.1	45	SSE	5	bq	1026.1	0	41	-1	S	6	-	b	4	-	47	38	bc. oq	bq	bq. oq b	*
Yarmouth (Gorleston)	1031.1	47	S	5	bc	1028.6	0	45	+2	SSW	5	-	cmq	4	-	49	43	bc. c	c. bcq	bq bcq	0.0
Clacton-on-Sea	1030.9	48	SSE	4	c	1029.3	+1	45	-3	SSE	4	S	c	3	-	48	45	bc. c	c	c. bc. c	0.0
Nottingham	1027.8	42	*	*	b	1026.1	*	42	0	S	2	S	o	*	-	50	38	c. o.	c. bcm.	b	0.2

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4.

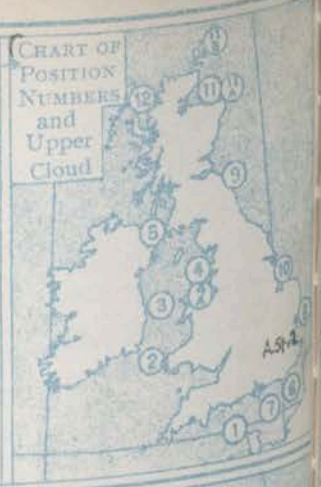
M.O. FORM 2370

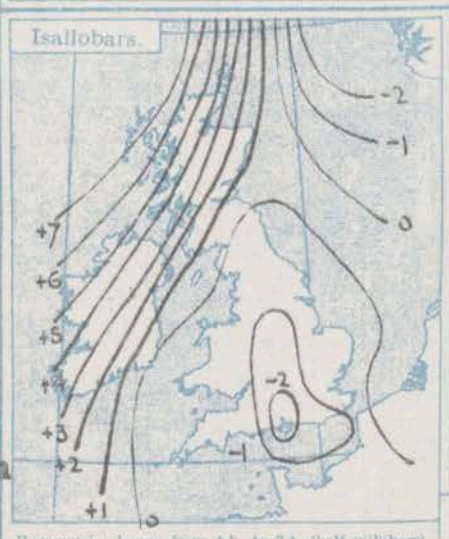
SUMMARY OF CONDITIONS AT 7 h. G.M.T. 19.11.1920

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Variable sky, misty.	Indiff.	Mod.
2. E. England	Cloudy or dull, local squalls.	"	"
3. E. Midlands	Dull, some mist.	Poor	-
4. W. Midlands	Variable sky, misty.	Indiff.	-
5. S.W. England	Mainly cloudy or dull.	Fair	R.Rough.
6. South Wales	Fine to cloudy, misty.	"	"
7. North Wales	Fair to dull.	"	Mod.
8. N.W. England	Variable sky, misty.	"	R.Rough
9. N. Midlands	Variable sky, misty.	Poor	"
10. N.E. England	Variable sky, some mist.	Indiff.	Mod.
11. E. Scotland	Fine to cloudy, local squalls.	"	"
12. S.W. Scotland	Dull, some rain & squalls	"	R.Rough
13. Isle of Man	Dull, squally.	Fair	"
14. N.& N.W. Scotland	Dull, squally, local rain.	Indiff	"
15. Hebrides	Dull, rainy, squally.	"	Mod.
16. Orkneys and Shetlands	Dull, squally, misty.	Poor	Rough
17. N.W. Ireland	Dull, rainy.	Fair	Mod.
18. N.E. Ireland	Dull, local mist & squalls	Indiff	"
19. S.E. Ireland	Dull.	"	R.Rough
20. S.W. Ireland	Dull, some rain.	"	Slight

Temperature reported from Coastal and Cross Channel Steamers

Position Number	Date	Time G.M.T	Sea °F	Air °F
4a	18th	0500	52	49
5	18th	0821	54	53
3	18th	1020	55	54
7	19th	0255	56	56





Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. A hail. fog. mist. T thunder. thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

The barometer is rising again in the West and North of these Islands, and it appears probable that the Continental anticyclone will extend further over our Eastern districts. Mainly fair weather, with Southerly winds, is to be expected, but occasional rain is still likely on our/West and Northwest extreme Coasts.

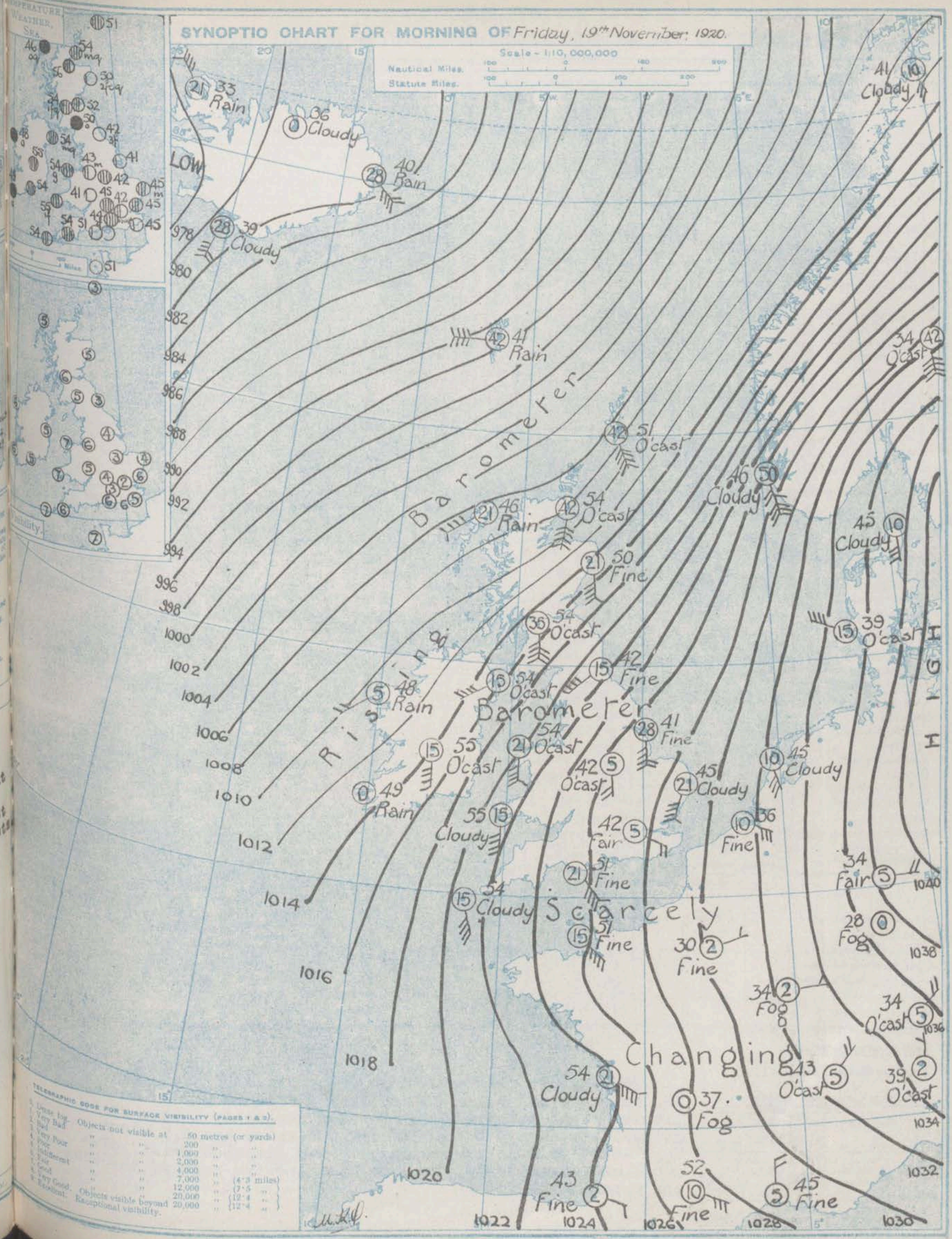
Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Friday, 19th November, 1920.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands	Wind Southerly, light or moderate; fair or cloudy; visibility fair generally; temperature rising.
5. S.W. England 6. South Wales 7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England 11. E. Scotland	Wind S or S.W. light or moderate, fresh locally; cloudy or variable sky, mist at times, visibility indifferent to fair; moderate or mild temperature.
12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind S or S.W. light or moderate, fresh or strong at times locally; much cloud generally, some showers, mist at times; visibility indifferent to fair; moderate temperature.

Further Outlook.

Mainly fair, but probably some rain in the most Western districts.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 10.10

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Friday, 19th November, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
Barometer
Rising
Barometer
Scarcely
Changing
HIGH
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " (4·3 miles)
6. Fair " " 12,000 " (7·5 "
7. Good " " 20,000 " (12·4 "
8. Very Good. Objects visible beyond 20,000 " (12·4 "
9. Excellent. Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 324 {Friday 19th November

WEATHER, TEMPERATURE RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 18th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 17th-18th	Rainfall. Day. 9h-18h. 18th	Sunshine. Sunrise to Sunset. 18th
Scotland.	Oban	0	0	56	43	-	-	0·0
	Banff	9	9	49	35	-	-	0·0
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	0. cq	c. bc	45	34	0·1	-	0·0
	Scarborough	bb	bc	47	39	-	-	0·0
	Skegness	0. bc	0. bc. b	47	38	-	-	0·4
England, E.	Lowestoft	0. cq						
	Felixstowe	0. cq	bcm	48	35	-	-	0·8
	Southend-on-Sea	0. c	c. bc	48	35	0·1	-	0·4
England, S.E.	Tunbridge Wells	b. bc. o	o. c. bc. b	49	34	-	-	0·0
	Margate	c	c	47	42	-	-	0·7
	Ramsgate	*	*	50	41	-	-	1·4
	Folkestone	bc. c. o	o. c. bc	56	40	-	-	1·8
	Hastings	bc. c	bc	50	42	-	-	3·3
	Eastbourne	bc. c	c. bc	57	35	-	-	3·3
	Brighton	bc	bc	52	37	-	-	1·6
	Worthing	c. bc	bc. b	52	36	-	-	2·5
	Littlehampton	o. c	bc	53	40	-	-	2·2
	Portsmouth (S'thsea)	*	*	54	40	-	-	2·9
	Bournemouth	*	*	54	46	-	-	4·0
	Ventnor (I. of W.)	*	*					

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 17th-18th	Rainfall. Day. 9h-17h. 18th	Sunshine.	Sunrise to Sunset. 18th
	Douglas (I.O.M.)								0·0
England, N.W.	Blackpool	0	c	49	40	-	-		1·2
	Southport	c. o. c	c. o. c. bc. b	50	40	-	-		0·0
	Morecambe	*	*	49	40	-	-		
Midlands.	Buxton								1·5
	Leamington Spa	o. c. b	bc	51	34	-	-		1·7
	Malvern	o. c	bc. b	61	37	-	-		3·0
	Bath	o. c. bc. b	b. bc	54	35	-	-		0·0
Wales.	Rhyl	bc	c	52	38	-	-		0·9
	Colwyn Bay	*	*	55	41	-	-		1·1
	Llandudno	c	c. bc	57	41	-	-		3·0
	Aberystwyth	o. c. b	c. c. o	55	43	-	-		
	Tenby								
	Swansea								3·0
England, S.W.	Weymouth	o. bc	bc. b	56	39	-	-		
	Teignmouth								1·8
	Torquay	c	b	56	50	-	-		2·0
	Paignton	o. c	c. bc	57	47	-	-		0·0
	Penzance	o	o	56	45	0·2	-		0·0
	Newquay	o	o	54	42	-	-		0·1
	Bude	w. bc	c	54	38	-	-		0·2
	Ilfracombe	o. c. o	o. c. bc	54	44	-	-		0·6
	Weston-s-Mare	bc. c. bc	c	52	43	-	-		

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather 7h-13h. 18th	Weather 13h-18h. 18th	Weather 18h-1h. 19th	Weather 1h-7h. 19th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall† Day. 7h-18h. mm.	Rainfall† Night. 18h-7h. mm.	Sun. Hours.
Renfrew	or. oq	o2f p	o if dd	o if q	55	47	47	1	1	0·0
Eskdalemuir	o	o d d	p d. o.	oq/o2f p.	49	42	42	1	0·1	0·0
Valencia (Cahire'n)	o2f r	r. o	orr.	rr. r.	57	40	48	5	5	0·0
Baldonnel	o2f or. bq	c. o p d.	bc. cps. o	c. o	58	51	50	-	0·1	0·0
Manchester (Alex Pk)	c. o2f	c. o bc. o2f	b. bc 2f	b if.	50	42	30	-	-	*
Ross on Wye	oq. o. c. o	c. o. bc. c	b. bc q	bw	52	41	32	-	-	0·5
Falmouth	o if	o if. o	c. o. b bc.	b. o.	54	50	45	-	-	0·0
Calshot (Hants)	o if. bc. c	bc. c if. b if	b if	b bc if	53	47	44	-	-	3·2
Lympne (Folkestone)	q o2f. o if	o if. c. o. bc	b. bc q if.	b bc bc q rw	47	42	40	-	-	0·5
Aberdeen	o if. o2f	o2f q	o2f q	2f c q.	51	47	47	-	-	0·0
Howden	o. o2f	c. o f fo	b. bc 2f c.	o2f c	47	37	34	-	-	0·0
Cranwell (Lincs)	o2f	bc. c	bc. c. o.	o	46	33	33	-	-	0·0
Felixstowe	b. o	o. c. o	bc. c if.	bc. c. o	49	45	*	-	-	0·4
Shoeburyness	o. c. o	bc. c b. bc	b bc. b. bc	b bc. c. o	48	41	37	trace	-	0·6
Benson		b. bc	b. b. bc	b bc. o2f	51	40	30	-	-	*
S. Farnborough	o	c. o b. bc	b. bc if c	o. o2f c	53	35	26	-	-	1·9
London (Kew Obsy.)	w. o2f	c. o b. bc 2f	b bc x bw.	b bc 3f.	51	38	29	trace	trace	0·5
Croydon	o2f. o if	o if. bc. c. o	c. o. b. bc w if	b bc w if 2f	51	41	*	-	trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r,r, = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·6
12	Above 75	32·6 or above

SYMBOLS—
Aurora ☆ Solar halo ⊕
Rime ≡ Lunar halo ◐
Glazed frost ∿ Solar corona ◎
Glazed roads ⚒ Lunar corona ◎

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 11 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9H G.M.T. 19th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	o ⊕	o. c bc	cw.	50	39	31	-	0·3	77	94
City (Bunhill Row)	*	*	*	*	*	*	*	0·0	*	*
Westminster (St. James's Park)	*	*	bm. m.	52	42	34	-	0·0	70	87
Regents Pk. (Botanical Gardens)	*	*	*	*	*	*	*	3·2	*	*
Camden Sq. (British Rainfall)	cm. c	bc. b	*	50	36	29	-	*	72	92
Kensington Palace	bc.	b.	*	51	36	29	-	*	81 (18h)	97
Hampstead Observatory	*	*	*	49	39	32	trace	0·0	*	99

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total 260 Joules.

	Milliwatts.
Average Rate.	8·3
Maximum Rate.	15

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM

19th to 20th Nov.R 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.22	11.38	3.55
	7.24	11.39	3.54
Greenwich	7.26	11.45	4.3
	7.28	11.46	4.4
Wick	8.12	11.57	3.43
	8.14	11.58	3.42
Valencia	8.9	12.36	4.44
	8.11	12.37	4.43

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 18th 17 h. 15 m. to 19th 6 h. 15 m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris	13. 0	13. 0	100
δ Ursae Minoris	13. 0	12. 16	94

NOTES ON THE WEATHER OF YESTERDAY.

Temperature rose to 55° or rather higher in the SW, W, and NW. but remained below 50° at many places in the E and SE. Little bright sunshine was recorded generally - none at several stations - but at Jersey the value was 6.7 hours. Very heavy rain fell at Stornoway and Blacksod Point, 47mm and 40mm respectively, but over the greater part of the Kingdom the weather was dry.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,548 Saturday, November 20th 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 19th														18H. G.M.T. of 19th													
Renfrew																												
Eskdalemuir	1016.2	0	SSW	5	01f	56	85	6	1250	St	10	-	-	*	1018.0	+2	S	5	00f	55	92	6	1250	Nb	10	-	-	*
Valencia (Cahirc'n)	1019.4	+1	SSW	6	0	51	85	7	2000	St	10	-	-	*	1021.1	+2	SSW	5	0	52	95	6	-	St	10	-	-	*
Baldonnel	1015.5	-1	-	0	0	49	97	6	<500	St	10	-	-	4	1014.2	+4	S	6	01f	57	92	6	750	St	10	-	-	4
Manchester (Alex Pk)	1017.3	+1	S	5	09	56	85	5	2000	St	9	A St	1	*	1017.8	+1	S	5	bc ⊕	55	92	4	2000	St Cu	3	A St	2	*
Ross on Wye	1024.0	+1	SSE	5	02f	49	85	4	2000	St	9	-	-	*	1024.7	+1	S	5	bcm	52	85	4	2000	St Cu	5	-	-	*
Falmouth	1024.9	0	S	2	0	52	85	5	2000	St	10	-	-	*	1025.3	0	S	2	cm	53	85	4	3000	St Cu	10	-	-	*
Calshot (Hants)	1023.7	+1	SSE	4	0	53	92	6	-	St Cu	10	-	-	*	1024.3	+1	SSE	4	02fc	54	92	4	-	St	10	-	-	*
Lympne (Folkestone)	1026.7	0	ESE	3	bf	55	85	7	-	-	-	-	-	3	1027.6	+2	SE	3	01f	51	97	6	2000	St	10	-	-	3
Aberdeen	1028.8	-1	SSE	4	bf	46	85	6	750	St	3	-	-	*	1029.5	+1	S	3	02f	41	92	5	<500	St	10	-	-	*
Howden	1016.9	+2	S	4	02f	52	92	5	750	St	10	-	-	*	1018.4	+2	SSW	3	02f	03	92	5	750	St	10	-	-	4
Cranwell (Lincs)	1025.8	-1	S	4	0	45	97	6	750	St	10	-	-	*	1026.2	+3	S	3	02f	47	97	6	1250	St	10	-	-	*
Felixstowe	1026.1	0	S	4	bc2fc	48	92	5	750	St	6	-	-	4	1027.0	0	S	3	b	42	97	4	2000	St	2	-	-	*
Shoeburyness	1029.2	-2	SSE	4	b	49	95	7	-	-	-	Ci	1	3	1029.8	+1	SSE	4	b	46	85	6	-	-	-	-	-	3
Benson	1028.5	-1	S	1	b	51	95	6	-	-	-	Ci St	1	*	1028.7	0	S	2	cw	43	85	6	2000	St Cu	8	-	-	*
S. Farnborough	1025.7	-1	SSE	2	b	54	95	6	-	-	-	-	-	*	1026.9	+1	SSE	2	b	46	92	5	-	-	-	-	-	*
London (Kew Obsy.)	1027.1	0	SSE	2	bf	55	95	6	-	-	-	Ci St	1	*	1027.7	0	-	0	b	46	92	5	-	-	-	-	-	*
Croydon	1027.3	-1	SSE	2	b3	54	95	5	-	-	-	-	-	*	1027.9	+1	SE	1	b2fw	50	85	4	-	-	-	-	-	*
	1027.5	+1	S	3	bf	55	95	6	-	-	-	-	-	*	1028.3	+1	SSE	2	b2fw	45	92	5	-	-	-	-	-	*
	1H. G.M.T. of 20th														7H. G.M.T. of 20th													
Renfrew																												
Eskdalemuir															1022.4	+4	S	5	0 q	54	92	6	1,250	Str Cu	9	-	-	*
Valencia (Cahirc'n)	1022.5	+1	SW	4	bc	51	85	6	-	St	6	-	-	*	1024.4	+2	SW	6	0	49	85	6	2,000	St	8	Ci St	2	*
Baldonnel	1016.2	+2	SSE	5	cmd	57	*	*	*	*	*	*	*	6	1017.0	+1	SSE	6	c	56	85	7	2,000	Str Cu	7	-	-	*
Manchester (Alex Pk)	1019.6	+1	S	5	cq	55	92	4	2,000	Str Cu	8	-	-	*	1021.8	+4	S	2	c	53	85	5	2,000	St	8	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1026.9	+1	SSE	3	03f	49	85	2	2,000	Str Cu	10	-	-	*
Falmouth	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1026.8	+1	S	2	01f	52	85	6	2,000	Str Cu	10	-	-	*
Calshot (Hants)	1024.7	0	SSE	3	0	54	86	6	-	St	10	-	-	*	1025.3	0	SSE	3	0	52	92	6	-	Str Cu	9	-	-	*
Lympne (Folkestone)	1028.2	0	SE	4	02f	50	97	5	2,000	St	10	-	-	3	1028.3	0	E	3	02fc	47	97	4	2,000	St	10	-	-	3
Aberdeen	1029.8	0	S	4	02f	42	97	5	<500	St	10	-	-	*	1030.5	+1	S	4	02f	40	92	5	<500	St	10	-	-	*
Howden	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1020.2	+3	SSW	3	02f	53	92	5	1,250	St	10	-	-	2
Cranwell (Lincs)	1026.8	0	SSE	3	03f	44	97	3	750	St	10	-	-	*	1027.6	+1	S	1	02f	48	92	4	750	St	10	-	-	*
Felixstowe	1028.2	0	E	1	04f	38	97	2	1,250	St	10	-	-	*	1028.6	0	S	1	04fc	42	97	2	<500	St	10	-	-	*
Shoeburyness	1030.6	0	S	3	0	42	92	7	3,000	St	10	-	-	1	1030.5	0	SSE	3	bc	44	85	7	1,250	St	4	-	-	2
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.0	0	SE	1	0	41	85	7	2,000	St	10	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1028.1	0	SSE	2	03fc	42	97	3	-	St	10	-	-	*
London (M.O. at 1H.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1029.1	0	ESE	2	05f	41	97	1	<500	St	10	-	-	*
Croydon	1029.0	+1	*	*	*	43	*	*	*	*	*	*	*	*	1029.7	+1	SE	2	04fw	39	97	2	<500	St	10	-	-	*
	1029.4	*	SSE	2	02f	41	97	5	1,250	St	10	-	-	*	1030.0	0	SE	2	03fc	37	97	3	<500	St	10	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather. §	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 19th					7H. G.M.T. of 20th									24 HOURS ENDED 7H. 20th						19th
Lerwick	1016.2	48	SW	2	c	1015.2	-2	52	+1	SW	3	-	o	2	12	52	49	omq	omq	omd.omd	*
Stornoway	1014.0	46	WSW	2	c	1013.7	0	54	+8	SW	6	-	orq	5	4	54	42	rq.c	c	o.rq.	1.2
Castlebay (Barra Is)	1014.6	50	SE	3	0	1015.6	+1	55		SSE	5	-	⊕	5	1	55	46	r0 bc	bc.0.	⊕	1.0
Malin Head	1013.3	47	SE	1	omr	1015.0	+1	55	?	S	4	S	omq	3	6	55	47	omr	omr	omr.om	0.0
Blacksod Point	1011.9	49	SSE	2	c	1013.0	+2	56	+8	SSW	6	-	cqm	6	3	57	48	bc	oc	omr.cq/bcq	*
Roche's Point	1018.2	54	S	4	0	1021.3	+2	52	-2	SSE	4	-	c	4	3	55	52	omd	dm.0	o.c	*
Birr Castle	1015.9	54	S	3	0	1019.4	*	54	-1	SE	2	-	o	*	5	56	53	or.	od.r0	0	0.0
Donaghadee	1017.0	53	SW	4	cm	1020.9	+1	53	-1	SW	4	-	bmq	4	-	56	54	om	cqm	cm.bm	*
Liverpool (Eldston)	1023.5	49	SE	4	b	1025.7	+2	42	-1	SE	4	-	b	3	-	50	43	o.bm	bm	bm	2.2
Holyhead	1021.1	54	S	5	b	1024.4	+2	51	-3	SSW	4	-	b	2	-	55	50	c.bc	c.bc.b	c.bc.b.	0.0
Pembroke (St. Ann's Head)	1022.7	54	S	4	c	1025.1	0	53	-2	SSE	3	-	cm	4	-	56	53	cm.c	cm	cm.om	2.5
Scilly (St. Mary's)	1022.1	53	SSE	4	cm	1023.1	0	54	0	SSE	4	-	o	4	-	56	52	c.cm	cm	b.cm	0.5
Jersey (St. Aubin)	1026.6	54	SE	3	b	1027.0	0	45	-6	ESE	2	-	ocm	0	-	54	44	b	b	fg.ocm	7.2
Portland Bill	1023.4	54	S	4	c	1026.0	0	53	+2	S	3	S	c	4	-	57	49	b	bc	c.o.c.	*
Dungeness	1028.9	43	S	4	0	1029.1	0	42	-3	S	3	-	o	3	-	48	40	b	bc.o	o.cm.o	*
Wick	1016.6	46	S	2	cm	1016.2	+2	52	-2	SSW	2	-	cm	2	6	54	44	omq	cm	cmp.cm	*
Nairn	1016.1	46	-	0	0	1017.0	*	56	0	-	0	-	cq	1	4	56	45	oq.c	dc	od.cq	0.0
Leith	1018.4	55	SSW	4	c	1021.6	+1	52	0	W	2	W	bc	2	-	56	52	o.cq.c	c.oq.uc	c.bcq.c	*
Tynemouth	1023.6	45	SW	2	bcm	1025.4	0	42	0	SSW	3	-	bfc	3	-	47	42	cm	f	f	*
Spurn Head	1024.0	47	S	4	bm	1028.1	0	43	+2	SSW	2	-	fd	3	trace	47	39	f.cm	cm	bmwfd.	*
Yarmouth (Gorleston)	1024.9	47	S	6	0	1029.4	+1	44	-1	SW	3	-	o	2	-	49	41	bmq.bq	bq	bq.bc.c	4.2
Clacton-on-Sea	1029.1	43	SSE	3	b	1029.9	+2	44	-1	SSE	3	S	bcz	2	-	60	40	c.bc.bz	bz	b.cm.bc	6.0
Nottingham	1024.1	44	S	1	bm	1028.2	*	48	+6	SW	2	SW	cmc	*	-	49	39	cm	o.bm	c.cm.	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3. † See footnote p.4.

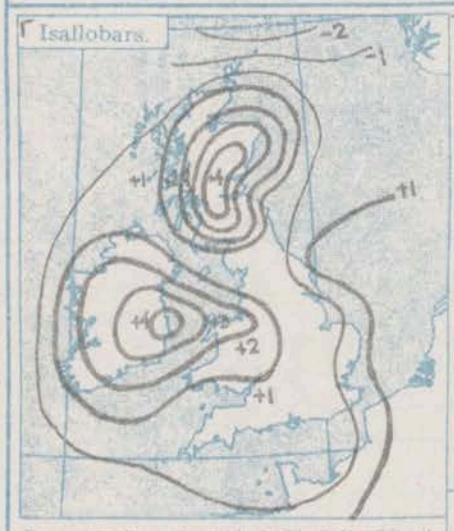
M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 20.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, mist or fog.	V.Poor	Slight
2. E. England	Fair to dull, fog inland	Var.	Smooth
3. E. Midlands	Dull, mist or fog.	V.Poor	-
4. W. Midlands	Dull, misty.	Poor	-
5. S.W. England	Dull, local mist.	Fair	Mod.
6. South Wales	Dull, misty.	"	"
7. North Wales	Fine to cloudy.	"	Slight
8. N.W. England	Variable sky, some mist.	Indiff.	Mod.
9. N. Midlands	Dull, misty.	Poor	-
10. N.E. England	Dull, mist & fog.	Bad	Slight
11. E. Scotland	Fair to dull, some mist.	Indiff.	Smooth
12. S.W. Scotland	Dull, local squalls.	Fair	Mod.
13. Isle of Man	Fair.	"	"
14. N.& N.W. Scotland	Cloudy to dull, local rain)	Ind.	"
15. Hebrides	Dull, squall, local rain.	Indiff	Rough
16. Orkneys and Shetlands	Dull.	Poor	Smooth
17. N.W. Ireland	Cloudy, misty, squally.	Indiff.	Rough
18. N.E. Ireland	Varibale sky, misty, squally)	Fair	Mod.
19. S.E. Ireland	Cloudy.	"	"
20. S.W. Ireland	Cloudy.	"	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
4	19th	0430	48	45
8	19th	0517	52	47
5	19th	0825	54	55
3	19th	1020	55	56
1	19th	1225	57	54
6	19th	1500	55	50
7	20th	0510	54	51
4a	20th	0345	51	50



Barometric change from 4 h. to 7 h. (half millibars).

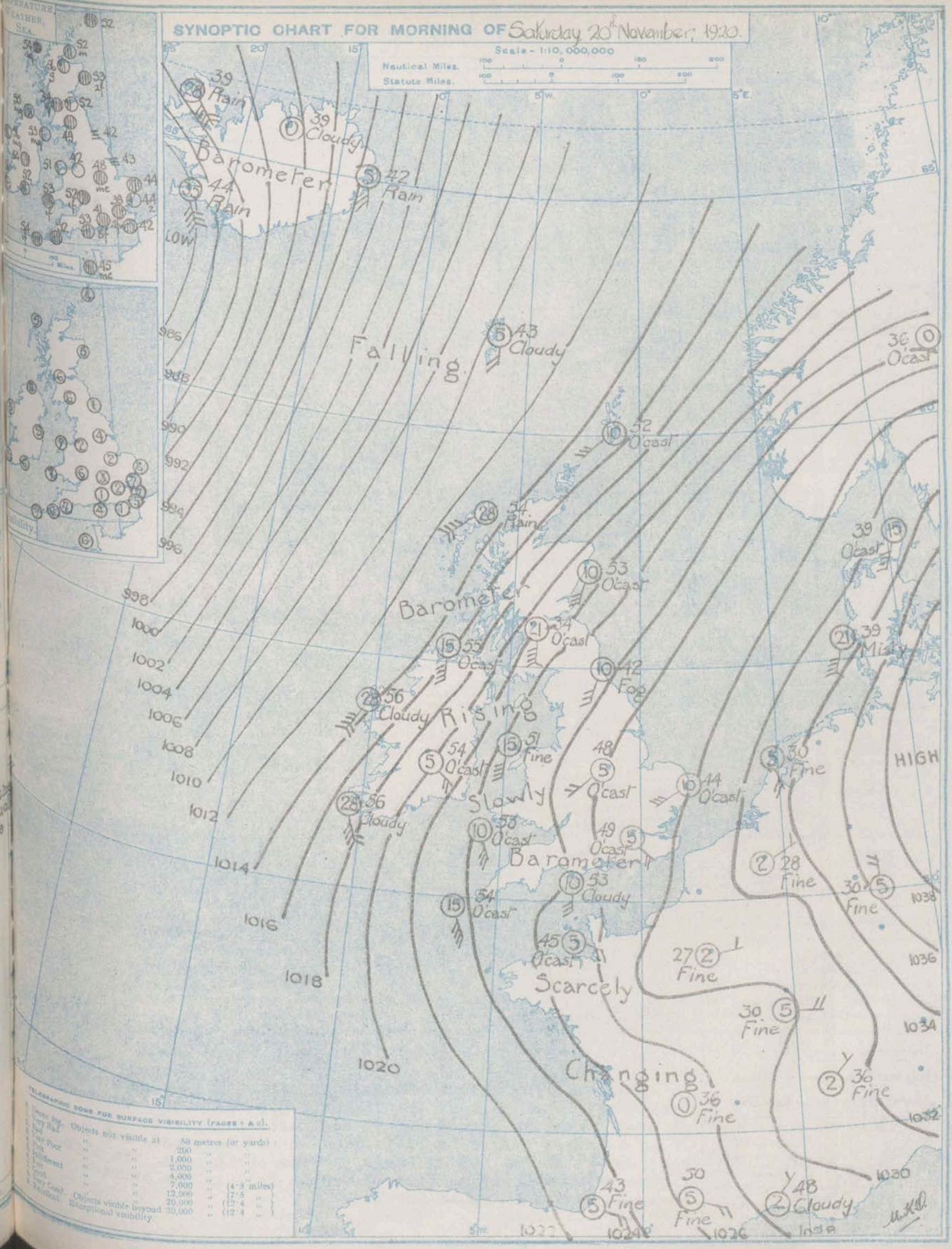
EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

A large anticyclone centred over the Baltic region extends to the East and South of this country while another depression is advancing on Iceland from the Westward. S.E. to S or S.W. winds are probable over the British Isles, with mainly fair weather in the East and Southeast and much cloud, accompanied by occasional local drizzle, in the West and North. Similar conditions may continue for 2 or 3 days.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Saturday, 20th November, 1920.	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands 5. S.W. England 6. South Wales	Wind between S.E. & S or S.W., light or moderate; cloudy or fair, some mist at times; visibility indifferent; moderate temperature.	Mainly fair in the East & South, much cloud, with some drizzle in the West and North.
7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England 11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind S or S.W., moderate or fresh, stronger at times; much cloud generally, some drizzle in places; visibility indifferent to fair; mild.	

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 08.45 G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Saturday 20th November, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
Barometer Falling
Barometer Rising Slowly
Barometer Scarcely Changing
HIGH
LOW
39 Rain
39 Cloudy
44 Rain
42 Rain
43 Cloudy
36 O'cast
52 O'cast
54 Rain
53 O'cast
34 O'cast
55 O'cast
42 Fog
39 Misty
56 Cloudy
51 Fine
54 O'cast
48 O'cast
44 O'cast
30 Fine
56 Cloudy
58 O'cast
49 O'cast
53 Cloudy
28 Fine
30 Fine
54 O'cast
45 O'cast
27 Fine
30 Fine
36 Fine
36 Fine
43 Fine
50 Fine
48 Cloudy
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
Very Bad: Objects not visible at 50 metres (or yards)
Bad " " 200 " "
Very Poor " " 1,000 " "
Poor " " 2,000 " "
Moderate " " 4,000 " "
Fair " " 7,000 " (4·3 miles)
Good " " 12,000 " (7·5 "
Very Good " " 20,000 " (12·4 "
Excellent: Objects visible beyond 20,000 " (12·4 "
Exceptional visibility

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 325

Saturday Nov. 20th 1920

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 19th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 18th-19th	Rainfall. Day. 9h-18h. 19th	Sunshine. Sunrise to Sunset. 19th
Scotland.	Oban	p	p	49	46	13	6	0.0
	Banff	oc	r.c.o	55	46	-	3	0.0
	Montrose							
	St. Andrews	o	c	56	48	-	-	1.3
England, N.E.	Harrogate	sm.b	m.bc.c	49	36	-	-	1.3
	Scarborough	b	b	48	39	-	-	3.7
	Skegness	o	o.b	47	41	-	-	2.0
England, E.	Lowestoft							
	Felixstowe	b	b3	49	47	-	-	4.3
	Southend-on-Sea	b	b.bc	54	41	-	-	6.2
England, S.E.	Tunbridge Wells	bc.b	b.bc.o	53	40	o3	-	5.2
	Margate	b	b	50	41	-	-	6.6
	Ramsgate	*	*	50	42	-	-	7.0
	Folkestone	b.bc	bc	54	41	-	-	6.8
	Hastings	bc.b	bc.c.o	53	45	-	-	5.2
	Eastbourne	b	b.bc.b	53	47	-	-	7.4
	Brighton	b	b	53	48	-	-	6.5
	Worthing	b	b	54	48	-	-	7.6
	Littlehampton							
	Portsmouth (S'ttbaos)	*	*	56	49	-	-	7.1
	Bournemouth	*	*	58	53	-	-	7.8
	Ventnor (I. of W.)	*	*	58	48	-	-	8.0
England, N.W.	Douglas (I.O.M.)							0.4
	Blackpool	mc	bc	50	43	-	-	2.3
	Southport	c.o.c.bc	bc.b	51	42	-	-	1.5
	Morecambe	*	*	50	43	-	-	
Midlands.	Buxton							2.0
	Leamington Spa	o.c.bc	c.bc	54	37	-	-	0.5
	Malvern	b.bc	bc.c.o	52	42	-	-	2.9
	Bath	o.c.bc.b	b.bc.c	59	43	-	-	0.9
Wales.	Rhyl	bc.c	c	56	46	-	-	1.3
	Colwyn Bay	*	*	58	46	-	-	0.1
	Llandudno	*	*	57	51	-	-	1.5
	Aberystwyth	o.c.c	bc.o	57	50	-	-	
	Tenby							
	Swansea							1.0
England, S.W.	Weymouth	b.bc	bc.o	58	51	-	-	
	Teignmouth							0.2
	Torquay	o	o	57	53	-	-	1.0
	Paignton	c	c	59	54	-	-	0.1
	Penzance	c.o	o.bc	57	53	-	-	3.0
	Newquay	bc	bc	56	50	-	-	4.1
	Bude	w.f.c	b	58	44	-	-	4.4
	Ilfracombe	bc.c	bc	58	51	-	-	7.0
	Weston-s-Mare	bc.c.bc	bc.c	56	46	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 19th	Weather. 13h-18h. 19th	Weather. 18h-1h. 20th	Weather. 1h-7h. 20th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. Day. 7h-13h. mm.	Rainfall. Night. 18h-7h. mm.	Sun. Hours.
Renfrew	o1fq	o1f	or	c.o	57	54	53	0.4	1	0.3
Eskdalemuir	o1fo	o	o.c.o	bc.c.o	52	47	46	trace	-	0.0
Valencia (Cahirciveen)	o1f	o1f	o	c.o.c.o	57	48	54	4	-	0.0
Baldonnel	c.oq	c.oq	c.oq	bc.c2f	57	53	48	-	-	0.2
Manchester (Alex Park)	o1f.o2f	o2f.c.o	b.bc3fb	b.o3fo3f	52	44	33	-	-	*
Ross on Wye	b1qfc.o1f	o1f.c2.1f	o2f.o1f.	o1f	54	41	47	-	-	1.7
Falmouth	o.o1f.o	o1f.o2f	o	o	55	50	51	-	-	0.8
Calshot (Hants)	b1f	b.bc.c.o	o.o2f	o2fc	55	46	45	-	-	6.8
Lympne (Folkestone)	o2f.o6f.bc	b.bc1f.c.o2f	o2f.o3f	o.o2f.	46	39	39	-	-	6.1
Aberdeen	3fc.o2f	o2f.o.	o2f.2fc	2fc.o2f	55	49	47	-	-	0.0
Howden	o2fo	o1f.o2f	c.o4.5fc	o3fc.	49	39	35	-	-	0.0
Cranwell (Lincs)	o2f	bbc.3f	c.o o4.5f	4-5fc.	49	36	33	trace	o2	3.0
Felixstowe	b.bc.b	b.bc.b	o.3fc.c.o	c.o.bc.c	50	39	*	-	-	7.2
Shoeburyness	bc.c.b.bc	b.bc.bc.c	c.o.o	o	52	39	38	-	-	7.5
Benson	b	b	b1fc	3fc	55	41	37	-	0.1	*
S. Farnborough	o1f.b.bc	b.bc.b	b.bc1fc	c.o.po	57	40	34	-	0.1	6.3
London (Kew Obsy.)	w.o1f.b	b2fw	b2f.	ow.5fw	55	39	31	trace	-	6.2
Croydon	3fc.o2f.c.b.bc	bw1f.2f	w.b.bc.c.o1f	3fc.o2f	56	37	*	0.1	trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

(Used only for surface observations.)

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·6
12	Above 75	32·6 or above

SYMBOLS—
Aurora. Rime. Glazed frost. Glazed roads. Solar halo. Lunar halo. Solar corona. Lunar corona.

LONDON. OBSERVATIONS.

	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours. (Yesterday.)	Humidity %. 15 h. G.M.T. (Yesterday.)	Humidity %. 6 h. G.M.T. (To-day.)
	24 Hours ended 9h G.M.T. 20th									
Greenwich (Royal Observatory)	b	b	cm	55	38	34	-	6.3	72	99
City (Bunhill Row)	*	*	*	*	*	*	*	1.0	*	*
Westminster (St. James's Park)	*	*	m	57	38	38	-	4.9	69	96
Regent's Pk. (Botanical Gdns)	*	*	*	*	*	*	*	3.7	*	*
Camden Sq. (British Rainfall)	cm.bc	b	*	52	39	37	-	*	79	97
Kensington Palace	b	b	*	56	35	35	-	*	87 (18h)	99
Hampstead Observatory	*	*	*	54	37	38	-	3.6	*	96

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total 24.9 Joules.

	Milliwatts.
Average Rate.	8·0
Maximum Rate.	17

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

20th + 21st Nov. 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.24	11.39	3.54
	7.26	11.39	3.52
Greenwich	7.28	11.46	4.4
	7.29	11.46	4.3
Wick	8.14	11.58	3.42
	8.16	12.27	3.43
Valencia	8.11	12.27	4.42
	8.12		

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 19th 17 h. 15 m. to 20th 18 h. 15 m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	13	0	2	40	21
δ Ursae Minoris	13	0	2	16	17

NOTES ON THE WEATHER OF YESTERDAY.

Maximum temperature readings of 55° or higher were recorded over the greater part of the Kingdom, but they were below 50° at many places in the Southeast and East of England. Little or no sunshine was recorded in Ireland and Scotland, but there were several hours over a large portion of England, the highest figure being 8 hours at Ventnor. Rain fell in the extreme West and North; 12 mm at Lerwick.

* Information for these columns not usually received.

‡ Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B. 21549 SUNDAY. 21st. NOVEMBER. 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

Stations	Barom. at M.S.L. mb. (13h)	Change in 3 hours (13h)	Wind Direc. (13h)	Wind Force 0-12 (13h)	Weather (13h)	Temp. °F. (13h)	% Humidity (13h)	Visibility 0-9 (13h)	Height of Low Cloud Feet (13h)	Low Cloud Form (13h)	Low Cloud Amt. 0-10 (13h)	Upper Cloud Form (13h)	Upper Cloud Amt. 0-10 (13h)	Sea 0-9 (13h)	Barom. at M.S.L. mb. (18h)	Change in 3 hours (18h)	Wind Direc. (18h)	Wind Force 0-12 (18h)	Weather (18h)	Temp. °F. (18h)	% Humidity (18h)	Visibility 0-9 (18h)	Height of Low Cloud Feet (18h)	Low Cloud Form (18h)	Low Cloud Amt. 0-10 (18h)	Upper Cloud Form (18h)	Upper Cloud Amt. 0-10 (18h)	Sea 0-9 (18h)
	13H. G.M.T. 20th														**18H. G.M.T. OF 20th**													
Renfrew	1024.6	+2	WSW	3	o	55	86	~~4~~	2,000	Sr Cu	6	A Cu	3	*	1026.5	+3	S	2	o	49	92	5	1260	Sr Cu	5	A Sr	5	*
Eskdalemuir	1025.7	+1	SW	2	o2f	49	85	3	2000	Sr	10	-	-	*	1027.7	+1	-	0	bm	41	92	5	-	Sr Cu	1	-	-	*
Valencia (Cahirc'n)	1018.1	-1	ESE	6	bc	58	75	5	3000	Cu	1	A Cu	3	4	1019.1	+1	SSE	5	o	56	85	5	2000	Sr Cu	9	-	-	4
Baldonnel	1023.9	-1	S	5	c	54	80	3	1250	Sr Cu	8	-	-	*	1024.0	0	S	3	b	52	86	8	2000	Sr Cu	2	-	-	*
Manchester (Alex. Pk.)	1027.5	0	SSE	4	o2f	51	86	4	2000	Sr	10	-	-	+	1028.6	+2	SSE	4	o3f	46	92	3	2000	Sr	10	-	-	+
Ross on Wye	1027.7	0	SSW	2	o2fm	47	92	5	1250	Sr	10	-	-	*	1028.1	0	S	2	o2f	47	92	5	1250	Sr	10	-	-	*
Falmouth	1028.6	*	SE	3	o1f	53	92	6	-	Sr Cu	9	-	-	*	1025.4	0	ESE	4	o3fe	51	92	8	-	-	-	-	-	*
Calshot (Hants)	~~1027.4~~ 1028.7	-1	E	4	~~o2f~~ o3f	48	97	3	750	Sr	10	-	-	3	1029.1	+1	ENE	3	b2f	43	97	4	-	-	-	-	-	3
Lympne (Folkestone)	1030.5	*	SSE	4	bf	45	75	7	-	-	-	C Sr	3	*	1030.8	+1	SE	2	bmw	37	92	4	-	-	-	Ci	1	*
Aberdeen	1022.8	+2	SW	3	bc1f	55	86	6	-	-	-	A Cu	4	2	1025.6	+5	SSW	2	bc2fe	52	86	5	-	-	-	A Sr	6	+
Howden	1029.0	0	SSE	2	o6f	47	97	3	<500	Sr	10	-	-	*	1029.8	0	SE	5	!od	?	?	0	<600	Sr	10	-	-	*
Cranwell (Lincs)	1030.0	+1	SSE	3	o3fe	40	97	1	<500	Sr	10	-	-	÷	1030.3	+1	SSE	3	o5fe	35	97	1	<500	Sr	10	-	-	÷
Felixstowe	1030.9	0	SSE	3	bz	48	75	7	-	-	:	-	-	2	1031.5	+1	SE	4	bif	45	85	6	-	-	-	-	-	2
Shoeburyness	1030.5	+1	ESE	1	b	[illegible]	75	7	-	-	-	Ci	1	*	1030.6	0	SE	2	bw	43	85	7	*	-	-	-	-	*
Benson	1029.7	0	SSE	2	o4fe	44	97	2	-	-	-	-	-	*	~~1029.4~~ 1029.8	0	SSE	1	o4fe	38	97	2	-	Sr	10	-	-	*
S. Farnborough	1029.5	0	ENE	2	o6f	41	97	2	<500	Sr	10	-	-	*	1029.3	0	ENE	2	o2f	41	97	4	<500	Sr	10	-	-	*
London (Kew Obsy.)	1030.2	-2	SE	2	o3f	40	97	2	<500	Sr	10	-	-	*	1030.2	0	-	0	bc4fw	38	92	1	750	Sr	5	-	-	*
Croydon	1030.3	+1	SE	3	o3fe	42	97	3	<500	Sr	10	-	-	*	1030.3	+1	-	0	b2fe	35	97	4	-	-	-	-	-	*
	1H. G.M.T. OF 21st														**7H. G.M.T. OF 21st**													
Renfrew															1028.1	0	-	0	o1f	47	97	6	2000	Sr	10	-	-	*
Eskdalemuir	1029.4	0	-	0	o3f	43	97	3	-	Sr	10	-	-	*	1029.1	0	SE	1	o3fe	42	97	3	1250	Sr	10	-	-	*
Valencia (Cahirc'n)	1021.7	0	SSE	5	o	53	*	*	*	*	*	*	*	4	1020.2	+1	SE	5	c	55	75	7	2000	Sr Cu	8	-	-	*
Baldonnel	1025.2	+1	S	2	c	50	75	5	1250	Sr Cu	7	-	-	*	1025.6	0	-	0	c	44	92	4	1250	Sr Cu	8	-	-	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.4	0	NE	1	b7f'	29	97	0	-	-	-	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1029.6	+1	E	2	o2f	39	92	5	1250	Sr	10	-	-	*
Falmouth	1025.2	0	ESE	5	b	51	86	7	-	Sr Cu	2	-	-	*	1025.3	0	E	5	o	49	85	7	-	Sr Cu	10	-	-	*
Calshot (Hants)	1025.9	0	E	3	b	41	97	5	-	-	-	-	-	3	1029.2	0	ENE	3	b2f	39	97	5	2000	Sr	10	-	-	3
Lympne (Folkestone)	1030.6	0	SE	3	b	37	92	4	-	-	-	-	-	*	1031.2	+2	SE	2	bmx	31	92	5	-	-	-	Ci Sr	1	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1027.9	+1	S	2	b2few	43	97	5	-	-	-	-	-	2
Howden	1031.0	-2	SSW	3	o3f	35	97	4	<500	Sr	10	-	-	*	1032.0	+2	-	0	o2fe	35	97	5	750	Sr	10	-	-	*
Cranwell (Lincs)	1030.8	0	S	3	o5fe	32	97	1	<500	Sr	10	-	-	*	1031.9	+1	SSE	2	o6fe	28	97	1	<500	Sr	10	-	-	*
Felixstowe	1031.5	0	SSE	3	bif	42	75	6	-	-	-	-	-	1	1033.2	+1	SE	4	bif	42	85	6	-	-	-	A Sr	2	3
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1031.4	0	SE	1	bx	36	75	7	-	-	-	Ci	1	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.4	0	N	1	o4f	25	97	2	-	Sr	10	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.7	0	-	0	o6fx	29	97	1	<500	Sr	10	-	-	*
London (M.O. at 1h.)	1030.3	0	*	*	*	27	*	*	*	*	*	*	*	*	1031.1	+1	E	2	bmx	31	92	2	-	-	-	-	-	*
Croydon	1030.8	0	S	1	b2fx	29	92	4	-	-	-	-	-	*	1031.6	0	-	0	bx2f	27	92	4	-	-	-	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

Stations	Barom. at M.S.L. mb. (18h)	Temp. °F. (18h)	Wind Direc. (18h)	Wind Force 0-12 (18h)	Weather (18h)	Barometer at M.S.L. mb. (7h)	Barometer Change in 3 hours (7h)	Temp. °F. (7h)	Temp. Change in 24 hours (7h)	Wind Direc. (7h)	Wind Force 0-12 (7h)	Direc. of Upper Cloud (7h)	Weather (7h)	Sea 0-9 (7h)	Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
	18H. G.M.T. of 20th					**7H. G.M.T. of 21st**									**24 HOURS ENDED 7H. 21st**						**20th**
Lerwick	1020.9	55	SW	4	bcm	1026.5	+3	50	-2	SSW	3	-	om	3	-	56	49	bcm	bcm	bc	*
Stornoway	1019.3	55	SW	5	oq	1024.7	+3	53	-1	S	5	-	o	4	1	56	52	or. oq	oq	co	0.0
Castlebay (Barra Is.)	1020.8	54	SE	5	b	1024.8	+1	53		SSE	4	-	o	5	-	55	52	op	op. b	b. op. c. o	0-0
Malin Head	1020.4	54	SSW	2	c	1022.0	0	50	-5	SSW	3	SW	c	2	-	56	49	bc	o	c	0.2
Blacksod Point	1017.2	54	SW	3	bc	1015.8	0	50	~~6~~	SE	4	-	bc	5	-	54	43	cg	bc	bc	*
Roche's Point	1022.8	53	S	3	o	1023.5	0	52	0	SSE	4	-	o	4	0.2	55	51	c.o	o	o	*
Birr Castle	1022.3	53	SSE	3	o	1023.4	*	52	-2	SSE	2	-	c	*	-	56	50	c	co	c	0.5
Donaghadee	1023.4	52	SW	3	cm	1026.3	+1	50	-3	S	4	-	cmq	3	-	55	50	cm	bmq	om	*
Liverpool (Bidston)	1027.0	48	SE	6	o	1028.4	+1	39	-3	SE	4	SE	bc	3	-	52	38	bm	o	b. bc	6.6
Holyhead	1026.8	57	SSW	4	b	1026.4	0	47	-4	WSW	3	-	cg	1	-	54	46	b. bc. b	bz	bc ocg	2.2
Pembroke (St. Ann's Head)	1025.8	52	SE	2	om	1026.3	0	46	-7	ESE	3	-	bcm	4	-	54	46	om	om	c bem	0.1
Scilly (St. Mary's)	1024.0	53	SE	4	o	1023.9	0	51	-3	SE	3	SE	o	4	-	54	51	om	om	o	0.2
Jersey (St. Aubin)	1026.4	46	ESE	2	f	1026.2	0	42	-3	ESE	5	-	o	4	trace	50	38	o. em. b	b. o. cf	fe o	3.3
Portland Bill	1027.8	51	E	5	o	1027.8	0	47	-6	SE	6	SE	bc	5	-	53	45	c. o	o	o. bc	*
Dungeness	1029.6	47	SE	2	b	1030.3	0	39	-3	SE	4	-	b	4	-	48	39	o. bc. b	b	b	*
Wick	1021.4	52	SSW	3	om	1025.2	+3	49	-4	SSW	2	-	bc	2	-	54	47	cm	om	ombc	*
Nairn	1022.4	53	SSW	1	c	1025.6	*	40	-16	-	0	-	bc	1	-	57	38	cg	cg	cg bcx	0.0
Leith	1026.5	49	NW	1	c	1027.8	0	46	-6	SW	1	-	o	1	-	55	42	bcc bc	bcc	cbzo	*
Tynemouth	1027.5	47	SW	2	f	1029.9	0	36	-6	SW	2	-	bcf	2	-	50	36	f	f	f. bcf	*
Spurn Head	1029.9	40	S	4	fw	1031.6	+1	34	-9	SSW	2	-	fw	2	trace	43	31	fw	fw	fw	*
Yarmouth (Gorleston)	1030.8	46	SSE	4	b	1031.9	0	40	-4	S	2	-	b	2	-	49	40	bz. b	b	b.	6.5
Clacton-on-Sea	1030.7	47	ESE	3	b	1031.5	0	43	-1	ESE	3	-	bcz	3	-	48	42	bc. bz	bz	b. bcz	6.5
Nottingham	1020.0	40	S	2	ome	1031.3	*	34	-14	SE	1	-	o	*	-	49	33	ome	ome	ome	0.0

* Information for these columns not usually received. * The barometric change is expressed in half millibars. § For code see page 3. † See footnote p. 4.

M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 21.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fine, frosty, some mist or fog.	Indiff.	Slight
2. E. England	Fine, misty.	Good	"
3. E. Midlands	Fine to dull, mist or fog.	Poor	-
4. W. Midlands	Dull, some fog.	Bad	-
5. S.W. England	Dull to fair.	Good	Mod.
6. South Wales	Fair, misty.	Fair	"
7. North Wales	Cloudy to fair.	"	Smooth
8. N.W. England	Fair to dull, local fog.	"	Slight
9. N. Midlands	Dull, some fog.	Poor	-
10. N.E. England	Fair to dull, some fog or mist.	"	Smooth
11. E. Scotland	Fine, misty.	Indiff.	"
12. S.W. Scotland	Dull, misty.	Fair	"
13. Isle of Man	Cloudy.	"	Slight
14. N.& N.W. Scotland	Dull.	"	Mod.
15. Hebrides	Dull.	"	"
16. Orkneys and Shetlands	Dull, misty.	Poor	Slight
17. N.W. Ireland	Cloudy, some mist.	Good	Mod.
18. N.E. Ireland	Fair.	"	Smooth
19. S.E. Ireland	Dull.	Fair	Mod.
20. S.W. Ireland	Dull.	Good	Slight

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T	Sea °F	Air °F
5	20th	0835	53	54
12	20th	0550	52	53
3	20th	0925	55	54
7	21st	0250	56	44
8	21st	0341	51	45
4A	21st	0430	52	44

Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0–12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. R thunderstorm.
SEA DISTURBANCE.—Rough. High.

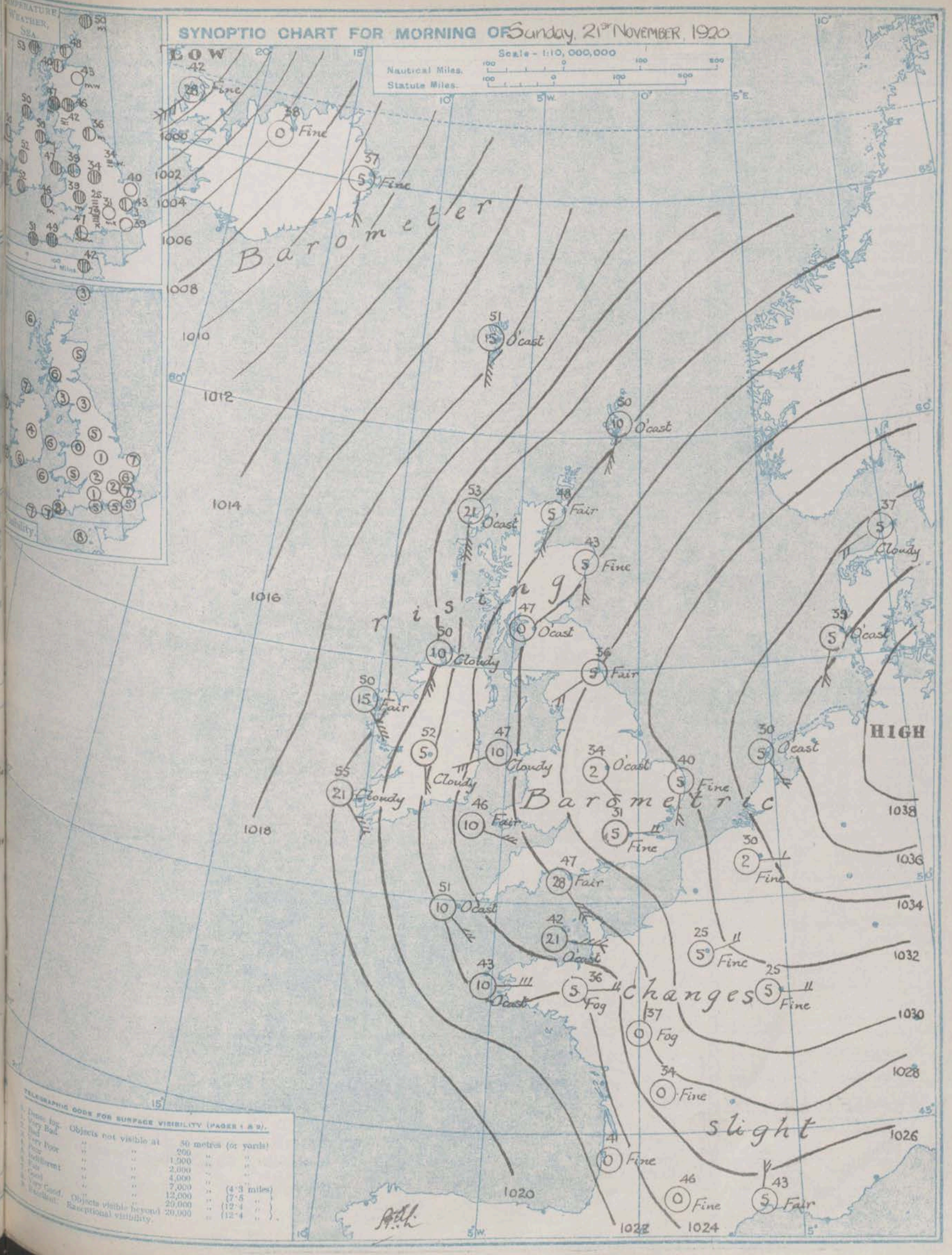
GENERAL INFERENCE from observations received up to 9h.

The antocyclone covering the Northwest Continent is moving slowly Northward. Mainly dry weather may be expected over the Kingdom generally but temperature will be rather low and there will be a good deal of fog in places.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Sunday, 21st November, 1920.	Further Outlook.
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 mainly S.E., light or moderate; fair generally, visibility varying from poor to fair; local mist or fog; rather cold.	Winds S.E. or S., weather mainly dry but local fog and rather low temperature. -----
11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland	Wind mainly Southerly, light or moderate; fair or cloudy, visibility varying from poor to fair, local mist or fog; moderate or rather low temperature.	
19. S.E. Ireland 20. S.W. Ireland	Wind S.E. or S., moderate; cloudy, visibility mainly fair; moderate temperature.	

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.30.

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Sunday, 21st NOVEMBER, 1920
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
HIGH
Barometer rising
Barometric changes slight
1000
1002
1004
1006
1008
1010
1012
1014
1016
1018
1020
1022
1024
1026
1028
1030
1032
1034
1036
1038
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " "
6. Fair " " 12,000 " (4·3 miles)
7. Good " " 20,000 " (7·5 ")
8. Very Good " " 20,000 " (12·4 ")
9. Excellent. Exceptional visibility. 20,000 " (12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 326.

Sunday 7.55 Nov 7 1920

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 20th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 19th-20th.	Rainfall. Day. 9h-18h. 20th.	Sunshine. Sunrise to Sunset. 20th.
Scotland.	Oban	c	bc. c	56	47	2	-	2.7
	Banff	bc. c	c. o	60	45	0.1	-	0.7
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	f. bc. b	bc. om	48	38	0.1	0.1	1.6
	Scarborough	o	om	50	43	-	-	0.0
	Skegness							
England, E.	Lowestoft							
	Felixstowe	b3	b	48	42	-	-	7.5
	Southend-on-Sea	oc	bc. b	49	37	-	-	3.1
England, S.E.	Tunbridge Wells	o. c. bc	bc. b	48	38	-	-	2.6
	Margate	b	b	48	37	-	-	6.6
	Ramsgate	*	*	50	40	-	-	7.1
	Folkestone	b	b. bc	52	39	-	-	6.9
	Hastings	f. bc. b	b	49	41	-	-	4.3
	Eastbourne	o. c. bc	b	51	43	-	-	5.0
	Brighton							
	Worthing	o. bc. b	b	48	42	-	-	2.7
	Littlehampton	o. om	bc	50	42	-	-	2.2
	Portsmouth (S'thorne)	+	+	49	43	-	-	0.4
	Bournemouth	*	*					
	Ventnor (I. of W.)	*	*					

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 19th-20th.	Rainfall. Day. 9h-17h. 20th.		Sunshine. Sunrise to Sunset. 20th.
England, N.W.	Douglas (I.O.M.)								0.2
	Blackpool	mc	o	52	46	-	-		0.5
	Southport	c. o	c. o	53	45	0.2	-		
Midlands.	Buxton								0.0
	Leamington Spa	o. c	o. c	45	44	-	-		0.0
	Malvern	m	m	45	43	-	-		0.0
	Bath	mo	mo	49	47	-	-		
Wales.	Rhyl								
	Colwyn Bay								7.0
	Llandudno	*	*	53	44	-	-		5.7
	Aberystwyth	c. b. b	c. c. o	58	43	-	-		
	Tenby								
	Swansea								
England, S.W.	Weymouth	o	o	53	49	-	-		0.0
	Teignmouth								
	Torquay								0.0
	Paignton	o7	o7	53	50	-	-		
	Penzance								
	Newquay								0.0
	Bude	c	c	54	49	-	-		3.4
	Ilfracombe	bc. c	c. o. c. bc	53	50	-	-		
	Weston-s-Mare								

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 19th	Weather. 13h-18h. 19th	Weather. 18h-21h. 19th	Weather. 21h-7h. 20th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h. mm.	Rainfall.† Night. 18h-7h. mm.	Sun. Hours.
Renfrew	o. o3f	o. 3f	o3f. o3f	o3f. o3f	55	47	44	-	-	1.4
Eskdalemuir	o. bc. o3f	o3f. b. o	bo3f	o3f. 3fc	50	36	30	-	-	1.5
Valencia (Cahir'ty)	bc. c	2c. c. r. o	coco	cbco	59	54	51	-	-	4.4
Baldonnel	c. o2f	bc. o. b. bc	bcc3f	bcc3f	57	44	36	-	-	4.5
Manchester (Ship Canal)	o3f. o3f	o3f. o3f	o3	o3f. bc-8fx	52	28	21	-	-	*
Ross on Wye	b. o. b3	o3fpd. pod	o3fpd	8o3f	62	39	36	-	-	0.0
Falmouth	o. o3f	o. o3f. c. o3f8	co. bcc	bo	53	49	45	-	-	0.0
Calshot (Hants)	o3f	c. o3f. b. b3f	b3f	b3f	49	38	34	-	-	0.0
Lympne (Folkestone)	o3f. c. o3f8c	b. 3c. f	b4	b3f. bbcx	45	31	26	-	-	6.3
Aberdeen	3f. 8f	3f. 8f	3fc. 8fc	2fc. w	56	43	38	-	-	1.1
Howden	o3f. w	3. w. o3f8	3fc. c. o3fc	3fc	49	34	33	-	-	0.0
Cranwell (Linc)	w. o3fc	b8fc. o3f8	c. o3fc	2fc	43	28	23	0.1	-	0.0
Felixstowe	3. b	3. b. 3c	b4	3f b	49	40	*	-	-	7.3
Shoeburyness	c. o. b. 3c	b. bc. 3	b	bbcx	48	32	26	-	-	4.1
Benson	o4. o3f	o4. o3f	o4. o3f	o4. o3f	42	23	24	-	-	*
S. Farnborough	o4. o3fbc	bc. o3f	o4. o3fbc	① o3f. x	42	22	19	0.3	-	0.0
London (Kew Obsy.)	o3fw	c. bc. [illegible]	bx. o. o3f	bc. o. o3f. 3f	42	25	21	-	-	0.0
Croydon	o3fc. 3fc	o3fc. b. bc. 3f	b3fc. 3f. w. x	b3f. x	45	27	*	Trace	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r,r, = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·6
12	Above 75	32·6 or above

SYMBOLS

Aurora ⚹ Solar halo ⊙
Rime ⚹ Lunar halo ◐
Glazed frost ~ Solar corona ◎
Glazed roads ⁂ Lunar corona ◐

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15h. G.M.T.	Humidity % 18h. G.M.T.
	24 Hours ended 9h G.M.T. 21st							Yesterday.		To-day.
Greenwich (Royal Observatory)	omd	o. b m	bxmbx	44	27	19	-	0.5	59	79
City (Bunhill Row)	*	*	*	*	*	*	*		*	*
Westminster (St. James's Park)	*	*	x	44	33	27	-		82	87
Regent's Park (Barrow Gate)						*				
Camden Sq. (British Rainfall)	om	om	*	42	28	21	-	*	92	97
Kensington Palace			*	42	27	19	-	*	93 (18h)	82
Hampstead Observatory	*	*	*	40	30	24	-	0.0	*	98

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total ..... Joules.

Milliwatts.
Average Rate.
Maximum Rate.

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

21st & 22nd NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.26 / 7.28	11.39 / 11.39	4.52 / 4.50
Greenwich	7.29 / 7.31	11.46 / 11.46	4.49 / 4.47
Wick	8.16 / 8.18	11.58 / 11.58	2.35 / 2.33
Valencia	8.12 / 8.14	12.21 / 12.21	4.28 / 4.26

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from .....h..... m.
to .....h..... m.

Star.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris			
δ Ursae Minoris			

NOTES ON THE WEATHER OF YESTERDAY.

Except for very slight local falls, the day was dry throughout the Kingdom. Sunshine was most abundant on the East and South-East coasts and in Wales 6 to 7 hours were recorded. Temperature reached 59° at Valencia but rose no higher than 42° at some stations in the South of England, including London. Fog prevailed in many localities.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B 21550 MONDAY 22nd NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1h., 7h., 13h. AND 18h.

STATIONS.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility. 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility. 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13h. G.M.T. 21st														18h. G.M.T. of 21st													
Renfrew															1029.0	+1	ENE	2	b3fe	40	91	4	-	-	-	-	-	
Eskdalemuir ...	1028.8	-1	ESE	2	o3f	46	85	4	2000	St	8	-	-	*	1030.1	+1	SE	1	o3fe	39	91	4	-	-	-	-	-	
Valencia (Cahirc'n)	1029.1	-1	-	0	b2f	45	55	5	-	-	-	-	-	*	1028.5	+1	N	1	b4g	52	55	6	-	-	-	-	-	*
Baldonnel ...	1019.9	-1	SE	3	o	55	75	8	2,000	St Cu	9	-	-	4	1020.6	0	SE	5	bc	58	86	8	2000	St Cu	3	Ac Cu	2	4
Manchester (Alex. Pk.)	1030.2	-2	SE	3	b3f	48	86	3	-	-	-	-	-	*	1030.2	+1	SE	3	b3fe	34	85	3	-	-	-	-	-	-
Ross on Wye ...	1029.5	-2	E	3	o2f	30	92	4	750	St	10	-	-	*	1029.7	0	ENE	2	bm	38	97	3	-	-	-	-	-	*
Falmouth	1024.9	-3	ESE	5	oq2f	47	86	5	-	St Cu	10	-	-	*	1025.2	+1	SE	4	c2f	47	85	5	-	-	-	St Cu	7	*
Calshot (Hants) ...	1028.6	-2	ESE	4	b1f	48	75	6	-	-	-	-	-	4	1029.3	+1	E	4	b3f	40	75	6	-	-	-	-	-	4
Lympne (Folkestone)	1029.8	-2	E	5	bcz	39	75	5	-	-	-	Ci St	5	*	1030.2	0	E	5	b3g	39	75	5	-	-	-	Ci	1	*
Aberdeen	1028.8	0	ESE	2	o2f	47	85	4	750	St	10	-	-	2	1029.1	+1	E	2	b2fe	42	92	4	-	-	-	-	-	2
Howden	1031.8	-2	-	0	o2f	34	97	3	<500	St	10	-	-	*	1029.8	-2	SSE	3	o5fo	39	97	1	<500	St	10	-	-	*
Cranwell (Linc.) ...	1031.9	0	ESE	1	o5fe	33	97	1	<500	St	10	-	-	*	1032.0	0	ENE	1	o5fe	29	97	1	<500	St	7	-	-	*
Felixstowe ...	1032.2	-2	ESE	3	bz	46	65	7	-	-	-	Ci St	2	3	1032.5	0	E	4	b3	45	65	7	-	-	-	-	-	3
Shoeburyness ...	1031.4	0	ESE	3	b	43	65	7	-	-	-	Ci St	2	*	1031.1	0	E	2	b	42	75	7	-	-	-	-	-	*
Benson	1030.0	-2	SE	1	b	38	97	2	-	-	-	-	-	*	1029.8	0	ESE	3	b	35	75	4	-	-	-	-	-	*
S. Farnborough	1029.7	-1	E	3	b2fe	41	97	4	<500	St	1	-	-	*	1030.1	0	ENE	2	b2fe	32	86	4	<500	St	2	-	-	*
London (Kew Obsy.)	1030.0	-3	E	3	b3fw	40	85	2	-	-	-	-	-	*	1030.4	0	E	3	b3fe	37	85	3	-	-	-	-	-	*
Croydon	1030.2	-1	E	4	b2f	44	75	4	-	-	-	Ci	2	*	1030.4	0	E	2	b3f	30	80	4	-	-	-	Ci	1	*
	1h. G.M.T. of 22nd														7h. G.M.T. of 22nd													
Renfrew ...															1030.4	0	-	0	o5f	31	97	1	<500	St	10	-	-	*
Eskdalemuir ...	1031.8	+1	-	0	cxW	25	65	6	-	-	-	A.Cu	8	*	1030.0	0	-	0	b	25	85	8	-	-	-	-	-	*
Valencia (Cahirc'n)	1021.6	0	ESE	5	bc	50	*	*	*	*	*	*	*	4	1022.8	+1	ESE	3	b	48	75	8	-	-	-	-	-	*
Baldonnel ...	1021.4	+1	-	0	b	41	85	3	2,000	Cu	2	-	-	*	1027.2	+1	-	0	bx	32	85	4	750	St	2	-	-	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	3	*	*	*	1031.2	-1	ESE	1	b3fx	29	92	3	-	-	-	-	-	*
Ross on Wye ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.9	0	NE	1	o4f	27	97	2	<500	St	10	-	-	*
Falmouth ...	1025.1	0	SE	4	b	46	75	8	-	St Cu	2	-	-	*	1026.2	+1	SE	4	bc	47	85	6	-	St Cu	6	-	-	*
Calshot (Hants) ...	1029.3	+1	ENE	3	b1f	39	92	6	-	-	-	-	-	2	1029.4	0	NE	3	b1f	36	85	6	-	-	-	-	-	3
Lympne (Folkestone c.)	1030.4	0	E	3	bm	36	85	5	-	-	-	-	-	*	1030.8	0	NE	2	bmx	33	85	4	-	-	-	Ci	1	*
Aberdeen ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1029.7	0	SSW	2	c3fex	38	92	2	-	-	-	A.Cu	8	2
Howden ...	1033.0	0	-	0	o7fe	31	97	0	<500	St	10	-	-	*	1032.9	0	-	0	o7fex	28	97	0	<500	St	10	-	-	*
Cranwell (Linc.)	1030.5	0	NE	1	bx	26	97	2	-	-	-	-	-	*	1032.5	0	NE	1	cx	23	97	1	<500	St	8	-	-	*
Felixstowe ...	1031.9	0	ESE	3	bz	44	75	7	-	-	-	-	-	3	1031.8	0	SE	2	b2f	31	97	5	-	-	-	-	-	2
Shoeburyness ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1031.2	0	-	0	b2fex	30	85	7	-	-	-	Cu St	2	*
Benson ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.4	0	-	0	bxf	23	97	4	-	-	-	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1030.3	0	-	0	o5fx	23	97	1	<500	St	10	-	-	*
London (M.O. 41. 1a.)	1030.8	0	*	*	*	32	*	*	*	*	*	*	*	*	1030.5	0	ENE	2	b7fx	28	97	0	-	-	-	-	-	*
Croydon ...	1031.4	0	ESE	2	b1fx	29	86	6	-	-	-	Cu St	1	*	1031.4	0	E	2	b2f	28	92	4	-	-	-	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7h. AND 18h.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	Barometer. ‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	Rainfall ‡ mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18h. G.M.T. of 21st					7h. G.M.T. of 22nd									24 HOURS ENDED 7h. 22nd						21st
Lerwick ...																50					
Stornoway ...	1028.4	49	S	2	o	1029.0	-2	47	-3	-	0	-	bc	0	-	53	40	om	o	o.b	*
Castlebay (Barra'l)	1026.3	50	S	3	b	1025.7	0	45	-8	S	4	-	o	3	-	53	44	o.bc	bc.b	b.o	2.8
Malin Head ...	1025.7	50	SSE	4	o	1025.7	0	50		S	4	-	o	5	-	53	47	o	o	o	
Blacksod Point	1024.8	47	SSE	3	c	1025.6	0	41	-9	SSE	1	-	bcm	2	-	53	40	c	c	bcm	1.1
Roche's Point ...	1020.7	51	SE	3	bc	1021.1	0	46	-4	SE	3	-	b	2	-	54	45	bc	bc	bc.b.	*
Birr Castle ...	1023.9	50	SE	4	o	1024.9	+1	50	-2	SE	4	-	o	4	0.4	53	49	obg	og.o	og.o	*
Donaghadee ...	1024.4	47	SE	2	o	1024.8	*	45	-7	SE	2	-	c	*	-	52	44	c.og.	og	o.c	0.0
Liverpool (Sidston)	1027.1	46	ESE	2	bcm	1027.7	0	45	-5	S	2	-	bcm	2	-	50	45	omg	bcm	bcm	*
Holyhead ...	1028.9	44	SE	4	m	1030.5	0	31	-8	SE	3	-	om	2	-	40	31	bm	bm	c om	3.4
Pembroke (St. Ann's Head)	1027.3	41	-	0	bmx	1028.0	0	37	-10	SE	2	-	bw	0	-	54	33	bz	bzm	bxm	5.0
Scilly (St. Mary's)	1026.5	44	E	3	bcm	1027.3	0	45	-1	SE	3	-	om	4	-	49	43	cm	cm	bm.cm	1.8
Jersey (St. Aubin)	1024.3	49	SE	2	o	1024.6	0	48	-3	SSE	3	SE	o	4	-	52	47	o	o	o	0.0
Portland Bill ...	1025.5	42	E	4	b	1026.4	0	39	-3	E	3	-	b	3	-	44	35	o	o.b	bwx.	2.3
Dungeness ...	1026.0	48	E	6	c	1026.8	0	47	0	ESE	5	-	b	5	-	51	43	bc	bc.o	c bc.b.	*
Wick	1029.2	44	E	4	b	1029.1	0	42	+3	ESE	3	-	b	3	-	45	39	b	bc.b	b	*
Nairn	1027.1	48	S	2	b	1028.6	0	44	-4	SSW	3	-	bm	2	-	49	37	bc.bm	bm	bcme	*
Leith	1026.5	38	-	0	b	1026.7	*	30	-10	-	0	-	bcx	0	-	47	28	bc	bc.b.	bxbc	5.8
Tynemouth ...	1029.2	43	E	1	b	1030.2	0	37	-9	SE	1	-	m	1	-	49	35	om.c	c.bz	by.cm	*
Spurn Head ...	1031.8	35	SW	3	f	1032.0	0	33	-3	SSW	2	-	f	2	-	39	32	bcf	f	bcf.	*
Yarmouth (Gorleston)	1031.6	41	SW	2	b	1032.3	0	33	-1	[illegible]	2	-	fw	2	0.1	44	30	f.bg	bg	fw.	*
Clacton-on-Sea ...	1031.7	46	SE	4	b	1032.0	0	44	+4	ESE	3	-	b	2	-	47	39	b	b	b	7.2
Hornsea ...	1031.2	45	E	3	b	1031.3	0	41	-2	NE	3	-	bz	2	-	46	38	bcz	bcz.b	bz	7.1
Nottingham ...	1031.9	34	E	2	fe	1032.8	*	30	-4	E	2	-	fe	*	-	34	23	ofe	fe	fe	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4.

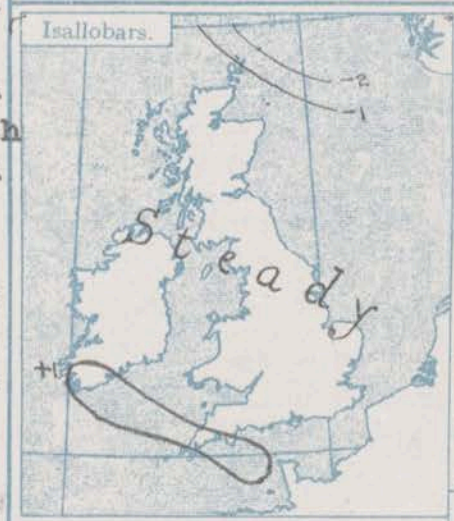
M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 21.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fine, local mist or fog.	Very bad	V. Smooth
2. E. England	Fine.	Indiff.	Smooth
3. E. Midlands	Fine, some mist, frosty.	Very bad	-
4. W. Midlands	Dull, fog or mist, frosty.	Bad	-
5. S.W. England	Fair to fine, dull locally	Good	Mod.
6. South Wales	Dull, misty.	Fair	"
7. North Wales	Fine.	Excellent	V. Smooth
8. N.W. England	Fine, some fog, frosty.	Indiff.	Smooth
9. N. Midlands	Fine; foggy, frosty.	Bad.	-
10. N.E. England	Fine, some fog.	"	Smooth
11. E. Scotland	Fine, mist or fog.	"	V. Smooth
12. S.W. Scotland	Fine, frosty.	V. Good	Smooth
13. Isle of Man	Fair, misty.	Indiff.	"
14. N.& N.W. Scotland	Fair or fine, frosty.	"	"
15. Hebrides	Dull.	Fair	Slight
16. Orkneys and Shetlands	Fine.	Indiff.	Calm.
17. N.W. Ireland	Fine.	V. Good	Smooth
18. N.E. Ireland	Fair, misty.	Indiff.	"
19. S.E. Ireland	Dull.	"	Mod.
20. S.W. Ireland	Dull.	V. Good	Slight

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
8	21st	0341	51	45
3	21st	1025	53	51



Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0–12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. thunder. thunderstorm.
SEA DISTURBANCE.— Rough. High.

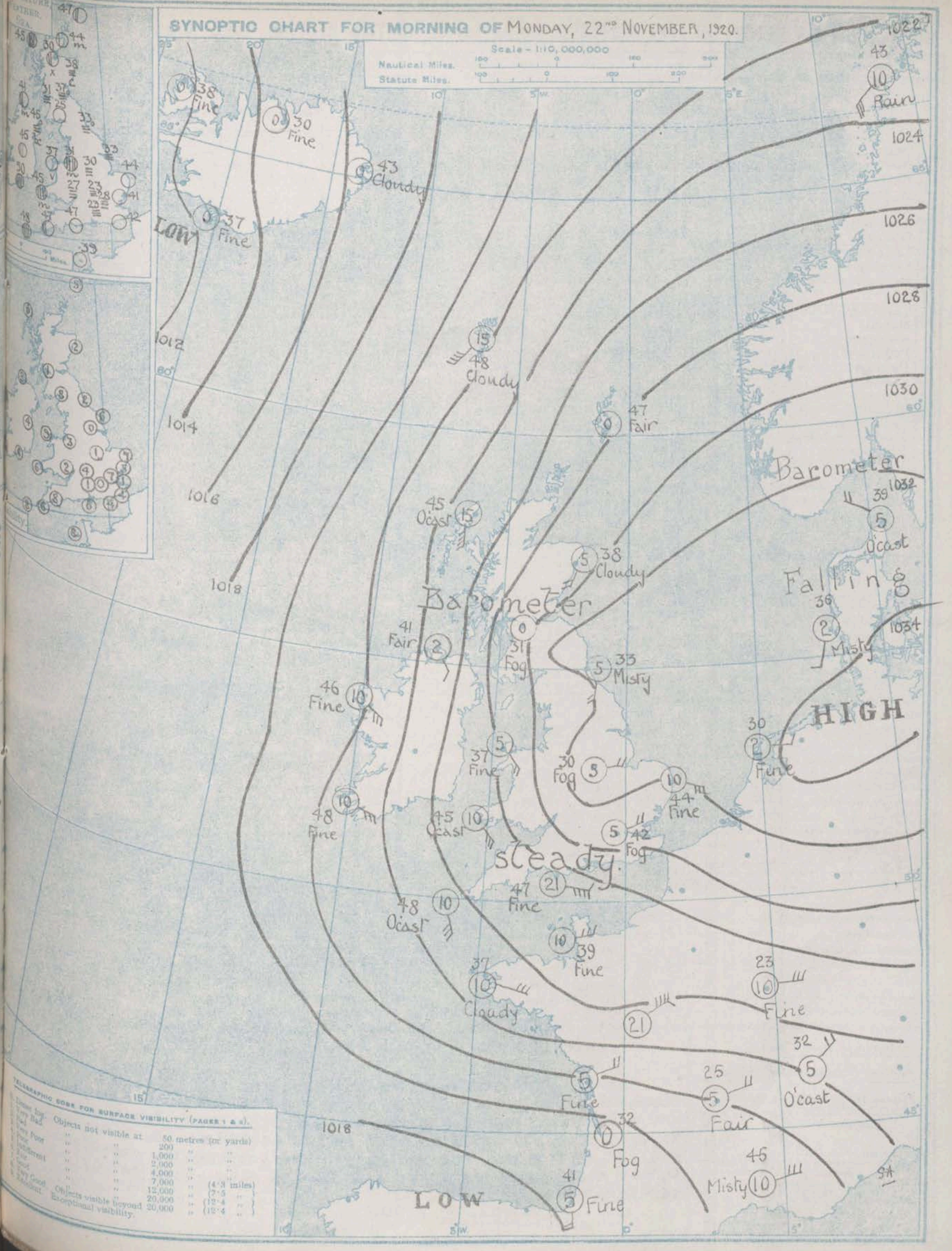
GENERAL INFERENCE from observations received up to 9h. G.M.T.

The Continental anticyclone will continue and the weather will be fair to fine for the next few days with mist or fog and frost at night especially over the inland districts.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Monday, 21st November, 1920.	Further Outlook.
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	Light to moderate winds from between E and S.E.; fine; mist or fog at night; cold.	Fair to fine and rather cold for the next few days.
11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland	Light to moderate Southerly winds; fair to fine, mist at night; rather cold.	
19. S.E. Ireland 20. S.W. Ireland	Same as 1 - 10.	

E.V.N

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 10.00. G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF MONDAY, 22nd NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
HIGH
LOW
Barometer steady.
Barometer Falling
1012
1014
1016
1018
1022
1024
1026
1028
1030
1032
1034
Rain
Fine
Cloudy
Fair
O'cast
Misty
Fog
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
Objects not visible at
Objects visible beyond
Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. Nov. 22...

Monday 22nd Nov.

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 21st

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 20-21	Rainfall. Day. 9h-18h. 21st	Sunshine. Sunrise to Sunset. 21st
Scotland.	Oban							
	Banff	b bc	b	47	39	-	-	2.6
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	cm	cf	45	31	0.2	-	0.0
	Scarborough							
	Skegness							
England, E.	Lowestoft							
	Felixstowe	b	b	46	42	-	-	7.8
	Southend-on-Sea	b	b	44	37	-	-	7.3
England, S.E.	Tunbridge Wells	b	b	43	29	-	-	6.9
	Margate	b	b	44	35	-	-	7.2
	Ramsgate	*	*					
	Folkestone	b	b	50	36	-	-	7.2
	Hastings	f. mc	b	45	35	-	-	7.2
	Eastbourne	b	b	45	42	-	-	7.1
	Brighton	b	b	45	34	-	-	6.8
	Worthing	b	b	45	36	-	-	7.1
	Littlehampton							
	Portsmouth (S'thsea)	*	*	45	36	-	-	7.2
	Bournemouth	*	*	48	36	-	-	6.6
	Ventnor (I. of W.)	*	*	49	42	-	-	7.8

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 20-21	Rainfall. Day. 9h-18h. 21		Sunshine. Sunrise to Sunset. 21st
England, N.W.	Douglas (I.O.M.)								2.8
	Blackpool	mb	mb	41	36	-	-		4.3
	Southport	o.c.bc.b	bm.b	40	34	-	-		
	Morecambe								
Midlands.	Buxton								3.0
	Leamington Spa	bo	cm	42	33	-	-		
	Malvern								0.2
	Bath	m.o.c	o.b	41	36	-	-		6.9
Wales.	Rhyl	bc	bc	45	34	-	-		4.0
	Colwyn Bay	*	*	50	36	-	-		7.3
	Llandudno	b	b	52	36	-	-		
	Aberystwyth								
	Tenby								
	Swansea								6.7
England, S.W.	Weymouth	bc. b	b. bc. b	50	43	-	-		
	Teignmouth								5.5
	Torquay	bc. c. bc	bc. b	51	44	-	-		3.6
	Paignton	bc	bc	53	43	-	-		0.0
	Penzance	o. c	o	50	46	-	-		0.5
	Newquay	o	o. b	48	43	-	-		6.9
	Bude	b	b	53	37	-	-		6.2
	Ilfracombe	bo. b	b	49	~~37~~ 43	-	-		3.8
	Weston-s-Mare	bc	bc. c	47	37	-	-		

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 21st	Weather. 13h-18h 21st	Weather. 18h 21st-1h 22nd	Weather. 1h-7h 22nd	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h mm.	Rainfall.† Night. 18h-7h mm.	Sun. Hours.
Renfrew	c.o.zf	bc.c.zf b3f	c.o.zf	o5fx	50	31	26	-	-	0.1
Eskdalemuir	o3f.bbc.b3f	b3f	bx b.bcx	b.bcx	46	25	17	-	-	5.5
Valencia (Cahire'ty)	bc.c.c.o	c.o.bc.c	bc.c	b.bc.b.	55	48	44	-	-	0.4
Baldonnel	bbc.zf	b. bc.zf	4-5f.4-5f.bbc.f	x bbc.zf.zf	50	31	24	-	-	5.8
Manchester (Alex. Pk)	b.4-5f.x.bc.f	b3f.b.3f	b3fc ox	b3f	43	28	15	Trace	-	*
Ross on Wye	o.3f	b3f.c.o.3f	bo.3f.4-5f.x	o.w.5f.x	40	25	25	-	-	0.2
Falmouth	o. o.2f	o.2f.4f	b. bc	b bc	49	45	42	-	-	0.0
Calshot (Hants)	b.2f.b.if	b.if.3f.b.bc	b.if	bx	48	34	25	-	-	7.2
Lympne (Folkestone)	bbc.f.bbc.zf	b. bc.zf	b. bc.q.f.b	b.zf.bbcx	40	30	20	-	-	7.5
Aberdeen	3fc.o.2f	o.2f.5fc	2fc	x 3fc	48	37	27	-	-	0.6
Howden	o.3fc	3fc.4-5fc	c 4-5fc	c.4-5fc x	36	28	27	-	-	0.0
Cranwell (Lincs)	c.4-5fc	3fc.4-5fc	c.3fx.	3f x.4-5f	34	23	17	0.2	-	0.0
Felixstowe	z. bbc	b. bcz	bx.	bx	47	30	8	-	-	7.5
Shoeburyness	bbc.bbc	b. bc.c	b	2fx	44	28	16	-	-	7.6
Benson	b	b	bx	bx.2f	39	22	18	-	0.2	*
S. Farnborough	x.4-5f.bc.zf	b. bc	bx	4-5f	43	18	14	-	Trace	4.7
London (Kew Obsy.)	3f.bx.w	w.b. 3f.3f	bx 3fx	c.4-5f x	41	28	19	Trace	-	2.6
Croydon	bbc.bx.3f.zf	b. bc.zf	bx.f.3fx (1)	bbc.if.x.2f	44	~~28~~ 24	8	Trace	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air: humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·4
3	8-12	3·5- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·6
12	Above 75	32·7 or above

SYMBOLS—

Aurora — Solar halo
Rime — Lunar halo
Glazed frost — Solar corona
Glazed roads — Lunar corona

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 18 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 22nd							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	b	b	bxf	42	23	15	-	6.9	77	87
City (Bunhill Row)	*	*	*	*	*	*	*		*	*
Westminster (St. James's Park)	*	*	*	44	34	27	-		63	95
Regent's Pk (Botanic Gdn)	*	*	*	*	*	*	*	2.59	*	*
Camden Sq. (British Rainfall)	*	*	*	38	27	20	-	*	*	97
Kensington Palace	b bc	b bc	*	42	27	20	-	*	83 (18h)	92
Hampstead Observatory	*	*	*	40	31	27	0.3		*	88

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total ..... Joules.

Milliwatts.

Average Rate.

Maximum Rate.

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

22nd & 23rd Nov. 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.25 / 7.29	11.39 / 11.39	3.50 / 3.49
Greenwich	7.31 / 7.32	11.46 / 11.46	4.1 / 4.0
Wick	8.18 / 8.20	11.58 / 11.58	3.38 / 3.38
Valencia	8.14 / 8.15	12.27 / 12.27	4.40 / 4.39

Photographic Record of Pole Star (Polaris) and of δ Ursæ Minoris at Greenwich Observatory:

Exposure from 21st ....h.....m.
to 22nd ....h.....m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	13	0	12	50	99
δ Ursæ Minoris	13	0	12	27	96

NOTES ON THE WEATHER OF YESTERDAY.

The day was rainless over the whole of the British Isles. Sunshine records exceeding 7 hours were of common occurrence, and under the generally clear sky at night sharp frost was experienced, the minimum being as low as 18° at South Farnborough and 22° at Benson. During the day the temperature exceeded 50° at a few stations only, and did not rise above 34° at Nottingham and Cranwell.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON

BRITISH SECTION. No. B21,551 TUESDAY, 23RD NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	18H. G.M.T. 22ND													
Renfrew	1031·4	0	-	0	06fc	30	97	1	<500	St	10	-	-	x
Eskdalemuir	1031·2	0	S	1	bz2	45	45	7	-	-	-	-	-	*
Valencia (Cahire'n)	1024·0	-1	SSE	4	b	54	75	8	3,000	StCu	2	-	-	4
Baldonnel	1028·2	0	S	3	bz	48	75	5	3,000	Cu	3	-	-	*
Manchester (Alex. Pk.)	1032·5	0	SE	1	07f	30	97	0	<500	St	10	-	-	x
Ross on Wye	1031·7	0	ENE	2	04f	39	97	2	<500	St	10	-	-	*
Falmouth	1027·1	0	E	4	b	53	65	7	-	-	-	-	-	*
Calshot (Hants) *	1029·6	-1	NE	3	b	45	75	5	-	-	-	-	-	3
Lympne (Folkestone)	1030·0	-1	NE	3	b1f	45	65	6	-	-	-	-	-	*
Aberdeen	1030·3	0	SSW	1	b2f	44	75	5	-	-	-	-	-	2
Howden	1033·3	0	-	0	08fc	33	97	0	<500	St	10	-	-	*
Cranwell (Lincs)	1033·0	0	N	1	c4f	30	97	2	<500	St	8	-	-	x
Felixstowe	1031·5	-1	ENE	3	b	48	75	7	-	-	-	-	-	*
Shoeburyness	1030·9	-2	E	3	b1f	48	65	7	-	-	-	-	-	*
Benson	1030·3	-2	-	0	b2f	36	85	4	-	-	-	-	-	*
S. Farnborough	1030·6	-2	-	0	04f	31	97	1	<500	St	10	-	-	*
London (Kew Obsy.)	1030·4	-2	-	0	08fx	29	97	0	<500	St	10	-	-	*
Croydon	1030·4	-2	ENE	3	b3f	42	75	3	-	-	-	-	-	*
	1H. G.M.T. OF 23RD													
Renfrew														
Eskdalemuir	1031·9	-1	N	1	b	27	46	5	-	-	-	-	-	*
Valencia (Cahire'n)	1021·8	-2	SE	4	bc	47	*	*	*	*	*	*	*	4
Baldonnel	1027·4	-2	-	0	bx	36	85	4	-	-	-	-	-	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Falmouth	1025·4	-3	E	5	bc1fc	46	85	6	-	StCu	4	-	-	*
Calshot (Hants)	1027·7	-3	ENE	3	b3f	37	92	3	-	-	-	-	-	2
Lympne (Folkestone)	1028·2	-3	NE	3	b2f	40	75	4	-	-	-	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Howden	1032·3	-2	-	0	05fc0	30	97	0	<500	-	-	-	-	*
Cranwell (Lincs)	1031·2	0	NNW	1	05f	28	97	1	2000	St	10	-	-	*
Felixstowe	1030·4	-1	E	3	b1f	45	75	6	-	-	-	-	-	1
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*
London (M.O. at 1H.)	1029·2	-2	*	*	*	28	*	*	*	*	*	*	*	*
Croydon	1029·2	-3	-	0	08fx	32	97	0	<500	St	10	-	-	*

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	18H. G.M.T. OF 22ND													
Renfrew	1031·4	+1	SSW	2	08fc	29	97	0	<500	St	10	-	-	x
Eskdalemuir	1032·5	0	-	0	b	27	65	7	-	-	-	-	-	*
Valencia (Cahire'n)	1024·0	0	SE	4	b	48	75	8	3,000	StCu	2	-	-	4
Baldonnel	1028·6	0	SE	2	b	40	92	4	2,000	Cu	1	-	-	*
Manchester (Alex. Pk.)	1032·2	0	-	0	08f	29	97	0	<500	St	10	-	-	x
Ross on Wye	1031·4	+1	NE	2	05fx	31	97	1	<500	St	10	-	-	*
Falmouth	1026·7	+1	NE	5	bq.2f	50	75	5	-	Cu	1	-	-	*
Calshot (Hants) *	1029·7	+1	NE	2	b2f	40	75	4	-	-	-	-	-	3
Lympne (Folkestone)	1029·9	0	ENE	3	b2f	38	75	5	-	-	-	Ci	1	*
Aberdeen	1030·2	+1	SSW	2	b2f	39	45	5	-	-	-	-	-	2
Howden	1033·3	0	-	0	08fc	32	97	0	<500	St	10	-	-	*
Cranwell (Lincs)	1032·8	+1	N	1	05f	28	97	1	<500	St	8	-	-	x
Felixstowe	1031·3	0	NE	2	b2f	37	97	5	-	-	-	-	-	*
Shoeburyness	1030·2	-1	-	0	b	35	85	7	-	-	-	Ci	1	*
Benson	1031·1	0	-	0	b4f	25	97	2	-	-	-	-	-	*
S. Farnborough	1030·6	+1	WNW	1	c3f	25	97	2	<500	St	7	-	-	*
London (Kew Obsy.)	1030·7	+1	NE	2	08fc	37	85	0	<500	St	10	-	-	*
Croydon	1031·3	+2	NE	2	b3f	37	97	3	-	-	-	-	-	*
	7H. G.M.T. OF 23RD													
Renfrew	1030·7	0	SE	1	7fexI	25	97	0	<500	St	10	-	-	x
Eskdalemuir	1030·5	-1	N	2	bx2	31	65	6	-	-	-	-	-	*
Valencia (Cahire'n)	1019·4	-3	E	4	b	49	75	8	3000	Cu	1	-	-	x
Baldonnel	1025·0	-2	-	0	bx	38	65	4	-	-	-	-	-	*
Manchester (Alex. Pk.)	1029·8	-2	-	0	b7fx	26	97	0	-	-	-	-	-	x
Ross on Wye	1028·1	-2	NE	1	02f	33	97	3	<500	St	10	-	-	*
Falmouth	1023·0	-2	E	5	01f	47	92	6	-	StCu	10	-	-	*
Calshot (Hants)	1025·8	-4	NE	3	b3f	35	85	3	4200	StCu	2	-	-	3
Lympne (Folkestone)	1026·6	-2	ESE	3	bxm	38	85	5	-	-	-	-	-	*
Aberdeen	1030·0	0	W	2	b1f	29	75	6	-	-	-	-	-	2
Howden	1030·8	-1	-	0	05fc0	29	97	0	<500	St	10	-	-	*
Cranwell (Lincs)	1030·0	0	NNW	1	cI	26	97	2	<500	St	8	-	-	*
Felixstowe	1028·4	-1	E	5	b	46	65	8	-	-	-	A.Cu	1	4
Shoeburyness	1027·3	-3	NE	1	bx	40	75	7	-	-	-	CuCu	1	*
Benson	1027·0	-2	E	2	b3fx	28	97	2	-	-	-	-	-	*
S. Farnborough	1027·3	-2	-	0	08fx	24	97	1	<500	St	10	-	-	*
London (Kew Obsy.)	1027·0	-2	-	0	c6fx	27	97	0	750	St	8	-	-	*
Croydon	1027·0	-3	-	0	b3fx	29	97	2	-	-	-	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours	Temperature Temp. °F.	Temperature Change in 24 hours	Wind Direc	Wind Force 0-12	Direc. of Upper Cloud.	Weather.	Sea 0-9	Rainfall in 24 hrs.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours.
	18H. G.M.T. of 22ND					7H. G.M.T. of 23RD									24 HOURS ENDED 7H. 23RD						22ND
Lerwick	1027·4	46	S	1	b	1029·0	+1	39	-8	-	0	-	bx	0	-	50	39	bcm	bcm	b	*
Stornoway	1026·9	47	WSW	4	c	1027·2	0	46	+1	-	0	-	b	0	-	47	44	bc	bc.c	b	0·5
Castlebay (Barra Is)	1027·3	48	S	5	0	1025·9	0	48	-2	SE	5	-	bm	5	-	50	47	0.cm	cm.c	0bm	0·0
Malin Head	1026·5	51	SSE	2	bcm	1024·4	+1	40	-1	SSE	1	-	bm	1	-	45	39	bcm	bcm	bm	4·0
Blacksod Point	1024·2	47	SE	2	bc	1025·7	-5	43	-3	SE	4	-	bc	4	-	54	46	b	bc	bc.bcq	*
Roche's Point	1027·1	50	SSE	3	c	1022·9	-1	49	-1	SE	4	-	c	4	-	51	49	0.c.0.	0.c	c	*
Birr Castle	1026·8	44	SE	1	c	1023·7	*	32	-13	ESE	1	-	c	*	-	50	32	c	cq	qxc	2·9
Donaghadee	1028·8	45	SSW	2	bm	1026·8	-3	48	+3	SSE	3	-	bm	3	-	50	43	bcm	bm	bm	*
Liverpool (Bidston)	1031·2	33	SE	4	f	1028·5	-1	35	+4	SE	3	-	f	3	-	36	30	bf	bf.	f	4·0
Holyhead	1028·9	42	E	3	bz	1025·7	0	42	+5	E	3	-	br	1	Trace	53	34	bz	bz	bx	6·7
Pembroke (St. Ann's Head)	1028·4	44	E	3	bm	1025·0	-1	42	-3	E	3	-	bm	3	-	49	40	cm.bm	bm	bm	6·4
Scilly (St. Mary's)	1025·3	50	ESE	4	b	1022·1	-2	49	+1	ESE	4	SE	bc	6	-	52	47	0.b.	b.	b.bc	7·1
Jersey (St. Aubin)	1026·1	45	ENE	4	b	1022·3	-2	39	0	ENE	3	-	b	3	-	47	25	b.	b.	bwx	8·0
Portland Bill	1028·4	46	ENE	5	bm	1025·9	-5	40	-7	ENE	6	-	bm	6	-	47	38	bm	bm	bm	*
Dungeness	1028·8	46	ENE	4	b	1025·4	-2	41	-1	E	4	-	b	4	-	49	41	b	b	b	*
Wick	1027·7	38	NW	2	bm	1028·4	0	33	-11	SW	1	-	bm	1	-	46	29	bm	bm	bm	*
Nairn	1028·2	31	-	0	b	1028·4	*	26	-4	-	0	-	bx	0	0·2	39	25	bc	bc	bx	4·5
Leith	1030·8	36	NW	1	f	1030·4	0	27	-10	W	1	-	bm	1	-	37	25	cm.c	cmf	fcx.bm	*
Tynemouth	1032·0	35	SSW	2	f.	1030·4	0	33	0	SSW	1	-	bf	2	-	39	31	f.	f	f	*
Spurn Head	1032·1	40	NW	1	fW	1029·8	-1	37	+4	WNW	1	-	f	2	-	44	30	f.bm	bmf.	bmf.	*
Yarmouth (Gorleston)	1030·8	47	E	3	b	1028·5	-1	47	+3	E	4	-	bw	2	-	49	44	bz.b.	b	bc.bwx	7·6
Cleeton-on-Sea	1030·6	43	NNE	3	b	1027·7	-2	45	+4	NE	3	-	bc	3	-	50	35	bz	bz	b.bcz	7·0
Nottingham	1031·7	31	NE	1	fE	1030·0	*	33	+3	NE	2	-	fe	1	0·2	33	28	fE.	fE.	fe	0·0

10239

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4.

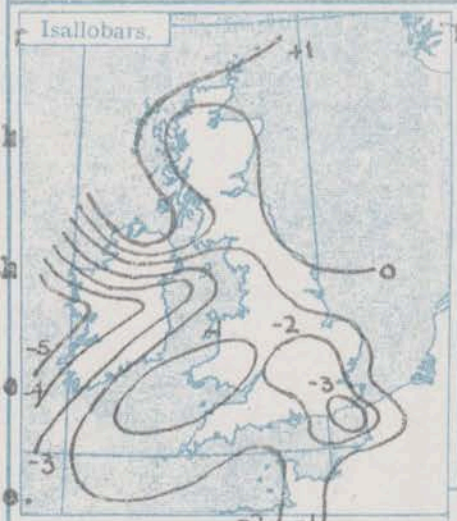
M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 23.11.20.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Foggy, Frosty.	V.poor.	Slight
2. E. England	Fine, clear.	V.good.	"
3. E. Midlands	Frosty.	Bad	-
4. W. Midlands	Foggy, Frosty.	Dense fog	-
5. S.W. England	Dull, misty	Good	R.rough.
6. South Wales	Fine, misty.	Fair.	Slight.
7. North Wales	Fine, clear.	ll.	V.smooth
8. N.W. England	Foggy.	V.poor.	Slight.
9. N. Midlands	Dull, some fog.	"	-
10. N.E. England	Fine, " "	"	Smooth
11. E. Scotland	Fine, hazy.	Fair	V.smooth
12. S.W. Scotland	Fine, frosty	"	Slight.
13. Isle of Man	Fine, misty	"	"
14. N.& N.W. Scotland	Fine, frosty.	"	V.smooth
15. Hebrides	Fine.	Good	Calm.
16. Orkneys and Shetlands	"	Indiff.	"
17. N.W. Ireland	Fair	Fair	Moderate
18. N.E. Ireland	Fine, misty.	"	Slight.
19. S.E. Ireland	Fine to cloudy, frost locally.	"	Moderate.
20. S.W. Ireland	Fine.	V.good.	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
5	22nd	0838	53	45
3	22nd	1020	53	48



Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. rain falling. snow. sleet. hail. fog. mist. T thunder. R thunderstorm.
SEA DISTURBANCE.— Rough. High.

GENERAL INFERENCE from observations received up to 9h.

The continental anticyclone will maintain fine weather generally over the British Isles for a day or two, with sharp frost at night over the inland districts of England and Scotland.

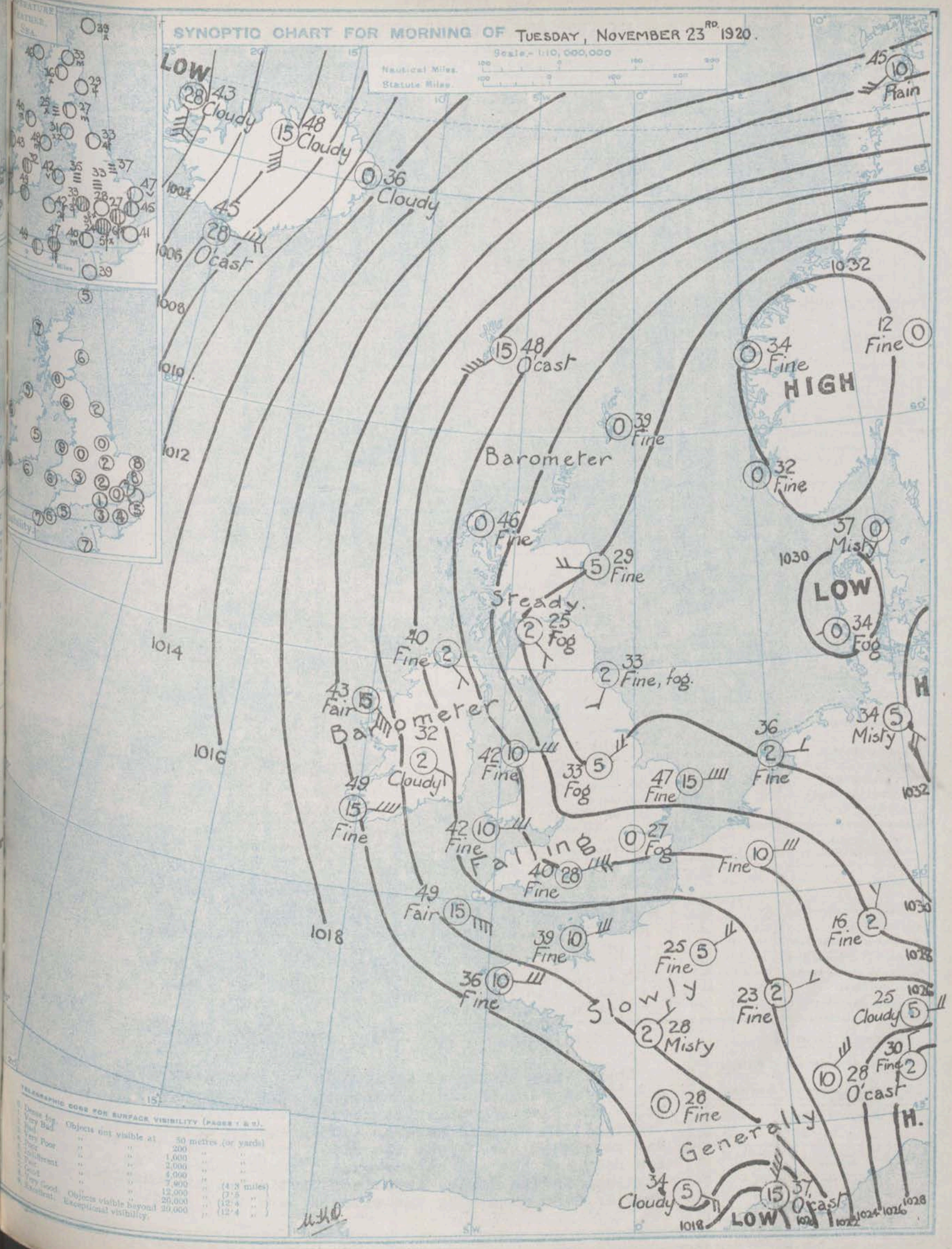
Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Tuesday, 23rd November 1920
1. S.E. England 2. E. England	Easterly wind, fresh to strong at times on the Coast; fine visibility fair to good; cold.
~~3. E. Midlands~~ 4. W. Midlands	Moderate Easterly wind; fine, visibility fair to good; cold.
5. S.W. England 6. South Wales	as 1 - 2
~~7. North Wales~~ 8. N.W. England 9. N. Midlands	Light to moderate Easterly wind; fine, visibility mainly fair to good, but some mist at night; cold.
~~10. N.E. England~~ 11. E. Scotland 12. S.W. Scotland	Light Southerly breezes; fine, visibility mainly fair to good but mist or fog at night; cold.
13. Isle of Man	as 7 - 9
~~14. N.& N.W. Scotland~~ 15. Hebrides 16. Orkneys and Shetlands	Light to moderate Southerly breezes; fair to fine, visibility fair to good; rather cold.
~~17. N.W. Ireland~~ 18. N.E. Ireland	Moderate SE wind; fair to fine, visibility fair to good, rather cold.
~~19. S.E. Ireland~~ 20. S.W. Ireland	as 1 - 4

Further Outlook.

Fair to fine for two or three days over England and Eastern Scotland, but further outlook uncertain for Ireland and Western Scotland.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 10.00

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF TUESDAY, NOVEMBER 23RD 1920.
Scale.- 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
HIGH
LOW
H
H.
LOW
Barometer
Barometer
Falling
Steady.
Slowly
Generally
Fine
Cloudy
O'cast
Fog
Misty
Fair
Rain
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0 Dense fog. Objects not visible at 50 metres (or yards)
1 Very Bad " " 200 " "
2 Bad " " 1,000 " "
3 Very Poor " " 2,000 " "
4 Poor " " 4,000 " "
5 Moderate " " 7,900 " (4·8 miles)
6 Good " " 12,000 " (7·5 ")
7 Very Good " " 20,000 " (12·4 ")
8 Excellent. Objects visible beyond Exceptional visibility. 20,000 " (12·4 ")
M.H.O.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No 328.

Tuesday, 23rd November

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 22nd

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 21st-22nd	Rainfall. Day. 9h-18h. 22nd	Sunshine. Sunrise to Sunset. 22nd		STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 21st-22nd	Rainfall. Day. 9h-18h. 22nd	Sunshine. Sunrise to Sunset. 22nd
Scotland.	Oban	b	b	49	34	-	-	5·2	England, N.W.	Douglas (I.O.M.)							1·5
	Banff	bc.b.	b	45	34	-	-	4·3		Blackpool	m	o.c.	37	26	-	-	1·0
	Montrose									Southport	x.fo	o.c.o.f	35	27	-	-	6·0
	St. Andrews	x.	x.	38	29	-	-	3·0		Morecambe	x.	x.	36	28	-	-	
England, N.E.	Harrogate	of	of	34	31	-	-	0·0	Midlands.	Buxton							0·0
	Scarborough									Leamington Spa	of	of	32	24	-	-	
	Skegness	b.	b	44	23	-	-	5·5		Malvern							6·3
England, E.	Lowestoft									Bath	b.	b	40	28	-	-	6·0
	Felixstowe	b.	b	47	34	-	-	7·5	Wales	Rhyl	x.b	b	50	25	-	-	6·8
	Southend-on-Sea	mx.b.	b	49	32	-	-	7·1		Colwyn Bay	x.	x.	50	31	-	-	7·2
England, S.E.	Tunbridge Wells	b.	b	48	29	-	-	7·2		Llandudno	b	b.	51	31	-	-	7·8
	Margate	b.	b	48	38	-	-	7·6		Aberystwyth	o.c.b	b.bc.	52	34	-	-	
	Ramsgate	*	*	47	40	-	-	7·5		Tenby							
	Folkestone	b.	bc	48	35	-	-	7·0		Swansea							6·8
	Hastings	b.	b	48	35	-	-	7·8	England, S.W.	Weymouth	b.	b	47	34	-	-	
	Eastbourne	b.	b	48	32	-	-	7·6		Teignmouth							6·7
	Brighton	b.	b	48	33	-	-	7·4		Torquay	b.	b	52	46	-	-	6·1
	Worthing	b.	b	46	34	-	-	7·5		Paignton	b.	b	51	45	-	-	7·9
	Littlehampton	b.	b	48	30	-	-	7·0		Penzance	b.	b	53	47	-	-	7·2
	Portsmouth (S'thsea)	x.	x.	47	35	-	-	7·2		Newquay	bz	bz	52	40	-	-	7·2
	Bournemouth	*	*	45	30	-	-	7·1		Bude	wxb.	b	51	37	-	-	6·9
	Ventnor (I. of W.)	*	*	48	42	-	-	7·4		Ilfracombe	b.	b	47	36	-	-	6·2
										Weston-s-Mare	b.	b	41	29	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 22nd	Weather. 13h-18h 22nd	Weather. 18h 22nd-11h 23rd	Weather. 11h-7h 23rd	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h. mm.	Rainfall.† Night. 18h-7h. mm.	Sun. Hours.
Renfrew	o6·8f.	3fx	6·8fe	6·8fe I	32	24	26	-	-	0·0
Eskdalemuir	bx1f.	b1f.	bx	bx	45	21	14	-	-	7·2
Valencia (Cahirc'n)	b.b.bc	b.bc.b.bc	b.bc	b.bc	53	45	40	-	-	5·8
Baldonnel	zb.bc	b.bc2f.	b2f	xb	50	29	25 24	-	-	6·1
Manchester (Alex. Pk)	b3f1b8f	6-8f.	6-8fx	6-8fx	32	21	15	-	-	*
Ross on Wye	o4-5fx.	o4-5fx	o4-5f	o4-5f o3f	33	27	31	-	-	0·0
Falmouth	b.bc.b	b.b.bc2f.	b.bc.ife	b.ofe	54	45	41	-	-	7·5
Calshot (Hants)	b2f.b2f.	b2f	2f.3f	3fx	46	34	27	-	-	7·6
Lympne (Folkestone)	b.bc.b2f1f	b.b.bc1f2f	b.bc1f.b2f	bx2f	46	32	29	-	-	7·9
Aberdeen	2fc.2f.	2f.	2f 1f	2f 1f	44	28	19	-	-	4·5
Howden	6-8f2 V.	o6-8f68fc	co 6-8fe	co 6-8fe	34	29	29	-	-	0·0
Cranwell (Lincs)	b.bcx4-5fx	5fx.	4-5fx	4-5f I	32	25 22	25	-	-	2·5
Felixstowe	b	b2f.	b.bc b.	1f. b.bc	49	35	*	-	-	7·0
Shoeburyness	x1f	b.b.bc	b.bc.b.	b.bcx	49	28	23	-	-	6·5
Benson	b	b	bx	2fx	37	20	20	-	-	*
S. Farnborough	x o4-5f	o6-8fVcaf	bc.c.bx	o4-5fx	31	22	19	-	-	0·0
London (Kew Obsy.)	6-8f V	x 6-8fc	bx3fx6-8fx	c-8fx	37	24	22	-	-	0·0
Croydon	~~[illegible]~~	b3f.	b bcx3f 4-8f 6-8f	b2fx bo2f 4-3f	43	24	*	Trace	-	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:- R = heavy rain, rr = continuous moderate rain, r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 10 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·6
12	Above 75	32·7 or above

SYMBOLS—

Aurora. Solar halo. Rime. Lunar halo. Glazed frost. Solar corona. Glazed roads. Lunar corona.

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9H G.M.T. 23rd							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	fx	bx	bmx	45	28	21	0·3	6·1	78	83
City (Bunhill Row)	*	*	*	*	*	*	*	0·0	*	*
Westminster (St. James's Park)	*	*	*	47	35	28	-	0·0	69	77
Regent's Pk. (Botanical Gdns)	*	*	*	*	*	*	*	3·6 23	*	*
Camden Sq. (British Rainfall)	bm.b	b	*	41	31	25	-	*	84	89
Kensington Palace	ofx	bc	*	43	30	24	-	*	90(18h)	89
Hampstead Observatory	*	*	*	44	35	30	Trace	6·3	*	77

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total 172 Joules.

	Milliwatts.
Average Rate.	5·6
Maximum Rate.	10

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

23rd AND 24th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7·29 / 7·31	11·31 / 11·40	3·49 / 3·48
Greenwich	7·32 / 7·34	11·46 / 11·47	4·0 / 3·59
Wick	8·20 / 8·22	11·58 / 11·59	3·36 / 3·34
Valencia	8·15 / 8·17	12·27 / 12·28	4·39 / 4·38

Photographic Record of Pole Star (Polaris) and of δ Ursæ Minoris at Greenwich Observatory.

Exposure from 11 h. 15 m. to 6 h. 15 m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	13	0	13	0	100
δ Ursæ Minoris	13	0	12	58	100

NOTES ON THE WEATHER OF YESTERDAY.

Sharp frost occurred again, the minimum being 20° at Benson and 21° at Eskdale and Manchester. The temperature even fell below the freezing point at many coast stations in England and Scotland, in Ireland however conditions were relatively mild. Fog persisted throughout the day in many places but at Yarmouth and Holyhead the air became exceptionally clear. At a few stations in the North, there was little bright sunshine, but over England generally the records were very good.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,552 . WEDNESDAY, 24TH NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

13H. G.M.T. 23RD / 18H. G.M.T. OF 23RD

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew	1028.5	-3	-	0	o7fe	26	97	0	<500	St	10	-	-	·x·	1027.0	0	-	0	b	26	97	1	-	-	-	-	-	·x·
Eskdalemuir	1028.0	-2	NNE	1	byz	47	45	7	-	-	-	-	-	*	1027.5	0	N	2	bz	35	65	7	-	-	-	-	-	*
Valencia (Cahirc'n)	1016.6	-3	NNE	3	bz	52	65	7	3000	StCu	3	-	-	3	1014.1	-2	ESE	4	bcz	49	75	6	3,000	StCu	6	-	-	3
Baldonnel	1022.5	-5	E	3	bif	50	55	6	-	-	-	aCu	1	*	1020.8	-2	E	1	b2f	44	65	4	4,200	Cu	1	-	-	*
Manchester (Alex. Pk.)	1026.7	-4	SSE	3	b3f	44	85	3	-	-	-	aCu	3	·x·	1025.1	-1	ENE	3	c3f	41	85	3	-	-	-	aCu	8	·x·
Ross on Wye	1024.5	-6	ENE	2	bz	41	85	5	-	-	-	-	-	*	1022.5	-2	E	2	bx	37	85	5	-	-	-	-	-	*
Falmouth	1019.4	-5	~~ENE~~ E (red)	5	c2fe	48	86	5	-	StCu	8	-	-	*	1017.0	-1	ESE	6	bq2f	47	75	5	-	StCu	2	-	-	*
Calshot (Hants)	1022.8	-2	E	4	bif	46	65	6	-	-	-	-	-	3	1021.3	-2	E	4	b	41	75	6	-	-	-	-	-	3
Lympne (Folkestone)	1023.9	-4	E	4	by2f	43	55	6	-	-	-	aCu	1	*	1022.0	-3	E	4	b2f	37	75	5	-	-	-	-	-	*
Aberdeen	1029.7	-2	W	1	b4f	40	75	2	-	-	-	-	-	2	1028.8	0	WSW	1	b2fe	33	97	2	-	-	-	-	-	2
Howden	1028.4	-3	-	0	o6fe	35	97	1	<500	St	10	-	-	*	1026.7	0	ENE	1	bm	37	92	4	5,200	-	-	aCu	3	*
Cranwell (Lincs)	1027.6	-3	NNE	1	b2f	38	92	4	1,250	St	1	-	-	·x·	1025.5	-1	?ENE (red)	3	b	40	85	5	-	-	-	aSt	1	·x·
Felixstowe	1026.2	-4	ENE	4	b	49	65	8	-	-	-	aCu	1	*	1024.3	-2	E	5	b	47	65	7	-	-	-	-	-	*
Shoeburyness	1024.9	-3	E	2	b	48	65	7	-	-	-	-	-	*	1022.6	-2	E	2	b	41	75	7	-	-	-	-	-	*
Benson	1023.6	-3	NE	2	b	43	75	5	-	-	-	-	-	*	1022.3	-1	E	1	b	38	75	4	-	-	-	-	-	*
S. Farnborough	1023.7	-5	ENE	3	bc3f	39	85	2	<500	St	5	-	-	*	1022.1	-2	ENE	2	b2fe	34	85	5	<500	St	2	-	-	*
London (Kew Obsy.)	1023.8	-6	ENE	2	bmx	41	75	2	<500	St	3	-	-	*	1022.0	-2	ENE	2	b3f	40	75	3	-	-	-	-	-	*
Croydon	1024.5	·2	E	4	b2f	46	65	5	-	-	-	-	-	*	1022.6	-2	E	4	b2f	36	75	5	-	-	-	-	-	*

1H. G.M.T. OF 24TH / 7H. G.M.T. OF 24TH

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
Renfrew															1019.7	-3	E	4	b1f	39	92	6	1250	St	2	-	-	*
Eskdalemuir	1024.3	-4	N	2	b	30	75	5	-	-	-	-	-	*	1019.5	-3	N	4	o2f	38	92	4	~	St	9	-	-	*
Valencia (Cahirc'n)	1010.0	0	ESE	5	bcq	45	*	*	*	*	*	*	*	4	1006.5	-1	E	4	o	47	75	7	4,200	StCu	10	-	-	*
Baldonnel	1016.6	-4	E	4	b	42	65	4	-	-	-	-	-	*	1013.4	-5	-	0	bx	32	85	5	3,000	St	1	-	-	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1014.6	-7	ENE	4	b2f	40	85	4	-	-	-	ASt	2	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.1	-5	ENE	3	o3f	33	97	2	<500	St	10	-	-	*
Falmouth	1012.6	-4	ESE	5	b	47	75	7	-	StCu	2	-	-	*	1006.5	-6	NE	6	oq	46	85	6	-	StCu	10	-	-	*
Calshot (Hants)	1016.3	-6	ENE	4	b2f	37	85	4	-	-	-	-	-	3	1011.7	~~-6~~ -9 (red)	E	4	b2f	39	92	4	-	-	-	ACu	2	4
Lympne (Folkestone)	1017.5	-5	NE	3	b2f	35	85	4	-	-	-	-	-	*	1013.8	-2	SE	4	cxm	35	78	5	-	-	-	ASt	7	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1023.4	-3	WNW	2	bsfex	32	97	1	-	-	-	-	-	2
Howden	1021.5	-3	ENE	1	ome	39	97	4	2,000	St	8	ASt	1	*	1016.7	-3	ENE	3	b	38	92	7	2,000	St	2	-	-	*
Cranwell (Lincs)	1020.7	-2	ENE	3	osfe	37	97	1	2,000	St	1	-	-	*	1016.4	-3	E	3	b	36	92	5	3,000	St	2	-	-	*
Felixstowe	1019.3	-4	E	4	b	~~36~~ 45 (red)	75	8	-	-	-	-	-	3	1016.2	-1	ESE	4	bcif	42	75	6	4,200	Cu	6	-	-	3
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1014.5	-3	SE	3	c	39	75	7	-	-	-	ASt	7	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1012.5	-2	NE	2	3fx	28	97	3	-	-	-	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.0	-4	E	2	o3f	30	97	2	3000	StCu	9	-	-	*
London (M.O. at 1H.)	1017.5	-3	*	*	*	32	*	*	*	*	*	*	*	*	1013.5	-3	ENE	1	omx	32	92	2	3,000	St	10	-	-	*
Croydon	1018.5	-4	E	1	b2fx	27	97	4	-	-	-	-	-	*	1013.4	-4	NNE	2	o3fx	31	92	2	2,000	St	5	A.Cu	4	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

Stations	18H. G.M.T. of 23RD: Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	7H. G.M.T. of 24TH: Barometer at M.S.L. mb.	‡ Change in 3 hours	Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather	Sea 0-9	24 HOURS ENDED 7H. 24TH: † Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours 23RD
Lerwick	1028.9	40	-	0	b	1025.5	-3	44	+5	-	0	-	c	0	0.2	47	42	b	b	bx	·x·
Stornoway	1025.0	40	-	0	b	1019.6	-2	42	-4	E	1	-	b	1	-	51	37	b.	b	b	5.0
Castlebay (Barra)	1023.5	52	ESE	4	b	1014.9 (red)	-2 (red)	49 (red)	+1 (red)	ESE (red)	3 (red)	- (red)	b (red)	3 (red)	- (red)	53 (red)	47 (red)	bm.bz	bz.b	bz b (red)	5.9 (red)
Malin Head	1021.5	45	SE	2	bm	1014.4	-2	43	+3	SE	2	-	bm	2	-	47	39	bm	bm	bm	6.7
Blacksod Point	1017.0	48	SE	4	b	1009.0	-2	45	+2	SE	4	-	bc	4	-	56	43	b.	b	b	*
Roche's Point	1017.3	49	ESE	4	bc	1008.4	-4	48	-1	SE	4	-	c	5	Trace	51	47	c.bcz	bc	b bc c	*
Birr Castle	1018.3	44	SE	2	b	1010.9	*	39	+7	SE	1	-	bc	*	-	50	32	zb	zb	bcx	7.3
Donaghadee	1023.8	50	SSE	3	bm	1015.8	-4	45	-3	SE	4	SE	bcm	4	-	?51	44	bm.	bm	bm	*
Liverpool (Bidston)	1023.3	39	ESE	2	f	1014.1	-4	37	+2	ESE	2	-	bm	2	-	43	35	m.	f.	bmx	1.5
Holyhead	1021.4	46	E	6	bz	1012.4	-4	41	-1	E	6	-	bq	4	-	50	38	bz	b.bc.c.b	b.bc.cb	6.1
Pembroke (St. Ann's Head)	1018.9	46	E	5	bm	1010.0	-4	38	-4	E	4	-	om	4	-	47	37	bm	bm	bm om	6.4
Scilly (St. Mary's)	1015.6	47	SE	5	bc	1005.2	-5	48	-1	ESE	4	SE	bc	5	-	51	46	bc.	bc	b.bc	6.5
Jersey (St. Aubin)	1018.9	40	ENE	4	b	1007.6	-3	42	+3	E	5	-	o	4	-	42	35	b.	bm	bm.o	7.3
Portland Bill	1019.0	45	ENE	6	bc	1008.7	-6	42	+2	ENE	6	NE	o	5	-	48	38	bm.	bm.bc	bc b.o	*
Dungeness	1021.6	43	E	3	b	1013.5	-3	39	-2	SE	4	SE	c	3	-	46	39	b.	b	b.bc.c	*
Wick	1027.0	47	S	2	b	1022.7	-3	48	+15	SSE	3	-	b	2	-	48	27	bm.b	b	bm.b	*
Nairn	1027.3	30	-	0	b	1021.9	*	27	+1	-	0	-	bx	0	-	34	24	bx.	bxm	bcx	6.6
Leith	1027.8	37	E	1	b	1019.9	-2	40	+13	E	1	-	b	1	0.3	43	25	bmfe.c	cmfe.b	bm.bz.b	*
Tynemouth	1028.0	43	ENE	1	fe	1019.3	-3	47	+14	ESE	3	-	bm	3	0.4	47	32	f.	om	b.bc	*
Spurn Head	1026.1	47	E	3	bv	1016.3	-4	46	+9	E	4	-	b	2	0.1	49	33	bv.	bv	b	*
Yarmouth (Gorleston)	1024.6	46	E	5	b	1016.2	-3	45	-2	SE	5	-	b	3	-	50	44	b.	bc b	b	[illegible]
Clacton-on-Sea	1023.2	46	E	3	b	1015.1	0	43	-2	ESE	4	SE	bcz	3	-	49	42	bc.	bc.b	b.bcz	7.0
Nottingham	1024.8	38	E	1	c	1015.8	*	35	+2	E	2	E	b	*	-	40	32	fe.bm	bmf.c	bcb.	1.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4.

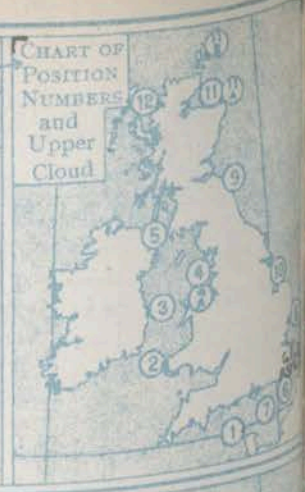
M.O. FORM 2370.

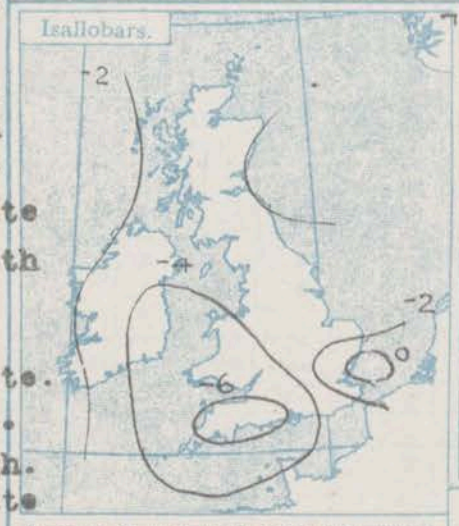
SUMMARY OF CONDITIONS AT 7 h. G.M.T. 24.11.20.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, mist or fog.	V.poor.	Slight.
2. E. England	Fair to fine, misty.	Indiff.	"
3. E. Midlands	Fine to dull, mist or fog	Poor	-
4. W. Midlands	Fair to dull, foggy.	V.poor.	-
5. S.W. England	Fair to dull.	Fair	R.rough
6. South Wales	Dull, misty.	"	Moderate
7. North Wales	Fine, misty.	"	"
8. N.W. England	Fair, mist or fog.	Indiff.	Slight
9. N. Midlands	Fine, misty.	"	-
10. N.E. England	Fine, some mist.	Good	Slight
11. E. Scotland	Fine, local fog.	Indiff.	Smooth
12. S.W. Scotland	Fine, mist or fog.	"	Slight
13. Isle of Man	Fair.	"	Moderate
14. N.& N.W. Scotland	Fine	Good	V.smooth
15. Hebrides	Fine.	"	"
16. Orkneys and Shetlands	Fine to cloudy	Poor	"
17. N.W. Ireland	Fair	Good	Moderate.
18. N.E. Ireland	Fair, misty	Fair	Slight.
19. S.E. Ireland	Fair to cloudy	Indiff.	R.rough.
20. S.W. Ireland	Dull to cloudy	Good	Moderate

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
7	23rd	0400	51	48
4A	23rd	0430	40	37
12	23rd	0530	52	51
5	23rd	0903	53	47
3	23rd	1025	53	53
1	23rd	1328	56	48
6	23rd	1458	55	44





Barometric change from 4 h. to 7 h. (half millibars).

GENERAL INFERENCE from observations received up to 9h.

A large depression is centred off our South-west Coasts and is likely to move Eastward. Winds will be mainly between SE and NE and will maintain cold weather. An early development of unsettled conditions may be expected over Southern England.

EXPLANATION.

BAROMETER.—Isobars are drawn at intervals of two millibars.

WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.

TEMPERATURE is given in degrees F.

WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. overcast sky. sky ¾ clouded. rain falling. snow. sleet. hail. fog. mist. T thunder. ⚡ thunderstorm.

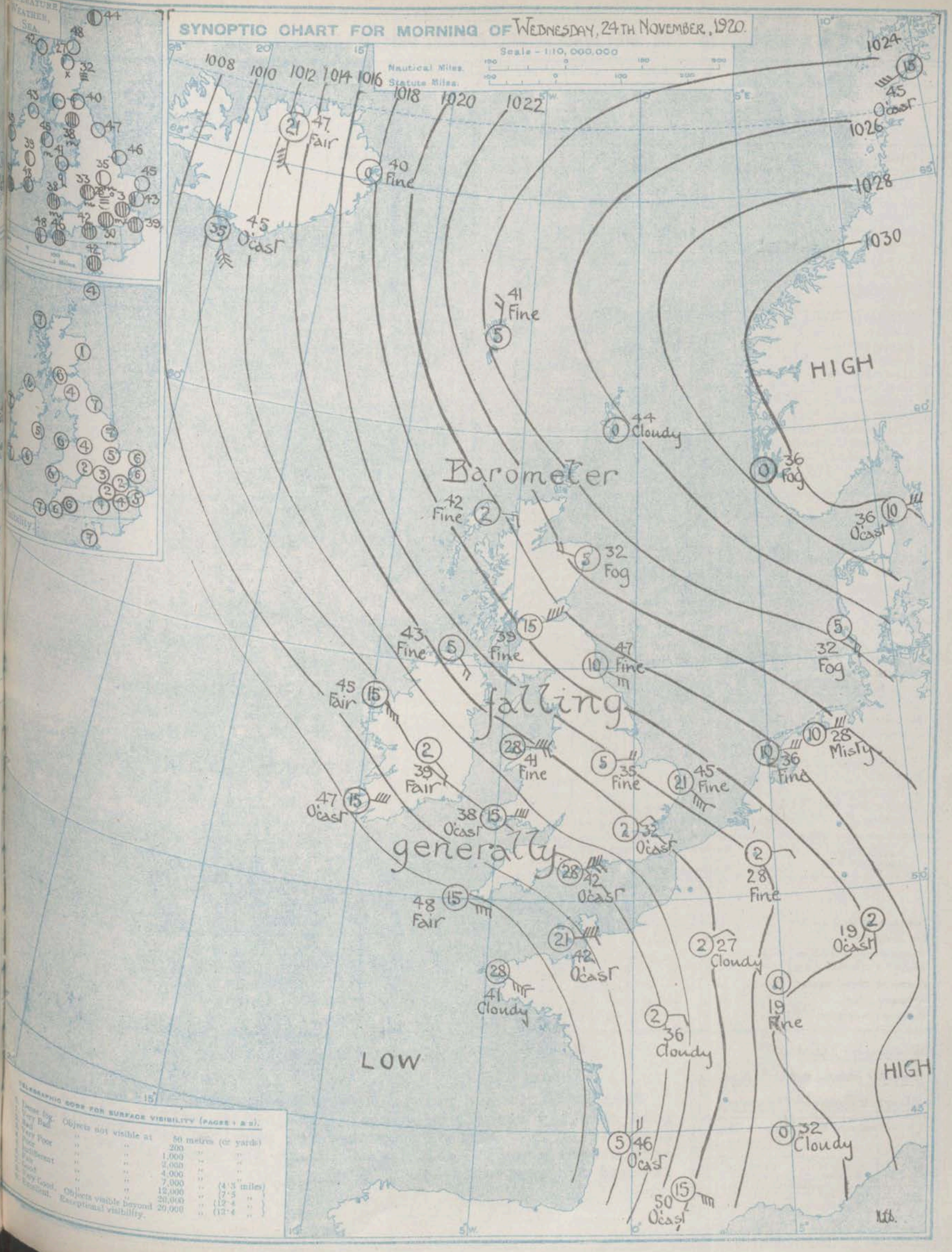
SEA DISTURBANCE.—Rough. High seas.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Wednesday, 24th Nov. 1920	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands 5. S.W. England 6. South Wales	Wind Easterly moderate or fresh, strong in places; fair at first, probably some rain later; visibility indifferent to fair; cold.	Continuing cold. Unsettled in the South.
7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England 11. E. Scotland 12. S.W. Scotland 13. Isle of Man 14. N.& N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland	Wind mainly Easterly, moderate, fresh at times; mainly fair or fine; visibility indifferent to fair, some mist, cold.	
19. S.E. Ireland 20. S.W. Ireland	Wind Easterly moderate or fresh, cloudy or overcast, perhaps some rain later; visibility fair; cold.	

E.S.B.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.55.

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF WEDNESDAY, 24TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
1008
1010
1012
1014
1016
1018
1020
1022
1024
1026
1028
1030
HIGH
Barometer
falling
generally
LOW
HIGH
21 47 Fair
0 40 Fine
35 45 O'cast
5 41 Fine
0 44 Cloudy
0 36 Fog
15 45 O'cast
10 36 O'cast
2 42 Fine
5 32 Fog
15 39 Fine
5 43 Fine
10 47 Fine
5 32 Fog
15 45 Fair
10 28 Misty
2 39 Fair
28 41 Fine
5 35 Fine
21 45 Fine
10 36 Fine
15 47 O'cast
15 38 O'cast
2 32 O'cast
2 28 Fine
28 42 O'cast
15 48 Fair
21 42 O'cast
2 27 Cloudy
2 19 O'cast
28 41 Cloudy
0 19 Fine
2 36 Cloudy
5 46 O'cast
0 32 Cloudy
15 50 O'cast
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0 Dense fog. Objects not visible at 50 metres (or yards)
1 Very Bad " " 200 " "
2 Bad " " 1,000 " "
3 Very Poor " " 2,000 " "
4 Poor " " 4,000 " "
5 Indifferent " " 7,000 " (4·3 miles)
6 Fair " " 12,000 " (7·5 ")
7 Good " " 20,000 " (12·4 ")
8 Very Good. Objects visible beyond 29,000 " (12·4 ")
9 Excellent. Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 329

Wednesday 24th November 1920

WEATHER, TEMPERATURE RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR .....

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 23rd-23rd	Rainfall. Day. 9h-18h. 23rd	Sunshine. Sunrise to Sunset. 23rd
Scotland.	Oban	b.	b	54	30	-	-	6·1
	Banff	bx	bx	43	23	-	-	6·5
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	of	bo.b	38	30	0·3	-	1·7
	Scarborough	m.	m	47	35	-	-	1·0
	Skegness	xm.b	b	49	25	0·2	-	6·5
England, E.	Lowestoft							
	Felixstowe	b	b	43	40	-	-	7·8
	Southend-on-Sea	b	b	50	35	-	-	7·2
England, S.E.	Tunbridge Wells	b.	b	47	35	-	-	6·7
	Margate	b	b	48	42	-	-	7·1
	Ramsgate	*	*	47	42	-	-	7·2
	Folkestone	b.	b	49	40	-	-	6·8
	Hastings	b.	b	46	35	-	-	6·9
	Eastbourne	b.	b	46	33	-	-	7·4
	Brighton	b.	b	46	36	-	-	6·5
	Worthing	b.	b	45	35	-	-	6·8
	Littlehampton	b.	b	47	33	-	-	6·0
	Portsmouth (S'thsea)	*	*	46	35	-	-	6·6
	Bournemouth	*	*	45	31	-	-	6·0
	Ventnor (I. of W.)	*	*	47	40	-	-	6·8

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 23rd-23rd	Rainfall. Day. 9h-17h. 23rd	Sunshine.	Sunrise to Sunset. 23rd
England, N.W.	Douglas (I.O.M.)								
	Blackpool								0·0
	Southport	ons.	o.c.bo.b	38	28	-	-		
	Morecambe								
Midlands.	Buxton								5·0
	Leamington Spa	b.	bc	46	25	-	-		4·2
	Malvern	m bc	bo.b	42	31	-	-		4·7
	Bath	o.o.bo.b	b.	42	28	-	-		6·3
Wales.	Rhyl	b	b	46	32	-	-		5·8
	Colwyn Bay	*	*	47	30	-	-		6·8
	Llandudno	b.	b	49	33	-	-		5·0
	Aberystwyth	o.c.bc	c.o	48	38	-	-		
	Tenby								
	Swansea								4·9
England, S.W.	Weymouth	bc.b.	b.bc	46	34	-	-		
	Teignmouth								0·3
	Torquay	c.bc.	c.	48	37	-	-		0·0
	Paignton	o	o	49	33	-	-		3·0
	Penzance	bcz	bc.b	51	47	-	-		5·0
	Newquay	bz	bz	47	39	-	-		7·0
	Bude	xo.bo.b	b	45	33	-	-		6·4
	Ilfracombe	b.	b	45	38	-	-		3·4
	Weston-s-Mare	m.bo.b	bm	43	30	-	-		

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather 7h-13h. 23rd	Weather 13h-18h. 23rd	Weather 18h-23h. 23rd	Weather 23h-1h. 24th	Weather 1h-7h. 24th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall† Day. 7h-18h. mm.	Rainfall† Night. 18h-7h. mm.	Sun. Hours.
Renfrew	6·8fx	6·8fx.	b 4 5 f	b 2 f.		40	23	20	-	-	0·0
Eskdalemuir	b1f.	b1f.	b1f	b.o		47	30	25	0·1	-	6·9
Valencia (Cahiro'a)	b.bo.b.bc	15 b.bc	bc.cz.	c.o		52	47	42	-	-	5·9
Baldonnel	x2f b.b.bc	b.bc2f.	b2f	x b		51	32	23	-	-	7·4
Manchester (Alex.Pk)	6·8fx b.bc2f	f.b.bc3f bc2f	bc.e 3f	b.bc2f		45	27	27	0·2	-	*
Ross on Wye	o2f b.bo2f	f. bz	bx	bx.bo o2f		42	30	25	-	-	?
Falmouth	c. o2fe	bo c1f. 1f2f	b.bc	b.o		50	45	40	-	-	2·3
Calshot (Hants)	b.bo2f. b1f	b2f. b2f.	b2f	b2f		46	34	31	-	-	7·0
Lympne (Folkestone)	b. bo2f.	b.bc. b2f	b2f	b.bc.c x2f		43	30	20	-	-	7·4
Aberdeen	2f. 5f.	5f 3f f	4·5fe 3fe	4·5fe x		42	28	27	-	-	3·3
Howden	o 7	c. o2fe	2fe x	2fe b.bc		41	29	27	-	-	0·2
Cranwell (Lincs)	ou5fx b.bc2f	f. bc.c b.bc	4·5fe	3fe bx		42	26	29	-	0·4	5·1
Felixstowe	b.bo.b.bc	bc. c b.	b	b. bc		49	41	*	-	-	7·7
Shoeburyness	b.bo.b	b.	b. bc.	b bc.c		49	36	31	-	-	7·4
Benson	2f.b.	b.	b	3fx		44	25	17	-	-	*
S. Farnborough	ou5f.bc.c	3f b.bc 2fe	b.bc x	o3f x		43	19	16	0·4	-	4·5
London (Kew Obsy.)	u6·8f 3fe	2.3f	bx e.8f 1f	b3fx o3f		44	24	21	~~0·3~~	Trace	1·7
Croydon	5fx.5f.1f	b.b.bo2f	b2fx	bo x2f o3f		46	25	*	Trace	Trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—

Aurora ☆ Solar halo ⊗
Rime ⌶ Lunar halo ⊙
Glazed frost ⌇ Solar corona ⊙
Glazed roads ⌇ Lunar corona ⊙

LONDON OBSERVATIONS

24 HOURS ENDED 9H G.M.T. 24th

	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall. mm.	Sunshine to Sunset. Hours. (Yesterday.)	Humidity % 15 h. G.M.T. (Yesterday.)	Humidity % 9 h. G.M.T. (To-day.)
Greenwich (Royal Observatory)	b	b.bc	bcxm	48	29	19	0·3	6·1	64	79
City (Bunhill Row)	*	*	*	*	*	*	*	1·9	*	*
Westminster (St. James's Park)	*	*	*	49	35	27	-	2·5	60	72
Regent's Pk (Botanical Gdns)	*	*	*	*	*	*	*		*	*
Camden Sq. (British Rainfall)	bm.b	b	*	48	29	22	-	*	68	81
Kensington Palace	bc	bc c.	*	47	29	20	(1 hour frost)	*	80 (18h)	78
Hampstead Observatory	*	*	*	46	32	27		6·4	*	80

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total ..... 195 ..... joules.

	Milliwatts.
Average Rate.	64
Maximum Rate.	13

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

24th AND 25th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7·31 / 7·33	11·40 / 11·40	3·46 / 3·47
Greenwich	7·34 / 7·36	11·45 / 11·47	3·54 / 3·56
Wick	8·22 / 8·24	11·59 / 11·59	3·35 / 3·33
Valencia	8·17 / 8·19	12·38 / 12·38	4·37 / 4·37

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from ....17.... h. 15.... m.
to .....6..... h. 15.... m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	13	0	12	36	97
δ Ursae Minoris	13	0	12	12	94

NOTES ON THE WEATHER OF YESTERDAY.

Weather continued rainless over the Kingdom generally and good sunshine records were again obtained at nearly all the coast stations. Inland, temperature remained low, especially at South Farnborough and Benson, where the grass minima were 16° and 17° respectively.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,553 Thursday, 25th November, 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1h, 7h, 13h AND 18h.

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	13h. G.M.T. 24th														**18h. G.M.T. of 24th**													
Renfrew	1015.0	-6	E	4	bc2f	45	92	4	1,250	StCu	3	aCu	2	*	1012.1	-3	NE	6	bc2f	44	85	5	1,250	StCu	2	CiSt	3	*
Eskdalemuir	1014.5	-5	NNE	4	bc	44	75	7	-	Cu	2	aCu	2	*	1013.5	0	ENE	4	bcm	41	85	5	-	-	-	aSt	5	*
Valencia (Cahirc'n)	1002.5	-5	ENE	4	oz	46	75	7	4,200	StCu	1	aSt	8	3	1001.3	-1	E	4	b	43	75	7	4,200	StCu	1	aCu	1	3
Baldonnel	1007.1	-6	E	3	o2f	46	75	4	1,250	St	10	-	-	*	1005.4	-3	-	0	or2.3f	44	92	3	<500	Nb	10	-	-	*
Manchester (Alex. Pk)	1011.9	-4	ESE	5	bc2f	45	65	4	-	-	-	aCu	6	*	1010.4	-1	E	5	bc3f	41	75	3	9,000	-	-	aCu	6	*
Ross on Wye	1009.6	-4	E	3	om	39	85	4	2,000	St	1	aSt	9	*	1008.1	-2	E	3	o2f	44	85	4	750	St	10	-	-	*
Falmouth	1001.1	-6	ESE	6	or0q	48	85	6	-	Nb	10	-	-	*	1000.2	+1	SW	4	cr0	49	92	5	-	Nb	8	-	-	*
Calshot (Hants)	1008.8	-3	SE	6	301f	49	85	6	3000	St	2	ASt	6	5	1009.1	+2	SSE	5	or0*	49	92	6	3,000	StCu	4	aSt	6	5
Lympne (Folkestone)	1013.5	-1	SE	3	b2f	43	75	5	-	-	-	Ci	2	*	1013.3	+1	SE	4	c2f	43	75	5	-	-	-	aCu	7	*
Aberdeen	1020.0	-4	E	3	bc1fe	45	97	7	1,250	St	6	-	-	3	1018.1	-2	SE	5	bc1fe	46	85	7	750	St.	4	-	-	4
Howden	1014.2	-3	ESE	4	c1f	46	85	5	3,000	St	2	Ci	5	*	1013.1	0	ESE	2	ow	39	92	4	3,000 (5000-15000)	St	2	Ci	7	*
Cranwell (Lincs)	1014.6	-2	ESE	3	c	42	85	5	4,200	St	1	CiCu	7	*	1013.6	0	E	3	c	37	85	4	~~<500~~	StCu	2	CiSt	6	*
Felixstowe	1014.9	-1	SE	4	b1f	45	75	6	-	-	-	CiSt	3	*	1014.0	-0	SE	4	b1f	45	85	6	-	-	-	Ci	1	*
Shoeburyness	1013.2	-2	ESE	3	b2f	44	65	5	-	-	-	CiCu	2	*	1012.9	0	SE	5	b	42	85	7	-	-	-	CiSt	2	*
Benson	1010.1	-2	ESE	2	bc	40	75	4	-	-	-	CiCu	5	*	1008.3	0	E	5	bc	41	75	4	-	-	-	CiSt	5	*
S. Farnborough	1010.8	-1	ENE	3	c2f	42	75	4	-	-	-	CiSt	7	*	1010.5	0	E	4	cm	42	85	5	1,250	StCu	1	aSt	6	*
London (Kew Obsy.)	1011.6	-3	NE	2	bc3f	41	75	2	<500	St	3	Ci	1	*	1011.3	0	ESE	3	o3f	42	85	3	1,250	St	6	aCu	4	*
Croydon	1012.3	-1	E	4	bc2f	45	75	5	-	-	-	CiSt	3	*	1012.4	0	SE	4	o2f	42	75	4	-	-	-	aCu	9	*
	1h. G.M.T. of 25th														**7h. G.M.T. of 25th**													
Renfrew															1009.6	-1	ESE	4	o2f	45	92	3	2,000	St	9	-	-	*
Eskdalemuir	1011.6	-2	ENE	4	bcm	38	82	4	-	-	-	CiSt	4	*	1011.6	+2	SSE	3	o2f	41	92	5	-	St	9	-	-	*
Valencia (Cahirc'n)	1002.9	+2	SSW	2	bc	45	*	*	*	*	*	*	*	2	1005.1	+7	SSW	3	or0	48	85	6	2,000	St	10	-	-	*
Baldonnel	1004.0	+1	ESE	1	bc	45	92	4	2,000	St	2	ASt	2	*	1006.4	+2	ESE	2	c	48	85	5	1,250	St	8	-	-	*
Manchester (Alex. Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.4	+4	SE	3	b3f	42	92	3	3,000	CuNb	1	ACu	1	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.4	+4	SSW	1	b	45	97	6	4,200	StCu	1	-	-	*
Falmouth	1017.9	+4	SSW	4	bv	51	85	9	-	CuNb	1	-	-	*	1011.6	+4	S	1	bc	51	92	7	-	-	-	ACu	4	*
Calshot (Hants)	1012.4	+4	SSW	4	b	51	92	8	2,000	St	2	-	-	4	1015.7	+4	SSW	3	b1f	49	97	7	2,000	St	2	-	-	3
Lympne (Folkestone)	1015.2	+3	SSE	3	o2f	46	97	4	-	-	-	ASt	9	*	1017.8	+3	S	3	o2f	48	92	5	1,250	StCu	10	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.8	0	SSE	4	o2f	47	75	5	1,250	St	10	-	-	4
Howden	1012.7	-1	SE	2	b3fw	37	92	4	5700	-	-	ASt	1	*	1014.8	+2	SSE	1	o2f	40	97	4	750	St	10	-	-	*
Cranwell (Lincs)	1013.8	0	SSW	3	b	36	92	5	3,000	St	2	-	-	*	1015.6	+4	SSW	3	o5f	38	97	1	<500	St	10	-	-	*
Felixstowe	1015.8	+2	S	4	bc1f	46	92	6	-	-	-	ACu	4	3	1017.9	+2	S	3	b1f	46	97	6	4,200	StCu	3	-	-	3
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1017.3	+2	S	1	b	44	92	6	4,200	StCu	2	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1014.8	+3	SSE	3	o	48	92	5	-	St	9	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1017.9	+3	SSE	1	o2f	47	92	5	3,000	StCu	10	-	-	*
London (M.O. at 1h.)	1013.8	+2	*	*	*	47	*	*	*	*	*	*	*	*	1016.2	+4	SSE	2	b	46	92	5	?	StCu	1	-	-	*
Croydon	1014.5	+4	SE	3	o2f	46	92	5	2,000	St	10	-	-	*	1016.9	+3	SE	3	b2f	48	92	4	1,250	StCu	1	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7h. AND 18h.

Stations	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours	Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather	Sea 0-9	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
	18h. G.M.T. of 24th					**7h. G.M.T. of 25th**									**24 HOURS ENDED 7h. 25th**						**24th**
Lerwick	1022.7	45	SE	3	c	1016.5	-3	46	+2	SE	6	-	o	4	-	48	44	b.	b	c. o	*
Stornoway	1013.1	45	E	4	b1f	1005.8	-2	47	+5	SE	6	-	bcq	5	-	49	42	b.	b	b,bcq	4.9
Castlebay (Barra Is)	1010.2	50	E	4	c	1004.4	-1	53		SE	5	-	o	6	-	53	47	bc. b	bc	c.o	4.5
Malin Head	1005.4	46	ESE	3	cm	1003.4	0	40	+3	S	3	S	cm	3	1	48	42	c.	c	cmp	3.1
Blacksod Point	1003.3	44	SE	2	bc	999.3	-2	40	-5	SE	3	-	c	2	-	54	40	bc	bc	bc.bc.	*
Roche's Point	1002.5	42	E	3	b	1007.0	+5	50	+2	SW	3	-	o	4	0.4	51	37	cz	og z. bz	bw.o	*
Birr Castle	1004.1	43	ESE	1	c	1004.4	*	44	+5	ESE	1	-	c	*	0.2	44	35	bcz.c	cz.o.	of.c	1.3
Donaghadee	1009.2	47	ESE	7	bcmq	1008.1	+4	45	0	SW	3	-	bm	4	1	50	45	bcm	bcmq	bcqmp	*
Liverpool (Bidston)	1008.7	41	ESE	2	m	1011.1	+3	42	+5	ESE	3	-	b	3	-	45	37	bm	bm	bc b.	1.4
Holyhead	1005.4	44	E	6	cq2f	1008.6	+2	50	+9	S	5	-	bc	4	Trace	52	40	b.bcq.	bc.o.c.	copd.c	1.3
Pembroke (St. Ann's Head)	1001.5	47	E	6	or0g2.3f	1009.7	+3	53	+15	SSW	4	-	bc	4	1	53	38	ogm	ogm	odm.c	0.0
Scilly (St. Mary's)	1001.0	48	W	2	bc	1009.9	+3	52	+4	S	2	S	bc1f	4	-	53	48	bc.c	cm.bc	b.bc	0.4
Jersey (St. Aubin)	1007.2	51	SE	7	c	1015.8	+2	50	+8	S	3	S	b	3	0.1	52	42	o.c.o	o.cdp.c	cdpb	0.8
Portland Bill	1005.0	52	SE	8	bc	1013.8	+5	53	+11	SSW	5	SW	bc	6	3	55	42	o.c.	c.bc.	r.cq.bc	*
Dungeness	1012.3	46	SSE	4	bc	1017.4	+3	50	+11	SW	3	-	o	4	-	51	39	c.b.	b.bc	bc.bc.q	*
Wick	1017.4	46	SE	5	omq	1011.1	-2	47	-1	SSE	6	-	omq	5	-	49	45	omq	omq	omq	*
Nairn	1015.2	42	E	2	bc	1009.2	*	44	+17	ESE	1	-	cg	1	0.2	45	24	bxm.bc	bc	bc.c	4.7
Leith	1014.0	45	E	2	bc	1010.1	0	42	+2	ESE	2	-	c	2	0.3	47	40	b.bc.c	c.bc	bcem.c	*
Tynemouth	1014.6	46	SE	4	c1f.	1012.6	0	43	-4	SW	3	-	o3f	3	-	48	~~32~~ 43	bcm.	bcm	cm.om	*
Spurn Head	1012.9	45	ESE	3	bc	1015.1	+2	42	-4	SSE	3	-	bmw	3	-	47	40	bc.	bc	bcq.c.	*
Yarmouth (Gorleston)	1015.5	45	SSE	5	b	1017.3	+2	44	-1	SSW	3	-	bm	1	-	46	42	b.bm	bzb	bz.w	4.8
Clacton-on-Sea	1013.5	45	ESE	4	bc	1017.2	+3	47	+4	SSE	3	S	bcz	2	-	47	41	bcz	bcz	c.bcz	3.8
Nottingham	1011.8	39	E	3	bc	1014.9	*	43	+8	S	2	S	bm	*	-	43	33	bm.	b.bc	bc.c	1.4

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4.

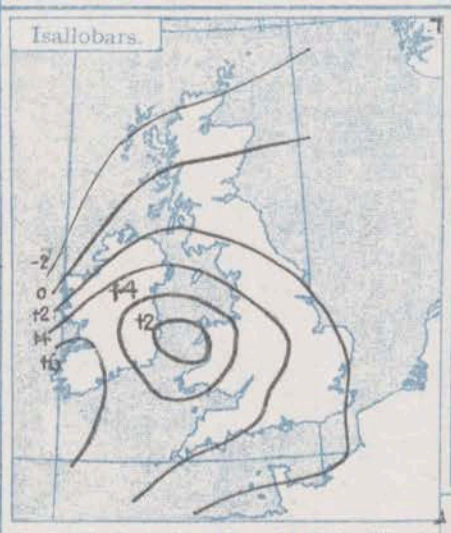
M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 25.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fine, misty, o'cast locally.	Indiff.	Mod.
2. E. England	Fine, misty.	Fair	Slight
3. E. Midlands	Fine, misty, o'cast locally.	Indiff.	-
4. W. Midlands	Fine.	Fair	-
5. S.W. England	Fair.	Good	Mod.
6. South Wales	Fair.	V. Good	"
7. North Wales	Fair.	Good	"
8. N.W. England	Fine, misty.	Indiff.	"
9. N. Midlands	Fine, misty.	"	-
10. N.E. England	Fine to dull, misty.	Poor	Slight
11. E. Scotland	Dull, misty.	Indiff.	Mod.
12. S.W. Scotland	Dull, misty or foggy.	Poor	"
13. Isle of Man	Fine.	Fair	"
14. N. & N.W. Scotland	Cloudy.	Good	R. Rough
15. Hebrides	Cloudy, squally.	"	"
16. Orkneys and Shetlands	Dull, misty.	Indiff.	Mod.
17. N.W. Ireland	Cloudy.	Fair	Smooth
18. N.E. Ireland	Fine to cloudy.	"	Mod.
19. S.E. Ireland	Cloudy.	Fair	Mod.
20. S.W. Ireland	Dull, some drizzle.	"	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
7	24th	0300	55	47
4A	24th	0410	49	45
5	24th	0823	53	45
3	24th	1020	53	46



Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrow flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small italics.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky; sky ½ clouded; sky 1 clouded; overcast sky; rain falling; snow; sleet; hail; fog; mist; thunder; thunderstorm.
SEA DISTURBANCE.—Rough; High seas.

GENERAL INFERENCE from observations received up to 9h.

The depression which was off the Mouth of the Channel on Wednesday has moved rapidly away to Northward and winds are becoming generally Southerly or South-Westerly. Weather is likely to be mild for a day or two, but the appearance of another disturbance in the South-West is very probable.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Thursday, 25th November, 1920.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands 5. S.W. England 6. South Wales	Wind Southerly, light or moderate; fair early, probably unsettled later, visibility fair, some mist; mild.
7. North Wales 8. N.W. England 9. N. Midlands 10. N.E. England 11. E. Scotland 12. S.W. Scotland 13. Isle of Man	Wind Southerly, moderate or fresh; fair generally, visibility fair but local mist; mild.
14. N. & N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands	Wind S.E. to S.W., fresh or strong; fair but local showers, visibility fair to good; mild.
17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind Southerly, moderate; cloudy, some showers, probably rain later, visibility fair to good; mild.

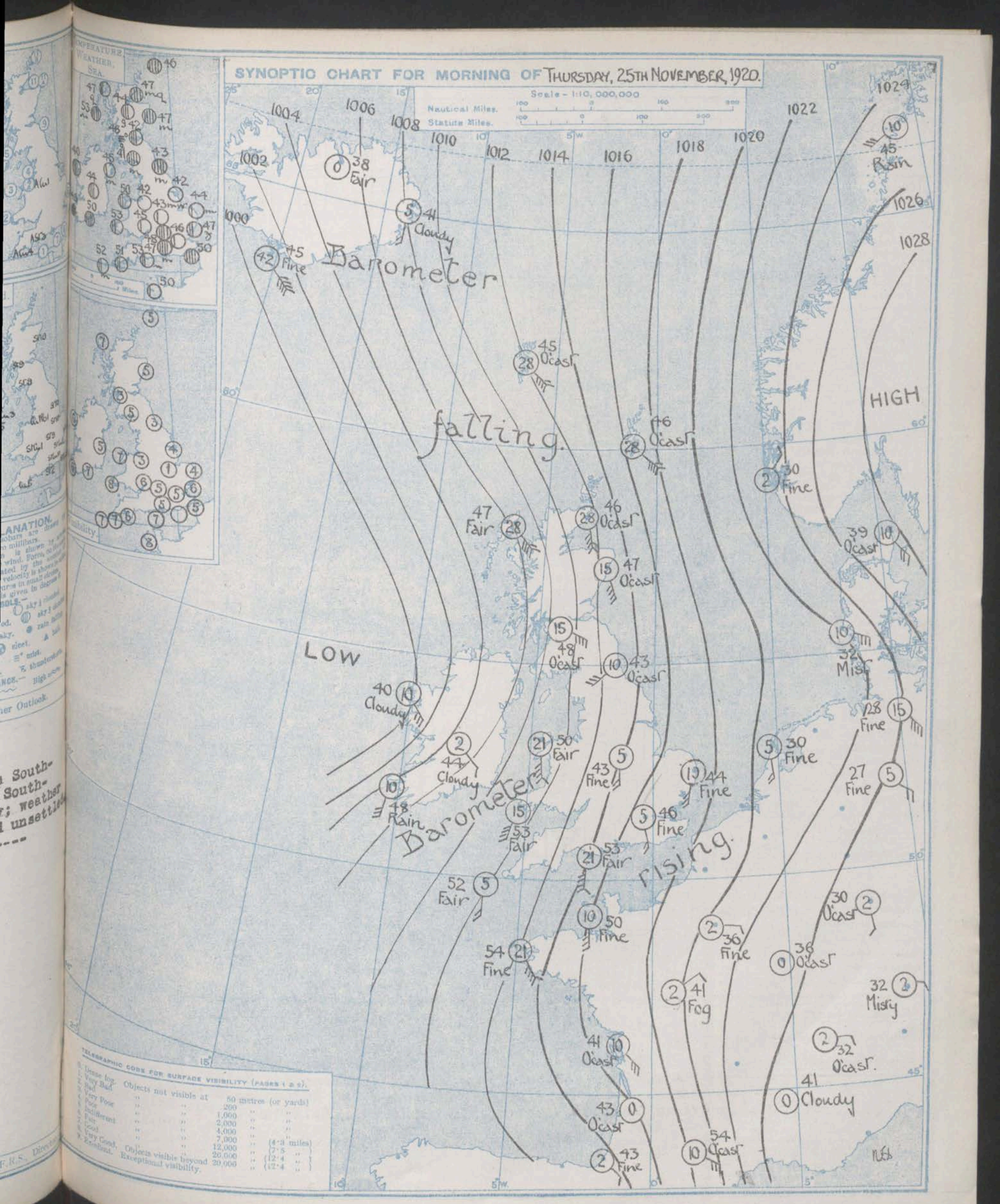
Further Outlook.

Winds Southerly or South-Westerly; weather mild and unsettled.

E.G.B.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.00.

G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF THURSDAY, 25TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
Barometer falling.
Barometer rising.
LOW
HIGH
1000
1002
1004
1006
1008
1010
1012
1014
1016
1018
1020
1022
1024
1026
1028
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " "
6. Fair " " 12,000 " (4·3 miles)
7. Good " " 20,000 " (7·5 ")
8. Very Good " " 30,000 " (12·4 ")
9. Excellent. Objects visible beyond Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No 330.

THURSDAY, 25th NOVEMBER

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 24th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 23rd-24th	Rainfall. Day. 9h-18h. 24th	Sunshine. Sunrise to Sunset. 24th
Scotland.	Oban	b.	b	52	35	-	-	5.3
	Banff	bc	c.bc	44	29	-	-	2.0
	Montrose							
	St. Andrews	c.	c	49	26	-	-	3.9
England, N.E.	Harrogate	bm	b.bc.b	44	33	-	-	2.2
	Scarborough							
	Skegness	bc.b	c.b	47	41	-	-	3.4
England, E.	Lowestoft							
	Felixstowe	bz	bm	45	43	-	-	5.2
	Southend-on-Sea	bc	bc	45	35	-	-	4.3
England, S.E.	Tunbridge Wells	bc.b	b.bc	45	31	-	-	3.1
	Margate	c.bc.b	b	45	36	-	-	4.0
	Ramsgate	*	*	45	36	-	-	4.8
	Folkestone	o.c.	c	46	36	-	-	4.1
	Hastings	o.bc	bc.c.o	47	33	-	-	3.6
	Eastbourne	o.c.	c.o	50	30	-	-	1.9
	Brighton	o.c.bc	c.o	50	32	-	-	1.1
	Worthing	o	o	50	33	-	-	0.3
	Littlehampton	o.c.	o.cq	53	32	-	-	0.0
	Portsmouth (S'thsea)	*	*	50	34	-	-	0.3
	Bournemouth	*	*	50	29	-	-	0.2
	Ventnor (I. of W.)	*	*					

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 23rd-24th	Rainfall. Day. 9h-18h. 24th	Sunshine. Sunrise to Sunset. 24th
England, N.W.	Douglas (I.O.M.)							0.6
	Blackpool	o.	c	46	31	-	-	1.4
	Southport	x.b.bc	c.bc.	44	35	0.2	-	2.8
	Morecambe	*	*	48	40	-	-	
Midlands.	Buxton							1.0
	Leamington Spa	o.	bc.	41	30	-	-	0.0
	Malvern	mz.	m	40	33	-	-	0.2
	Bath	bc.c.o	o.c.bc	46	30	-	-	
Wales.	Rhyl	c.	c	43	34	-	-	0.5
	Colwyn Bay	*	*	43	34	-	-	1.2
	Llandudno	c.	c	43	36	-	-	0.8
	Aberystwyth	o.c.	cz.o	44	37	-	-	1.0
	Tenby							
	Swansea							0.3
England, S.W.	Weymouth	o.c.	c.	52	32	-	-	
	Teignmouth							0.0
	Torquay	or	or	51	41	-	1	0.0
	Paignton	opq	opq	53	40	-	2	0.5
	Penzance	c.bc.or	o.c	51	43	-	1	0.0
	Newquay	or.o.	ogr.	50	40	-	5	0.0
	Bude	o.	c.	52	34	-	-	0.0
	Ilfracombe	o.	o	?	38	-	-	0.3
	Weston-s-Mare	c.bc	cm	46	30	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h. 24th	Weather. 13h-18h. 24th	Weather. 18h-1h. 24th-25th	Weather. 1h-7h. 25th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. † Day. 7h-18h. mm.	Rainfall. † Night. 18h-7h. mm.	Sun. Hours.
Renfrew	b. o2f	bc.o2f	bcc⦶cof	ob.	46	38	36	-	Trace	0.9
Eskdalemuir	obc.cbbc	bbc.s.obcc	bcc.bbc ⦶	b.bc.co	45	37	35	-	Trace	3.8
Valencia (Cahirc'ty)	1f.c.o	c.o.b.bc	b.bc	c.o.o	50	40	35	-	-	0.3
Baldonnel	o3fpdo	c.orro	o3fldlo	bc.c2f	48	32	34	1	3	0.2
Manchester (Ackr. Pk)	b.bo2fbccf	bc.c ⦶	b.bc2f	b.bc2f	46	29	32	-	-	*
Ross on Wye	o2fco o2f.c.o2fo3f	o2fzif q r	bc.c.b		50	33	33	-	1	0.3
Falmouth	opo.	rorr o.rrco/	b.bcv	b.bc	51	44	43	6	Trace	0.0
Calshot (Hants)	c.o.bc.c	o2frrr	c.o1fbcbbc	b1f	52	39	45	-	-	0.1
Lympne (Folkestone)	bcc2fb.bc2fb.bc.c.o1f	2f.o.	o2f		43	34	41	-	-	4.4
Aberdeen	45fcb.o	(w)1fcq	q o2f	q o2f	47	40	30	-	-	0.8
Howden	1fbbc ?	2f.bc.c	⦶ bc.c.	o2fx	46	36	29	-	-	2.7
Cranwell (Lincs)	bc.c.bc.c	c.o.c.o	bc.c.b.bc	bbccoof	43	31	28	-	Trace	2.4
Felixstowe	bc.c.b.bc	b.bc1f.	1f. bc.c	bbc2fc	47	40	*	-	-	5.4
Shoeburyness	bc.c.b.bc	b.bc.b.bc	b.bc	b.bc	47	38	39	-	-	4.5
Benson	2f.bc.c	b.bc.b.bc	bc.c.o	c.o	49	27	35	-	0.1	*
S. Farnborough	o3f.c.o	c.o ⦶	o2f pdo	o2fc	50	28	37	-	0.2	1.8
London (Kew Obsy.)	⁄3f.	23fbccof	cof.bbc2f	o2f b.bc	48	32	31	0.1	Trace	2.2
Croydon	zbcc2fx	bc.c.o2f⦶	c.o2fpdof	bcc2f3f	50	31	*	Trace	Trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·9
3	8-12	5·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—

Aurora ☆ Solar halo ⦶
Rime ⚌ Lunar halo ⦷
Glazed frost ∽ Solar corona ⦶
Glazed roads ⚍ Lunar corona ⦷

LONDON. OBSERVATIONS.	Morning.	Weather. Afternoon.	Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. † mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 24th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	c.o ⦶	bc	⦶bw.	47	34	30	-	3.3	79	94
City (Bunhill Row)	*	*	*	*	*	*	*	0.0	*	*
Westminster (St. James's Park)	*	*	*	48	37	31	-	0.5	71	94
Regent's Pk (Botanical Gdns)	*	*	*	*	*	*	*	0.1	*	*
Camden Sq. (British Rainfall)	cxbc	bc	*	47	36	30	-	*	82	97
Kensington Palace	bc.	bc.o	*	48	34	30	-	*	80 (18h)	96
Hampstead Observatory	*	*	*	48	33	32	Trace	2.2	*	94

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total 208 Joules.

	Milliwatts.
Average Rate.	6·9
Maximum Rate.	14

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

25th and 26th November 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.33 / 7.34	11.40 / 11.40	3.47 / 3.46
Greenwich	7.36 / 7.37	11.47 / 11.47	3.35 / 3.37
Wick	8.24 / 8.27	11.59 / 11.59	3.33 / 3.31
Valencia	8.19 / 8.20	12.27 / 12.28	4.37 / 4.36

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 17 h. 15 m. to 6 h. 15 m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	13	0	9	30	73
δ Ursae Minoris	13	0	6	40	51

NOTES ON THE WEATHER OF YESTERDAY.

The day was generally milder and more cloudy than of late. The minimum temperature at a few stations was below 32° but these temperatures chiefly occurred early on Wednesday morning. Sunshine generally showed a considerable falling off but Felixstowe and Banff recorded 5 hours. Except at Falmouth (6mm) and Baldonnel (4mm) there was little precipitation.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,554 FRIDAY, 26th NOVEMBER, 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

13H. G.M.T. 25th / 1H. G.M.T. OF 26th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0–12	Weather	Temp. °F.	% Humidity	§ Visibility 0–9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0–10	Upper Cloud Form	Upper Cloud Amt. 0–10	Sea 0–9
13H. G.M.T. 25th														
Renfrew	1010.8	0	SE	4	c1f	48	92	6	2,000	StCu	8	–	–	x
Eskdalemuir	1012.8	+1	SSE	3	od₀m	46	85	5	2,000	St	10	–	–	*
Valencia (Cahirc'n)	1008.1	+1	S	2	o	50	75	8	4,200	StCu	2	aSt	7	4
Baldonnel	1010.3	+4	SW	4	oq	50	75	8	4,200	St	10	–	–	*
Manchester (Alex. Pk.)	1015.0	+2	S	5	c2f	53	75	4	9,000	–	–	aCu	8	x
Ross on Wye	1015.3	+1	SSW	2	o	55	75	6	3,000	Cu	2	Ci	7	*
Falmouth	1012.6	-1	SSE	4	o	54	85	7	–	A.St	5	~~a.St~~ A.Cu	~~9~~ 7	*
Calshot (Hants)	1017.4	0	SSE	3	c	52	92	6	2,000	StCu	8	–	–	3
Lympne (Folkestone)	1019.5	+1	S	2	o2fe	47	97	5	<500	St	10	–	–	*
Aberdeen	1013.3	+1	S	3	o2f	48	85	4	1,250	St	9	–	–	4
Howden	1016.6	0	SSE	1	o	48	92	5	2,000	St	8	–	–	*
Cranwell (Lincs)	1017.6	+1	S	3	o2f	48	97	5	1,250	StCu	9	–	–	x
Felixstowe	1019.8	+1	S	3	bc	50	85	7	5,700	StCu	5	–	–	*
Shoeburyness	1018.8	+2	S	1	b	53	75	7	4,200	StCu	1	Ci	1	*
Benson	~~1011.3~~	+1	SSE	3	c	51	85	6	·	Cu	7	–	–	*
S. Farnborough	1017.7	-0	S	3	c	52	85	7	2,000	StCu	8	–	–	*
London (Kew Obsy.)	1017.7	0	S	3	c2f	54	75	5	4,200	Cu	7	–	–	*
Croydon	1018.7	+1	SSW	2	bc1f	54	75	6	1,250	StCu	4	–	–	*
1H. G.M.T. OF 26th														
Renfrew														
Eskdalemuir	1015.7	0	SSE	3	om⊕	45	92	4	–	–	–	Ci.St	9	*
Valencia (Cahirc'n)	1005.6	-2	–	0	bc	45	*	*	*	*	*	*	*	0
Baldonnel	1010.5	-1	SSE	4	o2f	51	85	4	1250	Cu	6	aSt	4	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Falmouth	1011.0	-1	SSE	5	bc	52	85	8	–	–	–	Ci.St	5	*
Calshot (Hants)	1015.8	-2	E	4	b1f	50	92	6	–	–	–	Ci	3	3
Lympne (Folkestone)	1018.0	-2	SE	3	bwm	45	92	4	–	–	–	Ci.St	3	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Howden	1019.1	0	SSE	3	o7fe	48	97	0	<500	St	10	–	–	*
Cranwell (Lincs)	1019.6	0	SE	3	o4fe	42	97	2	<500	St	10	–	–	*
Felixstowe	1020.5	0	E	2	ce	45	97	6	–	–	–	Ci	7	2
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*
London (M.O. at 1H.)	1019.5	-1	*	*	*	43	*	*	*	*	*	*	*	*
Croydon	1018.9	-2	SE	3	bc2f	43	97	5	–	–	–	Ci	2	*

(In the right margin, in red: 1016.3)

18H. G.M.T. OF 25th / 7H. G.M.T. OF 26th

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0–12	Weather	Temp. °F.	% Humidity	§ Visibility 0–9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0–10	Upper Cloud Form	Upper Cloud Amt. 0–10	Sea 0–9
18H. G.M.T. OF 25th														
Renfrew	1013.3	+3	SE	2	o1f	48	85	6	3,000	StCu	7	a.St	3	x
Eskdalemuir	1015.7	+3	S	1	o1f	44	85	6	–	StCu	10	–	–	*
Valencia (Cahirc'n)	1006.7	-2	E	4	c	45	85	8	3,000	StCu	1	aSt	7	4
Baldonnel	1011.2	-2	SSE	2	od₀	45	97	4	1,250	Nb	10	–	–	*
Manchester (Alex. Pk.)	1016.8	+2	SE	3	o⊕	46	92	3	–	–	–	a.St	9	x
Ross on Wye	1016.4	+2	ESE	2	o⊕	49	85	6	–	–	–	a.St	9	*
Falmouth	1012.0	0	SE	6	b⊕	53	85	8	–	–	–	–	–	*
Calshot (Hants)	1018.0	+~~3~~2	~~SSW~~ ESE	4	o	49	97	6	1,250	StCu	10	–	–	3
Lympne (Folkestone)	1020.2	+2	E	2	b3fe	43	97	3	–	–	–	–	–	*
Aberdeen	1014.6	+3	S	2	ba2fe	48	92	4	1,250	StCu	6	–	–	4
Howden	1018.5	+2	SE	1	b3fe	37	97	3	2,000	St	2	–	–	*
Cranwell (Lincs)	1019.4	+2	SE	2	b2f	40	97	5	1,250	St	1	a.St	1	x
Felixstowe	1020.8	+2	SSE	3	o	48	97	7	1,250	St	10	–	–	*
Shoeburyness	1020.0	+2	S	2	o	47	85	7	4,200	StCu	3	a.St	7	*
Benson	1017.7	+1	S	3	b	46	92	7	–	–	–	Ci	3	*
S. Farnborough	1018.5	+1	SE	3	o1f	47	92	6	2,000	StCu	9	–	–	*
London (Kew Obsy.)	1019.3	+2	SSE	2	o2f	47	92	4	3,000	Cu	9	–	–	*
Croydon	1019.7	+1	SSE	2	o2f	47	92	5	1,250	St	10	–	–	*
7H. G.M.T. OF 26th														
Renfrew	1018.6	0	SSE	3	o1f	46	85	6	1,250	St	10	–	–	*
Eskdalemuir	1016.0	0	–	0	bc	39	85	6	–	St	3	Ci	3	*
Valencia (Cahirc'n)	1003.4	-1	SE	3	o	53	85	6	2,000	StCu	10	–	–	*
Baldonnel	1009.3	0	SSE	5	o1f	51	85	6	1,250	~~St~~ Cu	9 10	~~A.St~~	~~3~~	*
Manchester (Alex. Pk.)	1016.0	-1	ESE	3	o3f	42	92	3	3,000	St	6	A.St	3	*
Ross on Wye	1014.5	0	ESE	4	o	45	92	5	1,250	St	9	Ci	1	*
Falmouth	1009.3	0	SE	5	o	52	92	7	–	St	10	–	–	*
Calshot (Hants)	1014.7	-2	E	3	c	45	97	5	–	–	–	A.St	7	2
Lympne (Folkestone)	1017.3	-2	SE	5	bcwm	46	75	5	–	–	–	Ci	4	*
Aberdeen	1016.7	0	SSE	4	o2f	49	92	4	1250	St	10	–	–	4
Howden	1018.3	-1	SE	1	o4fe	43	97	2	<500	St	10	–	–	*
Cranwell (Lincs)	1018.3	-2	SE	3	o4fe	43	97	1	<500	St	10	–	–	*
Felixstowe	1019.2	-2	ESE	4	b1f	46	92	6	–	–	–	Ci	1	2
Shoeburyness	1017.8	-1	SSE	1	bc1fe	44	85	6	4,200	Cu	3	Ci	2	*
Benson	1015.3	-1	SE	4	o2f	42	97	4	–	St	10	–	–	*
S. Farnborough	1016.5	-1	E	1	o4f	39	97	2	750	St	10	–	–	*
London	1016.6	-3	E	3	bcmw	40	97	2	2,000	StCu	3	A.St	2	*
Croydon	1017.4	-1	SE	4	bc2f	43	92	4	–	–	–	Ci	5	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

Stations	Barom. at M.S.L. mb. (18H. G.M.T. of 25th)	Temp. °F.	Wind Direc.	Wind Force 0–12	Weather	Barometer at M.S.L. mb. (7H. G.M.T. of 26th)	‡ Change in 3 hours	Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0–12	Direc. of Upper Cloud	Weather	Sea 0–9	† Rainfall mm. (24 hours ended 7H. 26th)	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours (25th)
Lerwick	1013.4	49	SE	5	o2f	1015.5	+1	50	+4	S	5	–	o2f	3	–	50	49	om	om	omc	*
Stornoway	1006.1	51	S	6	opq	1007.9	0	52	+5	S	6	–	oq	5	1	52	47	bc	bc.opq	oq	1.5
Castlebay (Barra Is.)	1008.6	50	SW	4	o	1007.7	0	52	-1	SE	6	–	od	6	8	52	47	o.c.op.	op.o	ord	0.0
Malin Head	1009.2	46	S	2	om	1005.8	0	50	+4	SE	3	–	om	2	4	50	42	cm	om	omr	1.9
Blacksod Point	1006.1	49	S	2	bc	1003.6	-3	45	+5	–	0	–	od.r3f	1	1	51	41	bc.	bc	bbc.om	*
Roche's Point	1008.1	53	ESE	4	o	1006.6	-1	53	+3	SE	5	–	o	5	18	54	48	orm.	rmo	ol.or.o	*
Birr Castle	1009.1	45	E	1	r	1005.7	*	51	+7	SE	2	–	o	*	10	51	43	g.om.o	g.or	op.o	0.0
Donaghadee	1012.6	48	W	1	omp	1011.6	-1	50	+5	SW	3	–	omg	3	1	53	44	bm	cmp	omp⊕	*
Liverpool (Bidston)	1015.1	47	SE	3	c	1014.0	0	44	+2	ESE	5	S	o	4	–	52	42	bcm.	bcm	om	2.7
Holyhead	1012.9	50	S	3	og	1011.1	0	47	-3	SSE	5	–	c	3	–	54	46	bc.c.	c.o	ocg⊕	1.1
Pembroke (St. Ann's Head)	1012.5	53	SE	4	o	1006.2	-1	51	-2	SSE	4	–	o1f	4	1	55	50	c.	c.o	oc.om	1.0
Scilly (St. Mary's)	1010.6	54	SE	4	c	1007.4	-1	53	+1	SE	4	S	bc	5	–	55	52	bc.c.o	o.c	z.bc.	0.3
Jersey (St. Aubin)	1015.2	53	ESE	5	b	1012.4	0	50	0	E	4	–	o	4	–	54	47	bc.b.	b	⊕bw.o	6.6
Portland Bill	1016.3	55	SE	5	bc	1012.6	0	53	0	SE	6	SE	bc	6	–	~~52~~ 59	50	bc.	bc	bc	*
Dungeness	1019.5	46	E	2	b	1015.8	-2	49	-1	SSE	4	S	b	4	–	50	45	c.o.	oyb	b bc	*
Wick	1009.4	48	SSW	7	omq	1013.1	0	48	+1	S	6	–	omq	5	–	49	46	omq	omq	omq	*
Nairn	1009.5	48	S	3	c	1012.3	*	50	+6	SSW	2	–	cg	2	–	50	42	cg.o bc	~~o.bc~~ bc.cg	q.cg.	1.7
Leith	1002.9	48	SE	1	c	1013.8	0	45	+3	SSE	2	–	o	0	–	50	42	c.bc	bc.c	c.o	*
Tynemouth	1016.3	45	SW	3	fc	1018.2	0	43	0	SW	2	–	o2f	2	–	46	41	f.	f.	fe.om	*
Spurn Head	1018.6	46	SE	2	bm	1018.3	0	47	+5	SSE	4	–	ogm	3	–	50	40	om.	bm	cf.om	*
Yarmouth (Gorleston)	1019.9	47	S	3	c	1019.7	-2	47	+3	SE	3	–	bz	2	–	51	42	cm.cv	cv	bmbcz⊕	3.9
Clacton-on-Sea	1020.5	48	SSE	2	o	1018.4	-2	47	0	ESE	3	–	bcme	2	–	51	46	bcz	bcz.om	c.bcme	4.7
Nottingham	1018.2	42	SSE	1	b	1017.0	*	43	0	E	3	E	o	*	–	52	41	c.om	o.c.bc	c.o	0.1

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4.

M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 26.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fair to cloudy, misty.	Poor	Mod.
2. E. England	Fair to cloudy, misty.	Indiff.	Smooth
3. E. Midlands	Dull, misty.	Poor	-
4. W. Midlands	Dull.	"	-
5. S.W. England	Dull, some slight rain.	Good	R.Rough
6. South Wales	Dull, misty.	"	Mod.
7. North Wales	Cloudy.	V.Good	Slight
8. N.W. England	Dull, local mist.	Indiff.	Slight
9. N. Midlands	Dull, misty.	Poor	-
10. N.E. England	Dull, misty.	"	Slight
11. E. Scotland	Dull, some mist.	Indiff	Mod.
12. S.W. Scotland	Fair to dull, some mist.	Fair	Slight
13. Isle of Man	Dull.	Good	"
14. N.&N.W. Scotland	Dull, misty, squally.	Fair	R.Rough
15. Hebrides	Dull, squally, some drizzle	Good	"
16. Orkneys and Shetlands	Dull, misty.	Poor	Mod.
17. N.W. Ireland	Dull, misty, some drizzle.	Fair	Smooth
18. N.E. Ireland	Dull, misty.	Fair	Slight
19. S.E. Ireland	Dull.	"	R.Rough
20. S.W. Ireland	Dull.	"	Smooth

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
7	25th	0850	55	5
4A	25th	0500	53	5
3	25th	1020	54	5
10	25th	1100	48	4
6	25th	1500	55	5

Barometric change from 4 h. to 7 h. (half millibars).

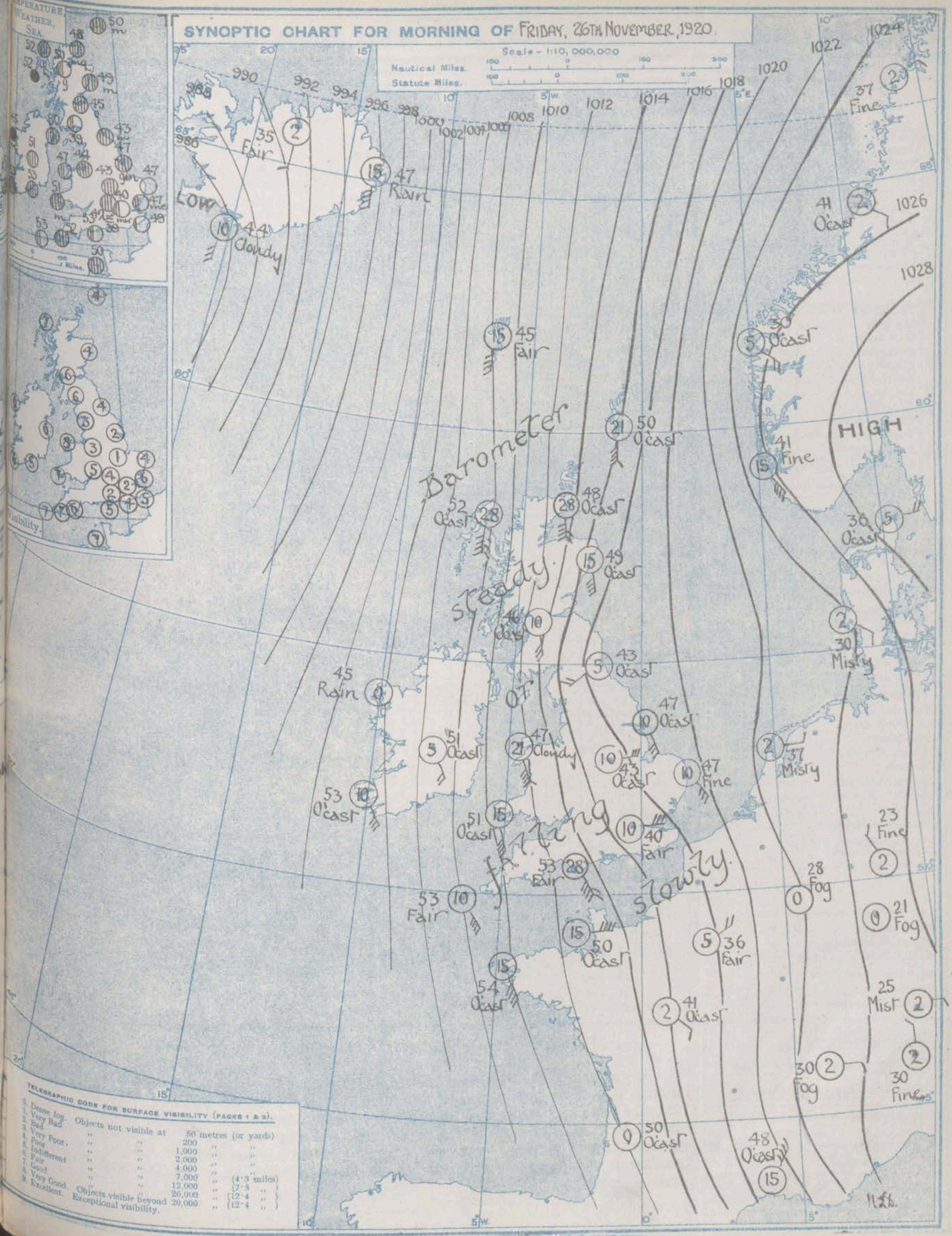
EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ½ clouded. overcast sky. sky ½ clouded. rain falling. snow. sleet. mist. fog. T thunder. ℞ thunderstorm.
SEA DISTURBANCE.—Rough. High seas.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

A depression centred near the Azores will probably move Eastward or North-eastward. A secondary over the Bay of Biscay is likely to move Northward. We may, therefore, anticipate unsettled weather during the next day or two, with Southerly winds.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Friday, 26th November, 1920.	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands	Wind SE or S moderate, fresh locally; variable sky, probably some rain; visibility indifferent to fair, some mist; moderate temperature.	Wind between SW and SE; unsettled.
4. W. Midlands 5. S.W. England 6. South Wales 7. North Wales 8. N.W. England	Wind SE or S, moderate or fresh; cloudy or dull, probably some rain; visibility fair but local mist; rather mild.	
9. N. Midlands 10. N.E. England 11. E. Scotland	Wind SE or S, moderate; cloudy, perhaps slight rain; visibility indifferent to fair, some mist; moderate temperature.	
12. S.W. Scotland 13. Isle of Man	As for 4 - 8	
14. N.&N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands	Wind Southerly, fresh or strong; variable sky, some rain; visibility mainly fair; mild.	
17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Wind Southerly, moderate, fresh locally; cloudy or dull, some rain; visibility fair, local mist; rather mild.	

E.S.B.


SYNOPTIC CHART FOR MORNING OF FRIDAY, 26TH NOVEMBER, 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
TEMPERATURE, WEATHER, SEA.
Barometer steady or rising slowly.
LOW
HIGH
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very Bad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor. " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " (4·3 miles)
6. Fair " " 12,000 " (7·5 "
7. Good " " 20,000 " (12·4 "
8. Very Good. Objects visible beyond 20,000 " (12·4 "
9. Excellent. Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 331.

Friday 26th November

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 25th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 24th-25th.	Rainfall. Day. 9h-18h. 25th.	Sunshine. Sunrise to Sunset. 25th.
Scotland.	Oban	bc	c.o	52	43	-	-	0.3
	Banff	o.c.	bc.c.	49	42	-	-	0.4
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	of	m.bc bm	46	34	-	-	0.0
	Scarborough	bc	bc	49	42	-	-	0.6
	Skegness	b.o	oc b	51	41	-	-	4.0
England, E.	Lowestoft							
	Felixstowe	b	om	50	46	-	-	5.5
	Southend-on-Sea	o.c.c.bc	bc.c.oc	55	37	-	-	3.9
England, S.E.	Tunbridge Wells	bc.c	c.o	54	41	-	-	1.4
	Margate	o.c.	o	50	37	-	-	0.0
	Ramsgate	*	*	48	42	-	-	0.0
	Folkestone	m.o	o	49	39	-	-	0.0
	Hastings	o	o	51	47	-	-	0.0
	Eastbourne	o	o	52	48	-	-	0.0
	Brighton	o.bc	bc.o.b	55	48	-	-	1.0
	Worthing	c.bc	bc.o	55	47	-	-	1.3
	Littlehampton	o.c.	bc	57	47	-	-	1.5
	Portsmouth (S'thsea)	*	*	55	39	1	-	3.1
	Bournemouth	*	*	56	50	-	-	6.5
	Ventnor (I. of W.)	*	*	57	49	-	-	5.0

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 24th-25th.	Rainfall. Day. 9h-18h. 25th.	Sunshine. Sunrise to Sunset. 25th.
England, N.W.	Douglas (I.O.M.)							
	Blackpool	bc	bc	52	40	-	-	1.4
	Southport	b.bc	bc.b.bc.c.o	51	39	-	-	2.5
	Morecambe	*	*	53	48	-	-	2.8
Midlands.	Buxton							
	Leamington Spa	oc.	c.b	55	35	-	0.3	2.0
	Malvern	o.c.	cz	52	40	-	-	3.0
	Bath	b.bc	b.bc.c.o	56	36	1	-	5.4
Wales.	Rhyl	bc.c.	c	47	39	-	-	1.6
	Colwyn Bay	*	*	55	38	-	-	2.8
	Llandudno	bc.c	c	57	42	0.2	-	2.2
	Aberystwyth	o.c.	bc.o	55	40	1	-	0.5
	Tenby							
	Swansea							
England, S.W.	Weymouth	bc.	bcd.	57	51	6	0.2	4.6
	Teignmouth							
	Torquay	c.bc.	bc	58	50	2	-	4.0
	Paignton	bc	bc	58	46	2	-	3.8
	Penzance	c.o	o.c.b	55	45	0.2	-	0.5
	Newquay	b	bc	56	44	1	-	2.5
	Bude	w.b.	bc	57	43	1	-	3.2
	Ilfracombe	o.c.	c.bc.c.o	55	40	-	-	1.0
	Weston-s-Mare	bc.c	bc	52	32	2	-	2.0

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 25th	Weather. 13h-18h 25th	Weather. 18h-1h 25th-26th	Weather. 1h-7h 26th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
Renfrew	b.o2fc o1f/c.o1f	o1f	o1f		51	42	41	mm. -	mm. 2	1.3
Eskdalemuir	o2f pd	o.o1f	o)d.c o1f c.o(1)	bc.c	47	38	33	Trace	-	0.2
Valencia (Cahire'n)	o.	o.c.o.	bc.c.v	o1p	53	39	34	-	2	0.0
Baldonnel	bc.c.c.o	o2f r r.	c.o2f	o2f	57	45	43	1	-	11
Manchester (Alex Pk)	b.bo3f bc c2f	bc.c2f	b.o.3f	c.o3f	53	41	29	-	-	*
Ross on Wye	bc.b bc.c.o	b.o.bc.c.o(1)	c.o(1) bc.c.o	o3w.c	55	42	38	-	-	4.2
Falmouth	bc.c.c.o	c.o.b.bc	b.bc	c.o	55	51	47	-	-	1.3
Calshot (Hants)	b.bc1f bc.c1f	c.o2f	2f. 1f.	b.1f bc.c2f	54	45	41	-	-	6.1
Lympne (Folkestone)	o1f.2f1f	o3f c.o3f c3f	b.bc w2f	b.bc w2f	48	41	34	-	Trace	0.0
Aberdeen	o2f.o2f	o2f.2fe	2fe	2fe o2f	49	46	39	-	-	0.0
Howden	4-5fe.2fe	b.bc2fe	6-8fe (1)	4-5fe 6-8fe	49	38	31	-	-	0.5
Cranwell (Lincs)	4-5fe.o2f	bc.c.o	4-5fe c8fe	4-5fe	48	35	31	0.1	0.3	0.8
Felixstowe	b.bc.bc.c	bo.c.o.o	o1f bc.c	bc.c.bbc	51	43	*	-	0.1	5.6
Shoeburyness	b.bc b.bc	bc.o.o.o	2fe 4-5fe	3fe 2fe	55	36	34	-	Trace	3.9
Benson	bc.c.bc.c	b.bc.b.bc	bc.c.o	c.o	57	41	31	-	0.1	*
S. Farnborough	o2f bc.o	bc.c o2f	b.bc.o	o3f	53	39	32	-	Trace	2.0
London (Kew Obsy.)	w3f b bc2f	b bc c o2f	o3f w	3f w	55	39	28	Trace	0.2	4.6
Croydon	b.bc c o2f1f/b.bc1f c o2f/c o2f c o bc	2f. 1f. b bc2f.	bc c2f1f b b c		55	38	*	Trace	0.1	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r,r, = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—
Aurora — Solar halo
Rime — Lunar halo
Glazed frost — Solar corona
Glazed roads — Lunar corona

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9h G.M.T. 26th							Yesterday.	Yesterday.	To-day.
Greenwich (Royal Observatory)	bc	bc	om.bw	55	37	30	0.3	4.7	85	89
City (Bunhill Row)	*	*	*	*	*	*	*	0.4	*	*
Westminster (St. James's Park)	*	*	*	56	42	33	-	3.4	72	85
Regent's Pk (Botanical Gdns)	*	*	*	*	*	*	*		*	*
Camden Sq. (British Rainfall)	bc f.c.	c.o	*	55	38	30	-	*	80	100
Kensington Palace	bc	bc.o	*	56	37	32	-	*	94 (18h)	98
Hampstead Observatory	*	*	*	54	38	35	Trace	1.6	*	98

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total 269 Joules.

	Milliwatts.
Average Rate.	8.9
Maximum Rate.	20

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

26th AND 27th NOVEMBER, 1920.

Stations	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.34 / 7.36	11.40 / 11.41	3.46 / 3.45
Greenwich	7.37 / 7.39	11.47 / 11.48	3.57 / 3.56
Wick	8.27 / 8.30	11.59 / 12.0	3.31 / 3.29
Valencia	8.20 / 8.22	12.28 / 12.29	4.36 / 4.35

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 17 h. 15 m. to 6 h. 15 m.

Stars.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	13	0	9	26	73
δ Ursae Minoris	13	0	4	14	33

NOTES ON THE WEATHER OF YESTERDAY.

A good deal of rain fell in Ireland and the Hebrides, 18mm being measured at Roche's Point 10mm at Birr Castle and 8mm at Castlebay. Sunshine was fairly abundant in the Eastern and Southern districts, Bournemouth, Jersey and Calshot each recording 6 hours or more. Temperature was rather high, maximum readings above 55° being observed at most of the Southern Stations.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21555 ..SATURDAY, 27TH NOVEMBER 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather	Temp. °F.	% Humidity.	§ Visibility 0-9.	Height of Low Cloud. Feet.	Low Cloud. Form	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 26th														18H. G.M.T. of 26th													
Renfrew	1012.4	-2	E	3	02f	48	85	4	5,700	St	4	aCu	6	*	1011.1	-2	E	4	02f	49	85	4	2,000	St	10	-	-	*
Eskdalemuir	1014.2	-2	SSE	3	cm	46	75	6	-	St	3	Ci	5	*	1012.5	-3	SE	4	cm	44	85	5	-	StCu	4	aCu	3	*
Valencia (Cahire'n)	1001.9	-1	SSE	5	c	55	85	8	1,250	StCu	8	-	-	4	1001.4	0	SSE	5	c	53	92	7	1,250	St	8	-	-	4
Baldonnel	1008.0	-1	SE	3	od₀	50	92	5	750	St	10	-	-	*	1007.0	+1	SE	4	od₀	52	85	4	750	St	10	-	-	*
Manchester (Alex. Pk.)	1014.0	-4	ESE	5	02f	48	75	4	4,200	StCu	10	-	-	*	1012.7	-1	E	4	03f	48	85	3	4,200	StCu	10	-	-	*
Ross on Wye	1013.0	-2	E	2	02f	47	85	5	2,000	St	10	-	-	*	1011.6	-1	E	2	03f	46	92	3	1,250	St	9	aSt	1	*
Falmouth	1008.5	-2	SE	5	o	53	92	6	-	aSt	5	aCu	4	*	1007.5	0	SSE	3	o2m	53	92	5	-	Nb	10	-	-	*
Calshot (Hants)	1013.4	-2	ESE	4	o1f	50	92	6	2,000	St	10	-	-	3	1012.2	-1	ESE	4	02f	50	92	5	2,000	StCu	10	-	-	3
Lympne (Folkestone)	1015.9	-2	SE	4	bc1f	49	75	6	5,700	StCu	3	Ci	3	*	1015.0	-1	SE	4	o2f	47	85	5	2,000	StCu	8	aCu	2	*
Aberdeen	1016.4	-1	SSE	4	o1f	48	85	6	1,250	St	10	-	-	4	1015.5	-1	SSE	5	o2f	48	85	5	1,250	St	10	-	-	4
Howden	1016.2	-3	SE	3	c	50	97	5	2,000	St	6	Ci	2	*	1013.4	-3	SE	2	c	44	97	4	4,200	StCu	6	aCu	2	*
Cranwell (Lincs)	1016.7	-2	SE	4	bc	49	85	6	3,000	St	3	CiCu	2	*	1015.6	0	SE	3	o2f	44	92	5	5,700	StCu	10	-	-	*
Felixstowe	1016.9	-3	SE	4	bc1f	49	85	6	-	-	-	aSt	6	*	1016.7	-1	SE	4	bc1f	48	85	6	-	-	-	aCu	4	*
Shoeburyness	1016.1	-2	SE	2	b2fg	49	75	5	4,200	St	2	-	-	*	1014.9	-1	SE	2	c2fg	46	85	5	2,000	StCu	5	CiCu	3	*
Benson	1013.4	-2	SE	3	bc	46	85	5	-	-	-	CiSt	5	*	1013.2	-1	SE	4	bc	47	85	5	-	-	-	CiCu	5	*
S. Farnborough	1014.2	-3	ESE	2	cm	50	85	5	-	-	-	aCu	8	*	1013.0	-1	ESE	4	o	46	92	4	2,000	StCu	5	aCu	3	*
London (Kew Obsy.)	1014.6	-3	ESE	2	o2f	49	85	4	4,200	StCu	7	aSt	3	*	1013.7	-1	ESE	2	o3f	47	85	3	3,000	StCu	10	-	-	*
Croydon	[illegible]	-2	ESE	3	o2f	49	85	5	4,200	StCu	5	CiCu	4	*	1014.2	-0	E	3	o2f	47	85	5	2,000	St	10	-	-	*
	1015.4																											
	1H. G.M.T. of 27th														7H. G.M.T. of 27th													
Renfrew															1006.4	-2	ENE	2	o1r2.3f	46	97	3	1,250	St	10	-	-	*
Eskdalemuir	1010.6	-2	NE	1	o1r2.3f	45	85	5	-	Nb	10	-	-	*	1007.7	-2	SE	2	o	46	92	6	2,000	St	10	-	-	*
Valencia (Cahire'n)	1008.4	+5	NNW	4	or	47	*	*	*	*	*	*	*	3	1004.6	+3	NNW	4	or	45	85	5	3,000	Nb	10	-	-	*
Baldonnel	1005.9	-2	ESE	4	oq	51	85	23	1,250	StCu	10	-	-	*	1003.3	-2	SE	3	o1r23f	51	92	5	750	St	10	-	-	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1007.8	-3	ESE	4	o3f	48	85	3	4,200	StCu	10	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1006.4	-2	ESE	4	o1₀m	49	92	5	1,250	Nb	9	A.St	1	*
Falmouth	1005.2	-2	SE	4	o	53	97	6	-	StCu	10	-	-	*	1002.8	-2	SSE	3	o	53	97	7	-	Nb	10	-	-	*
Calshot (Hants)	1004.6	-2	ESE	4	o1₀	51	97	5	2,000	StCu	10	-	-	3	1007.0	-3	SE	4	o1f	50	97	6	1,250	St	10	-	-	3
Lympne (Folkestone)	1013.4	-2	E	3	bc2f	46	85	4	-	-	-	A.Cu	4	*	1010.6	-2	SE	4	o1₀m	47	85	5	750	Nb	10	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1010.5	-2	SSE	4	oq1r23f	48	97	4	1,250	Nb	10	-	-	4
Howden	1012.7	-1	-	0	o2f	44	92	4	2,000	St	10	-	-	*	1009.9	-2	-	0	o2f	45	92	5	3,000	St	10	-	-	*
Cranwell (Lincs)	1013.3	-2	ESE	2	60	43	97	4	4,200	StCu	10	-	-	*	1010.8	-3	SE	3	o	43	97	4	3,000	StCu	10	-	-	*
Felixstowe	1014.6	-1	SE	3	bc	47	92	6	-	-	-	A.Cu	4	2	1012.7	-2	SE	4	c1f	47	85	6	7,200	StCu	8	-	-	3
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	-	*	1010.5	-1	SE	2	c	45	85	6	2,000	StCu	5	A.St	3	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1006.9	-2	ESE	4	o	47	85	5	-	StCu	10	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008.3	-3	SSE	2	o2f	47	92	4	3,000	StCu	7	A.Cu	3	*
London (M.O. at 1H.)	1011.7	-3	*	*	*	47	*	*	*	*	*	*	*	*	1008.8	-2	E	2	o3f	46	85	3	3,000	StCu	10	-	-	*
Croydon	1012.5	-3	SE	2	o2f ψ	46	85	5	4200	StCu	4	A.Cu	5	*	1010.0	-3	ENE	1	o2f	46	92	4	3,000	StCu	8	A.St	2	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather.	Barometer. at M.S.L. mb.	‡ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
	18H. G.M.T. of 26th					7H. G.M.T. of 27th									24 HOURS ENDED 7H. 27th						26th
Lerwick	1015.3	49	SSE	5	o	1012.5	-1	48	-2	SE	6	SE	oq	5	-	50	48	om.	o	cq	*
Stornoway	1006.1	52	S	3	o	1003.4	-1	50	-2	S	2	-	or	1	1	52	50	o	o	o. or	0.0
Castlebay (Barrals)	1006.2	51	SE	6	odp	1002.1	-1	52	0	SSE	4	-	o1c	5	1	52	50	d.om.	om.odp	d1c.om1c	0.0
Malin Head	1004.3	48	S	3	om													om	om		
Blacksod Point	1000.2	52	SE	3	bc	1001.4	+1	45	0	NW	2	-	or23f	2	18	54	44	or.	bc	omr. or	*
Roche's Point	1004.9	53	SE	4	o	1002.4	-1	51	-2	SE	2	-	o	4	0.4	54	50	o.c.om	o	o.c1c.o.	*
Birr Castle	1004.1	53	SE	2	o	1001.8	*	49	-2	SE	1	-	o	*	0.4	53	47	god.o	c.o	o	0.8
Donaghadee	1009.6	50	SSE	4	omq	1005.6	-3	50	0	S	2	-	omr	2	3	51	50	omq.	omq/p	ompa	*
Liverpool (Bidston)	1010.8	47	ESE	4	o	1005.7	-2	46	+2	SE	5	-	om	4	-	48	44	om.	om	om	0.2
Holyhead	1008.7	50	SSE	4	oq	1004.0	-2	50	+3	SSE	4	-	or2.3f	2	6	53	48	c.op	op.c.o	op.or	0.0
Pembroke (St. Ann's Head)	1008.3	52	SSE	4	o2f	1003.5	-2	52	+1	ESE	3	-	od23f	4	2	53	50	omg	omg	om, omd	0.0
Scilly (St. Mary's)	1007.0	53	SSE	3	bc	1002.2	-2	51	-2	SE	3	-	or23f	4	1	57	51	bc.c.o	o.c.bc	bcc.o1m	2.8
Jersey (St. Aubin)	1010.4	53	ESE	4	o	1006.0	0	52	+2	ESE	4	SE	c	4	-	54	48	o.c.bc.o	o.c.o	o.c	0.1
Portland Bill	1009.8	53	ESE	6	o	1006.1	-4	53	+2	SSE	5	-	o1c	5	1	57	51	bc.c.	o	o1c	*
Dungeness	1014.1	50	SSE	4	c	1010.2	-3	50	+1	SSW	3	SW	c	4	-	51	48	bc.	bc.c	c	*
Wick	1011.6	49	S	7	omq	1007.0	-2	48	0	S	7	-	ompq	5	21	49	44	omq	omq	ompq	*
Nairn	1010.6	48	SE	2	c	1006.0	*	48	-2	-	0	-	cg	1	-	50	44	cgm	cgm	cg	0.2
Leith	1011.3	48	SSE	1	o	1006.7	-2	47	+2	SSE	1	-	o	1	-	50	45	o.c.o	o	ou.om.o	*
Tynemouth	1014.1	48	SSE	4	c1fq	1009.4	-3	48	+5	S	3	-	o2f	3	0.1	49	42	om.	cm	om.	*
Spurn Head	1014.9	48	SE	5	bcm	1011.5	-1	47	0	SE	4	-	c	3	-	49	44	bcm	bcm	c. omc	*
Yarmouth (Gorleston)	1016.9	47	SSE	4	b	1012.3	-3	48	+1	SSE	4	-	b	3	-	50	47	b2.	b2.b	bcc.bc	4.6
Clacton-on-Sea	1015.5	48	ESE	3	c	1011.1	-2	47	0	ESE	3	S	cz	2	-	49	47	bcmcz	bc.cz	cz	3.7
Nottingham	1013.9	47	ESE	2	o	1009.1	*	45	+2	ESE	2	SE	o	*	-	50	42	o.c	c.o	c.o	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p.4.

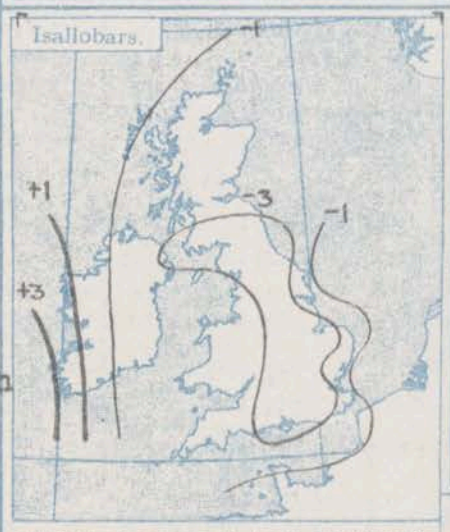
M.O. FORM 2370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 27.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, misty; local rain.	Indiff.	Mod
2. E. England	Cloudy, some mist.	Fair	Slight
3. E. Midlands	Dull, misty.	Poor	-
4. W. Midlands	Dull, slight local rain.	Indiff.	-
5. S.W. England	Dull, some rain.	Good	Mod.
6. South Wales	Dull, misty; some drizzle	"	"
7. North Wales	Dull, misty; local rain.	Fair	Smooth
8. N.W. England	Dull, misty.	Indiff.	Mod.
9. N. Midlands	Dull.	"	-
10. N.E. England	Dull, some mist.	Poor	Slight
11. E. Scotland	Dull, misty, some rain.	"	Mod.
12. S.W. Scotland	Dull, misty, some rain.	Indiff.	Slight
13. Isle of Man	Dull, misty.	"	"
14. N. & N.W. Scotland	Dull, some rain, squally	"	R. Rough
15. Hebrides	Dull, some rain.	"	Mod.
16. Orkneys and Shetlands	Dull, squally.	Poor	R. Rough
17. N.W. Ireland	Dull, misty; some rain.	V. Poor	Smooth
18. N.E. Ireland	Dull, misty, some rain.	"	"
19. S.E. Ireland	Dull, some rain.	Indiff.	Mod.
20. S.W. Ireland	Dull, some rain.	"	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number	Date	Time G.M.T.	Sea °F	Air °F
4A	26th	0400	52	49
7	26th	0255	55	50
8	26th	?	52	49
5	26th	0830	53	49
3.	26th	1020	54	52
1	26th	1215	55	55
7	27th	0345	53	55



Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain. snow. sleet. hail. fog. mist. T thunder. R thunderstorm.
SEA DISTURBANCE.—Rough. High seas.

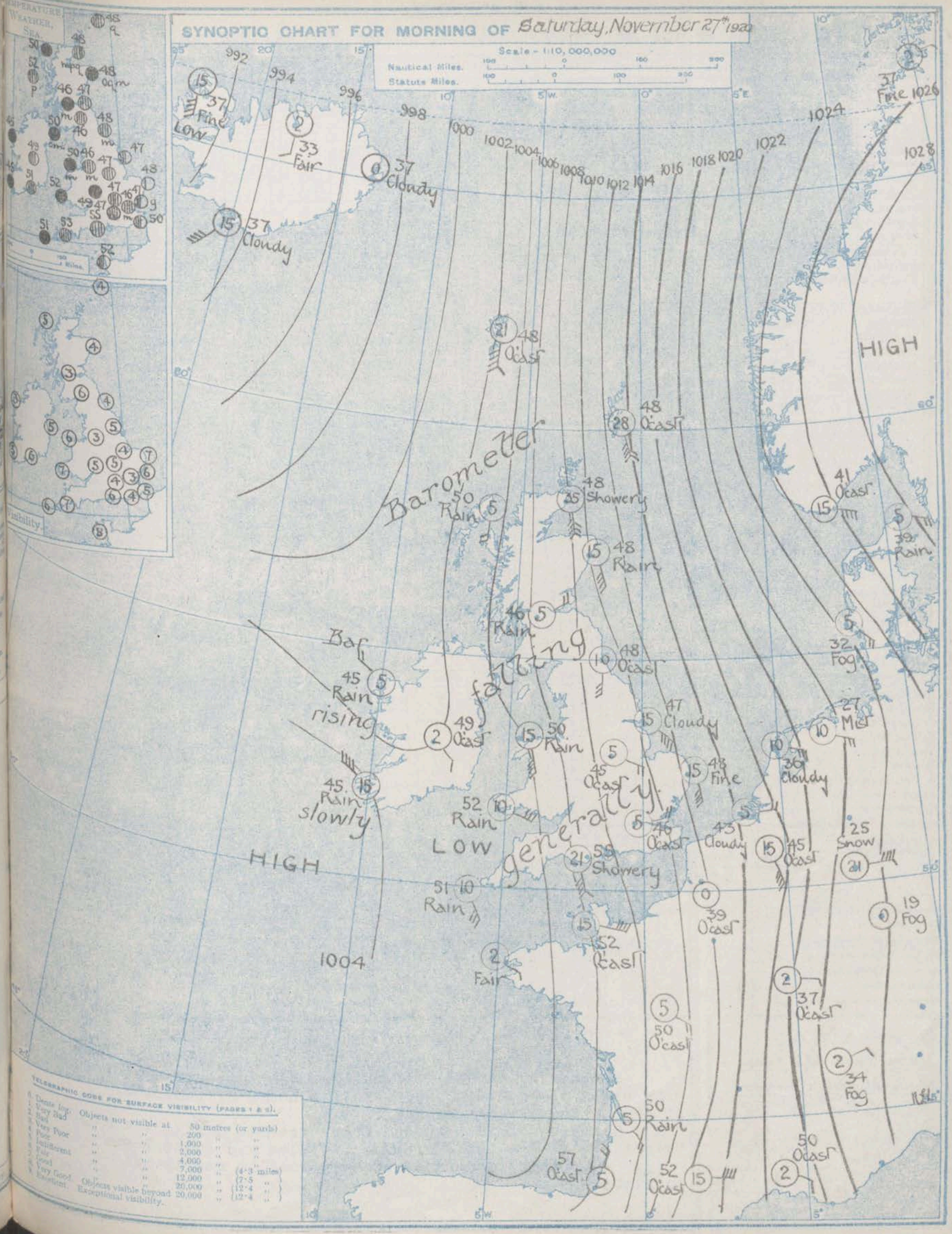
GENERAL INFERENCE from observations received up to 9h. G.M.T.

A V-shaped depression lying over Ireland will move Eastward or North-eastward and cause rain over the whole Kingdom. Several days unsettled weather seems probable.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Saturday, 27th November, 1920.	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands	Wind mainly S.E. or S, moderate or fresh, strong in places; dull some rain; visibility indifferent to fair; mild.	Unsettled for several days.
4. W. Midlands 5. S.W. England 6. South Wales 7. North Wales 8. N.W. England	Wind S.E. or S, moderate, veering W or N.W. later; dull some rain, heavy in places; visibility indifferent, then improving; rather mild to moderate temperature.	
9. N. Midlands 10. N.E. England 11. E. Scotland	Same as 1 - 3.	
12. S.W. Scotland 13. Isle of Man	Same as 4 - 8	
14. N. & N.W. Scotland 15. Hebrides	Wind N.W. moderate, probably backing later; changeable, rain or hail showers; visibility good; rather cold.	
16. Orkneys and Shetlands	Same as 1 - 3	
17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Same as 14 - 15.	

E.S.B.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 10.00 G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Saturday, November 27th 1920
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
Barometer
falling
generally.
HIGH
LOW
HIGH
Low
Bar
rising
slowly
992
994
996
998
1000
1002
1004
1006
1008
1010
1012
1014
1016
1018
1020
1022
1024
1026
1028
1004
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0. Dense fog. Objects not visible at 50 metres (or yards)
1. Very dad " " 200 " "
2. Bad " " 1,000 " "
3. Very Poor " " 2,000 " "
4. Poor " " 4,000 " "
5. Indifferent " " 7,000 " "
6. Fair " " 12,000 " (4·3 miles)
7. Good " " 20,000 " (7·5 ")
8. Very Good " " 30,000 " (12·4 ")
9. Excellent. Objects visible beyond 30,000 " (12·4 ")
Exceptional visibility.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 332. {Saturday 27th NOVEMBER

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 26TH

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 25th-26th	Rainfall. Day. 9h-18h. 26th	Sunshine. Sunrise to Sunset. 26th
Scotland.	Oban	c	o	50	46	3	-	0·0
	Banff	o c	o	49	45	-	-	0·0
	Montrose							
	St. Andrews	x	x	48	42	1	-	0·0
England, N.E.	Harrogate	o f. bc	bc c m	45	39	-	-	0·0
	Scarborough	o	o	49	42	-	-	0·0
	Skegness	b. o. bc	o. bc. b	50	44	-	-	3·7
England, E.	Lowestoft							
	Felixstowe	bc	b	49	46	-	-	4·6
	Southend-on-Sea	c bc	bc c	50	41	0·2	-	5·0
England, S.E.	Tunbridge Wells	bc	bc	51	41	-	-	3·2
	Margate	bc. c. b	b. bc. b	50	45	-	-	3·6
	Ramsgate	*	*	47	45	-	-	4·6
	Folkestone	o bcw	bc. c	52	45	-	-	4·2
	Hastings	c. bc	bc. c. o	51	47	-	-	3·0
	Eastbourne	c o	o. c. o	50	46	-	-	1·6
	Brighton	c. o. c.	c. o. bc	52	47	-	-	0·3
	Worthing	bc	bc	52	48	0·3	-	1·8
	Littlehampton	o. c	bc. o. c	58	46	-	-	2·0
	Portsmouth (S'thsea)	x	x	53	43	0·4	-	2·1
	Bournemouth	*	*	52	47	-	-	1·2
	Ventnor (I. of W.)	*	*	57	47	trace	-	4·0
England, N.W.	Douglas (I.O.M.)							0·0
	Blackpool	c	o	50	42	-	-	1·0
	Southport	c	c. o	48	39	-	-	2·4
	Morecambe	x	x	51	42	-	-	
Midlands.	Buxton							2·5
	Leamington Spa	b	c b	49	40	-	-	0·2
	Malvern	z	c	46	42	-	-	0·6
	Bath	o. c bc.	o	51	46	-	-	0·0
Wales.	Rhyl	o. c	c	48	45	-	-	0·1
	Colwyn Bay	x	x	51	42	-	-	1·3
	Llandudno	c	c	51	46	-	-	0·0
	Aberystwyth	o. c.	c. o	53	47	-	-	
	Tenby							
	Swansea							0·0
England, S.W.	Weymouth	c.	c. o	54	50	-	-	
	Teignmouth							0·0
	Torquay	o.	c	55	52	0·2	-	0·0
	Paignton	odp	o	55	51	-	-	0·0
	Penzance	op	o	55	52	-	0·2	0·5
	Newquay	om	o. bc. o	54	50	-	-	1·0
	Bude	c	c	57	48	-	-	0·0
	Ilfracombe	o	o	54	50	0·1	0·3	0·0
	Weston-s-Mare	c.	c	52	44	-	-	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 25th	Weather. 13h-18h 25th	Weather. 18h-1h 25th-26th	Weather. 1h-7h 26th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall.† Day. 7h-18h mm.	Rainfall.† Night. 18h-7h mm.	Sun. Hours.
Renfrew	o2f	o2f.	o2f r	o3f r	50	45	42	-	4	0·0
Eskdalemuir	c. o bc. c	c. o bc. c	c o r. c o	r. o	47	37	40	-	1	2·2
Valencia (Cahirc'n)	o1f. c. o	c. op o	r r	r. o. r r	55	44	43	1	26	0·1
Baldonnel	o2f pd	o2f d o	opd	o3f 2f	52	50	46	0·1	0·1	0·0
Manchester (Alex Pk)	bbc3f. o2f	o2f o3f	fd. o 3f	o3f	49	43	42	-	0·3	*
Ross on Wye	o1f. c o2f	o1f o2f	o3f o2f	o1f r.	50	45	43	-	1	0·4
Falmouth	op.	o1f o1f c.	o	op.	53	52	51	-	Trace	0·0
Calshot (Hants)	c o2f ⊕ 1f	bc o1f c o2f	o2f p.	o2f p. r r q	51	45	47	-	1	1·5
Lympne (Folkestone)	o1f bc. c bo	bc c p r. r. f	o2f c o bc o2f	bc. c. o2f c	49	44	41	-	Trace	6·4
Aberdeen	o1f q.	o1f q	o2f q	q r r	49	47	46	-	6	0·0
Howden	c. o2f c	c. o2f	r. 2f c	o2f o1f	50	37	35	-	-	1·7
Cranwell (Lincs)	o 5f c bc	o	c. o	o	50	38	36	-	-	3·1
Felixstowe	bc. c bc. c	bc. c 1f	bc. c 2f	bc. c 1f	51	46	*	-	-	5·4
Shoeburyness	1f c. 2f c	2f c. r.	2f c 4-5f c	1f c. c o	49	43	?	0·1	-	5·0
Benson	c. o. c. o	c. o. c. o	c. o	o	48	41	42	-	0·1	*
S. Farnborough	o3f c. o ⊕	bc. c 2f.	o1f c. o	o. o2f	50	38	36	-	Trace	0·5
London (Kew Obsy.)	o3f c o. o2f	o3f o2f.	o3f. 3f	o3f 3f	51	40	34	0·1	-	0·5
Croydon	bc. c. o2f	c o2f bc c2f c	o2f/c o2f ⊕	o2f ⊕	50	42	*	Trace	Trace	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—
Aurora ☆ Solar halo ⊕
Rime ⌶ Lunar halo ⊕
Glazed frost ⌇ Solar corona ⊕
Glazed roads ⌇ Lunar corona ⊕

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass °F.	Rainfall. mm.	Sunshine to Sunset. Hours. Yesterday.	Humidity % 15 h. G.M.T. Yesterday.	Humidity % 9 h. G.M.T. To-day.
	24 Hours ended 9h G.M.T. 27th									
Greenwich (Royal Observatory)	bc	bc c.	c bc a	50	42	32	-	3·7	84	91
City (Bunhill Row)	*	*	*	*	*	*	*	0·0	*	*
Westminster (St. James's Park)	*	*	x	51	44	37	-	0·4	80	86
Regent Pk. (Botanical Gdns)	*	*	x	x	x	*	*		x	x
Camden Sq. (British Rainfall)	bc m c	c. bc m	*	49	40	33	-	*	87	92
Kensington Palace	bc	bc. o	*	51	38	34	0·3	*	85 (18h)	89
Hampstead Observatory	*	*	*	47	39	38	Trace	0·2	*	?

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total 231 Joules.

	Milliwatts.
Average Rate.	7·7
Maximum Rate.	16

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

27th and 28th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7·36 / 7·38	11·41 / 11·41	3·43 / 3·44
Greenwich	7·39 / 7·41	11·48 / 11·48	3·56 / 3·55
Wick	8·30 / 8·33	12·0 / 12·0	3·29 / 3·27
Valencia	8·22 / 8·24	12·29 / 12·29	4·35 / 4·30

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 12 h. 15 m. to 6 h. 15 m.

Star	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	12	0	6	30	50
δ Ursae Minoris	13	0	5	9	40

NOTES ON THE WEATHER OF YESTERDAY.

Weather continued fair in the South-eastern districts, many stations recording four or five hours of sunshine. At Lympne there were 6.4 hours.

Rainy conditions spread from Westward during the night, Valencia having a total of 27mm and Blacksod Point 18mm.

Temperature continued above normal in nearly all localities.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B21,556 ...SUNDAY, 28TH NOVEMBER..1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	13H. G.M.T. 27th														**18H. G.M.T. OF 27th**													
Renfrew	1004.4	-3	NE	3	or₀2-3f (red correction)	48	97	2	1,250	St	10	-	-	x.	1003.3	0	SE	4	or₀2-3f	50	92	5	(1,250?)	Nb	10	-	-	x.
Eskdalemuir	1005.4	-4	SE	2	or₀2-3f	49	85	5	2,000	Nb	10	-	-	*	1004.7	-2	SE	3	o2f	46	97	4	-	Nb	10	-	-	*
Valencia (Cahirc'n)	1006.8	+2	NW	4	o	46 (red: 58)	75	8	2,000	StCu	4	ASt	6	4	1011.2	+6	NW	5	bc	46	75	8	2,000	StCu	6	-	-	4
Baldonnel	1001.6	-3	W	2	oR2-3f	50	97	4	750	Nb	10	-	-	*	1003.6	+4	NW	2	or	42	97	3	<500	St	10	-	-	*
Manchester (Alex. Pk.)	1005.8	-4	SE	5	o3f	49	85	3	3,000	Nb	8	ASt	2	x.	1005.1	-1	ESE	3	c3f	50	85	3	4,200	StCu	8	-	-	x.
Ross on Wye	1005.1	-2	S	2	o	53	85	8	2,000	Nb	10	-	-	*	1004.0	-1	SE	2	o	51	85	7	2,000	StCu	10	-	-	*
Falmouth	1001.9	-2	SSE	4	o	54	92	7	-	StCu	10	-	-	*	1002.9	+1	NW	7	orz	50 (red: 47)	92	4	-	Nb	10	-	-	*
Calshot (Hants)	1006.1	-2	SSE	5	o	53	92	8	1,250	StCu	9	Ci	1	4	1004.8	-1	SE	4	or₀	51	97	7	1,250	St	10	-	-	3
Lympne (Folkestone)	1009.4	-3	SE	4	o1f	51	85	6	2,000	StCu	9	-	-	*	1007.6	-2	SE	5	or₀2-3f	50	85	5	2,000	Nb	10	-	-	*
Aberdeen	1009.1	-1	SSE	4	o2f	49	92	5	1,250	Nb	10	-	-	5	1007.6	-2	SSE	4	or2-3f	48	92	5	1,250	Nb	10	-	-	x.
Howden	1007.9	-3	SE	3	or₀2-3f	46	92	5	750	Nb	10	-	-	*	1007.0	-1	-	0	od₀m	46	97	4	750	Nb	10	-	-	*
Cranwell (Lincs)	1008.7	-2	SE	4	o2f	47	97	5	2,000	- (red)	- (red)	ASt (red)	10 (red)	x.	1007.4	-1	SE	4	o	47	97	5	3,000	StCu	10	-	-	x.
Felixstowe	1010.9	-2	SE	3	o2f	48	85	5	4,200	StCu	8	ASt	2	*	1009.7	-1	SE	5	o2f	49	85	5	5,700	StCu	10	-	-	*
Shoeburyness	1009.3	-2	SE	3	o1fe	50	85	6	2,000	StCu	7	ASt	2	*	1007.8 (red)	-3 (red)	BE (red)	2	o1fe (red)	47 (red)	85 (red)	4 (red)	2000 (red)	StCu (red)	7 (red)	St (red)	10 (red)	*
Benson	1006.5	-2	SSE	4	o	53	85	6	-	StCu	5	Ci	4	*	1004.9	-2	SSE	2	o	50	92	5	-	St	10	-	-	*
S. Farnborough	1007.5	-2	SE	4	o2f	53	85	5	2,000	St	10	-	-	*	1005.6	-3	SE	2	or2-3f	51	97	3	750	Nb	10	-	-	*
London (Kew Obsy.)	1007.7	-3	SE	3	o2f	53	85	5	4,200	StCu	8	ASt	2	*	1006.2	-1	SE	3	or2-3f	50	92	3	2,000	Nb	10	-	-	*
Croydon	1008.9	-1	SE	4	o1f	52	85	6	1,250	StCu	7	ASt	3	*	1007.1	-2	SE	3	or2f	49	92	4	1,250	Nb	10	-	-	*

STATIONS	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	§ Visibility 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	1H. G.M.T. OF 28th														**7H. G.M.T. OF 28th**													
Renfrew															1010.9	+3	-	0	or2-3f	47	97	2	1,250	St	10	-	-	*
Eskdalemuir	1007.2	+2	N	1	o3f	45	92	3	-	St (red)	10 (red)	-	-	*	1010.3	+3	-	0	o	44	92	6	- (red)	St (red)	9 (red)	- (red)	- (red)	*
Valencia (Cahirc'n)	1017.2	+5	NNW	5	bcq	46	*	*	*	*	*	*	*	5	1020.3	+3	WNW	2	bc	45	65	8	4,200	StCu	4	ACu	2	*
Baldonnel	1010.8	+5	NNW (red: SSW)	4	or₀2-3f	42	85	5	1,250	St	10	-	-	*	1015.2	+4	WNW	2	c	41	86	7	3,000	StCu	8	-	-	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008.8	+4	NE	2	o3f	47	92	3	3,000	Nb	9	-	-	*
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008.4	+6	N	1	o2f	48	97	4	750	St	10	-	-	*
Falmouth	1006.9	+2	NW	7	or₀q	45	92	6	-	Nb	9	-	-	*	1012.1	+6	NW	7	oq	46	85	7	-	Nb	10	-	-	*
Calshot (Hants)	1003.3	-1	ESE	1	or₀2-3f	50	97	5 (red)	1,250	St	10	-	-	2	1006.1	+5	-	0	or2-3f	49	97	5	1,250	St	10	-	-	0
Lympne (Folkestone)	1005.5	-2	SSE	5	or₀2-3f	49	92	4	750	Nb	10	-	-	*	1005.6	?	SSW	2	o2f	50	97	5	<500	St	10	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1012.1	+2	-	0	or₀2-3f	48	97	5	1,250	Nb	10	-	-	4
Howden	1006.7	0	-	0	or	46	97	3	750	Nb	10	-	-	*	1009.2	+4	-	0	o3f	46	97	3	750	St	10	-	-	*
Cranwell (Lincs)	1006.9	0	SE	3	o	46	97	4	1,250	St	10	-	-	*	~~1006.7~~ (red: 1008.7)	+2	NNE	2	or2-3f	46	97	4	1,250	Nb	10	-	-	*
Felixstowe	1008.9	-1	SE	4	bc2f	48	97	9	5,700	StCu	5	-	-	3	1007.6	0	SE	4	or₀2-3f	49	97	4	750	Nb	10	-	-	5
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1005.3	+1	-	0	o1fe	47	92	5	2,000	St	10	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1006.4	+3	ENE	1	o	48	97	5	-	St	10	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1007.4	+3	SW	2	o3fe	49	97	2	750	St	10	-	-	*
London (M.O. at 1h.)	1005.3	-1	*	*	*	51	*	*	*	*	*	*	*	*	1005.9	+3	NE	2	or₀2-3f	49	97	3	1250	St	10	-	-	*
Croydon	1005.9	-2	SE	4	o2f	51	92	5	2000	St	8	ASt	2	*	1007.0	+2	-	0	o3f	48	97	2	1,250	St	10	-	-	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

STATIONS	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours	Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather	Sea 0-9	† Rainfall mm.	Max. °F.	Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
	18H. G.M.T. of 27th					**7H. G.M.T. of 28th**									**24 HOURS ENDED 7H. 28th**						**27th**
Lerwick	1011.1	48	SE	6	oq/	1012.3	+4	49	+1	SE	6	-	oqr	5	4	48 (red: 49)	44	oqr	oq/p	oqr	x
Stornoway	1004.5	46	W	4	or	1014.7	+4	~~44~~	-6	NW	3	-	o	2	1	51	42	or.	or	or.o.	0.0
Castlebay (Barra Is)	1005.4	46	NW	4	or	1016.2	+2	47	-5	NNW	4	-	c	3	5	52	45	op	opr.	r.o.c	0.0
Malin Head	1003.2	44	WNW	4	oRq	1013.3	+3	42		NW	4	NW	cq	4	13	54	41	om.	omr.	oq	0.0
Blacksod Point	1007.2	45	NW	3	c	1017.1	+6	43	-2	NW	1	-	bc	1	4	48	38	bcp.	cp	bcbc.	*
Roche's Point	1007.3	45	NNW	4	o	1018.6	+5	41	-10	NNW	4	-	b	3	9	53	40	r.	ro.	cb.	*
Birr Castle	1006.6	43	W	2	f	1017.0	*	36	-13	W	1	-	b	*	9	49	36	or	or	or.b	0.0
Donaghadee	1002.1	52	S	3	omr	1012.1	+6	48	-2	N	4	-	oq	4	13	52	45	omr.	omr.	cm	*
Liverpool (Bidston)	1003.6	49	SE	3	o	1008.9	+4	47	+1	SE	1	-	og	0	2	50	45	D.	D.	opm	0.0
Holyhead	1001.5	50	SE	3	or₀2-3f	1010.3	+4	48	-2	N	7	-	oq	6	10	53	46	op.cp.o	op.cp	oeq.m.	0.0
Pembroke (St. Ann's Head)	1001.6	50	SSE	2	or2-3f	1012.1	+5	46	-7	NW	5	-	or₀	3	47	53	44	omd.o	o.orm	ormor	0.0
Scilly (St. Mary's)	1004.7	?44	NW	7	o	1015.1 (red)	+3 (red)	48 (red)		NW (red)	7 (red)	NW (red)	c (red)	7 (red)	10 (red)	53 (red)	46 (red)	omrq	opq.	opqc (red)	0.0 (red)
Jersey (St. Aubin)	1003.8	52	SE	3	o	1007.7	+1	49	-3	W	6	-	or	4	8	55	49	c.o.	op.o	op.oqr	0.7
Portland Bill	1003.5	53	S	5	o	1005.6	+8	52	-3	NE	3	-	o	5	1	57	51	op.	o	op	*
Dungeness	1006.9	52	S	5	c	1005.0	+2	53	+3	SW	4	SW	c	4	2	53	49	c.bc.6	c	cp.crc	*
Wick	1005.3	48	SSE	7	omq	1011.8	+4	44	-4	S	5	-	omqr	5	18	49	44	ompq	omq/r.	omqr	*
Nairn	1003.2	50	SE	2	o	1013.8	*	48.5	0	-	0	-	ou	1	3	51	43	cpg	cq.o	opg	0.0
Leith	1003.3	49	SE	1	o	1010.3	+2	46	-1	NE	1	-	dm	1	1	50	46	om.o	od.o.	om.od	*
Tynemouth	1006.6	47	S	4	o2f	1009.2	+2	48	0	S	1	-	om	4	6	49	47	cm.	omp	omr	*
Spurn Head	1008.1	48	SE	4	orm	1008.5	+1	48	+1	SE	4	-	o	3	2	~~52~~ (red: 48)	44	odm	odm.	op	*
Yarmouth (Gorleston)	1010.3	48	SSE	4	bc	1008.5	0	48	0	SSE	4	-	omr	3	1	49	47	bo.cm	cm.bcm	cp.om	0.7
Clacton-on-Sea	1008.2	49	SE	4	o	1005.9	0	49	+2	ESE	3	-	ogr	3	2	49	47	c.ozp	ozgp	ogpdr	0.0
Nottingham	1006.5	48	SE	2	o	1008.4	*	47	+2	N	2	-	or	*	11	50	44	ro.	o.	or	0.0

* Information for these columns not usually received ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4

M.O. Form 3370

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 28.11.20.

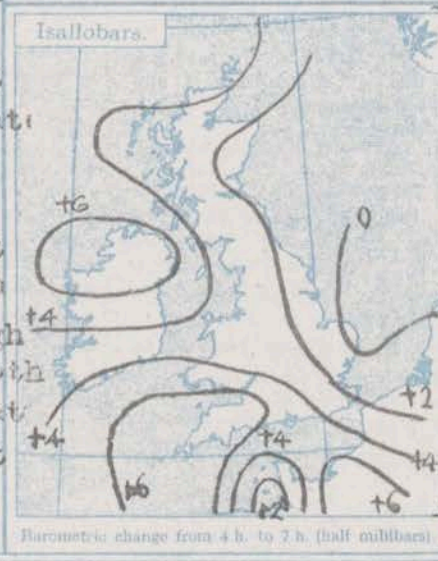
Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, misty, rain locally	Indiff.	Smooth
2. E. England	Dull, misty, rainy.	Poor	Slight
3. E. Midlands	Dull, misty, rainy.	"	-
4. W. Midlands	Dull, gloomy.	V. poor	-
5. S.W. England	Dull, squally.	Good	Rough
6. South Wales	Dull, rainy.	V. good	Slight
7. North Wales	Dull, squally	Fair	Rough
8. N.W. England	Dull, gloomy.	Poor	Slight
9. N. Midlands	Dull, rainy.	V. poor	-
10. N.E. England	Dull, misty, rainy.	Poor	Slight
11. E. Scotland	Dull, rainy, foggy.	Indiff.	Moderate
12. S.W. Scotland	Overcast	Fair	"
13. Isle of Man	Dull, squally.	"	"
14. N. & N.W. Scotland	Dull.	"	Slight
15. Hebrides	Dull.	"	Smooth
16. Orkneys and Shetlands	Dull, squally, rainy.	Indiff.	R. rough
17. N.W. Ireland	Fair.	Good	V. smooth
18. N.E. Ireland	Dull, squally.	Fair,	Moderate
19. S.E. Ireland	Cloudy to fine,	Good	Slight
20. S.W. Ireland	Fair.	V. good	-

Temperature reported from Coastal and Cross Channel Steamers

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
12	27th	0450	52	59
5	27th	0822	53	50
3	27th	1020	54	53
6	27th	1457	55	54

Chart of Position Numbers and Upper Cloud

Isallobars.



Barometric change from 4 h. to 7 h. (half millibars)

Lower Cloud.

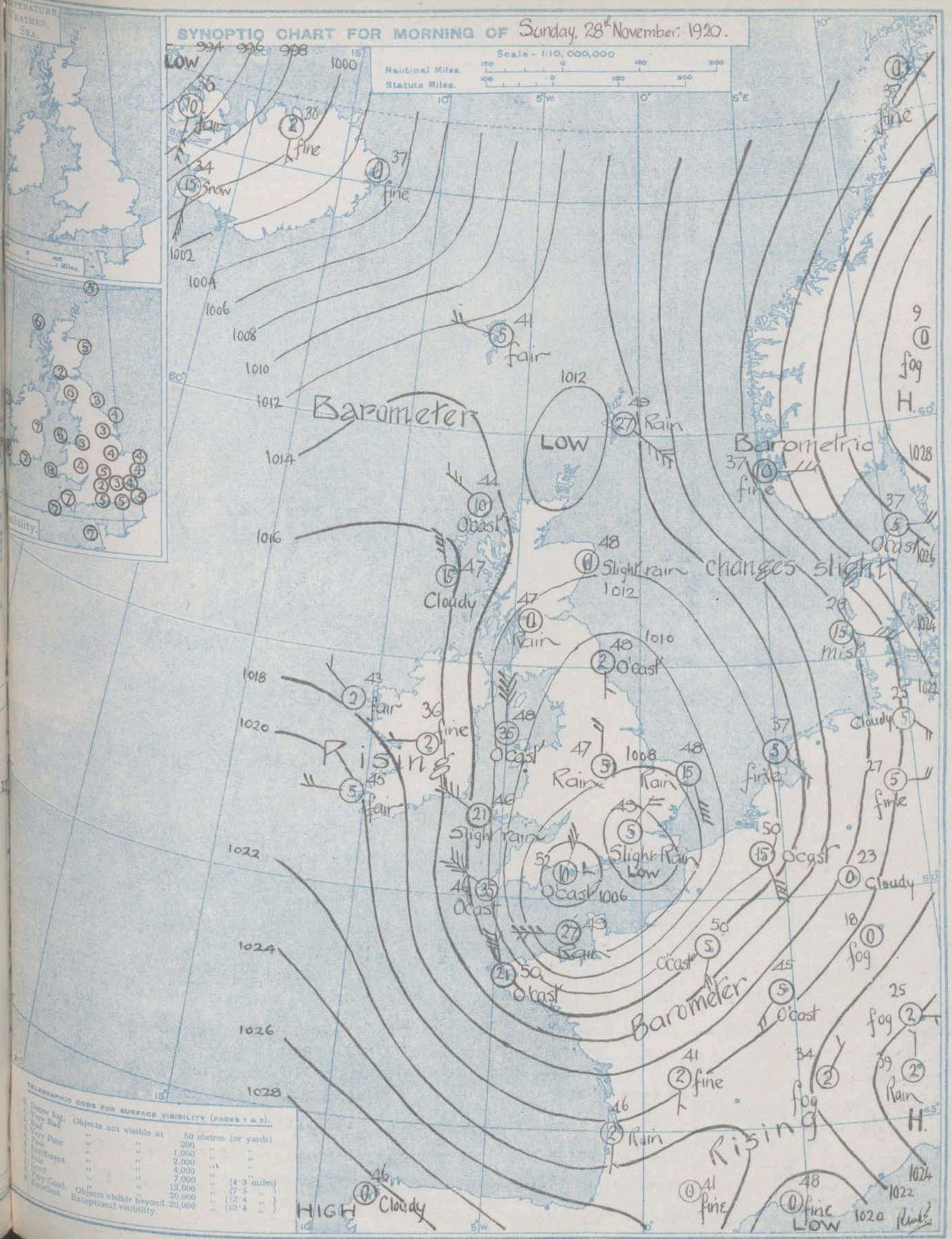
EXPLANATION.
BAROMETER.—Isobars are drawn for intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0–12, is indicated by the number of feathers. Mean velocity is shown in small circles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.— clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain falling. sleet. hail. snow. mist. fog. T thunder. thunderstorm.
SEA DISTURBANCE.— Rough. High.

GENERAL INFERENCE from observations received up to 9h. G.M.T.

A trough of low pressure, with three separate minima, extending from Shetland to the SE and S of England will move slowly North-eastward and become less deep, followed by some improvement in the weather over these Islands. It is probable however, that another disturbance will arrive shortly from the Atlantic, so that the conditions will continue unstable.

Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Sunday, 28th November 1920	Further Outlook.
1. S.E. England, 2. E. England, 3. E. Midlands, 4. W. Midlands	Wind between NE & NW, light or moderate, fresh locally; much low cloud, some rain, then improving temporarily. Visibility indifferent to fair.	Continuing unsettled generally
5. S.W. England, 6. South Wales, 7. North Wales, 8. N.W. England	Wind NW, backing to W or SW, moderate or fresh; changeable, some showers, visibility fair or good, moderate temperature.	
9. N. Midlands, 10. N.E. England, 11. E. Scotland	Wind light, variable, then light NW or W. Dull, some rain or showers, fairer later. Visibility indifferent to fair. Moderate temperature.	
12. S.W. Scotland, 13. Isle of Man	Same as 5 - 8.	
14. N. & N.W. Scotland, 15. Hebrides, 16. Orkneys and Shetlands	Wind mainly between W & N, moderate or fresh to light. Dull, some rain, then fairer. Visibility indifferent to fair. moderate temperature.	
17. N.W. Ireland, 18. N.E. Ireland, 19. S.E. Ireland, 20. S.W. Ireland	Wind backing to W or SW, light to fresh; Fair, then much cloud and some rain, visibility good to fair or indifferent, temperature rising.	

RE.


SYNOPTIC CHART FOR MORNING OF Sunday, 28th November 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
LOW
Barometer
Rising
Barometric changes slight
HIGH
LOW
H.
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
Dense fog. Objects not visible at 50 metres (or yards)
Very Bad " " 100 " "
Bad " " 200 " "
Very Poor " " 1,000 " "
Poor " " 2,000 " "
Indifferent " " 4,000 " "
Good " " 7,000 " (4·3 miles)
Very Good " " 12,000 " (7·5 ")
Excellent " " 20,000 " (12·4 ")
Exceptional visibility. " " 20,000 " (12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 333.

Sunday 28th NOVEMBER

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 27TH

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 26th-27th	Rainfall. Day. 9h-18h. 27th	Sunshine. Sunrise to Sunset. 27th
Scotland.	Oban	r	or	49	47	3	15	0·0
	Banff	d.o	od.	49	48	-	0·2	0·0
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	op	op	49	41	0·4	1	0·0
	Scarborough	o	o	56	47	-	-	0·0
	Skegness							
England, E.	Lowestoft							
	Felixstowe	om	omg	50	47	-	-	0·0
	Southend-on-Sea	c	c	50	43	-	-	0·1
England, S.E.	Tunbridge Wells	o	op.o	53	43	-	1	0·0
	Margate	c	c	50	45	-	-	0·3
	Ramsgate	*	*	49	45	-	-	0·4
	Folkestone							
	Hastings	or.o	oc	54	48	0·2	-	0·0
	Eastbourne	o	or	53	49	0·2	1	0·0
	Brighton							
	Worthing	c.bc	c.or	56	49	1	1	0·4
	Littlehampton	bc	o.cr	57	48	3	1	1·2
	Portsmouth (S'tbsea)	*	*	56	46	1	0·4	2·4
	Bournemouth	*	*					
	Ventnor (I. of W.)	*	*					

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 26th-27th	Rainfall. Day. 9h-18h. 27th	Sunshine. Sunrise to Sunset. 27th
England, N.W.	Douglas (I.O.M.)							0·0
	Blackpool	o	o	50	42	4	2	0·0
	Southport	or	ro	49	46	1	2	
	Morecambe							
Midlands.	Buxton							0·5
	Leamington Spa	oc	or	52	43	-	-	0·0
	Malvern	o	o	51	45	4	-	1·0
	Bath	opc.bc	o	54	49	1	-	0·0
Wales.	Rhyl					2		
	Colwyn Bay							0·8
	Llandudno	*	*	54	48	1	0·3	0·5
	Aberystwyth	o.c.	c.o	54	49	-	-	
	Tenby							
	Swansea							0·1
England, S.W.	Weymouth	c.o	p.o	54	52	2	0·2	
	Teignmouth							1·1
	Torquay	c.or	bc.or	55	53	3	0·4	0·4
	Paignton	cp.bc	cp.op	57	52	4	4	0·0
	Penzance	opr.	c.opr	54	47	1	4	
	Newquay							0·0
	Bude	r.od.	r.o.cdr	55	50	3	2	0·0
	Ilfracombe	o.c.bc	c.o	55	52	1	0·2	
	Weston-s-Mare							

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-13h 27th	Weather. 13h-18h 27th	Weather. 18h 27th-1h 28th	Weather. 1h-7h 28th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h	Rainfall.† Night. 18h-7h	Sun. Hours.
								mm.	mm.	
Renfrew	o3f rr	o3f rro2fr	o2f r	o3f r	50	46	44	11	2	0·0
Eskdalemuir	o2f r.r.	rr2f o2fr	o2f o2f	o3f. o	49	43	41	5	Trace	0·0
Valencia (Cahire'n)	rr r. o o	o.c.o.c.o	prh.bcc/cog	r bc.c	48	41	37	4	2	0·0
Baldonnel	RRo2f3f5	o3f RR	qro2f	RR.o	53	40	?	18	5	0·0
Manchester (Alex. Pk)	o2f	o3f.	c o3f	o3f	50	45	38	Trace	0·3	*
Ross on Wye	ropd cog	opo c.obc	c. o.c.o	o1f. o2f	53	48	45	1	-	0·2
Falmouth	o	2fcr	r.r. q	rr o	54	43	42	2	9	0·1
Calshot (Hants)	o.o.o	opo1fr.r.	o1f. o2f rr2f	RR rr2f	54	49	46	1	4	2·7
Lympne (Folkestone)	o1fr.o1f o	o1fr.o2f	r.r.cor.2f	o2fr.o2f rr	51	43	42	Trace	3	0·3
Aberdeen	rrg	o2frr.	rr o2f	o2f rr	49	48	47	7	9	0·0
Howden	r.r.rr.	o2f.o	rr 3f	o3f rr	47	44	42	0·4	9	0·0
Cranwell (Lincs)	r.o o2f.	c.o.o	r.r.	o2f hd	48	42	44	1	2	0·1
Felixstowe	p.o o2f.	o2f.o2f.	p. c.o	c.or	50	46	*	0·2	2	0·0
Shoeburyness	c.o1f2	o1f2	1f2 o	hd.o	51	45	?	-	0·2	0·2
Benson	bc.cbcc	bc.bc.c	bc.c?	bc.c?	54	46	44	-	10	*
S. Farnborough	o.o2f	od.d.	b.od.d.	rr.e	54	47	47	1	9	0·1
London (Kew Obsy.)	o3f o2f	o3f rr	o2f rr2f	o3f rr	54	46	45	5	8	0·0
Croydon	cobccpdr	r.o1f.o2f.o3f	rr./rro1f	o2f.o3f hd	52	45	*	7	7	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·9
3	8-12	5·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-32·6
12	Above 75	32·6 or above

SYMBOLS—
Aurora — Solar halo
Rime — Lunar halo
Glazed frost — Solar corona
Glazed roads — Lunar corona

LONDON. OBSERVATIONS.

	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED 9H G.M.T. 28th							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	o	o.or	o.or m	53	46	46	7	0·0	90	98
City (Bunhill Row)	*	*	*	*	*	*	*		*	*
Westminster (St. James's Park)	*	*	*							
Regent's Pk (Botanical Gdns)	*	*	*	*	*	*	*	0·0	*	*
Camden Sq. (British Rainfall)	om.c	c.or	*	54	50	45	13	*	83	99
Kensington Palace	o	or	*	54	45	45	17	*	99(18h)	99
Hampstead Observatory	*	*	*	52	45	45	15	0.0	*	99

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total ..... Joules.

Milliwatts.
Average Rate.
Maximum Rate.

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

28th AND 29th NOVEMBER 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	7.38 / 7.39	11.41 / 11.41	3.44 / 3.43
Greenwich	7.41 / 7.42	11.48 / 11.48	3.55 / 3.54
Wick	8.33 / 8.35	12.0 / 12.0	3.23 / 3.26
Valencia	8.24 / 8.26	12.29 / 12.29	4.34 / 4.32

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from.....h.....m.
to.....h.....m.

Stars.	Duration of Exposure. h. m.	Duration of Record. h. m.	%
Polaris			
δ Ursae Minoris			

NOTES ON THE WEATHER OF YESTERDAY.

Rain fell very generally, the quantity being very large in some Western and Northern localities; 47 mm. at PEMBROKE, 28 mm. at WICK and 23 mm. at BALDONNEL. Scarcely any bright sunshine was recorded. Temperature exceeded 55°F at a few southern stations, but remained below 50°F over a considerable area in the west and north.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B.21,557 Monday, 29th November 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	13H. G.M.T. 28th														18H. G.M.T. of 28th													
Renfrew	1014.2	+2	-	0	02f	48	92	4	4,200	St Cu	10	-	-	x	1015.5	+2	NW	1	b	44	92	4	4200	StCu	2	--	-	*
Eskdalemuir	1013.2	+2	N	4	o	44	85	7	2,000	St	10	-	-	*	1014.1	+1	N	4	od0	44	85	6	~~5,100~~	Nb	9			*
Valencia (Cahirc'n)	1020.7	-1		0	c	48	65	8	4200	StCu	7	ASt	1	3	1018.0	-3	SE	3	o	45	65	8	3000	StCu	9	-	-	3
Baldonnel	1017.5	-1	NW	2	bv	46	75	9	4,200	St	1	aSt	2	*	1017.8	+1	WNW	2	bc	40	85	5	4200	St	4	-	-	*
Manchester (Alex Pk)	1011.1	+2	NNW	2	04f	49	92	2	3,000	St	10	-	-	x	1013.0	+2	N	3	03f	47	92	3	2000	St	10	.	-	*
Ross on Wye	~~1011.1~~ 1012.1	+4	NNW	2	o	52	85	5	3,000	StCu	10	-	-	*	1014.7	+3	WNW	2	o	48	85	8	2000	St	10	-	-	*
Falmouth	1017.3	+3	NNW	7	cq	47	75	7	-	Cu	7	-	-	*	1019.2	+4	NW	3	b	44	85	7	-	Cu	1	-	-	*
Calshot (Hants)	1011.8	+4	NW	3	02f	50	92	5	1,250	St	10	-	-	2	1014.5	+3	W	3	02f	50	97	5	2000	St	10	-	.	2
Lympne (Folkestone)	1011.4	?	S	7	orqm	47	97	5	<500	Nb	10	-	-	*	1014.6	+5	S	5	orm	46	97	4	<500	Nb	10	-	.	*
Aberdeen	1014.3	+2	NW	3	or0	47	92	7	1,250	Nb	10	-	-	4	1015.2	+1	NW	3	01f	46	92	6	1250	St	10	-	-	4
Howden	1010.7	+1	-	0	or	48	97	3	1,250	Nb	10	-	-	*	1011.9	+2	-	0	or2-3f	47	97	3	1260	Nb	10	-	-	*
Cranwell (Lincs)	1010.5	+1	NNW	3	or0 2-3f	47	97	2	1,250	Nb	10	-	-	x	1012.6	+2	NNW	3	or2-3f	47	97	2	1260	Nb	10	-	-	*
Felixstowe	1011.3	+4	S	4	or0 2-3f	48	97	5	750	Nb	10	-	-	*	1013.8	+3	SSW	3	02f	48	97	4	1260	St	10	-		4
Shoeburyness	1010.4	+9	-	0	or0 6-8f	48	92	4	750	CuNb	10	-	-	*	1013.4	+6	-	0	06f	48	92	2	700	CuNb	10	-	-	*
Benson	1010.8	+3	NW	1	04f	48	92	3	-	St	10	-	-	*	1013.5	+3	NW	1	b	48	97	3	-	St	10	-	-	*
S. Farnborough	1011.0	+4	W	2	od0m	50	92	3	1,250	St	10	-	-	*	1014.3	+4	WNW	1	02f	48	97	3	750	St	10	-	.	*
London (Kew Obsy.)	1010.6	+4	NW	2	03f	50	92	3	1,250	St	10	-	-	*	1014.1	+3	-	0	02f	48	97	3	750	St	10	-	.	*
Croydon	1011.0	+5	WNW	2	or0 2-3f	48	97	3	<500	St	10	-	-	*	1014.3	+4	WNW	3	03fd0	48	97	3	<600	St	10	.	.	*

1012.1

Stations	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9	Barom. at M.S.L. mb.	‡ Change in 3 hours	Wind Direc.	Wind Force 0-12	Weather	Temp. °F.	% Humidity	Visibility § 0-9	Height of Low Cloud Feet	Low Cloud Form	Low Cloud Amt. 0-10	Upper Cloud Form	Upper Cloud Amt. 0-10	Sea 0-9
	1H. G.M.T. of 29th														7H. G.M.T. of 29th													
Renfrew															1011.2	-3	-	0	03f	44	97	3	1250	St	10	-	-	4
Eskdalemuir	1014.1	0	N	2	o	44	92	6	-	St	10	-	-	*	1011.7	-2	-	0	od0m	44	92	4	700	St	10	-	-	*
Valencia (Cahirc'n)	1009.0	-8	SSW	5	bcp	48	*	*	*	*	*	*	*	6	999.4	-7	SSE	6	or	52	92	5	2000	St	10	-	-	4
Baldonnel	1015.1	-2	S	3	bcv	36	65	8	-	-	-	CSt	6	*	1009.1	-6	E→S	2	ov	45	95	8	2000	StCu	10	-	-	*
Manchester (Alex Pk)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.3	0	SSW	2	02f	44	97	3	1250	Nb	10	-	-	4
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1015.9	0	SSW	2	o	41	85	7	5,700	StCu	9	ACu	1	*
Falmouth	1018.9	-2	SW	1	o	40	85	8	-	-	-	-	-	x	1014.8	-5	S	4	01f	50	75	8	-	StCu	10	-	-	*
Calshot (Hants)	1017.8	-2	W	1	b	46	92	7	-	-	-	ASt	2	1	1017.4	+1	-	0	~~[illegible]~~	41	92	7	1250	St	2	ACu	8	1
Lympne (Folkestone)	1016.6	-2	-	0	or6-8f	47	97	1	<500	St	10	-	-	*	1017.2	+1	SW	3	03fd	45	97	3	<500	St	10	-	.	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1012.4	-1	W	1	odf	46	97	3	1250	Nb	10	-	-	4
Howden	1015.7	+2	-	0	05f0	47	97	1	750	St	10	-	-	*	1013.7	0	-	0	04f	45	97	1	<500	St	10	-	-	*
Cranwell (Lincs)	1015.8	+2	W	2	o	47	97	4	3,000	StCu	9	-	-	*	1013.3	0	SSW	3	c	43	97	5	4,200	StCu	5	-	-	*
Felixstowe	1016.0	+2	S	3	or2-3f	47	97	4	750	Nb	10	-	-	3	1017.1	+1	SSW	2	03f	45	97	2	4,200	StCu	9	-	-	2
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.9	+1	SW	1	04f	45	85	3	1250	StCu	10	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1016.2	+1	SW	2	bc	36	92	5	-	-	-	ACu	5	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1017.4	+2	WNW	1	bc	35	97	7	1250	St	1	ACu	3	*
London (M.O. at 1H.)	1016.5	+3	*	*	*	45	*	*	*	*	*	*	*	*	1017.6	+2	SW	2	bwm	42	92	5	1250	St	2	ACu	1	*
Croydon	1017.1	+2	W	3	02f	46	97	4	1250	St	9	ASt	1	*	1017.3	+1	SW	3	b1f	41	85	6	3,000	StCu	1	ACu	2	*

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

Stations	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12	Weather	Barometer at M.S.L. mb.	‡ Change in 3 hours	Temperature Temp. °F.	Change in 24 hours	Wind Direc.	Wind Force 0-12	Direc. of Upper Cloud	Weather	Sea 0-9	Rainfall † mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning	Weather Afternoon	Weather Night	Sunshine Hours
	18H. G.M.T. of 28th					7H. G.M.T. of 29th									24 HOURS ENDED 7H. 29th						28th
Lerwick	1016.7	47	SE	3	or0 2-3f	1014.4	-5	44	-2	SE	3	-	om	2	12	48	44	omr	omr	o	*
Stornoway	1018.1	40	N	2	bc	1008.4	?	43	-1	-	0	-	b	0	-	46	38	o.bc	b.bc	bc.b	3.8
Castlebay (Barra Is)	1017.4	45	N	2	b	1008.0	-5	49	+2	SE	5	*	o	6	-	49	44	c.bc	bc.b	b.o	5.4
Malin Head	1015.3	47	WNW	2	bc	1006.7	-2	48	-2	S	2	S	o	3	.	52	40	bcp	bcv	o	1.6
Blacksod Point	1016.0	44	S	1	bc	1000.0	-9	48	+2	SE	5	-	omr	5	0.3	53	48	bc	bc	bc	*
Roche's Point	1020.0	43	-	0	b	1004.9	-8	50	+9	SE	5	-	or	5	4	50	37	b.bc	c.bc.b	b orm	*
Birr Castle	1019.1	36	NW	1	b	1005.2	*	44	+8	ESE	3	-	r	*	1	45	32	b	b	or	6.4
Donaghadee	1015.2	48	N	2	om	1011.3	-2	49	-5	W	1	-	c	1	-	49	43	cq	om	om	*
Liverpool (Bidston)	1013.0	47	WNW	2	o	1012.0	-1	44	<3	W	1	W	o	1	.	49	48	ogm	om	c.o	0.0
Holyhead	1014.2	49	NW	6	pd0	1011.4	-3	46	-2	SW	5	-	oq	4	1	50	48	ocq	opd	oq	0.4
Pembroke (St. Ann's Head)	1017.7	47	W	3	bcv	1013.6	-4	49	+3	S	4	-	o	3	-	53	43	or.c	bcv.	bcv.o	1.7
Scilly (St. Mary's)	1020.6	46	WNW	3	bc	1011.9	-5	52	?	S	5	S	oq	5	0.2	52	47	c.bc	bc	c.or	6.0
Jersey (St. Aubin)	1016.6	51	NW	5	og	1015.9	0	48	-1	SW	4	-	o	3	6	56	43	oqcop	op.oq	oq.o	0.8
Portland Bill	1015.4	50	NW	5	o	1017.4	0	50	-2	WNW	5	-	o	5	-	64	45	o	o	bc.o	*
Dungeness	1013.6	49	SW	7	rq	1017.1	+1	48	-5	WSW	3	SW	c	4	11	53	47	cqrqr	q.or	q.o	*
Wick	1015.1	45	N	4	cq	1010.4	-3	48	+4	SSE	2	-	om	4	5	48	43	ompq	ompq	oq.omp	*
Nairn	1017.2	44	NW	1	bc	1011.2	*	41	-7	*	0	-	oq	1	0.2	48	40	o.oq	oq.bc	bc.cp	0.0
Leith	1014.6	46	NE	2	p	1011.1	-1	45	-1	SE	1	SE	c	2	2	47	44	bm.o	od.o	dom.c	*
Tynemouth	1012.1	48	N	2	02-3f	1012.1	0	47	-1	-	0	-	03f	3	1	48	47	f	f	omd.ome	*
Spurn Head	1011.0	47	N	1	f-r	1013.4	0	46	-2	SW	2	-	om	3	1	49	43	omp	omp	f.om	*
Yarmouth (Gorleston)	1013.2	49	SSW	6	o	1015.8	0	47	-1	SW	3	-	ome	2	2	50	47	omq	opoq	or.ome	0.0
Clacton-on-Sea	1013.4	48	SSW	2	m	1016.4	0	46	-8	SW	2	-	oqm	2	6	49	45	oqmr	oqme	oqmr	0.0
Nottingham	1012.7	49	W	1	o	1015.0	*	41	-6	SW	2	SW	d	4	2	49	41	r.om	d.m.o	o	0.0

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3. † See footnote p.4.

M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 29.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Fair, local fog.	Fair	Slight
2. E. England	Cloudy, misty, local fog.	Poor	Smooth
3. E. Midlands	Fair, misty.	Indiff.	-
4. W. Midlands	Fair to dull.	Good	-
5. S.W. England	Dull.	"	R. Rough
6. South Wales	Dull.	V. Good	"
7. North Wales	Dull.	Fair	Mod.
8. N.W. England	Dull, slight drizzle.	Poor	Smooth
9. N. Midlands	Dull, slight drizzle.	"	-
10. N.E. England	Dull, foggy.	V. Poor	Slight.
11. E. Scotland	Dull, slight drizzle locally.	Poor	Mod.
12. S.W. Scotland	Dull, misty, slight drizzle.	Poor	Smooth
13. Isle of Man	Dull.	Indiff.	"
14. N. & N.W. Scotland	Fair to dull, misty.	"	Slight
15. Hebrides	Fine to dull.	Good	Mod.
16. Orkneys and Shetlands	Dull, misty.	Poor	Slight
17. N.W. Ireland	Dull, some rain.	Indiff.	Mod.
18. N.E. Ireland	Dull.	Good	Slight
19. S.E. Ireland	Rainy.	Indiff.	R. Rough
20. S.W. Ireland	Rainy.	"	"

Temperature reported from Coastal and Cross Channel Steamers.

Position Number	Date	Time G.M.T.	Sea °F	Air °F
4A	28th	0520	52	51

Barometric change from 4 h. to 7 h. (half millibars).

EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—
clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. rain. snow. sleet. hail. fog. mist. T thunder. ₹ thunderstorm.
SEA DISTURBANCE.—Rough. High seas.

GENERAL INFERENCE from observations received up to 9h.

A deep depression Westward of Ireland will cause freshening Southerly winds over the British Isles which will reach gale force on the Western coasts. The weather will be dull to rainy and mild, and will continue unsettled for two or three days.

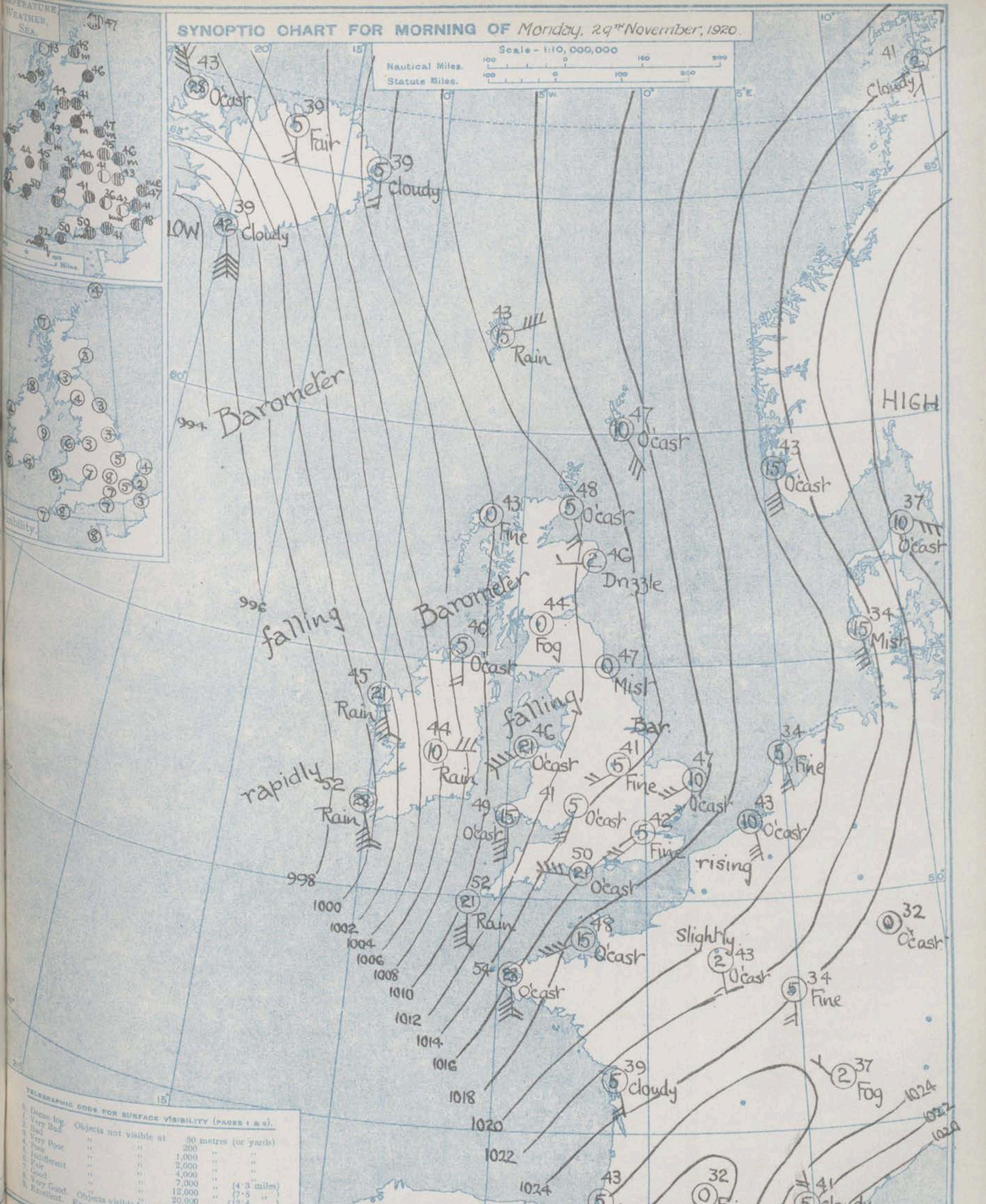
Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Monday, 29th November, 1920.	Further Outlook.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands	Freshening Southerly wind; much low cloud, some rain, visibility fair at first but becoming indifferent; mild.	Unsettled generally for two or three days.
5. S.W. England 6. South Wales 7. North Wales 8. N.W. England	Strong Southerly wind, reaching gale force on the coast; much low cloud and rain, visibility indifferent; mild.	
9. N. Midlands 10. N.E. England 11. E. Scotland	Freshening Southerly wind; much low cloud, some rain, visibility indifferent to poor; mild.	
12. S.W. Scotland 13. Isle of Man 14. N. & N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands 17. N.W. Ireland 18. N.E. Ireland 19. S.E. Ireland 20. S.W. Ireland	Same as 5 - 8.	South Cone hoisted this morning

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 08.40.

G. C. SIMPSON, F.R.S., Director.

ettled
lly for two
ee days.

Cone
ted this morning



0. Dense fog.	Objects not visible at	50 metres (or yards)
1. Very Bad	" "	200
2. Bad	" "	1,000 " "
3. Very Poor	" "	2,000 " "
4. Poor	" "	4,000 " "
5. Indifferent	" "	7,000 " (4·3 miles)
6. Fair	" "	12,000 " (7·5 ")
7. Good	" "	20,000 " (12·4 ")
8. Very Good.	Objects visible beyond	20,000 " (12·4 ")
9. Excellent.	Exceptional visibility.	

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 334 {Monday 29th November

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 28th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 27th-28th	Rainfall. Day. 9h-18h. 28th	Sunshine. Sunrise to Sunset. 28th
Scotland.	Oban							
	Banff	d	d.o	48	46	3	3	0.0
	Montrose							
	St. Andrews							
England, N.E.	Harrogate	odm	odm	48	45	5	-	0.0
	Scarborough							
	Skegness							
England, E.	Lowestoft							
	Felixstowe	omd	omd	49	48	2	2	0.0
	Southend-on-Sea	odf	gfd	48	45	0.4	3	0.0
England, S.E.	Tunbridge Wells	f.o	or	50	47	7	3	0.0
	Margate	-	-	52	46	2	3	0.0
	Ramsgate	*	*	50	46	2	3	0.0
	Folkestone	r.o	r.r.	53	48	3	7	0.0
	Hastings	or	or	53	48	2	9	0.0
	Eastbourne	or	r.or	52	49	5	17	0.0
	Brighton	o.g.o	o.g.o	51	50	15	0.3	0.0
	Worthing	o	or.o	51	50	10	0.3	0.0
	Littlehampton							
	Portsmouth (S'thsea)	-	-	51	49	2	-	0.0
	Bournemouth	*	*	52	47	2	-	0.0
	Ventnor (I. of W.)	*	*					

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 17h-9h. 27th-28th	Rainfall. Day. 9h-17h. 28th	Sunshine.	Sunrise to Sunset. 28th
England, N.W.	Douglas (I.O.M.)								0.0
	Blackpool	0.c		49	44	-	-		0.0
	Southport	c.o	c.c.o	48	45				
	Morecambe								
Midlands.	Buxton								0.0
	Leamington Spa	od	o	49	45	3	-		
	Malvern								0.0
	Bath	o	o	52	49	-	-		0.0
Wales.	Rhyl	r	r	51	45	0.3	7.6		0.0
	Colwyn Bay	-	-	49	44	1	8		0.0
	Llandudno	d	d	51	47	1	6		
	Aberystwyth								
	Tenby								
	Swansea								1.3
England, S.W.	Weymouth	o.c	c.bc	54	48	-	-		
	Teignmouth								
	Torquay								0.5
	Paignton	c.bc	c.o bc	51	42	10	.4		4.2
	Penzance	c.bc	bc.c	52	45	3	-		2.0
	Newquay	o.g.b	b	49	45	3	-		0.5
	Bude	r	o.c.bc	50	46	2.3	3		0.0
	Ilfracombe	o	o	54	51	12	0.1		0.4
	Weston-s-Mare	m.c	bc.c	52	48	-	-		

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-18h 28th	Weather. 18h-18h 28th	Weather. 18h-1h 29th	Weather. 1h-7h 29th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. Day. 7h-18h (mm.)	Rainfall. Night. 18h-7h (mm.)	Sun. Hours.
Renfrew										
Eskdalemuir										
Valencia (Calire'n)										
Baldonnel										
Manchester										
Ross on Wye										
Falmouth										
Calshot (Hants)										
Lympne (Folkestone)										
Aberdeen										
Howden										
Cranwell (Lincs)										
Felixstowe										
Shoeburyness										
Benson										
S. Farnborough										
London (Kew Obsy.)										
Croydon										

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, i.e., rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:- R = heavy rain. rr = continuous moderate rain. r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·9
1	1–3	0·9–1·6
2	4–7	1·7–3·4
3	8–12	3·5–5·9
4	13–18	6·0–7·9
5	19–24	8·0–10·9
6	25–31	11·0–13·9
7	32–38	14·0–17·1
8	39–46	17·2–20·7
9	47–54	20·8–24·4
10	55–63	24·5–28·4
11	64–75	28·5–32·6
12	Above 75	32·7 or above

SYMBOLS

Aurora — Solar halo
Rime — Lunar halo
Glazed frost — Solar corona
Glazed roads — Lunar corona

LONDON OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 15h. G.M.T.	Humidity % 9h. G.M.T.
	24 hours ended 9h G.M.T. 29th							Yesterday.		To-day.
Greenwich (Royal Observatory)										
City (Bunhill Row)										
Westminster (St. James's Park)										
Regents Pk. (Botanical Gdns)										
Camden Sq. (British Rainfall)										
Kensington Palace										
Hampstead Observatory										

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday

Total ..... Joules.

Average Rate. ..... Milliwatts.

Maximum Rate.

TABLE SHOWING THE GREENWICH TIME OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

29th & 30th November 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth			
Greenwich			
Wick			
Valencia			

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 28th 17h. 0 m. to 29th 8 13 m.

Star.	Duration of Exposure. h.	m.	Duration of Record. h.	m.	%
Polaris	13	30	-	58	7
δ Ursae Minoris	13	30	-	22	3

NOTES ON THE WEATHER OF YESTERDAY.

Rain fell almost everywhere, but at a few stations in the West there was none. Valencia recorded 15mm, Lerwick 12mm and Dungeness 11mm. There was a general deficiency of bright sunshine, but at Birr Castle and Jersey there were six hours. The maximum temperature was everywhere about 50°.

* Information for these columns not usually received.

† Trace – rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. No. B. 21558 Tuesday 30th November 1920.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1H, 7H, 13H AND 18H.

Stations	Barom. at M.S.L. mb.	Change in 3 hours.	Wind Direc.	Wind Force 0-12.	Weather	Temp. °F.	% Humidity.	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud Form	Low Cloud Amt. 0-10.	Upper Cloud Form.	Upper Cloud Amt. 0-10.	Sea 0-9.	Barom. at M.S.L. mb.	Change in 3 hours.	Wind Direc.	Wind Force 0-12.	Weather	Temp. °F.	% Humidity.	Visibility § 0-9.	Height of Low Cloud. Feet.	Low Cloud Form	Low Cloud Amt. 0-10.	Upper Cloud Form.	Upper Cloud Amt. 0-10.	Sea 0-9.
	13H. G.M.T. 29th														**18H. G.M.T. of 29th**													
Renfrew	1009.0	-2	SE	3	ou	47	85	6	2000	St.Cu	6	A.Cu	4	*	1006.2	-3	SE	4	or 2f	44	97	2	1250	Nb	10	-	*	*
Eskdalemuir	1010.4	-2	SSW	3	o	43	85	7	2000	Nb	2	A.St	8	*	1008.1	-3	SE	2	ro 2 3f	40	92	3	-	Nb	10	-	-	*
Valencia (Cahirc'n)	1003.1	+8	WSW	4	c	55	85	7	2000	St.Cu	4	Cu	3	4	1006.9	+4	SW	2	b	49	75	7	2000	St.Cu	3	-	-	4
Baldonnel	1002.4	-9	S	6	oq	52	85	6	2000	St	4	A.Cu	1	*	1005.2	+4	SSW	3	b	49	85	5	3000	St	1	-	-	*
Manchester (Alex. Pk.)	1012.6	-4	S	3	o2f	44	75	4	3000	St.Cu	4	A.St	6	*	1009.6	-5	SSE	5	r	47	85	4	750	Nb	10	-	-	*
Ross on Wye	1013.0	-4	SSE	4	od₀	47	75	6	1250	Nb	9	A.St	1	*	1010.7	-3	S	5	odq	49	92	5	1250	Nb	10	-	-	*
Falmouth	1009.7	-5	S	5	or	51	97	5	-	Nb	10	-	-	*	1011.6	+4	WSW	3	b	49	92	5	-	Cu	1	-	-	*
Calshot (Hants) *	1016.2	-2	SSW	4	o	50	85	8	1250	St	10	-	-	34	1014.0	-2	S	5	or₀	48	97	6	750	Nb	10	-	-	4
Lympne (Folkestone)	1017.8	-1	SSW	1	o	46	85	8	2000	St.Cu	10	-	-	*	1017.7	0	SSW	4	or₀	47	85	8	1250	Nb	7			*
Aberdeen	1010.6	-2	-	0	b 4f	49	92	2	-	-	-	-	-	4	1009.0	-1	S	3	o2f	48	85	5	750	St	10	-	-	4
Howden	1013.3	-2	SSW	3	o	43	85	3	3000	St.Cu	9	-	-	*	1012.6	0	SSE	3	or₀	42	97	3	750	Nb	10	-	-	*
Cranwell (Lincs)	1015.2	-2	S	3	o	44	85	6	4200	St.Cu	10	-	-	*	1014.4	0	SSE	4	od₀	43	92	5	4200	St	10	-	-	*
Felixstowe	1017.9	-1	S	2	c 1f	47	85	5	?	St.Cu	8	-	-		1018.2	0	S	4	o2f	47	85	5	2000	St	10	-	-	3
Shoeburyness	1017.6	-1	WSW	1	c	48	75	6	4200	St.Cu	7	-	-	*	1017.1	0	S	1	c	47	85	6	3000	St.Cu	8	-	-	*
Benson	1014.5	-4	SSE	4	o	46	85	6	-	St.Cu	10	-	-	*	1013.4	-2	S	4	o	46	92	5	-	St	10	-	-	*
S. Farnborough	1016.3	-2	S	2	o	47	92	6	3000	St	4	A.St	6	*	1015.2	-1	S	4	o1f	47	92	5	1250	Nb	10	-	-	*
London (Kew Obsy.)	1016.8	-3	SSE	3	o2f	47	75	5	3000	St.Cu	2	A.St	8	*	1015.7	-1	SSE	3	or 2f	48	85	5	1250	St	10	-	-	*
Croydon	1017.6	-2	S	3	o1f	46	85	6	3000	St.Cu	8	A.St	2	*	1016.7	-1	SW	4	or 2f	47	85	4	1250	St	9	A.St	1	*
	1H. G.M.T. of 30th														**7H. G.M.T. of 30th**													
Renfrew															1008.5	+2	S	2	b	42	92	6	1200	St	2	-	-	+
Eskdalemuir	1005.5	+4	SSW	3	o	46	92	5		St	9	-		*	1010.2	+1	S	1	o2f	44	85	5	4000	St.Cu	10	-	-	*
Valencia (Cahirc'n)	1006.1	-2	SSW	4	bc	56	*	*	*	*	*	*	*	5	995.2	-11	SE	7	o	54	75	7	3000	St.Cu	10	-	-	+
Baldonnel	1009.6	+2	S	2	b	43	92	5	-	-	-	-	-	*	1006.6	-3	SSE	4	o2f	49	85	5	2000	St	5	A.St	4	*
Manchester (Alex. Pk.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1011.5	0	SSE	3	b 3f	46	92	3	4200	St.Cu	3	-	-	+
Ross on Wye	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1013.0	0	SW	1	o 2f	45	97	5	450	St	10	-	-	*
Falmouth	1014.4	0	WSW	3	b5fa Ⓣ	48	97	1	-	-	-	-	-	*	1010.9	-8	S	5	o	52	97	6	-	Nb	10	-	-	*
Calshot (Hants)	1014.6	+1	WSW	3	o Ⓣ	50	97	7	3000	St	1	A.St	9	3	1015.2	0	S	1	c	48	97	7	2000	St	7	-	-	1
Lympne (Folkestone)	1016.5	-1	SSW	5	or₀ q	47	97	7	450	Nb	10	-		*	1015.9	0	SSW	2	o2f	48	97	4	<500	St	10	-	-	*
Aberdeen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1008.9	+2	-	0	o2f	45	92	5	1200	St	10	-	-	3
Howden	1011.2	+1	S	4	cm	46	97	5	2000	St	8	-	-	*	1012.5	+1	ESE	1	b2f	44	97	4	2000	St	7	-	-	*
Cranwell (Lincs)	1013.2	0	SSW	4	c	47	97	7	3000	St.Cu	7	Cu	1	*	1014.1	0	SSW	3	bc	44	97	6	5700	St.Cu	3	Cu	2	*
Felixstowe	1016.4	-1	S	4	od₀	48	97	6	1250	Nb	10	-	-	4	1015.5	-1	SSW	2	od₀	48	97	5	1200	St	10	-	-	1
Shoeburyness	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1015.2	0	W	1	c	49	85	6	3000	St.Cu	8	-	-	*
Benson	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1014.3	+1	SSW	1	o	46	92	5	-	St	10	-	-	*
S. Farnborough	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1015.1	+1	SSW	3	o2f	47	97	4	1250	St	10	-	-	*
London (M.O. at 1H.)	1014.4	-1	*	*	*	49	*	*	*	*	*	*	*	*	1015.4	+2	SSW	3	o3f	48	97	2	1260	St	10	-	-	*
Croydon	1015.2	-1	SSW	5	o2f rq	49	97	4	1260	St	9	A.St	1	*	1016.0	+1	WSW	1	o2f	47	97	4	<500	St	10	-	-	*

-SSE

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

Stations.	Barom. at M.S.L. mb.	Temp. °F.	Wind Direc.	Wind Force 0-12.	Weather.	Barometer at M.S.L. mb.	Barometer ‡ Change in 3 hours.	Temperature Temp. °F.	Temperature Change in 24 hours.	Wind Direc.	Wind Force 0-12.	Direc. of Upper Cloud.	Weather.	Sea 0-9.	† Rainfall mm.	Temp. Max. °F.	Temp. Min. °F.	Weather Morning.	Weather Afternoon.	Weather Night.	Sunshine Hours.
	18H. G.M.T. of 29th					**7H. G.M.T. of 30th**									**24 HOURS ENDED 7H. 30th**						**29th**
Lerwick	1009.9	49	ESE	6	oq	1008.5	-1	47	0	SE	6	SE	oqr	5	4	48	44	o	oqr	oqp oq	*
Stornoway	1002.5	50	SSE	4	odp	1003.8	+2	46	+3	S	2	-	b	1	3	50	43	b.bc	codp	or. b	0.9
Castlebay (Barrals)	1000.6	49	SE	7	or	1003.6	0	51	+2	SE	4	SE	b	4	3	51	47	op	opr	r.o.c.b	0.0
Malin Head	999.5	47	SW	3	cm	1003.3	-1	42	+2	SW	1	-	bc	2	2	50	40	omr	omr	cm. bc	0.0
Blacksod Point	1001.3	50	W	2	bc	997.2	-9	48	+3	SE	5	-	bc	5	11	54	44	omr	bc	bc	*
Roche's Point	1007.9	50	W	3	b	1002.6	-5	52	+2	SE	5	-	o	5	9	55	47	r.bc	bcb	b.o	*
Birr Castle	996.5	48	SW	1	c	1002.8	*	49	+5	SE	3	-	o	*	4	52	41	or.	or.c	c.o	0.0
Donaghadee	1083.0	49	SE	4	omrq	1008.4	0	43	0	SSW	2	W	b	3	6	51	41	cm	omr	bcm	*
Liverpool (Bidston)	1006.8	45	SE	5	o	1010.5	0	44	0	SSE	3	-	b	2	5	49	44	com	phq	or. b	0.0
Holyhead	1005.0	50	S	6	r	1009.1	-1	48	+2	SSE	4	-	b	3	4	52	?	oqr	oqqr	o.b.bc Ⓣ	0.0
Pembroke (St. Ann's Head)	1008.4	53	SW	4	c	1009.7	-2	51	+2	SSE	4	-	oq	4	6	53	48	omqr	omqr	c.bc.c	0.0
Scilly (St. Mary's)	1011.4	53	WSW	3	c	1009.1	-3	53	+1	SSE	5	-	bm	6	4	54	52	orm	obcc	c.bc.b.bc.c	1.3
Jersey (St. Aubin)	1015.6	50	S	5	o	1015.7	0	51	+3	S	3	S	bc	4	3	51	48	o	opo	op.bc	0.0
Portland Bill	1011.7	51	S	7	r	1014.0	0	52	+2	W	4	W	bc	6	2	54	47	oqr	oqr	oqr.bc	*
Dungeness	1017.5	50	SW	5	o	1015.2	+1	52	+4	SW	5	SW	bc	4	2	52	45	bcc	co	op.cr.c	*
Wick	1006.1	48	SSE	4	omq	1005.5	+2	47	-1	SSW	3	-	om	3	2	49	45	omq	omq pd	omqp	*
Nairn	1006.5	43	E	1	o	1006.5	*	41	0	-	0	-	c	1	1	46	37	ocm	mcgo	op.q.c	1.6
Leith	1006.6	44	SE	1	r	1008.5	+1	44	-1	NW	1	-	b	1	6	48	43	cqoqo	oqrom	r.o.c.b	*
Tynemouth	1010.8	45	SSW	3	rm	1011.1	+2	46	-1	SSW	2	-	o	3	0.4	48	43	om	omr	omrq. om	*
Spurn Head	1012.8	45	S	5	omr	1012.9	+1	46	0	SSW	4	*	c	2	0.4	47	42	om	cor	omp. cm	*
Yarmouth (Gorleston)	1017.3	46	SSW	3	o	1015.1	-1	48	+1	SSW	3	*	or	3	2	48	44	fe bm	bco	odz omr	0.0
Clacton-on-Sea	1017.6	48	SSE	3	o	1014.9	0	49	+8	SW	3	-	o	2	1	49	48	og bcz	bcz co	og. dm	0.9
Nottingham	1013.8	45	SSE	3	or	1013.4	*	46	+5	S	1	S	o	+	2	49	40	co	or	r.o	0.6

* Information for these columns not usually received. ‡ The barometric change is expressed in half millibars. § For code see page 3 † See footnote p. 4.

M.O. FORM 2370.

SUMMARY OF CONDITIONS AT 7 h. G.M.T. 30.11.1920.

Districts.	Weather, Cloud and Precipitation.	Visibility.	Sea.
1. S.E. England	Dull, misty, local drizzle.	Indiff.	Mod.
2. E. England	Dull, rainy.	"	Smooth
3. E. Midlands	Dull.	Fair	-
4. W. Midlands	Fine, misty.	V. Poor	-
5. S.W. England	Dull.	Good	Rough
6. South Wales	Dull, gloomy.	"	Mod.
7. North Wales	Fine.	"	Slight
8. N.W. England	Fine, misty.	Fair	Smooth
9. N. Midlands	Fine, misty.	"	-
10. N.E. England	Dull, misty.	V. Poor	Smooth
11. E. Scotland	Dull, local fog.	Indiff.	Slight
12. S.W. Scotland	Dull, misty.	"	"
13. Isle of Man	Fine, misty.	Fair	"
14. N. & N.W. Scotland	Dull.	Good	V. Smooth
15. Hebrides	Fine.	"	"
16. Orkneys and Shetlands	Dull, rainy, squally.	Indiff.	R. Rough
17. N.W. Ireland	Fair.	Fair	"
18. N.E. Ireland	Fine, misty.	Good	Slight
19. S.E. Ireland	Dull.	Fair	R. Rough
20. S.W. Ireland	Dull.	Good	-

Temperature reported from Coastal and Cross Channel Steamers.

Position Number.	Date	Time G.M.T.	Sea °F	Air °F
5	29th	0851	52	47
6	29th	1455	54	51
7	30th	0345	53	55
4A	30th	0430	51	50

EXPLANATION.
BAROMETER.—Isobars are drawn at intervals of two millibars.
WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0-12, is indicated by the number of feathers. Mean velocity is shown in miles per hour by figures in small circles.
TEMPERATURE is given in degrees F.
WEATHER SYMBOLS.—clear sky. sky ¼ clouded. sky ½ clouded. sky ¾ clouded. overcast sky. snow. sleet. rain. fog. mist. thunder. hail. thunderstorm.
SEA DISTURBANCE.—Rough. High.

GENERAL INFERENCE from observations received up to 9h.

A new depression which is approaching Ireland will cause fresh to strong Southerly winds over the British Isles generally and gales over the Western districts, the weather remaining mild and very unsettled for the next few days in all districts.

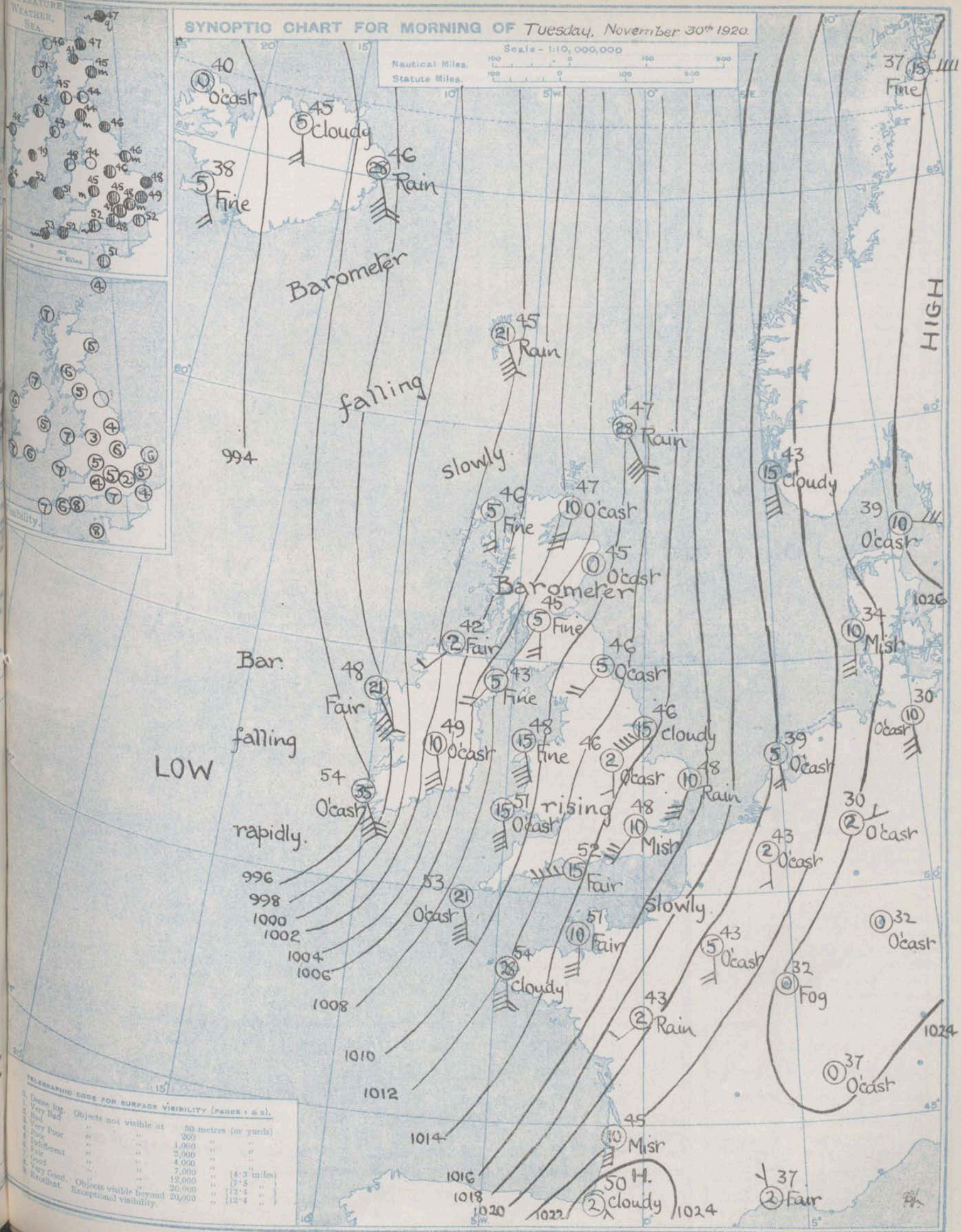
Districts.	Forecasts for the 24 hours commencing 15 h. G.M.T. Tuesday, 30th November, 1920.
1. S.E. England 2. E. England 3. E. Midlands 4. W. Midlands	Freshening Southerly winds; much low cloud, some rain, visibility poor at times; mild.
5. S.W. England 6. South Wales 7. North Wales 8. N.W. England	Strong Southerly winds, a gale at times on the coast; much low cloud and rain, visibility poor at times; mild.
9. N. Midlands 10. N.E. England	Same as 1 - 4.
11. E. Scotland 12. S.W. Scotland	Moderate to fresh S.E. wind; much low cloud, some rain, visibility indifferent to poor; mild.
13. Isle of Man 14. N. & N.W. Scotland 15. Hebrides 16. Orkneys and Shetlands	Fresh to strong S.E. to S. wind, a gale at times locally; much low cloud, some rain, visibility indifferent to poor; mild.
17. N.W. Ireland 18. N.E. Ireland	Wind Southerly, strong to a gale; much low cloud and rain, visibility indifferent to poor; mild.
19. S.E. Ireland	Same as 12 - 16.
20. S.W. Ireland	Same as 17.

Further Outlook.

Mild and unsettled for the next few days.

South Cone hoisted yesterday morning.

Meteorological Office: Air Ministry, Kingsway, London, W.C.2. Forecasts issued at 09.30. S.V.N. G. C. SIMPSON, F.R.S., Director.


SYNOPTIC CHART FOR MORNING OF Tuesday, November 30th 1920.
Scale - 1:10,000,000
Nautical Miles.
Statute Miles.
TEMPERATURE, WEATHER, SEA.
Barometer falling slowly
Bar. falling rapidly.
LOW
HIGH
Barometer rising slowly
994
996
998
1000
1002
1004
1006
1008
1010
1012
1014
1016
1018
1020
1022
1024
1026
40 O'cast
45 Cloudy
38 Fine
46 Rain
45 Rain
47 Rain
43 Cloudy
39 O'cast
46 Fine
47 O'cast
45 O'cast
45 Fine
42 Fair
46 O'cast
43 Fine
48 Fair
49 O'cast
48 Fine
46 Cloudy
46 O'cast
48 Rain
39 O'cast
54 O'cast
51 O'cast
48 Mist
52 Fair
53 O'cast
57 Fair
54 Cloudy
43 Rain
45 Mist
50 Cloudy
37 Fine
34 Mist
30 O'cast
30 O'cast
32 O'cast
43 O'cast
43 O'cast
32 Fog
37 O'cast
37 Fair
TELEGRAPHIC CODE FOR SURFACE VISIBILITY (PAGES 1 & 2).
0 Dense fog. Objects not visible at 50 metres (or yards)
1 Very Bad " " 200 " "
2 Bad " " 1,000 " "
3 Very Poor " " 2,000 " "
4 Poor " " 4,000 " "
5 Indifferent " " 7,000 " "
6 Fair " " 12,000 " (4·3 miles)
7 Good " " 20,000 " (7·5 ")
8 Very Good " " 20,000 " (12·4 ")
9 Excellent Objects visible beyond Exceptional visibility. " (12·4 ")

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, BRITISH SECTION, 1920. No. 335.

TUESDAY 30th Nov. 1920

WEATHER, TEMPERATURE, RAINFALL AND SUNSHINE AT HEALTH RESORTS FOR 29th

	STATIONS.	Weather. Forenoon.	Weather. Afternoon.	Temperature. Max. °F.	Temperature. Min. °F.	Rainfall. Night. 18h-9h. 28th-29th	Rainfall. Day. 9h-18h. 29th	Sunshine. Sunrise to Sunset. 29th
Scotland.	Oban	od	od	49	36	-	0·3	0·0
	Banff	mo	od	48	44	1	03	0·0
	Montrose							
	St. Andrews	o	o	47	43	-	-	0·0
England, N.E.	Harrogate	omo	odo	45	40	-	1	0·0
	Scarborough	o	br	49	42	-	1	1.2
	Skegness	bobo	obcor	47	44	2	0.2	2.2
England, E.	Lowestoft							
	Felixstowe	of	og	48	46	3	-	0·6
	Southend-on-Sea	ocbc	bo	50	40	1	-	1·2
England, S.E.	Tunbridge Wells	bbco	o	48	40	1	-	1·7
	Margate	c	c	49	46	1	-	0·6
	Ramsgate	*	*	48	44	1	-	0·4
	Folkestone	oc	cog	50	45	3	-	0·9
	Hastings	orbco	o	54	51	2	-	0·9
	Eastbourne	bcco	or	51	41	5	0·2	0·2
	Brighton	o	o	51	41	3	-	0·3
	Worthing	o	o	51	38	-	-	0·0
	Littlehampton	og	rq	52	38	1	-	0·0
	Portsmouth (S'thsea)	-	-	50	39	-	1	0·0
	Bournemouth	*	*	51	38	-	2	0·0
	Ventnor (I. of W.)	*	*					
England, N.W.	Douglas (I.O.M.)							0.0
	Blackpool	o	or	46	43	-	4	0.0
	Southport	oco	oro	45	44	-	4	0.0
Midlands.	Buxton							0.0
	Leamington Spa	o	or	46	36	-	2	0.0
	Malvern	o	or	46	43	-	2	0.0
	Bath	co	ro	50	35	-	1	0.0
Wales.	Rhyl	o	r	48	42	-	1	0.0
	Colwyn Bay	-	-	49	42	-	2	0.0
	Llandudno	*	*	51	42	0.2	2	0.2
	Aberystwyth	roc	cro	50	40	1	1	
	Tenby							
	Swansea							0.0
England, S.W.	Weymouth	o	orp	52	40	0.2	2	
	Teignmouth							0.0
	Torquay	orr	orr	51	38	0.1	5	0.0
	Paignton	o.or	or	52	35	-	5	0.6
	Penzance	or	orcb	55	39	2	3	0.0
	Newquay	or	oroh	53	40	1	3	0.0
	Bude	rcc	cbc	54	40	3	1	
	Ilfracombe							0.0
	Weston-s-Mare	bccr	ror	50	39	-	6	

SUMMARIES FOR PAST 24 HOURS.

STATIONS.	Weather. 7h-18h 29th	Weather. 18h-18h 29th	Weather. 18h 29th-1h 30th	Weather. 1h-7h 30th	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall.† Day. 7h-18h. mm.	Rainfall.† Night. 18h-7h. mm.	Sun. Hours.
Renfrew	o3f2fo1fu	o2fr	o2f rr c.o3	b.bc3f	47	39	31	1	4	0·0
Eskdalemuir	4-3fco1fpd	o1fpdo3fc	d.d o2f	o3f	46	39	38	1	3	0·0
Valencia (Cahire'n)	RR bo	bcbcbbc	b.bc.bc.c	c.o.o	55	48	44	11	-	2·5
Baldonnel	rrq.o2f	bbcco	c.o2f	b.bc.bc.c	53	40	34	5	0·1	0·0
Didsbury	o3fpdo2f	o3fr.rg	or	or.b.o3f	49	41	31	2	1	4
Ross on Wye	o1fopd	3dg	cg.bccb	o1f.o2f	50	41	35	0·4	0·3	0·0
Falmouth	orr	r.o r.o bbc	b.o 4fc	4fc.b.o	53	47	38	5	-	0·0
Calshot (Hants)	o3fo	o o4f.o3f.rg	o2f.dd.o1f	o1f.c.o	53	40	30	1	2	0·0
Lympne (Folkestone)	3fc o1fbcc bbcb	o1fo	r.q.o1fr	b.o.o.o3f	50	43	34	0·1	3	1·2
Aberdeen	o3f o4f	o3f o1f	o3f.bc	r.o2f	48	43	41	0·4	0·3	0·0
Howden	c o3f	r.o o3f	o3f rr	2fc.bc.c	47	40	35	1	2	1·2
Cranwell (Linc)	bbc.co	co pd	bc.o.d	bc.c	47	39	36	Haze	1	1·7
Felixstowe	1fco	o1f	p.d.d	pd.o	50	45	*	-	1	0·6
Shoeburyness	o1fco	co co	c.o.d.d	d.d.c.o	50	44	*	Haze	1	1·4
Benson	bcco	o	r.o	o	49	34	35	0·2	0·3	*
S. Farnborough	co+3fo	o.PD?	o1f.d.d	odd	49	34	37	1	1	0·0
London (Kew Obsy.)	r3fo2f	o1fo	o3f	50	40	39	0·1	1	0·3	
Croydon	bo1fo2f	o1fo2fo	r.o1fg.rr	o2fr	50	40	*	0·1	2	*

BEAUFORT NOTATION.

b blue sky (not more than a quarter covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling.
f fog. g gloom.
h hail. l lightning.
m mist. o overcast sky.
p passing showers.
q squalls. r rain.
rs sleet, *i.e.*, rain and snow together.
s snow. t thunder.
u ugly, threatening sky.
v unusual visibility.
w dew. x hoar frost.
y dry air; humidity less than 60 per cent.
z dust haze; the turbid atmosphere of dry weather.

Capital letters indicate intensity, and repetition of letters continuity, thus:-
R = heavy rain.
rr = continuous moderate rain.
r.r. = continuous light rain.

THE BEAUFORT SCALE OF WIND FORCE.

Used only for surface observations.

No.	Limits of Velocity at about 30 feet above ground. Statute miles per hour.	Metres per second.
0	Less than 1	Less than 0·3
1	1- 3	0·3- 1·5
2	4- 7	1·6- 3·3
3	8-12	3·4- 5·4
4	13-18	5·5- 7·9
5	19-24	8·0-10·7
6	25-31	10·8-13·8
7	32-38	13·9-17·1
8	39-46	17·2-20·7
9	47-54	20·8-24·4
10	55-63	24·5-28·4
11	64-75	28·5-33·5
12	Above 75	33·6 or above

SYMBOLS—

Aurora ☆ Solar halo ⊕
Rime ⌶ Lunar halo ◎
Glazed frost ~ Solar corona ◎
Glazed roads ⚒ Lunar corona ◎

LONDON. OBSERVATIONS.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Max. Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. mm.	Sunshine to Sunset. Hours.	Humidity % 5 h. G.M.T.	Humidity % 9 h. G.M.T.
	24 HOURS ENDED ON G.M.T. 30							YESTERDAY.		TO-DAY.
Greenwich (Royal Observatory)	c.o	o. op	p.o	50	40	44	1	1·1	78	96
City (Bunhill Row)	*	*	*	*	*	*	*	0·0	*	*
Westminster (St. James's Park)	*	*	omu	51	40	36	1	0·0	78	92
Regent's Pk (Botanical Gdns)	*	*	*	*	*	*	*	0·243	*	*
Camden Sq. (British Rainfall)	bcm. c	o	*	50	42	41	1	*	76	99
Kensington Palace	o	o	*	51	39	41	1	*	80 (18h)	94
Hampstead Observatory	*	*	*	49	39	*	1	0·2	*	?

SOUTH KENSINGTON (Meteorological Office).

Vertical Component of Solar Radiation per Square Centimetre during yesterday.

Total ....169..... Joules.

Milliwatts.
Average Rate. 5·4
Maximum Rate. 12

TABLE SHOWING THE GREENWICH TIMES OF SUNRISE, NOON AND SUNSET FOR STATIONS IN THE UNITED KINGDOM.

30th Nov. & 1st Dec. 1920.

Stations.	Sunrise. G.M.T.	Noon. G.M.T.	Sunset. G.M.T.
Yarmouth	741	11.42	343
	742	11.42	343
Greenwich	744	11.49	354
	745	11.49	354
Wick	8.37	12.1	325
	8.38	12.1	325
Valencia	8.27	12.30	432
	8.28	12.30	432

Photographic Record of Pole Star (Polaris) and of δ Ursae Minoris at Greenwich Observatory.

Exposure from 29th ...17h.... m. to 30th ....6..h...10.m.

Stars.	Duration of Exposure. h.	Duration of Exposure. m.	Duration of Record. h.	Duration of Record. m.	%
Polaris	13	30	N. i. r.		-
δ Ursae Minoris	13	30	N. i. r.		-

NOTES ON THE WEATHER OF YESTERDAY.

Rain fell generally but as a rule the amount was not very large. At Valencia and Blacksod Point the total was 11mm. The sun shone for an hour or two at a few places, but for the most part the sky remained overcast. The maximum temperature was again about 50° in all parts of the Country.

* Information for these columns not usually received.

† Trace = rain has fallen but amount less than 0·1 mm.

AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. CORRECTIONS AND ADDITIONS, November 1920.

I.—CORRECTIONS. (Continued)

Report for	STATION.	CORRECTION.
12th	Baldonnel 12th 7h.	Bar. 1014.0 mb.
	Castlebay " "	Sea. 6. Min. Temp 47°
	Blacksod	min. temp 49°
13th	Baldonnel 12th 13h.	Wind Force 7.
	Calshot. 12th 18h.	Low cloud amt. 2.
	Baldonnel 13th 7h.	Wind Force 3.
	Calshot 13th 7h.	Sea 4.
	"	Sunshine 0.7h.
	Cranwell.	min temp 39°
14th	Renfrew 13th 13h.	Bar change +5
	Eskdale. " "	Low Cloud amt. 4
	Howden " "	Bar. 1010.6 Wind W. Weather "cmq". Cloud: Ht. 2000 C. Nb 8.
	Croydon " "	weather. 0f. 2f
	Calshot 13th 18h.	wind WSW.
	Baldonnel 14th 1h.	Bar. 1005.5 mb.
	Howden 14th 7h.	Upper Cloud form. A.St.
	Stornoway 13th 18h.	Wind Force 5.
	Roches Point	Max. Temp 54°
	Leith 14th 7h.	wind W.
	Calshot	Min temp 46°
	Croydon 13th 7-13h.	Past Weather. "cd. 2f. 6. 2f. 1f"
15th	Renfrew 14th 13h.	weather. 0f
	Eskdale. " "	Bar change +2
	Renfrew 14th 18h.	wind E.
	Croydon 15th 1h.	wind Force 7.
	Calshot 15th 7h.	wind WSW
	Howden " "	Bar. 993.5 mb. wind W.
	London " "	wind Force 6
	Donaghadee " "	Bar. 988.8 mb.
	Jersey " "	Rainfall. 0.2 min.
	Cranwell.	Min. temp. 47°
	S. Farnboro'.	min. temp. 47°
	London	Max. temp 58° Min 46°
16th	Lympne 15th 13h.	Bar. 1006.2 mb. Temp 55°
	Valencia 15th 18h.	" 1004.2 mb.
	Baldonnel. 16th 1h.	" change +4
	Calshot. " "	wind Force 4.
	Renfrew 16th 7h	Bar. 998.4 mb.
	Blacksod 15th 18h	Temp 50°
	"	max. temp 50°
	Portland	" " 59°
	Renfrew 16th 1h.	7h. Past weather bo pr h
	Eskdale.	Rainfall Day 0.2 mm.
	Calshot.	" Night. trace.
17th	Renfrew. 16th 13h.	weather orh.
	S. Farnboro' " "	Wind WNW.
	Calshot. 17th 7h.	" Force 2.
	Leith. 16th 18h.	Bar. 1005.6 mb.
	Jersey 17th 7h.	" 1028.4 mb.
	Falmouth. 16th 18h	-17th 1h. p.o.b
	Lympne " "	" bbc
	Croydon	max. temp 53°
18th	Renfrew 17th 13h	Low cloud amt. 4.
	Cranwell " 18h.	Temp 36°
	Baldonnel 18th 1h.	Bar. 1018.6
	Calshot " "	Humidity 86 %
	Renfrew. " 7h.	Bar. 1018.1 mb. Low cloud St. Cu 10. Upper Cld nil.
	Baldonnel " 7h	cloud St. 10. Upper cld nil.
	Cranwell " "	Bar. 1029.7 mb.
	Blacksod " "	Wind Force 7. Min. temp 45
	Howden	Sunshine 1.0h.
19th	Eskdale 19th 7h.	Bar. 1018.3 mb.
	Calshot. " "	Low cloud amt. 1.
	Lerwick 18th	18h. Temp 50°
	Stornoway 18th 18h	" 54°
	Nairn 19th 7h.	wind SSW.
	Tynemouth. 19th 7h.	weather om
	"	min. temp 42°
	Baldonnel	max. temp. 58°. min. temp 51
	Regents Pk	Sunshine 3.2h.
20th	Lympne 20th 1h.	Bar 1029.8 mb.
	Renfrew. 20th 7h.	Temp 54°
	Felixstowe 19th 18h - 20th 1h.	Past wthr. bccco
21st	Renfrew 20th 13h.	Visibility 6
	Baldonnel "	" " 3
	Calshot "	" Bar. 1028.7 mb. Weather 03f
	- Heading	: for 18h. 21st read 18h. 20th.
	Lympne 20th 18h.	Bar. 1030.8 mb.
	Benson "	" " 1029.8 mb.
	Eskdale 21st 1h.	Low cloud St. 10.
	Blacksod 21st 7h.	Max. temp. 56°
	London. 20th 13h - 18h.	Past Weather. obcc3f.2f.
22nd	Renfrew. 21st 13h.	Wind SSE.
	Ross-on-Wye "	" Temp. 26°
	Falmouth	" " Low cloud amt. 10
	Felixstowe.	Bar. 1032.2 mb.
	Renfrew v Manchester	21st. 18h: interchange all observations, excepting Renfrew v15 (= 2) v Past wthr.
	Renfrew 21st	13h - 18h Past Weather 1.0cc2fb3f
	Manchester.	21st. 13h - 18h. Past weather b3f. b3fe.
	Croydon	min. temp 24°
	Regent's Pk.	Sunshine. 2.9h.
23rd	Cranwell. 22nd	13h. Low cloud amt. 8.
	Falmouth. 22nd	18h. Wind E.
	Stornoway.	22nd 18h. wind Force 4.
	Malin Head.	22nd 18h. Temp 44°
	Blacksod	min. temp 43°
	Portland 23rd	7h. Bar. 1023.9 mb.
	Nottingham 22nd	18h. Bar. 1032.7 mb.
	Baldonnel.	Grass min. 24°.
	Cranwell.	Min. temp. 22°
	Croydon 22nd	7h.-13h. 2f. 3f. 5f. 6-8f. x. b.
	Regents Pk.	Sunshine. 2.3h.
24th	Falmouth	23rd 13h. Wind E.
	Cranwell.	" 18h " ENE
	Felixstowe.	24th 1h. Temp. 45°
	Calshot. 24th	7h. Bar. change -9.
	Yarmouth.	Sunshine. 5.2h.
	London.	Rainfall Day 0.4 mm.
25th	Calshot 24th	13h. weather. 0f. Cloud Ht 3000 Cloud: Low St. 2: Upper. A St 8.
	Aberdeen. 24th	13h. weather. bc1fe
	Calshot 24th 18h.	" 0f o1f.
	Cranwell. "	" Cloud Height 5700
	Falmouth 25th	1h. Bar 1007.9 mb.
	Tynemouth.	Min. temp. 43°
	Calshot	" " 39: Rain Day trace
	Aberdeen. 24th	7h - 13h. 4-5fe. b0 1fe
	Cranwell.	Grass min 28°
26th	Benson 25th 13h.	Bar. 1016.3 mb.
	Baldonnel. 25th 7h.	Low cloud St. Cu 10.
	" Upper	" nil.
	Lerwick 25th 18h.	Wind SE.
	Portland	max. temp. 59°
	Nairn	Past weather: morn'g, cgobc
	" "	afternoon, bccg.
	Baldonnel.	min. temp. 45° Sun 1.1h.
27th	Falmouth. 26th 13h	Cloud A. St. 9
	Cranwell "	" Humidity. 85 %
	Croydon "	" Bar. 1015.4 mb
	Eskdale "	18h. Temp 45°
	Baldonnel 27th. 1h	Visibility 3.
	Cranwell. "	" weather. 0
	Eskdale "	7h. wind SE. 2
	Wick	Rainfall. 1 mm.
	Lympne 26th 13h - 18h.	Past weather bccor. 2f.
28th	Renfrew. 27th 13h.	weather. 0f. 3f.
	Valencia "	" Temp. 58°
	Cranwell. "	" Cloud A. St. 10.
	Falmouth "	18h. Temp 47°
	Eskdale. 28th 1h	Cloud St. 10
	Baldonnel "	" Wind SSW.
	Calshot. "	" Visibility 5
	Eskdale "	7h. Cloud St. 9.
	Cranwell. "	" Bar. 1008.7 mb.
	Lerwick	max. temp 49°
	Nairn	" " 48°
	Renfrew	Grass min. 44°
	Baldonnel 27th	13h - 18h. 03f. RR.
	Lympne	Grass min 42°
29th	Baldonnel 28th 13h.	Wind NW.
	Ross-on-Wye "	" Bar. 1012.1
	Falmouth. "	" Temp 47°
	Eskdale. "	18h. Omit cloud Ht. Cloud Nb. 9
	Croydon 29th 1h	Wind Force 3.
	Falmouth. "	" Cloud St. 10.
	Baldonnel "	7h. wind E. 2: Humidity 75 % Vis. 8
	Calshot. 29th	7h. weather 0f.
	Shoeburyness 29th 7h.	Temp 45°
	Nairn	Max. temp 48°
	Clacton 29th	7h. Temp 46°
	Baldonnel	min. temp 39° Grass min. 29°
	Calshot.	Rainfall. Day 0.1 mm.
	" 29th 13h	Sea 3.
30th	London " "	wind SSE.
	Calshot 30th	1h. Upper Cloud Ci. 3f.
	Renfrew "	7h. Temp 42°
	Tynemouth	Rain 4 mm: Max. temp 48°
	Clacton	min. temp 41°
	Calshot	" " 40°. Grass 36°
	Lympne	Grass min 44°

II.—ADDITIONS.

OBSERVATORIES AND STATIONS CONTRIBUTING REPORTS AT 1h, 7h, 13h AND 18h.

Report for	STATION.	Barom. at M.S.L. mb.	‡ Change in 3 hours.	Wind. Direc.	Wind. Force 0-12.	Weather.	Temp. °F.	% Humidity.	Visibility. 0-9	Height of Low Cloud. Feet.	Low Cloud. Form.	Low Cloud. Amt. 0-10.	Upper Cloud. Form.	Upper Cloud. Amt. 0-10.	Sea. 0-9.	Summaries for past 24 Hours. Weather. 7h-13h.	13h-18h.	18h-1h.	1h-7h.	Max Temp. °F.	Min. Temp. °F.	Min. on Grass. °F.	Rainfall. Day. 7h-18h. mm.	Rainfall. Night. 18h-7h. mm.	Sun. Hours.
2nd	Baldonnel. 2nd 7h	1012.8	0	–	0	02f	47	85	4	1250	St.	10	-	-	4										
3rd	Renfrew 2nd 18h	1013.1	0	E	3	02f	44	75	4	3000	St	10	-	-	4		02f								
9th	Howden 8th 18h	1029.0	+1	SSW	1	0d	52	92	4	4200	St	10	-	-	4		03f. 03f								
15th	Eskdalemuir 15th 7h.	993.2	0	SW	8	cg	47	66	6	-	61.	10	-	-	4				ORR	54	44	40	3	36	0.5
17th	" 17th 7h.	1021.0	+6	SW	4	r	47	92	5	-	nb	10	-	-	4				rh. o	45	35	29	4	1	2.5
20th	Cranwell. 19th 18h	1027.0	0	S	3	b	42	97	4	2000	St.	5	-	-	4		bbc3f.								
26th	Baldonnel. 26th 1h	1010.5	-1	SSE	2	02f	51	85	4	1250	Cu	6	4.St	4	3			02f							
27th	Valencia 27th 7h	1008.1	+8	WSW	4	c	55	85	7	2000	St Cu	7	-		4	RR. 60.									

‡ The barometric change is expressed in half millibars.

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AIR MINISTRY.

DAILY WEATHER REPORT OF THE METEOROLOGICAL OFFICE, LONDON:

BRITISH SECTION. CORRECTIONS AND ADDITIONS November 1920.

I.—CORRECTIONS.

Report for	STATION.	CORRECTION.
N	Calshot 31st 18h.	Temp 52°
	Baldonnel 1st 7h	Bar 987.2 mb
	Eskdalemuir 1st 7h	Bar 1000.0 mb.
	Baldonnel "	" Weather be. Temp 34°
	Lympne "	" Temp. 44°
	Eskdalemuir 1st 7h.	Max. Temp 50°
	Castlebay "	Rainfall 19mm.
	Yarmouth "	" 0.2 mm.
	Calshot "	Grass Min 41°
	Baldonnel "	Min. Temp 39°
	City 1st m	Sunshine 0.4h
	Westminster	" 0.9h
	Hampstead	" 0.4h.
2ND	Baldonnel 1st 13h	Weather. 01fdo
	" 2nd m.	Cloud Height 750'.
	Calshot 2nd 7h	Bar change +8
	Cranwell " "	Temp. 41°
	Portland 1st 18h	Weather. 'cp'
	Castlebay 2nd 7h.	Bar. 1011.8 mb.
	Yarmouth " "	" 1009.2 mb
	Blacksod " "	min Temp 47°
	Scilly " "	" 45°
	Baldonnel 1st 13h-18h	Past Weather - fdo 03f
	Croydon 1st 7h-13h	" " - 02fp, 01fo 02
3RD	Renfrew 2nd 13h	Temp 46°
	Stornoway " "	Wind Force 4
	Baldonnel 3rd 7h.	Bar 1009.1 mb.
	Plymouth 2nd 18h.	Weather. 'OZ'.
	Spurn Head " "	Wind ENE
	Baldonnel	Grass Min 41°
	"	Rainfall; Day —; Night, trace.
	Eskdalemuir	Sunshine 0.1h.
	Lympne	Max. Temp 45°
4TH	Renfrew 3rd 13h	Humidity 75%.
	Eskdalemuir " "	Wind ESE
	Shoeburyness " "	Temp. 46°
	Renfrew 3rd 18h.	Bar. Change +1.
	Eskdalemuir 3rd 18h.	Cloud. St.10.
	" 4th 7h	" St.10
4TH (cont)	Calshot. 4th 7h	Weather. bzf. Cloud, nil. Sea.1.
	Blacksod 3rd 18h.	Bar 1005.1mb.
	Portland " "	Weather. bcm
	Blacksod 4th 7h.	Temp. 53°. Change +7.
	Holyhead " "	Weather. or zf.
	Nairn " "	Min. Temp. 35°
	Calshot. " "	Max. Temp. 47°. min temp 36°
	" " "	Grass Min 31°. Rainfall; Day nil Night nil. Sunshine 2.7h.
5TH	Renfrew 4th 18h	Weather. Od.
	Eskdalemuir " "	Cloud. St.10.
	Cranwell 4th 18h	Bar. 1012.2mb. Temp 47°
	Kew " "	Weather 04fg.
	Renfrew " 18h.	" 03f.D
	Calshot " "	Bar. 1012.4 mb.
	Baldonnel 5th 7h.	Bar change +3. Cloud St.7.
	Renfrew 5th 7h.	Wind SW.1.
	Roches " "	Sea. 1.
	Dungeness	min. temp 33°
	Wick	Rainfall 6mm.
	Baldonnel.	Max. temp. 54°: Sunshine 0.0h.
	Kew Gardens PK.	Sunshine 0.6h
6TH	Renfrew 5th 13h.	Cloud form, low, Cu.
	Baldonnel " "	" " " Cu.
	Renfrew 5th 18h.	Cloud Height 7200
	Eskdalemuir 6th 7h.	Bar. change 0. Temp 47°
	Calshot. 6th 7h	Wind N.
	Lympne " "	Temp 43°
	Cranwell 6th 7h.	Low cloud amount. St.1.
	Castlebay 6th 7h.	Bar. 1022.7mb
	Liverpool 6th 7h.	Weather. 0
	Falmouth	Sunshine. 2.3h.
	Regents Pk.	" 0.0h.
7TH	Renfrew 6th 13h.	Wind force 4. Cloud Ac 1250'
	" " "	Cloud Nb8. A.St.2.
	Aberdeen " "	Temp 49°
	Cranwell 6th 18h.	Upper Cloud form A.St.
	Kew. " "	Cloud nil.
7TH (cont)	Renfrew.	Min. temp 48°
	Manchester	Min. temp 32°
	Rose-on-Wye	Grass Min 39°
	Lympne	Max. temp 49°
	Howden	Grass Min 26°
	Cranwell	" " 31°
	Croydon	Max. temp 45° min temp 34°
8TH	Calshot. 7th 13h	Bar. 1026.4 mb.
	Falmouth. 7th 18h.	Visibility 8
	Renfrew 8th 7h.	Cloud St.10.
	Lerwick 7th 18h.	Temp 53°
	" 8th 7h.	min. temp 42°
	Calshot	Grass min. 41°
	Cranwell	" " 41°
	Benson	min. temp 39°
9TH	Valencia 8th 18h.	Low cloud amt. 7: Sea 4
	Falmouth " "	Visibility. 8.
	Lympne 9th 18h.	Temp 46°
	London 9th 7h.	Bar. change 0. Cloud Al. 1500
	Lympne 8th 7-13h.	Past Weather 0c. 01f
	Cranwell.	Max. temp 57°
10TH	Rose-on-Wye 9th 13h.	wind NSW.
	Valencia 10th 1h.	Weather 'bcp'.
	Eskdale. " "	Cloud, Nb 10
	Falmouth. " "	St. 10
	Stilistown 10th 7h.	Bar. 1026.1 mb.
	Stornoway 9th 18h.	Temp. 54°
	Blacksod 10th 7h.	Sea 4.
	Jersey.	Sunshine 8.8h.
	Nairn	" 1.0h.
	Yarmouth	" 5.8h.
	Valencia	Grass min. 46°
11TH	Lympne 10th 13h.	Visibility 6.
	Valencia " 18h.	Low cloud amount 7.
	Falmouth 11th 6h.	Bar. 1025.4mb
	Calshot. 11th 7h	Bar change -1.
	Dungeness 11th 7h.	wind force 2.
	Renfrew	Max. temp 50°
	Cranwell. 10th 7h-13h.	Past Weather. 0.
	"	Sunshine 0.0h.

II.—ADDITIONS

STATIONS CONTRIBUTING REPORTS AT 7H. AND 18H.

Report for	STATION.	Barom. at M.S.L. mb.	Temp. °F.	Wind. Direc.	Wind. Force 0-12.	Weather	Barometer. At M.S.L. mb.	Barometer. ¢ Change in 3 hours.	Temperature. Temp. °F.	Temperature. Change in 24 hours.	Wind. Direc.	Wind. Force 0-12.	Direc. of Upper Cloud.	Weather	Sea 0-9.	Rainfall. mm.	Temp. Max. °F.	Temp. Min. °F.	Weather. Morning.	Weather. Afternoon.	Weather. Night.	Sunshine Hours.
		18H. G.M.T.					7H. G.M.T.									24 Hours Ended 7H.						
11TH	Malin Hd. 7h						1017.9	0	46	-3	SSW	2	SW	C	4	4	52	43			bcq	1.4
12TH	" 8h.	1016.5	48	NSW	3	0																0.6
	" 8h						1005.6	-3	48	+2	SSW	4	SW	O	4	trace	51	42	c	cp	o	0.0
13TH	" 8h	997.8	54	SSW	4	0																
	" 7h						998.6	+2	46	-2	W	4	W	cqp	4	5	54	43	o	o	cqp	2.5
14TH	" 18h.	1004.4	45	SSW	4	0																1.5
	" 7h						997.9	+3	45	-1	WSW	5	W	C	8	17	50	43	cqp	cq	cqp	0.0
15TH	Stornoway 7h						958.0	-10	46	+7	SW	8	-	ory	6	21	46	38			ory	0.0
	Castlebay 7h						939.5	-1	47	+2	W	10	-	O	-	5	56	45			rbtp	0.0
	Malin Hd.	978.2	46	SE	4	0																
16TH	Stornoway 8h	979.6	47	NNW	7	opbly	975.6	0	47	+2	W	8	W	cq	6	6	44	45	o	op	cqpl	0.0
	Castlebay 18h	980.9	47	W	6	0																
	" 7h						994.8	+4	46	0	WNW	5	-	O	5	4	48	41	prqm	opqmp	op.pc.o	0.9
	Malin Hd. 18h	989.9	45	WSW	7	cq																
	" 7h						998.0	+3	43	-4	WSW	4	W	cqp	6	8	50	40	cqp	cqpl	cqph	1.5
17TH	Castlebay 18h	1005.7	47	WNW	4	0																
	" 7h						1017.1	+4	46	0	WNW	4	-	bc	4	2	47	42	op.c.o	op.o	bcpbc	2.3
	Malin Hd. 18h	1007.4	47	SW	3	or													cqp	bp.		
18TH	Castlebay 18h	1016.7	49	ESE	5	0																
	" 7h						1006.9	-2	53	+1	SSE	7	-	ad	-	6	53	43	bc.o.bc	bc.o	ord	0.0
19TH	" 18h	1006.4	55	SSE	6	0																1.0
	" 7h.						1010.5	+4	47	-6	W	4	-	r	4	25	53	46	dr	r.o	or	0.0
20TH	"	1014.6	50	SE	3	0	1015.6	+1	55	+2	SSE	5	-	op	5	1	55	46	ro.bc	bc.o	op	0.0
21ST	"	1020.8	54	SE	5	b	1024.8	+1	53	-2	SSE	4	-	O	6	-	55	52	op	op b	bopc.o	0.0
22ND	"	1025.7	56	SSE	4	0	1025.7	0	50	-3	S	4	-	O	6	-	53	47	o	o	o	5.9
23RD	"	1027.3	48	S	5	0	1025.4	0	48	-2	SE	5	-	bm	5	-	50	47	o.m	cm.o	o bm	3.1
24TH	" 7h.						1017.7	-2	44	+1	SSE	8	-	b	3	-	53	47			b.b	1.9
25TH	Malin Hd. 7h						1003.4	0	46	+3	S	8	S	cm	3	1	48	[illegible]			cmp	0.0
26TH	" "	1004.4	46	S	2	om	1005.8	0	50	+4	SE	3	-	cm	2	4	50	42	cm	om	omr	
27TH	" 18h	1004.3	48	S	3	om													om	om		
28TH	Scilly 7h						1015.1	+3	48	-3	NW	7	NW	C	7	10	53	46			opqc	