METEOROLOGICAL OFFICE,

LONDON.

DAILY WEATHER REPORTS.

1ST JANUARY–30TH JUNE,

1890.

Soc. Reg. Lond.

22. 1. 91.

DAILY WEATHER REPORT

January to June 1890.

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DAILY WEATHER REPORT.

for Saturday, 1st February, 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.66	12	SW	6	S	29.60	-.61	22	22	+ 28	Z	0	S		?	-15	0.24
	Hernösand ...	29.85	25	ESW	2	b	29.88	-.31	31	29	+ 26	SW	2	b		?	3	0.04
	Stockholm ...	30.12	29	SW	4	o	30.01	-.27	34	33	+ 9	W	2	f		?	?	?
	Wisby	30.24	31	W	6	s	30.10	-.13	35	33	+ 5	W	4	o		?	25	0.04
	Bodö	30.46	40	WSW	8	o	29.46	-.21	39	37	+ 3	WSW	8	c	5	?	32	0.12
	Christiansund	29.85	42	WSW	8	c	29.83	+.12	42	38	0	WSW	6	c	5	43	39	0.12
	Skudesnaes ...	30.14	42	Z	0	f	30.06	-.15	42	41	+ 5	SSE	2	o	5	43	?	0.43
	Christiania Fjord (Faerder)	30.08	39	NSW	7	c	30.03	-.25	38	37	+ 6	SSW	2	c	3	39	?	-
	Skagen (The Scaw)	30.17	35	SW	3	o	30.08	-.24	35	38	+ 7	W	3	o	3	39	30	0.08
	Fanö	30.34	36	WSW	4	o	30.23	-.16	38	38	+ 10	WSW	4	f		?	28	-
BRITISH ISLANDS.	Sumburgh Head	30.03	46	W	3	c	29.80	-.14	45	42	- 3	SW	4	o	4	48	41	0.03
	Stornoway ...	30.13	46	W	4	o												
	Wick	30.16	45	W	2	c	29.82	-.18	45	44	- 4	SW	2	o	1	50	41	-
	Nairn	30.19	44	Z	0	b	29.86	-.22	49	46	- 2	WSW	3	bc	2	53	39	0.01
	Aberdeen ...	30.22	44	WNW	2	b	30.00	-.16	45	44	- 2	SSW	2	c	2	54	35	-
	Leith	30.26	48	SW	1	bc	30.09	-.14	49	47	- 2	SW	1	om		53	39	-
	Shields	30.28	50	W	2	c	30.14	-.10	47	46	- 3	SW	2	c	2	54	46	0.01
	Spurn Head ...	30.29	45	W	1	o	30.23	-.06	45	44	+ 1	SW	2	cm	3	48	42	-
	York	30.31	49	W	1	c	30.23	-.08	48	47	+ 1	SW	1	c		54	44	-
	Loughborough	30.35	49	WNW	2	o	30.28	-.07	47	46	- 1	WNW	1	omw		52	46	-
	Ardrossan ...	30.29	48	WNW	2	o	30.07	-.19	47	46	- 2	S	4	c	3	50	44	-
	Malin Head ...	30.23	46	SW	3	of	29.98	-.26	45	44	- 3	S	5	og	3	49	44	0.02
	Mullaghmore ...	30.32	45	SW	2	o	30.03	-.30	47	45	- 1	SSW	6	o	4	50	46	0.01
	Belmullet ...	30.30	48	SSW	3	o	30.02	-.31	48	48	- 2	SW	5	om		52	49	0.03
	Donaghadee ...	30.33	51	W	3	c	30.13	-.20	48	46	0	SW	4	c	2	54	48	-
	Liverpool (Bidston)	30.37	47	W	3	r	30.24	-.13	46	45	- 1	SW	2	c	2	48	45	0.06
	Holyhead ...	30.40	48	Z	0	ogm	30.23	-.16	47	46	- 1	SW	3	cgm	2	52	46	0.04
	Parsonstown ...	30.37	50	Z	0	o	30.16	-.23	45	43	- 2	SE	1	bc		51	44	0.02
	Valencia	30.42	50	SW	3	om	30.18	-.28	50	48	0	WSW	5	o	5	51	46	0.04
	Roche's Point...	30.43	49	WNW	2	c	30.25	-.20	48	46	+ 1	WSW	2	o	3	52	45	-
	Pembroke (St. Ann's Hd.)	30.42	48	WNW	2	op	30.30	-.14	46	46	- 2	SW	3	of	2	49	45	-
	Scilly	30.42	48	WNW	4	o	30.33	-.14	46	45	- 2	WSW	3	o	4	49	45	0.01
	Prawle Point ...	30.42	48	NNE	1	o	30.32	-.11	47	47	+ 2	ENE	1	odm	1	52	44	-
	Jersey (St. Aubin's)	30.39	50	N	3	o	30.35	-.05	48	47	- 2	NNE	3	odm	3	51	46	0.02
	Hurst Castle ...	30.39	50	NNW	1	om	30.33	-.06	48	46	0	NNW	1	om	2	52	45	-
GERMANY & HOLLAND.	Dungeness ...	30.35	45	Z	0	m	30.32	-.00	43	42	- 1	SSW	3	m	2	46	42	0.01
	London	30.39	49	NW	1	o	30.31	-.03	47	47	0	S	1	ofg		51	46	0.02
	Oxford	30.38	48	W	1	o	30.32	-.06	46	45	- 1	SW	1	og		49	46	-
	Cambridge ...	30.37	47	Z	0	o	30.30	-.03	46	45	0	Z	0	o		50	40	0.01
	Yarmouth ...	30.33	42	SSW	1	f	30.28	-.05	43	42	+ 2	SW	2	f	3	44	40	0.05
	Cuxhaven ...	30.44	32	SSW	2	c	30.37	-.03	32	31	+ 3	SW	4	bc		34	?	-
	Berlin	30.49	30	Z	0	b	30.49	+.15	25	24	- 1	SSW	3	o		34	23	-
	Wiesbaden ...						30.46	+.19	25	24	- 10	Z	0	b		37	25	-
	Munich	30.37	17	NE	2	bc	30.37	+.13	13	13	- 9	E	4	m		28	5	0.04
	The Helder ...	30.41	35	SSE	1	c	30.33	-.03	38	37	+ 3	SSW	2	f	3	39	34	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)						30.41	+.08	31	29	- 7	S	1	b		39	31	-
	Cape Gris Nez	?	44	ESE	1	o	?	?	37	35	- 7	S	3	o	2	48	36	-
	Paris	30.38	37	NE	1	o	30.39	+.09	28	27	- 14	NNW	1	b		46	28	-
	Brest	?	49	N	2	o	?	?	48	45	0	N	1	o	3	54	43	-
	Lorient	30.39	50	N	3	o	30.33	-.07	48	48	- 1	N	1	m	5	50	46	-
	Rochefort ...	30.34	48	NE	2	o	30.34	-.05	35	34	- 9	NE	4	b	?	50	23	-
	Belfort	?30.20	29	SE	1	c	?30.22	+.06	26	19	- 1	SE	2	b		33	23	-
	Lyons	30.19	38	N	1	r	30.24	?	24	23	- 8	NNW	3	b		39	24	0.04
	Nice	29.97	41	NE	6	b	30.08	+.13	38	29	- 2	ENE	5	b	3	52	30	-
	Perpignan ...	30.06	45	NW	5	o	30.16	+.02	33	31	- 9	NE	2	bc		48	31	-
	Biarritz	30.28	45	NE	3	o	30.17	-.19	44	39	0	E	3	b	6	48	34	0.32
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon																	

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Saturday, 1st February 1890.

BAROMETER, WIND AND SEA.

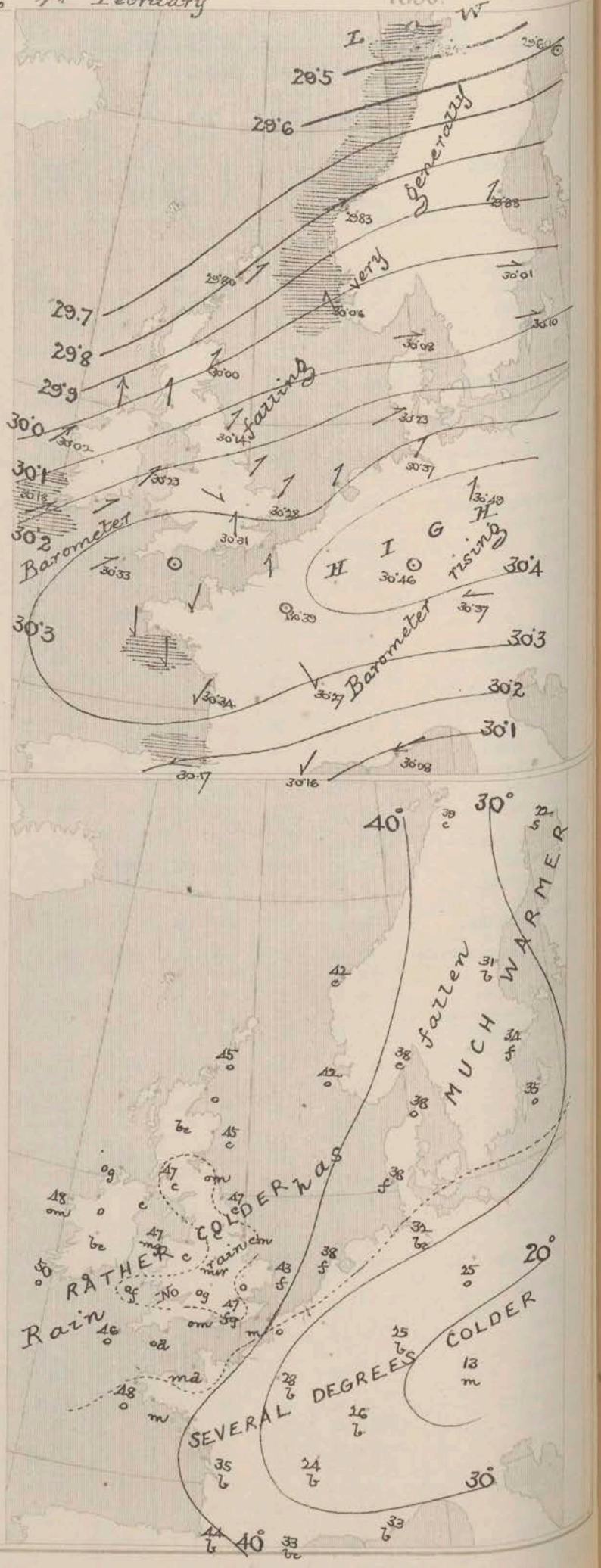
EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.
WIND. Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.
SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·967
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·3 ins: to 30·5 ins: over Germany, the north of France, and the south of England.
Lowest, 29·8 ins: and less, in the extreme northwest of Scotland, and 29·5 ins: and less, over Lapland.
Gradients moderate for SW^{ly} winds over the western and northern parts of our area, and for E^{ly} winds in the south of France
Barometer apparently still falling except in Germany and the east of France.

TEMPERATURE

Highest, 50° at Valencia, 49° at Nairn and Leith, 48° at Belmullet, Roche Point, Jersey and Roscoff.
Lowest, 13° at Munich, 22° at Haparanda, 24° at Lyons, 25° at Wiesbaden and Berlin, and 28° at Paris.
It has risen fast in Sweden, fallen over France and Germany, since yesterday.

WIND

Moderate from E. and NE. over the southern parts of Germany and France, calm or nearly so over Western Germany, the north of France and southeast of England, generally SW^{ly} elsewhere — light on our northeast coasts, fresh in Ireland, strong to a gale in the northwest of Norway.

WEATHER

Fine and bright over France and Germany, cloudy in most other places, overcast and foggy and misty in many part of our Islands, with slight rain occasionally.
In London it is very gloomy, and a damp fog prevails.

SEA

Rough over the Bay of Biscay, rather so at Valencia and on the Norwegian coast, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

At present there is no indication of any decided change, but conditions are becoming favourable for the advance of large depressions towards our northwestern coasts from the Atlantic.

FORECASTS

For the 24 hours ending at NOON on 2nd FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SW^{ly} breezes, freshening; mild, rain at times.
1 SCOTLAND EAST	SW^{ly} breezes, light or moderate; very mild, fair.
2 ENGLAND N.E.	
3 ENGLAND EAST	Very light breezes or calms; very mild damp, misty, drizzle at times.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No 0.
7 ENGLAND N.W.	
8 ENGLAND S.W.	SW^{ly} breezes, light to moderate; mild, some showers.
9 IRELAND NORTH	SW^{ly} breezes, light to moderate; mild, some showers.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼|), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲|), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER. D	THER. W	WIND D	WIND F	WEA.	SEA
Skudesnaes ...	30·12	42	41	S	6	rf	5
Sumburgh Head	30·03	47	44	W	3	bc	4
Stornoway	30·13	49	47	W	3	c	4
Aberdeen	30·19	53	49	NSW	1	c	1
Shields	30·24	53	50	W	2	c	2
Arurossan	30·29	50	49	WNW	3	c	2
Malin Head ..	30·28	48	48	WSW	4	o	2
Mullaghmore ...	30·34	49	49	WSW	4	cm	3
Belmullet	30·34	51	51	SW	2	b	*

	BAR.	THER. D	THER. W	WIND D	WIND F	WEA.	SEA
Holyhead	30·40	50	49	WSW	1	o g	[illegible]
Valentia	30·44	51	51	SW	4	o a m	4
Scilly	30·45	48	48	NNW	5	c p d	6
Jersey	30·40	51	48	N	3	o	3
Dungeness	30·34	46	45	SW	1	m	1
London	30·35	51	49	NNW	2	o	[illegible]
Yarmouth	30·32	43	42	SSW	2	o f d	3
Rochefort	30·37	48	48	NNW	2	o	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE
DURING THE PAST 24 HOURS.

Weather fine and bright in the south and east of France, as well as in many parts of Germany, Sweden, Finland and the north of Russia, cloudy or overcast elsewhere, snow in Austria-Hungary – damp mists and slight rain in many parts of the British Isles. Thunder and lightning at Rome, rain in some parts of Algeria. Very slight rain in several parts of our Islands later, and heavy quantities over Scandinavia and in the southwest of France.

Temperature rising decidedly over Western and Northwestern Europe, falling in most other places; above 50° at Malta and Sanguinaire, as well as in some parts of Scotland, and touching 50° in the west of Ireland and at Shields; below the freezing point over Northern, Eastern, and Central Europe, and as low as –23° F. at Archangel, –8° at Ulleaborg, –4° at Haparanda, +7° at St. Petersburg, at Helsingfors, 12° at Moscow, and 22° at Kharkov. Rising later to between 50° and 54° in many part of our Islands and at Brest, but falling short of 50° in the south of France.

Wind strong from N. and NE. over the northern part of the Mediterranean, light and variable over the Continent as a whole, light W. to NW. over England and the Channel, SW. in Ireland and Scotland, S. to SE. in Norway. Very light N. breezes in the Baltic. SW. gales in the northwest of Norway later, NE. breezes over France, no important change elsewhere.

Barometer, highest 30·4 ins. and more, over the southwest of our Islands, Brittany, the northwest of Spain, and adjacent part of the Atlantic, and exceeding 30·3 ins. in a "ridge" extending thence across the Netherlands and Denmark to the south of Sweden; lowest 29·7 and less, in two depressions, one off the northwest of Norway, the over the Mediterranean, and about 29·9 ins. in another shallow system over Central Russia. The northern depression advancing northeastwards to Lapland later, no other change of importance.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 2nd FEB^Y 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. **R. H. SCOTT,** *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sun. (0 to 10.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.75	16	Z	0	b	29.43	− ·17	32	31	+ 10	SW	4	0	*	?	16	—
	Hernösand ...	29.79	22	Z	0	bc	29.51	− ·37	32	32	+ 1	S	2	0	*	36	21	0.08
	Stockholm ...	29.98	34	Z	0	0	29.81	− ·20	37	36	+ 3	SW	4	0	*	37	28	—
	Wisby	30.06	36	SW	4	0	29.99	− ·11	36	35	+ 1	SSW	6	0	*	37	30	—
	Bodö	29.32	39	WSW	6	r	29.23	− ·23	39	36	0	SSE	2	0	1	39	34	0.21
	Christiansund	29.54	42	SW	5	r	29.38	− ·45	37	36	− 5	SW	5	r	5	45	36	0.32
	Skudesnaes ...	29.85	43	SSE	4	r	29.92	− ·34	40	39	− 2	W	6	r	5	43	39	0.32
	Christiania Fjord (Færder)	29.91	37	SSW	5	m	29.70	− ·33	41	41	+ 3	SSW	7	m	4	?	37	—
	Skagen (The Scaw)	29.97	39	SW	3	m	29.85	− ·23	39	39	+ 1	SW	4	f	3	39	37	—
	Fanö	30.13	38	WSW	5	a	30.01	− ·22	38	37	0	SSW	4	0	*	39	37	0.16
BRITISH ISLANDS.	Sumburgh Head	29.65	43	SW	3	r	29.35	− ·45	35	35	− 10	W	6	0	5	46	33	0.20
	Stornoway ...	29.73	40	W	4	0	29.76	− ·02	37	37	− 8	N	6	bc	5	45	34	0.15
	Wick	29.75	45	NW	1	bc	?29.66	− ·16	35	33	− 10	W	3	bc	1	48	35	0.02
	Nairn	29.79	44	WSW	2	c	29.78	− ·08	36	35	− 13	W	2	b	2	52	34	0.04
	Aberdeen ...	29.82	45	SSW	3	c	29.87	− ·13	37	33	− 8	SW	2	b	2	49	35	—
	Leith	29.88	49	SW	3	c	29.97	− ·10	38	35	− 11	W	3	b	*	54	35	0.06
	Shields	29.98	47	SW	2	c	29.97	− ·17	40	38	− 7	WSW	3	c	2	52	39	—
	Spurn Head ...	30.08	46	SSW	3	c	30.04	− ·19	42	41	− 3	WSW	2	c	3	49	42	—
	York	30.07	48	SW	1	0	30.05	− ·18	42	40	− 6	WNW	1	c	*	51	41	—
	Loughborough	30.14	48	SSW	3	0	30.09	− ·19	42	41	− 5	W	1	0	*	51	42	—
	Ardrossan ...	29.91	46	SSW	2	0	30.04	− ·03	42	40	− 5	WSW	4	c	2	47	39	0.16
	Malin Head ...	29.90	43	SW	3	c	30.05	+ ·07	38	37	− 7	W	5	bchpq	4	46	37	0.11
	Mullaghmore ...	29.94	45	SW	4	c	30.15	+ ·12	42	38	− 5	W	6	c	5	47	38	0.13
	Belmullet ...	29.96	45	W	3	0	30.18	+ ·16	42	40	− 6	W	3	b	*	48	36	0.20
	Donaghadee ...	29.96	47	WSW	3	r	30.13	·00	34	34	− 14	WSW	3	b	1	49	34	0.16
	Liverpool (Bidston)	30.06	46	SSW	3	0	30.14	− ·10	41	39	− 5	WNW	4	bc	4	50	41	0.07
	Holyhead ...	30.06	47	SW	3	0	30.16	− ·07	42	40	− 5	NNW	3	b	3	47	41	0.16
	Parsonstown ...	30.00	45	Z	0	r	30.23	+ ·07	33	32	− 14	Z	0	bc	*	51	32	0.16
	Valencia	30.06	46	NW	1	0	30.31	+ ·13	42	38	− 8	NW	2	bc	3	51	38	0.38
	Roche's Point ...	30.05	49	SW	4	r	30.26	+ ·01	40	37	− 8	NNW	3	b	4	51	38	0.15
	Pembroke (St. Ann's Hd.)	30.13	46	SSW	3	0	30.20	− ·10	43	41	− 3	NW	4	bc	3	47	42	0.11
	Scilly	30.20	46	SSW	4	0	30.18	− ·15	47	46	+ 1	N	6	c	6	49	44	0.31
	Prawle Point ...	30.29	45	WSW	1	0	30.17	− ·15	45	45	− 2	NNW	2	og	1	46	43	0.15
	Jersey (St. Aubin's)	30.25	47	SE	1	0	?30.20	− ·15	46	45	− 2	NW	1	ogm	1	48	45	—
	Hurst Castle ...	30.23	48	NW	1	0	30.16	− ·17	47	45	− 1	W	1	og	2	48	44	—
	Dungeness ...	30.24	44	SSW	4	0	30.13	− ·19	44	43	+ 1	SW	4	m	3	44	41	—
	London	30.22	47	SSW	1	0	30.13	− ·18	43	42	− 4	WSW	1	0	*	49	43	0.01
	Oxford	30.17	47	SW	3	0	30.14	− ·18	43	42	− 3	SW	1	og	*	50	43	—
	Cambridge ...	30.18	45	SW	1	0	30.08	− ·22	44	43	− 2	SW	1	0	*	51	42	—
	Yarmouth ...	30.17	46	SW	2	0	30.06	− ·22	42	41	− 1	SW	3	bcm	3	46	40	0.01
GERMANY & HOLLAND.	Cuxhaven	30.38	31	SSW	2	bc	30.16	− ·21	30	29	− 2	SSW	3	c	*	36	28	—
	Berlin	30.40	26	SSW	2	b	30.30	− ·19	21	20	− 4	SE	2	b	*	30	19	—
	Wiesbaden ...	*	*	*	*	*	?	?	23	22	− 2	?	1	bc	*	34	23	—
	Munich	30.32	13	NE	3	b	30.25	− ·12	15	15	+ 2	SE	3	m	*	25	9	—
	The Helder ...	30.22	37	S	2	0	30.12	− ·21	39	37	+ 1	SSW	3	c	3	39	37	0.04
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.23	− ·18	30	28	− 1	S	3	c	*	39	30	—
	Cape Gris Nez	?	40	SW	3	0	?	?	36	33	− 1	SW	3	0	3	48	34	—
	Paris	30.31	33	E	1	b	30.24	− ·15	25	25	− 3	SE	1	bc	*	42	24	—
	Brest	?	49	Z	0	0	?	?	48	45	0	W	2	0	3	54	41	0.08
	Lorient	30.26	47	SW	2	0	30.18	− ·15	46	42	− 2	SSE	2	0	2	50	43	—
	Rochefort ...	30.28	40	NE	4	b	30.26	− ·08	30	29	− 5	ENE	3	b	1	45	25	—
	Belfort	?30.26	29	SW	1	b	30.25	+ ·03	23	17	− 3	SW	1	b	*	43	21	—
	Lyons	30.30	28	E	1	b	30.26	− ·01	21	?	− 3	NE	1	b	*	36	21	—
	Nice	30.18	39	Z	0	b	30.24	+ ·16	34	28	+ 1	E	2	b	2	46	32	—
	Perpignan ...	30.23	38	NE	1	b	30.25	+ ·09	29	28	− 4	SW	1	b	*	47	28	—
	Biarritz	30.20	37	ENE	2	b	?30.20	+ ·08	47	35	− 3	SW	4	c	2	45	34	—
PENINSULA.	Corunna	*	*	*	*	*	30.26	− ·01	49	48	− 3	E	1	0	4	55	?	—
	Lisbon	30.05	56	N	5	b	30.25	+ ·19	43	?	− 7	NNE	4	0	5	64	43	—

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Sunday, 2nd February, 1890.

BAROMETER, WIND AND SEA.

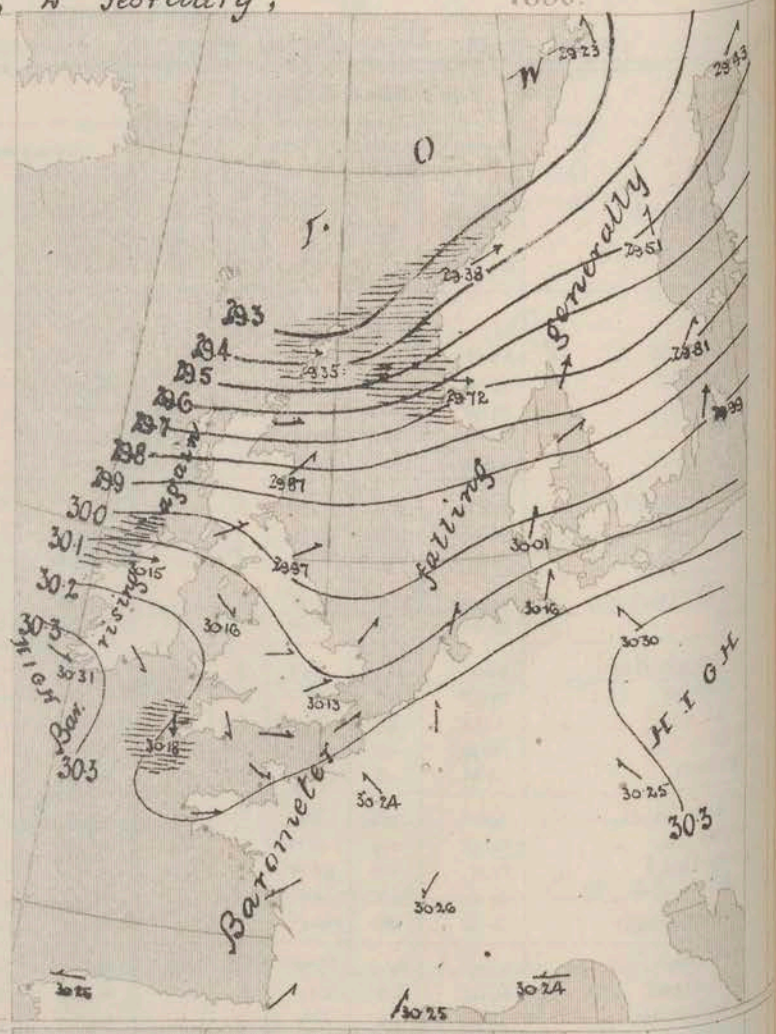
EXPLANATION OF MAP

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.
WIND · Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.
SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 713
Stornoway	29 · 700
Wick	29 · 737
Nairn	29 · 747
Aberdeen	29 · 780
Leith	29 · 803
Shields	29 · 847
York	29 · 884
Loughborough	29 · 912
Ardrossan	29 · 805
Donaghadee	29 · 812
Holyhead	29 · 848
Liverpool	29 · 873
Parsonstown	29 · 834
Valencia	29 · 850
Roche's Point	29 · 850
Pembroke	29 · 875
Scilly	29 · 911
Jersey	29 · 975
Hurst Castle	29 · 944
Dover	29 · 957
LONDON	29 · 949
Oxford	29 · 938
Cambridge	29 · 935
Yarmouth	29 · 928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

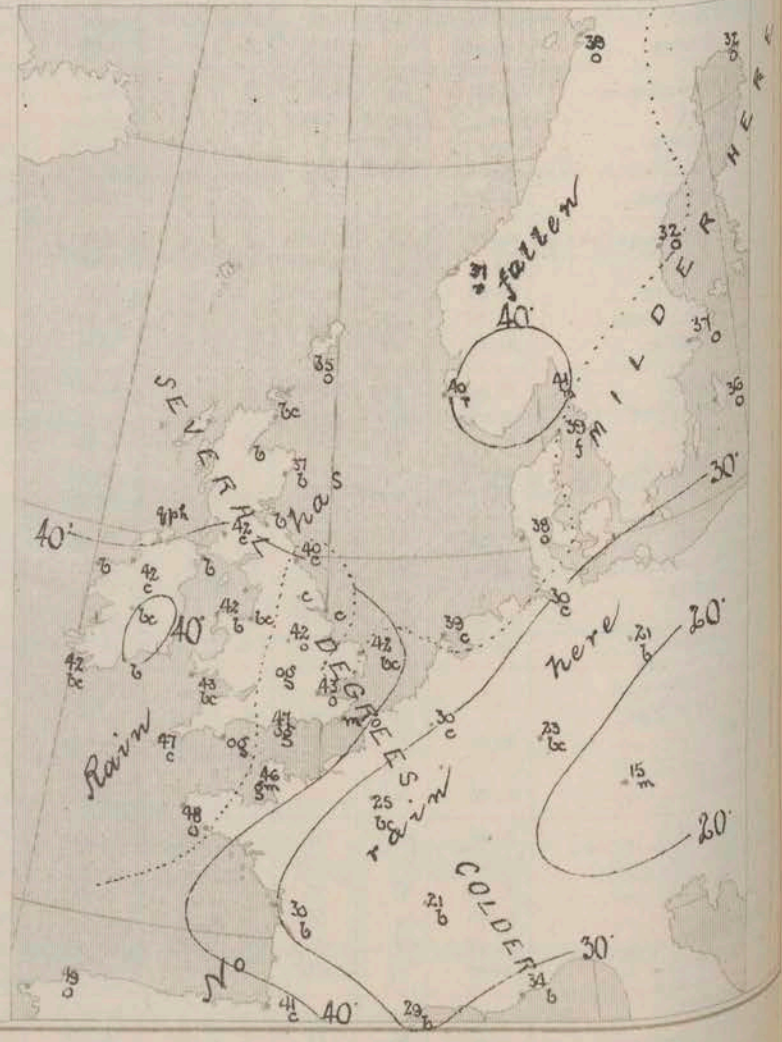
TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.
WEATHER is shown by Letters of the Beaufort Scale.
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. *(Inches.)*
Sumburgh Head	42 · 6	34 · 7	38 · 7	37 · 7	3 · 29
Stornoway	43 · 5	34 · 7	30 · 3	38 · 2	3 · 07
Wick	43 · 4	33 · 5	38 · 4	37 · 0	2 · 02
Nairn	43 · 4	33 · 8	37 · 4	35 · 7	1 · 51
Aberdeen	43 · 5	34 · 2	37 · 8	36 · 2	2 · 51
Leith	46 · 6	34 · 7	39 · 2	37 · 7	1 · 58
Shields	44 · 3	35 · 7	39 · 2	37 · 9	1 · 63
York	45 · 3	34 · 2	38 · 2	37 · 1	1 · 88
Loughborough	46 · 0	34 · 5	38 · 4	37 · 3	2 · 00
Ardrossan	45 · 0	36 · 7	40 · 0	38 · 6	3 · 47
Donaghadee	45 · 8	37 · 0	40 · 7	39 · 7	2 · 71
Holyhead	46 · 1	39 · 3	42 · 3	40 · 8	2 · 90
Liverpool	45 · 3	36 · 9	39 · 9	38 · 3	1 · 85
Parsonstown	47 · 4	36 · 1	40 · 1	38 · 8	2 · 45
Valencia	50 · 2	40 · 8	45 · 1	43 · 4	5 · 29
Roche's Point	48 · 9	40 · 0	43 · 6	42 · 2	4 · 86
Pembroke	46 · 2	40 · 3	43 · 1	41 · 9	3 · 20
Scilly	49 · 7	43 · 7	46 · 9	45 · 3	2 · 98
Jersey	47 · 6	40 · 1	43 · 2	42 · 0	2 · 72
Hurst Castle	46 · 5	37 · 9	41 · 3	40 · 4	2 · 63
Dover	45 · 4	37 · 4	40 · 3	39 · 1	2 · 12
LONDON	46 · 9	36 · 0	39 · 7	38 · 6	1 · 89
Oxford	45 · 9	35 · 9	38 · 8	37 · 7	2 · 06
Cambridge	46 · 4	33 · 9	38 · 3	37 · 3	1 · 60
Yarmouth	43 · 5	35 · 2	38 · 9	38 · 2	2 · 02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·2 ins: to 30·3 ins: and more over the southern parts of Ireland, the Bay of Biscay, France and Germany;
Lowest, 29·3 ins: and less, in a depression off the west and northwest of Norway, 30·2 ins: and less, in a "V" shaped secondary stretching SW'ly from the North Sea across England to Brittany.
Gradients steep in the north, moderate over England and the Eastern shores of the North Sea, very slight over France.
Barometer rising decidedly at our western stations and in the west of Norway, falling elsewhere.

TEMPERATURE

Highest, 49° at Corunna, 48° at Brest, 47° at Scilly and Hurst Castle, 43° in London, 42° at Valencia, Belmullet, Yarmouth and York.
Lowest, 15° at Aftenrich, 21° at Berlin and Lyons, 23° at Wiesbaden, 25° at Paris, 29° at Perpignan, and 30° at Rochefort.
It had begun to fall decidedly especially at our western and northern stations.

WIND

W'ly over the northern parts of our Islands, SW'ly over the southeast of England, the Netherlands, Denmark and Scandinavia.
NW'ly over the southwestern parts of our Islands, NE'ly over Spain and the south and west of France.

WEATHER

Fine and bright over the greater part of Germany, France, and our Islands, but dull in the far north, with rain in Norway and very slight drizzle at times over the south and southeast of England.

SEA

Rather rough in the extreme north and northwest and at Seaton, moderate at several of our western stations, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 3rd FEBY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	The S. CONE was hoisted yesterday in the N and NW but has been lowered again this morning.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.95	42	41	SSE	6	of	5
Sumburgh Head	29.66	45	44	SW	3	o	4
Stornoway	29.74	45	45	SW	4	r	4
Aberdeen	29.86	48	44	SSW	4	c	3
Shields	30.03	50	46	SW	2	c	2
Ardrossan	29.95	46	46	SSW	3	r	3
Malin Head ...	29.92	45	45	WSW	4	o	3
Mullaghmore ...	29.99	46	46	SW	4	cm	3
Belmullet	29.99	47	47	WSW	3	bcp	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.12	46	45	SSW	3	c	2
Valencia	30.07	50	50	SSW	6	rm	5
Scilly	30.24	48	46	WSW	4	cmpa	4
Jersey	30.30	47	46	ESE	2	o	2
Dungeness	30.28	43	41	SSW	4	o	3
London	30.25	49	48	S	2	om	*
Yarmouth	30.20	46	45	SW	3	f	3
Rochefort	30.31	43	38	ENE	4	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Continental Information will appear tomorrow.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday, 3rd February, 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.15	21	N	0	c	29.11	-.32	13	12	-19	N	0	bc	*	32	?	-
	Hernösand ...	29.29	34	SSW	2	c	29.52	+.01	28	24	-4	WNW	2	b	*	37	21	-
	Stockholm ...	29.59	38	WSW	6	c	29.76	-.05	34	33	-3	W	4	b	*	43	34	-
	Wisby	29.81	37	SW	6	c	29.90	-.09	38	36	+2	W	6	b	*	39	32	-
	Bodö	29.10	34	SW	4	m	29.21	-.02	35	32	-4	SW	4	bc	3	39	30	-
	Christiansund	29.38	33	W	8	s	29.43	+.05	44	42	+7	WSW	9	r	6	?	32	0.43
	Skudesnaes ...	29.85	41	W	5	r	29.96	+.24	45	44	+5	WSW	4	r	5	?	39	0.24
	Christiania Fjord (Færder)	29.71	39	WSW	7	b	29.81	+.11	42	40	+1	WSW	7	c	4	?	39	-
	Skagen (The Scaw)	29.90	41	WNW	4	0	29.97	+.12	41	40	+2	WNW	4	c	4	41	39	0.04
	Fanö	30.13	37	W	4	b	30.21	+.20	38	38	0	W	4	b	*	41	37	0.04
BRITISH ISLANDS.	Sumburgh Head	29.73	40	W	6	s	29.84	+.49	47	46	+12	W	7	r	6	47	35	0.13
	Stornoway ...	29.92	45	NW	5	0												
	Wick	29.92	39	W	2	b	30.04	+.28	42	40	+7	W	2	bc	2	48	38	-
	Nairn	29.99	46	WSW	3	bc	30.09	+.31	48	46	+12	WSW	4	c	2	49	36	0.01
	Aberdeen ...	30.07	38	S	2	b	30.14	+.27	44	41	+7	SW	2	bc	2	47	34	-
	Leith	30.15	42	W	3	c	30.24	+.27	46	45	+8	WSW	3	bc	*	46	36	-
	Shields	30.21	42	W	3	bc	30.30	+.33	44	42	+14	WSW	3	c	2	44	38	-
	Spurn Head ...	30.27	41	W	3	b	30.36	+.32	38	37	-4	WSW	3	b	3	44	36	-
	York	30.28	40	W	2	0	30.38	+.28	38	38	-4	W	1	bc	*	47	36	-
	Loughborough	30.36	38	WNW	1	b	30.45	+.36	29	28	-13	E	1	cm	*	48	28	-
	Ardrossan ...	30.21	44	SW	4	c	30.30	+.26	45	45	+3	SW	4	dm	3	49	40	-
	Malin Head ...	30.22	44	WSW	6	0	30.28	+.23	44	44	+6	WSW	5	od	4	46	36	0.05
	Mullaghmore ...	30.32	45	WSW	5	c	30.38	+.20	45	44	+3	SW	4	om	4	46	40	0.01
	Belmullet ...	30.32	46	W	4	0	30.35	+.17	47	46	+5	SW	3	o	*	48	41	0.02
	Donaghadee ...	30.30	40	WNW	3	b	30.38	+.25	43	43	+9	SW	2	c	1	45	34	-
	Liverpool (Bidston)	30.35	39	W	3	b	30.42	+.28	42	40	+1	WSW	3	o	3	44	37	-
	Holyhead ...	30.36	41	WNW	3	b	30.43	+.27	45	44	+3	SW	3	og	2	45	41	-
	Parsonstown ...	30.39	40	N	0	b	30.43	+.20	41	40	+8	N	0	o	*	46	32	-
	Valencia	30.47	43	WNW	2	c	30.46	+.15	44	43	+2	WSW	1	og	1	49	39	0.01
	Roche's Point ...	30.43	44	NW	3	b	30.48	+.22	37	35	-3	NNW	2	b	3	48	34	-
	Pembroke (St. Ann's Hd.)	30.42	39	N	2	b	30.48	+.28	38	38	-5	NW	2	b	1	44	37	-
	Scilly	30.39	45	NNE	6	bc	30.47	+.29	43	41	-4	E	1	b	3	47	40	-
	Prawle Point ...	30.38	41	N	3	c	30.49	+.32	35	33	-10	NNE	3	b	2	49	33	-
	Jersey (St. Aubin's)	30.31	47	NNE	3	0	30.46	+.26	42	40	-4	NE	3	bcm	3	50	41	0.06
	Hurst Castle ...	30.36	44	NNE	2	b	30.49	+.33	34	32	-13	NNE	1	bm	1	47	28	-
GERMANY & HOLLAND.	Dungeness ...	30.26	47	NNE	3	m	30.44	+.31	30	29	-14	NNE	3	m	2	52	28	-
	London	30.36	45	NNE	2	bc	30.47	+.34	29	27	-14	W	1	b†	*	47	28	-
	Oxford	30.42	35	NNW	1	b	30.49	+.35	29	28	-14	SW	2	b	*	48	29	-
	Cambridge ...	30.29	39	SW	1	b	30.47	+.34	30	29	-14	SW	1	b	*	48	29	-
	Yarmouth ...	30.27	42	NW	1	bc	30.40	+.34	33	32	-9	WNW	2	bm	2	45	30	-
	Cuxhaven ...	30.13	34	SW	4	0	30.32	+.16	34	32	+4	WSW	2	m	*	37	30	-
	Berlin	30.26	27	SSW	3	b	30.37	+.07	33	32	+12	NW	3	o	*	?	?	-
	Wiesbaden ...	*	*	*	*	*	30.44	?	28	24	+5	SE	1	s	*	28	23	-
	Munich	30.30	11	N	0	b†	30.38	+.13	7	7	-8	NE	4	b†	3	21	5	-
	The Helder ...	30.28	40	NW	1	b	30.40	+.15	39	38	0	W	1	b	1	43	39	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.46	+.23	31	31	+1	N	0	b†	*	37	?	-
	Cape Gris Nez																	
	Paris																	
	Brest	30.31	33	NE	1	bc	30.42	+.18	33	32	+8	NNE	1	o	*	41	?	-
	Lorient	?	47	ENE	1	o	?	?	44	42	-4	NE	3	c	3	52	41	-
	Rochefort ...	30.26	46	N	0	o	30.39		45	44		ENE	2	o	3	50	43	-
	Belfort	30.31	39	ENE	3	c	30.35	+.09	33	31	+3	NE	4	b	2	46	27	-
	Lyons	30.28	35	SW	1	b	?	?	23	19	0	SW	2	o	*	45	23	-
	Nice	30.02	33	N	1	b	30.37	+.11	26	25	+5	NNW	1	b	*	39	?	-
	Perpignan ...	30.21	39	N	0	b	30.24	.00	34	31	0	E	4	b	1	46	30	-
	Biarritz	30.24	39	N	0	b	30.28	+.03	29	29	0	SW	1	b	*	48	27	-
PENINSULA.	Corunna	30.21	48	W	3	o	30.23	+.03	38	36	-3	S	3	b	2	50	36	-
	Lisbon	* 30.23	* 49	* N	* 2	* c	30.22	-.03	48	46	+5	W	1	bc	5	55	?	-

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at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

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	ins.
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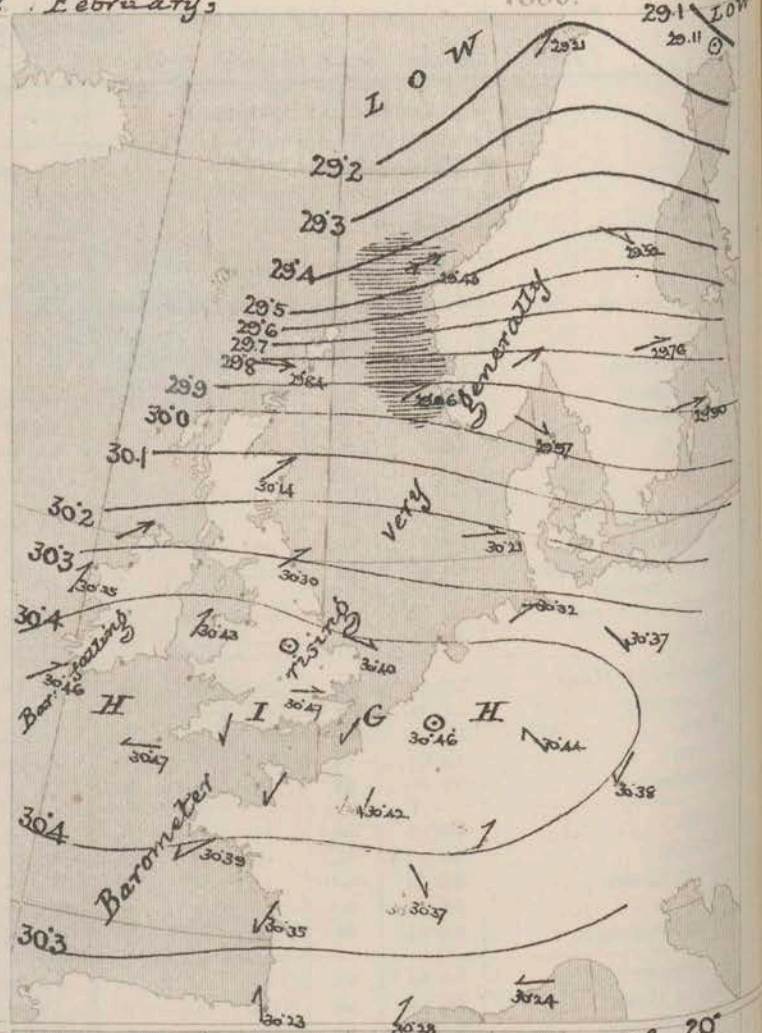
Loughborough	29 · 912
Ardrossan	29 · 805
Donaghadee	29 · 812
Holyhead	29 · 848
Liverpool	29 · 873
Parsonstown	29 · 834
Valencia	29 · 850
Roche's Point	29 · 850
Pembroke	29 · 875
Scilly	29 · 911
Jersey	29 · 975
Hurst Castle	29 · 944
Dover	29 · 957
LONDON	29 · 949
Oxford	29 · 938
Cambridge	29 · 935
Yarmouth	29 · 928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE.—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

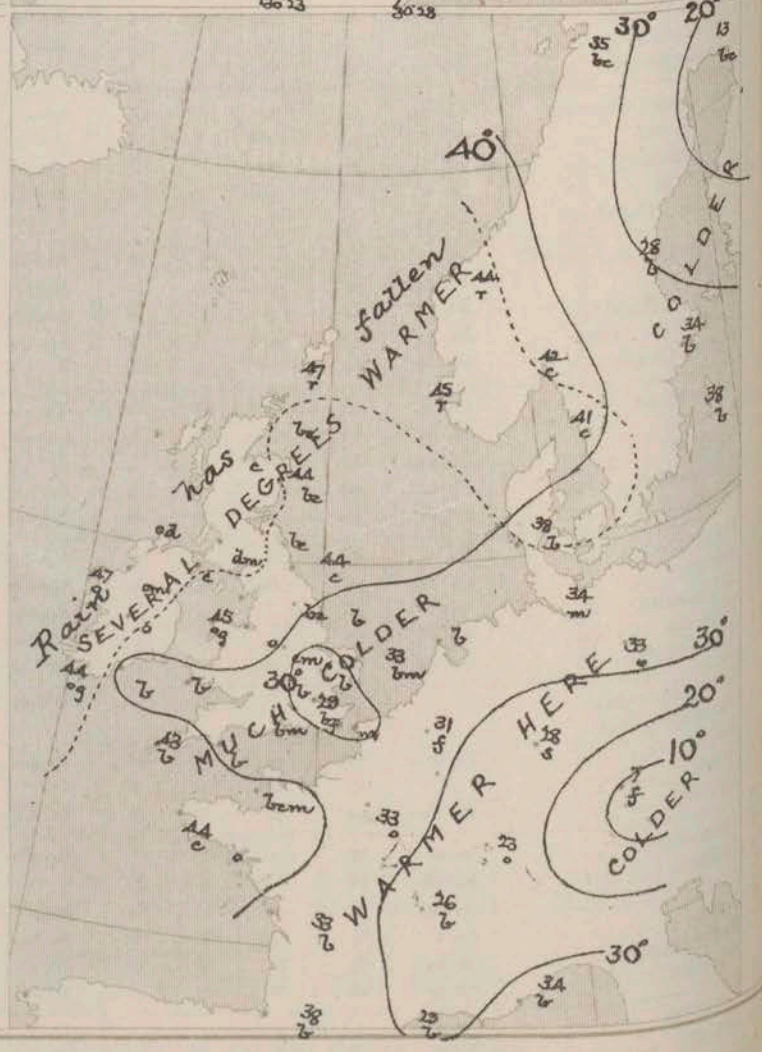
RAINFALL.—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	42 · 6	34 · 7	38 · 7	37 · 7	3 · 29
Stornoway	43 · 5	34 · 7	39 · 3	38 · 2	3 · 97
Wick	43 · 4	33 · 5	38 · 4	37 · 0	2 · 02
Nairn	43 · 4	33 · 8	37 · 4	35 · 7	1 · 51
Aberdeen	43 · 5	34 · 2	37 · 8	36 · 2	2 · 51
Leith	46 · 6	34 · 7	39 · 2	37 · 7	1 · 58
Shields	44 · 3	35 · 7	39 · 2	37 · 9	1 · 63
York	45 · 3	34 · 2	38 · 2	37 · 1	1 · 88
Loughborough	46 · 0	34 · 5	38 · 4	37 · 3	2 · 00
Ardrossan	45 · 0	36 · 7	40 · 0	38 · 6	3 · 47
Donaghadee	45 · 8	37 · 0	40 · 7	39 · 7	2 · 71
Holyhead	46 · 1	39 · 3	42 · 3	40 · 8	2 · 90
Liverpool	45 · 3	36 · 9	39 · 9	38 · 3	1 · 85
Parsonstown	47 · 4	36 · 1	40 · 1	38 · 8	2 · 45
Valencia	50 · 2	40 · 8	45 · 1	43 · 4	5 · 29
Roche's Point	48 · 9	40 · 0	43 · 6	42 · 2	4 · 86
Pembroke	46 · 2	40 · 3	43 · 1	41 · 9	3 · 20
Scilly	49 · 7	43 · 7	46 · 9	45 · 3	2 · 98
Jersey	47 · 6	40 · 1	43 · 2	42 · 0	2 · 72
Hurst Castle	46 · 5	37 · 9	41 · 3	40 · 4	2 · 63
Dover	45 · 4	37 · 4	40 · 3	39 · 1	2 · 12
LONDON	46 · 9	36 · 0	39 · 7	38 · 6	1 · 89
Oxford	45 · 9	35 · 9	38 · 8	37 · 7	2 · 06
Cambridge	46 · 4	33 · 9	38 · 3	37 · 3	1 · 60
Yarmouth	43 · 5	35 · 2	38 · 9	38 · 2	2 · 02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·4 in: and more, over the southern half of the British Isles, the Channel, north of France and Northwest Germany.
Lowest, 29·2 in: and less, over Lapland, and about 30·2 in: in the extreme south of France.
Gradients are slight except in the far north.
Barometer is still rising in most places, but has begun to fall again in the west of Ireland.

TEMPERATURE

Highest, 48° at Nairn, 47° at Dumbrugh Hd. and Wilmullet, 46° at Leith, 45° at Kudemacs, Ardencraig, Mullaghmore, and 44° at Valencia and Brest.
Lowest, 7° at Hunich, 13° at Haparanda, 23° at Belfast, 26° at Cyone, 28° at Wiesbaden and Hernosand, 29° in London and at Oxford, and 33° at Paris and Brussels.
It has been as low as 28° in the shade and 18° on the grass early this morning.

WIND

W^ly at all the more northern stations, and blowing a gale at Christiansund, Tarden, and Dumbrugh Hd.
SW^ly, moderate on our northwestern coasts, variable and light at our southwestern and inland stations, and NE^ly to E^ly over the Channel and west of France.

WEATHER

Fine and bright over Southern Europe, the Channel, England and Scotlands, but with local fog, overcast elsewhere, with rain in the far north, snow at Wiesbaden.
Snow fell at Dumbrugh Head yesterday, and a little rain on our north and northwest coasts.

SEA

Rough in the far north, moderate in the extreme northwest, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fresh fall of the barometer in the west points to the advance of a new series of disturbances towards the northwestern and northern parts of our area, and which are likely to cause a rise of temperature generally and rain at times in the west and north.

FORECASTS

For the 24 hours ending at NOON on 4th FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	Wind backing to SW^rly again; milder, some showers.
1 SCOTLAND EAST	SW^ly breezes, light; fine.
2 ENGLAND N.E.	
3 ENGLAND EAST	Same as No 5
4 MIDLAND COUNTIES	Same as No 2
5 ENGLAND SOUTH	Light Variable airs, finally SW^ly; fine, becoming milder, but cold at night.
6 SCOTLAND WEST	SW^ly breezes, freshening; fair to showery, milder.
7 ENGLAND N.W.	
8 ENGLAND S.W.	
9 IRELAND NORTH	SW^ly breezes, freshening; showery, mild.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER: D.	THER: W.	WIND D.	WIND F.	WEA	SEA
Skudesnaes ...	29·76	40	38	W	7	rhq	5
Dunburgh Head							
Stornoway	29·89	43	42	W	5	bc	4
Aberdeen							
Shields							
Arbroath							
Malin Head ...							
Mullaghmore ...							
Belmullet	30·30	47	45	W	4	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·32	43	40	WNW	2	b	2
Valencia							
Scilly							
Jersey	30·23	50	47	NNW	2	c	2
Dungeness	30·19	49	47	N	2	o	2
London							
Yarmouth							
Rochefort	30·28	42	39	E	1	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather improving over the British Islands and France, fine and bright over southern and central Europe, dull and gloomy in the far North, with rain at several Scandinavian stations, rainfall considerable in northern Europe later, snow in some places, very slight rain on our own N.W. coasts, but weather improving over England.

Temperature fallen considerably over central Europe and beginning to decrease in the W. and N.W. but risen considerably over Finland and northern Russia: exceeding 50° at Brindisi only, but over 45° in many parts of our Islands, Spain and Algeria. Lowest (1) +1° at Archangel, +15° at Kuopio, 27° at Wilna, 28° at St Petersburg, (2) 6° at Cracow, 10° at Hermanstadt, 15° at Munich and Breslau, 20° at Kharkov, 21° at Berlin, 25° at Paris and Madrid, falling still further over the United Kingdom later, past inland at night.

Wind chiefly E. ¾ to N. ¾ over the Mediterranean, very light and variable over E. Nn. and central Europe, NW. ¾ on our southwestern and southern coasts, W. ¾ at our N. stations, SW. ¾ over Holland, Denmark and Scandinavia. The NW. ¾ wind becoming general in Ireland and England later, NE. ¾ over the Channel, France and Bay of Biscay.

Barometer above 30·0 ins. over all but the N. parts of the British Isles and Europe; as high as 30·4 ins. and 30·6 ins. and more over Austria-Hungary and S. Russia and exceeding 30·2 ins. in a new anticyclone advancing over Ireland from the Atlantic; lowest 29·3 ins. and less off the west of Norway. The new anticyclone spreading to the east decidedly later.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 26TH JANUARY TO 1ST FEBRUARY 1890.

The severe gales which had been blowing from between S. and W. over the British Islands during the previous week continued with great force on Sunday, but died down entirely on Monday last, and the barometer rose everywhere. A complex depression then came in over the south of England, and on Tuesday caused a temporary renewal of rough weather over the southeast of England, but on Wednesday this had passed off, and a well marked "ridge" lay over us, with cold, dry, bright weather. This system also soon moved southeastwards, and the remainder of the week was marked by W. ¾ and SW. ¾ breezes, of little strength, mild weather and damp air, and occasionally drizzling rain. At the close of the week a well marked depression was travelling past our extreme northwestern coasts in a northeasterly direction and a "V" shaped secondary had reached Ireland from the westward.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for TUESDAY 4TH FEBY 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.16	6	X	0	0	29.45	+.24	3	2	−10	X	0	bc	*	23	3	—
	Hernösand ...	29.44	31	X	0	b	29.65	+.13	34	32	+6	SSW	2	b	*	36	25	—
	Stockholm ...	29.75	42	WSW	6	b	29.85	+.13	37	35	+3	WSW	2	bc	*	43	34	—
	Wisby	29.84	39	SSW	4	b	30.02	+.12	38	37	0	W	4	b	*	41	34	—
	Bodö	29.12	30	E	2	c	29.19	−.02	35	34	0	S	2	r	1	?	28	0.12
	Christiansund	29.62	42	WSW	8	r	29.53	+.10	47	42	+3	WNW	7	c	6	?	41	0.28
	Skudesnaes ...	30.10	44	WSW	2	0	30.00	+.04	42	42	−3	S	2	0	5	45	41	0.04
	Christiania Fjord (Færder)	29.93	44	NNW	3	b	29.95	+.14	41	40	−1	WSW	5	b	3	45	41	—
	Skagen (The Scaw)	30.04	41	W	5	b	30.05	+.08	41	41	0	W	3	0	3	45	39	—
	Fanö	30.26	39	WSW	4	f	30.21	0.0	39	39	+1	SW	1	f	*	41	37	—
BRITISH ISLANDS.	Sumburgh Head	29.84	46	W	6	c	29.77	−.07	43	42	−4	NW	4	0	6	48	42	0.02
	Stornoway ...	29.92	48	SW	7	c												
	Wick	30.00	45	W	2	bc	29.92	−.12	41	39	−1	W	1	bc	1	49	39	—
	Nairn	30.04	46	WSW	3	bc	29.94	−.15	43	42	−5	WSW	3	c	1	51	43	—
	Aberdeen ...	30.10	44	S	1	bc	29.99	−.15	40	39	−4	SW	1	cm	2	52	40	—
	Leith	30.23	46	W	3	0	30.05	−.19	44	43	−2	W	2	cm	*	50	41	—
	Shields	30.27	46	WSW	3	c	30.13	−.17	43	41	−1	SW	2	0	2	50	38	—
	Spurn Head ...	30.32	41	SW	2	bc	30.18	−.18	41	40	+3	WSW	2	om	2	44	37	—
	York	30.34	44	SSW	1	0	30.18	−.20	42	41	+4	SW	1	0	*	51	38	—
	Loughborough	30.37	43	WSW	1	0	30.22	−.23	37	36	+8	ENE	1	om	*	45	29	—
	Ardrossan ...	30.24	45	SSW	3	0	30.07	−.23	45	44	0	SW	3	0	2	45	44	—
	Malin Head ...	30.18	45	SSW	5	0p	30.08	−.20	43	42	−1	NW	2	0r	3	46	41	0.03
	Mullaghmore ...	30.23	46	SW	4	0	30.11	−.24	43	43	−2	NW	4	0r	3	48	43	0.12
	Belmullet ...	30.22	46	WSW	3	od	30.14	−.21	42	40	−5	NW	1	0	*	48	42	0.16
	Donaghadee ...	30.29	45	W	3	bc	30.12	−.26	42	42	−1	WSW	2	c	1	47	41	—
	Liverpool (Bidston)	30.36	44	SW	1	0	30.19	−.23	42	39	0	SW	1	0	2	47	41	—
	Holyhead ...	30.35	45	SW	2	0g	30.18	−.25	45	42	0	SW	2	0g	2	47	44	—
	Parsonstown ...	?	?	?	?	?g	30.15	−.28	40	39	−1	X	0	0	*	47	40	—
	Valencia	30.33	47	SW	3	0p	30.17	−.29	44	43	0	X	0	c	2	48	42	0.13
	Roche's Point ...	30.36	45	W	2	c	30.18	−.30	43	41	+6	WSW	1	c	3	48	37	0.01
	Pembroke (St. Ann's Hd.)	30.38	44	SW	2	b	30.22	−.26	39	39	+1	E	1	bc	1	49	36	—
	Scilly	30.37	42	E	1	b	30.22	−.25	40	38	−3	ENE	1	bc	3	48	39	—
	Prawle Point ...	30.40	38	NE	2	b	30.22	−.27	33	33	−2	N	2	b	1	50	33	—
	Jersey (St. Aubin's)	30.37	44	ENE	3	b	30.19	−.27	37	36	−5	ENE	2	bum	2	48	34	—
	Hurst Castle ...	30.40	42	NNE	1	bm	30.22	−.27	34	32	0	NNE	2	bcm	1	46	31	—
GERMANY & HOLLAND.	Dungeness ...	30.37	41	X	0	b	30.19	−.25	38	36	+8	ENE	3	b	1	45	29	—
	London	30.39	37	N	1	bm	30.22	−.25	31	31	+2	NW	1	f	*	45	29	—
	Oxford	30.38	36	SW	1	c	30.24	−.25	28	28	−1	X	0	bef	*	48	26	—
	Cambridge ...	30.38	39	W	1	c	30.23	−.24	34	33	+4	SSW	1	0	*	49	28	—
	Yarmouth ...	30.37	41	W	1	bm	30.21	−.19	35	34	+2	X	0	bef	2	44	31	—
	Cuxhaven ...	30.36	35	SW	2	c	30.29	−.03	33	32	−1	SSW	1	f	*	40	32	—
	Berlin	30.42	35	SW	2	0	30.35	−.02	32	31	−1	SW	3	0	*	36	30	—
	Wiesbaden ...	*	*	*	*	*	30.23	−.21	30	29	+2	E	4	0	*	34	25	—
	Munich	30.34	16	NE	3	f	30.15	−.23	20	20	+13	E	5	m	*	20	7	—
	The Helder ...	30.37	39	SSW	1	b	30.25	−.15	29	29	−10	SSW	1	f	1	45	28	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.22	−.24	26	26	−5	E	2	0	*	40	26	—
	Cape Gris Nez	?	39	E	2	b	?		33	31		E	2	b	2	45	32	—
	Paris	30.36	36	NE	2	0	30.17	−.25	26	26	−7	N	1	b	*	39	25	—
	Brest	?	43	NE	1	b	?	?	38	36	−6	ENE	2	b	2	52	36	—
	Lorient	30.31	46	ENE	3	0	30.15	−.24	35	33	−10	ENE	2	bc	2	46	34	—
PENINSULA.	Rochefort ...	30.29	39	ENE	5	b	30.18	−.17	30	29	−3	E	4	m	2	45	23	—
	Belfort	30.22	26	SE	1	b	30.06	?	24	16	+1	SE	2	0	*	37	20	—
	Lyons	30.29	28	ENE	1	b	?	?	21	21	−5	?	?	m	*	38	21	—
	Nice	30.16	31	W	1	b	30.10	−.14	35	32	+1	ENE	4	b	1	46	?	—
	Perpignan ...	30.19	39	X	0	b	30.13	−.15	28	28	−1	SW	1	m	*	50	27	—
	Biarritz	30.17	44	ENE	2	b	30.06	−.17	38	35	0	S	2	b	3	50	34	—
	Corunna	*	*	*	*	*												
	Lisbon																	

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Tuesday, 4th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

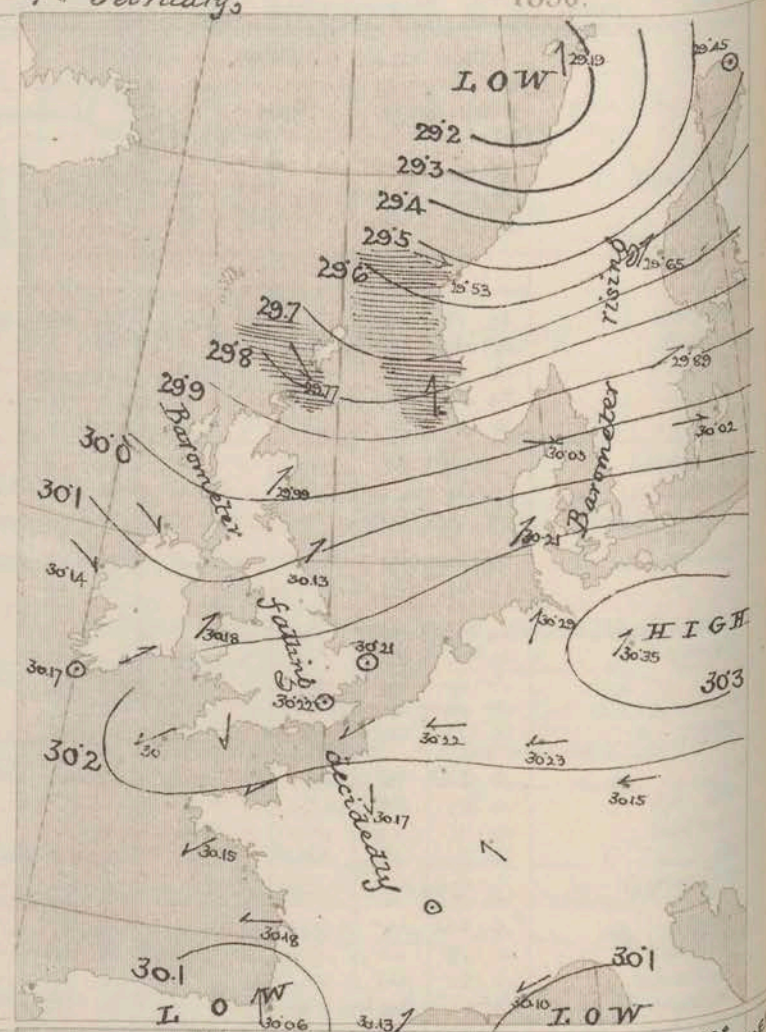
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

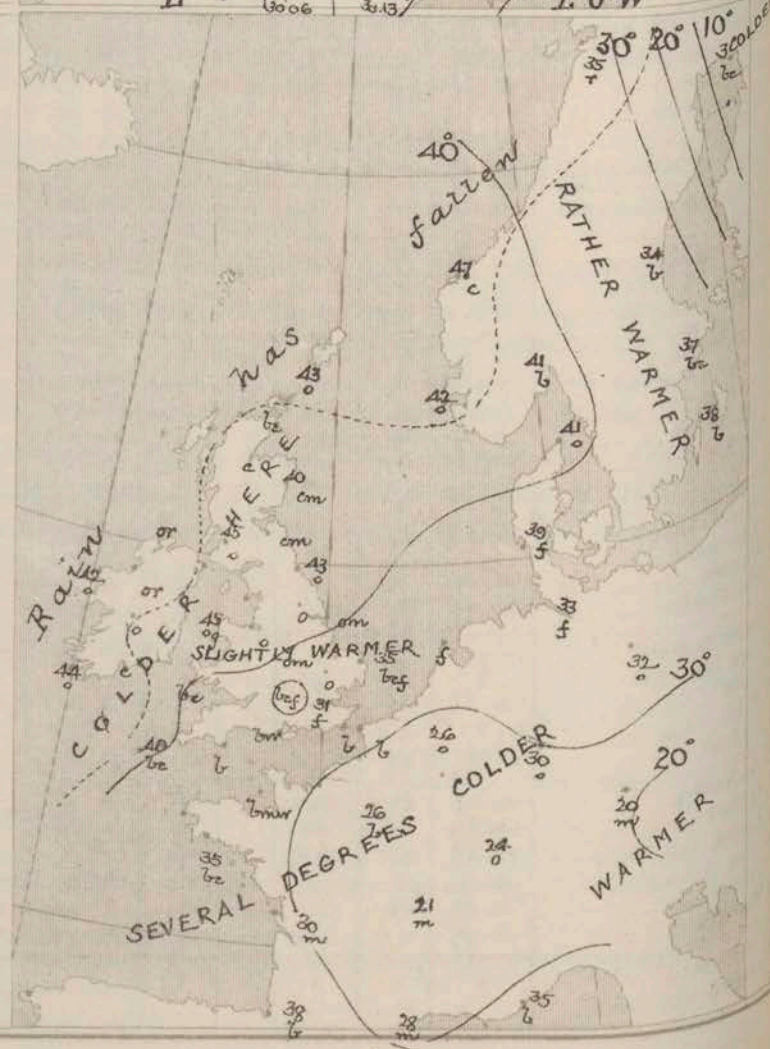
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·2 ins: to 30·3 ins: and more, over the south of England, the north of France and North Germany.
Lowest, 30·1 ins: and less, in the southwest of France; 29·2 ins: to 29·5 ins: over the northwestern parts of Scandinavia.
Gradient very slight over the southern half of our area, moderate in the north.
Barometer appears to have ceased falling in the southwest and south, but is still going down in the northwest and north of our Islands.

TEMPERATURE

Highest, Christiansund 47°, Holyhead 45°, Simbugh 44°, Nairn & Malin Hd. 43°, and Valencia 44°.
Lowest, 20° at Munich, 23° at Perpignan, 28° at Lyons and Oxford, 31° in London, 32° at Berlin.
The changes since yesterday have been irregular. In London the thermometer fell to 23° in the shade and 22° on the grass early this morning.

WIND

Light W^ly (SW to NW) over the northern parts of our Islands.
Light E^ly to NE^ly over the Bay of Biscay, France, and the Channel.
Calms and variable airs prevail at our inland stations. S^ly airs in Holland.

WEATHER

Dull over the northern half of our Islands and in Norway, with rain in several places, foggy or fine in the south, and over the Netherlands. Very fine in Sweden and many parts of France.
In London thick fog prevails, but over the Channel the air is only hazy.

SEA

Rough at the extreme northern stations, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A continuation of high and uniform pressure is probable in the south accompanied by calms, clear skies in some places, thick fog in others.

FORECASTS

For the 24 hours ending at NOON on 5th FEBY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E.	W^ly and NW^ly breezes, light; fair colder, hazy.	6 SCOTLAND WEST 7 ENGLAND N.W.	SW^ly to NW^ly breezes, light; slight rain then finer and colder.
3 ENGLAND EAST 4 MIDLAND COUNTIES	Calms and Variable airs; colder, foggy.	8 ENGLAND S.W.	Same as No^s 3 and 4.
5 ENGLAND SOUTH	Calms and E^ly airs; foggy.	9 IRELAND NORTH 0 IRELAND SOUTH	NW^ly or N^ly airs; colder, hazy.
		WARNINGS	NONE ISSUED.

No^s.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.06	45	44	W	2	o	5
Sumburgh Head	29.86	49	45	W	6	c	6
Stornoway	30.01	48	48	SW	5	o	5
Aberdeen	30.13	51	45	SSW	2	bc	2
Shields	30.27	49	45	WSW	3	c	2
Ardrossan	30.28	45	45	SSW	3	o	3
Malin Head ...	30.24	45	45	SW	4	o p	4
Mullaghmore ...	30.29	48	45	SSW	4	o m	3
Belmullet	30.29	43	47	SW	3	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.39	46	45	SW	2	o q	4
Valencia	30.39	48	46	SSW	3	o	4
Scilly	30.41	46	42	E	1	bc	3
Jersey	30.42	48	43	NE	4	bc	0
Dungeness	30.41	45	41	E	0	m	*
London	30.41	45	41	W	1	bc	2
Yarmouth	30.38	44	42	W	2	b	2
Rochefort	30.34	41	39	ENE	5	b	

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine over Southeastern, Central, and Western Europe, as well as England, and several of the Swedish stations, dull in the extreme west and north of our Islands and in Norway, with rain in several places; snow reported at Kuopio & Moscow. Rain thunder and lightning at the Algerian stations. Some rain later in Norway, the Shetlands, and Ireland.

Temperature highest, 50° and more, over the southeastern parts of the Mediterranean, and ranging between 40° and 50° on the Mid coasts of Norway, the British Isles, Brittany and Spain. Below the freezing point over Northern, Eastern, and Central Europe and Central Spain; lowest morning values – 1° F. at Hermanstadt, + 1° at Munich, 9° at Cracow, 12° at Lemberg, 19° at Kiew, 22° at Archangel, 25° at Mad 29° at Moscow. Oxford and in London. No important change later.

Wind mainly E. over the northern parts of the Mediterranean, very light and variable over Central Europe, NE. over the Channel France, and the Bay of Biscay. Light SW. breezes prevalent over the northern half of the United Kingdom, W. gales in the Shetlands and west of Norway, fresh to strong W. breezes over the Baltic.

Barometer 30·3 ins. to about 30·5 ins. over Ireland, England, central and southeastern Europe, highest of all 30·6 ins. at Hermanstadt; lowest 29·1 ins. and less, in a depression over the north of Finland, 29·2 ins. and less off the northwest of Norway, and 30·0 ins. and less, in a complex depression lying over Eastern Algeria, Sicily and the southern parts of Sardinia. Falling over Western Europe later, and large depression approaching Lapland from the SW.

General remarks on the Weather over Europe for the 24 hours ending 8 am on Feb 2nd 1900

Weather fine and bright over southwestern and southern Europe, and in many parts of Germany and France; cloudy or overcast elsewhere, with snow in several parts of Finland and Lapland, and wet mists in the British Isles. Rain over Ireland and Scandinavia later, slight falls in some parts of Scotland, England and Russia, and considerable falls over western Algeria.

Temperature highest in the extreme south and west lowest over Central Europe and northern Russia. Exceeding 50° at Brindisi, Malta, Lisbon and Coruna and falling but little short of that value over the British Isles exceeding 40° even in the west of Norway. Below the freezing point over the whole of northern, eastern and central Europe and as low as (1) – 30° F. at Archangel, 10° at Moscow, 11° at St Petersburg, 15° at Kuopio and 19° at Kharkow, (2) 13° at Munich 21° at Vienna, 24° at Lyons, 25° at Berlin, and 28° at Paris. Very mild over the British Isles all day, with damp air.

Wind NE. to E. over the Mediterranean, strong at the northern stations; N. and NE., light, over the Bay of Biscay and France, SW. light to moderate, over the British Islands and blowing a gale from WSW over the N. half of Norway. Becoming strong from S. at Valencia later, but gale in Norway subsiding.

Barometer highest 30·3 ins. to 30·5 ins. and more in a high-pressure area lying over Germany, France and the southern parts of the British Isles; lowest 29·5 ins. and less over Lapland, 29·8 ins. and less off our extreme northwestern coasts, and 29·9 ins. and less in a shallow depression lying over Scilly and Malta. Latter disturbance filling up later, but large depression approaching Norway

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday 5th February 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.28	29	SW	2	b	29.39	-.06	21	21	+18	W	2	bc	*	30	-4	—
	Hernösand ...	29.65	28	E	0	bc	29.76	+.11	30	28	-4	E	0	b	*	41	28	—
	Stockholm ...	29.86	39	W	6	c	29.88	-.01	39	37	+2	W	2	o	*	46	36	—
	Wisby	29.99	38	WSW	4	b	29.95	-.07	38	37	0	WSW	4	o	*	41	36	—
	Bodö	29.32	39	WSW	6	o	29.41	+.22	35	31	0	WSW	6	c	3	39	30	—
	Christiansund	29.74	38	W	8	s	29.71	+.18	37	35	-10	WSW	9	r	6	41	36	1.18
	Skudesnaes ...	30.00	40	E	0	bc	30.04	+.04	36	36	-6	NW	1	o	3	43	36	—
	Christiania Fjord (Færder)	29.91	41	SW	5	o	29.93	-.02	39	35	-2	NW	2	o	2	41	37	—
	Skagen (The Scaw)	29.99	40	WSW	2	m	29.93	-.12	40	40	-1	SW	2	f	1	43	?	—
	Fanö	30.10	37	SSW	1	c	30.02	-.19	35	35	-4	E	0	o	*	39	?	—
BRITISH ISLANDS.	Sumburgh Head	29.93	41	W	3	b	29.94	+.17	42	40	-1	WSW	3	c	5	45	38	0.04
	Stornoway ...																	
	Wick	30.04	36	E	0	b	30.05	+.13	37	35	-4	W	2	b	1	45	32	—
	Nairn	30.08	37	W	1	b	30.12	+.18	36	34	-7	WSW	1	b	1	44	33	—
	Aberdeen ...	30.10	38	WNW	2	bc	30.17	+.18	32	29	-8	SW	2	bm	2	47	30	—
	Leith	30.05	44	W	1	c	30.21	+.16	35	34	-9	W	1	bm	*	47	31	—
	Shields	30.07	46	WNW	2	o	30.18	+.05	36	34	-7	NW	2	b	2	49	35	0.01
	Spurn Head ...	30.06	41	WNW	1	c	30.11	-.07	43	42	+2	N	4	c	3	43	?	0.03
	York	30.11	43	SW	1	o	30.17	-.01	40	39	-2	NNW	1	o	*	45	39	—
	Loughborough	30.11	42	WSW	1	o	30.13	-.09	42	41	+5	NNE	3	ogmd	*	44	37	—
	Ardrossan ...	30.13	44	W	1	o	30.23	+.16	32	32	-13	NE	1	bm	0	45	31	—
	Malin Head ...	30.15	42	NNW	2	b	30.23	+.15	39	38	-4	WSW	2	b	3	44	39	—
	Mullaghmore ...	30.19	42	NNE	4	bc	30.28	+.17	37	35	-6	SSW	1	b	3	46	33	0.05
	Belmullet ...	30.21	39	NW	3	bc	30.31	+.17	36	35	-6	SE	2	b	*	46	32	—
	Donaghadee ...	30.15	42	NW	2	o	30.26	+.14	34	34	-8	W	2	b	0	45	32	0.02
	Liverpool (Bidston)	30.13	43	W	1	o	30.20	+.01	37	36	-5	N	2	b	3	46	37	0.01
	Holyhead ...	30.13	44	WSW	1	c	30.23	+.05	42	38	-3	NNE	4	b	3	48	42	0.04
	Parsonstown ...	30.17	41	E	0	o	30.30	+.15	26	26	-14	E	0	b	*	45	25	0.04
	Valencia	30.22	43	NNE	3	o	30.32	+.15	37	35	-7	E	0	b	1	46	34	0.03
	Roche's Point ...	30.15	45	NNW	4	cm	30.27	+.09	39	36	-4	N	4	b	3	46	35	0.02
	Pembroke (St. Ann's Hd.)	30.14	42	NE	1	r	30.18	-.04	41	40	+2	NE	4	bc	2	46	38	0.04
	Scilly	30.12	45	N	4	bc	30.14	-.08	45	44	+5	NE	4	bc	5	48	39	0.02
	Prawle Point ...	30.13	37	NE	3	b	30.13	-.09	39	38	+6	N	3	cq	2	52	33	—
	Jersey (St. Aubin's)	30.07	44	NNE	3	bm	30.09	-.10	44	40	+7	N	3	ogm	3	47	36	—
	Hurst Castle ...	30.10	38	NNE	1	cm	30.10	-.12	41	39	+7	NE	2	om	1	45	33	—
GERMANY & HOLLAND.	Dungeness ...	30.04	41	ENE	3	bc	30.02	-.17	39	38	+1	NE	3	mq	2	44	31	—
	London	30.10	34	NE	2	o	30.07	-.15	40	39	+9	N	1	ob	*	41	29	—
	Oxford	30.11	38	WNW	1	o	30.11	-.13	40	39	+12	NW	2	b	*	45	28	0.02
	Cambridge ...	30.09	38	NW	1	o	30.09	-.14	40	39	+6	N	1	o	*	48	33	—
	Yarmouth ...	30.09	40	N	1	cf	30.04	-.17	40	39	+5	N	1	f	2	42	33	—
	Cuxhaven ...	30.17	30	SSE	1	f	30.04	-.25	30	30	-3	E	0	o	*	34	29	—
	Berlin	30.19	29	SW	2	b	30.06	-.29	27	26	-5	S	2	o	*	34	27	—
	Wiesbaden ...	*	*	*	*	*	30.07	-.16	23	22	-7	E	0	o	*	34	23	—
	Munich	30.05	17	E	0	b	30.02	-.13	15	15	-5	E	4	f	*	28	10	—
	The Helder ...	30.09	34	ENE	1	f	30.05	-.20	32	31	+3	ENE	1	c	1	34	28	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.05	-.17	28	27	+2	NNW	3	o	*	31	3	—
	Cape Gris Nez	?	39	E	3	b	?	?	35	34	+2	SE	1	r	1	43	30	0.04
	Paris	30.06	33	ENE	1	o	30.04	-.13	32	30	+6	NW	1	o	*	34	?	—
	Brest	?	43	NE	1	bc	?	?	44	40	+6	NE	1	o	2	52	36	—
	Lorient	30.06	44	NE	3	bc	30.06	-.09	38	37	+3	NNE	3	c	2	46	32	—
PENINSULA.	Rochefort ...	30.12	33	ENE	3	b	30.11	-.07	29	29	-1	NE	2	b	2	41	23	—
	Belfort														*			
	Lyons ... ... †	30.09	33	W	1	c	30.04	?	32	31	+11	ENE	1	o	*	38	?	—
	Nice	30.04	41	WNW	4	c	29.97	-.13	35	31	0	ENE	4	b	1	50	32	—
	Perpignan ...	30.06	40	E	0	o	30.04	-.09	30	29	+2	SW	1	o	*	48	?	—
	Biarritz	30.02	48	NW	3	c	30.02	-.04	45	42	+7	SW	4	r	2	52	?	0.16
	Corunna	*	*	*	*	*												
	Lisbon	30.01	48	NE	2	bc	30.02	-.02	44	41	-1	N	4	b	5	52	43	0.32

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Wednesday, 5th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

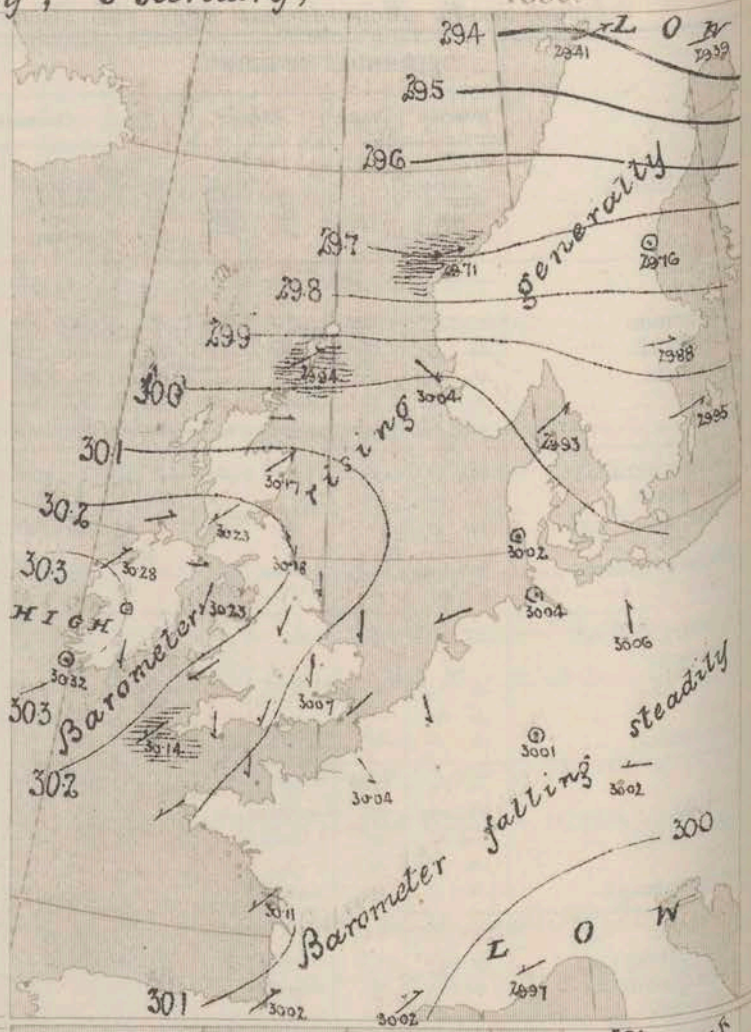
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

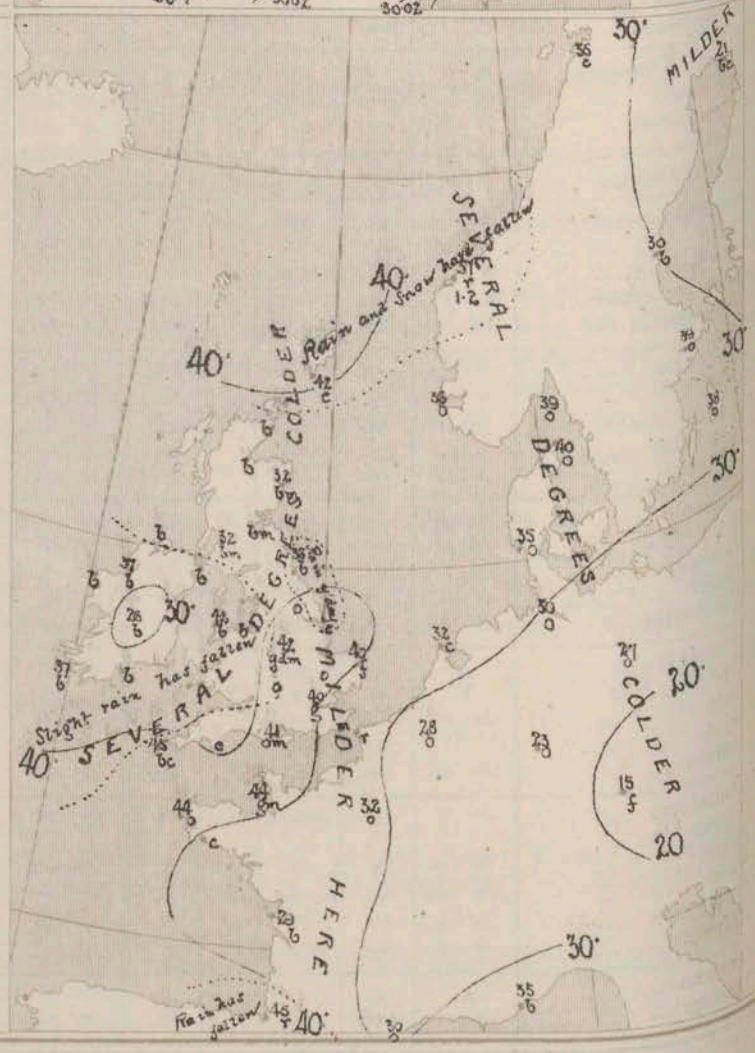
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	36·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	45·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·3 in: and more, over the west of Ireland.
Lowest, 29·4 in: and less, over the north of Scandinavia, and 29·9 in: and less over Northern Italy.
Gradients moderate over the north of Scandinavia, slight elsewhere. Barometer rising except over France, Germany, and the southeast of England.

TEMPERATURE

Highest, 45° at Penzance and Scilly, 44° at Jersey and Brest, and 42° at Berwick, Hts. and Loughborough.
Lowest, 15° at Aberdeen, 21° at Haparanda, 24° at Tyne, 25° at Parsontown, and 27° at Bateau.
It is falling except in the south and southeast of England

WIND

Strong to gale from WSW in the west of Norway, light from the W.ds in Scotland and the north of Ireland, but light from N. or NE. at most of the French and English stations.

WEATHER

Dull, damp, and misty in the southeast of England, as well as over Germany, the north of France and the greater part of Scandinavia, but very fine and bright elsewhere.
Slight rain has fallen at several of the western stations, and at Christiansund more than an inch of rain and snow has been measured.

SEA

Rough at Christiansund, rather so at Berwick Head and Scilly, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone in the west appears to be spreading slowly over us, and fair weather seems probable in most districts, but in the east and southeast of England conditions are not settled in consequence of very slight depressions appearing off our east coast

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NOTE. Owing to an unforeseen accident the issue of Monday's Report was delayed nearly a whole day.

FORECASTS

For the 24 hours ending at NOON on 6TH FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	W.ly and SW.ly winds, light, fair generally.
1 SCOTLAND EAST	
2 ENGLAND N.E	N.ly and NE.ly winds, light or moderate; dull, slight rain occasionally.
3 ENGLAND EAST	
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	NE.ly winds, light and moderate; dull, damp, misty, some slight rain.

DISTRICTS.	FORECASTS
6 SCOTLAND WEST	Varying W.ly breezes; fair generally.
7 ENGLAND N.W.	
8 ENGLAND S.W.	N.ly and NE.ly winds, moderate; fair generally.
9 IRELAND NORTH	Same as Nos 6 and 7.
0 IRELAND SOUTH	Same as No 8.
WARNINGS	NONE ISSUED

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29·99	43	42	SW	4	of	5
Sumburgh Head	29·89	43	39	NW	3	bc	6
Stornoway	30·03	44	43	W	3	b	3
Aberdeen	30·06	45	40	NW	2	c	2
Shields	30·07	47	43	W	2	o	2
Ardrossan	30·09	45	43	W	3	o	2
Malin Head ...	30·12	44	40	N	3	o	4
Mullaghmore ...	30·14	45	41	NNW	4	om	3
Belmullet	30·18	46	42	NNW	3	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·14	44	42	WSW	1	ap	1
Valencia	30·18	46	42	N	3	ofp	4
Scilly	30·15	46	43	N	2	bc	3
Jersey	30·11	46	41	NE	3	bm	2
Dungeness	30·08	44	40	ENE	3	bc	*
London	30·12	38	37	X	0	f	2
Yarmouth	30·12	42	41	W	1	bcf	2
Rochefort	30·15	33	32	ENE	4	m	

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over Southwestern and Southern Europe, the greater part of France, the south of England and also in Sweden; cloudy or dull elsewhere; fog at the Dutch stations, as well as in several localities in the southeast of England, rain in the Sound and at Swinemunde, also in the northwestern parts of our Islands and in Norway; snow at Moscow.

Temperature risen over Eastern Germany, Poland, and Southern Russia, fallen over Lapland and Finland. Highest morning values 50° at Malta only, 48° at La Calle and San Fernando, 47° at Christiansund, 45° at Ardrossan, 44° at Leith and Valencia, and 43° at Sumburgh Head, Nairn, Mullaghmore, Rochebiot and Shields. Below the freezing point over nearly all the inland districts, including the southern counties of England, and as low as (1) 3° at Haparanda, 20° at Uleaborg, and 21° at Archangel; (2) −1° F. at Hermanstadt, +15° at Kharkov, 20° at Munich, and 21° at Kiev. At Paris and Brussels the temperature was 26°, at Oxford and Perpignan 28°, and in London 31°.

Wind continuing E^ly to NE^ly over Southern and Southwestern Europe, NE^ly over the Channel and Bay of Biscay, very variable (anticyclonic) over Austria Hungary, and the south of Russia. W^ly and SW^ly breezes still prevalent over the more northern countries, but of very little strength at Irish and Scotch stations, where they tended to veer N^wly.

Barometer highest 30·3 ins. to 30·5 ins. over the southwest of Russia, Austria Hungary, and Germany, and exceeding 30·2 ins. in a band stretching westwards from North Germany across the Netherlands and the south of England to the Atlantic off our southwestern coast. New anticyclone appearing in the west later, but barometer falling over Central Europe.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for THURSDAY 6TH FEBRUARY 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. **R. H. SCOTT,** *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.52	15	W	2	b	29.84	+.45	6	6	−15	X	0	bc	*	30	?	—
	Hernösand ...	29.76	31	NW	2	b	30.01	+.25	28	25	−2	NNW	2	b	*	39	25	—
	Stockholm ...	29.83	33	W	2	b	30.01	+.13	28	25	−11	NW	2	b	*	45	?	—
	Wisby	29.91	37	NW	4	c	29.95	0.0	34	31	−4	N	6	b	*	39	?	0.04
	Bodö	29.64	34	N	2	c	29.89	+.48	30	28	−5	S	2	o	1	34	27	—
	Christiansund	29.94	36	WNW	3	bc	30.03	+.32	39	36	+2	WSW	5	o	5	39	34	0.32
	Skudesnaes ...	30.04	41	WNW	2	c	30.24	+.20	36	35	0	NNW	2	b	3	45	36	—
	Christiania Fjord (Færder)	29.94	40	W	3	b	30.20	+.27	36	33	−3	NNE	3	b	1	41	36	—
	Skagen (The Scaw)	30.02	36	NNW	1	b	30.13	+.20	36	34	−4	NE	2	b	1	41	34	—
	Fanö	30.09	34	NW	2	b	30.15	+.18	37	37	+2	NW	2	c	*	39	34	—
BRITISH ISLANDS.	Sumburgh Head	30.05	43	WNW	2	b	30.18	+.24	45	43	+3	W	3	c	4	47	41	0.07
	Stornoway ...	30.17	42	SW	4	c	30.24	+.17	38	38	−3	SW	3	o	3	47	35	0.02
	Wick	30.13	40	NW	1	bc	30.27	+.22	37	36	0	W	1	o	1	45	33	0.02
	Nairn	30.19	42	X	0	c	30.26	+.14	38	36	+2	X	0	bc	1	46	34	—
	Aberdeen ...	30.21	38	WSW	1	b	30.32	+.15	34	33	+2	WSW	1	bcm	1	47	32	—
	Leith	30.23	41	WSW	1	b	30.33	+.12	29	29	−6	X	0	bf	*	45	26	—
	Shields	30.23	41	NNE	1	b	30.32	+.14	35	34	−1	WNW	1	m	2	47	31	—
	Spurn Head ...	30.21	42	NNE	4	bc	30.27	+.16	40	40	−3	N	3	m	3	44	34	—
	York	30.25	36	NNE	1	b	30.31	+.14	30	30	−10	N	1	o	*	45	27	—
	Loughborough	30.24	39	NNW	2	b	30.30	+.17	28	27	−14	NW	1	cf	*	45	27	0.01
	Ardrossan ...	30.26	45	X	0	c	30.32	+.05	32	32	0	X	0	af	0	47	31	—
	Malin Head ...	30.27	44	WNW	3	b	30.30	+.07	40	39	+1	S	1	m	2	46	39	0.02
	Mullaghmore ...	30.31	44	SW	2	cm	30.32	+.04	37	37	0	SE	3	b	3	46	36	0.07
	Belmullet ...	30.34	44	WSW	2	c	30.32	+.01	37	36	+1	S	1	b	*	48	35	—
	Donaghadee ...	30.30	42	NW	3	bc	30.33	+.07	38	38	+4	WNW	2	bc	0	47	34	—
	Liverpool (Bidston)	30.27	40	NNW	1	b	30.32	+.12	32	31	−5	SE	1	b	1	43	31	—
	Holyhead ...	30.29	44	NNE	2	bc	30.30	+.07	37	37	−5	X	0	b wm	0	44	37	—
	Parsonstown ...	30.32	38	X	0	b	30.32	+.02	32	31	+6	X	0	c	*	44	25	—
	Valencia	30.35	40	NNE	1	b	30.31	−.01	32	32	−5	X	0	b	1	47	30	—
	Roche's Point ...	30.32	36	NNE	2	b	30.28	+.01	35	33	−4	NNE	2	b	3	47	32	—
	Pembroke (St. Ann's Hd.)	30.25	41	NNE	3	b	30.28	+.10	34	34	−7	ENE	2	b	1	45	33	—
	Scilly	30.19	47	NE	5	o	30.21	+.07	41	39	−4	NE	5	b	4	47	40	0.01
	Prawle Point ...	30.20	43	NE	4	o	30.21	+.08	35	34	−4	NE	5	cq	3	47	32	—
	Jersey (St. Aubin's)	30.13	45	NE	3	o	30.13	+.04	40	39	−4	NE	4	ofmfp	3	48	39	0.02
	Hurst Castle ...	30.17	44	NE	3	cm	30.21	+.11	38	35	−3	NE	2	c	1	45	35	—
GERMANY & HOLLAND.	Dungeness ...	30.07	42	NE	4	p	30.17	+.15	36	35	−3	E	5	ofkp	3	42	35	0.15
	London	30.15	41	N	2	b	30.22	+.15	36	35	−4	ENE	2	ofofp	*	45	35	—
	Oxford	30.25	36	NNE	2	b	30.27	+.16	28	28	−12	NE	1	bf	*	44	28	—
	Cambridge ...	30.20	39	N	3	b	30.27	+.18	33	33	−7	N	1	o	*	46	30	0.04
	Yarmouth ...	30.14	41	NNE	5	c	30.22	+.18	40	38	0	ENE	4	cv	4	42	33	0.02
	Cuxhaven ...	30.09	32	X	0	b	30.17	+.13	35	34	+5	X	0	b	*	36	?	—
	Berlin	30.08	30	WNW	2	o	30.16	+.10	31	30	+4	WNW	2	o	*	?	27	—
	Wiesbaden ...	*	*	*	*	*	30.16	+.09	22	21	−1	X	0	b	*	32	21	—
	Munich	30.02	17	X	0	m	30.04	+.02	22	22	+7	E	4	m	*	27	14	—
	The Helder ...	30.16	34	NE	1	b	30.24	+.19	35	35	+3	NE	1	bc	1	36	30	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.21	+.16	29	29	+1	ENE	2	o	*	33	27	—
	Cape Gris Nez	?	36	ESE	2	o	?	?	31	30	−4	ESE	4	o	4	41	30	—
	Paris	30.08	31	N	2	o	30.08	+.04	31	29	−1	E	2	o	*	36	29	—
	Brest	?	44	NE	1	m	?	?	39	37	−5	NE	1	b	1	52	36	0.12
	Lorient	30.11	44	NNE	1	o	30.07	+.01	40	39	+2	NNE	3	bc	4	45	36	—
	Rochefort ...	30.15	37	NE	3	b	30.10	−.01	37	36	+8	N	3	o	?	41	27	—
	Belfort	29.95	29	SE	1	b	30.01	+.08	23	16	+4	N	1	o	*	37	11	—
	Lyons	30.04	31	N	2	b	30.06	+.02	29	27	−3	N	1	o	*	44	28	—
	Nice	29.91	42	ESE	2	bc	29.89	−.08	37	32	+2	E	4	bc	1	50	?	—
	Perpignan ...	29.99	40	E	1	b	29.97	−.07	38	36	+8	SW	1	o	*	55	?	—
	Biarritz	30.00	42	X	0	o	30.02	0.0	32	30	−13	ESE	2	o	2	45	?	0.35
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.02	46	NNW	4	b	29.99	−.03	43	41	−1	X	0	b	?	52	43	—

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Thursday, 6th February, 1890.

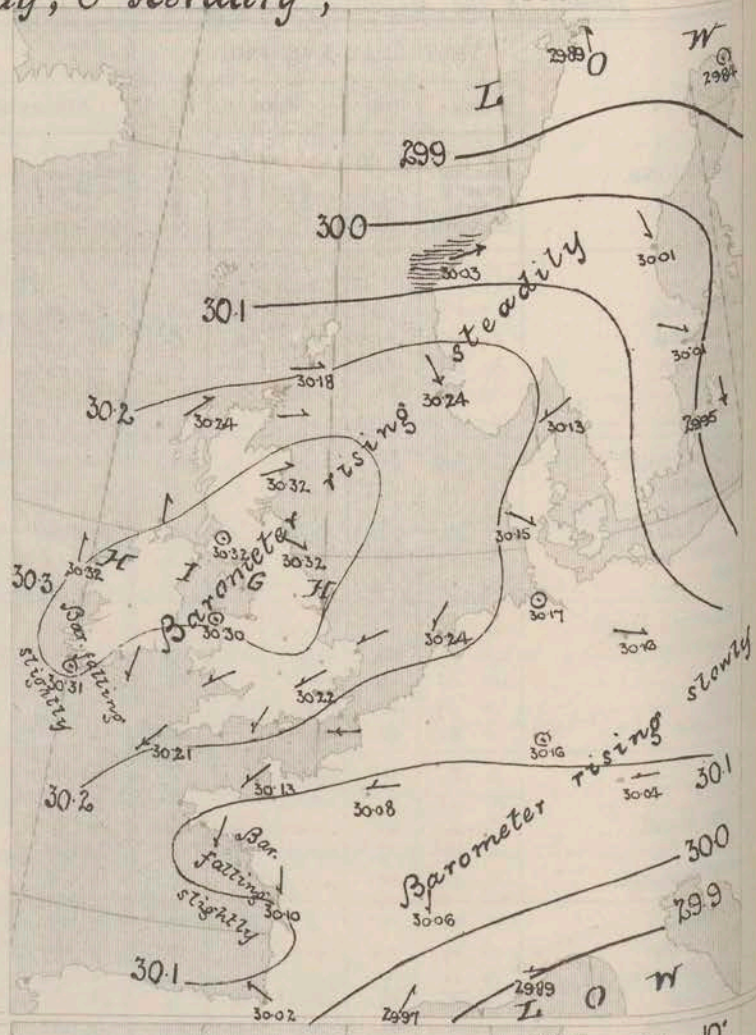
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

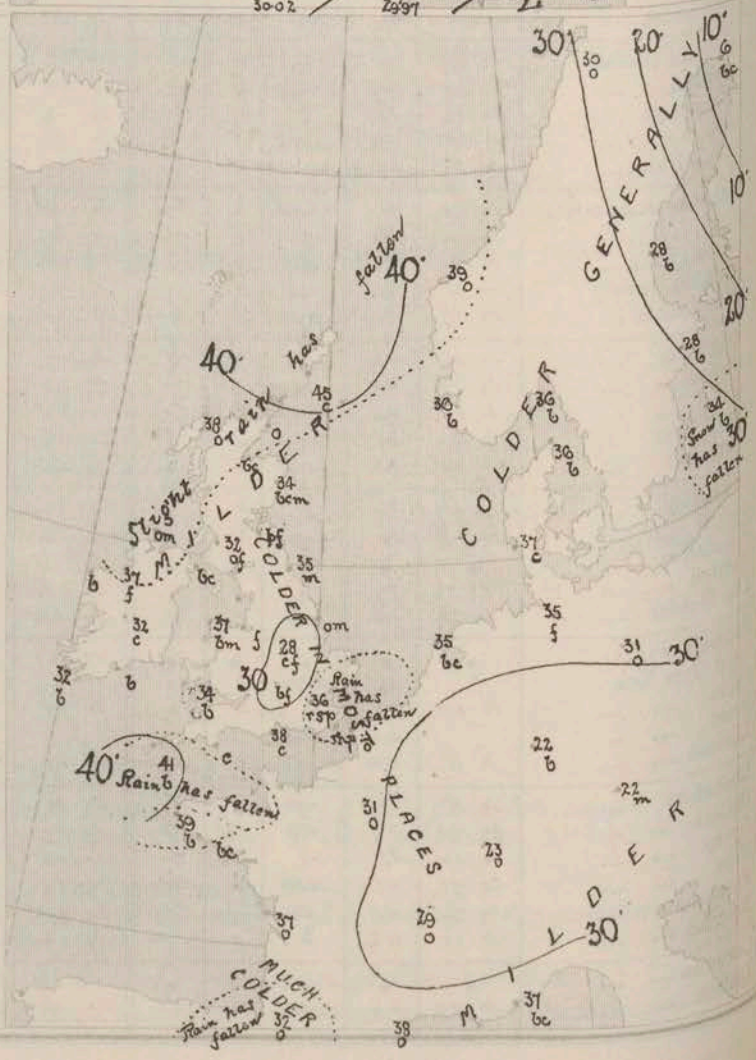
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·876
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·3	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·3	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·7	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·3 ins: and more, in an anticyclone lying over Ireland, the north of England, and south of Scotland.
Lowest, 29·8 ins: and less, over the north of Scandinavia, and 29·9 ins: and less, over the Gulf of Genoa.
Gradients are slight everywhere, especially over the United Kingdom and France.
Barometer falling a little in the west of Ireland and at some of the western French stations; rise continuing elsewhere.

TEMPERATURE

Highest, 46° at Lumbugh Head, 43° at Lisbon, 41° at Sicily, and 40° at Jersey and Lorient.
Lowest, 6° at Haparanda, 22° at Wiesbaden and Munich, 23° at Belfort, 28° over Central England.
It has fallen in nearly all parts of Western Europe since yesterday.

WIND

Light from the W.ward or NW.ward over Scotland, and the greater part of Scandinavia, light from the S.ward in the north of Ireland, moderate from N. or NE. over France and England, but blowing somewhat freshly in the Channel.

WEATHER

Dull with occasional sleet showers in the southeast of England, but fine and bright in nearly all other places.
Slight rain has fallen at some of the northern and southern stations.

SEA

Rather rough at Christiansund, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are indications that the anticyclone will continue to move slowly to the northeastward, and that fair cold weather will prevail in most parts of the country. Over the southeastern districts occasional cold showers may be experienced.

FORECASTS

For the 24 hours ending at NOON on 7th FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	W. and SW. winds, light; fair generally.
2 ENGLAND N.E	Varying N. breezes, light; fair generally, cold, some fog or mist locally.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	NE. breezes, moderate; fair generally, but some showers locally.
6 SCOTLAND WEST 7 ENGLAND N.W.	S. and SW. winds, light to moderate; fair generally.
8 ENGLAND S.W.	E. and NE. winds, fresh; fair generally.
9 IRELAND NORTH 0 IRELAND SOUTH	S. and SE. winds, light to moderate; fair to dull, and perhaps some rain.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.04	45	42	W	2	bc	3
Sumburgh Head	29.97	46	43	WNW	3	bc	5
Stornoway	30.14	47	46	W	3	c	1
Aberdeen	30.17	46	40	SW	2	b	1
Shields	30.21	45	40	N	2	b	2
Ardrossan	30.24	45	43	SE	1	b	0
Malin Head ...	30.26	46	44	WNW	4	b	3
Mullaghmore ...	30.31	46	43	SW	4	bc	2
Belmullet	30.33	47	43	WNW	2	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.28	44	40	NNE	3	b	2
Valencia	30.24	47	42	NE	2	b	2
Scilly	30.18	47	45	NNE	6	cfo	5
Jersey	30.11	45	42	NNE	3	ogm	1
Dungeness	30.07	40	39	E	0	b	0
London	30.13	43	41	N	1	ogmd	*
Yarmouth	30.09	42	41	N	4	c	4
Rochefort	30.15	36	34	NE	3	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE
DURING THE PAST 24 HOURS.

Weather fine and bright over the greater part of the United Kingdom and at most of the Mediterranean stations, cloudy or dull elsewhere; fog in some parts of Russia, Austria and Bavaria, and rain at Copenhagen, Biarritz, and Palermo.

Temperature rises over Algeria, Spain, France, and the southern district of England, fallen in nearly all other places. Highest morning values 55° at Malta, 53° at Brindisi, 51° at Pavia, 50° at Algiers, 49° at Sanguinaire, 45° at Biarritz and Scilly, and 42° at Sumburgh Head: Below the freezing point over nearly the whole of Russia, Germany and France, as well as over the Central parts of Ireland. Lowest morning values 4° at Hermanstadt, 15° at Moscow and Lemberg, 18° at Cracow, 19° at Belfast, and 21° at Archangel, Haparanda, and Breslau.

Wind N. and NE. over England, and the greater part of France and Spain, very variable (anticyclonic) over the south of Russia, and calm (cyclonic) over Italy. W. and SW. breezes still prevailing over most of the northern countries, and light S. rains over the north of Ireland.

Barometer highest 30.3 ins: over the east of Ireland and the south of Russia, and 30.1 ins: in a small anticyclone lying over Central Spain. Lowest 29.4 ins: over the north of Scandinavia, and 29.8 ins: in a well marked depression near Sicily. Anticyclone over Ireland moving slowly to the NE. and later, and barometer rising in nearly all parts of Western Europe.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for FRIDAY 7TH FEBRUARY. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. **R. H. SCOTT**, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.88	7	2	0	c	29.39	−.45	30	30	+24	W	4	bc	*	?	−2	—
	Hernösand ...	30.06	32	2	0	b	29.91	−.10	30	30	+2	SSW	4	b	*	37	27	—
	Stockholm ...	30.25	29	W	2	b	30.16	+.15	28	26	0	W	4	bc	*	36	27	—
	Wisby	30.25	35	N	4	b	30.25	+.30	35	34	+1	W	4	b	*	39	32	—
	Bodö	29.64	42	WSW	8	r	29.57	−.32	35	33	+5	WSW	8	m	5	43	27	0.20
	Christiansund	30.13	43	SW	8	bc	30.14	+.11	41	39	+2	WSW	7	o	5	43	39	0.08
	Skudesnaes ...	30.39	36	2	0	bc	30.45	+.21	39	37	+3	ESE	1	r	3	43	36	0.08
	Christiania Fjord (Færder)	30.25	38	WSW	4	b	30.26	+.06	33	31	−3	WSW	2	b	1	?	32	—
	Skagen (The Scaw)	30.36	35	2	0	b	30.30	+.17	37	36	+1	WNW	3	b	3	37	32	—
	Fanö	30.39	32	SE	2	f	30.49	+.34	30	30	−7	NW	1	o	*	41	30	—
	Sumburgh Head	30.26	45	WSW	2	o	30.37	+.19	45	44	0	W	2	o	4	47	42	0.01
	Stornoway ...	30.29	44	SW	3	o	30.41	+.17	40	40	+2	SW	4	c	4	47	36	—
	Wick	30.38	39	W	2	c	30.45	+.18	37	35	0	W	2	b	0	48	33	—
	Nairn	30.34	41	2	0	b	30.48	+.22	34	34	−4	2	0	b	0	50	33	—
	Aberdeen ...	30.39	37	SW	1	b	30.53	+.21	31	30	−3	W	1	bm	1	45	31	—
BRITISH ISLANDS.	Leith	30.38	31	2	0	f	30.52	+.19	28	28	−1	W	1	bcf	*	36	23	—
	Shields	30.37	42	NNE	1	o	30.49	+.17	40	40	+5	NNE	2	o	2	44	33	—
	Spurn Head ...	30.33	41	NNE	3	bc	30.46	+.19	38	37	−2	NE	3	cf	3	44	37	0.01
	York	30.46	37	N	1	o	30.48	+.17	36	36	+6	N	1	o	*	39	29	—
	Loughborough	30.34	37	N	2	o	30.46	+.16	37	37	+9	NE	2	om	*	39	28	0.02
	Ardrossan ...	30.39	36	2	0	o	30.51	+.19	31	31	−1	2	0	of	0	37	30	—
	Malin Head ...	30.36	42	S	1	b	30.47	+.17	39	38	−1	S	1	bm	2	47	37	—
	Mullaghmore ...	30.36	38	2	0	b	30.47	+.15	34	34	−3	E	4	o	4	44	32	—
	Belmullet ...	30.36	44	ESE	1	bc	30.47	+.15	35	34	−2	E	1	b	*	48	34	—
	Donaghadee ...	30.39	40	NE	2	m	30.50	+.17	41	40	+3	NNE	2	c	0	44	37	—
	Liverpool (Bidston)	30.37	40	NE	1	o	30.47	+.15	37	36	+5	ENE	1	of	2	41	31	—
	Holyhead ...	30.36	42	2	0	ogm	30.46	+.16	40	39	+3	ENE	1	ogm	2	44	37	—
	Parsonstown ...	30.34	39	2	0	b	30.43	+.11	37	36	+5	2	0	o	*	46	30	—
	Valencia	30.32	42	ENE	1	bm	30.40	+.09	40	37	+8	NE	3	bcm	2	48	32	0.01
	Roche's Point...	30.30	40	E	3	b	30.39	+.11	43	40	+8	ESE	5	c	4	46	35	—
	Pembroke (St. Ann's Hd.)	30.31	41	ENE	4	c	30.40	+.12	38	38	+4	ENE	3	cm	1	42	34	—
	Scilly	30.11	43	ENE	6	c	30.28	+.07	42	41	+1	ENE	6	of	5	48	40	0.01
	Prawle Point ...	30.21	40	ENE	6	o	30.32	+.11	40	37	+5	ENE	6	c	4	43	34	—
	Jersey (St. Aubin's)	30.16	37	E	5	o	30.28	+.15	38	36	−2	ENE	5	ogm	4	41	35	0.01
	Hurst Castle ...	30.24	42	E	4	og	30.35	+.14	40	37	+2	E	6	c	4	42	36	—
GERMANY & HOLLAND.	Dungeness ...	30.22	38	E	6	c	30.27	+.10	37	36	+1	E	6	c	4	40	35	—
	London	30.28	39	ENE	2	bc	30.40	+.18	39	36	+3	E	3	c	*	42	36	0.03
	Oxford	30.33	38	ENE	3	o	30.42	+.15	38	37	+10	NE	1	o	*	43	28	0.01
	Cambridge ...	30.32	40	N	1	o	30.44	+.17	38	38	+5	NE	1	o	*	44	31	0.02
	Yarmouth ...	30.30	41	NE	1	c	30.43	+.21	40	38	0	E	4	cr	5	43	38	0.02
	Cuxhaven ...	30.27	36	NNE	1	c	30.49	+.32	33	32	−2	SSE	2	bc	*	39	30	—
	Berlin	30.31	33	NNE	3	o	30.46	+.30	30	30	−1	N	2	c	*	34	28	—
	Wiesbaden ...	*	*	*	*	*	30.37	+.21	33	32	+11	NE	2	o	*	34	?	—
	Munich	30.12	24	NE	1	o	30.24	+.20	25	24	+8	NE	5	s	*	25	21	0.04
	The Helder ...	30.32	39	NE	1	c	30.46	+.22	38	36	+3	ENE	2	c	3	41	?	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.39	+.18	28	28	−1	E	3	b	*	35	28	—
	Cape Gris Nez	?	32	ENE	3	c	?	?	30	29	−1	ENE	3	b	3	37	28	—
	Paris	30.16	34	NNE	3	b	30.28	+.20	32	29	+1	ENE	2	o	*	?	?	—
	Brest	?	37	E	3	o	?	?	35	33	−4	E	1	o	2	52	32	—
	Lorient	30.11	37	ENE	4	o	30.22	+.15	33	32	−7	ENE	4	m	2	43	32	—
	Rochefort ...	30.13	35	ESE	2	o	30.21	+.11	30	29	−7	NE	4	b	2	37	23	—
	Belfort	30.02	25	N	1	c	30.09	+.08	26	?	+3	SW	1	o	*	30	21	—
	Lyons	30.10	30	NNW	1	o	30.15	+.09	27	25	−2	N	1	m	*	32	27	—
	Nice	29.92	43	SW	2	c	29.97	+.08	39	37	+2	ENE	4	o	1	48	37	—
	Perpignan ...	30.03	38	NW	2	c	30.04	+.07	29	28	−9	SW	1	b	*	46	28	—
	Biarritz	30.06	39	E	3	o	30.05	+.03	34	32	+2	ESE	4	o	2	43	30	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.97	47	NNW	2	b	29.99	0.0	39	37	−4	NNE	4	b	?	52	39	—

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Friday, 7th February, 1890

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

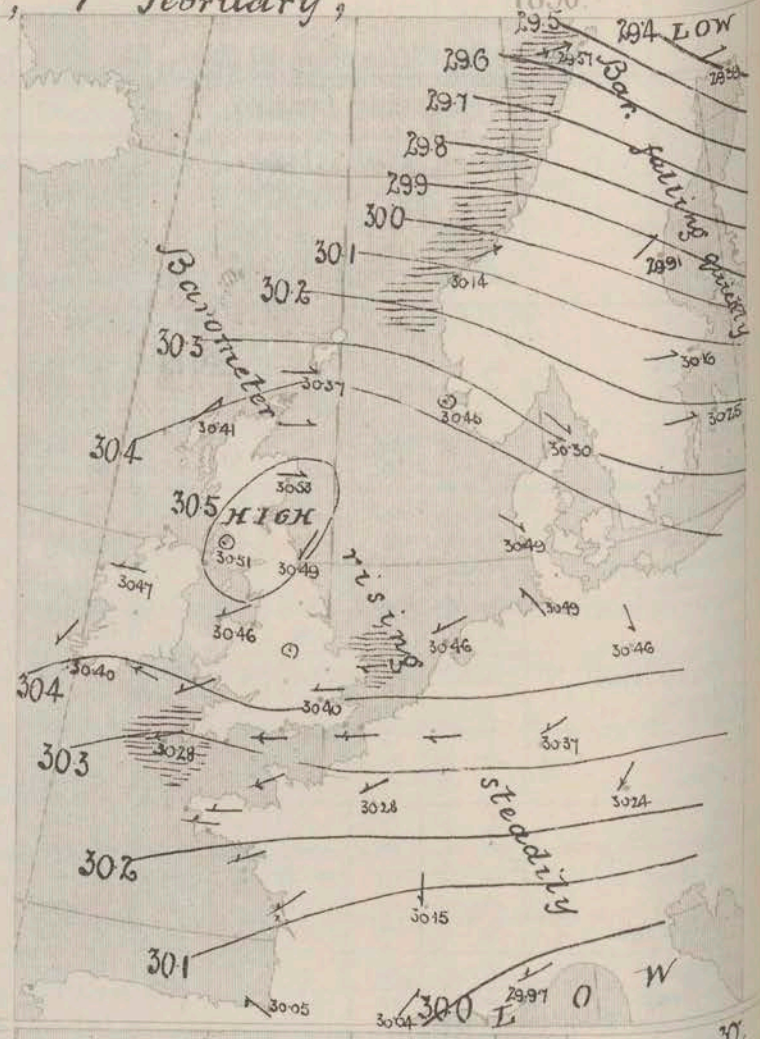
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

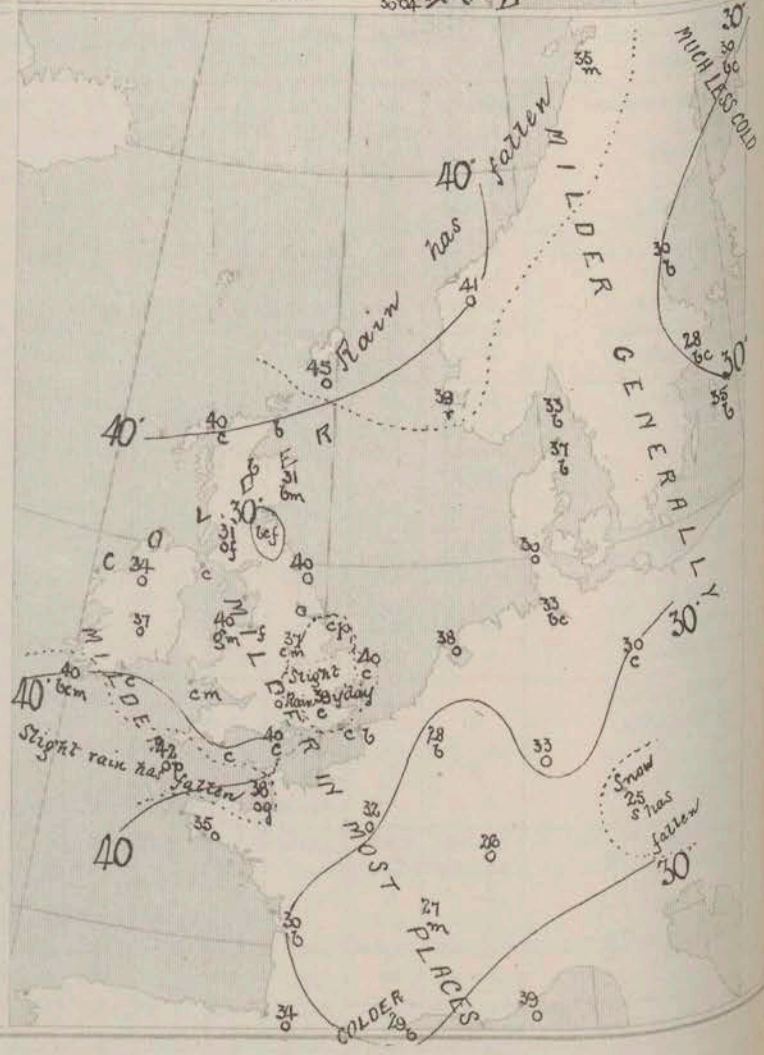
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	45·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·3	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·5	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·5 ins: and more, over Scotland.
Lowest, 29·3 ins: and less, over the north of Sweden, and 29·9 ins: and less, over the Gulf of Genoa.
Gradients steep over Scandinavia, but slight in our Islands and France.
Barometer falling over the Gulf of Bothnia, rising elsewhere.

TEMPERATURE

Highest, 45° at Dunmoreness, 43° at Roches Point, 42° at Scilly, 41° at Christiansund, and 40° at Stornoway, Valencia, Crowlapoint, and Hurst Castle.
Lowest, 25° at Munich, 26° at Belfort, 27° at Lyons, 28° at Stockholm, Brunn, and Nairn, 29° at Perpignan, and 30° at Hermosand, Berlin and Rochefort.

WIND

Moderate to strong from the W^rd over the greater part of Scandinavia, light from SW. and W. in Scotland, but E^ly and NE^ly over Ireland, France and England, blowing strongly in the English Channel.

WEATHER

Fine and bright at most of the Irish and Scotch stations, as well as in Sweden, but dull in most parts of France, Germany and England, with showers at Spurn Head and Scilly, rain at Shudenacs, and snow at Munich.
A little rain has fallen during the past twenty-four hours at some of the northern and southern stations.

SEA

Sea rather rough off the coast of Norway and at Yarmouth and Scilly, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone seems to be extending slowly, and quiet, dry weather with fog or mist in some places is likely to continue over our Islands.

FORECASTS

For the 24 hours ending at NOON on 8th FEB^ry^ 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	W^ly and SW^ly winds, light; fair generally some mist locally.
2 ENGLAND N.E. 3 ENGLAND EAST 4 MIDLAND COUNTIES	NE^ly winds, light and moderate; fair, but perhaps some showers locally.
5 ENGLAND SOUTH	E^ly winds, moderate, strong on coast; cloudy and cold, perhaps some showers.
6 SCOTLAND WEST 7 ENGLAND N.W.	E^ly winds, light or moderate; dull, some fog or mist.
8 ENGLAND S.W.	E^ly winds, fresh or strong; cloudy, some cold showers.
9 IRELAND NORTH 0 IRELAND SOUTH	E^ly winds, moderate or fresh; fair generally.
WARNINGS	NONE ISSUED.

NOTE.—The **South Cone**, *point downwards* (▼|), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲|), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·34	43	39	X	0	b	3
Sumburgh Head	30·25	45	42	W	2	o	4
Stornoway	30·28	46	46	SW	3	c	3
Aberdeen	30·36	43	40	WNW	1	bcm	1
Shields	30·35	43	41	WNW	1	c	2
Ardrossan	30·36	37	37	W	1	o	1
Malin Head ...	30·34	46	44	SW	1	b	2
Mullaghmore ...	30·35	43	42	NW	1	c	3
Belmullet	30·35	48	44	SSW	2	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·34	44	40	ENE	3	b	2
Valencia	30·31	46	41	N	1	b	1
Scilly	30·22	48	41	ENE	5	c	4
Jersey	30·15	38	35	E	3	ogmr	3
Dungeness	30·19	39	36	E	6	c	5
London	30·26	42	39	ENE	3	cfo	*
Yarmouth	30·26	43	42	NE	3	cv	3
Rochefort	30·13	36	34	NNE	2	o	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE
DURING THE PAST 24 HOURS.

Weather fine over the greater part of the British Islands, the North Sea and Scandinavia and at several of the Mediterranean stations, cloudy or overcast elsewhere, foggy over the central portions of our Islands and also in the south of Russia, hail and sleet showers on part of the Channel and southeast of England. A little rain in Norway and the Shetland Isles later, and very slight cold showers at some of our own southern stations during the morning.

Temperature increasing in Ireland, Scotland, and the greater part of Central Europe, decreasing elsewhere. Above 50° at Brindisi and Malta only; touching 45° at Sumburgh Hd, but very little above 40° even at Lisbon. Below the freezing point over almost all the inland parts of Europe and Central England, and as low as (1) 1° F at Ulleaborg, 6° at Haparanda, 20° at Kuopio, 26° at Hango, 28° at Hernösand and Stockholm, (2) at Hermanstadt, 15° at Lemberg, 16° at Kiev, 22° at Munich, 23° at Belfort and Kharkov.

Wind light to moderate generally, and very variable; anticyclonic over the United Kingdom and North Sea, N to NW over the Baltic and Eastern Russia, chiefly NE to E over France, the Channel, and Bay of Biscay, N over the western parts of the Mediterranean, NW at Valencia.

Barometer highest, 30·2 ins: to 30·3 ins: and more, in an anticyclone of rather irregular form, lying over the British Isles and their neighbourhood, and exceeding 30·1 ins: over the south of Russia, lowest, 29·5 ins: and less, over Northern Russia, and 29·9 ins: and less, over the northeastern parts of the Mediterranean. Gradients slight everywhere. Anticyclone in northwest, moving slightly to E and later, and increasing in height.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Saturday 8th February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.69	23	NW	4	b	29.95	+.56	22	21	−8	NNW	2	c	*	34	7	—
	Hernösand ...	30.07	36	2	0	o	30.17	+.26	30	30	0	2	0	bc	*	43	30	—
	Stockholm ...	30.15	37	WNW	2	b	30.28	+.12	32	30	+4	WNW	2	c	*	39	27	—
	Wisby	30.23	37	N	4	b	30.23	−.02	37	35	+2	N	4	b	*	37	32	—
	Bodö	29.95	32	W	6	c	29.90	+.33	41	39	+6	SW	6	r	4	?	32	0.04
	Christiansund	30.26	43	WSW	7	r	30.27	+.13	44	42	+3	WSW	7	o	6	?	43	0.04
	Skudesnaes ...	30.47	42	WNW	2	o	30.48	+.03	36	36	−3	ENE	2	f	2	43	36	—
	Christiania Fjord (Færder)	30.30	42	WNW	4	b	30.38	+.12	37	36	+4	WNW	2	b	1	?	?	—
	Skagen (The Scaw)	30.34	37	NW	1	b	30.40	+.10	38	37	+1	2	0	b	0	41	36	—
	Fanö	30.45	36	W	3	b	?30.41	−.08	33	33	+3	NW	1	f	*	37	30	—
BRITISH ISLANDS.	Sumburgh Head	30.42	44	W	2	o	30.35	−.02	42	40	−3	W	1	o	3	47	39	—
	Stornoway ...	30.43	43	SW	3	o	30.34	−.07	42	41	+2	W	5	o	4	45	38	—
	Wick	30.46	35	2	0	b	30.40	−.05	31	30	−6	W	1	b	0	47	29	—
	Nairn	30.47	36	2	0	b	30.41	−.07	33	31	−1	SW	1	b	0	46	27	—
	Aberdeen ...	30.53	36	S	2	f	30.46	−.07	34	32	+3	SW	1	bm	1	42	31	—
	Leith	30.53	34	2	0	bc	30.49	−.03	25	25	−3	2	0	f	*	37	23	—
	Shields	30.52	40	E	2	o	30.50	+.01	35	34	−5	S	2	o	2	43	34	—
	Spurn Head ...	30.50	40	ENE	3	c	30.49	+.03	37	36	−1	ENE	3	c	3	42	35	—
	York	30.52	40	E	1	o	?	?	34	33	−2	ENE	1	o	*	42	33	—
	Loughborough	30.49	39	NE	1	o	30.49	+.03	34	33	−3	NE	2	sm	*	42	33	—
	Ardrossan ...	30.51	38	E	1	bm	30.47	−.04	31	31	0	E	1	sm	0	43	31	—
	Malin Head ...	30.48	38	SSE	3	bm	30.42	−.05	34	33	−5	SSE	2	bm	1	45	33	—
	Mullaghmore ...	30.47	41	ESE	3	cm	30.41	−.06	37	35	+3	ESE	2	b	2	42	31	—
	Belmullet ...	30.46	39	ESE	1	b	30.40	−.07	35	33	0	E	1	b	*	43	32	—
	Donaghadee ...	30.50	43	SSE	2	bc	30.47	−.03	40	39	−1	SSE	3	c	1	45	39	—
	Liverpool (Bidston)	30.50	39	ESE	1	o	30.48	+.01	31	30	−6	E	1	cm	2	41	31	—
	Holyhead ...	30.45	38	E	4	bm	30.43	−.03	34	33	−6	ESE	3	bw	2	44	32	—
	Parsonstown ...	30.44	38	2	0	bc	30.39	−.04	24	24	−13	2	0	b	*	44	23	—
	Valencia	30.40	43	NE	3	cm	30.33	−.07	37	36	−3	ENE	1	b	2	46	35	—
	Roche's Point ...	30.40	44	ESE	5	c	30.36	−.03	40	36	−3	ESE	5	b	4	45	35	—
	Pembroke (St. Ann's Hd.)	30.41	41	ENE	3	bc	30.38	−.02	32	32	−6	ENE	3	b	2	44	32	—
	Scilly	30.31	43	ENE	6	o	30.23	−.05	40	39	−2	ENE	6	o	4	44	39	—
	Prawle Point ...	30.34	41	ENE	6	bc	30.27	−.05	37	36	−3	ENE	7	c	6	41	36	—
	Jersey (St. Aubin's)	30.28	38	ENE	4	cm	30.26	−.02	35	32	−3	E	5	bm	4	40	33	—
	Hurst Castle ...	30.36	40	NE	4	b	30.34	−.01	38	35	−2	E	6	cm	4	45	34	—
GERMANY & HOLLAND.	Dungeness ...	30.33	38	E	7	c	30.37	+.02	34	31	−3	ESE	5	b	4	41	32	—
	London	30.41	38	ENE	3	bc	30.40	0.0	33	32	−6	E	2	bm	*	42	32	—
	Oxford	30.45	36	ENE	3	bc	30.44	+.02	32	31	−6	NE	3	c	*	41	32	—
	Cambridge ...	30.48	38	E	1	o	30.46	+.02	28	27	−10	NE	1	b	*	42	27	—
	Yarmouth ...	30.46	37	E	4	bc	30.46	+.03	38	36	−2	E	4	b	4	41	36	—
	Cuxhaven ...	?	33	NNE	2	c	30.44	−.05	37	36	+4	NW	3	c	*	38	33	—
	Berlin	30.48	30	NW	3	o	30.40	−.06	29	25	−1	WNW	2	o	*	36	27	—
	Wiesbaden ...	*	*	*	*	*	30.44	+.07	29	26	−4	2	0	b	*	36	25	—
	Munich	30.28	25	NE	7	o	30.34	+.10	12	12	−13	NNE	2	bc	*	30	10	—
	The Helder ...	30.50	35	ENE	2	b	30.50	+.04	33	32	−5	ENE	1	c	2	37	32	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.44	+.05	26	26	−2	E	2	bc	*	35	25	—
	Cape Gris Nez	?	33	E	6	b	?	?	26	26	−4	ESE	4	b	3	39	?	—
	Paris	30.27	33	NE	2	b	30.30	+.02	25	24	−7	NE	1	b	*	39	25	—
	Brest	?	34	E	1	o	?	?	35	31	0	E	5	o	4	52	30	0.04
	Lorient	30.22	33	ENE	4	o	30.13	−.09	34	31	+1	ENE	5	o	4	36	30	—
	Rochefort ...	30.19	38	ENE	5	o	30.15	−.06	35	33	+5	ESE	5	o	?	?	25	—
	Belfort	?30.12	27	N	2	o	?30.21	+.12	26	19	0	SW	2	o	*	32	6	—
	Lyons	30.15	28	N	1	o	30.30	+.15	24	23	−3	NE	1	b	*	31	23	—
	Nice	30.06	41	NE	4	r	30.13	+.16	41	33	+2	ENE	4	b	2	43	37	0.28
	Perpignan ...	30.04	42	W	1	o	30.12	+.08	38	36	+9	SW	1	o	*	48	?	—
	Biarritz	30.04	42	E	3	o	30.02	−.03	33	31	−1	ESE	4	o	2	45	30	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon																	

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Saturday, 8th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

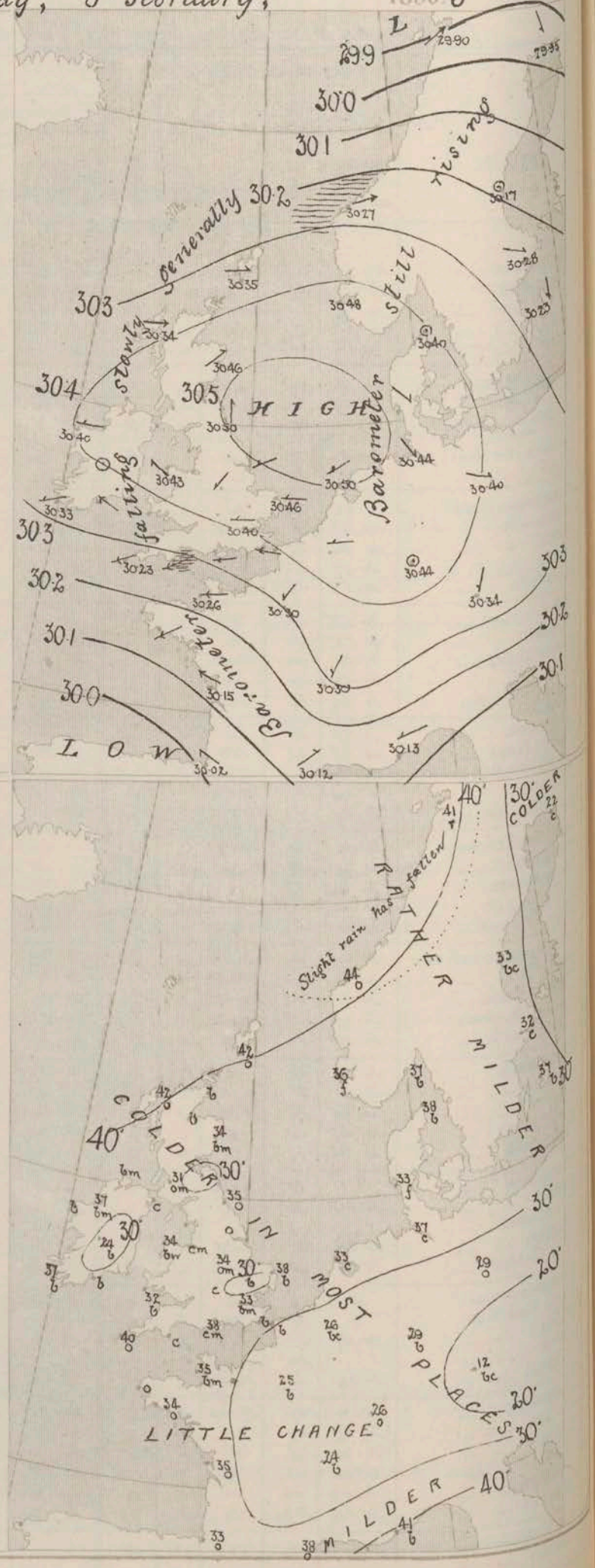
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 9 a.m. Dry.	at 9 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·6	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·5 ins: and more, in an anticyclone lying over the North Sea.
Lowest, 28·8 ins: and less, over the North of Scandinavia, and 30·0 ins: and less, over the north of Spain.
Gradient moderate in the north of Scandinavia and south of France, very slight elsewhere.
Barometer falling in our Islands, but rising steadily at most of the Continental stations.

TEMPERATURE

Highest, 44° at Christiansund, 42° at Lumsburgh Head and Stornoway, 41° at Bodö, and 40° at Rochelle Point and Scilly.
Lowest, 12° at Munich, 22° at Haparanda, 24° at Barrowtown and Belfast, 25° at Leith and Paris, 26° at Brussels and C. Gris Nez, and 28° at Berlin.
It has risen somewhat over Norway and Sweden, but fallen over our Islands, Germany, and the Netherlands.

WIND

Strong from SW. on the west coast of Norway, light from SW. and W. in Scotland.
N. over Sweden and Germany, but E. over France, Ireland, and England, still blowing strongly in the English Channel.

WEATHER

Dull in the west of France, the west of Norway, and northwest of Scotland, with rain at Bodö, fine in most other places, with fog or mist locally.
With the exception of a little rain in the west of Norway the weather has been very dry in all parts of Northwestern Europe.

SEA

Rough at Christiansund, and Brawle Point, moderate in the Channel generally, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the anticyclone appears to be moving eastwards, and at the same time extending northwards and southwards the wind in the west will probably become more S., with somewhat milder weather in Ireland and Scotland, but elsewhere there is no indication of any important change.

FORECASTS

For the 24 hours ending at NOON on 9th FEB. 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E	SW. winds, light to fresh; fair to unsettled and perhaps some rain.
3 ENGLAND EAST 4 MIDLAND COUNTIES	E. and SE. winds, light; fair generally, cold.
5 ENGLAND SOUTH	E. winds, moderate, strong in the Channel; fair generally, cold.
6 SCOTLAND WEST 7 ENGLAND N.W.	SE. and S. winds, moderate or light; fair generally.
8 ENGLAND S.W.	E. winds, strong; fair generally.
9 IRELAND NORTH	Same as No 6 and 7.
0 IRELAND SOUTH	SE. winds, moderate; fair generally.
WARNINGS	NONE ISSUED.

N.B.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.47	42	40	X	0	c	3
Sumburgh Head	30.41	46	44	W	2	bc	3
Stornoway	30.44	45	45	SW	3	c	3
Aberdeen	30.51	40	38	SSE	2	bm	1
Shields	30.51	43	40	E	2	c	2
Ardrossan	30.51	43	41	SE	2	b	1
Malin Head ...	30.48	45	42	SSE	3	bm	2
Mullaghmore ...	30.48	42	40	ESE	4	o	3
Belmullet	30.47	43	40	ESE	2	c	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.46	43	39	E	4	bcm	3
Valencia	30.40	45	41	E	3	cm	4
Scilly	30.31	43	41	ENE	6	o	4
Jersey	30.30	38	35	ENE	5	cm	5
Dungeness	30.35	40	37	E	6	c	*
London	30.42	42	39	ENE	3	o	4
Yarmouth	30.44	40	38	E	4	c	?
Rochefort	30.23	31	30	ENE	5	o	

GENERAL REMARKS ON THE WEATHER OVER EUROPE
DURING THE PAST 24 HOURS.

Weather fair generally, and in many places clear, but snow reported at Munich, haze or fog in several of the more northern parts of the British Islands. Slight rain in Norway later, but none at any of the other stations in Western Europe.

Temperature fallen decidedly over the north of Russia, slightly at the more central and southern stations, as well as over the southeastern parts of France and in Scotland; risen elsewhere — slightly over Central Europe, more decidedly over England, and rapidly at the northern extremity of the Gulf of Bothnia. Morning readings below 50° except at Brindisi and Malta, but below 40° in most places, and below the freezing point at most inland stations. Lowest readings −1°F. at Archangel, +8° at St Petersburg, 14° at Hermanstadt, 18° at Kharkoff, 25° at Munich, 28° at Leith, and Brussels, 30° at Berlin and Paris.

Wind W and SW over the northern countries including Scotland, N over Poland, Eastern Russia and Austria, NE to E in nearly all other places, and blowing strongly in the English Channel. Very variable over the southern parts of the Mediterranean, and light in force.

Barometer highest, 30·3 ins. to 30·5 ins., over the whole of the British Islands, the Netherlands, North Germany, and the most southern parts of Scandinavia; lowest, 29·4 ins. and less, in a depression over Lapland, and about 29·9 ins. in a shallow disturbance over Corsica and the north of Sardinia. Gradients slight except in the far north. The northern depression moving southeastwards later, and barometer falling over Russia.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 9TH FEBY 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.85	33	SW	2	0	29.95	.00	37	36	+ .15	W	4	b	*	?	16	—
	Hernösand ...	30.24	35	Z	0	b	30.28	+ .11	35	32	+ 5	NW	2	bc	*	46	30	—
	Stockholm ...	30.35	33	W	2	b	30.39	+ .11	28	26	— 4	Z	0	bc	*	45	28	—
	Wisby	30.32	36	N	4	b	30.32	+ .09	35	33	— 2	WNW	2	b	*	37	34	—
	Bodö	29.89	41	WSW	8	0	30.01	+ .11	42	41	+ 1	SW	8	0	5	43	41	0.35
	Christiansund	30.32	43	WSW	6	0	30.35	+ .08	40	36	— 4	WSW	2	b	5	4†	39	—
	Skudesnaes ...	30.49	40	Z	0	0	30.44	— .04	35	34	— 1	Z	0	b	2	40	34	—
	Christiania Fjord (Færder)	30.39	37	SSW	2	b	30.40	+ .02	30	30	— 7	NNW	2	f	1	39	28	—
	Skagen (The Scaw)	30.44	34	Z	0	b	30.41	+ .01	31	30	— 7	NW	1	b	0	41	30	—
	Fanö	30.45	33	E	1	b	30.47	+ .06	26	26	— 7	Z	0	f	*	41	26	—
BRITISH ISLANDS.	Sumburgh Head	30.34	42	Z	0	0	30.26	— .09	41	40	— 1	S	3	b	3	45	37	—
	Stornoway ...	30.27	41	SW	4	bc	30.16	— .18	42	40	0	W	6	c	5	44	33	—
	Wick	30.35	35	NW	1	b	30.26	— .14	37	36	+ 6	S	3	bc	1	43	30	—
	Nairn	30.34	33	Z	0	b	30.25	— .16	24	23	— 9	Z	0	b	0	44	23	—
	Aberdeen ...	30.40	37	S	1	b	30.36	— .10	38	36	+ 4	SSE	3	0	3	41	34	—
	Leith	30.41	34	E	1	b	30.33	— .16	29	29	+ 4	Z	0	m	*	38	24	—
	Shields	30.45	35	SE	2	c	30.35	— .15	36	35	+ 1	NW	1	om	2	37	32	—
	Spurn Head ...	30.43	38	E	3	0	30.30	— .19	40	38	+ 3	E	5	c	4	40	36	—
	York	30.46	37	E	1	0	30.34	— .18	38	37	+ 4	E	1	c	*	38	33	—
	Loughborough	30.42	36	E	1	b	30.30	— .19	36	36	+ 2	E	2	0	*	49	33	0.01
	Ardrossan ...	30.38	37	NE	1	bm	30.31	— .16	30	30	— 1	NE	3	bem	1	42	28	—
	Malin Head ...	30.31	40	SSE	2	b	30.23	— .19	34	34	0	SSE	3	bm	2	44	33	—
	Mullaghmore ...	30.28	42	E	4	b	30.20	— .21	38	34	+ 1	SE	4	b	4	46	34	—
	Belmullet ...	30.25	42	SE	3	b	30.15	— .25	35	34	0	SE	3	b	*	45	33	—
	Donaghadee ...	30.36	44	SSE	3	b	30.30	— .17	38	36	— 2	SE	5	c	3	46	37	—
	Liverpool (Bidston)	30.40	38	ESE	2	b	30.32	— .16	34	32	+ 3	E	1	0	2	40	31	—
	Holyhead ...	30.34	39	E	3	bm	30.26	— .17	33	32	— 1	ESE	1	b	2	43	32	—
	Parsonstown ...	30.27	40	SE	2	bc	30.19	— .20	36	34	+ 12	SE	1	0	*	45	23	—
	Valencia	30.19	42	SSW	4	om	30.10	— .23	44	42	+ 7	ESE	3	og	3	46	37	—
	Roche's Point...	30.24	41	SE	5	0	30.16	— .20	43	40	+ 3	ESE	5	c	4	43	39	—
	Pembroke (St. Ann's Hd.)	30.27	42	E	5	m	30.20	— .18	36	35	+ 4	E	4	c	3	42	32	—
	Scilly	30.14	42	ESE	7	0	30.08	— .15	45	43	+ 5	ESE	6	bc	4	45	39	—
	Prawle Point ...	30.24	40	ENE	6	0	30.15	— .12	39	39	+ 2	ENE	6	0	4	41	37	—
	Jersey (St. Aubin's)	30.28	39	E	3	bc	30.13	— .13	39	35	+ 4	E	3	cm	3	42	34	—
	Hurst Castle ...	30.32	39	E	5	b	30.19	— .15	40	37	+ 2	E	5	c	3	41	35	—
	Dungeness ...	30.31	40	ESE	6	b	30.20	— .17	34	33	0	ESE	6	c	5	40	33	—
	London	30.39	37	E	2	bc	30.25	— .15	36	34	+ 3	E	3	c	*	43	33	—
	Oxford	30.37	33	NE	2	b	30.25	— .19	35	34	+ 3	NE	2	0	*	44	31	—
	Cambridge ...	30.42	35	E	1	b	30.29	— .14	37	35	+ 9	E	1	0	*	44	27	—
	Yarmouth ...	30.43	38	E	4	c	30.29	— .14	37	36	— 1	ESE	5	cg	4	39	36	—
GERMANY & HOLLAND.	Cuxhaven ...	30.44	32	ESE	2	0	30.45	+ .01	32	31	— 5	ESE	3	0	*	37	30	—
	Berlin	30.43	35	NNE	3	0	30.43	+ .03	32	31	+ 3	E	2	0	*	35	29	—
	Wiesbaden ...	*	*	*	*	*	30.29	— .15	32	30	+ 3	NE	3	0	*	36	29	—
	Munich	30.27	21	E	3	bc	? 30.17	— .17	17	17	+ 5	E	5	bc	*	28	12	—
	The Helder ...	30.41	38	NE	1	0	30.38	— .12	32	?	— 1	ENE	2	c	3	39	32	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.27	— .17	29	28	+ 3	E	2	b	*	39	26	—
	Cape Gris Nez	?	33	E	4	b	?	?	29	28	+ 3	E	3	c	2	37	21	—
	Paris	30.29	33	NE	2	bc	30.14	— .16	26	25	+ 1	NNE	1	b	*	41	25	—
	Brest	?	40	ESE	4	bc	?	?	34	33	— 1	ENE	2	b	2	?	32	—
	Lorient	30.13	37	E	5	b	30.05	— .08	33	30	— 1	ENE	5	bc	2	41	32	—
	Rochefort ...	30.17	42	ENE	4	b	30.07	— .08	20	?	— 5	ENE	2	b	?	47	30	—
	Belfort	? 30.19	29	E	2	0	?	?	30	23	+ 4	E	1	bc	*	32	14	—
	Lyons	30.21	29	NW	1	b	30.11	— .19	25	24	+ 1	SE	1	b	*	32	24	—
	Nice	30.09	42	SE	3	bc	30.11	— .02	38	31	— 3	NE	4	bc	7	50	37	—
	Perpignan ...	30.07	43	N	3	0	30.03	— .09	39	39	+ 1	Z	0	0	*	48	39	0.63
	Biarritz	30.01	44	E	4	b	29.95	— .07	35	32	+ 2	ESE	3	b	1	50	32	—
PENINSULA.	Corunna	*	*	*	*	*	29.91	— .04	41	37	— 3	SW	2	b	2	50	37	0.04
	Lisbon	29.82	46	N	3	b	29.86	— .04	40	36	0	NNE	4	c	5	52	37	—

For Explanation of Columns, see bottom of p. 4.

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for 8 a.m. on Sunday, February 9th, 1890.

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EXPLANATION OF MAP.

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Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

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= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

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	ins.
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Stornoway	29·700
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Leith	29·803
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York	29·884
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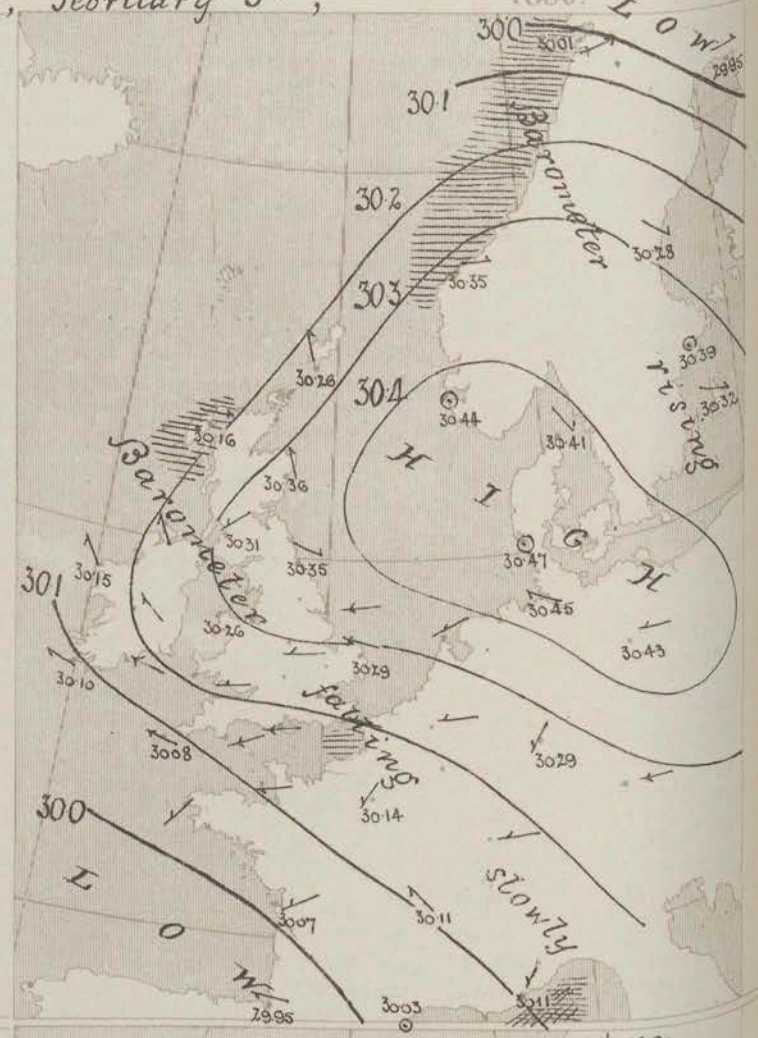
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

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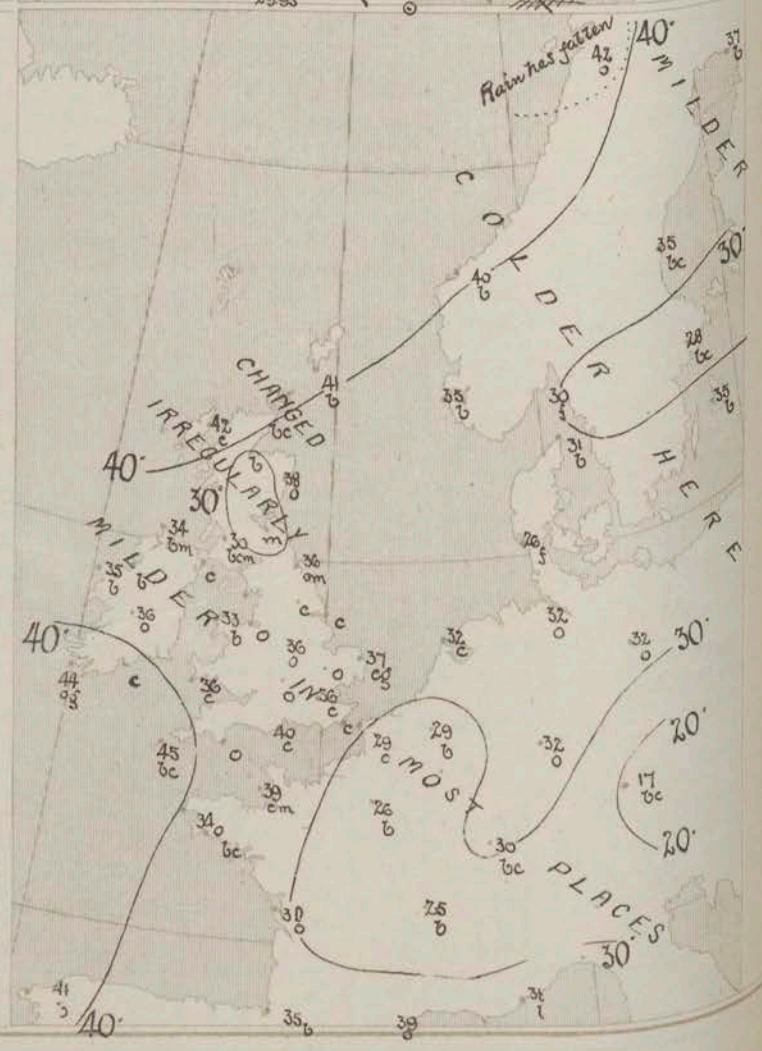
(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (*Inches.*)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·3 ins. to nearly 30·5 ins. in an anticyclonic system, covering the North Sea, the north and east of England, the southern half of Scandinavia, Denmark, Holstein, the Baltic and North Germany.

Lowest, 30·0 ins. and less, over Lapland and the north coast of the Gulf of Bothnia, 29·9 ins. and less over Portugal and the southwest of Spain.

Gradients slight generally except over the north of Sweden. Barometer rising over Northern Europe, falling elsewhere, but changes slight.

TEMPERATURE

Highest, 45° at Scilly, 44° at Valencia, 42° at Stornoway and Bodö, 41° at Lumbough Head and Corunna, 40° at Spurnhead.

Lowest, 17° at Munich, 25° at Lyons, 26° at Paris and Tarnö, 28° at Stockholm, 29° at Brussels, and 32° at Berlin.

The changes during the past twenty-four hours have been slight.

WIND

E^ly over the southern half of our area, and blowing rather strongly in the Channel.

SE^ly, moderate in Ireland, S^ly in Scotland, SW^ly over the northern half of Norway, (a gale at Bodö), and W^ly at Haparanda.

WEATHER

Fair as a whole — cloudy in some localities, clear in others — but dry generally.

Rain has fallen (0·35 ins) at Bodö and slight drizzle at Loughborough; from our other stations there is none reported.

SEA

Rather rough in the far north and at Dungeness, moderate to smooth at our other stations.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 10th Febry 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

N.B.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·50	40	39	Z	0	0	2
Sumburgh Head	30·33	43	40	WSW	1	c	3
Stornoway	30·32	43	42	SW	6	0	4
Aberdeen	30·44	41	38	S	1	bm	1
Shields	30·46	37	35	S	2	c	2
Ardrossan	30·43	42	39	NE	1	b	1
Malin Head ...	30·35	44	41	SSE	3	b	1
Mullaghmore ...	30·33	45	41	E	3	b	2
Belmullet	30·31	45	41	SSW	2	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·39	42	38	E	4	b	3
Valencia	30·25	44	41	E	5	bcm	5
Scilly	30·18	42	40	E	6	0	5
Jersey	30·27	39	36	E	4	b	3
Dungeness	30·36	40	36	ESE	6	b	5
London	30·38	42	37	E	3	b	*
Yarmouth	30·44	39	37	E	4	b	4
Rochefort	30·19	45	41	E	4	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine generally, but dull in Russia and the west of Norway, with snow at Moscow and rain at Bodö. Fog reported in many parts of Great Britain and fog on the eastern shores of the North Sea. Subsequently becoming dull and rainy at many of the Italian stations.

Temperature risen a little over Scandinavia and Russia, as well as at some of the Mediterranean stations, but fallen elsewhere,—several degrees over Southern Germany. Morning readings very little above zero over Central Russia and below the freezing point in the central parts of most other countries, thermometer reaching 50° or a little above at some of the Mediterranean stations. Lowest readings 2° at Moscow, 12° at Munich, 16° at Lemberg, and 20° at Uleaborg; highest 53° at Malta, and 52° at Brindisi.

Wind E over the greater part of England, Ireland, France and Southern Europe, fresh or strong in force over the Channel and Bay of Biscay. Strong from the SW^ly in the west of Norway, light or moderate from the NW^ly or N^ly over Sweden, Finland, and the Baltic; variable over Austria and the south of Russia. Subsequently increasing to a moderate gale from ESE. at the mouth of the English Channel.

Barometer highest, 30·3 ins: to 30·5 ins: in a large anticyclone extending eastwards from our Islands and the North Sea to Germany and the south of Austria; lowest 29·8 ins: and less. over Northern Russia and also over Morocco. Gradients moderate over north of Scandinavia, but slight elsewhere. Somewhat decided fall of the barometer taking place during day on the west coasts of our Islands; little change observed elsewhere.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Monday, 10th February,* 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30·10	30	ENE	0	b	30·10	+·15	30	28	-7	W	2	0	*	43	27	-
	Hernösand ...	30·35	30	NE	0	b	30·36	+·08	18	16	-17	NE	0	b	*	46	?	-
	Stockholm ...	30·44	29	W	2	b	30·47	+·08	21	20	-7	W	2	f	*	37	?	-
	Wisby	30·34	32	NW	4	b	30·39	+·07	31	30	-4	N	4	c	*	37	30	-
	Bodö	30·12	42	WSW	4	c	29·66	-·35	43	40	+1	WSW	8	c	5	48	39	-
	Christiansund	30·29	36	ESE	1	b	30·36	+·01	39	36	-1	WSW	1	b	5	41	32	-
	Skudesnaes ...	30·48	37	SSE	2	0	30·54	+·10	35	33	0	ESE	2	0	3	?	34	-
	Christiania Fjord (Færder)	30·46	31	NNE	2	0	30·50	+·10	24	23	-6	NNW	2	f	1	30	23	-
	Skagen (The Scaw)	30·47	36	W	3	0	30·50	+·19	36	35	+5	NW	1	0	1	39	30	-
	Fanö	30·49	32	E	2	b	30·52	+·06	26	26	0	SSE	2	f	*	36	?	-
BRITISH ISLANDS.	Sumburgh Head	30·25	41	SSE	3	c	30·31	+·05	42	39	+1	S	3	0	4	42	40	-
	Stornoway ...	30·19	41	SW	5	0	30·24	+·08	40	38	-2	S	6	0	5	45	33	-
	Wick	30·24	39	S	5	b	30·30	+·04	40	39	+3	S	5	bc	2	42	35	-
	Nairn	30·20	37	NE	0	b	30·30	+·05	28	26	+4	NE	0	b	0	44	23	-
	Aberdeen ...	30·33	37	S	2	c	30·36	·00	40	37	+2	SSE	3	c	4	40	37	0·01
	Leith	30·30	38	S	1	0	30·33	·00	37	36	+8	SSE	1	c	*	39	29	-
	Shields	30·30	40	ESE	3	0	30·33	-·02	40	37	+4	SE	2	0	2	42	35	-
	Spurn Head ...	30·26	39	E	6	0	30·31	+·01	38	36	-2	ESE	4	c	4	40	34	-
	York	30·29	39	E	1	0	30·34	·00	37	35	-1	ESE	1	0	*	42	35	-
	Loughborough	30·25	36	E	3	0	30·30	·00	33	31	-3	ESE	2	c	*	39	31	-
	Ardrossan ...	30·28	37	NE	2	0	30·30	-·01	36	36	+6	ENE	2	0m	1	40	30	-
	Malin Head ...	30·26	37	ESE	3	bc	30·24	+·01	37	35	+3	SSE	2	0m	1	40	34	-
	Mullaghmore ...	30·21	40	ESE	3	0m	30·21	+·01	39	36	+1	ESE	4	0m	2	41	35	-
	Belmullet ...	30·18	40	E	2	c	30·19	+·04	35	34	0	E	2	0	*	45	31	-
	Donaghadee ...	30·25	41	SSE	4	c	30·29	-·03	39	38	+1	SE	4	0	2	41	34	-
	Liverpool (Bidston)	30·25	38	E	2	0	30·30	-·02	34	32	0	ESE	2	c	3	39	34	-
	Holyhead ...	30·19	38	E	2	c	30·25	-·01	34	33	+1	ESE	1	cg	1	43	32	-
	Parsonstown ...	30·19	37	NE	0	c	30·19	·00	36	34	0	NE	0	0	*	41	33	-
	Valencia	30·14	43	E	2	bcm	30·13	+·03	40	38	-4	NE	0	0	1	49	38	-
	Roche's Point ...	30·16	42	ESE	4	0	30·15	-·01	40	37	-3	E	4	0	4	45	37	-
	Pembroke (St. Ann's Hd.)	30·17	39	E	3	c	30·17	-·03	36	36	0	E	4	bc	3	41	34	-
	Scilly	30·07	44	ENE	5	0	30·07	-·01	41	40	-4	ESE	6	r	5	48	39	-
	Prawle Point ...	30·11	39	NE	4	0	30·15	·00	38	36	-1	ESE	4	cg	3	41	36	-
	Jersey (St. Aubin's)	30·07	41	ENE	4	b	30·17	+·04	37	34	-2	ESE	4	bm	3	45	35	-
	Hurst Castle ...	30·14	39	E	4	bcm	30·21	+·02	40	37	0	SE	3	bc	2	40	36	-
GERMANY & HOLLAND.	Dungeness ...	30·14	36	ESE	6	c	30·26	+·06	37	35	+3	SE	4	b	3	39	32	-
	London	30·17	36	ESE	3	0	30·27	+·02	32	30	-4	ESE	2	b	*	39	31	-
	Oxford	30·22	35	SE	2	0	30·27	+·02	33	32	-2	ENE	2	c	*	40	31	-
	Cambridge ...	30·25	37	E	1	0	30·30	+·01	31	30	-6	NE	1	b	*	39	29	-
	Yarmouth ...	30·23	36	E	6	cg	30·33	+·04	37	36	0	SE	5	bc	4	37	34	-
	Cuxhaven ...	30·46	30	ESE	3	0	30·51	+·06	31	30	-1	SSE	2	f	*	?	28	-
	Berlin	30·47	33	NE	0	b	30·51	+·08	26	26	-6	NW	3	f	*	34	?	-
	Wiesbaden ...	*	*	*	*	*	30·41	+·12	31	30	-1	NE	4	fg	*	36	30	-
	Munich	30·28	28	E	5	0	30·37	+·20	17	17	0	SE	3	m	*	30	14	-
	The Helder ...	30·36	34	E	3	b	30·42		32	31		ESE	1	b	2	36	32	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30·36	+·09	28	28	-1	E	1	b	*	36	26	-
	Cape Gris Nez	?	33	E	3	b	?	?	30	28	+1	SE	2	b	1	37	29	-
	Paris	30·10	33	NE	2	b	30·26	+·12	30	29	+4	E	2	b	*	40	?	-
	Brest	? 30·05	41	E	1	c	30·04	?	40	35	+6	E	5	0	4	54	34	0·04
	Lorient	30·01	42	ENE	1	b	30·11	+·06	35	31	+2	E	4	c	2	45	32	-
	Rochefort ...	? 30·05	44	?	3	bc	? 30·19		36	36		SE	4	b	?	52	28	-
	Belfort	? 30·12	23	E	1	b	?	?	29	21	-3	SSE	1	b	*	32	10	-
	Lyons	30·16	35	ENE	1	b	30·28	+·17	29	29	+4	SW	1	b	*	41	?	0·04
	Nice	30·12	42	SW	2	b	30·15	+·04	35	31	-3	ESE	4	b	1	46	34	-
	Perpignan ...	30·06	46	NE	2	0	30·16	+·13	44	43	+5	NE	2	0	*	53	?	0·04
	Biarritz	29·97	48	ESE	2	0	30·09	+·12	46	42	+11	SSE	3	c	1	52	?	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29·95	60	N	4	b	30·03	+·17	45	39	+5	NNE	4	bc	2	55	?	-

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.

WEATHER CHARTS

for 8 a.m. on Monday, 10th February, 1890.

BAROMETER, WIND AND SEA.

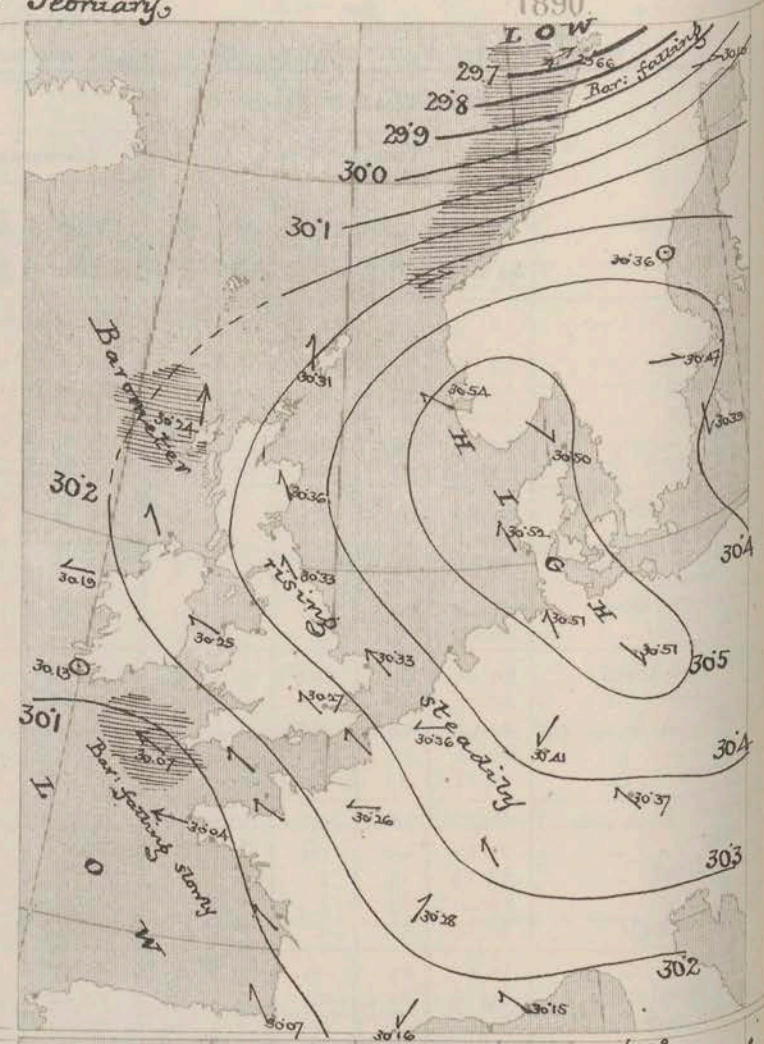
EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.
SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

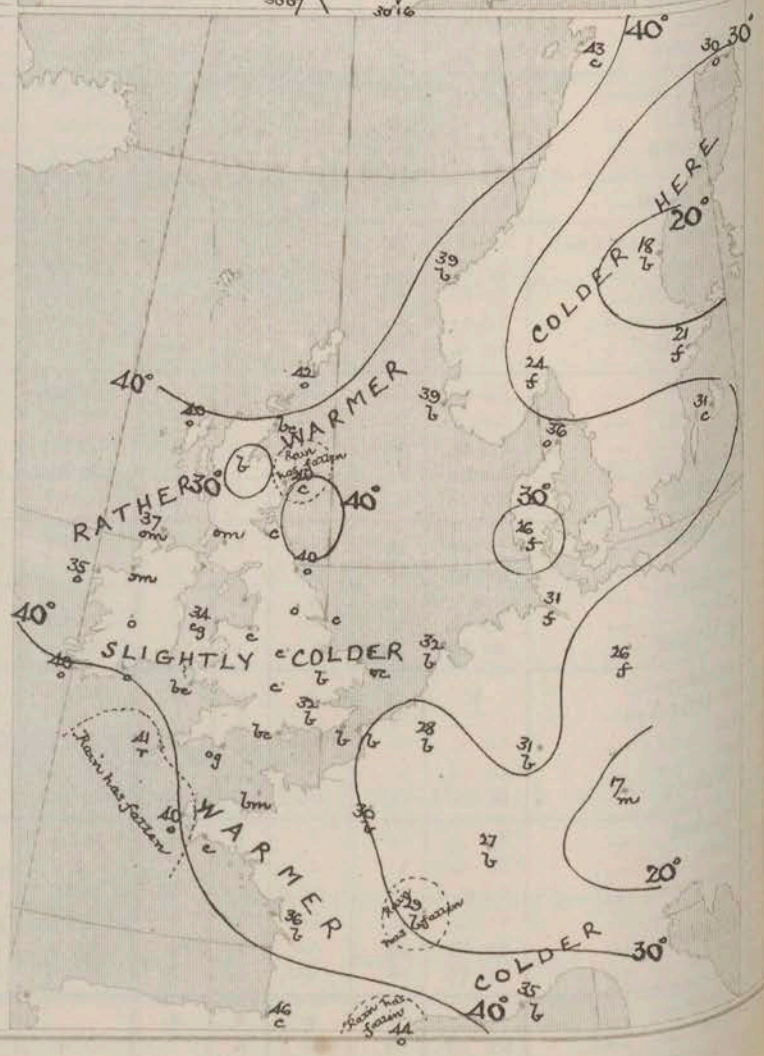
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·03
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·20
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·5	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·5 ins: and more over Denmark, Holstein, and the eastern parts of the North Sea.
Lowest, 29·7 ins: and less, over the western part of Lapland, 30·1 ins: and less, at the extreme southwestern stations and over the Bay of Biscay.
Gradients slight except in the far north.
Barometer was rising in the east and south, changing very little in the west.

TEMPERATURE

Highest, (1.) 46° at Biarritz, 45° at Lisbon, 44° at Perpignan, and 41° at Sicily.
(2.) 43° at Bodö, 42° at Dumbuck Hd, and 40° at Stornoway, Aberdeen, and Shields.
Lowest, 17° at Munich, 18° at Hernösand, 21° at Stockholm, 26° at Berlin, 30° at Paris, and 32° in London.
It went down to 31° in the shade, and 24° on the grass in London early this morning.

WIND

Moderate or light – from the E.ward over France, from SE. over the greater part of England and Ireland, and from the S.ward in Scotland.
At Christiansund it is light from WSW. and at Bodö there is a fresh gale from the same direction.

WEATHER

Fine and bright over many parts of Great Britain and France; foggy on the eastern shores of the North Sea.
Dull in nearly all other places with rain at Scilly. There has been slight snow in several parts of France.

SEA

Rather rough in far north and at Scilly, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The shallow low pressure area in the extreme southwest seems likely to move northward outside our western coasts, and to cause milder and damper weather in Ireland. Fair cold weather is likely to hold at present over England.

FORECASTS

For the 24 hours ending at NOON on 11th FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	S.ly to SW.ly breezes; fair to showery, milder.
1 SCOTLAND EAST	SE.ly and S.ly breezes, light; fair.
2 ENGLAND N.E	
3 ENGLAND EAST	SE.ly breezes, moderate or light; fair, very cold at night.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No 0
7 ENGLAND N.W.	Same as Nos 3 to 5.
8 ENGLAND S.W.	SE.ly winds, moderate or fresh; rain at times, milder.
9 IRELAND NORTH	Very light breezes; fair, some showers.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

N.B.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnses ...	30·44	40	37	W	1	o	2
Sumburgh Head							
Stornoway	30·20	44	42	SW	5	bc	4
Aberdeen							
Shields							
Ardrossan							
Malin Head ...	30·26	40	37	SSE	4	c	2
Mullaghmore ...							
Belmullet	30·16	45	41	SSE	2	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·21	41	39	ENE	3	b	
Valencia							
Scilly							
Jersey	30·08	44	39	NE	3	b	
Dungeness	30·17	39	36	ESE	6	c	
London							
Yarmouth							
Rochefort	30·06	44	42	ENE	3	b	

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over France and the Bay of Biscay and several parts of Italy, as well as on the S.ern shores of the North Sea, the N.ern parts of our Islands, and in Sweden; cloudy more or less elsewhere, but dry in most places, continuing fair over the British Islands during day, but slight showers over in France.

Temperature highest on the Atlantic coast of Europe and the British Islands; 45° at Scilly, over Valencia and exceeding 40° at Bodo, Christiansund, Sumburgh Head, Stornoway, Corunna and Lisbon; over 50° at Algiers, Malta and Brindisi. Lowest over Russia and S. Germany; 17° at Munich, 21° at Buda-Pesth, 23° at Kiev, and 25° at Moscow and Hango. As low as 20° at St Petersburg and Archangel.

Wind mainly E.ly over the southern half of Europe – moderate generally, but fresh to strong in some places. SE.ly on our NW. coasts, S.ly in Scotland, SW.ly over the N.ern parts of Norway, and NW.ly over Finland. Tend to veer somewhat over England and Ireland later.

Barometer 30·3 ins to nearly 30·5 ins. in large anticyclone, the centre of which lay over Denmark; lowest 29·8 ins, and less in a depression lying over the White Sea and 29·9 ins., and less in the W. and S. of the Iberian Peninsula as well as over Algeria and Tunis. Falling somewhat over the British Islands at first, subsequently rising again.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 2.ND TO THE 8.TH FEBRUARY 1890

The weather experienced over the United Kingdom during this week may be divided into two distinct parts. In the first of these (lasting from Sunday to Tuesday) the gradient for cyclonic SW.ly winds which prevailed at the beginning of February passed slowly away in a northerly direction, and a high pressure band spread gradually over England and Ireland from the S.wd. so that while light SW.ly to NW.ly breezes prevailed over our northern districts, E.ly breezes of little strength appeared over France and the Channel. Early on Wednesday, however, a new high-pressure (anticyclonic) system began to spread over Ireland from the westward, and gradually became the dominant pressure-system of western Europe; on Thursday and Friday its central area covered the NW.rn and N.rn parts of the Kingdom and on Saturday it had reached the North Sea. As this change took place temperature fell decidedly; E.ly winds, moderate to strong in force set in over the southern parts of our area, with dry and at times bright weather; milder W.ly and SW.ly winds, and slight showers, prevailed in the far North, while fogs were reported at the intermediate stations.

At the close of the week there was no indication of any immediate change.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for Tuesday 11th February 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30.17	30	X	0	b	30.29	+.19	30	28	0	WSW	2	c	*	34	25	—
	Hernösand ...	30.46	21	X	0	b	30.52	+.16	16	15	−2	X	0	b	*	36	16	—
	Stockholm ...	30.52	26	WNW	2	0	30.59	+.12	22	21	+1	X	0	f	*	32	19	—
	Wisby	30.45	30	N	2	f	30.57	+.18	28	28	−3	NNW	2	c	*	32	28	—
	Bodö	30.19	37	WSW	6	r	30.29	+.63	41	40	−2	WSW	4	0	2	43	?	0.43
	Christiansund	30.44	37	ESE	2	b	30.45	+.09	32	31	−7	X	0	b	4	43	32	—
	Skudesnaes ...	30.53	35	SE	4	0	30.57	+.03	36	35	+1	SE	4	0	4	36	34	—
	Christiania Fjord (Færder)	30.56	27	X	0	m	30.61	+.11	26	22	+2	N	2	f	1	27	21	—
	Skagen (The Scaw)	30.56	33	X	0	f	30.59	+.09	32	32	−4	NNE	1	0	1	41	30	—
	Fanö	30.57	31	E	4	f	30.56	+.04	30	30	+4	E	2	0	*	?	?	
BRITISH ISLANDS.	Sumburgh Head	30.27	41	SSE	4	0	30.27	−.04	42	40	0	SSE	3	0	5	43	38	—
	Stornoway ...	30.17	39	S	5	0	30.10	−.14	43	42	+3	SE	6	bc	5	43	38	—
	Wick	30.33	40	S	6	b	30.25	−.05	39	37	−1	S	5	b u	4	43	35	—
	Nairn	30.21	34	X	0	b	30.22	−.08	37	35	+5	SW	1	b	0	44	25	—
	Aberdeen ...	30.33	40	S	3	0	30.34	−.02	39	37	−1	SSE	3	cm	4	41	37	—
	Leith	30.30	35	E	1	b	30.33	±.0	27	27	−10	X	0	f	*	39	26	—
	Shields	30.34	40	SE	3	0	30.37	+.04	36	35	−4	SSW	2	m	2	41	34	—
	Spurn Head ...	30.34	40	ESE	5	0	30.35	+.04	40	38	+2	E	3	c	4	41	36	—
	York	30.35	39	E	1	0	30.39	+.05	32	32	−5	E	1	f	*	42	29	—
	Loughborough	30.33	38	E	1	b	30.36	+.06	30	30	−3	ENE	1	of	*	47	28	—
	Ardrossan ...	30.27	37	E	2	0m	30.27	−.03	32	31	−4	NE	2	bm	1	40	30	—
	Malin Head ...	30.18	37	SSE	4	0	30.10	−.14	40	39	+3	SSE	4	b	2	41	35	—
	Mullaghmore ...	30.16	38	ESE	4	bc	30.08	−.13	44	42	+5	SE	5	bc	4	45	37	—
	Belmullet ...	30.15	38	SSE	2	0	30.02	−.17	40	38	+5	SSE	3	b	*	41	34	0.02
	Donaghadee ...	30.25	41	SE	4	0	30.24	−.03	43	42	+4	SE	4	m	2	43	38	—
	Liverpool (Bidston)	30.29	36	SE	3	b	30.32	+.02	29	29	−5	ESE	2	of	3	38	29	—
	Holyhead ...	30.25	38	SE	1	bm	30.24	−.01	37	35	+3	X	0	bwm	0	41	33	—
	Parsonstown ...	30.14	37	X	0	bc	30.11	−.08	42	41	+6	SE	1	bc	*	43	35	0.04
	Valencia	30.05	40	ESE	4	0m	29.99	−.14	48	45	+8	SE	6	bc	5	48	38	0.05
	Roche's Point ...	30.07	40	ESE	4	•prs	30.10	−.05	46	43	+6	S	5	bc	4	46	38	0.30
	Pembroke (St. Ann's Hd.)	30.20	41	SE	5	b	30.21	+.04	40	40	+4	ESE	5	bcm	3	44	36	—
	Scilly	30.09	47	ESE	6	c	30.13	+.06	48	47	+7	SE	5	bc	4	48	38	0.21
	Prawle Point ...	30.23	44	ESE	3	c	30.22	+.07	44	42	+6	ENE	3	b	2	45	38	—
	Jersey (St. Anbin's)	30.23	45	E	3	bm	30.22	+.05	37	35	0	ENE	2	bwm	2	47	35	—
	Hurst Castle ...	30.28	45	SE	4	bm	30.27	+.06	40	37	0	E	4	bcm	2	45	34	—
	Dungeness ...	30.28	42	SE	3	b	30.27	+.01	37	36	0	ESE	4	b	2	44	36	—
	London	30.33	39	SE	2	bf	30.31	+.04	30	30	−2	X	0	f	*	47	30	—
	Oxford	30.35	37	SE	1	b	30.33	+.06	29	29	−4	NE	1	f	*	44	26	—
	Cambridge ...	30.34	37	ESE	1	b	30.34	+.04	26	24	−5	N	1	b	*	48	23	—
	Yarmouth ...	30.36	40	SE	5	b	30.34	+.01	38	36	+1	ESE	5	b	4	41	35	—
GERMANY & HOLLAND.	Cuxhaven	30.53	30	ESE	3	f	30.52	+.01	30	29	−1	SE	3	0	*	?	29	—
	Berlin	30.51	30	NNE	4	0	30.54	+.03	30	30	+4	ESE	3	0	*	32	?	—
	Wiesbaden ...	*	*	*	*	*	30.37	−.04	39	37	+8	NE	2	b	*	?	28	—
	Munich	30.34	26	E	3	b	30.29	−.08	27	26	+10	NE	4	c	*	32	?	—
	The Helder ...	30.45	35	E	1	b	30.45	+.03	31	30	−1	E	1	b	2	36	30	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.32	−.04	29	28	+1	E	1	b	*	40	28	—
	Cape Gris Nez	?	32	E	2	b	?	?	30	28	0	E	2	b	1	45	30	?
	Paris	30.32	40	NE	1	b	30.21	−.05	26	25	−4	NE	2	b	*	48	25	—
	Brest	?	46	SSE	4	b	30.11	+.07	44	41	+4	SE	4	0	3	52	36	—
	Lorient	30.16	44	SE	3	b	30.14	+.03	38	36	+3	E	4	c	2	48	34	—
	Rochefort ...	30.23	48	ESE	2	b	30.18	−.01	36	35	0	E	3	b	2	55	30	—
	Belfort	30.21	32	E	1	b	30.09	?	32	23	+5	N	2	b	*	39	17	—
	Lyons	?	35	NNW	1	b	30.19	−.09	26	23	−3	SE	1	b	*	43	26	—
	Nice	30.07	43	SSW	2	b	30.11	−.04	39	35	+4	ENE	3	0	3	50	?	—
	Perpignan ...	30.15	45	X	0	b	30.13	−.03	33	33	−11	SW	2	b	*	52	14	—
	Biarritz	30.12	50	E	3	b	30.09	+.02	42	37	−4	SE	3	b	2	57	41	—
SPAIN & POR.	Corunna	*	*	*	*	*												
	Lisbon																	

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Tuesday 11th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—*Isobars are drawn for each tenth of an inch.*
Changes since previous morning are stated in words.

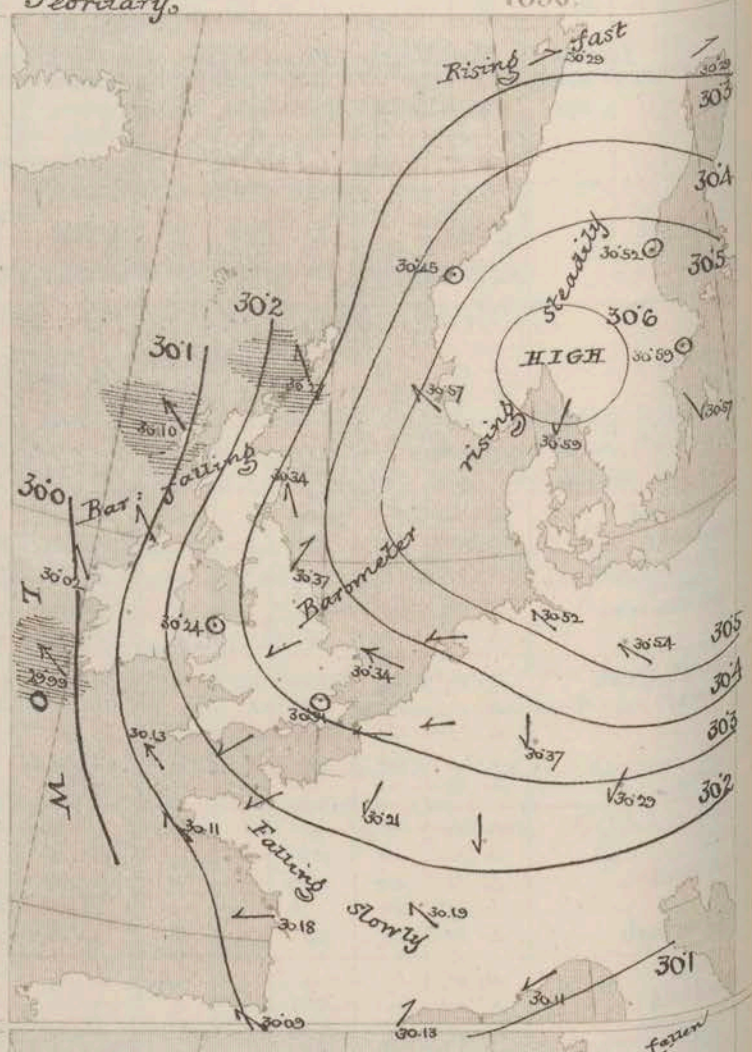
WIND—*Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—*
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—*Where considerable, is shewn thus:*
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 713
Stornoway	29 · 700
Wick	29 · 737
Nairn	29 · 747
Aberdeen	29 · 780
Leith	29 · 803
Shields	29 · 847
York	29 · 884
Loughborough	29 · 912
Ardrossan	29 · 805
Donaghadee	29 · 812
Holyhead	29 · 848
Liverpool	29 · 873
Parsonstown	29 · 834
Valencia	29 · 850
Roche's Point	29 · 850
Pembroke	29 · 875
Scilly	29 · 911
Jersey	29 · 975
Hurst Castle	29 · 944
Dover	29 · 957
LONDON	29 · 949
Oxford	29 · 938
Cambridge	29 · 935
Yarmouth	29 · 928



TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—*Isotherms are drawn for each 10°. Changes since previous morning are stated in words.*

WEATHER *is shown by Letters of the Beaufort Scale.*

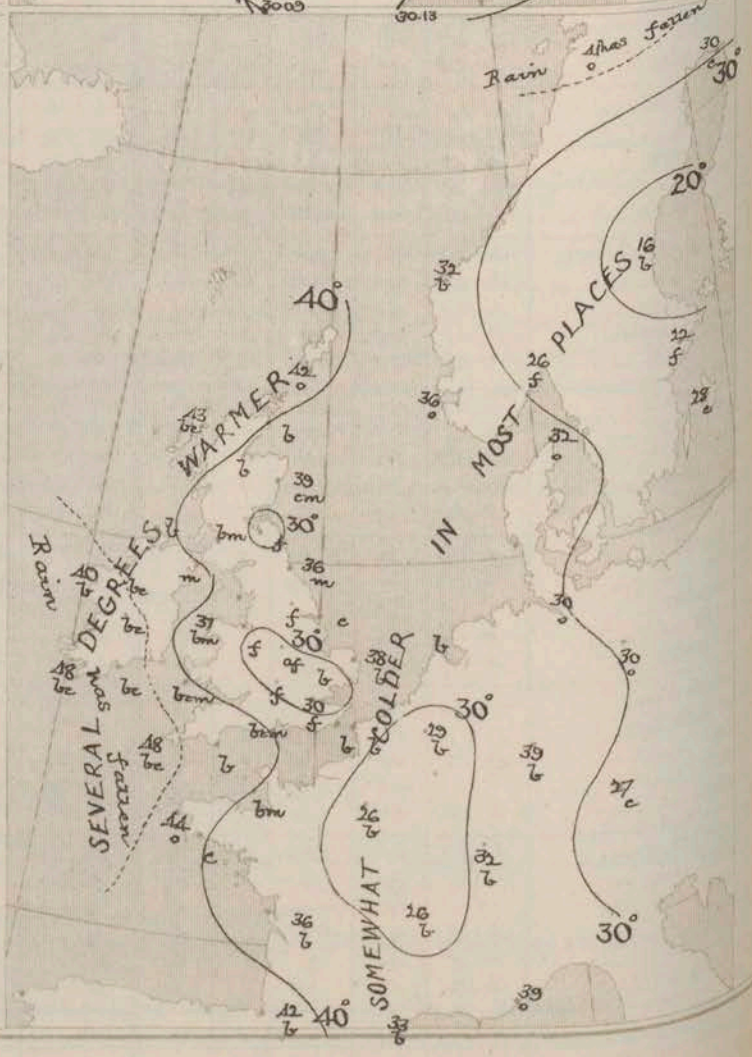
RAINFALL.—*A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.*

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	42 · 6	34 · 7	38 · 7	37 · 7	3 · 29
Stornoway	43 · 5	34 · 7	39 · 3	38 · 2	3 · 97
Wick	43 · 4	33 · 5	38 · 4	37 · 0	2 · 02
Nairn	43 · 4	33 · 8	37 · 4	35 · 7	1 · 51
Aberdeen	43 · 5	34 · 2	37 · 8	36 · 2	2 · 51
Leith	46 · 6	34 · 7	39 · 2	37 · 7	1 · 58
Shields	44 · 3	35 · 7	39 · 2	37 · 9	1 · 63
York	45 · 3	34 · 2	38 · 2	37 · 1	1 · 88
Loughborough	46 · 0	34 · 5	38 · 4	37 · 3	2 · 00
Ardrossan	45 · 0	36 · 7	40 · 0	38 · 6	3 · 47
Donaghadee	45 · 8	37 · 0	40 · 7	39 · 7	2 · 71
Holyhead	46 · 1	39 · 3	42 · 3	40 · 8	2 · 90
Liverpool	45 · 3	36 · 9	39 · 9	38 · 3	1 · 85
Parsonstown	47 · 4	36 · 1	40 · 1	38 · 8	2 · 45
Valencia	50 · 2	40 · 8	45 · 1	43 · 4	5 · 29
Roche's Point	48 · 9	40 · 0	43 · 6	42 · 2	4 · 86
Pembroke	46 · 2	40 · 3	43 · 1	41 · 9	3 · 20
Scilly	49 · 7	43 · 7	46 · 9	45 · 3	2 · 98
Jersey	47 · 6	40 · 1	43 · 2	42 · 0	2 · 72
Hurst Castle	46 · 5	37 · 9	41 · 3	40 · 4	2 · 63
Dover	45 · 4	37 · 4	40 · 3	39 · 1	2 · 12
LONDON	46 · 9	36 · 0	39 · 7	38 · 6	1 · 89
Oxford	45 · 9	35 · 0	38 · 8	37 · 7	2 · 06
Cambridge	46 · 4	33 · 9	38 · 3	37 · 3	1 · 60
Yarmouth	43 · 5	35 · 2	38 · 0	38 · 2	2 · 02

NOTE.—*The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.*



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·4 ins: to 30·6 ins: over the North Sea, Denmark, the Baltic, and Scandinavia.
Lowest, 30·0 ins: and less, off our extreme western coasts, 30·1 ins: and less, over the northern parts of the Mediterranean.
Gradients were moderate over Ireland and Scotland, slight elsewhere.
Barometer was changing little and irregularly, — inclined to fall again over France.

TEMPERATURE

Highest, 48° at Valencia and Scilly, 46° at Roche's Point, 44° at Brest and Pauls Point, and between 40° and 43° at Biarritz, Hunstanton, Parsonstown, Belmullet Stornoway, Sumburgh Head and Christiansund.
Lowest, 16° at Hammerfest, 22° at Stockholm, 26° at Lyons and Paris, 27° at Munich, 29° at Brussels, and Oxford, and 30° at Berlin, Loughborough and in London.
In London the minimum temperature on the grass was 24°, and a glazed frost occurred in trees, gates &c exposed to the sky.

WIND

Light to moderate from between N. and E. at the French stations, E^ly in the Channel and east of England, SE^ly to S^ly in Ireland and Scotland (strong in places) and SW^ly in Lapland.

WEATHER

Fine in most places, dull in North Germany, very foggy over England — especially in London.
Rain fell yesterday at some of the southwestern stations and at Bodö.

SEA

Rather rough at Sumburgh Head, Stornoway, and Valencia, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

No decided change in the weather is indicated at present — mild days and cold foggy nights are probable over England while these conditions last.

FORECASTS

For the 24 hours ending at NOON on 12th February 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	S^ly and SE^ly breezes, moderate to light; fair generally, becoming colder.
1 SCOTLAND EAST	
2 ENGLAND N.E.	E^ly and SE^ly breezes, light; fair, cold and foggy at night.
3 ENGLAND EAST	
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as Nos 0 and 1.
7 ENGLAND N.W.	SE^ly breezes, moderate; fair generally.
8 ENGLAND S.W.	
9 IRELAND NORTH	SE^ly breezes, fresh to moderate; some showers.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

NOTE.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.35	35	34	SSE	2	o	3
Sumburgh Head	30.28	43	40	S	3	o	4
Stornoway	30.20	41	40	S	5	c	5
Aberdeen	30.33	40	36	SSE	4	o	4
Shields	30.34	40	37	SE	3	o	2
Ardrossan	30.28	40	38	ENE	3	c m	2
Malin Head ...	30.19	37	35	SSE	4	o m	2
Mullaghmore ...	30.17	39	36	SE	4	o m	3
Belmullet	30.15	38	37	SSE	2	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.24	39	36	SSE	2	bc	2
Valencia	30.09	41	39	E	3	o m	4
Scilly	30.06	44	43	ESE	6	r m	5
Jersey	30.23	43	40	ESE	3	b m	3
Dungeness	30.29	43	40	SE	4	bc	3
London	30.31	44	41	ESE	2	b	*
Yarmouth	30.34	41	39	ESE	4	b	4
Rochefort	30.22	48	46	ESE	3	b	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fair generally except in the extreme north and east, but cloudy in many places, with rain at one or two of our southwestern stations, snow at Moscow. A considerable fall of rain during the day at Scilly, Roche's Point, and Bodö, and small quantities at some other of the Irish stations.

Temperature in morning 50° or more at Brindisi, Malta, Algiers, Barcelona, and Sanguinaire, 40° or more at many stations on the Atlantic coasts, 43° at Bodö. Lowest over Hungary, South Germany and the north of Russia, the minima being 8° at Hermanstadt, 19° at Munich, 21° at Kiew; 14° at Archangel, 18° at Haparanda, 19° at St Petersburg, 23° at Moscow. Rising decidedly in the west of France and the British Isles later, but cold at night over England and the Continent.

Wind light to moderate in force, anticyclonic in direction; — mainly E at the southern and southwestern stations, SE to S over the British Islands and North Sea, SW to W over the north of Scandinavia, N over the Baltic, North Germany, and Poland. SE rising freshening at our southwestern stations later.

Barometer highest, 30·2 ins: to 30·5 ins: and more, in an anticyclone covering the greater part of Europe, and having its central area over Denmark, the south of Norway, and North Germany; lowest, 29·7 ins: and less, in a depression over Denmark, 29·5 ins: and less, in another over the southeastern parts of the Mediterranean, and apparently 30·0 ins: and less, in a shallow system over the Atlantic to the southwest of our Islands. Northern depression travelling away northwards later, that in the west moving northwards outside our western coasts.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for Wednesday, 12th Feby. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30·35	22	↙	0	b	30·40	+·11	13	12	−17	↙	0	b	*	32	?	—
	Hernösand ...	30·54	15	↙	0	b	30·54	+·02	6	5	−10	↙	0	b	*	37	?	—
	Stockholm ...	30·62	23	↙	0	f	30·60	+·01	25	24	+3	ESE	2	o	*	28	19	—
	Wisby	30·62	27	N	2	o	30·59	+·02	30	28	+2	N	2	o	*	30	25	—
	Bodö	30·38	41	WSW	4	o	30·39	+·10	41	39	0	S	1	c	1	43	39	—
	Christiansund	30·45	34	↙	0	b	30·36	−·09	29	27	−3	↙	0	b	4	37	28	—
	Skudesnaes ...	30·52	36	SSE	4	o	30·40	−·17	32	30	−4	SSE	4	c	4	37	32	—
	Christiania Fjord (Færder)	30·58	31	NNE	2	f	30·54	−·07	20	18	−6	NE	2	f	1	35	19	—
	Skagen (The Scaw)	30·56	28	SE	1	o	30·51	−·08	29	28	−3	SE	2	o	1	32	27	—
	Fanö	30·50	31	ESE	4	o	30·39	−·17	30	30	0	ESE	4	o	*	?	28	—
BRITISH ISLANDS.	Sumburgh Head	30·26	42	SSE	4	o	30·13	−·14	42	39	0	SSE	5	o	6	45	40	—
	Stornoway ...	30·04	43	S	4	b	29·85	−·25	42	40	−1	SE	6	bc	4	47	39	—
	Wick	30·19	40	S	6	o	30·05	−·20	41	39	+2	S	7	o	5	42	35	—
	Nairn	30·15	40	SW	1	b	29·98	−·24	37	35	0	ESE	3	b	2	48	27	—
	Aberdeen ...	30·27	40	SSE	4	c q	30·11	−·23	39	36	0	SSE	5	o g q	5	41	39	—
	Leith	30·21	37	ESE	2	b	30·04	−·29	36	35	+9	S	1	o	*	43	27	—
	Shields	30·24	39	ESE	4	c	30·07	−·30	38	35	+2	SE	4	o	4	42	36	—
	Spurn Head ...	30·21	40	ESE	5	b	30·02	−·33	37	35	−3	ESE	6	c	5	42	35	—
	York	30·25	39	E	1	b	30·09	−·30	34	33	+2	E	1	o	*	44	31	—
	Loughborough	30·21	36	E	1	b	30·05	−·31	32	31	+2	ESE	3	o	*	45	29	—
	Ardrossan ...	30·15	41	E	3	bm	29·96	−·31	35	34	+3	ENE	3	bm	2	46	30	—
	Malin Head ...	30·04	41	↙	0	bm	29·94	−·36	37	35	−3	SE	5	bm	3	47	36	—
	Mullaghmore ...	29·97	44	SE	6	b	29·65	−·43	39	37	−5	SE	7	b	4	47	37	—
	Belmullet ...	29·89	45	SE	4	b	29·59	−·43	39	38	−1	SE	4	o	*	49	37	—
	Donaghadee ...	30·12	42	SSE	5	b	29·91	−·33	40	39	−3	SSE	6	c	4	47	40	—
	Liverpool (Bidston)	30·18	35	SE	2	b	29·96	−·36	33	32	+4	ESE	6	c	4	36	29	—
	Holyhead ...	30·10	38	ESE	3	b	29·88	−·36	35	33	−2	E	11	b	1	51	33	—
	Parsonstown ...	29·99	42	SE	1	bc	29·69	−·42	40	38	−2	SE	3	c	*	50	39	—
	Valencia	29·86	48	ESE	6	bcm	29·47	−·52	48	46	0	ESE	7	og	6	51	45	0·15
	Roche's Point ...	29·95	46	SE	5	bc	29·60	−·50	47	44	+1	SE	8	c	5	48	45	—
	Pembroke (St. Ann's Hd.)	30·06	38	ESE	5	c	29·80	−·41	40	40	0	ESE	6	cg	4	44	37	—
	Scilly	29·95	49	ESE	7	b	29·69	−·46	47	47	−1	SE	7	bc	6	50	45	—
	Prawle Point ...	30·06	41	E	4	c	29·85	−·37	40	38	−4	E	4	b	3	47	39	—
	Jersey (St. Aubin's)	30·07	41	E	3	bcm	29·89	−·33	38	37	+1	ESE	3	bum	3	49	34	—
	Hurst Castle ...	30·11	42	ESE	5	og	29·95	−·32	39	36	−1	ESE	4	bc	2	43	35	—
GERMANY & HOLLAND.	Dungeness ...	30·13	41	ESE	6	b	30·00	−·27	33	32	−4	SE	5	b	3	43	32	—
	London	30·17	37	ESE	3	bm	30·02	−·29	30	29	0	ESE	2	bc	*	45	30	—
	Oxford	30·16	34	NE	1	b	30·02	−·31	29	28	0	ENE	1	b	*	43	28	—
	Cambridge ...	30·22	37	N	1	b	30·05	−·29	34	32	+8	ESE	2	o	*	46	24	—
	Yarmouth ...	30·23	39	E	6	b	30·09	−·25	35	34	−3	ESE	6	c	5	41	33	—
	Cuxhaven	30·48	30	ESE	5	o	30·36	−·16	31	30	+1	ESE	5	c	*	32	29	—
	Berlin	30·50	33	ESE	2	o	30·43	−·11	24	23	−6	ESE	5	b	*	34	?	—
	Wiesbaden ...	*	*	*	*	*	30·16	−·21	28	26	−11	NE	4	b	*	?	27	—
	Munich	30·21	27	E	5	b	30·06	−·23	12	12	−15	E	5	b	*	?	12	—
	The Helder ...	30·34	30	E	3	f	30·21	−·24	31	30	0	E	3	c	3	32	28	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30·10	−·22	26	26	−3	E	2	b	*	42	?	—
	Cape Gris Nez	?	36	E	3	b	?	?	27	25	−3	E	3	b	2	43	25	—
	Paris	30·11	38	NE	1	b	29·99	−·22	25	24	−1	NNE	1	b	*	45	24	—
	Brest	?	49	SE	2	b	?	?	42	41	−2	SSE	4	b	4	54	39	0·08
	Lorient	30·03	43	SE	3	b	29·84	−·30	34	32	−4	ESE	3	o	2	48	32	—
	Rochefort ...	30·08	46	NE	3	b	29·95	−·23	33	32	−3	E	3	b	?	57	27	—
	Belfort	30·02	34	SSE	1	b	29·87	−·22	27	20	−5	SE	2	b	*	39	21	—
	Lyons	30·08	32	N	1	b	29·89	−·30	28	27	+2	N	1	f	*	39	?	—
	Nice	30·09	34	WNW	5	f	30·01	−·10	29	27	−10	NE	5	o	4	41	28	0·47
	Perpignan ...	30·01	44	W	2	b	29·88	−·25	38	37	+5	NW	2	o	*	54	?	—
	Biarritz	29·97	48	NE	3	bc	29·85	−·24	46	42	+4	SW	4	o	2	57	41	—
PENINSULA.	Corunna	*	*	*	*	*	30·00	−·07	45	45	+3	↙	0	f	5	59	45	—
	Lisbon	30·03	52	NW	3	b												

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on *Wednesday, 12th February,* 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.
SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 713
Stornoway	29 · 700
Wick	29 · 737
Nairn	29 · 747
Aberdeen	29 · 780
Leith	29 · 803
Shields	29 · 847
York	29 · 884
Loughborough	29 · 912
Ardrossan	29 · 805
Donaghadee	29 · 812
Holyhead	29 · 848
Liverpool	29 · 873
Parsonstown	29 · 834
Valencia	29 · 850
Roche's Point	29 · 850
Pembroke	29 · 875
Scilly	29 · 911
Jersey	29 · 975
Hurst Castle	29 · 944
Dover	29 · 957
LONDON	29 · 949
Oxford	29 · 938
Cambridge	29 · 935
Yarmouth	29 · 928

TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

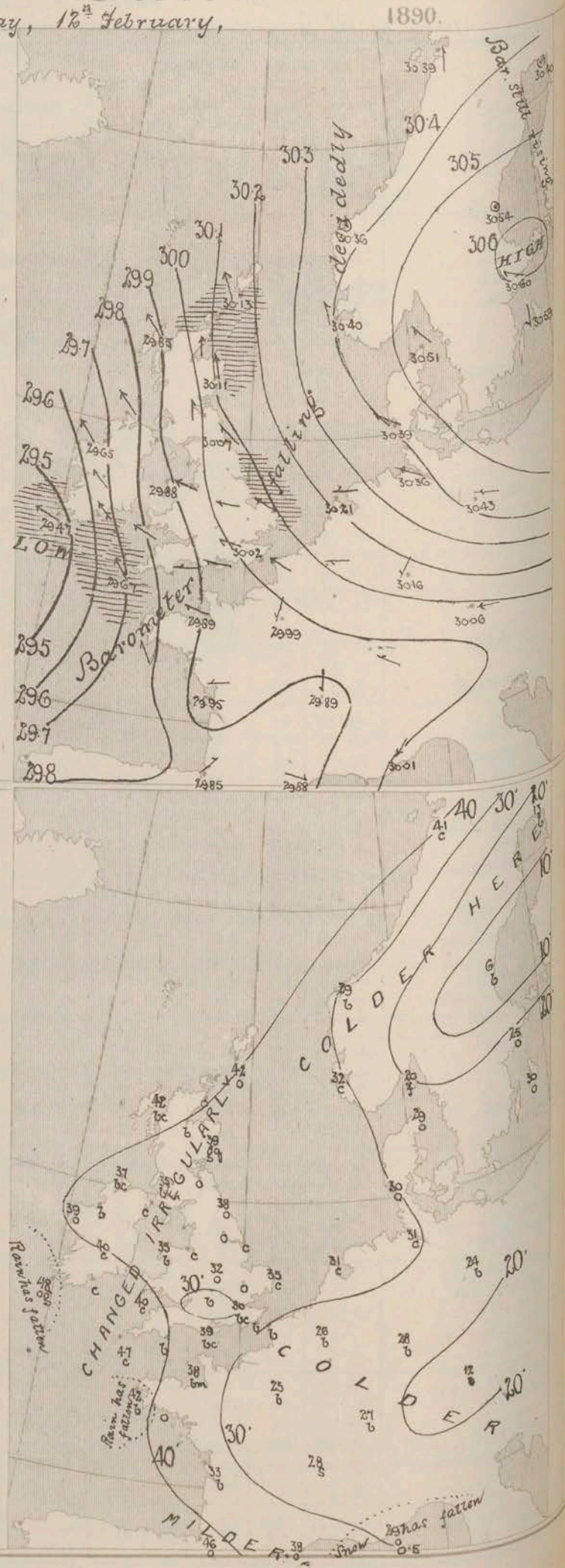
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (*Inches.*)
Sumburgh Head	42 · 6	34 · 7	38 · 7	37 · 7	3 · 29
Stornoway	43 · 5	34 · 7	39 · 3	38 · 2	3 · 97
Wick	43 · 4	33 · 5	38 · 4	37 · 0	2 · 02
Nairn	43 · 4	33 · 8	37 · 4	35 · 7	1 · 51
Aberdeen	43 · 5	34 · 2	37 · 8	36 · 2	2 · 51
Leith	46 · 6	34 · 7	39 · 2	37 · 7	1 · 58
Shields	44 · 3	35 · 7	39 · 2	37 · 9	1 · 63
York	45 · 3	34 · 2	38 · 2	37 · 1	1 · 83
Loughborough	46 · 0	34 · 5	38 · 4	37 · 3	2 · 00
Ardrossan	45 · 0	36 · 7	40 · 0	38 · 6	3 · 47
Donaghadee	45 · 8	37 · 0	40 · 7	39 · 7	2 · 71
Holyhead	46 · 1	39 · 3	42 · 3	40 · 8	2 · 90
Liverpool	45 · 3	36 · 9	39 · 9	38 · 3	1 · 85
Parsonstown	47 · 4	36 · 1	40 · 1	38 · 8	2 · 45
Valencia	50 · 2	40 · 8	45 · 1	43 · 4	5 · 29
Roche's Point	48 · 9	40 · 0	43 · 6	42 · 2	4 · 86
Pembroke	46 · 2	40 · 3	43 · 1	41 · 9	3 · 20
Scilly	49 · 7	43 · 7	46 · 9	45 · 3	2 · 98
Jersey	47 · 6	40 · 1	43 · 2	42 · 0	2 · 72
Hurst Castle	46 · 5	37 · 9	41 · 3	40 · 4	2 · 63
Dover	45 · 4	37 · 4	40 · 3	39 · 1	2 · 12
LONDON	46 · 9	36 · 0	39 · 7	38 · 6	1 · 89
Oxford	45 · 9	35 · 9	38 · 8	37 · 7	2 · 06
Cambridge	46 · 4	33 · 9	38 · 3	37 · 3	1 · 60
Yarmouth	43 · 5	35 · 2	38 · 9	38 · 2	2 · 02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·5 ins: to 30·6 ins: in anticyclone lying over the eastern shores of the North Sea and the Baltic.
Lowest, 29·4 ins and less, in a depression lying off our southwest coasts.
Gradients rather steep in the west, moderate over England and the North Sea, slight elsewhere.
Barometer falling decidedly over our Islands and France, but almost steady over Sweden.

TEMPERATURE

Highest, 48° at Valencia, 47° at Scilly and Roche's Point, 46° at Biarritz, 46° at Lisbon, and 41° at Lerwick Hd. and Stornoway.
Lowest, 6° at Haparanda, 12° at Munich, 13° at Haparanda, 20° at Tavoy, 24° at Berlin, 25° at Paris and Stockholm, 26° at Brussels and 27° at Belfort.
In London the minimum temperature on the grass was 24°.

WIND

Strong from the SE.ly or S.ly over the United Kingdom, blowing a gale in exposed places, fresh from E. in Germany, and light or moderate from E. and NE. at the French stations. Over Scandinavia the winds are light and variable.
A strong gale was reported at Wick during the night

WEATHER

Dull at some of the western and northern stations, and in Denmark and the south of France, with snow at Lyons, but fine and bright elsewhere. Rain has fallen at Valencia and Brest and considerable quantities of snow in the Riviera during the past 24 hours.

SEA

Rough on exposed parts of our coasts, moderate in most other places.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the west appears likely to move away in a northerly direction so that strong S.ly and SE.ly winds are probable in most places, with perhaps rain in the extreme west and north.

FORECASTS

For the 24 hours ending at NOON on 13th FEBY 1890.

DISTRICTS.	FORECASTS.
▼ 0 SCOTLAND NORTH	S.ly and SE.ly gales or strong winds; dull, squally, some rain.
▼ 1 SCOTLAND EAST	
2 ENGLAND N.E.	Same as No 5.
3 ENGLAND EAST	
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	SE.ly winds, fresh or strong; fair as a whole, cold.
6 SCOTLAND WEST	SE.ly winds, strong; squally, cloudy, perhaps some showers.
7 ENGLAND N.W.	
8 ENGLAND S.W.	Same as No 5.
9 IRELAND NORTH	SE.ly and S.ly winds, strong, a gale in places; squally, unsettled, some rain.
▼ 0 IRELAND SOUTH	
WARNINGS	The SOUTH CONE was hoisted yesterday in districts 0. 1. and 10.

No's.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.56	37	36	SSE	4	o	4
Sumburgh Head	30.26	44	41	SSE	4	bc	5
Stornoway	30.07	47	46	S	6	bc	5
Aberdeen	30.31	41	38	SSE	4	oq	4
Shields	30.29	40	37	ESE	3	c	3
Ardrossan	30.21	46	44	NE	3	bm	2
Malin Head ...	30.06	46	42	SSE	4	bm	3
Mullaghmore ...	30.03	46	43	SE	6	cm	4
Belmullet	29.96	49	45	SSE	4	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.16	49	43	SSE	1	b	5
Valencia	29.95	51	46	SE	6	b	5
Scilly	30.08	49	47	ESE	6	bc	3
Jersey	30.13	48	45	ENE	3	bm	4
Dungeness	30.21	43	39	ESE	6	b	*
London	30.22	42	39	ESE	4	bm	4
Yarmouth	30.30	41	39	ESE	4	b	?
Rochefort	30.15	51	46	ESE	3	b	

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine generally over western and southern Europe, as well as in Sweden and Finland, cloudy or overcast elsewhere, fair in the Baltic Provinces. Snow at Nice later, rain at Brest and Valencia, and weather becoming squally and unsettled in the northeast of Scotland, continuing fine in other parts of our Islands.

Temperature risen considerably over Scotland and Ireland, fallen over Russia, southwest of France and south of Italy. Reaches 50° at San Fernando and on the Algerian coast only; below 40° in most places, and below the freezing point over all the inland parts of the Continent and England; lowest of all 13° at Hermanstadt, 18° at Kiev and Kharkov; 16° at Hernösand, 17° at Haparanda, 26° at Paris. Rising decidedly in England during the day, falling fast again at night.

Wind still anticyclonic; E. over the northern parts of the Mediterranean, SE. over the Bay of Biscay and western parts of our Islands, S. in Scotland, W. in Lapland and the north of Russia. A cyclonic N. wind prevalent in the south of Italy, Sicily and Malta. SE. wind increasing considerably in force at our western and northern stations later.

Barometer highest 30·4 ins. to 30·6 ins., in an anticyclone covering nearly the whole of Northern, Eastern, and Central Europe, and varying from 30·0 ins. to nearly 30·4 ins. in a "ridge" extending thence across the British Islands. Lowest 29·8 ins. and less in a depression lying over the southeastern parts of the Mediterranean, less than 30·0 ins. off the southwest of Ireland, and less than 30·0 ins. over the White Sea and north of Russia. Falling decidedly in the west and southwest of our Islands later, and gradients for SE. winds increasing over Western Europe generally.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Thursday, 13th February,* 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30·54	15	NE	0	c	30·58	+·18	27	27	+14	SW	4	S	*	?	7	0·04
	Hernösand ...	30·59	24	NE	0	0	30·58	+·04	34	34	+28	SSW	2	0	*	?	8	-
	Stockholm ...	30·61	28	NE	0	0	30·58	-·02	30	29	+5	E	2	S	*	30	19	-
	Wisby	30·56	30	S	4	c	30·51	-·08	30	29	0	S	4	c	*	34	25	-
	Bodö	30·36	36	E	1	b	30·23	-·16	41	37	0	E	4	b	2	41	32	-
	Christiansund	30·28	36	SW	2	b	30·27	-·09	36	33	+7	ESE	1	b	3	36	?	-
	Skudesnaes ...	30·33	31	ESE	2	b	30·28	-·12	34	29	+2	ESE	4	b	4	34	25	-
	Christiania Fjord (Færder)	30·53	25	NNE	2	[illegible]	30·50	-·04	26	25	+6	NNE	3	0	1	?	19	-
	Skagen (The Scaw)	30·45	30	SE	4	b	30·42	-·09	30	?	+1	SE	3	0	3	32	27	-
	Fanö	30·27	30	ESE	6	b	30·19	-·20	29	28	-1	E	6	b	*	32	28	-
BRITISH ISLANDS.	Sumburgh Head	30·03	41	SSE	5	0	30·00	-·13	40	40	-2	SSE	7	0	7	42	38	-
	Stornoway ...	29·70	43	SE	5	b	29·75	-·10	39	38	-3	SE	5	b	4	46	35	-
	Wick	29·91	40	S	8	0	29·90	-·15	41	39	0	S	8	0	7	42	35	-
	Nairn	29·84	38	ESE	4	bc	29·84	-·14	39	37	+2	SE	2	0	2	44	31	-
	Aberdeen ...	29·97	38	SE	6	0	29·90	-·21	38	35	-1	SE	6	0qu	7	40	37	-
	Leith	29·90	36	E	1	c	29·82	-·22	37	34	+1	E	1	0	*	40	33	-
	Shields	29·93	37	SE	5	0	29·81	-·26	38	37	0	ESE	6	0	5	38	35	-
	Spurn Head ...	29·88	37	E	6	c	29·78	-·24	37	35	0	ESE	6	bc	5	38	35	-
	York	29·91	36	E	3	0	29·79	-·30	34	32	0	E	1	0	*	39	32	-
	Loughborough	29·85	34	ESE	2	b	29·75	-·30	30	29	-2	ESE	2	0	*	42	27	-
	Ardrossan ...	29·78	37	ENE	3	b	29·77	-·19	34	34	-1	ENE	3	bm	2	40	31	-
	Malin Head ...	29·53	35	SE	7	bm	29·64	-·10	34	32	-3	SE	5	bm	3	40	33	-
	Mullaghmore ...	29·53	40	E	8	cq	29·61	-·04	36	33	-3	ESE	3	c	4	43	35	-
	Belmullet ...	29·45	39	SE	6	bc	29·59	·00	35	33	-4	SE	3	S	*	45	34	0·37
	Donaghadee ...	29·72	40	SE	5	c	29·72	-·19	38	36	-2	SE	6	c	4	44	36	-
	Liverpool (Bidston)	29·77	38	ESE	4	b	29·71	-·25	31	30	-2	E	3	c	3	37	30	-
	Holyhead	29·68	37	SE	4	cmq	29·64	-·24	32	31	-3	E	4	b	4	44	32	-
	Parsonstown ...	29·52	40	SE	3	c	29·57	-·12	35	33	-5	SE	2	bc	*	44	35	-
	Valencia	29·31	47	ESE	7	rm	29·58	+·11	43	41	-5	NW	6	oq	5	50	41	0·68
	Roche's Point...	29·41	45	SE	8	r	29·45	-·15	42	42	-5	E	4	r	5	47	40	0·55
	Pembroke (St. Ann's Hd.)	29·54	41	ESE	7	c	29·55	-·25	36	36	-4	ESE	6	cpm	5	42	35	-
	Scilly	29·40	45	ESE	8	rm	29·44	-·23	44	43	-3	WNW	9	o	7	49	42	0·27
	Prawle Point ...	29·62	42	ESE	5	o	29·56	-·29	38	37	-2	ESE	5	oq	3	43	37	-
	Jersey (St. Aubin's)	29·66	41	ESE	5	bc	29·60	-·29	37	36	-1	ESE	3	ogpm	3	43	34	0·09
	Hurst Castle ...	29·72	40	ESE	5	b	29·64	-·31	38	35	-1	ESE	4	oq	3	42	35	-
GERMANY & HOLLAND.	Dungeness ...	29·82	37	SE	5	b	29·70	-·30	34	32	+1	SE	5	b	4	39	32	-
	London	29·83	34	ESE	3	b	29·70	-·32	32	30	+2	SE	2	0	*	43	30	-
	Oxford	29·78	33	E	3	b	29·70	-·32	27	26	-2	E	2	bm	*	39	26	-
	Cambridge ...	29·87	36	ESE	2	b	29·78	-·27	30	29	-4	E	1	b	*	44	26	-
	Yarmouth ...	29·92	37	ESE	7	b	29·78	-·31	35	34	0	ESE	7	bc	5	37	33	-
	Cuxhaven ...	30·25	29	ESE	6	b	30·13	-·23	27	26	-4	ESE	6	b	*	31	26	-
	Berlin	30·34	27	ESE	4	b	30·23	-·20	23	22	-1	ESE	4	b	*	32	23	-
	Wiesbaden ...	*	*	*	*	*	29·95	-·21	26	25	-2	NE	2	b	*	36	25	-
	Munich	29·98	21	E	6	b	29·95	-·11	13	12	+1	E	4	b	*	30	12	-
	The Helder ...	30·02	31	ESE	3	b	29·91	-·30	28	27	-3	ESE	2	b	3	34	28	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29·81	-·29	28	27	+2	ESE	2	b	*	38	?	-
	Cape Gris Nez	?	31	ESE	3	b	?	?	27	27	0	ESE	3	b	2	37	27	-
	Paris	29·84	32	S	3	b	29·67	-·32	31	30	+6	SE	1	0	*	41	?	-
	Brest	?	42	SSE	8	r	?	?	46	43	+4	NW	7	0	6	46	41	0·16
	Lorient	29·53	41	SE	6	r	29·63	-·21	42	41	+8	W	4	0	5	46	34	0·55
	Rochefort ...	29·76	1	SE	4	0	29·72	-·23	47	45	+14	WNW	7	c	?	48	32	0·16
	Belfort	?29·85	30	S	1	b	?29·85	-·02	30	22	+3	SSE	1	S	*	32	?	-
	Lyons	29·85	33	ENE	4	0	29·86	-·03	33	29	+5	S	4	c	*	33	?	0·12
	Nice	30·04	31	E	4	c	30·02	+·01	31	?	+2	E	4	c	4	36	28	-
	Perpignan ...	29·88	43	NE	3	0	29·95	+·07	38	36	0	W	3	r	*	53	36	0·04
	Biarritz	29·69	53	SW	4	r	29·89	+·04	51	46	+5	W	8	r	7	57	43	0·12
PENINSULA.	Coruña	*	*	*	*	*												
	Lisbon	30·01	52	N	3	0	30·07	+·07	47	45	+2	N	1	c	?	57	43	0·35

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Thursday, 13th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

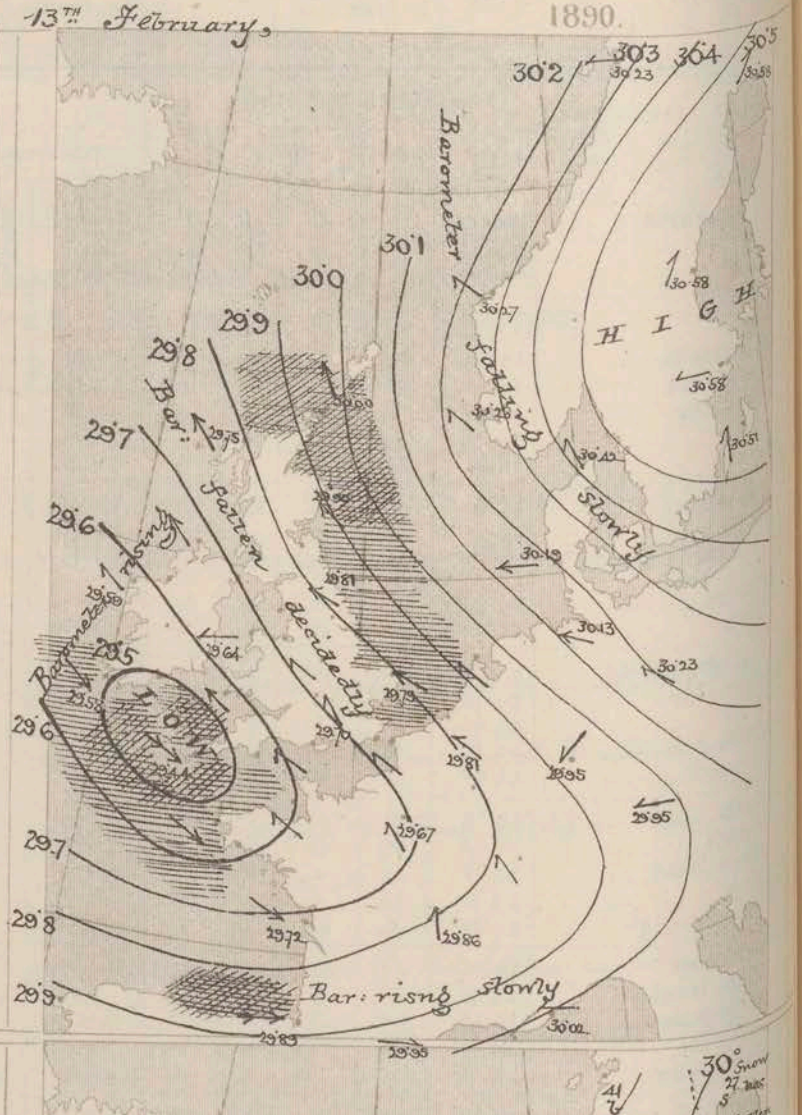
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟫⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

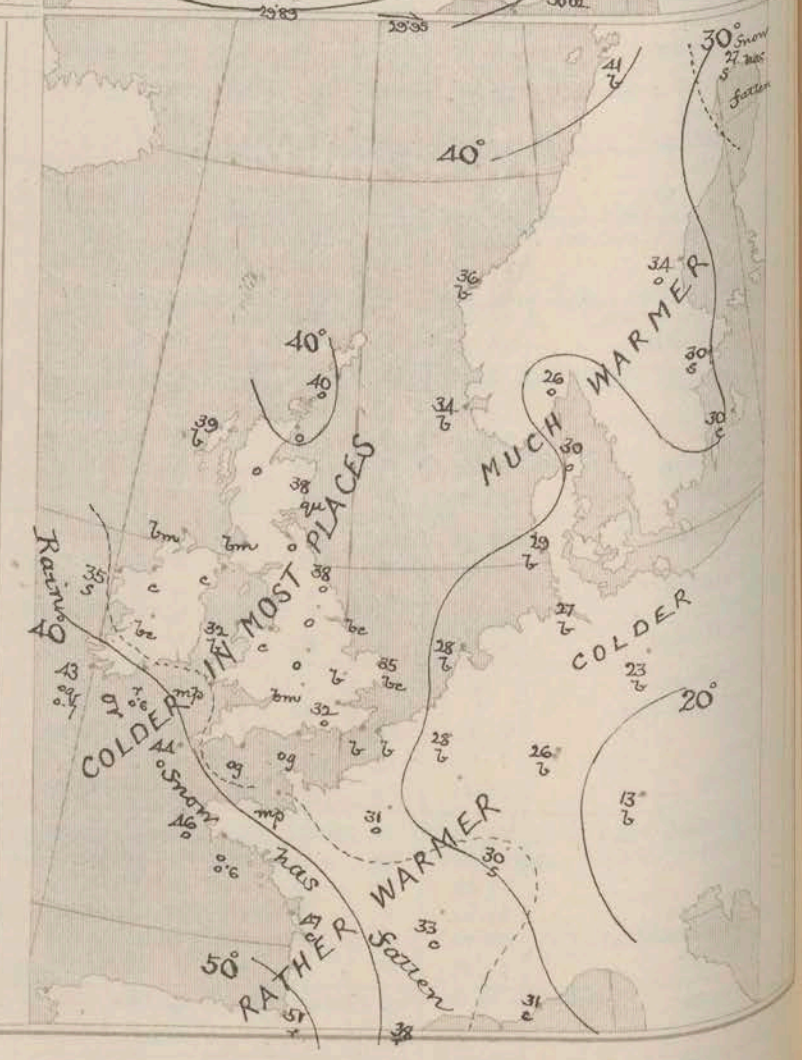
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·39
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, { 30·3 in: to 30·6 in: in an anticyclone covering the north of Russia and Scandinavia.
30·0 in: and more, over Portugal and the southwestern part of Spain.

Lowest, 29·5 in: and less, in a depression lying at the mouth of St George's Channel.

Gradients moderate, for NW^ly winds over the Bay of Biscay and the southeast of our Islands, for SE^ly winds over the North Sea, Denmark & Norway.

Barometer rising decidedly in extreme southwest and west, falling in northeast.

TEMPERATURE

Highest, 51° at Biarritz, 47° at Lisbon and Rochefort, 46° at Brest, 44° at Scilly, 43° at Valencia and 41° at Bodö.

Lowest, 13° at Munich, 23° at Dublin, 26° at Wiesbaden, 27° at Haparanda and Cuxhaven, 28° at the Helder and Brussels, 31° at Paris and 32° in London.

It has risen decidedly over France, especially at the western stations – rapidly in Sweden.

WIND

SE^ly over the North Sea and greater part of our Islands, fresh to a gale in force.

NW^ly, strong to a strong gale at our extreme southwestern stations and in the west of France.

E^ly in Norway and Denmark, SW^ly in the north of Sweden.

Very variable in the southern parts of France.

WEATHER

More cloudy than of late, though still clear in several localities.

Squally and threatening in the east of Scotland, squally and raining at several southwestern stations.

Rain and snow have fallen in several parts of Ireland and France.

SEA

High off the north and east coasts of Scotland and at Scilly and Biarritz, rather rough on exposed parts of most of our coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The present movement of the depression in the southwest is somewhat uncertain: weather seems likely to become much less fair than of late.

FORECASTS

For the 24 hours ending at NOON on 14TH FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SE^ly winds, strong, a gale at times; squally, some showers.
1 SCOTLAND EAST	
2 ENGLAND N.E.	
3 ENGLAND EAST	
4 MIDLAND COUNTIES	SE^ly to E^ly winds; fair as a whole. Very cold tonight
5 ENGLAND SOUTH	
6 SCOTLAND WEST	SE^ly winds, moderate; fair, cold.
7 ENGLAND N.W.	
8 ENGLAND S.W.	Conditions too uncertain to admit of forecast.
9 IRELAND NORTH	Same as No^s 6 and 7.
0 IRELAND SOUTH	Same as No 8
WARNINGS	The signals are up except in district 6.

No^s.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.37	34	31	SE	2	b	3
Sumburgh Head	30.06	41	40	SSE	5	o	6
Stornoway	29.75	46	44	SE	6	b	5
Aberdeen	30.02	39	35	SE	6	o q	6
Shields	29.96	38	35	SE	4	o	4
Ardrossan	29.84	40	38	ENE	3	bc	2
Malin Head ...	29.67	39	36	SE	5	o	3
Mullaghmore ...	29.66	43	39	ESE	8	bc	6
Belmullet	29.49	45	43	SE	6	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.74	42	37	SE	3	b	2
Valencia	29.33	50	48	ESE	8	r m	6
Scilly	29.47	48	46	ESE	8	o m	6
Jersey	29.75	43	38	SE	4	b	3
Dungeness	29.87	39	36	SE	5	b	3
London	29.87	40	36	ESE	3	b m	5
Yarmouth	29.98	37	35	ESE	6	b	3
Rochefort	29.86	44	39	ESE	4	c	

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather dull in the northeast of Great Britain, as well as over Central Russia and the southern parts of France and Switzerland, snow falling at Lyons, Toulon, Marseilles and Tarein. Fine in nearly all other localities, but foggy over the Gulf of Finland, and also in the Christiania Fiord

Temperature highest 45° to 50° or a little more on the coasts of the Iberian Peninsula and the southern shores of the Mediterranean (Corunna and Algiers 53°, Oran 50°, Barcelona and Malta 49°) — Lowest 5° at Hermanstadt, 6° at Haparanda, 7° at Kuopio, 10° at Nicolaieff, 12° at Munich, and 13° at Haparanda; below the freezing point at nearly all the Continental stations, as well as over Central England.

Wind SE. in our Islands and their immediate neighbourhood; strong in force in many places, with a moderate gale on the extreme southwestern, western, and northern coasts. Light from between E. and N. over the greater part of southern and central Europe; S. on the Algerian coasts, calm or variable over the northern parts of Scandinavia and Russia.

Barometer highest, 30.4 ins: and upwards, in a large anticyclone lying over Scandinavia, Russia and the Baltic; highest, 30.4 and upwards, in another system lying over the southern parts of the Iberian Peninsula. Lowest, 29.5 ins: and less, in a depression lying to the southwestward of Ireland; gradients rather steep over the western parts of the United Kingdom. Barometer falling at all but the Russian stations. Depression in southwest subsequently spreading eastwards, and barometer falling decidedly in our Islands.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Friday, 14th February, 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda	30.63	27	SW	2	0	30.62	+.04	26	25	-1	S	2	0	*	30	12	0.04
	Hernösand	30.65	26	NNW	2	0	30.62	+.04	28	27	-6	S	2	0	*	?	21	-
	Stockholm	30.53	29	E	4	0	30.58	.00	30	28	0	SE	2	0	*	32	27	-
	Wisby	30.52	29	SE	4	0	30.55	+.04	29	28	-1	SE	4	0	*	32	27	-
	Bodö	30.38	34	E	2	b	30.30	+.07	34	31	-7	ENE	2	b	1	41	30	-
	Christiansund	30.23	33	E	2	b	30.15	-.12	36	32	0	ESE	4	b	3	36	32	-
	Skudesnaes	30.20	36	ESE	4	b	30.21	-.07	36	31	+2	SE	8	0	5	37	32	-
	Christiania Fjord (Færder)	30.48	27	NNE	5	0	30.42	-.08	32	30	+6	ESE	4	0	7	?	?	-
	Skagen (The Scaw)	30.35	35	SE	5	0	30.36	-.06	32	31	+2	SSE	4	0	3	?	30	-
	Fanö	30.15	30	E	6	0	30.19	.00	29	28	0	E	6	b	*	37	28	-
BRITISH ISLANDS.	Sumburgh Head	29.95	40	SSE	7	0	29.92	-.08	39	38	-1	SSE	5	0	7	41	37	0.10
	Stornoway	29.73	40	SE	6	ops	29.77	+.02	39	39	0	S	6	0	5	43	35	-
	Wick	29.81	38	S	7	0	29.83	-.07	39	37	-2	S	4	c	4	43	35	0.03
	Nairn	29.79	45	SE	1	c	29.86	+.02	31	29	-8	Z	0	c	1	43	29	-
	Aberdeen	29.86	38	SE	5	cqu	29.93	+.03	36	33	-2	S	1	om	5	39	35	0.01
	Leith	29.80	35	E	1	c	29.90	+.08	34	32	-3	S	1	bcm	*	39	33	-
	Shields	29.83	38	ESE	4	0	29.94	+.13	35	33	-3	Z	0	m	4	40	32	-
	Spurn Head	29.83	38	SE	4	bc	29.90	+.12	40	38	+3	E	2	0	3	40	34	-
	York	29.81	36	E	1	0	29.93	+.14	32	31	-2	N	1	0	*	41	31	-
	Loughborough	29.79	32	E	1	m	29.91	+.16	33	32	+3	NE	1	om	*	38	30	-
	Ardrossan	29.77	36	ENE	3	0	29.87	+.10	34	33	0	NE	2	om	1	39	33	-
	Malin Head	29.69	35	SSE	3	om	29.77	+.13	34	33	0	SSE	3	b	2	39	33	-
	Mullaghmore	29.69	38	SSE	2	om	29.78	+.17	38	36	+2	ESE	4	og	3	41	33	-
	Belmullet	29.68	37	SSE	2	0	29.73	+.14	37	36	+2	SSE	2	bc	*	37	34	0.17
	Donaghadee	29.76	36	SW	2	bc	29.86	+.14	32	32	-6	SW	3	bc	1	39	31	-
	Liverpool (Bidston)	29.79	33	ESE	1	b	29.92	+.21	31	30	0	SE	1	bc	2	37	31	-
	Holyhead	29.75	36	E	1	cm	29.89	+.25	33	32	+1	Z	0	m	0	39	32	-
	Parsonstown	29.73	35	Z	0	0	29.80	+.23	36	35	+1	Z	0	0	*	38	30	0.07
	Valencia	29.78	42	WNW	3	bc	29.83	+.25	42	40	-1	W	2	cph	3	47	37	0.23
	Roche's Point	29.73	41	NNW	4	bc	29.81	+.36	42	42	0	W	2	r	4	43	36	1.55
	Pembroke (St. Ann's Hd.)	29.70	39	ESE	4	c	29.91	+.36	34	33	-2	E	2	bc	3	40	33	0.01
	Scilly	29.74	47	NNW	9	og	29.88	+.44	45	42	+1	Z	0	0	5	48	43	0.09
	Prawle Point	29.69	39	NNW	3	r	29.93	+.37	33	33	-5	N	2	ogm	3	47	32	0.11
	Jersey (St. Aubin's)	29.74	46	WSW	5	qcm	29.92	+.32	38	37	+1	NW	2	cm	2	49	36	0.13
	Hurst Castle	29.72	42	ESE	3	odm	29.91	+.27	38	36	0	NNE	2	om	2	42	35	-
GERMANY & HOLLAND.	Dungeness	29.77	39	S	4	0	?29.89	+.19	43	43	+9	SW	5	r	4	44	33	0.11
	London	29.78	37	SSE	2	0	29.86	+.16	38	37	+6	NW	1	og	*	42	32	0.04
	Oxford	29.79	34	SE	2	0	29.91	+.21	33	33	+6	N	1	0	*	38	27	0.01
	Cambridge	29.80	36	E	1	0	29.90	+.12	35	34	+5	NW	1	0	*	44	28	-
	Yarmouth	29.83	37	SSE	5	c	29.88	+.10	39	39	+4	SE	3	ogm	4	39	34	-
	Cuxhaven	30.13	30	ESE	6	b	30.17	+.04	26	25	-1	SE	4	b	*	31	25	-
	Berlin	30.22	28	SE	3	0	30.31	+.08	22	21	-1	ESE	3	b	*	30	21	-
	Wiesbaden	*	*	*	*	*	30.16	+.21	33	31	+7	NE	1	0	*	39	?	-
	Munich	30.02	24	Z	0	b	30.19	+.24	20	19	+7	SSE	3	bc	*	34	12	-
	The Helder	29.93	35	ESE	2	b	30.00	+.09	34	33	+6	SE	1	c	1	36	28	?
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.00	+.19	38	37	+10	? SSE	3	b	*	41	?	-
	Cape Gris Nez	?	36	ESE	2	0	?	?	38	37	+11	S	4	0	3	39	27	-
	Paris	29.88	39	S	1	0	30.02	+.35	32	32	+1	ENE	1	b	*	40	?	-
	Brest	29.88	47	NW	6	0	29.90	?	43	42	-3	E	2	0	4	52	37	0.12
	Lorient	29.89	46	WNW	5	bc	29.93	+.30	42	41	0	E	1	0	5	48	39	-
	Rochefort	30.04	47	WNW	6	c	30.05	+.33	40	40	-7	SE	3	0	?	52	34	-
	Belfort	?29.90	35	N	1	0	?30.10	+.25	37	29	+7	N	1	0	*	38	27	0.08
	Lyons	30.04	37	S	8	0	30.19	+.33	32	31	-1	SSW	2	bc	*	45	31	0.04
	Nice	30.05	36	SSW	4	c	30.17	+.15	36	32	+5	ENE	4	0	1	41	?	-
	Perpignan	30.13	41	Z	0	c	30.15	+.20	38	37	0	SW	2	bc	*	45	36	-
	Biarritz	30.10	50	WNW	4	0	29.95	+.06	45	42	-6	SE	3	0	5	55	41	0.35
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.06	56	SSW	4	c	30.00	-.07	54	53	+7	SSE	3	0	6	57	?	-

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Friday, 14th February, 1890.

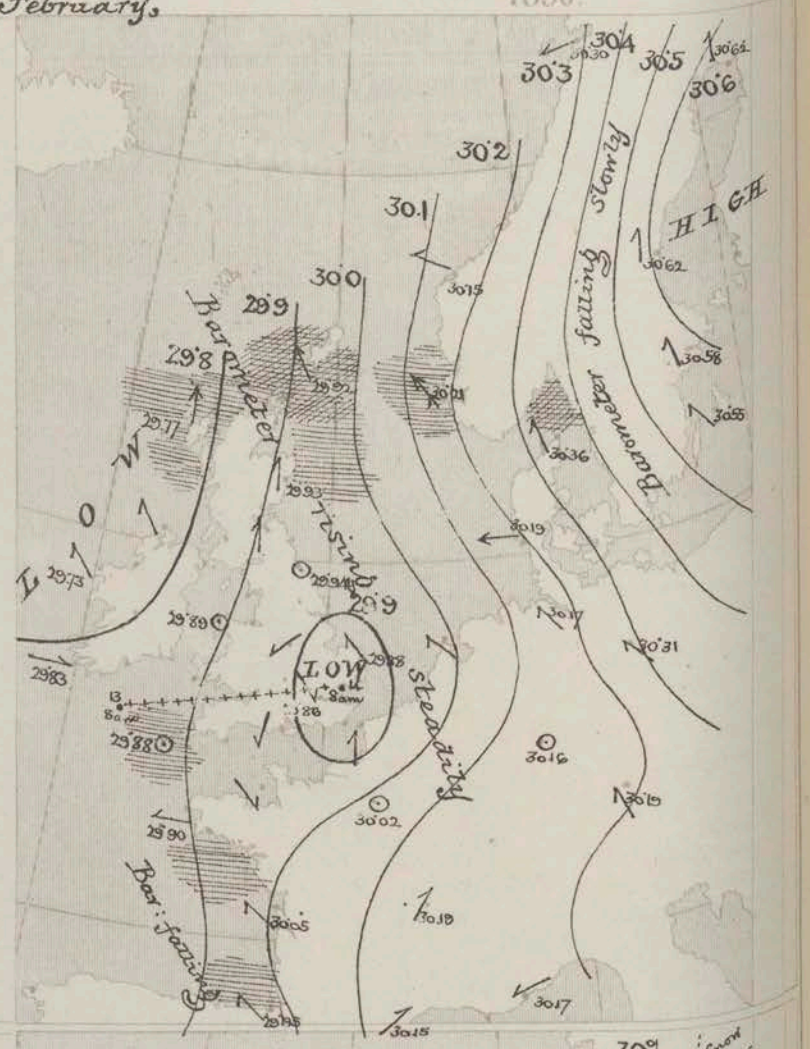
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February. During the 15 Years: 1871—1885.

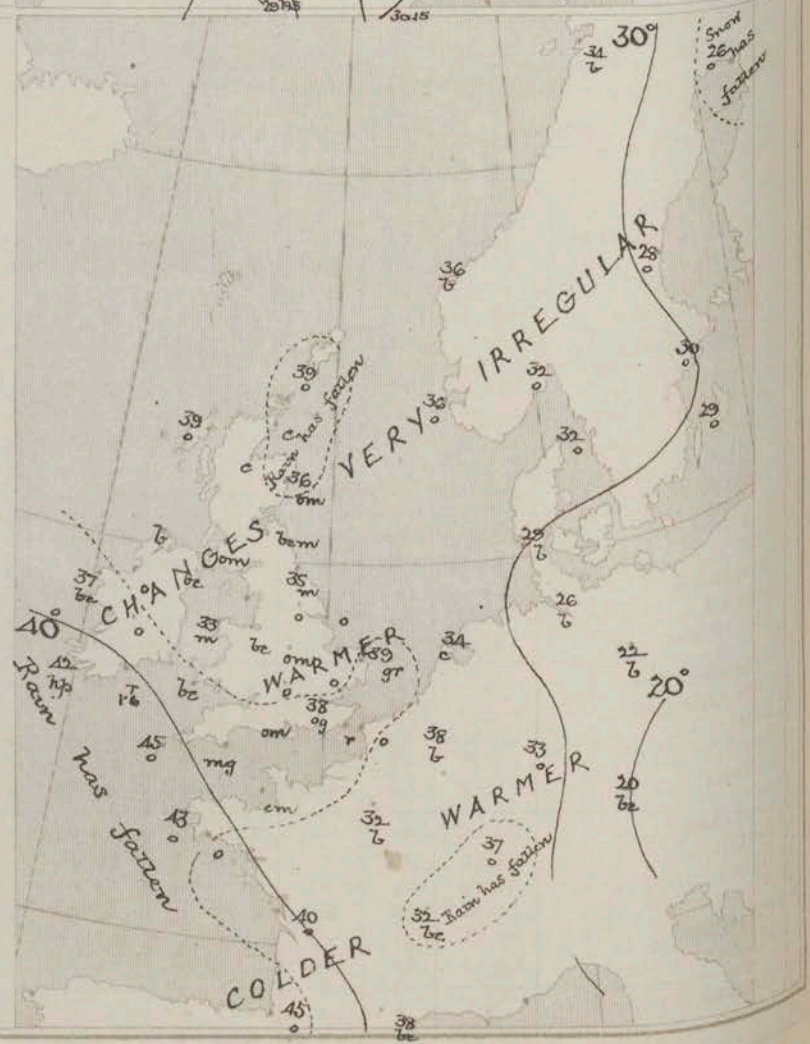
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·718
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	39·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE. The Temperature means are for the 15 years 1871-85; the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·4 ins: to 30·6 ins: and more, in a depression lying over the Baltic and Northern Europe, and about 30·2 ins: over the north of Italy.
Lowest, about 29·7 ins: off our extreme western coasts; 29·3 ins: and less, over the eastern counties of England.
Gradients slight and variable except in the far north, where they are moderate for S^ly winds.
Barometer falling again over Spain and the southwest of France, unsteady in the south of Ireland, rising over England.

TEMPERATURE

Highest, 54° at Lisbon, 45° at Biarritz and Scilly, 43° at Dungeness, 42° at Valencia and Rochebonne.
Lowest, 20° at Munich, 22° at Berlin, 26° at Cuxhaven and Haparanda, and 29° at Donaueschingen.
At Paris the reading is 32° and in London 38°.

WIND

Still strong from S and SE. at our most northern stations, and blows a gale from SE. at Shetland; over Ireland and England it has become light and very variable, while in the west of France it is light from SE. and E.
At Babbacombe the sky is covered with Cirrus moving very quickly from WSW.

WEATHER

Still fine and bright over Central France and North Germany, much more cloudy than of late elsewhere, with heavy rain and some hail in the south of Ireland.
Rain has fallen at all our southwestern and southern stations, and slight showers in some parts of Scotland.

SEA

Rough in the far north (high at some stations) and also over the Bay of Biscay moderate to smooth elsewhere. At Dungeness it is moderate and at Holyhead smooth.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Although the wind is at present very quiet there are some indications that a fresh disturbance is approaching our southwestern coasts from the Atlantic. The conditions are therefore far from being settled.

FORECASTS

For the 24 hours ending at NOON on 15th FEBY. 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E.	SE^ly and S^ly winds, increasing in force again; fair to rainy and unsettled.	6 SCOTLAND WEST 7 ENGLAND N.W.	Same as Nos. 0 to 2.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	Wind shifting to SE. or S. again, light and fair at first, less settled later.	8 ENGLAND S.W. 9 IRELAND NORTH 0 IRELAND SOUTH	SE^ly or S^ly winds, increasing with squally, rainy weather.
		WARNINGS	NONE ISSUED AT PRESENT.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...							
Sumburgh Head	29.98	40	37	SSE	7	o	7
Stornoway	29.74	41	40	SE	6	c	5
Aberdeen	29.87	39	35	SE	5	c q p r s	7
Shields	29.78	39	35	ESE	6	c	5
Ardrossan	29.75	38	36	ENE	3	o	2
Malin Head ...	29.66	38	34	SSE	4	c	2
Mullaghmore ...	29.64	40	35	SE	4	c	3
Belmullet	29.63	35	34	SSE	3	o	*
Holyhead	29.68	39	34	NNE	1	b	1
Valencia	29.71	45	43	NW	5	o q p	5
Scilly	29.62	45	43	WNW	10	c q	8
Jersey	29.66	47	45	W	4	b c	3
Dungeness	29.71	39	37	S	4	c	4
London	29.72	40	36	ESE	4	b c m	*
Yarmouth	29.76	37	35	SE	4	c	4
Rochefort	29.93	49	46	WSW	6	c	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather still fine and bright over Norway, Denmark, Germany, many parts of England, and Spain; cloudy or overcast elsewhere, and less fair than of late in many places. Heavy rain falling at Roche's Point, showers at several other of our southwestern stations and in the southwest of France, snow at Belmullet, Haparanda, and even at Toulon. Rain at all our southwestern and southern stations later, but heavy at Roche's Point only; slight hail showers at some Scotch stations.

Temperature rises rapidly over Sweden and Finland, less decidedly in France and Spain. Highest 50° and more at Malta, Algiers and Barcelona only, 48° at Corunna, 47° at Lisbon and Rochefort, 46° at Brest, 44° at Scilly, and 43° at Valencia; below the freezing point all over Russia, Germany, Central France and our south midland counties, lowest being (1.) 11° at Kuopio and Moscow, 18° at Nicolaieff, 19° at Archangel, Kharkov, Kiev, Odessa, and Cracow; (2) 13° at Munich, 20° at Vienna and Prague, 23° at Berlin and 26° at Wiesbaden.

Wind W^{1} over Spain, NW^{1} over the Bay of Biscay, at Scilly and Valencia, and blowing a gale in most places; still E^{4} to SE^{4} over Germany, the North Sea, Great Britain, and the north of Ireland — strong to a gale — S^{3} in Sweden, NW^{3} (light) over Russia. Moderate to a gale from E. in the south of France, variable elsewhere. SE^{5} wind decreasing in force later on, but WNW^{3} gale continuing at Scilly till 8 p.m.

Barometer, highest, 30·4 ins. to 30·7 ins. in an anticyclone covering Sweden, the Baltic and northern half of Russia, 29·8 ins. to 30·1 ins. over Spain. Lowest (apparently) off our extreme western coast, but 29·5 ins. and less, in a local depression at mouth of St. George's Channel, and 29·9 ins. in a shallow system over the Mediterranean. Depression off southwest coast moving eastward later, and barometer rising fast.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Saturday, 15th February, 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30.58	13	S	4	0	30.48	-.14	19	19	-7	S	4	0	*	30	10	0.04
	Hernösand ...	30.56	31	S	4	0	30.49	-.13	29	27	+1	SSW	4	0	*	34	23	-
	Stockholm ...	30.58	30	SE	2	0	30.51	-.07	30	28	0	SE	2	0	*	34	28	-
	Wisby	30.56	30	SW	3	0	30.47	-.08	28	27	-1	SSE	4	0	*	30	27	-
	Bodö	30.25	32	ENE	2	b	30.29	-.01	30	28	-4	ENE	2	0	2	37	25	-
	Christiansund	30.25	33	ESE	4	b	30.20	+.05	34	30	-2	ESE	4	c	3	41	30	-
	Skudesnaes ...	30.21	37	SE	8	0	30.19	-.02	35	31	-1	ESE	4	0	4	37	32	-
	Christiania Fjord (Fierder)	30.44	31	SE	3	0	30.35	-.07	31	30	-1	ESE	3	0	1	32	30	-
	Skagen (The Scaw)	30.38	31	SE	3	0	30.28	-.08	31	30	-1	SE	3	0	3	32	30	-
	Fanö	30.21	30	SE	5	b	30.12	-.07	28	27	-1	ESE	6	0	*	?	28	-
BRITISH ISLANDS.	Sumburgh Head	29.95	38	SSE	3	0	29.95	+.03	39	38	0	Z	0	0	6	41	34	0.24
	Stornoway ...	29.83	38	SW	3	bc	29.87	+.10	30	30	-9	NE	2	be	3	42	27	-
	Wick	29.90	38	S	5	b	29.91	+.08	34	32	-5	W	2	0	7	42	32	-
	Nairn	29.90	30	Z	0	c	29.89	+.03	22	22	-9	Z	0	bc	0	42	21	-
	Aberdeen ...	29.95	36	SSE	1	c	29.93	.00	32	31	-4	WNW	1	0 pm	4	41	31	0.01
	Leith	29.92	37	ENE	1	b	29.88	-.02	34	33	0	W	1	f	*	41	27	-
	Shields	29.92	39	ESE	2	bc	29.80	-.14	41	40	+6	ESE	3	f	4	42	33	0.08
	Spurn Head ...	29.88	41	SE	2	0	29.75	-.17	41	39	+1	E	4	r	3	44	39	0.01
	York	29.92	41	NE	1	0	29.78	-.15	40	39	+8	NE	1	r	*	43	32	0.04
	Loughborough	29.90	39	N	1	0	29.71	-.20	38	37	+5	E	2	r	*	41	33	0.13
	Ardrossan ...	29.88	36	NE	1	0	29.85	-.02	32	32	-2	NE	3	cf	2	38	31	-
	Malin Head ...	29.77	36	SE	4	0	29.80	+.03	34	33	0	S	3	b	1	40	32	0.03
	Mullaghmore ...	29.77	39	S	2	bc	29.79	+.01	34	33	-4	E	4	bc	3	43	33	0.01
	Belmullet ...	29.74	41	W	3	b	29.78	+.05	36	35	-1	E	1	b	*	43	33	0.23
	Donaghadee ...	29.85	42	S	2	c	29.83	-.03	39	38	+7	ENE	2	0	0	42	32	0.01
	Liverpool (Bidston)	29.89	36	ESE	1	b	29.73	-.19	37	36	+6	NNE	2	0	3	40	31	-
	Holyhead ...	29.86	39	SSE	1	0	29.77	-.12	40	39	+7	NE	3	ogm	2	44	33	-
	Parsonstown ...	29.82	38	Z	0	b	29.83	+.03	28	28	-8	Z	0	c	*	42	28	0.07
	Valencia	29.88	42	WNW	3	bc	29.85	+.02	42	38	0	WNW	2	c	2	48	37	0.06
	Roche's Point ...	29.84	42	NW	4	b	29.83	+.02	35	33	-7	N	2	b	3	44	33	0.15
	Pembroke (St. Ann's Hd.)	29.84	39	E	3	m	29.74	-.17	39	38	+5	NNE	2	cm	1	42	33	-
	Scilly	29.79	45	NE	3	0	29.76	-.12	44	42	-1	NNW	7	c	5	47	42	-
	Prawle Point ...	29.82	37	ENE	3	0	29.63	-.30	36	36	+3	NNW	4	ogm	2	39	33	0.14
	Jersey (St. Aubin's)	29.81	43	E	3	r	29.47	-.45	40	39	+2	NW	6	orm	5	45	37	1.17
	Hurst Castle ...	29.91	38	NNE	2	0	29.50	-.41	36	35	-2	NE	6	dm	4	41	34	0.50
	Dungeness ...	29.86	42	W	3	m	29.51	-.38	41	40	-2	SE	6	c	5	43	37	0.43
	London	29.88	41	NE	1	gmd	29.53	-.33	36	35	-2	NE	4	rs	*	41	34	0.54
	Oxford	29.87	38	Z	0	0	29.60	-.31	35	35	+2	N	4	ogrs	*	42	33	0.29
	Cambridge ...	29.87	40	NE	1	0	29.62	-.28	37	36	+2	NE	3	r	*	41	33	0.23
	Yarmouth ...	29.90	40	SSE	4	c	29.70	-.18	38	37	-1	E	6	ogr	5	41	37	0.12
GERMANY & HOLLAND.	Cuxhaven ...	30.20	30	ESE	4	b	30.10	-.07	27	26	+1	ESE	5	c	*	31	?	-
	Berlin	30.30	30	ESE	4	b	30.22	-.09	22	21	0	SE	4	bc	*	36	21	-
	Wiesbaden ...	*	*	*	*	*	29.96	-.20	32	29	-1	NE	3	b	*	39	30	-
	Munich	30.13	26	E	1	b	29.99	-.20	18	18	-2	SE	3	b	*	37	16	-
	The Helder ...	30.01	36	SE	1	b	29.84	-.16	34	33	0	E	2	c	3	41	34	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.71	-.29	38	36	0	ESE	1	0	*	46	36	0.04
	Cape Gris Nez	?	39	ESE	3	0	?	?	38	36	0	SE	5	0	3	41	37	0.28
	Paris	29.94	44	SE	2	bc	29.60	-.42	47	42	+15	SSE	4	0	*	48	?	-
	Brest	? 29.63	40	E	5	r	? 29.75	-.15	44	42	+1	NNW	7	0	7	52	41	1.10
	Lorient	29.54	41	E	7	r	29.67	-.26	42	40	0	NW	6	0	5	46	36	0.91
PENINSULA.	Rochefort ...	29.75	49	SSE	5	0	29.82	-.23	46	44	+6	WNW	7	r	?	50	39	0.04
	Belfort	? 30.00	37	N	1	b	? 29.85	-.25	38	31	+1	SW	1	s	*	43	30	-
	Lyons	30.02	42	S	3	b	29.86	-.33	44	41	+12	S	5	r	*	48	?	-
	Nice	30.16	39	SSW	2	b	30.09	-.08	37	32	+1	NE	4	0	1	45	32	-
	Perpignan ...	29.95	45	NE	2	b	? 29.93	-.22	48	44	+10	NW	3	0	*	54	?	-
	Biarritz	29.73	61	SSE	5	0	29.95	.00	48	46	+3	W	6	r	5	64	45	0.20
	Corunna	*	*	*	*	*												
	Lisbon	29.99	51	NNW	5	c	30.13	+.13	46	44	-8	N	4	b	4	59	46	0.08

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Saturday, 15th February 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

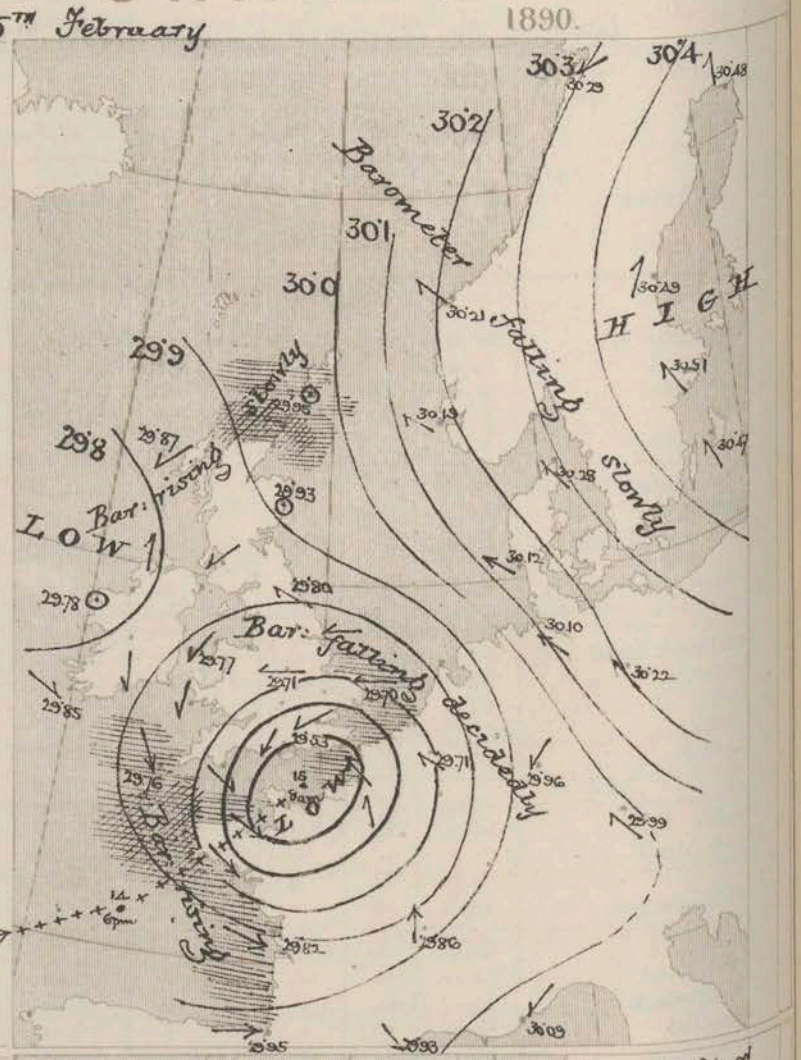
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

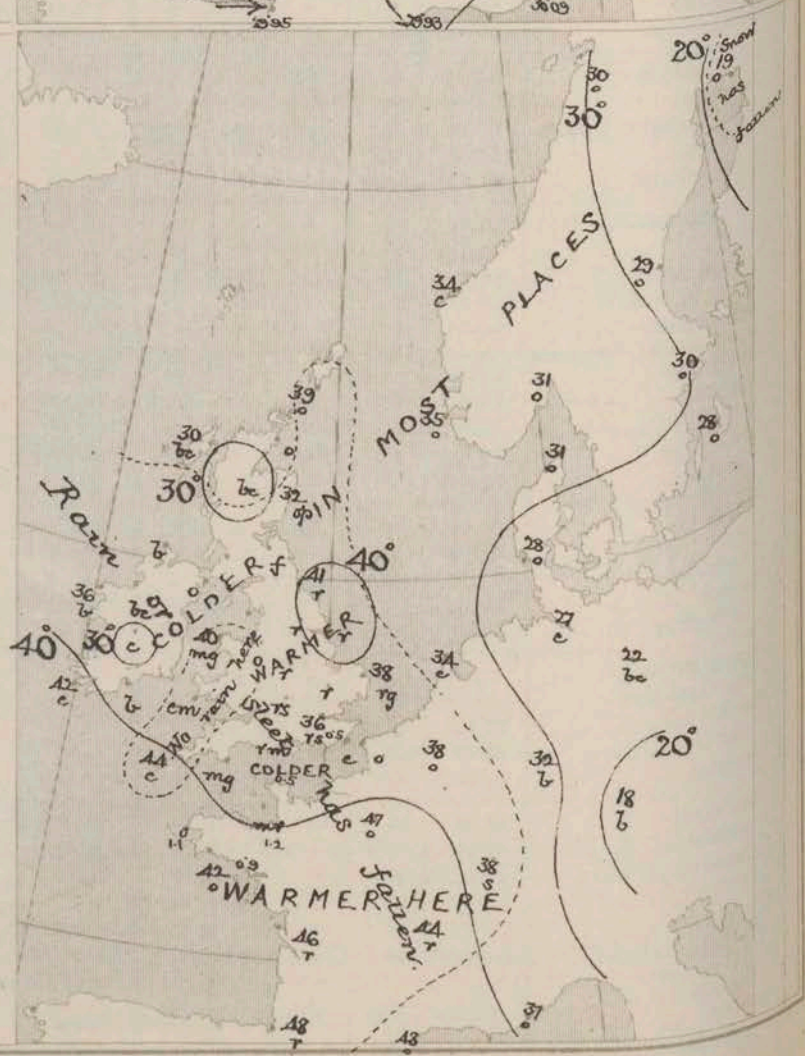
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·29
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·0	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·66
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·2 ins: to 30·5 ins: over Norway and Sweden, and apparently still higher over Finland and the Baltic Provinces
Lowest, 29·8 ins: and less, off the west of Ireland; 29·5 ins: and less, in a depression over the English Channel.
Gradient rather steep and variable in the south, moderate in the east, slight in the north.
Barometer falling steadily on our south and east coasts, rising again over France. In NW. Ireland and W. Scotland it is rising very slowly.

TEMPERATURE

Highest, 48° at Biarritz, 46° at Lisbon, and Rochefort, 44° at Scilly, 42° at Valencia.
Lowest, 18° at Munich, 19° at Haparanda, 22° at Berlin and Nairn, 27° at Inverness, 28° at Parsonstown, 29° at Kew and 32° at Wiesbaden and Aberdeen, 35° at Oxford, 36° in London.
It has changed very fitfully at the French stations since yesterday.

WIND

Very light and variable in Ireland and Scotland, NE. to NW. over England (strong at the southern stations.)
NW., strong to gale in the west and northwest of France
SE. in the Straits of Dover, SE. to E. over the North Sea.

WEATHER

Fine in Ireland, the west and north of Scotland and in Germany, rain over England and the Channel, with wet snow at times over the southern districts.
The amount of rainfall measured this morning is 1·2 ins: at Jersey, 0·9 in: at Lorient, and 0·5 in: at Dungeness and in London.

SEA

Rough in the Channel and on the east coast, moderate in the west, but a high ground swell was rolling in at Wick.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the depression moves northwards the wind is likely to back to the northwestward over the south of England, and subsequently fall light, with dry and very cold weather.

FORECASTS

For the 24 hours ending at NOON on 16th FEBY. 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E.	Varying and NE. to NW. winds; rain and wet snow.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	NE. to NW. winds, strong to moderate; rain and wet snow, improving later. Very cold in morning.
6 SCOTLAND WEST 7 ENGLAND N.W.	Variable light winds; fair as a whole. Cold.
8 ENGLAND S.W.	NW. to W. winds, falling light; cold
9 IRELAND NORTH 0 IRELAND SOUTH	Varying airs; fair cold, foggy later.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.23	36	32	SE	8	0	5
Sumburgh Head	29.92	40	39	SSE	5	0	7
Stornoway	29.80	42	41	SW	5	c	4
Aberdeen	29.93	41	36	SSE	2	bc	5
Shields	29.91	41	39	ESE	2	bm	4
Ardrossan	29.89	38	37	NE	2	0	1
Malin Head ...	29.78	37	37	SSE	3	0	2
Mullaghmore ...	29.75	40	39	SE	4	op	2
Belmullet	29.73	40	39	SSW	4	0	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.88	42	38	SSE	1	cm	1
Valencia	29.85	45	43	NNW	3	c ph	4
Scilly	29.83	47	44	ENE	1	0	5
Jersey	29.88	44	42	NE	2	0	2
Dungeness	29.84	41	41	NW	5	f	4
London	29.88	41	40	N	1	o g f	*
Yarmouth	29.89	41	40	SE	4	cm	4
Rochefort	29.90	47	45	SE	5	0	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over Italy, the northern parts of France, the greater part of Germany, and the northern half of Norway; cloudy or overcast in nearly all other places, unsettled in the southwest, south, and southeast of our Islands, with hail and rain in the south of Ireland and slight rain in the southeast of England. Rain setting in over France later, solar halos seen in several places and weather unsettled in the south generally.

Temperature changing somewhat fitfully over Western Europe; morning readings exceeding 50° on the Algerian and Spanish coasts only, and exceeding 40° in the south of Italy, west of France and southwest of the British Isles, below the freezing point over northern, eastern and Central Europe, and as low as 5° at Archangel, 8° at Kuopio, 12° at Uleaborg; 15° at Nicolaieff, 17° at Hermanstadt and Cracow, 19° at Lemberg and Breslau, 20° at Vienna and Munich. Rising fast over France later.

Wind very variable, SE over Scandinavia, the Baltic, and eastern shores of the North Sea, as well as in the north of Ireland, S in Scotland; very light and variable over England, France, and the southwest of Ireland. S winds, belonging to a new system, setting in at Lisbon and Corunna, and spreading to France later, light E breezes appearing over the Channel.

Barometer highest, 30.3 ins: to 30.8 ins: in a large anticyclone covering the northern half of Russia, Scandinavia, eastern Germany and Austria Hungary. Lowest, 29.8 ins: and less, off the northwest of Ireland and northwest of Spain, and about 30.0 ins: in the extreme south of Italy. Well formed, but not deep, depression advancing northeastward over the Bay of Biscay later, and increasing in intensity.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 16th FEBY. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. **R. H. SCOTT**, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30·46	22	S	4	s	30·36	− ·12	26	26	+ 7	S	2	o	*	?	10	0·04
	Hernösand ...	30·39	30	SSW	2	o	30·36	− ·13	28	28	− 1	S	2	o	*	34	27	—
	Stockholm ...	30·13	29	SE	2	o	30·33	− ·18	30	28	o	SSE	2	o	*	32	27	—
	Wisby	30·36	30	SSE	4	r	30·28	− ·19	30	28	+ 2	SE	6	o	*	30	25	—
	Bodö	30·25	31	E	2	o	30·31	+ ·02	27	24	− 3	E	2	s	1	32	27	—
	Christiansund	30·14	33	ESE	3	b	30·10	− ·10	29	26	− 5	ESE	3	b	2	37	28	—
	Skudesnaes ...	30·08	36	ESE	4	b	29·99	− ·20	35	29	o	ESE	8	c	5	41	34	—
	Christiania Fjord (Færder)	30·24	31	NNE	3	o	30·21	− ·14	30	28	− 1	NE	4	o	1	31	28	—
	Skagen (The Scaw)	30·16	30	SE	4	o	30·14	− ·14	31	30	o	SE	4	o	3	32	31	—
	Fanö	29·93	29	ESE	6	o	29·90	− ·22	29	29	+ 1	ESE	6	s	*	30	27	—
BRITISH ISLANDS.	Sumburgh Head	29·95	40	SSE	4	o	29·84	− ·11	37	36	− 2	ESE	6	r	7	42	35	0·05
	Stornoway ...	29·79	36	E	2	o	29·63	− ·24	38	38	+ 8	E	4	o	4	41	28	0·02
	Wick	29·86	38	SSE	5	o	29·66	− ·25	38	37	+ 4	ESE	8	rw	8	42	38	0·25
	Nairn	29·77	37	ESE	2	s	29·59	− ·30	34	33	+ 12	ESE	1	s	1	37	22	0·05
	Aberdeen ...	29·81	37	E	6	o	29·57	− ·36	39	38	+ 7	E	7	ogrw	8	43	28	0·43
	Leith	29·71	36	ENE	1	r	29·49	− ·39	36	36	+ 2	SE	1	orf	*	40	32	0·48
	Shields	29·62	39	ESE	5	r	29·49	− ·31	37	36	− 4	WSW	3	o	5	42	35	0·57
	Spurn Head ...	29·53	38	ENE	6	r	29·56	− ·17	37	36	− 4	W	5	bc	5	41	36	0·39
	York	29·55	37	NNE	1	r	29·56	− ·22	38	36	− 2	W	2	c	*	41	35	0·45
	Loughborough	29·49	33	NNW	2	s	29·63	− ·08	36	34	− 2	WSW	3	b	*	38	33	0·39
	Ardrossan ...	29·68	37	NE	2	o	29·51	− ·34	36	36	+ 4	Z	0	bc	0	40	32	—
	Malin Head ...	29·70	40	E	3	o	29·52	− ·28	36	36	+ 2	S	1	or	1	41	39	0·03
	Mullaghmore ...	29·69	35	E	3	m	29·51	− ·28	34	33	o	E	4	b	2	37	26	—
	Belmullet ...	29·67	41	E	2	o	29·47	− ·31	32	30	− 4	E	2	b	*	47	30	—
	Donaghadee ...	29·66	41	E	2	r	29·54	− ·29	35	35	− 4	W	2	o	o	44	33	0·05
	Liverpool (Bidston)	29·59	37	N	1	o	29·58	− ·15	36	34	− 1	SW	1	bc	2	38	36	0·45
	Holyhead ...	29·64	39	NE	1	r	29·56	− ·21	36	36	− 4	SSW	1	cm	2	42	35	0·11
	Parsonstown ...	29·67	37	Z	o	bc	29·48	− ·35	26	25	− 2	Z	o	bc	*	43	25	—
	Valencia	29·69	43	SW	1	o	29·28	− ·57	44	43	+ 2	E	4	rmg	4	49	38	0·09
	Roche's Point...	29·70	43	WNW	3	bc	29·38	− ·45	45	45	+ 10	SSW	5	r	4	45	35	0·30
	Pembroke (St. Ann's Hd.)	29·66	42	NW	3	bc	29·53	− ·21	42	42	+ 3	SE	4	cp	3	44	39	—
	Scilly	29·75	45	WNW	5	c	29·43	− ·33	48	47	+ 4	S	8	ogr	6	48	42	0·14
	Prawle Point ...	29·69	40	NW	5	b	29·63	·00	45	44	+ 9	S	6	ong	4	46	36	—
	Jersey (St. Aubin's)	29·69	46	WNW	6	c	29·76	+ ·19	43	41	+ 3	SSE	5	bcm	4	45	39	0·17
	Hurst Castle ...	29·57	40	NW	5	o	29·72	+ ·22	44	42	+ 8	WSW	5	cp	4	44	36	0·10
GERMANY & HOLLAND.	Dungeness ...	29·41	40	W	6	r	29·75	+ ·24	42	41	+ 1	WSW	6	cp	4	44	37	0·12
	London	29·44	35	NW	2	od	29·7[illegible]	+ ·19	36	35	o	S	2	b	*	41	34	0·35
	Oxford	29·52	36	W	3	r	29·70	+ ·10	34	33	− 1	SSE	1	bm	*	37	33	0·37
	Cambridge ...	29·44	37	NE	2	r	29·72	+ ·10	35	34	− 2	SSW	1	b	*	40	32	0·36
	Yarmouth ...	29·41	40	SE	6	r	29·68	− ·02	36	35	− 2	SW	3	b	3	40	34	0·29
	Cuxhaven ...	29·96	30	ESE	6	c	29·90	− ·20	32	32	+ 5	SSE	3	bc	*	32	27	—
	Berlin														*			
	Wiesbaden ...	*	*	*	*	*	30·00	+ ·04	36	35	+ 4	Z	o	o	*	41	?	—
	Munich	29·92	30	E	1	o	?30·03	+ ·04	33	33	+ 15	SW	2	s	*	37	18	0·12
	The Helder ...	29·62	37	ESE	3	o	29·75	− ·09	38	37	+ 4	S	3	c	3	39	34	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29·97	+ ·36	37	36	− 1	SSW	2	b	*	47	37	—
	Cape Gris Nez	?	42	SW	4	o	?	?	41	39	+ 3	WSW	5	c	5	45	37	0·08
	Paris																	
	Brest	29·76	43	WSW	4	o	29·95	+ ·35	32	32	− 15	S	1	bc	*	48	31	
	Lorient	29·82	46	N	2	b	29·63	− ·12	45	45	+ 1	SSW	7	r	4	52	37	0·04
	Rochefort ...	29·83	46	NW	5	c	29·73	+ ·06	46	44	+ 4	S	4	o	4	46	39	—
	Belfort	29·97	46	WNW	6	bc	29·93	+ ·11	38	38	− 8	SSE	5	b	2	53	30	—
	Lyons														*			
	Nice	29·99	38	S	2	o	30·08	+ ·22	32	32	− 12	S	1	f	*	47	31	0·20
	Perpignan ...	30·04	41	SE	2	o	30·07	− ·02	36	35	− 1	E	4	o	2	45	34	—
	Biarritz	30·00	47	NW	2	o	30·05	+ ·12	37	37	− 11	NE	1	c	*	50	36	—
PENINSULA.	Corunna	30·04	48	NW	4	o	29·91	− ·04	39	36	− 9	SSE	4	bc	3	50	36	0·47
	Lisbon	*	*	*	*	*	29·[illegible]5	− ·38	46	44	− 2	S	4	r	4	52	45	0·16
		30·12	47	N	4	b	30·00	− ·13	44	42	− 2	SSW	1	c	5	54	43	—

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Sunday, 16th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

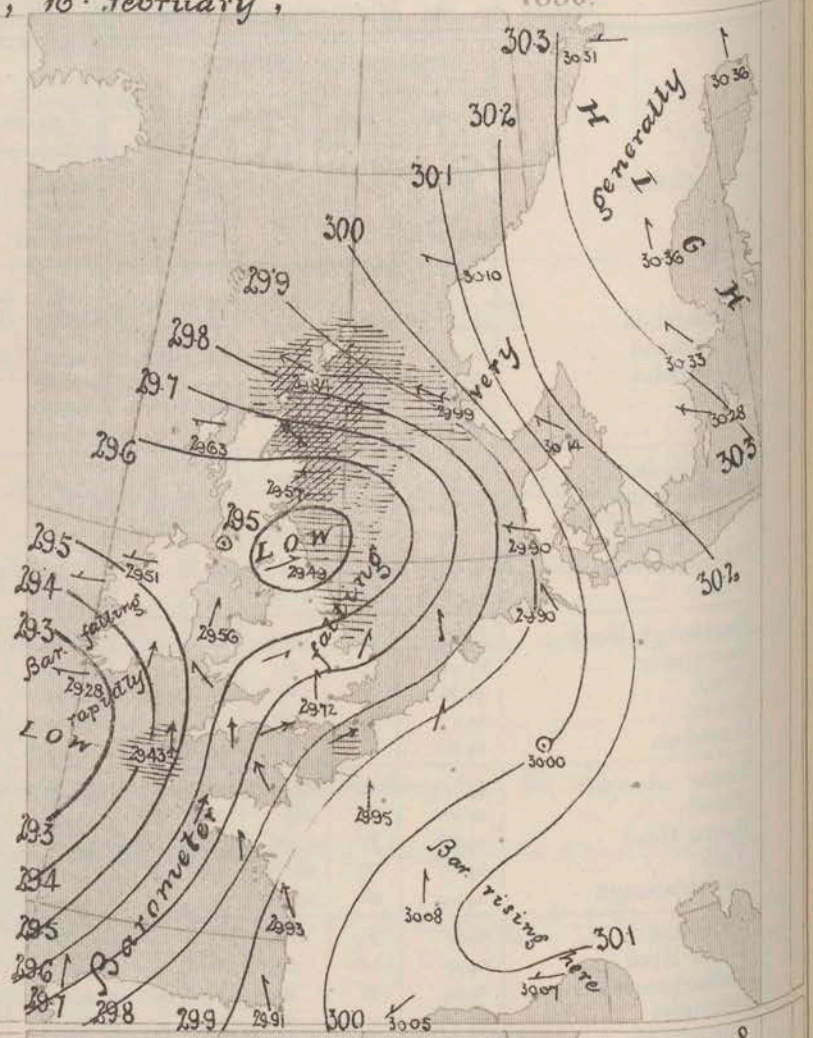
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February. During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

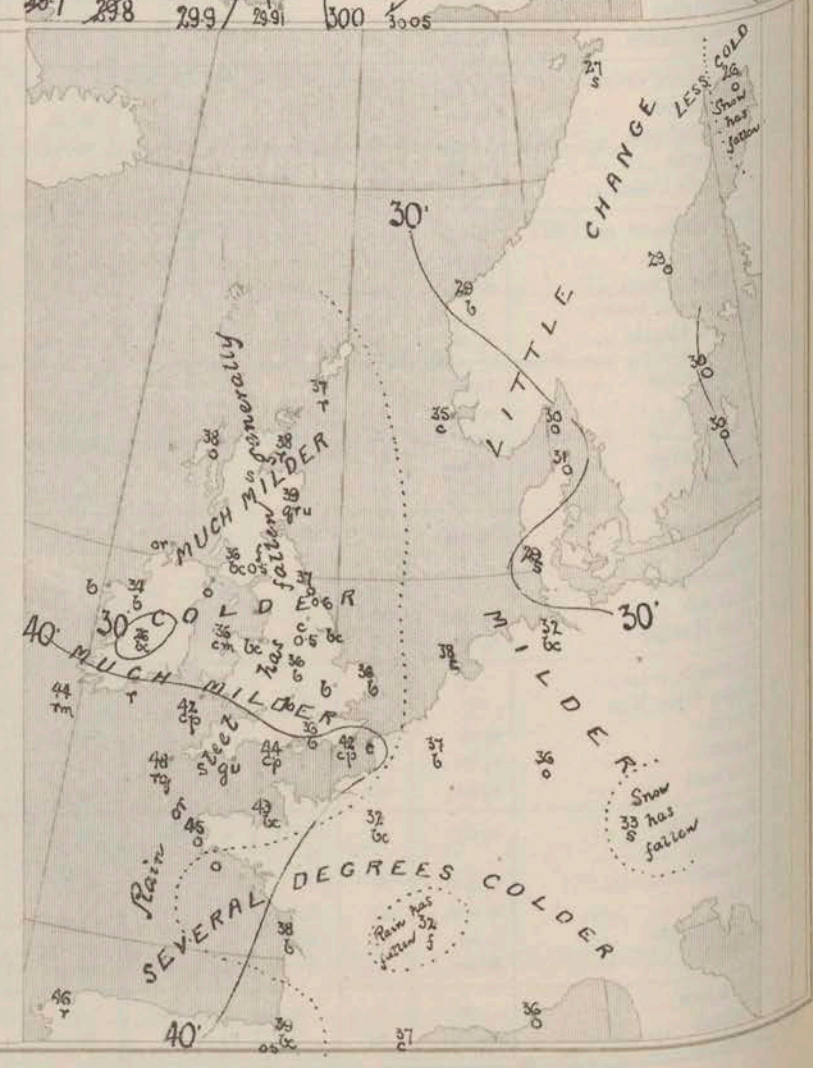
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·0 ins. to 30·3 ins. over Scandinavia — 30·0 and less over the south of Spain.
Lowest, 29·3 ins. and less, in a large depression advancing to our southwestern coasts; 29·5 ins. and less, in a smaller one near Berwick.
Gradients steep in the southwest, and also over the eastern and northeastern side of the North Sea.
Barometer falling fast in the southwest of our Islands, and considerably in the north, rising in the southeast, and in the Netherlands, Germany and east of France.

TEMPERATURE

Highest, 48° at Scilly, 46° at Lorenna and Lorient, 45° at Prawle Point and Rocheport.
Lowest, 26° at Haparanda and Parsontown, 27° at Bodö, 28° at Hernösand, 29° at Jaro, 32° at Lyons and Paris, 33° at Alnwick, and 34° to 33° over the major part of Great Britain.
The changes since yesterday have been very irregular. Thermometer is now rising fast in the south.

WIND

Strong to a gale from S.ward over the Bay of Biscay and at the mouth of the Channel.
Light E.ly in the west and northwest of Ireland. A gale from ESE.ly in the north of Scotland and at Shuderness.
W.ly fresh in the southeast of England, moderate on our northeast coast, SE.ly over the eastern shores of the North Sea).
The gale at Scilly eat in at about 6 am.

WEATHER

Rainy and threatening both on our southwestern and extreme northern coasts, showery in the Channel, temporarily clear (after rain) both at our northwestern, midlands, and some of our southeastern stations, very variable and changeable elsewhere — snow or fog in some places, clear elsewhere in others. In London a bank of Str. Cloud was seen to the WSW.ward.

SEA

High off the northeast of Scotland, rough at Scilly, rather rough off our East coast, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 17th Feby. 1890.

DISTRICTS.	FORECASTS.
☂ 0 SCOTLAND NORTH	NONE ISSUED
☂ 1 SCOTLAND EAST	
☂ 2 ENGLAND N.E.	
☂ 3 ENGLAND EAST	
4 MIDLAND COUNTIES	
☂ 5 ENGLAND SOUTH	

DISTRICTS.	FORECASTS
6 SCOTLAND WEST	NONE ISSUED.
7 ENGLAND N.W.	
☂ 8 ENGLAND S.W.	
9 IRELAND NORTH	
☂ 0 IRELAND SOUTH	
WARNINGS	The SOUTH CONE was hoisted yesterday in districts 0 to 2, and this morning in districts 3. 5. 8. and 10.

NOTE.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·14	41	34	ESE	4	c	3
Sumburgh Head	29·95	42	40	SSE	4	c	6
Stornoway	29·83	41	40	E	2	c	2
Aberdeen	29·85	41	39	ESE	6	opqw	6
Shields	29·70	40	38	ESE	4	r	4
Ardrossan	29·75	40	40	NE	2	o	1
Malin Head ...	29·76	41	39	ESE	3		
Mullaghmore ...	29·75	36	36	E	4	m	2
Belmullet	29·73	47	44	SSW	2	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29·68	39	39	NE	3	rmg	2
Valencia	29·77	47	43	WSW	3	bcv	3
Scilly	29·76	46	43	NNW	6	bc	5
Jersey	29·66	44	42	WNW	5	c	5
Dungeness	29·35	43	43	S	6	rs	*
London	29·40	41	41	E	0	rfg	5
Yarmouth	29·48	40	39	ESE	6	ogd	3
Rochefort	29·93	47	46	WNW	6	c	

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather cloudy or overcast over the greater part of Western Europe, with rain and snow at many of the English and French stations and rain (singly) in some parts of Spain and Italy. Fine in Ireland and Scotland, as well as in Germany, Austria and Northern Italy. Squalls of rain and sleet occurring later in the north and east of Scotland.

Temperature highest 50° and upwards, over the Central and Southern parts of the Mediterranean (Algiers 57°, Nemours 56°, Barcelona 55°); high 45° and upwards in the west of France and on the coasts of the Iberian Peninsula. Lowest 10° or less over Northern Russia and also over Southern Austria (Hermanstadt 6°, Archangel 8°); frost prevailing in all parts of Northern, Eastern, and Central Europe, as well as over the central parts of Ireland and Scotland. Daily maxima above 45° in our Islands generally, but thermometer rising above 55° in many parts of Southern Europe, and above 65° in Algeria.

Wind showing distinct cyclonic circulation over Western Europe; NW^n wind blowing strongly over the Bay of Biscay and the western part of the Channel, E^n breeze nearly as strong in the east of England. Moderate from SE^rly or S^rly over Scandinavia, Denmark, the Baltic and Germany; chiefly N^n in Spain and Italy, variable in Algeria. E^n gale setting in towards night on the north and east coast of Scotland.

Barometer highest, 30·5 ins: to 31·0 ins: or a little more, in a large anticyclone lying over Russia (Moscow reading 31·03 ins:); high 30·1 ins: and upwards, in another area lying over or to the westward of Portugal. Lowest, 29·5 ins: and less, in a depression which had advanced from the SW^rd to the eastern part of the Channel. Depression moving slowly northeastward during day, and barometer beginning to rise in the south of England.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday 17th. February. 1890.

Issued by the Meteorological Office, 63, *Victoria Street, London.* R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 8.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30.51	21	X	0	b	30.55	+.19	22	21	−4	X	0	0	*	30	19	0.08
	Hernösand ...	30.43	29	X	0	0	30.49	+.11	26	25	−2	X	0	0	*	30	25	—
	Stockholm ...	30.38	29	X	0	0	30.44	+.11	28	28	−2	X	0	0	*	32	28	0.04
	Wisby	30.37	29	X	0	0	30.39	+.11	30	29	0	SE	2	c	*	32	27	—
	Bodö	30.38	29	E	2	b	30.40	+.09	28	25	+1	ESE	4	b	2	30	25	—
	Christiansund	30.10	31	E	1	b	30.26	+.16	31	30	+2	ESE	3	b	2	34	28	—
	Skudesnaes ...	30.11	36	ESE	6	0	30.30	+.31	36	31	+1	SE	4	0	4	?	34	—
	Christiania Fjord (Færder)	30.29	31	NE	4	0	30.39	+.18	31	30	+1	ENE	3	0	1	32	30	—
	Skagen (The Scaw)	30.26	31	SE	2	0	30.36	+.22	31	28	0	SE	1	0	1	32	30	—
	Fanö	30.14	31	ESE	4	0	30.24	+.34	31	30	+2	ESE	4	0	*	?	28	—
BRITISH ISLANDS.	Sumburgh Head	29.84	37	ESE	7	p	30.05	+.21	43	41	+6	ESE	4	c	7	43	37	0.15
	Stornoway ...	29.58	40	SE	5	p	29.83	+.20	43	40	+5	SE	5	p	4	43	33	0.04
	Wick	29.67	41	ESE	7	p	29.96	+.30	43	42	+5	SE	7	ow	8	43	35	0.20
	Nairn	29.61	37	X	0	c	29.88	+.29	41	40	+7	ESE	1	c	2	41	32	0.01
	Aberdeen ...	29.67	40	SE	2	0	29.99	+.42	42	41	+3	SE	4	cw	6	42	34	0.11
	Leith	29.63	37	E	1	b	29.88	+.39	41	39	+5	ESE	2	c	*	42	30	—
	Shields	29.69	41	SE	2	c	29.89	+.40	42	40	+5	ESE	4	0	5	44	35	0.01
	Spurn Head ...	29.76	41	SSE	6	bc	29.87	+.31	42	40	+5	ESE	6	c	5	46	36	—
	York	29.72	44	ESE	1	0	29.87	+.31	41	39	+3	E	1	0	*	46	37	0.01
	Loughborough	29.73	45	SSE	2	0	29.81	+.18	38	37	+2	SE	3	ow	*	49	34	—
	Ardrossan ...	29.61	38	NE	2	0	29.80	+.29	41	40	+5	NE	3	0	3	41	35	0.08
	Malin Head ...	29.52	41	SE	4	0	29.66	+.14	42	41	+6	SE	5	0p	3	42	36	0.07
	Mullaghmore ...	29.47	39	ENE	5	p	29.60	+.09	43	42	+5	E	5	0	3	43	33	0.08
	Belmullet ...	29.45	39	E	3	0	29.58	+.11	40	39	+8	E	3	c	*	41	30	0.08
	Donaghadee ...	29.56	42	SE	4	p	29.73	+.19	43	42	+8	ESE	5	p	3	44	35	0.19
	Liverpool (Bidston)	29.63	43	ESE	4	0	29.74	+.16	39	37	+3	E	4	0	3	44	36	0.03
	Holyhead ...	29.53	44	SSE	4	0	29.67	+.11	41	39	+5	E	4	omq	4	45	36	0.03
	Parsonstown ...	29.42	43	X	0	p	29.56	+.08	42	41	+16	X	0	0	*	46	26	0.08
	Valencia	29.37	46	SE	2	0	29.48	+.20	41	40	−3	N	1	pm	3	45	37	0.24
	Roche's Point...	29.42	45	SSW	4	bc	29.46	+.08	44	44	−1	ESE	5	p	4	46	42	0.65
	Pembroke (St. Ann's Hd.)	29.52	44	SE	5	0	29.56	+.03	44	44	+2	SE	5	cp	4	47	37	0.23
	Scilly	29.45	48	SSE	3	c	29.49	+.06	46	45	−2	SSE	5	bc	5	52	42	0.34
	Prawle Point ...	29.59	45	SSE	6	p	29.64	+.01	45	44	0	SSE	6	bc	4	45	43	0.13
	Jersey (St. Aubin's)	29.69	47	SE	5	0	29.71	−.05	45	43	+2	SE	5	cg	4	48	42	0.06
	Hurst Castle ...	29.71	46	S	4	0	29.74	+.02	46	44	+2	SSW	4	c	5	47	42	—
	Dungeness ...	29.81	44	S	4	bc	29.84	+.09	42	40	0	SSE	6	bc	4	46	40	0.05
	London	29.78	45	S	3	c	29.82	+.10	39	38	+3	SE	2	c	*	50	36	—
	Oxford	29.77	42	SE	3	0	29.78	+.08	40	38	+6	ESE	3	c	*	47	34	—
	Cambridge ...	29.81	40	S	1	b	29.85	+.13	38	37	+3	SE	2	bc	*	48	33	—
	Yarmouth ...	29.82	41	S	4	b	29.90	+.22	40	39	+4	SE	6	bc	5	46	35	—
GERMANY & HOLLAND.	Cuxhaven ...	30.02	34	SE	2	bc	30.20	+.30	31	30	−1	ESE	2	f	*	39	29	—
	Berlin	30.16	32	X	0	d	30.25	?	32	31	?	SE	2	0	*	32	30	—
	Wiesbaden ...	*	*	*	*	*	30.14	+.14	36	35	0	E	3	0	*	43	34	—
	Munich	30.11	32	SE	2	c	30.13	+.10	31	30	−2	SE	4	m	*	37	30	0.08
	The Helder ...	30.01	35	SSW	1	b	30.07	+.22	35	34	−3	ESE	2	bc	2	43	32	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.99	+.02	35	33	−2	ESE	1	c	*	47	34	—
	Cape Gris Nez	?	43	S	1	b	?	?	37	35	−4	SE	4	c	3	48	37	—
	Paris																?	—
	Brest	29.90	44	X	0	c	29.89	−.06	37	29	+5	SE	1	bc	*	49		
	Lorient	29.55	46	S	6	p	29.61	−.02	47	45	+2	S	5	bc	5	52	41	1.14
	Rochefort ...	29.62	45	SE	5	p	29.65	−.08	47	44	+1	S	3	b	5	48	45	0.39
	Belfort	29.79	47	SSE	4	0	29.82	−.11	45	44	+7	SSE	4	0	?	48	37	—
	Lyons	30.02	38	SE	1	b	30.02		36	31		SW	1	b	*	46	32	—
	Nice	30.00	41	SE	1	b	29.99	−.09	38	36	+6	E	1	b	*	46	?	—
	Perpignan ...	30.08	44	E	2	0	30.10	+.03	41	38	+5	ENE	4	bc	3	46	?	—
	Biarritz	29.77	45	E	2	0	29.92	−.13	50	50	+13	SE	3	p	*	?	?	0.08
FENINSULA.	Corunna	29.71	55	S	4	c	29.73	−.18	50	43	+11	ESE	3	c	4	55	?	—
	Lisbon	* 29.82	* 50	* NW	* 1	* 0	29.70	−.30	46	44	+2	X	0	c	?	54	?	0.39

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Monday, 17th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

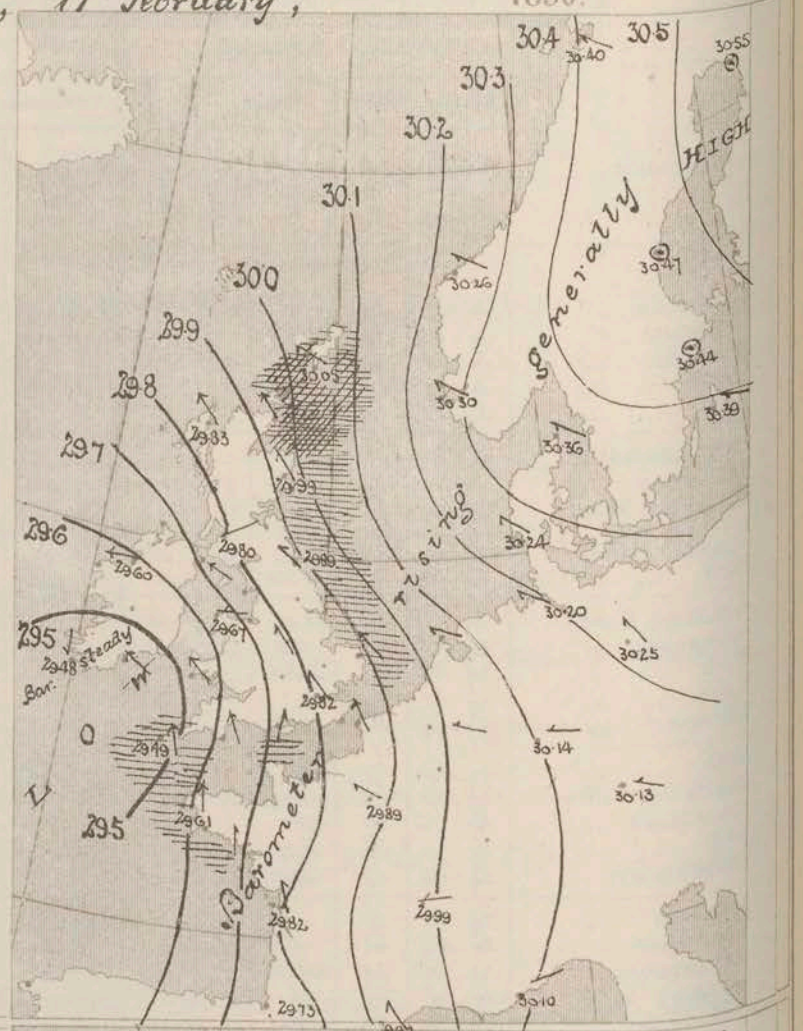
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 713
Stornoway	29 · 700
Wick	29 · 737
Nairn	29 · 747
Aberdeen	29 · 780
Leith	29 · 803
Shields	29 · 847
York	29 · 884
Loughborough	29 · 912
Ardrossan	29 · 805
Donaghadee	29 · 812
Holyhead	29 · 848
Liverpool	29 · 873
Parsonstown	29 · 834
Valencia	29 · 850
Roche's Point	29 · 850
Pembroke	29 · 875
Scilly	29 · 911
Jersey	29 · 975
Hurst Castle	29 · 944
Dover	29 · 957
LONDON	29 · 949
Oxford	29 · 938
Cambridge	29 · 935
Yarmouth	29 · 928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

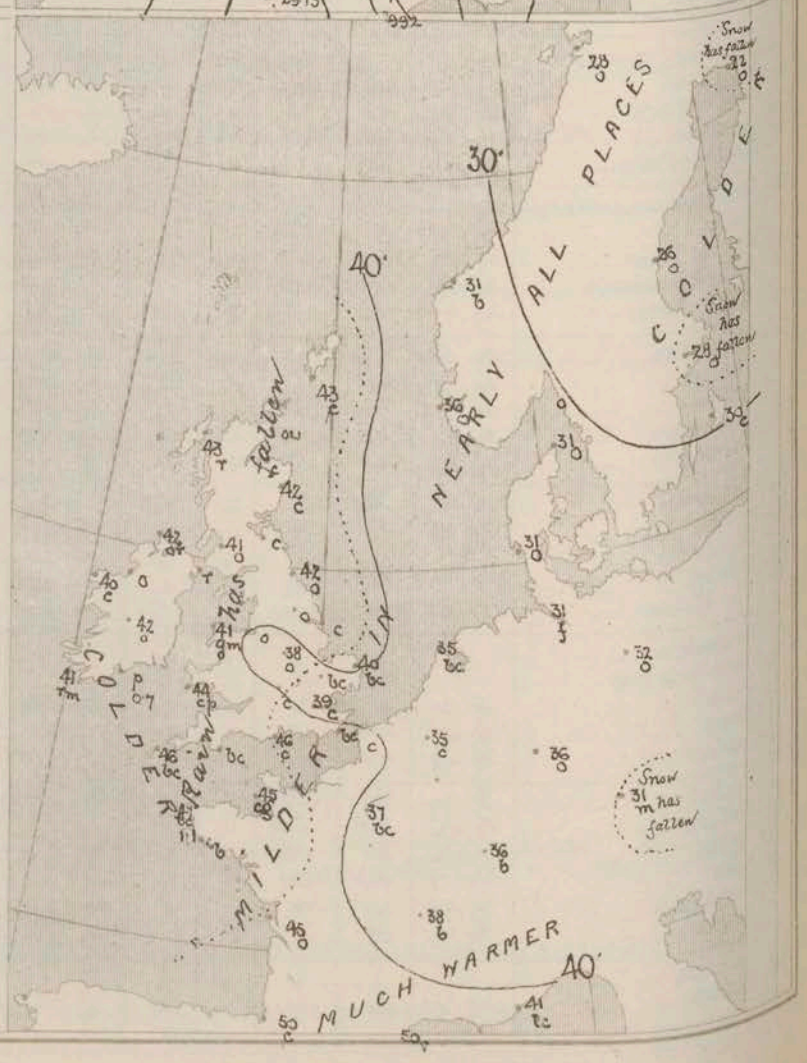
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (*Inches.*)
Sumburgh Head	42 · 6	34 · 7	38 · 7	37 · 7	3 · 29
Stornoway	43 · 5	34 · 7	39 · 3	38 · 2	3 · 97
Wick	43 · 4	33 · 5	38 · 4	37 · 0	2 · 02
Nairn	43 · 4	33 · 8	37 · 4	35 · 7	1 · 51
Aberdeen	43 · 5	34 · 2	37 · 8	36 · 2	2 · 51
Leith	46 · 6	34 · 7	39 · 2	37 · 7	1 · 58
Shields	44 · 3	35 · 7	39 · 2	37 · 9	1 · 63
York	45 · 3	34 · 2	38 · 2	37 · 1	1 · 88
Loughborough	46 · 0	34 · 5	38 · 4	37 · 3	2 · 00
Ardrossan	45 · 0	36 · 7	40 · 0	38 · 6	3 · 47
Donaghadee	45 · 8	37 · 0	40 · 7	39 · 7	2 · 71
Holyhead	46 · 1	39 · 3	42 · 3	40 · 8	2 · 90
Liverpool	45 · 3	36 · 9	39 · 9	38 · 3	1 · 85
Parsonstown	47 · 4	36 · 1	40 · 1	38 · 8	2 · 45
Valencia	50 · 2	40 · 8	45 · 1	43 · 4	5 · 29
Roche's Point	48 · 9	40 · 0	43 · 6	42 · 2	4 · 86
Pembroke	46 · 2	40 · 3	43 · 1	41 · 9	3 · 20
Scilly	49 · 7	43 · 7	46 · 9	45 · 3	2 · 98
Jersey	47 · 6	40 · 1	43 · 2	42 · 0	2 · 72
Hurst Castle	46 · 5	37 · 9	41 · 3	40 · 4	2 · 63
Dover	45 · 4	37 · 4	40 · 3	39 · 1	2 · 12
LONDON	46 · 9	36 · 0	39 · 7	38 · 6	1 · 89
Oxford	45 · 9	35 · 9	38 · 8	37 · 7	2 · 06
Cambridge	46 · 4	33 · 9	38 · 3	37 · 3	1 · 60
Yarmouth	43 · 5	35 · 2	38 · 0	38 · 2	2 · 02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·3 ins: to 30·5 ins: in an anticyclone over Scandinavia and the Baltic.
Lowest, 29·4 ins: off our southwest coast.
Gradients are rather steep over Great Britain, but slight to the eastward of the North Sea
Barometer rising except over Spain and in some parts of France

TEMPERATURE

Highest, 50° at Biarritz and Perpignan, 47° at Brest and Lorient, 46° at Scilly and Lisbon, and 45° at Jersey and Prawle Point.
Lowest, 22° at Haparanda, 26° at Hernösand, 28° at Stockholm and Bodö, 30° at Wick, and 31° at Christiansund, at the Danish stations and Memel
It has risen in nearly all parts of Western Europe since yesterday.

WIND

Fresh from the SE^ly over the United Kingdom, France, and Germany, blowing a moderate gale at Wick, over Scandinavia calms are reported. A strong E^ly gale was felt on the northeast of Scotland yesterday

WEATHER

Fine and bright on the northwest of Norway, over the southern and southeastern districts of England and in Central France, dull or cloudy elsewhere, with rain at Stornoway, in the north of Ireland, at Valencia and Perpignan, and passing showers at Rochebrit and Pembroke. Rain has fallen during the past 24 hours except at our eastern and southeastern stations.

SEA

Very high off the northeast of Scotland, rather rough in the North Sea generally and on our southwestern coasts moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A continuance of SE^ly winds, fresh or strong in force, with occasional cold rain or sleet is probable in most parts of the Kingdom.

FORECASTS

For the 24 hours ending at NOON on 18th FEBY 1890.

DISTRICTS.	FORECASTS.
¶ 0 SCOTLAND NORTH ¶ 1 SCOTLAND EAST	SE^ly gales; dull, unsettled, some rain.
¶ 2 ENGLAND N.E. ¶ 3 ENGLAND EAST	SE^ly winds, strong, perhaps a gale; cloudy, some rain.
4 MIDLAND COUNTIES	SE^ly winds, moderate; fair to dull and some rain
¶ 5 ENGLAND SOUTH	SE^ly and S^ly winds, fresh; fair to cloudy and some rain.
6 SCOTLAND WEST 7 ENGLAND N.W.	E^ly and SE^ly winds, fresh, dull, some rain.
¶ 8 ENGLAND S.W.	Same as No 5.
9 IRELAND NORTH ¶ 0 IRELAND SOUTH	E^ly winds, fresh; dull, unsettled, some rain.
WARNINGS	The SOUTH CONE is still flying except in districts 6, 7, and 9

No's.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.04	38	31	E	8	c	5
Sumburgh Head							
Stornoway	29.88	40	40	E	5	r	5
Aberdeen							
Shields							
Ardrossan							
Malin Head ...	29.52	40	38	ESE	4	c	1
Mullaghmore ...							
Belmullet	29.44	41	39	E	8	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.55	43	42	SE	2	dmg	2
Valencia							
Scilly							
Jersey	29.71	47	44	SE	5	c	4
Dungeness	29.81	46	44	SSW	6	c	5
London							*
Yarmouth							
Rochefort	29.88	47	44	SSE	5	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over Russia, Poland and Hungary, as well as in the extreme south of Europe; temporarily fine over France and a great part of England, very dull and unsettled elsewhere, rain falling on our south and southwest coasts and at Toulon and Algiers, rain and snow in the north, snow in some parts of Germany. Heavy rain in Brittany later, considerable falls on our southwestern coasts and in Caithness, and smaller quantities on our N.ra. W.rn. and S.W.rn. coasts generally.

Temperature changing considerably and very irregularly over western Europe, falling fast over Russia. Highest 50° and more over several parts of the Mediterranean, 56° at Bilbao, 48° at Scilly, 46° at Coruna, and 40° to 45° at most stations in the south and southwest of the British Islands and west of France, lowest over eastern and central Europe, −5° F at Moscow, +4° at Kharkov, 5° at Hermanstadt, 7° at St Petersburg, 9° at Cracow, and less than 30° at all the Russian, Austrian and Polish stations, rising to between 45° and 52° over the south and east of England later.

Wind light to moderate, and mainly from the southeastward, over eastern and northern Europe, E. to N. over the Mediterranean; much stronger in force and very variable in direction in the west. — ESE. gales over the northern half of Scotland moderate to fresh W. and SW. breezes over the east and southeast of England, S. gales at the mouth of the Channel and moderate E. breezes in Ireland. Gales all dying down later.

Barometer highest 30.3 ins. to 30.9 ins. over Sweden, the Baltic and Russia, 30.0 ins. and more over the south of Spain; lowest 29.5 ins. and less in a depression near Berwick, and 29.3 ins. and less in another (larger) one off our southwestern coasts. Gradients steep between Scotland and Norway and also over the Bay of Biscay and southwest of England, NE depression filling up later, that in southwest moving S. towards Spain.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 9TH TO THE 15TH FEBRUARY 1890

The anticyclonic conditions which prevailed over the United Kingdom at the close of last week continued during the earlier part of that now under notice, the system, however, continued to move very slowly to the eastward and northeastward, but increased both in size and intensity. The weather was cold, dry, and bright except in Ireland and the extreme north of Scandinavia, where rain fell at times.

On Tuesday the barometer was falling in the west and southwest, rising in the north and east, and as the gradients increased SE. gales began to spread gradually over Scotland and Ireland, and in several places blew strongly. Rain soon began to fall in the southwest of Ireland and northwest of France, whence the fall spread slowly in an easterly and northerly direction, as the centre of a depression advanced to the St George's and Bristol Channels. This system reached our SW.rn. coasts early on Thursday and filled up off the mouth of the Thames on Friday. In its rear NW. gales were experienced for a time on our southwestern coasts.

Friday evening brought a new depression to the Bay of Biscay, and this, as it advanced northeastward across Brittany and the Channel, grew deeper and caused large falls of cold rain, sleet and wet snow all over England and France, no gale of any importance. On its advancing northwards, however, SE. gales again set in over the east of Scotland.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Tuesday 18th February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30.53	31	2	0	0	30.50	-.05	18	18	-4	2	0	0	*	?	18	—
	Hernösand ...	30.52	28	2	0	0	30.56	+.09	25	24	-1	2	0	0	*	30	25	0.04
	Stockholm ...	30.58	29	2	0	0	30.63	+.15	30	28	+2	2	0	0	*	32	27	—
	Wisby	30.54	31	NE	4	0	30.59	+.20	32	32	+2	ENE	4	0	*	36	25	—
	Bodö	30.43	29	ESE	2	b	30.59	+.17	23	21	-5	E	2	b	1	30	21	—
	Christiansund	30.43	38	SW	4	0	30.59	+.31	36	35	+5	WSW	4	bc	4	?	?	0.43
	Skudesnaes ...	30.49	36	E	2	b	30.63	+.32	31	28	-5	ENE	4	c	4	36	30	—
	Christiania Fjord (Færder)	30.54	31	NE	3	0	30.66	+.27	30	28	-1	NNW	4	0	1	32	30	—
	Skagen (The Skaw)	30.50	31	SE	1	0	30.63	+.27	33	32	+2	SE	1	0	1	?	30	—
	Fanö	30.41	29	E	4	b	30.51	+.27	27	26	-4	E	4	b	*	32	25	—
BRITISH ISLANDS.	Sumburgh Head	30.26	43	NE	4	0	30.45	+.40	40	38	-3	SE	3	0	6	45	39	—
	Stornoway ...	29.95	42	E	6	c	30.16	+.33	43	43	0	SE	6	0	5	45	40	0.02
	Wick	30.14	43	SE	7	0	30.35	+.39	42	39	-1	SE	8	ow	8	43	39	—
	Nairn	30.02	42	E	3	c	30.19	+.31	41	40	0	SE	6	bc	3	45	39	—
	Aberdeen ...	30.12	42	SE	6	ogw	30.36	+.37	40	38	-2	ESE	6	ogq	7	43	40	—
	Leith	29.98	42	SE	2	0	30.25	+.37	41	40	0	E	4	0	*	47	38	0.01
	Shields	30.00	43	ESE	5	0	30.25	+.36	40	39	-2	ESE	4	0	5	44	39	—
	Spurn Head ...	30.00	41	ESE	4	b	30.21	+.34	39	38	-3	ESE	6	0	5	42	38	—
	York	29.98	42	E	3	0	30.23	+.36	39	38	-2	E	2	0	*	44	38	—
	Loughborough	29.94	44	E	3	0	30.16	+.35	37	37	-1	E	2	ogm	*	44	37	—
	Ardrossan ...	29.91	43	ENE	3	cm	30.16	+.36	43	41	+2	NE	3	bc	2	44	39	—
	Malin Head ...	29.76	42	SSE	4	0†	29.99	+.33	42	41	0	SE	4	omT	2	43	40	0.19
	Mullaghmore ...	29.71	44	ESE	5	0†	29.94	+.34	45	44	+2	ENE	5	om	3	45	41	0.02
	Belmullet ...	29.66	42	E	4	c	29.88	+.30	42	41	+2	E	2	b	*	44	39	—
	Donaghadee ...	29.84	45	SE	5	c	30.07	+.34	44	44	+1	SE	6	p	4	45	40	0.25
	Liverpool (Bidston)	29.89	43	ESE	3	o	30.09	+.35	40	38	+1	E	5	0	4	45	39	—
	Holyhead ...	29.80	45	E	5	omq	30.01	+.34	41	41	0	E	5	cq	5	50	39	0.34
	Parsonstown ...	29.68	45	2	0	p	29.92	+.36	44	42	+2	SE	1	0	*	45	40	0.11
	Valencia	29.56	44	E	3	0†	29.80	+.32	44	42	+3	E	2	bc	3	47	40	0.11
	Roche's Point...	29.61	45	SSE	5	†	29.88	+.37	47	46	+3	SE	5	c†	4	49	43	0.20
	Pembroke (St. Ann's Hd.)	29.73	45	ESE	5	b	29.93	+.37	43	43	-1	E	4	c	4	48	42	0.07
	Scilly	29.60	46	SE	7	0qtw	29.78	+.25	49	49	+3	ESE	6	o	5	51	42	0.59
	Prawle Point ...	29.78	46	ESE	4	c	29.92	+.28	47	47	+2	ENE	3	c	2	48	45	—
	Jersey (St. Aubin's)	29.80	47	ESE	3	omq	29.93	+.22	48	46	+3	E	5	oqm	4	48	44	0.10
	Hurst Castle ...	29.86	45	SE	4	0	30.02	+.28	44	42	-2	E	3	oqm	3	47	42	—
GERMANY & HOLLAND.	Dungeness ...	29.93	45	SE	4	c	30.07	+.23	42	40	0	SE	3	bc	3	48	40	—
	London	29.93	45	SE	3	bc	30.08	+.26	39	38	0	ENE	2	b	*	51	38	—
	Oxford	29.95	44	ESE	2	bc	30.09	+.31	39	38	-1	ENE	1	0	*	47	38	—
	Cambridge ...	30.00	40	SE	1	bc	30.16	+.31	39	38	+1	E	1	0	*	50	35	—
	Yarmouth ...	30.01	41	SE	5	bc	30.19	+.29	38	37	-2	ESE	6	c	5	42	37	—
	Cuxhaven ...	30.32	30	E	5	f	30.48	+.28	29	28	-2	E	4	b	*	31	27	—
	Berlin	30.39	33	2	0	b	30.50	+.25	27	26	-5	SE	3	0	*	36	25	—
	Wiesbaden ...	*	*	*	*	*	30.31	+.17	33	31	-3	NE	2	b	*	37	32	—
	Munich	30.19	29	NE	2	0	30.27	+.14	24	24	-7	E	4	m	*	32	?	—
	The Helder ...	30.16	38	E	3	b	30.32	+.25	34	33	-1	E	4	f	3	43	34	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.21	+.22	33	32	-2	E	2	c	*	50	33	—
	Cape Gris Nez	?	43	E	2	bc	?	?	36	36	-1	E	3	bc	3	48	36	—
	Paris	29.96	43	NE	1	b	30.08	+.19	39	36	+2	SE	2	b	*	51	37	—
	Brest	29.71	48	S	3	p	29.76	+.15	46	45	-1	SE	4	0	4	52	39	0.12
	Lorient	29.70	47	SSE	3	0	29.80	+.15	46	44	-1	ESE	4	c	5	52	43	0.04
	Rochefort ...	29.83	52	SE	3	0	29.88	+.06	46	45	+1	ESE	4	0	?	57	39	—
	Belfort	30.09	38	E	1	bc	30.19	+.17	31	24	-5	NW	3	0	*	46	30	—
	Lyons	30.03	46	S	2	b	30.17	+.18	36	34	-2	N	2	b	*	54	33	—
	Nice	30.11	48	E	6	b	30.21	+.11	46	38	+5	ENE	5	bc	3	52	?	—
	Perpignan ...	29.95	51	SE	3	p	30.02	+.10	52	52	+2	SSE	4	p	*	54	50	1.30
	Biarritz	29.72	58	SSW	4	0	29.72	-.01	46	44	-4	E	4	0	5	63	43	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.65	47	2	0	b	29.65	-.05	44	42	-2	2	0	bc	5	48	41	0.04

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Tuesday, 18th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

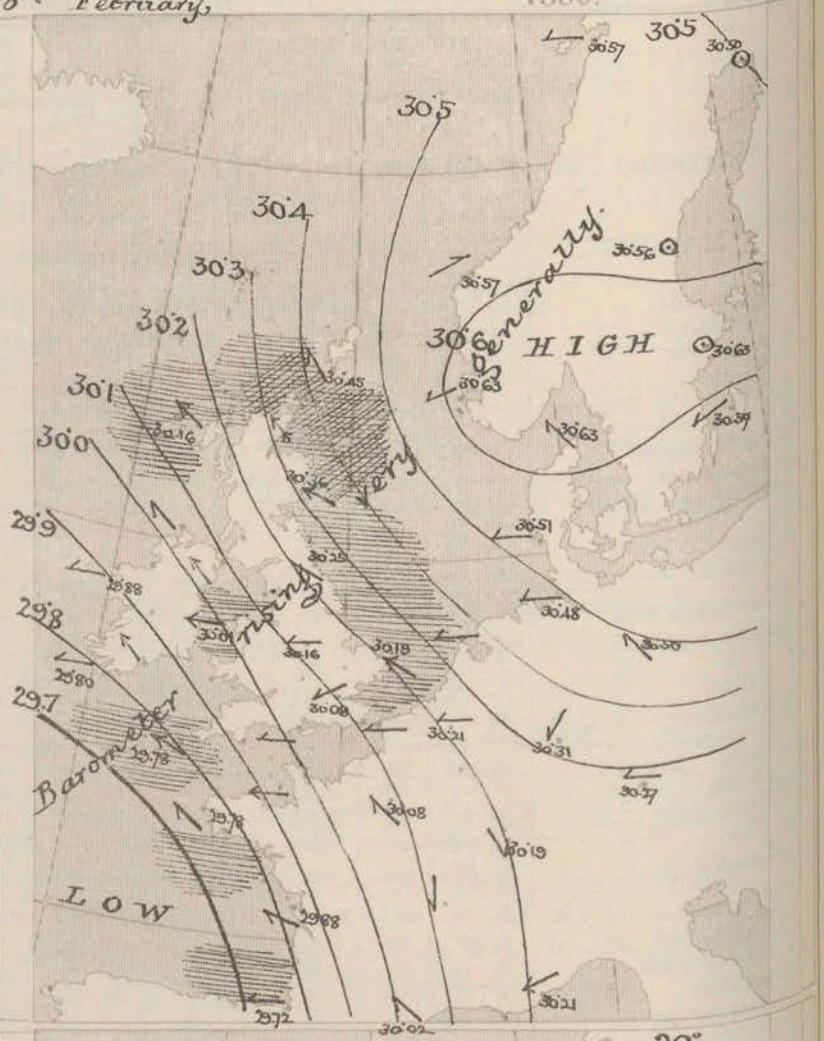
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

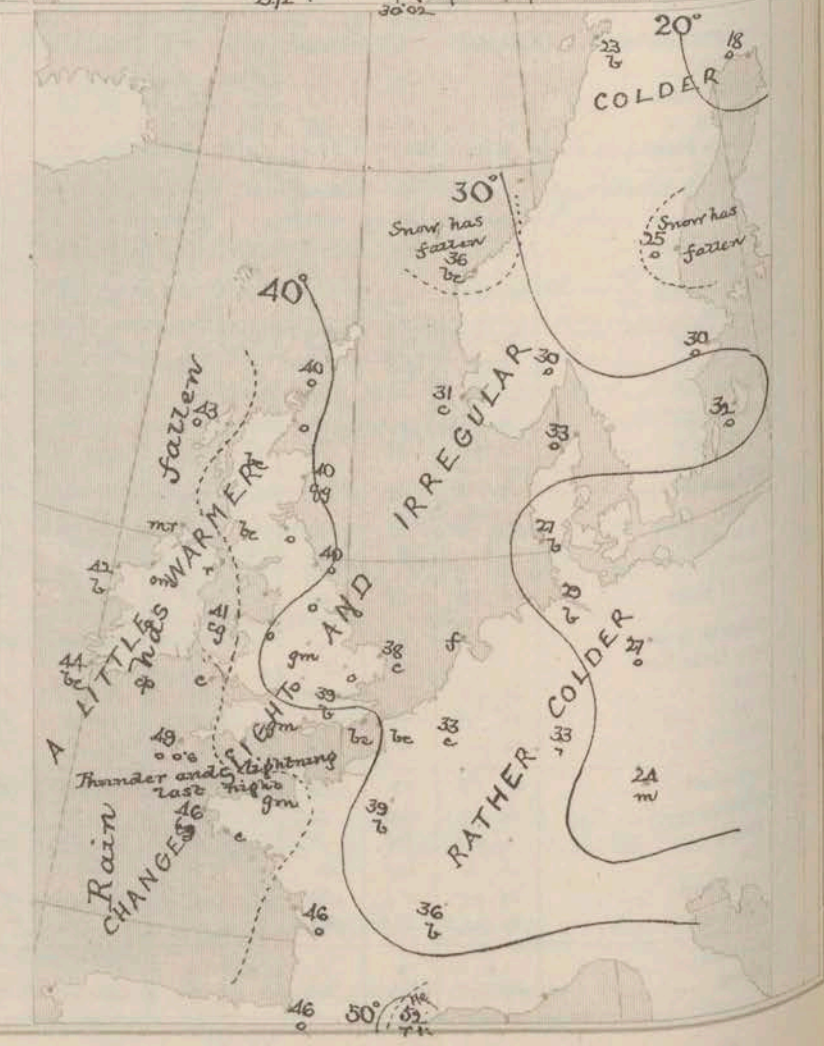
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·3 ins. to 30·6 ins. and more, in an anticyclone lying over the Baltic, Scandinavia, and the eastern parts of the North Sea.
Lowest, 29·7 ins. and less, over Spain, the Bay of Biscay, and off our southwestern coasts.
Gradients moderate for SE. winds over the United Kingdom, slight and variable to the eastward of the North Sea.
Barometer rising generally, most over our Islands.

TEMPERATURE

Highest, 52° at Perpignan, 49° at Scilly, 48° at Jersey, 47° at Prawle Point and Rocket's Point, and 46° at all the western Foreign stations and Nice.
Lowest, (1) 18° at Haparanda, 23° at Bodö, 25° at Hernösand, and 30° at Stockholm; (2) 24° at Munich, 27° at Berlin, and 31° at Belfort.
Over England it varies from 36° to 47°; at Paris and in London it was 39°.

WIND

SE. at almost all our stations, fresh in Ireland, strong on the east coast of England, strong to gale in the northeast of of Scotland. Over our southern and midland counties it was light from the E. and, and in the Bay of Biscay moderate from SE.

WEATHER

Fine and bright over France and the southeast of England, cloudy, more or less showery, with rain at some western stations and at Perpignan. Rain fell generally in the east and southwest yesterday—heavily at Perpignan and Scilly; thunder and lightning occurred very generally on our southwestern and southern coasts.

SEA

Still very high on the northeast coast of Scotland, rather rough at many of the eastern, western, and southern stations, slight off Queenstown.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any change of importance.

FORECASTS

For the 24 hours ending at NOON on 19th FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	SE. winds, strong; squally, dull, perhaps some rain.
2 ENGLAND N.E. 3 ENGLAND EAST	SE. and E. winds, strong to fresh; fair as a whole.
4 MIDLAND COUNTIES 5 ENGLAND SOUTH	E. breezes, light to moderate; fair. Cold tonight.
6 SCOTLAND WEST 7 ENGLAND N.W.	SE. winds, moderate; fair.
8 ENGLAND S.W. 9 IRELAND NORTH 0 IRELAND SOUTH	SE. winds, fresh or strong; some rain at times.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·41	36	31	ESE	4	o	4
Sumburgh Head	30·19	44	42	SE	4	c	7
Stornoway	29·94	45	45	SE	5	c	4
Aberdeen	30·09	42	42	SE	5	o g u	6
Shields	29·96	43	41	ESE	5	o	5
Ardrossan	29·85	43	43	E	3	o m	2
Mulin Head ...	29·73	40	39	SE	5	o T	3
Mullaghmore ...	29·65	43	41	E	5	o g m T	4
Belmullet	29·63	44	42	ESE	3	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29·74	49	45	SE	4	bc	4
Valencia	29·49	47	45	ENE	4	o	4
Scilly	29·53	49	47	SSE	6	c q T	6
Jersey	29·79	46	44	ESE	4	c g m p	4
Dungeness	29·89	46	44	SSE	5	bc	4
London	29·88	49	46	SE	3	c	*
Yarmouth	29·95	42	40	SE	5	b	4
Rochefort	29·84	52	50	SE	4	o	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE
DURING THE PAST 24 HOURS.

Weather fine and bright over the southeastern, eastern, and northeastern parts of the Mediterranean, central Russia, the eastern parts of France and England, and over the Bay of Biscay and northwest of Norway; cloudy or overcast elsewhere, with rain at Perpignan, on our southwestern, western, and northwestern coasts; a threatening appearance in the northeast of Scotland, snow in the Gulf of Finland, fog in Hungary. Rain general on our west and southwest coasts later, thunder and lightning in the southwest and south, and much rain at Perpignan.

Temperature in morning exceeding 50° on the southern and western shores of the Mediterranean, and ranging between 40° and 50° on many of the coasts of Western Europe and the British Isles; below the freezing point over Northern, Eastern, and Southeastern Europe; and as low as (1) −8° F at Moscow, +5° at Kharkov, 9° at Kiev, 18° at St Petersburg and Kuopio, 19° at Archangel and Nicolaieff; (2) −1° F at Hermannstadt, +14° at Cracow, 21° at Warsaw, 23° at Lemberg, and 24° at Breslau. Rising to 50° and more in the south of England later, and to 63° at Biarritz.

Wind SE^{ly} over Northeastern and Northern Europe — fresh to strong in the British Islands (a gale at Wick), moderate on the eastern shores of the North Sea; more S^{ly} over Spain and the Bay of Biscay, E^{ly} over the south of France. Very light and variable over eastern and central Europe. No important change later.

Barometer highest, 30·3 ins: to 30·8 ins: in a very large anticyclone covering the whole of Eastern and Northern Europe; lowest 29·5 ins: and less, in a depression off our southwestern coast, and 29·7 ins: and less over Portugal and the northwest of Spain. Gradients moderate over the British Isles, slight elsewhere. Rising steadily later throughout Northwestern Europe, falling slowly over the Spanish Peninsula.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday 19th February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30·64	8	SW	2	0	30·66	+·16	6	5	−12	X	0	bc	*	23	5	0·04
	Hernösand ...	30·74	3	X	0	b	30·82	+·26	10	10	−15	X	0	b	*	34	?	—
	Stockholm ...	30·69	29	X	0	0	30·78	+·15	23	23	−7	NE	2	b	*	32	?	—
	Wisby	30·64	31	E	2	0	30·65	+06	32	31	0	NE	2	0	*	36	28	0·04
	Bodö	30·32	25	E	2	b	30·39	−·18	28	26	+5	SE	2	0	1	?	21	—
	Christiansund	30·69	36	ESE	1	0	30·76	+·19	31	29	−5	ESE	4	b	2	36	30	0·16
	Skudesnaes ...	30·70	34	E	2	b	30·75	+·12	32	30	+1	E	2	bc	2	36	30	—
	Christiania Fjord (Færder)	30·72	31	?	6	b	30·79	+·13	31	29	+1	NE	3	0	1	?	28	—
	Skagen (The Scaw)	30·73	31	X	0	b	30·74	+·11	32	30	−1	E	1	0	1	34	30	—
	Fanö	30·65	31	E	4	0	30·67	+·16	30	29	+3	ENE	4	0	*	32	27	—
BRITISH ISLANDS.	Sumburgh Head	30·51	40	SE	4	0	30·55	+·10	40	37	0	SE	4	0	6	41	37	—
	Stornoway ...	30·19	44	SE	6	c	30·24	+·08	42	41	−1	SE	6	c	5	45	39	—
	Wick	30·39	42	SE	8	0	30·46	+·11	41	39	−1	SE	8	ow	8	43	39	—
	Nairn	30·35	42	NNE	3	c	30·37	+·18	39	37	−2	ENE	4	c	2	43	38	—
	Aberdeen ...	30·44	40	SE	5	ogr	30·50	+·14	38	36	−2	SE	5	ogr	6	41	38	—
	Leith	30·31	40	E	3	0	30·39	+·14	40	38	−1	E	4	0	*	47	36	—
	Shields	30·34	41	ESE	5	0	30·41	+·16	39	37	−1	ESE	4	0	6	41	37	—
	Spurn Head ...	30·26	39	E	6	0	30·35	+·14	38	36	−1	ESE	6	om	5	40	36	—
	York	30·30	39	E	2	0	30·38	+·15	38	36	−1	E	3	0	*	41	37	—
	Longhborough	30·22	40	NE	3	c	30·30	+·14	36	35	−1	ENE	4	om	*	46	35	—
	Ardrossan ...	30·22	42	NE	3	0	30·27	+·11	38	38	−5	NE	3	b	2	44	37	—
	Malin Head ...	30·07	43	SSE	5	om	?	?	42	40	0	SE	5	om	3	45	40	0·01
	Muliaghmore ...	30·01	45	E	6	omf	30·02	+·08	43	41	−2	E	6	om	4	47	42	0·01
	Belmullet ...	29·95	45	ESE	4	0	29·99	+·05	44	42	+2	ESE	4	0	*	48	42	0·08
	Donaghadee ...	30·15	43	SSE	5	bc	30·20	+·13	42	42	−2	E	6	bc	4	45	41	0·07
	Liverpool (Bidston)	30·15	41	E	5	bc	30·21	+·12	38	36	−2	E	5	c	4	44	36	—
	Holyhead ...	30·06	40	E	6	mcq	30·12	+·11	40	39	−1	E	6	cmqq	6	46	40	—
	Parsonstown ...	29·96	45	ENE	1	c	29·96	+·04	45	42	+1	ENE	3	bc	*	49	43	—
	Valencia	29·83	49	ESE	4	Tm	29·86	0·0	49	48	+5	E	4	Tm	4	52	43	0·58
	Roche's Point...	29·90	47	ESE	5	om	29·88	+·05	47	46	0	ESE	6	m	5	49	45	0·01
	Pembroke (St. Ann's Hd.)	29·96	46	E	5	c	30·01	+·08	43	42	0	ESE	7	c	5	48	42	0·01
	Scilly	29·84	50	ESE	6	0	29·87	+09	50	49	+1	SSE	6	0	5	51	48	—
	Prawle Point ...	29·98	46	ENE	6	b	30·04	+·12	46	45	−1	ENE	4	c	3	49	45	—
	Jersey (St. Aubin's)	29·95	51	E	3	cm	30·06	+·13	47	45	−1	E	4	cq	3	55	46	—
	Hurst Castle ...	30·06	45	ESE	4	bcm	30·15	+·13	44	42	0	SE	5	ogm	4	47	42	—
GERMANY & HOLLAND.	Dungeness ...	30·11	45	ESE	4	m	30·22	+·15	39	37	−3	E	4	m	3	48	38	—
	London	30·15	42	E	3	0	30·25	+·17	38	37	−1	E	3	bc	*	47	37	—
	Oxford	30·18	40	ESE	2	b	30·24	+·15	36	36	−3	ENE	2	bcm	*	49	35	—
	Cambridge ...	30·23	40	E	2	b	30·31	+·15	37	36	−2	E	2	0	*	49	34	—
	Yarmouth ...	30·23	39	ESE	6	bc	30·33	+·14	36	35	−2	ESE	6	cq	5	40	34	—
	Cuxhaven ...	30·56	30	ESE	4	c	30·59	+·11	32	31	+3	E	4	c	*	?	?	—
	Berlin	30·59	32	E	4	0	30·61	+·11	30	28	+3	ESE	3	0	*	32	?	—
	Wiesbaden ...	*	*	*	*	*	30·44	+·13	32	30	−1	ENE	4	0	*	36	32	—
	Munich	30·38	28	E	4	0	30·43	+·16	27	26	+3	E	5	0	*	30	?	—
	The Helder ...	30·39	34	E	4	b	30·46	+·14	29	28	−5	E	4	c	4	37	28	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30·34	+·13	31	31	−2	E	1	b	*	46	31	—
	Cape Gris Nez	?	45	E	3	b	?	?	34	33	−2	ESE	2	b	2	52	34	—
	Paris	30·12	48	E	3	c	30·23	+·15	33	32	−6	E	1	b	*	58	32	—
	Brest	29·82	52	SE	4	0	29·90	+·14	50	47	+4	SSE	4	0	5	52	45	0·12
	Lorient	29·86	?	ESE	4	0	29·96	+·16	46	46	0	SE	3	c	3	54	45	—
	Rochefort ...	29·92	53	ESE	5	0	30·05	+·17	48	47	+2	ESE	4	0	?	59	39	—
	Belfort	30·19	37	NW	1	f	30·28	+09	27	22	−4	NW	3	bc	*	41	25	—
	Lyons	30·17	46	ENE	1	b	30·29	+·12	30	29	−6	N	2	f	*	55	29	—
	Nice	30·23	51	ENE	4	0	30·23	+02	50	46	+4	ENE	4	c	4	59	?	—
	Perpiguan ...	30·08	53	ESE	4	0	30·11	+·09	53	52	+1	ESE	2	0	*	54	52	0·43
	Biarritz	29·71	59	ENE	3	bc	29·95	+23	52	49	+6	N	2	0	2	64	?	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29·76	47	ENE	1	0	29·99	+·34	41	41	−3	NE	1	f	?	54	41	0·16

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Wednesday, 19th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

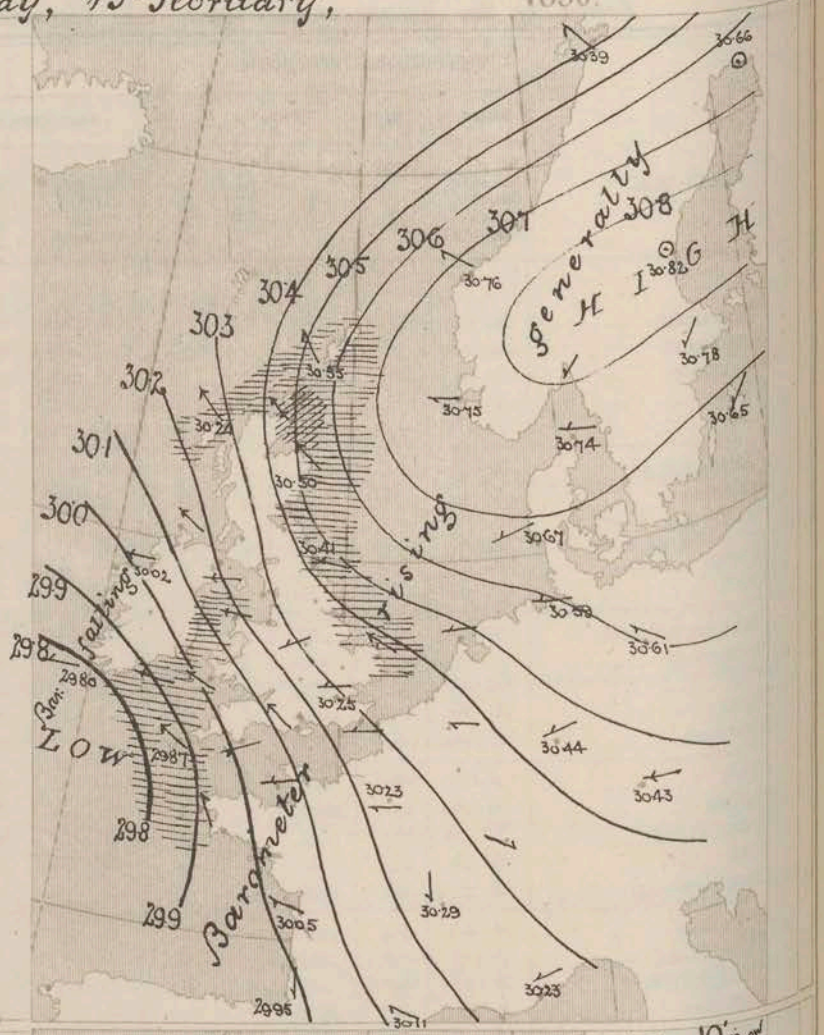
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·7 ins: to 30·8 ins: in an anticyclone still lying over Scandinavia.
Lowest, 29·8 ins: and less, off the southwest coast of Ireland.
Gradient rather steep over our Islands, but slight over the North Sea and Norway and Sweden.
Barometer falling in the south of Ireland, rising elsewhere, most over Scandinavia.

TEMPERATURE

Highest, 53° at Perpignan, 52° at Biarritz, 50° at Sicily, Brest, and Nice, 49° at Valencia, and 47° at Rochefort.
Lowest, 6° at Haparanda, 10° at Hernösand, 23° at Stockholm, 27° at Belfort and Munich, 28° at Bodö and 30° at Lyons.
It has risen in Ireland and over the Bay of Biscay, but fallen somewhat in most other places.

WIND

Fresh or strong from SE. and E. (blowing a gale at Wick) over the whole of our Islands, and the greater part of France and Germany, but light from the same direction in Norway.
Over Sweden calms and light NE. breezes are reported.

WEATHER

Dull in Ireland and the north of Scotland, with rain at Valencia, but fair or dry in most other places.
Rain has fallen in Ireland and some part of France, and snow at some of the Scandinavian stations during the past 24 hours.

SEA

Very high at Wick, rough in the North Sea generally, and on our southwest coast, moderate elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the barometer has commenced to fall in Ireland, while it continues to rise elsewhere the gradients for SE. winds will probably increase generally, especially over Ireland and Scotland.

FORECASTS

For the 24 hours ending at NOON on 20th FEBY 1890.

DISTRICTS.	FORECASTS.
⚑ 0 SCOTLAND NORTH ⚑ 1 SCOTLAND EAST	SE. strong winds or gales; dull, squally.
2 ENGLAND N.E. 3 ENGLAND EAST	E. and SE. winds, strong; fair generally.
4 MIDLAND COUNTIES 5 ENGLAND SOUTH	E. winds, fresh or strong; fair generally.
6 SCOTLAND WEST 7 ENGLAND N.W.	E. winds, strong and squally; fair generally.
8 ENGLAND S.W.	E. winds, strong; cloudy, perhaps some showers.
9 IRELAND NORTH	E. and SE. winds, strong; squally, some rain
⚑ 0 IRELAND SOUTH	E. to SE. winds, strong or gale; squally, dull, some rain
WARNINGS	The SOUTH CONE has been hoisted this morning in districts 0. 1. and 10.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·67	36	32	E	2	o	4
Sumburgh Head	30·50	40	38	SE	4	o	6
Stornoway	30·20	44	44	SE	6	c	5
Aberdeen	30·41	41	38	SE	6	ogq	7
Shields	30·31	40	38	ESE	5	o	6
Ardrossan	30·20	43	41	NE	3	om	2
Malin Head ...	30·05	44	42	SSE	5	o	3
Mullaghmore ...	29·99	46	44	E	5	om	4
Belmullet	29·94	47	45	ESE	4	c	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·05	45	43	E	5	bc	5
Valencia	29·82	51	49	ESE	4	ofp	4
Scilly	29·82	51	49	ESE	6	om	5
Jersey	29·95	53	49	E	3	bcm	8
Dungeness	30·10	48	45	ESE	4	bc	2
London	30·13	46	43	ESE	3	c	*
Yarmouth	30·21	40	39	ESE	6	bc	5
Rochefort	29·91	59	54	ESE	5	c	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright in several parts of Algeria, France, Germany, Denmark and Norway, and in the east of England; cloudy, more or less, elsewhere, and showery at several of our western stations, rain still falling at Perpignan. Rainfall considerable at Valencia later, but slight at our other western stations; slight snow in various parts of Scandinavia.

Temperature varying from 50° to 59° at 8 a.m. over the southern and eastern parts of the Mediterranean, and exceeding 40° over all the western parts of the United Kingdom and France; below the freezing point over northern, eastern, central, and southeastern parts of Europe, and as low as 1° F. at Moscow, 3° at Hermanstadt, 5° at Kiev, 6° at Kharkov, 13° at Archangel, and St Petersburg, 15° at Hango and Uleaborg, 24° at Munich, 27° at Berlin. Rising to 64° at Biarritz, 58° at Paris, 55° at Jersey, 52° at Valencia, and 47° in London later.

Wind continuing SE. to E. over the British Isles, the North Sea, Bay of Biscay and Spain, fresh to strong in most places and a gale at Wick, but light to moderate over the south of England and on the eastern shores of the North Sea. Very light and variable over Northern, Eastern, and Central Europe, E. fresh to strong over the northern parts of the Mediterranean. No important change later.

Barometer highest 30·6 ins. to 30·9 ins. in a large anticyclone covering Russia, and 30·5 ins. to 30·6 ins. in a secondary system lying over Scandinavia. Lowest 29·8 ins. and less, in a low pressure area lying off the coasts of Western Europe, and as low as 29·6 ins. at Corunna. Rising a little in most places later, but scarcely any alteration observed in the relative distribution of pressure.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Thursday 20th February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30·66	12	X	0	b	30·67	+·01	3	3	−3	X	0	bc	*	19	3	—
	Hernösand ...	30·77	21	X	0	0	30·73	−·09	17	16	+7	X	0	b	*	37	9	—
	Stockholm ...	30·77	28	E	2	0	30·73	−·05	27	25	+4	E	2	0	*	30	19	—
	Wisby	30·66	29	E	4	c	30·63	−·02	24	23	−8	E	4	b	*	34	9	—
	Bodö	30·77	32	ESE	2	0	30·55	+·16	32	30	+4	ENE	2	c	1	32	25	—
	Christiansund	30·72	32	ESE	1	b	30·53	−·23	34	31	+3	WSW	2	c	2	36	32	—
	Skudesnaes ...	30·70	33	ESE	4	bc	30·54	−·21	32	28	0	SE	4	0	4	39	32	—
	Christiania Fjord (Færder)	30·76	30	NE	5	c	30·61	−·18	29	27	−2	NE	5	0	1	32	28	—
	Skagen (The Scaw)	30·65	31	ESE	2	0	30·54	−·20	30	29	−2	E	2	0	1	34	30	—
	Fanö	30·58	30	E	4	0	30·41	−·26	27	25	−3	ENE	4	b	*	32	27	—
BRITISH ISLANDS.	Sumburgh Head	30·52	38	SE	6	0	30·30	−·25	37	35	−3	SE	6	0	7	41	36	0·03
	Stornoway ...	30·15	43	SE	6	c	30·04	−·20	41	41	−1	S	6	p	5	46	39	0·03
	Wick	30·40	41	SE	8	0	30·18	−·28	39	38	−2	SSE	8	ow	8	41	37	0·01
	Nairn	30·33	38	ESE	2	c	30·11	−·26	37	35	−2	X	0	c	1	43	36	—
	Aberdeen ...	30·45	38	SE	6	ogq	30·24	−·26	36	35	−2	SE	5	ogbtr	6	39	36	0·03
	Leith	30·34	38	E	4	0	30·17	−·22	37	35	−3	E	2	0	*	40	34	—
	Shields	30·37	38	ESE	5	0	30·20	−·21	36	34	−3	ESE	4	0	6	39	35	—
	Spurn Head ...	30·28	37	ESE	7	0	30·15	−·20	36	35	−2	ESE	6	om	5	38	35	—
	York	30·35	36	E	3	0	30·18	−·20	35	34	−3	E	2	0	*	39	34	—
	Loughborough	30·29	36	E	4	0	30·15	−·15	34	33	−2	ESE	3	ogm	*	38	34	—
	Ardrossan ...	30·21	38	NE	5	0	30·08	−·19	34	34	−4	NE	2	tsm	2	42	34	0·07
	Malin Head ...	30·05	42	SE	5	om	29·96	?	39	38	−3	SE	5	og	2	45	39	0·05
	Mullaghmore ...	29·95	45	SE	7	ogtm	29·90	−·12	46	44	+3	SSE	6	c	4	47	42	0·01
	Belmullet ...	29·89	46	S	5	c	29·85	−·08	45	44	+1	SE	5	0	*	48	42	0·04
	Donaghadee ...	30·15	43	E	5	0	30·07	−·13	39	39	−3	ESE	5	t	3	45	39	0·25
	Liverpool (Bidston)	30·20	37	E	5	0	30·09	−·12	33	33	−5	ESE	3	ts	3	43	33	0·06
	Holyhead ...	30·12	42	E	4	omq	30·06	−·06	40	40	0	ESE	1	tmq	2	44	40	0·41
	Parsonstown ...	29·97	47	SE	2	0	29·94	−·02	45	44	0	SE	1	c	*	47	44	0·07
	Valencia	29·90	48	ESE	6	0	29·88	+·08	47	46	−2	S	5	t	4	51	44	0·47
	Roche's Point...	29·97	47	S	4	bc	29·94	+·06	47	45	0	S	3	bcp	4	50	46	0·10
	Pembroke (St. Ann's Hd.)	30·08	45	SE	6	t	30·04	+·03	41	41	−2	ESE	4	cm	4	45	40	0·10
	Scilly	30·04	49	SSE	4	c	29·99	+·12	49	49	−1	SSE	4	0	4	51	47	0·01
	Prawle Point ...	30·11	47	E	3	c	30·09	+·05	43	43	−3	NE	2	omq	1	48	42	0·27
	Jersey (St. Aubin's)	30·09	54	SE	1	cq	30·08	+·02	48	46	+1	X	0	mt	0	56	46	0·05
	Hurst Castle ...	30·16	40	ESE	4	0	30·08	−·07	42	40	−2	ENE	3	md	2	46	40	0·03
GERMANY & HOLLAND.	Dungeness ...	30·20	43	ENE	4	m	30·10	−·12	39	37	0	ESE	3	c	2	45	38	—
	London	30·24	39	ESE	3	c	30·10	−·15	37	36	−1	ENE	2	oq	*	43	36	—
	Oxford	30·23	36	E	2	c	30·12	−·12	36	36	0	NE	1	bt	*	47	33	0·01
	Cambridge ...	30·28	38	E	2	bc	30·14	−·17	36	36	−1	E	1	0	*	41	30	—
	Yarmouth ...	30·30	37	ESE	6	cq	30·16	−·17	35	34	−1	ESE	6	cq	5	37	33	—
	Cuxhaven ...	30·55	31	E	4	c	30·39	−·20	30	29	−2	E	4	b	*	32	27	—
	Berlin	30·54	28	SE	2	b	30·40	−·21	23	22	−7	ESE	2	b	*	30	23	—
	Wiesbaden ...	*	*	*	*	*	30·25	−·19	28	27	−4	NE	4	b	*	37	27	—
	Munich	30·34	23	E	3	b	30·23	−·20	21	21	−6	E	5	m	*	30	18	—
	The Helder ...	30·41	30	E	4	0	30·27	−·19	28	27	−1	E	2	c	3	32	27	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30·19	−·15	28	28	−3	E	2	c	*	42	27	—
	Cape Gris Nez	?	40	E	4	b	?	?	33	31	−1	SE	3	c	3	46	32	—
	Paris	30·21	41	ENE	2	0	30·13	−·10	30	30	−3	ESE	1	b	*	49	29	—
	Brest	30·13	53	X	0	0	30·04	+·14	45	44	−5	E	2	0	1	52	41	0·04
	Lorient	30·06	48	SE	1	0	30·10	+·14	47	46	+1	X	0	0	2	52	45	0·08
	Rochefort ...	30·11	55	E	2	0	30·14	+·09	48	47	0	E	2	0	?	61	41	—
	Belfort	30·22	32	N	1	c	30·10	−·18	30	23	+3	N	1	bc	*	35	26	—
	Lyons	30·21	42	E	1	b	30·18	−·11	31	31	+1	NNE	1	b	*	49	30	—
	Nice	30·13	51	E	6	b	30·04	−·19	52	44	+2	ENE	4	c	4	57	46	—
	Perpignan ...	30·06	54	SE	1	0	30·08	−·03	50	50	−3	W	1	t	*	57	49	0·20
	Biarritz	30·04	52	W	3	0	30·14	+·19	51	50	−1	S	5	t	3	57	48	0·16
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30·16	51	N	3	b	30·24	+·25	46	44	+5	NNE	2	0	3	55	?	—

For Explanation of Columns, see bottom of p. 4.

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WEATHER CHARTS

for 8 a.m. on *Thursday, 20th February,* 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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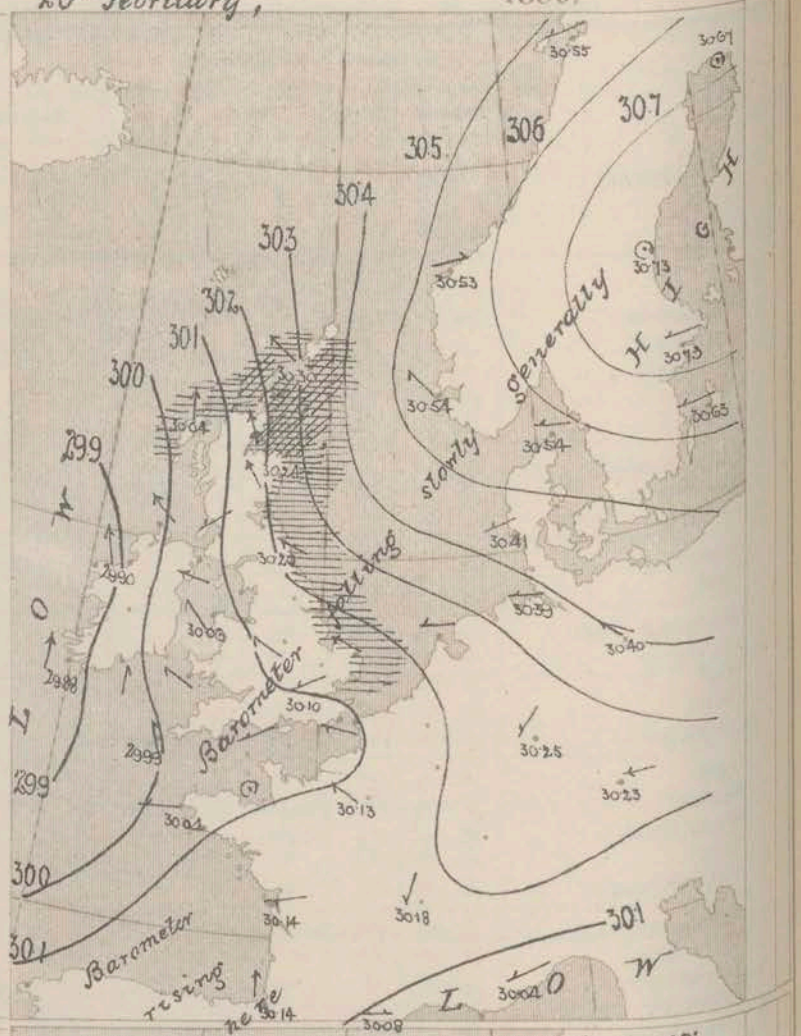
WIND: Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

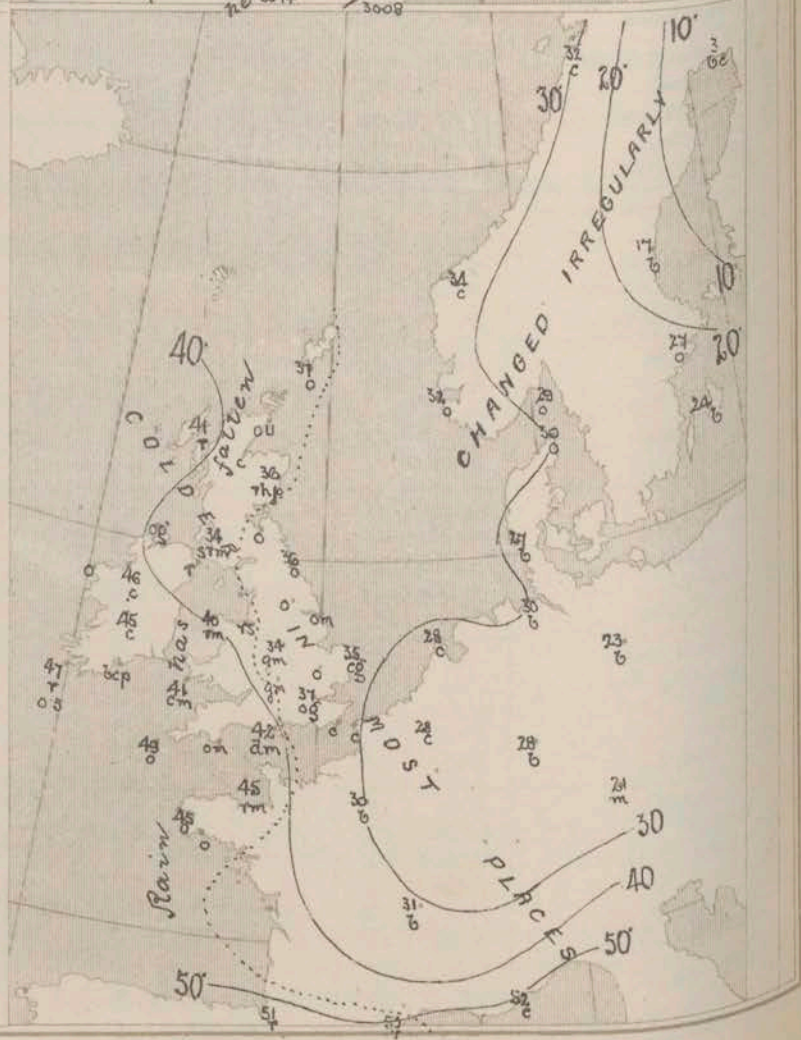
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·88
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·7 ins: and more, in an anticyclone lying over Scandinavia and the Baltic, and 30·2 ins: and more over Spain.
Lowest, 29·8 ins: and less, off the west of Ireland, and 30·0 ins: and less, over the Gulf of Lion.
Gradients are less steep over our Islands than they were yesterday, and remain slight to the eastward of the North Sea.
Barometer rising over Spain and the south of France, falling elsewhere

TEMPERATURE

Highest, 52° at Nice, 50° at Perpignan, 49° at Scilly, 48° at Rochefort, 47° at Valencia, Roche Point and Lizard, and 46° at Mullaghmore.
Lowest, 3° at Haparanda, 17° at Hernösand, 21° at Stornoway, 23° at Berlin, 24° at Wick, 24° at Stockholm and Vardö, and 25° at Helder, Brussels and Wiesbaden.
It has risen at some of the Continental stations since yesterday, but fallen in most other places.

WIND

Strong from SE and S. in Scotland and Ireland (still blowing a gale at Wick), fresh from the E.ly at most of the English stations, but light to moderate in force from the same direction on the Continent.

WEATHER

Fine over Sweden, Denmark, Germany, and the east of France, but dull or cloudy over our Islands and the west of France, with rain at some of the northern and eastern stations and at Oxford, Hunt Castle, Jersey, and Perpignan.
Rain has fallen during the past 24 hours in most parts of the Kingdom.

SEA

Still high off the northeast of Scotland, rough in the North Sea generally, moderate elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Depressions are still travelling to the northeastward outside our western coasts, and, as pressure remains high over Scandinavia SE.ly winds fresh or strong in force will continue at most of the northern and western stations. The local depression in the south appears likely to cause cold rain or sleet over most of the southern and eastern districts of England

FORECASTS

For the 24 hours ending at NOON on 21st Febry 1890.

DISTRICTS.	FORECASTS.
¶ 0 SCOTLAND NORTH ¶ 1 SCOTLAND EAST	S.ly and SE.ly winds, strong or a gale; dull, squally, some showers.
2 ENGLAND N.E. 3 ENGLAND EAST	E.ly and SE.ly winds, strong; dull, unsettled, some showers.
4 MIDLAND COUNTIES 5 ENGLAND SOUTH	Varying E.ly breezes, moderate or fresh; dull, unsettled, some cold showers.

DISTRICTS.	FORECASTS
6 SCOTLAND WEST 7 ENGLAND N.W.	E.ly and SE.ly winds, fresh; dull, some rain.
8 ENGLAND S.W.	S.ly and SE.ly winds, fresh; dull, some rain.
9 IRELAND NORTH ¶ 10 IRELAND SOUTH	S.ly and SE.ly winds, strong; squally, some showers.
WARNINGS	The SOUTH CONE is still flying in districts 0. 1 and 10

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.76	37	38	ESE	4	c	3
Sumburgh Head	30.54	37	36	SE	5	o	6
Stornoway	30.20	46	45	SE	6	c	5
Aberdeen	30.47	39	36	SE	6	ogq	6
Shields	30.38	38	36	ESE	5	o	6
Ardrossan	30.22	42	41	NE	6	c	3
Malin Head ...	30.04	44	40	SE	6	om	3
Mullaghmore ...	29.95	46	43	E	7	omq	5
Belmullet	29.86	48	45	ESE	6	ou	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.10	43	41	E	6	cmq	6
Valencia	29.82	47	45	SSW	7	om	6
Scilly	29.98	51	50	SSE	6	o	5
Jersey	30.09	53	50	ESE	3	bc	3
Dungeness	30.20	45	41	E	4	m	3
London	30.23	43	40	E	4	c	*
Yarmouth	30.32	37	36	ESE	6	cq	5
Rochefort	30.11	59	56	ESE	3	o	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine in many parts of Great Britain and France as well as in Scandinavia the Netherlands, and Italy. Cloudy or overcast elsewhere, with mist or fog locally, rain at Valencia, snow at Lemberg.

Temperature highest, 50° to 55° and upwards at the Mediterranean stations (Laballe 60°, Malta 59°, Cagliari 58°). Lowest, −17° F. at Moscow; low, 20° or less, at most of the Russian and Swedish stations; below the freezing point over the whole of northern, eastern and central Europe.

Wind E. or SE. in nearly all parts of Western Europe, strong in force in many parts of the British Islands with a gale at Wick. Light or moderate from the NE. and over the Baltic, Germany, and the greater part of Southern Europe. Variable at the Russian stations, as well as in Algeria.

Barometer, highest 30·8 ins. and upwards, over the Central parts of Sweden and Russia, high 30·5 ins. and upwards, over the whole of northern and eastern Europe. Lowest 29·8 ins. and less in a large depression lying off the south of Ireland; low, 29·9 ins. and less, in a smaller disturbance lying near Algiers. Gradients rather steep over the western and northern parts of the Kingdom.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Friday 21st February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30.55	15	X	0	0	30.52	−.15	19	19	+16	S	2	c	*	?	0	—
	Hernösand ...	30.68	21	X	0	0	30.62	−.11	25	24	+8	S	2	0	*	32	16	—
	Stockholm ...	30.64	29	E	2	0	30.54	−.19	27	27	0	E	2	0	*	30	23	—
	Wisby	30.58	27	E	4	0	30.48	−.15	24	23	0	SE	4	bc	*	30	23	—
	Bodö	30.50	33	E	2	bc	30.43	−.12	30	27	−2	E	2	bc	1	36	27	—
	Christiansund	30.44	33	SSW	1	c	30.38	−.15	31	28	−3	ESE	3	0	2	36	30	—
	Skudesnaes ...	30.43	32	SE	2	b	30.34	−.20	32	29	0	ESE	6	0	4	36	32	—
	Christiania Fjord (Færder)	30.51	30	NNE	5	0	30.43	−.18	29	26	−2	ENE	5	0	2	30	27	—
	Skagen (The Scaw)	30.38	30	SE	3	0	30.31	−.23	29	28	−1	SE	2	0	2	30	28	—
	Fanö	30.30	28	ENE	4	0	30.24	−.17	28	29	+1	ENE	4	0	*	32	29	—
BRITISH ISLANDS.	Sumburgh Head	30.20	36	SE	6	0	30.12	−.18	38	36	+1	SE	5	0	6	39	36	0.04
	Stornoway ...	29.96	39	S	5	p	29.98	−.06	42	42	+1	S	5	0	4	42	39	0.20
	Wick	30.10	39	SSE	3	0	30.05	−.13	39	38	0	S	5	0	6	40	35	0.05
	Nairn	30.04	36	X	0	p	30.01	−.10	39	35	0	X	0	c	1	40	34	0.10
	Aberdeen ...	30.14	37	SE	6	ogpr†	30.11	−.13	39	36	+1	SSW	3	odm	6	39	36	0.06
	Leith	30.10	33	E	1	0	30.11	−.06	34	34	−3	NW	1	of	*	39	31	0.12
	Shields	30.11	35	SE	3	pr	30.13	−.07	35	34	−1	SSE	2	pr	4	37	33	0.15
	Spurn Head ...	30.08	35	ESE	4	p	30.13	−.02	37	35	+1	NSW	2	cm	3	39	34	0.02
	York	30.12	35	E	1	m	30.15	−.03	34	34	−1	SE	1	m	*	39	33	0.10
	Loughborough	30.10	36	E	1	0	30.15	0.0	36	35	+2	ESE	1	f	*	36	33	0.09
	Ardrossan ...	30.05	37	NE	2	0	30.09	+.01	35	35	+1	NNE	1	m	1	39	33	0.13
	Malin Head ...	29.89	42	SSE	5	om	30.02	+.06	40	39	+1	S	3	0	1	45	39	—
	Mullaghmore ...	29.90	47	S	2	bc	30.05	+.15	40	39	−6	X	0	c	2	50	39	0.01
	Belmullet ...	29.88	45	SW	2	0	30.05	+.20	43	42	−2	SW	2	0	*	51	40	0.04
	Donaghadee ...	30.00	42	SE	3	0	30.08	+.01	35	35	−4	SSW	3	c	1	42	34	0.29
	Liverpool (Bidston)	30.05	37	ESE	3	0	30.12	+.03	36	35	+3	SE	1	c	2	39	33	0.09
	Holyhead ...	30.02	45	SSE	1	ogm	30.11	+.05	42	42	+2	SW	1	cmq	2	47	40	0.02
	Parsonstown ...	29.93	46	X	0	c	30.07	+.13	39	38	−6	X	0	0	*	54	34	0.02
	Valencia	29.96	48	SW	1	c	30.00	+.12	46	45	−1	SE	2	og	2	52	41	0.13
	Roche's Point...	29.97	47	SW	3	b	30.07	+.13	47	45	0	SSW	4	o	4	52	43	0.01
	Pembroke (St. Ann's Hd.)	30.03	44	SE	2	m	30.13	+.09	41	41	0	E	1	f	3	45	39	0.02
	Scilly	30.04	48	W	3	b	30.09	+.10	48	47	−1	SSE	4	c	4	54	44	—
	Prawle Point ...	30.06	44	ESE	2	0	30.12	+.03	43	42	0	NE	2	bcm	1	45	40	—
	Jersey (St. Aubin's)																	
	Hurst Castle ...	30.07	44	ENE	2	om	30.17	+.09	39	37	−3	NE	1	f	3	44	37	0.01
	Dungeness ...	30.04	40	SSE	1	p	30.13	+.03	36	35	−3	NW	2	m	1	42	34	0.10
	London	30.09	39	SE	1	ogm	30.15	+.05	35	34	−2	X	0	fq	*	40	35	—
	Oxford	30.11	38	NE	1	0	30.17	+.05	36	36	0	X	0	fq	*	39	35	0.03
	Cambridge ...	30.10	37	E	1	0	30.18	+.04	35	34	−1	N	1	0	*	39	33	0.04
	Yarmouth ...	30.10	36	SE	4	cmd	30.12	−.04	37	36	+2	NW	2	of	4	37	33	0.05
GERMANY & HOLLAND.	Cuxhaven ...	30.28	28	E	4	0	30.21	−.18	26	25	−4	ESE	3	b	*	?	23	—
	Berlin	30.29	28	ESE	4	b	30.25	−.15	24	?	+1	ESE	3	b	*	30	23	—
	Wiesbaden ...	*	*	*	*	*	30.17	−.08	26	25	−2	NE	2	b	*	37	25	—
	Munich	30.13	21	SE	2	b	30.15	−.08	16	16	−5	NW	4	f	*	28	16	—
	The Helder ...	30.15	30	E	2	b	30.12	−.15	30	29	+2	E	1	f	1	32	28	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.12	−.07	38	36	+10	SW	2	0	*	43	?	—
	Cape Gris Nez	?	41	NE	1	c	?	?	38	37	+5	N	3	f	3	45	?	0.04
	Paris	30.08	48	SE	1	bc	30.12	−.01	38	38	+8	NE	1	0	*	54	?	0.04
	Brest	30.08	52	WNW	1	b	30.15	+.11	45	44	0	X	0	b	2	59	41	0.04
	Lorient	30.09	50	W	2	bc	30.17	+.07	41	41	−6	ENE	1	f	4	54	39	—
	Rochefort ...	30.19	48	WNW	2	0	30.23	+.09	46	45	−2	NW	2	bc	2	55	48	—
	Belfort	30.06	29	SW	1	c	30.08	−.02	25	17	−5	SW	4	m	*	41	22	—
	Lyons	30.12	43	W	1	bc	30.17	−.01	34	34	+3	W	1	m	*	49	?	—
	Nice	30.02	54	NE	2	0	30.08	+.04	46	44	−6	E	2	bc	1	61	45	—
	Perpignan ...	30.11	54	NW	2	0	30.15	+.07	50	44	0	NW	4	0	*	56	47	0.12
	Biarritz	30.22	48	S	2	p	30.25	+.11	48	45	−3	WSW	5	0	3	54	45	0.32
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.34	52	NNW	4	b	30.34	+.10	47	45	+1	NNE	3	b	?	59	46	—

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Friday, 21st February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

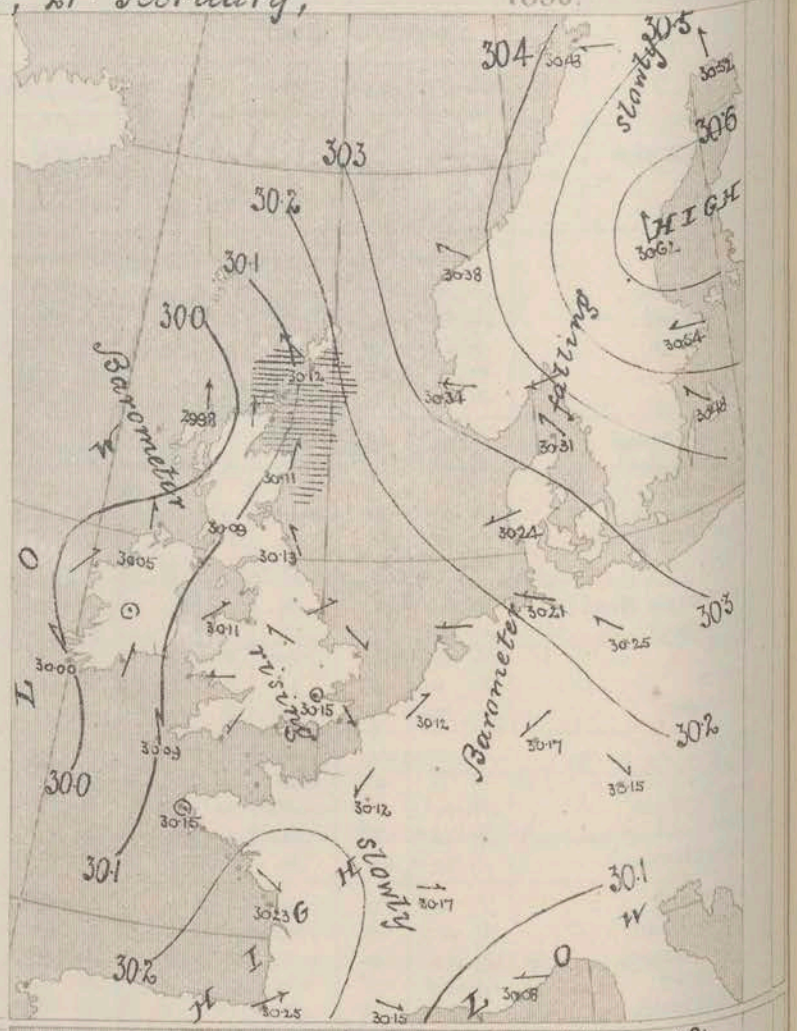
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

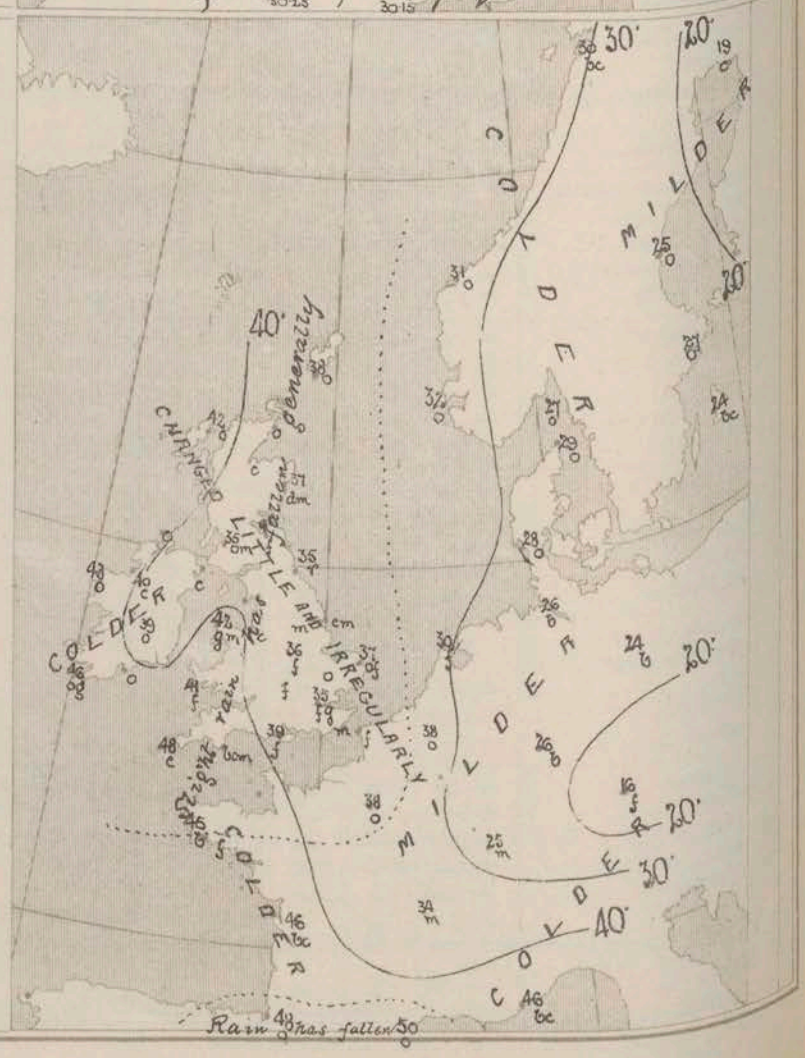
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·6 ins. and more, in an anticyclone still lying over the east of Sweden and the Baltic, and 30·2 ins. and more over Spain and the south of France.
Lowest, 29·9 ins. and less, off our northwest coast, and 30·0 ins. and less, over the Gulf of Lion.
Gradients slight generally.
Barometer rising over our Islands, falling over Scandinavia and Germany.

TEMPERATURE

Highest, 50° at Valencia, 48° at Scilly and Bournemouth, 47° at Rochelle Point, 46° at Valencia, Rochefort and Nice, and 45° at Brest.
Lowest, 16° at Munich, 19° at Haparanda, 24° at Werlo and Berlin, 25° at Stockholm and Belfort, 26° at Wiesbaden, 27° at Jacobsen, and 28° at Tromsö.
It has fallen somewhat in Ireland and over Norway, but changed irregularly elsewhere.

WIND

Fresh from S. or SE. in the extreme north of our Islands, light or moderate from the S. in Ireland, E. over Scandinavia and North Germany, but light and variable at the English stations and over the greater part of France.

WEATHER

Fine and bright over Germany and in some parts of France, but cloudy or dull over our Islands generally with rain at Aberdeen and Shields, and mist or fog at several of the English stations.
Rain has fallen over the greater part of our Islands and in some part of France during the past 24 hours. In London the amount collected was not measurable.

SEA

Rough off the northeast of Scotland, moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The distribution of pressure appears to be becoming rather complex, but the general tendency is toward the formation of S. gradients over our Islands, with, perhaps, gradually improving weather.

FORECASTS

For the 24 hours ending at NOON on 22nd FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	S. and SE. winds, fresh; dull, some rain locally.
1 SCOTLAND EAST	S. winds, light or moderate; dull and misty, perhaps some rain.
2 ENGLAND N.E.	
3 ENGLAND EAST	Calms and light variable breezes; dull, some fog or mist.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Varying S. breezes, light or moderate; cloudy, perhaps some rain.
7 ENGLAND N.W.	
8 ENGLAND S.W.	
9 IRELAND NORTH	
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

No'e.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.49	35	30	SE	4	c	3
Sumburgh Head	30.23	36	35	SE	5	rh p	6
Stornoway	29.99	41	41	S	5	p	5
Aberdeen	30.16	38	35	SE	6	o r p	6
Shields	30.13	36	34	SE	4	o	5
Ardrossan	30.07	37	36	NE	2	o r	1
Malin Head ...	29.92	42	41	SSE	5	o	2
Mullaghmore ...	29.88	50	46	SSE	5	c	3
Belmullet	29.86	51	47	SSW	3	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.04	46	41	ESE	1	c	2
Valencia	29.98	50	48	SSW	5	bcm	5
Scilly	30.00	52	51	WSW	3	b	3
Jersey	30.08	50	48	SSE	2	o r	2
Dungeness	30.05	42	40	SSE	2	r	2
London	30.08	40	39	E	1	o f q	*
Yarmouth	30.11	36	34	ESE	5	c f g	4
Rochefort	30.15	49	49	NW	3	o	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over Sweden, Denmark, Germany, some parts of France and in some parts of Italy, dull or cloudy elsewhere, with rain at some of the Irish and Scotch stations, and in the south of England, as well as at some of the Mediterranean stations. Rain falling later over the United Kingdom.

Temperature, highest, 60° at Malta, 50° to 56° at the Mediterranean stations generally, 45° to 49° on the west coasts of Great Britain and 41° at Stornoway. Lowest, 1° at Moscow, 3° at Haparanda, and Kharkov, 13° at Uleaborg, and 14° at Memel and Kiev; below the freezing point over the whole of Northern, Eastern, and Central Europe.

Wind strong from SE. and S. at the Irish and Scotch stations (blowing a gale at Wick) fresh from E. over England, and light from the NW. and in the north of Russia. Over the greater part of the Continent, light or moderate E. breezes were reported, and variable cyclonic winds over the Mediterranean.

Barometer, highest, 30·8 ins: and upwards over Central Russia, high 30·5 ins: and more, over Scandinavia and Eastern Europe, lowest 29·8 ins: and less, in a depression lying off the west of Ireland, and also in a small disturbance between Sardinia and Sicily. Gradients less steep over the United Kingdom later, and wind becoming light and variable at the English stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for SATURDAY 22ND FEBRUARY. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30.58	16	X	0	0	30.57	+.05	19	19	0	X	0	c	*	27	12	—
	Hernösand ...	30.57	26	E	2	0	30.53	−.09	24	23	−1	ENE	2	s	*	28	19	0.08
	Stockholm ...	30.48	27	E	2	s	30.45	−.09	28	27	+1	SE	2	s	*	30	25	0.04
	Wisby	30.42	27	SE	4	s	30.42	−.06	31	31	+7	SE	4	0	*	?	19	—
	Bodö	30.42	28	E	2	b	30.35	−.08	23	20	−7	E	2	b	1	34	21	—
	Christiansund	30.36	33	S	2	c	30.38	0.0	30	28	−1	ESE	2	c	2	34	28	—
	Skudesnaes ...	30.38	31	NNE	2	b	30.48	+.14	33	29	+1	SSE	2	0	2	36	25	—
	Christiania Fjord (Færder)	30.41	30	ENE	5	0	30.49	+.06	26	25	−1	NNE	2	b	1	30	25	—
	Skagen (The Scaw)	30.38	30	ESE	2	0	30.43	+.12	29	28	0	NE	3	0	3	32	28	—
	Fanö	30.27	29	NNW	2	0	30.39	+.15	26	25	−2	NNW	2	b	*	30	25	—
BRITISH ISLANDS.	Sumburgh Head	30.13	38	SSE	5	p	30.28	+.16	42	40	+4	WNW	1	0	4	42	37	0.30
	Stornoway ...	30.10	43	SW	3	bc	30.33	+.35	40	40	−2	SW	1	0	3	48	35	0.05
	Wick	30.13	40	S	1	c	30.36	+.31	39	38	0	NW	1	0	2	41	36	0.05
	Nairn	30.16	40	W	1	b	30.37	+.36	40	38	+3	W	1	c	1	47	34	—
	Aberdeen ...	30.20	39	SSE	2	0	30.43	+.32	32	31	−5	SW	1	bcm	4	40	31	0.01
	Leith	30.22	39	ESE	1	c	30.45	+.34	36	34	+2	W	1	cm	*	40	33	—
	Shields	30.21	41	X	0	m	30.46	+.33	32	32	−3	W	2	m	3	43	31	—
	Spurn Head ...	30.21	38	S	2	0	30.45	+.32	37	37	0	NNW	2	b	3	41	35	—
	York	30.21	38	S	1	0	30.48	+.33	35	35	+1	S	1	b	*	39	33	—
	Loughborough	30.22	41	SE	1	0	30.46	+.31	38	38	+2	N	2	fg	*	45	36	—
	Ardrossan ...	30.20	40	NNE	1	0f	30.45	+.36	38	38	+3	NE	1	of	0	40	35	—
	Malin Head ...	30.17	44	SW	1	bcf	30.38	+.36	40	40	0	S	2	0	2	49	37	—
	Mullaghmore ...	30.17	44	X	0	b	30.40	+.35	45	44	+5	X	0	0mfd	2	46	39	—
	Belmullet ...	30.14	48	SSE	2	c	30.39	+.34	46	46	+3	SSE	2	0	*	52	42	—
	Donaghadee ...	30.20	44	SSW	2	bc	30.43	+.35	42	42	+7	ESE	3	m	1	50	35	0.01
	Liverpool (Bidston)	30.23	43	WNW	1	bc	30.47	+.35	37	37	+1	SSE	1	f	1	48	36	—
	Holyhead ...	30.22	45	WSW	1	0g	30.44	+.33	39	39	−3	X	0	cm	0	49	39	—
	Parsonstown ...	30.16	46	X	0	0	30.40	+.33	43	42	+4	X	0	c	*	47	38	0.14
	Valencia	30.13	50	SE	2	0m	30.39	+.39	49	47	+3	SE	2	0	3	50	45	0.03
	Roche's Point ...	30.14	47	S	1	0	30.40	+.33	47	45	0	S	1	c	3	49	45	0.06
	Pembroke (St. Ann's Hd.)	30.22	45	SE	2	0	30.44	+.31	42	41	+1	ESE	2	cm	4	47	41	—
	Scilly	30.17	49	SSE	4	b	30.39	+.30	47	47	−1	X	0	c	6	53	45	—
	Prawle Point ...	30.23	45	E	2	0	30.42	+.30	42	41	−1	NE	3	bcm	1	46	41	—
	Jersey (St. Aubin's)																	
	Hurst Castle ...	30.23	43	SW	1	f	30.43	+.26	42	40	+3	ENE	3	m	2	44	37	—
GERMANY & HOLLAND.	Dungeness ...	30.21	38	N	2	m	30.38	+.25	41	38	+5	ESE	3	bc	2	41	35	?
	London	30.24	38	SE	1	ogf	30.43	+.28	38	38	+3	NE	1	ogf	*	39	35	—
	Oxford	30.28	42	X	0	0	30.46	+.29	38	38	+2	NE	1	ogf	*	44	34	—
	Cambridge ...	30.25	37	X	0	0	30.47	+.29	35	35	0	X	0	0	*	38	32	—
	Yarmouth ...	30.21	39	NNE	1	c	30.43	+.31	39	38	+2	NNE	2	bc	3	40	35	—
	Cuxhaven ...	30.17	32	ESE	3	c	30.33	+.12	32	32	+6	ENE	2	0	*	?	?	—
	Berlin	30.24	31	SE	3	b	30.31	+.06	25	24	+1	SE	3	bc	*	37	23	—
	Wiesbaden ...						30.29	+.12	33	31	+7	X	0	0	*	34	?	—
	Munich	* 30.15	* 25	* SW	* 2	* f	30.23	+.08	22	22	+6	N	1	f	*	34	?	—
	The Helder ...	30.23	35	NE	1	c	30.40	+.28	35	34	+5	NNE	1	0	1	36	30	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)						30.40	+.28	33	30	−5	NNE	3	0	*	42	32	—
	Cape Gris Nez	* ?	* 39	* NNW	* 2	* f	?	?	40	37	+2	E	4	0	4	45	34	—
	Paris																	
	Brest	30.20	42	N	3	0	30.31	+.19	36	34	−2	NNE	3	0	*	44	36	0.04
	Lorient	30.19	49	W	1	b	30.31	+.16	43	41	−2	E	2	m	6	54	41	0.04
	Rochefort ...	30.17	41	SSW	1	f	30.31	+.14	42	42	+1	NE	3	c	6	50	36	—
	Belfort	30.25	48	NNW	1	0	30.31	+.08	43	43	−3	NNE	4	0	?	50	36	—
	Lyons	30.10	38	SW	1	bc	?30.18	+.10	32	21	+7	SSE	1	0	*	46	22	—
	Nice	30.19	41	N	1	0	30.21	+.04	38	37	+4	N	2	0	*	43	?	—
	Perpignan ...	30.10	48	SW	3	m	30.13	+.05	42	42	−4	ENE	5	0	2	57	41	0.67
	Biarritz	30.17	52	NW	2	b	30.19	+.04	39	37	−11	SW	2	b	*	55	36	—
PENINSULA.	Corunna	30.21	51	N	3	0	30.22	−.03	41	40	−7	SSE	2	c	3	55	39	—
	Lisbon	* 30.30	* 52	* X	* 0	* b	30.22	−.12	53	51	+6	N	3	c	5	57	?	

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Saturday, 22nd February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

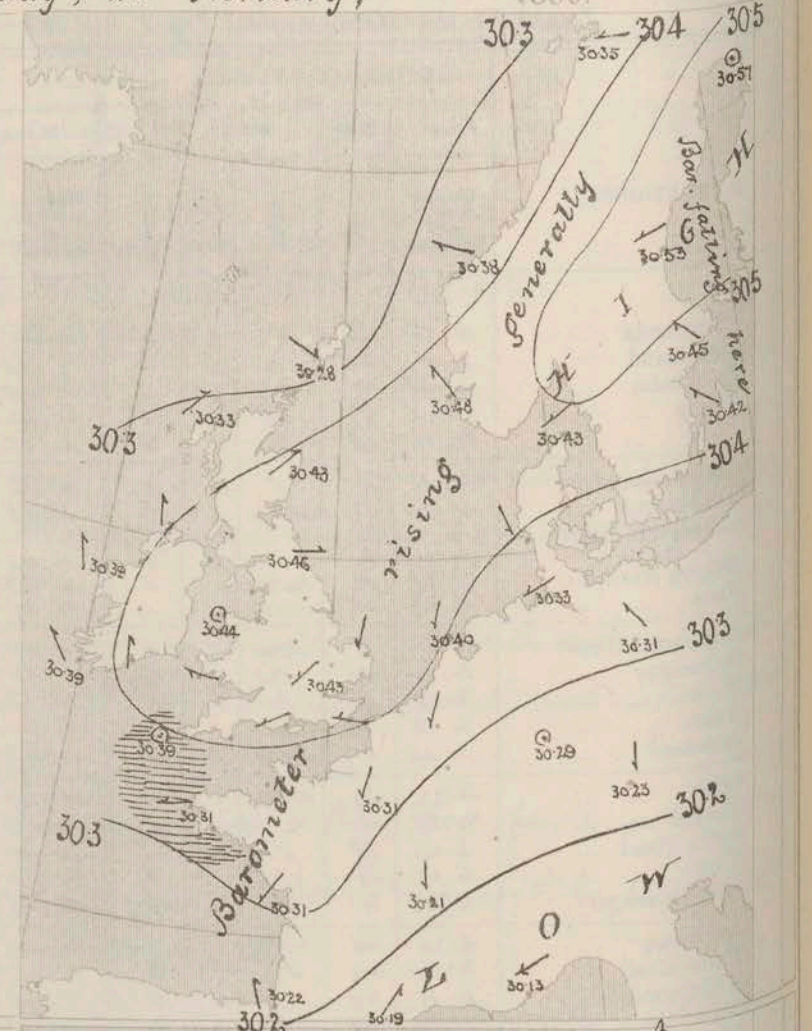
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟫⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shewn by Letters of the Beaufort Scale.

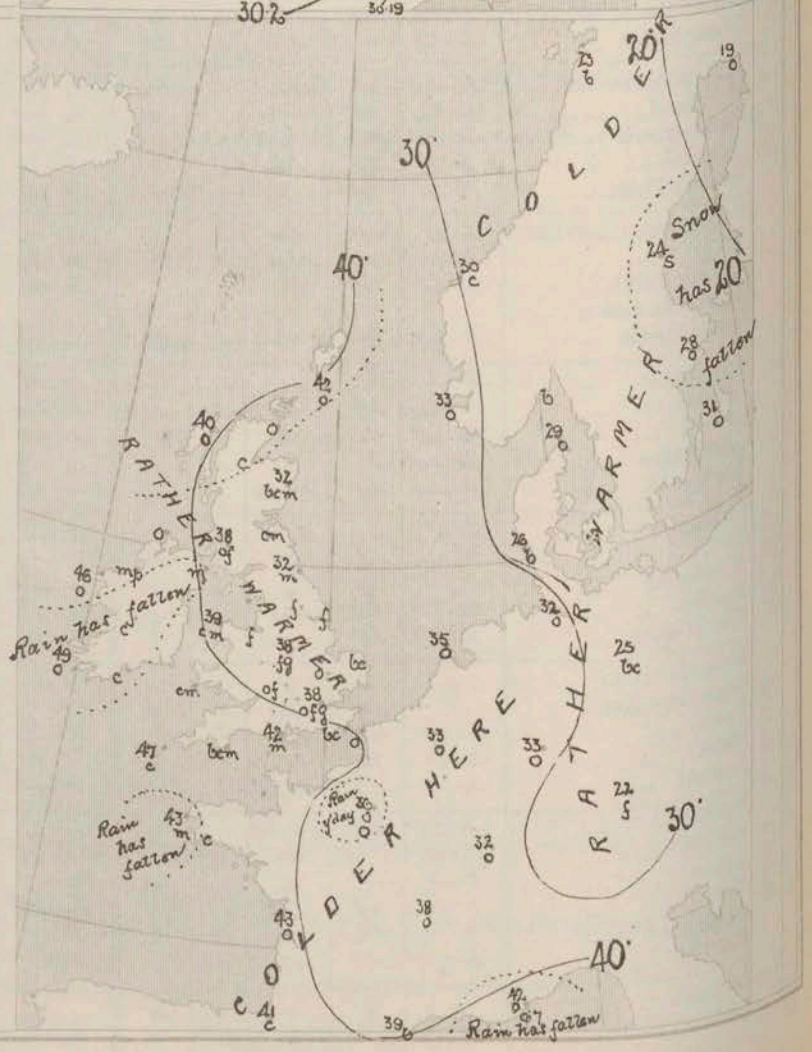
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·5 ins: and more, over Sweden, and high 30·4 ins: and more in an elongated area covering the greater part of our Islands and the North Sea.
Lowest, 30·2 ins: and less, over the south of France and Northern Italy.
Gradients are very slight everywhere
Barometer rising decidedly except over the Baltic and the Iberian Peninsula, where a slight fall is reported.

TEMPERATURE

Highest, 53° at Lisbon, 49° at Valencia, 47° at Rockes Point and Scilly, 46° at Belmullet, and 45° at Mullaghmore.
Lowest, 19° at Haparanda, 22° at Munich, 23° at Bodö, 24° at Stockholm, 25° at Berlin, and 26° at Jaeder and Fanö
It has risen somewhat over our Islands and Germany, but fallen in most part of France

WIND

Very light and variable over the greater part of England, light from the S^ern in the extreme west and north, light from NE. and NE. at the French stations and on the south and southeast coast of England.
Over Scandinavia varying E^ly breezes are reported.

WEATHER

Fair at some of the southern English stations and at Fanö, Berlin, and Perpignan, but cloudy or dull elsewhere with fog or mist over England and showers at Mullaghmore. Rain has fallen during the past twenty-four hours at several of the western and northern stations, as well as in the extreme south of France, where the fall has been heavy

SEA

Rough at Scilly and on the northwest coasts of France, moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As barometrical pressure appears likely to remain very uniform, calms and variable airs with occasional fog or mist are probable in most parts of the country.

FORECASTS

For the 24 hours ending at NOON on 23rd February 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SW^ly winds, light; cloudy but fair.
1 SCOTLAND EAST	
2 ENGLAND N.E.	Light Variable breezes, dull, misty, cold.
3 ENGLAND EAST	NE^ly breezes, light; fair but misty.
4 MIDLAND COUNTIES	Same as No 2
5 ENGLAND SOUTH	E^ly and NE^ly breezes, light; fair some fog locally. Rather cold.
6 SCOTLAND WEST	Varying S^ly breezes; dull, some showers locally.
7 ENGLAND N.W.	
8 ENGLAND S.W.	Same as No 5.
9 IRELAND NORTH	Same as Nos 6 and 7.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

N.B.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.35	35	28	ESE	4	o	3
Sumburgh Head	30.12	37	37	SSE	5	r	6
Stornoway	30.04	48	47	SW	4	bc	4
Aberdeen	30.14	40	38	SSE	2	c	5
Shields	30.15	39	38	WSW	1	m	4
Ardrossan	30.15	39	38	NNE	1	of	1
Malin Head ...	30.12	48	45	SW	2	bf	2
Mullaghmore ...	30.12	46	43	NNW	2	b	2
Belmullet	30.11	52	47	NE	2	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.17	46	45	SW	2	o	2
Valencia	30.08	50	50	SE	2	ond	2
Scilly	30.18	52	50	SSE	5	b	6
Jersey							
Dungeness	30.22	37	37	N	2	m	1
London	30.21	39	38	E	0	fog	*
Yarmouth	30.15	40	39	NNW	1	r	3
Rochefort	30.26	47	47	NNW	3	m	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather cloudy or overcast in most places, with fog or mist in many parts of Great Britain and France, and rain at Shields as well as in Algeria. Fine over Germany and the Baltic, as well as in isolated parts of France and Spain.

Temperature, highest, 50° and upwards over the Mediterranean (Malta 59°, Sanguinaire, Cagliari, and Algiers 54°); high 45° and upwards on the southwest coast of our Islands and the west coast of France. Lowest −3°F at Hermanstadt, −1° at Kharkov, +10° at Riga and Nicolaieff; below 20° at most of the Russian and several of the Austrian stations, below the freezing point over Northern, Eastern, and Central Europe generally.

Wind moderate from the S and W over the west and north of our Islands; variable over the greater part of England and France; E or SE over Scandinavia, Denmark, the Baltic, and Central Europe; N or NW over the eastern parts of the Mediterranean, light and variable in Russia.

Barometer highest 30·7 ins: and upwards over Central Russia, high 30·3 ins: and upwards, over the whole of Northern and Eastern Europe, as well as over the Iberian Peninsula. Lowest, 30·0 ins: and less, in a large shallow area lying to the westward of our Islands. Gradients slight generally. Barometer falling in the northern and eastern countries, but rising elsewhere.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for Sunday 23rd FEBY 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. **R. H. SCOTT,** *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30·47	16	Z	0	0	30·16	— ·41	15	15	— 4	SSW	2	s	*	28	12	0·04
	Hernösand ...	30·51	6	Z	0	b	30·30	— ·23	12	12	— 12	Z	0	b	*	34	5	—
	Stockholm ...	30·51	28	Z	0	0	30·54	+ ·09	13	13	— 15	Z	0	bc	*	32	?	0·08
	Wisby	30·49	31	SE	4	0	30·56	+ ·14	31	29	0	NW	4	c	*	34	25	—
	Bodö	30·27	24	E	4	bc	29·78	— ·57	30	29	+ 7	ENE	4	s	2	?	23	—
	Christiansund	30·34	36	SW	4	c	30·15	— ·23	42	41	+ 12	SW	9	r	5	42	34	—
	Skudesnaes ...	30·52	34	SSE	6	s	30·54	+ ·06	39	39	+ 6	E	1	r	3	?	33	0·28
	Christiania Fjord (Færder)	30·55	31	N	2	b	30·52	+ ·03	28	27	+ 2	SW	3	b	2	30	26	—
	Skagen (The Scaw)	30·57	30	Z	0	b	30·57	+ ·14	31	30	+ 2	SSW	3	o	2	32	25	—
	Fanö	30·62	24	N	2	b	30·69	+ ·30	25	24	— 1	Z	0	c	*	32	21	—
BRITISH ISLANDS.	Sumburgh Head	30·38	44	W	2	0	30·49	+ ·21	46	46	+ 4	W	2	o	3	46	42	0·04
	Stornoway ...	30·43	45	SW	4	0	30·61	+ ·28	47	47	+ 4	Z	0	o	2	47	35	—
	Wick	30·46	43	SW	1	c	30·61	+ ·25	46	45	+ 4	W	1	p	1	46	37	0·03
	Nairn	30·50	44	SW	1	bc	30·63	+ ·26	45	44	+ ·5	SW	1	c	0	50	39	—
	Aberdeen ...	30·53	41	Z	0	cm	30·66	+ ·23	41	40	+ 9	W	1	cm	2	46	32	0·01
	Leith	30·56	41	W	1	b	30·68	+ ·23	42	42	+ 6	W	2	bcm	*	46	36	0·02
	Shields	30·52	46	Z	0	bc	30·68	+ ·22	36	36	+ 4	SW	1	m	3	47	31	—
	Spurn Head ...	30·56	39	SE	1	b	30·70	+ ·25	38	37	+ 1	Z	0	b	2	42	33	—
	York	30·56	39	SE	1	f	?30·67	+ ·19	34	34	— 1	Z	0	f	*	43	32	—
	Loughborough	30·57	39	ENE	1	c	30·44	+ ·28	27	27	— 11	NW	1	f	*	47	27	—
	Ardrossan ...	30·55	43	SSE	1	0	30·70	+ ·25	44	44	+ 6	Z	0	of	0	44	37	—
	Malin Head ...	30·53	48	SW	1	om	30·69	+ ·31	45	45	+ 5	W	2	oam	2	49	40	—
	Mullaghmore ...	30·54	47	Z	0	0	30·72	+ ·32	46	45	+ 1	WNW	1	om	2	48	44	0·03
	Belmullet ...	30·56	49	WSW	2	0	30·75	+ ·36	40	46	0	NW	1	o	*	52	45	—
	Donaghadee ...	30·55	44	SSW	2	c	30·71	+ ·28	45	45	+ 3	WNW	2	c	1	46	41	—
	Liverpool (Bidston)	30·57	39	ESE	2	b	30·72	+ ·25	34	34	— 3	ESE	1	f	2	46	33	—
	Holyhead ...	30·57	44	NNW	1	c	30·70	+ ·26	43	42	+ 4	N	1	omg	1	46	39	0·01
	Parsonstown ...	30·55	48	Z	0	bc	30·70	+ ·30	43	42	0	Z	0	c	*	53	42	—
	Valencia	30·57	48	SE	1	bcm	30·71	+ ·32	41	40	— 8	Z	0	bw	1	52	39	—
	Roche's Point ...	30·55	47	SSW	1	bc	30·69	+ ·29	46	45	— 1	ENE	2	m	3	50	44	—
	Pembroke (St. Ann's Hd.)	30·56	44	ESE	1	f	30·40	+ ·26	36	35	— 6	E	2	cm	3	46	36	—
	Scilly	30·53	47	ENE	4	om	30·62	+ ·23	43	41	— 4	ENE	5	cm	6	52	42	—
	Prawle Point ...	30·54	40	NNE	2	bc	30·64	+ ·22	37	35	— 5	NE	6	cm	4	43	35	—
	Jersey (St. Aubin's)																	
	Hurst Castle ...	30·54	44	E	3	0	30·66	+ ·23	36	34	— 6	ENE	3	bm	3	46	33	—
	Dungeness ...	30·48	40	ENE	5	0	30·58	+ ·20	37	34	— 4	ENE	6	c	4	42	36	—
	London	30·54	40	ENE	1	bcf	30·67	+ ·24	35	33	— 3	NE	4	bc	*	43	33	—
	Oxford	30·62	38	E	1	0	30·41	+ ·25	30	29	— 8	NE	1	b	*	47	28	—
	Cambridge ...	30·58	35	NE	1	b	30·72	+ ·25	30	29	— 5	N	1	b	*	42	26	—
	Yarmouth ...	30·54	39	ENE	3	bcv	30·67	+ ·24	37	35	— 2	ENE	3	bcv	4	41	35	—
GERMANY & HOLLAND.	Cuxhaven ...														*			
	Berlin	30·29	35	Z	0	0	30·53	+ ·22	32	31	+ 7	NNE	3	o	*	36	2	—
	Wiesbaden ...	*	*	*	*	*	30·50	+ ·21	35	32	+ 2	NE	2	o	*	37	33	—
	Munich	30·31	25	NW	2	f	30·40	+ ·17	24	24	+ 2	NE	3	m	*	27	21	—
	The Helder ...	30·56	34	NE	3	b	30·68	+ ·28	32	30	— 3	NE	2	b	3	37	32	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30·61	+ ·21	31	31	— 2	NE	2	o	*	37	31	—
	Cape Gris Nez	?	39	ENE	4	0	?	?	30	29	— 10	E	4	bc	3	45	28	—
	Paris	30·43	36	NNE	5	0	30·51	+ ·20	33	31	— 3	NNE	3	o	*	39	33	—
	Brest	30·39	46	E	3	0	30·17	— ·14	42	40	— 1	E	3	o	5	52	39	—
	Lorient	30·38	45	NE	5	0	30·45	+ ·14	40	37	— 2	NE	5	bc	6	46	36	—
	Rochefort ...	30·35	42	NNE	5	0	30·41	+ ·10	36	35	— 7	NE	6	o	?	48	30	—
	Belfort	30·21	36	S	2	0	?30·30	+ ·12	32	?	0	S	3	o	*	43	27	—
	Lyons	30·25	42	NNW	2	0	30·34	+ ·13	32	30	— 6	NNW	3	m	*	45	31	—
	Nice	30·13	47	E	2	c	30·17	+ ·04	46	41	+ 4	SE	3	c	1	50	41	0·04
	Perpignan ...	30·17	47	N	2	b	30·23	+ ·04	38	36	— 1	W	2	b	*	62	36	0·35
	Biarritz	30·20	48	N	5	0	30·24	+ ·02	42	41	+ 1	E	3	m	3	52	41	—
PENINSULA.	Corunna	*	*	*	*	*	30·25	+ ·17	49	47	— 4	NE	6	c	5	57	46	0·08
	Lisbon	30·12	51	NNW	4	b	30·01	— ·21	46	42	— 7	NE	5	b	6	59	46	—

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Sunday, 23rd February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

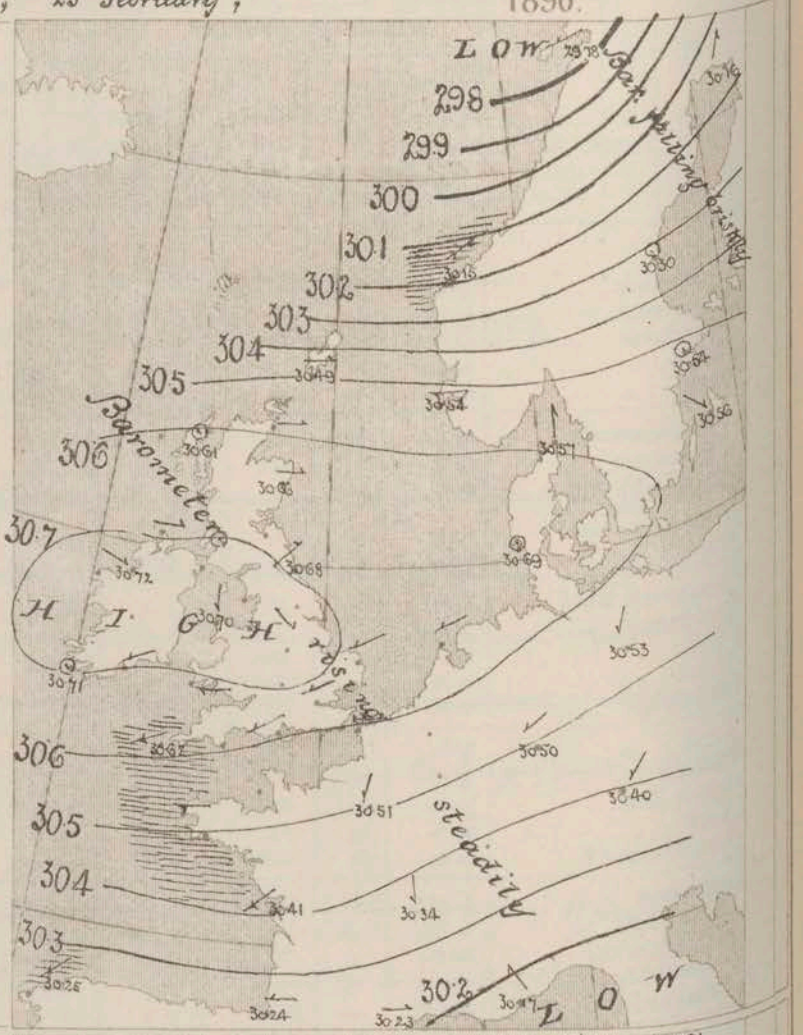
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 713
Stornoway	29 · 700
Wick	29 · 737
Nairn	29 · 747
Aberdeen	29 · 780
Leith	29 · 803
Shields	29 · 847
York	29 · 884
Loughborough	29 · 912
Ardrossan	29 · 805
Donaghadee	29 · 812
Holyhead	29 · 848
Liverpool	29 · 873
Parsonstown	29 · 834
Valencia	29 · 850
Roche's Point	29 · 850
Pembroke	29 · 875
Scilly	29 · 911
Jersey	29 · 975
Hurst Castle	29 · 944
Dover	29 · 957
LONDON	29 · 949
Oxford	29 · 938
Cambridge	29 · 935
Yarmouth	29 · 928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

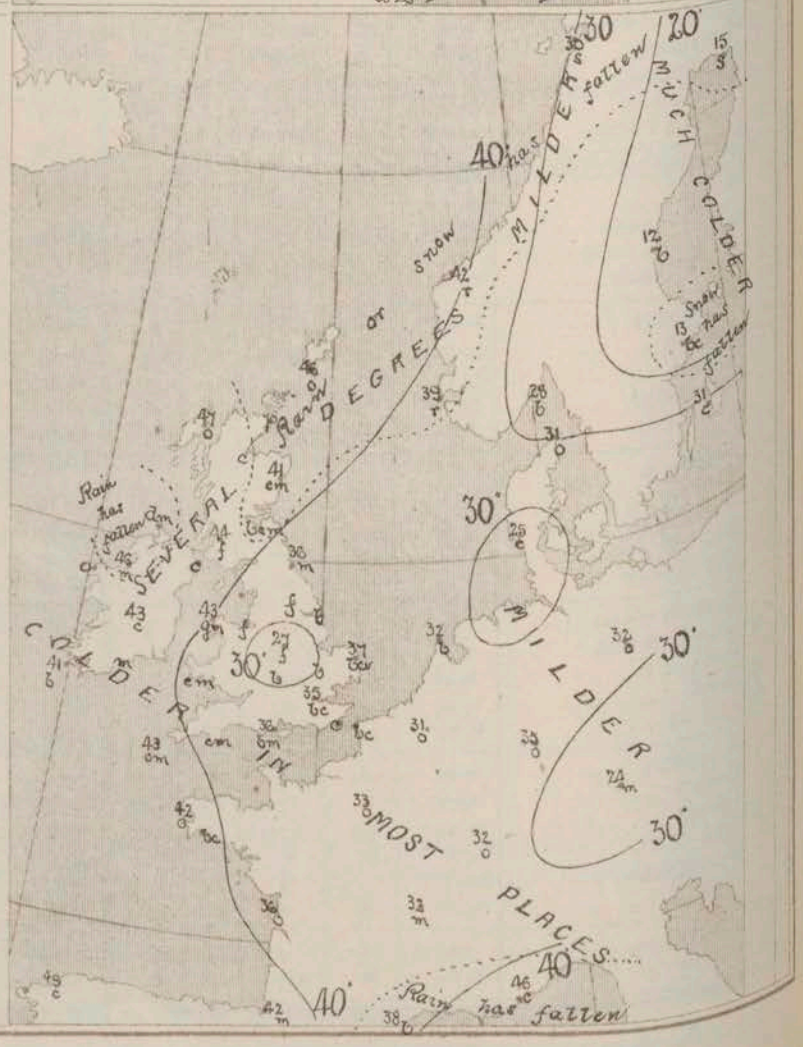
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	42 · 6	34 · 7	38 · 7	37 · 7	3 · 29
Stornoway	43 · 5	34 · 7	39 · 3	38 · 2	3 · 97
Wick	43 · 4	33 · 5	38 · 4	37 · 0	2 · 02
Nairn	43 · 4	33 · 8	37 · 4	35 · 7	1 · 51
Aberdeen	43 · 5	34 · 2	37 · 8	36 · 2	2 · 51
Leith	46 · 6	34 · 7	39 · 2	37 · 7	1 · 58
Shields	44 · 3	35 · 7	39 · 2	37 · 9	1 · 63
York	45 · 3	34 · 2	38 · 2	37 · 1	1 · 88
Loughborough	46 · 0	34 · 5	38 · 4	37 · 3	2 · 00
Ardrossan	45 · 0	36 · 7	40 · 0	38 · 6	3 · 47
Donaghadee	45 · 8	37 · 0	40 · 7	39 · 7	2 · 71
Holyhead	46 · 1	39 · 3	42 · 3	40 · 8	2 · 90
Liverpool	45 · 3	36 · 9	39 · 9	38 · 3	1 · 85
Parsonstown	47 · 4	36 · 1	40 · 1	38 · 8	2 · 45
Valencia	50 · 2	40 · 8	45 · 1	43 · 4	5 · 29
Roche's Point	48 · 9	40 · 0	43 · 6	42 · 2	4 · 86
Pembroke	46 · 2	40 · 3	43 · 1	41 · 9	3 · 20
Scilly	49 · 7	43 · 7	46 · 9	45 · 3	2 · 98
Jersey	47 · 6	40 · 1	43 · 2	42 · 0	2 · 72
Hurst Castle	46 · 5	37 · 9	41 · 3	40 · 4	2 · 63
Dover	45 · 4	37 · 4	40 · 3	39 · 1	2 · 12
LONDON	46 · 9	36 · 6	39 · 7	38 · 6	1 · 89
Oxford	45 · 9	35 · 9	38 · 8	37 · 7	2 · 06
Cambridge	46 · 4	33 · 9	38 · 3	37 · 3	1 · 60
Yarmouth	43 · 5	35 · 2	38 · 9	38 · 2	2 · 02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·6 ins. and 30·7 ins. and more, in an anticyclone lying over the North Sea and British Isles.
Lowest, 29·8 ins. and less, in a depression off the northwest of Norway, and 30·2 ins. and less, over the Mediterranean.
Gradient slight except over the northern half of Scandinavia, where they were moderate for SW winds.
Barometer rising except in far north, where it is falling somewhat.

TEMPERATURE

Highest, 49° at Lorenna, 47° at Stornoway, Nice, Roches Point, Belmullet, and Sumburgh Hd.
Lowest, 12° at Haparanda, 13° at Stockholm, 15° at Haparanda, 24° at Munich, 31° at Brussels, 32° at Lyons and Berlin, 33° at Paris.
It has fallen decidedly over England, France, and Spain, rise in Scotland, Norway, and North Germany.

WIND

W and SW at the northern stations (excepting Bodö) light in Scotland, a gale at Christiansund.
E and NE in the south — fresh to strong over the Channel and Bay of Biscay, light to moderate inland.
Calms and variable airs prevail over Ireland, the North Sea, and north of England.

WEATHER

Unsettled over Scandinavia and the north of Scotland with snow and rain in places.
Foggy over our northeastern and north midland counties, fair and dry elsewhere, and clear in places.
Rain fell in the south of France yesterday.

SEA

Rough at Bodö and at the mouth of the Channel and over the Bay of Biscay, moderate on our south and southeast coasts, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 24TH FEBY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F	WEA.	SEA
Skudesnaes ...	30·51	34	33	SSE	6	s	4
Sumburgh Head	30·33	45	43	WSW	1	o	3
Stornoway	30·40	47	46	S	4	bc	4
Aberdeen	30·47	45	40	SW	1	c	3
Shields	30·50	47	42	SW	1	m	3
Ardrossan	30·51	43	42	?	0	c	0
Malin Head ...	30·48	49	46	SW	1	o	1
Mullaghmore ...	30·51	47	46	NNW	2	cm	2
Belmullet	30·50	52	50	SSW	2	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·52	46	44	NNW	1	o	1
Valencia	30·50	52	50	SSE	4	bcm	4
Scilly	30·47	50	48	ESE	3	bcm	5
Jersey							
Dungeness	30·44	41	39	NE	4	r	3
London	30·52	43	42	NE	2	cm	*
Yarmouth	30·49	41	38	NE	3	h	3
Rochefort	30·34	44	42	NNE	4	m	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE
DURING THE PAST 24 HOURS.

Weather fine in Austria and some parts of Russia and Italy, and fair in the eastern and southern parts of Great Britain. Cloudy or overcast elsewhere, with fog at many of the English and German stations, rain at Finisterre and Laballe, and snow at Hernösand and Stockholm. Sky clearing later in many parts of Western Europe, but snow falling at Ulleaborg and Skudesnaes.

Temperature highest 50° and upwards, at several of the Mediterranean stations, and also on the coasts of the Iberian Peninsula (Coruña 57°, Malta 56° and Sanguinaire 54°). Lowest −7° F. at Hermanstadt, −1° at Kharkov, +3° at Kiev, and 4° at Nicolaieff; below 20° at most of the Austrian and Russian stations, and below the freezing point in nearly all parts of Northern, Central and Eastern Europe. Daily maxima a little above 50° at many of our western stations and above 60° in Algeria and the southern parts of Spain and Italy.

Wind light from the SE.ly in the west of our Islands and also over the greater part of Northern and Central Europe. NE.ly or N.ly over France, Spain, Italy, and the south of England. Variable in Algeria as well as in the Central and southern parts of Russia. Light SW.ly breeze setting in later on our extreme north and northwest coasts.

Barometer highest 30·7 ins: and upwards, over all the more central parts of Russia, high 30·3 ins: and upwards in all but the extreme southern countries of Europe. Gradients slight; barometer rising generally. Fall of mercury taking place later in Spain and Algeria, and large shallow depression appearing in those regions.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday 24th February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30.00	26	S	0	f	30.10	−.06	10	9	−5	SE	2	bc	*	27	9	0.04
	Hernösand ...	30.11	38	NW	6	c	30.30	0.0	33	30	+21	NE	2	bc	*	39	1	—
	Stockholm ...	30.21	31	WSW	4	0	30.28	−.26	32	28	+19	NW	2	b	*	34	10	—
	Wisby	30.31	33	NW	6	f	30.24	−.32	36	34	+5	NNE	6	b	*	?	28	—
	Bodö	30.15	38	WSW	6	0	30.13	+.35	39	38	+9	SW	6	r	3	?	28	0.08
	Christiansund	30.50	41	WSW	4	c	30.50	+.35	41	39	−1	WSW	7	0	5	43	?	0.08
	Skudesnaes ...	30.53	41	S	0	b	30.50	−.04	38	37	−1	NNW	6	b	3	41	34	0.12
	Christiania Fjord (Færder)	30.55	36	WSW	3	b	30.48	−.04	31	30	+3	NNW	2	c	2	36	?	—
	Skagen (The Scaw)	30.47	34	S	*	bq	30.46	−.11	34	33	+3	S	0	b	0	41	30	—
	Fanö	30.54	36	WSW	4	0q	30.45	−.24	33	33	+8	NW	2	b	*	37	25	—
BRITISH ISLANDS.	Sumburgh Head	30.58	46	WNW	1	0	30.60	+.11	45	43	−1	NW	2	c	2	49	42	0.03
	Stornoway ...	30.68	48	W	2	0	30.70	+.09	44	44	−3	S	0	f	2	52	42	0.05
	Wick	30.66	48	NW	2	0	30.69	+.08	45	45	−1	NW	1	d	1	52	43	0.05
	Nairn	30.69	48	NW	1	0	30.69	+.06	43	43	−2	S	0	0	1	53	42	0.03
	Aberdeen ...	30.65	47	NW	1	c	30.70	+.04	44	43	+3	NW	2	0	2	52	40	0.03
	Leith	30.69	45	S	0	bc	30.68	0.0	41	40	−1	S	0	f	*	55	40	—
	Shields	30.67	45	S	0	bm	30.63	−.05	44	44	+8	N	1	d	2	48	35	0.03
	Spurn Head ...	30.68	39	ESE	1	b	30.59	−.11	40	40	+2	NNW	1	f	3	43	35	—
	York	30.70	40	S	1	b	30.63	−.04	39	39	+5	N	1	0	*	43	29	0.01
	Loughborough	30.69	40	ENE	1	b	30.63	−.11	33	32	+6	WNW	1	omdf	*	49	27	—
	Ardrossan ...	30.70	45	S	0	bw	30.68	−.02	39	38	−5	S	0	of	0	50	36	—
	Malin Head ...	30.73	46	NNE	1	0	30.70	+.01	44	44	−1	NNE	3	of	1	49	44	0.02
	Mullaghmore ...	30.75	49	NW	2	om	30.70	−.02	43	42	−3	E	4	c	2	50	42	—
	Belmullet ...	30.76	48	N	2	0	30.70	−.05	44	43	−2	NE	1	b	*	51	44	0.01
	Donaghadee ...	30.71	46	NE	3	c	30.69	−.02	44	44	−1	NE	2	m	0	50	43	0.01
	Liverpool (Bidston)	30.71	38	NNE	1	0	30.65	−.07	35	35	+1	NW	1	f	2	41	33	0.02
	Holyhead ...	30.70	43	N	1	c	30.66	−.04	39	39	−4	ENE	1	fq	1	46	38	0.02
	Parsonstown ...	30.71	48	S	0	c	30.65	−.05	42	41	−1	S	0	bc	*	52	41	—
	Valencia	30.70	49	N	2	cm	30.62	−.09	45	42	+4	N	1	bc	2	51	39	—
	Roche's Point...	30.67	47	ENE	2	c	30.62	−.07	40	38	−6	ENE	2	cm	3	50	38	—
	Pembroke (St. Ann's Hd.)	30.66	43	E	2	m	30.63	−.07	37	36	+1	ENE	2	c	2	46	35	—
	Scilly	30.58	45	ENE	4	b	30.51	−.11	41	40	−2	ENE	6	cm	5	45	39	—
	Prawle Point ...	30.60	40	NE	5	c	30.53	−.11	38	37	+1	ENE	6	bc	4	40	35	—
	Jersey (St. Aubin's)																	
	Hurst Castle ...	30.60	40	ENE	4	bm	30.57	−.09	35	34	−1	ENE	3	bcm	2	43	30	—
	Dungeness ...	30.58	37	ENE	6	c	30.55	−.03	39	37	+2	E	5	c	3	40	36	—
	London	30.67	37	ENE	2	b	30.59	−.08	35	34	0	N	1	f	*	42	32	—
	Oxford	30.69	35	ENE	1	b	30.63	−.08	33	32	+3	NE	1	0	*	42	29	—
	Cambridge ...	30.71	37	N	1	b	30.61	−.11	33	32	+3	N	1	c	*	45	27	—
	Yarmouth ...	30.68	38	NE	3	bv	30.55	−.12	36	35	−1	NW	2	cf	3	40	33	—
GERMANY & HOLLAND.	Cuxhaven ...	30.64	32	N	3	b	30.48		37	37		NW	3	f	*	37	32	—
	Berlin	30.57	35	NW	3	0	30.40	−.13	31	29	−1	?ENE	3	0	*	36	27	—
	Wiesbaden ...	*	*	*	*	*	30.49	−.01	33	31	−2	NE	2	0	*	36	32	—
	Munich	30.42	26	E	3	0	30.41	+.01	25	23	+1	NE	1	0	*	28	25	—
	The Helder ...	30.67	34	NE	1	bc	30.53	−.15	38	37	+6	NW	1	f	1	?	32	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	?	*	*	*	*	30.57	−.04	27	27	−4	ENE	2	bc	*	38	26	—
	Cape Gris Nez		34	E	4	bc	?	?	29	29	−1	ESE	3	b	2	45	28	—
	Paris	30.51	35	NE	3	0	30.47	−.04	32	29	−1	ENE	2	0	*	37	32	—
	Brest	30.445	39	E	3	0	30.39	−.18	35	34	−7	E	3	0	3	52	32	0.08
	Lorient	30.41	37	E	6	0	30.37	−.08	34	31	−6	ENE	5	0	5	45	32	—
	Rochefort ...	30.35	38	ENE	6	0	30.31	−.10	34	33	−2	ENE	6	bc	?	41	27	—
	Belfort	?30.31	34	SW	2	0	?	−.02	32	22	0	N	1	0	*	?	28	—
	Lyons	30.34	36	NW	1	0	30.37	+.03	31	30	−1	N	1	0	*	38	31	—
	Nice	30.18	46	W	4	bc	30.21	+.04	42	37	−4	E	2	bc	2	57	39	—
	Perpignan ...	30.20	47	NE	2	b	30.23	0.0	43	41	+5	NE	2	r	*	56	?	0.04
	Biarritz	30.18	45	E	3	c	30.16	−.08	37	36	−5	E	3	m	2	50	34	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.84	51	NE	5	b	29.75	−.26	47	46	+1	ENE	4	c	5	59	46	—

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Monday, 24th February, 1890.

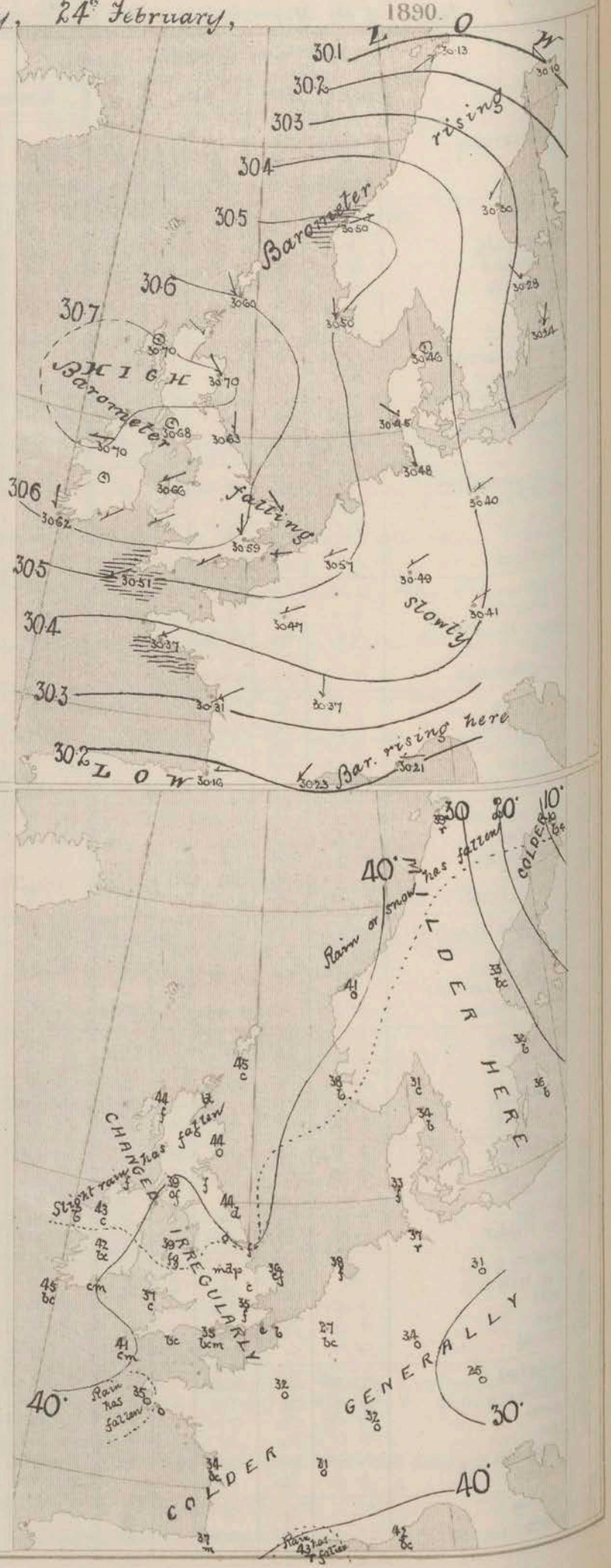
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

WIND Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	35·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·8	36·6	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·05
Cambridge	46·4	33·9	38·3	37·3	1·69
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·6 ins: to 30·7 ins: and more over our Islands.
Lowest, 30·1 ins: and less, over Northern Europe, and 29·7 ins: and less, over the south of Spain.
Gradients steep over the Iberian Peninsula, rather so off the west of Norway, slight elsewhere.
Barometer rising in the extreme north of Scotland, and in Sweden and the south of France, falling elsewhere decidedly over Spain.

TEMPERATURE

Highest 45° at Sumburgh Head, Mull and Valencia, 44° at Stornoway, 43° at Perpignan, Malin Hd. Holmwood, Aberdeen Thistle, and 42° at Donaghadee and Nice.
Lowest, 10° at Haparanda, 25° at Munich, 27° at Brussels, 29° at C. Gris Nez, and 31° at Balmoral and Belfast.
It has risen rapidly in Sweden, slightly in some parts of England, but fallen somewhat in most other places.
In London a thermometer on the grass fell to 24° early this morning.

WIND

Fresh from E. over the English Channel and the west of France, strong from the W.ward on the west coast of Norway.
Over our Islands, Sweden, and Germany, varying N.ly and NE.ly breezes are reported.

WEATHER

Fair in the west and southwest of our Islands, as well as in Sweden, but cloudy or dull in most other places, with fog at several of the English and Scotch stations. Slight rain has fallen in the north and northwest during the past 24 hours.

SEA

Rather rough at Scilly and off Lowestoft, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The weather appears likely to remain rather cold over our Islands, with varying N.ly winds in most places. Over the Channel, however, fresher winds from the E.ward are probable.

FORECASTS

For the 24 hours ending at NOON on 25th FEBY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NW.ly winds, light, and calms; fair generally.
1 SCOTLAND EAST	
2 ENGLAND N.E.	
3 ENGLAND EAST	
4 MIDLAND COUNTIES	N.ly winds, light; dull, some fog
5 ENGLAND SOUTH	E.ly breezes, light, fresh on coast; fair, dry, fog locally.
6 SCOTLAND WEST	Varying N.ly breezes; light; dull, some fog.
7 ENGLAND N.W.	
8 ENGLAND S.W.	E.ly breezes, fresh or strong; fair, dry, some mist
9 IRELAND NORTH	Same as No 6 and 7.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·54	41	41	WNW	1	f	3
Sumburgh Head							
Stornoway	30·67	51	50	W	3	bc	3
Aberdeen							
Shields							
Ardrossan							
Malin Head ...	30·73	47	47	NNW	2	o	1
Mullaghmore ...							
Belmullet	30·76	50	48	N	3	o	*

	BAR:	THER: D	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·72	46	44	N	1	o	1
Valencia							
Scilly							
Jersey							
Dungeness	30·59	38	35	ENE	6	bc	5
London							*
Yarmouth							
Rochefort	30·38	41	39	NE	6	o	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine at several of the English stations, over Austria, and on the southern shores of the Mediterranean, cloudy or overcast elsewhere, with snow in Lapland, rain at Skudesnaes, Malin Head and Bilbao and fog over Central England. Slight rain falling later in the N. and NW. of our Islands, and snow in Scandinavia.

Temperature highest, 50° and upwards, over the Mediterranean (Malta and La Galle 56°, Algiers 55°, Sanguinaire 52° and Barcelona and Brindisi 50) high 45° and upwards over Spain and in the SW of our Islands. Lowest 3° at Kharkov, 7° at Hermanstadt, 9° at Kuopio, 12° at Cracow and 13° at Lemberg, below 20° over most parts of Russia and Austria and varying between 38° and the freezing point over Central Europe generally.

Wind fresh from the E. over Spain, France and the English Channel and at most of the Mediterranean stations, light from W and SW over the north of Ireland, Scotland, Scandinavia, and the N. of Russia (blowing a gale at Christiansund) Light and variable over the greater part of Russia and Austria.

Barometer highest, 30·8 ins. and upwards, over Central Russia and high 30·6 ins. to 30·7 ins. and more over the whole of our Islands, Denmark and the Netherlands. Lowest 29·7 ins. and less over Finland, 30·0 ins. and less over the S. of Spain. Gradients steep over Scandinavia but slight generally elsewhere. Barometer falling quickly over the N. of Europe, and somewhat decidedly over the Iberian Peninsula, but rising elsewhere.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 16TH TO THE 22ND FEB 1890

During the whole of the week pressure remained highest over Scandinavia and lowest in the southwestern and western parts of our area. The only depressions observed over us were shown at the commencement of the period, when one which had travelled from the southward lay to the northeastward of England, while another had approached the southwest of Ireland rapidly from the Atlantic. By Monday however, the former had entirely dispersed, and the latter was remaining stationary and filling up. Towards the end of the week pressure gave way considerably over Norway and Sweden, while it rose over the Iberian Peninsula, whence an elongated area of comparatively high readings extended gradually NE.wds. and finally joined the Scandinavian anticyclone.

The general direction of the wind was SE. ¼ or E. ¼. During the greater part of the week it was fresh or strong to a gale in the N. and E. and occasionally in the W. and SW, but subsequently it became very light, and at the end of the period calms and light variable airs were reported.

Some rain fell almost daily at the Irish stations and on the Welsh coasts, but over Great Britain the weather, after the first day or two, was mostly dry, though a good deal of cloud prevailed and finally gloom and local mists or fogs.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Tuesday 25th. February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. **R. H. SCOTT,** *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.78	39	SW	6	bc	29.58	-.52	34	30	+24	NW	6	b	*	39	9	—
	Hernösand ...	30.23	40	WSW	2	b	30.13	-.17	42	37	+9	W	4	bc	*	45	28	—
	Stockholm ...	30.39	29	x	0	b	30.30	+.02	27	25	-5	WSW	2	b	*	39	?	—
	Wisby	30.42	31	NNW	4	b	30.36	+.12	32	31	-4	WSW	4	b	*	39	30	—
	Bodö	30.04	41	SW	8	o	29.96	-.17	34	31	-5	WNW	7	c	5	41	34	—
	Christiansund	30.51	41	WSW	6	o	30.44	-.06	40	39	-1	WSW	6	f	5	43	39	—
	Skudesnaes ...	30.55	39	NNW	4	b	30.44	-.06	37	37	-1	NNW	6	o	4	45	36	—
	Christiania Fjord (Færder)	30.44	36	WSW	2	b	30.40	-.08	33	31	+2	N	2	b	1	36	30	—
	Skagen (The Scaw)	30.44	34	x	0	b	30.39	-.07	33	32	-1	x	0	b	0	39	30	—
	Fanö	30.50	32	SW	1	b	30.42	-.03	29	28	-4	x	0	b	*	45	28	—
BRITISH ISLANDS.	Sumburgh Head	30.62	43	NW	2	o	30.59	-.01	40	40	-5	N	1	c	2	46	39	—
	Stornoway ...	30.71	44	NE	3	c	30.67	-.03	39	39	-5	NE	2	f	3	48	35	—
	Wick	30.69	44	N	2	o	30.66	-.03	42	42	-3	x	0	dm	1	46	36	0.07
	Nairn	30.68	46	x	0	c	30.66	-.03	40	40	-3	SW	1	od	1	50	40	0.02
	Aberdeen ...	30.70	43	N	2	o g	30.65	-.05	41	40	-3	NW	2	o	2	47	40	—
	Leith	30.67	44	E	1	c	30.65	-.03	41	41	0	E	1	om	*	50	39	—
	Shields	30.64	42	NE	2	odp	30.59	-.04	40	39	-4	N	1	odp	2	45	37	0.05
	Spurn Head ...	30.56	41	NE	3	c	30.53	-.06	40	39	0	NNE	4	dm	3	44	37	0.02
	York	30.60	44	NNE	1	o	30.60	-.03	38	37	-1	N	1	o	*	47	36	—
	Loughborough	30.57	43	NE	2	o	30.59	-.04	38	37	+5	N	2	om	*	45	33	0.01
	Ardrossan ...	30.67	46	NE	1	o †	30.65	-.03	41	40	+2	NE	1	o	0	47	38	—
	Malin Head ...	30.66	43	E	1	b	30.64	-.06	41	40	-3	S	1	om	0	45	39	0.02
	Mullaghmore ...	30.64	46	ENE	2	c	30.64	-.06	41	40	-2	ENE	4	ow	2	47	39	—
	Belmullet ...	30.64	47	NE	2	c	30.64	-.06	42	42	-2	E	2	o	*	50	39	—
	Donaghadee ...	30.66	45	ENE	3	c	30.65	-.04	40	40	-4	NE	1	bc	0	47	40	—
	Liverpool (Bidston)	30.60	43	NE	2	c	30.61	-.04	35	34	0	ENE	1	c	2	44	34	0.01
	Holyhead ...	30.60	44	NNE	2	cmq	30.60	-.06	39	39	0	NE	2	bw	1	45	38	—
	Parsonstown ...	30.60	47	x	0	bc	30.58	-.07	40	39	-2	x	0	bc	*	51	40	—
	Valencia	30.54	47	E	3	bcm	30.53	-.09	46	42	+1	ENE	2	cmq	2	51	43	—
	Roche's Point...	30.55	45	ENE	3	c	30.53	-.09	43	41	+3	ENE	3	c	4	47	39	—
	Pembroke (St. Ann's Hd.)	30.54	45	ENE	2	c	30.52	-.11	39	38	+2	ENE	3	b	2	47	36	—
	Scilly	30.44	44	ENE	7	c	30.42	-.09	45	43	+4	ENE	6	o	4	46	40	—
	Prawle Point ...	30.47	41	ENE	4	o	30.46	-.07	39	37	+1	NE	6	og	4	43	36	—
	Jersey (St. Aubin's)																	
	Hurst Castle ...	30.49	44	SE	1	m	30.47	-.10	39	37	+4	E	4	b	3	45	34	—
GERMANY & HOLLAND.	Dungeness ...	30.48	42	E	3	c	30.44	-.11	40	38	+1	ENE	4	bc	2	44	38	0.01
	London	30.53	43	ENE	2	o	30.52	-.07	35	34	0	NW	1	bem	*	45	34	—
	Oxford	30.55	41	NE	2	d	30.55	-.08	35	34	+2	NE	3	c	*	44	32	0.01
	Cambridge ...	30.56	41	N	1	o	30.55	-.06	35	34	+2	N	1	o	*	44	31	—
	Yarmouth ...	30.52	40	ENE	3	cw	30.50	-.05	37	36	+1	NNW	3	c	3	42	32	0.01
	Cuxhaven ...	30.48	32	NE	2	b	30.44	-.04	32	30	-5	E	2	b	*	32	?	—
	Berlin	30.39	36	NNW	2	o	30.38	-.02	32	31	+1	NE	3	o	*	36	30	0.04
	Wiesbaden ...	*	*	*	*	*	30.34	-.15	36	32	+3	NE	2	b	*	?	?	—
	Munich	30.34	24	SW	2	o	30.24	-.17	24	23	-1	NE	2	o	*	28	23	0.04
	The Helder ...	30.52	34	SSE	2	f	30.43	-.10	35	35	-3	N	2	f	3	41	32	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	? 30.45	-.12	30	28	+3	NNE	2	o	*	38	?	0.04
	Cape Gris Nez	?	39	NNE	2	o	?	?	35	33	+6	E	4	b	2	41	28	—
	Paris	30.44	32	ESE	1	b	30.35	-.12	34	33	+2	NNE	2	b	*	37	25	—
	Brest	30.34	38	E	3	bc	30.35	-.04	34	32	-1	E	3	o	2	52	30	—
	Lorient	30.33	34	ENE	5	o	30.29	-.08	34	31	0	ENE	5	b	4	37	32	—
	Rochefort ...	30.30	42	NE	5	b	30.25	-.06	32	31	-2	ENE	6	b	?	50	25	—
	Belfort	? 30.27	32	E	1	c	? 30.15	?	32	23	0	SE	1	s	*	34	25	—
	Lyons	30.35	34	WNW	2	b	30.21	-.16	27	26	-4	N	2	m	*	39	26	—
	Nice	30.20	45	SE	4	b	30.02	-.19	38	35	-4	ENE	4	b	1	54	36	—
	Perpignan ...	30.18	46	W.	2	o	30.10	-.13	43	43	0	NW	2	o	*	46	39	0.32
	Biarritz	30.11	46	E	5	b	30.06	-.10	37	37	0	ESE	5	m	2	48	36	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.70	57	E	1	c	29.73	-.02	57	50	+4	NE	4	o	?	59	?	0.04

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Tuesday, 25th February, 1890.

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EXPLANATION OF MAP.

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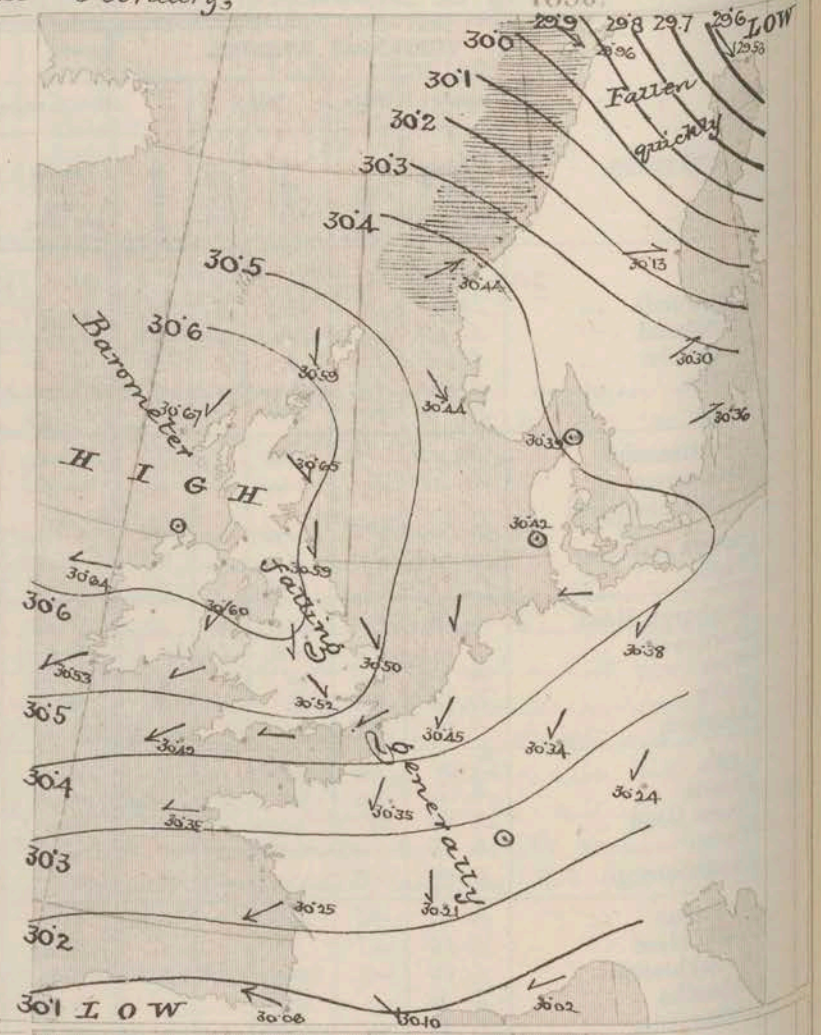
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

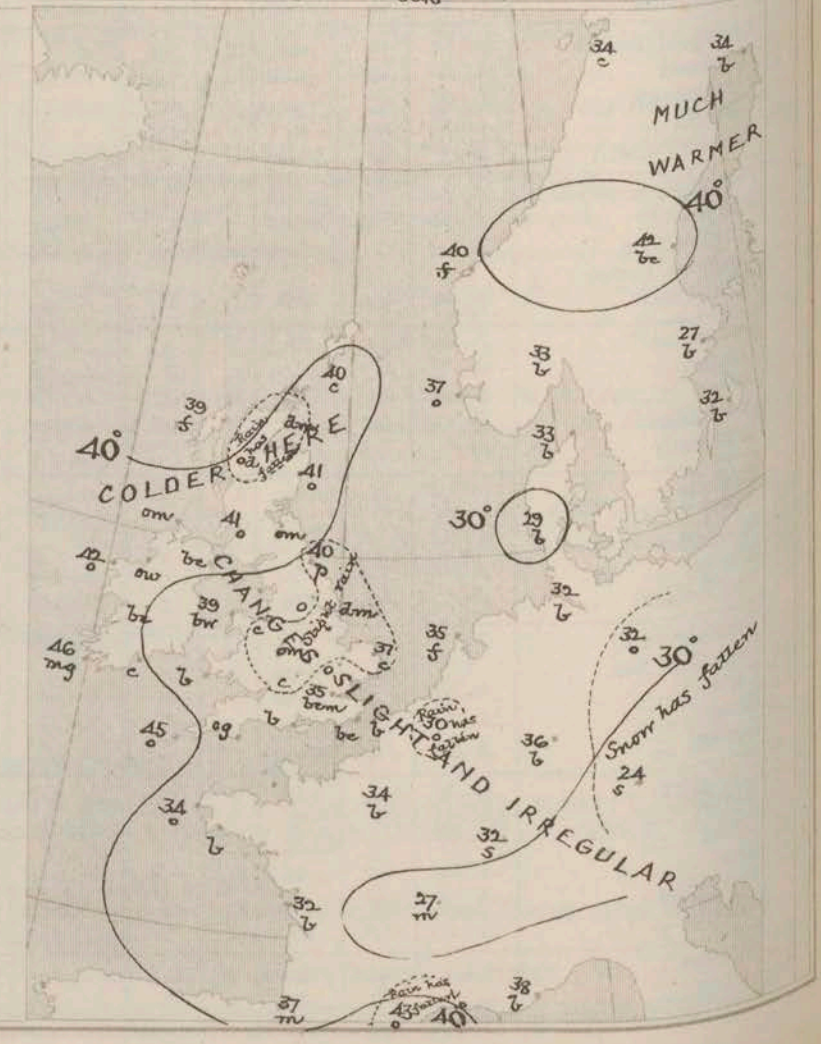
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·5 ins: to nearly 30·7 ins: over the British Islands.
Lowest, about 29·7 ins: over the south of Spain, and 29·6 ins: and less, in the extreme north of Sweden
Gradients were rather steep over the northern part of Scandinavia, slight elsewhere
Barometer changing very little except in the extreme north.

TEMPERATURE

Highest, 51° at Lisbon, 46° at Valencia, 45° at Scilly, 42° at Belmullet, Nitth, and Hernösand.
Lowest, 24° at Munich, 27° at Stockholm and Byjorn, 29° at Varö, 32° at Berlin, 35° in London.
In London the thermometer rose to 45° yesterday, and for a time the air became damp and misty; this morning it is dry.

WIND

Strong from the W^ard over the northern half of Scandinavia, and from NNW. at Rhudensaes.
Very light and variable in the north of our Islands, light NE^ly over Ireland ~~and~~ England and Germany.
Fresh to strong NE^ly over the Channel and Bay of Biscay.

WEATHER

Fine and bright at most of the southern stations — hazy in places; dull and damp in the north, with drizzling rain at several stations.
A little rainfall was measured this morning at a few places, and a considerable quantity at Perpignan.

SEA

Rather rough off the northwest of Norway, moderate at the mouth of the English Channel, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any immediate change of importance.

FORECASTS

For the 24 hours ending at NOON on 26th February, 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	Varying NW^ly airs and Calms; changeable, showery to fine.
1 SCOTLAND EAST	
2 ENGLAND N.E	
3 ENGLAND EAST	NW^ly breezes, light; some rain then fine.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	NE^ly breezes, moderate; fine, cold.
6 SCOTLAND WEST	Varying N^ly breezes, light; fair as a whole.
7 ENGLAND N.W.	
8 ENGLAND S.W.	Same as No 5.
9 IRELAND NORTH	NE^ly breezes, moderate or light; fine.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

No's.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·56	44	41	NNW	4	b	3
Sumburgh Head	30·62	45	45	NW	1	f	2
Stornoway	30·71	47	47	NE	3	c	3
Aberdeen	30·69	46	44	NNW	2	c	2
Shields	30·63	44	43	NNE	2	o	2
Ardrossan	30·67	46	45	NW	1	of	1
Malin Head ...	30·69	44	44	NNE	2	o	1
Mullaghmore ...	30·67	47	45	N	1	o	2
Belmullet	30·62	48	46	ENE	3	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·64	44	43	NNE	2	omg	1
Valencia	30·59	50	45	ENE	4	bom	3
Scilly	30·45	44	41	ENE	7	bc	5
Jersey							
Dungeness	30·49	44	41	E	3	bc	2
London	30·53	45	43	NNE	2	omg	*
Yarmouth	30·52	42	41	NNE	2	c	3
Rochefort	30·29	47	44	E	5	b	9

GENERAL REMARKS ON THE WEATHER OVER EUROPE
DURING THE PAST 24 HOURS.

Weather very variable — foggy, misty and damp in many parts of our Islands, clear and bright in other localities, as well as at some of the Continental stations; dull and unsettled over Northern, Eastern, and Southern Europe, with rain at several Mediterranean stations and in the north of Norway, snow at Archangel, Hangö, Riga, Lemberg, Constantinople, and in the south of Russia. Slight rain in several parts of the British Islands later, and 0·3 in: at Perpignan.

Temperature changing irregularly, but decided rise reported over the Baltic, Eastern Germany, and many parts of Russia. Highest, 50° to 57° over the southern parts of the Mediterranean, 50° in the northwest of Spain, 40° to 45° in the south of France and at the Irish stations; below the freezing point over Russia, Austria, and Germany, and as low as −10° F. at Hermannstadt, +13° at Lemberg, 17° at Nicolaieff, 19° at Odessa and Kiev, 20° at Cracow, and 22° at Prague and Warsaw; 8° at Moscow, 10° at Haparanda, 14° at Wesiberg and Archangel, 20° at St Petersburg. Rising considerably over the British Islands later, but falling fast again at night.

Wind fresh from the NE^{ly} over Spain, the south and west of France, and the English Channel, strong from SW. in the northwest of Norway, light NW^{ly} in Scotland and on the eastern shores of the North Sea, variable elsewhere, but chiefly NE^{ly} over Ireland and England. Not much change later.

Barometer highest, 30·5 ins: to 30·7 ins: in an anticyclone of irregular form lying over the British Isles, the Netherlands, North Sea, and east of Norway, and 30·5 ins: to 30·6 ins: over the southern half of Russia. Lowest, 29·8 ins: and less, in the southwest of Spain, about 30·0 ins: in the extreme north of Russia, and 30·1 ins: and less, in a local depression near Reval. Gradients slight to moderate. No important change during the day.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday 26th February 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.58	23	NW	6	b	29.48	−.10	23	20	−11	NW	4	o	*	36	21	—
	Hernösand ...	29.99	35	NW	4	b	29.84	−.29	24	21	−18	NW	2	b	*	46	?	—
	Stockholm ...	30.09	36	SW	2	b	29.76	−.54	32	31	+5	N	2	s	*	45	27	0.16
	Wisby	30.14	36	W	4	b	29.71	−.65	33	33	+1	W	6	s	*	39	25	—
	Bodö	29.93	27	WNW	8	c	29.88	−.08	26	24	−8	N	6	c	4	34	23	—
	Christiansund	30.25	39	WNW	4	p	30.21	−.23	29	26	−11	NW	8	s	6	41	27	0.20
	Skudesnaes ...	30.28	39	NNW	6	b	30.16	−.28	36	31	−1	NNW	9	b	5	41	36	—
	Christiania Fjord (Færder)	30.19	32	SSW	2	f	29.91	−.49	31	31	−2	N	5	c	2	34	28	—
	Skagen (The Scaw)	30.13	34	W	1	b	29.83	−.56	35	34	+2	N	2	c	2	45	32	—
	Fanö	30.30	31	SW	1	b	30.02	−.40	36	36	+7	W	4	m	*	43	28	—
BRITISH ISLANDS.	Sumburgh Head	30.45	42	NW	2	b	30.35	−.04	35	32	−5	NNE	3	o	0	44	33	—
	Stornoway ...	30.58	44	NE	3	p	30.61	−.06	41	40	+2	E	6	c	5	46	37	0.02
	Wick	30.52	43	NW	2	0	30.61	−.05	39	35	−3	NE	3	o	2	44	37	0.05
	Nairn	30.54	43	S	0	0	30.54	−.12	41	40	+1	ESE	5	d	4	44	39	0.02
	Aberdeen ...	30.52	43	NW	3	0	30.50	−.15	40	38	−1	NNE	5	cqfu	4	43	40	0.02
	Leith	30.53	41	E	1	bc	30.48	−.17	36	36	−5	W	1	m	*	46	35	—
	Shields	30.48	41	N	3	dfp	30.39	−.20	42	42	+2	NE	4	cfpd	4	44	38	0.04
	Spurn Head ...	30.38	41	N	6	d	30.30	−.23	42	41	+2	N	5	bcfpd	4	44	39	0.03
	York	30.46	43	N	3	0	30.36	−.24	42	41	+4	N	3	c	*	46	37	—
	Loughborough	30.42	44	N	3	0	30.34	−.25	40	39	+2	N	3	omdp	*	44	37	0.01
	Ardrossan ...	30.51	43	N	1	bm	30.50	−.15	37	36	−4	N	1	bcm	0	44	36	—
	Malin Head ...	30.56	42	NNE	3	0	30.50	−.14	43	40	+2	NE	4	c	3	44	41	—
	Mullaghmore ...	30.55	40	E	2	b	30.49	−.15	43	41	+2	NE	5	o	4	46	40	—
	Belmullet ...	30.56	45	E	2	b	30.51	−.13	44	43	+2	N'NE	5	bc	*	48	42	—
	Donaghadee ...	30.51	44	NE	3	b	30.45	−.16	42	40	+2	NE	4	c	2	47	39	—
	Liverpool (Bidston)	30.46	40	WNW	1	b	30.40	−.21	39	38	+4	NNE	2	o	3	43	35	—
	Holyhead ...	30.48	42	N	2	b	30.41	−.19	42	40	+3	NE	3	cq	2	45	39	—
	Parsonstown ...	30.51	45	S	0	bc	30.45	−.13	41	39	+1	S	0	bc	*	51	34	—
	Valencia	30.49	48	NE	2	bm	30.41	−.12	42	40	−4	N	5	bm	5	52	38	—
	Roche's Point...	30.48	44	E	3	bc	30.40	−.13	39	37	−4	NE	3	bc	4	50	36	—
	Pembroke (St. Ann's Hd.)	30.40	44	NNE	4	b	30.35	−.17	39	38	0	NE	4	cm	2	50	37	—
	Scilly	30.38	45	NE	4	b	30.26	−.16	43	40	−2	ENE	6	om	4	48	41	—
	Prawle Point ...	30.34	43	N	3	c	30.27	−.19	40	39	+1	NE	6	og	4	47	38	—
	Jersey (St. Aubin's)																	
	Hurst Castle ...	30.33	44	ENE	4	og	30.27	−.20	41	39	+2	E	5	og	3	48	38	—
	Dungeness ...	30.28	41	NE	5	c	30.21	−.23	39	36	−1	ENE	4	c	3	43	37	—
	London	30.35	41	NNE	3	0	30.28	−.24	37	36	+2	ENE	2	og	*	43	35	0.01
	Oxford	30.36	41	NE	3	0	30.31	−.24	39	38	+4	NE	3	o	*	46	35	—
	Cambridge ...	30.36	40	N	3	p	30.30	−.25	39	38	+4	NNE	1	o	*	42	34	0.03
	Yarmouth ...	30.35	39	NNE	3	odm	30.25	−.25	39	38	+2	NNE	2	cf	3	41	35	0.03
GERMANY & HOLLAND.	Cuxhaven ...	30.37	34	E	1	m	30.20	−.24	28	27	−4	WSW	3	b	*	36	26	—
	Berlin	30.39	34	ESE	2	0	30.19	−.19	27	26	−5	SSW	2	b	*	37	27	—
	Wiesbaden ...	*	*	*	*	*	30.17	−.17	29	28	−7	NE	2	b	*	39	28	—
	Munich	30.10	25	E	6	0	30.09	−.15	18	17	−6	S	0	m	*	30	16	—
	The Helder ...	30.32	33	NE	1	b	30.24	−.19	31	31	−4	NW	1	b	1	37	27	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.23	−.22	28	27	−2	NNE	2	b	*	43	27	—
	Cape Gris Nez	?	39	E	5	0	?		32	30	−3	E	2	m	2	48	30	—
	Paris	30.18	39	NE	4	b	30.13	−.22	28	26	−6	NNE	2	b	*	?	?	—
	Brest	30.28	44	E	5	b	30.15	−.20	43	42	+9	E	3	o	3	52	34	—
	Lorient	30.21	44	NE	5	b	30.12	−.17	38	35	+4	ENE	5	bc	4	46	30	—
	Rochefort ...	30.16	41	NE	6	c	30.05	−.20	34	32	+2	NE	6	b	?	48	27	—
	Belfort	30.03	32	SE	1	c	29.97	−.18	31	23	−1	NW	2	b	*	37	27	—
	Lyons	29.99	29	N	2	0	29.98	−.23	28	26	+1	N	2	bc	*	33	27	0.04
	Nice	29.89	39	NE	5	c	29.85	−.17	42	34	+4	NE	7	o	5	48	36	0.24
	Perpignan ...	29.80	51	E	2	0	29.83	−.29	32	32	−11	NW	2	s	*	59	32	0.28
	Biarritz	29.54	49	NNE	5	b	29.88	−.18	35	31	−2	ENE	5	om	2	50	32	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.79	51	NNE	2	0	29.82	+.09	51	50	0	NW	4	b	4	59	50	0.08

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on *Wednesday, 26th February,* 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

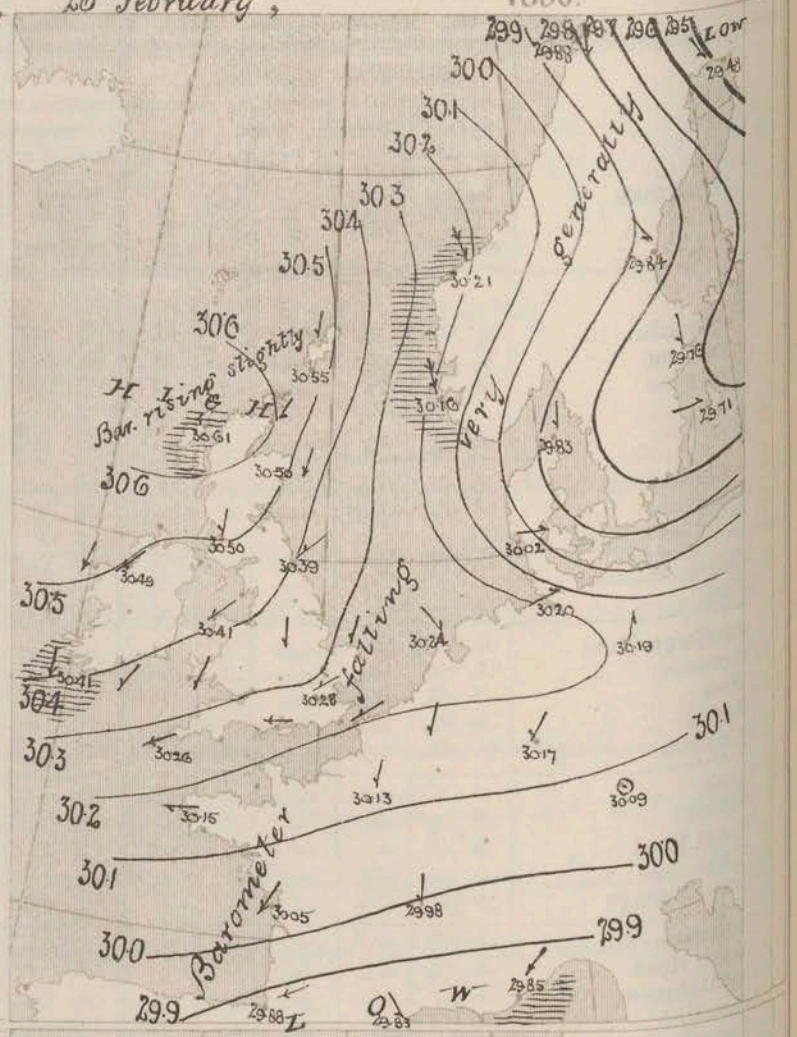
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

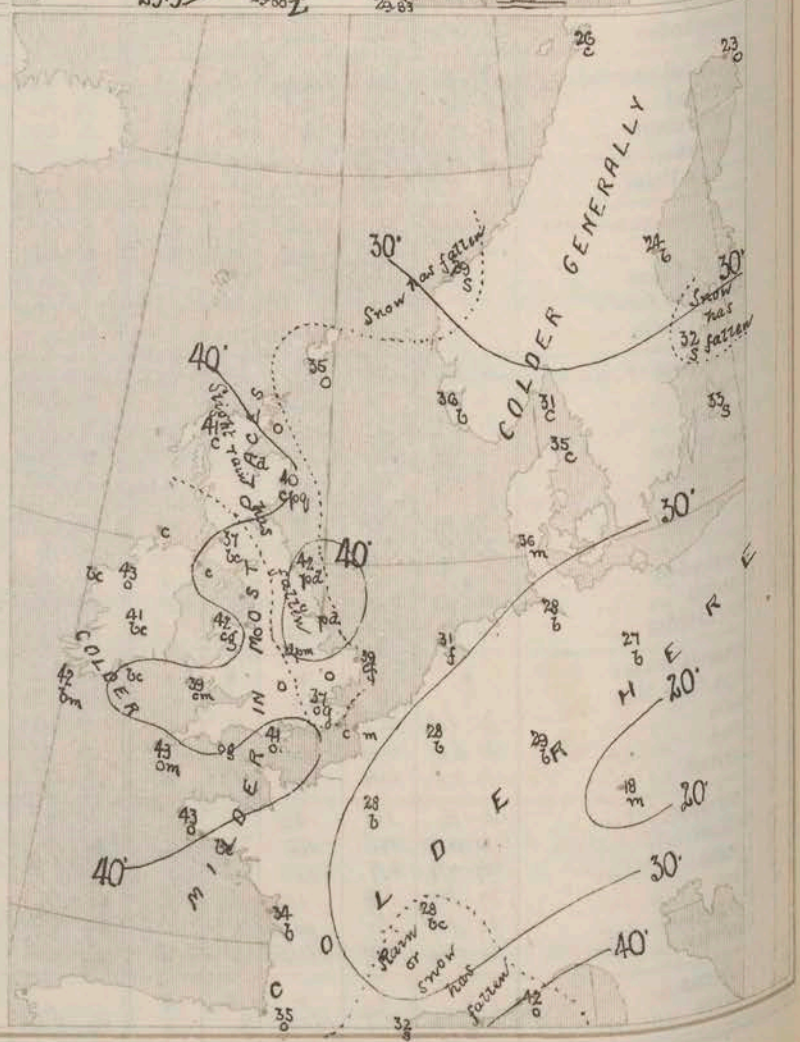
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·5	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·5 ins: to 30·6 ins: in an anticyclone lying over the northern parts of the country.
Lowest, 29·4 ins: and less, over Northern Europe, and 29·8 ins: and less over Spain.
Gradients steep over Scandinavia and the northern parts of the North Sea
Barometer rising a little in the north of Scotland, falling elsewhere, most over the south of Sweden and in Denmark.

TEMPERATURE

Highest, 51° at Lisbon, 44° at Belmullet, 43° at Malin Hd, Scilly and Brest, 42° in the northeast of England and at Nice, and 41° at Donaghadee, Nairn and Hunstanton.
Lowest, 18° at Marwick, 23° at Haparanda, 24° at Stockholm, 26° at Bodö, 27° at Berlin, 28° at Paris and Lyons, and 29° at Christiansund, Wicklow and Belfast.
It has risen in most parts of our Islands and in the west of France, fallen elsewhere, quickly over the Gulf of Bothnia.

WIND

Strong to a gale from the N.and on the west coast of Norway, light from NE over Central France and the Netherlands.
Over our Islands the wind remains N. and NE. and blows freshly or strongly in many places.

WEATHER

Fine in Ireland, over Central France and North Germany, as well as at Stockholm and Madeira, dull or cloudy elsewhere with slight rain on our east and southeast coasts, snow at some of the Scandinavian stations, and also at Perpignan

SEA

Rough at Christiansund, rather rough at Stornoway and Valencia, moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

N. and NE. winds are likely to remain general, with dull weather in most places, and occasional cold rain on our east and southeast coasts.

FORECASTS

For the 24 hours ending at NOON on 27th FEBY. 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E.	NE. winds, fresh; dull, some cold showers.	6 SCOTLAND WEST 7 ENGLAND N.W.	Same as Nos 0 to 2.
		8 ENGLAND S.W.	Same as No 5.
3 ENGLAND EAST 4 MIDLAND COUNTIES	N. and NE. winds, moderate or fresh; cloudy, slight rain at times.	9 IRELAND NORTH 0 IRELAND SOUTH	Same as Nos 0 to 2
5 ENGLAND SOUTH	E. winds, fresh; dull, slight rain occasionally.	WARNINGS	NONE ISSUED.

No's.—The **South Cone**, *point downwards* (▼|), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲|), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·39	40	39	NNW	8	cf	4
Sumburgh Head	30·53	43	43	NW	2	r	2
Stornoway	30·62	45	45	NE	2	o	2
Aberdeen	30·59	43	41	NW	3	o	3
Shields	30·53	43	42	N	3	o dp	2
Ardrossan	30·55	44	43	NW	1	o	1
Malin Head ...	30·61	43	43	NW	1	o	0
Mullaghmore ...	30·60	45	43	ENE	4	b	2
Belmullet	30·60	48	45	ENE	2	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·55	44	43	NNE	2	b	3
Valencia	30·51	51	46	E	3	bm	4
Scilly	30·40	44	42	ENE	6	bc	4
Jersey							*
Dungeness	30·37	39	37	NE	6	o	?
London	30·41	42	40	NE	4	om	
Yarmouth	30·41	41	40	NNE	4	c	
Rochefort	30·19	46	43	ENE	6	b	

GENERAL REMARKS ON THE WEATHER OVER EUROPE
DURING THE PAST 24 HOURS.

Weather in morning fine and bright over the Adriatic, the Bay of Biscay, France, several parts of our Islands, the Eastern shores of the North Sea, Sweden and Finland, cloudy or overcast elsewhere, with snow in some parts of Germany and the south of Russia, slight rain in the north and east of our Islands, and fog or mist in many places. Drizzling rain continuing in north and east during day, rain and snow in south of France.

Temperature exceeding 50° over southern and western parts of Mediterranean and western parts of Spain, exceeding 40° in Ireland and Scotland, but below the freezing point over Northern and Eastern Europe and in several parts of Germany and France. Lowest morning values 12° F. at Kharkov, 13° at Hermanstadt, 16° at Kiev, 18° at Odessa and Lemberg, 19° at Moscow; rising fast over Northern and Central Europe. Not much change in our Islands later.

Wind strong to a gale from W^ard (SW to NW) over Northern Europe, fresh from the E^ward over the Adriatic, Italy, the Bay of Biscay and English Channel. Light NE^ly in most other places, but very variable over Scotland and Eastern Europe.

Barometer highest, 30·4 ins: to 30·6 ins: and more, over Northwestern Europe and the British Isles, 30·4 ins: to 30·5 ins: and more, over the southern half of Russia; lowest 29·3 ins: and less, in a depression over Northern Europe, 29·8 ins: and less, off the southwest and south of Spain, lowest 30·0 ins: and less, over the Mediterranean. Falling irregularly but not rapidly over the British Isles all day.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Thursday 27th. February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. **R. H. SCOTT,** *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.52	17	NW	4	b	29.75	+.27	12	11	−11	N	4	b	*	27	?	—
	Hernösand ...	29.79	23	NNW	6	b	29.88	+.04	16	15	−8	N	6	c	*	36	?	—
	Stockholm ...	29.74	21	NW	4	b	29.73	−.03	18	15	−14	NW	4	c	*	37	?	0.08
	Wisby	29.73	28	NNE	7	bc	29.71	0.0	26	24	−7	N	8	c	*	36	23	0.08
	Bodö	29.91	22	NNW	6	c	30.06	+.18	22	20	−4	SE	2	c	1	27	18	—
	Christiansund	30.24	29	NW	9	s	30.08	−.13	24	23	−5	NNW	3	s	5	?	21	0.12
	Skudesnaes ...	30.35	31	NNW	7	bc	30.13	−.03	26	25	−10	NNW	7	s	4	36	?	—
	Christiania Fjord (Færder)	30.09	30	NNW	5	b	29.96	+.05	26	22	−5	NNW	3	bc	1	34	?	—
	Skagen (The Scaw)	30.06	31	N	6	b	29.96	+.13	30	?	−5	N	3	bc	4	36	28	—
	Fanö	29.94	28	N	2	b	30.07	+.05	32	30	−4	NW	4	b	*	43	25	—
BRITISH ISLANDS.	Sumburgh Head	30.61	33	N	4	o	30.45	−.10	30	?	−5	N	4	bc	4	35	28	0.01
	Stornoway ...	30.73	37	E	5	o	30.66	+.05	35	34	−6	N	6	c	5	41	32	—
	Wick	30.70	36	N	3	o	30.57	−.04	33	32	−6	N	4	s	2	39	31	0.05
	Nairn	30.69	38	ESE	4	o	30.61	+.07	33	32	−8	ENE	3	c s f	2	41	32	0.01
	Aberdeen ...	30.64	36	N	4	o q	30.53	+.03	33	31	−7	NW	3	bc s f q	5	41	32	0.01
	Leith	30.63	38	NE	3	c	30.58	+.10	35	32	−1	NW	2	b	*	44	33	—
	Shields	30.55	40	N	6	o	30.51	+.12	34	33	−8	NW	3	c	5	45	33	0.01
	Spurn Head ...	30.42	41	NNE	7	c	30.42	+.12	36	35	−6	NNW	6	bc f h	4	43	33	0.02
	York	30.48	40	N	4	o	30.51	+.15	34	33	−8	N	2	o	*	47	33	0.02
	Loughborough	30.43	40	NNE	4	o	30.51	+.17	35	33	−5	NNW	3	o m	*	47	34	0.02
	Ardrossan ...	30.66	39	NNE	1	c	30.62	+.12	36	33	−1	WNW	1	b	0	44	32	—
	Malin Head ...	30.60	42	NE	4	o q	30.67	+.17	38	34	−5	NNE	4	o	2	45	37	—
	Mullaghmore ...	30.59	46	NE	4	o m	30.69	+.20	39	32	−4	E	0	o m	0	46	33	—
	Belmullet ...	30.60	45	ESE	3	o	30.69	+.18	34	32	−10	SSE	3	o	*	46	32	—
	Donaghadee ...	30.60	42	ENE	4	bc	30.65	+.16	37	35	−5	NE	5	c	3	46	37	—
	Liverpool (Bidston)	30.51	40	NE	5	c	30.58	+.18	35	34	−4	N	2	o	3	44	35	—
	Holyhead ...	30.49	43	ENE	5	o g p	30.60	+.19	38	35	−4	NE	4	c	3	45	36	—
	Parsonstown ...	30.52	44	NE	1	c	30.66	+.21	35	32	−6	NE	1	c	*	44	34	—
	Valencia	30.49	45	NE	4	bc m	30.62	+.21	39	36	−3	ENE	3	b m	3	48	36	—
	Roche's Point ...	30.48	44	E	3	c	30.59	+.19	39	36	0	ENE	4	o	4	46	36	—
	Pembroke (St. Ann's Hd.)	30.40	43	NE	3	bc	30.56	+.21	37	34	−2	ENE	4	c	2	45	36	—
	Scilly	30.33	45	ENE	6	o m	30.49	+.23	39	36	−4	ENE	6	o	4	48	38	—
	Prawle Point ...	30.31	?	NE	5	c	30.46	+.19	37	34	−3	ENE	7	c	5	42	36	—
	Jersey (St. Aubin's)																	—
	Hurst Castle ...	30.29	44	E	4	o d	30.46	+.19	36	34	−5	E	2	b	2	44	34	—
GERMANY & HOLLAND.	Dungeness ...	30.22	42	NE	5	o	30.35	+.14	38	33	−1	NE	6	o	4	43	36	—
	London	30.34	41	NE	4	o f d	30.44	+.16	35	33	−2	N	2	bc m	*	44	33	—
	Oxford	30.43	38	NE	4	o	30.49	+.18	34	32	−5	NE	3	c	*	44	33	0.01
	Cambridge ...	30.35	39	NNE	4	o	30.45	+.15	34	33	−5	N	1	s p f	*	45	30	0.04
	Yarmouth ...	30.31	39	NNE	7	c g q	30.37	+.12	36	34	−8	N	5	c	4	42	35	0.01
	Cuxhaven ...	30.01	35	N	4	o	?30.12	−.08	32	31	+4	W	2	b	*	39	30	—
	Berlin	29.85	35	WNW	4	o	30.07	−.12	25	23	−2	NW	4	b	*	36	23	—
	Wiesbaden ...	*	*	*	*	*	30.21	+.04	31	28	+2	N	2	b	*	45	?	—
	Munich	29.94	30	ESE	1	b	30.03	−.06	27	27	+9	NE	5	s	*	36	18	0.12
	The Helder ...	30.24	37	NNE	5	c	30.32	+.08	34	31	+3	N	2	bc	2	41	?	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	?30.34	+.11	30	28	+2	NNE	3	b	*	39	?	0.04
	Cape Gris Nez	?	41	NE	5	r	?	?	37	28	+5	E	5	o	5	43	18	—
	Paris	30.14	38	N	4	b	?30.30	+.17	32	28	+4	NNE	4	bc	*	45	?	—
	Brest	30.21	43	E	4	o	30.35	+.20	40	37	−3	ENE	4	o	2	52	34	—
	Lorient	30.15	41	NE	5	b	30.29	+.17	39	35	+1	ENE	6	o	4	45	36	—
PENINSULA.	Rochefort ...	30.08	44	NE	5	b	30.21	+.16	36	35	+2	NE	6	o	?	50	27	—
	Belfort	?30.03	33	N	1	b	?30.02	+.05	34	24	+3	N	2	b	*	41	23	—
	Lyons	30.03	40	W	1	bc	30.06	+.08	31	28	+3	NNW	3	b	*	44	?	—
	Nice	29.90	46	NE	5	o	29.76	−.09	41	36	−1	ENE	4	b	2	48	39	—
	Perpignan ...	29.88	34	W	3	r	29.88	+.05	41	41	+9	W	3	o	*	?	32	1.30
	Biarritz	29.90	38	NE	4	o	29.98	+.10	42	39	+7	NW	3	o	2	43	34	—
	Corunna	*	*	*	*	*												
	Lisbon ... ... †	29.77	50	N	6	b	29.84	+.02	49	42	−4	ENE	5	c	5	59	43	—

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Thursday, 27th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

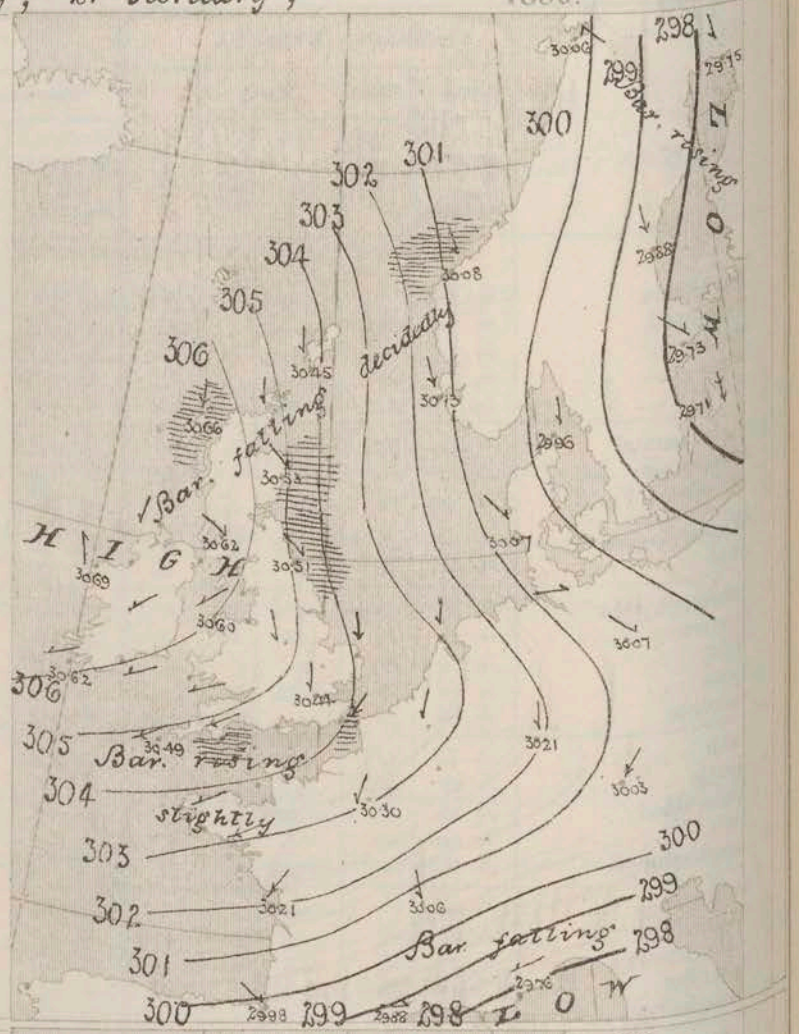
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February. During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

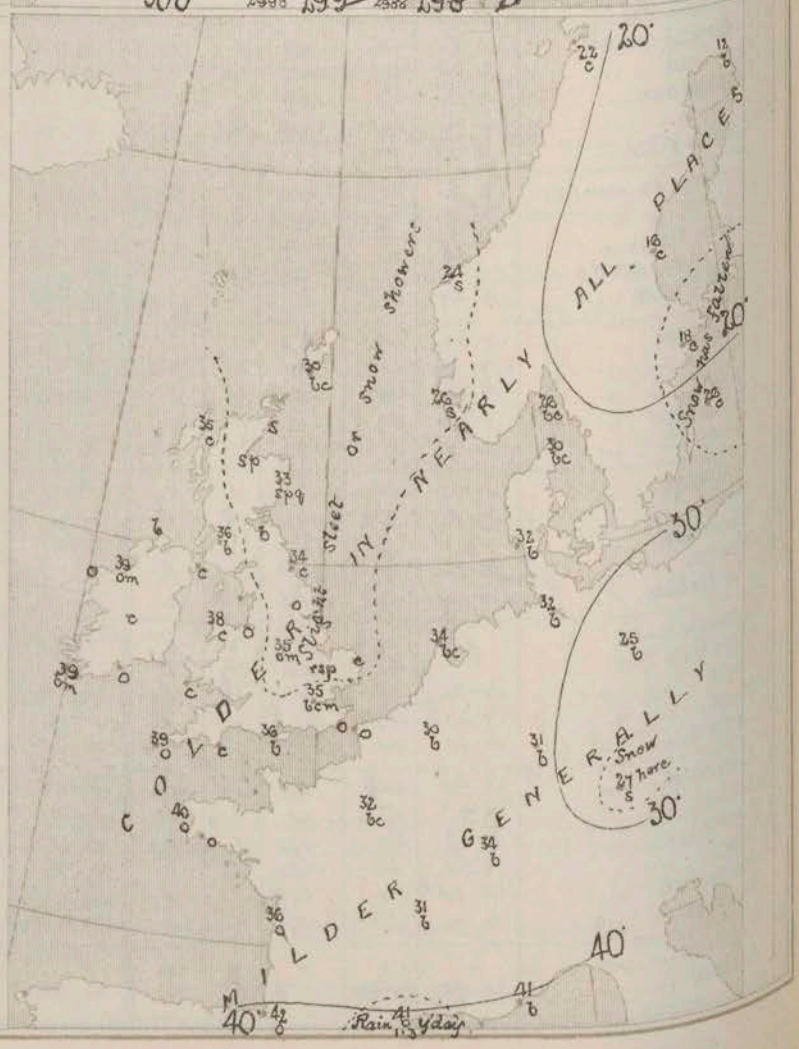
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	31·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·53
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·2	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·6 ins. and more in an anticyclone lying over Ireland and the East of Scotland.
Lowest, 29·8 ins. and less, over the Baltic and east of Sweden, and also over the Gulf of Lion.
Gradients rather steep over the North Sea and in the south of France, moderate elsewhere.
Barometer falling in the north of Scotland and west of Norway, rising in most other places.

TEMPERATURE

Highest, 42° at Biarritz, 41° at Nice and Perpignan, 40° at Brest and 39° at Lorient, Valencia and Roche's Point.
Lowest, 12° at Haparanda, 16° at Hernösand, 18° at Stockholm, 25° at Berlin, 26° at Wisby, 27° at Munich.
It has fallen somewhat except over France and Germany.

WIND

N. and NE. over the whole of Western Europe, blowing freshly or strongly except in the west of our Islands and east of France.

WEATHER

Cloudy with occasional sleet or snow showers in Scotland and the East of England as well as in the west of Norway and at Munich. Very heavy rain has fallen at Perpignan during the past twenty four hours.

SEA

Rather rough at several of our northern, eastern, and southern stations, slight in the west.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fall of the barometer in the north points to the advance of depressions which may travel in a southerly direction and cause an increase in the force of the wind in Scotland and on the East coast of England, with showers of sleet or snow in those districts.

FORECASTS

For the 24 hours ending at NOON on 28TH FEB.Y 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NW. to N. winds, strong; squally, some cold showers.
1 SCOTLAND EAST	
2 ENGLAND N.E.	
3 ENGLAND EAST	N. winds, fresh; cloudy, some showers.
4 MIDLAND COUNTIES	NE. winds, moderate; fair as a whole.
5 ENGLAND SOUTH	NE. and E. winds, fresh or strong; cloudy, some cold showers.
6 SCOTLAND WEST	N. and NE. winds, moderate or fresh; fair but perhaps some cold showers.
7 ENGLAND N.W.	
8 ENGLAND S.W.	E. winds, strong; fair as a whole.
9 IRELAND NORTH	Same as Nos 6 and 7.
0 IRELAND SOUTH	E. winds, moderate or fresh; fair generally.
WARNINGS	NONE ISSUED.

NOTE.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·26	35	29	NNW	9	bc	5
Sumburgh Head	30·59	35	32	N	4	c	4
Stornoway	30·72	39	37	E	5	o	5
Aberdeen	30·61	38	33	N	6	cq	5
Shields	30·49	43	40	NE	5	o	5
Ardrossan	30·58	44	40	NW	1	bc	1
Malin Head ...	30·57	45	42	NE	3	oq	2
Mullaghmore ...	30·53	46	42	ENE	5	c	3
Belmullet	30·53	46	44	E	4	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·45	44	43	NNE	4	o	3
Valencia	30·45	48	44	NE	6	b	5
Scilly	30·29	44	42	ENE	6	o	4
Jersey							
Dungeness	30·22	41	39	NE	5	c	3
London	30·27	43	41	NNE	3	omq	*
Yarmouth	30·24	42	41	NNE	4	cfdp	4
Rochefort	30·02	46	42	NE	6	b	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine in Central Europe, France, Spain, the Bay of Biscay, and eastern parts of the British Islands, cloudy or overcast elsewhere, with snow at some of the Scandinavian stations, snow and rain in the south of France, and slight rain over the northern and eastern parts of Great Britain. Rain at times (in very small quantity) in London during day, but weather improving in Scotland.

Temperature highest 50° to 57° over the southern parts of the Mediterranean and south of Spain only, 43° at Corunna, 44° at Belmullet, 43° at Scilly and Malin Head, 40° at Loughborough and Aberdeen; much below the freezing point over Russia and Central Europe, and as low as (1) −1°F. at Hermannstadt, 13° at Lemberg, 15° at Cracow and Kiev, 17° at Odessa, 18° at Munich, and 19° at Khartov, (2) 17° at Kuopio, 18° at Archangel, 22° at St Petersburg and Moscow. Falling in the north of our Islands latr.

Wind N. to NW. over Northern Europe (a gale in several places), N. to NE. over the British Islands and Western Europe generally (light to fresh), E. strong to gale on the northern shores of the Mediterranean, SE. at Cagliari. Very light and variable over Germany, Austria-Hungary, southern and Central Russia. Wind increasing considerably over the British Isles and North Sea later — blowing a moderate gale at some of the more eastern of our stations.

Barometer highest, 30·2 ins: to 30·6 ins: and more over the British Isles, 30·2 ins: to nearly 30·4 ins: over Southern Europe, lowest 29·0 ins: and less, in a large depression over the northeast of Russia, 29·7 ins: and less, in a small secondary over the Baltic, and also in a larger disturbance over the eastern portion of the Mediterranean. Russian anticyclone giving way. Northern depressions moving southeastwards later, and barometer rising over Northwestern Europe

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for Friday 28th February. 1890.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, *Secretary.*

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30·01	6	N	4	b	30·04	+·29	1	−1	−11	NNW	4	b	*	19	?	—
	Hernösand ...	30·06	17	NNW	4	b	30·10	+·22	10	10	−6	NNW	4	b	*	28	?	—
	Stockholm ...	29·90	20	NW	4	c	29·98	+·25	13	12	−5	NNW	6	bc	*	23	?	0·04
	Wisby	29·81	27	N	6	o	29·89	+·18	24	24	−2	N	6	bc	*	28	23	0·12
	Bodö	30·19	22	N	2	b	30·23	+·17	13	11	−9	E	2	b	1	25	?	—
	Christiansund	30·27	28	ESE	3	s	30·18	+·10	29	27	+3	Z	0	s	5	30	?	0·35
	Skudesnaes ...	30·29	27	N	2	b	30·24	+·11	25	23	−1	ENE	1	b	2	30	23	—
	Christiania Fjord (Færder)	30·10	26	N	7	b	30·18	+·22	23	20	−3	NNW	4	b	1	27	21	—
	Skagen (The Scaw)	30·07	26	NE	6	bc	30·15	+·19	25	22	−5	NE	3	b	4	32	23	—
	Fanö	30·04	22	N	6	b	30·19	+·12	21	19	−11	N	4	b	*	36	19	—
BRITISH ISLANDS.	Sumburgh Head	30·50	31	NE	4	c	30·39	−·06	30	29	0	N	2	c†	4	32	27	0·01
	Stornoway ...	30·63	35	N	6	o	2 30·50	−·16	35	34	0	NW	3	s	4	38	31	0·01
	Wick	30·50	34	NE	5	c	30·45	−·12	32	31	−1	NW	2	c	2	37	29	0·05
	Nairn	30·57	34	NNE	5	o	30·50	−·11	32	30	−1	Z	0	c	1	38	30	0·01
	Aberdeen ...	30·52	32	NNW	4	bc†	30·46	−·07	30	29	−3	WNW	3	bc†	5	37	29	0·03
	Leith	30·53	37	N	2	c	30·51	−·07	31	30	−4	WNW	1	c	*	41	30	—
	Shields	30·44	36	N	5	c	30·45	−·06	30	30	−4	NW	3	c	6	39	29	0·15
	Spurn Head ...	30·31	35	N	7	bc	30·38	−·04	33	31	−3	NW	5	bcq†	4	38	30	0·13
	York	30·41	33	N	3	f†	30·49	−·02	29	29	−5	N	2	f	*	40	25	0·03
	Loughborough	30·41	35	N	4	c	30·46	−·05	29	28	−6	NW	2	bm	*	40	27	—
	Ardrossan ...	30·56	36	N	2	bc	30·55	−·07	32	30	−4	NNW	1	bc	0	42	30	—
	Malin Head ...	30·59	38	NNE	5	of†	30·58	−·09	37	33	−1	NNE	2	o	1	40	36	—
	Mullaghmore ...	30·56	40	NE	5	cf†	? 30·60	−·09	37	34	−2	ESE	1	o	1	42	35	0·01
	Belmullet ...	30·64	39	N	1	o	30·62	−·07	37	35	+3	WSW	1	o	*	41	33	—
	Donaghadee ...	30·55	40	ENE	5	c	30·58	−·07	37	36	0	NE	4	c	3	42	36	—
	Liverpool (Bidston)	30·48	34	N	3	b	30·51	−·07	32	31	−3	NNE	2	b	3	39	29	—
	Holyhead ...	30·51	39	NNE	5	of	30·55	−·05	36	33	−2	NNE	4	bc	3	40	35	—
	Parsonstown ...	30·57	37	Z	0	c	30·60	−·06	31	30	−4	Z	0	c	*	38	31	—
	Valencia	30·60	39	NE	3	om	30·60	−·02	37	33	−2	NNE	1	c	2	42	32	—
	Roche's Point...	30·57	37	NE	4	c	30·56	−·03	35	32	−4	NNE	3	b	4	45	33	—
	Pembroke (St. Ann's Hd.)	30·48	36	NE	4	bc	30·54	−·02	34	32	−3	ENE	2	b	1	41	33	—
	Scilly	30·42	40	NNE	6	fq	30·49	0·0	39	35	0	ENE	4	bc	4	42	37	—
	Prawle Point ...	30·41	35	N	3	c	30·48	+·02	32	30	−5	N	3	b	2	38	27	—
	Jersey (St. Aubin's)	30·34	40	ENE	4	cm	30·42		37	32		NNE	3	bqm	3	43	35	—
	Hurst Castle ...	30·37	36	NE	4	bm	30·44	−·02	32	30	−4	NE	4	bm	2	40	29	—
	Dungeness ...	30·27	35	N	5	cf†	30·34	−·01	29	29	−9	N	5	c	3	42	26	—
	London	30·34	35	NNE	4	b	30·41	−·03	30	29	−5	N	3	b	*	40	28	0·02
	Oxford	30·40	33	ENE	4	b	30·47	−·02	28	27	−6	N	2	b	*	40	27	—
	Cambridge ...	30·34	33	N	3	b	30·43	−·02	29	27	−5	N	2	s	*	42	24	?
	Yarmouth ...	30·24	36	N	6	cfq	30·33	−·04	34	32	−2	NNE	5	bc	5	39	30	0·04
GERMANY & HOLLAND.	Cuxhaven ...	29·89	29	NNW	4	s	30·14	+·02	25	24	−7	NNE	5	b	*	34	23	—
	Berlin	29·80	28	SW	4	s	29·89	−·18	23	22	−2	NE	5	o	*	32	21	0·20
	Wiesbaden ...	*	*	*	*	*	29·99	−·22	23	22	−8	NW	4	bc	*	37	23	0·32
	Munich	29·99	16	Z	0	b	29·88	−·15	21	20	−6	NW	5	s	*	28	12	0·04
	The Helder ...	30·09	35	NNW	7	s	30·26	−·06	29	27	−5	NNE	4	b	4	37	28	0·08
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30·26	−·08	26	23	−4	N	3	b	*	39	24	0·04
	Cape Gris Nez	?	36	NNE	6	o	?	?	33	32	−4	NE	7	c	7	43	32	—
	Paris	30·22	34	NE	2	c	30·24	−·06	29	25	−5	NNE	4	b	*	41	27	—
	Brest	30·34	38	NE	3	o	30·38	+·03	37	36	−3	ENE	2	o	2	50	36	0·04
	Lorient	30·26	39	ENE	5	o	30·38	+·09	35	32	−4	NE	3	bc	2	41	34	—
	Rochefort ...	30·20	39	NE	6	b	30·30	+·09	33	32	−3	NE	6	b	?	46	25	—
	Belfort	30·00	34	N	1	b	29·94	−·08	29	21	−5	NW	1	s	*	39	25	—
	Lyons	29·99	35	N	5	bc	30·06	0·0	27	25	−4	N	5	bc	*	40	26	—
	Nice	29·69	45	SE	3	c	29·61	−·15	40	37	−1	SW	4	bc	1	54	37	—
	Perpignan ...	29·84	42	NW	4	b	29·91	+·03	35	30	−6	NW	5	b	*	50	34	—
	Biarritz	30·01	45	NNW	4	o	30·15	+·17	29	26	−13	ENE	4	b	3	46	27	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon																	

For Explanation of Columns, see bottom of p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Friday, 28th February, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

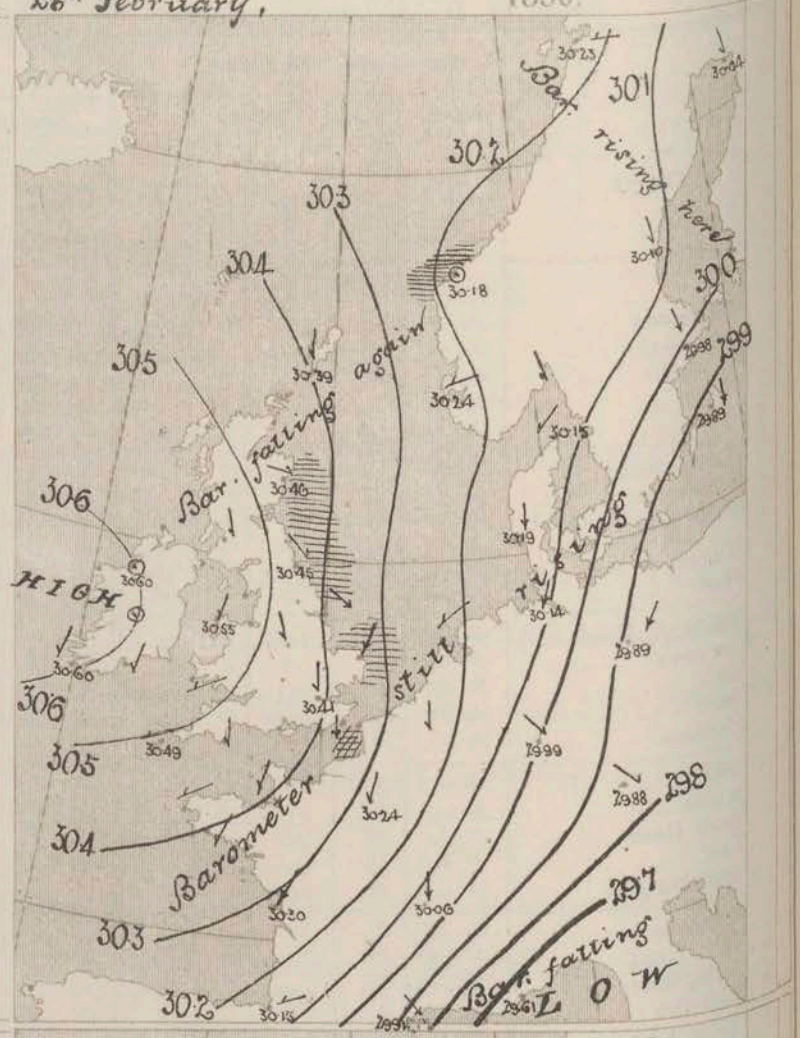
WIND—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of February. During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·713
Stornoway	29·700
Wick	29·737
Nairn	29·747
Aberdeen	29·780
Leith	29·803
Shields	29·847
York	29·884
Loughborough	29·912
Ardrossan	29·805
Donaghadee	29·812
Holyhead	29·848
Liverpool	29·873
Parsonstown	29·834
Valencia	29·850
Roche's Point	29·850
Pembroke	29·875
Scilly	29·911
Jersey	29·975
Hurst Castle	29·944
Dover	29·957
LONDON	29·949
Oxford	29·938
Cambridge	29·935
Yarmouth	29·928



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

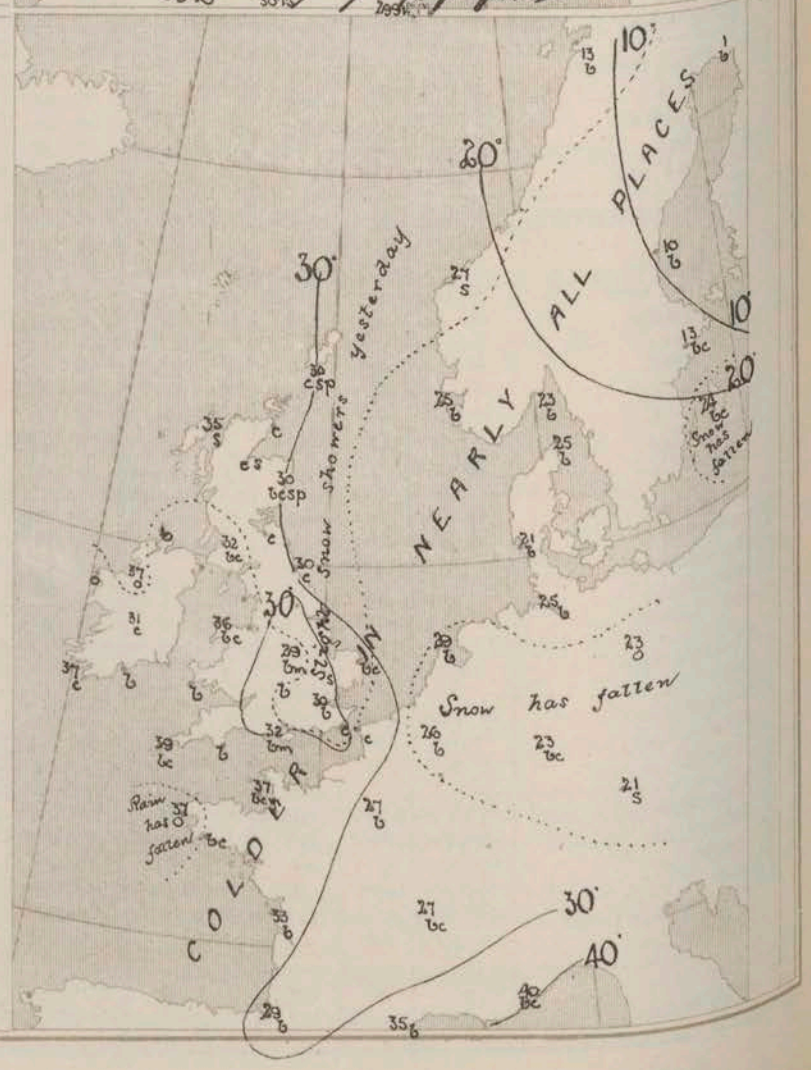
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of February.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	42·6	34·7	38·7	37·7	3·29
Stornoway	43·5	34·7	39·3	38·2	3·97
Wick	43·4	33·5	38·4	37·0	2·02
Nairn	43·4	33·8	37·4	35·7	1·51
Aberdeen	43·5	34·2	37·8	36·2	2·51
Leith	46·6	34·7	39·2	37·7	1·58
Shields	44·3	35·7	39·2	37·9	1·63
York	45·3	34·2	38·2	37·1	1·88
Loughborough	46·0	34·5	38·4	37·3	2·00
Ardrossan	45·0	36·7	40·0	38·6	3·47
Donaghadee	45·8	37·0	40·7	39·7	2·71
Holyhead	46·1	39·3	42·3	40·8	2·90
Liverpool	45·3	36·9	39·9	38·3	1·85
Parsonstown	47·4	36·1	40·1	38·8	2·45
Valencia	50·2	40·8	45·1	43·4	5·29
Roche's Point	48·9	40·0	43·6	42·2	4·86
Pembroke	46·3	40·3	43·1	41·9	3·20
Scilly	49·7	43·7	46·9	45·3	2·98
Jersey	47·6	40·1	43·2	42·0	2·72
Hurst Castle	46·5	37·9	41·3	40·4	2·63
Dover	45·4	37·4	40·3	39·1	2·12
LONDON	46·9	36·0	39·7	38·6	1·89
Oxford	45·9	35·9	38·8	37·7	2·06
Cambridge	46·4	33·9	38·3	37·3	1·60
Yarmouth	43·5	35·2	38·9	38·2	2·02

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·6 ins. and more, over the west of Ireland.
Lowest, about 29·6 ins. over the Gulf of Genoa and 29·9 ins. and less, over the Baltic.
Gradients steep in the southeast of France, rather so over Germany, slight elsewhere.
Barometer falling in the extreme north, and also over Northern Italy, rising in most other places.

TEMPERATURE

Highest, 40° at Nice, 39° at Scilly, 37° in the west of Ireland, and also at Brest, 36° at Holyhead, and 35° at Stornoway and Lorient.
Lowest, 1° at Haparanda, 10° at Hernösand, 13° at Bodö and Stockholm, 21° at Tromsö and Alburnak, 23° at Berlin and Wiesbaden, and 24° at Werlo.
It has fallen very generally and frost prevails this morning except on our western coasts.

WIND

Light from the NW.ward in Scotland, but remains N. and NE. over England, Ireland, and at the Continental stations.
It blows freshly over France, Germany, and the east and south of England, but is light or moderate in force elsewhere.

WEATHER

Fine and bright in nearly all parts of Western Europe, but occasional showers of snow are reported in Scotland and the east of England.
During the past 24 hours snowshowers have fallen in many parts of our Islands and also in Germany and at some of the Scandinavian stations.

SEA

High at C. Gris Nez, rather rough in the east generally, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Cold weather, with fresh N. winds and occasional showers of snow are still probable in most parts of our Islands.

FORECASTS

For the 24 hours ending at NOON on 1st March. 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NW. and N. winds, strong; squally, some snow showers.
1 SCOTLAND EAST	
2 ENGLAND N.E.	
3 ENGLAND EAST	N. and NE. winds, fresh; fair and cold generally, but perhaps some snow showers.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	

DISTRICTS.	FORECASTS
6 SCOTLAND WEST	Same as Nos 0 to 2.
7 ENGLAND N.W.	
8 ENGLAND S.W.	N. and NE. winds, fresh; fair generally, cold.
9 IRELAND NORTH	N. or NE. winds, light or moderate; fair, cold.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30.15	30	29	NNW	8	bc	4
Sumburgh Head	30.49	30	29	N	4	bc fp	5
Stornoway	30.64	38	36	NE	5	o	5
Aberdeen	30.51	32	31	NNW	5	cq sp	6
Shields	30.45	37	34	NNW	6	sp	6
Ardrossan	30.55	40	37	NNE	2	c	1
Malin Head ...	30.61	40	36	NNE	5	sh p	3
Mullaghmore ...	30.63	41	37	NNE	4	c v	2
Belmullet	30.68	39	36	N	2	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.55	38	34	NNE	4	bc	3
Valencia	30.61	41	36	NE	2	o	4
Scilly	30.45	41	37	NE	5	o	3
Jersey	30.30	42	36	NE	4	c m	3
Dungeness	30.31	41	36	N	5	c	*
London	30.37	39	36	NW	3	c sp	5
Yarmouth	30.28	38	36	NNW	5	c q	4
Rochefort	30.60	43	38	NE	6	b	

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over France, Germany, and the southeastern parts of England, changeable and unsettled elsewhere, with snow in many parts of Russia the north and east of Scotland & the west of Norway. Snow showers later over Germany, the North Sea, and many parts of our Islands, amounts measured considerable in Germany and at Christiansund, slight elsewhere.

Temperature exceeding 50° over the southern parts of the Mediterranean only; 40° to 50° on the Atlantic coasts of Spain and Portugal, but below 40° in nearly all parts of Northwestern and Western Europe. Below the freezing point over the whole of eastern and central Europe, as well as in the Netherlands, and at Turin. Lowest morning values (1) −9° at Hermannstadt, +11° at Kharkov and Kiev, 17° at Odessa, 24° at Cracow, (2) 3° at Kuopio, 10° at Ulleaborg, 12° at Haparanda, 13° at Archangel, 17° at Haugesund, 20° at Riga, and 22° at Moscow. Falling decidedly in the northeast and east of our Islands later.

Wind N^ly over the whole of Northern Europe, N^ly to NW^ly over Great Britain, the North Sea and Germany, NE^ly in Ireland, the southeast of England, France and Spain, as well as at most of the Mediterranean stations, very variable over Southeastern Europe, S^ly over the southern half of Russia, fresh to strong in many places, a gale at Wisby and Skudesnaes. Very strong squally from the N^ward over the North Sea and eastern parts of the British Isles later.

Barometer, highest 30.4 ins. to nearly 30.7 ins. over the British Isles, 29.9 ins. to 30.0 ins. over Southeastern Europe and the Black Sea, lowest 29.5 ins. to 29.7 ins. over the Mediterranean, 29.3 ins. to 29.5 ins. over the northern half of Russia. Gradients moderate generally, but rather steep over the Baltic, Germany, Switzerland, and the south of France. Not much change later.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY.

DATE.	STATIONS.	YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO-DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direct.	Wind. Force (0 to 12.)	Weather.	Sea (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
1	Stornoway	-	-	-	-	-	29.78	-.30	45	45	-2	SW	4	0	4	49	41	0.06
"	Corunna	*	*	*	*	*	30.27	-	52	50	+8	NE	4	c	4	54	?	-
"	Lisbon	30.16	50	N	5	bc	30.06	-.26	51	46	+7	NNE	4	b	5	57	?	-
3	Stornoway	-	-	-	-	-	30.04	+.28	47	46	+10	W	6	0	5	48	35	0.08
"	Corunna	*	*	*	*	*	30.23	-.03	42	?	-7	NNE	2	bc	3	52	39	0.28
4	Stornoway	-	-	-	-	-	29.94	-.10	40	39	-7	SW	3	c	3	48	38	0.02
"	Corunna	*	*	*	*	*	30.12	-.11	40	39	-2	E	2	0	4	55	36	-
"	Lisbon	30.18	48	NW	4	b	30.04	-.18	45	44	-3	NW	4	b	?	55	45	0.08
5	Stornoway	30.04	38	W	4	bc	30.07	+.13	41	41	+1	SW	4	c	4	45	35	-
"	Belfort	?30.00	21	SW	1	bc	?29.93	-.13	19	14	-5	SW	1	b	*	32	15	-
"	Corunna	*	*	*	*	*	30.08	-.04	42	42	+2	NE	2	c	3	50	39	-
6	Corunna	*	*	*	*	*	30.04	-.04	40	39	-2	NE	2	b	2	52	36	-
7	Corunna	*	*	*	*	*	30.06	+.02	41	37	+1	NE	3	b	3	52	34	-
8	Corunna	*	*	*	*	*	29.95	-.11	44	?	+3	E	4	0	4	56	37	-
"	Lisbon	29.93	50	NE	4	b	29.90	-.16	40	35	+1	NE	4	b	?	54	39	-
10	Corunna	*	*	*	*	*	30.03	+.12	40	37	-1	E	3	b	3	57	36	-
11	Corunna	*	*	*	*	*	30.04	+.01	46	44	+6	?	3	0	4	57	39	-
"	Lisbon	30.06	52	SSW	3	b	30.07	+.04	42	41	+7	NNE	4	bc	?	59	?	-
12	Corunna	*	*	*	*	*	29.75	-.29	53	51	+7	S	5	r	4	55	37	-
13	Corunna	*	*	*	*	*	29.92	+.17	48	45	-5	SW	2	bc	5	55	43	0.47
14	Corunna	*	*	*	*	*	29.72	-.20	41	-	-7	S	6	0	6	-	-	-
15	Corunna	*	*	*	*	*	30.13	+.41	48	45	+7	NW	3	bc	4	59	?	0.89
17	Corunna	*	*	*	*	*	29.68	-.07	46	43	0	SSE	4	bc	4	48	39	0.71
18	Corunna	*	*	*	*	*	29.61	-.07	45	43	-1	ESE	5	bc	4	54	41	-
19	Corunna	*	*	*	*	*	29.97	+.36	49	45	+4	SE	1	b	3	55	41	-
20	Corunna	*	*	*	*	*	30.21	+.24	50	48	+1	S	2	c	2	57	39	-
21	Corunna	*	*	*	*	*	30.22	+.03	48	46	-2	SSE	4	0	4	55	43	-
22	Corunna	*	*	*	*	*	29.69	-.55	53	51	+5	NNE	2	r	4	57	46	0.71
24	Corunna	*	*	*	*	*	29.98	-.27	50	45	+1	ENE	4	b	3	52	45	-
25	Corunna	*	*	*	*	*	29.95	-.03	51	47	+1	NE	1	b	2	57	43	-
26	Corunna	*	*	*	*	*	30.02	+.07	49	45	-2	NNE	6	c	4	57	45	0.04
27	Corunna	*	*	*	*	*	30.10	+.08	50	46	+1	NNE	6	bc	5	52	37	-
28	Corunna	*	*	*	*	*	30.16	+.06	46	41	-4	NE	7	0	6	52	37	-
"	Lisbon	29.32	53	N	5	b	29.88	+.04	42	35	-5	NE	5	b	8	59	41	-

REPORTS FOR FEBRUARY 1890.

2. CORRECTIONS.

DATE.	STATIONS.	YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO-DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
1	Mullaghmore	-	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Parsonstown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	-
-	Oxford	-	-	-	-	-	-	-	-	-	-	-	-	-	-	? 48	-	-
4	Parsonstown	30·31	44	2	0	0	-	-	-	-	-	-	-	-	-	-	-	-
5	Spurn Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49	-
7	Scilly	30·21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	Dungeness	-	-	-	-	-	30·35	+ ·18	-	-	-	-	-	-	-	-	-	-
8	York	-	-	-	-	-	30·53	+ ·05	-	-	-	-	-	-	-	-	-	-
-	Valencia	-	-	-	-	-	-	-	38	37	- 2	-	-	-	-	-	-	-
9	Liverpool	-	-	-	-	-	-	-	-	33	-	-	-	-	-	-	-	-
-	Wiesbaden	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Ardrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	-
14	Valencia	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	29	-
15	Malin Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·25
16	Aberdeen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·04
"	Ardrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·45
"	Liverpool	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·08
19	Nairn	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
"	Malin Head	-	-	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Liverpool	-	-	-	-	-	30·08	+ ·09	-	-	-	-	-	-	-	-	-	-
21	Hurst Castle	-	-	-	-	-	30·12	- ·09	-	-	-	-	-	-	-	-	-	-
22	Dungeness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	-	-
24	Mullaghmore	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No rain
26	Dumbrugh Hd.	-	-	-	-	-	30·69	- ·03	-	-	-	-	-	-	-	-	-	-
27	Mullaghmore	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·02
28	Jersey	-	-	-	-	-	-	-	35	-	0	-	-	-	-	-	-	-
-	Cambridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·08