

METEOROLOGICAL OFFICE,
✓
LONDON.

DAILY WEATHER REPORTS.

1ST JANUARY—30TH JUNE,
1889.

Sec. Reg. Lond.

9/12/89

DAILY WEATHER REPORT.

January to June 1889.



DAILY WEATHER REPORT.

for *Friday, 1st February 1889.*
Issued by the Meteorological Office, 63, Victoria Street, London. R.H. SCOTT, Secretary.

Issued by the Meteorological Office, 65, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.			
			Dir.	Force. (0 to 12.)		Reading at 8 A.M. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ..	28.77	16	Z	0	b	28.89	+0.9	12	12	-7	NE	4	0	*	19	9	-
	Hernösand ...	28.82	22	N	2	b	29.08	+1.4	17	16	-5	N	2	0	*	30	9	0.04
	Stockholm ...	28.89	24	WNW	2	b	29.02	-0.6	22	20	-5	NW	4	0	*	36	23	-
	Wisby ...	29.00	33	W	6	b	29.00	-2.2	30	28	-3	N	6	0	*	39	30	-
	Bodö ...	28.89	24	E	2	bc	29.18	+4.9	19	17	-5	E	2	0	1	25	16	-
	Christiansund...	28.97	31	WSW	1	b	29.24	+1.8	33	32	+1	SW	6	5	5	34	28	-
	Skudesnaes ...	28.85	44	WNW	7	r	29.39	+0.4	35	32	0	N	1	0	4	45	34	0.63
	Christiania Fjord (Farder)	28.90	34	N	2	S	29.26	+0.1	31	28	-2	WNW	4	0	3	39	27	-
	Skagen (The Scaw)	28.76	38	Z	0	r	29.30	-0.0	32	31	-6	NNE	2	0	1	39	32	0.63
	Fanö ...	29.05	43	WNW	7	b	29.42	-1.7	40	38	+3	NW	6	0	*	43	34	0.16
BRITISH ISLANDS.	Sumburgh Head	28.98	47	NW	6	c	29.30	+1.6	39	38	-1	Z	0	0	5	48	35	0.43
	Stornoway ...	29.39	49	W	7	c	29.14	-1.5	46	46	-3	SW	7	0	6	50	41	0.12
	Wick ...	29.25	46	NW	5	bc	29.30	+0.7	44	42	-1	S	4	0	3	52	39	0.10
	Nairn ...	29.39	50	W	4	c	29.29	-0.5	45	42	-7	Z	0	0	1	56	42	-
	Aberdeen...	29.36	51	W	7	bc	29.40	+0.2	43	41	-2	S	2	0	4	58	41	0.01
	Leith ...	29.51	49	W	5	b	29.47	-0.4	47	45	-3	S	2	0	*	53	45	0.01
	Shields ...	29.50	53	W	5	c	29.61	+0.1	47	46	-3	SW	1	0	2	54	46	0.04
	Spurn Head ...	29.59	49	W	7	o	29.68	-0.7	45	44	+1	SSW	2	0	3	50	44	-
	York ...	29.60	53	W	5	o	29.67	-0.5	50	49	+1	SSW	1	0	*	53	47	0.01
	Loughborough	29.76	52	WSW	3	r	29.74	-1.3	51	50	+3	SW	2	0	*	55	48	0.05
GERMANY.	Ardrossan ...	29.61	50	W	4	o	29.42	-1.8	48	47	0	SSW	5	0	4	51	46	0.11
	Malin Head ...	29.66	48	WNW	5	o	29.36	-2.1	50	50	+1	SW	4	0	?	49	?	0.08
	Mullaghmore ...	29.79	49	W	5	omr	29.50	-2.5	52	51	+2	SW	6	0	5	52	48	0.15
	Belmullet ...	29.82	51	WNW	5	om	29.51	-2.7	51	51	+1	WSW	7	0	*	52	48	0.18
	Donaghadee ...	29.70	54	NW	5	bcq	29.52	-1.9	52	51	+3	W	5	0	8	54	49	0.04
	Barrow-in-Furness	29.66	50	SW	7	o	29.61	-1.5	46	46	-1	SSW	6	0	*	50	45	0.08
	Liverpool (Bidston)	29.71	50	W	8	o	29.67	-1.6	52	50	+4	SW	3	0	4	53	48	0.08
	Holyhead ...	29.80	52	WSW	5	o	29.66	-1.8	49	49	0	SSW	6	0	6	53	48	0.02
	Parsonstown ...	29.88	52	W	2	o	29.65	-2.5	52	51	+3	W	3	0	*	54	48	-
	Valencia ...	29.99	52	WSW	4	odm	29.78	-2.5	53	52	+1	WSW	6	0	6	53	49	0.11
FRANCE & NETHERLANDS.	Roche's Point...	29.94	55	WNW	4	bc	29.78	-2.0	52	50	+2	WSW	4	0	4	57	50	0.01
	Pembroke ...	29.91	50	WSW	6	b	29.79	-2.1	49	49	+1	SW	5	0	6	50	48	0.02
	Scilly ...	30.07	52	W	6	f	29.93	-2.2	52	52	+3	WSW	6	0	6	52	48	0.04
	Prawle Point ...	30.01	51	WSW	4	o	29.93	-1.6	50	50	+2	WSW	4	0	4	50	46	0.16
	Jersey ...	30.11	50	W	5	o	30.00	-1.6	52	51	+2	W	6	0	4	52	49	0.06
	Harst Castle ...	29.93	47	WSW	6	m	29.88	-1.4	47	47	0	WSW	6	0	4	48	46	0.01
	Dungeness ...	29.84	47	WSW	5	o	29.83	-1.6	47	47	+3	W	5	0	4	48	43	0.01
	London ...	29.84	57	W	4	o	29.82	-1.4	51	50	+7	SW	1	0	*	54	44	0.04
	Oxford ...	29.86	50	SW	4	r	29.80	-1.3	49	49	+2	WSW	1	0	*	51	46	0.03
	Cambridge ...	29.75	52	SW	4	bc	29.77	-1.1	50	49	+5	SW	1	0	*	54	48	0.01
PORTUGAL.	Yarmouth ...	29.64	51	W	4	c	29.75	-0.8	47	46	+5	WSW	2	0	3	51	40	0.01
	Cuxhaven ...	29.48	50	WSW	7	r	29.52	-2.0	42	41	+5	NW	6	0	*	43	?	0.25
	Berlin ...	29.47	42	WSW	5	o	29.36	-3.6	44	41	+5	WNW	7	0	*	46	?	0.24
	Wiesbaden ...	*	*	*	*	*	29.82	-1.5	49	47	+8	W	2	0	*	50	36	0.16
	Munich ...	29.96	40	W	6	o	29.86	-1.7	44	41	+9	W	8	0	*	45	?	0.16
	The Helder ...	29.53	45	WSW	7	o	29.74	-1.0	44	42	+4	W	3	0	3	46	?	0.08
	Brussels ...	*	*	*	*	*	29.88	-1.2	50	49	+9	WSW	3	0	*	?	?	0.04
	Cape Gris Nez...	?	47	WSW	8	o	?	?	46	43	+1	SW	5	0	5	48	45	-
	Paris ...	30.06	49	SW	4	o	30.02	-1.1	50	50	+5	SW	4	0	*	51	?	0.08
	Brest ...	30.23	51	NW	7	r	30.14	?	51	47	+2	WNW	5	0	5	?	43	0.12
SPAIN.	Lorient ...	30.28	50	W	7	m	30.10	-1.5	51	51	+1	W	5	0	4	?	48	0.39
	Rochefort ...	30.35	49	WSW	4	f	30.25	-0.5	50	50	+2	WSW	5	0	2	52	43	0.08
	Belfort ...	30.10	38	W	1	o	30.05	-0.9	43	43	+4	W	3	0	*	44	36	0.08
	Lyons ...	30.29	43	E	1	o	30.21	-0.7	41	41	+4	E	1	0	*	50	?	-
	Nice ...	30.01	47	Z	0	bc	29.97	-0.9	42	40	+2	E	4	0	1	52	39	-
	Perpignan ...	30.26	57	NW	5	c	30.24	-0.6	52	47	+1	NW	5	0	*	61	57	-
	Biarritz ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lisbon ...	30.42	51	WNW	5	b	30.43	-0.4	46	45	+1	N	3	0	2	55	45	-

For Explanation of Columns, see p. 4.

† Received too late for insertion in Charts and 2

WEATHER CHARTS

For 8 a.m. on

Friday, 1st February.

1889.

BAROMETER, WIND & 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 —
 ——— force above 10 ——— force 6 to 10
 ——— force 5 to 7 ——— force 1 to 4
 ○ — dead calm

Sea Disturbance — where considerable is shown thus.

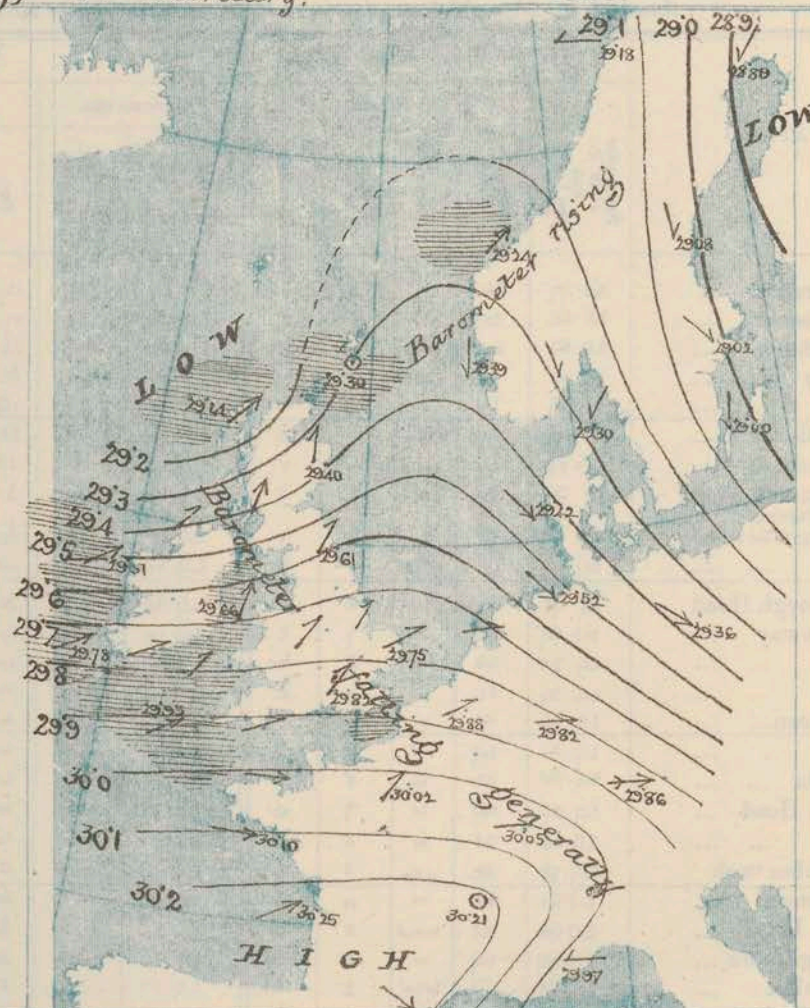
— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February

During the 15 Years 1871–1885.

STATIONS.	MEAN READINGS.
	<i>in.</i>
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	29.905
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	29.940
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.

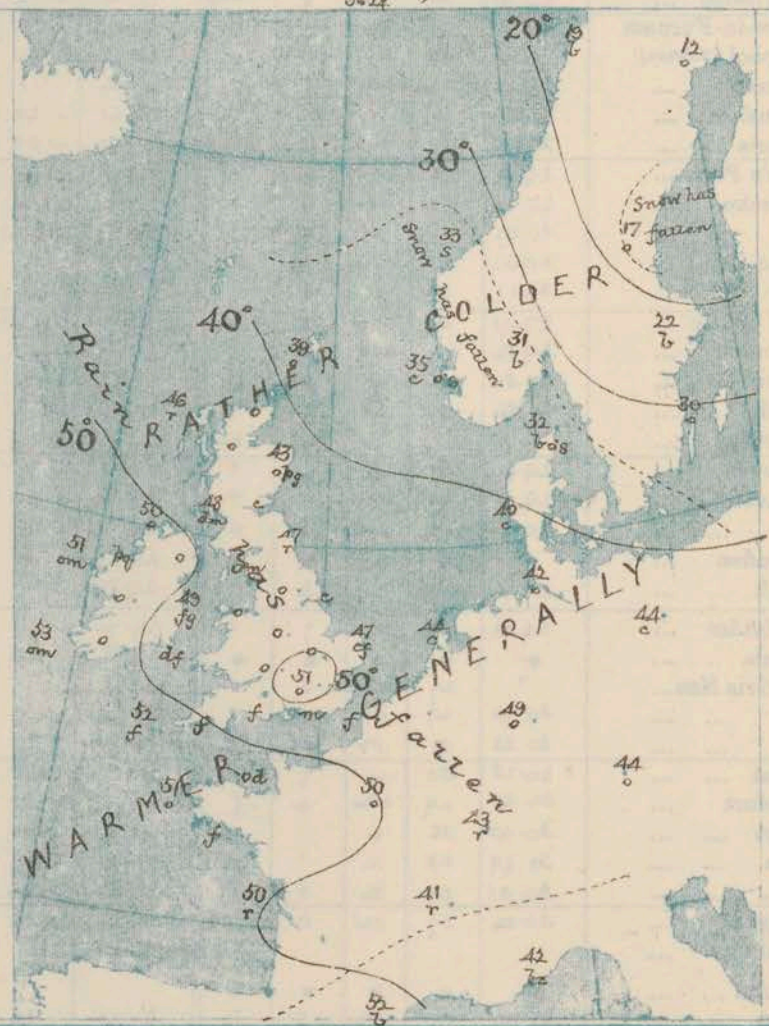
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL

for the month of February

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
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	40.2	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 in. to 30.4 in. and more, in a high-pressure area spreading from the Atlantic across Spain and the southern part of France.
Lowest, 29.0 in. and less, over Finland and the Baltic Provinces — 29.2 in. and less, off the northwest of Scotland.
Gradients, moderate — for SW winds in our Islands and for N to the eastward of the North Sea.
Barometer rising in Scandinavia, falling in our Islands and France — most in the north-west.

TEMPERATURE

Highest, 53° at Palermo, 52° at Jersey, Sabley, Rochefort, and Mullaghmore, 51° at Bismarck, Lorient, and in London.
Lowest, 12° at Haparanda, 11° at Helsingfors, 10° at Oslo, 12° at Stockholm, 33° to 35° in the west of Novaya Zemlya.
It is above 40° throughout our Islands, France, and Germany. The daily maxima yesterday were as high as 58° at Aberdeen, 57° at Rochefort, 55° on our northeast coast, and 53° in London.

WIND

S^{ly}, light on our northeast coasts — S^W to W^{ly} at our other stations and in France, light at the eastern stations, strong in the west and northwest, — a moderate gale at Stromsøya.
Over the Baltic and Germany the wind is NW and W. The gale over the Baltic has died down, but gales are now reported at Berlin and Munich.

WEATHER

Bull, cloudy and damp generally; rain is falling in several localities.
Fog is very prevalent in the Irish and English Channels.
The rainfall, though general, has been large in the south of Norway, the north of Denmark and the Shetland Islands only.

SEA

Rough in the extreme west, rather so in the north, moderate in the Channel, slight on our east coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any important change.

FORECASTS

for the 24 hours ending at NOON on 2nd FEB 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	S ^{ly} and S ^W winds strong; squally, showery, mild.
1	SCOTLAND EAST	
2	ENGLAND N.E.	S ^W winds, light to fresh; mild, some rain.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	S ^W winds, freshening; cloudy, showery, mild.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	Same as N° 0
7	ENGLAND N.W.	
8	ENGLAND S.W.	S ^W winds, strong or fresh; showery, mild.
9	IRELAND NORTH	Same as N° 0
10	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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudeenaes ...	29.54	35	34	ESE 4	CTS	4	Holyhead ...	29.78	52	50	WSW 5	0	5
Sumburgh Head	28.90	47	47	W 4	T	5	Valencia ...	29.99	53	53	WSW 5	0 gm	5
Stornoway ...	29.28	50	50	W 7	T	6	Scilly ...	30.09	52	52	WSW 6	0 pd	5
Aberdeen ...	29.18	57	50	W 7	CQU	4	Jersey ...	30.12	50	50	W 5	0	4
Shields ...	29.45	53	51	SW 5	C	2	Dungeness ...	29.87	47	47	W 5	0	4
Ardrossan ...	29.53	52	50	W 5	0	4	London ...	29.86	54	50	W 4	0	3
Malin Head ...	29.56	49	49	W 6	0	6	Yarmouth ...	29.69	50	48	W 4	C	3
Mullaghmore ...	29.72	51	51	WSW 6	0 d	6	Rocheport ...	30.36	50	50	WSW 4	f	2
Belmullet ...	29.78	52	52	W 5	0 m	*							

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

The reports for yesterday morning showed that although the highest pressures, 30.5 ins. and upwards, were still found over Portugal and Central Spain the large area of high readings which existed over the Mediterranean on the previous day had partially given way. The lowest readings, 28.7 ins. and less, were found in a depression lying near Rodø, but a "V" shaped disturbance was reported over the Gulf of Bothnia and the coast of Finland. Moderate to strong breezes from the Wnd prevailed over the greater part of Western and Central Europe, but in the south of Sweden gales from the Nnd were reported, while in Finland the wind blew very strongly from the Snd. On the northern shores of the Mediterranean the wind was chiefly NE^{ly}, but on its southern shores SW^{ly} or W^{ly} breezes were general. Cloudy or overcast weather was reported at all but the Spanish and Southern French stations, with rain over the northwest of our Islands and Central Italy, and snow over Northern Russia. Temperature had fallen briskly over Scandinavia and Central Russia, and to a less extent over Spain, but risen elsewhere—quickly over Finland; readings ranged from 50° or a little above over Ireland, Scotland, the west and south of France and the Mediterranean to a few degrees below zero over Central Russia. The highest individual readings were 53° at Sangüinaria and Algiers, 52° at Nain, Valencia, and Palermo, 51° at Biarritz, Perpignan and Cagliari and 50° at Leith, Mullaghmore, Belmullet, Rochepoint, Jersey, Lorient, Lghorn, La Cella and Brindisi; the lowest were -5° F. at Moscow, +8° at Archangel, 13° at Kharkov, 19° at Haparanda, 21° at Odessa, 22° at Uleaborg and Helsingfors, 24° at Rodø and Kiasloiff, 26° at St Petersburg, and 27° at Stockholm.

In the course of the day a rather deep depression advanced from the WNWnd to the south of Norway, and occasioned some increase in the force of the W^{ind} on our extreme northern coasts. The weather over the United Kingdom remained very mild and damp, and maxima were recorded as high as 56° at Nain, 57° at Rochepoint, and 58° at Aberdeen.

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, 2nd February 1889.*
Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

+ YESTERDAY EVENING.																		8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.															
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.													
SCANDINAVIA.																														
Haparanda ..	29.18	16	SE	2	0	29.19	+ .30	13	13	+ 1	EHE	2	0	*	19	5	0.04													
Hernösand ...	29.25	14	N	2	0	29.10	+ .02	9	9	- 8	Z	0	0	*	27	9	-													
Stockholm ...	29.28	21	WNW	2	0	28.95	- .07	18	16	- 4	EHE	2	0	*	27	16	-													
Wisby ...	29.32	28	N	6	0	28.91	- .19	28	27	- 2	ESE	4	5	*	36	27	0.04													
Bodö ...	29.26	18	EHE	4	0	29.11	- .07	19	17	0	WNW	4	0	2	19	16	-													
Christiansund...	28.95	33	ESE	5	0	28.60	- .64	36	34	+ 3	SE	1	0	3	36	32	0.16													
Skudenesnaes ...	28.96	38	SE	5	0	28.79	- .60	38	36	+ 3	WSW	6	0	5	?	?	0.28													
Christiania Fjord (Færdor)	29.23	35	SSE	4	0	28.79	- .47	30	30	- 1	ASE	2	0	2	36	27	-													
Skagen (The Scaw)	29.21	35	SW	2	0	28.78	- .52	35	33	+ 3	NW	3	0	3	36	32	0.20													
Fanö ...	29.12	39	SW	4	0	29.04	- .38	38	36	- 2	W	6	0	*	43	37	0.20													
BRITISH ISLANDS.																														
Sumburgh Head	28.77	44	WSW	6	0	28.46	- .84	39	37	0	W	9	0	7	46	38	0.24													
Stornoway ...	29.00	42	W	7	0	28.97	- .17	34	34	- 12	NW	8	0	5	50	32	0.13													
Wick ...	28.95	41	W	5	0	28.80	- .50	37	34	- 7	NW	8	0	5	53	32	0.08													
Nairn ...	29.08	40	WNW	4	0	29.01	- .28	32	32	- 13	SW	3	0	1	56	32	0.32													
Aberdeen...	29.11	44	WSW	4	0	29.04	- .36	33	31	- 10	WSW	7	0	4	55	33	-													
Leith ...	29.24	42	W	5	0	29.19	- .28	33	32	- 14	W	5	0	*	55	31	0.10													
Shields ...	29.28	50	SW	4	0	29.32	- .29	34	32	- 13	W	4	0	2	56	32	0.11													
Spurn Head ...	29.40	49	SW	4	0	29.45	- .23	37	36	- 8	WSW	6	0	5	52	35	0.03													
York ...	29.39	53	SW	4	0	29.43	- .24	35	33	- 15	SW	5	0	*	55	34	0.03													
Loughborough	29.51	53	SW	5	0	29.60	- .14	34	32	- 17	WSW	4	0	*	56	33	0.01													
Ardrossan ...	29.79	46	WSW	5	0	29.77	- .17	37	35	- 11	W	8	0	5	50	34	0.16													
Malin Head ...	29.82	41	WNW	5	0	29.29	- .07	35	35	- 15	NW	8	0	6	51	32	0.14													
Mullaghmore ...	29.49	43	W	8	0	29.58	+ .08	36	35	- 16	NW	9	0	7	52	34	0.15													
Belmullet ...	29.56	42	WNW	9	0	29.68	+ .17	39	35	- 12	WNW	10	0	*	52	32	0.34													
Donaghadee ...	29.42	46	WNW	6	0	29.48	- .04	33	32	- 19	NW	6	0	4	54	31	0.05													
Barrow-in-Furness	29.43	47	WSW	5	0	29.44	- .17	36	34	- 10	W	8	0	*	50	35	0.10													
Liverpool (Bidston)	29.49	48	W	6	0	29.53	- .14	36	34	- 16	W	8	0	5	55	34	0.12													
Holyhead ...	29.55	48	W	4	0	29.62	- .04	37	35	- 12	WNW	8	0	6	52	37	0.02													
Parsonstown ...	-	-	-	-	-	29.76	+ .11	33	32	- 19	W	2	0	*	53	33	0.13													
Valencia ...	29.82	47	WNW	6	0	29.99	+ .21	41	36	- 12	WSW	7	0	6	53	36	0.26													
Roche's Point...	29.76	48	WNW	5	0	29.91	+ .13	37	35	- 15	WNW	4	0	4	56	34	0.25													
Pembroke ...	29.67	49	WSW	5	0	29.81	+ .02	40	37	- 9	WNW	8	0	7	50	38	0.03													
Scilly ...	29.85	51	WNW	7	0	30.00	+ .07	42	39	- 10	NW	8	0	7	52	37	0.12													
Prawle Point ...	29.79	50	WSW	4	0	29.92	- .01	36	35	- 14	WNW	4	0	4	50	34	0.14													
Jersey ...	29.88	51	W	6	0	29.96	- .04	42	40	- 10	WNW	6	0	5	52	42	0.05													
Hurst Castle ...	29.71	48	WSW	6	0	29.82	- .06	38	37	- 9	WNW	6	0	5	49	37	0.09													
Dungeness ...	29.64	48	WSW	6	0	29.71	- .12	38	37	- 9	WNW	5	0	4	48	39	-													
London ...	29.62	54	WSW	5	0	29.71	- .11	37	34	- 14	WNW	5	0	*	57	37	-													
Oxford ...	29.60	50	W	5	0	29.72	- .08	35	33	- 14	W	4	0	*	53	35	-													
Cambridge ...	29.54	52	SW	3	0	29.63	- .14	34	33	- 16	W	3	0	*	57	34	0.01													
Yarmouth ...	29.50	53	W	4	0	29.53	- .22	36	35	- 11	W	6	0	3	54	35	0.02													
Cuxhaven ...	29.52	39	SW	5	0	29.25	- .27	40	40	- 2	W	6	0	*	43	38	0.22													
Berlin ...	29.56	41	W	2	0	29.21	- .15	46	43	+ 2	WNW	4	0	*	48	39	0.32													
Wiesbaden ...	*	*	*	*	*	29.59	- .23	46	43	- 3	NW	4	0	*	54	45	-													
Munich ...	29.80	46	SW	7	0	29.64	- .22	48	47	+ 4	SW	7	0	*	48	43	0.20													
FRANCE & NETHERLANDS.																														
The Helder ...	29.42	46	SW	5	0	29.43	- .31	41	37	- 3	W	8	0	4	46	39	0.08													
Brussels ...	*	*	*	*	*	29.67	- .21	42	39	- 8	WSW	4	0	*	52	42	0.12													
Cape Gris Nez...	?	48	WSW	8	0	?	?	41	35	- 5	NW	8	0	6	48	41	0.08													
Paris ...	29.88	53	SW	4	0	29.86	- .16	44	41	- 6	W	4	0	*	55	43	0.04													
Brest ...	30.04	51	W	5	0	30.12	- .02	46	43	- 5	WNW	9	0	7	52	39	0.12													
Lorient ...	30.02	51	W	5	0	30.08	- .02	44	41	- 7	NW	8	0	7	52	43	0.08													
Rochefort ...	30.15	51	W	5	0	30.15	- .10	48	46	- 2	WNW	5	0	2	54	41	0.43													
Belfort ...	29.95	41	W	3	0	29.80	- .25	46	46	+ 3	W	5	0	*	49	40	0.32													
Lyons ...	30.09	47	S	1	0	29.96	- .25	48	47	+ 7	S	1	0	*	50	?	0.12													
Nice ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-													
Perpignan ...	30.13	60	SW	4	0	30.02	- .22	60	55	+ 8	NW	5	0	*	64	?	-													
Biarritz ...	30.24	54	W	7	0	30.21	- .14	52	52	-	WNW	7	0	4	55	48	0.28													
PORTUGAL.																														
Corunna ...	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-													
Lisbon ...	30.35	50	WNW	5	0	30.29	- .14	52	51	+ 6	N	3	0	2	59	?	-													

WEATHER CHARTS

for 8 a.m. on

Saturday, 2nd February,

1889.

BAROMETER, WIND & 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 6 to 10;
 — = forces 5 to 7; — = forces 1 to 4;
 ○ = dead calm

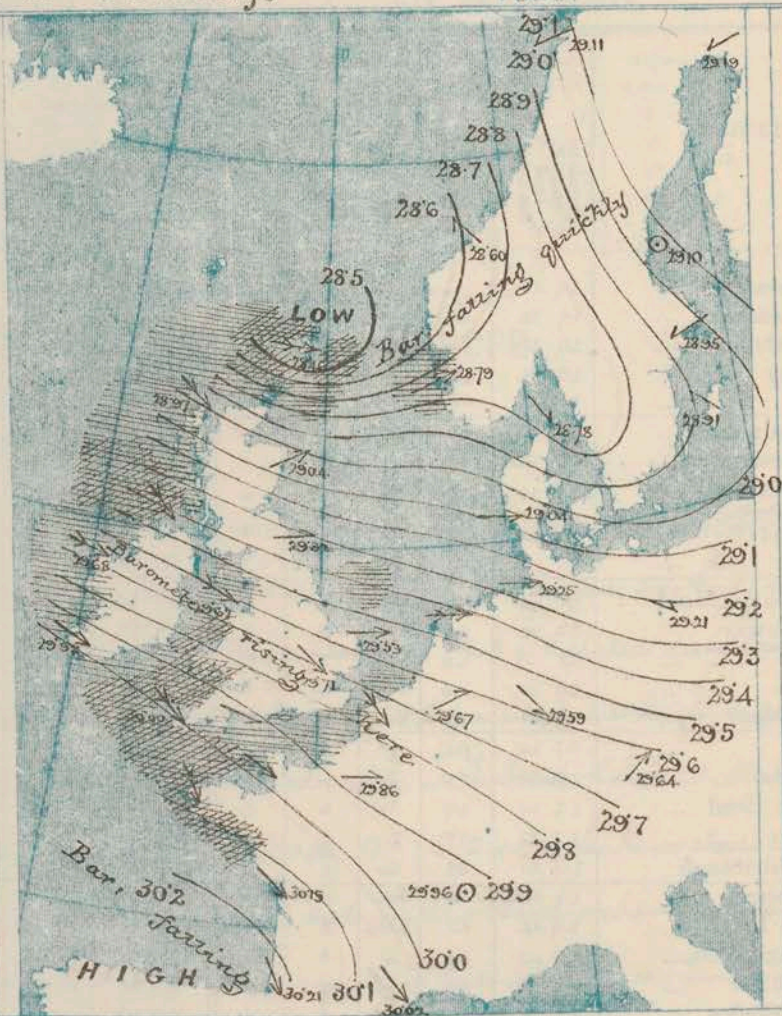
Sea Disturbance — where considerable is shown thus:
 — = Rough — = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February

During the 15 Years 1871—1885.

STATIONS	MEAN READINGS.
	in.
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	29.884
Valencia	29.850
Roche's Point	29.859
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.

Temperatures — 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.

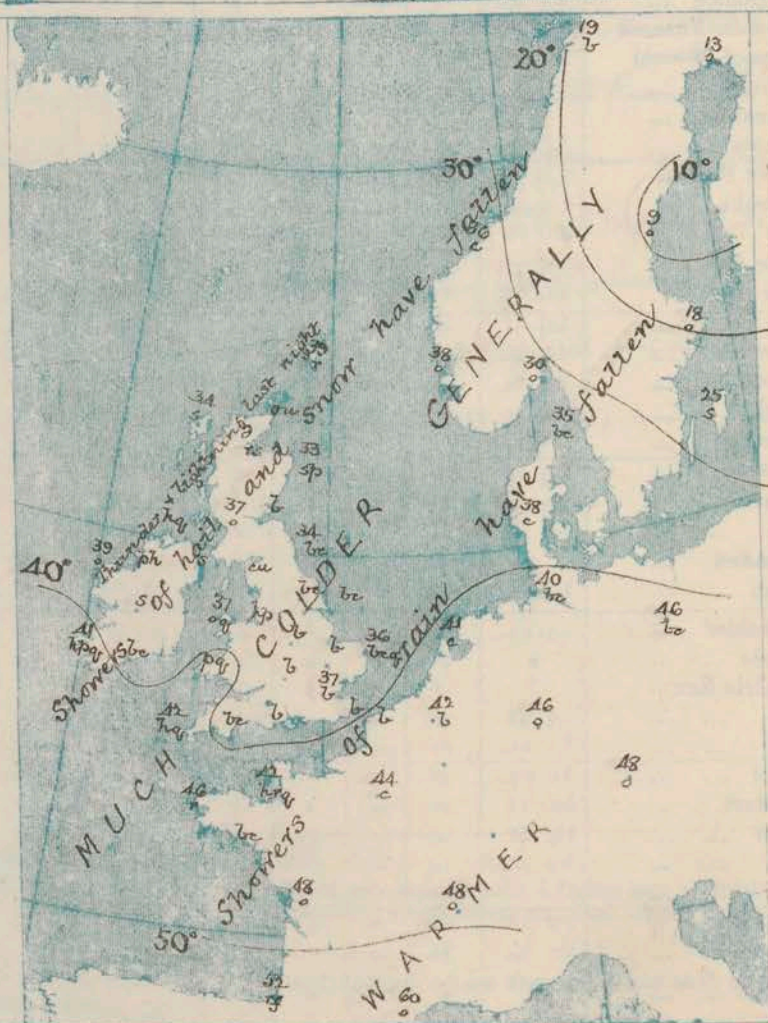
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL

for the month of February

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	Dry at 8 a.m.	Wet	
Sumburgh Head	42.6	34.7	38.7	37.7	3.29
Stornoway	43.5	34.7	39.3	35.2	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	39.3	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 in. to 30.3 in. in a high-pressure area lying over Spain, the west of France and Bay of Biscay; 29.1 in. and more, over Ireland, England and the N. of Scotland.
 Lowest, 28.5 in. and less, in a depression near the Shetlands - 28.8 in. and less, in the Kattegat.
 Gradient steep in north, moderate in south and south-west.
 Barometer rising west and south, steady in north-east.

TEMPERATURE

Highest, 76° at Perpignan, 52° at Lisbon and Biarritz, 48° at Rochefort, 46° at Brest.
 Lowest, 9° at Hammerfest, 13° at Haparanda, 18° at Stockholm, 19° at Rodez, 28° at Nîmes, 32° at Nîmes, 33° at Pau.
 It has fallen very fast over the United Kingdom since yesterday - as much as 19° at Pau, 16° at Liverpool, and 14° in London.

WIND

NW⁴ and W⁴ throughout our Islands, blowing fresh in the north and west, and a strong breeze in the east and south.
 The gale was strong in the west and north of Scotland during the night, and is strong now in the west of Ireland.

WEATHER

Clear and bright in the east and south of our Islands; cloudy and squally in the west and north, with showers of rain.
 hail and sleet at times.
 Thunder and lightning have occurred at many of the northern and northwestern stations.

SEA

High in north and west, rough, or rather so on our East and south coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The NW³/₄ gales and strong winds referred to above will probably moderate gradually as the centre of the depression passes off.

FORECASTS

for the 24 hours ending at NOON on 3rd FEB^{ry} 1889.

DISTRICTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

FORECASTS.

NW³/₄ gales and strong winds; squally, cold showers.
 Strong and gusty winds from W and NW.
 Some passing showers with bright intervals and dry air.

DISTRICTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

WARNINGS

FORECASTS.

NW³/₄ gales and strong winds subsiding gradually; showery to fair.

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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.33	37	37	ase 4	5	5	Holyhead ...	29.57	52	50	WSW 4	0	5
Sumburgh Head ...	28.88	44	44	SEW 3	5	5	Valencia ...	29.78	52	50	W 5	c qm	5
Stornoway ...	29.01	48	47	W 7	6	6	Scilly ...	29.86	52	52	WSW 6	f	6
Aberdeen ...	29.06	48	49	SW 4	6	4	Jersey ...	29.93	51	51	WSW 5	0	4
Shields ...	29.33	56	54	WSW 3	0	2	Dungeness ...	29.70	47	47	WSW 6	f	5
Ardrossan ...	29.32	50	48	W 5	0	4	London ...	29.67	57	54	SW 5	0	*
Malin Head ...	29.35	47	46	W 4	6	4	Yarmouth ...	29.56	54	53	WSW 4	c m	3
Mullaghmore ...	29.49	49	46	W 6	2	5	Rochefort ...	30.21	52	52	W 7	r	3
Belmullet ...	29.54	47	44	WSW 7	0	q p							

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

The reports for yesterday morning showed that pressure was highest 30.5 in. and upwards, in an anticyclone lying over Central Spain and lowest, 28.5 in. and less, in an elongated depression having its centre near St. Petersburg. Another depression with readings below 29.2 in. was however reported off the north-west of Scotland, while a shallow system with readings below 30.0 in. existed over the Gulf of Genoa. The wind was fresh or strong from the SWnd or Wnd over the greater part of our Islands and France, from the NWnd in Denmark, North Germany and the south of Norway, and from the Nnd over Sweden and the Baltic. Over Russia however, light breezes from between SW and SE were reported while over the Mediterranean the wind was very variable; at Florence there was a gale from the Snd. The weather was fine over Denmark and the south of Scandinavia, as well as in Spain, Algeria, and the southern parts of Italy and France, but cloudy or overcast elsewhere, with fog over the English, Bristol and St. George's Channels, rain in the extreme north-west of our Islands and many parts of France, and snow at some of the Russian stations as well as at Christiansund. Temperature had risen several degrees over Central Russia and to a less extent over Central and Southern Europe and the west and south of our Islands, but fallen in most other localities — quickly over the Gulf of Finland; readings ranged from 50° and upwards at several of our western and southern as well as at the Mediterranean stations to many degrees below the freezing point over the north of Scandinavia and the central and northern parts of Russia, and to about zero in the neighbourhood of the White Sea. The highest individual readings were 55° at Malta, 53° at Valencia (Ireland) and Barcelona, and 52° at Mullaghmore, Donaghadee, Larne, Rosstown, Rochestown, Scilly, Jersey, Langunian, Cagliari, Algiers and La Balle; the lowest were 0° zero at Archangel, +12° at Haparanda and Moscow, 14° at Uleaborg, 16° at St. Petersburg, 17° at Helsingfors, 18° at Riga, 19° at Rode and Helsingfors, 21° at Hango, 22° at Kuopio and Stockholm.

In the course of the day the depression to the northward of Scotland moved slowly eastwards and increased considerably in depth. A fresh to strong gale from W. or NW. was experienced at night on all our western and extreme northern coasts, with thunder and lightning in many places.

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 3rd FEBRY 1889.
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

		† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
				Dir.	Force (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ..	29.23	0	N	4	b	29.33	+ .14	-3	-6	- .16	N	2	bc	*	18	?	—	
	Hernösand ...	29.14	15	NE	4	s	29.36	+ .26	11	11	+ .3	NNE	6	o	*	15	7	0.08	
	Stockholm ...	28.97	19	NE	4	c	29.17	+ .22	16	15	- .2	N	2	s	*	27	14	—	
	Wishy ...	28.84	27	NE	4	o	29.08	+ .17	26	25	- .2	ENE	4	s	*	32	21	0.36	
	Bedö ...	29.26	18	E	2	b	29.48	+ .27	22	20	+ .3	NE	2	b	1	?	16	—	
	Christianstund...	28.68	30	ESE	5	b	29.12	+ .52	28	26	- .8	ESE	5	b	3	36	25	—	
	Skudesnaes ...	28.80	39	WSW	6	bc	29.00	+ .21	34	30	- .4	E	6	o	4	39	30	0.16	
	Christiania Fjord (Færdor)	28.90	26	ENE	5	o	29.18	+ .39	23	22	- .7	NNE	6	o	4	30	18	—	
	Skagen (The Seaw)	28.85	35	SE	1	o	29.05	+ .27	28	27	- .7	E	4	o	3	36	28	0.24	
	Fanö ...	29.06	34	W	6	c	29.01	- .03	32	31	- .6	S	3	cprsh	*	39	30	0.04	
BRITISH ISLANDS.	Sumburgh Head	28.35	39	W	7	r	29.04	+ .58	39	36	+ .0	NE	4	c	6	41	37	0.14	
	Stornoway ...	28.91	35	NNW	5	s	29.24	+ .27	36	36	+ .2	NNW	9	o	6	38	32	0.12	
	Wick ...	28.71	33	WNW	8	o	29.03	+ .23	41	40	+ .4	N	8	cu	6	41	31	0.20	
	Nairn ...	28.95	32	WSW	3	s	29.01	+ .00	40	39	+ .8	N	8	o	6	40	28	0.26	
	Aberdeen...	28.97	31	SW	5	b	28.80	- .24	42	39	+ .7	NNW	8	ogprsh	6	40	31	0.17	
	Leith ...	29.13	32	NNW	4	b	28.94	- .25	37	35	+ .4	W	4	c	*	38	33	0.04	
	Shields ...	29.28	34	SW	5	b	28.96	- .36	37	35	+ .3	W	4	c	2	37	31	0.04	
	Spurn Head ...	29.35	34	W	9	s	29.01	- .44	38	37	+ .1	WSW	6	bc	5	39	33	0.09	
	York ...	29.36	32	W	5	s	29.06	- .37	37	35	+ .2	W	2	bc	*	42	31	0.10	
	Loughborough	29.53	35	WSW	5	b	29.19	- .41	35	34	+ .1	W	4	c	*	42	31	0.10	
GERMANY.	Ardrossan ...	29.22	37	W	7	o	29.15	- .14	41	38	+ .4	NNW	6	cprsh	5	44	35	0.18	
	Malin Head ...	29.28	34	NNW	9	o	29.32	+ .03	40	38	+ .5	NNW	9	og	7	40	33	0.01	
	Mullaghmore ...	29.54	38	WNW	9	o	29.53	- .05	41	39	+ .5	NNW	9	cprsh	7	42	34	0.22	
	Belmullet ...	29.62	40	NNW	10	o	29.71	+ .08	41	39	+ .2	NNW	9	bc	*	42	36	0.75	
	Donaghadee ...	29.44	33	WNW	6	s	29.26	- .22	39	38	+ .6	NNW	7	b	5	41	33	0.23	
	Barrow-in-Furness	29.38	35	NNW	10	s	29.13	- .31	40	38	+ .4	NNW	6	bc	*	41	34	0.12	
	Liverpool (Bidston)	29.44	37	W	9	c	29.19	- .34	40	38	+ .4	NNW	7	o	5	41	33	0.06	
	Holyhead ...	29.53	38	WNW	9	o	29.29	- .33	41	39	+ .4	NNW	9	cprsh	7	42	34	0.13	
	Parsonstown ...	29.72	37	W	4	r	29.62	- .14	37	35	+ .4	NNW	3	o	*	38	32	0.18	
	Valencia ...	29.73	45	WNW	7	o	29.85	- .14	41	39	+ .0	NNW	7	cprsh	6	47	38	0.37	
FRANCE & NETHERLANDS.	Roche's Point...	29.53	42	WNW	6	r	29.69	- .22	40	38	+ .3	NNW	5	bc	5	43	37	0.55	
	Pembroke ...	29.74	41	W	8	c	29.47	- .34	40	37	+ .0	NNW	8	cprsh	7	43	35	0.10	
	Scilly ...	29.97	46	WNW	9	o	29.61	- .39	44	39	+ .2	NNW	10	chg	8	48	37	0.54	
	Prawle Point ...	29.89	38	WNW	5	c	29.47	- .45	34	33	- .2	NNW	4	bc	4	43	32	0.20	
	Jersey ...	29.95	44	W	6	bc	29.44	- .52	38	35	- .4	NNW	7	cprsh	5	47	37	0.42	
	Hurst Castle ...	29.77	39	WNW	8	bc	29.35	- .47	36	35	- .2	NNW	5	bc	6	45	35	0.02	
	Dungeness ...	29.66	40	WNW	6	bc	29.26	- .45	32	32	- .6	NNW	4	c	3	46	32	0.07	
	London ...	29.65	39	WNW	6	cq	29.27	- .44	32	32	- .5	WSW	2	b	*	43	32	0.05	
	Oxford ...	29.61	35	WSW	5	o	29.28	- .42	33	31	- .2	W	4	c	*	43	32	0.06	
	Cambridge ...	29.55	37	W	4	b	29.20	- .43	33	31	- .1	W	2	b	*	43	30	—	
PENINSULA.	Yarmouth ...	29.47	37	W	6	c	29.13	- .40	32	31	- .4	W	5	bcq	1	40	30	0.01	
	Cuxhaven ...	29.25	37	W	6	s	29.11	- .14	34	34	- .6	SSW	3	s	*	38	32	—	
	Berlin ...	29.38	35	WNW	5	o	29.26	+ .05	33	31	- .13	SW	3	c	*	48	32	0.12	
	Wiesbaden ...	*	*	*	*	*	29.35	- .24	36	34	- .10	W	4	s	*	52	34	0.04	
	Munich ...	29.75	33	SW	6	o	29.49	- .15	31	27	- .17	W	7	b	*	50	30	0.12	
	The Helder ...	29.36	38	WSW	8	c	29.10	- .33	37	35	- .4	WSW	5	c	4	41	37	—	
	Brussels ...	*	*	*	*	*	29.27	- .40	35	32	- .7	WSW	4	b	*	43	34	0.04	
	Cape Gris Nez...	30.00	40	WNW	8	bc	?	?	37	34	- .4	WNW	7	c	6	46	34	—	
	Paris ...	29.93	36	WNW	5	o	29.39	- .47	39	37	- .5	WSW	4	o	*	47	34	0.20	
	Brest ...	30.16	45	NNW	9	r	29.66	- .46	45	43	- .1	NNW	12	o	8	50	37	0.28	

For Explanation of Columns, see p. 4.

2 Received too late for insertion in Charts on p. 5.

WEATHER CHARTS

for 8 a.m. on

Sunday, 3rd February

1889.

BAROMETER, WIND & 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

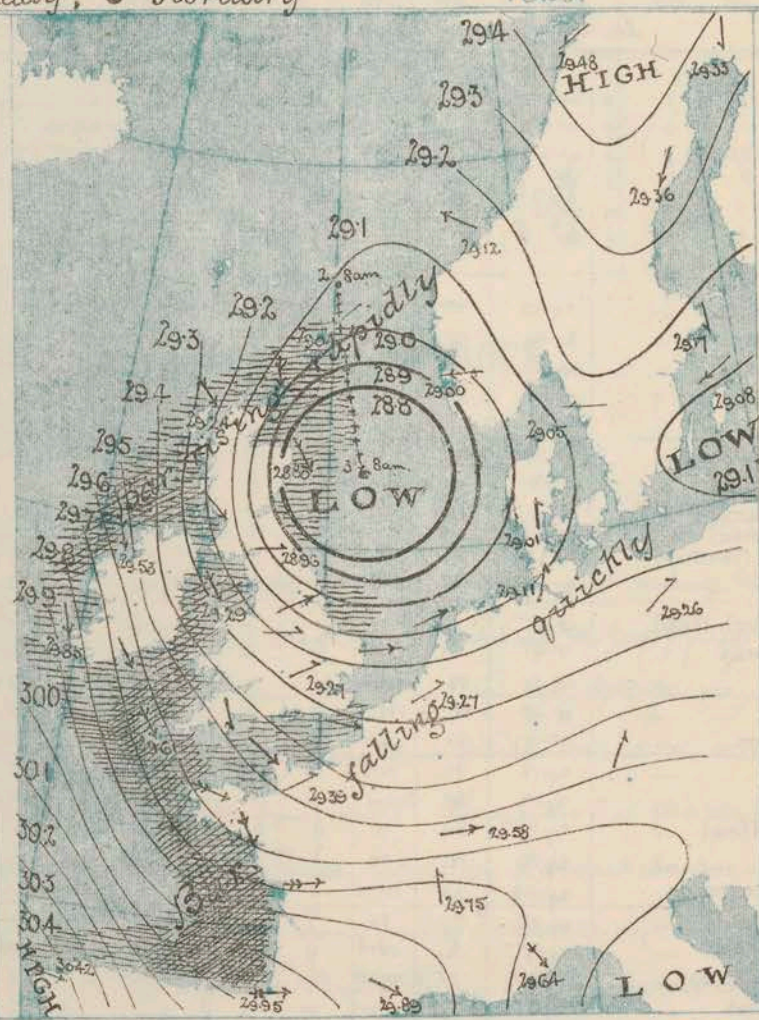
Sea Disturbance — where considerable is shown thus.

— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 Years 1871—1885.

STATIONS.	MEAN READINGS.
	in.
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	29.905
Donaghadee	29.912
Holyhead	29.948
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.

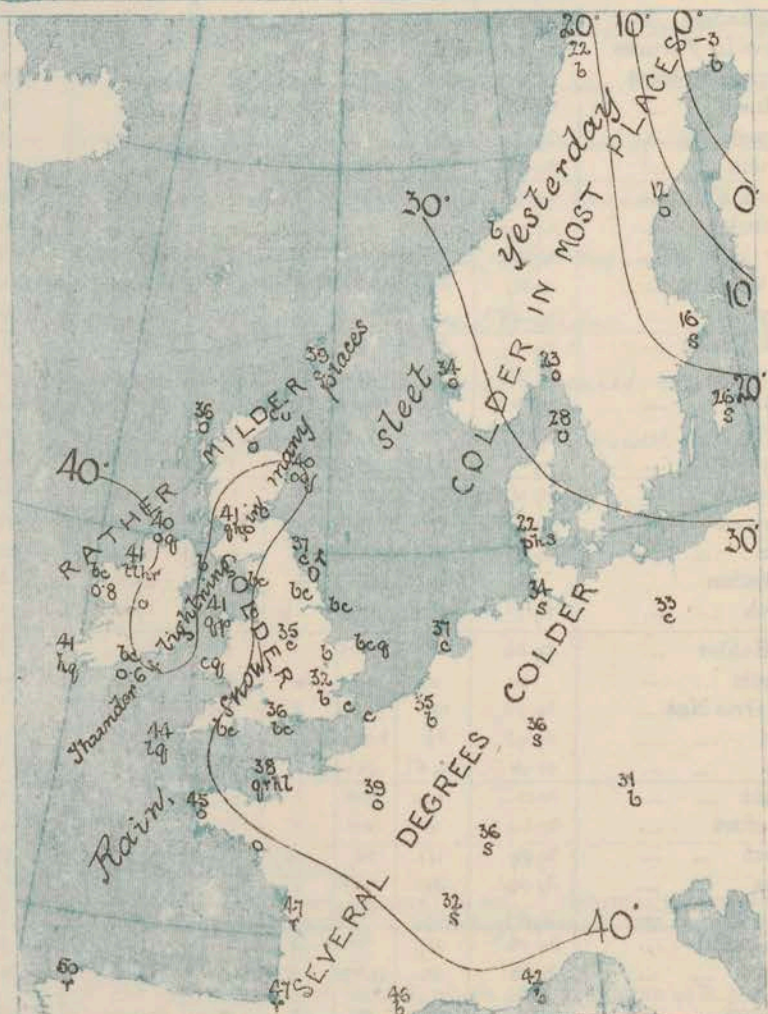
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL
for the month of February

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max	Daily Min	Dry	Wet	
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	44.8	35.7	39.2	37.9	1.63
York	45.3	34.2	38.2	37.1	1.88
Loughborough	45.0	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 1868—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 ins. and upwards, in an anticyclone lying over and to the westward of Portugal.
Lowest, 28.8 ins. and apparently much less in a smaller and shallower system lying over the North Sea; 28.9 ins. and less, in a smaller and shallower system lying over the Baltic Provinces; 29.5 ins. and less, in a well-marked disturbance lying over the northern part of the Adriatic.
Gradients steep in most parts of Western Europe - especially over the west and north of our islands.
Barometer rising rapidly in the north of Scotland, and less decidedly in Scandinavia, but falling briskly elsewhere.

TEMPERATURE

Highest, 50° at Corunna, 47° at Rochefort and Brest, 46° at Brest, 45° at Brest and Brest, and 44° at Seilly.
Lowest, -3° at Stapananda, +12° at Hamburg, 16° at Stockholm, 22° at Rode, 23° at Taenar, 26° at Metz, and 28° at Riga.

WIND

Blowing a fresh to strong gale from the N.W. or N.W. in the west and north of our islands, and a severe gale from N. in the Bay of Biscay.
Fresh to strong from the W. on our east and southeast coasts and also over the Netherlands and east of France.
Moderate from S.W. or S. in Germany and Denmark, strong in the south of Norway.

WEATHER

Fine in the southeast of England, the north of Scandinavia and the extreme south of France.
Cloudy or overcast elsewhere, with hail showers on our western coasts, and snow in Germany and Central France.
Since yesterday morning snow, hail, or rain has fallen generally. Thunder and lightning occurred last night in many parts of the United Kingdom.

SEA

Very high at the mouth of the Channel, and high or rough in nearly all other localities.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay to the northward of Scotland yesterday is travelling in a south-easterly direction down the North Sea; its centre being at present ~~being~~ about 100 miles to the eastward of Aberdeen. The winds on our east and south coasts are apparently increasing in force.

FORECASTS

for the 24 hours ending at NOON on 4th FEB^{ry} 1889.

DISTRICTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

FORECASTS.

NONE ISSUED

DISTRICTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

WARNINGS

FORECASTS.

NONE ISSUED

The NORTH CONE was hoisted last evening in districts 1, 2, 3, 5, and 8.

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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		
Skudesnaes ...	28.75	39	38	W	7	csr	5	Holyhead ...	29.61	39	36	W	9	cspg	7
Sumburgh Head ...	28.50	40	36	W	8	o	7	Valencia ...	30.00	45	41	WNW	7	oghfm	6
Stornoway ...	28.99	37	37	NW	8	s	6	Scilly ...	30.02	45	41	WNW	9	bcq	7
Aberdeen ...	29.03	34	32	WSW	6	bcgsp	4	Jersey ...	29.99	45	39	WNW	6	c	5
Shields ...	29.28	37	34	W	5	sp	2	Dungeness ...	29.70	45	39	WNW	7	bc	5
Ardrossan ...	29.25	36	34	W	7	o	5	London ...	29.69	43	38	W	6	crsp	*
Malin Head ...	29.32	35	34	NW	7	c	7	Yarmouth ...	29.57	40	38	W	6	bcq	4
Mullaghmore ...	29.59	41	37	WNW	10	chrg	8	Rochefort ...	30.02	46	45	NW	8	cqphs	3
Belmullet ...	29.71	40	37	NW	10	cpq	*								

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

The report for yesterday morning showed that rough disturbed weather was becoming much more prevalent over Europe and the British Islands than it had been for a long while past. Barometric readings varied from between 30.2 ins. and 30.5 ins. over the Spanish Peninsula, (probably a still higher value off the northwest coast of Spain), from between 30.0 ins. and 30.2 ins. over Algeria, and from between 29.3 ins. and 29.4 ins. over the extreme north of Russia, to 28.5 ins. and less, in a deep depression the centre of which lay near the Shetlands, between 28.7 ins. and 29.0 ins. in a "V" shaped secondary stretching across the south of Scandinavia and Baltic to North Germany, and also in another larger depression lying across Central Russia. There was also a new but small depression in course of formation over the Gulf of Genoa. The wind was NW² or W³ over nearly the whole of the British Isles, Western, and Central Europe, and had increased to a strong gale in the north and west of Scotland, a fresh gale on our western coast and at the mouth of the Channel, and to a strong equally breeze along the northeastern, eastern, and southern coasts of the British Isles. Over Central France and Germany it was comparatively moderate, while Russia and the Baltic were under the influence of variable air. The weather was very unsettled, though temporarily bright in one or two places; snow, sleet, and hail showers were reported in the west and north of our Islands, and at several of the Baltic and Central European stations, and rain in the southwest and south. Thunder and lightning had prevailed at many northwestern stations—especially those in the British Isles. Temperature had fallen rapidly over the United Kingdom and north of France, as the NW¹ wind had spread over them, while over the Mediterranean, and Southern and Central Europe it had risen. It had fallen and was very low over Russia. The lowest morning values were 7° at Kuopio, 8° at Archangel, 9° at Helsingfors, 10° at Uleaborg, and 11° at Petersburg, 13° at Haparanda, 17° at Helsingfors, 18° at Moscow, Hangö and Stockholm, 19° at Rode, 25° to 31° over Southern Russia, 32° at Kaini, 33° at Panskov, 35° at York and 37° in London. The highest were 60° at Reims, 58° at Malta, 51° to 57° over the Mediterranean generally, 52° at Lisbon and Biarritz, 51° at Corunna and Vienna, 46° at Berlin and 44° at Kiev. Later in the day the depressions all grew deeper. The N¹ and NW¹ gales on our northern and northwestern coasts spread southwards to the Bay of Biscay, and even over the Mediterranean the wind began to rise decidedly. Thunderstorms, snow and hail were again very prevalent over NW¹ 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.

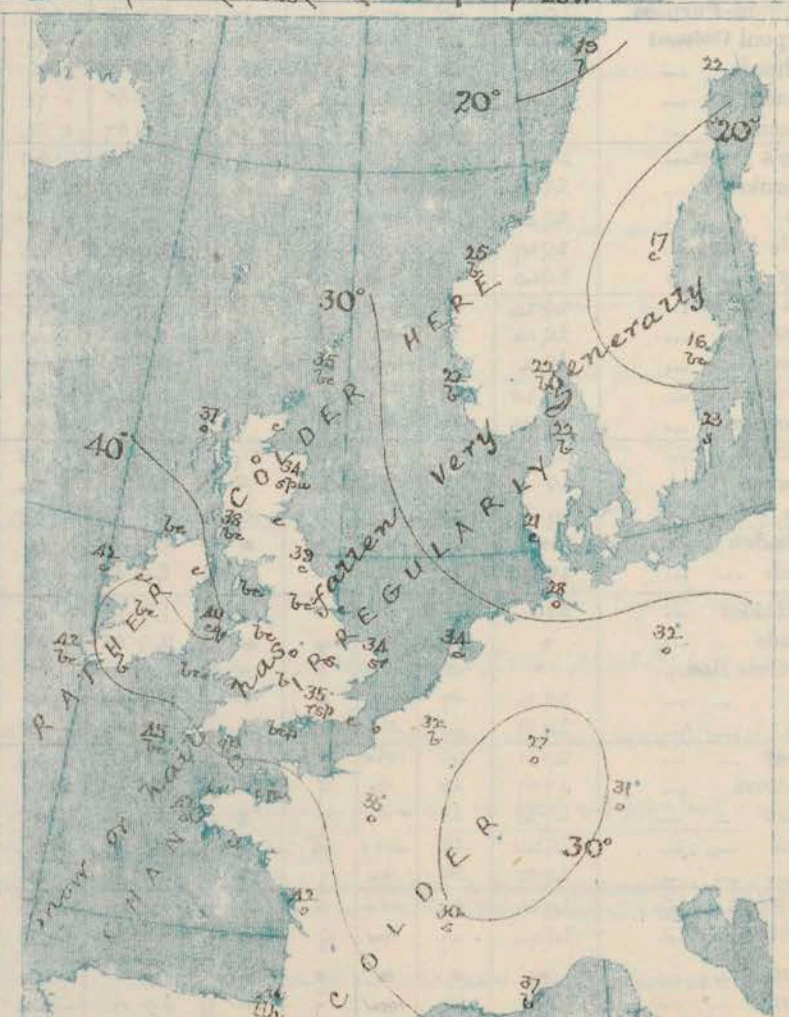
DAILY WEATHER REPORT.

for *Monday, 4th February* 1889.
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

		† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.				
				Dir.	Force (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ..	29.46	12	N	4	bc	29.35	+12	32	21	+ 7	NE	4	?	?	- 8	-		
	Hernösand ...	29.55	14	NW	2	b	29.72	+186	17	15	+ 5	N	6	?	18	7	-		
	Stockholm ...	29.47	13	NW	2	o	29.84	+147	16	15	0	NW	2	bc	21	12	-		
	Wisby ...	29.40	21	N	4	bc	29.62	+184	23	23	- 3	NNE	4	?	32	19	0.08		
	Bodö ...	29.78	25	NE	4	b	29.97	+169	19	28	- 3	ENE	2	b	25	16	-		
	Christiansund...	29.83	22	E	2	b	30.03	+191	25	24	?	?	0	b	25	21	0.04		
	Skudesnæs ...	29.85	28	SE	6	s	30.08	+198	22	21	- 12	N	2	b	34	19	-		
	Christiania Fjord (Færdor)	29.88	19	NE	6	b	29.88	+190	22	20	- 1	SE	5	b	23	16	-		
	Skagen (The Seaw)	29.48	23	ENE	4	o	29.84	+179	22	18	- 6	NE	4	b	28	19	-		
	Fanö ...	29.41	29	NE	6	o	29.79	+178	21	20	- 11	NNE	6	?	34	21	-		
BRITISH ISLANDS.	Sumburgh Head	29.68	36	NE	6	o	30.23	+119	35	34	- 4	N	3	bc	44	31	0.11		
	Stornoway ...	29.82	36	NE	8	c	30.38	+114	37	36	+ 1	NE	5	o	5	40	32	0.06	
	Wick ...	29.67	38	NE	8	r	30.28	+125	37	36	+ 4	N	4	?	44	35	0.15		
	Nairn ...	29.65	38	N	5	s	30.31	+130	37	36	- 3	N	5	o	6	43	36	0.21	
	Aberdeen...	29.61	37	NW	2	bc	30.26	+146	34	33	- 6	N	6	bc	41	33	0.22		
	Leith ...	29.82	40	N	3	b	30.23	+129	37	35	0	N	3	?	42	34	-		
	Shields ...	29.88	41	NNE	8	o	30.07	+111	39	38	+ 2	NNE	7	?	41	35	0.15		
	Spurn Head ...	29.04	36	NNE	7	r	29.88	+1087	37	36	- 1	NE	8	?	43	34	0.14		
	York ...	29.14	40	NW	6	r	30.00	+194	34	34	- 3	NNE	5	bc	42	38	0.16		
	Loughborough	29.12	40	NW	6	o	29.91	+172	35	33	0	NW	4	?	43	34	0.23		
GERMANY.	Ardrossan ...	29.65	42	NW	3	o	30.29	+116	38	34	- 3	NW	3	bc	45	36	-		
	Malin Head ...	29.74	40	NW	8	bc	30.35	+103	41	38	+ 1	N	6	bc	5	41	37	-	
	Mullaghmore ...	29.86	40	N	9	cq	30.40	+107	40	38	- 1	N	5	?	43	36	0.08		
	Belmullet ...	30.03	42	N	8	c	30.48	+177	42	37	+ 1	NNE	8	?	44	38	0.15		
	Donaghadee ...	29.63	43	N	8	c	30.30	+104	40	35	+ 1	NE	6	?	44	35	0.02		
	Barrow-in-Furness	29.41	40	NW	8	bc	30.10	+1077	37	33	- 3	NE	3	bc	44	36	-		
	Liverpool (Bidston)	29.40	40	NW	7	c	30.09	+190	36	31	- 4	N	6	?	44	35	-		
	Holyhead ...	29.47	44	NW	10	c	30.18	+189	40	36	- 1	NNE	8	cq	44	39	-		
	Parsonstown ...	29.83	39	NW	1	o	30.35	+173	33	31	- 4	NW	2	bc	43	33	0.03		
	Valencia ...	30.01	44	N	7	cq	30.37	+152	42	38	+ 1	NNE	7	bc	45	38	0.23		
FRANCE & NETHERLANDS.	Roche's Point...	29.82	42	NW	8	b	30.29	+160	38	34	- 2	N	6	?	44	36	0.06		
	Pembroke ...	29.84	42	NW	9	c	30.09	+162	39	36	- 1	NE	6	bc	43	36	0.14		
	Scilly ...	29.65	46	NW	10	bc	30.02	+141	45	42	+ 1	NNE	9	bc	46	38	0.05		
	Prawle Point ...	29.47	40	NW	6	bc	29.92	+145	36	34	+ 2	N	6	bc	44	34	0.03		
	Jersey ...	29.45	44	NW	6	cq	29.79	+135	40	37	+ 4	NE	7	cm	46	37	0.12		
	Hurst Castle ...	29.26	40	NW	7	c	29.85	+150	37	36	+ 1	NNE	8	bc	44	35	0.04		
	Dungeness ...	29.16	38	NW	4	cq	29.69	+143	35	34	+ 3	NNE	5	?	44	31	0.06		
	London ...	29.14	40	NW	4	or	29.82	+155	35	34	+ 3	N	4	or	43	34	0.20		
	Oxford ...	29.20	39	N	7	r	29.89	+161	34	31	+ 1	N	5	?	42	33	0.43		
	Cambridge ...	29.07	38	NW	3	r	29.87	+167	34	33	+ 1	N	3	?	45	31	0.13		
PORTUGAL.	Yarmouth ...	29.05	38	W	4	oq	29.78	+165	34	34	+ 1	NNE	8	rs	42	31	0.06		
	Oxhaven ...	29.11	33	NE	4	s	29.65	+154	28	27	- 6	NE	7	?	?	26	0.07		
	Berlin ...	29.27	32	?	?	?	29.51	+125	32	31	- 1	NW	1	?	37	27	0.08		
	Wiesbaden ...	?	?	?	?	?	29.51	+116	27	26	- 9	SW	2	?	39	25	0.04		
	Munich ...	29.22	32	?	?	?	29.37	+112	31	30	0	W	4	?	43	?	-		
	The Helder ...	29.14	37	S	1	b	29.72	+162	34	32	- 3	NE	7	?	39	34	0.04		
	Brussels ...	?	?	?	?	?	29.65	+168	32	30	- 3	NE	8	?	41	32	0.04		
	Cape Gris Nez...	?	40	NW	7	c	?	?	37	37	0	NE	8	?	43	37	-		
	Paris ...	29.34	37	NW	4	o	29.49	+110	35	34	- 4	NE	3	?	39	34	0.12		
	Brest ...	29.57	45	SW	11	o	29.87	+121	42	39	- 3	E	8	?	52	36	0.51		
P.N.N. GULF.	Lorient ...	29.61	43	NW	8	o	29.67	+199	43	40	- 5	NNE	11	?	48	39	0.12		
	Rochefort ...	29.67	46	NW	9	bc	29.49	-121	42	39	- 5	NW	9	?	50	36	0.12		
	Belfort ...	29.85	33	W	7	s	29.50	-108	23	22	- 13	W	1	bc	40	29	0.32		
	Lyons ...	29.24	35	NW	8	o	29.48	-127	30	30	- 2	E	1	?	39	29	0.39		
	Nica... ..	29.39	38	NW	7	c	29.30	-134	37	30	- 5	NE	7	?	48	32	0.20		
	Perpignan ...	29.69	42	NW	5	o	29.51	-138	39	34	- 7	W	3	?	57	38	0.08		
	Biarritz ...	29.74	47	NW	9	o	29.66	-129	46	44	- 1	NW	11	bc	50	39	1.14		
	Corunna ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		
	Lisbon ...	30.30	50	NW	7	bc	30.12	-132	45	47	+ 3	NW	7	?	54	?	0.12		

1889

(*Explanation of Map*)

MEAN HEIGHT *of the* BAROMETER

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 ins. and upwards, in an anticyclone lying off the west of Ireland.
Lowest, 29.3 ins. and less, in a depression lying over the Gulf of Genoa; 29.4 ins. and less, in two depressions lying respectively over Central France and South Germany.
Radiant clear over England, the north of France, and the Bay of Biscay, but slight elsewhere.
Barometer rising at all but the southern French stations. In Scotland, the rise since yesterday morning amounts to from 1.4 ins. to 1.5 ins.

TEMPERATURE

Highest, 48° at Lisbon, 46° at Binnitz, 45° at Bally, 43° at Lorient, and 42° at Belmullet, Valence, Jersey, Brest and Rochefort.
Lowest, 16° at Stockholm, 17° at Helsingfors, 18° at Riga, 21° at Tams, and 22° at Haparanda, Skutumpah, Vaerö and Skagen.

WIND

Strong from N. and NE. in our Islands, with gales on the English coast.
A severe N. and NW. gale is reported over the Bay of Biscay, and a moderate NNW. gale at Lisbon.
On our extreme western and northern coasts the wind appears to be moderating quickly.

WEATHER

Fine in Scandinavia and Denmark, as well as at most of our western and northern stations.
Cloudy elsewhere with snow showers in the east and south of England, and a thunderstorm at Binnitz.
Snow hail or sleet fell yesterday in nearly all parts of the Kingdom.

SEA

High or rough on nearly all coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

An anticyclone has now appeared off the west of Ireland, and is inclined to spread eastwards and southwards. A gradual improvement in the weather is therefore likely to take place generally.

FORECASTS

for the 24 hours ending at NOON on 5TH FEB^R 1889.

DISTRICTS.		FORECASTS.	
0	SCOTLAND NORTH	{	<i>N^W winds, moderating; fair generally.</i>
1	SCOTLAND EAST		
2	ENGLAND N.E.	{	<i>NE^W gales, moderating gradually; fair generally, but some snow showers.</i>
3	ENGLAND EAST		
4	MIDLAND COUNTIES		
5	ENGLAND SOUTH	{	<i>NE^W gales, moderating gradually; squally at first with some snow showers, but improving later.</i>

DISTRICTS.		FORECASTS.	
6	SCOTLAND WEST	{	<i>Same as N^W 0 and 1.</i>
7	ENGLAND N. W.		
8	ENGLAND S. W.	{	<i>N^W and NE^W gales, moderating gradually; fair generally, but some cold showers.</i>
9	IRELAND NORTH		
10	IRELAND SOUTH		
WARNINGS		<i>The NORTH CONE has been lowered this morning in district 1. but is still flying</i>	

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.	Dry.	Wet.	Wind.	Woa.	Sea.		Bar.	Dry.	Wet.	Wind.	Woa.	Sea.
Skudesnes ...	29.32	32	30	E. 2	0	5	Holyhead ...	29.36	41	40	W 10	0	8
Sumburgh Head ...							Valencia ...						
Stornoway ...	29.63	40	38	N 5	0	6	Scilly ...						
Aberdeen ...							Jersey ...	29.47	44	40	W 7	c	5
Shields ...							Dungeness ...	29.18	41	39	W 5	c	3
Ardrossan ...							London ...						*
Malin Head ...	29.56	41	38	W 8	0	7	Yarmouth ...						
Mullaghmore ...							Rocheport ...	29.67	44	39	W 12	bc	7
Belmullet ...	29.89	42	39	W 9	0	*							

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

The reports for yesterday morning show that the distribution of pressure over Europe was of a most complex character. Readings were as high as 30.0 inches to 30.4 inches over Spain and Portugal, about 30.2 inches over Algeria, and 29.5 inches and more in a second high pressure system lying over Lapland and the north of Norway. At the same time there was a large and deep depression travelling in a S.E. direction over the North Sea, another rather complex (but not deep) depression over the Baltic Provinces, and a third over the northern parts of the Adriatic. The winds reported were consequently extremely variable. Strong gales were experienced from the Northward in Scotland, Ireland and the west of England, from Northward over the greater part of the Mediterranean, but from South-West at Rome. Over Central France and Germany the wind was fresh mainly from the Westward and South-Westward, in Holland it was S.W., while over Sweden, Norway and the Shetland Isles it was N.E. and blew a gale in several places. The weather was very unsettled everywhere. Snow, sleet, hail, thunder and lightning were reported in many parts of the British Islands, and though the sky had cleared at many of the eastern stations, the improvement was of a temporary character; rain was falling over the west of France and N. Italy, snow at Belfort and Lyons as well as at many of the stations lying to the eastward of the North Sea. Temperature was low generally—very low over the N. of Russia; the lowest morning values were 14° at Archangel, 17° at St. Petersburg, and the Finnish stations generally, 11° at Moscow, 12° at Koenigsberg, 16° at Stockholm, 22° at Fano, 23° at Faenza, 32° in London and at Lyons, 35° at Brussels, 37° at Paris, 39° at Paris; the highest were 57° at Dalton, 50° to 55° on the southern and southern shores of the Mediterranean generally, and at Leghorn, 50° at Genoa, 44° at Gally and Valencia.

Later on the depression over the North Sea moved southwards and N.W. gales spread over the east and south of England, with sleet.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 27TH JANUARY TO THE 2ND FEBRUARY 1889.

In the course of this week the high pressure area which had prevailed over and off our western coasts for so long, moved southwards to France, the Mediterranean and Spain, while depressions of considerable importance moved in an easterly direction from the Atlantic, past our extreme northern coasts to Northern Russia. The consequence has been that the variable N. winds, cold weather, and fogs which prevailed over the United Kingdom last week have given way to milder and more humid winds from between S.W. and N.W. with showery weather, while in Italy and over the Adriatic the N.W. gales have lulled, and temperature in that region also has risen decidedly. The depression observed in the north produced but little effect on the winds over France and Central Europe, but caused strong S.W. to N.W. breezes at times in our Islands and frequent changes of temperature. Some of the thermometric readings have been very high—maxima being recorded as high as 58° at Aberdeen, 57° at Roche Point and 56° at Nairn on the 31st ult., and 57° in London on Feb. 1st.

On Friday (Feb. 1st) a well-marked depression approached the north of Scotland from the westward, and, growing deeper as it advanced, caused N.W. gales of considerable force on our north and west coasts. Showers of hail and sleet fell in most districts, thunder and lightning occurred in several places, and temperature fell fast as the N.W. wind set in. At the close of the week the depression referred to was passing off slowly.

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, 5th February* 1889.
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 12.)	SHADE TEMP.		Amount of Rain.		
			Dir.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.	Haparanda ...	29.71	15	NE	4	bc	29.66	+ 11	0	0	- 22	N	2	C	*	23	?	-	
	Hernösand ...	29.90	17	N	2	o	29.79	+ 0.7	3	3	- 14	N	0	b	*	25	?	-	
	Stockholm ...	29.82	19	NW	4	bc	29.84	+ 20	10	9	- 6	N	0	b	*	21	?	-	
	Wishby ...	29.83	26	N	6	o	29.88	+ 26	24	24	+ 1	N	6	C	*	27	18	-	
	Bodö ...	29.91	19	E	2	b	29.38	- 64	29	27	+ 10	ESE	4	O	2	?	16	-	
	Christiansund...	30.06	29	SW	2	b	29.37	- 66	36	32	+ 11	SW	6	C	4	36	?	-	
	Skudesnaes ...	30.19	27	ESE	1	b	29.85	- 23	36	35	+ 14	SSW	6	O	5	?	?	-	
	Christiania Fjord (Farrier)	30.04	27	N	5	b	29.89	+ 0.1	28	24	+ 6	SSW	5	O	2	?	19	-	
	Skagen (The Screw)	29.94	26	NE	2	b	29.97	+ 13	26	25	+ 4	NW	1	b	2	?	21	-	
	Fanö ...	30.08	24	N	4	b	30.08	+ 29	22	21	+ 1	N	0	b	*	27	21	-	
BRITISH ISLANDS.	Sumburgh Head	30.22	34	NW	2	o	29.68	- 55	42	40	+ 7	WNW	3	C	4	44	34	0.14	
	Stornoway ...	30.35	38	W	2	o	30.00	- 38	43	42	+ 6	W	4	O	4	43	35	0.04	
	Wick ...	30.30	39	W	1	o	29.87	- 41	42	40	+ 5	NW	3	O	3	42	32	0.05	
	Nairn ...	30.36	35	W	1	C	29.96	- 35	39	38	+ 2	SW	2	O	1	41	33	0.07	
	Aberdeen...	30.36	34	WNW	2	bc	29.97	- 29	40	37	+ 6	SW	2	Op	4	40	33	0.09	
	Leith ...	30.37	36	N	2	C	30.07	- 16	39	37	+ 2	W	4	cm	*	42	32	0.01	
	Shields ...	30.31	38	NE	3	C	30.10	+ 0.3	36	34	- 3	SW	2	O	4	42	32	0.02	
	Spurn Head ...	30.21	37	NNE	6	bc	30.17	+ 29	36	35	- 1	W	4	O	4	35	33	-	
	York ...	30.24	36	NNE	1	b	30.17	+ 17	34	32	0	W	2	O	*	41	30	0.02	
	Loughborough	30.27	34	NW	4	b	30.27	+ 36	33	32	- 2	W	2	O	*	40	28	0.02	
GERMANY.	Ardrossan ...	30.42	38	NW	1	b	30.10	- 19	42	42	+ 4	SW	3	O	2	43	34	-	
	Malin Head ...	30.46	41	NW	4	o	30.13	- 22	42	42	+ 1	NW	4	O	4	42	40	0.24	
	Mullaghmore ...	30.50	42	N	4	o	30.21	- 19	45	45	+ 5	SW	4	0.2	3	45	39	0.14	
	Belmullet ...	30.54	43	N	3	o	30.29	- 19	45	43	+ 3	N	3	O	*	49	41	0.23	
	Donaghadee ...	30.43	41	NNE	5	C	30.17	- 13	38	37	- 2	SW	4	O	3	43	36	0.03	
	Barrow-in-Furness	30.34	37	N	3	b	30.21	+ 11	39	38	+ 2	WSW	2	O	*	42	35	-	
	Liverpool (Bidston)	30.36	35	NNE	3	b	30.26	+ 17	35	34	- 1	W	2	O	3	40	33	0.01	
	Holyhead ...	30.39	41	NNE	6	Cq	30.28	+ 10	39	38	- 1	W	2	O	3	42	39	-	
	Parsonstown ...	30.50	36	W	0	bc	30.28	- 0.7	38	37	+ 5	N	0	r	*	43	32	0.11	
	Valencia ...	30.55	42	N	3	bc	30.36	- 0.1	47	46	+ 5	WSW	1	rf	2	47	40	0.22	
FRANCE & NETHERLANDS.	Roche's Point...	30.48	40	NE	4	b	30.36	+ 0.7	39	38	+ 1	WSW	1	rm	4	43	38	0.16	
	Pembroke ...	30.36	40	NNE	5	b	30.35	+ 26	40	37	+ 1	NW	3	cp	3	42	36	0.04	
	Soilly ...	30.28	44	NNE	8	o	30.39	+ 37	42	41	- 3	N	4	O	5	45	38	0.03	
	Prawle Point ...	30.24	36	NNE	6	bc	30.38	+ 46	32	31	- 4	N	2	C	4	41	29	-	
	Jersey ...	30.11	39	NNE	7	o	30.35	+ 56	36	32	- 6	ESE	4	cm	4	42	35	0.05	
	Hurst Castle ...	30.19	34	ESE	6	bqsp	30.35	+ 50	30	30	- 7	WNW	2	cm	4	40	28	0.01	
	Dungeness ...	30.05	32	NE	6	C	30.25	+ 56	27	27	- 8	WNW	4	C	2	43	25	0.34	
	London ...	30.17	32	NE	3	b	30.28	+ 46	29	28	- 6	WSW	1	C	*	37	28	0.02	
	Oxford ...	30.28	32	NE	3	b	30.31	+ 42	30	29	- 4	W	2	bc	*	39	28	0.01	
	Cambridge ...	30.21	32	NE	3	C	30.26	+ 39	31	31	- 3	W	1	O	*	37	24	0.05	
PENINSULA.	Yarmouth ...	30.12	32	NNE	8	qsh	30.18	+ 40	38	32	- 1	NW	3	gef	4	35	29	0.03	
	Cuxhaven ...	?	27	NE	5	bc	30.10	+ 45	26	25	- 2	NNE	2	b	*	?	24	-	
	Berlin ...	29.85	30	NNE	2	b	30.07	+ 56	24	23	- 8	NW	1	S	*	34	23	0.04	
	Wiesbaden ...	*	*	*	*	*	30.12	+ 61	24	23	- 3	N	2	O	*	36	23	0.04	
	Munich ...	29.64	25	NW	2	S	29.97	+ 60	23	23	- 8	NW	2	O	*	32	21	-	
	The Helder ...	30.11	32	NE	5	bc	30.17	+ 45	21	20	- 13	S	1	bc	1	34	21	0.04	
	Brussels ...	*	*	*	*	*	30.25	+ 60	24	24	- 8	NNE	1	C	*	34	23	0.04	
	Cape Gria Nez...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-
	Paris ...	29.93	32	NNE	7	o	30.22	+ 73	25	23	- 10	NNE	5	b	*	37	26	-	
	Brest ...	30.19	40	NE	8	r	30.41	- 54	36	32	- 6	NE	4	b	5	46	34	0.12	
PENINSULA.	Lorient ...	30.01	39	NNE	8	bc	30.35	+ 68	37	32	- 6	NNE	5	O	3	43	32	-	
	Rochefort ...	29.91	41	NE	9	o	30.23	+ 74	30	28	- 12	NE	8	b	2	45	25	-	
	Belfort ...	29.54	25	W	4	S	30.01	+ 51	26	?	+ 3	NE	1	b	*	33	17	0.05	
	Lyons ...	29.71	31	NNE	5	o	30.02	+ 54	27	26	- 3	N	7	O	4	36	26	0.05	
	Nice ...	29.42	40	ESE	7	b	29.71	+ 43	38	30	+ 1	E	5	b	4	50	32	-	
	Perpignan ...	29.59	42	NW	4	o	29.94	+ 43	36	32	- 3	NW	4	bc	*	49	32	-	
	Biarritz ...	29.75	42	NNE	9	o	30.14	+ 48	33	30	- 13	NE	7	O	7	46	30	0.34	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-
Lisbon ...	30.01	40	N	8	b	30.06	- 06	41	35	- 7	NNE	7	b	5	52	39	0.01		

WEATHER CHARTS

for 8 a.m. on

Tuesday, 5th February.

1889.

BAROMETER, WIND & 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 —
 * — force above 10; — force 8 to 10;
 — force 5 to 7; — force 1 to 4;
 ○ — dead calm.

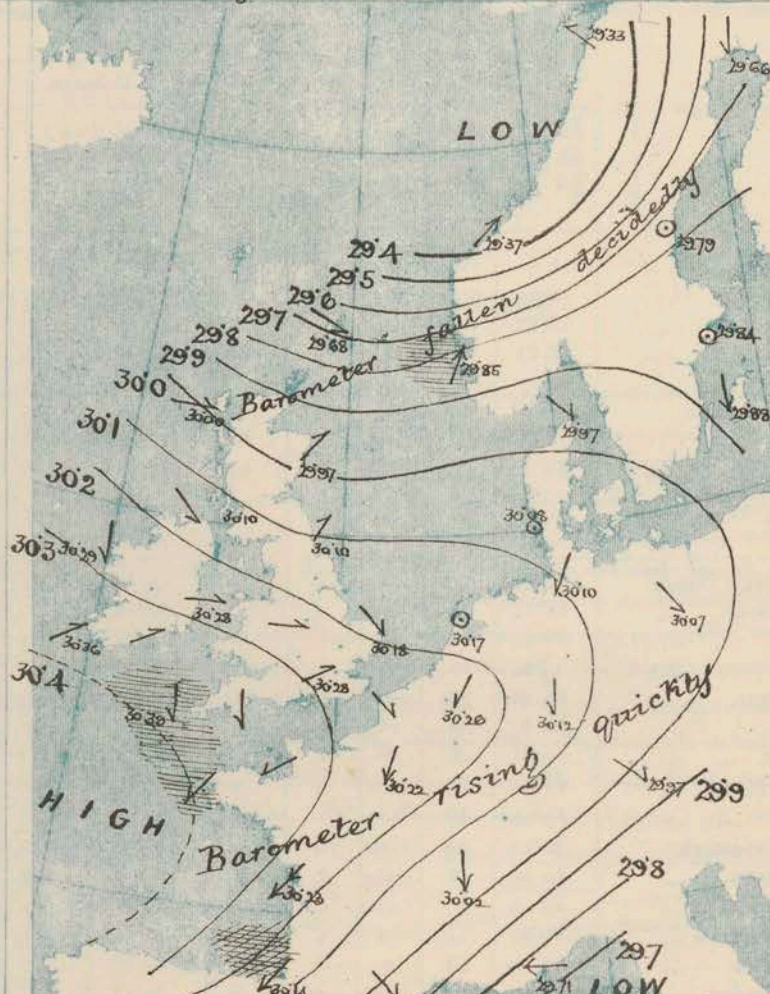
Sea Disturbance — where considerable is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER

at 6 a.m. for the month of February.
 During the 15 Years 1871—1885.

STATIONS.	MEAN READINGS.
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	29.940
Oxford	29.938
Cambridge	29.935
Yarmouth	29.928



TEMPERATURE, & WEATHER at 8 a.m., with RAINFALL in PAST 24 HOURS

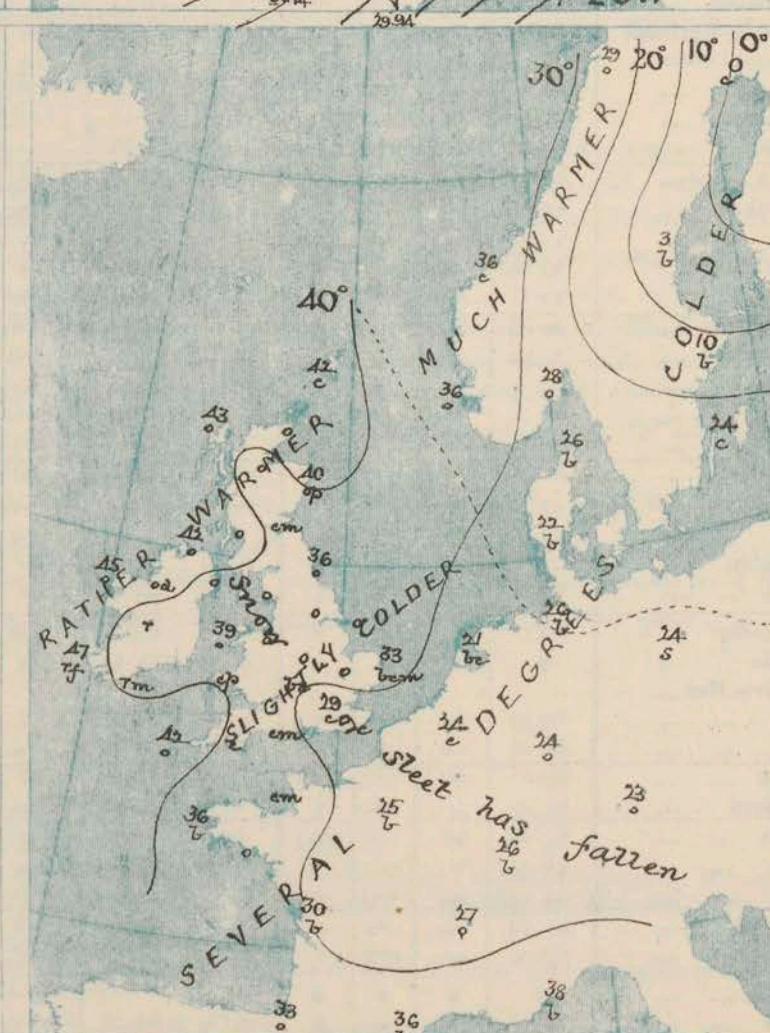
Temperature — Isotherms are drawn for each 10° changes since previous morning are stated in words.
Weather — is shown by Letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

for the month of February.

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	at 8 a.m. Dry	Wet	
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	38.8	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	38.9	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 upwards, in an anticyclone lying to the southward of our Islands.
 Lowest, 29.4 in. and less, in a large depression lying off the west of Norway, 29.5 in. and less, over the Gulf of Genoa.
 Gradients rather steep over Scandinavia, but moderate or slight elsewhere.
 Barometer falling quickly in the north, and less decidedly in the west, but rising at our southern and the French stations.

TEMPERATURE

Highest, 47° at Palermo, 45° at Mullaghmore and Walmullet, 43° at Stromsøy, and 42° at Lumburg, Had, Meik, Malin, Had, and Seilly.
 Lowest, 0° at Sapaunda, 3° at Helsingfors, 10° at Stockholm, 21° at Hilde, 22° at Jané, and 23° at Hainich.
 Sharp frost occurred over Great Britain last night; in London the thermometer on the grass fell to 23°.

WIND

Moderate from W. or SW. over Ireland, Scotland, and the north of England; strong from the latter quarter in the west of Norway.
 Light from NW. or N. over Germany, the Netherlands, and the south of England.
 Fresh or strong from the NE. or N. over France and Spain.

WEATHER

Fine in Sweden, Denmark, the Netherlands, France and the southeast of England.
 Dull elsewhere, with rain at some of the Irish and Scotch coasts and snow at Berlin.
 Snow or sleet fell yesterday in nearly all parts of Western Europe, and a thunderstorm occurred at Biarritz.

SEA

High at Biarritz, and rather rough at the mouth of the Channel, but moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large depression in the far north seems likely to occasion a considerable increase of wind from W. and NW. on our extreme northern coasts, and unsettled weather will probably extend gradually over the entire Kingdom.

FORECASTS

for the 24 hours ending at NOON on 6th February 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	W ^{ly} to NW ^{ly} winds, increasing in force; unsettled, some cold rain or sleet.
1	SCOTLAND EAST	
2	ENGLAND N.E.	W ^{ly} winds, freshening; dull, some cold ^{rain} or sleet.
3	ENGLAND EAST	W ^{ly} winds, light to fresh; fair to unsettled, with some cold rain or sleet.
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	Same as No 0 and 1.
7	ENGLAND N.W.	Same as No 2.
8	ENGLAND S.W.	NW ^{ly} and W ^{ly} winds, freshening; some cold rain.
9	IRELAND NORTH	Same as No 2.
10	IRELAND SOUTH	Same as No 8.
WARNINGS		The NORTH CONE was hoisted last evening in district 0. and parts of 1. and 6.

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.	Dry.	Wet.	Wind.	Wes.	Ses.		Bar.	Dry.	Wet.	Wind.	Wes.	Ses.
Skudommes ...	30.13	29	25	N.W. 2	6	3	Holyhead ...	30.33	41	38	N.E. 7	6.50	7
Sunbury Head ...	30.27	36	33	N 1	0	4	Valencia ...	30.49	45	40	N.E. 5	60	4
Stornoway ...	30.40	40	39	N 4	0	4	Scilly ...	30.18	43	40	N.E. 9	cq	4
Aberdeen ...	30.32	38	36	N.W. 2	60	6	Jersey ...	29.94	41	37	N 6	c	5
Shields ...	30.23	41	38	N.E. 6	0	7	Dungeness ...	29.89	37	34	N.E. 7	s	5
Ardrossan ...	30.40	43	38	N.W. 3	6	2	London ...	30.05	36	33	N.E. 6	cq	*
Malin Head ...	30.45	42	38	N 4	0	4	Yarmouth ...	30.01	34	33	N.E. 8	cq	6
Mullaghmore ...	30.48	43	39	N 5	0	4	Rochefort ...	29.73	43	39	N.E. 9	0	3
Belmullet ...	30.54	44	40	N.E. 3	0	*							

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

The reports for yesterday morning showed that the depression which passed in a southerly direction over the North Sea on Sunday had reached the neighbourhood of Limerick and had so far filled up that the lowest readings near its centre were about 29.4 in., or at least an inch less low than when the centre was near the Shetland Islands. Three other depressions existed simultaneously — one over Northern Italy, another over Southern France, and a third (shallower one) near Archangel. Over the Mediterranean the barometer had fallen fast, but over the whole of Northwestern Europe and the British Isles it was rising rapidly, and somewhat steep gradients for NE and N winds were prevalent. The gales on our western and northern coasts had lulled, but fresh gales from NE were felt at our eastern and southern stations, and strong gales from NW in the south of France, while strong winds and moderate gales, chiefly from between W. and SW, were reported over the eastern parts of the Mediterranean and the Gulf of Venice. The weather had improved greatly over the northwestern and northern quarters, but was in a very unsettled condition elsewhere, and showers of snow, sleet, hail or cold rain had occurred except in the eastern and northeastern countries. Temperature was low and changing fitfully; the lowest individual values were recorded at the Finnish stations, -7° F. at St. Petersburg, -4° at Kuopio, -1° at Helsingfors and Hangö, +13° at Moscow and Archangel, 14° at Uleaborg, 16° at Stockholm, 23° at Belfast and Wicklow, 28° at Cracow and Prague, 29° at Bonn, Warsaw and Kiev, 31° at Berlin and Brussels, 33° at Parnassus, 35° at Paris and in London, 37° at Nice, 38° at Florence. The highest were 54° at Marmora, Oran, and Malta, 53° at Palermo, 52° at Rhindia, 48° at Sanguinaria, and Lisbon, 46° at Danzig, 45° at Scilly, and 42° at Valencia.

Later on pressure became more uniform over the British Isles, and the weather colder. The NE gales in the East and south of England subsided and the snow ceased.

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 6TH FEB^Y

1880.

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

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.		Difference from 8 a.m. yesterday.	WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)				Dry.	Wet.		Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ..	29.40	7	2	0	?	29.24	-0.2	6	6	+6	SE	2	?	*	18	-4	—		
Hernösand ...	29.25	21	SEW	4	0	29.17	-0.62	17	17	+14	2	0	0	*	25	0	0.08		
Stockholm ...	29.43	?	SEW	2	0	29.08	-0.76	20	20	+20	2	0	0	*	1	9	—		
Wisby ...	29.58	24	SW	4	6C	29.12	-0.76	29	28	+5	SEW	4	0	*	20	21	0.16		
Bodö ...	29.79	27	E	6	0	29.07	-0.26	22	20	-7	ENE	6	C	3	28	19	—		
Christiansund...	29.10	32	WNW	6	0	29.10	-0.27	32	31	-4	NNW	1	C	5	36	28	—		
Skudesnaes ...	29.36	16	WNW	8	C	29.32	-0.53	36	33	0	NW	9	0	6	37	30	—		
Christiania Fjord (Færd)	29.16	26	SEW	5	0	29.12	-0.77	27	24	-1	WNW	3	6	2	36	23	—		
Skagen (The Scaw)	29.19	23	WNW	5	6	29.13	-0.84	33	31	+7	N	4	6	3	34	25	0.04		
Fanö ...	29.49	24	W	6	2	29.35	-0.72	33	31	+11	NW	6	C	*	36	21	0.16		
Sumburgh Head	29.53	36	NNW	5	0	29.72	+0.4	33	31	-9	NNW	5	0	6	44	29	0.05		
Stornoway ..	29.92	42	NW	6	C	29.95	-0.05	38	37	-5	N	3	0	3	44	35	0.06		
Wick ...	29.76	28	NW	8	0	29.83	-0.04	34	32	-8	N	6	0	4	44	32	0.10		
Nairn ...	29.87	40	NNW	7	0	29.91	-0.05	37	35	-2	WNW	5	0	3	47	37	0.05		
Aberdeen...	29.81	40	W	6	6C	29.86	-0.11	35	32	-5	NW	6	6C	5	44	34	0.04		
Leith ...	29.93	43	W	2	C	29.92	-0.15	40	37	+1	W	1	C	*	50	37	—		
Shields ...	29.91	41	W	2	C	29.87	-0.23	39	36	+3	WNW	3	C	3	44	35	—		
Spurn Head ...	29.90	40	WNW	5	2	29.84	-0.29	40	38	+4	WNW	6	C	5	41	37	0.01		
York ...	29.93	43	W	3	0	29.89	-0.28	40	37	+6	W	3	C	*	43	33	—		
Loughborough	30.05	40	WNW	3	0	29.98	-0.29	42	40	+9	WNW	4	0	*	43	33	—		
BRITISH ISLANDS.																			
Ardrossan ...	29.99	44	NW	3	6	29.97	-0.13	42	40	0	NNW	2	C	1	46	41	—		
Malin Head ...	30.13	45	NW	6	0m	30.05	-0.08	43	43	+1	NW	4	0	3	46	42	0.04		
Mullaghmore ...	30.25	45	NW	6	6C	30.09	-0.12	46	46	+1	W	2	20	3	46	44	0.15		
Belmullet ...	30.34	47	NW	5	0	30.17	-0.12	49	48	+4	NW	5	0	*	49	45	0.09		
Donaghadee ...	30.13	44	NNW	5	C	30.05	-0.12	42	40	+4	W	3	0	2	46	38	0.02		
Barrow-in-Furness	30.21	43	NW	6	6	29.98	-0.23	43	42	+4	NNW	3	0m	*	44	38	0.08		
Liverpool (Bidston)	30.07	42	WNW	6	C	30.02	-0.24	42	41	+7	WNW	6	0	4	44	35	0.07		
Holyhead ...	30.15	46	NW	5	29	30.09	-0.19	44	44	+5	WNW	5	0	5	46	37	0.02		
Parsonstown ...	30.28	43	2	0	6	30.16	-0.12	45	45	+7	2	0	*	47	37	0.03			
Valencia ...	30.38	48	N	4	0	30.32	-0.04	48	46	+1	NNW	4	0	4	50	45	0.10		
Roche's Point...	30.30	46	N	4	6C	30.24	-0.12	47	45	+8	NW	4	6C	4	49	39	0.02		
Pembroke ...	30.20	43	NNW	3	C	30.17	-0.18	46	43	+6	WNW	5	0	4	46	39	0.03		
Seilly ...	30.26	44	WNW	4	0m	30.29	-0.12	49	48	+7	NNW	6	0	5	49	40	0.04		
Prawle Point ...	30.25	41	WNW	3	0	30.21	-0.17	43	41	+11	W	4	C	3	43	31	0.09		
Jersey ...	30.38	39	SW	3	0	30.19	-0.16	46	43	+10	NW	3	0	3	46	35	0.09		
Hurst Castle ...	30.21	40	W	4	C	30.10	-0.25	42	42	+12	NNW	4	0m	4	44	30	0.02		
Dungeness ...	30.14	37	WNW	4	0	29.97	-0.28	39	37	+12	WNW	4	C	3	43	26	—		
London ...	30.15	38	WNW	4	C	30.01	-0.27	40	38	+11	W	2	0	*	40	29	0.02		
Oxford ...	30.12	39	W	3	0	30.03	-0.28	41	39	+11	WNW	3	0	*	41	29	0.02		
Cambridge ...	30.08	38	W	2	0	29.97	-0.29	41	39	+10	NW	1	0	*	41	29	0.02		
Yarmouth ...	30.02	35	W	3	C	29.87	-0.31	37	36	+4	NW	4	6C	4	37	31	0.01		
Cuxhaven ...	29.97	28	SEW	2	0	29.46	-0.64	35	34	+9	WNW	5	6C	*	?	?	—		
Berlin ...	29.99	22	SW	3	6	29.44	-0.63	28	27	+4	WNW	3	0	*	30	21	0.12		
Wiesbaden ...	*	*	*	*	*	29.78	-0.34	34	32	+10	SW	4	0	*	34	19	0.08		
Munich ...	30.10	22	W	1	C	29.91	-0.06	25	23	+2	SW	7	0	*	30	18	—		
FRANCE & NETHERLANDS.																			
The Helder ...	29.88	37	WNW	7	2	29.72	-0.33	38	36	+17	NW	7	C	4	41	21	0.12		
Brussels ...	*	*	*	*	*	29.90	-0.25	38	37	+14	?	4	C	*	38	?	0.04		
Cape Gris Nez...	?	38	NNW	7	0	?	—	41	39	—	NW	8	6C	6	41	32	0.12		
Paris ...	30.23	30	WNW	3	6	30.10	-0.12	34	32	+9	WNW	5	0	*	37	?	—		
Brest ...	30.39	40	SW	1	0	30.34	-0.07	46	43	+10	NW	5	0	3	52	?	0.16		
Lorient ...	30.25	41	NNW	1	0	30.26	-0.09	46	44	+9	NNW	4	0	3	?	37	0.08		
Rochefort ...	30.37	32	E	4	6	30.39	+0.16	36	32	+6	SW	5	0	2	41	25	—		
Belfort ...	30.11	26	NE	3	6C	30.13	+0.12	25	24	-1	NE	5	0	*	31	18	0.04		
Lyons ...	30.25	27	N	4	C	30.35	+0.33	20	19	-7	N	1	0	*	30	17	—		
Nice ...	29.95	43	SEW	1	C	30.01	-0.30	36	29	-2	ENE	7	6	1	52	30	—		
Perpignan ...	30.17	36	NW	5	6	30.30	+0.36	31	28	-5	NW	3	6	*	42	31	—		
Biarritz ...	30.30	35	ENE	3	0	30.36	+0.22	27	27	-6	ENE	4	6	2	37	27	—		
PENINSULA.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	30.19	42	NNW	7	6	30.31	+0.25	35	30	-6	N	5	6	?	42	34	—		

WEATHER CHARTS

for 8 a.m. on

WEDNESDAY 6th FEBRY

1889.

BAROMETER, WIND & 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 —

→ = force above 10; →→ = forces 8 to 10;
→→ = forces 5 to 7; → = forces 1 to 4;
⊙ = dead calm.

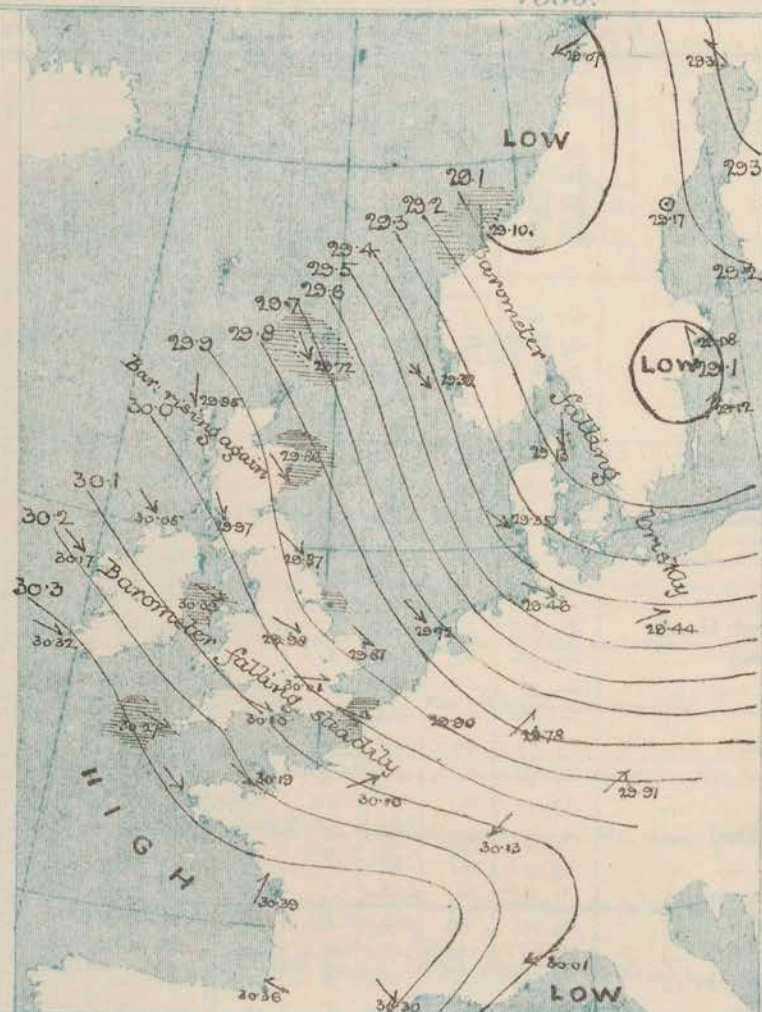
Sea Disturbance — where considerable is shown thus.

— Rough — High

MEAN HEIGHT of the BAROMETER

at 6 a.m. for the month of February
During the 15 Years 1871—1885

STATIONS.	MEAN READINGS.
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	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.878
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.

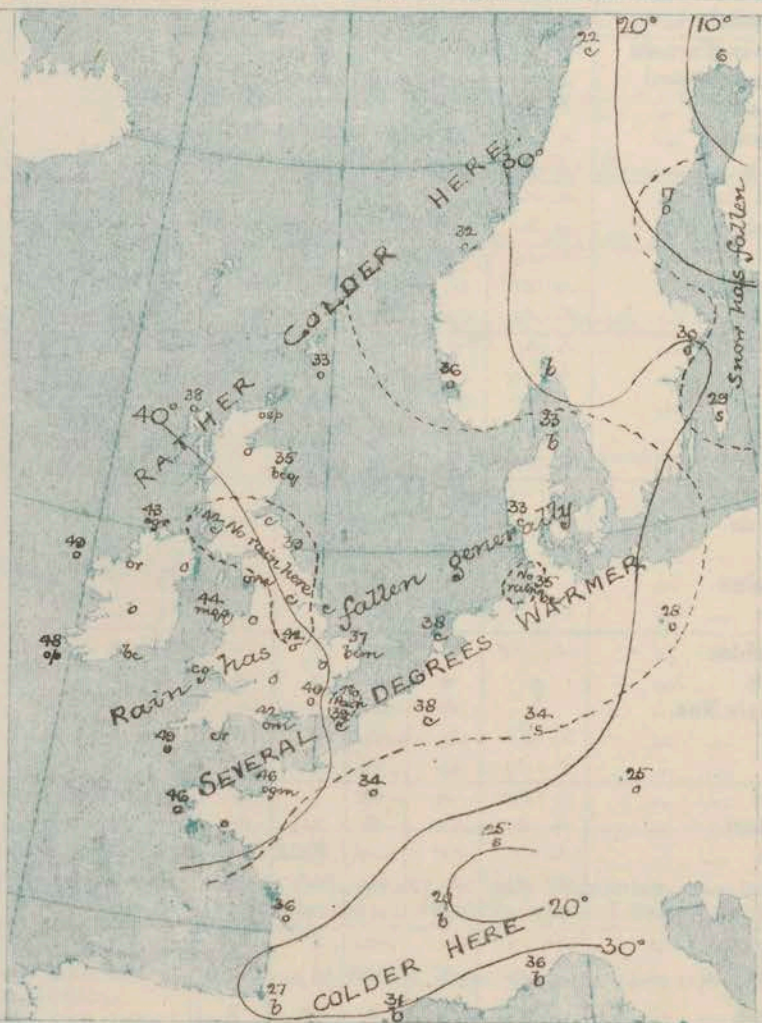
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of February

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max	Daily Min	Dry at 8 a.m.	Wet	
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	32.8	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	45.9	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	38.9	38.3	37.3	1.60
Yarmouth	43.5	35.2	38.9	38.2	2.03

NOTE — The Temperature means are for the 46 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 upwards in an anticyclone lying over Spain, the Bay of Biscay, the south of France & the extreme SW of Ireland.
 Lowest 29.1 ins. and less in a large depression lying over the northwest of Norway and also in a smaller disturbance lying over the south of Sweden.
 Gradients rather steep over Norway, Denmark, Germany and the North Sea, but moderate or slight elsewhere.
 Barometer rising over Spain, the south of France and the north of Scotland, but falling elsewhere.

TEMPERATURE

Highest 49° at Belmullet and Scilly, 48° at Valencia, 47° at Roch's Point, 46° at Mullaghmore, Pembroke, Jersey, Brest & Lorient.
 Lowest 6° at Haparanda, 17° at Hennösand, 20° at Lyons, 21° at Rode, 25° at Munich and Belfort, and 28° at Berlin.

WIND

Fresh or strong from the NW over our Islands and the eastern shores of the North Sea, with gale at Skudesnæs.
 Moderate SW in Germany; light in Sweden; E or NE in the south of France.
 A fresh gale from NW was experienced yesterday in the north and northeast of Scotland.

WEATHER

Fine on the east coasts of Great Britain, as well as in Denmark and the south of France.
 Cloudy elsewhere with rain at some of our western and south-western stations and snow at Wick, Aberdeen & Belfast.
 A little sleet or cold rain fell yesterday in many parts of the United Kingdom.

SEA

Rough on the more exposed parts of our West and North coasts, but moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The low pressure systems over Scandinavia appear to be moving south-eastwards, and strong NW winds are likely to continue on many parts of our coasts, with cold showers in most districts.

FORECASTS

for the 24 hours ending at NOON on 7th February 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	Strong N ^{ly} and NW ^{ly} winds, backing later; unsettled, some cold showers.
1	SCOTLAND EAST	
2	ENGLAND N.E.	NW ^{ly} winds, strong; cloudy, some showers.
3	ENGLAND EAST	W ^{ly} and NW ^{ly} winds, moderate or fresh; cloudy, some showers.
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	N ^{ly} and NW ^{ly} winds, force doubtful; cloudy, some showers.
7	ENGLAND N.W.	
8	ENGLAND S.W.	Same as N ^o 2.
9	IRELAND NORTH	NW ^{ly} winds, fresh or strong; dull and some rain to fall.
10	IRELAND SOUTH	

WARNINGS

The NORTH CONE was hoisted last evening in districts 2, 3, 4, 9 and part of 1 and 6, and is now flying in all districts excepting 5 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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.45	37	37	W 6	0.25	5	Holyhead ...	30.17	43	43	W 4	nd	3
Sumburgh Head ...	29.54	41	37	NW 6	0	6	Valencia ...	30.34	48	45	N 4	om	4
Stornoway ...	29.95	43	42	NW 5	c	4	Scilly ...	30.30	44	43	W 5	odp	3
Aberdeen ...	29.87	44	39	W 5	cq	4	Jersey ...	30.34	43	39	SE 3	b	3
Shields ...	29.97	43	41	W 4	c	4	Dungeness ...	30.18	41	36	W 5	bc	3
Ardrossan ...	30.02	46	43	W 4	c	3	London ...	30.19	39	36	W 3	om	*
Malin Head ...	30.18	44	42	NW 5	0	4	Yarmouth ...	30.12	37	36	WNW 3	bc	3
Mullaghmore ...	30.20	46	44	NW 6	c	4	Rochefort ...	30.32	35	33	NE 5	b	2
Belmullet ...	30.33	47	44	NW 4	0	*							

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

The reports for yesterday morning showed that pressure had become high again (30.2 ins to 30.35 ins. and more) in an anticyclone lying over the Atlantic, and spreading eastwards across the southern parts of our Islands and the north of France, and that a second high-pressure area had begun to appear over southern Russia. These two areas were separated by a broad band of low pressure (or Trough) which stretched from northern Russia in a south-southeasterly to southeasterly direction as far as the Carpathian Mountains, and thence in an east-southeasterly direction across Austria and Italy to the Mediterranean. Over northwestern Europe an important fall of the barometer had set in, caused by the advance of a new and large depression to the Norwegian coasts. Thus while NE^{ly} and N^{ly} winds remained prevalent over central Europe and the western parts of France and Spain, and still blew rather hard in the two latter regions, W^{ly} and SW^{ly} winds had again set in at the northwestern stations - moderate in force on our own northern coasts, but strong in the south and west of Norway. Over the northern parts of the Mediterranean the wind had become E^{ly}, and had moderated in force. The weather over Spain, France and Germany had improved considerably, but snow continued to fall at many of the Austrian stations, while in Russia the sky was overcast, and snow fell locally. Over northwestern Europe the sky was overcast, and rain was reported over several of the western and northern parts of the British Islands. Temperature had fallen over western Europe generally, but risen fast in the northwest. It was still very low over Finland and northern Russia, and the Baltic Provinces and was below the freezing point in most places. The lowest morning values were -8° F. at St. Petersburg, -3° at Helsingfors and Uleaborg, 0° at Haparanda and Riga, +5° at Kuopio and Hangö, 11° at Kharkov, 13° at Moscow, 15° at Warsaw, 19° at Breslau, 23° to 27° over the central parts of Germany and France, 29° in London, and 31° at Madrid, it was as low as 34° at Turin, 36° at Florence and Perpignan, 38° at Nice. The highest were 55° at Malta, 51° at Palermo and Nemours, 49° at Cagliari, 47° at Valencia (Ireland), 46° at Corunna, 45° at Belmullet and Langunnaire, 43° at Stornoway and Naples, and 42° at Sumburgh Head.

Later on the new depression in the north began to spread southwards, and NW^{ly} winds, strong to a gale in force, set in over Scotland and the extreme northwest of Ireland, with slight cold showers in several places.

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, 7th February 1889.
 Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.	Temp. in Shade.	Weather.	Sec. 9 to 12.	Max.	Min.	Amount of Rainfall.		
			Dir.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.									
SCANDINAVIA.																			
Haparanda ..	29.73	12	Z	0	0	29.28	-06	18	18	+12	SW	2	0	*	?	5	0.04		
Härnösand ...	29.13	21	NE	2	0	29.29	+12	19	19	+2	Z	0	0	*	23	12	0.43		
Stockholm ...	29.02	28	Z	0	0	29.10	+02	25	24	-5	NE	2	0	*	34	19	0.04		
Widby ...	29.09	31	?	4	c	29.01	-11	30	29	+1	N	4	0	*	34	23	0.16		
Bodo ...	29.11	22	ENE	4	b	29.25	+18	24	26	+8	N	6	0	*	?	18			
Christiansund...	29.25	32	WNW	9	s	29.45	+35	30	29	-2	N	8	c	6	34	28	0.28		
Skudesnaes ...	29.44	29	NW	8	0	29.41	+09	30	28	-6	NW	6	bc	4	?	27			
Christiania Fjord	29.15	32	N	2	b	29.23	+11	28	25	+1	N	3	b	1	32	23			
(Fardet)																			
Skagen (The Scaw)	29.14	35	N	3	c	29.20	+07	32	30	-1	N	9	b	3	36	30			
Fanø ...	29.39	33	NW	7	bc	29.32	-03	31	30	-2	NW	6	c	*	36	28			
BRITISH ISLANDS.																			
Sumburgh Head	29.72	30	N	4	0	29.76	+04	30	29	-3	N	2	0	5	34	25	0.01		
Sornoway ...	29.82	35	N	3	om	29.92	-03	33	32	-5	N	1	0	2	38	31			
Wick ...	29.80	33	NW	2	0	29.80	-03	31	31	-3	N	3	0	3	34	29	0.02		
Nairn ...	29.82	35	NW	1	0	29.87	-04	33	31	-4	NW	3	c	1	38	32			
Aberdeen ...	29.82	33	W	2	c	29.83	-03	30	29	-5	NW	3	cspg	5	37	30	0.02		
Leith ...	29.83	40	W	2	c	29.83	-09	33	32	-7	N	1	bc	*	46	31	0.01		
Shields ...	29.85	39	N	2	0	29.74	-13	36	32	-3	NE	4	c	5	44	34	0.01		
Spurn Head ...	29.85	39	WNW	2	c	29.65	-23	38	36	-2	NW	6	c	5	41	35	0.05		
York ...	29.86	38	NW	1	0	29.68	-21	37	34	-3	N	1	0	*	46	33	0.15		
Loughborough	29.90	42	W	2	0	29.65	-33	34	34	-8	N	3	0	*	47	33	0.42		
Andressan ...	29.83	42	Z	0	pm	29.91	-06	30	30	-12	N	1	bm	1	44	30			
Malin Head ...	29.80	44	SSW	3	od	29.93	-12	36	35	-7	NNE	4	oph	4	46	35	0.30		
Mullaghmore ...	29.87	48	W	5	d	29.94	-15	41	40	-5	NNE	6	cspg	4	48	40	0.17		
Belmullet ...	29.93	50	WNW	4	0	30.03	-14	43	41	-6	N	4	c	*	50	42	0.21		
Donaghadee ...	29.86	43	SW	3	0	29.89	-16	37	35	-5	NE	5	b	3	44	35	0.44		
Barrow-in-Furness	29.87	43	W	3	0	29.71	-27	34	33	-9	N	4	c	*	45	34	0.32		
Liverpool (Bidston)	29.90	41	WNW	2	r	29.72	-30	36	34	-6	ENE	3	0	3	45	36	0.64		
Holyhead ...	29.91	45	WSW	2	md	29.77	-32	39	38	-5	NE	4	0	4	48	38	0.32		
Parsonstown ...	29.96	48	W	2	0	29.89	-27	43	40	-2	NW	3	0	*	51	42	0.06		
Valencia ...	30.12	50	W	5	omd	30.06	-26	48	46	0	NW	5	pm	4	54	47	0.02		
Roche's Point...	30.04	50	WNW	4	c	29.82	-42	48	45	+1	N	7	bq	5	51	47	0.03		
Pembroke ...	29.99	49	W	4	c	29.69	-48	47	45	+1	NW	7	bc	6	49	45	0.12		
Scilly ...	30.10	50	WNW	6	0	29.83	-44	49	48	0	NW	7	oq	6	50	47	0.03		
Prawle Point ...	30.03	47	W	2	0	29.69	-52	45	44	+2	NW	4	bcu	4	47	41	0.26		
Jersey ...	30.07	48	WNW	3	omg	29.67	-52	48	46	+2	WNW	6	cspg	5	49	45	0.17		
Hurst Castle ...	29.98	44	WNW	2	md	29.53	-57	45	44	+3	NW	5	bc	5	46	42	0.16		
Dungeness ...	29.92	43	WNW	4	0	29.42	-55	44	44	+5	WNW	3	r	2	45	37	0.24		
London ...	29.92	42	W	3	ogf	29.54	-47	37	36	-3	NE	4	pm	*	46	37	0.36		
Oxford ...	29.91	40	NW	2	0	29.59	-44	36	35	-5	NNE	3	rg	*	46	36	0.18		
Cambridge ...	29.87	40	N	1	0	29.61	-36	35	35	-6	NNE	2	r	*	47	33	0.40		
Yarmouth ...	29.87	37	NW	2	bcf	29.58	-29	37	35	0	NE	5	r	4	39	33	0.06		
Cuxhaven ...	29.49	32	NW	7	s	29.41	-05	32	32	-3	NW	6	b	*	?	?			
Berlin ...	29.42	34	WNW	5	c	29.36	-08	30	29	+2	NW	4	bc	*	34	28	0.16		
Wiesbaden ...	*	*	*	*	*	29.62	-16	34	32	0	WNW	1	0	*	37	32	0.16		
Munich ...	29.82	28	W	7	0	29.67	-24	30	29	+5	W	5	0	*	30	25			
FRANCE & NETHERLANDS.																			
The Helder ...	29.79	33	WNW	1	bc	29.57	-15	35	34	-3	WNW	1	0	0	41	32	0.04		
Brussels ...	*	*	*	*	*	29.49	-41	37	37	-1	SSW	3	r	*	40	35	0.16		
Cape Gris Nez...	?	43	WNW	7	r	?	?	42	42	+1	W	3	r	4	43	39	0.47		
Paris ...	30.02	39	W	3	0	29.58	-52	41	41	+7	SW	5	0	*	42	?	0.32		
Brest ...	30.14	48	NW	4	0	29.86	-48	46	44	0	NW	8	0	4	52	39	0.08		
Lorient ...	30.15	49	NW	5	0	29.80	-46	49	47	+3	NW	7	m	4	50	43	0.04		
Rocheport ...	30.21	45	W	3	0	29.92	-47	46	45	+10	WNW	5	0	2	46	?	0.12		
Belfort ...	29.45	29	W	4	s	?	?	34	34	+9	W	3	s	*	?	22	0.32		
Lyons ...	30.20	27	ENE	1	s	29.92	-43	30	30	+10	S	1	s	*	33	?			
Nice ...	29.85	40	S	4	bc	29.80	-21	37	32	+1	E	4	b	1	46	32			
Perpignan ...	30.14	41	NW	4	c	29.96	-34	41	41	+10	NW	3	0	*	47	?			
Biarritz ...																			
PORTUGAL.																			
Goronna ...	*	*	*	*	*														
Lisbon ...	30.34	49	N	5	b	30.32	-01	42	37	+7	NNE	5	b	2	48	?			

For Explanation of Columns, see p. 4.

‡ Received too late for insertion in Chart on p. 2.

1883

(Explanation of Map)

Wind ——— Arrows show the prevalent winds. Thy fly with the wind and their barbs and feathers refer to force thus —

* \longrightarrow = forces above W_1 ; \longrightarrow = forces 8 to W_1 ,
 \longrightarrow = forces 5 to T_1 ; \longrightarrow = forces 1 to 4,
 ⊙ = dead culm.

Sea Disturbance—where considerable is shewn thus.

MEAN HEIGHT of the BAROMETER

at 6 a m for the month of February
During the 15 Years, 1871 — 1885.

[illegible]

AND RAINFALL.
For the month of February

A hand-drawn map of Europe and North Africa, showing isotherms and weather notes. The map is drawn on a grid of latitude and longitude lines. Isotherms are drawn and labeled with handwritten text:

- 30°** isotherm: Labeled "WARMER" in the north and "has fallen" in the south.
- 40°** isotherm: Labeled "SOMEWHAT COLDER" in the north and "has fallen" in the south.
- 50°** isotherm: Labeled "RAATHER WARMER" in the north and "has fallen" in the south.
- 60°** isotherm: Labeled "CONSIDERABLY WARMER" in the north.

Other handwritten notes include "Snow" near the 30° isotherm in the north and "Rain" near the 50° isotherm in the south. Numerous numerical values are scattered across the map, likely representing temperature readings at specific locations.

NOTE - The Temperature means are for the 25 years 1871-88. the Rainfall means are mainly those for the 20 years 1866-85

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 ins. and upwards over Portugal.
Lowest, 29.0 ins. and less, over the British; 29.5 ins. and less, in a well defined depression lying over the Netherlands and the extreme southeast of England.
Gradient, moderate generally, but rather steep over France and the southeast of our islands.
Barometer rising in Scandinavia and the west and north of our islands, but falling elsewhere - quickly over France.

TEMPERATURE

Highest, 49° at Scilly, and Lorient, 48° at Valence, Rochefort and Jersey, 47° at Limbork, and 46° at Brest and Rochefort.
Lowest, 18° at Haparanda, 19° at Helsingfors, 25° at Stockholm, 27° at Rode, 28° at Vaasa, and 30° at Nisby, Christiansund, Skutumpah, Lomberg, H. Aberdeen, Anstron, Boston, Munich and Lyons.

WIND

Light from the N.W. in Scotland; strong from the same quarter on the eastern shore of the North Sea.
Fresh from N.E. over the north of Ireland and the north and east of England.
Strong to gale from the N.W. over the southwest of our islands and the west of France.

WEATHER

Fine in Denmark and North Germany, and also (with local showers) in the west of our islands.
Cloudy elsewhere with rain over Belgium and the southeast of England, and snow in some parts of Scandinavia and the E. of France.
Since yesterday 0.6 in. of rain has fallen at Liverpool, 0.5 in. at Cape Gris Nez, and 0.4 in. at Copenhagen, Cambridge and in London.

SEA

Rough or rather so on the more exposed parts of all but our northwestern coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off the southeast of England will probably continue to travel quickly southwards, and in its rear a temporary improvement in the weather is likely to take place over our islands. There are at present no signs of the advance of any new disturbances.

FORECASTS

for the 24 hours ending at NOON on 8th FEB^{ry} 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	N ^{ly} to NW ^{ly} winds, light or moderate; changeable, some cold showers.
1	SCOTLAND EAST	
2	ENGLAND N.E.	N ^{ly} and NE ^{ly} winds, fresh or strong; some cold showers at first then fair.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	Same as N ^o 0 and 1.
7	ENGLAND N.W.	N ^{ly} winds, freshening; unsettled, some cold showers.
8	ENGLAND S.W.	NW ^{ly} to N ^{ly} winds, strong, a gale in places; squally, some showers.
9	IRELAND NORTH	N ^{ly} winds, strong, squally, some showers.
10	IRELAND SOUTH	

WARNINGS

The NORTH CONE was hoisted last evening in district 10 and is still flying there as well as in districts 7, 8, and 9.

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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.44	30	30	NW 9	S	6	Holyhead ...	30.02	46	45	NW 4	C	4
Sumburgh Head ...	29.75	32	30	NW 5	C	6	Valencia ...	30.21	52	49	W 4	Om	4
Stornoway ...	29.91	38	37	N 3	O	3	Scilly ...	30.16	50	50	WNW 6	O	4
Aberdeen ...	29.88	36	33	NW 3	OU	4	Jersey ...	30.14	48	46	WNW 3	O	3
Shields ...	29.89	44	39	NW 3	C	3	Dungeness ...	29.94	44	41	WNW 4	O	3
Ardrossan ...	29.92	44	42	NW 3	O	2	London ...	29.96	46	43	WNW 4	O	*
Malin Head ...	29.95	44	44	WSW 2	O	3	Yarmouth ...	29.88	39	37	NW 4	ben	4
Mullaghmore ...	29.98	48	48	WSW 4	Trm	3	Rochefort ...	30.29	43	42	WSW 7	r	3
Belmullet ...	30.06	50	50	NW 4	r	*							

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

The reports for yesterday morning showed that the high pressure system over the western part of our area had moved still further in a southerly direction and increased somewhat in intensity, so that readings varied from between 30.3 ins. and 30.5 ins. over the Spanish Peninsula and southwest of France to 29.1 ins. and less, in a complex depression which lay over Scandinavia to 29.7 ins. and less in another low pressure area over Little Russia, and to about 30.0 ins. in the Gulf of Genoa, Algeria, and the extreme south of the Mediterranean. NW winds, light to a gale in force prevailed over the British Isles, North Sea, and English Channel, SW^{ly} over Germany and Austria, and S^{ly}, moderate to strong, over the Baltic. Over the Mediterranean and Southern Europe the winds, though chiefly N^{ly} or NE^{ly} were very variable, and, except in the south of France, were of little force. The weather over Southern Europe and at most Mediterranean stations was fine and bright, but in all other regions it was very cloudy or overcast, snow was falling at some of the Russian and Baltic stations, rain or sleet showers in some of the western and northern parts of the British Isles. Temperature had recovered considerably over Western Europe, but continued low in the north, east, and south. The lowest morning values were 3° at St. Petersburg, 4° at Kiof, 5° at Archangel, 6° at Haparanda, 7° at Moscow, 12° at Kiev, 17° at St. Petersburg and Riga, 18° at Leningrad, 20° at Lyons, 25° at Belfort, and 27° at Brindisi, over Eastern Germany, Switzerland, and Central Spain they ranged between 20° and 30°, while they were 30° at Florence, 31° at Perpignan and Pavia, 35° at Rome, Lisbon, and Corunna and 36° at Alicant. The highest readings were 58° at Malta, Brindisi, Naples and Algiers, 48° to 49° in the extreme west of Ireland and at Scilly, 46° at Pembroke and Jersey. At Paris the reading was 34°, at Brussels 38°, and in London 40°.

Later in the day a new small depression appeared off our northwest coast and moving southeastwards brought very unsettled weather to the British Isles 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 *Friday, 8th February* 1889.
 Issued by the Meteorological Office 63 Victoria Street, London. R.H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. 0 to 9.)		SHADE TEMP.		
			Dir.	Force (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)				Max.	Min.	Amount of Rainfall.
<i>SCANDINAVIA.</i> Haparanda ...	29.35	15	Z	0	0		29.38	+10	13	12	-5	Z	0	0	*		21	?	-
Hernösand ...	29.39	14	Z	0	0		29.30	+01	9	9	-10	Z	0	0	*		23	?	0.04
Stockholm ...	29.31	16	Z	0	bc		29.28	+18	16	15	-9	Z	0	0	*		23	14	0.04
Wisby ...	29.20	26	NW	6	S		29.22	+21	23	23	-7	Z	4	S	*		34	23	0.04
Bodö ...	29.35	25	N	4	0		29.19	-06	20	18	-1	ESE	4	0	2		27	19	-
Christiansund...	29.39	27	SW	4	bc		28.73	-72	27	26	-9	ESE	1	0	4		27	23	0.28
Skudesnaes ...	29.55	30	Z	0	S		28.65	-76	36	35	+6	SW	6	2	5		?	30	-
Christiania Fjord (Fjærd)	29.43	32	NW	2	0		29.06	-17	31	28	+3	SSW	4	0	2		35	25	-
Skagen (The Scaw)	29.45	30	N	1	b		29.12	-08	30	29	-2	SW	3	0	2		32	27	-
Fanö ...	29.54	29	WSW	1	0		29.25	-07	33	32	+2	SW	6	S	*		36	28	-
<i>BRITISH ISLANDS.</i> Sumburgh Head	29.55	35	WSW	2	S		28.63	-113	25	25	-5	WSW	3	S	5		35	24	0.48
Stornoway ...	29.68	38	W	5	0		29.01	-091	33	33	0	NW	8	S	6		39	28	0.20
Wick ...	29.63	38	W	2	0		28.83	-097	27	27	-4	NW	9	0	7		39	27	0.18
Nairn ...	29.69	35	WSW	3	0		29.01	-086	31	31	-2	NW	1	0	7		41	30	0.08
Aberdeen...	29.80	33	SW	2	og		28.98	-085	30	28	0	W	8	bcsp	5		41	30	0.05
Leith ...	29.88	34	N	1	m		29.09	-74	40	34	+7	W	4	0	*		45	29	0.05
Shields ...	29.91	32	NW	2	bc		29.10	-64	45	43	+9	W	6	0	4		46	29	-
Spurn Head ...	29.87	36	NW	5	0		29.31	-34	40	39	+2	SSW	6	0	5		40	31	-
York ...	29.90	32	NW	1	b		29.24	-44	42	42	+5	W	5	0	*		42	28	0.02
Loughborough	29.97	33	NW	2	b		29.50	-15	38	37	+4	SW	5	og	*		39	30	-
Ardrossan ...	29.92	38	W	2	0		29.22	-69	39	38	+9	NW	8	cm	5		39	30	0.16
Malin Head ...	29.92	46	W	4	bcg		29.33	-60	41	38	+5	NW	7	ogp	6		45	36	0.12
Mullaghmore ...	30.01	42	SW	4	om		29.56	-38	45	42	+4	NW	7	ogp	6		48	39	0.08
Belmullet ...	30.03	45	SW	2	om		29.67	-36	45	42	+2	NW	6	0	*		49	42	0.08
Donaghadee ...	30.00	36	SW	3	0		29.38	-41	43	43	+8	NW	7	0	4		46	35	0.06
Barrow-in-Furness	29.96	34	NW	3	bc		29.29	-42	46	45	+12	SW	9	0	*		46	33	0.06
Liverpool (Bidston)	29.99	34	NW	3	bc		29.37	-35	46	44	+10	WSW	8	0	5		46	34	-
Holyhead ...	30.02	39	NW	4	og		29.48	-29	46	46	+7	WSW	5	pmg	4		47	38	0.01
Parsonstown ...	30.08	40	Z	0	0		29.59	-30	48	47	+5	SW	3	0	*		48	39	0.03
Valencia ...	30.16	47	NW	1	omd		29.74	-32	51	50	+3	NW	5	adm	5		51	45	0.06
Roche's Point...	30.11	45	N	3	bc		29.68	-14	49	47	+1	W	3	bcp	4		50	44	0.01
Pembroke ...	30.07	41	NNE	3	0		29.66	-03	48	47	+1	WSW	6	ogp	5		48	40	-
Scilly ...	30.08	46	N	5	0		29.85	+02	49	49	0	WSW	5	opd	6		50	44	0.01
Prawle Point ...	30.07	36	NNE	2	bc		29.83	+14	44	44	-1	WSW	5	om	4		47	34	-
Jersey ...	29.98	43	N	4	om		29.90	+23	45	42	-3	WSW	4	pdgm	3		49	37	0.03
Hurst Castle ...	29.95	45	NW	5	bc		29.72	+19	44	43	-1	W	6	0	5		46	31	0.02
Dungeness ...	29.89	37	NNE	4	0		29.70	+28	40	38	-4	W	5	0	4		44	28	0.04
London ...	29.95	37	N	3	b		29.64	+10	38	37	+1	W	4	0	*		40	29	?
Oxford ...	30.02	32	NW	2	0		29.63	+04	38	37	+2	SW	3	0	*		41	30	-
Cambridge ...	29.95	34	N	1	bc		29.52	-09	36	35	+1	SW	2	bc	*		40	28	-
Yarmouth ...	29.85	35	N	3	0		29.50	-08	35	34	-2	WSW	5	og	4		38	29	0.01
Cuxhaven ...	29.49	32	NW	5	0		29.49	+08	33	32	+1	SW	5	0	*		34	31	-
Berlin ...	29.44	29	NW	3	0		29.61	+25	28	27	-2	NW	3	0	*		34	25	-
Wiesbaden ...	*	*	*	*	*		29.84	+22	31	30	-3	NW	3	0	*		36	28	0.16
Munich ...	29.56	31	NW	5	S		29.87	+20	19	19	-11	SW	3	0	*		36	19	0.39
<i>FRANCE & NETHERLANDS.</i> The Helder ...	29.77	35	NW	4	0		29.43	-14	36	34	+1	SW	7	0	4		37	34	-
Brussels ...	*	*	*	*	*		29.77	+28	33	31	-4	SW	5	0	*		38	32	0.04
Cape Gris Nez...	?	37	NE	8	0		?	?	40	37	-2	NW	8	0	6		45	34	0.08
Paris ...	29.83	38	NNE	7	0		29.97	+39	34	31	-7	SW	1	0	*		47	31	0.12
Brest ...	30.00	45	N	5	0		30.04	+18	47	45	+1	NW	5	0	5		50	39	0.35
Lorient ...	29.95	46	N	7	0		30.02	+22	48	42	-6	NW	5	0	4		50	41	-
Rochefort ...	29.89	48	NW	7	0		30.13	+21	40	36	-4	WSW	4	0	2		50	30	-
Belfort ...	29.65	43	W	3	S		29.94	?	28	27	-6	W	1	0	*		35	19	0.35
Lyons ...	29.72	38	SSW	3	0		30.02	+10	29	27	-1	NW	5	0	*		42	29	0.12
Nice ...	29.59	44	S	4	b		29.63	-17	39	35	+2	ESE	7	0	1		48	34	-
Perpignan ...	29.83	49	NW	5	0		29.82	-14	43	39	+2	NW	8	0	*		59	33	0.02
Biarritz ...	29.98	51	NW	9	0		30.10	-14	41	37	-4	E	4	0	5		52	37	0.24
Corunna ...	*	*	*	*	*		*	*	*	*	*	*	*	*	*		*	*	*
Lisbon ...	30.28	51	NW	5	0		30.27	-05	50	46	+8	NNE	7	0	3		55	?	-

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on

Friday, 8th February,

1883.

BAROMETER, WIND & 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 shown thus.

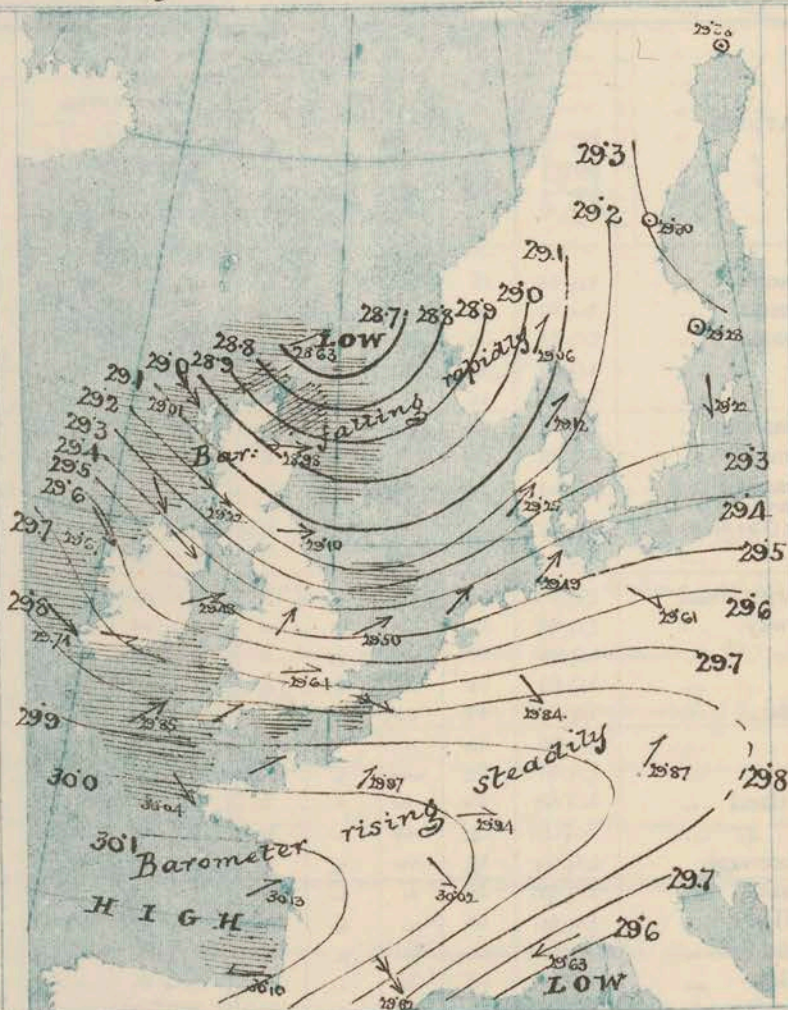
— Rough — High

MEAN HEIGHT of the BAROMETER

at 6 a.m. for the month of February

During the 15 Years 1871 — 1885.

STATIONS.	MEAN READINGS.
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	29.906
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.884
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.

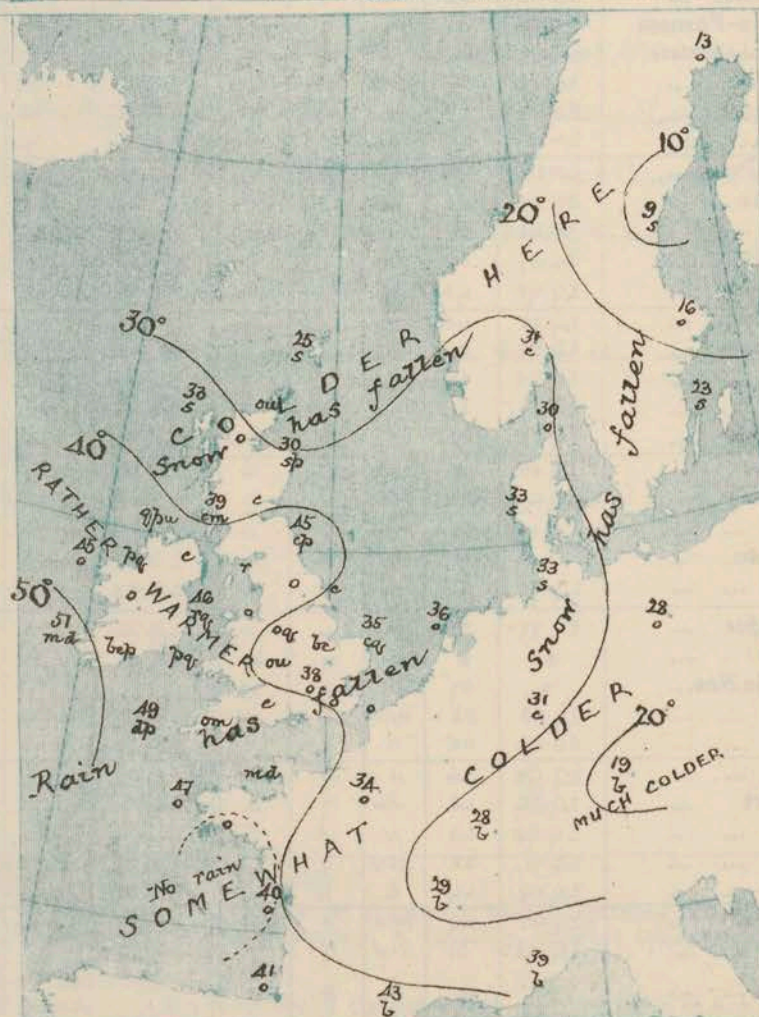
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of February

STATIONS	TEMPERATURE				RAINFALL. (Inches)
	Daily Max	Daily Min	Dry at 8 a.m.	Wet	
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	37.8	2.00
Ardrossan	45.0	38.7	40.0	38.6	3.47
Donaghadee	46.8	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	6.29
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	40.8	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	38.9	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 10 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 ins. and upwards, in an anticyclone lying over the Bay of Biscay.
Lowest, 28.7 ins. and less, in a deep depression, the centre of which lies close to the Shetlands Islands.
Gradients steep over our Islands and the North Sea, and also over the south of France, but slight elsewhere.
Barometer falling at all but the French and German stations, rapidly in Scotland.

TEMPERATURE

Highest, 51° at Valencia, 49° at Rocher Point and Lally, 48° at Parsonstown, Pembroke and Lorient, and 47° at Paris.
Lowest, 3° at Haparanda, 13° at Haparanda, 16° at Stockholm, 13° at Munich, 22° at Nisy, and 25° at Sumburg, Had.

WIND

Strong to gale from NW. and W. on all our more northern coasts; fresh from W. in the south.
Moderate to strong from the SW. on the eastern shore of the North Sea.
Chiefly E. in the south of France, but strong to gale from NW. at Kirkcubright.

WEATHER

Cloudy or overcast in many places, with rain in the west of our Islands, and east in the Shetlands and Hebrides, as well as in many parts of Scandinavia and Denmark.
Fine in the southern parts of France and Germany, and fair in the east of England.
Showers fell yesterday in most parts of the United Kingdom.

SEA

High off the north of Scotland, and rough or rather so in nearly all parts of our coast.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The deep depression in the north seems likely to advance in a southeasterly direction across over North Sea, and the gale now prevailing in Scotland will probably extend to all coasts. Snow is likely in many parts of Great Britain.

FORECASTS

for the 24 hours ending at NOON on 9th FEB^{RY} 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	NW to N ^W gales, squally, some snow.
1	SCOTLAND EAST	
2	ENGLAND N.E.	W ^W to NW ^W or N ^W winds, increasing to a gale; squally, some sleet or snow.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	Same as Nos 0 and 1.
7	ENGLAND N.W.	W ^W to N ^W gales, squally, some rain, followed by snow.
8	ENGLAND S.W.	W ^W to NW ^W or N ^W winds, increasing to a gale; squally, some rain or sleet.
9	IRELAND NORTH	Same as Nos 0 and 1.
10	IRELAND SOUTH	Same as No 8.

WARNINGS

The NORTH CONE was hoisted last evening in all districts excepting 10, where the signals were previously flying.

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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.55	33	29	NNW 4	bc	4	Holyhead ...	30.01	38	35	NNE 4	c	4
Sumburgh Head	29.75	31	30	NNW 1	osp	4	Valencia ...	30.14	50	46	N 4	bc m	4
Stornoway ...	29.88	31	36	W 3	o	3	Scilly ...	29.96	47	46	N 7	c	6
Aberdeen ...	29.88	31	31	NW 5	c g s p	5	Jersey ...	29.77	46	43	NNW 5	c	4
Shields ...	29.89	36	33	N 3	c	4	Dungeness ...	29.71	40	37	N 7	c	5
Ardrossan ...	29.98	35	33	N 2	b	1	London ...	29.81	40	35	N 5	c q	*
Malin Head ...	30.02	40	36	NNW 1	c	3	Yarmouth ...	29.74	38	35	N 4	bc v	4
Mullaghmore ...	30.07	42	38	NNW 4	c	3	Rochefort ...	29.85	49	46	WNW 8	o	3
Belmullet ...	30.10	45	43	W 1	o	*							

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

The reports for yesterday morning showed that pressure was still highest, 30.3 ins. and more, over the Atlantic and Spain, lowest over the Baltic, Belgium, and the southeast of England, and the northern half of the Mediterranean, in each of which districts a well-formed depression was found. The deepest was that over the Baltic, where the readings were as low as 29.0 ins.; in Belgium the lowest value was about 29.5 ins., and over the Mediterranean less than 29.8 ins. The wind was N² (NE. & NW) over the whole of Northwestern and western Europe, and blew strongly over the southern half of the British Isles, and a gale in some parts of the Bay of Biscay, and in the southwest of France; over Central Europe it was moderate from the Wnd, in Russia light from the Snd, and in the Gulf of Bothnia E². The weather was very changeable in our Islands, rainy and equally in the south, showery in the west, and rather showery (sleet and hail) in the southwest and northeast. In France it was dull and unsettled, in Belgium rainy, in Germany, Austria, and southern Russia snow was falling locally, and in Northern Russia the sky was overcast generally. Temperature was very low over Russia, and below the freezing point over the whole of Austria and Eastern Germany, the southern inland French stations and at Madrid. The lowest morning values were -19° F. at Moscow, +2° at Archangel, 5° at Kuopio and Kharkov, 9° at St. Petersburg and Helsingfors, 15° at Hangö, 18° at Haparanda, 19° at Hernösand and Kier; the highest were 57° at Malta, 52° at Brindisi and Genoa, 51° at Palermo, 49° at Scilly and Bilbao, 48° at Langunair, Biarritz, and Valencia and 47° at Llandudno. At Madrid the temperature was 24°, at Berlin 30°, at Biarritz and in London 37°, and at Paris 41°.

Later in the day a new and large depression began to approach the Shetland Islands and the north of Scotland from the NW², and while the wind in that region backed to the Wnd with a rise of temperature, and rain, that in the south lulled to a light breeze with clear weather and frost at the inland 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. (Christiana time).

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

DAILY WEATHER REPORT.

for Saturday, 9th February 1889.

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

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.				
			Dirce.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.		
SCANDINAVIA.																			
Haparanda ..	29.44	-1	SE	0	b	29.49	+ .11	2	2	- 11	SE	0	0	*	16	-2	0.04		
Hernösand ...	29.26	13	NE	2	S	29.83	+ .03	6	5	- 3	ESE	2	S	*	19	0	0.04		
Stockholm ...	29.05	21	SE	2	0	28.91	- .37	24	22	+ 8	ESE	8	m	*	?	14	-		
Wisby ...	28.97	26	E	4	S	28.67	- .55	25	25	+ 2	ESE	4	S	*	30	21	0.43		
Bodö ...	29.28	18	ESE	4	bc	29.40	+ .21	31	?	+ 11	E	4	b	2	?	12	-		
Christiansund...	28.82	29	E	7	0	29.10	+ .37	25	22	- 11	E	3	bc	3	?	22	0.20		
Skudesnaes ...	28.40	32	NNW	6	0	28.95	+ .30	30	24	- 6	NNE	4	0	4	?	27	-		
Christiania Fjord (Fæder)	28.43	30	ESE	9	S	28.84	- .22	23	23	- 8	NNE	8	0	3	32	19	-		
Skagen (The Seaw)	28.40	30	W	3	0	28.65	- .47	28	28	- 2	ENE	6	S	4	32	28	0.08		
Fanö ...													*						
BRITISH ISLANDS.																			
Sumburgh Head																			
Stornoway ...																			
Wick ...																			
Nairn ...	29.07	33	N	9	bc	29.61	+ .60	26	25	- 5	N	5	0	6	34	25	0.11		
Aberdeen...	28.92	29	NW	7	S	29.45	+ .47	24	27	- 3	NW	8	sqp	6	34	26	0.20		
Leith ...	29.14	36	NW	6	S	29.58	+ .44	23	27	- 12	W	2	b	*	41	26	0.10		
Shields ...	29.00	37	WNW	7	S	29.46	+ .36	28	27	- 17	NW	4	bq	6	45	26	0.06		
Spurn Head ...	29.03	37	W	8	b	29.34	+ .03	33	31	- 7	NW	8	b	7	43	31	0.02		
York ...	29.13	38	W	7	b	29.45	+ .21	31	30	- 11	WNW	5	b	*	45	30	-		
Loughborough	29.32	37	WNW	6	C	29.55	+ .05	31	28	- 7	NW	4	b	*	46	31	0.08		
Ardrossan ...	29.31	38	WNW	7	bqps	29.66	+ .44	30	30	- 9	N	5	b	3	44	30	-		
Malin Head ...	29.47	38	WNW	8	b	29.78	+ .45	30	30	- 11	WNW	5	csp	5	41	28	-		
Mullaghmore ...	29.71	40	WNW	9	cqk	29.88	+ .32	34	32	- 11	WNW	6	cphq	5	45	31	0.07		
Belmullet ...	29.83	38	NW	6	oqj	29.97	+ .30	37	32	- 8	WNW	2	b	*	45	35	0.04		
Donaghadee ...	29.48	38	WNW	8	C	29.73	+ .25	33	32	- 12	WNW	8	bc	7	45	31	0.06		
Barrow-in-Furness	29.29	39	W	11	b	29.58	+ .29	32	29	- 14	N	6	bc	*	46	32	0.08		
Liverpool (Bidston)	29.35	38	WNW	9	C	29.62	+ .25	34	32	- 12	NW	7	bc	5	47	33	0.10		
Holyhead ...	29.51	40	WNW	9	bqj	29.70	+ .22	35	32	- 11	WNW	9	chgm	8	47	34	0.06		
Parsonstown ...	29.76	37	NW	2	0	29.92	+ .39	32	30	- 12	NW	2	0	*	49	30	0.01		
Valencia ...	29.90	44	WNW	5	oqj	30.01	+ .24	40	38	- 11	NW	4	cqj	4	51	39	0.05		
Roche's Point...	29.78	42	WNW	6	Cq	29.98	+ .30	38	35	- 11	NW	3	bc	4	49	36	-		
Pembroke ...	29.64	41	NW	6	bc	29.83	+ .17	35	31	- 13	NW	7	bc	4	49	34	-		
Scilly ...	29.71	45	WNW	8	bc	29.91	+ .06	42	37	- 7	WNW	6	oqj	5	51	41	0.01		
Prawle Point ...	29.62	41	NW	4	0	29.82	- .01	34	31	- 10	NW	3	b	3	48	32	0.07		
Jersey ...	29.59	48	NW	5	0	29.79	- .11	39	34	- 6	NW	5	bc	4	49	38	0.10		
Hurst Castle ...	29.50	41	NW	6	bqj	29.69	- .03	33	32	- 11	WNW	5	b	3	48	31	-		
Dungeness ...	29.34	40	NW	6	oqj	29.49	- .21	33	31	- 7	NW	6	b	5	46	33	0.16		
London ...	29.40	39	NW	6	bqj	29.55	- .09	32	31	- 6	WNW	5	bc	*	50	32	0.10		
Oxford ...	29.45	33	NW	4	b	29.62	- .01	30	28	- 8	NW	5	bsqj	*	49	30	0.04		
Cambridge ...	29.30	36	W	4	b	29.52	- .00	32	28	- 4	WNW	4	b	*	47	30	0.07		
Yarmouth ...	29.15	37	WNW	7	bqj	29.31	- .19	32	31	- 3	NW	8	cqj	6	44	30	0.26		
Cuxhaven ...	29.86	32	WNW	6	S	28.55	- .94	33	32	0	NW	6	bc	*	33	31	-		
Berlin ...	28.98	31	SW	6	S	28.77	- .84	30	29	+ 2	W	6	0	*	34	27	0.20		
Wiesbaden ...	*	*	*	*	*	29.14	- .70	33	32	+ 2	W	6	S	*	36	?	0.12		
Munich ...	29.51	29	SW	4	0	29.32	- .55	27	27	+ 8	W	8	S	*	30	19	0.08		
FRANCE & NETHERLANDS.																			
The Helder ...	*	*	*	*	*	29.32	- .45	35	32	+ 2	WNW	8	C	*	40	?	0.28		
Brussels ...	*	*	*	*	*	?	?	36	?	- 4	WNW	9	b	7	46	32	0.20		
Cape Gris Nez...	?	40	WNW	9	0	?	?	36	?	- 4	WNW	9	b	7	46	32	0.20		
Paris ...	29.53	40	SW	7	0	29.58	- .39	35	32	+ 1	NW	5	b	*	41	34	-		
Brest ...	29.81	46	SW	8	r	29.97	- .07	43	41	- 4	NE	8	0	6	52	37	0.20		
Lorient ...	29.67	51	W	7	m	29.91	- .11	42	39	- 6	NW	5	0	4	?	41	0.04		
Rochefort ...	29.88	46	WSW	7	r	29.94	- .19	43	41	+ 3	WNW	8	C	2	48	37	0.16		
Belfort ...	29.75	30	W	4	0	29.54	- .40	32	32	+ 4	W	4	S	*	35	22	0.08		
Lyons ...	29.93	33	SSW	3	C	29.71	- .31	34	31	+ 5	WNW	5	S	*	38	?	-		
Nice ...	29.70	46	SE	1	b	?	?	42	37	+ 3	WSW	8	b	5	54	37	-		
Perpignan ...	29.88	46	NW	8	b	29.69	- .13	53	48	+ 10	NW	4	r	*	51	?	-		
Biarritz ...	30.01	49	WSW	8	r	29.95	- .15	52	49	+ 11	WNW	9	oqj	4	52	?	0.47		
PORTUGAL.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	30.27	51	WNW	4	r	30.24	- .03	51	50	+ 1	NW	3	0	2	55	48	-		

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on

Saturday, 9th February,

1889.

BAROMETER, WIND & 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; → = force 1 to 4;
○ = dead calm.

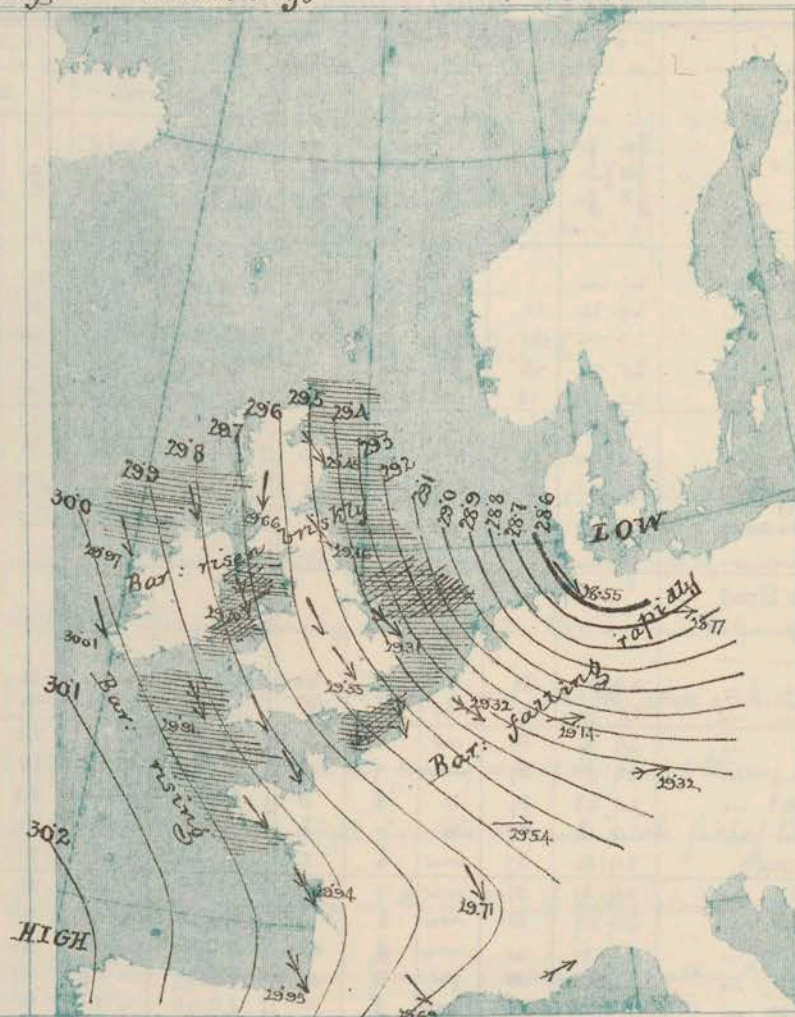
Sea Disturbance — where considerable, is shown thus.

■ = Rough ■ = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 Years 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.718
Stornoway	29.700
Wick	29.737
Nairn	29.747
Aberdeen	29.780
Leith	29.808
Shields	29.847
York	29.884
Loughborough	29.912
Ardrossan	29.805
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.884
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	29.940
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.

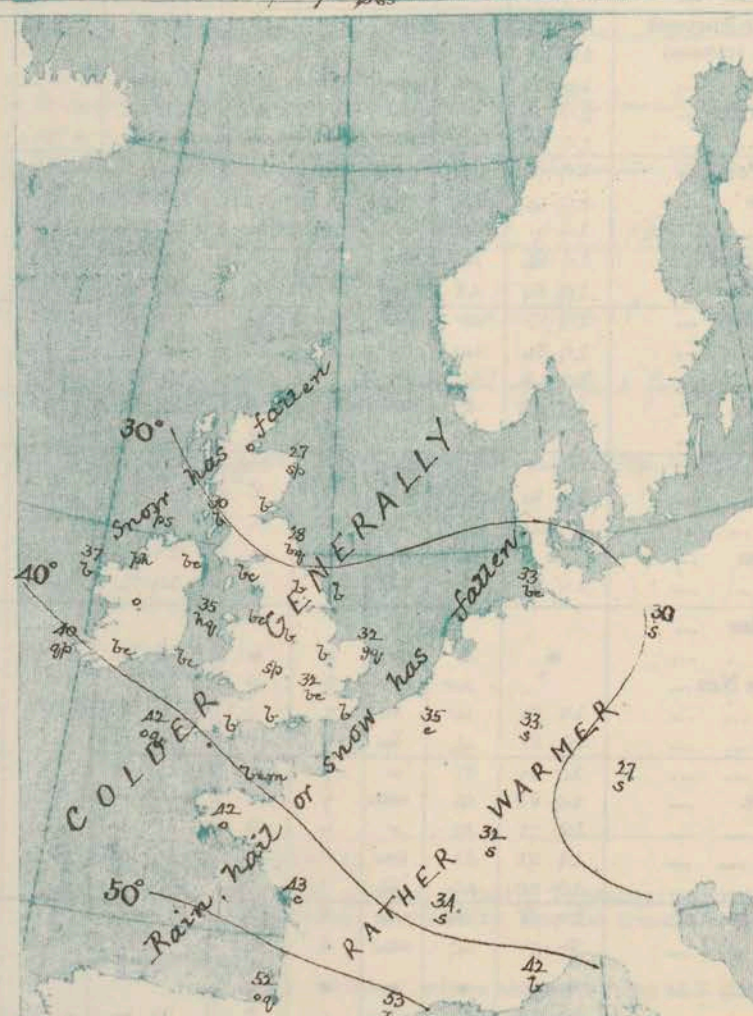
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of February

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
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	23.8	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	39.8	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	38.9	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 in: and upwards, in Portugal.
Lowest, 28.6 in: and less, over North Germany. The report from Scandinavia, Denmark, and the north of Scotland are all wanting.
Gradients very steep over the Netherlands and North Germany, and rather steep elsewhere.
Barometer rising in our Islands and the west of France, but falling elsewhere—rapidly in Germany.

TEMPERATURE

Highest, 53° at Perpignan, 51° at Banitz, 51° at Leobon, 43° at Briat, and 42° at Sicily, Orient, and Ahee.
Lowest, 24° at Kinn, 27° at Aberdeen and Munich, 28° at Leith and Shields, and 30° at Androssow, Malin, Oxford, and Berlin.
Frost occurred last night in nearly all parts of the United Kingdom.

WIND

Strong to a gale from the NWth over the greater part of our Islands and France, and from the Wth in Germany.
Since yesterday morning a severe NWth gale has blown on all but our southwest coast where the wind has not exceeded the force of a fresh gale.

WEATHER

Fine at several of our eastern and southern stations, but hail or snow showers reported in west and north.
Dull in France and Germany, with snow in many places.
Many snow fell yesterday in Scotland and sleet or hail in other parts of our Islands. Thunder was heard in London during the afternoon.

SEA

Very high at Holyhead, and high or rough on all other parts of our coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The deep depression which lay to the northward of our Islands has travelled southeastwards to the south of Denmark.
Shallow secondary disturbances are likely to pass across our Islands and strong squally winds from the Nth or NWth will probably continue in most places with snow showers locally.

FORECASTS

for the 24 hours ending at NOON on 10th FEB^{ry} 1889.

DISTRICTS.

- 1 SCOTLAND NORTH
- 2 SCOTLAND EAST
- 3 ENGLAND N.E.
- 4 ENGLAND EAST
- 5 MIDLAND COUNTIES
- 6 ENGLAND SOUTH

FORECASTS.

NWth to Nth gales, subsiding gradually; squally, some snow showers.

DISTRICTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

FORECASTS.

NWth or Nth strong winds and gales; squally, some snow showers.

WARNINGS

The NORTH CONE is still flying on all our coasts.

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.	Dry.	Wet.	Wind.	Wav.	Sea.		Bar.	Dry.	Wet.	Wind.	Wav.	Sea.
Skudesnaes ...	28.38	33	32	W 6	5	5	Holyhead ...	29.48	42	38	W 8	bcy	7
Sumburgh Head ...	28.71	26	25	N 3	bc	5	Valencia ...	29.84	47	44	W 5	bcy	5
Stornoway ...	29.13	33	33	W 6	5	7	Scilly ...	29.66	50	50	W 6	sm	5
Aberdeen ...	28.88	30	27	W 6	cq	6	Jersey ...	29.69	48	47	W 5	o	4
Shields ...	29.03	39	35	W 7	6	4	Dungeness ...	29.85	46	44	W 7	r	6
Ardrossan ...	29.22	38	36	W 8	bc	5	London ...	29.32	50	47	W 6	org	*
Malin Head ...	29.39	40	37	W 8	bc	7	Yarmouth ...	29.14	41	40	W 8	org	5
Mullaghmore ...	29.65	40	38	W 8	cq	6	Rochefort ...	30.04	44	41	W 7	o	2
Belmullet ...	29.76	41	35	W 6	bc	*							

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

The reports for yesterday morning showed that pressure ranged from between 30.1 ins. and 30.3 ins. over the Spanish Peninsula, and a still higher value over the adjacent parts of the Atlantic, to 28.6 ins. and less, in a large and deep depression lying between the Shetlands and Norway, to 29.2 ins. and less, in a third lying over the northern part of the Mediterranean. The Baltic system was apparently filling up, but both the others were growing deeper. Strong NW and W gales had set in over the northern part of the British Islands, strong and increasing winds in the south, strong SW winds over the Netherlands and Denmark, while E winds were felt over the northern half of Norway. Over France and Central Europe there were light to moderate winds from the W, while over the Mediterranean there was a complete cyclonic circulation, the E and N winds in the south of France and the NW winds over Algeria blowing with the force of a gale, while the W and SE breezes in Sicily and the south of Italy were light to moderate. The weather was becoming very rough and squally in Scotland, with snow in places, it was showery in Ireland, but fine over Central and Southern Europe, dull (with snow in places) in Russia. Temperature (though less low than on Thursday) was still below zero at Moscow, and below 20° F at nearly all the Russian stations and in Sweden and Lapland. It was below the freezing point over Poland, South Germany, the inland parts of the south of France, Central Spain and the north of Scotland, but exceeded 32° in the north of France and over England; whilst it was above 50° on the shore of Western Algeria and off the southwest coast of Ireland. The lowest values were -4° at Moscow, -3° at Vitebsk, 0° at St. Petersburg, +3° at Archangel, 5° at Helsinki, 9° at Helsingfors, 13° at Haparanda and Kuopio, 16° at Stockholm, 19° at Åbo and Malmö, 20° at Riga. The highest were 55° at Oran, 54° at Brindisi, 53° at Nemours and Algiers, 51° at Valencia, 50° at Lisbon, 49° at Lailly and Rocher Point. At Berlin the temperature was 28° at Madrid 29°, at Brussels 33° at Paris 34° and in London 38°.

Later on the depression over the North Sea moved southwards, severe N gales and cold weather spread all over the United Kingdom and Holland, heavy snow fell in the northern part of the Kingdom, hail and rain in the south and thunder was heard in London.

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 10th FEB^{RY} 1883.
 Issued by the Meteorological Office 63 Victoria Street, London. R.H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING,					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dirac.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.62	-12	Z	0	b	29.73	+ .24	-10	-11	-12	N	2	bv	*	3	-13	-	
Hernösand ...	29.49	4	NE	6	s	29.58	+ .25	4	4	-2	NE	4	s	*	14	1	0.08	
Stockholm ...	29.09	17	NE	6	s	29.26	+ .35	15	14	-9	NNE	4	s	*	25	?	0.12	
Wisby ...	28.87	30	NE	6	s	29.08	+ .41	25	23	0	NNE	6	s	*	36	23	0.51	
Bodö ...	29.57	13	E	4	b	29.67	+ .27	11	8	-20	E	2	b	2	31	9	-	
Christiansund...	29.36	20	ESE	2	b	29.47	+ .37	16	14	-9	ESE	2	b	3	25	14	-	
Skudesnaes ...	29.27	28	NNE	1	o	29.42	+ .47	24	23	-6	SE	6	s	4	30	24	-	
Christiania Fjord (Færder) ...	29.26	22	NNE	6	o	29.47	+ .63	16	14	-7	NNE	5	o	2	23	14	-	
Skagen (The Scaw)	29.19	22	NE	4	o	29.36	+ .71	19	19	-9	ENE	3	o	2	28	19	-	
Fanö ...	29.21	24	N	6	o	29.42	+ 1.01	20	20	-10	N	1	c	*	30	19	0.04	
BRITISH ISLANDS.																		
Sumburgh Head	29.57	25	N	6	o	29.45	+ .12	27	27	-1	N	3	o	5	31	23	0.09	
Stornoway ..	29.81	25	N	5	s	29.63	- .09	23	23	-4	N	3	o	3	29	20	0.30	
Wick ...	29.66	26	N	8	o	29.47	- .05	31	31	+4	N	2	c	3	31	23	0.30	
Nairn ...	29.73	26	WNW	4	o	29.58	- .03	23	23	-3	WNW	1	b	1	30	20	0.04	
Aberdeen...	29.65	27	NNW	7	bops	29.53	+ .08	25	23	-2	W	5	bog	4	31	22	0.09	
Leith ...	29.76	31	NNW	1	b	29.62	+ .04	24	24	-4	W	1	b	*	34	22	-	
Shields ...	29.65	29	NW	4	c	29.64	+ .18	23	23	-5	WSW	2	b	4	32	21	-	
Spurn Head ...	29.85	29	NNW	8	b	29.66	+ .32	27	24	-6	NW	5	b	5	35	25	-	
Yerik ...	29.63	30	WNW	4	b	29.66	+ .21	25	25	-6	WNW	1	b	*	33	21	-	
Loughborough	29.71	30	NW	3	b	29.76	+ .21	26	24	-5	W	2	c	*	35	24	-	
Ardrossan ...	29.80	32	N	2	b	29.61	- .05	28	28	-2	ENE	1	om	1	35	26	-	
Malin Head ...	29.88	33	N	4	b	29.62	- .16	29	29	-1	SSE	3	os	3	33	29	-	
Mallaghmore ...	29.94	34	NNE	4	bv	29.61	- .27	31	30	-3	SSE	4	os	3	39	29	0.05	
Belmullet ...	29.99	34	N	2	b	29.46	- .51	31	31	-6	SE	5	os	*	38	30	0.38	
Donaghadee ...	29.86	34	NNE	4	bv	29.73	.00	29	29	-4	SW	3	bv	2	36	29	0.03	
Barrow-in-Furness	29.75	32	NNW	6	b	29.68	+ .10	29	29	-3	NE	3	o	*	35	26	-	
Liverpool (Bidston)	29.77	33	NNW	5	c	29.72	+ .10	30	29	-4	SSW	1	s	2	35	30	0.10	
Holyhead ...	29.83	33	NNW	6	s	29.73	+ .03	33	33	-2	W	3	sgm	3	37	30	0.22	
Parsonstown ...	29.97	33	Z	0	o	29.65	- .27	29	29	-3	SE	1	s	*	37	26	-	
Valencia ...	30.00	39	NNE	1	cm	29.48	- .53	43	42	+3	SE	7	rmv	6	46	36	0.30	
Roche's Point...	29.95	38	NNE	3	c	29.59	- .39	38	38	0	SE	7	r	5	41	30	0.50	
Pembroke ...	29.89	36	NW	5	bv	29.77	- .06	35	32	0	SW	3	rs	2	37	33	-	
Scilly ...	29.92	42	N	5	o	29.72	- .19	42	41	0	SSE	5	rmv	4	43	38	0.11	
Prawle Point ...	29.92	33	NW	3	bv	29.85	+ .03	35	32	+1	WSW	2	ow	2	41	27	-	
Jersey ...	29.83	29	NNW	5	cphs	29.88	+ .09	36	34	-3	Z	0	om	0	44	30	0.03	
Hurst Castle ...	29.76	35	NNW	6	b	29.84	+ .15	32	31	-1	W	2	b	2	44	27	-	
Dungeness ...	29.62	32	NNW	5	bv	29.80	+ .31	25	25	-8	NW	4	b	3	37	21	-	
London ...	29.68	32	NW	4	bv	29.80	+ .25	25	24	-7	W	1	b	*	36	22	-	
Oxford ...	29.49	29	NW	3	b	29.80	+ .18	26	24	-4	WSW	3	c	*	36	23	0.01	
Cambridge ...	29.66	40	NNW	3	bv	29.46	+ .24	24	24	-8	SW	1	b	*	36	20	-	
Yarmouth ...	29.46	30	NW	7	gsg	29.65	+ .34	26	25	-6	NW	4	b	5	24	23	0.05	
Cuxhaven ...	28.91	32	N	7	o	29.41	+ .86	27	26	-6	N	2	b	*	33	25	-	
Berlin ...	28.82	32	NNW	5	o	29.29	+ .52	26	25	-4	NW	5	s	*	33	25	0.16	
Wiesbaden ...	*	*	*	*	*	29.59	+ .45	33	31	0	NW	6	bv	*	36	30	0.28	
Munich ...	29.84	26	W	8	o	29.58	+ .26	23	22	-4	W	8	?	*	32	23	-	
FRANCE & NETHERLANDS.																		
The Helder ...	29.31	36	NNW	4	c	29.52		34	32		NW	5	c	4	37	32	0.43	
Brussels ...	*	*	*	*	*	29.73	+ .41	30	29	-1	W	3	c	*	36	30	0.04	
Cape Gris Nez...	?	33	NNW	8	c	?	?	28	28	-8	NW	7	b	5	36	28	-	
Paris ...	29.69	32	NNW	3	c	29.89	+ .31	24	23	-11	SW	1	b	*	40	24	0.04	
Brest ...	29.98	41	N	7	o	29.92	+ .01	39	39	-4	SW	3	f	3	50	37	-	
Lorient ...	29.91	43	NW	7	o	29.93	+ .02	41	37	-1	SW	3	o	2	50	37	-	
Roche fort ...	29.95	44	NW	7	o	30.05	+ .11	38	36	-5	SSE	4	o	2	48	32	-	
Belfort ...														*				
Lyons ...	29.89	33	NW	5	o	30.02	+ .31	24	?	-10	NW	1	b	*	40	23	-	
Nice ...	29.50	39	NW	9	b	29.66	+ .36	35	26	-7	NW	9	b	1	50	32	-	
Perpignan ...	29.82	44	NW	5	r	29.93	+ .24	39	38	-14	NW	3	o	*	55	37	0.24	
Biarritz ...	30.01	50	NW	8	o	30.01	+ .06	47	45	-5	SE	1	f	3	32	48	0.55	
PORTUGAL.																		
Corunna ...	*	*	*	*	*	30.19	- .04	55	55	+4	WSW	5	r	5	55	48	-	
Lisbon ...	30.26	52	NNW	5	o	30.31	+ .07	51	51	0	WNW	1	c	2	59	50	-	

WEATHER CHARTS

for 8 a.m. on

Sunday, 10th February

1889.

BAROMETER, WIND & 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.

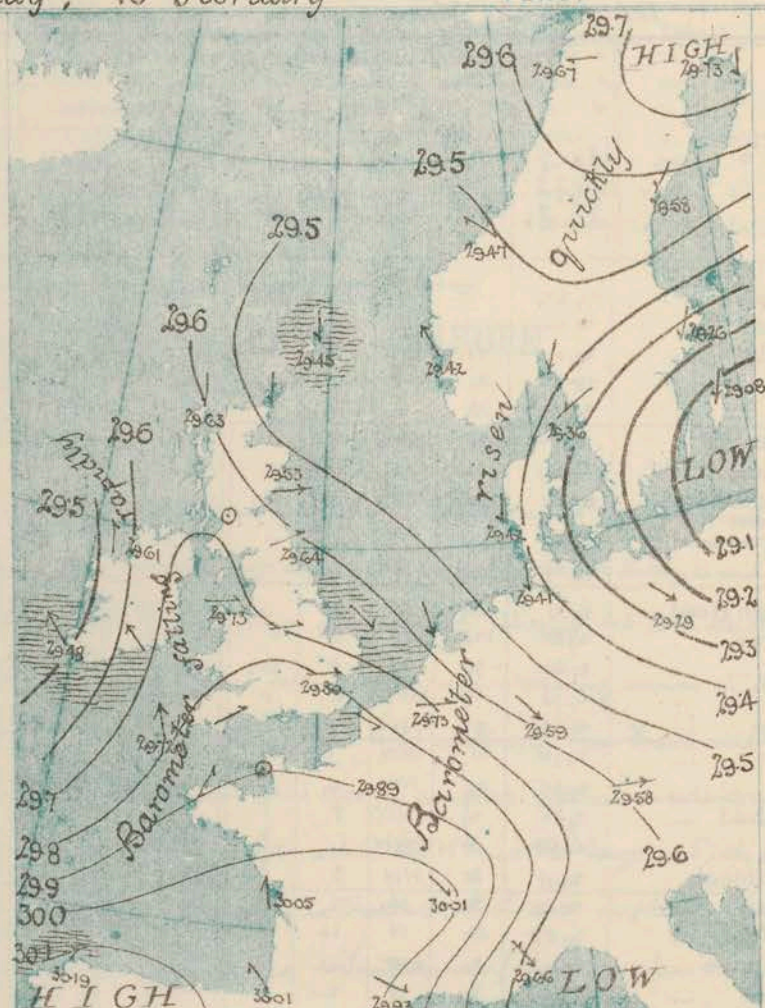
Sea Disturbance — where considerable, is shown thus.

■ = Rough ■ = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 Years 1871—1885.

STATIONS.	MEAN READINGS.
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	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.884
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	29.940
Oxford	29.988
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.

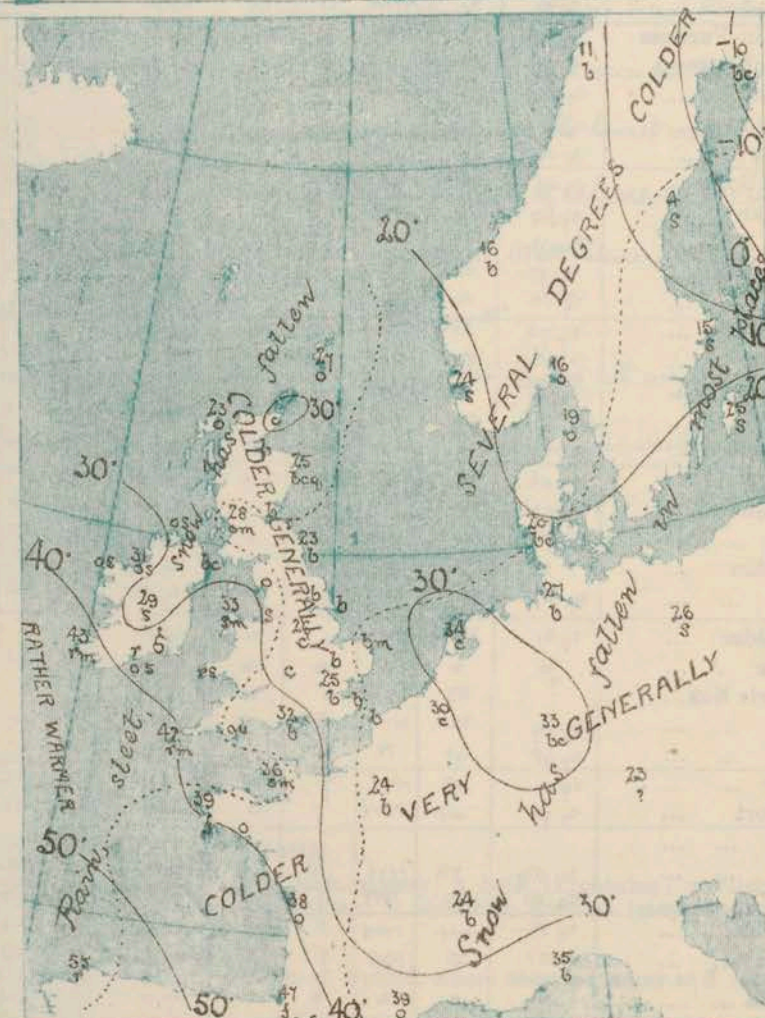
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of February

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
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	38.9	38.3	37.3	1.60
Yarmouth	48.5	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 upwards, in the east of Portugal.
Lowest, 29.1 ins. and less, over the Baltic, 29.5 ins. and less, in the west of Ireland.
Falling moderate generally, but increasing over Ireland.
Barometer falling rapidly in Ireland, and less decidedly on our western and northern coast generally, but rising elsewhere.

TEMPERATURE

Highest, 55° at Coimbra, 51° at Lisbon, 47° at Biarritz, 43° at Valencia and 42° at Seville, and 41° at Lorient.
Lowest, -10° at Haparanda, +4° at Helsingfors, 11° at Rode, 15° at Stockholm, 16° at Christiansund and Hauden and 19° at Skagen.
Sharp frost occurred over Great Britain last night; at Shields, York, and Dungeness the thermometer fell to 21°, and at Romsdal, near Cambridge, to 20°.

WIND

SE in Ireland, with moderate gales at Valencia and Rochepoint; light SW in the southwest of England and the northwest of France.
Light or moderate from the NW in the north and east of our Islands, strong to gale from the same quarter in the south of France.
Moderate NE in Sweden, SE in the west of Norway.

WEATHER

Fine over the eastern parts of Great Britain, as well as in the Netherlands and the east and south of France. A solar halo is however reported in London.
Cloudy or overcast elsewhere, with rain on our extreme southwestern coasts, and snow in many parts of Ireland and Wales, as well as in Sweden.
Snow showers fell yesterday, in many parts of Great Britain.

SEA

Rough at Valencia and rather rough on several of the more exposed parts of our coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay over Denmark yesterday has travelled away from our area, but a new and apparently deep disturbance is advancing rapidly towards our western coasts. Snow is extending over our Islands from the NW.

FORECASTS

for the 24 hours ending at NOON on 12TH FEB: 1889.

DISTRICTS.

- † 0 SCOTLAND NORTH
- † 1 SCOTLAND EAST
- † 2 ENGLAND N.E.
- † 3 ENGLAND EAST
- † 4 MIDLAND COUNTIES
- † 5 ENGLAND SOUTH

FORECASTS.

NONE ISSUED.

DISTRICTS.

- † 6 SCOTLAND WEST
- † 7 ENGLAND N.W.
- † 8 ENGLAND S.W.
- † 9 IRELAND NORTH
- † 10 IRELAND SOUTH

FORECASTS.

NONE ISSUED.

WARNINGS

The NORTH CONE has been hoisted this morning in districts 0 to 2, with 6, 7 and 9, and the SOUTH CONE elsewhere.

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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.05	27	23	Z 0	c	3	Holyhead ...	29.79	31	31	N 6	sg	7
Sumburgh Head ...	29.46	25	25	N 6	osp	7	Valencia ...	29.99	44	41	N 3	cp	3
Stornoway ...	29.79	25	25	N 5	0	4	Seilly ...	29.92	43	38	NNW 6	c	5
Aberdeen ...	29.58	31	28	NN 4	bgsp	7	Jersey ...	29.82	38	33	NNW 5	c	4
Shields ...	29.56	31	29	NNW 4	b	6	Dungeness ...	29.54	35	31	NW 6	c	6
Ardrossan ...	29.75	35	34	N 4	b	3	London ...	29.61	36	33	NW 6	cg	*
Malin Head ...	29.85	33	33	N 5	bc	5	Yarmouth ...	29.38	33	32	NW 8	cgsp	6
Mullaghmore ...	29.92	35	33	NNW 5	bcsp	3	Rocheport ...	29.76	45	40	NW 8	o	3
Belmullet ...	29.98	38	35	NE 5	b	*							

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

The report for yesterday morning showed that the deep depression which lay between the Shetlands and the Norwegian coast on the previous day, had moved southeastward to Denmark. The lowest readings, 28.4 ins. and less, were found over the central parts of that country, but another minimum, with readings below 28.5 ins. was apparently lying over the extreme south of Sweden. The highest pressures, 30.2 ins. and upwards, were found to the southwestward of the Iberian Peninsula, but a well defined depression with readings below 29.3 ins. was lying west of Sicily. The wind was strong to a gale from the NWnd or NWnd over our Islands and France and from the Wnd in Western Germany. Over Austria, North Germany and the Baltic, however, it drew into the Snd, while over Scandinavia and Northern Russia it was Est. At many of the Mediterranean stations strong gales from between NW and W were reported. Snow was falling over Sweden, Denmark, the Baltic, Germany and the east of France, as well as in the northern parts of the United Kingdom. Over the southern parts of our Islands, however, the weather was fine. Temperatures had fallen several degrees over the United Kingdom and also in the south of Russia, but risen a little in most other localities; readings ranged from slightly above 50° at some of the Mediterranean and the Spanish coast stations to 30° or a little below over Central and Northern Russia; the highest individual reading was 53° at Perpignan, 52° at Biarritz, Oporto, Langunaire and Algiers, 51° at Corunna, Lisbon, San Fernando and Barcelona, and 49° at Belm and ... the lowest was -3° at Archangel, -2° at Ulesbog, 0° zero at Moscow, +2° at Haparanda, 6° at Helsingfors, 9° at St. Petersburg, 10° at Helsinki, 13° at Kharkov, 15° at Harbin and Kien, 18° at Nicolaieff, and 19° at Hermannstadt.

In the course of the day the depressions over Denmark and its neighbourhood continued to move away in an easterly direction and the wind over our Islands gradually moderated. Towards night the sky cleared over Great Britain, and a very sharp frost was experienced.

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, 11th February 1889.*
Issued by the Meteorological Office 63 Victoria Street, London. R.H. SCOTT, Secretary.

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

STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force, (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dr.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force, (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.84	10	2	7	b	29.80	+ .07	11	12	- 1	N	2	bc	*	-4	-15	-	
Hernösand ...	29.74	3	NE	2	c	29.77	+ .19	-1	-1	- 5	NE	2	b	*	9	?	-	
Stockholm ...	29.14	13	NE	6	c	29.44	+ .18	11	10	- 4	N	6	s	*	19	12	0.02	
Wisby ...	29.26	26	N	6	bc	29.31	+ .23	23	22	- 2	NE	4	s	*	34	19	0.20	
Bodö ...	29.80	12	E	4	b	29.79	+ .12	10	9	- 1	E	4	b	2	14	7	-	
Christiansund...	29.66	18	ESE	3	b	29.68	+ .21	17	15	+ 1	S	4	b	3	21	14	-	
Skudesnaes ...	29.48	26	ESE	6	c	29.63	+ .21	22	20	- 2	2	0	0	3	27	21	-	
Christiania Fjord (Færdar)	29.53	17	NE	5	b	29.60	+ .13	13	12	- 3	NNE	5	bc	2	18	9	-	
Skagen (The Scaw)	29.52	19	NE	3	0	29.53	+ .17	15	15	- 4	ENE	4	0	3	25	?	-	
Fanö ...	29.43	15	ENE	4	b	29.48	+ .06	15	14	- 5	NE	4	b	*	23	14	-	
BRITISH ISLANDS.																		
Sumburgh Head	29.42	29	ENE	1	csp	29.63	+ .18	30	30	+ 3	NE	4	s	4	30	24	0.18	
Stornoway ..	29.45	23	N	3	c	29.73	+ .10	29	29	+ 6	N	6	s	5	33	20	0.53	
Wick ...	29.40	31	NNE	2	c	29.62	+ .15	32	32	+ 1	N	6	cu	4	34	27	0.04	
Nairn ...	29.41	28	2	0	c	29.64	+ .06	29	28	+ 6	WNW	2	bc	2	30	20	-	
Aberdeen...	29.38	27	WNW	3	bc	29.59	+ .06	27	27	+ 2	WNW	2	bcsp	4	31	24	0.15	
Leith ...	29.36	27	W	1	m	29.60	- .02	31	30	+ 7	NW	1	bm	*	32	22	-	
Shields ...	29.38	30	2	0	m	29.49	- .15	27	27	+ 4	NW	2	c	3	31	21	-	
Spurn Head ...	29.39	29	SE	3	s	29.42	- .24	30	30	+ 3	N	3	c	3	32	25	0.08	
York ...	29.38	28	SSW	1	s	29.49	- .17	27	27	+ 2	N	1	bc	*	31	24	0.14	
Loughborough	29.36	29	SE	1	s	29.50	- .26	27	27	+ 1	NW	2	s	*	31	26	0.53	
GERMANY.																		
Ardrossan ...	29.36	30	NE	2	om	29.67	+ .06	32	32	+ 4	N	2	b	1	32	26	-	
Malin Head ...	29.33	31	E	5	OS	29.76	+ .14	34	33	+ 5	N	5	bsh	4	35	28	-	
Mullaghmore ...	29.22	31	NE	6	s	29.75	+ .14	36	33	+ 5	N	5	c	4	36	29	0.21	
Belmullet ...	29.18	37	NE	2	0	29.84	+ .38	39	37	+ 8	NNE	5	0	*	42	30	0.23	
Donaghadee ...	29.31	32	E	5	s	29.66	- .07	35	35	+ 6	NE	4	b	3	35	29	0.14	
FRANCE & NETHERLANDS.																		
Barrow-in-Furness	29.32	28	NE	4	s	29.55	- .13	27	27	- 2	N	1	0	*	31	24	0.28	
Liverpool (Bidston)	29.28	29	ESE	4	s	29.57	- .15	24	23	- 6	NE	2	c	2	31	22	0.44	
Holyhead ...	29.22	31	NE	3	sgm	29.60	- .13	35	35	+ 2	NNE	5	bc	5	36	29	0.20	
Parsonstown ...	29.21	40	WNW	3	0	29.77	+ .12	23	22	- 6	2	0	b	*	41	22	0.24	
Valencia ...	29.48	43	WNW	7	cqsp	29.81	+ .33	36	35	- 7	ENE	3	b	3	50	35	0.27	
Roche's Point...	29.37	44	NW	6	bcq	29.74	+ .15	32	30	- 6	N	4	b	4	49	31	0.30	
Pembroke ...	29.23	45	W	8	c	29.60	- .17	34	31	- 1	NE	4	bc	3	46	29	0.30	
Scilly ...	29.48	48	WNW	8	bc	29.62	- .10	42	37	0	N	6	0	6	51	40	0.38	
Prawle Point ...	29.34	43	WNW	6	0	29.54	- .31	32	30	- 3	WNW	3	bc	4	47	31	0.22	
Jersey ...	29.39	49	W	6	0	29.45	- .43	40	37	+ 4	NW	6	cqm	5	49	32	0.40	
Hurst Castle ...	29.23	38	SE	4	r	29.41	- .43	33	32	+ 1	NNE	5	c	4	42	31	0.47	
Dungeness ...	29.43	33	S	5	s	29.21	- .59	33	33	+ 8	E	6	s	5	36	24	0.45	
London ...	29.34	30	SSE	2	OS	29.39	- .41	31	30	+ 6	NNE	4	0	*	33	25	0.51	
Oxford ...	29.21	30	E	1	s	29.47	- .33	29	28	+ 3	ENE	3	s	*	32	25	0.44	
Cambridge ...	29.36	30	2	0	s	29.46	- .30	30	30	+ 6	N	1	0	*	34	23	?	
NETHERLANDS.																		
Yarmouth ...	29.46	29	SW	2	osp	29.48	- .17	31	31	+ 5	N	4	s	5	32	24	0.07	
Cuxhaven ...	29.45	27	SE	3	0	29.39	- .02	25	24	- 2	SE	5	bc	*	27	23	-	
Berlin ...	29.50	22	NW	1	b	29.39	+ .10	24	24	- 2	S	1	s	*	30	18	0.04	
Wiesbaden ...	*	*	*	*	*	29.20	- .39	26	25	- 7	E	2	s	*	34	25	0.32	
Munich ...	29.70	24	W	4	c	29.33	- .25	35	34	+ 12	W	7	c	*	36	19	0.12	
FRANCE.																		
The Helder ...	29.43	32	SSW	1	c	29.35	- .17	26	26	- 8	S	1	c	1	34	?	0.04	
Brussels ...	*	*	*	*	*	29.29	- .44	25	25	- 5	E	3	0	*	33	25	?	
Cape Gris Nez...	29.58	30	S	4	s	29.35	- .54	37	35	+ 13	WSW	5	b	*	?	?	0.16	
Paris ...	29.66	50	NW	11	0	29.63	- .35	44	41	+ 5	NW	11	0	7	50	37	0.08	
Brest ...	29.61	50	NW	9	0	29.57	- .36	47	43	+ 6	W	9	c	7	50	37	0.24	
Lorient ...	29.73	49	WSW	8	r	29.77	- .28	46	46	+ 8	W	9	c	4	50	?	0.20	
Rochefort ...	29.66	33	W	3	0	29.47	- .38	38	37	- 1	W	1	0	*	40	20	0.28	
Belfort ...	29.91	30	SE	3	0	29.71	- .09	34	32	- 2	SE	1	0	*	36	27	-	
Lyons ...	29.79	40	SW	3	b	29.57	- .09	49	43	+ 14	SW	7	b	5	48	32	-	
Nice ...	29.95	44	NW	3	0	29.84	- .09	51	48	+ 12	NW	5	bc	*	51	40	0.04	
Perpignan ...	29.95	44	NW	3	0	29.84	- .09	51	48	+ 12	NW	5	bc	*	51	40	0.04	
Biarritz ...	29.95	44	NW	3	0	29.84	- .09	51	48	+ 12	NW	5	bc	*	51	40	0.04	
FRANCE & NETHERLANDS.																		
Corunna ...	*	*	*	*	*	30.27	- .04	52	50	+ 1	WNW	3	0	2	57	50	-	
Lisbon ...	30.31	53	W	3	0	30.27	- .04	52	50	+ 1	WNW	3	0	2	57	50	-	

For Explanation of Columns, see p. 4. Erratum, - The amount of Rainfall in London on the 8th Feb. *Received too late for insertion in Charts on 2.*
 should have been 0.02.

WEATHER CHARTS

for 8 a.m. on Monday, 11th February, 1883.

BAROMETER, WIND & 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.

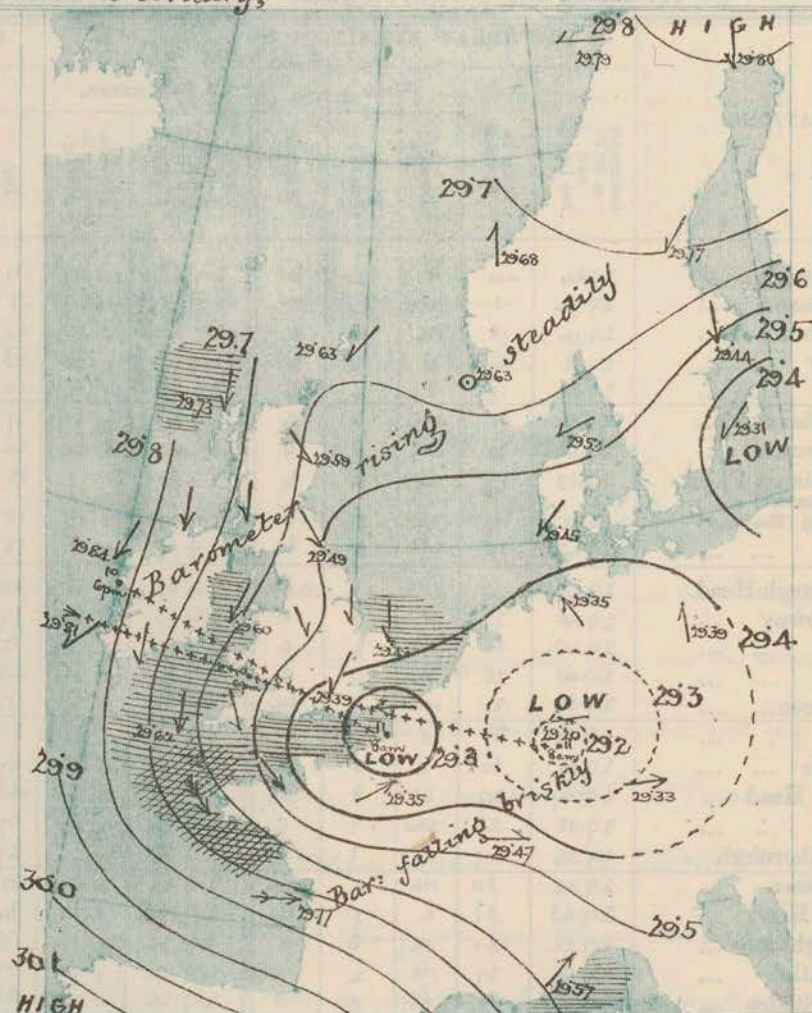
Sea Disturbance — where considerable is shown thus.

■ = Rough ■ = High.

MEAN HEIGHT of the BAROMETER

at 6 a.m. for the month of February
During the 15 Years 1871—1885.

STATIONS.	MEAN READINGS.
	in.
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	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.884
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.

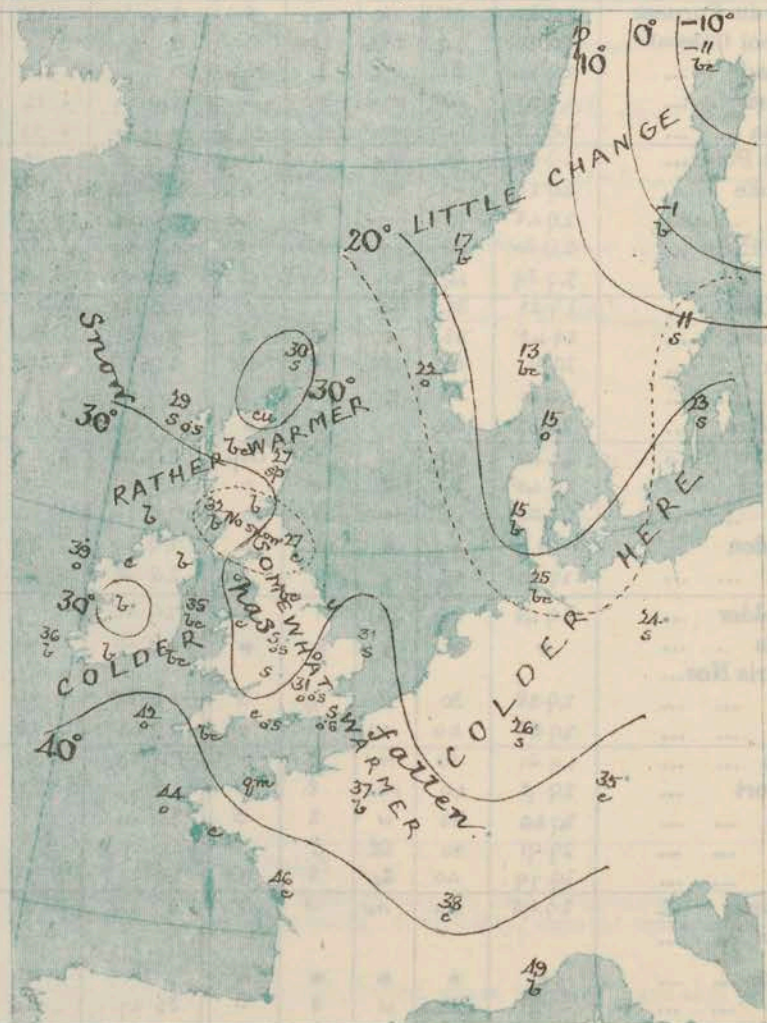
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of February.

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
Sumburgh Head	42.6	34.7	38.7	37.7	8.36
Stornoway	43.5	34.7	39.3	38.2	8.97
Wick	43.4	33.5	38.4	37.0	8.02
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	1.66
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	38.7	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	46.3	36.9	39.9	38.3	1.86
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	2.20
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 1868—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.00 in: to 30.25 in: over Spain, 29.8 in: and more off the west of Ireland and also over Lapland.
 Lowest, 29.2 in: and less, in a complex depression lying over Northern Germany, the Netherlands and Belgium, 29.3 in: and less over the Baltic.
 Gradients rather steep over the Channel and Bay of Biscay, moderate to slight elsewhere.
 Barometer falling over Germany and the east and south of France, rising in our Islands, - most in the west.

TEMPERATURE

Highest, 52° at Lisbon, 49° at Nice, 47° at Genoa, 44° at Paris, and 42° at Seville.
 Lowest, -11°F. at Haparanda, -1° at Helsingfors, 10° at Riga, 11° at Stockholm, 23° at Rangoon, 24° at Berlin and Liverpool, 27° at Yokohama, 28° in London.
 The thermometer did not rise above 31° at several of the inland stations yesterday.

WIND

Light to strong from the N.W. in our Islands, with local variations to NW. on our northeast coasts.
 Strong gale from W. and NW. over north and west of France - strong from SW. and W. in the south of France and South Germany.
 Moderate E. on the Danish coast, strong E. in the Straits of Dover.
 N. gales were felt yesterday on all our southwest coasts, but have now subsided.

WEATHER

Fine and light in Ireland and north of Scandinavia, dull elsewhere, with snow in many places.
 A heavy fall of snow is reported from nearly all parts of Ireland and England, as well as over France, Germany and the Netherlands, but none worth mentioning on our NE. coast.
 In London the snow lay to the depth of 6 ins. at 8 am, and yielded half an inch of water.

SEA

High on the French coast, rough at Seville, rather rough in the Channel, moderate elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the depressions in the southeast pass off it is probable that quiet but very cold weather will prevail over the southern half of the Kingdom but in the north the appearance is still very unsettled and snowlike.

FORECASTS

for the 24 hours ending at NOON on 12TH FEB: 1889.

DISTRICTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

FORECASTS.

N^W winds, increasing in force; squally, snow showers. Very cold.
 N^W winds, varying in force; some snow showers. Very cold.

DISTRICTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

FORECASTS.

N^W winds, moderate; very cold, fair generally.

WARNINGS

The NORTH CONE was hoisted yesterday in districts 0 to 2, with 6, 7, and 9, and the SOUTH CONE seen there; the latter 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.	Dry.	Wet.	Wind.	Woa.	Sea.		Bar.	Dry.	Wet.	Wind.	Woa.	Sea.
Skudesnaea ...	29.45	27	24	ESE 4	bc	3	Holyhead ...	29.41	30	30	ESE 4	sgm	3
Sumburgh Head ...							Valencia ...						
Stornoway ...	29.47	30	30	N 3	c	3	Scilly ...						
Aberdeen ...							Jersey ...	29.60	35	35	ESE 5	ors	4
Shields ...							Dungeness ...	29.63	35	34	WSE 4	o	3
Ardrossan ...							London ...						*
Malin Head ...	29.38	28	28	SE 3	o	3	Yarmouth ...						
Mullaghmore ...							Rocheport ...	29.95	42	40	SSW 7	r	2
Belmullet ...	29.18	39	39	W 4	c	*							

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

The reports for yesterday morning showed that the deep depression which lay over Denmark on the previous day had reached the Baltic Provinces and western Russia, where it appeared to be filling up. A new and rapid fall of the barometer had, however, set in on the west coasts of our Islands, and another disturbance was evidently approaching Ireland. The highest pressures (30.5 inches, and upwards) were found in an anticyclone lying to the south of the Iberian Peninsula. The wind was moderate from the NW over Scandinavia and northern Russia, and from the NW over the North Sea, the Netherlands and N. Germany, but in S. Germany it was strong from the SE, while over the Central and Southern parts of Russia it was light from SE or S. In Ireland increasing SE winds were reported, while in the S of France there was a moderate to strong gale from the NW. The weather was fine in the N of Scandinavia, the E parts of Great Britain, and western Germany, as well as in the south of France and N of Italy, but dull elsewhere with snow in Ireland and Wales, and also in the northern parts of Germany and Austria. Temperature had risen a little at some of the Russian and Austrian stations, but fallen elsewhere; readings ranged from a little above 50° over Portugal, western Spain, Algeria and S. Italy, to several degrees below zero over the northern parts of Sweden and Russia. The highest individual readings were 57° at Nemours, 55° at Corunna and Algiers, 54° at La Caille, 53° at Cagliari and Palermo, 52° at Aron and Brindisi, and 51° at Lisbon; the lowest were -10° at Archangel and Khabarovsk -5° at Kuopio -3° at Uleaborg, +3° at Helsingfors, 14° at Helsingfors, 10° at St. Petersburg, 11° at Bodö, 14° at Khar'kov, 15° at Stockholm, and 16° at Moscow and Tander.

In the course of the day the baric fall in the west of our Islands became general and two small depressions advanced over England and Ireland. Heavy snowstorms were experienced in all parts of these countries, and in the rear of the disturbance a fresh to strong gale from west or northwest was reported on our southern and south-western coasts.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD.

FROM THE 3RD TO THE 9TH FEBRUARY 1889.

The weather of the past week has been very rough, unsettled and wintry, with gales in all parts of Western Europe, and snow in many parts of Great Britain.

Barometric pressure was at first highest to the westward of our Islands, but after Monday the 4th the highest readings were found in a large area the central position of which lay to the westward of Portugal. Four depressions of considerable importance have appeared over our area:-

The first, a large and very deep system, which lay to the north-eastward of Scotland at the close of the previous week, and which then appeared to be travelling away eastwards, altered its course and moved southwards down the North Sea on the 3rd Feb. Its progress was attended by severe NW & N. gales on our W and N coasts and fresh or strong gales in most other districts, with snow, hail or sleet in all parts of the Kingdom. On the 4th the disturbance passed away to France, where it rapidly filled up.

The second, a complex system, having two minima, advanced from the NW over Scandinavia on the 5th and 6th, and subsequently, travelled away to the Baltic & W. Russia. A very serious increase of wind took place on our coasts, but fresh NW gales were experienced in the N and NE of Scotland, and strong winds from the same quarter in most other places, with showers of sleet or hail.

The third, a well defined but not very deep disturbance appeared off the north of Ireland on the evening of the 6th, and afterwards moved SE with great rapidity, its centre reaching Belgium by 3 a.m. on the 7th. Later in the day it filled up quickly. Flight gales from between NW and NE occurred on all our more S. coasts, and heavy rain fell at some of the English stations.

The fourth a depression of great size and depth with minimum readings below 29.4 was appeared off the N of Scotland on the night of the 7th, and afterwards travelled steadily in a SE direction, its centre reaching Ireland by the morning of the 9th. During its progress severe NW to N. gales were again experienced in many parts of the United Kingdom with heavy falls of snow in Scotland and less decided falls over England and Ireland. At the close of the week the disturbance was passing away over the Baltic and Russia, and some improvement in the weather was reported over our islands.

Temperature fluctuated considerably from time to time, but was upon the whole below the average for the time of year. Frost has been experienced nightly in some parts of Great Britain, and on Saturday 9th the maximum readings were below 32° at most of our N. 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 Tuesday, 12th February 1889.
Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force, (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force, (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ..	29.78	-14	N	2	6	29.66	-1.14	-26	-27	-15	N	0	6	*	-8	1	-		
Hernösand ...	29.81	8	N	0	6	29.88	+1.11	-9	-9	-8	N	0	6	*	12	1	-		
Stockholm ...	29.57	14	N	4	0	29.75	+1.31	13	12	+2	N	4	S	*	14	10	0.04		
Wisby ...	29.49	22	N	6	6	29.68	+1.37	21	20	-2	NNE	4	S	*	27	18	0.16		
Bodö ...	29.53	15	E	4	0	29.57	-1.22	23	21	+13	SSE	4	0	2	?	?	-		
Christiansund...	29.86	19	ESE	1	6	29.88	+1.20	22	21	+5	SEW	3	6	4	23	?	-		
Skudesnaes ...	29.83	19	20	0	0	29.99	+1.36	21	19	-1	ESE	1	6	2	27	16	-		
Christiania Fjord (Farder)	29.75	19	NNE	5	6	29.92	+1.32	16	15	+3	NNE	4	6	1	19	12	-		
Skagen (The Seaw)	29.73	16	NE	4	0	29.87	+1.34	17	14	+2	NE	8	6c	2	18	14	-		
Fanö ...	29.75	11	NW	4	6	29.93	+1.45	10	10	-5	NW	2	6	*	18	9	-		
BRITISH ISLANDS.																			
Sumburgh Head	29.87	30	N	3	ops	30.03	+1.40	33	33	+3	N	2	0	4	33	26	0.03		
Stornoway ..	30.02	31	N	4	S	30.12	+1.39	34	34	+5	NW	3	0	3	34	26	0.26		
Wick ...	29.94	31	N	2	6	30.10	+1.48	27	27	-5	NW	1	0	1	35	23	0.15		
Nairn ...	29.94	30	NW	3	6c	30.15	+1.51	29	29	0	NW	1	0	1	35	25	0.01		
Aberdeen...	29.92	30	NW	2	csp	30.15	+1.56	29	28	+2	NW	2	6c	4	35	27	0.26		
Leith ...	29.91	31	NW	1	0	30.20	+1.60	30	30	-1	W	1	6m	*	39	27	0.02		
Shields ...	29.80	34	ESE	4	6csp	30.12	+1.63	31	31	+4	NW	3	S	4	36	25	0.22		
Spurn Head ...	29.73	32	NW	1	0	30.03	+1.61	32	31	+2	NW	5	csp	4	35	27	0.19		
York ...	29.76	30	NW	1	6c	30.08	+1.59	29	29	+2	NW	2	S	*	36	22	0.07		
Loughborough	29.79	29	NW	2	6	30.14	+1.64	24	23	-3	NW	2	6	*	38	21	-		
ARDROSSAN	29.94	34	N	2	6	30.23	+1.56	34	33	+2	NW	2	6	1	38	30	-		
Malin Head ...	30.01	38	N	5	csp	30.28	+1.52	38	36	+4	NW	4	0	3	40	34	0.02		
Mullaghmore ...	30.08	38	NW	6	csp	30.36	+1.61	34	33	-2	NW	2	6	3	39	32	0.02		
Belmullet ...	30.16	37	NNE	5	ops	30.40	+1.56	35	34	+4	NW	1	6	*	41	34	0.40		
Donaghadee ...	29.96	37	NNE	5	6c	30.27	+1.61	38	35	+3	NNE	5	6	3	38	34	0.02		
GERMANY.																			
Barrow-in-Furness	29.80	35	NW	4	0	30.18	+1.63	31	31	+4	N	1	6	*	36	26	-		
Liverpool (Bidston)	29.83	34	NW	4	6c	30.21	+1.64	32	31	+8	NW	2	6	4	35	24	-		
Holyhead ...	29.89	38	N	5	0	30.24	+1.64	38	35	+3	NNE	5	6	5	39	35	0.07		
Parsonstown ...	30.07	38	NW	1	6	30.38	+1.61	25	24	+2	N	0	6	*	38	22	-		
Valencia ...	30.16	42	NW	5	csp	30.44	+1.63	36	35	0	N	1	6c	2	44	35	0.03		
FRANCE & NETHERLANDS.																			
Roche's Point...	30.03	39	N	5	6	30.37	+1.63	35	33	+3	N	4	6	4	42	32	-		
Pembroke ...	29.91	38	N	4	3	30.26	+1.66	34	33	0	N	3	6csp	4	37	31	-		
Scilly ...	29.90	41	N	6	0	30.29	+1.67	39	38	-3	NNE	4	csp	4	42	35	0.08		
Prawle Point ...	29.86	32	N	2	6	30.24	+1.70	32	31	0	N	4	6	3	40	28	-		
Jersey ...	29.76	36	NW	4	6csp	30.14	+1.69	36	32	-4	N	3	6m	3	42	33	0.02		
HURST CASTLE	29.79	32	N	4	m	30.18	+1.77	25	25	-8	NNE	3	m	2	38	24	0.01		
Dungeness ...	29.66	31	N	4	0	30.05	+1.84	20	20	-18	N	3	6	2	34	21	-		
London ...	29.76	31	N	3	6	30.11	+1.72	22	22	-9	NW	1	csp	*	34	21	-		
Oxford ...	29.86	26	N	3	6	30.16	+1.69	24	23	-5	NW	3	6m	*	33	20	0.05		
Cambridge ...	29.76	29	N	0	0	30.10	+1.64	25	25	-5	N	1	6c	*	33	18	-		
Yarmouth ...	29.68	33	NE	5	csp	30.01	+1.53	30	30	-1	NE	4	csp	5	35	22	0.44		
Cuxhaven ...	29.59	23	ESE	3	0	29.91	+1.52	21	21	-4	NNE	4	0	*	?	19	-		
Berlin ...	29.56	22	NNE	2	0	29.81	+1.42	17	17	-7	NW	2	S	*	27	16	0.04		
Wiesbaden ...	*	*	*	*	*	29.94	+1.74	17	15	-9	N	1	6	*	30	16	0.05		
Munich ...	29.37	35	SW	3	0	29.82	+1.49	20	19	-15	NW	3	S	*	39	19	0.04		
PORTUGAL.																			
The Helder ...	29.73	28	NE	3	0	29.96	+1.61	23	22	-3	SE	1	S	1	32	23	0.12		
BRUSSELS	*	*	*	*	*	?	?	31	29	+3	N	4	6c	4	34	?	-		
Cape Gris Nez...	?	34	NNE	7	0	?	?	23	23	-14	N	1	m	*	?	22	-		
PARIS	29.67	30	NW	4	0	30.03	+1.68	23	23	-14	N	1	m	*	?	22	-		
Brest ...	29.58	43	N	9	0	30.19	+1.56	39	37	-5	N	7	6c	5	48	34	0.12		
Lorient ...	29.76	40	N	8	0	30.15	+1.58	34	31	-13	NNE	5	6c	4	48	30	0.04		
Rochefort ...	29.76	42	NNE	3	0	30.09	+1.52	33	32	-13	N	7	6	2	50	28	0.12		
Belfort ...	29.52	29	W	3	0	29.89	+1.42	22	22	-16	W	1	0	*	40	16	-		
LYONS	29.67	41	WSW	4	0	29.86	+1.15	28	38	-6	N	5	0	*	50	28	0.04		
Nice ...	29.62	48	SW	5	6	29.52	-0.05	39	34	-10	SW	3	0	3	54	37	-		
PERPIGNAN	29.80	48	NW	4	6	29.69	-1.15	40	35	-11	NW	7	0	*	60	38	0.08		
Biarritz ...	29.78	46	W	9	?	29.98	+1.04	34	32	-19	N	11	0	7	54	32	0.43		
CORUNNA	*	*	*	*	*	30.35	+1.24	44	42	-8	NNE	9	S	8	54	37	0.16		
Lisbon ...	30.26	52	NW	5	0	30.33	+1.06	44	39	-8	N	5	6	?	57	48	-		

WEATHER CHARTS

for 8 a.m. on *Tuesday, 12th February,*

1883.

BAROMETER, WIND & 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 —
 — force above 10; — forces 8 to 10;
 — forces 5 to 7; — forces 1 to 4;
 ○ = dead calm.

Sea Disturbance — where considerable, is shown thus.

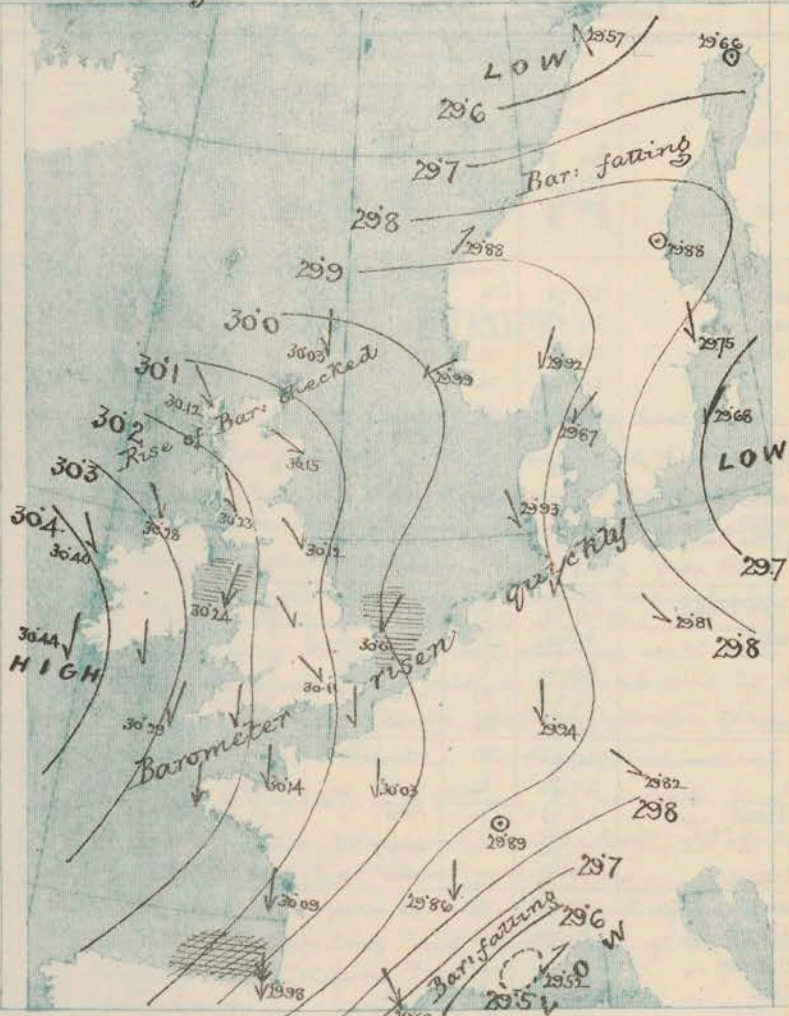
— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February.

During the 15 Years 1871—1885.

STATIONS	MEAN READINGS.
Sumburgh Head	29.713
Stornoway	29.700
Wick	29.787
Nairn	29.747
Aberdeen	29.780
Leith	29.803
Shields	29.847
York	29.884
Loughborough	29.912
Ardrossan	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.878
Parsonstown	29.894
Valencia	29.850
Roche's Point	29.850
Pembroke	29.875
Silly	29.911
Jersey	29.975
Hurst Castle	29.944
Dover	29.957
LONDON	29.940
Oxford	29.938
Cambridge	29.935
Yarmouth	29.928



TEMPERATURE, & WEATHER at 8 A.M., with RAINFALL in PAST 24 HOURS.

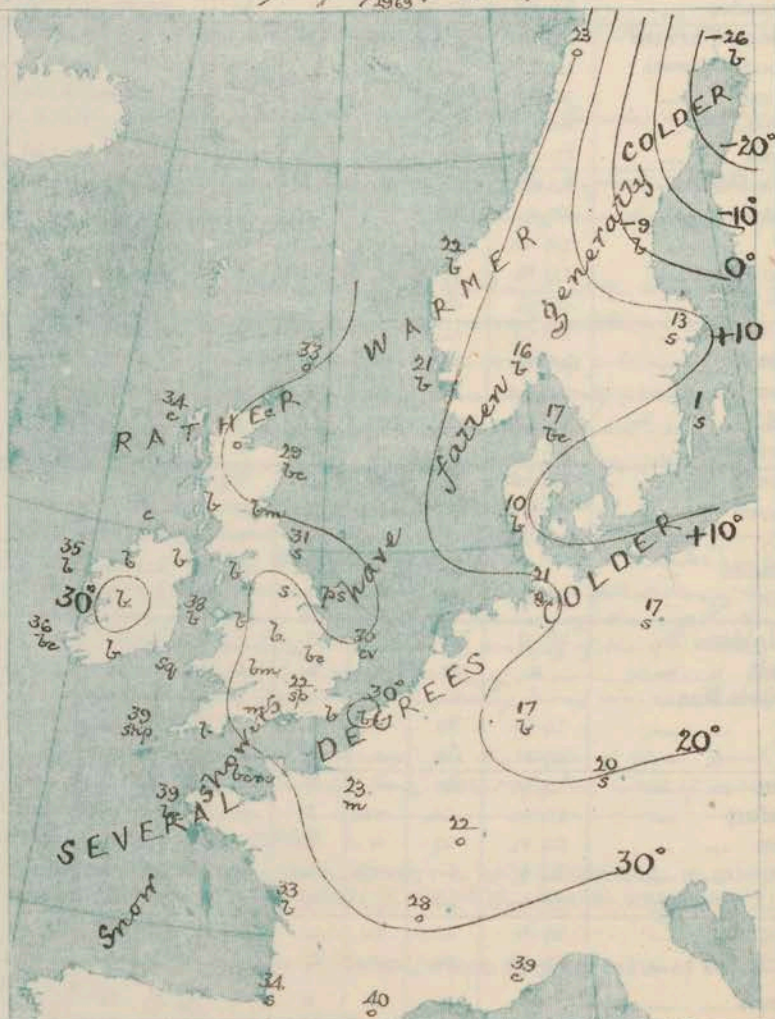
Temperature — Isotherms are drawn for each 10° Changes since previous morning are stated in words.
Weather — is shown by Letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of February

STATIONS.	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m. Dry	Wet.	
Sumburgh Head	42.6	34.7	38.7	37.7	3.20
Stornoway	43.5	34.7	39.3	38.2	8.97
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	45.8	34.2	38.2	37.1	1.88
Loughborough	46.0	34.5	38.4	37.3	2.00
Ardrossan	45.0	38.7	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	45.9	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
Silly	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	48.5	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 10 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.20 in. to 30.4 in. on our western coast, and apparently still higher over the Atlantic.
Lowest, 29.5 in. in a small depression over the south of France, 29 in. and less, over the Baltic Provinces.
Gradients slight except over the south of France.
Barometer rising decidedly except in the far north, where fresh fall seems to be setting in.

TEMPERATURE

Highest, 44° at Lubeck, 40° at Copenhagen, 39° at Brest and Seilly, 38° at Malin Head, and 36° at Palermo.
Lowest, -26° at Niparanda, -9° at Helsingfors, +10° at Jeno, 13° at Stockholm, 16° at Gdansk, 17° at Berlin and Rostock, 21° at London, 23° at Paris, 26° at Cassanese.
It appears to be now rising a little in Scotland.

WIND

Moderate Nth to NWth in our Islands, SWth at Christiansund, SEth at Rode. Nth at the Continental stations generally.
Moderate in most places, but blowing hard in the southeast and south of France.

WEATHER

Fair and dry as a whole, but snow showers still prevail in many localities.
The snow has been more heavy in the northeast and northwest than elsewhere.

SEA

High over the southern part of the Bay of Biscay, moderate on our coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It appears as though a new depression is approaching the north of Scotland from the NWth, but of its size and intensity nothing is known at present.

FORECASTS

for the 24 hours ending at NOON on 13th FEBRUARY 1889.

DISTRICTS.

FORECASTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

Wind backing to NW or W, force doubtful but increasing; fair to showery. Milder.
Wind backing to NW; cold, dry, with slight snow, less settled tomorrow.

DISTRICTS.

FORECASTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

Same as Nos 0 and 1.
Nth to NWth winds, cold, dry.
Same as No 0 and 1
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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.74	27	22	20 0	b	3	Holyhead ...	29.78	37	33	N 5	bc	5
Sumburgh Head ...	29.79	30	30	NNE 3	S	4	Valencia ...	30.04	41	38	N 5	bcv	4
Stornoway ...	29.93	33	32	N 4	e	4	Scilly ...	29.79	41	30	N 6	bc	6
Aberdeen ...	29.77	35	31	NNE 6	chp	6	Jersey ...	29.67	39	35	NW 5	c	5
Shields ...	29.64	36	34	NW 3	c	3	Dungeness ...	29.53	32	32	N 4	c	3
Ardrossan ...	27.21	38	34	N 3	b	2	London ...	29.61	33	31	NW 4	o	*
Malin Head ...	29.89	38	35	N 6	bc	4	Yarmouth ...	29.54	34	33	NNE 5	eq	5
Mullaghmore ...	29.96	39	35	N 5	b	4	Rocheport ...	29.75	45	45	NW 8	c	3
Belmullet ...	30.05	39	36	NNE 7	osp	*							

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

The report for yesterday morning showed that the large depression of last week was moving slowly eastwards across Russia its centre lying near Smolensk. The two small depressions which appeared over Ireland and England on Sunday were also travelling in a similar direction, and while one of these had reached Western Germany the other was found near Calais. The highest pressures were still reported in an anticyclone lying to the southward of the Iberian Peninsula. The wind was moderate to strong from the NE^{ad} over Northern Europe, and from the N^{ad} over the British Islands, while strong W² to NW² gales were reported in the west and north of France. Over Germany, Italy, and Algeria, however, moderate breezes from SW. or W. were reported while over Russia there was a distinct cyclonic circulation around the large depression mentioned above. The weather was fine in the Western parts of the United Kingdom, and also in Algeria, but cloudy and unsettled elsewhere, with snow at several of the English, Scotch, French, German and Russian stations, and rain over Northern Italy. Temperatures had risen over the greater part of Western and Southern Europe, but fallen elsewhere; readings ranged from a little above 50° over the Mediterranean, the greater part of the Iberian Peninsula and the extreme south of France to below the freezing point over the whole of northern central, and Eastern Europe, as well as over Great Britain and to several degrees below zero in Lapland and Northern Russia. The highest individual values were 57° at Algiers, 55° at Tangier, 54° at Barcelona and Palermo, 53° at Genoa and Cagliari, 52° at Messina, Oporto, Lisbon, San Fernando and Leghorn, and 51° at Bilbao, Perpignan, Marseilles and Brno; the lowest were -14° at Archangel, -12° at Uleaborg, -11° at Haparanda, -6° at Kuopio, 0° at Helsingfors, +7° at Helsinki, 8° at Hangö, 10° at Riga and Copenhagen, 11° at Stockholm, 13° at Gothenburg, 14° at St. Petersburg, 15° at Leningrad and Tientsin.

In the course of the day the depressions over France and Germany continued to move eastwards and the barometer rose steadily over our Islands. A sharp frost was again experienced over Great Britain at night.

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 3 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 13TH FEBRUARY.

1889.

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

		+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.			
				Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ..	29.29	7	S	2	6	29.28	-0.01	1	0	+27	2	0	6c	*	2	-27	—	
	Hernösand ...	29.75	9	S	2	6	29.54	-0.21	21	19	+20	SW	2	0	*	7	5	—	
	Stockholm ...	29.92	5	2	0	6	29.86	+0.06	3	3	-10	SW	2	6	*	16	3	—	
	Wishby ...	29.95	22	N	4	0	29.99	+0.04	19	19	-2	WNW	4	6	*	27	18	0.04	
	Bodö ...	29.33	20	W	8	C	29.32	-0.01	27	25	+4	NW	2	C	1	30	23	—	
	Christiansund...	29.78	31	SW	8	C	29.35	-0.43	38	34	+16	SWW	8	0	5	?	?	—	
	Skudesnes ...	30.08	26	ENE	1	0	29.75	-0.33	37	36	+16	SWW	8	0	5	?	?	—	
	Christiania Fjord (Fierdes)	29.99	23	W	3	6	29.80	-0.19	26	24	+10	WNW	4	6	1	?	?	—	
	Skagen (The Sea)	30.04	19	2	0	6	29.92	-0.12	24	22	+7	WNW	3	6c	2	25	16	—	
	Fenö ...	30.13	23	WNW	1	6	30.09	-0.04	30	28	+20	WNW	2	C	*	30	10	—	
BRITISH ISLANDS.	Sumburgh Head	29.94	25	W	1	0	29.49	-0.45	38	37	+5	W	1	0	3	41	28	0.18	
	Sornoway ...	29.99	29	SW	4	0	29.61	-0.38	36	36	+2	SW	2	0	3	42	32	0.05	
	Wick ...	30.00	37	W	3	C	29.58	-0.42	37	36	+10	NW	3	0	1	38	26	0.10	
	Nairn ...	30.05	37	WNW	2	C	29.61	-0.44	37	36	+8	2	0	1	40	29	0.01		
	Aberdeen...	30.11	32	SW	1	C	29.64	-0.47	36	35	+7	SWW	2	20g	3	37	26	0.19	
	Leith ...	30.16	37	W	2	C	29.67	-0.49	43	40	+12	WNW	4	C	*	43	29	—	
	Shields ...	30.21	33	2	0	6m	29.84	-0.37	38	36	+7	SWW	4	0	2	38	29	0.11	
	Spurn Head ...	30.20	33	WNW	3	6c	30.02	-0.18	33	32	+1	SWW	6	0	4	34	29	—	
	York ...	30.20	31	WNW	1	6	29.96	-0.24	35	34	+6	2	1	0	*	38	26	—	
	Loughborough	30.27	29	WNW	1	6	30.11	-0.16	33	31	+9	2	4	0	*	39	19	—	
GERMANY.	Ardrossan ...	30.20	45	NW	2	0x	29.68	-0.52	44	43	+10	WNW	5	C	4	44	33	0.23	
	Malin Head ...	30.21	29	SW	4	6	29.79	-0.42	44	43	+6	NW	3	0	4	46	35	0.14	
	Mullaghmore...	30.29	38	SW	4	0m	29.88	-0.41	45	44	+11	WNW	5	0g	3	46	33	0.28	
	Belmullet ...	30.29	42	WNW	4	0	29.90	-0.39	46	45	+11	W	2	0m	*	48	34	0.33	
	Donaghadee ...	30.28	35	WNW	4	6c	29.82	-0.46	38	38	0	W	4	C	2	40	35	0.26	
	Barrow-in-Furness	30.24	34	WNW	3	5	29.88	-0.36	38	38	+7	SW	8	2	*	40	30	0.28	
	Liverpool (Bidston)	30.29	33	NW	1	5	29.99	-0.30	37	36	+5	SWW	3	0	4	39	32	0.02	
	Holyhead ...	30.30	29	SW	4	C	29.95	-0.35	42	42	+4	SWW	6	2mg	5	42	38	0.38	
	Parsonstown ...	30.28	25	2	0	6	29.90	-0.38	47	46	+22	2	0	0	*	48	34	0.18	
	Valencia ...	30.41	40	2	0	C	30.08	-0.33	51	51	+15	SW	5	2m	5	51	36	0.40	
FRANCE & NETHERLANDS.	Roche's Point...	30.42	42	N	2	6	30.05	-0.37	49	48	+14	W	3	0m	4	49	35	0.01	
	Pembroke ...	30.26	37	N	3	6	30.07	-0.19	43	42	+9	SWW	6	2m	6	43	33	0.26	
	Scilly ...	30.38	42	N	5	C	30.22	-0.16	45	45	+6	SWW	6	2m	4	45	38	0.12	
	Prawle Point ...	30.25	34	N	2	6	30.28	+0.03	41	38	+9	WNW	5	C	4	44	30	—	
	Jersey ...	30.29	39	WNW	3	6c	30.25	+0.04	35	33	-1	N	2	Cm	2	41	33	—	
	Hurst Castle ...	30.28	34	WNW	3	m	30.28	+0.00	38	38	+13	WNW	3	C	2	38	24	—	
	Dungeness ...	30.17	29	N	2	6	30.26	+0.09	18	18	-2	N	2	f	2	32	14	0.02	
	London ...	30.26	33	WNW	2	C	30.24	+0.02	29	28	+7	W	1	0	*	36	21	—	
	Oxford ...	30.22	27	NW	1	6	30.21	+0.05	30	29	+6	SW	3	0	*	37	24	—	
	Cambridge ...	30.26	26	2	0	6c	30.19	-0.07	25	24	0	2	1	0	*	36	15	—	
PENINSULAR.	Yarmouth ...	30.18	31	NNE	1	6c	30.17	+0.01	27	27	-3	WNW	3	6m	3	34	16	—	
	Cuxhaven ...	30.06	28	NNE	2	C	30.19	+0.13	23	23	+2	WNW	2	C	*	25	21	—	
	Berlin ...	30.10	17	NW	2	0	30.25	+0.15	16	15	-1	NW	2	0	*	23	16	—	
	Wiesbaden ...	*	*	*	*	*	30.20	+0.10	2	0	-15	NW	1	0	*	27	1	—	
	Munich ...	30.04	14	NW	2	5	30.17	+0.13	8	7	-12	NW	2	6	*	25	7	0.04	
	The Helder ...	30.23	28	ENE	1	6	30.20	+0.03	29	28	+6	ENE	3	C	3	?	18	—	
	Brussels ...	*	*	*	*	*	30.25	+0.02	10	10	-9	2	1	f	*	28	9	0.04	
	Cape Gris Nez...	?	31	N	7	5	?	?	25	25	-6	2	3	6c	2	26	25	—	
	Paris ...	30.13	28	N	4	C	30.36	+0.23	15	15	-8	SWW	1	m	*	35	13	0.04	
	Brest ...	30.42	39	N	4	0	30.47	+0.05	41	36	+22	WNW	1	0	2	50	36	—	

WEATHER CHARTS

for 8 a.m. on

WEDNESDAY 13th FEBRUARY

1883

BAROMETER, WIND & 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.

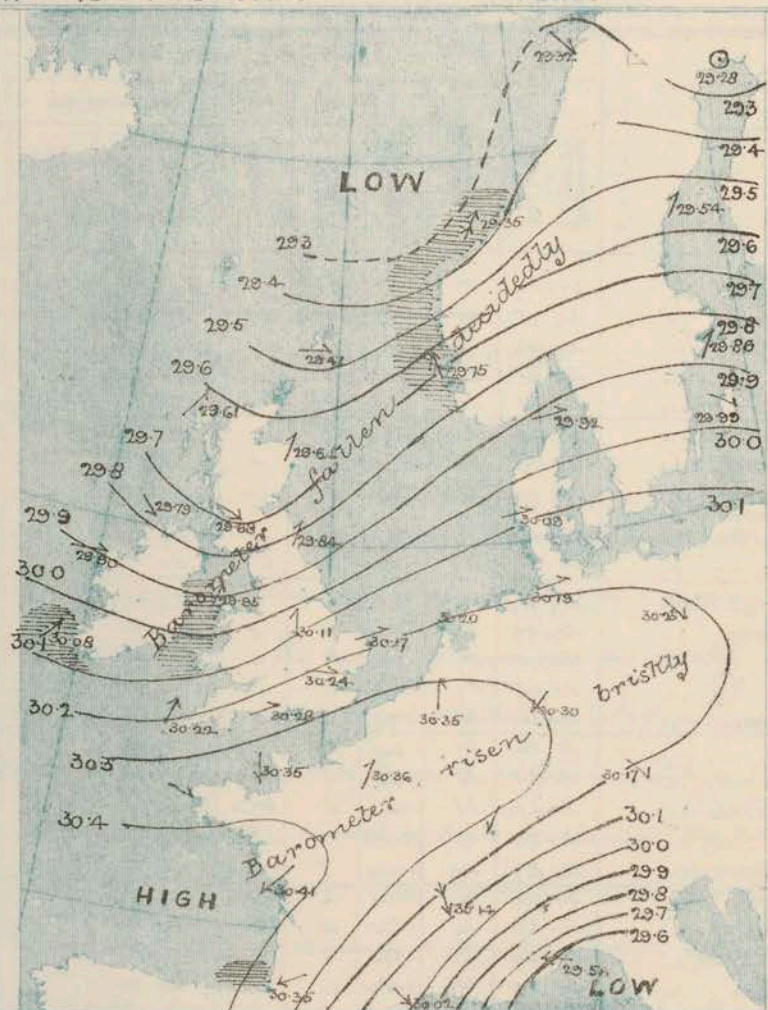
Sea Disturbance — where considerable is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 Years 1871 — 1885.

STATIONS.	MEAN READINGS.
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	29.884
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.

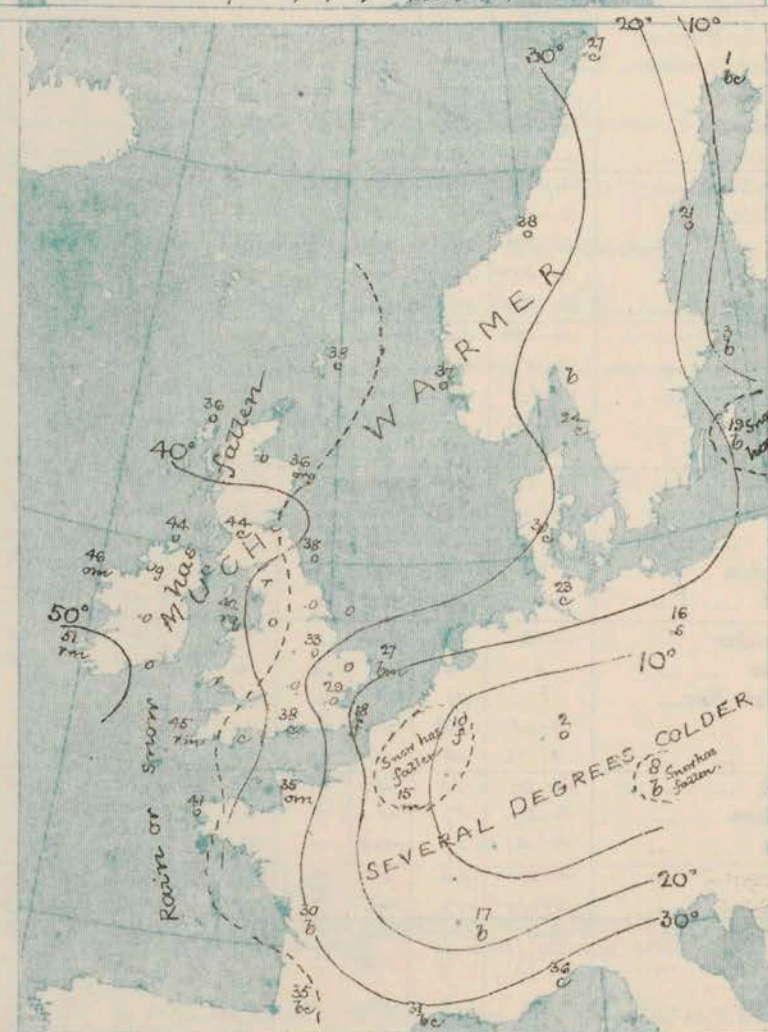
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of February

STATIONS	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
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	1.53
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	46.0	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	46.3	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	46.9	40.0	43.6	42.2	4.66
Pembroke	46.2	40.2	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 30 years 1856 — 85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest { 30.4 ins. to 30.6 ins. over the southern parts of the Bay of Biscay and west of the Spanish Peninsula
 { 30.2 ins. to 30.4 ins. in a ridge extending thence across France and Germany.
 Lowest { 29.3 ins. and less in a large depression off the west of Norway.
 { 29.6 ins. and less in a deep depression over the Gulf of Genua.
 Gradients { steep over the south of France, rather steep over the northern part of our area, slight over the Bay of Biscay, France and north Germany.
 Barometer falling decidedly over our Islands and the North Sea.

TEMPERATURE

Highest 51° at Valencia, 46° at Belmullet, 45° at Scilly, 42° at Lisbon.
 Lowest 1° at Haparanda, 2° at Wiesbaden, 3° at Stockholm, 8° at Munich, 10° at Brussels, 10° at Paris, 16° at Berlin, and 17° at Lyons.
 It has risen with great suddenness over the British Isles, the North Sea and Scandinavia, although it was very low over England early this morning.

WIND

S^W and S^W⁴ over England, the North Sea and Norway - strong in the Irish Sea at Spurn N^W and on the Norwegian coast.
 Moderate W⁴ in Ireland, very light W⁴ and S^W⁴ in the north of France, and blowing hard from between N^W and N^E in the south of France.

WEATHER

Very unsettled. Overcast throughout our Islands, with cold rain at several of the western and northern stations, and a rainy appearance in London.
 Fine and bright over southern Europe. Rain has fallen very generally, but not heavily, in the west and north-west.

SEA

Rough at Biarritz, in the Irish Channel, and off the west of Norway, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It appears likely that cold rain or sleet will fall in all parts of England today, followed by a change of wind to the W⁴. Very unsettled weather is likely in all parts of the Kingdom.

FORECASTS

for the 24 hours ending at NOON on 14 February 1889.

DISTRICTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

FORECASTS.

S^W to NW⁴ winds, force uncertain at present; rain and sleet showers.

S^W to W⁴ and NW⁴ winds, very changeable and unsettled, cold rain or sleet.

DISTRICTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

FORECASTS.

Wind shifting to NW again, and becoming colder, with sleet or snow showers.

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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	30.05	2.0	2.5	ENE 2	b	2	Holyhead ...	30.31	3.0	3.7	NNE 5	2 g	5
Sumburgh Head ...	30.00	3.2	3.1	N 0	c	3	Valencia ...	30.46	4.7	4.2	WSW 1	b v	1
Stornoway ...	30.03	3.9	3.9	N 3	bc	3	Scilly ...	30.34	4.3	3.9	N 5	bc	4
Aberdeen ...	30.14	3.6	3.2	WN 2	c	4	Jersey ...	30.26	4.1	3.6	NNW 3	bc m	3
Shields ...	30.19	3.3	3.6	NW 3	c	3	Dungeness ...	30.10	3.2	3.1	N 4	bc	2
Ardrossan ...	30.23	4.0	3.9	NW 3	c	2	London ...	30.18	3.6	3.4	NW 3	o	*
Malin Head ...	30.26	4.3	3.9	N 4	b	3	Yarmouth ...	30.12	3.3	3.2	NW 3	bc m	4
Mullaghmore ...	30.35	4.4	4.0	N 4	bc	2	Rocheport ...	30.20	4.0	3.6	N 7	c	2
Belmullet ...	30.38	4.5	4.0	WSW 4	bc	*							

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

The reports for yesterday morning showed that the highest pressures, 30.4 ins. and upwards, were found in a large anticyclone, the eastern edge of which extended from the west of Ireland to the Portuguese coasts. The depression of last week still existed in the form of a shallow area over Russia, its centre being about midway between St Petersburg and Moscow. A long trough of low pressure was also lying over the south of France, northern Italy and the south of Austria, while a new depression was approaching the northwest of Norway. The wind had backed to the NWnd in the north of our Islands, and to the SWnd or SEnd in the west of Norway, but in all other parts of western and northern Europe it remained N^{ly}, and in Spain and the south of France it blew with the force of a gale. In Algeria the wind was W^{ly}, and in Italy SW^{ly}, while over central Russia there was a cyclonic circulation of light breezes round the depression mentioned above. The weather was fine over the greater part of northern and northwestern Europe, as well as over central Spain. Elsewhere however, the sky was cloudy or overcast, with snow in Germany, the northeast of England and the north of Spain. Temperature had risen a little in Norway and the west and north of our Islands, as well as in Italy, Austria and the south of Russia, but fallen elsewhere; readings ranged from a little above 55° at several of the Mediterranean stations to considerably below the freezing point over the whole of northern and central Europe, and to many degrees below zero over Lapland. The highest individual readings were 54° at Cagliari, Palermo, Malta, Nemours, Cron, and Algiers, 52° at Sanguinaire and Brindisi, 51° at San Fernando and Naples, and 49° at Rome. The lowest were -26° at Haparanda, -21° at Ulsaborg, -9° at Hernösand, -7° at Kuopio, -3° at Hangö, -2° at Archangel, -1° at Helsingfors, 0° at St Petersburg, +6° at Memel, 10° at Fano, and 12° at Copenhagen, Warsaw and Kiev.

In the course of the day the barometer began to fall somewhat decidedly on our west and north coasts, and the wind there backed to the Wnd or SWnd with a brisk rise of temperature. Rain occurred at night at many of our western 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 *Thursday, 14th February 1889.*
Issued by the Meteorological Office 63 Victoria Street, London. R.H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			BAROMETER.		SHADE TEMP.			WIND.			Weather.	Sea. 0 to 9.)	SHADE TEMP.		
			Dir.	Force. (0 to 12.)	Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)	Weather.			Max.	Min.	Amount of Rainfall.
SCANDINAVIA.																		
Haparanda ..	29.20	1	Z	0	0	29.01	-27	12	12	+11	Z	0	0	*		12	-9	0.16
Hernösand ...	29.30	26	Z	2	0	29.12	-17	25	25	+4	Z	0	0	*		28	5	0.08
Stockholm ...	29.67	27	SW	2	bc	29.34	-52	26	25	+23	SSW	4	0	*		27	0	0.04
Wisby ...	29.83	27	SW	6	b	29.50	-49	28	27	+9	SSW	6	S	*		30	16	-
Bodö ...	28.97	24	ESE	6	S	28.98	-34	25	24	-2	NE	2	C	1		27	21	-
Christiansund...	29.20	38	SSW	4	bc	28.96	-39	34	31	-4	ESE	3	bc	4		32	?	-
Skudesnaes ...	29.37	35	Z	0	b	28.71	-104	33	33	-4	NNE	6	S	5		36	?	-
Christiania Fjord (Farder)	29.47	35	SSW	7	r	28.93	-107	33	33	+7	ESE	5	r	4		36	?	-
Skagen (The Sea)																		
Fanö ...																		
BRITISH ISLANDS.																		
Sumburgh Head	29.30	40	W	2	0	28.85	-62	37	36	-1	NW	3	0	3		43	35	0.40
Stornoway ...	29.26	39	SW	3	r	29.11	-50	36	36	0	NW	5	S	4		42	32	0.22
Wick ...	29.34	38	SW	2	0	29.00	-55	34	33	-3	NW	4	C	3		39	32	0.40
Nairn ...	29.31	39	SW	1	0	29.11	-50	35	35	-2	WSW	2	C	1		44	34	0.21
Aberdeen...	29.45	38	SSE	2	om	29.11	-53	36	34	0	W	6	qz	4		43	36	0.15
Leith ...	29.52	41	W	2	r	29.24	-43	38	36	-5	W	1	b	*		49	36	0.03
Shields ...	29.60	43	SW	1	0	29.32	-52	39	37	+1	W	3	bc	2		51	38	0.02
Spurn Head ...	29.71	36	SW	5	r	29.38	-65	40	39	+7	WSW	3	bc	3		44	32	0.07
York ...	29.70	39	SW	2	0	29.34	-62	42	40	+7	W	2	bc	*		51	35	0.02
Loughborough	29.81	37	SW	3	0	29.45	-66	44	40	+11	NW	1	C	*		49	33	0.06
Ardrossan ...	29.45	43	S	4	r	29.31	-37	42	40	-2	WNW	4	C	3		48	40	0.40
Malin Head ...	29.33	47	SW	5	0	29.35	-44	42	40	-2	NW	5	qz	4		47	40	0.38
Mullaghmore ...	29.50	49	SW	6	orq	29.47	-41	43	40	-2	WNW	5	qz	4		49	41	0.27
Belmullet ...	29.50	50	WSW	8	0	29.50	-40	44	42	-2	WNW	3	qz	*		51	43	0.21
Donaghadee ...	29.53	45	SW	3	r	29.42	-40	40	39	+2	WSW	3	0	3		49	34	0.12
Barrow-in-Furness	29.64	43	S	4	r	29.89	-49	42	41	+4	SW	3	C	*		47	38	0.37
Liverpool (Bidston)	29.70	43	SSW	3	r	29.46	-53	42	40	+5	W	6	0	4		50	37	0.14
Holyhead ...	29.70	48	SW	4	omq	29.51	-44	45	43	+3	W	4	qz	4		51	42	0.17
Parsonstown ...	29.73	50	WSW	3	0	29.54	-36	44	43	-3	SW	2	0	*		52	44	0.09
Valencia ...	29.87	52	WSW	6	om	29.57	-51	48	48	-3	WNW	3	r	4		53	48	0.06
Roche's Point...	29.86	51	W	5	0	29.57	-48	48	48	-1	WNW	4	r	4		52	47	0.20
Pembroke ...	29.86	48	WSW	6	0	29.56	-51	48	45	+5	WSW	5	r	7		49	43	0.28
Scilly ...	30.03	50	W	6	om	29.74	-48	51	51	+6	WSW	6	r	5		51	44	0.29
Prawle Point ...	29.98	48	W	5	r	29.69	-59	48	48	+7	WSW	5	r	5		48	39	0.50
Jersey ...	30.13	39	S	5	r	29.79	-56	50	49	+15	W	6	r	5		50	34	0.57
Hurst Castle ...	29.96	42	SW	7	or	29.59	-69	46	46	+8	W	6	C	5		46	38	0.31
Dungeness ...	29.99	39	WSW	7	r	29.55	-71	44	44	+26	W	6	0	5		44	14	0.18
London ...	29.94	38	SW	5	or	29.52	-72	44	44	+20	WSW	2	0	*		49	29	0.25
Oxford ...	29.82	39	SW	3	r	29.50	-71	48	47	+18	WNW	1	qz	*		49	30	0.23
Cambridge ...	29.83	36	S	3	r	29.50	-69	45	44	+20	W	1	0	*		48	23	0.19
Yarmouth ...	29.87	34	SW	5	orqm	29.43	-74	42	41	+15	W	3	C	4		42	26	0.13
Cuxhaven ...	29.99	24	SW	6	0	29.39	-80	26	25	+3	SW	8	qz	*		?	?	-
Berlin ...	30.23	18	SW	3	b	29.82	-43	15	15	-1	SSW	4	qz	*		23	?	-
Wiesbaden ...	*	*	*	*	*	29.92	-38	16	16	+14	NE	1	S	*		18	?	0.02
Munich ...	30.21	8	Z	0	m	30.03	-14	4	3	-4	SE	4	b	*		16	-2	-
FRANCE & NETHERLANDS.																		
The Helder ...	29.87	31	SSW	8	0	29.34	-86	40	40	+11	SW	4	C	4		?	28	0.12
Brussels ...	*	*	*	*	*	29.61	-74	35	34	+25	SSW	5	r	*		35	?	0.04
Cape Gris Nez...	?	36	SW	6	r	?	?	45	45	+20	W	5	0	5		?	25	0.87
Paris ...	30.26	30	SSW	1	0	29.84	-52	35	34	+19	SSW	3	r	*		?	?	0.20
Brest ...	30.20	49	WNW	4	0	30.01	-46	50	44	+9	W	7	0	6		50	39	0.39
Lorient ...	30.19	49	WNW	5	r	30.00	-40	51	50	+12	W	7	r	6		50	39	0.28
Rocheport ...	30.41	37	SW	3	r	30.18	-23	42	42	+18	WNW	6	0	3		?	?	0.24
Belfort ...	30.16	19	NE	1	b	30.03	-34	21	21	+9	W	1	S	*		24	2	0.04
Lyons ...	30.30	25	N	4	b	30.25	+11	20	20	+3	SSE	2	S	*		30	?	-
Nice ...	29.83	38	Z	0	b	29.99	+43	33	28	-5	ESE	5	b	2		46	30	-
Perpignan ...	30.19	34	NW	7	b	30.16	+14	47	43	+16	NW	3	0	*		?	?	-
Biarritz ...	30.42	40	WNW	2	0	30.29	-06	50	48	+15	W	6	0	5		?	?	0.28
SPAIN.																		
Corunna ...	*	*	*	*	*													
Lisbon ...	30.62	48	NE	4	b	30.67	+03	47	45	+5	NNE	3	C	2		53	?	-

WEATHER CHARTS

for 8 a.m. on

Thursday, 14th February

1889.

BAROMETER, WIND & 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 —

→ = force above 10; → = forces 8 to 10;
→ = forces 5 to 7; → = forces 1 to 4;
○ = dead calm.

Sea Disturbance — where considerable is shown thus.

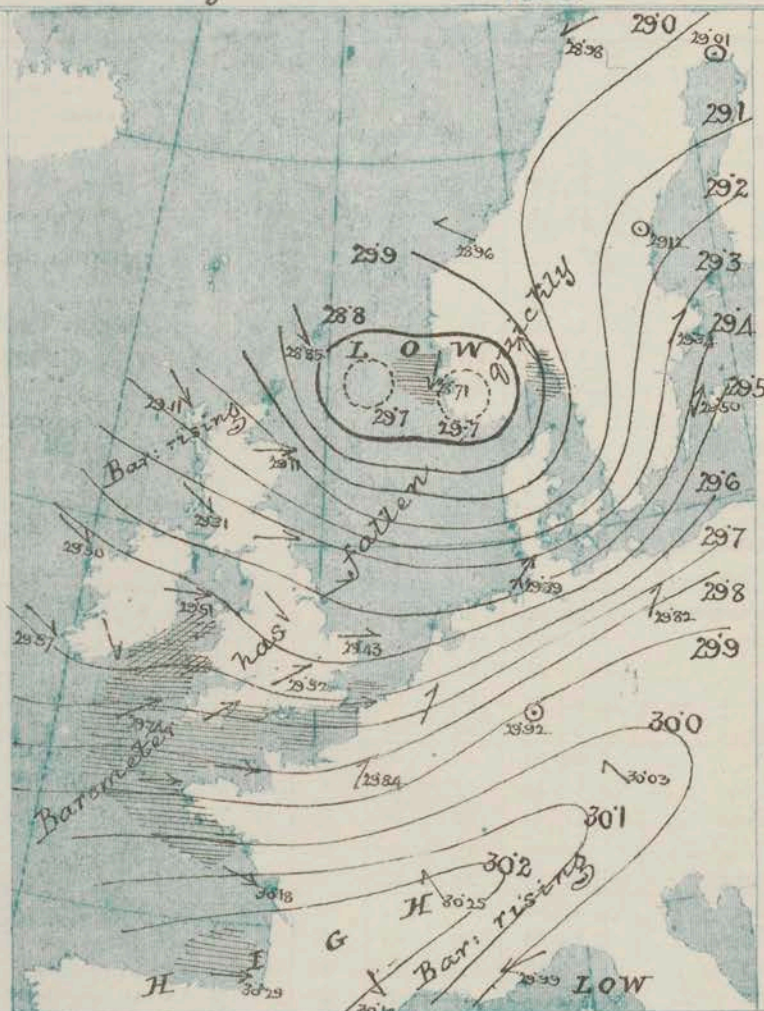
— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February

During the 15 Years 1871-1885.

STATIONS.	MEAN READINGS.
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	29.884
Valencia	29.850
Roche's Point	29.850
Pembroke	29.875
Scilly	29.911
Jersey	29.875
Hurst Castle	29.944
Dover	29.957
LONDON	29.940
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.

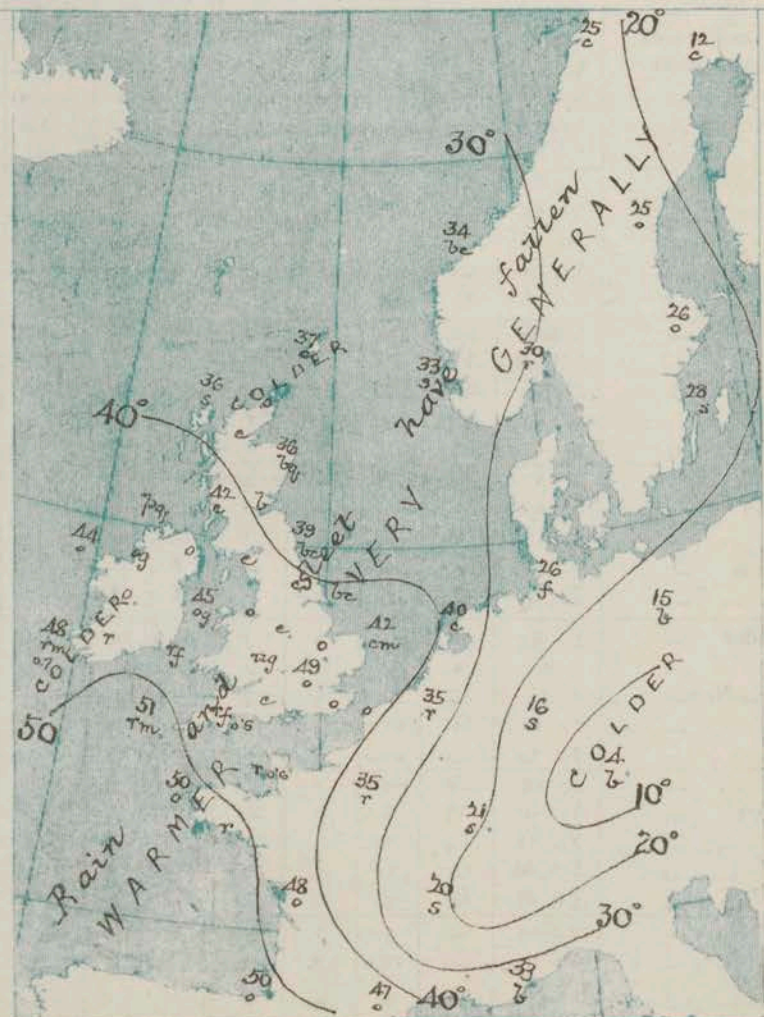
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of February.

STATIONS.	TEMPERATURE				RAINFALL. (Inches)
	Daily Max.	Daily Min.	Dry at 8 a.m.	Wet	
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	38.9	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: over Spain; 30.0 ins: to 30.3 ins: over the southwest of France.
Lowest, 28.9 ins: middle, in a depression lying over the southwest of Norway.
Gradient steep over the North Sea, France and the Netherlands, moderate and irregular over our Islands.
Barometer falling except in Spain - rapidly to the eastward of the North Sea.

TEMPERATURE

Highest, 51° at Scilly and Lowest, 50° at Breizh, 49° in London, 48° in the south of Ireland.
Lowest, 4° at Munich, 12° at Naparanda, 15° at Berlin, 16° at Wiesbaden, 20° at Lyons, and 26° at Antwerp and Stockholm.
 It has risen rapidly in France, Sweden, and over the eastern and south eastern counties of England, but has begun to fall again in the west. London 20° warmer than it was yesterday.

WIND

W⁴ to NW⁴ in our Islands, light to strong in force.
W³, a moderate gale, over the Bay of Biscay, SW¹ to S³, moderate to a gale on the eastern shores of the North Sea.
SE to E in the west of Norway.

WEATHER

Time over the north of Scandinavia and in Germany, overcast and dull elsewhere with rain, sleet or snow in several places. A good deal of rain and sleet fell over the United Kingdom generally.

SEA

High at Pembroke, and rough in the Channel and northern part of the Bay of Biscay, moderate to slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Very unsettled weather is likely to ensue as the depression in the northeast moves southeastwards. Increasing NW winds and cold showers are probable in most places.

FORECASTS

for the 24 hours ending at NOON on 15TH FEBRUARY 1889.

DISTRICTS.

FORECASTS.

0	{	SCOTLAND
		NORTH
1	{	SCOTLAND
		EAST
2	{	ENGLAND
		N.E.
3	{	ENGLAND
		EAST
4	{	MIDLAND
		COUNTIES
5	{	ENGLAND
		SOUTH

NW²⁴ winds, increasing in force, with decreasing temperature and cold showers.

SW⁷/₈ to NW⁷/₈ winds, force doubtful;
temperature variable, rain at times.

DISTRICTS.

FORECASTS.


4	6	{	SCOTLAND
			WEST
4	7	{	ENGLAND
			N. W.
4	8	{	ENGLAND
			S. W.
4	9	{	IRELAND
			NORTH
4	10	{	IRELAND
			SOUTH

Wind becoming NW²⁴, with colder unsettled weather, rain or sleet.

WARNINGS

The NORTH CONE. was hoisted last evening
on all coasts.

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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.52	36	36	S 8	r S	6	Holyhead ...	29.25	46	45	WSW 4	0	4
Samburgh Head ...	29.40	40	38	W 1	b O	3	Valencia ...	29.99	53	52	WSW 6	om	5
Stornoway ...	29.48	42	41	SW 3	0	3	Scilly ...	30.04	50	50	WSW 6	of	5
Aberdeen ...	29.59	43	38	SW 2	c	3	Jersey ...	30.26	39	38	SSW 3	0	3
Shields ...	29.69	43	40	WSW 3	0	2	Dungeness ...	30.11	38	36	WSW 5	r	4
Ardrossan ...	29.65	45	44	SW 4	0	3	London ...	30.08	38	37	SW 5	OT	*
Malin Head ...	29.65	44	43	SSW 3	0	3	Yarmouth ...	30.01	34	33	SW 5	om S	4
Mullaghmore ...	29.67	47	46	SSW 5	OT	4	Rocheport ...	30.45	36	34	NEW 1	0	2
Belmullet ...	29.68	50	50	W 6	om	*							

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

The reports for yesterday morning showed that pressure was highest, 30.5 in: and upwards, in a large anticyclone lying over and to the westward of Portugal, and lowest, 29.3 in: and less, in two large, but somewhat shallow depressions lying respectively over Lapland and to the northward of the Shetlands. A well marked and rather deep disturbance, with readings below 29.6 in:, was however, reported over Russia and the Gulf of Genoa, while a fourth was apparently lying over the Adriatic. Moderate W^{ly} or NW^{ly} breezes were reported in Ireland and the west and north of Scotland, strong SW^{ly} breezes in the west and north of England, and moderate SW^{ly} or W^{ly} breezes over our East coasts, the North Sea, Sweden, and Northern Russia. Over Northern Italy, however, the wind was strong from the End, and in the south of France strong to a gale from NW, while in South Italy it was moderate or fresh from the SWnd. The weather was fine over Sweden, the Gulf of Finland, Denmark, Spain, South Germany, and the East of France, but dull in most other localities, with rain in the west and north of our Islands, and snow at some of the German and Austrian stations, as well as at Lighorn. Temperature had fallen rapidly in Scandinavia and briskly over the greater part of the United Kingdom, but fallen considerably over Central and Southern Europe; readings ranged from a little above 50° in the extreme southwest of Ireland and over the eastern parts of the Mediterranean to about zero over Lapland, Northern Russia and Western Germany. The highest individual readings were 56° at Malta, 54° at Athens, 51° at Valencia, 50° at Sfax, 49° at Rochester, Naples, Palermo, Tunis, Oran and Nemours, and 48° at Cagliari; the lowest were -4° at St Petersburg, -3° at Humber, 0° zero at Archangel, +1° at Haparanda, 2° at Wiesbaden, 3° at Helsingfors and Stockholm, 6° at Warsaw, 7° at Memel, 8° at Munich, and 9° at Riga.

In the course of the day some small depressions advanced in an E^{ly} direction across the United Kingdom occasioning heavy rain in many places, and strong SW^{ly} winds in the Channel. Towards night a larger disturbance approached Scotland, and moderate to fresh gales from the SW^{ly} were experienced on some parts of our northern 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).

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

DAILY WEATHER REPORT.

for *Friday, 15th February 1889.*
Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.23	10	N	2	0	28.95	- .06	18	18	+ .6	S	4	S	*	23	0	0.32	
Hernösand ...	29.18	27	S	4	8	28.71	- .41	22	22	- .3	NE	8	S	*	30	19	0.28	
Stockholm ...	28.70	30	SSE	8	8	28.67	- .07	25	23	- .1	WSW	2	0	*	30	23	0.12	
Wisby ...	28.89	30	S	9	5	28.84	- .06	30	28	+ .2	W	6	0	*	32	25	0.32	
Bodö ...	28.94	26	E	2	6	28.94	- .04	27	25	+ .2	N	4	0	2	30	23	-	
Christiansund...	28.80	31	ESE	1	6	29.01	+ .05	31	30	- .3	SW	1	S	3	?	27	-	
Skudesnaes ...	28.80	34	W	0	0	29.04	+ .33	30	29	- .3	N	2	bc	3	36	27	-	
Christiania Fjord (Færdar)	28.65	29	NW	5	0	28.89	- .04	30	27	- .3	WNW	2	0	3	?	25	-	
Skagen (The Scaw)	28.72	32	NW	4	bc	28.86	- .05	28	27	0	NW	1	c	1	36	18	0.08	
Fanö ...	29.03	34	WSW	4	0	28.99	- .07	33	32	+ .1	WSW	3	c	*	37	32	-	
BRITISH ISLANDS.																		
Sumburgh Head	28.90	38	NW	3	c	29.35	+ .50	35	33	- .2	N	5	0	5	40	32	0.11	
Stornoway ...	29.06	36	NW	3	0	29.65	+ .54	35	34	- .1	N	6	S	5	40	31	0.32	
Wick ...	29.01	35	NW	3	c	29.46	+ .46	34	33	0	N	5	0	4	37	31	0.27	
Nairn ...	29.07	35	SW	1	0	29.53	+ .42	34	33	- .1	NW	4	0	3	41	32	0.06	
Aberdeen...	29.08	36	W	3	0	29.48	+ .37	35	33	- .1	WNW	7	bcspg	5	42	34	0.06	
Leith ...	29.17	38	W	3	0	29.55	+ .31	36	33	- .2	NW	1	bc	*	45	33	-	
Shields ...	29.22	41	SW	3	0	29.47	+ .15	35	33	- .4	WNW	3	0	2	45	33	-	
Spurn Head ...	29.30	39	W	3	0	29.44	+ .06	37	37	- .3	WNW	6	0	5	43	35	0.01	
York ...	29.31	40	W	2	0	29.49	+ .15	36	34	- .6	W	2	0	*	46	33	0.09	
Loughborough	29.41	42	WNW	2	bc	29.57	+ .12	36	35	- .8	WNW	3	0	*	47	34	0.01	
Ardrossan ...	29.28	44	WNW	4	0	29.63	+ .32	38	36	- .4	NW	2	0	2	45	36	0.06	
Malin Head ...	29.30	39	WNW	5	bcspg	29.72	+ .37	39	37	- .3	NW	5	0	4	43	35	0.05	
Mullaghmore ...	29.46	41	WNW	6	chrspg	29.80	+ .33	40	39	- .3	NW	6	0	5	47	37	0.13	
Belmullet ...	29.55	44	NW	5	bc	29.89	+ .39	42	39	- .2	NW	3	0	*	46	37	0.11	
Donaghadee ...	29.37	41	WNW	3	bc	29.71	+ .29	36	35	- .4	W	4	0	3	45	34	0.05	
GERMANY.																		
Barrow-in-Furness	29.35	42	NW	4	bc	29.58	+ .19	39	37	- .3	NW	4	bc	*	45	38	0.04	
Liverpool (Bidston)	29.37	41	W	6	c	29.62	+ .16	40	37	- .2	WNW	5	bc	5	45	38	-	
Holyhead ...	29.45	44	WNW	5	c	29.69	+ .18	40	38	- .5	NW	6	bc	6	46	39	0.01	
Parsonstown ...	29.56	43	W	0	bc	29.86	+ .32	35	33	- .9	W	0	bc	*	49	34	0.05	
Valencia ...	29.73	46	NW	4	cq	29.97	+ .40	45	42	- .3	NW	3	cq	3	49	43	0.14	
FRANCE & NETHERLANDS.																		
Roche's Point...	29.61	46	NW	4	bc	29.91	+ .34	42	39	- .6	WNW	3	bc	4	49	40	0.25	
Pembroke ...	29.54	46	WNW	5	c	29.79	+ .23	42	39	- .6	NW	6	bc	6	49	41	0.40	
Scilly ...	29.62	48	NW	4	0	29.91	+ .17	48	46	- .3	WNW	6	bc	5	52	44	0.19	
Prawle Point ...	29.58	44	NW	3	c	29.82	+ .13	40	39	- .8	WNW	5	bc	4	49	36	0.55	
Jersey ...	29.55	51	W	7	c	29.83	+ .04	45	41	- .5	WNW	4	bc	4	51	43	0.28	
NETHERLANDS.																		
Hurst Castle ...	29.55	51	NW	3	c	29.70	+ .11	40	38	- .6	NW	6	0	5	48	39	0.15	
Dungeness ...	29.37	43	NW	2	c	29.57	+ .02	37	35	- .7	WNW	4	0	3	45	35	0.32	
London ...	29.42	45	NW	2	0	29.58	+ .06	38	35	- .11	NW	4	0	*	50	36	0.43	
Oxford ...	29.47	40	W	3	bc	29.64	+ .14	37	34	- .11	W	3	0	*	48	37	0.07	
Cambridge ...	29.39	42	W	1	c	29.55	+ .05	36	35	- .9	NW	3	0	*	47	34	-	
Yarmouth ...	29.34	40	W	3	bc	29.44	+ .01	37	35	- .5	NW	5	bc	4	44	33	-	
Cuxhaven ...	29.23	34	WSW	3	0	29.11	- .28	34	33	+ .8	WSW	3	0	*	34	?	-	
Berlin ...	29.34	28	SW	5	0	29.20	- .62	28	28	+ .13	W	2	0	*	28	?	0.12	
Wiesbaden ...	?	?	?	?	?	29.37	- .55	37	36	+ .21	W	3	0	*	37	?	0.47	
Munich ...	29.58	33	W	4	0	29.38	- .65	37	37	+ .33	W	5	0	*	?	3	0.67	
NETHERLANDS.																		
The Helder ...	29.28	39	W	2	0	29.22	- .12	38	37	- .2	NW	4	0	3	41	36	0.04	
Brussels ...	?	?	?	?	?	29.46	- .15	38	35	+ .3	W	5	0	*	40	?	0.28	
Cape Gris Nez...	?	41	ENE	4	c	?	?	39	36	- .6	NW	5	0	5	48	39	0.47	
Paris ...	29.52	47	SW	3	c	29.67	- .17	39	37	+ .4	W	2	0	*	?	?	0.24	
Brest ...	29.73	51	W	8	c	29.98	- .03	46	43	- .4	NW	5	0	6	52	39	0.39	
Lorient ...	29.74	52	W	7	m	29.95	- .05	48	44	- .3	NW	6	0	7	52	45	0.51	
Rocheport ...	29.98	50	W	7	c	30.00	- .18	47	45	- .1	WNW	5	0	3	52	41	0.63	
Belfort ...	29.69	38	W	4	c	29.63	- .40	39	38	+ .18	W	2	0	*	41	?	0.35	
Lyons ...	?	33	S	2	c	29.77	- .48	41	39	+ .21	NW	3	0	*	?	?	0.39	
Nice ...	29.87	37	E	2	0	29.48	- .51	38	34	+ .5	E	2	0	3	46	?	-	
Perpignan ...	30.08	55	NW	4	0	29.75	- .41	56	50	+ .9	NW	6	0	*	59	?	0.04	
Biarritz ...	30.23	53	W	7	0	30.12	- .17	53	51	+ .3	NW	7	0	8	57	45	0.16	
Corunna ...	?	?	?	?	?	30.40	- .27	55	55	+ .8	WSW	5	c	4	55	46	0.32	
Lisbon ...	30.65	51	NW	4	0	30.60	- .07	51	48	+ .4	WNW	4	0	?	54	?	-	

WEATHER CHARTS

for 8 a.m. on

Friday, 15th February,

1883.

BAROMETER, WIND & 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.

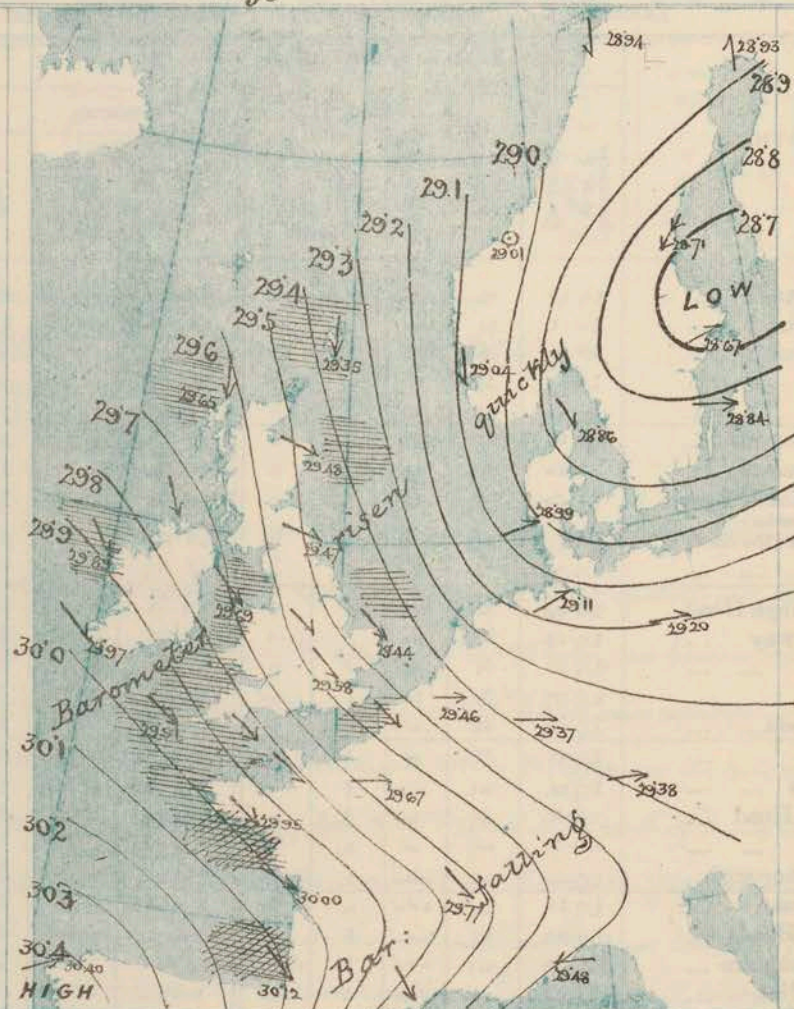
Sea Disturbance—where considerable, is shown thus.

▨ = Rough ▨ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 Years 1871—1885.

STATIONS	MEAN READINGS.
	in.
Sumburgh Head	29.713
Stornoway	29.700
Wick	29.787
Nairn	29.747
Aberdeen	29.780
Leith	29.803
Shields	29.847
York	29.894
Loughborough	29.912
Ardrossan	29.805
Donaghadee	29.813
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.824
Valencia	29.850
Roche's Point	29.850
Pembroke	29.875
Scilly	29.911
Jersey	29.976
Hurst Castle	29.944
Dover	29.957
LONDON	29.940
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.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
Sumburgh Head	42.6	34.7	38.7	37.7	8.29
Stornoway	43.5	34.7	39.3	38.2	2.97
Wick	43.4	33.5	38.4	37.0	2.02
Nairn	43.4	33.8	37.4	35.7	1.61
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	46.3	38.9	39.9	38.3	1.85
Parsonstown	47.4	38.1	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	40.2	43.1	41.9	3.20
Scilly	49.7	43.7	46.9	45.3	2.98
Jersey	47.8	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 10 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.0 ins: to 30.6 ins: over the Spanish Peninsula and the Bay of Biscay.
Lowest, rather below 29.5 ins: along our north-east and east coasts—29.7 ins: and less, in a depression over the Baltic.
Gradient rather steep over France, the British Isles, and the North Sea.
Barometer rising decidedly over the British Isles and north of France—most in Scotland, falling in the south of France.

TEMPERATURE

Highest, 53° at Biarritz, 51° at Lisbon, 48° at Scilly, 45° at Valencia.
Lowest, 18° at Haparanda, 22° at Helsingfors, 25° at Stockholm, 27° at Rode, 28° at the Scour and Berlin.
It has risen rapidly over Germany and the south of France, fallen fast in our Islands.

WIND

N¹ to NW¹ over the British Isles and France, and blowing strongly at all the exposed stations.
W¹ over Germany, Denmark, the north-east of France and the Baltic, NE¹ (a gale) at Helsingfors.
N¹, light, in the west of Norway.

WEATHER

Clear and bright in many places, but with an unsettled appearance.
(Dull in the west and south of France. Cold rain and sleet have fallen in most places, and at some western and northern stations the fall continues.)

SEA

High in the Bay of Biscay, moderate or rather rough on exposed parts of our own coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It is probable that NW¹ to N¹ wind, strong and squally, will prevail in most parts of our Islands today, and reach the force of a gale in some places. That is likely to occur inland at night.

FORECASTS

for the 24 hours ending at NOON on 16th February 1889.

DISTRICTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

FORECASTS.

NW¹ and N¹ winds, strong, a moderate gale at times; sleet showers, cold.

NW¹ winds, strong, squally, cold showers, frost at night.

DISTRICTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

WARNINGS

FORECASTS.

W¹ and N¹ winds, strong, but moderating later, cold showers, very cold at night.

The NORTH CONE has not been lowered.

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.	Dry.	Wet.	Wind.	Waa.	Sea.		Bar.	Dry.	Wet.	Wind.	Waa.	Sea.
Skudesnaes ...	28.76	36	33	NW 2	0	5	Holyhead ...	29.44	45	43	WNW 4	00	4
Sumburgh Head ...	28.89	39	38	NW 3	c	3	Valencia ...	29.65	49	47	WNW 4	00	3
Stornoway ...	29.09	39	38	NW 5	s	4	Scilly ...	29.58	52	52	W 7	00	6
Aberdeen ...	29.10	41	36	W 5	bg	4	Jersey ...	29.67	50	49	W 6	00	5
Shields ...	29.25	44	40	W 3	c	2	Dungeness ...	29.44	44	44	WSW 5	00	4
Ardrossan ...	29.28	44	40	WNW 4	0	3	London ...	29.43	48	46	W 2	00	*
Malin Head ...	29.33	43	40	WNW 4	00	4	Yarmouth ...	29.38	44	43	W 4	cm	3
Mullaghmore ...	29.45	44	42	WNW 5	cp	4	Rochefort ...	30.11	50	49	W 6	0	4
Belmullet ...	29.52	43	42	WNW 4	c	*							

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

The reports for yesterday morning showed that while the highest readings of all, 30.6 ins: and upwards, were found in an anticyclone lying over the south of the Iberian Peninsula, a new area of high pressure with readings above 30.2 ins: had appeared over Central Russia. The lowest readings, 28.7 ins: to 28.8 ins:, were found in a somewhat deep and complex depression, which extended from the south of Norway to the neighbourhood of the Shetlands, but two shallow disturbances, with readings below 29.3 ins: were lying respectively over the southern part of the Adriatic and between the coasts of Italy and Sardinia. The wind was fresh from the NWnd in the extreme west and north of our Islands, and moderate to strong from the NWnd over Great Britain and France. Over the Netherlands, Denmark and the Baltic, however, it was strong, to a gale from the SWnd or Snd, while in the west of Norway it drew into E. or NE. On the northern shores of the Mediterranean the wind was chiefly NE^{ly} while in Algeria it varied between W. and NW. The weather was fine in Germany, the north of Italy, the southern part of France and Spain and Western Algeria, but cloudy or overcast elsewhere, with rain in the western and southern part of the United Kingdom and the north of France, and snow over Finland, Denmark, the south of Scandinavia and the east of France as well as in the Hebrides. Temperature had fallen somewhat in Ireland and Scotland as well as in Russia, Austria and Italy, but risen elsewhere — rapidly over France, Western Germany, and the southeast of England; readings ranged from a little above 50° in the west of France and the extreme southwest of England, as well as at one or two of the Mediterranean stations to a few degrees below zero over Central Russia. The highest individual readings were 55° at Oran, 53° at Brindisi, 51° at Scilly, Lorient, and Bilbao, 50° at Jersey, Brest, Trianitz and Corunna and 49° in London; the lowest were -8° at Moscow, +4° at Prague and Munich, 7° at Archangel, 9° at Kharkov, 12° at Bialow, 13° at Kiev, 14° at Vienna and 15° at Cracow and Lemberg.

In the course of the day the depression in the north travelled in an E^{ly} direction and in its rear the wind increased to a gale from the NWnd in Scotland. Towards night a decided fall of temperature occurred over England and ground frost was experienced in some of the inland districts.

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, 16th February 1889.*
Issued by the Meteorological Office 63 Victoria Street, London. R.H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 3.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 8 A.M. and Sea Level.	Difference from 8 A.M. yesterday.	Dry.	Wet.	Difference from 8 A.M. yesterday.	Dir.	Force. (0 to 12.)		Max.	Min.			
SCANDINAVIA.																		
Haparanda ..	29.09	12	NE	2	S	29.16	+2.1	-5	-6	-23	N	2	bc	*	21	?	0.08	
Hernösand ...	29.14	19	Z	0	b	29.35	+6.4	25	22	+3	NW	8	b	*	28	12	-	
Stockholm ...	29.21	21	WNW	2	b	29.57	+9.0	13	12	-12	W	2	b	*	32	19	-	
Wisby ...	29.21	30	NW	6	o	29.62	+7.8	27	26	-3	N	4	b	*	30	23	-	
Bodö ...	28.88	27	SE	6	S	29.27	+3.3	30	29	+3	W	4	c	2	?	21	-	
Christiansund...	29.48	27	WNW	8	S	29.66	+6.5	27	25	-4	W	5	c	5	32	23	-	
Skudesnaes ...	29.65	31	NW	8	c	29.87	+8.3	33	31	+3	SE	2	o	3	37	27	-	
Christiania Fjord	29.40	33	W	2	b	29.75	+8.6	27	23	-3	WNW	2	b	1	34	23	-	
(Furder)																		
Skagen (The Seaw)	29.45	30	NW	1	b	29.78	+9.2	31	30	+3	NW	1	c	1	36	28	-	
Fanö ...	29.58	34	NW	5	b	29.90	+9.1	32	31	-1	NW	5	b	*	37	32	-	
BRITISH ISLANDS.																		
Sumburgh Head	29.80	32	N	4	o	29.68	+3.3	37	34	+2	SSW	3	o	4	37	30	0.01	
Stornoway ...	29.96	35	N	2	o	29.41	-2.4	38	38	+3	SW	7	r	6	38	30	0.20	
Wick ...	29.97	27	N	2	b	29.65	+1.9	35	34	+1	S	4	o	3	35	26	0.04	
Nairn ...	29.96	35	WNW	2	o	29.67	+1.4	33	33	-1	Z	0	s	1	38	29	0.03	
Aberdeen...	29.94	34	WNW	4	bc	29.76	+2.8	34	32	-1	S	4	ogs	4	39	30	0.08	
Leith ...	29.97	36	N	2	b	29.78	+2.3	39	36	+3	WSW	3	c	*	44	30	-	
Shields ...	30.02	37	NW	2	bc	29.98	+5.1	32	30	-3	SSW	3	c	3	42	29	-	
Spurn Head ...	29.90	39	NW	6	b	30.09	+6.5	34	32	-3	SSW	3	c	4	40	32	-	
York ...	29.98	38	NW	2	b	30.08	+5.4	33	31	-3	S	1	o	*	42	28	-	
Loughborough	30.00	38	NW	2	bc	30.13	+5.6	35	32	-1	SW	3	o	*	46	28	-	
GERMANY.																		
Ardrossan ...	30.01	37	NW	3	b	29.71	+0.8	42	42	+4	S	6	r	5	43	36	0.02	
Malin Head ...	30.05	39	Z	0	bc	29.53	-1.9	40	40	+1	S	6	ofu	4	43	35	0.08	
Mullaghmore ...	30.07	38	Z	0	b	29.68	-1.2	48	47	+8	SW	7	of	6	49	35	0.16	
Belmullet ...	30.06	43	S	2	b	29.74	-1.5	51	50	+9	W	5	o	*	51	38	0.23	
Donaghadee ...	30.05	41	NNE	4	bc	29.82	+1.1	41	41	+5	SW	6	r	4	43	35	0.06	
FRANCE & NETHERLANDS.																		
Harrow-in-Furness	30.04	40	NW	3	b	29.98	+4.0	37	36	-2	SE	4	o	*	44	34	-	
Liverpool (Bidston)	30.03	39	NW	3	b	30.03	+4.1	34	33	-6	SEE	3	o	4	42	34	0.02	
Holyhead ...	30.07	42	NW	5	c	29.96	+1.7	42	42	+2	SEW	6	rgm	5	46	37	0.06	
Parsonstown ...	30.11	40	Z	0	b	29.87	+0.1	47	46	+12	Z	0	r	*	48	33	0.38	
Valencia ...	30.15	42	WSW	1	bm	29.99	+0.2	53	53	+8	WNW	6	ogm	6	53	39	0.50	
Roche's Point...	30.16	42	NW	1	b	29.96	+0.5	52	50	+10	W	4	bc	4	52	42	0.20	
Pembroke ...	30.11	40	N	3	b	30.05	+2.6	44	44	+2	S	6	rgm	6	44	38	0.18	
Scilly ...	30.13	46	NW	4	b	30.14	+2.3	50	50	+2	SSW	6	rm	5	50	41	0.06	
Prawle Point ...	30.12	39	NW	2	b	30.23	+4.1	44	44	+4	SW	4	ou	4	49	33	0.01	
Jersey ...	30.06	45	NW	3	bm	30.31	+4.8	42	39	-3	SW	3	bcn	3	49	33	0.01	
PORTUGAL.																		
Hurst Castle ...	30.04	40	NW	2	b	30.25	+5.5	40	39	0	S	1	c	3	46	33	-	
Dungeness ...	29.89	40	WNW	3	c	30.22	+6.5	30	29	-7	WNW	3	bc	2	45	28	-	
London ...	29.99	40	NW	3	bm	30.22	+6.4	32	31	-6	SW	1	o	*	45	29	-	
Oxford ...	30.09	36	NW	2	b	30.20	+5.6	34	32	-3	SSW	2	og	*	46	31	-	
Cambridge ...	29.97	35	NW	2	b	30.19	+6.4	29	28	-7	S	1	b	*	47	26	-	
Yarmouth ...	29.84	38	WNW	6	c	30.15	+7.1	32	31	-5	WNW	2	bm	4	40	28	0.09	
Cuxhaven ...	29.54	35	NW	4	bc	29.94	+5.3	33	32	-1	WNW	4	b	*	35	30	-	
Berlin ...	29.45	35	W	2	o	29.88	+6.8	31	30	+3	WNW	2	c	*	39	?	0.04	
Wiesbaden ...	*	*	*	*	*	?	?	37	35	0	?	1	o	*	39	34	0.12	
Munich ...	29.69	32	W	5	o	30.06	+6.8	31	30	-6	W	5	s	*	37	28	0.04	
SPAIN & PORTUGAL.																		
The Helder ...	29.78	40	NW	3	b	30.12	-1.6	42	36	+4	NW	3	c	3	?	37	-	
Brussels ...	*	*	*	*	*	30.24	-2.2	36	35	+8	WNW	1	bc	*	41	35	0.08	
Cape Gris Nez...	?	35	NE	4	b	?	?	36	34	-3	?	2	b	2	43	?	-	
Paris ...	29.95	40	NW	3	bc	30.33	+6.6	30	29	-9	NW	1	m	*	45	29	-	
Brest ...	30.17	44	N	3	b	30.32	+3.4	47	45	+1	S	5	o	4	50	39	-	
Lorient ...	30.10	47	WNW	5	b	30.36	+4.1	44	40	-4	SSW	2	o	4	52	37	-	
Rocheport ...	30.10	46	NW	4	bc	30.43	+4.3	36	35	-11	E	1	b	2	?	30	0.04	
Belfort ...	29.80	33	W	1	o	30.24	+6.1	34	33	-5	W	1	c	*	39	28	0.08	
Lyons ...	29.90	30	WNW	3	o	30.32	+5.5	34	32	-7	WNW	3	o	*	45	?	0.04	
Nice ...	29.45	53	SW	6	b	29.85	+3.7	42	31	+4	NW	5	b	2	57	39	-	
Perpignan ...	29.93	48	NW	5	o	30.32	+5.7	42	36	-14	NW	4	b	*	57	41	0.08	
Biarritz ...	30.54	50	N	6	r	30.38	+2.6	42	39	-11	E	3	bc	5	55	41	0.39	
PORTUGAL.																		
Corunna ...	*	*	*	*	*	?	?	?	?	?	?	?	?	?	?	?	-	
Lisbon ...	30.56	54	WNW	4	o	30.52	-0.8	52	50	+1	NNE	1	c	6	57	?	-	

WEATHER CHARTS

for 8 a.m. on Saturday, 16th February, 1883.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

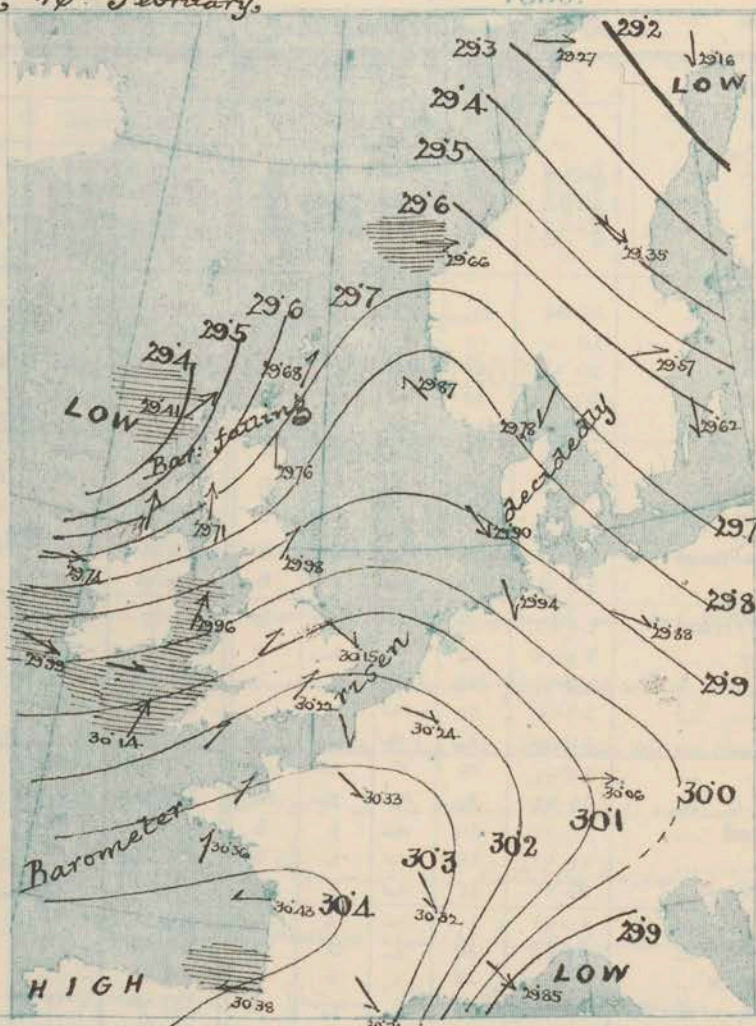
Sea Disturbance — where considerable is shown thus.

— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 years 1871–1885.

STATIONS.	MEAN READINGS
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	29.884
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.

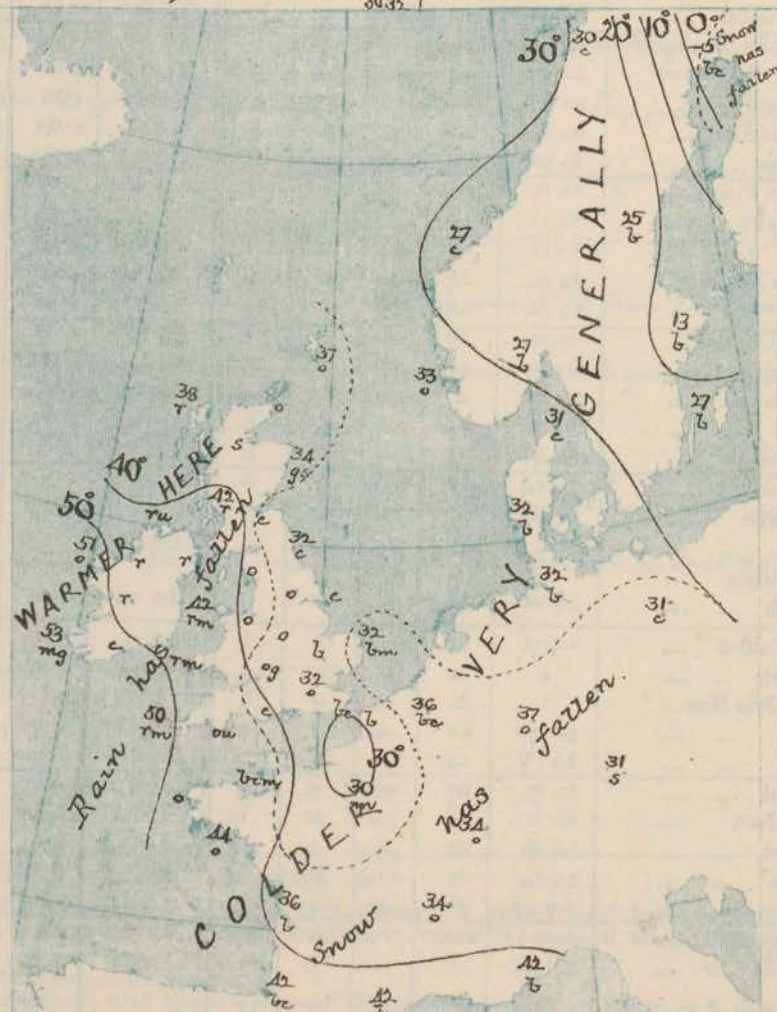
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL
for the month of February

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	at 8 a.m. Dry	Wet	
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	45.8	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	42.8	40.8	2.90
Liverpool	45.8	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	38.9	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 10 years 1866–85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 ins: to 30.5 ins: and more over the Spanish Peninsula and southern parts of the Bay of Biscay.
 Lowest, 29.2 ins: and more, along the south coast of England.
 Gradients, slight over the Continent, moderate over England, rather steep in the northwest of our islands.
 Barometer falling fast in the northwest, slowly in the east and southeast, but has begun to rise again at Valencia.

TEMPERATURE

Highest, 53° at Valencia, 52° at Rochester and Kibow, 51° at Helmsleet, and 50° at Seilly.
 Lowest, -5° at Vaharanda, 13° at Stockholm, 27° at Christiansund and Gaarder, 30° at Paris, 31° at Berlin and 32° in London.
 It has risen quickly at our western stations and the rise is spreading eastwards. A sharp frost occurred over the Central and Southern counties of England during the night.

WIND

Has backed to the SW over our islands, and blows very strongly in the west and northwest.
 At Valencia and Helmsleet, however, it is already veering again.
 NW winds still hold on the eastern shores of the North Sea and in the southern parts of France.

WEATHER

Dull and rainy in the west and northwest, with wet snow in the north and east of Scotland.
 In London the sky is becoming overcast and a faint halo is visible.
 Fine and bright over the Baltic and Southern Europe, cloudy in Germany, snow is falling at Munich.

SEA

Rough in the west and north, moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It is probable that very unsettled wet weather will prevail over the British Isles during the coming twenty-four hours with changeable temperature and strong winds. Our western and extreme northern coasts were warmed last evening.

FORECASTS

for the 24 hours ending at NOON on 17th FEB^y

1889.

DISTRICTS.

FORECASTS.

† 0	SCOTLAND NORTH	S ^w and SW ^w winds, strong, a gale in places; rainy, changeable.
† 1	SCOTLAND EAST	
2	ENGLAND N.E.	SW ^w to W ^w winds, freshening; very changeable, rain at times.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS.

† 6	SCOTLAND WEST	Same as N ^o 0 and 1
7	ENGLAND N.W.	SW ^w winds, strong, to W ^w , moderate; squally, changeable, showery
8	ENGLAND S.W.	
† 9	IRELAND NORTH	W ^w and SW ^w winds, force varying greatly; rainy, unsettled.
† 10	IRELAND SOUTH	

WARNINGS

The SOUTH CONE was hoisted last evening in districts 0, 6, 9, 10, and part of 1.

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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.32	37	35	NNW 6	c	3	Holyhead ...	29.93	43	40	NNW 6	b	6
Sumburgh Head ...	29.67	31	31	N 4	sp	5	Valencia ...	30.08	50	43	N 2	b	2
Stornoway ...	29.90	36	36	N 3	o	3	Scilly ...	30.04	47	43	NNW 5	b	5
Aberdeen ...	29.80	37	33	NW 5	c q	5	Jersey ...	29.95	48	42	NW 3	b	3
Shields ...	29.75	42	37	NNW 4	c	4	Dungeness ...	29.76	44	39	NNW 6	c	4
Ardrossan ...	29.89	42	40	NW 3	b	2	London ...	29.80	45	40	NW 6	bc q	*
Malin Head ...	29.96	42	38	N 3	c	4	Yarmouth ...	29.66	40	37	NW 6	bc q	4
Mullaghmore ...	30.01	45	42	N 2	bc	3	Rocheport ...	30.07	48	45	NNW 5	o	3
Belmullet ...	30.04	46	42	NNE 2	bc	*							

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

The reports for yesterday morning showed that the highest readings, 30.6 ins. and upwards, were still found in an anticyclone lying to the southwestward of the Iberian Peninsula, but the area of relatively high pressure noticed over Central Russia on the previous day, appeared to be going away quickly. The lowest reading, 28.7 ins. and less, were found in a depression lying over Central Sweden, but two small disturbances with readings below 29.5 ins. existed in the neighbourhood of the Gulf of Genoa, while a larger area with similar readings was reported over the Black Sea. Fresh or strong winds from the NWnd were prevalent over the greater part of Western Europe, moderate W^{ly} breezes over the more central countries, and strong SE^{ly} or SW^{ly} winds over the Baltic and Gulf of Finland. Over the central and southern parts of the Mediterranean the wind was moderate to strong from the Wnd, but in the south of France and north of Italy E^{ly} or NE^{ly} breezes were reported. The weather was fine over the greater part of Ireland and England, as well as on the eastern shores of the North Sea, but cloudy or overcast elsewhere, with snow in Finland, South Germany and Austria, as well as in some parts of Norway and Scotland. Temperature had risen rapidly over Central, and less decidedly, over Southern and Eastern Europe, but fallen elsewhere, readings ranged from 50° and upwards at several of the Mediterranean and Spanish coast stations to many degrees below zero over Northern and Central Europe, and to a little below zero over Central Russia. The highest individual readings were 57° at Oron, 56° at Perpignan, 55° at Bilbao, Corunna, Cagliari and Algiers, 54° at Sangüinaria, 53° at Biscaya and Malta, 52° at Palermo, 51° at Lisbon and 50° at Brindisi; the lowest were -3° at Moscow, +9° at St. Petersburg, 13° at Kuopio, 14° at Lemberg and Ruda Pert, 17° at Kiev, 18° at Hermsand and Oranien, 19° at Uleaborg and Prague and 20° at Helsingfors.

In the course of the day the wind backed to the NWnd or SWnd in the extreme west and north of our islands, and at night a fall of the barometer set in over those regions. Sharp frost was experienced over England at night.

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 17th FEB^{ry}

1883.

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

STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 8 a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.39	-7	N	2	b	29.55	+ .39	-16	-16	-	11	Z	0	f	*	14	?	-
Hernösand ...	29.59	15	Z	0	b	29.76	+ .41	20	20	-	5	NNW	2	b	*	36	14	-
Stockholm ...	29.74	17	W	2	b	29.85	+ .28	15	15	+	2	Z	0	b	*	25	?	-
Wisby ...	29.83	30	NW	4	b	29.97	+ .35	30	29	+	3	NW	4	c	*	30	25	-
Bodö ...	29.39	25	N	2	o	29.67	+ .40	30	28	0	NNW	4	bc	2	30	19	-	
Christiansund...	29.64	31	NNW	2	c	29.82	+ .16	29	28	+	2	SE	1	c	3	30	28	0.12
Skudesnaes ...	29.62	35	ESE	4	ors	29.73	- .14	35	34	+	2	ENE	4	ors	3	37	34	0.12
Christiania Fjord (Færd)	29.74	34	WSW	5	c	29.82	+ .07	32	31	+	5	ESE	4	s	2	34	28	-
Skagen (The Seaw)	29.80	31	W	1	o	29.76	- .02	33	32	+	2	S	4	s	3	34	30	-
Fanö ...	29.80	32	S	6	s	29.69	- .21	35	35	+	3	SW	2	f	*	36	32	0.12
BRITISH ISLANDS.																		
Sumburgh Head	29.20	29	SE	3	r	29.74	+ .06	38	37	+	1	Z	0	c	4	42	32	0.22
Stornoway ...	29.44	47	W	7	o	29.71	+ .30	47	47	+	9	SW	6	r	5	47	35	0.20
Wick ...	29.27	41	WSW	7	o	29.80	+ .15	40	39	+	5	NW	1	o	1	44	33	0.30
Nairn ...	29.43	44	WSW	3	o	29.80	+ .13	43	41	+	10	WSW	3	c	2	47	29	0.12
Aberdeen...	29.40	45	WSW	7	bc	29.88	+ .12	39	37	+	5	S	1	om	4	47	33	0.20
Leith ...	29.68	47	W	7	b	29.94	+ .16	45	43	+	6	SW	4	cm	*	50	39	0.04
Shields ...	29.68	49	SW	5	o	30.00	+ .02	45	42	+	13	WSW	3	o	2	50	30	0.02
Spurn Head ...	29.80	39	SW	4	c	30.04	- .05	42	40	+	8	WSW	6	bc	5	43	34	0.01
York ...	29.76	47	W	3	b	30.04	+ .01	44	42	+	11	WSW	2	c	*	48	31	0.02
Loughborough	29.88	44	WSW	3	c	30.17	+ .04	42	40	+	7	WSW	1	o	*	47	34	0.05
Ardrossan ...	29.75	48	W	7	bc	29.97	+ .20	45	45	+	3	S	4	d	3	50	41	0.12
Malin Head ...	29.78	46	W	5	bc	29.91	+ .38	47	47	+	7	WSW	5	od	4	48	40	0.01
Mullaghmore ...	29.96	47	WSW	5	o	30.04	+ .36	50	49	+	2	SW	6	og	5	51	44	0.04
Belmullet ...	29.98	48	W	4	b	30.06	+ .32	49	49	-	2	WSW	4	o	*	51	47	0.03
Donaghadee ...	29.84	48	NNW	6	bc	30.03	+ .21	48	48	+	7	WSW	4	c	3	50	41	0.08
Barrow-in-Furness	29.84	46	W	4	c	30.10	+ .12	43	43	+	6	S	3	fz	*	47	37	0.28
Liverpool (Bidston)	29.88	46	WSW	6	b	30.14	+ .11	44	43	+	10	S	2	o	3	52	34	0.15
Holyhead ...	29.96	48	SW	4	b	30.14	+ .18	46	46	+	4	SSW	4	cm	4	51	42	0.18
Parsonstown ...	30.02	48	W	2	b	30.16	+ .29	49	48	+	2	SW	3	o	*	54	42	0.02
Valencia ...	30.15	51	W	3	o	30.25	+ .26	51	50	-	2	SW	4	om	4	54	50	0.02
Roche's Point...	30.08	51	NNW	5	b	30.24	+ .28	50	48	-	2	W	3	c	4	50	45	-
Pembroke ...	30.04	49	WSW	5	c	30.24	+ .19	48	48	+	4	WSW	4	f	4	50	43	0.16
Scilly ...	30.17	51	W	6	o	30.35	+ .21	50	50	0	W	4	f	5	51	48	0.04	
Prawle Point ...	30.12	49	W	4	o	30.30	+ .07	48	48	+	4	W	4	m	4	49	41	0.18
Jersey ...	30.17	49	W	4	f	30.36	+ .05	50	47	+	8	NNW	5	cm	4	50	42	0.23
Hurst Castle ...	30.03	44	WSW	6	c	30.25	- .00	43	42	+	3	NNW	2	c	3	46	39	0.14
Dungeness ...	30.01	40	SW	6	r	30.14	- .08	40	38	+	10	NW	4	c	3	43	28	0.13
London ...	29.99	44	WSW	2	o	30.19	- .03	42	40	+	10	W	1	o	*	46	32	0.14
Oxford ...	30.00	45	W	4	b	30.22	+ .02	40	39	+	6	WSW	2	o	*	47	34	0.14
Cambridge ...	29.95	41	SSW	2	c	30.16	- .03	44	41	+	15	W	1	b	*	44	27	0.04
Yarmouth ...	29.89	39	WSW	5	o	30.07	- .08	40	39	+	8	NNW	3	bm	3	40	30	0.02
Cuxhaven ...	30.01	35	W	2	o	29.76	- .18	36	36	+	3	W	4	f	*	37	34	0.32
Berlin ...	30.08	31	NNW	2	c	29.97	+ .09	33	31	+	2	S	1	s	*	37	30	-
Wiesbaden ...	*	*	*	*	*	30.07	?	38	37	+	1	SW	2	o	*	41	32	-
Munich ...	30.07	38	SW	4	o	30.13	+ .07	31	30	0	W	6	s	*	36	28	0.04	
FRANCE & NETHERLANDS.																		
The Helder ...	29.80	38	SSW	7	r	29.97	- .15	40	40	-	2	NNW	3	bc	3	43	37	0.08
Brussels ...	*	*	*	*	*	?	?	42	39	+	6	W	4	b	2	43	36	0.12
Cape Gris Nez...	?	39	SW	6	r	?	?	42	42	+	13	SW	3	o	*	43	35	0.04
Paris ...	30.30	37	SW	4	r	30.25	- .08	48	42	+	2	NW	1	m	5	52	39	0.08
Brest ...	30.28	51	NNW	5	f	30.38	+ .06	49	45	+	6	NNW	4	m	4	50	41	0.08
Lorient ...	30.28	51	W	4	m	30.39	+ .03	50	49	+	11	NNW	3	o	2	50	39	0.04
Rocheport ...	30.43	46	SSW	5	o	30.43	+ .00	47	47	+	1	W	1	s	*	41	29	0.16
Belfort ...	30.28	33	NW	1	r	30.38	+ .06	32	?	-	2	S	1	o	*	42	33	-
Lyons ...	30.43	36	ENE	4	b	30.12	+ .27	44	?	+	2	SSW	3	o	1	57	36	-
Nice ...	30.08	47	ENE	4	b	30.32	- .00	54	49	+	12	W	3	b	*	54	44	-
Perpignan ...	30.37	46	NW	4	b	30.49	+ .11	52	51	+	10	NW	5	f	3	54	39	0.02
Biarritz ...	30.45	49	W	3	o	30.53	- .01	51	49	-	3	NNE	2	b	4	55	46	-
Corunna ...	*	*	*	*	*	30.42	- .10	47	46	-	5	NNE	4	b	2	61	35	-
Lisbon ...	30.41	53	NNW	5	b													

WEATHER CHARTS

for 8 a.m. on Sunday, 17th February

1883.

BAROMETER, WIND & SEA.

(Explanation of Map)

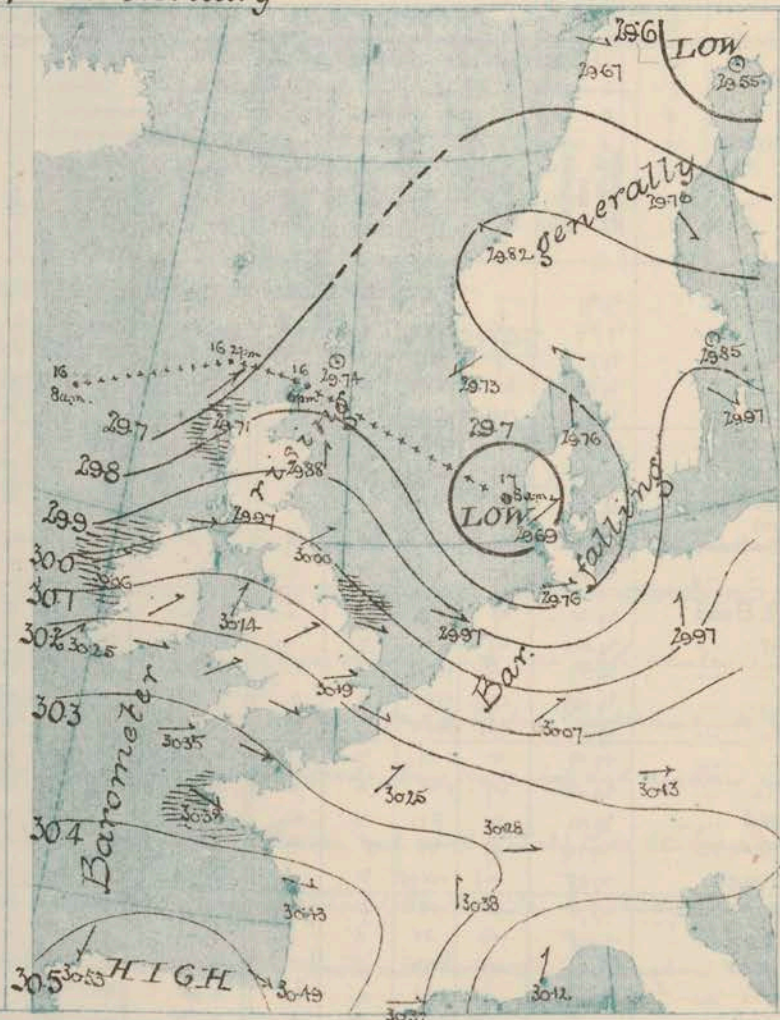
Barometer—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus—
 *— forces above 10; — forces 8 to 10;
 — forces 5 to 7; — forces 1 to 4;
 ○— dead calm.

Sea Disturbance—where considerable is shown thus.
 — Rough — High.

MEAN HEIGHT of the BAROMETER.

at 8 a.m. for the month of February
 During the 15 Years 1871—85.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.713
Stornoway	29.700
Wick	29.787
Nairn	29.747
Aberdeen	29.780
Leith	29.803
Shields	29.847
York	29.884
Loughborough	29.912
Ardrossan	29.905
Donaghadee	29.912
Holyhead	29.848
Liverpool	29.878
Parsonstown	29.884
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	29.940
Oxford	29.938
Cambridge	29.935
Yarmouth	29.928



TEMPERATURE, & WEATHER at 8 A.M., with RAINFALL in PAST 24 HOURS.

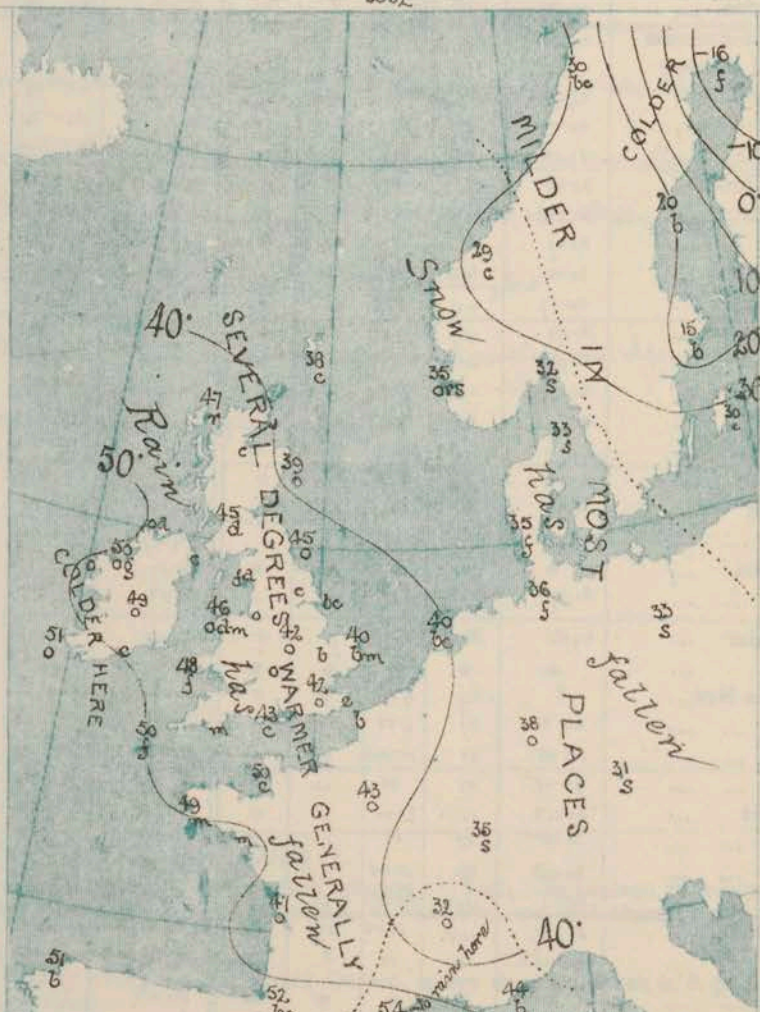
Temperature—Isotherms are drawn for each 10° Changes since previous morning are stated in words.
Weather—is shown by Letters of the Beaufort Scale.
Rainfall—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
 for the month of February

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
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	38.7	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	40.2	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	43.4	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 upwards, in an anticyclone lying over the northern part of the Iberian Peninsula.
 Lowest, 29.6 ins: and less, in the north of Sweden; 29.7 ins: and less, in a large area lying to the N.W. of Scotland, and also in a depression lying off the coast east of Denmark.
 Gradients moderate or slight generally. Barometer rising at all but the Danish and German stations.

TEMPERATURE

Highest, 54° at Perpignan, 52° at Biarritz, 51° at Valencia and Comuna, 50° at Obukhovo, Rostock, Pelly, Venz, and Brest.
 Lowest, -16° at Haparanda, +15° at Stockholm, 20° at Helsingfors, 23° at Christianund, 30° at Rode and Visby, 31° at Munich, and 32° at Berlin.
 Frost occurred last night over the eastern and southeastern parts of Great Britain.

WIND

Moderate or fresh from S.W. or W. in our Islands and from N.W. in the west of France.
 Light from S.W. or S. over Denmark and Germany, and from E. or S.E. in Norway.
 Strong W or S.W. gales were experienced in the north and east of Scotland yesterday, and moderate gales on our northern coast.

WEATHER

Fine in Sweden, the East of England and the south of France.
 Cloudy elsewhere, with rain in our extreme northwest coast, fog at the mouth of the English and Bristol Channels, and snow in the south of Norway and at Berlin.
 Rain or sleet fell yesterday in all parts of Western Europe.

SEA

Waves rough at the mouth of the Channel and at Stornoway, Spunth and Mullaghmore, but moderate to slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay to the northward of our Islands yesterday subsequently travelled eastwards to the north of Scotland has now reached the west coast of Denmark.

The wind is now backing in the straits and a new disturbance is apparently advancing towards our northern coast.

FORECASTS

for the 24 hours ending at NOON on 18th FEB 1889.

DISTRICTS.

- 10 SCOTLAND NORTH
- 11 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 1 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

FORECASTS.

NONE ISSUED

DISTRICTS.

- 16 SCOTLAND WEST
- 17 ENGLAND N.W.
- 8 ENGLAND S.W.
- 19 IRELAND NORTH
- 10 IRELAND SOUTH

WARNINGS

FORECASTS.

NONE ISSUED

Note.—The South Cone, point downwards (1) 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 (1) 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.

The signals were flying yesterday in districts 1, 2, and 6 to 10, but the S. cone has been lowered this morning in districts 2 and 8.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wca.	Sea.		Bar.	Dry.	Wet.	Wind.	Wca.	Sea.		
Skudesnaes ...	29.78	37	35	SSE	6	o	4	Holyhead ...	29.87	49	49	SW	5	cm	5
Sumburgh Head ...	29.35	35	35	SSE	4	r	5	Valencia ...	30.09	54	52	W	4	omg	4
Stornoway ...	29.22	47	47	W	7	r	6	Sally ...	30.14	57	57	W	6	om	1
Aberdeen ...	29.43	38	37	SSW	6	c	6	Jersey ...	30.24	43	42	S	4	r	3
Shields ...	29.64	42	40	SW	4	c	2	Dungeness ...	30.10	42	40	SW	5	r	3
Ardrossan ...	29.62	50	47	W	6	c	5	London ...	30.06	40	39	SSW	3	or	*
Malin Head ...	29.67	48	46	W	6	o	5	Yarmouth ...	30.05	38	37	SW	4	omd	3
Mullaghmore ...	29.85	50	48	W	7	bc	6	Rochefort ...	30.47	48	43	SW	3	bc	2
Belmullet ...	29.92	51	49	W	5	c	*								

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

The reports for yesterday morning showed that pressure varied from between 30.1 ins. and 30.5 ins. over Spain, France, Holland, and the southern half of England to less than 29.4 ins. in a depression which was advancing towards the Hebrides from the Atlantic, to about the same value in another depression lying over Sicily and the south of Italy and the western parts of Greece, and to between 29.1 ins. and 29.3 ins. in a long band of low pressure which stretched southwards from Finland right across the Baltic Provinces and Western Russia to the Black Sea. S^W to W^W winds of considerable strength had set in over the British Isles accompanied by mild weather and rain in the west and northwest; NW^W winds and variable weather were prevalent over Scandinavia, the Baltic, Central and Southern Europe, N^W winds over Spain, while over the Mediterranean N^W and NW^W winds were reported, varying in force from a moderate breeze to a moderate gale accompanied by clear weather on the northern shores, but by cloudy overcast skies in the south. Temperature was very low over Northern Europe, and low (for the region) over Southern Europe also, but was high and rising quickly over the western parts of the British Isles, but low in the southeast. The lowest morning values were -5° F. at Haparanda, 0° at Uleaborg, +7° at Kuopio, 12° at Hangö, 13° at Stockholm, 18° at Helsingfors and Archangel, 23° at St. Petersburg, 24° at Rumanstadt, 24° at Christiansund and Faerden, 28° at Kunda, 30° at Lemby, Casow, Paris and Quimper, 31° at Berlin, and 32° in London and at Shields; the highest were 58° at Algiers, 56° at Malta, 54° at Messina and Oporto, 53° at Valencia (Inland), 52° at Brindisi, Lisbon, and Rochefort, 51° at Belmullet and 50° at Sally.

Later on a well formed depression reached the Orkneys and Shetlands, where the barometer fell to 29.2 ins. and the wind veered to the SW^W and W^W over the United Kingdom and blew hard in the north and northwest, while temperature rose all over 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, 18th February* 1889.
 Issued by the Meteorological Office 63 Victoria Street, London. R.H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ..	29.90	2	Z	0	b	30.06	+ 51	-18	-19	- 2	Z	0	f	*	14	-18	-		
Hernösand ...	30.11	7	Z	0	b	30.09	+ 33	5	5	- 15	Z	0	o	*	37	5	-		
Stockholm ...	30.11	23	Z	0	c	30.12	+ 27	25	24	+ 10	S	2	o	*	30	12	-		
Wisby ...	30.13	30	S	4	o	30.18	+ 21	26	26	- 4	S	4	bc	*	?	25	-		
Bodö ...	29.91	32	WNW	2	c	29.66	- 01	26	23	- 4	ENE	6	c	3	32	21	-		
Christiansund...	29.84	30	ESE	5	o	29.69	- 13	41	38	+ 12	SW	4	o	4	41	28	0.16		
Skudesnaes ...	29.97	37	SSE	6	r	30.00	+ 27	38	38	+ 3	SSE	8	r	5	?	?	0.28		
Christiania Fjord	30.05	33	Z	0	r	30.02	+ 20	35	34	+ 3	WSW	2	o	1	?	30	-		
(Færdar)																			
Skagen (The Scaw)	30.04	33	SSW	1	m	30.08	+ 32	33	33	0	SW	1	f	1	34	32	0.04		
Fanö ...	30.06	35	W	4	o	30.14	+ 45	36	36	+ 1	WSW	4	f	*	37	34	0.04		
BRITISH ISLANDS.																			
Sumburgh Head	29.71	41	SSE	1	r	29.82	+ 68	45	41	+ 7	WSW	3	o	4	47	38	0.10		
Stornoway ..	29.78	51	SW	6	r	29.86	+ 15	45	45	- 2	Z	0	f	3	51	43	0.12		
Wick ...	29.82	48	NW	3	c	29.92	+ 12	47	47	+ 7	Z	0	dm	1	49	39	0.25		
Nairn ...	29.86	52	SSW	1	o	29.92	+ 12	50	46	+ 7	SW	3	c	1	53	43	0.01		
Aberdeen...	29.94	48	SW	1	c	30.01	+ 13	50	48	+ 11	SSW	3	c	4	52	39	0.01		
Leith ...	30.04	48	W	3	c	30.12	+ 18	53	50	+ 3	W	5	cm	*	53	45	-		
Shields ...	30.07	51	WSW	3	c	30.12	+ 22	52	50	+ 7	SW	2	o	2	52	44	-		
Spurn Head ...	30.16	45	WSW	2	c	30.30	+ 26	42	41	0	WSW	3	bc	3	47	41	-		
York ...	30.12	50	W	1	o	30.27	+ 23	50	39	+ 6	W	2	o	*	52	41	-		
Loughborough	30.24	50	WSW	2	o	30.39	+ 22	47	45	+ 5	WSW	3	o	*	53	41	-		
Ardrossan ...	30.06	50	W	4	odp	30.18	+ 21	47	47	+ 2	S	4	o	3	50	44	0.01		
Malin Head ...	30.06	49	WSW	4	op	30.10	+ 19	49	48	+ 2	SW	4	o	3	49	47	0.02		
Mullaghmore...	30.15	50	SW	5	o	30.21	+ 17	50	49	0	SW	5	og	5	52	43	-		
Belmullet ...	30.13	50	SW	4	om	30.21	+ 15	49	49	0	WSW	5	o	*	51	49	0.05		
Donaghadee ...	30.14	52	WNW	4	c	30.25	+ 22	49	48	+ 1	W	4	o	2	52	47	0.01		
GERMANY.																			
Barrow-in-Furness	30.21	45	SSE	4	r	30.28	+ 18	45	45	+ 2	SW	4	bc	*	47	42	0.15		
Liverpool (Bidston)	30.23	50	W	4	o	30.35	+ 21	49	47	+ 5	SW	3	o	3	52	44	0.03		
Holyhead ...	30.23	49	SW	4	o	30.34	+ 20	47	47	+ 1	SW	4	om	4	52	46	0.01		
Parsonstown ...	30.26	51	SW	2	o	30.34	+ 18	50	47	+ 1	SW	2	o	*	54	48	-		
Valencia ...	30.32	52	SW	4	om	30.40	+ 15	49	48	- 2	SSW	5	om	5	53	48	0.01		
FRANCE & NETHERLANDS.																			
Roche's Point...	30.33	51	WSW	4	o	30.41	+ 17	48	47	- 2	WSW	5	r	4	52	48	0.02		
Pembroke ...	30.33	47	WSW	4	c	30.44	+ 20	48	47	0	SW	4	c	4	49	47	0.02		
Scilly ...	30.40	48	W	4	odp	30.51	+ 16	46	46	- 4	WSW	3	of	6	51	45	0.02		
Prawle Point ...	30.41	48	W	3	o	30.52	+ 22	46	46	- 2	WSW	3	md	2	51	44	0.01		
Jersey ...	30.44	49	W	3	f	30.58	+ 22	51	45	+ 1	WNW	3	odp	3	51	45	0.06		
PENINSULA.																			
Hurst Castle ...	30.37	49	WNW	2	c	30.49	+ 24	44	44	+ 1	W	3	ca	2	51	42	-		
Dungeness ...	30.25	45	W	4	c	30.44	+ 30	40	40	0	NW	3	bc	2	55	37	-		
London ...	30.27	53	WSW	2	c	30.44	+ 23	42	41	0	WSW	1	bw	*	58	40	-		
Oxford ...	30.35	47	SW	2	c	30.45	+ 23	43	43	+ 3	W	1	og	*	54	40	-		
Cambridge ...	30.29	48	W	1	c	30.41	+ 25	43	42	- 1	SW	1	bc	*	58	39	-		
Yarmouth ...	30.20	51	WNW	4	c	30.34	+ 27	43	42	+ 3	WNW	3	bm	2	52	39	-		
Cuxhaven ...	30.12	36	W	3	f	30.21	+ 45	38	38	+ 2	W	3	f	*	39	36	0.10		
Berlin ...	30.10	37	SW	1	r	30.27	+ 30	37	37	+ 4	W	1	f	*	37	?	0.12		
Wiesbaden ...	*	*	*	*	*	30.44	+ 37	37	36	- 1	Z	0	o	*	45	36	0.08		
Munich ...	30.31	35	W	5	r	30.50	+ 37	37	37	+ 6	W	5	r	*	37	30	0.04		
GERMANY.																			
The Helder ...	30.20	41	SSW	2	c	30.33	+ 36	41	40	+ 1	SSW	2	c	2	43	39	-		
Brussels ...	*	*	*	*	*	30.46	?	45	44	?	SW	3	o	*	49	44	-		
Cape Gris Nez...	?	44	SW	3	c	?	?	42	42	+ 1	SW	2	j	2	46	41	-		
Paris ...	30.38	52	W	2	o	30.52	+ 27	48	45	+ 5	WNW	2	o	+	56	?	-		
Brest ...	30.52	49	SW	1	o	30.59	+ 21	46	45	- 3	W	2	o	5	52	39	0.08		
Lorient ...	30.48	50	W	3	o	30.57	+ 18	46	46	- 4	N	2	m	4	52	45	-		
Roche fort ...	30.52	48	W	2	f	30.62	+ 19	48	48	+ 1	WNW	1	f	1	59	?	-		
Belfort ...	?	34	W	1	o	?	?	39	38	+ 4	W	1	o	*	43	33	0.08		
Lyons ...	30.47	40	NW	1	c	30.55	+ 17	43	42	+ 11	NE	1	o	*	45	?	0.04		
Nice ...	30.15	45	SE	2	b	30.33	+ 21	47	39	+ 3	E	2	o	0	54	39	-		
Perpignan ...	30.32	54	NW	4	bc	30.46	+ 14	52	45	- 2	W	2	b	*	63	?	-		
Biarritz ...	30.53	52	NW	3	f	30.53	+ 04	48	47	- 4	E	2	f	2	54	46	0.08		
FRANCE & NETHERLANDS.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	30.39	64	NE	4	b	30.39	- 03	54	49	+ 7	NE	5	b	?	70	?	-		

WEATHER CHARTS

for 8 a.m. on Monday, 18th February, 1883.

BAROMETER, WIND & 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 shown thus.

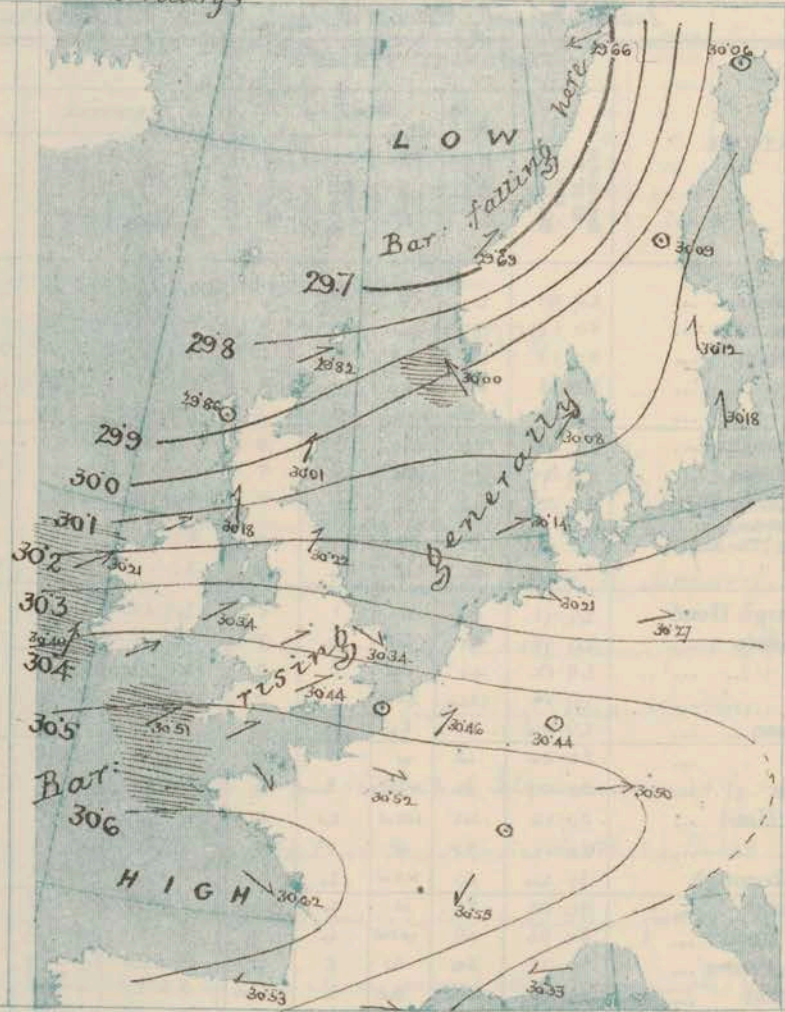
— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February.

During the 15 Years 1871 — 1885.

STATIONS	MEAN READINGS.
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	29.884
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	29.933
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.

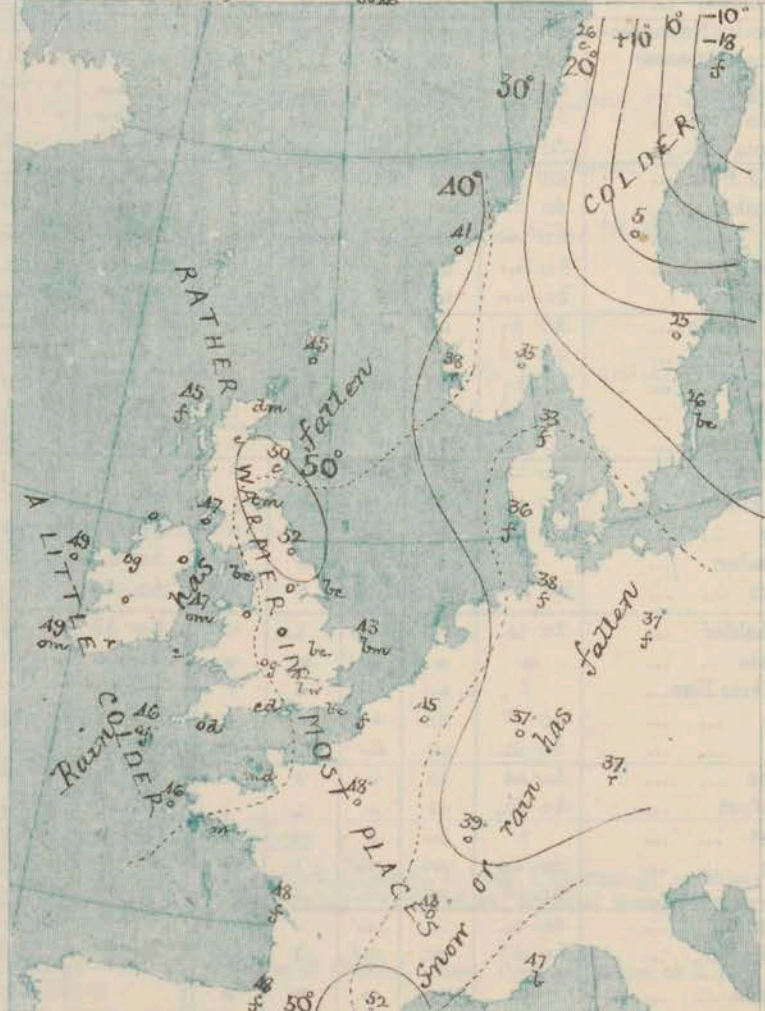
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of February

STATIONS	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head	42.6	34.7	33.7	37.7	3.29
Stornoway	43.5	34.7	33.3	38.2	2.97
Wick	43.4	33.5	33.4	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	35.2	37.7	1.58
Shields	44.3	35.7	39.2	37.9	1.63
York	45.3	34.2	35.2	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	46.3	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	38.0	39.7	38.6	1.89
Oxford	45.9	35.9	38.8	37.7	2.06
Cambridge	46.4	33.9	35.3	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 1868 — 85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.6 ins. and upwards, in an anticyclone over the Bay of Biscay and the west of France.
Lowest, 29.7 ins. and less, in a large depression lying off the west of Norway.
Gradient rather steep over the north of Scandinavia, but moderate or slight elsewhere.
Barometer rising at all but the Norwegian stations, - but change very slight in west.

TEMPERATURE

Highest, 54° at Dublin, 53° at Leith, 52° at Shields and Harwich, 51° at Jersey, and 50° at Kinn, Aberdeen, York, Mullaghmore, and Carnarvon.
Lowest, -18° at Haparanda, +5° at Helsingfors, 15° at Stockholm, 26° at Nisy and Rode, 33° at Paphos, and 35° at Faido.
During yesterday the thermometer rose to 58° in London and at Cambridge.

WIND

Light or moderate from the SWnd or West over our islands, the North Sea, Denmark and Germany.
Light from the Snd in the south of Sweden; strong to a gale from SSE. at Skudenes.
Light from E. in the south of France; fresh from NE. at Leith.

WEATHER

Fine in the southeast of England and also in the south of France.
Cloudy elsewhere, with fog in Denmark, North Germany, and the southwest of France as well as at Skudenes and Sully.
Drizzling rain is falling at most of the Channel stations.

SEA

Rough at Sully, and rather rough off the west of Ireland, as well as at Skudenes; but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer is still rising in the west, but the wind at Valencia is inclined to back and freshen. Another depression will probably appear off our west coasts in the course of the ensuing twenty-four hours.

FORECASTS

for the 24 hours ending at NOON on 19th FEB^{ry} 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	SW ^{ly} winds, moderate to strong; fair to dull, and some rain.
1	SCOTLAND EAST	
2	ENGLAND N.E.	W ^{ly} and SW ^{ly} winds, moderate; fair to dull and some rain.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	



DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	S ^{ly} and SW ^{ly} winds, freshening, dull some rain.
7	ENGLAND N.W.	
8	ENGLAND S.W.	SW ^{ly} winds, freshening; dull, some rain.
9	IRELAND NORTH	S ^{ly} and SW ^{ly} winds, increasing in force; dull, some rain.
10	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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.89	38	36	E 1	0	3	Holyhead ...	30.22	51	49	SW 4	C	4
Samburgh Head							Valencia ...						
Stornoway ...	29.77	50	50	SW 6	1	5	Scilly ...						
Aberdeen ...							Jersey ...	30.40	50	50	W 4	1	3
Shields ...							Dungeness ...	30.23	45	44	W 5	1	3
Ardrossan ...							London ...						*
Malin Head ...	30.00	49	49	WSW 4	0	4	Yarmouth ...						
Mullaghmore ...							Rochefort ...	30.50	53	50	WSW 3	6c	2
Belmullet ...	30.10	51	50	WSW 4	0gm	*							

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

The reports for yesterday morning showed that pressure was highest (30.40 in. to 30.55 in.) in an anticyclone covering the Spanish Peninsula and Bay of Biscay, whence a well marked ridge in which readings varied from 30.40 to 30.1 in. extended eastwards across the S. parts of France and Germany to Hungary. To the N. readings decreased in value to rather below 29.7 in. in the extreme NW and over Denmark, and to rather below 29.5 in. over the White Sea, while in a S. direction they decreased to less than 29.9 in. over Greece. The barometer was rising very generally. The winds over N. and NW Europe (including the British Islands) were mainly S.W. to W., but varied to SE over Denmark and E. in the south of Norway, in consequence of a local depression lying over the North Sea off the Danish coast. Over Central Europe the wind was very light and variable, while in S. Europe and the Mediterranean it was N. (NE to NW) - light in most places, but strong to a gale at Brindisi and Malta. Snow was falling over several parts of Germany and Austria and the S. of Russia as well as in Denmark and the S. of Norway, rain in some parts of the British Islands and at Barcelona while soft fogs prevailed about the mouths of the Irish and English Channels. In most other places the weather was fine, and at the Mediterranean stations it was very bright. Temperature was rising decidedly over W. and NW Europe, but had fallen over Russia, and was much below zero over Finland and Lapland, and below the freezing point in S. Germany, the S. of France, Switzerland and N. Italy. The lowest values recorded were -16° at Kaparanda, -6° at Uleaborg, -1° at Kuopio, +11° at Almel, 15° at Stockholm and Lemberg, 16° at Wladivostok and Warsaw, 21° at Riga, 20° at Vienna and Pesaro, 21° at Turin and Rome, 22° at Florence. The highest were 33° at Barcelona, 32° at Perpignan and La Galle, 31° at Valencia (Holland), Courmou and Janguinaire, 30° at Sally and Mullaghmore and 41° at Stornoway. At Berlin the temperature was 33°, at Madrid 40°, in London 42° and at Paris 43°.

Later on the weather cleared over Great Britain and the S. of France, and temperature rose to a maximum of 58° in London and at Cambridge, 56° at Paris, 54° at Rotterdam and 53° at Vain. Pressure continued to increase, and the general distribution over Europe appeared to be undergoing a marked change.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 10TH FEB. TO THE 16TH FEB. 1889.

The weather during this week has been of a rough and very changeable kind. Pressure has been as a rule highest over the Atlantic and the western coasts of Europe, lowest over the Baltic and Western Russia, while several depressions have passed in from the Atlantic to the continent, one travelling directly over Ireland and England, the others taking a more N.E. course, while their secondaries crossed the United Kingdom. Temperature has consequently changed frequently and considerably - on some occasions sharp frosts prevailed, on others the air was mild and genial. Large quantities of snow fell at the commencement of the week, sleet and rain subsequently in many places, but between the falls the sky has been brilliantly clear.

The first depression reached our shores on Sunday; it was complex in form but not deep, and, travelling ESE, reached Germany on Monday, and Austria on Tuesday.

The second passed over the extreme north of our area on Wednesday, while a V-shaped secondary moved across our Islands.

The third advanced quickly towards Scotland on Wednesday (15th) Evening. It was complex in form but not very deep; reached the S. of Norway on Thursday, and then moved NE to the Gulf of Finland. Some very shallow secondary systems passed across our Islands in its rear.

The fourth came rapidly from the westward towards our extreme northern coasts early on Saturday, and grew deeper as it approached the Shetland Isles. It then took a SE. course and finally filled up near Stralsund on Sunday the 17th Inst.

Several disturbances have appeared over S. Europe and the Mediterranean during the week, causing N. (NE to NW) gales in those regions, accompanied as a rule by bright, dry weather. The movements of these systems have been very irregular, but their effect has been to cause very cold weather in the S. of France and north of Italy.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—Deanfort 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 3 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, 19th February 1889.*
Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)	Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.88	7	S	2	S	29.56	- .50	20	20	+ 38	S	4	S	*	?	-18.	0.32	
Hernösand ...	29.80	28	S	2	O	29.34	- .75	30	29	+ 25	E	2	S	*	34	-2	0.12	
Stockholm ...	29.87	31	S	2	S	29.24	- .88	35	31	+ 10	20	0	T	*	36	19	0.16	
Wisby ...	30.01	33	S	4	T	29.38	- .80	37	36	+ 11	WSW	6	T	*	?	23	0.29	
Bodö ...	29.51	31	ESE	6	S	29.32	- .34	29	27	+ 3	E	4	bc	1	?	23	-	
Christiansund...	29.62	38	SW	4	T	29.37	- .32	35	35	- 6	SW	6	S	4	41	32	0.35	
Skudesnaes ...	29.77	41	WSW	4	T	29.64	- .36	38	36	0	WSW	6	O	4	41	36	0.87	
Christiania Fjord (Farder)	29.75	37	SSW	4	f	29.38	- .64	37	36	+ 2	WSW	4	O	2	37	34	0.12	
Skagen (The Scaw)	29.85	39	WNW	5	f	29.46	- .62	37	36	+ 4	NW	6	bc	3	39	32	0.16	
Fanö ...	30.06	38	WSW	4	C	29.82	- .32	38	38	+ .2	WNW	6	6	*	39	36	0.04	
BRITISH ISLANDS.																		
Sumburgh Head	29.75	42	W	2	O	29.74	- .08	40	37	- 5	NW	5	e	5	46	35	0.44	
Stornoway ..	29.85	44	W	4	T	30.08	+ .22	41	41	- 4	NW	5	O	5	45	37	0.48	
Wick ...	29.80	42	NW	2	O	29.95	+ .03	38	37	- 9	NW	6	bc	4	50	39	0.30	
Nairn ...	29.85	48	WSW	1	T	30.08	+ .16	40	39	- 10	WSW	2	e	1	56	39	0.47	
Aberdeen...	29.90	50	ESE	2	C	30.03	+ .07	40	36	- 10	W	4	6	2	55	40	0.09	
Leith ...	29.98	46	W	7	bc	30.16	+ .04	43	39	- 10	W	3	bc	*	54	40	0.07	
Shields ...	30.13	49	SW	5	C	30.24	+ .02	46	44	- 6	SW	2	bc	2	54	45	-	
Spurn Head ...	30.25	45	SSW	4	C	30.25	- .05	44	42	+ 2	WSW	3	bc	3	49	41	-	
York ...	30.21	50	W	1	bc	30.25	- .02	45	42	- 5	WNW	1	C	*	53	43	-	
Loughborough	30.34	49	SW	1	C	30.34	- .05	48	46	+ 1	W	2	O	*	55	45	-	
Ardrossan ...	30.07	48	SW	5	O	30.24	+ .06	44	43	- 3	WNW	5	b	4	51	43	0.13	
Malin Head ...	30.04	47	SW	5	O	30.32	+ .22	43	41	- 6	NW	4	bc	3	51	43	0.29	
Mullaghmore ...	30.16	50	SSW	6	ogm	30.42	+ .24	45	41	- 5	W	4	O	4	52	44	0.19	
Belmullet ...	30.16	49	SW	7	og	30.45	+ .24	45	43	- 4	WNW	2	O	*	50	43	0.20	
Donaghadee ...	30.19	50	WSW	4	bc	30.36	+ .11	41	39	- 8	W	4	e	2	52	40	-	
Barrow-in-Furness	30.24	45	SSW	5	O	30.32	+ .04	43	41	- 2	W	3	bc	*	46	42	0.06	
Liverpool (Bidston)	30.32	46	WSW	4	fg	30.35	- .00	43	42	- 6	W	4	O	4	51	43	0.02	
Holyhead ...	30.31	46	SW	4	cqm	30.40	+ .06	45	44	- 2	WNW	3	C	3	48	45	0.02	
Parsonstown ...	30.32	49	WSW	3	O	30.46	+ .12	45	44	- 5	20	O	O	*	52	45	0.02	
Valencia ...	30.40	50	WSW	4	om	30.49	+ .09	49	49	0	NW	2	f	2	52	48	0.08	
Roche's Point...	30.41	51	WSW	5	C	30.46	+ .05	50	48	+ 2	W	3	O	3	52	48	-	
Pembroke ...	30.43	46	SW	5	C	30.44	- .00	48	47	0	WSW	5	om	5	48	45	0.02	
Scilly ...	30.51	48	WSW	5	O	30.53	+ .02	48	48	+ 2	WNW	5	og	5	51	45	0.02	
Prawle Point ...	30.53	44	WSW	3	O	30.51	- .01	46	45	0	W	4	od	3	48	42	0.03	
Jersey ...	30.58	46	SW	3	og	30.56	- .02	46	44	?	W	4	om	3	47	44	0.02	
Hurst Castle ...	30.51	45	W	4	C	30.46	- .03	44	43	0	W	5	e	2	46	43	-	
Dungeness ...	30.46	44	WNW	4	O	30.40	- .04	43	42	+ 3	W	4	O	3	47	40	-	
London ...	30.44	50	SW	2	O	30.40	- .04	47	45	+ 5	WSW	2	O	*	55	42	-	
Oxford ...	30.41	46	W	3	O	30.39	- .06	45	44	+ 2	W	3	bc	*	53	43	-	
Cambridge ...	30.38	47	SW	1	bc	30.35	- .06	46	45	+ 3	SW	1	O	*	57	41	-	
Yarmouth ...	30.34	50	W	3	bc	30.29	- .05	46	45	+ 3	WNW	3	bc	2	55	41	-	
Cuxhaven ...	30.24	40	W	3	bc	29.98	- .23	40	40	+ 2	W	7	T	*	41	?	0.02	
Berlin ...	30.28	40	W	2	O	30.06	- .21	41	40	+ 4	W	4	T	*	41	?	0.08	
Wiesbaden ...	*	*	*	*	*	30.37	- .07	41	39	+ 4	W	2	O	*	43	36	-	
Munich ...	30.53	38	W	3	O	30.42	- .08	39	38	+ 2	SW	4	O	*	41	37	0.08	
FRANCE & NETHERLANDS.																		
The Helder ...	30.33	42	SW	2	C	30.19	- .14	42	41	+ 1	W	3	C	3	45	41	-	
Brussels ...	*	*	*	*	*	30.39	- .07	43	41	- 2	WSW	3	O	*	50	42	-	
Cape Gris Nez...	?	43	WSW	4	O	?	?	43	42	+ 2	W	4	O	4	45	41	-	
Paris ...	30.58	46	W	2	O	30.57	+ .05	41	38	- 7	W	2	O	*	52	40	-	
Brest ...	30.62	45	W	1	O	30.61	+ .02	43	42	- 3	WNW	1	O	4	52	39	-	
Lorient ...	30.62	46	W	2	O	30.61	+ .01	42	41	- 4	WNW	2	O	4	50	41	-	
Rochefort ...	30.63	49	WNW	2	O	30.62	- .00	45	44	- 3	NW	3	O	2	54	39	-	
Belfort ...	30.53	42	W	1	O	30.49	?	40	39	+ 1	W	1	O	*	44	32	-	
Lyons ...	30.60	49	N	3	O	30.59	+ .04	41	39	- 2	NW	1	C	*	51	?	-	
Nios ...	30.38	49	SW	2	b	30.39	+ .06	43	43	- 3	NW	4	C	1	39	41	-	
Perpignan ...	30.44	59	NW	3	b	30.47	+ .01	45	41	- 7	20	2	b	*	69	39	-	
Biarritz ...	30.54	52	E	3	b	30.59	+ .06	44	43	- 4	ESE	2	m	2	57	43	0.04	
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	30.40	63	NE	2	b	30.51	+ .12	50	49	- 4	NNE	4	b	2	70	50	-	

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on Tuesday, 19th February, 1883.

BAROMETER, WIND & 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.

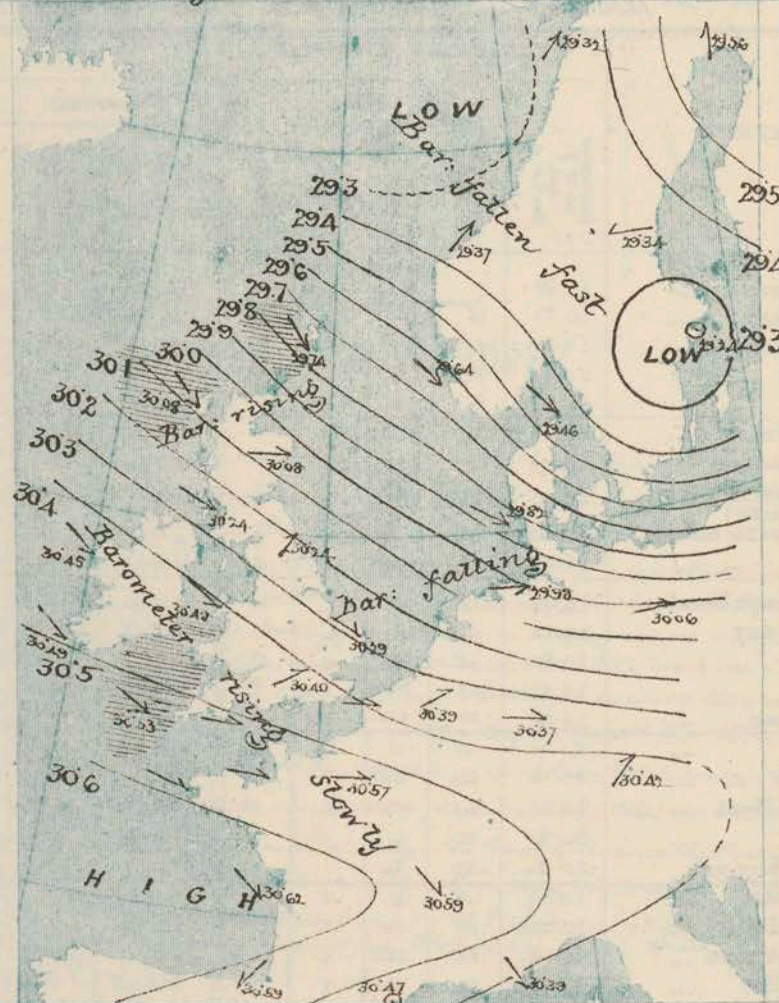
Sea Disturbance — where considerable, is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
 During the 15 Years 1871 — 1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.718
Stornoway	29.700
Wick	29.737
Nairn	29.747
Aberdeen	29.780
Leith	29.808
Shields	29.847
York	29.884
Loughborough	29.912
Ardrossan	29.905
Donaghadee	29.912
Holyhead	29.948
Liverpool	29.878
Parsonstown	29.934
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.

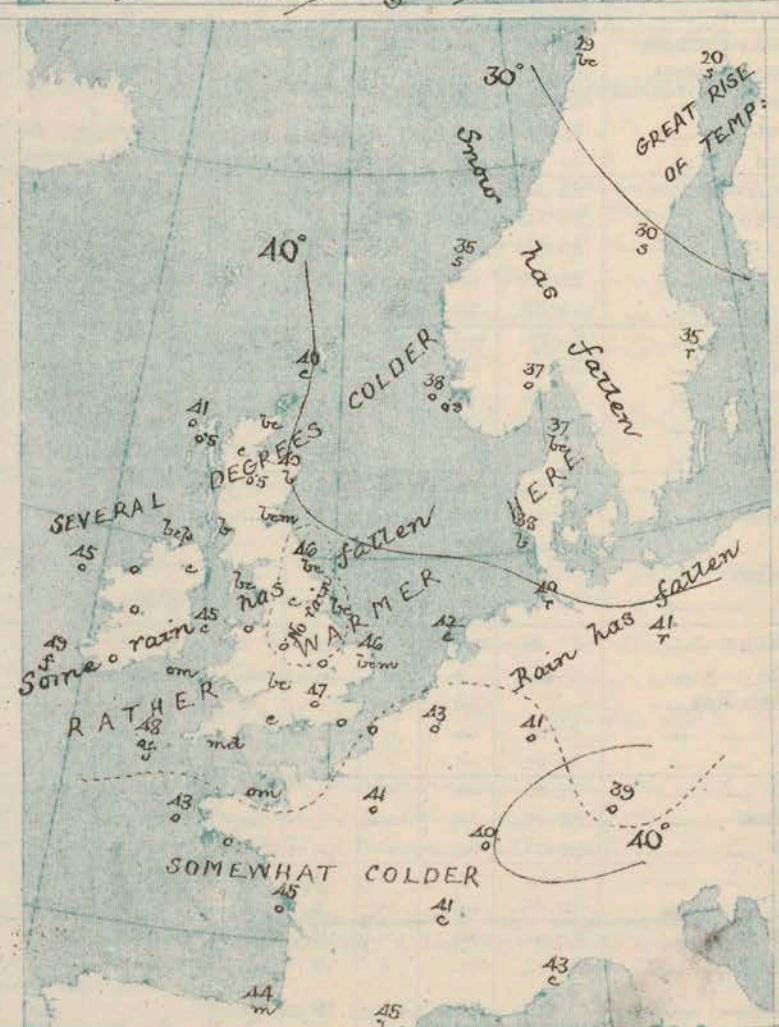
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
 for the month of February

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
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	46.7	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 upwards, in an anticyclone lying over the Bay of Biscay and the west of France.
Lowest, 29.3 ins: and less, in a depression lying off the west of Norway and also in a well marked secondary disturbance lying over the south of Sweden.
Isobars rather steep over the North Sea, Denmark and North Germany, but slight elsewhere.
Barometer rising over the greater part of our Islands and also in the south of France, but falling elsewhere.

TEMPERATURE

Highest, 50° at Rock Point and Lisbon, 48° at Valencia, 46° at Loughborough, Pembroke and Seilly and 47° in London.
Lowest, 20° at Apuranda, 23° at Horta, 30° at Helsingfors, 35° at Stockholm and Christianund, 37° at Tander and Hagen, and 38° at Munk.
During yesterday the thermometer rose to 55° at Aberdeen, Loughborough, Yarmouth, and in London, 56° at Paris, and 57° at Cambridge.

WIND

Moderate or fresh from W. or NW. over the United Kingdom and France; strong from the same quarters on the eastern shores of the North Sea.
Light from E. at Helsingfors and Horta; NE at Biarritz and Lisbon.

WEATHER

Fine on the east coast of Great Britain, as well as in Denmark and the south of France.
Cloudy elsewhere with fog at the mouth of the Channel, rain in North Germany, and snow at some of the Scandinavian stations.
Rain fell yesterday over the western and northern parts of the United Kingdom.

SEA

Rather rough off the north of Scotland and the southwest of England, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

During the past night a small secondary depression has passed across the north of our Islands, and in the rear of this the barometer is at present rising steadily in the west and north. Conditions are, however, still rather unsettled, and it is not improbable that in the course of the ensuing twenty-four hours other disturbances will appear off our western coasts.

FORECASTS

for the 24 hours ending at NOON on 20TH FEB^R 1889.

DISTRICTS.

- 0 { SCOTLAND
NORTH
- 1 { SCOTLAND
EAST
- 2 { ENGLAND
N.E.
- 3 { ENGLAND
EAST
- 4 { MIDLAND
COUNTIES
- 5 { ENGLAND
SOUTH

FORECASTS.

NW¹ winds, fresh or strong; fair generally, but some showers.
W¹ to NW¹ winds, moderate or fresh; changeable, some showers. Colder.

DISTRICTS.

- 6 { SCOTLAND
WEST
- 7 { ENGLAND
N.W.
- 8 { ENGLAND
S.W.
- 9 { IRELAND
NORTH
- 10 { IRELAND
SOUTH

FORECASTS.


Same as No 0 and 1.


Same as No 3 and 5.

NW¹ winds, fresh; fair generally, but some showers.

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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.91	38	37	SE 4	75	5	Holyhead ...	30.36	48	48	SW 4	cm	4
Sumburgh Head ...	29.80	42	41	WSW 2	7	4	Valencia ...	30.41	52	49	SSW 5	ogm	4
Stornoway ...	29.85	44	44	W 4	7	4	Scilly ...	30.52	48	47	WSW 3	of	4
Aberdeen ...	29.95	54	49	SW 4	36	4	Jersey ...	30.60	47	46	WSW 3	0	3
Shields ...	30.18	54	49	SW 4	c	2	Dunghess ...	30.44	46	44	WSW 4	c	2
Ardrossan ...	30.14	50	48	SW 5	0	4	London ...	30.45	54	49	WSW 4	0	*
Malin Head ...	30.08	49	48	SW 6	0	4	Yarmouth ...	30.35	55	52	W 3	b	2
Mullaghmore ...	30.21	50	48	SW 7	0	6	Rochefort ...	30.64	51	51	WSW 1	0	2
Belmullet ...	30.20	50	49	WSW 4	0	*							

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

The reports for yesterday morning showed an increase of pressure on that of the previous morning over nearly the whole of Europe, the exception being the northwest of Norway and the western parts of the Iberian Peninsula, in both of which places a slight fall was reported. The reading varied from between 30.5 ins. and 30.6 ins. over the Bay of Biscay, France, and Central Spain, and from between 30.2 ins. and 30.4 ins. over Germany, Austria, and Western Russia, to rather below 30.1 ins. in a depression lying off the west of Sicily and the extreme south of Italy, to about 29.9 ins. over the White Sea, and to rather below 29.7 ins. off the northwest of Norway. The gradients were moderate to slight generally, and the tendency of pressure was to decrease in the northwest, but to increase elsewhere. The wind was SW^{ly} and W^{ly}, light to fresh over the British Isles, the Netherlands and North Germany, S^{ly} over the southern half of Scandinavia, E^{ly} at Rode. In Russia and France it was extremely light and variable, in Central Europe W^{ly}, while over the Mediterranean it was N^{ly} to NE^{ly}, and blew strongly at Brindisi. The weather was fine and bright over Southern Europe, Finland, the north of Russia and east of England, dull elsewhere, with fog in several places, and drizzling rain on some parts of our northwestern and southern coasts. The cold over Northern Europe had become more intense than on Sunday, while over the British Isles, France, and North Germany the thermometer was rising. The lowest morning readings were -18° F. at Haparanda and Kuopio, -8° at Uleaborg, -1° at Helsingfors, +5° at St. Petersburg, +7° at Kiev, 8° at Archangel, 9° at Riga, 10° at Hangö, 12° at Moscow, 16° at Odessa and Warsaw, 18° at Lemberg, 22° at Budapesth, and 32° at Florence and Pavia; the highest were 61° at Opato, 55° at Algiers, 54° at Laballe and Lisbon, 53° at Fez, 51° at Malta, 50° at Brindisi and Kaim, 49° at Valence and Malin Head, and 45° at Sumburgh H^d. At Berlin and Vienna the temperature was 37°, in London 42°, at Brussels 45°, and at Paris 48°.

Later on a shallow depression moved eastwards across Scotland, temperature rose to between 55° and 57° in many parts of England and Scotland, and to 52° in Ireland. Some rain fell at several of our western and northern 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 WEDNESDAY 20TH FEBRUARY.

1889.

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

STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in shade.	WIND.		Weather.		BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)		SHADE TEMP.		Amount of Rainfall.
			Dir.	Force. (0 to 12.)			Reading at 8 a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)				Max.	Min.	
SCANDINAVIA.																			
Haparanda ..	29.50	18	SE	6	5		29.58	+0.08	14	13	-1.6	E	4	0	*		21	7	0.02
Hernösand ...	29.27	25	NE	6	5		29.38	+0.11	19	18	-1.1	NNE	6	0	*		20	7	0.24
Stockholm ...	29.15	28	NW	7	0		29.26	+0.11	22	21	-1.2	NWN	6	5	*		26	1	0.24
Wisby ...	29.17	15	N	6	0		29.26	-0.12	20	29	-7	N	4	5	*		41	20	—
Bodö ...	29.41	28	E	2	0		29.49	+0.07	27	25	-2	ENE	4	C	2		22	25	—
Christiansund...	29.54	32	WNW	7	0		29.57	+0.03	32	30	-2	SW	5	C	5		?	28	0.47
Skudesnaes ...	29.83	33	NW	7	5		29.70	+0.06	31	32	-5	NWN	4	0	4		29	32	—
Christiania Fjord (Færdar)	29.49	38	WNW	4	6		29.53	+0.04	31	27	-6	NW	4	6C	2		44	28	—
Skagen (The Scaw)	29.52	36	NW	6	6		29.54	+0.02	34	31	-3	N	2	0	2		29	34	—
Fanø ...	29.89	35	W	5	6		29.71	-0.11	35	34	-1	W	4	C	*		44	34	—
BRITISH ISLANDS.																			
Sumburgh Head	29.95	37	NW	5	C		29.78	+0.17	36	34	-4	N	2	C	4		44	34	0.01
Stornoway ...	30.16	42	NW	4	2		29.87	-0.29	41	41	0	NW	2	C	2		44	37	0.08
Wick ...	30.10	43	W	1	0		29.83	-0.27	37	36	-1	2	0	od	1		44	35	0.25
Nairn ...	30.15	42	WNW	2	6C		29.86	-0.29	40	39	-1	2	0	0	1		46	37	0.06
Aberdeen...	30.17	44	W	2	C		29.86	-0.31	39	37	-2	W	2	C	2		45	37	0.04
Leith ...	30.22	42	W	4	6C		29.92	-0.30	41	39	-2	W	2	C	*		51	38	—
Shields ...	30.25	44	W	2	C		29.94	-0.31	40	39	-1	W	2	C	2		49	39	0.01
Spurn Head ...	30.27	42	W	4	C		29.97	-0.30	40	39	-1	WNW	4	C	2		44	38	—
York ...	30.27	43	W	2	6		29.98	-0.29	41	40	-1	W	1	C	*		49	39	—
Loughborough	30.38	44	WNW	2	0		30.08	-0.30	41	40	-1	WNW	1	C	*		48	37	0.01
Ardrossan ...	30.29	45	WNW	2	C		29.97	-0.32	41	40	-1	NW	4	C	2		48	42	0.02
Malin Head ...	30.35	43	WNW	4	6C		30.02	-0.33	45	45	+2	NW	5	of	4		45	41	0.14
Mullaghmore ...	30.40	45	WNW	2	6		30.16	-0.26	47	46	+2	WNW	6	of	5		50	43	0.09
Belmullet ...	30.40	47	SW	2	0		30.22	-0.22	48	48	+3	WNW	5	6C	*		49	44	0.07
Donaghadee ...	30.37	44	WNW	2	6C		30.07	-0.30	47	47	+2	WNW	2	2	1		48	39	0.02
GERMANY.																			
Barrow-in-Furness	30.33	43	SW	2	6C		30.05	-0.28	47	42	-5	WNW	4	6C	*		45	42	0.03
Liverpool (Biston)	30.38	45	W	4	6C		30.09	-0.29	42	41	-1	W	6	0	4		46	41	0.01
Holyhead ...	30.41	44	W	1	C		30.14	-0.26	44	44	-1	WNW	2	C	2		47	42	—
Parsonstown ...	30.44	46	2	0	0		30.24	-0.20	45	44	-1	2	0	0	*		48	43	0.02
Valencia ...	30.46	51	WNW	4	om		30.38	-0.08	49	49	0	W	2	om	2		52	48	0.12
Roche's Point...	30.45	48	WNW	1	2m		30.29	-0.16	50	47	-3	WNW	2	6C	2		51	48	0.20
Pembroke ...	30.46	45	N	2	2		30.20	-0.26	48	47	-1	WNW	5	of	5		48	44	0.27
Scilly ...	30.52	49	W	5	0		30.31	-0.21	50	49	+2	WNW	6	of	5		51	46	0.01
Prawle Point ...	30.46	48	WNW	4	0		30.22	-0.24	47	47	+1	WNW	4	of	4		48	44	0.06
Jersey ...	30.52	48	W	2	0		30.27	-0.25	48	47	-1	W	4	om	2		49	45	0.01
FRANCE & NETHERLANDS.																			
Hurst Castle ...	30.44	45	W	4	2m		30.14	-0.30	44	44	0	W	2	6C	1		47	43	0.16
Dungeness ...	30.37	44	W	2	0		30.10	-0.27	44	40	-4	WNW	4	0	1		45	37	0.07
London ...	30.40	45	W	2	odf		30.10	-0.30	44	40	-4	SW	1	0	*		51	39	0.01
Oxford ...	30.40	44	W	1	0		30.12	-0.28	40	40	-5	W	1	2g	*		49	38	0.02
Cambridge ...	30.37	42	NW	1	6C		30.09	-0.28	40	39	-1	W	1	0	*		52	35	—
Yarmouth ...	30.31	45	NW	2	6C		30.01	-0.30	40	39	-1	WNW	2	C	2		49	35	—
GERMANY.																			
Cuxhaven ...	30.04	40	WNW	5	0		29.84	-0.20	38	38	-2	W	6	2	*		41	37	0.04
Berlin ...	29.96	39	WNW	5	6C		29.80	-0.16	37	35	-2	WNW	5	0	*		43	36	0.04
Wiesbaden ...	*	*	*	*	*		30.06	-0.31	36	35	-1	2	0	0	*		41	34	0.04
Munich ...	30.33	36	W	5	0		30.07	-0.26	35	35	-4	SW	5	0	*		43	34	0.04
FRANCE & NETHERLANDS.																			
The Helder ...	30.23	40	WNW	2	6		29.94	-0.29	40	39	-1	WNW	2	C	2		43	39	—
Brussels ...	*	*	*	*	*		30.06	-0.16	40	47	+7	WNW	2	0	*		?	39	0.04
Cape Gris Nez...	?	43	WNW	4	6		?	?	40	40	-2	WNW	2	0	2		45	39	0.16
Paris ...	30.48	45	W	1	0		30.20	-0.28	46	45	-1	WNW	2	2	*		46	?	0.16
Brest ...	30.60	46	W	2	0		30.41	-0.19	47	46	-1	WNW	4	2	4		52	41	—
Lorient ...	30.57	47	WNW	2	0		30.39	-0.18	48	47	-1	NW	4	0	4		48	41	—
Rochefort ...	30.60	48	NW	2	0		30.46	-0.14	48	45	-3	W	2	2	2		50	37	0.08
Belfort ...	30.44	38	W	2	0		30.10	-0.34	38	35	-3	W	1	0	*		42	31	0.08
Lyons ...	30.52	43	N	2	6C		30.36	-0.16	37	36	-1	NW	1	0	*		50	37	0.04
Nice ...	30.56	48	SW	2	0		29.99	-0.57	44	43	-1	ENE	2	C	2		57	43	—
Perpignan ...	30.40	59	W	2	C		30.29	-0.11	53	45	-8	NW	2	0	*		71	?	—
Biarritz ...	30.57	50	NW	2	6		30.51	-0.06	48	45	-3	NW	2	om	2		55	44	—
PENIN. S. I.																			
Corunna ...	*	*	*	*	*		*	*	*	*	*	*	*	*	*		*	*	*
Lisbon ...	30.49	63	NW	4	6		30.43	-0.06	57	49	-8	2	0	C	2		68	?	—

WEATHER CHARTS

for 8 a.m. on Wednesday

20th FEBRUARY,

1880.

BAROMETER, WIND & 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 shown thus.

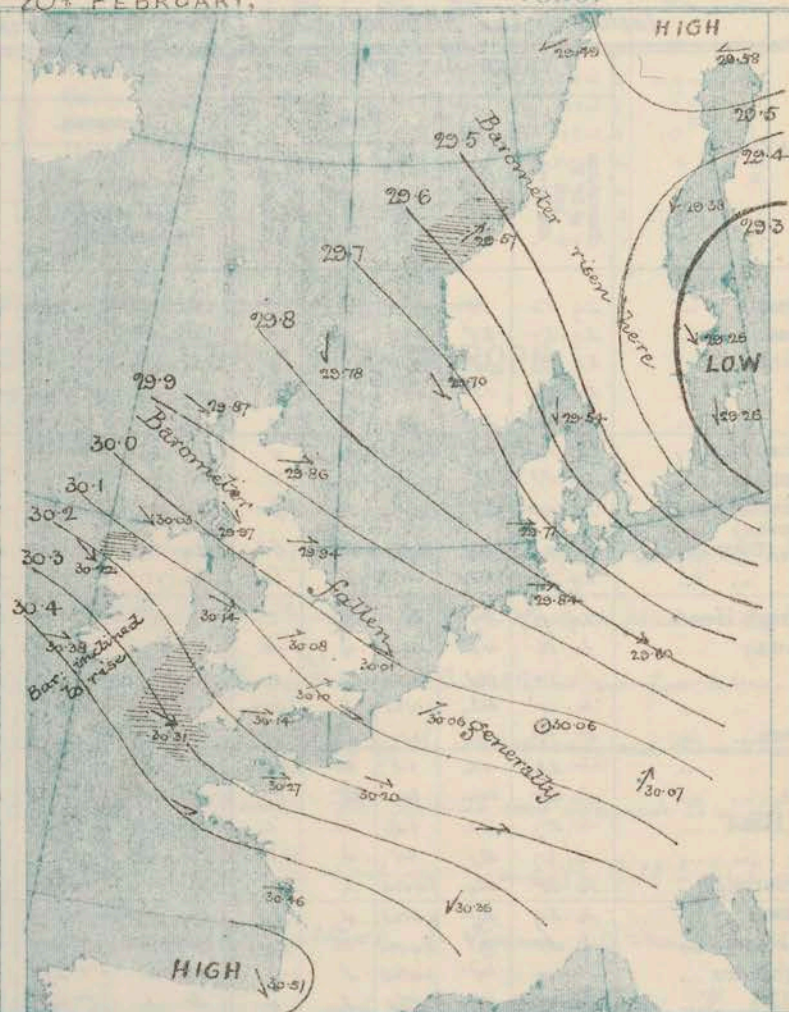
— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February

During the 15 Years 1871 — 1885.

STATIONS.	MEAN READINGS.
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	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.884
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	29.940
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.

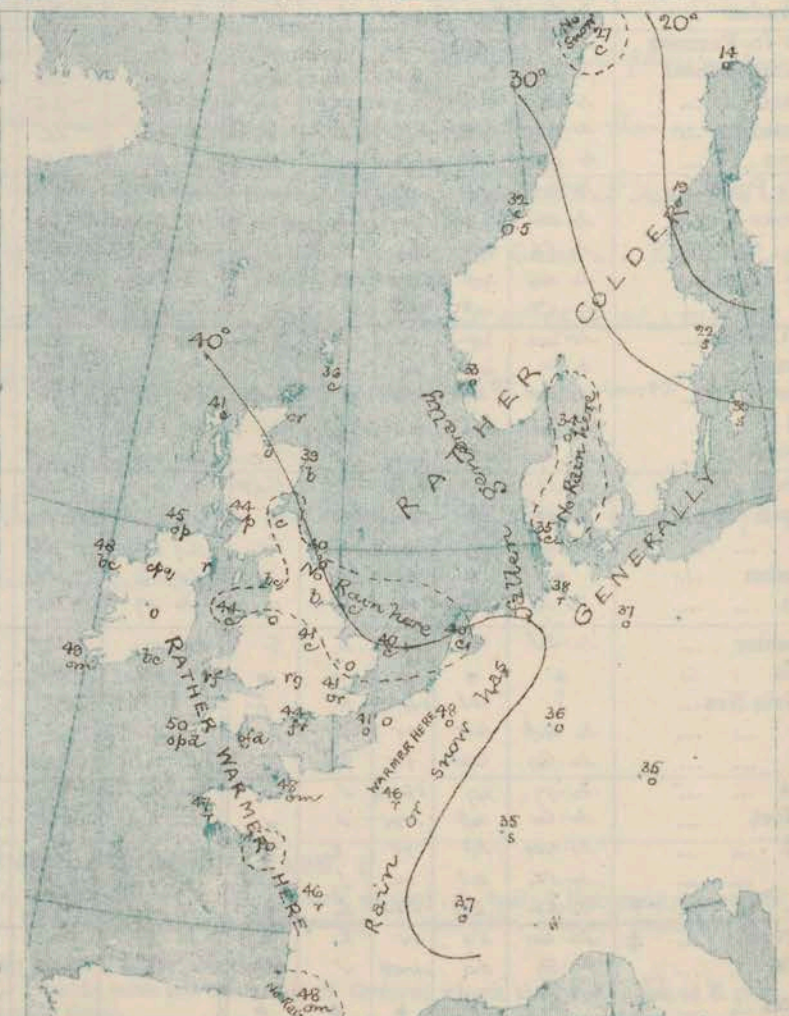
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of February

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	
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	45.3	37.0	40.7	39.7	2.71
Holyhead	48.1	39.3	42.3	40.8	2.90
Liverpool	48.3	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	38.9	38.3	37.3	1.60
Yarmouth	48.5	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	<p>Highest 30.5 ins. and upwards over the north of Spain and the southern parts of the Bay of Biscay.</p> <p>Lowest 29.3 ins. and less in a depression lying over the Baltic.</p> <p>Gradients moderate or slight generally. Barometer falling at all but the Scandinavian stations.</p>
TEMPERATURE	<p>Highest 53° at Lisbon, 50° at Roch's Point and Scilly, 49° at Valencia, and 48° at Belmullet, Pembroke, Jersey, Brussels, (London and Biarritz).</p> <p>Lowest 44° at Agerup, 49° at Hernesand, 22° at Stockholm, 21° at Bodo, 36° at Wisby, 31° at Faerder, and 32° at Christiansund.</p>
WIND	<p>Light to fresh from Wnd or N.W.nd over the greater part of western Europe.</p> <p>N^{ly} in Sweden, E^{ly} in the north of Scandinavia; S.W.^{ly} at Christiansund.</p>
WEATHER	<p>Fine at some of our eastern stations, but cloudy or overcast elsewhere.</p> <p>Rain is falling at many of our southern and the French stations, as well as at Wick, and snow in the south of Sweden.</p> <p>A little rain fell yesterday in most parts of western Europe.</p>
SEA	<p>Rather rough off the southwest of England, as well as at Skudesnaes and Mullaghmore, but moderate to smooth elsewhere.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The present indications are in favour of a continuance of N.W.^{ly} breezes, and changeable, showery weather, and as the barometer is falling steadily on our East coasts while it is inclined to rise at Valencia, the gradients over our Islands are likely to become somewhat steeper.

FORECASTS

for the 24 hours ending at NOON on 21st February 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	N.W. ^{ly} winds, light or moderate; changeable; some cold showers.	6 { SCOTLAND WEST	Same as N ^o 0 and 1.
1 { SCOTLAND EAST		7 { ENGLAND N.W.	
2 { ENGLAND N.E.	W ^{ly} to N.W. ^{ly} winds, moderate or fresh; changeable, some showers.	8 { ENGLAND S.W.	N.W. ^{ly} winds, fresh or strong; squally, some showers.
3 { ENGLAND EAST		9 { IRELAND NORTH	
4 { MIDLAND COUNTIES		10 { 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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.75	29	35	WNW 5	c th	5	Holyhead ...	30.43	47	44	WNW 2	c	3
Sumburgh Head ...	29.87	38	36	NW 5	c	5	Valencia ...	30.48	52	52	WNW 3	om d	4
Stornoway ...	30.16	44	43	NW 4	c	4	Scilly ...	30.53	50	49	WNW 4	o	4
Aberdeen ...	30.16	44	43	WNW 5	bagu	3	Jersey ...	30.56	49	47	W 3	om	3
Shields ...	30.25	43	43	W 2	c	2	Duageness ...	30.40	44	43	W 4	o	3
Ardrossan ...	30.28	43	46	WNW 4	c	3	London ...	30.41	51	49	W 2	om	*
Malin Head ...	30.35	45	43	NW 4	c	4	Yarmouth ...	30.30	49	45	NW 4	bc	2
Mullaghmore ...	30.42	48	45	W 4	c	3	Rocheport ...	30.64	49	47	NW 2	o	1
Belmullet ...	30.46	48	46	W 3	o	*							

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

The reports for yesterday morning showed that pressure was high, 30.4 ins. to 30.6 ins., over the Bay of Biscay, Spain, France and Germany, and that it was rather high, 30.2 ins. to 30.3 ins., and more over the southern half of Russia also, while it was lowest (29.3 ins. and less) in a depression lying off the northwest of Norway, and in a secondary system near Stockholm. Gradients were rather steep for NW. 4 winds over the North Sea, and for S. 4 to SE. 4 winds over the Baltic, over southern and western Europe they were slight and irregular. The wind had become NW. 4 to W. 4 over the British Islands and North Sea, and blew strongly at the Scotch and Danish stations and at Esboeven; over the Baltic it was S. 4 (SW to SE) moderate to strong in force, and blowing a gale (from SSE) at Hangö. Over Central Europe the wind was W. 4, over the Mediterranean chiefly NW. 4, but variable, and in Portugal E. 4. The weather was fine and bright on the Mediterranean coasts and in Spain, cloudy or overcast elsewhere, with ^{rain} at many of the German and Baltic stations, snow over Finland, the Gulf of Bothnia and at Christiansund. Temperature had risen rapidly over northern Europe (as much as 38° at Haparanda) and slightly over the north of Italy, but had fallen over the northern parts of the British Islands and the north of France. The lowest morning readings reported were 12° at Moscow, 13° at Odessa, 15° at Nicolaioff, 17° at Uleaborg, 25° at Riga, 27° at Lemberg, 36° at Florence; the highest were 61° at Ajaccio, 54° at Barcelona, 53° at Algiers, 51° at Cagliari and Corunna, 50° at Rocher Point, 49° at Valencia, Brindisi and Naples; at Berlin and Paris it was 44°, at Brussels 43°, and in London 47°.

The changes later were somewhat irregular, and the Swedish depression moved southeastwards towards the Baltic Provinces.

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, 21st February 1889.*
 Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer.	SHADE TEMP.			WIND.	Force (0 to 12.)	Weather.	Sea (0 to 9.)	SHADE TEMP.			Max.	Min.	Amount of Rainfall.
			Dir.	Force (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.								
SCANDINAVIA.																			
Haparanda ..	29.88	9	SE	4	0	29.84	+ .26	11	11	- 3	NE	2	0	19	7	-			
Hernösand ...	29.54	18	NE	6	S	29.81	+ .43	15	14	- 4	NNE	6	S	25	7	0.04			
Stockholm ...	29.31	18	NW	4	S	29.53	+ .27	14	13	- 8	N	4	S	28	9	0.08			
Wisby ...	29.31	24	N	6	bc	29.89	+ .13	23	23	- 7	N	6	S	41	21	0.12			
Bodö ...	29.77	23	ENE	4	b	29.91	+ .42	18	15	- 9	ENE	4	b	28	16	-			
Christiansund...	29.67	34	NE	3	C	29.89	+ .32	30	28	- 2	ESE	1	b	34	27	0.04			
Skudesnaes ...	29.73	32	NW	6	b	29.87	+ .17	33	32	0	NW	6	b	36	32	-			
Christiania Fjord (Fierder)	29.52	34	NW	2	b	29.70	+ .17	27	25	- 4	NNE	5	b	36	23	-			
Skagen (The Seaw)	29.48	36	NNE	4	b	29.65	+ .11	26	24	- 8	NE	4	0	36	9	-			
Fanö ...	29.59	33	NW	4	b	29.67	- .04	32	31	- 3	NW	4	b	37	30	-			
BRITISH ISLANDS.																			
Sumburgh Head	29.91	34	N	2	0	30.15	+ .37	35	33	- 1	N	3	bc	37	31	-			
Stornoway ...	29.99	41	NW	4	r	30.30	+ .43	36	36	- 5	NW	2	c	44	32	0.13			
Wick ...	29.97	39	NW	3	C	30.23	+ .40	34	33	- 3	N	4	0	41	33	0.07			
Nairn ...	29.95	42	W	1	0	30.26	+ .40	37	36	- 3	W	1	c/p	47	37	0.06			
Aberdeen...	29.97	39	N	2	C	30.22	+ .36	36	33	- 3	NW	4	c	45	35	0.01			
Leith ...	29.96	44	E	1	bc	30.24	+ .32	39	35	- 2	NNE	1	c	52	36	0.01			
Shields ...	29.90	43	N	2	C	30.17	+ .23	36	35	- 4	NW	3	c	49	35	0.01			
Spurn Head ...	29.88	41	NW	3	C	30.09	+ .12	36	36	- 4	N	6	c/p	44	35	0.03			
York ...	29.89	43	N	1	C	30.11	+ .13	37	35	- 4	N	2	bc	50	35	0.01			
Loughborough	29.95	43	NW	2	0	30.17	+ .09	39	37	- 2	NW	3	c	47	38	0.05			
Ardrossan ...	30.01	45	NW	3	bc	30.26	+ .29	40	38	- 4	W	0	bc/mw	47	36	0.01			
Malin Head ...	30.12	43	NW	5	bc/p	30.33	+ .30	44	42	- 1	NW	4	op	45	41	0.03			
Mullaghmore ...	30.23	45	NW	6	c/p	30.36	+ .20	44	42	- 3	NW	5	op/p	49	42	0.07			
Belmullet ...	30.30	46	NW	5	C	30.41	+ .19	43	42	- 5	N	1	b	49	42	0.04			
Donaghadee ...	30.10	45	NW	5	r	30.28	+ .21	44	43	+ 1	N	5	c	49	43	0.13			
Barrow-in-Furness	29.99	43	NW	3	bc	30.21	+ .16	37	36	- 6	N	1	c	47	36	0.05			
Liverpool (Bidston)	30.01	43	NW	6	C	30.23	+ .14	39	38	- 3	NW	1	bc	46	38	0.11			
Holyhead ...	30.09	45	NW	5	c/p	30.25	+ .11	44	43	0	NNE	4	c	50	43	-			
Parsonstown ...	30.27	45	NW	2	0	30.38	+ .14	38	37	- 7	W	0	0	53	37	-			
Valencia ...	30.38	50	NW	5	r	30.44	+ .06	48	45	- 1	N	2	c	53	46	0.01			
Roche's Point...	30.27	50	NW	5	bc	30.37	+ .08	45	41	- 5	NW	4	b	52	43	-			
Pembroke ...	30.16	47	NW	5	bc	30.28	+ .08	44	41	- 4	NW	5	c/p	49	44	0.02			
Scilly ...	30.24	50	NW	6	om	30.28	- .03	47	44	- 3	N	6	c	50	45	-			
Prawle Point ...	30.13	47	NW	4	C	30.22	- .00	41	39	- 6	NW	2	bc	53	37	0.03			
Jersey ...	30.10	48	NW	3	bc	30.17	- .10	45	41	- 3	NW	4	c/p	50	44	0.06			
Hurst Castle ...	30.00	46	NW	5	bc/p	30.16	+ .02	40	39	- 4	N	3	b	51	38	0.03			
Dunoon ...	29.90	45	N	2	m	30.05	- .05	38	37	- 3	N	5	0	48	37	0.02			
London ...	29.94	45	NW	3	0	30.13	+ .03	39	36	- 2	N	2	c	49	33	0.11			
Oxford ...	29.98	43	NW	5	r	30.18	+ .06	37	36	- 3	NW	2	C	50	37	0.05			
Cambridge ...	29.92	42	NW	2	0	30.14	+ .05	38	37	- 2	N	1	0	50	35	0.02			
Yarmouth ...	29.85	42	NW	3	C	30.01	- .00	38	36	- 2	N	5	bc/p	46	34	0.06			
Cuxhaven ...	29.60	34	NW	4	0	29.66	- .18	33	32	- 5	N	4	b	37	31	-			
Berlin ...	29.54	33	NW	3	0	29.58	- .22	29	28	- 8	NW	3	c	39	28	0.24			
Wiesbaden ...	*	*	*	*	*	29.72	- .34	34	32	- 2	NW	3	b	43	34	0.04			
Munich ...	29.72	32	W	5	b	29.59	- .48	30	30	- 5	NW	5	S	37	30	0.12			
FRANCE & NETHERLANDS.																			
The Helder ...	29.77	39	NW	2	C	29.87	- .07	37	35	- 3	N	3	bc	39	34	0.08			
Brussels ...	*	*	*	*	*	29.92	- .14	35	34	- 13	NW	3	C	37	35	0.08			
Cape Gris Nez...	?	45	NW	4	0	?	?	39	37	- 1	NNE	5	C	46	37	0.08			
Paris ...	29.97	45	NW	2	0	29.98	- .22	39	36	- 7	NW	4	bc	50	38	0.39			
Brest ...	30.26	49	NW	5	0	30.25	- .16	44	43	- 3	N	6	0	52	39	-			
Lorient ...	30.21	50	NW	4	C	30.19	- .20	45	42	- 3	NW	3	bc	50	43	-			
Rochefort ...	30.23	48	NW	5	f	30.15	- .31	45	42	- 1	NW	5	b	50	39	-			
Belfort ...	29.85	39	W	3	r	29.77	- .33	36	35	+ 1	W	1	C	40	31	-			
Lyons ...	30.03	42	W	2	r	29.84	- .52	36	35	- 1	NW	4	r	48	34	0.43			
Nice ...	29.59	50	SE	2	b	29.44	- .55	50	50	+ 6	W	2	b	51	37	-			
Perpignan ...	30.08	57	NW	4	bc	29.80	- .44	50	43	0	NW	6	b	65	47	-			
Biarritz ...	30.32	50	NW	4	0	30.15	- .36	50	48	+ 2	NW	6	0	54	45	0.08			
PORTUGAL.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lisbon ...	30.31	58	NW	4	b	30.16	- .27	50	47	- 3	W	0	b	70	48	-			

For Explanation of Columns, see p. 4.

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

Thursday, 21st February.

1883

(Explanation of Map)

Wind ——— Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —

* \rightarrow = forces above W_1 \rightarrow = forces 8 to W_1
 \rightarrow = forces 5 to T_1 \rightarrow = forces 1 to 4_2
 \odot = dead calm.

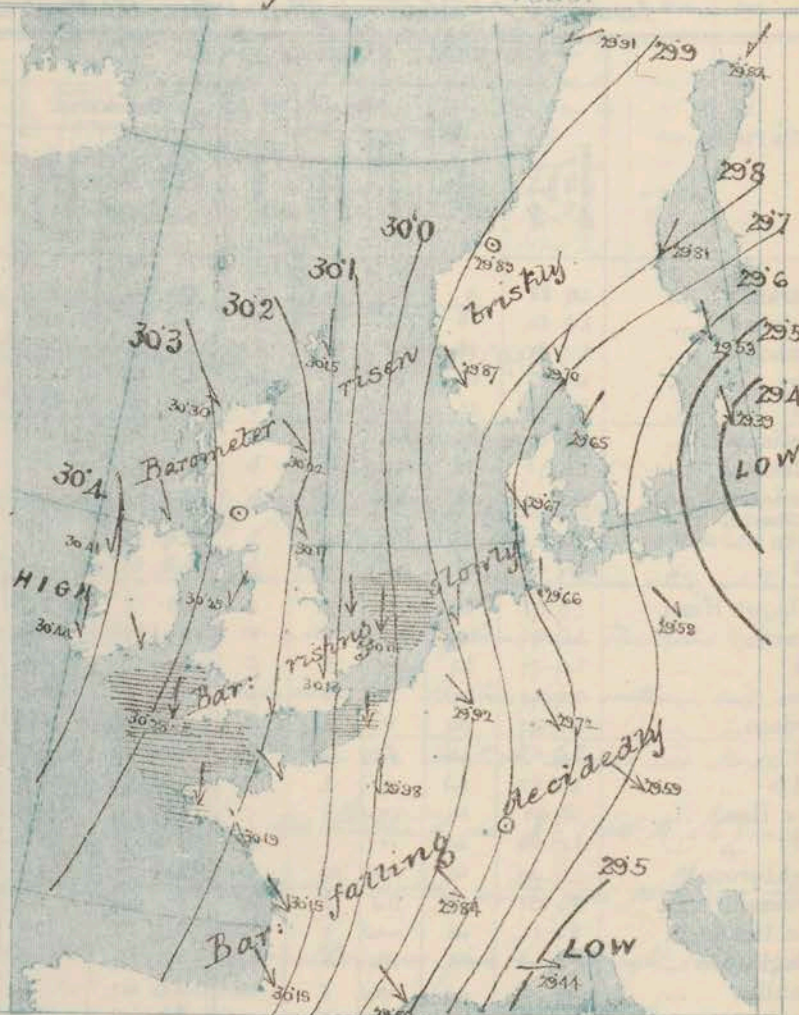
Sea Disturbance—where considerable, is shewn thus

 = Rough  = High

at 6 a. m. for the month of February

During the 16 Years 1871 — 1886

STATIONS.	MEAN READINGS.
	<i>ms.</i>
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



with RAINFALL in PAST 24 HOURS.

Weather is shown by Letters of the Beaufort Scale.

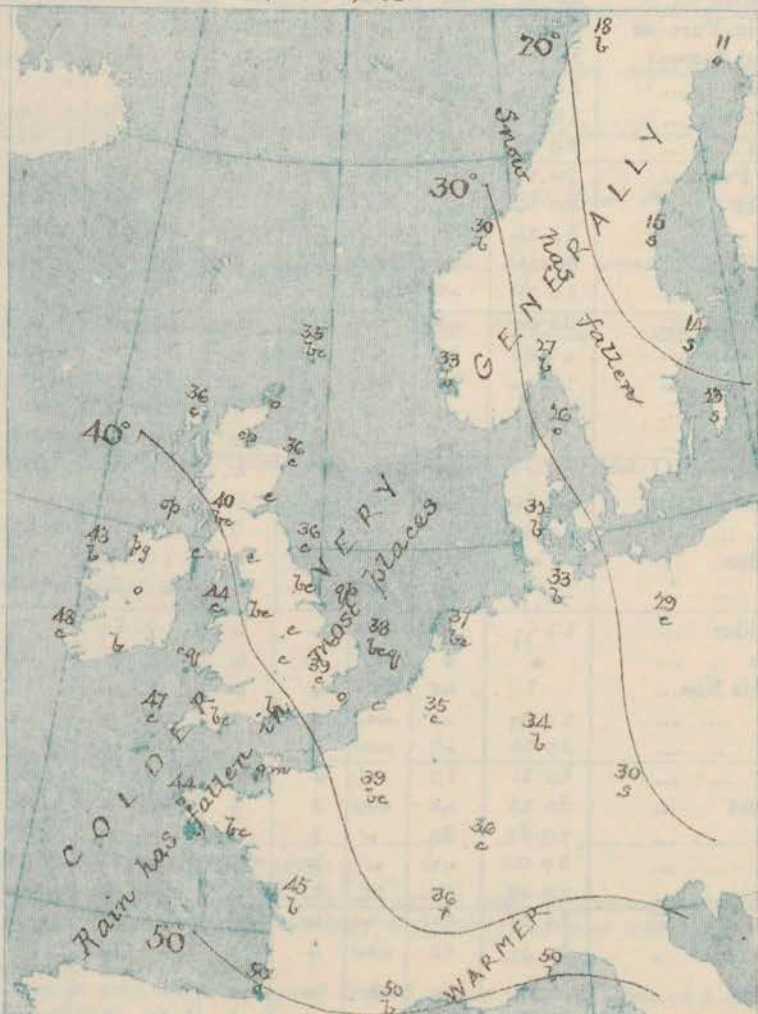
Rainfall. A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

AND RAINFALL.

for the month of February

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head	42.6	34.7	38.7	37.7	3.28
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	46.3	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	1.69
Oxford	45.9	35.9	38.6	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 45 years 1871-85, the Rainfall means are mainly those for the 30 years 1866-85



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.4 ins. and upwards, in an anticyclone lying to the westward of our islands.</p> <p>Lowest, 29.4 ins. and less, over the Baltic; 29.5 ins. and less, over the Gulf of Genoa.</p> <p>Gradients moderate or slight generally, but rather steep over the southeast of France.</p> <p>Barometer rising at all but the French and Spanish stations — most on our northern coasts.</p>
TEMPERATURE	<p>Highest, 50° at Biarritz, Perpignan, Nice and Lisbon, 48° at Valencia, 47° at Brest, and 45° at Rochefort, Jersey, Lorient and Rochefort.</p> <p>Lowest, 11° at Haparanda, 14° at Stockholm, 15° at Helsingfors, 18° at Rode, 23° at Vidy, 25° at Algeirs, and 27° at Tander.</p>
WIND	<p>Chiefly N^{ly} or NW^{ly}; light or moderate in force in the north of our islands, but fresh or strong at many of our southern and the Continental stations.</p> <p>Light or moderate from NE. or E. over the northern parts of Scandinavia.</p>
WEATHER	<p>Fair generally, but showery at some of our northern and eastern stations. Snow is falling in Sweden.</p> <p>A little rain fell yesterday in many parts of Western Europe.</p>
SEA	<p>Rather rough at the mouth of the Channel and also at Yarmouth and Freetown, but moderate or slight elsewhere.</p>


PROBABLE CHANGES IN SYSTEM NOW PREVALENT


N^{ly} winds seem likely to continue over our islands for a time, with cold weather and showers at some of our northern and eastern stations. There are at present no indications of the advance of any depressions towards our coasts.

FORECASTS

For the 24 hours ending at NOON on 22nd FEB^y 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	N ^{ly} and NW ^{ly} winds, moderate, changeable, some snow or sleet showers.	6 { SCOTLAND WEST	N ^{ly} winds, light or moderate, fair generally, but local showers.
1 { SCOTLAND EAST		7 { ENGLAND N.W.	
2 { ENGLAND N.E.		8 { ENGLAND S.W.	Same as N ^{os} 3 to 5
3 { ENGLAND EAST	N ^{ly} winds, fresh; fair generally, but some cold showers.	9 { IRELAND NORTH	Same as N ^{os} 6 and 7
4 { MIDLAND COUNTIES		10 { 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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.67	36	32	NW 6	c	4	Holyhead ...	30.06	48	46	NW 5	b	4
Stumburgh Head ...	29.78	35	32	N 2	c	4	Valencia ...	30.35	53	51	NW 5	bcg m	5
Stornoway ...	29.92	44	44	NW 3	op	3	Scilly ...	30.25	50	49	NW 6	om	4
Aberdeen ...	29.86	44	41	NW 4	bcg p	3	Jersey ...	30.16	49	48	W 4	o	3
Shields ...	29.85	48	44	N 2	c	2	Dungeness ...	29.98	49	45	NW 3	o	3
Ardrossan ...	29.93	47	46	NW 3	bc	2	London ...	29.98	49	45	NW 3	o	*
Malin Head ...	30.06	45	43	NW 4	o	4	Yarmouth ...	29.87	46	43	NW 4	c	4
Mullaghmore ...	30.18	46	43	NW 6	cp	5	Rochefort ...	30.37	48	47	NW 4	r	2
Belmullet ...	30.25	49	46	NW 3	bc	*							

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

The reports for yesterday morning showed that pressure was decreasing generally, but was still highest 30.3 ins. to 30.5 ins. over Spain, the Bay of Biscay, the west of France, and extreme southwest of our islands, lowest over the Baltic Provinces, and the northeastern shores of the Mediterranean, in both of which positions depressions were found. Each of these disturbances had increased greatly both in size and depth, but especially that in the north, which had spread out so as to cover the whole of Northern Russia, Poland, and the northeast of Germany. The wind was fresh and had veered to NW. over the whole of the British Isles and North Sea, to N. over the Baltic and south of Sweden and to E. in Lapland, while in Austro-Hungary, Germany, and the north of France it was W^{ly}; in Russia it was S^{ly} to SE^{ly}, and blew strongly over Finland. Over Southern Europe and the Mediterranean the winds circulated round the depression in that region; they were of little force, and were mainly E^{ly} at the more northern stations, NW^{ly} to W^{ly} in the south. The weather was less fair than on Tuesday — the sky being, as a rule, cloudy or overcast except on the southern shores of the Mediterranean, and while showers of rain prevailed in parts of the British Isles, France, and North Germany, snow was reported at several stations in Poland, Russia, and Finland. Temperature had fallen except over Southern and Southeastern Europe, where it had risen; it was not below zero, however, at any station. The lowest morning values were 4° at Moscow, 8° at Archangel, 13° at St. Petersburg, 14° at Kuopio and Haparanda, 16° at Kharkov, 19° at Helsingfors, and 29° at Odessa and Nicolaioff. At all the Austrian, German and French stations it was above the freezing point. The highest values were 55° at Algiers, 54° at Palermo and Cagliari, 53° at Languisari and Lisbon, 50° at Brindisi, Perpignan, Scilly, and Rock Point, 49° at Liphorn and Valencia. At Florence and Paris it was 46°, in London 41°, and at Berlin 27°.

Later on pressure increased over Northern and Northwestern Europe, but decreased in the south and southeast, the wind became still more N^{ly} over the British Isles, temperature continued to decrease, and it was evident that a permanent change in the relative distribution of pressure was in progress.

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, 22nd February* 1889.
 Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 53 Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	† YESTERDAY EVENING.					9 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Therm. Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)			Max.	Min.		
Haparanda ...	30.05	-6	Z	0	b	30.20	+ .36	2	1	- .9	NE	2	0	*	14	-6	-	
Bernsund ...	29.96	15	NNE	2	s	30.16	+ .35	12	11	- .3	NNE	4	0	*	21	12	-	
Stockholm ...	29.80	14	NW	4	0	29.92	+ .39	14	13	0	NNE	4	0	*	19	12	0.04	
Wibby ...	29.66	24	NNE	8	s	29.78	+ .39	26	25	+ .3	NE	4	0	*	?	19	0.12	
Redö ...	30.00	22	E	2	c	30.15	+ .24	23	21	+ .5	ESE	2	0	1	23	16	-	
Christiansund...	30.02	30	SE	2	bc	30.11	+ .22	33	32	+ .3	N	3	0	4	36	28	0.04	
Skudesnaes ...	30.01	34	NW	6	b	30.08	+ .21	28	27	- .5	N	1	0	2	39	28	-	
Christiania Fjord (Færdjer) ...	29.89	28	NNE	5	b	30.01	+ .31	25	21	- .2	NNE	5	0	1	30	21	-	
Skagen (The Seaw)	29.95	27	NE	4	b	29.95	+ .30	23	20	- .3	NE	4	0	2	28	23	-	
Fanö ...	29.91	26	N	4	b	29.92	+ .25	23	22	- .9	N	4	0	*	36	23	-	
Sumburgh Head	30.24	33	N	2	0	30.19	+ .04	35	34	0	Z	0	0	3	37	33	-	
Stornow y ...	30.33	41	N	2	c	30.16	- .14	43	43	+ .7	SW	2	0	3	43	34	-	
Wick ...	30.30	36	NW	2	0	30.21	- .02	35	34	+ .1	NW	1	0	1	39	33	-	
Nairn ...	30.30	38	W	1	c	30.22	- .04	38	37	+ .1	SW	1	0	1	41	34	-	
Aberdeen...	30.29	36	NW	3	c	30.24	+ .02	37	35	+ .1	NW	2	0	3	39	35	-	
Leith ...	30.31	39	NW	1	c	30.24	- .00	39	36	0	NW	1	0	*	45	31	-	
Shields ...	30.26	36	NW	3	c	30.20	+ .03	36	34	0	NW	1	0	3	39	33	-	
Spurn Head ...	30.16	39	NW	6	c	30.14	+ .05	35	35	- .1	NNE	6	0	5	40	33	0.13	
York ...	30.21	37	NW	3	0	30.18	+ .07	36	33	- .1	NW	1	0	*	40	33	-	
Loughborough	30.26	38	N	3	0	30.23	+ .06	33	31	- .6	NW	2	0	*	44	31	-	
Droghda ...	30.31	43	NW	2	bc	30.24	- .02	42	40	+ .2	NW	1	0	1	46	38	-	
Malin Head ...	30.37	43	N	2	b	30.29	- .04	44	44	0	WSW	2	0	2	45	42	-	
Mullaghmore ...	30.39	45	NW	4	c	30.32	- .04	44	44	0	SW	4	0	2	49	40	0.02	
Belmullet ...	30.43	45	N	1	b	30.35	- .06	46	46	+ .3	NW	1	0	*	49	40	0.05	
Donaghadee ...	30.34	43	NNE	4	bc	30.30	+ .02	41	41	- .3	W	2	0	1	47	40	0.01	
Barrow-in-Furness	30.28	40	N	2	bc	30.23	+ .02	38	36	+ .1	NW	2	0	*	44	33	-	
Liverpool (Bidston)	30.30	48	NNE	1	bc	30.26	+ .03	36	35	- .3	NW	2	0	2	43	33	-	
Holyhead ...	30.32	41	NE	1	c	30.28	+ .03	42	41	- .2	NW	3	0	2	45	36	-	
Parsonstown ...	30.38	45	Z	0	b	30.35	- .03	35	34	- .3	Z	0	0	*	49	32	-	
Valencia ...	30.44	47	N	2	bc	30.39	- .05	42	41	- .6	Z	0	0	1	52	38	-	
Roche's Point...	30.38	47	Z	3	b	30.36	- .01	40	37	- .5	NW	3	0	3	50	38	-	
Pembroke ...	30.32	43	N	4	b	30.31	+ .03	42	40	- .2	NW	3	0	2	47	37	-	
Seilly ...	30.32	47	N	6	0	30.35	+ .07	46	43	- .1	N	4	0	4	48	42	-	
Prawle Point ...	30.28	44	NW	2	b	30.30	+ .08	34	33	- .7	NW	2	0	2	52	31	-	
Jersey ...	30.25	45	N	3	c	30.25	+ .08	45	40	0	N	3	0	3	47	38	0.01	
Hurst Castle ...	30.24	40	NNE	4	c	30.24	+ .08	33	32	- .7	N	2	0	1	46	30	-	
Dungeness ...	30.14	38	N	5	c	30.11	+ .06	34	33	- .4	N	4	0	3	43	33	-	
London ...	30.21	38	N	2	0	30.18	+ .05	35	33	- .4	N	3	0	*	41	32	-	
Oxford ...	30.28	36	NW	2	0	30.24	+ .06	32	30	- .5	NW	1	0	*	41	31	-	
Cambridge ...	30.21	36	N	3	bc	30.17	+ .03	34	32	- .4	N	2	0	1	43	29	0.01	
Yarmouth ...	30.09	37	N	5	0	30.07	+ .06	37	36	- .1	NW	4	0	4	40	33	0.07	
Cuxhaven ...	29.81	30	NNE	6	b	29.93	+ .27	28	27	- .5	NNE	5	0	*	?	26	-	
Berlin ...	29.71	24	N	4	c	29.79	+ .21	21	20	- .8	NW	4	0	*	36	21	0.04	
Wiesbaden ...	*	*	*	*	*	29.90	+ .18	26	25	- .8	NW	3	0	*	37	25	0.04	
Manich ...	29.76	25	NW	4	0	29.73	+ .14	20	20	- .10	NW	5	0	*	32	19	0.08	
The Helder ...	29.98	32	N	2	s	29.97	+ .10	36	32	- .1	N	2	0	3	39	36	0.04	
Brussels ...	*	*	*	*	*	29.99	+ .07	33	?	- .2	NW	3	0	*	41	33	0.12	
Cape Gris Nez...	?	38	NNE	4	b	?	?	36	35	- .3	N	6	0	6	41	36	-	
Paris ...	30.10	38	N	4	c	30.08	+ .10	36	33	- .3	NW	3	0	*	44	35	0.04	
Brest ...	30.44	45	N	1	0	30.34	+ .09	39	36	- .5	ENE	1	0	2	52	36	0.04	
Lorient ...	30.26	46	NNE	3	c	30.26	+ .07	40	37	- .5	NNE	3	0	2	48	39	-	
Rochefort ...	30.20	46	N	5	c	30.23	+ .08	38	37	- .7	N	4	0	2	50	32	-	
Belfort ...	29.82	31	N	1	b	29.93	+ .16	32	31	- .4	N	1	0	*	38	25	-	
Lyons ...	29.98	32	N	5	bc	30.01	+ .17	31	28	- .5	N	4	0	4	42	28	0.08	
Nice ...	29.51	43	E	2	b	29.88	+ .44	32	32	- .18	E	2	0	1	57	30	-	
Perpignan ...	29.92	45	NW	3	bc	30.02	+ .22	39	34	- .11	NW	4	0	*	60	36	0.04	
Biarritz ...	30.15	48	NNE	5	0	30.13	- .02	37	34	- .13	E	3	0	2	52	34	0.04	
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	29.98	36	N	5	b	30.02	- .14	50	43	0	NE	6	0	2	66	48	-	

WEATHER CHARTS

for 8 a.m. on Friday, 22nd February

1889.

BAROMETER, WIND & 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 shown thus,

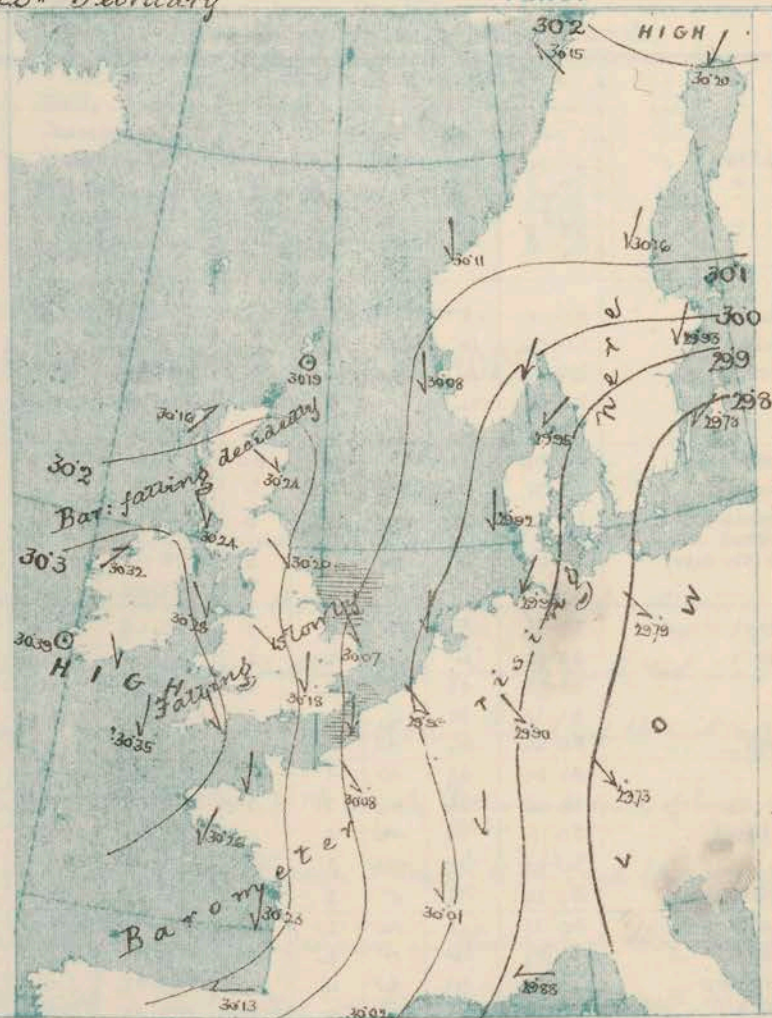
— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February

During the 15 Years 1871 — 1885.

STATIONS	MEAN READINGS.
Sumburgh Head	29.713
Stornoway	29.700
Wick	29.737
Nairn	29.747
Aberdeen	29.780
Leith	29.808
Shields	29.847
York	29.884
Loughborough	29.912
Ardrossan	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.878
Parsonstown	29.884
Valencia	29.860
Roche's Point	29.860
Pembroke	29.875
Scilly	29.911
Jersey	29.975
Hurst Castle	29.944
Dover	29.957
LONDON	29.940
Oxford	29.938
Cambridge	29.935
Yarmouth	29.928



TEMPERATURE, & WEATHER at 8 A.M., with RAINFALL in PAST 24 HOURS.

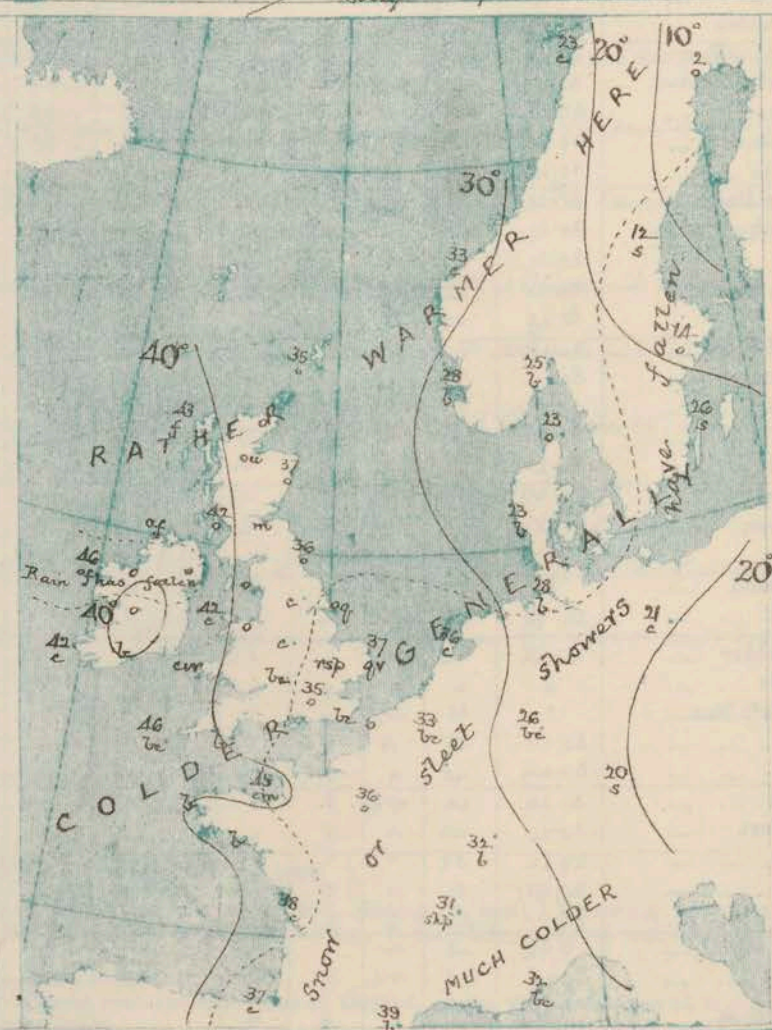
Temperature — Isotherms are drawn for each 10° changes since previous morning are stated in words.
Weather is shown by Letters of the Beaufort Scale.
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL for the month of February

STATIONS	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
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	28.5	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	45.8	36.9	39.9	38.3	1.85
Parsonstown	47.4	38.1	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 10 years 1866 — 85



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.3 in. and upwards, in an anticyclone lying over Ireland and the southwest of England; 30.2 in. and upwards over Lapland. Lowest, 29.8 in. and less, over the Baltic and Germany. Gradients slight generally. Barometer falling in the west and north of our Islands - most in the Hebrides, but rising elsewhere.
TEMPERATURE	Highest, 50° at Lodon, 46° at Belmullet and Selly, 45° at Jersey, 44° at Malin Head and Mullaghmore, and 43° at Hornoway. Lowest, 2° at Haparanda, 12° at Helsingfors, 14° at Stockholm, 20° at Munich, 21° at Berlin, and 23° at Rode, Hagen and Tans. Frost occurred last night in most parts of Great Britain.
WIND	Light from the SW nd or W nd on our extreme north and northwest coasts. Moderate or fresh from the N nd in nearly all other parts of Western Europe.
WEATHER	Fine over the south of our Islands, as well as in Denmark, the Netherlands and the southern parts of Norway and France. Cloudy in most other localities, with fog on our extreme northwest coasts, snow at some of the Swedish stations, and sleet at Cambridge and Lyons. Showers of snow, sleet or cold rain were experienced in most parts of Western Europe.
SEA	Rough at Cape Gris Nez, and rather rough at Spurn Head, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which is approaching Scotland seems likely to move in a southeasterly direction, but as the barometer is high over Northern Europe as well as to the southward of our Islands its progress will probably be slow.

A considerable increase of wind from the Wnd and NWnd is likely to take place on our northern coasts, and unsettled weather will probably extend to most parts of the United Kingdom, with snow or sleet over Great Britain.

FORECASTS

For the 24 hours ending at NOON on 23rd FEB: 1889.

DISTRICTS.



FORECASTS.

0	SCOTLAND NORTH	W ^{ly} to NW ^{ly} winds, increasing in force; unsettled, some rain.
1	SCOTLAND EAST	
2	ENGLAND N.E.	NW ^{ly} to W ^{ly} winds, freshening; dull, some snow.
3	ENGLAND EAST	NW ^{ly} to W ^{ly} winds, moderate or fresh; fair at first, unsettled later, probably some snow.
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	Same as N ^{os} 0 and 1.
7	ENGLAND N.W.	Same as N ^o 2.
8	ENGLAND S.W.	NW ^{ly} winds, moderate to strong; fair to unsettled and some cold showers.
9	IRELAND NORTH	Same as N ^{os} 0 and 1.
10	IRELAND SOUTH	Same as N ^o 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.	Dry.	Wet.	Wind.	Wen.	Sea.		Bar.	Dry.	Wet.	Wind.	Wen.	Sea.
Skutumpah ...	29.95	39	35	HW 6	bc	4	Holyhead ...	30.31	48	42	HW 3	bc	3
Samburgh Head ...	30.22	35	33	N 3	csp	4	Valencia ...	30.44	52	49	N 3	bc	3
Stornoway ...	30.33	42	42	HW 2	c	3	Scilly ...	30.32	47	45	N 5	c	3
Aberdeen ...	30.28	39	34	HW 5	bcq	4	Jersey ...	30.23	47	42	HW 4	bc	3
Shields ...	30.25	39	36	N 4	c	4	Dungeness ...	30.11	40	38	N 5	c	4
Ardrossan ...	30.30	45	42	HW 2	c	1	London ...	30.19	38	36	HW 5	ogrsp	4
Malin Head ...	30.37	44	41	HW 2	0	3	Yarmouth ...	30.08	40	38	N 4	bc	5
Mullaghmore ...	30.40	47	45	HW 4	bc	3	Rochefort ...	30.19	50	45	HW 4	c	2
Belmullet ...	30.44	49	46	HW 2	bc	4							

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

Yesterday morning's reports showed that pressure was still highest, 30.4 in. and more, over the Atlantic, lowest, 29.3 in. and less, over the Baltic Provinces and Central Italy. The depression near Riga, however, was filling up, while that over Italy had continued to grow deeper. The gradients over Western Europe were therefore favourable for N^W winds, but were not steep. The wind blew from a N^W direction over the whole of the British Islands, the North Sea, the Baltic, Western and Central Europe, and was moderate to strong in force. In Austria it was more W^W, while in Russia it was light from SW. at the southern stations, and from SE. and E. in the north. Strong N^W and NW^W winds were again prevalent over the Mediterranean, SE^W in Hungary, and E^W at Trieste. The weather was fair as a whole, but cloudy in many localities; snow fell in Sweden, at New Jahus and Munich, rain at Turin. Temperature was falling except at Archangel, Moscow, and over the Mediterranean, where it had risen. It was as low as 9° F. at Moscow and Helsinki, 10° at St. Petersburg and Hangö, 11° at Haparanda and Kuopio, 14° at Stockholm, 15° at Åbo, 18° at Riga, 22° at Kiev, 23° at Breslau and Berlin, and 30° at Munich; at all the more western stations it was above 32°. The highest were 60° at Algiers, 58° at Malta and Cagliari, 56° at Barcelona, 54° at Sanguinaria, 51° at Corunna, 48° at Lescia and Valencia (Ireland) 47° at Scilly and Lough, and 45° in the west and north of France. At Brussels the temperature was 35°, at Madrid 36°, and at Paris, London and Edinburgh 39.

The weather remained dry over the greater part of the British Islands during the day, some slight snow showers being excepted; the barometer rose, and some further decrease of temperature took place.

EXPLANATION OF COLUMNS GIVEN ON PAGE I.

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, 23rd February* 1889.
 Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

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

STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.			Sea. (0 to 9.)	Weather.	SHADE TEMP.		Amount of Rainfall.
			Dirac.	Force. (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)				Max.	Min.	
SCANDINAVIA.																			
Haparanda ..	30.45	-7	Z	0	b		30.52	+ 32	0	0	- 2	NE	2	0	*	q	-8		
Hernösand ...	30.44	3	Z	0	b		30.59	+ 43	-5	-5	- 14	Z	0	0	*	19	2		
Stockholm ...	30.24	16	NNE	6	o		30.34	+ 42	16	15	+ 2	N	6	0	*	19	10		
Wisby ...	29.99	28	NE	8	s		30.08	+ 30	27	26	+ 1	NE	6	0	*	30	21	0.16	
Bodö ...	30.36	25	E	2	c		30.44	+ 29	24	22	+ 1	E	2	0	1	27	21		
Christiansund...	30.31	28	E	1	b		30.40	+ 29	24	22	- 9	ESE	2	0	2	34	21		
Skudesnaes ...	30.21	31	Z	0	b		30.43	+ 35	27	24	- 1	NNE	1	0	2	?	27		
Christiania Fjord (Færdar)	30.25	22	NNE	7	b		30.40	+ 39	20	18	- 5	NNE	6	0	1	25	16		
Skagen (The Scaw)	30.15	21	E	6	bc		30.30	+ 35	20	18	- 3	ENE	5	0	3	25	19		
Fanö ...	30.07	23	N	6	o		30.15	+ 23	24	23	+ 1	NE	6	0	*	28	23		
BRITISH ISLANDS.																			
Sumburgh Head	30.21	38	Z	0	o		30.37	+ 18	37	34	+ 2	Z	0	bc	2	40	34		
Stornoway ..	30.18	47	N	3	o		30.39	+ 23	40	39	- 3	SE	3	c	3	49	37	0.02	
Wick ...	30.22	40	S	1	o		30.35	+ 14	38	36	+ 3	SE	2	bc	1	40	34	0.04	
Nairn ...	30.17	41	Z	0	r		30.35	+ 13	38	32	- 5	Z	0	ap	1	41	33	0.10	
Aberdeen...	30.22	38	NW	1	odp		30.37	+ 13	38	35	+ 1	ESE	3	csp	4	41	34	0.01	
Leith ...	30.20	41	NE	1	m		30.30	+ 06	37	35	- 2	E	2	c	*	45	35	0.03	
Shields ...	30.17	38	N	2	r		30.28	+ 08	35	33	- 1	ESE	1	c	2	41	32	0.05	
Spurn Head ...	30.10	39	NNE	4	o		30.21	+ 07	35	33	0	ENE	6	bcsp	5	40	31	0.03	
York ...	30.13	38	N	1	o		30.23	+ 05	32	32	- 4	NNE	1	o	*	40	31	0.02	
Loughborough	30.16	39	NW	3	o		30.23	- 00	32	31	- 1	N	2	cm	*	41	32	0.01	
ARDROSSAN.																			
Ardrossan ...	30.18	42	E	1	dm		30.32	+ 08	37	36	- 5	ENE	1	bm	1	42	35	0.04	
Malin Head ...	30.22	46	NW	3	of		30.31	+ 02	40	39	- 4	SE	4	og	3	47	40	0.02	
Mullaghmore ...	30.26	47	WNW	3	om		30.24	- 08	46	45	+ 2	NE	4	od	2	49	44	0.01	
Belmullet ...	30.30	49	N	1	o		30.26	- 09	47	46	+ 1	NNE	3	o	*	51	45	0.07	
Donaghadee ...	30.19	47	N	2	r		30.29	- 01	40	37	- 1	NE	4	b	2	47	40	0.07	
GERMANY.																			
Barrow-in-Furness	30.18	41	NE	3	o		30.24	+ 01	35	33	- 3	N	2	bc	*	43	34		
Liverpool (Bidston)	30.20	40	NW	1	o		30.26	- 00	34	32	- 2	NE	2	o	3	42	34		
Holyhead ...	30.20	43	NW	1	ga		30.24	- 04	38	37	- 4	ENE	3	b	2	45	38	0.08	
Parsonstown ...	30.26	47	Z	0	r		30.22	- 13	42	40	+ 7	Z	0	o	*	48	34	0.03	
Valencia ...	30.30	48	NW	1	op		30.21	- 18	47	47	+ 5	N	1	od	1	52	41	0.05	
FRANCE & NETHERLANDS.																			
Roche's Point...	30.26	48	N	2	c		30.18	- 18	45	44	+ 5	ESE	4	pm	4	50	39		
Pembroke ...	30.22	44	NW	3	r		30.19	- 12	39	37	- 3	ENE	3	c	3	46	38	0.05	
Scilly ...	30.21	46	N	5	c		30.10	- 25	42	42	- 4	E	5	od	4	48	41	0.02	
Prawle Point ...	30.19	40	NW	2	o		30.13	- 17	37	35	+ 3	NE	5	bc	4	46	33		
Jersey ...	30.18	42	NW	3	c		30.08	- 17	39	35	- 6	ENE	4	cq	3	45	35		
HURST CASTLE.																			
Hurst Castle ...	30.16	40	NNE	2	o		30.16	- 08	33	32	0	NE	3	m	2	44	37		
Dungeness ...	30.06	36	NNE	3	o		30.08	- 03	31	30	- 3	NE	5	csp	4	40	28	0.02	
London ...	30.12	39	N	2	o		30.14	- 04	31	29	- 4	NNE	2	bc	*	42	30	0.01	
Oxford ...	30.15	37	NE	1	o		30.20	- 04	31	29	- 1	NE	2	b	*	42	31		
Cambridge ...	30.12	36	N	2	o		30.21	+ 04	29	28	- 5	N	1	bc	*	42	27	0.07	
Yarmouth ...	30.07	37	NE	5	c		30.15	+ 08	33	32	- 4	NE	6	ogys	5	39	29	0.05	
Cuxhaven ...	29.93	26	NNE	6	o		30.01	+ 08	29	28	+ 1	NNE	6	o	*	29	26		
Berlin ...	29.83	22	NW	2	s		29.69	- 10	30	29	+ 9	NW	4	s	*	30	21	0.08	
Wiesbaden ...	*	*	*	*	*		29.95	+ 05	22	21	- 4	Z	0	b	*	34	21		
Munich ...	29.83	17	W	3	b		29.82	+ 09	12	12	- 8	NW	3	m	*	23	12	0.04	
NETHERLANDS.																			
The Helder ...	30.02	30	NNE	3	s		30.10	+ 13	31	30	- 5	NE	4	o	3	36	28	0.08	
Brussels ...	*	*	*	*	*		30.06	+ 07	25	24	- 8	NNE	2	s	*	39	25	0.04	
Cape Gris Nez...	?	37	NNE	6	o		?	?	27	27	- 9	ENE	4	s	5	41	?		
Paris ...	30.01	34	NW	3	c		29.99	- 09	29	28	- 7	N	3	b	*	40	28	0.04	
Brest ...	30.23	49	NNE	3	o		30.09	- 25	41	38	+ 2	NE	3	r	2	52	36	0.16	
FRANCE.																			
Lorient ...	30.17	44	N	4	c		30.04	- 22	39	38	- 1	NE	3	r	2	46	37		
Rochefort ...	30.16	43	NW	4	c		30.04	- 19	40	38	+ 2	N	4	o	2	46	34		
Belfort ...	29.88	28	N	1	b		29.86	- 07	22	22	- 10	N	1	c	*	33	17		
Lyons ...	29.96	28	N	2	c		29.94	- 07	19	17	- 12	WNW	2	b	*	34	19	0.16	
Nice ...	29.62	41	ESE	2	bc		29.65	- 23	32	30	0	ENE	4	c	?	50	28		
PERPIGNAN.																			
Perpignan ...	29.99	39	NW	4	c		29.89	- 13	34	33	- 5	NW	3	s	*	47	33	0.04	
BIARRITZ.																			
Biarritz ...	30.13	44	NNE	4	o		30.01	- 12	39	38	+ 2	SE	2	o	2	46	36	0.12	
PENINSULA.																			
Corunna ...	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	30.00	55	NNE	4	b		29.95	- 07	45	39	- 5	NNE	5	b	1	63	45		

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on *Saturday, 23rd February, 1883.*

BAROMETER, WIND & SEA.

(Explanation of Map)

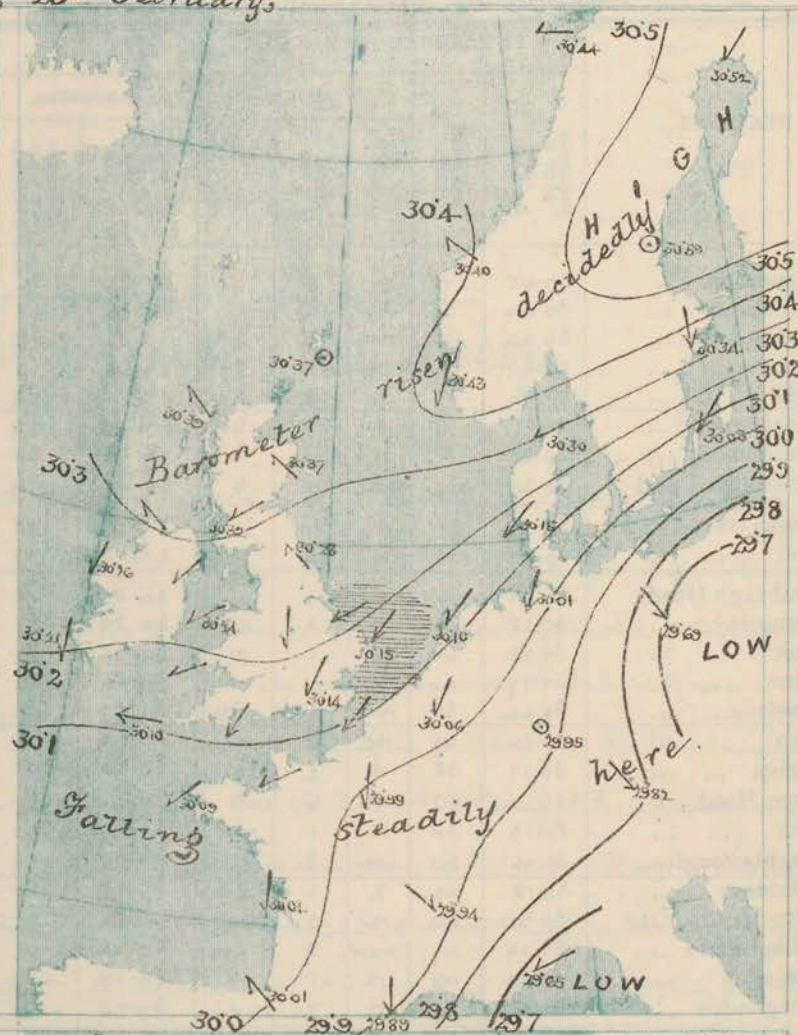
Barometer—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus—
 — = forces above 10; — = forces 8 to 10;
 — = forces 5 to 7; — = forces 1 to 4;
 ○ = dead calm.

Sea Disturbance—where considerable is shown thus.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 Years 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.713
Stornoway	29.700
Wick	29.737
Nairn	29.747
Aberdeen	29.780
Leith	29.803
Ghields	29.847
York	29.884
Loughborough	29.912
Ardrossan	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.884
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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.5 ins: and upwards, over the north of Sweden, 30.3 ins: and upwards over nearly the whole of Scandinavia, the northern part of the North Sea, Scotland, and extreme north of Ireland.
 Lowest, 29.7 ins: and less, in a depression, lying over Germany and also in another lying over the Gulf of Genoa.
 Gradients steep over North Germany and the Baltic, but slight elsewhere.
 Barometer falling in Germany, France, and the southwest of our Islands, rising steadily at all our more northern stations.

TEMPERATURE

Highest, 47° at Belmullet and Valencia, 46° at Mullaghmore, 45° at Rocher Point, 42° at Barmston and Drilly, and 41° at Rost.
 Lowest, -5° at Henningsand, +2° at Haparanda, 12° at Munich, 16° at Stockholm, 13° at Lyons, 20° at Vaxjo and Ryon, and 22° at Minsk and Bialystok.
 Frost occurred over Great Britain last night; in London the thermometer on the grass fell to 22°.

WIND

Light or moderate from the Nnd or NWnd over the greater part of France and Germany.
 E^{ly} or NE^{ly} in most other parts of Western Europe, but SE^{ly} in the north and west of Scotland.
 Over Denmark, the south of Sweden and the east of England the NE^{ly} wind blows strongly.
 Fine in Scandinavia and the north of Scotland, but cloudy and changeable elsewhere.

WEATHER

Drizzling rain is falling in Ireland and the southwest of England, snow showers at several of our eastern and southeastern stations, and steady snow at Berlin, Brussels, Cologne and Leipzig.
 Showers of snow sleet or cold rain were experienced yesterday in many parts of the United Kingdom.

SEA

Rather rough off the east and southeast of England, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The present distribution of pressure is favourable for the advance of the German depression towards our southeast coasts, and a further increase of wind from the NE^{ly} is therefore probable in the east and southeast of England with snow in many places.

FORECASTS

for the 24 hours ending at NOON on 24th FEB^{ry} 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	E ^{ly} or SE ^{ly} winds, light; fair generally. Colder.
1	SCOTLAND EAST	
2	ENGLAND N.E.	E ^{ly} and NE ^{ly} winds, increasing in force; unsettled, some snow.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	



DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	E ^{ly} and NE ^{ly} winds, light; fair generally.
7	ENGLAND N.W.	
8	ENGLAND S.W.	E ^{ly} and NE ^{ly} winds, fresh; cloudy, rain or sleet locally.
9	IRELAND NORTH	
10	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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	30.12	40	34	20 0	6	2	Holyhead ...	30.24	44	43	N 3	rg	2
Sumburgh Head ...	30.20	40	37	20 0	c	3	Valencia ...	30.35	50	48	WNW 1	c	1
Stornoway ...	30.17	48	48	W 3	0	3	Scilly ...	30.22	47	44	N 5	0	4
Aberdeen ...	30.22	41	38	NW 2	0p	3	Jersey ...	30.22	43	38	NW 3	c	3
Shields ...	30.18	39	38	NNE 2	r	3	Dungeness ...	30.06	40	37	N 4	0	3
Ardrossan ...	30.20	41	41	c 1	r	1	London ...	30.15	41	37	NW 2	0	*
Malin Head ...	30.25	47	47	WNW 3	0	2	Yarmouth ...	30.06	38	37	N 4	c	4
Mullaghmore ...	30.29	49	48	WSW 4	om	2	Rocheport ...	30.23	43	38	NW 4	c	2
Belmullet ...	30.32	51	47	NW 2	0	*							

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

The reports for yesterday morning showed a considerable increase of pressure over Eastern and Northern Europe and the Baltic, but a decided decrease over Southwestern Russia, and some slight decrease over the British Isles, and reading varied from 30.2 ins. and more over Lapland and the north of Russia, and from 30.2 ins. and more over the west and south of the British Isles to 29.2 ins. and less in a depression lying over Transylvania and to 29.6 and less, over Italy, Corsica, Sardinia and Sicily. The wind had become NE³ over the Baltic, N⁴ over Norway (Denmark), the North Sea, England, and France, NW⁴ over Germany and Austria, and was light to fresh in force; at the Mediterranean stations it was NE² to NW², and in Portugal E². The weather in the west and southwest had become fair and dry in most places — clear and light over the northern and western part of the Mediterranean, the west of France, and some parts of our Islands, cloudy, or overcast elsewhere. Over Central Europe it was less fair, snow was falling at several Swedish and German stations, rain in the northeast of Algeria, and in the north of Scotland the sky was said to wear a threatening appearance. Temperature had fallen very generally — frost had again set in over Germany, while over the central part of England it was but little above the freezing point in the shade and frost prevailed on the ground. The lowest morning readings were 1° F. at Archangel, 2° at Haparanda, 7° at Uleaborg, and St. Petersburg, 11° at Moscow, 12° at Kuopio and Hernösand, 14° at Stockholm, 20° at Warsaw, Breslau and Munich, 21° at Berlin, 22° at Posen and Prague. At Rome the temperature was 32°, at Brussels 33°, in London 35°, and at Paris and Madrid 36°. The highest values were 57° at Oran, 56° at Nemours, 51° at Brindisi and Cagliari, 50° to 54° in Portugal and in the west of Spain, 41° at Langunais, Bilbao and Bilbao.

Later in the day slight cold showers fell in many parts of the British Isles, but the night was dry and frosty.

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 24th FEBRUARY 1889.
Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary

Issued by the Meteorological Office, 53 Victoria Street, London. R. H. SCOTT, Secretary.																	
+ YESTERDAY EVENING.																	
8 A.M. TO DAY.																	
PAST 24 HOURS.																	
STATIONS.	Barometer at 32° F. and Sea Level.	Therm. in Shade.	WIND.			BAROMETER.		SHADE TEMP.			WIND.			Sea. (0 to 9.)	SHADE TEMP.		
			Dir.	Force. (0 to 12.)	Weather.	Reading at 8 a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)	Weather.		Max.	Min.	Amount of Rainfall.
SCANDINAVIA.																	
Haparanda ...	30.59	-18	Z	0	b	30.47	- .05	76	76	- 16	Z	0	f	*	3	-18	-
Hernösand ...	30.59	15	NE	2	o	30.52	- .07	3	3	+ 8	NE	2	f	*	21	-11	-
Stockholm ...	30.18	15	NNE	8	o	30.17	- .17	17	16	+ 1	NNE	4	o	*	18	10	0.04
Wibsy ...	29.95	24	N	8	o	30.01	- .07	31	31	+ 4	ENE	4	o	*	24	23	0.06
Bodo ...	30.47	15	E	2	b	30.37	- .07	27	25	+ 3	E	4	o	2	30	21	-
Christiansund...	30.46	26	ESE	1	b	30.39	- .01	24	22	0	ESE	1	b	2	30	19	-
Skudesnes ...	30.29	28	NNE	1	b	30.33	- .10	26	24	- 1	N	1	b	2	35	23	-
Christiana Fjord (Færev)	30.33	27	NNE	6	b	30.28	- .12	26	23	+ 6	NNE	6	c	2	27	20	-
Skagen (The Scar)	30.28	24	NE	6	b	30.14	- .16	23	21	+ 3	NE	5	o	3	25	19	-
Faro ...	30.17	23	N	6	b	30.08	- .07	22	21	- 2	NNE	6	c	*	32	19	-
BRITISH ISLANDS.																	
Sumburgh Head	30.43	37	Z	0	c	30.38	+ .01	37	35	0	Z	0	c	2	43	39	-
Stornoway ...	30.38	40	Z	0	bc	30.39	+ .00	36	36	- 4	N	2	c	2	45	32	0.01
Wick ...	30.42	39	SE	2	bc	30.41	+ .06	32	31	- 6	NW	2	c	5	42	27	-
Nairn ...	30.41	38	Z	0	b	30.41	+ .06	30	29	- 3	Z	0	b	1	44	26	-
Aberdeen...	30.47	33	SE	1	bm	30.37	+ .00	33	31	- 5	NW	3	c	4	40	28	-
Leith ...	30.44	36	N	1	c	30.39	+ .09	36	33	- 1	NE	1	b	*	43	29	-
Shields ...	30.40	37	ENE	2	o	30.31	+ .03	33	33	- 2	NW	1	bc	3	40	32	0.01
Spurn Head ...	30.29	32	NNE	6	o	30.24	+ .03	35	34	0	NNE	6	cyp	4	37	32	0.01
York ...	30.32	36	NE	1	o	30.27	+ .04	34	32	+ 2	NNW	1	o	*	39	31	-
Loughborough	30.32	35	NNE	2	o	30.31	+ .08	32	31	0	NNW	2	ocp	*	40	31	0.01
Ardrossan ...	30.41	40	ENE	1	o.m	30.38	+ .06	36	35	- 1	Z	0	af	0	42	32	-
Malin Head ...	30.38	39	SSE	3	b	30.41	+ .10	39	36	- 1	NNW	1	b	0	42	34	-
Mullaghmore ...	30.37	42	E	4	b	30.44	+ .20	32	30	- 14	Z	0	cm	1	46	29	0.02
Belmullet ...	30.35	44	ESE	2	o	30.44	+ .18	35	35	- 12	E	1	c	*	48	33	-
Donaghadee ...	30.41	39	SSE	3	bc	30.39	+ .10	34	33	- 6	S	3	c	1	43	33	-
Barrow-in-Furness	30.39	36	NNW	2	c	30.36	+ .12	34	31	- 1	N	1	c	*	40	33	-
Liverpool (Bidston)	30.39	35	ENE	2	o	30.37	+ .11	34	32	0	NNE	2	c	3	40	31	-
Holyhead ...	30.38	36	E	3	c	30.37	+ .13	36	34	- 2	E	2	cy	2	41	34	-
Parsonstown ...	30.35	40	Z	0	c	30.43	+ .21	30	29	- 12	Z	0	o	*	45	27	-
Valencia ...	30.30	44	ESE	1	c	30.41	+ .20	34	32	- 13	Z	0	b	1	50	32	0.01
Roche's Point...	30.32	40	ESE	3	bc	30.40	+ .22	36	33	- 9	ENE	3	o	4	46	35	0.01
Pembroke ...	30.33	37	ENE	4	b	30.36	+ .17	35	33	- 4	NE	3	cp	1	42	32	-
Scilly ...	30.23	32	ENE	5	o	30.29	+ .19	39	35	- 3	ENE	4	o	3	44	35	-
Prawle Point ...	30.25	36	NE	5	c	30.27	+ .14	33	32	- 4	NNE	4	o	4	40	30	-
Jersey ...	30.17	35	NE	3	cm	30.22	+ .14	39	34	0	NE	3	cym	3	40	33	0.03
Hurst Castle ...	30.24	36	NNE	5	bc	30.27	+ .11	33	32	0	NNE	4	b	2	39	31	-
Dungeness ...	30.14	34	E	5	s	30.17	+ .09	34	32	+ 3	NE	4	o	4	36	29	0.11
London ...	30.22	35	NE	3	osp	30.24	+ .10	33	31	+ 2	N	2	usp	*	38	30	-
Oxford ...	30.29	34	NE	3	o	30.29	+ .09	32	31	+ 1	N	1	s	*	39	29	-
Cambridge ...	30.27	34	N	3	o	30.26	+ .05	33	32	+ 4	N	2	s	*	39	27	0.02
Yarmouth ...	30.20	35	NE	6	cy	30.17	+ .02	35	33	+ 2	NNE	5	cyp	5	36	30	0.05
Cuxhaven ...	30.08	32	NNE	6	b	29.97	- .04	27	26	- 2	NNE	6	s	*	32	25	-
Berlin ...	29.80	29	NNW	5	s	29.79	+ .10	24	24	- 6	NNW	3	s	*	32	23	0.35
Wiesbaden ...	*	*	*	*	*	29.94	- .01	26	25	+ 4	N	2	s	*	32	22	0.12
Munich ...	29.84	15	W	2	b	29.84	+ .02	17	16	+ 5	SW	5	s	*	21	12	0.04
FRANCE & NETHERLANDS.																	
The Helder ...	30.18	33	NE	2	b	30.10	+ .00	32	32	+ 1	NNE	3	c	3	34	31	-
Brussels ...	*	*	*	*	*	30.08	+ .02	31	30	+ 6	NNE	2	s	*	31	9	0.04
Cape Gris Nez...	?	33	ENE	5	s	?	?	34	32	+ 7	NE	6	o	6	34	27	-
Paris ...	30.09	33	NE	3	bc	30.12	+ .13	27	25	- 2	NNE	2	b	*	32	27	-
Brest ...	30.22	37	E	4	b	30.26	+ .17	37	35	- 4	NE	3	o	2	50	34	0.08
Lorient ...	?	37	?	6	c	30.17	+ .13	36	33	- 3	NE	3	c	2	45	34	-
Rochefort ...	30.04	35	NE	5	s	30.17	+ .13	34	?	- 6	NE	4	o	2	45	25	-
Belfort ...	29.85	21	NNW	1	b	29.92	+ .06	24	24	+ 2	W	1	s	*	27	12	0.14
Lyons ...	29.93	25	N	3	c	30.04	+ .10	23	21	+ 4	N	3	cs	*	28	19	-
Nice ...	29.70	33	NE	3	bc	29.73	+ .08	35	28	+ 3	E	4	c	3	45	30	-
Perpignan ...	29.94	34	W	3	o	29.95	+ .06	29	26	- 5	NNW	3	b	*	41	27	-
Biarritz ...	29.94	35	E	4	s	30.08	+ .07	27	25	- 12	E	3	c	2	45	25	-
Corunna ...	*	*	*	*	*	30.01	+ .10	44	40	- 3	ENE	6	c	5	55	39	-
Lisbon ...	29.82	53	NNW	3	b	29.78	- .22	48	43	+ 3	NNE	3	o	?	61	45	-

For Explanation of Columns, see p. 1.

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

WEATHER CHARTS

for 8 a.m. on

Sunday, 24th February

1883.

BAROMETER, WIND & 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.

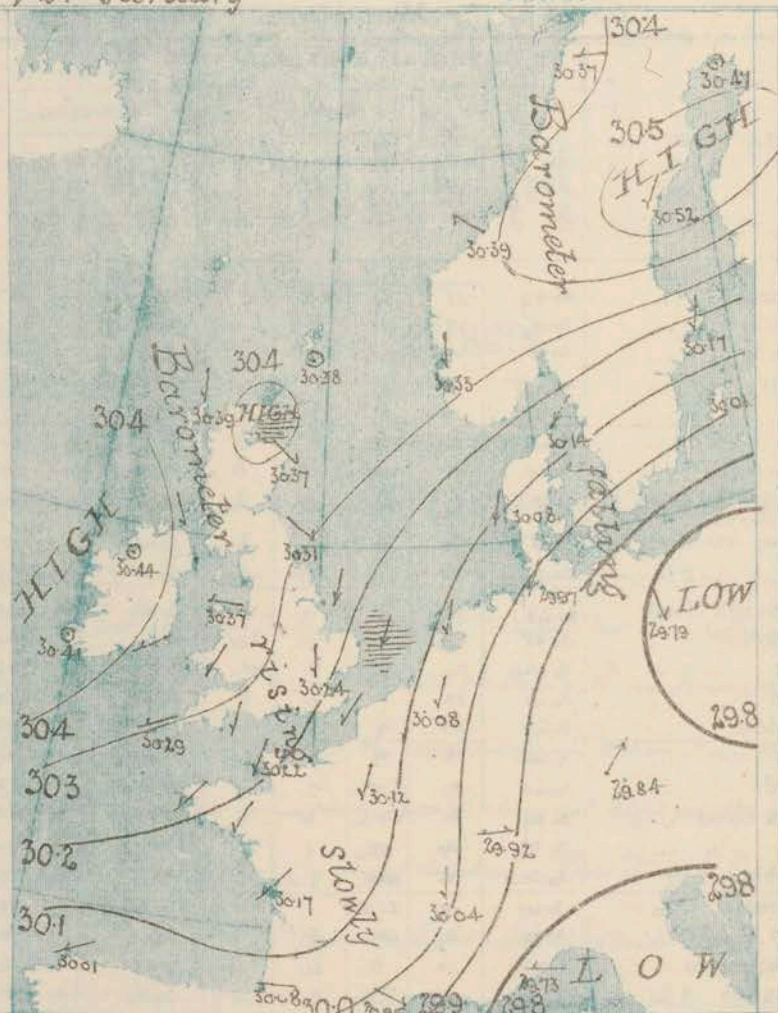
Sea Disturbance — where considerable, is shown thus.

— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 Years 1871 — 1885.

STATIONS.	MEAN READINGS.
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	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.878
Parsonstown	29.834
Valencia	29.850
Roche's Point	29.875
Pembroke	29.911
Silly	29.975
Jersey	29.944
Hurst Castle	29.957
Dover	29.949
LONDON	29.938
Oxford	29.935
Cambridge	29.928
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.

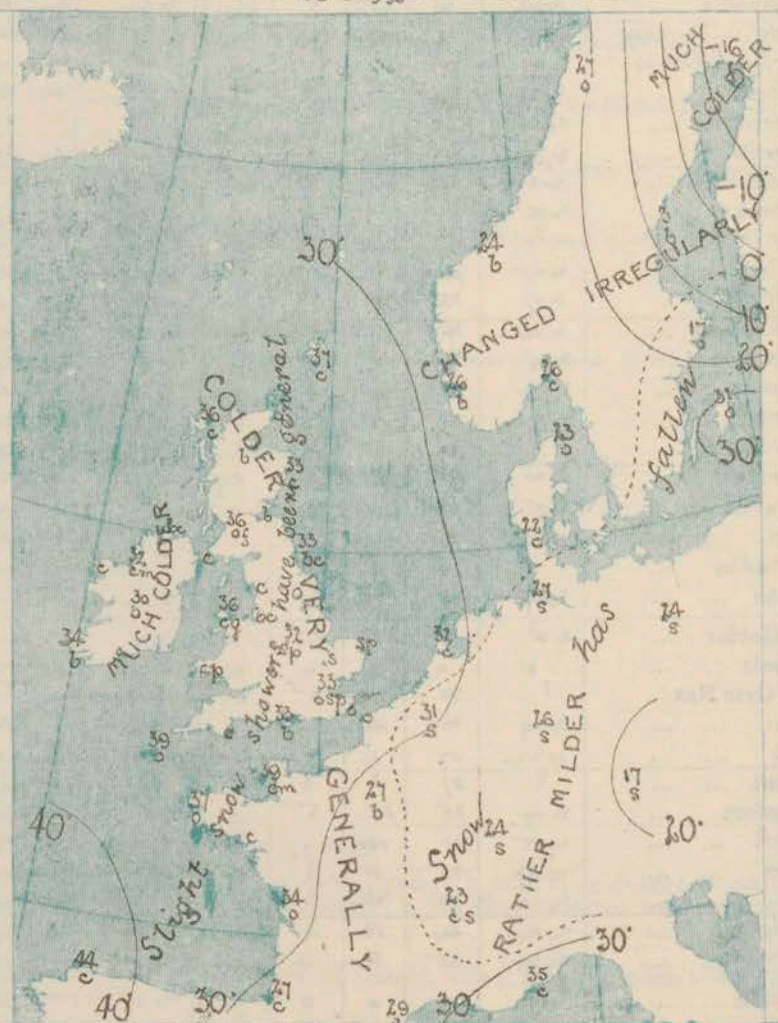
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of February

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
Sumburgh Head	42.6	34.7	38.7	37.7	3.28
Stornoway	43.5	34.7	39.3	38.2	2.97
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	1.68
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	42.8	40.8	2.90
Liverpool	46.3	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	4.88
Pembroke	46.2	40.2	43.1	41.8	3.20
Silly	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	1.82
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 10 years 1866 — 85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.5 in. and upwards, over the Gulf of Bohemia, 30.4 in. and upwards over Ireland.
 Lowest, 29.8 in. in a well defined but somewhat shallow depression lying over Germany and also in a large and complex area lying over the greater part of the Atlantic Ocean.
 Gradients moderate over the Baltic and the south of Scandinavia, slight elsewhere.
 Barometer falling a little in Scandinavia, Denmark and the east of Great Britain, but rising elsewhere.

TEMPERATURE

Highest, 48° at Lisbon, 44° at Lorient, 39° at Malin Head, Scilly and Jersey, and 37° at Dunbeath, H. and West.
 Lowest -16° at Haparanda, 3° at Helsingfors, 17° at Stockholm and Munich, 22° at Leno, and 23° at Skagen and Lyons.
 Frost occurred last night in nearly all parts of Western Europe.

WIND

Chiefly NE or N, strong in force over the south of Denmark and the east of England, but light or moderate elsewhere.
 In the east of Scotland NW breezes are reported, while in the north of Ireland the wind is very variable.

WEATHER

Fine in Scandinavia and fair in the west and north of our islands as well as at some of the French stations.
 Cloudy elsewhere, with snow in Germany, France and many parts of England.
 Snow or hail showers were experienced over Great Britain yesterday.

SEA

Rough at Cape Finlay, and rather rough at Wick, Yarmouth and Lorient, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression noticed over Germany yesterday does not appear to have changed its position much, but has extended in a northerly and westerly direction.

FORECASTS

For the 24 hours ending at NOON on 25TH FEB^R 1889.

DISTRICTS.

- 0 { SCOTLAND NORTH
- 1 { SCOTLAND EAST
- 2 { ENGLAND N.E.
- 3 { ENGLAND EAST
- 4 { MIDLAND COUNTIES
- 5 { ENGLAND SOUTH

FORECASTS.

NONE ISSUED.

DISTRICTS.

- 6 { SCOTLAND WEST
- 7 { ENGLAND N.W.
- 8 { ENGLAND S.W.
- 9 { IRELAND NORTH
- 10 { IRELAND SOUTH

WARNINGS

FORECASTS.

NONE ISSUED.

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.	Dry.	Wet.	Wind.	Wca.	Sea.		Bar.	Dry.	Wet.	Wind.	Wca.	Sea.		
Skudesnaes ...	30.47	35	30	NNW	2	b	2	Holyhead ..	30.32	39	36	E	4	bc	3
Samburgh Head	30.42	41	36	SW	1	c	2	Valencia ...	30.24	47	45	ESE	4	o	4
Stornoway ...	30.36	45	44	S	2	b	2	Scilly ...	30.17	44	39	E	5	om	4
Aberdeen ...	30.44	38	33	SE	2	bc	4	Jersey ...	30.14	39	35	ENE	5	bc	4
Shields ...	30.37	37	33	E	2	c	3	Dungeness ...	30.12	32	32	E	5	sq	5
Androssan ...	30.37	41	39	ENE	1	o	1	London ...	30.21	37	35	ENE	4	o	*
Mainz Head	30.34	42	39	SE	4	bc	2	Yarmouth ...	30.19	36	34	NE	6	cq	5
Mellaghmore ...	30.32	43	40	ESE	4	o	2	Rochefort ...	30.00	42	37	NE	4	o	2
Balmullet ...	30.30	47	40	SE	2	o	*								

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

The report for yesterday morning showed that pressure was highest, 30.5 ins. and upwards, over the northern parts of Sweden, but high 30.3 ins. and upwards, over the whole of Scandinavia, Northern Russia, and the northern parts of the United Kingdom. The lowest pressures 29.4 ins. and less, were found in a well defined and rather deep depression which had advanced from Transylvania to Poland, but another depression, with readings below 29.6 ins., was lying over the south of Italy and its immediate neighbourhood. The wind was SE³ or E³ in Scotland, the north of Ireland, and the west of Norway, but NE or N² in almost other parts of Western and Northern Europe. Over the Baltic the wind blew a moderate to strong gale from NE, or E, ^{while} in Poland and Galicia it was strong from the Wnd, and in Russia light from between SE and SW. Over the Mediterranean the wind was chiefly N² (NE. to NW). The weather was fine in Scandinavia as well as in Southern Austria; the east and south of France, and the south and west of the Iberian Peninsula. Snow was, however, falling in Germany and Poland, as also in many parts of Great Britain, and drizzling rain was reported in Ireland and the southwest of England. Temperature had fallen everywhere but in Northern and Central Russia; readings ranged from between 40° and 50° over the Mediterranean, the Spanish coasts and the west and southwest of the United Kingdom to a few degrees below zero in some parts of Sweden and Finland. The highest individual readings were 50° at Brindisi and Malta, 47° at Balmullet, Valencia and Messina, 46° at Mullaghmore and Algiers, 45° at Rochefort, Barcelona, Oporto and Lisbon, and 44° at San Fernando and Nemours; the lowest were -8° at Uleaborg, -5° at Helsingfors, +2° at St. Petersburg, 5° at Hango, Helsingfors and St. Petersburg, 10° at Krasno, 12° at Munich, 14° at Archangel, 16° at Stockholm, and 18° at Kinnar and Skerfve. In the course of the day the depression over Poland moved slowly, in a westerly direction and the barometer fell somewhat on the eastern shores of the North Sea. Snow showers continued to fall at the English stations throughout the day, and sharp frost was experienced in some places at night.

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, 25th February* 1889.
 Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.						9 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 5.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
Haparanda ..	30.42	18	Z	0	0	30.16	- 31	19	19	+ 35	SSW	2	0	*	?	-18	-		
Hernösand ...	30.43	21	Z	0	0	30.28	- 24	22	21	+ 19	Z	0	0	*	?	-2	-		
Stockholm ...	30.26	22	N	2	0	30.21	+ 04	17	17	0	Z	0	0	*	23	14	0.04		
Wisby ...	30.14	26	NE	2	0	30.09	+ 08	24	23	- 7	ESE	2	0	*	?	23	-		
Bodö ...	30.19	31	ESE	2	m	30.05	- 32	32	31	+ 5	? N	4	S	2	32	25	-		
Christiansund...	30.26	29	E	1	bc	30.06	- 33	31	30	+ 7	S	1	C	2	32	23	-		
Skudesnaes ...	30.26	30	NNE	1	b	30.17	- 16	30	27	+ 4	ESE	2	bc	2	39	?	-		
Christiania Fjord (Farder)	30.25	32	NNE	4	0	30.19	- 09	26	25	0	NNE	3	S	1	32	23	-		
Skagen (The Seaw)	30.20	26	ESE	5	0	30.13	- 01	27	25	+ 14	E	3	0	2	27	23	-		
Fanö ...	30.07	26	NNE	6	0	30.05	- 03	28	28	+ 6	NE	5	0	*	28	?	-		
Sumburgh Head	30.30	39	N	1	m	30.04	- 34	41	41	+ 4	Z	0	r	1	43	35	0.03		
Sornoway ...	30.38	39	N	2	bc	30.14	- 25	41	41	+ 5	Z	0	f	2	42	34	0.01		
Wick ...	30.37	40	N	2	C	30.09	- 32	40	40	+ 8	N	2	dm	2	42	31	0.05		
Nairn ...	30.32	38	Z	0	bc	30.11	- 30	36	35	+ 6	WSW	1	r	1	42	30	0.02		
Aberdeen...	30.32	36	NW	2	C	30.12	- 25	35	35	+ 2	WSW	1	orm	4	40	33	0.09		
Leith ...	30.32	39	NE	2	C	30.15	- 24	37	35	+ 1	W	1	m	*	41	34	-		
Shields ...	30.25	37	NE	2	C	30.13	- 18	33	31	0	NW	2	C	3	40	31	0.01		
Spurn Head ...	30.16	35	NNE	4	0	30.05	- 19	34	33	- 1	NNE	3	S	3	38	31	0.08		
York ...	30.20	35	N	1	0	30.09	- 18	34	31	0	N	1	0	*	39	31	-		
Loughborough	30.20	34	NW	3	S	30.06	- 25	33	31	+ 1	NW	2	os	*	40	32	0.02		
Ardrossan ...	30.32	40	NE	1	C	30.16	- 22	38	37	+ 2	NW	2	0	1	42	33	-		
Malin Head ...	30.31	38	SSE	3	0	30.20	- 21	38	36	- 1	W	2	0	1	43	34	0.01		
Mullaghmore ...	30.32	42	NW	4	0	30.24	- 20	36	33	+ 4	E	1	bc	2	44	31	0.04		
Belmullet ...	30.36	42	NW	2	0	30.22	- 22	39	39	+ 4	E	1	0	*	44	34	0.04		
Donaghadee ...	30.32	42	NE	3	b	30.19	- 20	40	36	+ 6	NNE	3	C	1	42	34	-		
Barrow-in-Furness	30.25	39	N	4	bc	30.15	- 21	35	32	+ 1	N	1	bc	*	42	33	-		
Liverpool (Bidston)	30.26	38	NNE	2	0	30.16	- 21	35	32	+ 1	N	2	b	3	39	31	-		
Holyhead ...	30.29	38	NE	4	b	30.18	- 19	36	33	0	ESE	1	C	2	39	34	-		
Parsonstown ...	30.32	39	NW	1	0	30.23	- 20	36	33	- 4	Z	0	f	*	41	26	-		
Valencia ...	30.33	39	NE	3	bcm	30.22	- 19	39	36	+ 5	ESE	1	0	1	43	34	-		
Roche's Point...	30.29	39	NNE	3	b	30.20	- 20	35	32	- 1	NNE	3	b	3	41	32	-		
Pembroke ...	30.26	35	ESE	3	b	30.17	- 19	35	32	0	ESE	3	b	1	39	30	-		
Silly ...	30.20	38	ESE	5	ops	30.12	- 17	39	36	0	NNE	4	osp	3	40	34	0.05		
Prawle Point ...	30.21	32	NNE	2	C	30.11	- 16	30	28	- 3	N	2	C	2	44	27	-		
Jersey ...	30.17	38	NE	3	bcm	30.05	- 17	35	33	- 4	NW	3	om	3	41	35	0.02		
Hurst Castle ...	30.17	36	N	4	csp	30.06	- 21	33	32	0	NNE	4	sm	1	39	31	-		
Dungeness ...	30.08	35	NE	4	0	29.99	- 18	32	32	- 2	E	1	S	1	37	32	0.03		
London ...	30.14	35	N	2	osp	30.03	- 21	34	33	+ 1	N	2	osp	*	38	32	0.01		
Oxford ...	30.19	33	N	1	S	30.08	- 21	32	31	0	N	2	spg	*	40	31	0.02		
Cambridge ...	30.19	33	N	2	C	30.04	- 22	33	33	0	N	1	S	*	40	30	0.04		
Yarmouth ...	30.11	34	NE	6	csp	30.00	- 17	34	34	+ 1	ESE	4	os	4	36	31	0.12		
Cuxhaven ...	29.99	28	NE	4	0	29.97	- 00	32	31	+ 5	ESE	3	0	*	?	?	-		
Berlin ...	29.93	27	SE	1	0	29.99	+ 20	25	24	+ 1	SSE	1	0	*	48	?	0.04		
Wiesbaden ...	*	*	*	*	*	29.96	+ 02	23	22	- 3	N	1	S	*	30	19	-		
Munich ...	29.98	21	W	2	S	29.89	+ 05	19	18	+ 2	S	2	S	*	25	16	0.04		
The Helder ...	30.04	31	NE	2	0	29.98	- 12	33	31	+ 1	ESE	2	C	2	34	30	0.04		
Brussels ...	*	*	*	*	*	29.98	- 10	25	25	- 6	Z	0	S	*	33	24	0.04		
Cape Gris Nez...	?	35	NNE	6	0	?	?	29	28	- 5	E	1	0	4	39	28	-		
Paris ...	30.05	32	N	2	0	29.97	- 15	29	28	+ 2	N	2	S	*	34	?	-		
Brest ...	30.20	35	ESE	5	S	30.10	- 16	31	29	- 6	Z	0	0	2	46	30	0.04		
Lorient ...	30.15	38	E	2	0	30.06	- 11	36	33	0	NW	3	0	2	43	32	-		
Rochefort ...	30.14	37	ESE	4	0	30.07	- 10	34	32	0	ESE	3	0	2	41	27	-		
Belfort ...	29.84	24	W	1	S	29.91	- 01	23	23	- 1	W	1	0	*	30	16	0.04		
Lyons ...	30.02	26	N	1	0	30.00	- 04	25	24	+ 2	N	1	0	*	31	22	-		
Nice ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Perpignan ...	29.97	32	NW	4	b	29.98	+ 03	26	24	- 3	NW	3	b	*	40	24	-		
Biarritz ...	30.04	35	ESE	3	C	29.97	- 11	28	26	+ 1	E	3	C	1	39	27	-		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	29.72	55	NE	4	0	29.69	- 04	45	41	- 3	NNE	5	0	3	57	45	-		

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on Monday, 25th February, 1889.

BAROMETER, WIND & 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 —

→ = force above 11; →→ = forces 8 to 11;
→→ = forces 5 to 7; → = forces 1 to 4;
○ = dead calm.

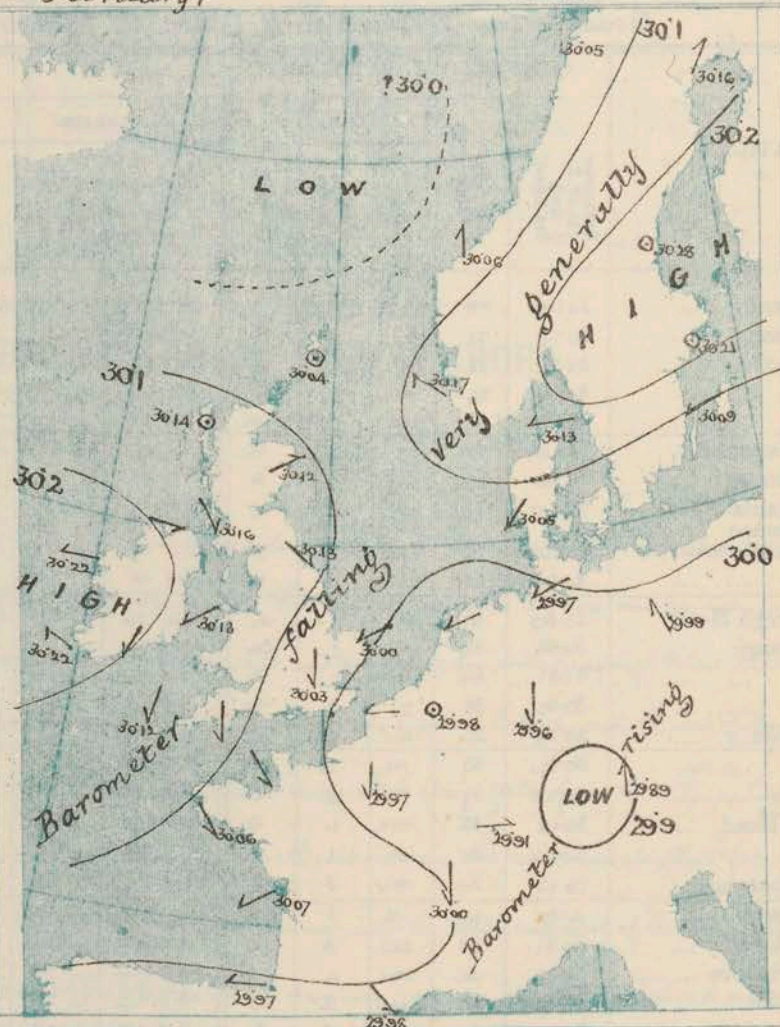
Sea Disturbance — where considerable is shown thus

— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February.
During the 15 Years 1871—1885

STATIONS.	MEAN READINGS.
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	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.884
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.

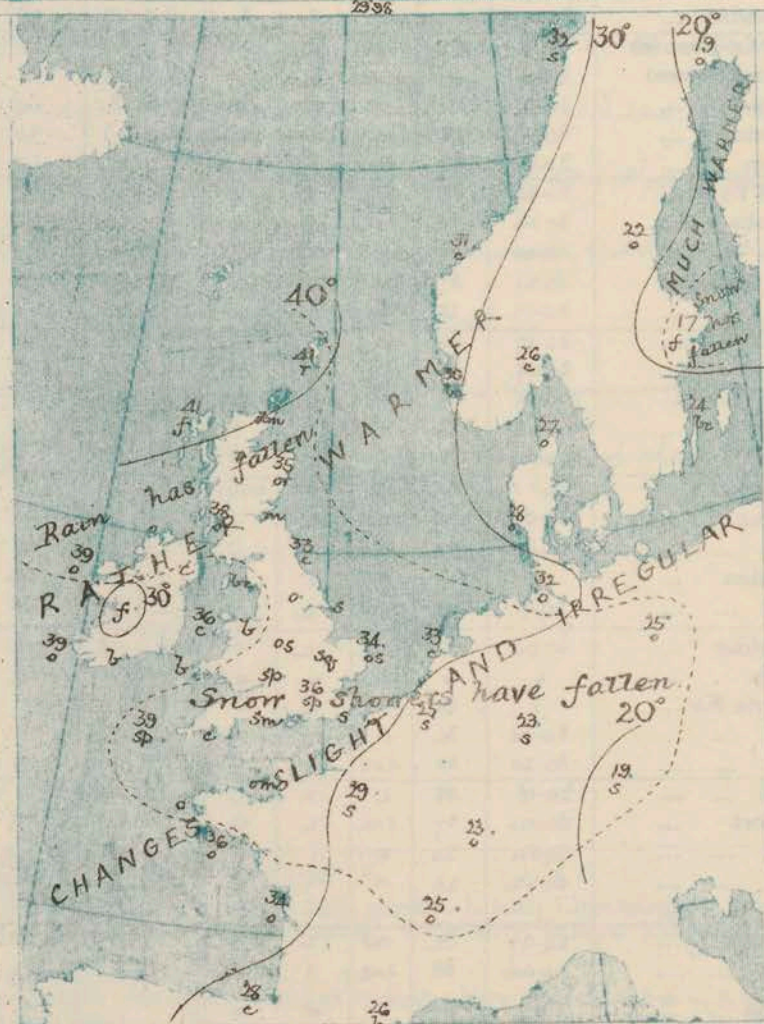
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of February

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
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	35.0	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	38.9	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 in. and more, over Ireland and also over Sweden and Finland.
 Lowest, about 30.0 in., to the northward of Lumburg Head, 29.9 in. and less over Germany and northeast of France. 29.7 in. and less over the South of Spain.
 Gradients slight and variable. Barometer falling except over Germany - most at our northern stations.

TEMPERATURE

Highest 45° at Lisbon, 41° at Stomway, and Lumburg Head, 40° at Kiel and Copenhagen.
 Lowest, 17° at Stockholm, 13° at Haparanda, 23° at Wiesbaden, 26° at Constantinople, 29° at Paris, 32° at Oxford, 34° at London.
 It has risen decidedly at the northern stations since yesterday, but remained steady in the south.

WIND

NE³ over the Baltic and Netherlands and also in Spain, N² over England, Central France.
 NE² and E² air prevail in Ireland, variable W¹ air on our northern coast.
 Very variable air over Germany and the East of France.

WEATHER

Dull generally, - foggy in the west, rainy in the north, snowy in the south and southeast.
 The amount of snow and rain measured this morning is slight.
 In the west there has been none.

SEA

Very little disturbed.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fall of the barometer in the north seems to be spreading southwards over the North Sea, and some temporary rise of temperature seems likely to occur generally during the daytime. A cold night over England is, however, probable.

FORECASTS

for the 24 hours ending at NOON on 26TH FEB^R 1889.

DISTRICTS.

FORECASTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

NW² and W² winds, force doubtful; unsettled, rain or sleet at times.
 N² breezes, backing to NW. light; cold showers at times.
 N² breezes, light; snow showers, unsettled.

DISTRICTS.


FORECASTS.


- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

NW² breezes; some cold showers.
 NE² and N² breeze, light; some cold showers.
 N² to NW² breeze; dull, hazy, some cold showers.

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.	Dry.	Wet.	Wind.	Wet.	Sea.		Bar.	Dry.	Wet.	Wind.	Wet.	Sea.
Skudesnaes ...	30.29	39	32	N 1	6	2	Holyhead ...	30.32	37	34	NE 4	60	3
Summargh Head ...							Valencia ...						
Stornoway ...	30.40	42	41	E 2	60	2	Scilly ...						
Aberdeen ...							Jersey ...	30.19	41	36	NE 4	c	3
Shields ...							Dungeness ...	30.10	37	35	NE 4	c	4
Ardrossan ...							London ...						
Malin Head ...	30.36	42	40	N 3	0	2	Yarmouth ...						
Mullaghmore ...							Rocheport ...	30.17	37	34	NE 4	0	2
Belmullet ...	30.40	41	38	E 2	0	*							

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

The reports for yesterday morning showed that, while the highest pressures of all, 30.6 inches and upwards were found over Central and Northern Russia, another anticyclonic area, with readings above 30.5 inches, existed over the Gulf of Bothnia, and a third, with readings above 30.4 inches, over Ireland. The lowest pressures, 29.2 inches and less, were found in a shallow depression lying over Germany and also in a large and complex area lying over the greater part of the Mediterranean, as well as over Italy, Greece and Turkey. NE^{ly} or N^{ly} winds were reported over the greater part of Western and Northern Europe, and in Denmark, the south of Scandinavia and the east of England they blew freshly or strongly. Over Germany, however, a cyclonic circulation of light breezes was shown round the depression noticed above, while in Russia and Algeria the wind was SE^{ly}. The weather was fine in Scandinavia and the north of our Islands as well as over the greater part of Southern Europe, but cloudy elsewhere with snow over England, Germany and the east of France as well as at some of the Russian stations. Temperature had changed somewhat irregularly, but the general tendency had been for a further decrease; readings ranged from between 45° and 55° on the southern shores of the Mediterranean and in the south of Spain to several degrees below zero over Lapland and Northern Russia. The highest individual readings were 55° at Lfax, 52° at San Fernando and Algiers, 49° at Nemours, 48° at Lisbon, Brindisi and Civita, and 44° at Corunna and Palermo; the lowest were -16° at Kapharanda, 5° at Archangel, -2° at Uleaborg, +3° at Romsö and, at Lemberg, at Warsaw and Cracow, 15° at Stockholm and 16° at Kuopio and Buda-Pesth. In the course of the day the barometer fell slowly over the whole of our Islands and France, but no important change occurred either in the winds or weather.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 17th TO THE 23rd FEBRUARY 1889.

During the early part of last week the weather over the United Kingdom and its immediate neighbourhood was exceedingly mild and genial, and in the southeastern districts the sky was usually clear. Towards the close of the period, however, a steady fall of temperature occurred, and snow showers were experienced in many parts of Great Britain.

Between Sunday 17th and Tuesday 19th the highest pressures were found in an anticyclone lying over the Bay of Biscay and west of France, and the prevailing winds over our Islands were therefore SW^{ly} or W^{ly}. On the 18th a large depression appeared off the west of Norway, and in the course of the ensuing night some secondary disturbances passed across Scotland, the latter occasioning some increase of wind over the northern parts of Ireland and England, and rain at nearly all our northern stations. During the day, however, these disturbances all passed away, over Northern Europe, and in their rear the wind on our N^{ly} and W^{ly} coasts veered to the NW^{ly}.

On the night of the 19th, and the morning of the 20th, a steady fall of the barometer took place over the whole of our Islands and France, and slight rain fell in many parts of the Kingdom. During the ensuing 24 hours a decided recovery of pressure set in on our W^{ly} and N^{ly} coasts, and a well marked anticyclone appeared off the west of Ireland. The wind therefore veered to the N^{ly} generally with a brisk fall of temperature, and local showers.

During Friday however, the anticyclone gradually broke up, while a new high pressure system of considerable size and importance extended from Northern Russia and Scandinavia to our own northern coasts. The wind now veered to NE^{ly} or E^{ly} in most places, and on the 20th, when a depression appeared over Germany, snow showers were reported over the E. and SE. parts of Great Britain. On the east coast of England the NE^{ly} wind blew very strongly for a time but no gale was reported.

Temperature has fallen steadily throughout the week. On the 17th and 18th maximum readings exceeding 55° were registered in many parts of Great Britain, but at the close of the period the readings in the same localities were below 40°. Sharp frosts were experienced on the nights of the 21st, 22nd and 23rd.

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, 26th February 1889.*
Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.																		
Haparanda ..	30.06	20	SW	2	0	30.10	-.06	19	18	0	NE	4	0	*	21	0	0.16	
Hernösand ...	30.13	18	2	0	0	30.03	-.25	19	18	-3	NE	2	0	*	34	14	-	
Stockholm ...	29.97	44	NE	2	0	29.80	-.41	24	23	+7	NE	2	0	*	25	14	-	
Wishby ...	29.75	28	NNE	4	0	29.70	-.39	27	27	+3	ESE	4	S	*	32	19	0.08	
Bodö ...	30.14	28	NE	6	bc	30.20	+.15	21	19	-11	ESE	2	B	1	32	19	-	
Christiansund...	30.06	32	S	1	S	30.06	-.00	31	30	0	ESE	4	S	4	36	28	0.08	
Skudesnes ...	30.04	28	2	0	b	29.92	-.25	27	24	-3	NNE	1	C	2	?	27	0.39	
Christiania Fjord (Færd)	30.02	30	NNE	4	0	29.88	-.31	26	24	0	NNE	5	b	1	30	23	-	
Skagen (The Scaw)	29.96	27	NE	4	bc	29.76	-.37	25	23	-2	ESE	5	0	3	28	25	-	
Fanö ...	29.91	26	N	2	b	29.77	-.28	26	25	-2	NNE	4	S	*	32	25	-	
BRITISH ISLANDS.																		
Sumburgh Head	29.88	37	SSE	1	r	30.00	-.04	36	35	-5	NE	4	r	4	42	33	0.58	
Stornoway ...	30.00	36	N	1	S	29.97	-.17	38	37	-3	NE	5	C	4	42	33	0.42	
Wick ...	29.82	40	SE	3	0	29.98	-.11	37	35	-3	E	3	C	3	41	35	0.15	
Nairn ...	29.88	39	NNE	3	r	29.95	-.16	33	32	-3	2	0	cp	1	39	33	0.26	
Aberdeen...	29.88	35	S	2	r	29.97	-.15	34	33	-1	E	2	osp	4	37	33	0.43	
Leith ...	29.88	37	W	1	0	29.90	-.25	35	34	-2	SE	3	osp	*	39	33	-	
Shields ...	29.91	37	ESE	1	C	29.90	-.23	33	32	0	S	1	0	2	42	31	-	
Spurn Head ...	29.90	34	NE	2	S	29.83	-.22	35	32	+1	NE	3	S	3	38	31	0.02	
York ...	29.91	36	E	1	m	29.85	-.24	31	31	-3	ESE	1	b	*	40	31	0.04	
Loughborough	29.93	34	N	1	0	29.87	-.19	29	29	-4	2	0	cm	*	38	29	0.02	
Ardsrossan ...	29.87	39	WNW	1	r	29.89	-.27	35	34	-3	ESE	3	rsm	2	40	33	0.29	
Malin Head ...	29.87	39	NNE	4	0	29.82	-.38	34	33	-4	SSE	2	bc	3	43	32	0.33	
Mullaghmore ...	29.92	37	SSW	3	0	29.77	-.47	35	34	-1	ESE	4	CQ	2	40	34	0.21	
Belmullet ...	29.92	42	SW	1	r	29.75	-.47	35	35	-4	ESE	4	b	*	43	34	0.45	
Donaghadee ...	29.91	39	SW	3	0	29.85	-.34	36	36	-4	SE	3	r	1	43	36	0.17	
GERMANY.																		
Barrow-in-Furness	29.90	38	NW	2	bc	29.85	-.30	33	31	-2	NE	2	bc	*	42	31	-	
Liverpool (Bidston)	29.94	34	NW	1	bc	29.86	-.30	33	32	-2	SE	1	0	3	40	31	-	
Holyhead ...	29.94	38	2	0	CQ	29.82	-.36	35	33	-1	E	2	b	2	41	33	-	
Parsonstown ...	29.97	37	2	0	S	29.76	-.47	33	32	+7	2	0	0	*	42	25	0.06	
Valencia ...	29.97	43	WNW	1	cm	29.64	-.58	39	37	0	E	2	0	2	45	38	0.12	
Roche's Point...	29.95	40	N	2	C	29.69	-.51	40	38	+5	SE	5	op	4	43	35	0.45	
Pembroke ...	29.94	36	N	2	bc	29.76	-.41	35	34	0	E	3	m	2	39	33	-	
Scilly ...	29.95	39	NNE	2	C	29.67	-.45	41	38	+2	ESE	5	0	3	41	35	0.01	
Prawle Point ...	29.92	35	N	3	0	29.77	-.34	36	33	+6	NE	4	0	2	38	29	-	
Jersey ...	29.90	39	NE	3	og	29.75	-.30	36	35	+1	ESE	2	ogm	2	40	34	0.04	
FRANCE & NETHERLANDS.																		
Hurst Castle ...	29.91	36	NNE	2	ops	29.78	-.28	38	37	+5	ESE	4	C	3	38	33	-	
Dungeness ...	29.86	35	2	0	C	29.79	-.20	28	28	-4	N	2	C	1	36	24	0.16	
London ...	29.90	36	NNE	2	og	29.82	-.21	31	29	-3	NE	1	bcn	*	38	30	0.01	
Oxford ...	29.91	33	N	1	S	29.84	-.24	31	29	-1	NE	1	b	*	38	29	0.02	
Cambridge ...	29.91	34	N	1	0	29.84	-.20	28	27	-5	2	0	CS	*	38	23	0.07	
Yarmouth ...	29.88	34	ESE	3	C	29.82	-.18	34	32	0	ESE	1	cy	3	35	31	0.01	
Cuxhaven ...	29.90	31	E	1	0	29.75	-.22	25	27	-4	N	5	S	*	32	26	-	
Berlin ...	29.82	25	WNW	3	S	29.64	-.35	26	26	+1	WNW	4	S	*	28	23	0.20	
Wiesbaden ...	*	*	*	*	*	29.81	-.15	22	21	-1	N	1	S	*	34	19	-	
Munich ...	29.80	21	2	0	S	29.77	-.12	10	9	-9	S	2	m	*	28	10	0.04	
FINLAND.																		
The Helder ...	29.89	32	E	1	0	29.80	-.18	30	30	-3	NE	1	S	1	34	30	-	
Brussels ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Cape Gris Nez...	?	33	?	?	b	?	?	29	28	0	S	1	S	2	36	28	-	
Paris ...	29.88	30	N	2	bc	29.81	-.16	24	24	-5	NE	1	b	*	32	24	-	
Brest ...	29.96	34	NNE	1	S	29.79	-.31	35	34	+4	SE	3	0	2	46	?	0.04	
Lorient ...	29.91	39	N	3	C	29.70	-.36	35	34	-1	E	3	0	2	43	34	-	
Rocheport ...	29.93	39	NNE	1	0	29.76	-.31	35	33	+1	ESE	3	0	2	43	28	-	
Belfort ...	29.82	26	W	1	0	29.75	-.16	25	25	+2	W	1	0	*	31	19	-	
Lyons ...	29.91	27	S	1	b	29.82	-.18	20	19	-5	W	1	b	*	38	20	-	
Nice ...	29.76	41	2	0	C	29.73	-.07	36	33	-1	ESE	4	C	2	50	32	-	
Perpignan ...	29.85	36	SW	1	bc	29.75	-.23	32	32	+6	2	0	S	*	49	?	0.04	
Biarritz ...	29.85	38	E	3	C	29.64	-.33	32	29	+4	E	3	0	1	45	28	-	
Corunna ...	*	*	*	*	*	29.56	-.34	43	40	+1	ESE	4	b	5	46	37	-	
Lisbon ...	29.49	46	NNE	5	0	29.82	-.37	43	41	-2	NNE	5	r	4	52	41	?	

1882

(Explanation of Map)

Wind ——— Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to times thus —

→ = forces above 10, → = forces 8 to 10,
 → = forces 5 to 7, → = forces 1 to 4,
 ⊙ = dead calm.

Sea Disturbance—where considerable, is shown thus.

MEAN HEIGHT of the BAROMETER

at 3 a. m. for the month of February.
During the 15 Years 1871—1885.

A hand-drawn weather map of the North Atlantic region, showing isobars, wind directions, and pressure trends. The map includes the following features:

- Isobars:** Labeled with values such as 30.2, 30.1, 30.0, 29.9, 29.8, 29.7, 29.6, 29.5, 29.4, 29.3, 29.2, 29.1, 29.0, 28.9, 28.8, 28.7, 28.6, 28.5, 28.4, 28.3, 28.2, 28.1, 28.0, 27.9, 27.8, 27.7, 27.6, 27.5, 27.4, 27.3, 27.2, 27.1, 27.0, 26.9, 26.8, 26.7, 26.6, 26.5, 26.4, 26.3, 26.2, 26.1, 26.0, 25.9, 25.8, 25.7, 25.6, 25.5, 25.4, 25.3, 25.2, 25.1, 25.0, 24.9, 24.8, 24.7, 24.6, 24.5, 24.4, 24.3, 24.2, 24.1, 24.0, 23.9, 23.8, 23.7, 23.6, 23.5, 23.4, 23.3, 23.2, 23.1, 23.0, 22.9, 22.8, 22.7, 22.6, 22.5, 22.4, 22.3, 22.2, 22.1, 22.0, 21.9, 21.8, 21.7, 21.6, 21.5, 21.4, 21.3, 21.2, 21.1, 21.0, 20.9, 20.8, 20.7, 20.6, 20.5, 20.4, 20.3, 20.2, 20.1, 20.0, 19.9, 19.8, 19.7, 19.6, 19.5, 19.4, 19.3, 19.2, 19.1, 19.0, 18.9, 18.8, 18.7, 18.6, 18.5, 18.4, 18.3, 18.2, 18.1, 18.0, 17.9, 17.8, 17.7, 17.6, 17.5, 17.4, 17.3, 17.2, 17.1, 17.0, 16.9, 16.8, 16.7, 16.6, 16.5, 16.4, 16.3, 16.2, 16.1, 16.0, 15.9, 15.8, 15.7, 15.6, 15.5, 15.4, 15.3, 15.2, 15.1, 15.0, 14.9, 14.8, 14.7, 14.6, 14.5, 14.4, 14.3, 14.2, 14.1, 14.0, 13.9, 13.8, 13.7, 13.6, 13.5, 13.4, 13.3, 13.2, 13.1, 13.0, 12.9, 12.8, 12.7, 12.6, 12.5, 12.4, 12.3, 12.2, 12.1, 12.0, 11.9, 11.8, 11.7, 11.6, 11.5, 11.4, 11.3, 11.2, 11.1, 11.0, 10.9, 10.8, 10.7, 10.6, 10.5, 10.4, 10.3, 10.2, 10.1, 10.0, 9.9, 9.8, 9.7, 9.6, 9.5, 9.4, 9.3, 9.2, 9.1, 9.0, 8.9, 8.8, 8.7, 8.6, 8.5, 8.4, 8.3, 8.2, 8.1, 8.0, 7.9, 7.8, 7.7, 7.6, 7.5, 7.4, 7.3, 7.2, 7.1, 7.0, 6.9, 6.8, 6.7, 6.6, 6.5, 6.4, 6.3, 6.2, 6.1, 6.0, 5.9, 5.8, 5.7, 5.6, 5.5, 5.4, 5.3, 5.2, 5.1, 5.0, 4.9, 4.8, 4.7, 4.6, 4.5, 4.4, 4.3, 4.2, 4.1, 4.0, 3.9, 3.8, 3.7, 3.6, 3.5, 3.4, 3.3, 3.2, 3.1, 3.0, 2.9, 2.8, 2.7, 2.6, 2.5, 2.4, 2.3, 2.2, 2.1, 2.0, 1.9, 1.8, 1.7, 1.6, 1.5, 1.4, 1.3, 1.2, 1.1, 1.0, 0.9, 0.8, 0.7, 0.6, 0.5, 0.4, 0.3, 0.2, 0.1, 0.0, -0.1, -0.2, -0.3, -0.4, -0.5, -0.6, -0.7, -0.8, -0.9, -1.0, -1.1, -1.2, -1.3, -1.4, -1.5, -1.6, -1.7, -1.8, -1.9, -2.0, -2.1, -2.2, -2.3, -2.4, -2.5, -2.6, -2.7, -2.8, -2.9, -3.0, -3.1, -3.2, -3.3, -3.4, -3.5, -3.6, -3.7, -3.8, -3.9, -4.0, -4.1, -4.2, -4.3, -4.4, -4.5, -4.6, -4.7, -4.8, -4.9, -5.0, -5.1, -5.2, -5.3, -5.4, -5.5, -5.6, -5.7, -5.8, -5.9, -6.0, -6.1, -6.2, -6.3, -6.4, -6.5, -6.6, -6.7, -6.8, -6.9, -7.0, -7.1, -7.2, -7.3, -7.4, -7.5, -7.6, -7.7, -7.8, -7.9, -8.0, -8.1, -8.2, -8.3, -8.4, -8.5, -8.6, -8.7, -8.8, -8.9, -9.0, -9.1, -9.2, -9.3, -9.4, -9.5, -9.6, -9.7, -9.8, -9.9, -10.0, -10.1, -10.2, -10.3, -10.4, -10.5, -10.6, -10.7, -10.8, -10.9, -11.0, -11.1, -11.2, -11.3, -11.4, -11.5, -11.6, -11.7, -11.8, -11.9, -12.0, -12.1, -12.2, -12.3, -12.4, -12.5, -12.6, -12.7, -12.8, -12.9, -13.0, -13.1, -13.2, -13.3, -13.4, -13.5, -13.6, -13.7, -13.8, -13.9, -14.0, -14.1, -14.2, -14.3, -14.4, -14.5, -14.6, -14.7, -14.8, -14.9, -15.0, -15.1, -15.2, -15.3, -15.4, -15.5, -15.6, -15.7, -15.8, -15.9, -16.0, -16.1, -16.2, -16.3, -16.4, -16.5, -16.6, -16.7, -16.8, -16.9, -17.0, -17.1, -17.2, -17.3, -17.4, -17.5, -17.6, -17.7, -17.8, -17.9, -18.0, -18.1, -18.2, -18.3, -18.4, -18.5, -18.6, -18.7, -18.8, -18.9, -19.0, -19.1, -19.2, -19.3, -19.4, -19.5, -19.6, -19.7, -19.8, -19.9, -20.0, -20.1, -20.2, -20.3, -20.4, -20.5, -20.6, -20.7, -20.8, -20.9, -21.0, -21.1, -21.2, -21.3, -21.4, -21.5, -21.6, -21.7, -21.8, -21.9, -22.0, -22.1, -22.2, -22.3, -22.4, -22.5, -22.6, -22.7, -22.8, -22.9, -23.0, -23.1, -23.2, -23.3, -23.4, -23.5, -23.6, -23.7, -23.8, -23.9, -24.0, -24.1, -24.2, -24.3, -24.4, -24.5, -24.6, -24.7, -24.8, -24.9, -25.0, -25.1, -25.2, -25.3, -25.4, -25.5, -25.6, -25.7, -25.8, -25.9, -26.0, -26.1, -26.2, -26.3, -26.4, -26.5, -26.6, -26.7, -26.8, -26.9, -27.0, -27.1, -27.2, -27.3, -27.4, -27.5, -27.6, -27.7, -27.8, -27.9, -28.0, -28.1, -28.2, -28.3, -28.4, -28.5, -28.6, -28.7, -28.8, -28.9, -29.0, -29.1, -29.2, -29.3, -29.4, -29.5, -29.6, -29.7, -29.8, -29.9, -30.0, -30.1, -30.2, -30.3, -30.4, -30.5, -30.6, -30.7, -30.8, -30.9, -31.0, -31.1, -31.2, -31.3, -31.4, -31.5, -31.6, -31.7, -31.8, -31.9, -32.0, -32.1, -32.2, -32.3, -32.4, -32.5, -32.6, -32.7, -32.8, -32.9, -33.0, -33.1, -33.2, -33.3, -33.4, -33.5, -33.6, -33.7, -33.8, -33.9, -34.0, -34.1, -34.2, -34.3, -34.4, -34.5, -34.6, -34.7, -34.8, -34.9, -35.0, -35.1, -35.2, -35.3, -35.4, -35.5, -35.6, -35.7, -35.8, -35.9, -36.0, -36.1, -36.2, -36.3, -36.4, -36.5, -36.6, -36.7, -36.8, -36.9, -37.0, -37.1, -37.2, -37.3, -37.4, -37.5, -37.6, -37.7, -37.8, -37.9, -38.0, -38.1, -38.2, -38.3, -38.4, -38.5, -38.6, -38.7, -38.8, -38.9, -39.0, -39.1, -39.2, -39.3, -39.4, -39.5, -39.6, -39.7, -39.8, -39.9, -40

Temperature—Isotherms are drawn for each 10° changes since previous morning are stated in words.

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.

[illegible]

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 in. to 30.2 in. over the Shetland Islands and the northern half of Scandinavia.

Lowest, About 29.6 in. over North Germany, as well off the southeast of Ireland, and (apparently) over the north and west of the Spanish Peninsula.

Gradients slight generally. Barometer rising in north, falling elsewhere.

TEMPERATURE

Highest, 41° at Seilly, 40° at Roche Point, 39° at Valencia, 38° at Stormy and 37° at Wick.

Lowest, 10° at Munich, 19° at Haparanda and Hemösand, 20° at Lyons, 21° at Bodo, 24° at Paris, 26° at Berlin, 28° at Birmm and Cambridge and 31° at London.

It appears to be decreasing as a whole, though rather higher in the southwest than it was yesterday.

WIND

Slight to moderate in force generally. NE² at the northern stations.

NE² to N² in the east, and NW² at Berlin.

NE over Spain, E over the Bay of Biscay, SE over W coasts, and over the western parts of the Channel.

WEATHER

Dull and misty in the west and northwest, with rain in some places—dull in the south.

Dull and unsettled in the northeast, east, and southeast, with snow in many places.

Rainfall has been heaviest (0.4 in. to 0.6 in.) in the west and north.

SEA

Moderate in the far north, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A depression appears to be advancing slowly from North Germany towards the North Sea, and will probably cause some freshening of the N² wind in the latter region, with a good deal of snow both there and in the east and southeast of our Islands. In the west finer weather is probable. Temperature is likely to remain low generally.

FORECASTS

for the 24 hours ending at NOON on 27th FEB^{ry}

1889.

DISTRICTS.

FORECASTS.

- 0 { SCOTLAND NORTH
- 1 { SCOTLAND EAST
- 2 { ENGLAND N.E.
- 3 { ENGLAND EAST
- 4 { MIDLAND COUNTIES
- 5 { ENGLAND SOUTH

NE² Winds, freshening; snow at times.

N² and NE² Winds, freshening, with snow.

DISTRICTS.

FORECASTS.


- 6 { SCOTLAND WEST
- 7 { ENGLAND N.W.
- 8 { ENGLAND S.W.
- 9 { IRELAND NORTH
- 10 { IRELAND SOUTH


Wind backing to the N²; fine and cold at first, perhaps snow later.

SE² and E² Winds, moderate; fair as a whole.

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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	30.09	35	32	SSE 2	c	2	Holyhead ...	30.06	40	36	2 0	c	0
Sumburgh Head ...	29.91	41	41	20 0	r	1	Valencia ...	30.10	45	41	SW 1	sm	1
Stornoway ...	30.05	39	39	N 5	r	4	Scilly ...	30.02	41	37	E NE 4	c	3
Aberdeen ...	29.96	37	36	S 1	orm	4	Jersey ...	29.98	40	37	NNE 3	o	3
Shields ...	30.10	40	37	NE 1	c	3	Dungeness ...	29.90	35	34	NE 3	c	3
Ardrossan ...	29.99	39	39	WNW 3	r	2	London ...	29.95	38	34	NW 2	o	*
Malin Head ...	30.03	42	42	W 1	o	1	Yarmouth ...	29.93	35	34	E NE 4	c	4
Mullaghmore ...	30.09	40	37	WSW 2	or	2	Rochefort ...	30.02	40	35	E NE 2	o	2
Belmullet ...	30.09	43	41	SSW 1	o	*							

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

The reports for yesterday morning showed that pressure was highest, 30.6 ins. and upwards, over central Russia, but high, 30.2 ins. and upwards, over Ireland. The lowest readings, 29.7 ins. and less, were found in three depressions, lying respectively, over Western Russia, the southern part of the Adriatic and off the southwest of Spain, while a further and very shallow system, with readings below 29.95 ins. was reported over Westphalia. The wind varied greatly in different localities. Over our Islands and the north of France it was chiefly N², and over the Baltic, Denmark, Spain, and the south of France NE³ or E³. Over the western and southern parts of Russia, however, a cyclonic circulation of light winds was shown round the first of the depressions mentioned above, while in the northern parts of Russia and Sweden light S³ airs were reported. The weather was fine in the western parts of the United Kingdom, as well as in Italy and the south of Austria, but cloudy or overcast elsewhere, with snow over the Baltic, the western parts of Russia and Germany, Belgium, the east of France and the east and south of England, and rain in Scotland. Temperature had risen rapidly over the northern parts of Sweden and Russia, and to a less extent over the north of our Islands and the west of Russia, but fallen elsewhere; readings ranged from between 45° and 55° over the central and southern parts of the Mediterranean to several degrees below the freezing point over northern and central Europe. The highest individual readings were 55° at Malta, 54° at San Fernando, 50° at Algiers, 49° at Cagliari, Palermo, and Oran, 48° at Nemours and Brindisi, and 47° at Tunis; the lowest were 3° at St. Petersburg, 2° at Moscow, 12° at Helsinki, 16° at Hango, 17° at Stockholm, 19° at Haparanda and Munich, 20° at Helsingfors, and 21° at Kuopio. In the course of the day, a decided fall of the barometer took place over the whole of the United Kingdom, and several shallow depressions appeared in our neighbourhood. The winds, therefore, became light and variable, and the weather very unsettled, with rain or sleet in nearly all districts.

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 27TH FEBRUARY 1889.

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

STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ..	29.17	14	NNE	6	0	29.21	+21	11	10	-1	ENE	4	bc	*	23	11	-		
Hernösand ...	29.97	21	NNE	6	5	29.10	+07	18	18	-1	NNE	6	5	*	23	9	0.08		
Stockholm ...	29.71	20	NNE	2	0	29.80	0.0	26	25	+2	E	2	5	*	23	19	0.20		
Wisby ...	29.66	28	E	4	0	29.73	+03	27	26	0	ESE	4	0	*	22	25	0.16		
Bodö ...	29.21	18	ENE	2	5	29.28	+08	18	15	-3	E	2	5	1	25	14	-		
Christiansund...	29.85	20	NNE	4	0	29.80	-06	27	24	-4	ESE	2	5	2	24	23	-		
Skudesnaes ...	29.78	22	ESE	2	bc	29.80	+12	29	26	+2	ESE	2	C	2	28	28	-		
Christiania Fjord (Færdar)	29.79	28	NNE	6	0	29.79	-09	24	22	-2	NNE	6	C	2	28	21	-		
Skagen (The Scaw)	29.71	26	ENE	5	0	29.68	-03	24	23	-1	E	4	5	2	27	23	-		
Fanö ...	29.66	24	NNE	4	5	29.64	-13	24	23	-2	NNE	4	C	*	28	23	-		
BRITISH ISLANDS.																			
Sumburgh Head	29.91	22	N	4	cop	29.70	-20	22	21	-4	N	1	cl	4	28	29	0.12		
Stornoway ...	29.94	40	N	6	5	29.78	-16	24	24	-4	E	4	5	4	41	21	0.18		
Wick ...	29.92	26	E	2	0	29.75	-17	29	27	-2	N	1	bc	1	29	26	0.10		
Nairn ...	29.87	26	NNE	2	sef	29.76	-11	20	20	-2	N	0	5	1	40	29	0.31		
Aberdeen...	29.86	26	NW	2	0	29.75	-11	20	29	-4	NNE	2	bc	4	29	29	0.08		
Leith ...	29.84	25	NNE	1	C	29.72	-12	25	23	0	NNE	1	C	*	42	21	0.04		
Shields ...	29.83	26	ENE	2	0	29.65	-18	28	24	+5	NNE	2	0	2	29	22	0.11		
Spurn Head ...	29.77	25	NNE	2	C	29.63	-14	25	24	0	NW	2	C	2	26	23	0.02		
York ...	29.79	25	NE	1	0	29.64	-15	23	23	+2	NNE	1	0	*	27	20	0.02		
Loughborough	29.80	24	NNE	2	0	29.68	-12	22	21	+3	NW	1	ogm	*	26	29	0.01		
Ardrossan ...	29.88	26	ENE	1	om	29.72	-16	24	23	-1	ENE	2	of	1	40	22	0.01		
Malin Head ...	29.87	27	E	1	com	29.71	-16	22	22	-1	S	2	C	2	29	22	0.03		
Mullaghmore ...	29.85	29	ENE	5	cm	29.70	-15	22	21	-3	ESE	1	bc	2	41	22	-		
Belmullet ...	29.85	29	E	2	bc	29.69	-16	25	24	0	ESE	2	5	*	41	23	0.07		
Donaghadee ...	29.86	28	ENE	2	C	29.72	-14	27	24	+1	ENE	2	bc	1	41	25	0.02		
Barrow-in-Furness	29.82	26	NNE	2	0	29.69	-13	24	23	+1	N	2	5	*	26	22	0.01		
Liverpool (Bidston)	29.82	24	ENE	1	0	29.70	-12	22	22	-1	ENE	1	of	2	27	22	-		
Holyhead ...	29.82	27	ENE	2	ogm	29.69	-13	24	23	+1	E	1	cmg	2	40	21	0.01		
Parsonstown ...	29.82	27	N	0	5	29.72	-10	20	29	+3	N	0	0	*	42	20	0.01		
Valencia ...	29.70	42	E	4	bc	29.70	+06	25	23	-4	NNE	2	bm	2	44	25	-		
Roche's Point...	29.72	40	ESE	5	bc	29.69	0.0	26	23	-4	NE	2	cm	4	44	24	0.01		
Pembroke ...	29.76	27	E	2	C	29.65	-11	24	22	-1	ENE	4	cg	2	40	22	-		
Scilly ...	29.65	40	ENE	5	C	29.52	-13	28	25	-3	ENE	4	0	2	41	25	0.06		
Prawle Point ...	29.70	27	ENE	5	0	29.61	-09	24	22	-2	ENE	5	0	2	40	21	-		
Jersey ...	29.68	29	E	4	5	29.57	-11	24	22	-2	ENE	2	cm	2	42	24	-		
Hurst Castle ...	29.72	26	E	2	5	29.62	-10	22	22	+5	NE	2	om	1	29	22	-		
Dungeness ...	29.76	22	NNE	2	bc	29.52	-24	22	22	+5	NE	2	0	2	24	27	0.03		
London ...	29.75	24	NE	1	om	29.62	-13	22	22	+2	NNE	1	og	*	28	20	0.01		
Oxford ...	29.76	22	NE	2	0	29.66	-10	22	21	+1	NE	1	of	*	29	28	-		
Cambridge ...	29.77	24	N	1	0	29.63	-14	22	22	+5	N	1	0	*	42	26	0.01		
Yarmouth ...	29.76	24	NNE	2	cp	29.61	-15	25	23	+1	ENE	2	C	5	25	21	0.02		
Cuxhaven ...	29.66	29	N	2	0	29.61	-05	29	29	+1	NNE	2	C	*	29	27	-		
Berlin ...	29.60	28	NNE	2	5	29.52	-08	27	27	+1	N	2	0	*	20	?	0.04		
Wiesbaden ...	*	*	*	*	*	29.62	-19	18	15	-4	N	0	0	*	24	16	-		
Munich ...	29.66	14	N	0	5	29.56	-10	7	7	-3	ESE	2	5	*	27	5	-		
FRANCE & NETHERLANDS.																			
The Helder ...	29.68	22	NNE	1	5	29.62	-06	21	20	+1	ENE	1	0	1	24	20	0.04		
Brussels ...	*	*	*	*	*	29.64	-04	20	20	-	N	0	5	*	24	29	0.04		
Cape Gris Nez...	?	22	NE	2	0	?	?	21	20	+2	N	0	5	1	27	22	-		
Paris ...	29.69	20	E	1	C	29.56	-13	24	24	0	NE	2	m	*	27	22	-		
Brest ...	29.67	24	ESE	1	0	29.62	-05	28	26	-2	E	1	5	2	46	?	-		
Lorient ...	29.62	28	E	4	bc	29.53	-09	21	21	+4	NE	2	5	2	42	28	-		
Rochefort ...	29.60	20	ENE	5	bc	29.50	-10	21	20	+4	NE	5	0	2	46	25	-		
Belfort ...	29.60	27	NE	1	5	29.51	-09	22	22	-2	E	2	0	*	25	18	-		
Lyons ...	29.65	21	ESE	1	C	29.46	-19	28	28	+8	N	1	5	*	27	2	-		
Nice ...	29.59	40	N	0	5	29.45	-14	27	26	+1	ENE	5	2	2	48	24	0.08		
Perpignan ...	29.52	28	NE	2	2	29.31	-21	41	40	+9	NE	2	2	*	46	?	0.71		
Biarritz ...	29.42	24	E	4	5	29.44	-02	40	37	+3	NNE	4	0	2	?	20	0.55		
PORTUGAL.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	29.49	47	N	4	5	29.76	+27	58	46	+12	NNE	2	C	5	?	?	0.16		

WEATHER CHARTS

for 8 a.m. on

WEDNESDAY 27th FEBRUARY

1889.

BAROMETER, WIND & 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.

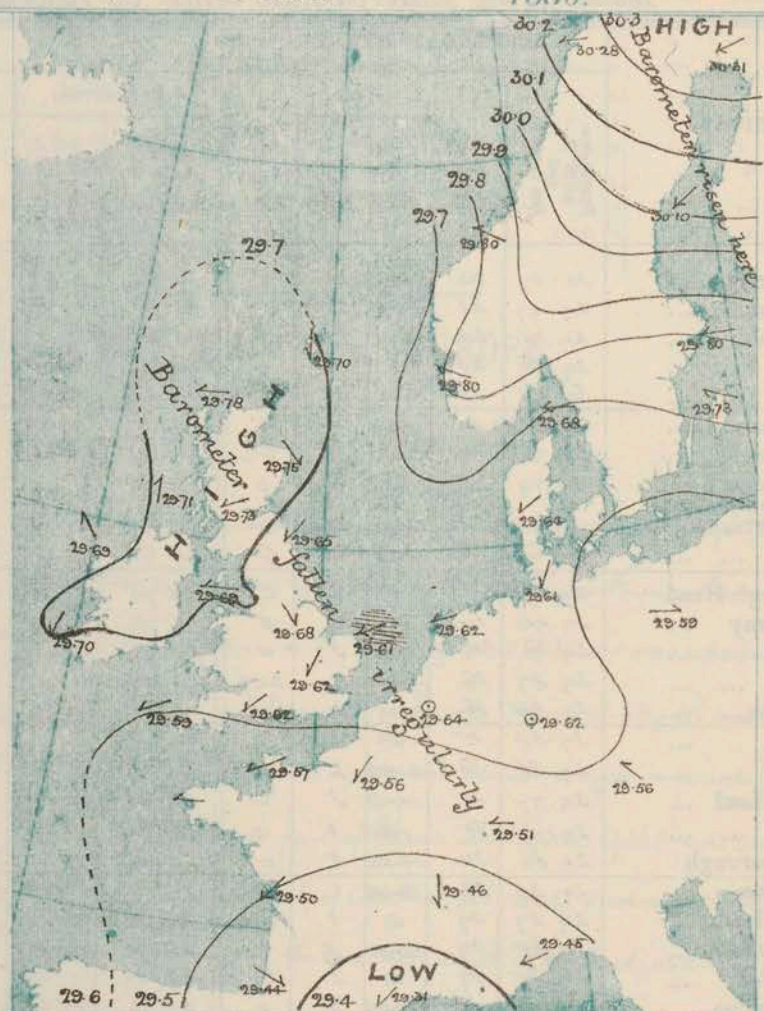
Sea Disturbance — where considerable, is shown thus.

— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
During the 15 Years 1871-1885.

STATIONS.	MEAN READINGS.
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	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.873
Parsonstown	29.884
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	29.940
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.

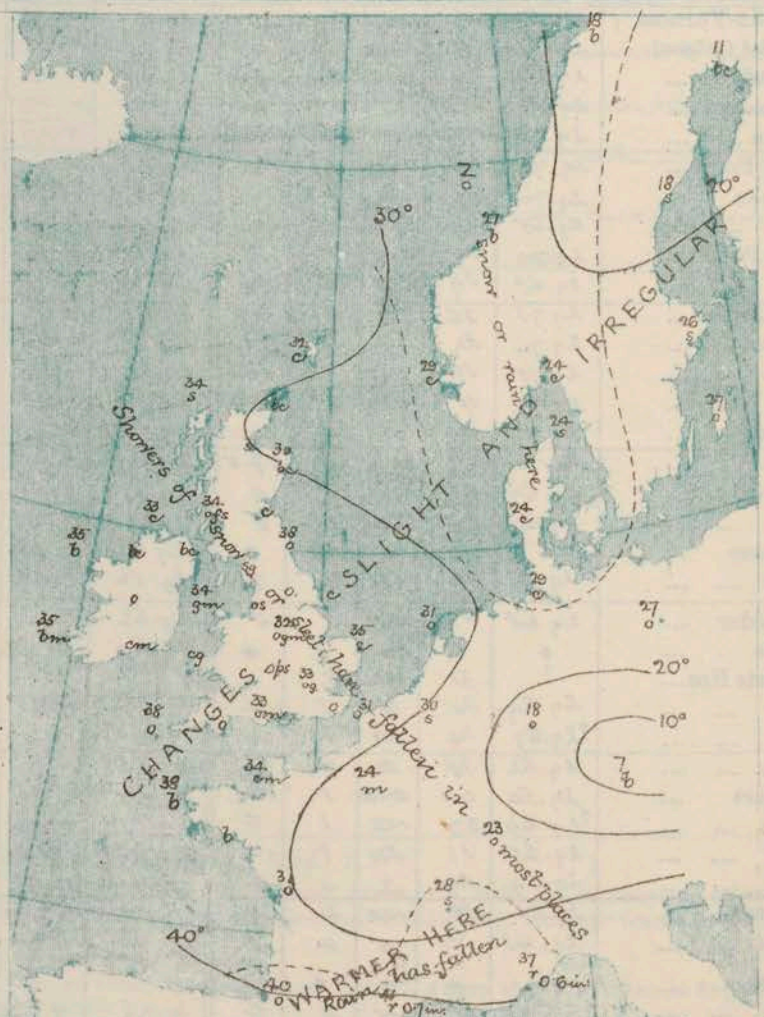
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of February.

STATIONS.	TEMPERATURE.				RAINFALL. (Inches).
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
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	45.8	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	46.9	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 10 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.0 ins. to 30.3 ins. over Lapland and the northern parts of Scandinavia; 29.7 ins. and more over Scotland and Ireland, and also over the southern part of Portugal.
 Lowest 29.4 ins. and less over the northern part of the Mediterranean, and about 29.5 ins. over north Germany.
 Gradients moderate over Scandinavia, slight elsewhere.
 Barometer rising in the far north, and also in Portugal, falling elsewhere, most in the south of France.

TEMPERATURE

Highest 58° at Lisbon, 51° at Perpignan, 40° at Biarritz, 38° at Scilly, 37° at Donaghadee.
 Lowest 7° at Munich, 11° to 18° over the northern part of Scandinavia, 18° at Wiesbaden, 24° at Paris, 25° at the Scaur, 27° at Berlin, 30° at Paris-St. Germain, 31° at Bordeaux, 33° at London.
 It is rising quickly over Spain and the south of France, changing little and irregularly elsewhere.

WIND

Is mainly N.E. or N. over the Continent, England, and the south of Ireland, and is light to moderate in force. On our northwestern coasts it is very light and variable.

WEATHER

Fine and bright over Brittany, Ireland, the northeast of Scotland, and west of Norway.
 Cloudy or overcast elsewhere, with snow at many of the northern and eastern stations.
 The amount of snow yesterday was very small over England, but greater in Scotland.

SEA

Rather rough both at Harwich and Lisbon, moderate in the north, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is at present no decided indication of any material change of weather over the United Kingdom.

FORECASTS

for the 24 hours ending at NOON on 28th February 1889.

DISTRICTS.

- 0 { SCOTLAND NORTH
- 1 { SCOTLAND EAST
- 2 { ENGLAND N.E.
- 3 { ENGLAND EAST
- 4 { MIDLAND COUNTIES
- 5 { ENGLAND SOUTH

FORECASTS.

N.W. and N. winds, light or moderate, cloudy, cold showers.

 N.E. or N. winds, light, cold, dull, slight snow at times.

DISTRICTS.

- 6 { SCOTLAND WEST
- 7 { ENGLAND N.W.
- 8 { ENGLAND S.W.
- 9 { IRELAND NORTH
- 10 { IRELAND SOUTH

FORECASTS.

Very light winds; changeable, some snow.

 Same as Nos 3 to 5.

 Varying light winds; changeable weather.

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.	Dry.	Wet.	Wind.	Wca.	Sea.		Bar.	Dry.	Wet.	Wind.	Wca.	Sea.
Skudesnaes ...	29.82	35	28	STE 2	bc	2	Holyhead ...	29.84	40	36	E 2	b	2
Sumburgh Head ...	29.97	32	32	NE 4	sf	4	Valencia ...	29.69	42	39	E 5	om	4
Stornoway ...	29.99	41	40	N 5	o	4	Scilly ...	29.66	39	38	E 6	n	4
Aberdeen ...	29.94	37	35	NW 2	bc	4	Jersey ...	29.73	39	37	ENE 3	bc	2
Shields ...	29.88	37	34	ENE 2	c	2	Dungeness ...	29.78	34	32	E 1	c	1
Ardrossan ...	29.91	39	38	ENE 3	om	2	London ...	29.79	36	33	ENE 1	ost	*
Malin Head ...	29.88	37	36	SE 2	o	2	Yarmouth ...	29.80	35	34	NE 1	CTV	2
Mullaghmore ...	29.86	40	37	E 5	om	2	Rocheport ...	29.70	42	37	E 4	c	2
Belmullet ...	29.84	39	37	E 4	bc	*							

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

The reports for yesterday morning showed that pressure was still highest, 30.3 ins. and upwards, over Central Russia, but that a second area of high readings, 30.2 ins. and upwards, had appeared over the north of Norway. The lowest readings, 29.4 ins. and less, were found in a depression lying to the southwest of the Iberian Peninsula, but pressure was also low, 29.6 ins. and less, in a disturbance which had advanced from western Russia to northern Germany, while a third system, with readings below 29.8 ins., was lying over the Black Sea. Over central Europe a cyclonic circulation of light breezes was shown round the first of these depressions, in Ireland the wind was SE. and in Algeria chiefly S.W., but in nearly all other parts of Europe it varied between E. and NE. The weather was fine over the central parts of our Islands and France, but cloudy or overcast elsewhere, with snow over the Baltic, north Germany and the south of Russia, as well as at some of our own northern stations. Temperature had risen in the southwest of our Islands, as well as over the Baltic, Italy, Spain and Algeria, but fallen elsewhere; readings ranged from a little above 60° in western Algeria, to many degrees below the freezing point over Russia and central Europe. The highest individual readings were 63° at Nemours, 62° at Aron, 58° at San Fernando, 57° at Sfax, 56° at Algiers and Biskra, 51° at Tunis, 50° at Brindisi, and 46° at Langensand and Palermo; the lowest were 8° at Moscow, 10° at Munich, 12° at Kuopio and Helsingfors, 15° at Hangö and St Petersburg, 17° at Vienna and Lemberg, and 18° at Prague and Hermannstadt.

In the course of the day very little change was observed either in pressure, winds or weather. Snow showers were however, experienced over England, and temperature remained low 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, 28th February 1889.*
 Issued by the Meteorological Office 63 Victoria Street, London. R.H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.					3 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.			
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ..	30.53	10	NE	4	b	30.51	+20	17	16	+6	NE	2	0	*	19	9	-	
Hernösand ...	30.25	18	NE	4	S	30.35	+25	15	14	-3	NE	6	0	*	21	14	0.04	
Stockholm ...	30.01	21	N	2	C	30.04	+24	21	20	-5	NNE	4	S	*	28	18	-	
Wisby ...	29.89	27	NE	4	S	29.89	+16	27	26	0	NNE	4	S	*	30	25	0.08	
Bodö ...	30.44	20	E	2	b	30.52	+24	17	15	-1	E	6	6	3	21	14	-	
Christiansund...	29.98	24	ESE	4	b	30.22	+42	27	25	0	ESE	3	b	2	30	?	-	
Skudesnaes ...	29.95	27	Z	0	b	30.15	+35	27	24	-2	ENE	4	b	2	?	27	-	
Christiania Fjord (Fjord)	29.59	27	NNE	6	b	30.15	+36	23	21	-1	NNE	6	C	2	27	19	-	
Skagen (The Scaw)	29.91	28	E	4	b	30.05	+37	23	22	-1	E	5	0	3	30	23	-	
Fanö ...	29.77	27	NE	4	0	29.89	+25	27	26	+3	ENE	4	C	*	28	?	-	
BRITISH ISLANDS.																		
Sumburgh Head	29.74	32	Z	0	b	30.01	+31	35	33	+3	SE	4	S	5	36	28	0.04	
Stornoway ...	29.74	33	N	2	bc	29.86	+08	36	34	+2	SE	5	bc	4	39	29	0.01	
Wick ...	29.73	32	N	1	bc	29.93	+18	37	35	+8	SE	4	0	4	41	26	0.10	
Nairn ...	29.74	30	Z	0	b	29.89	+13	27	26	-3	Z	0	b	1	39	20	-	
Aberdeen...	29.76	34	NW	1	bc	29.93	+18	34	32	+4	SE	5	og	5	38	30	0.09	
Leith ...	29.71	38	NE	1	C	29.83	+11	34	33	-1	E	3	CSP	*	40	32	0.03	
Shields ...	29.68	36	ESE	4	0	29.84	+19	36	34	-2	E	4	C	4	41	32	0.09	
Spurn Head ...	29.63	35	NE	4	0	29.73	+10	33	32	-2	ENE	5	S	4	36	31	0.05	
York ...	29.64	36	E	1	0	29.76	+12	32	32	-1	ENE	1	S	*	40	31	0.02	
Loughborough	29.65	34	ENE	2	S	29.74	+06	31	30	-1	NNE	1	OS	*	39	30	0.04	
Ardrossan ...	29.70	35	NE	1	cm	29.83	+10	34	33	0	ENE	3	0	2	39	32	-	
Malin Head ...	29.66	34	SSE	2	bc	29.75	+04	34	33	+1	SSE	4	bsp	2	36	33	0.01	
Mullaghmore ...	29.63	38	SE	2	C	29.71	+01	35	34	+3	ESE	4	og	2	44	31	-	
Belmullet ...	29.62	38	SSE	3	C	29.69	-00	32	31	-3	ESE	4	0	*	43	31	0.03	
Donaghadee ...	29.67	37	SE	3	S	29.75	+03	37	34	0	E	3	C	1	39	35	0.05	
GERMANY.																		
Barrow-in-Furness	29.64	37	NE	2	0	29.76	+07	33	31	-1	ENE	4	C	*	38	32	0.04	
Liverpool (Bidston)	29.64	35	NW	1	0	29.77	+07	32	30	0	E	3	0	3	36	31	0.03	
Holyhead ...	29.65	36	ENE	3	og	29.73	+04	34	33	0	ENE	4	ogm	3	39	34	0.01	
Parsonstown ...	29.65	37	Z	0	C	29.72	-00	21	21	-0	Z	0	C	*	41	21	-	
Valencia ...	29.64	39	NW	1	bc	29.67	-03	35	34	0	ENE	1	b	2	47	34	0.10	
FRANCE & NETHERLANDS.																		
Roche's Point...	29.63	36	E	3	C	29.68	-01	33	32	-3	NE	2	b	3	41	29	-	
Pembroke ...	29.62	35	ENE	3	C	29.70	+05	33	32	-2	ENE	3	cg	1	38	32	-	
Scilly ...	29.53	39	NNE	4	0	29.66	+07	40	37	+2	E	1	C	2	41	36	-	
Prawle Point ...	29.59	38	NE	3	S	29.68	+07	32	31	-2	N	2	C	2	35	30	0.05	
Jersey ...	29.54	38	N	2	0	29.63	+06	36	35	+2	NE	3	cg	3	44	34	0.03	
PENINSULA.																		
Hurst Castle ...	29.56	37	ENE	4	orosp	29.69	+04	33	32	0	NE	3	osp	1	38	31	-	
Dungeness ...	29.53	35	E	5	C	29.62	+03	31	31	-2	E	4	3	4	37	30	-	
London ...	29.60	34	NE	2	OS	29.67	+05	31	30	-2	NE	3	oshg	*	38	31	0.04	
Oxford ...	29.63	33	NE	2	0	29.72	+06	31	30	-1	NE	1	osp	*	38	31	0.02	
Cambridge ...	29.62	34	N	1	0	29.73	+10	31	30	-2	NE	1	b	*	38	29	0.01	
Yarmouth ...	29.60	34	ENE	5	cgksp	29.70	+09	32	31	-3	E	6	cg	5	36	29	0.04	
Guxhaven ...	29.66	29	NE	3	C	29.76	+15	30	29	+1	ENE	3	C	*	?	27	-	
Berlin ...	29.69	30	SSW	2	0	29.76	+17	25	24	-2	E	3	0	*	32	21	-	
Wiesbaden ...	*	*	*	*	*	29.61	-01	26	24	+8	NE	1	bc	*	32	?	-	
Munich ...	29.48	19	NE	4	b	29.50	-06	22	?	+15	SW	3	S	*	27	7	0.04	
FRANCE & NETHERLANDS.																		
The Holder ...	29.66	30	ENE	3	0	29.74	+12	30	29	-1	E	3	0	3	32	28	-	
Brussels ...	*	*	*	*	*	29.63	-01	24	?	-6	ENE	3	bc	*	33	23	0.04	
Cape Gris Nez...	?	31	GHE	4	0	?	?	31	29	0	ESE	3	0	3	46	28	-	
Paris ...	29.50	33	NE	3	bc	29.56	-00	28	28	+4	N	3	S	*	39	?	-	
Brest ...	? 29.60	37	E	1	0	? 29.66	+04	36	35	+8	Z	0	0	2	46	?	-	
Lorient ...	29.53	38	N	2	0	29.65	+12	38	35	+7	NW	1	0	1	44	30	-	
Rochefort ...	29.58	36	ENE	1	0	29.70	+20	37	33	+6	NW	3	0	2	41	27	-	
Belfort ...	29.45	28	E	1	bc	29.54	+03	31	31	+8	W	1	0	*	30	20	0.12	
Lyons ...	29.47	31	NW	1	S	29.60	+14	28	28	0	ESE	1	S	*	35	24	0.16	
Nice ...	29.38	41	NE	2	r	29.52	+07	36	33	-1	SW	5	b	6	41	34	0.14	
Perpignan ...	29.52	46	NW	3	0	29.65	+34	33	32	-8	S	2	b	*	50	31	0.16	
Biarritz ...	29.48	47	NW	4	0	29.62	+18	44	40	+4	WSW	5	r	3	50	?	0.14	
PENINSULA.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	29.87	52	WSW	5	bc	29.85	+09	50	47	-8	W	5	C	4	?	48	0.28	

WEATHER

CHARTS

for 8 a.m. on

Thursday, 28th February,

1889.

BAROMETER, WIND & 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 —
 — = force above 10; — = forces 6 to 10;
 — = forces 5 to 7; — = forces 1 to 4;
 ⊙ = dead calm.

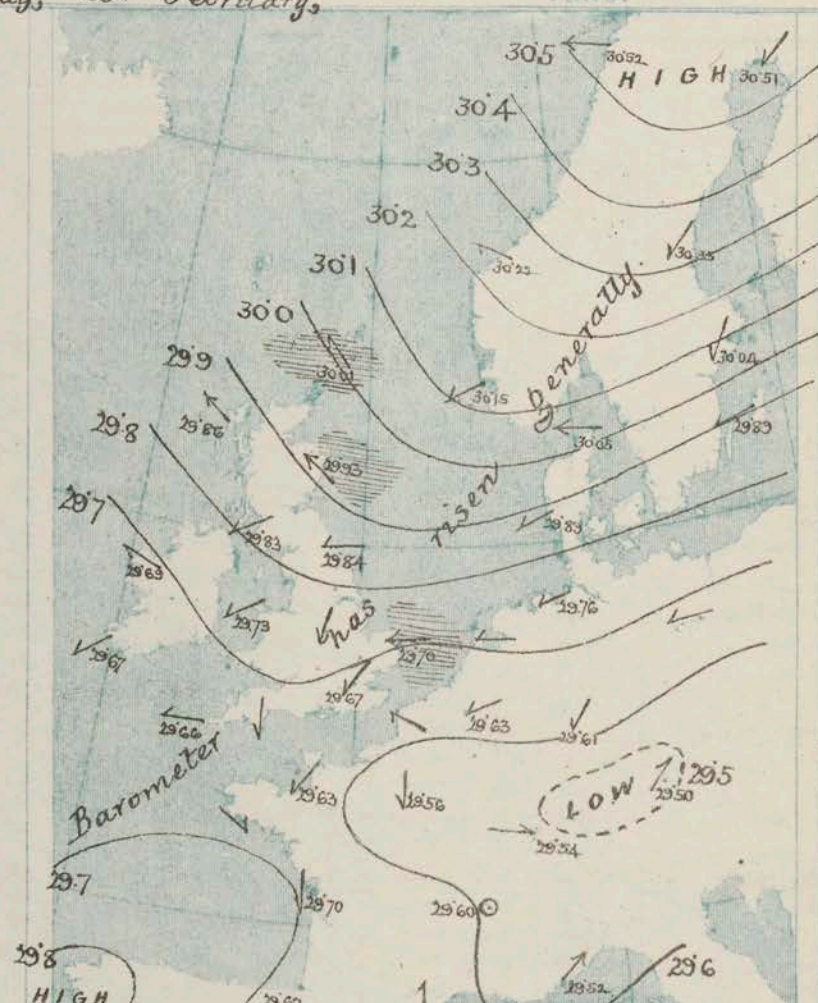
Sea Disturbance — where considerable, is shown thus.

— = Rough — = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of February
 During the 16 Years 1871-1886

STATIONS.	MEAN READINGS.
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	29.905
Donaghadee	29.812
Holyhead	29.848
Liverpool	29.878
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.

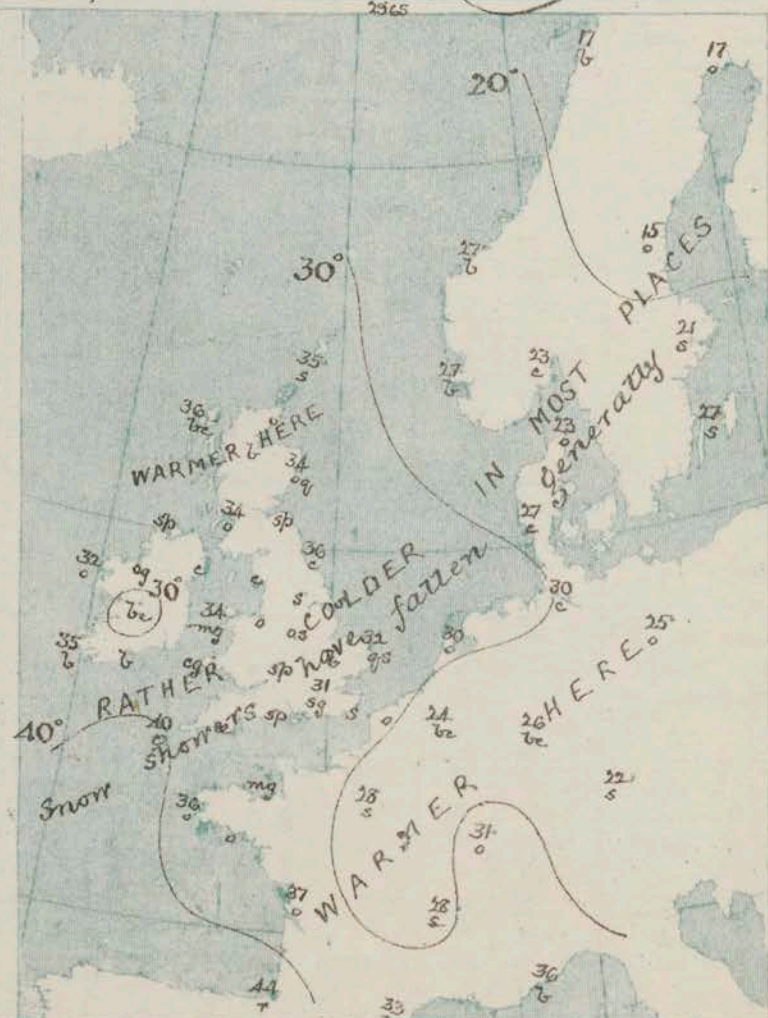
Temperature — Isotherms are drawn for each 10° changes since previous morning are stated in words.
Weather — is shown by Letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
 for the month of February

STATIONS.	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
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	3.63
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	38.9	38.3	37.3	1.60
Yarmouth	45.5	35.2	38.9	38.2	2.02

Note — The Temperature means are for the 16 years 1871-86, the Rainfall means are mainly those for the 20 years 1866-85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 ins. to 30.5 ins. over Norway and Sweden — 29.8 ins. and more over Portugal.
 Lowest, about 29.5 ins. over South Germany and the east of France — about 29.6 ins. off the southwest of Ireland.
 Gradients slight and irregular over Germany, France, and the Bay of Biscay, moderate for W. winds elsewhere.
 Barometer rising except at some of the southern stations.

TEMPERATURE

Highest, 50° at Lisbon, 44° at Biarritz, 38° at Lorient, 37° at Mirk and Baghdad.
 Lowest, 15° at Helsingfors, 21° at Stockholm and at Rensselaersburg, 22° at Munich, 24° at Brussels, 25° at Berlin, 28° at Tane, and 31° in London.
 It has risen somewhat over Western and Central France since yesterday, fallen in our islands as a whole.

WIND

Moderate from between NE. and SE. over Scandinavia, the North Sea, the British Isles and the Channel, light and variable over Germany, France, and the Bay of Biscay. SW. on the northern shores of the Mediterranean, W. at Lisbon.

WEATHER

Fine and bright in Ireland, Norway, and the west of Scotland, cloudy or overcast in most other places, with snow or "grapeful" occasionally at several of the northeastern, eastern, and southeastern stations.

SEA

Rather rough on our east coasts, moderate in the northeast and north, slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A continuation of cold E. winds over the British Isles and North Sea is probable, with snow at times, especially at the eastern stations.

FORECASTS

for the 24 hours ending at NOON on 1st March

1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	SE ² winds, fresh or strong; some snow showers.
1	SCOTLAND EAST	
2	ENGLAND N.E.	E ² winds, moderate or fresh; snow at times.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	E ² winds, fresh; cold, snow at times.
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	SE ² or E ² winds, moderate; fair.
7	ENGLAND N.W.	
8	ENGLAND S.W.	Same as No. 5.
9	IRELAND NORTH	E ² winds, moderate; some snow in the east, fair in the west.
10	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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudeanaes ...	29.87	35	38	ESE 2	b	2	Holyhead ...	29.66	38	36	EHE 2	c	2
Sumburgh Head ...	29.70	35	39	N 1	b	3	Valencia ...	29.65	45	38	N 1	b m	1
Stornoway ...	29.75	35	35	E 4	bc	4	Scilly ...	29.58	40	35	NHE 2	c	3
Aberdeen ...	29.74	38	34	E 2	bc	3	Jersey ...	29.54	38	34	NE 2	o	2
Shields ...	29.66	40	38	EHE 2	c	3	Dungeness ...	29.55	37	35	E 4	c	3
Ardrossan ...	29.70	39	36	EHE 2	c	1	London ...	29.59	38	35	NE 1	og	*
Malin Head ...	29.68	36	35	SSE 3	c	2	Yarmouth ...	29.60	35	34	EHE 5	cv	4
Mullaghmore ...	29.66	39	35	W 1	bc	2	Rocheport ...	29.52	36	34	NE 4	o	2
Belmullet ...	29.63	41	39	W 2	bc	*							

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

The reports for yesterday morning showed that pressure was highest, 30.3 ins and upwards, over Lapland, and lowest, 29.3 ins: and less in a depression which had travelled from the southwest to the northeast coast of Spain. An area of relatively high readings, 29.7 ins: and upwards, was however, lying over Ireland and Scotland, while a shallow depression, with readings below 29.6 ins:, was reported over North Germany and the general distribution of pressure was therefore somewhat irregular. The prevailing winds were E⁴ or NE⁴, but in the north of Ireland S⁴ breezes were reported, and in Spain and Algeria W⁴ or NW⁴ breezes, while in Austria and the south of Russia calms or variable airs were general. The weather was fine in Ireland as well as in the east of Scotland, the north of Scandinavia and Central Spain. Elsewhere, however, the sky was cloudy or overcast, with snow in many places and rain in the south of France. Temperature had risen over the greater part of Southern Europe, as well as in the east and southeast of England, but fallen elsewhere; readings ranged from a little above 60° in Tunis and Malta, and from above 50° over all the more central and southern parts of the Mediterranean to many degrees below the freezing point over Russia, the north of Scandinavia, and the central parts of Germany and Austria. The highest individual readings were 64° at La Calle and Malta, 62° at Liffey, 60° at Tunis, 58° at Lisbon and Algiers, 57° at Palermo, 56° at Nemours, 55° at Oran, and 53° at Cagliari; the lowest were 6° at Limburg, 7° at Munich, 8° at Kuspio, 11° at Archangel and Haparanda, 12° at Moscow, 15° at St Petersburg, Riga, and Minsk, 16° at Marawi, and 17° at Uleaborg.

In the course of the day the high pressure system over Lapland extended slowly southwards, and the barometer rose at our extreme northern stations. Very little change was however, observed in the winds or weather.

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.

CORRECTIONS AND ADDITIONS TO THE REPORTS FOR FEB^y 1889.

1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY.

DATE.	STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
				Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
1	Biarritz....	30.43	53	NW	6	0	30.36	+0.01	53	-	0	WSW	4	0	3	54	48	0.04		
-	Corunna....	*	*	*	*	*	30.44	-1.0	48	47	0	E	3	0	3	57	45	-		
2	Nice.....	29.93	48	SW	3	bc	29.80	-1.17	44	42	+2	ESE	5	0	2	54	41	-		
-	Corunna....	*	*	*	*	*	30.51	+0.07	51	48	+3	NE	7	7	6	61	45	0.24		
4	Corunna....	*	*	*	*	*	30.05	-4.6	44	42	-7	NW	8	7	6	54	41	0.32		
5	Cape Gris Neg.	?	33	ESE	7	0	?	?	32	-	-5	NW	3	0	4	43	25	-		
-	Corunna....	*	*	*	*	*	30.33	+2.8	46	41	+2	NE	9	0	?	?	?	?		
6	Corunna....	*	*	*	*	*	30.49	+1.6	35	34	-11	E	4	6	4	48	32	-		
7	Biarritz....	30.30	45	W	4	0	30.06	-3.0	48	*	+21	W	7	7	4	?	?	0.47		
-	Corunna....	*	*	*	*	*	30.34	-1.5	52	50	+17	NW	5	0	4	54	32	-		
8	Corunna....	*	*	*	*	*	30.30	-0.4	48	47	-4	ESE	1	?	5	55	37	0.01		
9	Tanö.....	28.53	31	NW	6	c	28.41	-8.4	30	30	-3	NW	6	0	*	?	?	0.39		
-	Sumburgh HA	28.83	29	NNE	6	s	29.33	+7.0	28	27	+3	N	7	0	7	31	23	0.15		
-	Stornoway...	29.37	32	NNW	9	s	29.72	+7.1	27	27	-6	N	8	s	6	35	25	0.60		
-	Trick.....	28.94	31	N	9	0	29.52	+6.9	27	27	0	N	8	c	7	34	24	0.24		
-	Corunna....	*	*	*	*	*	30.23	-0.7	51	48	+3	NW	5	0	6	55	46	0.28		
11	Cape Gris Neg.	?	29	SW	1	s	?	?	28	-	0	E	6	s	7	?	27	-		
-	Biarritz....	29.97	54	W	6	f	29.94	-0.7	53	-	+6	NW	7	0	8	55	45	0.28		
-	Corunna....	*	*	*	*	*	30.14	-0.5	52	48	-3	SW	5	0	6	57	48	0.67		
12	Brussels...	*	*	*	*	*	30.00	+7.1	19	18	-6	WSW	1	s	*	33	15	?		
13	Corunna....	*	*	*	*	*	30.62	+2.7	41	40	-3	E	1	0	4	48	37	0.04		
14	Skagen....	29.53	30	WSW	7	s	28.91	-1.01	28	28	+4	SSW	8	s	4	32	?	-		
-	Tanö.....	29.88	30	SSW	6	s	29.06	-1.03	32	32	+2	SSW	6	0	*	34	28	0.28		
-	Corunna....	*	*	*	*	*	30.56	-0.6	50	49	+9	SW	3	0	3	52	39	0.08		
16	Corunna....	*	*	*	*	*	30.54	+1.4	54	53	-1	NW	1	0	4	55	50	0.39		
17	Brussels...	*	*	*	*	*	30.13	-1.1	41	-	+5	W	1	b	*	43	?	0.04		
18	Corunna....	*	*	*	*	*	30.49	-0.4	50	47	-1	E	1	b	3	?	?	-		
19	Corunna....	*	*	*	*	*	30.54	+0.5	51	49	+1	E	1	b	3	68	45	-		
20	Corunna....	*	*	*	*	*	30.52	-0.2	46	46	-5	NW	1	f	3	66	43	-		
21	Corunna....	*	*	*	*	*	30.37	-1.5	51	51	+5	NE	4	0	4	52	45	-		
22	Corunna....	*	*	*	*	*	30.26	-1.1	50	47	-1	ESE	4	bu	4	55	46	-		
23	Corunna....	*	*	*	*	*	30.11	-1.5	47	45	-3	ESE	1	b	4	54	43	-		
25	Nice.....	29.76	39	E	5	bc	29.81	+0.8	36	-	+1	NE	4	c	2	45	30	-		
-	Corunna....	*	*	*	*	*	29.90	-1.1	42	38	-2	ESE	5	b	4	46	36	-		
27	Corunna....	*	*	*	*	*	29.51	-0.5	48	41	+5	WSW	4	7	4	50	36	-		
28	Corunna....	*	*	*	*	*	29.69	+1.8	43	42	-5	SE	1	0	4	48	39	0.79		

