

METEOROLOGICAL OFFICE,  
✓  
**LONDON.**

---

DAILY WEATHER REPORTS.

---

1<sup>ST</sup> JANUARY—30<sup>TH</sup> JUNE,  
1889.

*Sec. Reg. Lond.*

9/12/89

# DAILY WEATHER REPORT.

January to June 1889.



# DAILY WEATHER REPORT.

for Tuesday, 1<sup>st</sup> January 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 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 ..	30.21	20	S	6	c	30.22	- .03	20	20	- 1	S	8	S	*	30	16	0.51	
	Hernösand ...	30.13	32	S	4	o	30.16	+ .06	32	32	0	S	6	o	*	34	23	0.20	
	Stockholm ...	30.12	30	SE	2	o	30.24	?	28	27	- 3	SE	2	o	*	36	23	-	
	Wishby ...	29.89	82	ESE	2	b	29.75	- .22	35	32	+ 6	ESE	2	o	1	?	27	-	
	Bodö ...	29.80	33	ESE	4	b	29.77	- .12	44	39	+ 13	SW	4	o	3	45	?	-	
	Christiansund...	29.96	39	SE	6	o	30.10	+ .13	41	39	+ 8	SSE	6	o	5	?	?	-	
	Skudesnaes ...	30.04	35	NNE	3	b	30.19	+ .33	36	35	+ 2	SSW	2	o	1	?	30	-	
	Christiania Fjord (Fierder)	30.07	37	NE	1	o	30.22	+ .40	37	36	0	SSW	2	o	1	37	36	-	
	Skagen (The Scaw)	30.00	34	Z	0	c	30.22	+ .22	32	32	- 3	SE	2	o	*	30	32	-	
	Fanö ...	29.61	44	SSW	1	r	30.00	+ .28	41	38	- 1	WNW	1	c	3	45	40	0.42	
BRITISH ISLANDS.	Sumburgh Head	29.63	42	SW	5	r	30.08	+ .45	34	34	- 11	Z	0	b	3	45	32	0.70	
	Stornoway ...	29.66	40	WSW	1	o	30.10	+ .40	35	34	- 5	NW	1	b	0	43	30	0.26	
	Wick ...	29.67	40	SW	1	o	30.11	+ .38	37	35	- 4	SW	1	b	1	43	35	-	
	Nairn ...	29.78	40	S	3	o q	30.16	+ .32	33	32	- 4	W	1	b	3	41	33	0.03	
	Aberdeen ...	29.79	42	W	3	c	30.17	+ .25	32	32	- 9	Z	0	b m	*	44	31	-	
	Leith ...	29.92	36	SSW	3	c	30.10	+ .07	38	37	+ 5	WNW	2	o	2	38	31	0.04	
	Shields ...	30.03	36	SSW	4	c	30.13	+ .02	37	36	+ 3	Z	0	o	2	37	32	-	
	Spurn Head ...	29.99	34	S	1	o	30.12	+ .05	34	34	+ 6	Z	0	f	*	36	27	0.07	
	York ...	30.06	38	SSE	2	o	30.16	+ .01	33	33	+ 12	SE	1	og m	*	38	21	-	
	Loughborough	29.84	44	SSW	4	r	30.18	+ .26	35	34	- 9	Z	0	b f	0	45	34	0.12	
GERMANY.	Ardrossan ...	29.78	45	WNW	4	b	30.19	?	39	38	+ 1	SW	2	om	3	45	38	0.20	
	Malin Head ...	29.85	46	WNW	4	o	30.19	+ .39	39	38	- 4	SSE	1	c	3	46	36	0.47	
	Mullaghmore ...	29.89	46	NW	3	b	30.22	+ .47	35	34	- 11	ESE	2	b	*	48	33	0.53	
	Belmullet ...	29.85	42	SW	3	r	30.19	+ .24	36	35	- 3	W	3	bc	1	42	35	0.08	
	Donaghadee ...	29.96	34	ESE	2	o	30.15	+ .08	35	35	0	NE	1	f	*	37	34	0.16	
	Barrow-in-Furness	30.00	32	SSE	2	c	30.17	+ .07	37	37	+ 8	SW	1	f	2	40	29	0.09	
	Liverpool (Bidston)	29.94	46	SSW	7	om q p	30.15	+ .10	46	45	+ 5	NNE	4	c	3	47	40	0.16	
	Holyhead ...	29.89	45	SW	2	o	30.19	+ .24	30	30	- 7	Z	0	f	*	45	30	0.11	
	Parsonstown ...	29.94	44	WNW	1	o	30.19	+ .27	43	40	- 5	NE	2	c	2	52	42	0.54	
	Valencia ...	29.92	48	SW	5	r	30.14	+ .14	42	40	- 3	NNE	1	o	4	50	41	0.25	
FRANCE & NETHERLANDS.	Roche's Point...	30.01	45	SSW	4	bc	30.15	+ .06	43	43	+ 4	ESE	4	r f	3	47	39	0.10	
	Pembroke ...	30.02	43	WSW	1	c	30.08	00	48	46	+ 7	E	4	c	2	49	40	-	
	Scilly ...	30.04	44	NE	2	o	30.12	+ .01	44	43	+ 7	NE	3	bc	2	45	36	0.02	
	Prawle Point ...	30.04	44	E	3	om p	30.10	+ .03	45	43	0	E	3	om	3	47	41	-	
	Jersey ...	30.08	42	E	3	o	30.17	+ .03	33	33	- 2	NE	2	m	1	43	31	-	
	Hurst Castle ...	30.07	39	ESE	2	b	30.07	- .06	37	36	- 4	ESE	3	c	3	42	31	-	
	Dungeness ...	30.08	26	Z	0	b	30.16	00	29	29	+ 1	Z	0	f	*	32	25	-	
	London ...	30.11	24	Z	0	b	30.18	+ .01	29	29	+ 3	NNE	1	f	*	29	23	-	
	Oxford ...	30.10	35	Z	0	b	30.19	+ .03	23	23	+ 1	SW	1	b	*	30	21	-	
	Cambridge ...	30.10	38	SSW	1	bc	30.16	+ .02	37	36	+ 5	SE	1	b	3	40	30	-	
GERMANY.	Yarmouth ...	30.12	36	WSW	1	c	30.22	+ .17	37	36	+ 1	WNW	1	m	*	40	35	-	
	Cuxhaven ...	30.44	34	NW	2	o	30.22	+ .18	32	32	- 2	NW	2	o	*	37	30	-	
	Berlin ...	*	*	*	*	*	30.20	+ .06	29	28	- 4	Z	0	b	*	37	28	-	
	Wiesbaden ...	30.12	28	NNE	3	o	30.15	+ .05	11	11	- 14	E	6	m	*	28	?	-	
	Munich ...	30.15	33	SSW	1	b	30.21	+ .06	32	31	- 3	ESE	1	b	1	39	32	-	
	The Helder ...	*	*	*	*	*	30.16	- .01	26	26	- 8	ESE	1	b	*	38	25	-	
	Brussels ...	30.08	32	E	1	b	30.12	00	32	32	- 1	E	3	f	2	39	30	-	
	Cape Gris Nez...	30.07	39	NE	3	o	30.10	+ .02	35	35	- 6	NE	3	o	*	?	33	-	
	Paris ...	30.06	43	Z	0	o	30.10	+ .02	43	38	- 1	E	4	o	3	48	37	-	
	Brest ...	29.98	47	ESE	5	b	30.04	+ .02	41	39	- 2	ESE	4	o	2	50	?	-	
FRANCE & NETHERLANDS.	Lorient ...	29.94	47	ESE	7	b	30.02	+ .11	40	39	- 4	NE	5	o	2	52	34	-	
	Rocheport ...	30.06	34	SSE	1	o	30.06	+ .09	32	32	0	N	1	f	*	39	32	-	
	Belfort ...	30.02	48	E	3	r	29.90	- .03	53	50	+ 1	NE	7	o	4	53	45	1.97	
	Lyons ...	29.86	42	W	3	b	29.91	+ .18	45	44	+ 1	W	3	o	*	49	38	0.75	
	Nice ...	29.77	48	ESE	4	o	29.89	+ .09	44	43	- 4	ESE	4	b	3	52	41	0.12	
	Perpignan ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
	Biarritz ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-		
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-		
	Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-		

# WEATHER CHARTS

for 8 a.m. on

Tuesday, 1<sup>st</sup> January.

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.

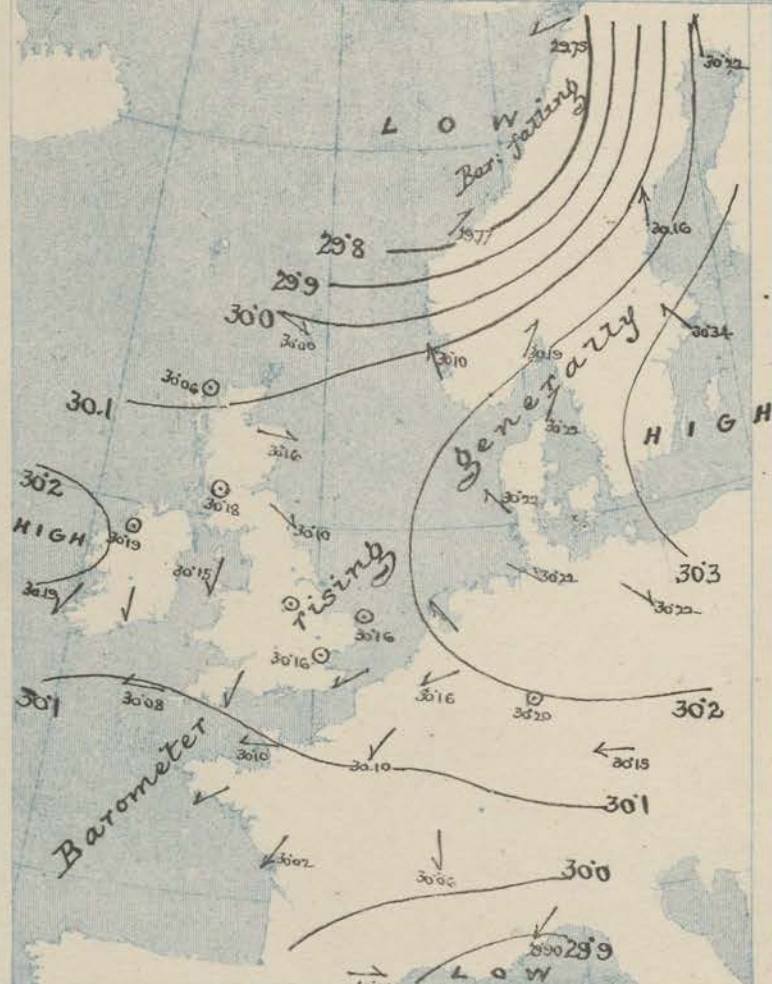
**Sea Disturbance** — where considerable, is shown thus.

— Rough — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.940
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.980
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

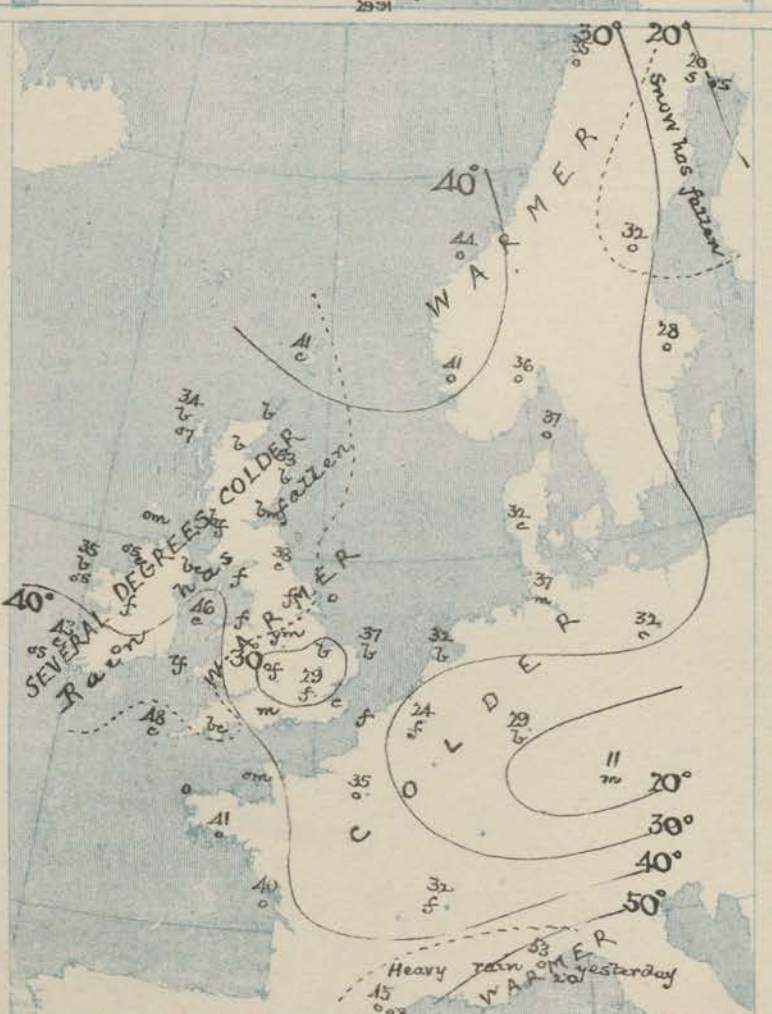
**Rainfall** — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of

STATIONS.	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m.	at 8 a.m. Dry Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.68
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	3.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.6	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	6.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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><sup>20.34 in: at Stockholm.</sup>  Highest, 30.2 in: and upwards, over Northern and Central Europe and also over the west of Ireland.  Lowest, 29.8 in: and less, in a large depression lying off the coast of Norway; 29.9 in: and less, in a smaller disturbance lying over the Gulf of Genoa.  Gradients moderate over Scandinavia, but slight elsewhere; over our Islands pressure is exceedingly uniform.  Barometer rising at all but the Scandinavian stations - steadily in Ireland.</p>
TEMPERATURE	<p>Highest, 53° at Kiev, 48° at Svalby, 46° at Holyhead, 45° at Jersey and Pospignan, and 44° at Christiansund and Howle Point.  Lowest, 11° at Affenich, 20° at Haparanda, 23° at Cambridge, 26° at Brussels, 28° at Stockholm, 29° at Oxford, London, and Wiesbaden, and 30° at Constantinople.  Frost occurred last night in most parts of Western Europe.</p>
WIND	<p>Light from W. in the north of Scotland, moderate from the S.W. over the greater part of Scandinavia and Denmark.  Moderate from E. or N.E. over France and the southern part of our Islands and Germany.  Calm or light and very variable over the central parts of the United Kingdom.</p>
WEATHER	<p>Foggy at most of the English stations, as well as over Central Ireland.  Fine in Scotland and the north of Ireland; dull on the Continent.  Rain fell yesterday in the west and north of our Islands, the largest amount being 0.7 in: at Stromway and 0.5 in: at Belmullet.</p>
SEA	<p>Rather rough at Glenties, but slight or smooth elsewhere.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay to the northward of our Islands yesterday has travelled away to the west of Norway, and a new anticyclone has appeared off the west of Ireland.

The latter system seems likely to extend eastwards and cold foggy weather will probably continue over England for a time.

## FORECASTS

For the 24 hours ending at NOON on 2<sup>nd</sup> January 1889.

### DISTRICTS.

### FORECASTS.

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

Light breezes, chiefly W<sup>ly</sup>; fine, cold.

Variable or N<sup>ly</sup> airs; cold, foggy.

### DISTRICTS.

### FORECASTS.

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

Light breezes, chiefly NW<sup>ly</sup>; fair generally but local fogs.


NE<sup>ly</sup> winds, light; fair generally, but local fogs.


Light variable airs; fair generally.

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 rear 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 rear 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.		
Skudesnaue ...	29.77	34	32	ESE	4	0	3	Holyhead ...	29.96	44	41	SSW	5	cg	4
Sumburgh Head ...	29.64	44	42	SSW	1	r	3	Valencia ...	29.85	52	51	SW	7	nm	6
Stornoway ...	29.73	44	44	L	0	r	3	Scilly ...	30.02	49	46	L	0	c	2
Aberdeen ...	29.50	39	37	S	3	cp	3	Jersey ...	30.05	44	43	E	3	0	3
Shields ...	29.94	37	34	SSW	3	c	2	Dungeness ...	30.10	40	38	ESE	4	bc	2
Ardrossan ...	29.82	48	44	SSW	4	r	3	London ...	30.11	35	35	L	0	f	*
Malin Head ...	29.73	44	44	SSW	4	0	5	Yarmouth ...	30.11	40	38	SSW	2	bem	3
Mullaghmore ...	29.69	44	43	S	7	or	5	Rocheport ...	29.91	51	47	ENE	7	b	3
Belmullet ...	29.76	47	46	NNW	5	0	*								

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

The reports for yesterday morning showed that over Russia pressure ranged from 30.5 ins. to 31.1 ins. but that it decreased in a westerly direction to rather below 29.6 ins. off the western coast of our Islands, and in a SW<sup>d</sup> direction to about 29.3 ins. over Central Spain. There was also a small secondary disturbance near Copenhagen, in which also the readings were a little below 29.3 ins. Thus, S<sup>d</sup> and SE<sup>d</sup> winds prevailed over Central and Eastern Europe, calms and variable airs over England, and NE over France and Spain, while in the west and north of the British Islands the wind was SW<sup>d</sup>, and varied in force from a moderate breeze to a moderate gale. Rain prevailed in the far west, dense fog over England, and dry but foggy weather in most other countries. In the south of France there had again been tremendous quantities of rain. Temperature had risen decidedly in the extreme western districts and was high, but had fallen over England and was low over the inland parts of the Continent generally. The lowest individual values were -20° F. at Moscow, -7° at Kiev, -4° at Odessa, -3° at Nicolaïff, +5° at Archangel, 12° at Uleaborg, Mirel, and Lemberg, 21° at Loughboro (England), 22° at New Fahrwasser and at Cambridge, 26° at Oxford, 28° in London, and 29° at Liverpool and Bodø. The highest were 63° at Malta, 62° at Cagliari, 61° at Palermo, 59° at Tunis, 53° at Catania, 52° at Naples and Nice, 51° at Legna, 48° at Valencia and 45° at Stornoway.

Later in the day the low pressure area in the far west passed off, and the wind there shifted to north-west, with a fall of temperature in Ireland. (Dense fog continued 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 Wednesday 2<sup>nd</sup> January 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 82° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETR.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 3.)	SHADE TEMP.			
				Dir.	Force. (0 to 12.)		Reading at 82° 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 ..	30.13	30	SW	4	0	30.38	+ .16	6	6	—	4	2	0	f	*	30	?	0.12.
	Hernösand ...	30.34	33	SW	2	0	30.52	+ .36	15	15	—	17	2	0	f	*	34	?	0.04
	Stockholm ...	30.52	28	2	0	0	30.60	+ .26	28	27	—	0	2	0	0	*	32	25	—
	Wisby ...	30.35	24	S	4	0	30.62	+ .62	28	27	—	3	SSE	2	0	*	36	21	—
	Bodö ...	30.07	41	SW	4	0	30.25	+ .50	38	35	+	3	SSW	4	0	2	41	34	0.08
	Christiansund...	30.30	39	WSW	4	0	30.36	+ .50	37	34	—	7	ESE	1	0	3	41	32	—
	Skudesnaes ...	30.40	41	ESE	2	0	30.49	+ .39	41	39	—	0	SSE	4	0	4	41	41	—
	Christiania Fjord (Fjord)	30.41	36	WSW	2	0	30.52	+ .33	34	34	—	2	N	2	0	1	36	34	—
	Skagen (The Scaw)	30.47	37	S	2	0	30.55	+ .33	35	34	—	2	SW	2	0	1	37	?	—
	Fanö ...	30.44	35	SE	2	0	30.54	+ .32	33	32	+	1	SE	2	0	*	34	32	—
BRITISH ISLANDS.	Sumburgh Head	30.27	38	2	0	0	30.29	+ .29	41	40	0	SW	1	0	2	44	37	—	
	Stornoway ..	30.24	39	SW	3	0	30.25	+ .17	44	43	+	10	S	5	0	4	45	33	0.03
	Wick ...	30.26	34	NW	1	0	30.34	+ .24	37	36	+	2	S	2	0	0	42	30	—
	Nairn ...	30.25	32	2	0	0	30.38	+ .27	31	30	—	5	2	0	0	1	42	26	—
	Aberdeen...	30.27	32	N	1	0	30.47	+ .31	28	27	—	5	WSW	1	0	3	38	26	—
	Leith ...	30.27	35	NE	1	0	30.47	+ .30	27	26	—	5	SW	1	0	*	44	25	—
	Shields ...	30.22	41	N	2	0	30.44	+ .24	39	39	+	1	NNW	1	0	2	41	37	—
	Spurn Head ...	30.29	38	2	0	0	30.46	+ .33	39	38	+	2	NW	1	0	2	41	36	—
	York ...	30.27	37	WNW	1	0	30.44	+ .32	34	34	0	0	NW	1	0	*	37	33	0.02
	Loughborough	30.32	35	WNW	1	0	30.49	+ .33	30	30	—	3	2	0	0	*	36	29	0.04
GERMANY.	Ardrossan ...	30.35	39	2	0	0	30.49	+ .31	31	31	—	4	2	0	0	0	42	30	—
	Malin Head ...	30.24	39	SW	3	0	30.47	+ .25	37	36	—	2	S	3	0	3	44	36	—
	Mullaghmore ...	30.34	36	E	1	0	30.48	+ .29	34	33	—	5	WSW	1	0	2	41	30	—
	Balmullet ...	30.23	37	SE	3	0	30.50	+ .28	38	38	+	3	SSE	2	0	*	46	34	—
	Donaghadee ...	30.35	44	SSW	2	0	30.50	+ .31	33	32	—	3	W	3	0	0	45	30	—
	Barrow-in-Furness	30.29	39	NE	1	0	30.47	+ .32	38	37	+	3	NE	2	0	*	40	33	—
	Liverpool (Bidston)	30.21	37	N	1	0	30.48	+ .31	37	37	0	0	E	1	0	2	40	35	—
	Holyhead ...	30.30	41	NE	2	0	30.47	+ .32	42	41	—	4	ENE	1	0	1	47	39	—
	Parsonstown ...	30.34	39	2	0	0	30.53	+ .34	25	25	—	5	2	0	0	*	34	24	—
	Valencia ...	30.32	42	NNE	2	0	30.54	+ .35	34	33	—	9	2	0	0	1	47	32	—
FRANCE & NETHERLANDS.	Roche's Point...	30.25	44	NE	2	0	30.49	+ .35	37	36	—	5	N	3	0	3	46	35	—
	Pembroke ...	30.27	2	E	3	0	30.46	+ .31	42	41	—	1	ENE	2	0	1	44	41	?
	Scilly ...	30.17	48	E	4	0	30.41	+ .33	48	46	0	0	ENE	4	0	4	50	44	—
	Prawle Point ...	30.24	42	NE	4	0	30.42	+ .30	34	33	—	10	NNE	4	0	2	47	32	—
	Jersey ...	30.17	45	NE	2	0	30.24	+ .24	42	40	—	3	ENE	2	0	2	46	41	—
	Hurst Castle ...	30.24	36	NE	3	0	30.41	+ .24	33	33	0	0	NNE	4	0	1	41	31	—
	Dungeness ...	30.18	41	ENE	4	0	30.35	+ .28	40	37	+	3	E	4	0	3	42	36	—
	London ...	30.27	35	E	2	0	30.43	+ .27	23	23	—	6	W	1	0	*	35	23	—
	Oxford ...	30.33	33	NE	1	0	30.47	+ .29	28	27	—	1	NE	1	0	*	41	27	—
	Cambridge ...	30.31	31	N	1	0	30.48	+ .29	25	25	+	2	N	1	0	*	38	22	—
PENINSULA.	Yarmouth ...	30.26	39	E	4	0	30.43	+ .27	40	38	+	2	E	4	0	4	40	35	—
	Cuxhaven ...	30.34	34	ESE	2	0	30.51	+ .29	35	34	—	2	ESE	3	0	*	37	33	—
	Berlin ...	30.42	24	ESE	2	0	30.61	+ .39	17	16	—	15	ESE	3	0	*	34	16	—
	Wiesbaden ...	*	*	*	*	*	30.38	+ .18	30	28	+	1	NE	1	0	*	37	28	—
	Munich ...	30.17	23	E	3	0	30.29	+ .14	19	19	+	8	NE	5	0	*	32	?	—
	The Helder ...	30.24	36	E	1	0	30.45	+ .24	33	32	+	1	E	1	0	1	37	32	—
	Brussels ...	*	*	*	*	*	30.39	+ .23	28	28	+	2	ENE	3	0	*	32	26	—
	Cape Gris Nez...	30.19	30	E	7	0	30.38	+ .26	30	30	—	2	E	4	0	2	37	30	—
	Paris ...	30.17	29	NE	3	0	30.27	+ .17	29	27	—	6	NNE	3	0	*	35	27	—
	Brest ...	30.02	44	ENE	4	0	30.30	+ .20	42	39	—	1	2	0	0	2	50	39	—

# WEATHER CHARTS

for 8 a.m. on

WEDNESDAY, 2<sup>nd</sup> JANUARY

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.

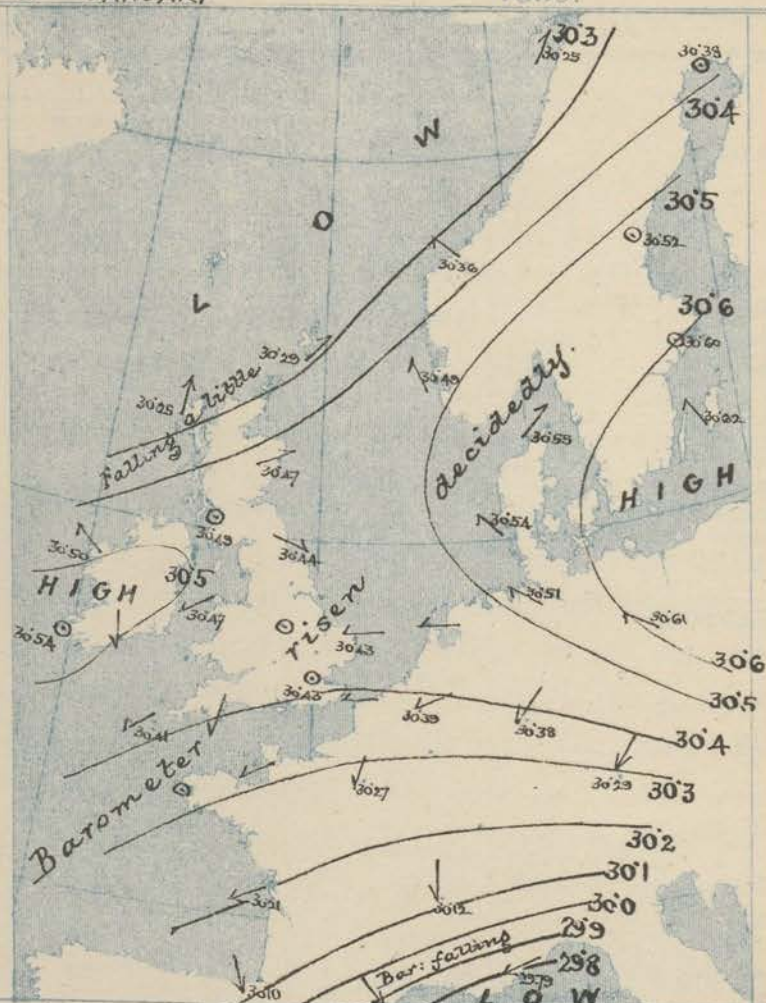
**Sea Disturbance**—where considerable is shown thus.

— Rough — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head.	29.685
Stornoway.	29.687
Wick.	29.725
Nairn.	29.753
Aberdeen.	29.790
Leith.	29.820
Shields.	29.886
York.	29.935
Loughborough.	29.967
Ardrossan.	29.840
Donaghadee.	29.851
Holyhead.	29.896
Liverpool.	29.922
Parsonstown.	29.886
Valencia.	29.869
Roche's Point.	29.894
Pembroke.	29.926
Scilly.	29.960
Jersey.	30.010
Hurst Castle.	29.997
Dover.	30.017
LONDON.	30.007
Oxford.	29.997
Cambridge.	29.992
Yarmouth.	29.981



## 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.

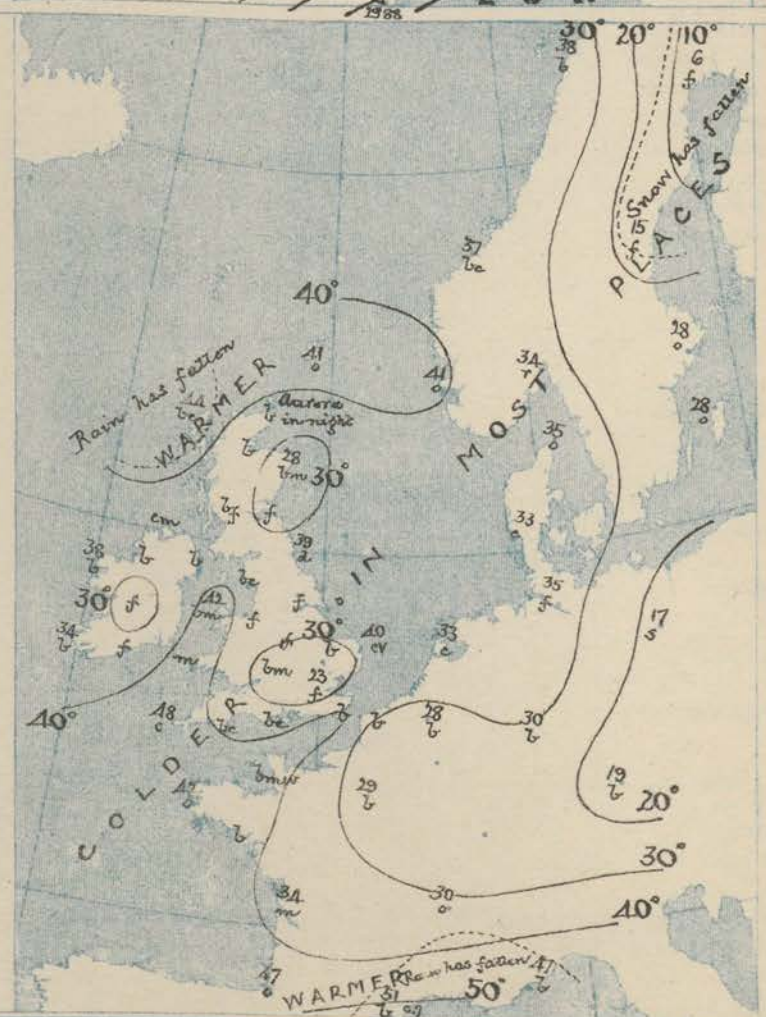
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January.

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.	42.9	35.4	39.4	38.2	8.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn.	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith.	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	43.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON.	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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	<i>Highest</i> { 30.5 to 30.6 inches and more over the Baltic, Germany and the eastern shores of the North Sea. <i>Lowest</i> { 29.8 inches and less in the extreme S. of France - S. S. and less off the NW. of Scotland and NW. of Norway. <i>Barometer</i> rising decidedly, except over the south of France, where it is falling a little.
TEMPERATURE	<i>Highest</i> 51° at Perpignan, 48° at Sally, 47° at Biarritz, 44° at Honfleur. <i>Lowest</i> 6° at Kaparanda, 15° at Helsingfors, 17° at Berlin, 19° at Munich, 23° in London, 25° at Portsmouth, 28° at Oxford and Aberdeen, 34° even at Val-de-Aix. It has fallen decidedly over our Islands. Thick hoar-frost prevails in many places.
WIND	Moderate or light from the SW. (S.E. to S.W.) at the extreme northern stations. Moderate to light from N.W. and E. over the Bay of Biscay, France, the Channel and S. of England. Calms or variable airs prevail at our central stations. Strong N.W. to N.W. winds in the extreme south of France.
WEATHER	Fair generally, (except at Berlin), and in many places bright. Fog is reported locally at many of the British and Irish stations. Bright aurora was seen in the north of Scotland last night.
SEA	Moderate to smooth


## PROBABLE CHANGES IN SYSTEM NOW PREVALENT


There is no indication of any important change.

## FORECASTS

for the 24 hours ending at NOON on 3<sup>rd</sup> January 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	SW <sup>ly</sup> winds, light or moderate; fair.	6 { SCOTLAND WEST	Same as N <sup>o</sup> 0.
1 { SCOTLAND EAST	Varying W <sup>ly</sup> winds; very cold, dry, foggy locally.	7 { ENGLAND N.W.	Variable airs; fair generally.
2 { ENGLAND N.E.		8 { ENGLAND S.W.	Same as N <sup>os</sup> 3 to 5.
3 { ENGLAND EAST		9 { IRELAND NORTH	Calms and variable breezes; very cold, foggy.
4 { MIDLAND COUNTIES	E <sup>ly</sup> and varying breezes, light to calm; very cold, dry fogs.	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 ...	30.26	41	40	SEF	5	0	5	Holyhead ...	30.25	43	42	NE	3	mg	3
Sumburgh Head ...	30.18	42	39	Z	0	6	2	Valencia ...	30.26	46	42	NE	2	c	2
Stornoway ...	30.19	42	41	SW	3	6	3	Scilly ...	30.13	50	47	E	4	0	5
Aberdeen ...								Jersey ...	30.12	45	43	NE	3	c	3
Shields ...	30.25	41	40	N	2	c	2	Dungeness ...	30.15	41	39	ENE	3	c	3
Ardrossan ...	30.30	42	41	ENE	1	6	1	London ...	30.22	33	32	ENE	1	f	*
Malin Head ...	30.29	44	41	SW	2	6	3	Yarmouth ...	30.22	40	38	ESE	3	6	2
Mullaghmore ...	30.29	40	39	ENE	1	6	3	Rochefort ...	30.03	43	42	NE	5	0	2
Belmullet ...	30.30	44	44	S	1	6	*								

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

*The Continental Information has not arrived.*

### 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.*

Ha  
He  
Sto  
Win  
Boo  
Chr  
Sku  
Chr  
Sku  
Fam  
Sun  
Sto  
Wic  
Nai  
Abe  
Leit  
Shie  
Spur  
Yor  
Lou  
Ard  
Mal  
Mul  
Bel  
Dor  
Bar  
Liv  
Hol  
Par  
Val  
Roc  
Pen  
Scil  
Pra  
Jers  
Hun  
Dun  
Lon  
Oxf  
Cam  
Yar  
Cux  
Berl  
Wie  
Mun  
The  
Bra  
Cap  
Par  
Bren  
Lon  
Roc  
Bel  
Lyc  
Nic  
Per  
Bia  
Cor  
Lis

SCANDINAVIA.  
BRITISH ISLANDS.  
GERMANY.  
FRANCE & NETHERLANDS.  
PENIN-  
SULA.

# DAILY WEATHER REPORT.

for Thursday, 3<sup>rd</sup> January 1883.  
 Issued by the Meteorological Office, 416, 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.	BAROMETR.		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 ..	30.41	16	S	2	0	30.15	- 23	30	30	+ 24	S	6	S	*	?	1	-	
	Hernösand ...	30.50	8	Z	0	0	30.29	- 23	26	25	+ 11	SW	6	C	*	24	5	-	
	Stockholm ...	30.26	29	SSE	2	0	30.52	- 08	31	30	+ 3	Z	0	0	*	?	25	-	
	Wisby ...	30.36	30	S	4	0	30.56	- 06	29	28	+ 1	SSW	4	0	*	32	25	-	
	Bodö ...	30.06	39	S	4	0	29.44	- 81	41	39	+ 3	SW	6	R	3	?	36	0.12	
	Christiansund...	30.21	43	SSW	4	0	29.85	- 51	46	42	+ 9	SW	9	0	5	46	?	-	
	Skudesnaes ...	30.56	41	S	5	0	30.46	- 03	43	41	+ 2	S	6	0	5	?	41	-	
	Christiania Fjord (Fjorder)	30.55	38	SSW	3	0	30.47	- 05	38	36	+ 4	WSW	5	6c	3	2	?	-	
	Skagen (The Scaw)	30.63	34	S	2	0	30.57	+ 02	35	34	0	WSW	2	0	1	36	32	-	
	Fanö ...	30.65	30	SSE	2	0	30.70	+ 16	31	31	- 2	S	2	0	*	34	25	-	
BRITISH ISLANDS.	Sumburgh Head	30.26	44	SW	3	0	30.07	- 22	49	46	+ 8	WSW	7	0	6	49	41	-	
	Stornoway ...	30.28	48	SW	6	0	30.20	- 05	50	50	+ 6	W	7	0	6	50	43	0.02	
	Wick ...	30.36	40	S	3	0	30.23	- 11	47	45	+ 10	SW	4	0	2	48	35	-	
	Nairn ...	30.40	43	SW	3	0	30.28	- 10	46	44	+ 14	SW	3	0	2	48	30	-	
	Aberdeen...	30.51	32	W	1	0	30.42	- 05	39	38	+ 11	S	2	6c	3	43	28	-	
	Leith ...	30.62	39	W	1	0	30.53	+ 06	42	40	+ 15	WSW	3	6c	*	42	25	-	
	Shields ...	30.59	36	Z	0	0	30.63	+ 19	36	34	- 3	WSW	2	6	2	41	29	-	
	Spurn Head ...	30.57	39	NW	2	0	30.69	+ 23	31	31	- 8	W	3	6	2	41	31	-	
	York ...	30.56	31	Z	0	0	30.65	+ 21	34	33	0	S	1	6	*	38	27	-	
	Loughborough	30.63	28	Z	0	0	30.73	+ 24	26	26	- 4	Z	0	6	*	31	25	-	
GERMANY.	Ardrossan ...	30.58	38	Z	0	0	30.58	+ 09	44	44	+ 13	S	3	0	3	44	29	0.01	
	Malin Head ...	30.53	39	SSW	4	0	30.51	+ 04	44	42	+ 7	SSW	5	6cm	4	44	37	-	
	Mullaghmore...	30.57	41	SSW	4	0	30.58	+ 10	45	42	+ 11	SSW	4	0	3	49	31	-	
	Belmullet ...	30.57	46	SW	4	0	30.58	+ 08	47	46	+ 9	WSW	5	6	*	47	37	-	
	Donaghadee ...	30.63	35	W	2	0	30.64	+ 14	34	33	+ 1	W	2	6c	0	42	31	-	
	Barrow-in-Furness	30.58	34	NE	1	0	30.67	+ 20	35	35	- 3	ENE	1	6	*	41	34	-	
	Liverpool (Bidston)	30.62	39	SSW	1	0	30.71	+ 23	30	30	- 7	SE	2	6	2	41	30	-	
	Holyhead ...	30.62	43	NE	1	0	30.70	+ 23	41	41	- 1	SSW	1	6	1	45	36	0.01	
	Parsonstown ...	30.65	27	Z	0	0	30.69	+ 16	24	23	- 1	Z	0	6	*	30	22	-	
	Valencia ...	30.66	38	Z	0	0	30.70	+ 16	43	41	+ 9	ESE	2	0	2	49	32	0.01	
FRANCE & NETHERLANDS.	Roche's Point...	30.63	37	N	3	0	30.71	+ 22	35	35	- 2	N	3	6	4	41	32	-	
	Pembroke ...	30.62	41	NE	2	0	30.74	+ 28	35	35	- 7	NE	2	6cm	1	46	33	-	
	Scilly ...	30.54	47	ENE	5	0	30.67	+ 26	41	37	- 7	ENE	5	0	4	49	39	-	
	Prawle Point ...	30.57	37	NNE	4	0	30.66	+ 24	39	36	+ 5	ENE	4	0	3	43	33	-	
	Jersey ...	30.50	45	NE	3	0	30.63	+ 29	42	40	0	ENE	4	0	3	47	41	-	
	Hurst Castle ...	30.58	35	NE	3	0	30.70	+ 29	37	36	+ 4	NE	3	0	1	39	31	-	
	Dungeness ...	30.48	41	E	5	0	30.68	+ 25	36	34	+ 13	E	1	6cm	*	38	23	-	
	London ...	30.58	37	ENE	2	0	30.72	+ 25	29	29	+ 1	N	1	6	*	38	27	-	
	Oxford ...	30.66	34	NE	2	0	30.73	+ 25	31	31	+ 6	N	1	6	*	35	23	-	
	Cambridge ...	30.58	35	N	1	0	30.73	+ 25	31	31	+ 6	N	1	6	*	35	23	-	
PENIN- SULA.	Yarmouth ...	30.55	30	ENE	4	0	30.68	+ 25	38	37	- 2	ENE	1	6c	2	40	36	-	
	Cuxhaven ...	30.59	30	SE	3	0	30.73	+ 22	20	19	- 15	SE	1	6	*	?	19	-	
	Berlin ...	30.70	12	ENE	1	0	30.77	+ 16	9	9	- 8	SE	2	6c	*	16	7	-	
	Wiesbaden ...	*	*	*	*	*	30.65	+ 27	19	19	- 11	NE	1	0	*	30	19	-	
	Munich ...	30.43	20	NE	2	0	30.55	+ 26	12	12	- 7	E	3	6	*	28	10	-	
	The Helder ...	30.45	31	ENE	1	0	30.69	+ 24	28	27	- 5	E	1	0	1	34	28	-	
	Brussels ...	*	*	*	*	*	30.70	+ 31	24	24	- 4	ENE	3	6	*	33	23	-	
	Cape Gris Nez...	30.49	37	ENE	7	0	30.62	+ 24	30	30	0	E	4	0	2	39	30	-	
	Paris ...	30.04	31	H	4	0	30.59	+ 32	23	23	- 6	N	3	6	*	36	23	-	
	Brest ...	30.50	43	ENE	4	0	30.62	+ 32	42	39	0	ENE	4	0	3	52	36	-	
FRANCE & NETHERLANDS.	Lorient ...	30.44	44	NNE	5	0	30.53	+ 23	41	39	0	ENE	7	0	4	48	39	-	
	Rochefort ...	30.37	37	NE	7	0	30.43	+ 22	30	29	- 4	NE	7	0	2	43	25	-	
	Belfort ...	30.26	28	E	4	0	30.47	+ 31	25	24	- 5	NE	5	6	*	31	19	-	
	Lyons ...	30.28	32	NW	5	0	30.43	+ 31	25	23	- 5	NW	5	6	*	33	25	-	
	Nice ...	29.92	48	ESE	3	0	30.15	+ 36	38	38	- 9	E	1	6	3	61	36	-	
	Perpignan ...	30.07	45	NW	5	0	30.28	+ 40	40	36	- 11	NW	5	6	*	53	38	-	
	Biarritz ...	30.27	49	NW	7	0	30.39	+ 29	37	35	- 10	ENE	3	0	2	50	34	-	
	Corunna ...	*	*	*	*	*	30.18	+ 08	45	42	- 1	NE	7	6	2	55	45	-	
	Lisbon ...	30.16	50	NNE	5	0	30.18	+ 08	45	42	- 1	NE	7	6	2	55	45	-	

For Explanation of Columns, see p. 4.

‡ Received too late for insertion in Charts on p. 3.

# WEATHER CHARTS

Thursday, 3<sup>rd</sup> January  
for 8 a.m. on

## 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.

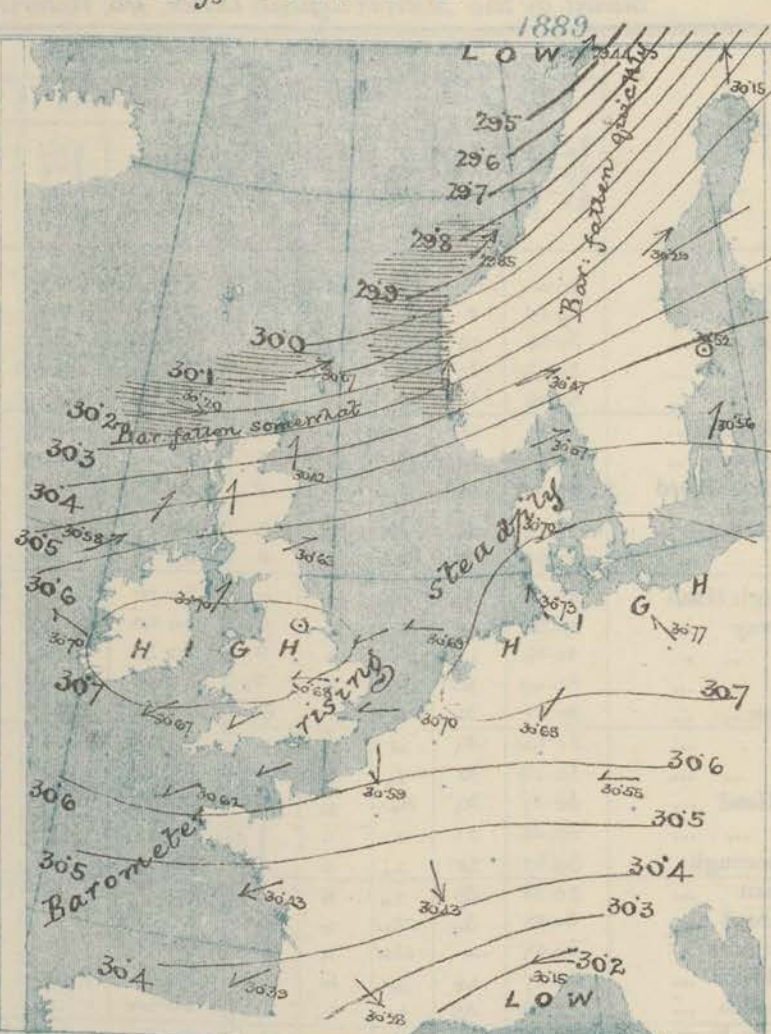
**Sea Disturbance** — where considerable is shown thus.

— Rough — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.987
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.860
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

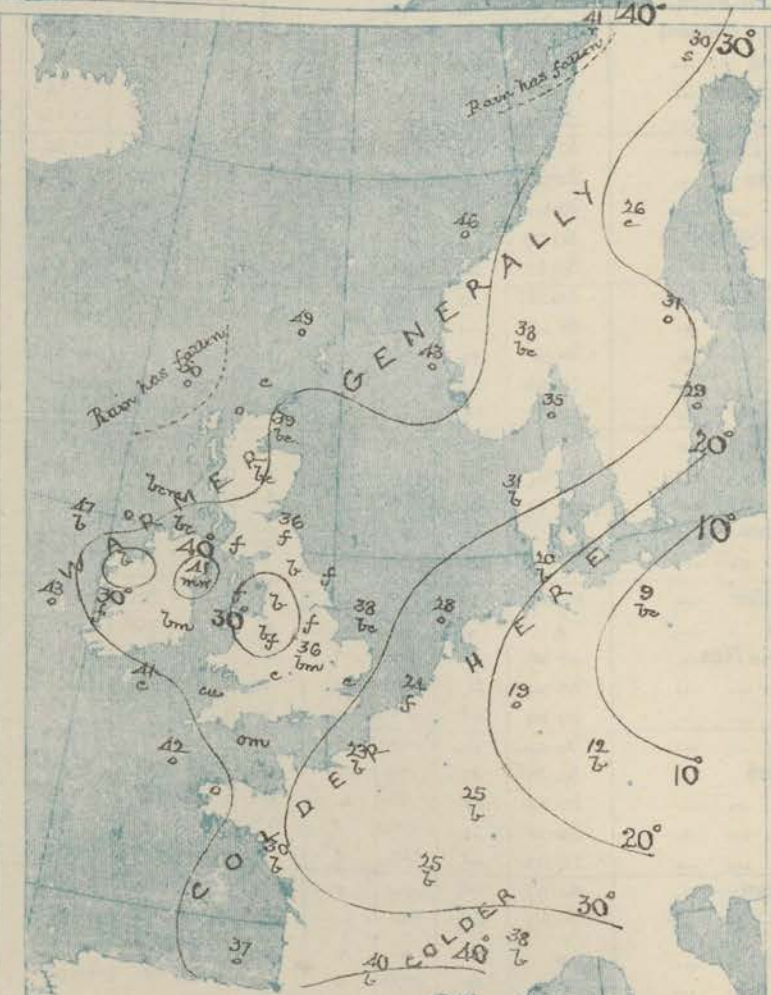
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January.

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max	Daily Min	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.0	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	6.92
Scilly	40.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.8	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest 30.7 inches and more, over North Germany, the greater part of England and the southeast of Ireland.  
 Lowest 29.5 inches and less in the west of Lapland -- 30.1 inches and less in the southeast of France.  
 Gradients steep over Scandinavia, moderate over Scotland, slight in France, almost nil over England & Germany.  
 Barometer rising in the south, falling in north -- rapidly in Norway.

## TEMPERATURE

Highest 55° at Hornum, 49° at Edinburgh, 46° at Belmullet, 46° at Christiansund & Vain, 45° at Lisbon & 45° at Valencia.  
 Lowest 9° at Berlin, 12° at Munich, 19° at Wiesbaden, 25° at Lyons, 26° at Loughboro', 29° at Nisby & at Oxford.  
 It has risen considerably in many parts of our Islands and over Scandinavia, fallen fast over Germany and the S. of France.

## WIND

W. to W. at the northern stations -- blowing a moderate gale in several places.  
 N.E. at the southern stations -- moderate generally, but a slight gale on the west of France.  
 Calms and variable air prevail over the Central parts of England and Ireland.

## WEATHER

Overcast, mild and rather showery in the far north, fair or foggy elsewhere. Fog is very prevalent over England, and is dense at Roches Point.

## SEA

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

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the north does not seem likely to extend much in a southerly direction, so that cold, quiet, foggy weather is still probable at the English and Irish stations.

## FORECASTS

For the 24 hours ending at NOON on 4<sup>th</sup> January 1889.

### DISTRICTS.

### FORECASTS.

0	SCOTLAND NORTH	N <sup>W</sup> winds, strong; squally, rain at times.
1	SCOTLAND EAST	S <sup>W</sup> breezes, freshening; fair as a whole.
2	ENGLAND N.E.	
3	ENGLAND EAST	Calms and variable airs; foggy, cold.
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	E <sup>W</sup> breezes, light and fine on coast; calm or nearly so, with fog inland.


### DISTRICTS.


### FORECASTS.

6	SCOTLAND WEST	N <sup>W</sup> winds, moderate or fresh; some showers.
7	ENGLAND N.W.	Light variable breezes; fair, rather cold.
8	ENGLAND S.W.	NE <sup>W</sup> breezes, moderate; fair.
9	IRELAND NORTH	Same as N° 6.
10	IRELAND SOUTH	E <sup>W</sup> breezes, light, fine.

### 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 ...	30.53	41	39	S 5	0	4	Holyhead ...	30.55	44	43	20 0	b m	0
Snmburgh Head	30.27	44	41	SW 3	0	3	Valencia ...	30.61	48	44	20 0	b m	0
Stornoway ...	30.29	48	47	SW 5	0	4	Scilly ...	30.49	48	46	NE 4	c	4
Aberdeen ...	30.37	35	32	SSW 1	b m	3	Jersey ...	30.42	47	43	NNE 3	b	3
Shields ...	30.53	38	37	WNW 1	c	2	Dungeness ...	30.42	41	38	E 5	c	4
Ardrossan ...	30.53	38	37	ENE 1	b	1	London ...	30.51	40	37	NE 2	c f	*
Malin Head ...	30.50	41	39	SSW 4	b	4	Yarmouth ...	30.48	40	38	E 4	c	4
Mullaghmore ...	30.53	44	41	SSW 2	b m	3	Rochefort ...	30.24	39	38	NE 5	b	2
Belmullet ...	30.53	45	44	SW 2	0	*							

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

The reports for yesterday morning showed that pressure varied from between 30.5 ins and 31.0 inches over Central Russia, and from 30.5 inches and more over Central Ireland to rather below 29.8 inches over the Mediterranean, and to rather below 30.8 inches off the north coast of Scotland, and the northwest of Norway. Thus, while E<sup>ly</sup> and NE<sup>ly</sup> breezes prevailed over France and the English Channel, and moderate S<sup>ly</sup> winds in the extreme northwest of our Islands and in Norway, variable airs and calms were reported in most other places. The weather was fair in most places, but a further considerable fall of rain had taken place in the south of France during the preceding 24 hours. Temperature continued very low over Russia and Central Europe and was rather low in many parts of our Islands also. The lowest individual values were -13° at Moscow, -5° at Warsaw, -2° at Lemberg, -1° at Memel, +1° at Neu Fahrwasser, 2° at Cracow, 5° at Breslau, 6° at Kopenhagen, 7° at St. Petersburg, and Kharkov, 12° at Odessa, Nicolaieff, Livinmunde and Archangel, 15° at Kernosand, 17° at Berlin, 19° at Munich, 23° in London, 25° at Parsonstown, 28° at Brussels and 29° at Paris. The highest were 60° at Tunis, 57° at Malta, 56° at Brindisi, 54° at Corunna, 51° at Palermo, and Perpignan, 50° at Cagliari, 48° at Scilly, and 44° at Stornoway.

### 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.

ST. ...  
Hapar ...  
Hernö ...  
Stockh ...  
Wisby ...  
Bodö ...  
Christ ...  
Skude ...  
Christ ...  
Skage ...  
Fanö ...  
Sumb ...  
Storne ...  
Wick ...  
Nairn ...  
Aberd ...  
Leith ...  
Shield ...  
Spurn ...  
York ...  
Longl ...  
Ardro ...  
Malin ...  
Mulla ...  
Belm ...  
Donag ...  
Barro ...  
Liver ...  
Holy ...  
Parso ...  
Valen ...  
Roch ...  
Pemb ...  
Scilly ...  
Prawl ...  
Jersey ...  
Hurst ...  
Dung ...  
Lond ...  
Oxfon ...  
Camb ...  
Yarm ...  
Cuxh ...  
Berlin ...  
Wies ...  
Main ...  
The ...  
Bruss ...  
Capo ...  
Paris ...  
Brest ...  
Lorie ...  
Roch ...  
Belfo ...  
Lyon ...  
Nice ...  
Perp ...  
Biar ...  
Cor ...  
Lisb ...

# DAILY WEATHER REPORT.

for Friday, 4<sup>th</sup> January 1889.  
Issued by the Meteorological Office, 116, 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.	Barometre.  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 ..	29.54	31	S	8	0	29.47	- .68	37	36	+ .7	SW	2	0	*	2	16	0.20	
	Hernösand ...	29.92	35	SSW	4	0	29.80	- .49	35	34	+ .9	Z	0	bc	*	34	7	0.04	
	Stockholm ...	30.29	34	S	2	0	30.09	- .43	35	34	+ .4	SSW	4	0	*	36	27	-	
	Wisby ...	30.52	32	SW	4	0	30.38	- .18	38	32	+ .4	S	6	0	*	34	24	-	
	Bodö ...	29.36	40	WSW	8	+	29.45	+ .01	33	32	- .8	WSW	8	m	5	45	30	-	
	Christiansund...	29.65	42	WSW	8	+	29.74	- .11	39	39	- .7	ESE	2	+	5	46	36	3.11	
	Skudesnaes ...	30.33	44	SSW	6	+	30.23	- .23	44	43	+ .1	SSW	4	0	5	?	43	0.24	
	Christiania Fjord (Færdar)	30.28	40	SSW	8	+	30.15	- .32	41	40	+ .3	SW	5	b	4	?	?	-	
	Skagen (The Scaw)	30.43	35	W	5	0	30.29	- .28	42	41	+ .7	W	4	0	3	?	34	-	
	Fanö ...	30.52	36	SW	2	c	30.50	- .20	39	38	+ .8	WSW	4	e	*	39	25	-	
	Sumburgh Head	30.06	48	W	8	0	29.94	- .13	48	46	- .1	W	8	0	8	49	45	0.01	
	Stornoway ...	30.21	49	W	4	0	30.08	- .12	48	48	- .2	W	4	0	6	51	45	0.02	
	Wick ...	30.23	46	W	3	b	30.14	- .09	47	45	0	WNW	4	0	2	50	40	-	
	Nairn ...	30.28	47	SW	5	c	30.20	- .08	47	44	+ .1	SW	6	0	3	49	35	-	
	Aberdeen...	30.37	42	SW	3	c	30.27	- .15	46	41	+ .7	SW	2	bc	3	47	30	-	
	Leith ...	30.53	43	SW	4	c	30.41	- .12	42	39	0	W	5	c	*	45	39	-	
	Shields ...	30.60	41	SW	1	b	30.49	- .14	40	37	+ .4	WSW	3	c	2	42	33	-	
	Spurn Head ...	30.65	36	SW	3	b	30.58	- .11	39	32	+ .2	SW	3	bc	2	37	29	-	
	York ...	30.61	33	S	1	b	30.56	- .09	34	33	0	S	1	b	*	38	31	-	
	Loughborough	30.72	27	Z	0	b	30.66	- .07	21	21	- .5	NE	1	bf	*	31	20	-	
	Ardrossan ...	30.56	44	S	3	0	30.50	- .08	44	43	0	SSW	4	0	3	44	43	-	
	Malin Head ...	30.49	45	SW	6	om	30.44	- .07	45	43	+ .1	WSW	5	om	5	46	44	-	
	Mullaghmore ...	30.57	45	SW	5	c	30.50	- .08	42	40	- .3	SW	5	c	4	46	41	-	
	Bolmullet ...	30.57	47	SW	5	bc	30.49	- .09	47	45	0	SW	6	0	*	49	46	0.01	
	Donaghadee ...	30.63	38	SW	2	bc	30.56	- .08	40	39	+ .6	SW	2	c	0	41	38	0.03	
	Barrow-in-Furness	30.65	39	E	1	f	30.58	- .09	44	43	+ .9	SW	3	0	*	44	35	-	
	Liverpool (Bidston)	30.71	34	S	1	bc	30.64	- .09	29	26	- .3	SSE	1	f	2	39	26	-	
	Holyhead ...	30.68	43	SW	1	c	30.61	- .09	44	42	+ .3	SW	4	cgm	3	45	41	-	
	Parsonstown ...	30.68	32	Z	0	b	30.61	- .08	28	27	+ .4	Z	0	b	*	38	23	-	
	Valencia ...	30.68	46	S	2	0	30.62	- .08	45	42	+ .2	S	3	c	2	47	43	-	
	Roche's Point...	30.71	38	N	1	f	30.65	- .06	41	40	+ .6	NW	1	m	4	41	35	-	
	Pembroke ...	30.72	40	E	2	b	30.69	- .05	38	37	+ .3	SSE	3	cm	2	42	33	-	
	Seilly ...	30.66	42	EHE	4	0	30.62	- .05	45	43	+ .4	E	2	c	3	45	39	-	
	Prawle Point ...	30.72	39	EHE	4	0	30.66	- .00	40	38	+ .1	EHE	2	c	2	40	37	-	
	Jersey ...	30.67	38	EHE	3	bm	30.66	+ .03	36	35	- .6	EHE	2	bcmy	2	42	34	-	
	Hurst Castle ...	30.72	38	E	4	om	30.69	- .01	34	33	- .5	NE	3	om	1	39	34	-	
	Dungeness ...	30.69	39	ESE	3	0	30.66	+ .03	38	36	0	E	4	c	3	39	36	-	
	London ...	30.74	37	EHE	1	0	30.69	+ .01	31	30	- .5	Z	0	f	*	39	29	-	
	Oxford ...	30.76	26	Z	0	f	30.71	- .01	22	22	- .7	W	1	b	*	33	20	-	
	Cambridge ...	30.73	27	Z	0	f	30.68	- .05	22	22	- .9	Z	0	b	*	31	21	-	
	Yarmouth ...	30.70	38	Z	0	bf	30.65	- .03	31	30	- .7	W	2	bm	2	39	27	-	
	Cuxhaven ...	30.69	24	S	2	c	30.63	- .10	27	2	+ .7	S	3	f	*	?	?	-	
	Berlin ...	30.77	15	SSE	1	b	30.73	- .04	12	12	+ .3	SSE	1	b	*	16	?	-	
	Wiesbaden ...	*	*	*	*	*	30.70	+ .05	17	17	- .2	NE	1	b	*	30	16	-	
	Munich ...	30.62	19	NE	2	c	30.60	+ .05	12	12	0	W	3	m	*	27	10	-	
	The Helder ...	30.71	28	S	1	f	30.65	- .04	30	29	+ .2	S	1	f	1	30	27	-	
	Brussels ...	*	*	*	*	*	30.67	- .03	21	21	- .3	Z	0	b	*	25	20	-	
	Cape Gris Nez...	30.69	30	E	4	0	30.66	+ .04	26	26	- .4	EHE	4	b	3	34	24	-	
	Paris ...	30.66	26	NHE	4	b	30.65	+ .06	19	19	- .4	NHE	3	m	*	32	19	-	
	Brest ...	30.62	39	E	4	b	30.65	+ .03	30	28	- .12	Z	0	b	0	52	27	-	
	Lorient ...	30.58	39	EHE	7	b	30.60	+ .07	35	29	- .6	EHE	5	b	3	45	37	-	
	Rochefort ...	30.52	36	EHE	3	b	30.52	+ .09	28	24	- .2	EHE	5	b	2	37	23	-	
	Belfort ...	30.51	26	NE	4	b	30.52	+ .05	19	18	- .6	NE	5	b	*	28	16	-	
	Lyons ...	30.50	2	N	5	b	30.51	+ .08	22	21	- .3	NW	5	b	*	34	22	-	
	Nice ...	30.26	42	E	4	b	29.92	- .23	37	34	- .1	EHE	3	b	3	50	34	-	
	Perpignan ...	30.36	37	W	4	b	30.35	+ .07	33	36	- .7	NW	5	b	*	45	28	-	
	Biarritz ...	30.41	36	NHE	4	0	30.41	+ .02	31	30	- .6	SSW	3	m	2	41	30	-	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Lisbon ...	30.13	57	NE	5	0	30.17	- .01	45	42	0	NHE	7	c	?	55	45	-	
PENIN- SULA.																			

# WEATHER CHARTS

for 8 a.m. on

Friday, 4<sup>th</sup> January,

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

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

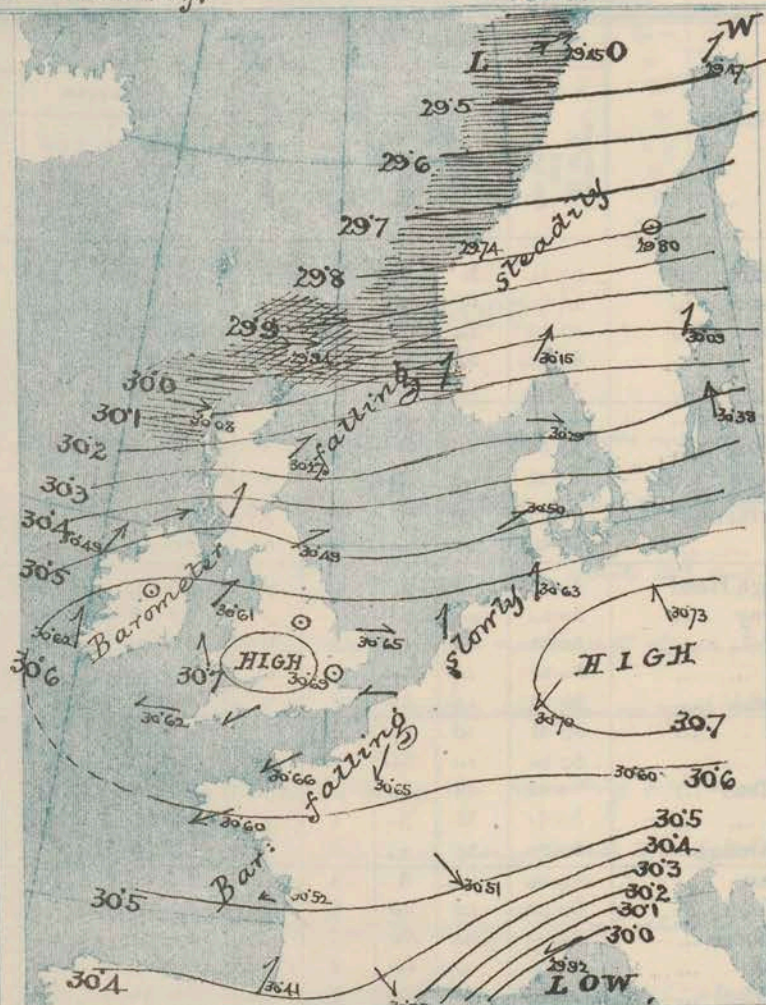
**Sea Disturbance** — where considerable is shown thus.

— Rough. — High.

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS. in.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.898
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

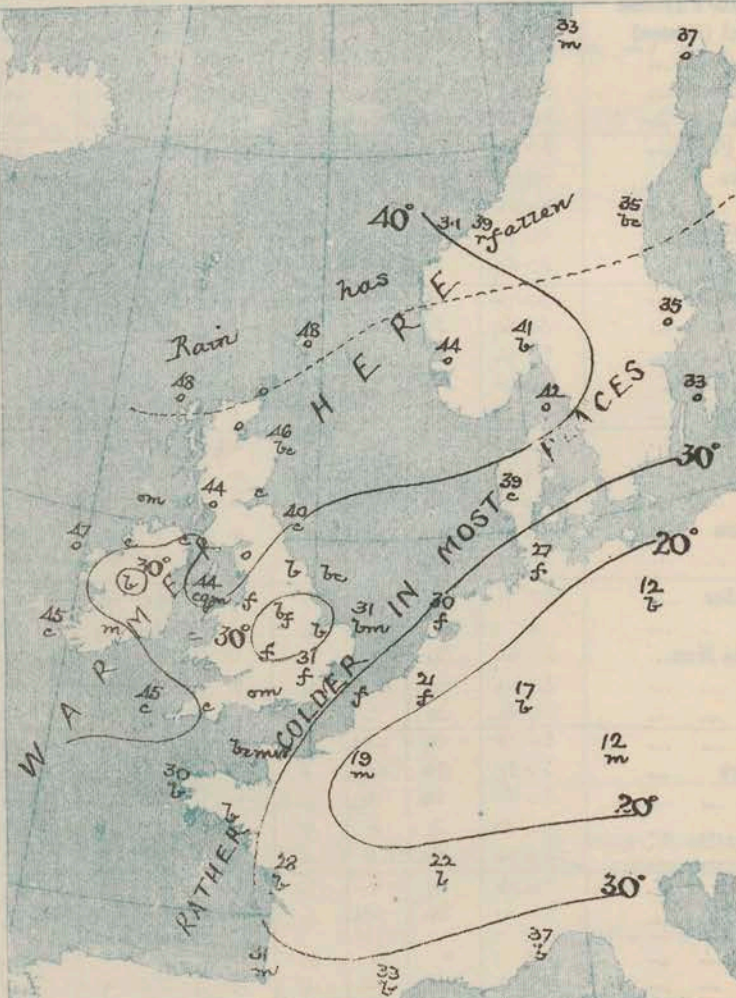
**Rainfall** — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE AND RAINFALL.

(for the month of January)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	Dry at 8 a.m.	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.8	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	38.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.98
Jersey	46.0	35.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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><i>Highest</i>, 30.60 to 30.70 in. and more, over the southern half of our islands, the Netherlands and North Germany.</p> <p><i>Lowest</i>, 29.5 in. and less, over Lapland - 30.0 in. off the north of Scotland - 29.9 in. over the Gulf of Genoa.</p> <p><i>Gradient</i>, Somewhat steep over Scotland and Northern Europe - very steep over the South of France, slight elsewhere.</p> <p><i>Barometer</i> falling in the north and west, steady in the south.</p>
TEMPERATURE	<p><i>Highest</i>, 48° at Lumburg Head and Stromway, 47° at Wick, Nairn and Belmullet, 45° at Valencia, Sully and Lisbon.</p> <p><i>Lowest</i>, 12° at Berlin and Munich, 17° at Wiesbaden, 19° at Paris, 21° at Brussels &amp; Loughborough, 22° at Oxford &amp; Cambridge and 31° in London.</p> <p>It has risen decidedly at our western and northern stations and in Sweden since yesterday, fallen over France &amp; Central England.</p>
WIND	<p>SW and W at the northwestern and northern stations - fresh to a gale in force.</p> <p>Calm and very variable over the Central parts of England and Germany.</p> <p>NE in the Channel and over the Bay of Biscay, and decreasing in strength.</p>
WEATHER	<p>Bulk and somewhat showery in the north (very rainy at Christiansund).</p> <p>Foggy over England, Holland and North Germany. Fine in France and Germany, but hazy in some places.</p>
SEA	<p>Very high off our extreme northern coasts, rather rough off the west of Norway.</p> <p>Moderate to slight in the west, slight or smooth elsewhere.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the barometer continues to fall decidedly at our northern and western stations it is probable that further disturbances are about to pass in a northeasterly direction outside our extreme north-western coasts, and the SW<sup>ly</sup> gales will be felt generally in the northwest and north.

These coasts have therefore been warned.

## FORECASTS

for the 24 hours ending at NOON on 5<sup>th</sup> January 1889.

### DISTRICTS.

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

### FORECASTS.

- 1 N<sup>ly</sup> and SW<sup>ly</sup> strong winds and gales, changeable, some rain, mild.
- 2 SW<sup>ly</sup> winds, light to moderate; fair.
- 3 Calms and variable light breezes; fair, foggy at times, cold at night.
- 4 Light E<sup>ly</sup> breezes and calms; cold, foggy inland.

### DISTRICTS.

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

### WARNINGS

### FORECASTS.

- Same as N<sup>os</sup> 0 and 1.
- SW<sup>ly</sup> breezes, freshening; some showers, milder.
- NE<sup>ly</sup> breezes, moderate; fine.
- Same as N<sup>os</sup> 0 and 1.
- S<sup>ly</sup> breezes, light and fresh; fair.
- The SOUTH CONE has been hoisted this morning in districts 0, 6, 9 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.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudermoes ...	30.32	43	42	S 7	0 f	5	Holyhead ...	30.68	45	43	SW 2	o gm	2
Sumburgh Head ...	30.07	47	46	W 8	r	7	Valencia ...	30.68	47	44	SSE 2	c m	2
Stornoway ...	30.22	50	50	W 7	0	6	Scilly ...	30.66	42	39	ESE 4	c	5
Aberdeen ...	30.40	48	40	S 3	0	8	Jersey ...	30.64	41	39	E 3	bc	3
Shields ...	30.60	41	39	SW 2	f	2	Dungeness ...	30.67	38	36	E 4	0	4
Ardrossan ...	30.57	44	44	S 4	0	3	London ...	30.72	39	37	ESE 1	f	*
Malin Head ...	30.49	45	43	SW 5	0	6	Yarmouth ...	30.68	38	37	NNE 2	bc f	3
Mullaghmore ...	30.57	46	43	SSW 5	0	3	Rocheport ...	30.51	36	34	NE 7	b	2
Belmullet ...	30.56	49	47	WSW 3	bc	*							

## 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 30.9 ins. and upward were reported in a large anticyclone lying over central Russia, another high pressure area with readings above 30.7 ins. existed over the southern parts of the United Kingdom. The lowest readings 29.5 ins. and less were found in a large and deep depression which was shifting the northwest of Norway, but another disturbance with readings below 29.8 ins. was lying to the southwest of Naples. Strong winds or gales from the SW were reported over Scandinavia and the extreme north of our Islands, and moderate to strong E. breezes over the greater part of south Europe. In the neighbourhood of the Italian depression however, the wind blew a gale, from E on the northern shores of the Adriatic, from NE at Rome, and from NW at Cagliari. Fog still prevailed in many parts of England, rain was falling at some of the Mediterranean stations, as well as at Bodö, and snow in the south of Russia, but elsewhere the weather was mostly fair. Temperature had risen somewhat in all the more northern countries, but fallen a little in the south; readings ranged from between 45° and 55° over the Mediterranean, Spain and the north of Scotland, to several degrees below zero over central Russia. The highest individual readings were 56° at La Calle, 55° at Brindisi, 53° at Algiers, 51° at Barcelona, San Fernando, Gran, Aja and Rishra, 50° at Stornoway, and 49° at Sumburgh Head; the lowest were -14° at Moscow, -2° at Warsaw, 0° at Riga and Lemberg, 3° at Memel, 6° at Caracow, 7° at Breslau, 9° at Berlin, 12° at Munich, and 13° at Kiev and Charkov. In the course of the day the large depression off the northwest of Norway travelled northeastwards, and the barometer rose slightly at some of our extreme northern stations. No important change was observed however, 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 8 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, 5<sup>th</sup> January 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 ..	29.57	31	SW	2	b	29.50	+0.03	27	26	-10	SW	2	c	*	37	?	-	
Hernösand ...	29.78	34	Z	0	b	29.69	-0.11	36	34	+1	SSW	2	o	*	43	34	-	
Stockholm ...	30.15	40	WSW	6	o	29.95	-0.14	39	38	+1	SSW	2	o	*	41	34	-	
Wisby ...	30.18	37	SW	6	o	30.11	-0.27	37	36	+1	SSW	4	o	*	39	?	-	
Bodö ...	29.59	33	W	8	o	29.13	-0.32	33	32	0	E	6	s	3	34	32	-	
Christiansund...	29.78	37	?	?	r	29.57	-0.17	44	42	+5	W	9	r	6	45	36	2.68	
Skudesnaes ...	30.19	44	SSW	3	r	30.10	-0.13	43	42	-1	S	4	o	5	45	43	0.16	
Christiania Fjord (Færdar)	30.01	41	SSW	8	b	29.97	-0.18	41	40	0	SSW	8	bc	5	41	41	-	
Skagen (The Sow)	30.17	41	NW	4	b	30.10	-0.19	40	39	-2	W	3	m	2	43	41	-	
Fanö ...	30.39	40	WSW	4	o	30.33	-0.17	40	39	+1	WSW	1	c	*	41	39	-	
BRITISH ISLANDS.																		
Sumburgh Head	29.97	47	W	6	r	29.81	-0.13	47	44	-1	W	6	o	4	48	45	0.12	
Stornoway ...	30.07	49	W	7	r	29.88	-0.20	48	47	0	W	8	o	6	49	45	0.04	
Wick ...	30.14	46	SW	2	bc	29.95	-0.19	46	45	-1	SW	2	c	0	48	42	-	
Nairn ...	30.22	47	SW	5	bc	30.02	-0.18	45	42	-2	SW	5	bc	3	49	39	-	
Aberdeen...	30.23	44	SSW	2	bc	30.09	-0.18	37	34	-9	S	2	bc	3	47	36	-	
Leith ...	30.36	41	W	5	b	30.20	-0.21	42	39	0	W	4	cm	*	43	36	-	
Shields ...	30.43	40	W	1	m	30.29	-0.20	37	36	-3	W	0	m	2	45	35	-	
Spurn Head ...	30.51	37	WSW	3	f	30.37	-0.21	27	26	-6	SW	2	bc	2	37	25	-	
York ...	30.48	39	W	1	bc	30.34	-0.22	27	27	-7	S	1	f	*	43	26	-	
Loughborough	30.57	25	W	1	b	30.44	-0.22	23	23	+2	Z	0	cm	*	34	21	-	
Ardrossan ...	30.42	44	SSW	3	o	30.26	-0.24	43	43	-1	SSW	4	bc	3	44	41	-	
Malin Head ...	30.35	44	SW	4	bc	30.14	-0.30	41	40	-4	SSW	5	bc	4	46	40	-	
Mullaghmore ...	30.40	43	SSW	4	bc	30.22	-0.28	43	40	+1	SSW	5	bc	4	46	41	-	
Belmullet ...	30.36	47	WSW	5	o	30.14	-0.35	48	46	+1	WSW	6	o	*	48	46	-	
Donaghadee ...	30.47	40	SW	2	c	30.31	-0.25	31	31	-9	W	2	c	0	43	30	-	
Barrow-in-Furness	30.50	43	SW	4	o	30.37	-0.21	36	36	-8	SSE	4	o	*	44	35	-	
Liverpool (Bidston)	30.56	34	S	1	b	30.42	-0.22	25	25	-2	SE	2	f	2	41	24	-	
Holyhead ...	30.53	43	SSW	4	ogm	30.36	-0.25	42	42	-2	S	4	ogm	4	45	41	-	
Parsonstown ...	30.50	34	Z	0	b	30.32	-0.29	30	29	+2	Z	0	b	*	41	26	-	
Valencia ...	30.50	47	S	4	o	30.32	-0.30	48	46	+3	SSE	3	c	4	48	43	-	
Roches Point...	30.53	45	WSW	3	c	30.37	-0.28	46	44	+5	SW	4	bc	4	46	40	-	
Pembroke ...	30.57	41	S	2	bc	30.42	-0.27	41	40	+3	S	2	cg	2	42	38	-	
Seilly ...	30.54	45	SSE	2	c	30.37	-0.25	44	42	-1	E	3	o	4	49	42	-	
Prawle Point ...	30.61	39	NE	2	o	30.44	-0.22	35	35	-5	NE	2	o	2	40	34	-	
Jersey ...	30.58	39	ENE	2	b	30.42	-0.24	36	34	0	NE	2	bc	2	43	32	-	
Hurst Castle ...	30.61	35	NE	2	o	30.45	-0.24	38	32	-1	NE	2	m	1	38	32	-	
Dungeness ...	30.58	35	ENE	3	c	30.38	-0.28	24	23	-14	ENE	2	f	1	41	21	-	
London ...	30.62	33	SSW	2	o	30.45	-0.24	26	26	-5	Z	0	o	*	36	26	-	
Oxford ...	30.61	27	Z	0	f	30.47	-0.24	22	22	0	Z	0	o	*	30	22	-	
Cambridge ...	30.62	30	Z	0	o	30.44	-0.24	24	23	+2	NW	1	o	*	32	21	-	
Yarmouth ...	30.57	32	WSW	2	bc	30.43	-0.22	26	26	-5	WSW	1	f	3	35	25	-	
Cuxhaven ...	30.57	30	SW	3	f	30.45	-0.18	32	32	+5	SW	3	o	*	2	?	-	
Berlin ...	30.65	21	SSW	1	b	30.54	-0.19	16	16	+4	S	1	b	*	23	?	-	
Wiesbaden ...	*	*	*	*	*	30.51	-0.19	19	18	+2	Z	0	b	*	27	?	-	
Munich ...	30.52	15	NE	3	b	30.40	-0.20	11	11	-1	NE	4	b	*	21	9	-	
FRANCE & NETHERLANDS.																		
The Helder ...	30.56	38	SW	3	c	30.46	-0.19	32	31	+2	S	1	f	1	39	30	-	
Brussels ...	*	*	*	*	*	30.50	-0.17	20	19	-1	SSE	1	f	*	26	19	-	
Cape Gris Nez...	30.58	28	SE	1	m	30.48	-0.18	32	32	+6	E	1	b	0	?	25	-	
Paris ...	30.56	29	NE	3	b	30.42	-0.23	21	21	+2	NE	1	b	*	32	?	-	
Brest ...	30.60	26	NE	3	b	30.47	-0.18	34	32	+4	NE	3	b	2	52	28	-	
Lorient ...																		
Rochefort ...	30.40	37	NE	7	b	30.36	+0.16	29	27	+1	NE	7	b	2	41	23	-	
Belfort ...	30.39	25	NE	3	b	?	?	20	19	+1	NE	4	b	*	?	17	-	
Lyons ...	30.32	31	N	5	b	30.36	-0.15	22	20	0	N	1	b	*	?	21	-	
Nice ...	30.30	35	E	5	S	30.29	+0.37	35	30	-2	E	3	b	3	46	30	0.04	
Perpignan ...	30.22	41	NW	4	b	30.28	-0.07	34	34	+1	W	3	S	*	48	32	0.39	
Biarritz ...	30.31	33	E	3	m	30.20	-0.21	28	26	-3	E	5	m	2	37	25	-	
PENINSULA.																		
Corunna ...	*	*	*	*	*													
Lisbon ...	30.12	57	ENE	5	b	29.99	-0.18	40	38	-5	NE	5	b	3	55	39	-	

# WEATHER CHARTS

for 8 a.m. on Saturday, 5<sup>th</sup> January,

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.

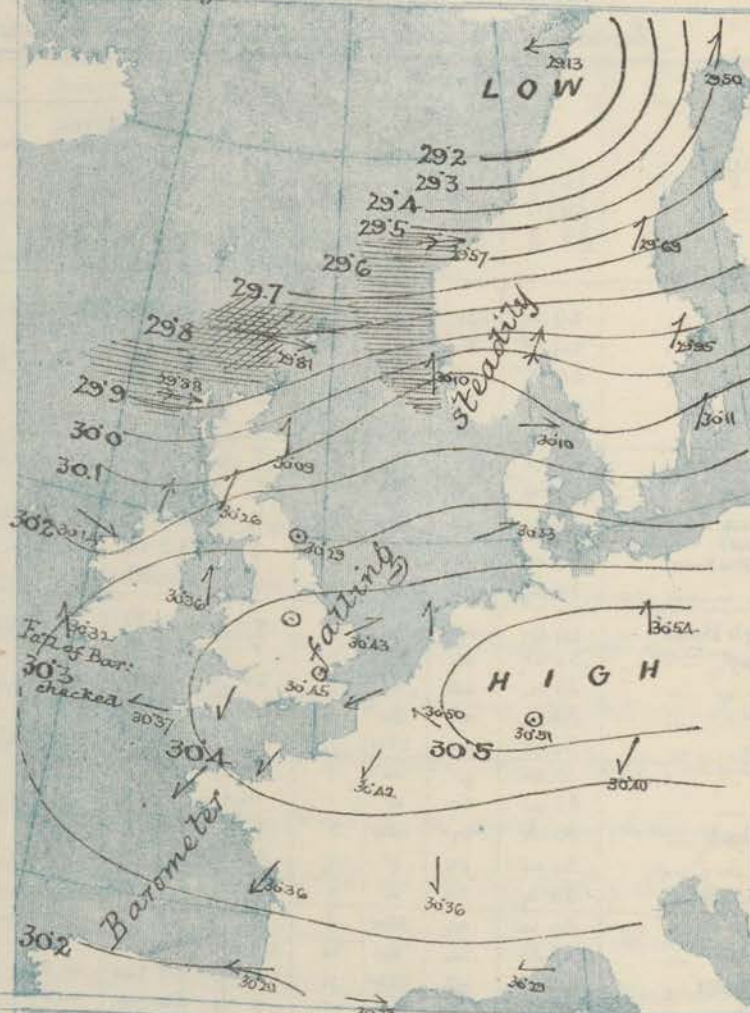
**Sea Disturbance** — where considerable is shown thus.

■ = Rough. ■ = High.

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

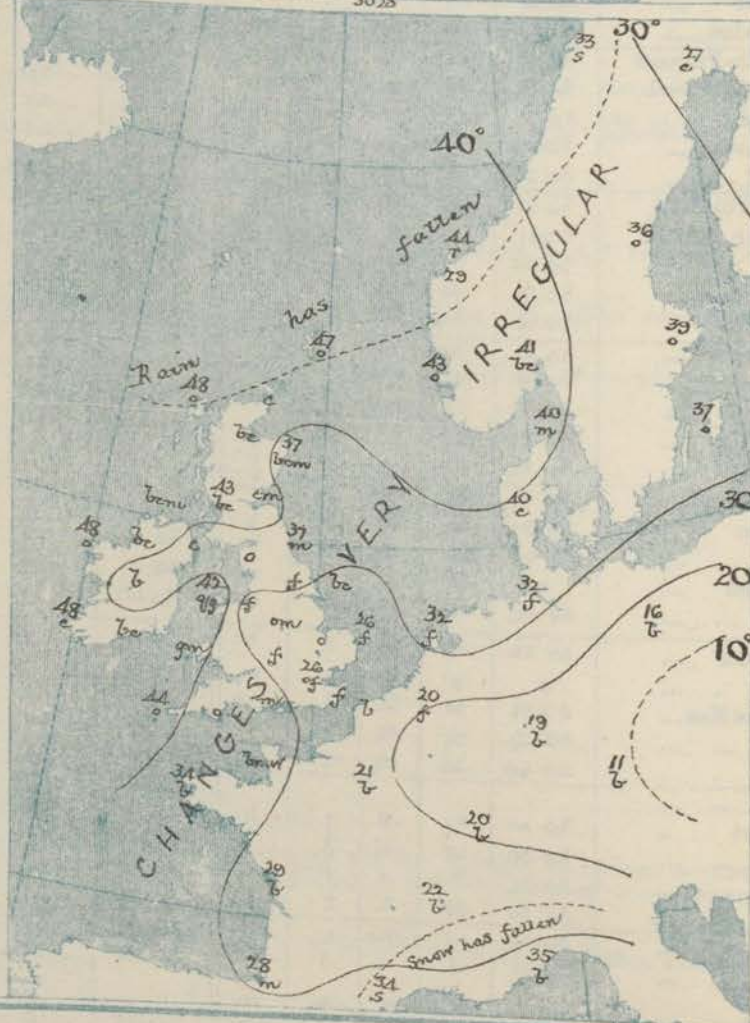
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January.

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max	Daily Min	at 8 a.m. Dry	Wet	
Sumburgh Head	42.0	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	32.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.06
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	5.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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: to 30.5 in: in a high pressure area stretching from Germany, across the Netherlands, the southern half of England and north of France.  
 Lowest, 29.2 in: and less, in a depression off the northwest of Norway. 30.2 in: and less, over Spain.  
 Gradients, rather steep over Scandinavia, moderate to very slight elsewhere.  
 Barometer, has now ceased falling on our southwest and south coasts - still falling in the far north.

## TEMPERATURE

Highest, 48° at Stornoway, Belmullet, and Valencia, 47° at Lumburg H., 46° at Rocher Point, 44° at Seilly, and Christiansund.  
 Lowest, 11° at Munich, 16° at Berlin, 20° at Bourges, 21° at Paris, 22° at Oxford, 26° in London, and 28° at Biarritz.  
 It had changed little and irregularly in our Islands during the past twenty-four hours.

## WIND

Moderate to light from the NE. at the southern stations - calm over Central England.  
 Moderate S. in Ireland (but said to be WNW. at Belmullet).  
 SW and W in the north, and blowing hard at Stornoway, strongly at Lumburg Head.

## WEATHER

Fine and bright in Germany, and France. Foggy over England.  
 Fair in Ireland and Scotland - dull and rainy in the far north.  
 The rainfall at Christiansund has again been very heavy.

## SEA

Very rough in the far north, moderate in the west and southwest, slight to smooth in the south and southeast.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

If the wind observation reported from Belmullet is correct, it is probable that NW. winds and colder weather will prevail in Ireland shortly, and that over England the frost now reported will not give way materially.

## FORECASTS

For the 24 hours ending at NOON on 6<sup>th</sup> January 1889.

### DISTRICTS.

### FORECASTS.

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

W. and NW. winds, strong; some cold showers

Wind veering to NW, light; cold, fog inland

Very light winds or calms; drizzle, fog at times, cold.

### DISTRICTS.

### FORECASTS.

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

Wind shifting to the NW. or N.W.; colder, fair, local fogs.

### WARNINGS

The warnings issued yesterday have been cancelled.

Note.—The South Cone, point downwards (V) 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 (A) 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 ...	30.19	45	43	SSW 5	0	5	Holyhead ...	30.55	44	42	SSW 3	c	3
Sumburgh Head ...	29.98	48	48	W 6	r	8	Valencia ...	30.55	46	43	SSE 3	om	3
Stornoway ...	30.11	48	48	W 7	r	6	Scilly ...	30.56	48	45	ESE 2	c	4
Aberdeen ...	30.26	46	42	SW 2	c	3	Jersey ...	30.60	42	39	NE 3	b	3
Shields ...	30.45	45	41	W 2	c	2	Dungeness ...	30.61	35	34	ESE 4	c	2
Ardrossan ...	30.46	44	43	SSW 4	0	3	London ...	30.64	36	35	Z 0	of	*
Malin Head ...	30.49	45	43	SW 4	0	5	Yarmouth ...	30.58	35	34	W 1	b	2
Mullaghmore ...	30.45	45	42	SSW 4	c	4	Rochefort ...	30.47	38	36	NE 5	b	2
Belmullet ...	30.43	48	46	WSW 5	0	*							

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

The reports for yesterday morning showed that a long anticyclonic band extended from Central Russia, where readings were as high as 30.8 ins. and upwards, across Central Europe to the southern parts of England and Ireland, where readings varied between 30.6 ins. and 30.7 ins. The lowest readings, 29.5 ins. and less, were found in a large depression which was passing across Lapland, but another low pressure system with readings below 30.1 ins. was lying between the coasts of Italy and Sardinia. The wind was strong to a gale from N. or SW. in the extreme west and north of our Islands, as well as over Lapland, Finland, and the White Sea, and moderate or fresh from the same quarters over Northern Europe generally. In the more southern regions however, it was E or NE, and in the neighbourhood of the Italian depression it blew a moderate gale. The weather was dull over Northern Europe generally, with rain at Christiansund and snow at St. Petersburg, and fog still prevailed over England and the Netherlands, but in the more southern countries conditions were fair or fine. Temperature had risen several degrees over Sweden, the Baltic and Northern Russia, and fallen over Italy and the southern parts of France, Austria, and Russia, but elsewhere the change was slight and irregular; readings ranged from between 45 and 50° over the north of Scotland and the Mediterranean to a few degrees below zero over Central Russia. The highest individual readings were 53° at San Fernando, 52° at Croisette, 51° at Paris, 50° at Cagliari and Algiers, 48° at Sumburgh Head and Stornoway, and 47° at Wick, Kauri, Belmullet and Loughmair, the lowest were -5° F. at Moscow, 0° at Kiev, 2° at Rastow, 6° at Neufahrwasser, 7° at Marseilles, 8° at Karkov, 10° at Breslau, 11° at Limburg and Hammstadt.

In the course of the day no very important change was observed either in pressure, 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.

# DAILY WEATHER REPORT.

for *Sunday 6<sup>th</sup> January 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.		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 ..	29.21	35	SW	3	b	29.47	-1.03	20	18	-7	SW	2	c	*	37	7	0.16
	Hernösand ...	29.52	35	W	0	b	29.64	-1.05	21	20	-15	W	0	b	*	45	?	—
	Stockholm ...	29.84	39	SW	4	o	29.89	-1.06	29	36	0	WNW	4	o	*	45	36	—
	Wisby ...	30.05	35	W	4	b	30.07	-1.04	35	34	-2	WNW	4	b	*	39	34	—
	Bodö ...	29.38	31	W	3	b	29.45	-1.02	31	29	-2	W	6	o	4	36	28	—
	Christiansand...	29.63	35	NW	2	b	29.49	-1.08	42	39	-2	WNW	6	2	5	46	32	2.21
	Skudesnaes ...	30.00	42	SW	4	of	29.91	-1.19	43	41	0	S	7	o	5	41	43	—
	Christiania Fjord (Farder)	29.92	40	WNW	5	b	29.91	-1.06	39	38	-2	SW	5	b	4	44	39	—
	Skagen (The Seaw)	30.06	41	WNW	3	o	30.01	-1.09	40	38	0	W	2	m	1	41	39	—
	Fanö ...	30.23	39	WNW	4	o	30.13	-1.20	36	36	-4	SW	2	b	*	41	36	—
BRITISH ISLANDS.	Sumburgh Head	29.71	47	WNW	4	o	29.68	-1.13	43	39	-4	WNW	5	c	6	48	42	0.06
	Stornoway ...	29.71	47	WNW	3	2	29.79	-1.09	40	38	-8	W	6	o	5	49	37	0.08
	Wick ...	29.84	45	W	3	bc	29.83	-1.12	38	36	-8	SW	1	b	0	50	36	0.03
	Nairn ...	29.81	45	SW	5	bc	29.86	-1.16	41	40	-4	SW	1	bc	1	50	40	—
	Aberdeen...	29.98	37	SW	2	b	29.93	-1.16	37	36	0	SW	2	bc	2	42	36	—
	Leith ...	30.07	39	W	4	b	29.97	-1.23	44	41	+2	W	1	b	*	45	39	—
	Shields ...	30.15	38	W	0	f	30.01	-1.28	32	32	-4	SW	1	cm	2	44	31	—
	Spurn Head ...	30.21	26	SW	1	f	30.06	-1.28	24	24	-3	W	0	f	*	30	24	—
	York ...	30.20	23	WNW	1	c	30.14	-1.30	21	21	-2	SW	1	om	*	29	18	—
	Loughborough	30.09	44	SW	4	c	29.98	-1.28	44	43	+1	SW	2	c	1	45	42	0.02
GERMANY.	Malin Head ...	30.00	43	S	5	om	29.99	-1.15	43	41	+2	NW	3	bc	3	44	41	0.01
	Mullaghmore...	30.03	46	SW	5	om	30.01	-1.21	39	38	-4	WNW	2	bc	3	47	39	0.01
	Belmullet ...	30.02	49	WNW	5	o	30.03	-1.11	38	37	-10	N	1	c	*	49	38	0.05
	Donaghadee ...	30.15	37	SW	2	c	30.03	-1.28	39	39	+8	SW	2	c	0	42	31	0.02
	Barrow-in-Furness	30.21	34	SE	4	f	30.08	-1.29	32	32	-4	SE	4	om	*	39	31	—
	Liverpool (Bidston)	30.24	28	SE	2	o	30.09	-1.23	24	24	-1	SE	1	of	2	32	22	—
	Holyhead ...	30.20	43	SW	5	c	30.06	-1.20	42	41	0	S	4	om	4	46	41	—
	Parsonstown ...	30.17	37	W	0	b	30.05	-1.27	38	37	+8	W	0	o	*	44	29	0.06
	Valencia ...	30.17	47	SW	2	o	30.06	-1.26	46	45	-2	N	1	om	1	51	44	0.24
	Roche's Point...	30.21	45	SW	4	bc	30.04	-1.23	45	43	-1	N	1	o	3	48	44	—
FRANCE & NETHERLANDS.	Pembroke ...	30.26	39	SE	3	o	30.09	-1.23	38	37	-3	W	2	mg	2	41	36	—
	Seilly ...	30.21	46	SE	3	bc	30.05	-1.22	45	43	+1	S	1	c	4	48	42	—
	Prawle Point ...	30.26	39	NE	2	b	30.12	-1.22	37	37	+2	NNE	2	c	2	49	34	—
	Jersey ...	30.24	40	ENE	2	b	30.14	-1.28	35	34	-1	SW	2	bc	2	44	28	—
	Hurst Castle ...	30.30	28	NW	2	f	30.15	-1.20	26	26	-7	NW	1	f	0	35	23	—
	Dungeness ...	30.28	43	ENE	1	m	30.11	-1.27	23	23	-1	NNE	3	m	2	43	20	—
	London ...	30.22	27	W	0	f	30.12	-1.23	22	22	-4	W	0	f	*	30	22	—
	Oxford ...	30.29	23	SW	1	f	30.14	-1.23	23	23	+1	W	0	of	*	24	20	—
	Cambridge ...	30.20	26	W	0	o	30.14	-1.20	15	15	-9	W	0	b	*	30	14	—
	Yarmouth ...	30.30	28	WNW	1	bc	30.11	-1.22	25	25	-1	WNW	2	bc	2	31	23	—
PENINSULA.	Cuxhaven ...	30.37	27	S	2	f	30.22	-1.23	23	22	-9	SW	2	b	*	3	22	—
	Berlin ...	30.41	25	W	0	b	30.31	-1.23	21	20	+5	SE	2	b	*	28	?	—
	Wiesbaden ...	*	*	*	*	*	30.27	-1.24	23	22	+4	NE	1	b	*	30	19	—
	Munich ...	30.21	17	E	2	b	30.23	-1.17	11	10	0	SE	3	b	*	32	?	—
	The Helder ...	30.30	27	S	1	b	30.16	-1.20	25	24	-7	SE	1	b	1	34	25	—
	Brussels ...	*	*	*	*	*	30.19	-1.21	26	24	+6	S	1	m	*	28	?	—
	Cape Gris Nez...	?	34	SE	1	b	?	?	29	29	-3	SW	1	m	0	41	28	—
	Paris ...	30.30	28	SE	1	b	30.19	-1.23	18	18	-3	NW	1	b	*	36	16	—
	Brest ...	30.26	37	ENE	4	b	?	?	30	28	-4	E	1	b	1	32	28	—
	Lorient ...	30.22	38	E	7	?	30.12	-1.25	33	30	-3	ENE	4	b	2	45	30	—
Rocheport ...	30.23	36	ENE	5	b	30.11	-1.25	34	32	+5	ENE	5	b	2	39	27	—	
Belfort ...	30.26	21	NE	2	b	30.19	-1.25	17	17	-3	NW	1	b	*	27	10	—	
Lyons ...	30.33	26	NW	1	b	30.26	-1.20	20	20	-2	ENE	1	b	*	33	20	—	
Nice ...	30.24	40	E	4	b	30.23	-1.06	35	33	0	ENE	5	c	6	46	30	—	
PENINSULA.	Perpignan ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Biarritz ...	30.06	36	E	5	o	29.93	-1.27	32	31	+4	E	5	b	2	39	?	—
	Corunna ...	*	*	*	*	*	29.89	-1.27	43	41	-1	ENE	4	b	6	52	39	—
Lisbon ...	29.84	47	NNE	7	bc	29.81	-1.18	39	37	-1	N	4	b	2	52	37	—	

# WEATHER CHARTS

For 8 a.m. on Sunday 6<sup>th</sup> JANUARY.

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.

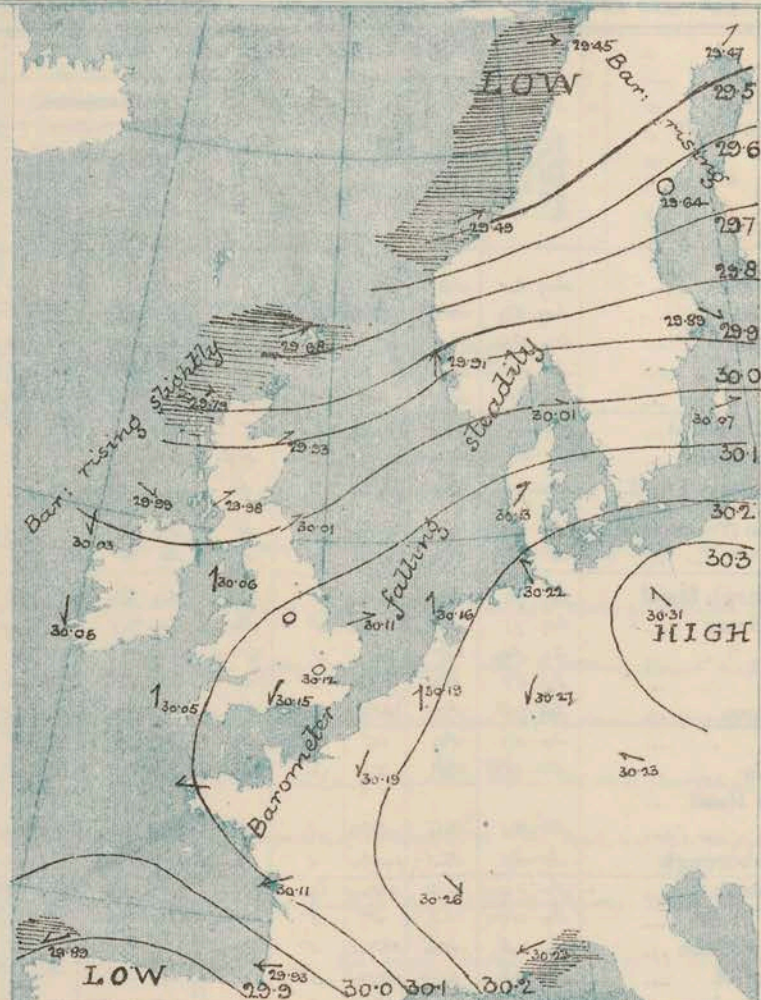
**Sea Disturbance**—where considerable, is shown thus.

— = Rough — = High.

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head.	29.685
Stornoway.	29.687
Wick.	29.725
Nairn.	29.753
Aberdeen.	29.790
Leith.	29.829
Shields.	29.886
York.	29.935
Loughborough.	29.967
Ardrossan.	29.840
Donaghadee.	29.851
Holyhead.	29.896
Liverpool.	29.922
Parsonstown.	29.886
Valencia.	29.869
Roche's Point.	29.894
Pembroke.	29.926
Scilly.	29.960
Jersey.	30.010
Hurst Castle.	29.997
Dover.	30.017
LONDON.	30.007
Oxford.	29.997
Cambridge.	29.992
Yarmouth.	29.981



## 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.

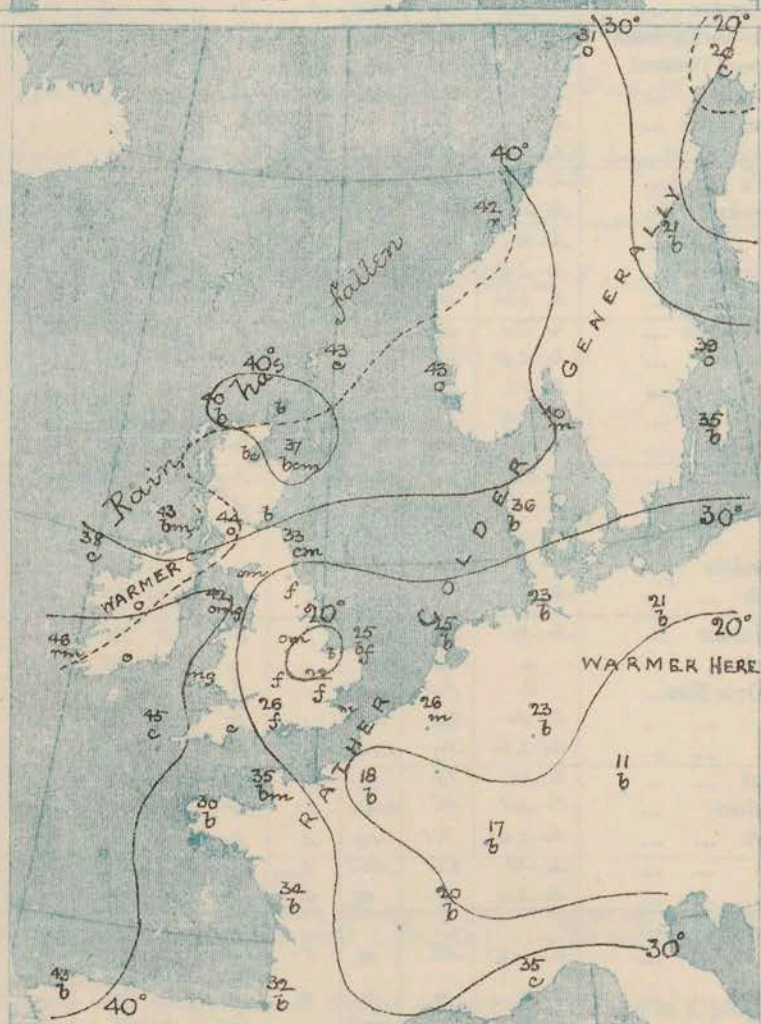
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January.

STATIONS	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	45.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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 over Central Germany.  
 Lowest, 29.5 ins: and less, in a large depression lying over the north of Scandinavia; 29.8 ins: and less, in another lying over Spain.  
 Gradients moderate over Scandinavia, but slight or smooth elsewhere.  
 Barometer falling at all but the Swedish and our extreme northern stations.

## TEMPERATURE

Highest 46° at Valencia, 45° at Rochefort, and 44° at Cork, and Ardara, and 43° at Christiansund, Lumburg, H<sup>o</sup>, Malin Head, & Brest.  
 Lowest, 11° at Munich, 15° at Cambridge, 17° at Belfast, 18° at Paris, 20° at Haparanda and Lyons, and 21° at Helsingfors, Loughborough, and Berlin.  
 Hard frost occurred over England last night the sheltered thermometer falling to 14° at Cambridge, 18° at Loughborough, and 20° at Helsingfors and Oxford.

## WIND

Fresh or strong from W. or SW. over Scandinavia and the north of our Islands.  
 Light from NE. on our southern coasts, and from SE. in Germany.  
 Moderate or fresh from the E<sup>st</sup> over the Bay of Biscay.

## WEATHER

Foggy over England and dull in the southern parts of Ireland and Norway, with rain at Christiansund and Valencia.  
 Fine in nearly all other localities.  
 A little rain fell yesterday at some of our western stations.

## SEA

Rough off the north of Scotland and rather rough off the west of Norway, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone over Central Europe appears to be giving way, but there are some slight indications of the formation of a new high pressure area off the west of Ireland.

## FORECASTS

for the 24 hours ending at NOON on 7<sup>th</sup> JAN<sup>y</sup>

1889.

### DISTRICTS.

### FORECASTS.

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

NONE ISSUED

### DISTRICTS.



### FORECASTS.

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

NONE ISSUED.

### 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 ...	29.04	43	41	SW 4	0	5	Holyhead ...	29.25	45	43	SW 4	6	4
Sumburgh Head ...	29.70	47	45	W 4	0	6	Valencia ...	29.21	50	47	SW 5	6	4
Stornoway ...	29.81	49	48	W 5	0	6	Scilly ...	29.26	48	45	SW 3	6	4
Aberdeen ...	29.03	41	39	S 2	6	3	Jersey ...	29.20	44	38	E 2	6	3
Shields ...	29.20	43	40	SW 1	m	2	Dungeness ...	29.24	41	35	ENE 3	6	1
Ardrossan ...	29.15	44	43	SW 4	0	3	London ...	29.27	30	30	Z 0	f	2
Malin Head ...	29.04	44	43	S 5	c	4	Yarmouth ...	29.24	31	30	WSW 1	f	2
Mullaghmore ...	29.09	44	41	SW 5	6	4	Rocheport ...	29.20	37	34	NE 5	6	2
Belmullet ...	29.07	49	46	WSW 5	0	*							

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

The reports for yesterday morning showed that pressure was decreasing over Europe generally, and that the large high pressure area recently observed over Russia, Germany and the southern half of our Islands was decreasing in intensity, and tending to move in a southerly direction. The readings over Russia (30.6 ins. to 30.8 ins.) were 1.5 to 1.7 ins. higher than those over the northwest of Norway, and 0.6 ins. to 0.8 ins. higher than those over the south of Spain. W. winds were still prevalent over northern, and NE. to E. over southern Europe; in the west of the British Islands the wind was S., but within the high pressure system calms and varying airs were reported. The weather had again been very showery on the Mediterranean coasts, and at Christiansund the fall of sleet and rain was very large. Temperature varied from many degrees below the freezing point over central and eastern Europe, to a little above 50° on the southern side of the Mediterranean, and to nearly that value in the extreme west and northwest of the British Islands. The lowest individual values were -8° at Kiöff, -4° at Lemberg, -3° at Kharkov, +6° at Warsaw, 7° at Nicolaieff, 11° at Munich, 16° at Berlin, 19° at Moscow, 20° at Brussels, 21° at Paris, and 22° to 30° over England, and 28° at Biarritz. The highest were 53° at Malta, 50° at San Fernando, 48° at Sangüinaire, Valencia, Belmullet and Stornoway, 47° at Sumburgh Head, and 44° at Scilly and Christiansund.

Little change occurred later, except that over the southeast of England the thermometer fell still lower, and the high pressure system continued to move southwards 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 21 per annum, payable in advance.

STATI  
Haparand  
Hernösand  
Stockholm  
Wisby  
Bodö  
Christiania  
Skudesna  
Christiania  
(Fjord)  
Skagen (T)  
Fanö  
Sumburgh  
Stornoway  
Wick  
Nairn  
Aberdeen  
Leith  
Shields  
Spurn Head  
York  
Loughboro  
Ardrossan  
Malin Head  
Mullaghmore  
Belmullet  
Donaghadee  
Barrow-in-  
Liverpool  
Holyhead  
Parsonstown  
Valencia  
Roche's  
Pembroke  
Scilly  
Prawle  
Jersey  
Hurst  
Dungeness  
London  
Oxford  
Cambridge  
Yarmouth  
Cuxhaven  
Berlin  
Wiesbaden  
Munich  
The Hague  
Brussels  
Cape Gr  
Paris  
Brest  
Lorient  
Rocheport  
Belfort  
Lyons  
Nice  
Perpignan  
Biarritz  
Corunna  
Lisbon

# DAILY WEATHER REPORT.

for Monday 7<sup>th</sup> JANUARY 1888.  
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 82° 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 ..														*				
Hernösand ...														*				
Stockholm ...														*				
Wisby ...														*				
Bodö ...														*				
Christiansund...																		
Skudesnaes ...																		
Christiania Fjord (Fjorder)																		
Skagen (The Scaw)																		
Fanö ...														*				
Sumburgh Head	29.80	42	W	4	c	29.88	+ .20	38	37	- 5	Z	0	c	4	43	35	0.07	
Stornoway ..	29.86	37	W	4	b	29.81	+ .02	41	40	+ 1	SN	4	o	4	43	32	0.10	
Wick ...	29.89	37	W	1	bc	29.89	+ .06	37	36	- 1	SN	2	bc	1	42	33	-	
Nairn ...	29.93	39	Z	0	c	29.90	+ .04	27	26	- 14	Z	0	c	1	42	26	-	
Aberdeen...	29.98	35	SSW	1	bc	29.96	+ .03	28	27	- 9	W	2	cm	3	43	28	-	
Leith ...	29.97	40	W	1	b	29.93	- .04	32	32	- 12	Z	0	f	*	48	26	-	
Shields ...	29.97	41	WNW	1	c	29.94	- .07	38	37	+ 5	Z	0	cm	2	42	31	-	
Spurn Head ...																		
York ...	29.98	38	S	1	f	29.94	- .12	31	31	+ 7	Z	0	f	*	31	23	-	
Loughborough	30.03	25	SW	1	o	30.00	- .14	30	30	+ 9	ESE	1	om	*	30	21	-	
Ardrossan ...	29.98	39	Z	0	o	29.91	- .07	31	31	- 13	NE	L	bc	1	44	29	-	
Malin Head ...	29.97	38	S	3	bm	29.81	- .18	38	38	- 5	S	4	om	3	45	35	-	
Mullaghmore ...	29.99	37	W	1	b	29.82	- .19	41	39	+ 2	SE	4	og	3	48	32	0.07	
Belmullet ...	29.98	40	SE	3	b	29.77	- .26	38	38	0	E	2	bc	*	49	35	-	
Donaghadee ...	30.00	37	WSW	2	o	29.89	- .14	44	42	+ 5	SSW	3	c	1	44	35	-	
Barrow-in-Furness	30.02	36	S	2	f	29.95	- .13	37	37	+ 5	E	3	f	*	38	31	-	
Liverpool (Bidston)	30.01	32	SE	1	o	29.98	- .11	34	32	+ 10	SSE	2	o	2	37	24	-	
Holyhead ...	30.01	43	S	2	om	29.94	- .12	43	41	+ 1	SSW	3	og	2	44	41	0.01	
Parsonstown ...	29.99	38	Z	0	f	29.86	- .19	37	36	- 1	Z	0	r	*	42	34	0.04	
Valencia ...	29.96	44	NNE	1	rm	29.79	- .27	48	46	+ 2	S	4	r	4	49	42	1.10	
Roche's Point...	29.98	45	S	1	odf	29.86	- .18	48	45	+ 3	SN	4	c	4	48	43	-	
Pembroke ...	30.01	43	NE	2	c	29.94	- .15	45	44	+ 7	S	3	cp	2	46	37	0.01	
Scilly ...	29.99	46	SSE	1	c	29.95	- .10	49	45	+ 4	SSW	5	o	4	51	44	0.01	
Prawle Point ...	30.03	40	ENE	1	c	30.01	- .11	44	42	+ 7	SSW	1	c	2	45	34	-	
Jersey ...	30.07	36	SE	2	bm	30.07	- .07	33	33	- 2	SSE	2	bm	2	47	30	-	
Hurst Castle ...	30.05	35	W	1	m	30.04	- .11	32	32	+ 6	NNE	1	m	1	40	25	-	
Dungeness ...	30.02	38	WSW	3	m	30.02	- .09	27	26	+ 4	Z	0	m	1	41	22	-	
London ...	30.05	27	SW	1	of	30.04	- .08	24	24	+ 2	N	1	f	*	30	22	-	
Oxford ...	30.04	24	SW	1	o	30.03	- .11	20	20	- 3	Z	0	f	*	27	20	-	
Cambridge ...	30.05	25	Z	0	a	30.03	- .11	26	26	+ 11	Z	0	c	*	27	14	-	
Yarmouth ...	30.04	30	WSW	1	bc	30.01	- .10	28	28	- 2	W	1	f	2	32	21	-	
Cuxhaven ...	30.11	27	SSE	2	m	30.02	- .20	22	21	+ 1	S	2	f	*	30	20	-	
Berlin ...	30.17	25	SSE	2	b	30.16	- .15	21	19	- 1	SSW	1	b	*	28	18	-	
Wiesbaden ...	*	*	*	*	*	30.16	- .11	21	21	- 1	NE	1	o	*	27	18	-	
Munich ...	30.17	26	Z	0	b	30.16	- .07	12	12	+ 1	E	2	b	*	34	10	-	
The Helder ...	30.04	25	S	1	b	29.97	- .19	33	32	+ 8	S	1	f	1	34	25	-	
Brussels ...	*	*	*	*	*	30.10	- .09	27	26	+ 1	Z	0	f	*	33	27	-	
Cape Gris Nez...	?	33	SW	3	c	?	?	36	35	+ 7	S	1	o	1	37	28	-	
Paris ...	30.12	27	NNE	1	b	30.10	- .09	19	19	+ 1	NNE	1	b	*	37	19	-	
Brest ...	30.06	42	SSE	1	o	30.07	- .19	41	39	+ 11	SSE	3	b	2	50	34	-	
Lorient ...	30.05	42	ENE	4	b	30.05	- .07	36	33	+ 3	S	1	b	2	43	32	-	
Rochefort ...	30.05	40	ENE	5	o	30.09	- .02	39	38	+ 5	E	3	o	2	45	28	-	
Belfort ...	30.12	26	ENE	1	b	30.13	- .06	24	23	+ 7	N	1	o	*	36	15	-	
Lyons ...	30.19	28	ESE	1	o	30.17	- .09	29	27	+ 9	N	1	o	*	31	20	-	
Nice ...	30.21	43	ENE	3	o	30.23	- .00	42	36	+ 7	E	4	e	3	45	39	-	
Perpignan ...	29.99	43	Z	0	r	30.01		45	45		S	1	r	*	50	38	2.95	
Biarritz ...	29.91	42	E	7	o	29.94	+ .01	41	40	+ 9	WSW	4	o	2	45	32	0.08	
Corunna ...	*	*	*	*	*													
Lisbon ...																		

# WEATHER CHARTS

for 8 a.m. on Monday, 7<sup>th</sup> January, 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.

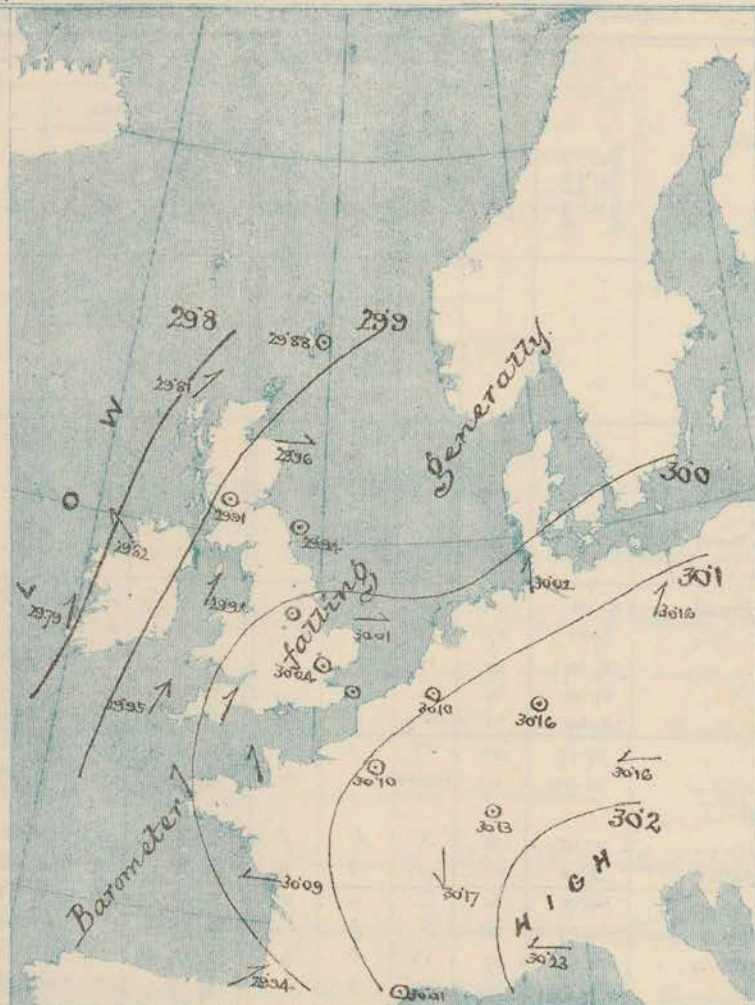
**Sea Disturbance** — where considerable is shown thus.

— Rough — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS	MEAN READINGS
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.982
Yarmouth	29.931



## 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.

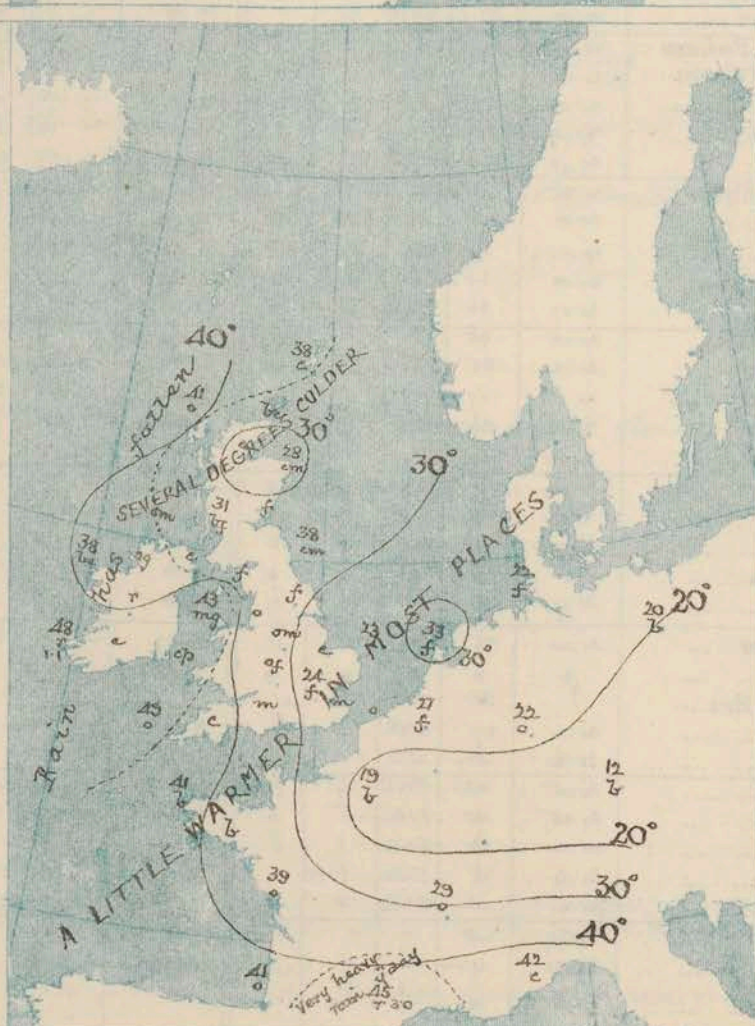
**Rainfall** — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.  
for the month of January.

STATIONS.	TEMPERATURE.				RAINFALL. (Inches).
	Daily Max	Daily Min	at 5 a.m.		
			Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.6	35.5	2.08
Ardrossan	44.4	33.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.8	39.0	37.9	3.09
Valencia	43.8	40.5	44.3	43.3	6.79
Roche's Point	47.8	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.33
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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	<p>Highest, 30.23 inches, at Sea, 30.1 inches and upwards over Germany and the east of France.</p> <p>Lowest, 29.8 inches and less, off the west of Ireland. The Scandinavian &amp; Danish reports have not arrived.</p> <p>Gradients slight. Barometer falling at all but the southern French stations, most in Ireland.</p>
TEMPERATURE	<p>Highest, 49° at Lillo, 48° at Valencia and Roches Point, 45° at Pembroke and Perpignan &amp; 44° at Braue.</p> <p>Lowest, 12° at Mullagh, 19° at Paris, 20° at Oxford and Berlin, 22° at Zurich, &amp; Wiesbaden, 23° at Yarmouth, 24° in London &amp; at Belfast.</p> <p>Sharp frost occurred last night over Great Britain, the Netherlands, Germany, and central France.</p>
WIND	<p>Light from E. or S.E. in the west of France, moderate from the S.W. on the western coasts of our Islands.</p> <p>Light from S.W. in the north and east of Scotland; calm or light and variable over the eastern and central parts of England.</p>
WEATHER	<p>Fine in Germany, and fair in the north and east of Scotland.</p> <p>Cloudy elsewhere, with fog over England, and rain in the south of Ireland.</p> <p>Since yesterday morning, 1.1 inch of rain has fallen at Valencia, and 3.0 inches at Perpignan.</p>
SEA	<p>Moderate on our southwestern and extreme northern coasts — but slight or smooth elsewhere.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The present tendency is for some increase in the steepness of the gradients over our western coasts, and freshening S.W. winds are therefore probable in those localities. Milder weather appears to be spreading in from the westward.

## FORECASTS

For the 24 hours ending at NOON on 8 January 1889.

### DISTRICTS.

### FORECASTS.

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

S.W. winds, light to S. fresh; fair and cold at first, unsettled and milder later.

Variable airs, finally S.W.; cold at first, with local fogs, afterwards becoming milder.

### DISTRICTS.

### FORECASTS.


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


S.E. winds, freshening; cloudy, some rain.

S.W. winds, freshening; cloudy, some rain.

### WARNINGS

NONE ISSUED.

Note.—The **South Cone**, point downwards (  ) means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.) Should it appear likely that a gale beginning from between W. and N.W. is likely to rear 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 rear 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 ...	29.93	43	42	SW 2	0	4	Holyhead ...	30.03	43	43	S 2	Am	3
Sumburgh Head ...	29.86	41	39	N 4	0	4	Valencia ...	30.08	44	40	SE 3	bc	3
Stornoway ...	29.99	43	40	SW 3	0	3	Scilly ...	30.04	42	36	N 2	m	1
Aberdeen ...	29.97	45	44	SE 2	6	*	Jersey ...	30.05	42	38	E 5	0	2
Shields ...							Dungeness ...						
Ardrossan ...							London ...						
Malin Head ...							Yarmouth ...						
Mullaghmore ...							Rochefort ...						
Belmullet ...													

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

The reports for yesterday morning showed that the large high pressure which has recently been lying over Russia, Germany, and the southern half of the British Islands, was moving in a southerly direction, and decreasing considerably in intensity. Readings, however, varied from 30.7 inches and more over Southern Russia to 29.9 inches and less over Spain, to 29.5 inches and less over the western parts of Lapland, and to 29.4 inches on the shores of the White Sea. W<sup>ly</sup> winds were consequently prevalent over Northern Europe, while E<sup>ly</sup> winds were felt in the South, but both currents had decreased in force while over Central Europe, and the greater part of the British Islands variable air and calms were reported. Temperature had risen somewhat over Germany and the northern half of Russia, but was still very low. In the British Islands and Western Europe it had decreased as a whole, but the changes had been irregular.

The lowest individual values were -4° at Nicolaieff, -1° at Gracow, +2° at Odessa, 7° at Kermantadt, 11° at Kiev, Kharthor, Lemberg, and Munich, 15° at Cambridge and Nancy, 18° at Paris, 21° at Kermisand, Berlin and Loughborough, 22° in London; the highest were 54° at Algiers, 55° at Brindisi (the Malta and Palermo reports are wanting), 46° at Valencia, 45° at Scilly, and Roches Point, 43° at Sumburgh Head and 42° at Christiansund.

During the day the barometer again fell generally, and temperature became very unsteady over the British Islands and France.

## SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 30<sup>th</sup> DEC. 1888 TO THE 5<sup>th</sup> JAN. 1889.

In the course of this week anticyclonic conditions have prevailed over England, the North of France and Germany, and, while gradients for E<sup>ly</sup> winds were found over France and Spain (caused by a depression over the Mediterranean) those over North Western Europe were favourable for W<sup>ly</sup> and N<sup>ly</sup> winds, caused by disturbances which were moving northwards from the Atlantic to Lapland. Pressure has been very high (30.7 inches and more) at the English stations. Temperature has been low except in the northern and western parts of Scotland and Ireland, and, while thick fog has prevailed daily in many parts of England, and frequently in the southeast of Ireland, the weather in the extreme west and north of our Islands has been fair and mild. In some parts of Norway heavy rain has accompanied the winds from the South Westward, while in the south of France there have been heavy falls, accompanying the strong N<sup>ly</sup> winds, caused by the Mediterranean disturbance.

At the close of the week the N<sup>ly</sup> disturbances were passing off, but the anticyclone over the Continent and England showed signs of giving way.

## 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.

STANDARD  
Haparanda  
Hernösand  
Stockholm  
Wisby  
Bodo  
Christiania  
Skudenes  
Christiania  
(Farø)  
Skagen  
Faro  
Sumburgh  
Stornoway  
Wick  
Nairn  
Aberdeen  
Leith  
Shields  
Spurn Head  
York  
Loughborough  
Ardrossan  
Malin Head  
Mullaghmore  
Belmullet  
Donaghadee  
Barrow  
Liverpool  
Holyhead  
Parsons  
Valencia  
Roches Point  
Pembroke  
Scilly  
Prawle  
Jersey  
Hurst Castle  
Dungeness  
London  
Oxford  
Cambridge  
Yarmouth  
Cuxhaven  
Berlin  
Wiesbaden  
Munich  
The Hague  
Brussels  
Cape Gravelines  
Paris  
Brest  
Lorient  
Rochefort  
Belfort  
Lyons  
Perpignan  
Biarritz  
Corunna  
Lisbon

# DAILY WEATHER REPORT.

for Tuesday, 8<sup>th</sup> January 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.		
			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.
<b>SCANDINAVIA.</b>																
Haparanda ...	30.10	26	Y	0	bc	30.11	+ .38	8	8	- .3	20	0	0	25	-11	
Hernösand ...	30.19	15	20	0	bc	30.18	+ .23	8	8	- .22	20	0	0	30	?	
Stockholm ...	29.99	33	20	0	bc	30.08	+ .08	30	28	- .2	20	0	0	34	?	
Wisby ...	30.06	32	SSW	4	bc	30.12	+ .05	30	29	- .3	WSW	4	0	34	28	
Bodö ...	29.56	21	ENE	4	bc	30.03	+ .22	30	29	0	ENE	2	0	30	18	
Christiansund ...	29.98	37	W	1	bc	29.92	+ .06	36	33	- .3	ESE	3	0	39	32	
Skudesnaes ...	29.99	39	NNE	1	bc	30.01	+ .04	39	34	+ .2	SE	6	0	39	37	
Christiania Fjord (Færd)	29.98	34	N	3	bc	30.06	+ .07	32	30	- .3	NW	3	0	36	27	
Skagen (The Sea)	29.99	31	S	1	bc	30.07	+ .12	32	31	- .5	20	0	0	37	30	
Faro ...	30.03	30	20	0	bc	30.06	+ .10	33	33	+ .3	SSW	3	0	34	28	
<b>BRITISH ISLANDS.</b>																
Burnburgh Head	29.84	40	SSE	1	bc	29.64	- .24	44	42	+ .6	SSE	4	0	44	38	
Stornoway ...	29.67	43	S	6	bc	29.30	- .37	45	45	+ .4	S	8	0	45	34	0.13
Wick ...	29.50	40	S	5	bc	29.52	- .37	43	41	+ .6	S	7	0	43	34	0.02
Nairn ...	29.77	39	20	0	bc	29.48	- .29	44	41	+ .7	SSW	4	0	45	27	0.01
Aberdeen ...	29.87	39	S	1	cm	29.69	- .18	41	39	+ .3	SSE	5	0	42	28	
Loth ...	29.97	38	W	1	bc	29.65	- .32	42	39	+ .10	S	2	0	42	28	0.05
Shields ...	29.92	39	SSW	2	m	29.78	- .14	36	35	- .2	S	1	0	41	31	
Spurn Head ...	29.98	35	SSW	3	bc	29.87	- .11	36	35	+ .3	S	4	0	37	32	
York ...	29.94	32	ESE	1	f	29.84	- .10	33	33	+ .2	ESE	2	0	34	29	
Loughborough	30.01	31	SE	1	bc	29.89	- .12	33	32	+ .3	SE	1	0	36	28	
Ardrossan ...	29.81	40	NE	1	bc	29.57	- .24	45	44	+ .14	SE	5	0	45	30	0.05
Malin Head ...	29.66	42	S	4	om	29.32	- .34	47	45	+ .9	S	6	0	47	35	0.11
Mullaghmore ...	29.63	47	SSE	6	om	29.32	- .31	49	47	+ .8	SSE	7	0	49	39	0.19
Belmullet ...	29.54	45	SE	6	ru	29.24	- .30	48	47	+ .10	S	4	0	48	37	0.46
Donaghadee ...	29.79	45	SSW	2	bc	29.53	- .26	46	45	+ .2	SSW	6	0	46	42	0.04
Barrow-in-Furness	29.90	39	SE	4	bc	29.70	- .20	39	38	+ .2	SE	8	0	40	36	0.04
Liverpool (Biston)	29.93	37	SE	3	bc	29.74	- .19	37	36	+ .3	SE	4	0	39	33	0.03
Holyhead ...	29.86	44	S	4	ru	29.62	- .24	45	43	+ .2	SSE	6	0	46	42	0.01
Parsonstown ...	29.69	44	SSE	2	bc	29.40	- .29	48	45	+ .11	SE	3	0	49	37	0.03
Valencia ...	29.54	49	SE	8	ru	29.18	- .36	50	49	+ .2	SE	8	0	50	47	1.08
Roche's Point ...	29.72	50	SSW	6	bc	29.81	- .09	50	49	+ .2	S	8	0	50	48	0.55
Pembroke ...	29.87	48	S	5	bc	29.60	- .27	48	48	+ .3	SSE	4	0	49	45	
Scilly ...	29.87	50	S	6	bc	29.52	- .35	52	50	+ .3	S	0	0	52	46	
Prawle Point ...	30.00	46	SSW	4	bc	29.78	- .22	47	46	+ .3	SSE	6	0	48	42	
Jersey ...	30.06	43	SE	2	bc	29.87	- .19	43	42	+ .10	SE	5	0	48	31	
Hurst Castle ...	30.08	45	WSW	2	bc	29.88	- .20	45	43	+ .13	S	5	0	46	32	0.01
Dungeness ...	30.03	43	W	3	bc	29.97	- .06	42	41	+ .15	S	4	0	45	25	
London ...	30.03	36	S	1	bc	29.93	- .10	37	36	+ .13	SE	2	0	39	24	
Oxford ...	30.03	33	SSE	1	bc	29.88	- .15	37	36	+ .17	SE	3	0	37	20	
Cambridge ...	30.05	28	20	0	bc	29.95	- .10	35	33	+ .9	S	1	0	35	24	
Yarmouth ...	30.02	31	W	1	f	29.99	- .03	38	37	+ .15	SSW	2	0	38	21	0.02
Cuxhaven ...	30.02	33	SSW	2	f	30.09	+ .07	28	27	+ .6	S	1	0	32	?	
Berlin ...	30.18	28	SSE	3	bc	30.18	+ .02	24	24	+ .4	S	1	0	30	?	
Wiesbaden ...	*	*	*	*	*	30.18	+ .02	31	30	+ .9	20	0	0	?	?	
Munich ...	30.22	21	20	0	m	30.18	+ .04	28	28	+ .16	SE	2	0	30	12	0.04
<b>FRANCE &amp; NETHERLANDS.</b>																
The Helder ...	30.06	35	WSW	1	bc	30.05	+ .08	33	33	0	S	1	0	36	32	
Brussels ...	*	*	*	*	*	30.11	+ .01	30	30	+ .3	SSE	1	0	36	9	
Cape Gris Nez ...	?	37	S	4	bc	?	?	34	32	- .2	S	4	0	41	34	
Paris ...	30.14	30	N	1	bc	30.07	- .07	31	31	+ .12	S	1	0	40	22	
Brest ...	30.06	46	SSE	5	bc	29.78	- .28	50	47	+ .9	S	9	0	52	37	
Lorient ...	30.06	40	SE	1	bc	29.80	- .26	49	48	+ .13	SSE	5	0	?	34	
Rochefort ...	30.12	43	SE	1	bc	30.00	- .12	40	40	+ .1	SSE	8	0	?	30	
Belfort ...	30.16	33	N	1	bc	30.12	- .04	35	35	+ .11	N	1	0	36	23	0.12
Lyons ...	30.21	33	N	1	bc	30.18	+ .01	38	32	+ .4	SSW	1	0	37	?	
Perpignan ...	30.22	44	E	4	bc	30.17	- .05	39	37	- .3	S	4	0	50	37	
Biarritz ...	30.17	45	20	0	bc	30.17	+ .10	36	36	- .9	SW	1	0	49	36	0.05
Coranna ...	30.08	45	ENE	4	bc	29.96	+ .02	49	43	+ .8	S	4	0	52	34	
<b>PENINSULA.</b>																
Lisbon ...	30.13	52	WSW	1	bc	29.98	- .15	53	53	+ .4	S	7	0	55	46	0.12

For Explanation of Columns, see p. 2.

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

# WEATHER CHARTS

for 8 a.m. on

Tuesday, 8<sup>th</sup> January,

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.

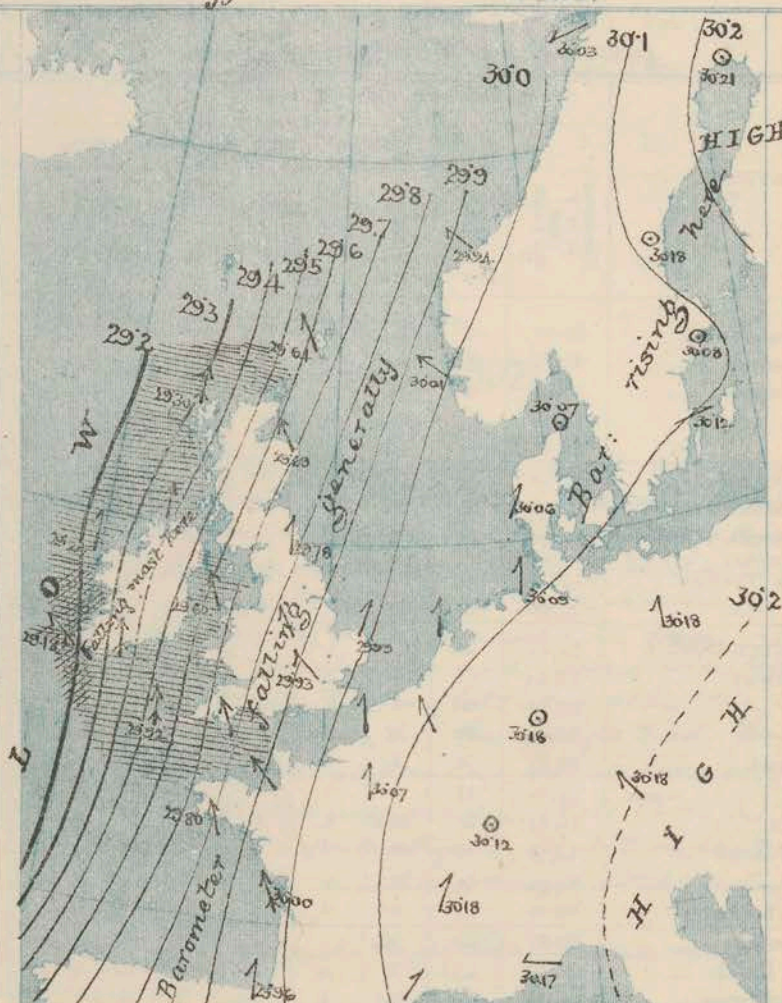
■ = Rough ■ = High.

## MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of January

During the 15 Years 1871 — 1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

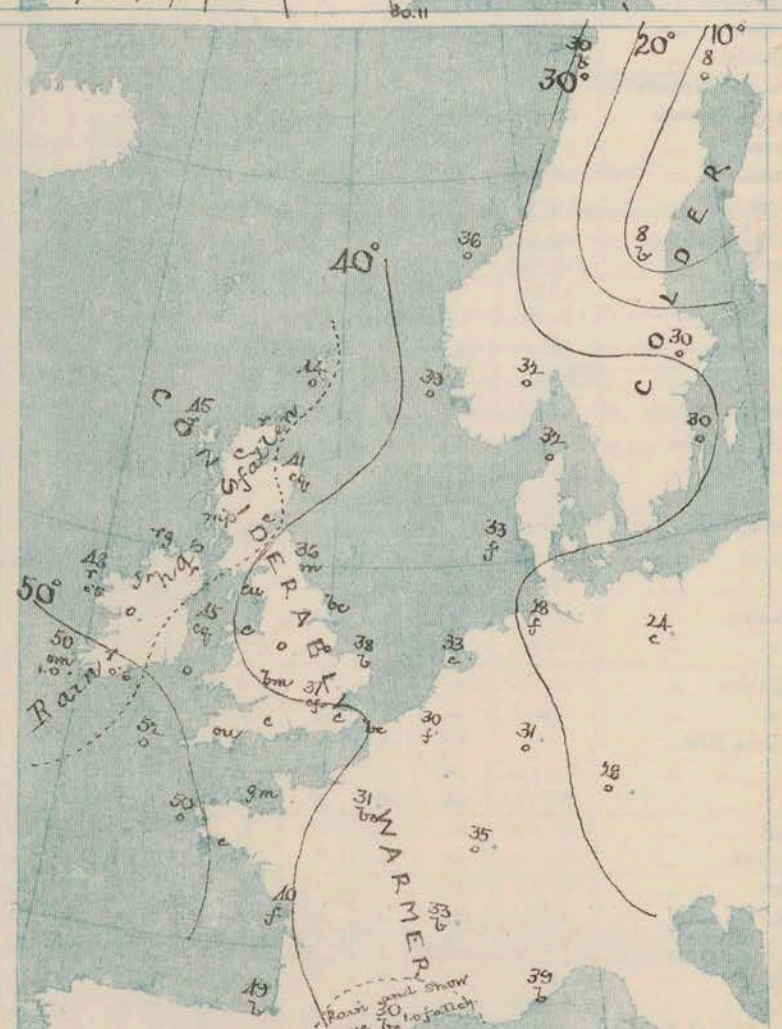
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January.

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	35.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	2.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON.	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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, 30.21 ins. at Haparanda; 30.1 ins. and upwards over the whole of Northern and Central Europe.  
 Lowest, 29.2 ins. and less, in a depression lying off the southwest of Ireland.  
 Gradients rather steep over our islands, especially in the west.  
 Barometer falling at all but the Scandinavian stations, — quickly on our western and northern coasts.

## TEMPERATURE

Highest, 53° at Lisbon, 52° at Scilly, 50° at Valencia, Roches Point and Krist, and 49° at Mullaghmore, Lorient and Biscaya.  
 Lowest, 8° at Haparanda and Skutumpah, 24° at Berlin, 28° at Copenhaven and Munich, and 30° at Stockholm, Malmö, and Gussak.  
 Frost occurred over England last night; in London the minimum on the grass was as low as 24°.

## WIND

Strong to a gale from the S<sup>W</sup> or S<sup>E</sup> on our western and extreme northern coasts.  
 Light or moderate from the same quarters in most other parts of Western Europe, but calm in Sweden.

## WEATHER

Dull and rainy in the west and extreme north of our islands.  
 Fair in most other localities, but foggy over the Netherlands and Denmark, as well as in London.  
 Since yesterday morning 1.1 ins. of rain has fallen at Valencia, 1.0 in. at Lerpapun, and 0.6 in. at Roches Point.

## SEA

High at Valencia, and rough on our western and extreme northern coasts generally, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

In the course of the past night a large depression has apparently travelled northwards along our extreme western coasts.  
 This morning another disturbance is approaching Ireland, and S<sup>W</sup> gales are therefore likely to continue in the west and north, with rain in many places. No serious increase of wind is anticipated over the eastern parts of the Kingdom at present.

## FORECASTS

for the 24 hours ending at NOON on 9<sup>th</sup> JANUARY

1889.

### DISTRICTS.

### FORECASTS.

0	SCOTLAND NORTH	S <sup>W</sup> strong winds or gales; squally, unsettled, some rain.
1	SCOTLAND EAST	
2	ENGLAND N.E.	S <sup>W</sup> winds, freshening considerably; fair to cloudy and some rain.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

### DISTRICTS.

### FORECASTS.

6	SCOTLAND WEST	S <sup>E</sup> to S <sup>W</sup> strong winds and gales; squally, some rain.
7	ENGLAND N.W.	
8	ENGLAND S.W.	Same as N <sup>o</sup> 0 and 1.
9	IRELAND NORTH	
10	IRELAND SOUTH	

### WARNINGS

The SOUTH CONE was hoisted last evening in districts 0.1 and 6 to 10.

Note.—The **South Cone**, point downwards (V) 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 ...	29.96	36	35	rrc 1	bc	3	Holyhead ...	29.89	46	46	S 3	c	2
Sumburgh Head ...	29.88	41	38	z 0	0	3	Valencia ...	29.67	49	47	S 7	rmg	6
Stornoway ...	29.86	43	41	S 6	0	5	Scilly ...	29.92	49	47	SSW 5	ep	5
Aberdeen ...	29.90	37	34	SSW 1	bcm	3	Jersey ...	30.07	46	41	SSW 2	b	2
Shields ...	29.92	41	39	z 0	m	2	Dungeness ...	30.03	40	37	rrw 1	b	1
Ardrossan ...	29.85	41	41	rrc 2	r	1	London ...	30.03	37	35	z 0	f	*
Malin Head ...	29.71	44	41	S 4	0	3	Yarmouth ...	30.01	28	27	w 1	f	2
Mullaghmore ...	29.70	45	43	SSW 4	ogm	3	Rochefort ...	30.12	48	45	SE 1	0	2
Belmullet ...	29.64	44	44	SSW 3	om	*							

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

The reports for yesterday morning showed that the high pressure area lying over Southern Russia and the Baltic, was still decreasing in intensity, and that while a shallow depression had advanced over Central Spain from the SW<sup>nd</sup>, there were indications that larger disturbances were approaching the west coast of the British Isles from the Atlantic. Thus, while very cold fine weather still held over Central and Eastern Europe, the weather over Spain was falling into a very unsettled condition, and in the western part of the British Islands, S<sup>th</sup> winds were general and were increasing in force, with a tendency to spread eastwards. Temperature was low <sup>in most places</sup> than on Sunday; the lowest morning values were 4° at Cracow, 10° at Kharkov, Kiev, and Nicolaieff, 13° at Kumanstadt and Warsaw, 14° at New Fahrwasser, 15° at Archangel, 19° at Paris, 20° at Oxford, 21° at Wiesbaden, 23° at Moscow and Riga, 24° in London, and 27° at Brussels. The highest were 53° at Malta, 58° at Palma, 51° at Cagliari and Languirane, 50° at Brindisi, 49° at Scilly, and 48° at Valencia.

Later on the S<sup>th</sup> wind continued to increase in force and to spread more and more over the British Isles, with a falling barometer, rising thermometer and much rain at the Irish stations and Perpignan.

### 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.

STATION
Haparanda
Hernösand
Stockholm
Wisby ...
Bodö ...
Christiania
Skudesnaes
Christiania
(Færder)
Skagen (The)
Fanø ...
Sumburgh
Stornoway
Wick ...
Nairn ...
Aberdeen...
Leith ...
Shields ...
Spurn Head
York ...
Loughboro
Ardrossan
Malin Head
Mullaghmore
Belmullet
Donaghadee
Barrow-in-
Liverpool
Holyhead
Parsonstown
Valencia ...
Roche's Pt
Pembroke
Scilly ...
Prawle Pt
Jersey ...
Hurst Castle
Dungeness
London ...
Oxford ...
Cambridge
Yarmouth
Cuxhaven
Berlin ...
Wiesbaden
Munich ...
The Helde
Brussels
Cape Gris
Paris ...
Brest ...
Lorient ...
Rochefort
Belfort
Lyons ...
Nice ...
Perpignan
Biarritz
Corunna
Lisbon

# DAILY WEATHER REPORT.

for Wednesday 9th January 1889.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										LAST 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.)			Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.				
SCANDINAVIA.																			
Haparanda ..	30.39	11	SE	2	0	30.09	-12	9	9	+1	N	2	0	*	16	-6	—		
Hernösand ...	30.30	16	SE	0	0	30.22	+14	23	23	+15	X	0	0	*	23	3	—		
Stockholm ...	30.18	31	ENE	2	0	30.19	+11	31	30	+1	SE	0	0	*	34	28	—		
Wisby ...	30.21	32	SE	4	0	30.19	+07	32	32	+2	E	2	0	*	37	28	—		
Bodö ...	30.04	30	ENE	2	6	29.97	-06	33	30	+3	ENE	4	6	0	3	27	—		
Christiansund...	29.83	37	ENE	4	6	29.78	-19	38	35	+2	ENE	4	6	2	3	24	—		
Skudesnaes ...	29.97	38	SE	8	0	29.84	-17	37	24	-2	SE	8	0	5	39	36	—		
Christiania Fjord (Færder)	30.12	35	E	4	0	30.08	+02	35	31	+3	ENE	4	0	1	36	34	—		
Skagen (The Scaw)	30.10	34	SW	1	0	30.04	-08	34	32	+2	SE	2	0	1	36	32	—		
Fanö ...	30.07	32	ENE	4	0	29.96	-10	31	30	-2	ENE	4	6	*	34	28	—		
BRITISH ISLANDS.																			
Sumburgh Head	29.45	42	ENE	6	0	29.28	-36	44	44	0	ENE	6	5	6	45	42	0.11		
Stornoway ...	29.24	45	SW	8	2	29.12	-18	45	45	0	SW	8	0	4	47	35	0.72		
Wick ...	29.42	43	S	6	0	29.18	-34	43	41	0	S	6	0	7	45	39	0.10		
Nairn ...	29.37	45	SW	4	C	29.20	-28	43	41	-1	SE	0	C	1	45	43	—		
Aberdeen...	29.35	42	ENE	7	C	29.31	-38	43	42	+2	ENE	5	0.29	6	43	41	0.29		
Leith ...	29.51	43	SW	4	C	29.28	-37	45	43	+3	S	2	C	*	45	40	—		
Shields ...	29.66	40	S	4	0	29.37	-41	42	41	+6	ENE	2	0	2	42	34	0.04		
Spurn Head ...	29.74	38	ENE	6	0	29.48	-39	40	39	+4	ENE	6	0	4	40	35	0.03		
York ...	29.70	38	ENE	8	0	29.44	-43	40	40	+7	ENE	8	0	*	40	32	0.08		
Loughborough	29.72	38	ENE	2	0	29.43	-46	43	42	+10	ENE	3	0	*	43	33	0.01		
Ardrossan ...	29.44	45	ENE	5	0	29.22	-35	44	44	-1	SW	2	0.6	3	45	43	0.28		
Malin Head ...	29.29	48	S	4	6C	29.17	-15	36	36	-11	S	3	6m	3	48	36	0.06		
Mullaghmore ...	29.30	49	S	5	C	29.21	-11	37	35	-12	SW	2	C	2	51	35	0.07		
Belmullet ...	29.30	42	NNE	6	2	29.20	-04	40	39	-8	W	4	6C	*	49	37	0.83		
Donaghadee ...	29.42	48	S	6	2	29.22	-31	43	43	-3	SW	3	2	1	48	42	0.58		
GERMANY.																			
Barrow-in-Furness	29.57	42	SE	6	0	29.31	-39	44	42	+5	ENE	5	0	*	44	39	0.12		
Liverpool (Bidston)	29.57	42	SE	5	0	29.25	-49	44	42	+7	SE	5	0	4	44	37	—		
Holyhead ...	29.48	48	ENE	7	2C	29.21	-41	45	44	0	SE	0	2m	0	49	45	0.06		
Parsonstown ...	29.34	45	SE	0	C	29.29	-11	32	32	-16	SE	0	6	*	32	32	0.17		
Valencia ...	29.25	48	ENE	2	C	29.39	+21	44	42	-6	W	3	C	4	51	41	0.63		
Roche's Point...	29.29	30	S	6	6C	29.38	+07	41	39	-9	W	4	6	4	37	40	0.30		
Pembroke ...	29.42	49	ENE	7	2	29.24	-36	46	45	-2	W	8	C	6	49	45	0.11		
Scilly ...	29.41	50	SW	6	C	29.51	-01	49	47	-2	W	7	C	6	52	46	0.11		
Prawle Point ...	29.58	47	ENE	6	7	29.50	-28	46	44	-1	W	6	0.2	6	49	44	0.10		
Jersey ...	29.73	47	ENE	5	6C	29.65	-22	47	45	+4	W	5	C	4	47	41	0.03		
Hurst Castle ...	29.70	48	ENE	6	C	29.53	-35	48	46	+3	SW	6	C	3	49	42	0.04		
Dungeness ...	29.82	43	S	6	6	29.81	-26	46	45	+4	S	6	2	4	46	40	—		
London ...	29.78	42	SE	2	C	29.54	-39	47	47	+10	S	5	6C	*	47	36	0.03		
Oxford ...	29.70	43	SE	3	0	29.46	-42	46	43	+9	S	5	0.9	*	46	37	0.03		
Cambridge ...	29.84	40	S	1	0	29.52	-43	42	41	+7	S	1	C	*	43	34	—		
Yarmouth ...	29.85	40	ENE	5	C	29.63	-36	42	41	+4	ENE	4	C	4	42	36	—		
Cuxhaven ...	30.07	33	ENE	2	f	29.90	-14	30	30	+2	SE	3	m	*	3	28	—		
Berlin ...	30.17	33	SE	0	f	30.06	-12	30	29	+6	SE	1	0	*	3	3	—		
Wiesbaden ...	*	*	*	*	*	29.96	-22	35	34	+4	SE	2	0	*	36	23	0.01		
Munich ...	30.10	30	SE	1	m	30.00	-18	23	23	-5	SE	2	m	*	36	23	0.01		
FRANCE & NETHERLANDS.																			
The Helder ...	29.98	33	SE	1	6	29.78	-27	31	31	-2	SE	4	f	2	37	3	0.16		
Brussels ...	*	*	*	*	*	29.80	-31	36	35	+6	S	1	0	*	37	3	—		
Cape Gris Nez...	?	40	S	5	6	?	?	41	39	+7	S	7	0	4	43	34	0.04		
Paris ...	29.93	41	SE	3	6	29.82	-25	36	35	+5	S	3	0	+	?	?	—		
Brest ...	29.63	50	S	9	0	29.73	-?	53	46	0	W	7	C	5	50	39	0.12		
Lorient ...	29.70	51	SW	7	0	29.71	-09	48	45	-1	W	5	6	5	54	48	0.16		
Rochefort ...	29.87	46	S	7	6C	29.86	-14	48	44	+5	S	4	2	2	50	?	0.06		
Belfort ...	30.04	31	N	1	6	29.94	-18	31	31	-4	W	1	6C	*	43	25	—		
Lyons ...	30.06	41	S	1	6	29.96	-22	41	39	+8	S	1	6C	*	50	?	—		
Nice ...	30.12	45	E	?	6	30.02	-15	42	40	+3	ENE	5	6	1	52	39	0.04		
Perpignan ...	29.93	51	S	3	6C	29.83	-28	39	37	+3	SW	3	0	*	53	34	—		
Biarritz ...	29.88	54	SW	7	m	29.88	-08	49	44	0	SW	7	2	3	53	45	0.04		
PORTUGAL.																			
Corunna ...	*	*	*	*	*	30.13	+15	46	45	-7	W	4	C	5	53	45	—		
Lisbon ...	29.77	51	NW	4	C	30.13	+15	46	45	-7	W	4	C	5	53	45	—		

# WEATHER CHARTS

for 8 a.m. on

Wednesday 9<sup>th</sup> JANUARY

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.

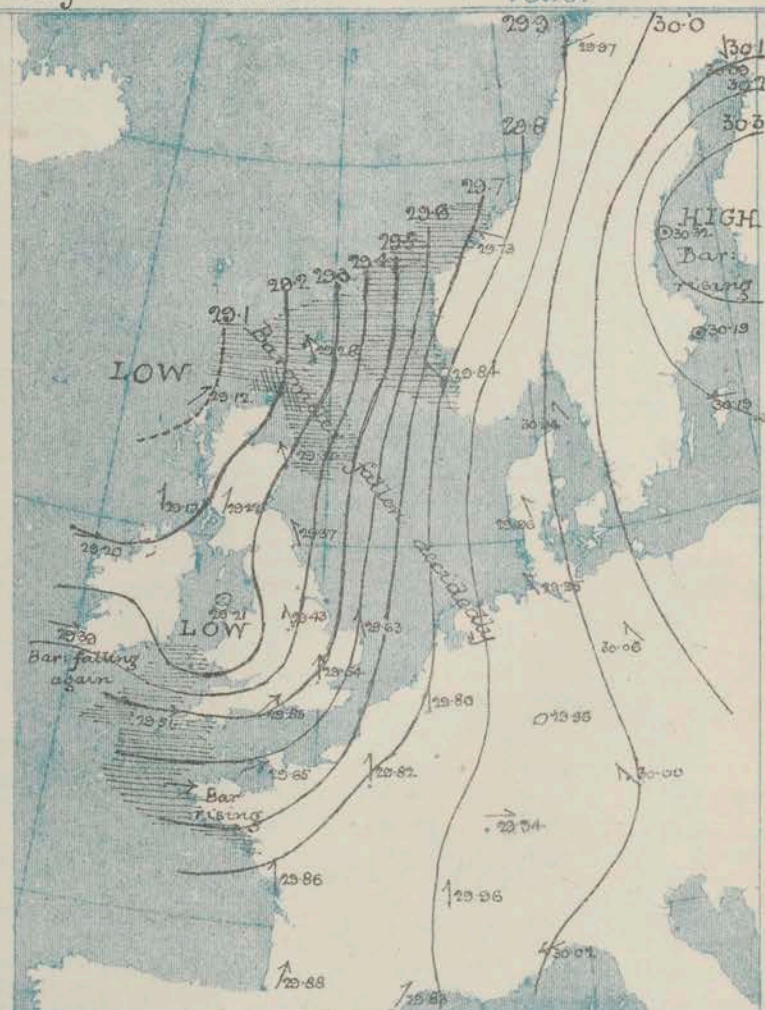
**Sea Disturbance** — where considerable, is shown thus.

— Rough. — High.

## MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of January  
 During the 15 Years 1871–1885.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

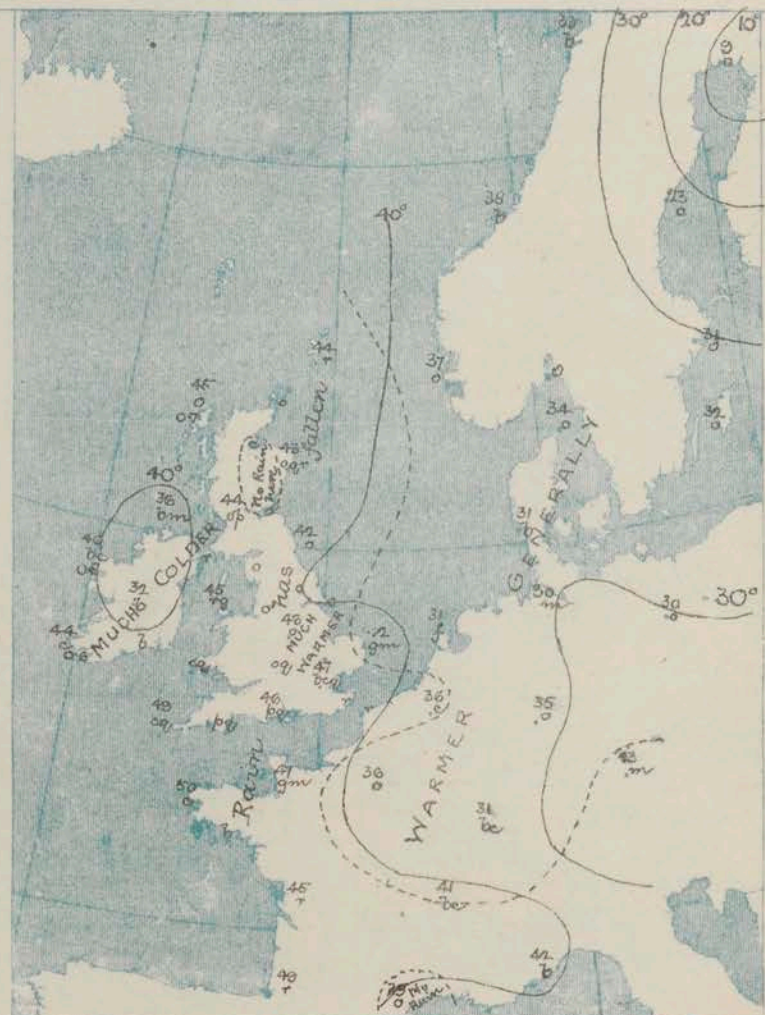
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.88
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.8	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.0	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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 ins. and upwards over the southern part of the Gulf of Bothnia.  
 Lowest 29.1 ins. and less in a depression lying to the northwest of the Hebrides; 29.3 ins. and less in a well marked secondary disturbance lying over Wales and the Irish Sea.  
 Gradients rather steep over the North Sea and the east and south of England, but moderate or slight elsewhere. Barometer falling at nearly all stations northward of the 54° part of Great Britain.

## TEMPERATURE

Highest 56° at Brest, 49° at Sully and Biarritz, 48° at Hurst Castle and Lorient, and 49° in London and at Jersey.  
 Lowest 9° at Haparanda, 28° at Hernösand and Munich, 28° at Christiansund, 30° at Copenhagen and Berlin, and 31° at Stockholm, Tans, Helder and Belfast.

## WIND

Moderate from W. in the west and south of Ireland; strong from the same quarter in the southwest.  
 Strong from E. or S.E. on the north and east coasts of Great Britain; calm in Sweden.  
 A fresh to strong gale from the E. was experienced last night in the north and east of Scotland.

## WEATHER

Fine at many of the Irish stations, and also in the southeast of France.  
 Cloudy or overcast elsewhere with rain in many parts of Great Britain, as well as in the west of France.  
 Since yesterday morning 0.8 ins. of rain has fallen at Belmullet, 0.7 ins. at Stormoway, 0.6 ins. at Donaghadee & Valentia.

## SEA

High at Wick and rough on our northern and southwest coasts generally, but moderate or slight elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A decided rise of the barometer was reported last evening in the west of Ireland, but this has now been succeeded by a fresh fall. Further depressions are probably advancing from the westward, and a continuance of S.W. winds and mild, unsettled weather is therefore likely in most parts of the Kingdom.

## FORECASTS

for the 24 hours ending at NOON on 10<sup>th</sup> January 1889.

### DISTRICTS.

### FORECASTS.

1	SCOTLAND NORTH	S.W. winds, strong; changeable, some rain.
2	SCOTLAND EAST	
3	ENGLAND N.E.	S.E. and S.W. winds, fresh or strong; changeable, some rain.
4	ENGLAND EAST	
5	MIDLAND COUNTIES	S.W. and S.E. winds, fresh or strong; changeable, some rain.
6	ENGLAND SOUTH	

### DISTRICTS.

### FORECASTS.

6	SCOTLAND WEST	S. and S.E. winds, increasing in force; unsettled, some rain.
7	ENGLAND N.W.	
8	ENGLAND S.W.	Wind backing to the E. and increasing in force; fair to unsettled and some rain.
9	IRELAND NORTH	
10	IRELAND SOUTH	

### WARNINGS

The SOUTH CONE was lowered last evening in districts 6 to 10, but the SIGNALS are still flying in districts 1 and 2.

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.		
Skrudsnæs ...	29.99	39	36	SE	6	0	5	Holyhead ...	29.51	48	45	SSE	7	09	6
Sumburgh Head ...	29.52	44	42	SSE	5	0	5	Valencia ...	29.21	49	47	SSE	5	cp	5
Stornoway ...	29.26	47	47	SW	7	r	6	Scilly ...	29.48	51	51	S	9	r	7
Aberdeen ...	29.61	41	39	SSE	6	099	5	Jersey ...	29.76	44	43	SW	5	cg	4
Shields ...	29.69	38	37	S	4	0	2	Dungeness ...	29.87	43	42	SW	5	m	4
Ardrossan ...	29.49	45	44	SE	4	072	3	London ...	29.84	42	41	SE	3	om	4
Malin Head ...	29.29	46	45	S	6	0	5	Yarmouth ...	29.89	40	39	SSE	4	c	4
Mullaghmore ...	29.26	50	48	SE	7	099	5	Rochefort ...							
Belmullet ...	29.20	49	47	S	4	071	*								

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

The reports for yesterday morning showed that pressure ranged from between 30.3 ins. and 30.5 ins. in a large high pressure area lying over southern Russia and Austria, and from 30.2 ins. and more in a ridge which extended northwards to Finland and Lapland, to less than 29.2 ins. off the west of Ireland. There was apparently a large area of low pressure over the Atlantic, and the gradients (for S.W. winds) were steep over the British Islands. Strong S.W. winds and gales prevailed over the western parts of the United Kingdom and the west of Spain, light S.W. or S.W. winds over France, Germany, the North Sea and Baltic, and very light breezes over Russia and southeastern Europe. Heavy rain had fallen on the Atlantic coasts as well as in the northwest of Spain, and at Perpignan, but in other places the weather was fair, with fog in several places. Temperature was still low over Russia and Austria, but not so low as of late; over the whole of western Europe the thermometer was rising. The lowest morning readings were 2° F. at Kharkov, 3° at Archangel, 4° at Hermanstadt, 5° at Odessa and Kiev, 6° at Prague, 8° at Warsaw, Hernösand and Haparanda, 11° at Moscow, 23° at Kuopio, 24° at Berlin, 28° at Munich and Cuxhaven, 31° at Paris, and 32° at the Scaw; the highest were 53° at Lisbon and Madrid, 52° at Scilly, 51° at Brindisi, 50° at Valencia and Rock's Point, 49° at Mullaghmore, 45° at Holyhead, and 44° at Sumburgh Head. In London the reading was 37°, and the thermometer was rising quickly.

Later on the wind shifted (temporarily) to the N.W. in Ireland with a fall of temperature, but the mild weather continued to spread E.W., with increasing S.W. winds, and some rain.

### 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.

ST  
Hapar  
Hernö  
Stock  
Wisby  
Bodö  
Christ  
Skude  
Christ  
Skagen  
Faro  
Samb  
Storn  
Wick  
Nairn  
Aberd  
Leith  
Shield  
Spurn  
York  
Lough  
Ardro  
Malin  
Malla  
Belmu  
Donag  
Barro  
Liver  
Holyh  
Parso  
Valen  
Roch  
Pemb  
Scilly  
Praw  
Jersey  
Hurs  
Dung  
Lond  
Oxfon  
Carn  
Yarm  
Cuxh  
Berli  
Wies  
Muni  
The  
Brus  
Cape  
Paris  
Bres  
Lori  
Roch  
Belf  
Lyon  
Nice  
Perp  
Biar  
Cor  
Lial

# DAILY WEATHER REPORT.

for *Thursday, 10<sup>th</sup> January 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 ..	30.40	22	S	4	0	30.42	+ .33	19	19	+ 10	SE	2	0	*	23	5	-		
Hernösand ...	30.18	31	ESE	2	0	30.15	- .17	32	30	+ 9	S	6	0	*	32	14	0.20		
Stockholm ...	30.10	31	E	2	0	30.12	- .07	30	29	- 1	SE	2	0	*	32	28	-		
Wisby ...	30.11	30	E	2	0	30.10	- .09	29	28	- 3	E	2	0	*	36	28	-		
Bodö ...	30.05	30	ESE	6	bc	29.98	+ .01	29	26	- 4	ESE	5	6	3	27	27	-		
Christiansund...	29.68	39	ESE	4	b	29.69	- .04	36	33	- 2	ESE	1	0	3	39	30	-		
Skudesnaes ...	29.73	38	ESE	8	bc	29.75	- .09	39	33	+ 2	ESE	6	0	5	?	36	-		
Christiania Fjord (Færdor)	30.00	34	ESE	4	0	29.94	- .14	34	32	- 1	ESE	4	0	1	?	30	-		
Skagen (The Scaw)	29.92	34	SSE	3	0	29.88	- .16	33	30	- 1	SSE	3	0	2	36	30	-		
Fanö ...	29.73	32	SE	6	0	29.70	- .26	30	29	- 1	SE	6	0	*	34	30	-		
BRITISH ISLANDS.																			
Sumburgh Head	29.29	43	SE	7	r	29.40	+ .12	44	44	0	SE	6	7	7	45	42	0.25		
Sternoway ...	29.06	40	W	0	r	29.33	+ .21	41	41	- 4	W	4	0	4	45	35	0.61		
Wick ...	29.10	43	S	6	r	29.40	+ .22	44	42	+ 1	W	2	6	6	45	38	0.14		
Nairn ...	29.00	42	W	0	r	29.41	+ .21	36	35	- 7	W	0	6	1	48	35	0.04		
Aberdeen...	29.01	44	SE	6	otq	29.49	+ .18	34	33	- 9	W	1	0	5	44	34	0.14		
Leith ...	29.12	40	SE	1	c	29.44	+ .16	37	35	- 8	W	1	6	5	45	34	0.06		
Shields ...	29.20	42	SW	3	b	29.41	+ .04	38	37	- 4	WNW	2	7	3	45	36	0.24		
Spurn Head ...	29.32	41	SSE	6	c	29.37	- .11	41	40	+ 1	ESE	3	7	4	45	34	0.15		
York ...	29.26	40	S	3	bc	29.41	0.00	36	36	- 4	WNW	1	7	*	45	34	0.55		
Loughborough	29.31	41	SSE	2	r	29.41	- .02	37	36	- 6	WNW	2	7	5	47	35	0.53		
GERMANY.																			
Ardrossan ...	29.11	41	W	0	p	29.45	+ .23	34	34	- 10	ESE	1	6	0	44	33	0.51		
Malin Head ...	29.14	41	NW	5	b	29.47	+ .30	41	40	+ 5	WNW	5	6	5	41	36	0.09		
Mullaghmore ...	29.23	41	NW	6	otrsq	29.57	+ .36	44	39	+ 7	NW	4	6	6	44	36	0.45		
Belmullet ...	29.32	41	NW	5	bc	29.68	+ .48	43	39	+ 3	SW	6	6	*	44	36	0.36		
Donaghadee ...	29.17	38	SW	2	bc	29.49	+ .27	37	36	- 6	SW	3	6	1	43	36	0.35		
FRANCE & NETHERLANDS.																			
Barrow-in-Furness	29.19	41	SE	2	0	29.46	+ .15	39	38	- 5	NW	2	0	*	44	38	0.33		
Liverpool (Bidston)	29.22	39	S	2	b	29.49	+ .24	40	38	- 4	NW	4	0	4	45	38	0.07		
Holyhead ...	29.20	41	WSW	4	c/p	29.54	+ .33	41	40	- 4	NW	5	0	5	45	40	0.26		
Parsonstown ...	29.32	35	WNW	2	c	29.68	+ .39	36	34	+ 4	W	0	0	*	41	32	0.07		
Valencia ...	29.57	41	NW	5	bc/p	29.81	+ .42	44	42	0	WNW	4	0	4	46	37	0.23		
Roche's Point...	29.36	40	WNW	5	c/q	29.72	+ .34	41	38	0	NW	4	0	4	42	36	0.05		
Pembroke ...	29.26	43	NW	7	c	29.61	+ .37	42	39	- 4	NW	7	0	5	48	40	0.13		
Scilly ...	29.38	45	WNW	8	bc/q	29.69	+ .18	47	44	- 2	WNW	8	0	6	51	39	0.17		
Prawle Point ...	29.32	44	WSW	4	0	29.61	+ .11	38	35	- 8	WNW	3	0	3	49	35	0.19		
Jersey ...	29.48	48	SSW	4	opm	29.56	- .09	45	40	- 2	NW	8	0	5	52	41	0.42		
PENINSULA.																			
Hurst Castle ...	29.36	45	SW	7	r	29.45	- .08	41	40	- 7	NW	6	0	3	49	39	0.47		
Dungeness ...	29.48	47	SW	6	c	29.31	- .30	40	40	- 6	W	3	0	2	48	40	0.21		
London ...	29.42	45	S	4	0	29.34	- .20	37	36	- 10	WNW	4	0	*	49	36	0.25		
Oxford ...	29.30	41	SSW	3	r	29.42	- .04	39	37	- 7	NW	3	0	0	47	38	0.28		
Cambridge ...	29.37	40	SW	1	r	29.35	- .17	38	37	- 4	NW	1	0	*	47	36	0.11		
Yarmouth ...	29.47	42	S	4	bc	29.37	- .26	42	42	0	SE	4	0	4	44	39	0.01		
Cuxhaven ...	29.74	30	ESE	4	f	29.67	- .28	28	27	- 2	ESE	5	0	*	31	26	-		
Berlin ...	29.94	23	E	?	0	29.82	- .24	21	21	- 9	ESE	4	0	*	36	19	-		
Wiesbaden ...	*	*	*	*	*	29.63	- .33	35	34	0	W	0	0	*	36	34	-		
Munich ...	29.87	33	SW	2	0	29.69	- .31	28	28	+ 5	SE	4	0	*	39	23	-		
AFRICA.																			
The Helder ...	29.59	36	S	1	f	29.50	- .28	36	36	+ 5	SE	1	0	1	37	?	-		
Brussels ...	*	*	*	*	*	29.45	- .35	41	40	+ 5	SE	1	0	*	43	?	0.04		
Cape Gris Nez...	?	41	SW	7	b	?	?	42	41	+ 1	W	4	0	4	45	41	0.12		
Paris ...	29.71	41	SSW	4	0	29.48	- .34	38	37	+ 2	SW	3	0	*	43	33	0.08		
Brest ...	29.51	46	WNW	8	r	29.73	- .00	46	43	- 4	NW	11	0	7	52	37	0.20		
Lorient ...	29.57	50	WSW	8	0	29.71	- .00	45	40	- 3	NW	8	0	7	52	39	0.47		
Rocheport ...	29.84	47	WSW	4	b	29.78	- .08	44	41	- 1	WNW	8	0	3	50	36	0.35		
Belfort ...	29.74	35	W	1	m	29.60	- .34	37	36	+ 6	W	1	0	*	40	29	0.22		
Lyons ...	29.86	43	S	3	bc	29.66	- .30	42	40	+ 1	S	9	0	*	50	41	0.04		
Nice ...	29.47	45	E	5	bc	29.79	- .23	42	42	0	E	5	0	3	57	39	0.08		
Perpignan ...	29.94	47	SW	3	0	29.84	+ .01	45	41	+ 6	W	3	0	*	56	38	-		
Biarritz ...	29.90	50	WNW	9	r	29.84	- .04	52	46	+ 3	WNW	12	0	8	54	43	0.67		
ASIA.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
Lisbon ...	30.28	50	WNW	5	bc	30.31	+ .18	51	50	+ 5	WNW	4	0	5	54	?	0.04		

For Explanation of Columns, see p. 4.

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

# WEATHER CHARTS

for 8 a.m. on Thursday, 10<sup>th</sup> January,

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.

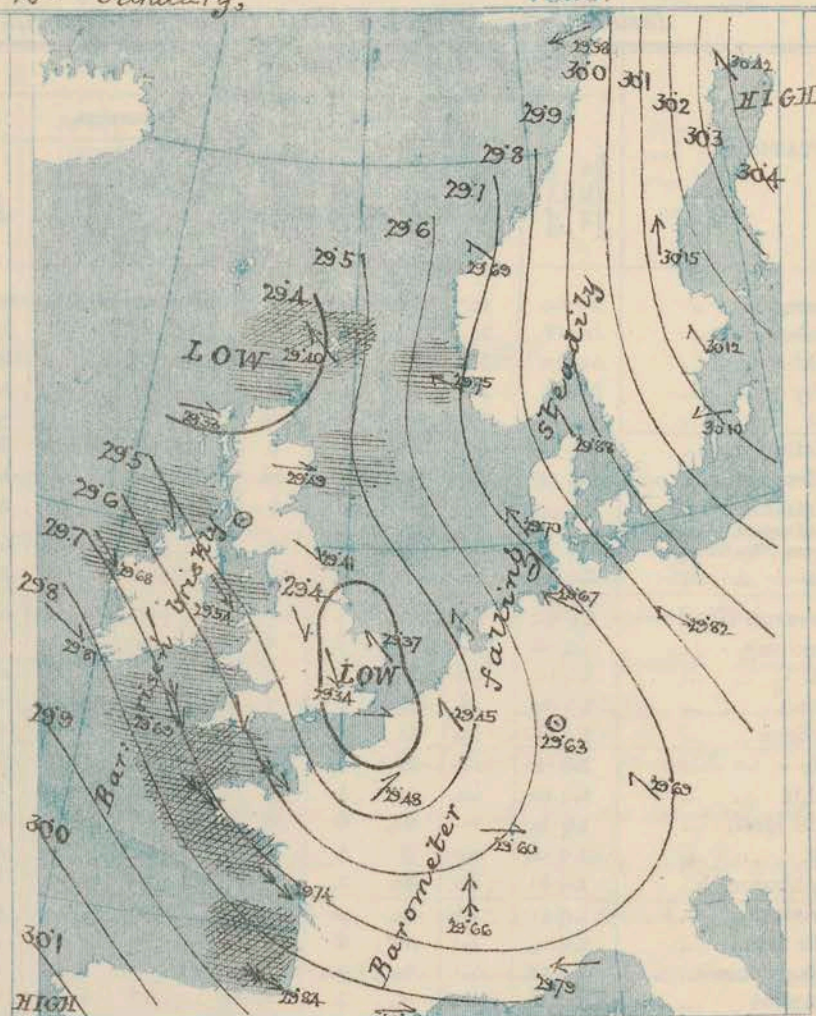
**Sea Disturbance** — where considerable, is shown thus.

— Rough — High.

## MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of January.  
During the 15 Years 1871–1885.

STATIONS	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 ins: and upwards, over the north of Sweden; 30.3 ins: and upwards over the south of Portugal.  
Lowest, 29.4 ins: and less, in a depression lying off the north of Scotland, and also in a disturbance lying over the east and southeast of England.  
Gradients moderate generally. Barometer rising in most parts of our Islands, but falling at our southeastern and the Continental stations.

## TEMPERATURE

Highest, 52° at Biarritz, 51° at Lisbon, 47° at Sully, 46° at Utrecht, and 45° at Jersey, Orient, and Perpignan.  
Lowest, 19° at Haparanda, 21° at Berlin, 28° at Copenhagen and Munich, 29° at Bodö, and 30° at Stockholm and Luleå.

## WIND

Strong from the NW<sup>nd</sup> on our western and southern coasts; a severe gale from the same quarter is blowing over the Bay of Biscay.  
Light from W. in the east of Scotland; moderate from SE. over Germany, the Netherlands, and the east of England.  
Strong from the SE<sup>th</sup> on the eastern shores of the North Sea.

## WEATHER

Fine at many of our western and northern stations, but showery, in the north of Ireland.  
Cloudy or overcast elsewhere, with rain over the Netherlands, the east of England, and thunder at Biarritz.  
Hard fell yesterday in all parts of our Islands and France, the largest amounts being 0.7 ins at Biarritz and 0.6 ins at Stromness, York.

## SEA

High in the Bay of Biscay as well as at Lumburgh Hd., and rough on all but our east coasts.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over the east of England will probably travel northeastwards across the North Sea, and NW<sup>ly</sup> winds are therefore likely to become general, with cold showers in nearly all districts.

## FORECASTS

for the 24 hours ending at NOON on 11<sup>th</sup> JAN: 1889.

### DISTRICTS.

### FORECASTS.

0	SCOTLAND NORTH	W <sup>ly</sup> to N <sup>ly</sup> winds, freshening; fair to cloudy, with some snow or sleet.
1	SCOTLAND EAST	
2	ENGLAND N.E.	NW <sup>ly</sup> winds, freshening; unsettled, some cold rain or sleet.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	NW <sup>ly</sup> winds, fresh or strong; squally, some showers of cold rain or sleet.
5	ENGLAND SOUTH	


### DISTRICTS.


### FORECASTS.

6	SCOTLAND WEST	Same as Nos 0 to 4.
7	ENGLAND N.W.	
8	ENGLAND S.W.	NW <sup>ly</sup> winds, strong; changeable, some cold showers.
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 ...	29.78	38	34	SE 8	0	5	Holyhead ...	29.19	44	42	SW 4	c q p	4
Sumburgh Head ...	29.27	43	43	SSE 6	r	7	Valencia ...	29.36	43	40	W 6	c q p	6
Stornoway ...	29.06	43	42	SE 0	0	2	Scilly ...	29.40	47	46	W 6	r h q	6
Aberdeen ...	29.16	44	42	SE 7	o g q	6	Jersey ...	29.61	51	47	SW 4	0	4
Shields ...	29.06	44	43	SSE 4	r	4	Dungeness ...	29.54	48	45	S 6	0	4
Ardrossan ...	29.06	38	38	W 3	r	3	London ...	29.48	49	45	SW 4	0	*
Malin Head ...	29.07	39	39	SW 3	bc	3	Yarmouth ...	29.47	44	43	S 5	c g m	4
Mullaghmore ...	29.12	40	39	W 4	p h	3	Rochefort ...	29.86	49	48	WSW 1	bc	2
Belmullet ...	29.17	39	34	W 4	op	*							

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

The reports for yesterday morning showed that while the high-pressure area recently noticed over Southeastern Europe was dispersing a new one of considerable size and intensity had appeared over the north of Russia, and another off the Portuguese coast. The depression off our northwestern coast was moving northwards, and secondary disturbances were found over the Irish Sea and the southwest of France. Readings varied from 30.6 ins. and more over Northern Russia, from about 30.2 ins. over the Irish Sea and from 30.1 ins. and more off the west of Portugal to rather below 29.1 ins. off the northwest of the British Isles, and to less than 29.3 ins. over the Irish Sea. The wind over Scandinavia, the Baltic, the North Sea, and Germany was SE<sup>3</sup>, and blew strongly at Wick, Sumburgh Head and Skudesnaes. In the south of Ireland it was strong from W. and SW, and in Portugal NW<sup>2</sup>. Over the Mediterranean the wind was over but mainly E<sup>2</sup> at the more northern stations. The weather was fair in the northern and eastern countries, but was becoming very wet and unsettled in the west of the British Isles, with sudden changes of temperature. Heavy falls of rain had occurred in Spain, and a small amount at Tunis. Temperature was falling fast over Northern, rising over Southern Russia, and was unsteady over Western Europe. Lowest individual values were (1) -10° F. at Archangel, +7° at Warsaw, 8° at Moscow, 9° at Haparanda, 10° at New Jahusasser, 15° at Breslau, 19° at and 23° at Heringsand, (2) 5° at Hermannstadt, 10° at Lemberg, and 12° at Kiev and Odessa. The highest values were 54° at Kamsars, 53° at Sempunau, 51° at Capri, 50° at San Fernando, Oran, Brindisi and Brat, 49° at Biarritz and Bally, 48° at Hunt Castle and 45° at Stornoway.

Later in the day a new depression began to appear at the mouth of St. George's Channel and a great deal of rain fell over England, accompanied by strong S winds, while in Ireland the wind veered to NW.

### 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, 11<sup>th</sup> January 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.					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.)			Max.	Min.	Amount of Rainfall.	
<b>SCANDINAVIA.</b>																		
Haparanda ..	30.37	21	S	4	0	30.43	+ 0.1	22	22	+ 3	SSE	4	0	*	25	18	0.08	
Hernösand ...	30.28	29	E	8	0	30.38	+ 2.3	29	28	- 3	SSE	6	0	*	34	29	0.04	
Stockholm ...	30.21	28	SE	4	0	30.30	+ 1.8	30	28	0	ESE	4	0	*	34	25	-	
Wisby ...	30.17	24	ESE	4	0	30.23	+ 1.3	30	29	+ 1	ESE	4	0	*	34	?	-	
Bodö ...	29.93	31	SE	2	0	30.01	+ 0.3	30	28	+ 1	ESE	2	0	1	34	25	-	
Christiansund...	29.83	35	ESE	2	0	29.97	+ 2.8	37	33	+ 1	ESE	3	0	2	37	32	-	
Skudesnaes ...	29.90	38	ESE	4	0	30.00	+ 2.5	35	31	- 4	ESE	4	0	4	39	?	-	
Christiania Fjord (Fæder)	30.06	33	ESE	2	0	30.15	+ 2.1	31	30	- 3	ESE	5	0	1	34	28	-	
Skagen (The Scaw)	30.00	34	SE	2	0	30.08	+ 2.0	30	29	- 3	SE	2	0	1	34	30	-	
Fanö ...	29.85	30	SE	6	0	29.93	+ 2.3	30	29	0	SE	6	0	*	30	28	-	
<b>BRITISH ISLANDS.</b>																		
Sumburgh Head	29.59	43	SSE	3	0	29.72	+ 3.2	42	42	- 2	SSE	4	0	6	44	41	0.18	
Stornoway ...	29.57	41	NW	3	0	29.69	+ 1.6	43	42	+ 2	S	6	0	5	44	39	0.04	
Wick ...	29.62	39	W	1	0	29.68	+ 2.8	43	42	- 1	S	4	0	4	44	39	-	
Nairn ...	29.62	30	Z	0	0	29.60	+ 1.9	32	30	- 4	Z	0	0	1	42	26	-	
Aberdeen...	29.68	37	NW	1	0	29.71	+ 2.2	42	40	+ 8	SE	4	0	5	42	34	0.02	
Leith ...	29.65	38	W	1	0	29.66	+ 2.2	39	38	+ 2	SSE	1	0	*	40	32	0.02	
Shields ...	29.59	40	NW	1	0	29.70	+ 2.9	42	41	+ 4	SSE	1	0	2	43	36	0.36	
Spurn Head ...	29.56	43	NE	2	0	29.72	+ 3.5	37	36	- 4	ESE	2	0	3	43	35	0.24	
York ...	29.57	37	NW	1	0	29.69	+ 2.8	37	37	+ 1	SE	1	0	*	40	35	0.28	
Loughborough	29.58	39	NW	2	0	29.72	+ 3.1	35	35	- 2	E	1	0	*	43	35	0.08	
<b>GERMANY.</b>																		
Ardrossan ...	29.65	36	NE	1	0	29.61	+ 1.6	36	36	+ 2	E	2	0	2	41	32	-	
Malin Head ...	29.66	41	SW	1	0	29.62	- 0.5	39	36	- 2	S	5	0	4	44	35	0.04	
Mullaghmore ...	29.69	43	WNW	4	0	29.62	- 1.5	40	38	- 4	SSE	5	0	4	44	35	0.03	
Belmullet ...	29.70	41	S	2	0	29.30	- 3.8	43	42	0	SSE	5	0	*	45	38	0.10	
Donaghadee ...	29.66	42	NW	3	0	29.59	+ 1.0	43	40	+ 6	SSE	4	0	2	43	34	0.02	
<b>FRANCE &amp; NETHERLANDS.</b>																		
Barrow-in-Furness	29.60	39	NNE	2	0	29.66	+ 2.0	37	37	- 2	E	2	0	*	43	34	-	
Liverpool (Bidston)	29.63	39	NW	2	0	29.68	+ 1.9	37	36	- 3	E	2	0	2	42	36	-	
Holyhead ...	29.64	43	NW	6	0	29.63	+ 0.9	34	33	- 7	SE	1	0	2	44	32	0.03	
Parsonstown ...	29.75	33	Z	0	0	29.50	- 1.8	38	37	+ 2	SE	3	0	*	43	29	0.03	
Valencia ...	29.76	45	NW	1	0	29.64	- 3.7	48	48	+ 4	SE	3	0	4	49	41	0.13	
Roche's Point...	29.77	42	NW	3	0	29.52	- 2.0	45	45	+ 4	SSE	6	0	5	45	41	0.25	
Pembroke ...	29.69	44	NW	6	0	29.62	+ 0.1	39	38	- 3	ESE	4	0	2	45	38	-	
Scilly ...	29.75	47	NW	5	0	29.60	- 0.9	45	44	- 2	SE	5	0	4	48	43	0.10	
Prawle Point ...	29.71	39	NW	4	0	29.67	+ 0.6	37	36	- 1	WNW	2	0	2	46	34	-	
Jersey ...	29.67	45	NW	4	0	29.67	+ 1.1	42	39	- 3	NW	3	0	3	48	40	-	
<b>GERMANY.</b>																		
Hurst Castle ...	29.59	40	NW	4	0	29.68	+ 2.3	39	38	- 2	NE	4	0	3	48	36	-	
Dungeness ...	29.68	38	N	3	0	29.62	+ 3.1	42	38	+ 2	E	5	0	3	42	37	0.19	
London ...	29.53	38	NW	3	0	29.69	+ 3.5	37	36	0	Z	0	0	*	40	36	0.12	
Oxford ...	29.61	38	NW	3	0	29.72	+ 3.0	30	29	- 9	NE	1	0	*	43	30	-	
Cambridge ...	29.54	38	NW	1	0	29.74	+ 3.9	30	30	- 8	NE	1	0	*	39	29	0.12	
<b>FRANCE &amp; NETHERLANDS.</b>																		
Yarmouth ...	29.50	41	SE	3	0	29.71	+ 3.4	40	39	- 2	ESE	3	0	3	43	38	0.02	
Cuxhaven ...	29.70	28	ESE	5	0	29.88	+ 2.1	28	27	0	ESE	5	0	*	30	26	-	
Berlin ...	29.86	23	E	1	0	29.92	+ 1.0	25	24	+ 4	E	2	0	*	28	19	-	
Wiesbaden ...	*	*	*	*	*	29.73	+ 1.0	36	34	+ 1	Z	0	0	*	39	34	0.08	
Munich ...	29.62	28	W	3	0	29.72	+ 0.3	27	27	- 1	E	4	0	*	37	27	-	
<b>FRANCE &amp; NETHERLANDS.</b>																		
The Helder ...	29.63	37	ESE	1	0	29.76	+ 2.6	33	33	- 3	E	1	0	1	39	?	-	
Brussels ...	*	*	*	*	*	29.69	+ 2.4	35	34	- 6	ESE	3	0	*	42	34	0.04	
Cape Gris Nez...	?	37	S	3	0	?	?	35	35	- 7	ESE	5	0	5	46	34	0.12	
Paris ...	29.53	34	SW	3	0	29.62	+ 1.4	34	33	- 4	NW	1	0	*	38	32	0.24	
Brest ...	29.80	42	N	7	0	29.74	+ 0.1	45	41	- 1	ESE	1	0	2	50	37	0.24	
Lorient ...	29.78	46	NW	8	0	29.71	0.0	43	42	- 2	Z	0	0	5	50	43	0.04	
Rochefort ...	29.86	45	NW	7	0	29.79	+ 0.1	43	41	- 1	WNW	4	0	2	52	37	0.04	
Belfort ...	29.66	34	W	1	0	29.67	+ 0.7	32	32	- 5	NW	1	0	*	39	29	0.04	
Lyons ...	29.77	34	NE	1	0	29.77	+ 1.1	33	31	- 9	N	3	0	*	45	29	0.04	
Nice ...	29.62	41	E	5	0	29.51	- 2.8	36	36	- 6	E	5	0	1	43	34	1.26	
<b>PENINSULA.</b>																		
Perpignan ...	29.80	45	NW	7	0	29.76	- 0.8	41	38	- 4	NW	3	0	*	54	40	-	
Biarritz ...	29.93	48	NW	11	0	29.76	- 0.8	46	45	- 6	SW	3	0	8	54	45	0.75	
<b>PENINSULA.</b>																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	30.35	53	NW	5	0	30.25	- 0.6	52	49	+ 1	NW	5	0	4	54	50	-	

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, 11<sup>th</sup> January,

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.

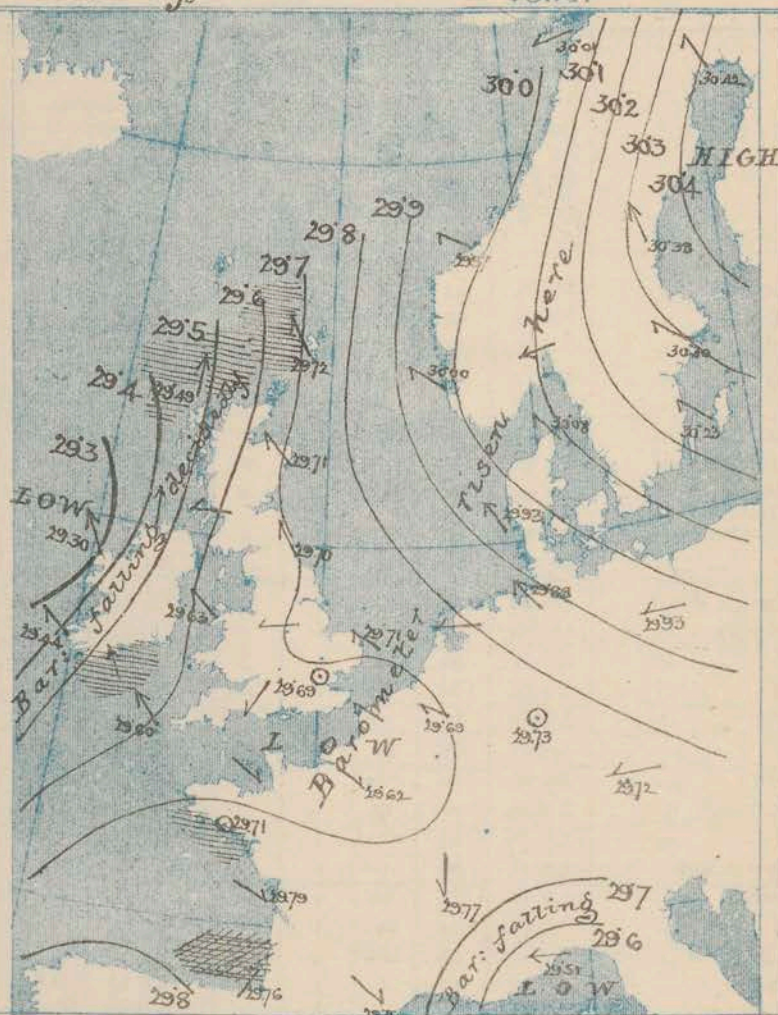
**Sea Disturbance** — where considerable is shewn thus.

— Rough. — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

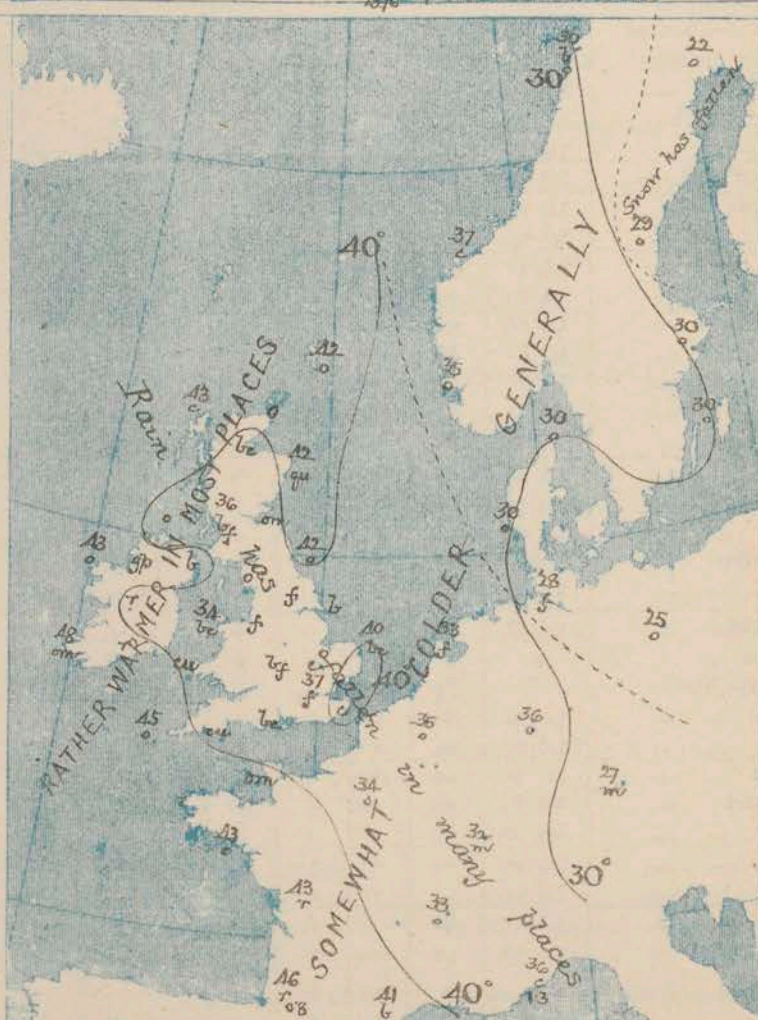
**Rainfall** — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.  
for the month of January

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m. Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	38.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 ins: and upwards in the north of Sweden; 30.2 ins: and upwards over the south of Portugal.  
 Lowest, 29.3 ins: and less, in a depression lying off the west of Ireland, 29.5 ins: and less, in a disturbance lying over the Gulf of Genoa.  
 Gradients moderate or slight generally, but increasing in the west and north.  
 Barometer falling quickly in Ireland, rising at our eastern and most of the Continental stations.

## TEMPERATURE

Highest, 52° at Lisbon, 48° at Valencia, 46° at Biarritz, and 45° at Rocher Point, Liller, and Borst.  
 Lowest, 22° at Haparanda, 25° at Berlin, 27° at Munich, 28° at Lyhaven, 29° at Haparanda, and 30° at Stockholm, Nijby, Haparanda, and Cambridge.

## WIND

Light from W. or NW. over the greater part of France, and from E. in the southeast of England.  
 SE or S elsewhere; strong in force at some of the Swedish and Danish stations and increasing in Ireland.

## WEATHER

Fine in many parts of Great Britain, but foggy over Central England as well as in the Netherlands.  
 Cloudy or overcast elsewhere, with rain in Ireland and the southeast of France.  
 Rain fell yesterday in many parts of the United Kingdom and France, and a little sleet was observed in London.

## SEA

Very high at Biarritz, rough off the north of Scotland, and rather rough at Rocher Point, Liller, and Borst, but moderate or slight elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new depression which has appeared off the west of Ireland seems likely to occasion a considerable increase of wind from SE. and S. in Ireland and Scotland. Rainy weather will probably extend gradually to most parts of the United Kingdom.

## FORECASTS

for the 24 hours ending at NOON on 12<sup>TH</sup> JAN<sup>Y</sup> 1889.

### DISTRICTS.

### FORECASTS.

1	SCOTLAND NORTH	S <sup>W</sup> and SE <sup>W</sup> winds, increasing to a gale; unsettled, some rain.
1	SCOTLAND EAST	
2	ENGLAND N.E.	SE <sup>W</sup> winds, freshening considerably; fair to unsettled and some rain.
3	ENGLAND EAST	E <sup>W</sup> to SE <sup>W</sup> and S <sup>W</sup> winds, freshening; fair to cloudy and some rain.
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

### DISTRICTS.

### FORECASTS.

6	SCOTLAND WEST	Same as N <sup>o</sup> 0 and 1.
7	ENGLAND N.W.	Same as N <sup>o</sup> 2.
8	ENGLAND S.W.	SE <sup>W</sup> to SW <sup>W</sup> winds, increasing in force, unsettled, some rain.
9	IRELAND NORTH	Same as N <sup>o</sup> 0 and 1.
10	IRELAND SOUTH	SE <sup>W</sup> gales, veering to SW, unsettled, some rain.
WARNINGS		The SOUTH CONE has been hoisted this morning in districts 0, 1, 6, 9, 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 ...	29.82	39	34	ESE 6	0	5	Holyhead ...	29.89	43	40	NW 6	cq qj	5
Sumburgh Head ...	29.53	44	44	SSE 4	c	7	Valencia ...	29.80	48	45	NW 3	bc m	3
Stornoway ...	29.51	44	43	NW 3	bc	3	Scilly ...	29.75	47	44	NW 6	cq	5
Aberdeen ...	29.60	38	37	NW 1	0	5	Jersey ...	29.63	48	42	NW 6	c	4
Shields ...	29.52	39	38	NW 1	r	3	Dungeness ...	29.39	38	38	N 3	m	2
Ardrossan ...	29.56	41	41	NW 2	b	1	London ...	29.46	89	38	NW 5	crqj	*
Malin Head ...	29.64	42	39	N 3	b	3	Yarmouth ...	29.42	42	41	SE 4	cq	4
Mullaghmore ...	29.67	43	40	NW 6	cqj	5	Rochefort ...	29.86	49	43	NW 8	r	4
Belmullet ...	29.72	44	40	NW 3	bc	*							

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

The reports for yesterday showed that pressure was increasing both over Southwestern and Northern Europe, and that two large areas of high pressure had appeared - one over Northern Russia, the other over the Atlantic, to the southwestward of Portugal. Over the British Isles, France and the Mediterranean, however, pressure was comparatively low, and three distinct depressions were shown - one off the north coast of Scotland, another (the deepest) immediately over the eastern counties of England, and the third off the coast of Algeria. In Russia and Central Europe the weather was quiet, cold and cloudy, but over the United Kingdom, France, and the Mediterranean it was very unsettled, considerable quantities of rain had fallen at the British, French, and Algerian stations, sleet in some places, and a thunderstorm was reported at Leghorn. Over Northern, Central and Eastern Europe the wind was SE<sup>2</sup> - very light at the Russian stations, moderate to strong elsewhere - but over Western and Southwestern Europe it was NW<sup>3</sup> - strong in our Islands, and blowing a heavy gale over the Bay of Biscay. At the Algerian stations it was W<sup>3</sup>, while over the northern part of the Mediterranean it was E<sup>4</sup>. Temperature was lowest over Northern and Eastern Europe, highest on the Portuguese coast and at some of the Mediterranean stations. In the British Isles and France it was changing suddenly. The lowest readings reported were 2° F. at Humanstad, 7° at New Fahrwasser, 14° at Lemberg, 15° at Breslau, 16° at Riga, and Moscow, 19° at Haparanda and Kuda Beth, 21° at Kieps and Berlin, 23° at Cracow and Vienna, 28° at Munich and Copenhagen, 29° at Rodo, 37° in London, and 38° in the highest were 54° at Cagliari, 53° at Nemours (Algeria) and Conunna, 52° at Biarritz, 51° at Lisbon, Pau, Fernando, and Algiers, 50° at Brindisi, 47° at Scilly, 44° at Valencia, Mullaghmore, and Sumburgh Head.

Later on the depression over England began to fill up, and while the barometer began to rise over Northern Europe it fell over the Atlantic coast - most in Ireland. Heavy rain fell again in the south of France as the depression over the Mediterranean advanced north.

### 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.

Hapara  
Hernös  
Stockh  
Wisby  
Bodö  
Christi  
Skudes  
Christi  
(Fr)  
Skagen  
Fano  
Sumbu  
Storno  
Wick  
Nairn  
Aberde  
Leith  
Shields  
Spurn  
York  
Lough  
Ardros  
Malin  
Mullag  
Belmul  
Donagh  
Barrow  
Liverpo  
Holyhe  
Parson  
Valenc  
Roche's  
Pembr  
Scilly  
Prawle  
Jersey  
Hurst  
Dunge  
London  
Oxford  
Cambr  
Yarmo  
Cuxhar  
Berlin  
Wiesbr  
Munich  
The H  
Brusse  
Cape C  
Paris  
Brest  
Lorien  
Roche  
Belfor  
Lyons  
Nice  
Perpi  
Biarri  
Corun  
Lisbo

# DAILY WEATHER REPORT.

for *Saturday, 12<sup>th</sup> January 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.		
			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 ..	30.52	24	SW	4	0	30.54	+ 11	23	22	+ 1	SSW	2	0	*	27	18	0.08		
Hernösand ...	30.45	30	SSE	4	5	30.36	- 62	29	28	0	ESE	4	5	*	32	27	0.12		
Stockholm ...	30.28	28	E	4	5	30.16	- 14	32	29	+ 2	ESE	4	5	*	32	25	0.04		
Wisby ...	30.20	25	E	4	5	30.11	- 12	32	32	+ 2	ESE	2	0	*	32	21			
Bodö ...	30.16	31	ESE	2	6	30.14	+ 16	30	24	0	ESE	2	6	1	32	25			
Christiansund...	29.99	31	ESE	2	6	30.00	+ 03	35	31	- 2	ESE	2	0	2	36	30			
Skudesnaes ...	30.03	33	ESE	6	6	29.99	- 01	33	29	- 2	ESE	4	0	4	36	32			
Christiania Fjord (Færd)	30.15	31	NNE	5	0	30.08	- 07	30	28	- 1	NNE	5	0	1	2	24			
Skagen (The Scaw)	30.06	32	SE	3	0	29.94	- 14	31	30	+ 1	SE	4	0	2	32	30			
Fanö ...	29.90	30	SE	6	0	29.76	- 17	32	31	+ 2	E	6	0	*	32	28			
BRITISH ISLANDS.																			
Sumburgh Head	29.67	41	SE	5	0	29.81	+ 09	40	39	- 2	SE	4	0	6	43	38	0.04		
Stornoway ...	29.35	44	SE	6	0	29.60	+ 11	44	43	+ 1	S	5	0	4	44	40	0.01		
Wick ...	29.57	42	S	7	0	29.68	00	39	38	- 4	S	7	0	6	44	39	0.05		
Nairn ...	29.48	40	W	0	6	29.40	+ 10	37	35	+ 5	E	1	0	1	42	31			
Aberdeen...	29.61	43	SE	5	0	29.49	+ 08	38	35	- 4	SE	6	0	6	44	37	0.06		
Leith ...	29.55	37	SSE	2	0	29.69	+ 03	38	36	- 1	E	3	0	*	44	36			
Shields ...	29.59	40	SE	3	0	29.66	- 04	38	37	- 4	ESE	4	0	4	43	36	0.03		
Spurn Head ...	29.59	41	E	3	0	29.53	- 19	37	35	0	ESE	5	0	4	43	35	0.01		
York ...	29.58	38	ESE	1	0	29.56	- 13	36	34	- 1	E	3	0	*	41	35			
Loughborough	29.57	34	ESE	1	6	29.50	- 22	36	35	+ 1	NE	3	0	*	43	32	0.01		
Ardrossan ...	29.47	37	E	2	cm	29.66	+ 05	38	38	+ 2	NE	2	0	2	41	35			
Malin Head ...	29.22	37	SSE	6	or	29.62	+ 20	40	38	+ 1	ESE	5	0	5	40	36	0.30		
Mullaghmore ...	29.16	40	SSE	6	rg	29.56	+ 14	40	38	0	ESE	4	0	3	41	37	0.54		
Belmullet ...	29.15	45	WNW	3	0	29.58	+ 28	40	40	- 3	ESE	2	0	*	45	37	0.72		
Donaghadee ...	29.38	44	SSE	7	0	29.61	+ 02	40	39	- 3	SSE	6	0	4	44	39			
Barrow-in-Furness	29.49	38	ESE	6	6	29.58	- 08	36	34	- 1	NE	2	0	*	40	35			
Liverpool (Bidston)	29.49	36	ESE	4	6	29.54	- 14	36	34	- 1	ESE	5	0	3	40	35			
Holyhead ...	29.41	38	SSE	5	om	29.54	- 09	39	38	+ 5	E	4	0	3	41	34			
Parsonstown ...	29.22	43	W	0	r	29.51	+ 01	39	38	+ 1	W	0	0	*	44	37	0.83		
Valencia ...	29.25	46	W	2	om	29.51	+ 07	46	43	- 2	WNW	2	0	3	50	42	0.90		
Roche's Point...	29.24	45	WNW	3	6	29.48	- 04	40	38	- 5	N	2	0	4	50	38	0.30		
Pembroke ...	29.33	41	SE	7	r	29.47	- 15	35	34	- 4	ESE	4	0	3	43	35	0.36		
Scilly ...	29.28	50	WNW	6	C	29.37	- 23	46	45	+ 1	N	4	0	5	50	41	0.64		
Prawle Point ...	29.42	44	ESE	4	0	29.39	- 28	38	37	+ 1	NE	5	0	3	44	35	0.16		
Jersey ...	29.49	43	SE	3	0	29.30	- 37	38	37	- 4	NE	4	0	3	49	37	0.14		
Hurst Castle ...	29.49	38	ESE	4	6	29.39	- 29	36	35	- 3	ESE	5	0	2	43	35			
Dungeness ...	29.53	40	ESE	4	0	29.37	- 25	37	36	- 5	ESE	4	0	3	42	36			
London ...	29.56	40	ESE	4	0	29.36	- 33	35	34	- 2	NNE	3	0	*	42	32			
Oxford ...	29.51	36	E	1	0	29.46	- 26	33	32	+ 3	E	2	0	*	43	30			
Cambridge ...	29.54	36	E	1	C	29.46	- 28	34	34	+ 4	NE	1	0	*	40	29	0.03		
Yarmouth ...	29.61	40	ESE	4	C	29.46	- 25	36	35	- 4	E	6	0	5	41	34	0.25		
Cuxhaven ...	29.86	23	ESE	6	0	29.66	- 22	30	29	+ 2	ESE	6	0	*	30	27			
Berlin ...	29.88	26	E	4	0	29.70	- 22	28	27	+ 3	ESE	4	0	*	28	25			
Wiesbaden ...	*	*	*	*	*	29.50	- 23	31	30	- 5	E	2	0	*	36	30			
Munich ...	29.65	25	E	2	0	29.49	- 23	25	25	- 2	E	5	0	*	30	25			
FRANCE & NETHERLANDS.																			
The Helder ...	29.69	27	ESE	3	0	29.53	- 23	29	28	- 4	E	4	0	3	34	27			
Brussels ...	*	*	*	*	*	29.43	- 26	33	32	- 2	E	3	0	*	38	33			
Cape Gris Nez...	?	36	E	4	0	?	?	33	32	- 2	ESE	4	0	2	39	30			
Paris ...	29.58	34	SE	3	0	29.30	- 32	34	32	0	E	11	0	*	?	33			
Brest ...	29.45	50	W	4	*	29.31	- 43	46	43	+ 1	NW	11	0	7	52	37	0.39		
Lorient ...	29.38	43	ESE	4	r	29.24	- 47	45	43	+ 2	NW	5	0	5	46	41	0.63		
Roche fort ...	29.60	41	SE	7	r	29.31	- 48	46	45	+ 3	WNW	8	0	3	?	36	0.35		
Belfort ...	29.67	33	NW	1	0	29.42	- 25	33	33	+ 1	NE	4	0	*	35	30			
Lyons ...	29.70	32	S	1	6	29.38	- 39	39	35	+ 6	S	9	0	*	39	30	0.11		
Nice ...	29.56	42	W	0	6	29.58	+ 07	41	38	+ 5	NE	7	0	2	45	36			
Perpignan ...	29.67	45	W	0	0	29.53	- 23	39	38	- 2	NE	4	0	*	46	38	0.39		
Biarritz ...	29.62	55	WNW	9	r	29.51	- 25	54	51	+ 8	W	11	0	7	55	?	0.08		
PENINSULA.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	30.15	55	WSW	7	0	30.02	- 23	56	56	+ 4	WNW	7	0	?	?	?	0.67		

# WEATHER CHARTS

for 8 a.m. on

Saturday, 12<sup>th</sup> January,

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.

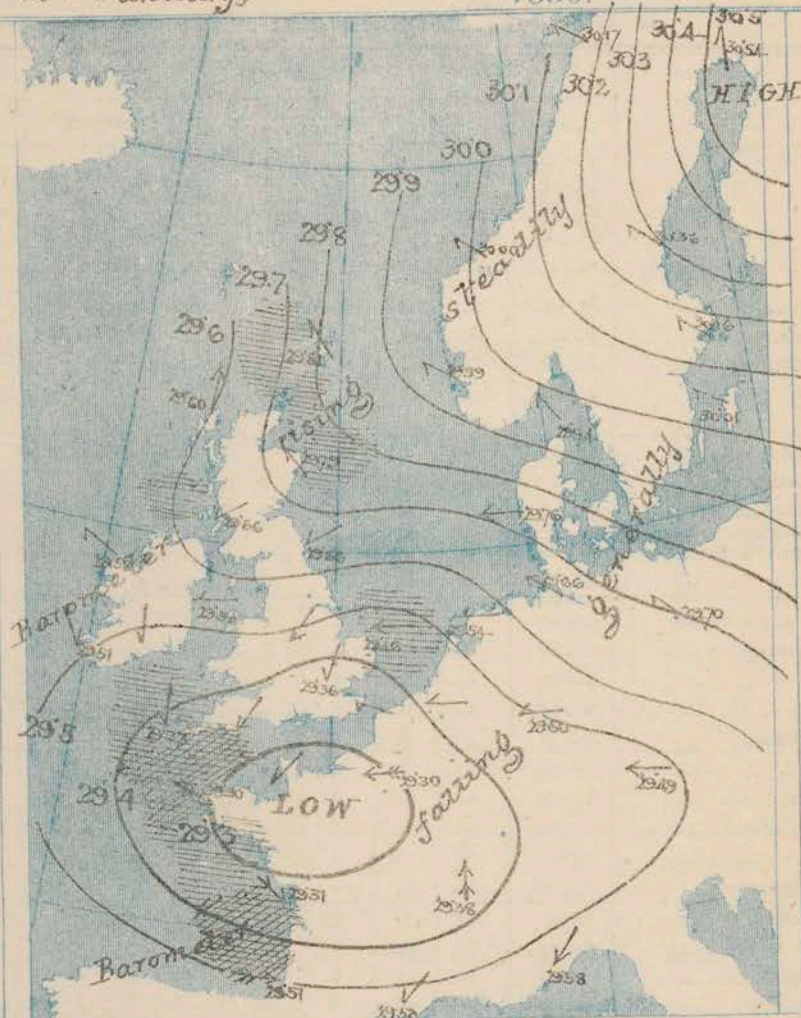
**Sea Disturbance** — where considerable is shown thus.

— Rough. — High.

## MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of January.  
 During the 15 Years 1871–1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.820
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Fembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

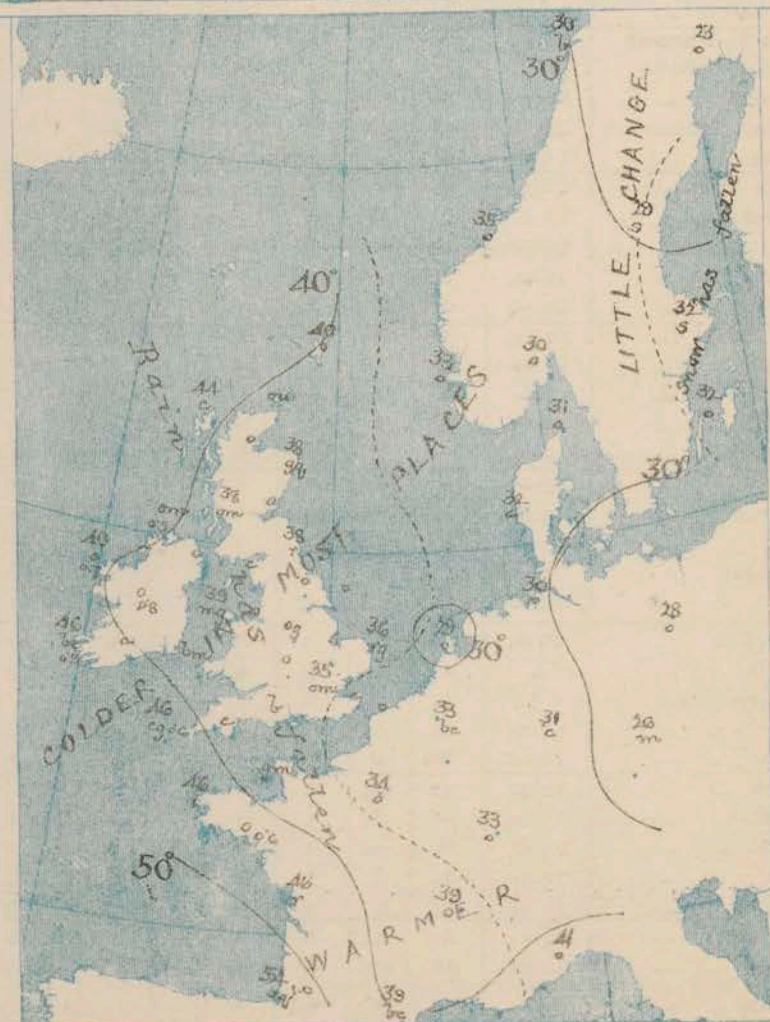
### MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January.

STATIONS	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.0	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Fembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	46.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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, over the north of Sweden; 30.0 ins. and upwards over the south of Portugal. Lowest, 29.3 ins. and less, in a depression lying over the north of France. Gradients rather steep generally. Barometer falling at our southeastern and many of the Continental stations, but rising at our northern and western stations.
TEMPERATURE	Highest, 56° at Lisbon, 54° at Biarritz, 46° at Valencia, Seilly, Brest, and Rochefort, and 45° at Lorient. Lowest, 23° at Haparanda, 26° at Munich, 28° at Berlin, 29° at Helsingfors and Hilda, and 30° at Bodo, Tromsø, and Utsira.
WIND	Strong from S. or SE. over the northern parts of Scotland and Ireland, moderate from SE. or E. in Scandinavia. Fresh from E. or NE. over England and the North Sea. Strong gales are general in France - from W. or NW. on the west coast, from S. or S.W. and from E. at Brest.
WEATHER	Cloudy or overcast generally, with rain in the east of England and east of France and snow in Sweden. Since yesterday morning heavy rain has fallen on the west coast of our Island and France; the largest amounts being 1.0 in. at Brest, 0.4 in. at Lorient, 0.3 in. at Helsingfors, and 0.2 in. at Utsira.
SEA	High in the Bay of Biscay, rough off the north and east of Scotland, and rather rough at Malin Head, Seilly, and Yarmouth.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over France seems likely to move slowly in an easterly direction, but the present distribution of pressure is not favourable for any general or decided improvement in the weather.

## FORECASTS

for the 24 hours ending at NOON on 13<sup>th</sup> JAN<sup>y</sup> 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
† <sub>0</sub> SCOTLAND NORTH	S <sup>W</sup> to SE <sup>W</sup> winds, strong; drizzle, showers locally.	† <sub>6</sub> SCOTLAND WEST	E <sup>W</sup> winds, freshening; drizzle, showers locally.
† <sub>1</sub> SCOTLAND EAST		† <sub>7</sub> ENGLAND N.W.	Same as No 5
† <sub>2</sub> ENGLAND N.E.	E <sup>W</sup> winds, strong, perhaps a gale; drizzle, some sleet or snow	† <sub>8</sub> ENGLAND S.W.	NE <sup>W</sup> winds, strong; cloudy, some sleet or cold rain.
† <sub>3</sub> ENGLAND EAST		† <sub>9</sub> IRELAND NORTH	E <sup>W</sup> winds, strong; drizzle, sleet showers locally.
† <sub>4</sub> MIDLAND COUNTIES	E <sup>W</sup> and NE <sup>W</sup> winds, fresh or strong; unsettled, some sleet showers.	† <sub>10</sub> IRELAND SOUTH	N <sup>W</sup> and NE <sup>W</sup> winds, moderate; fair generally.
† <sub>5</sub> ENGLAND SOUTH			The SOUTH CONE has been lowered this morning in district 10, but is still flying in districts 0 to 3, 6, 7, 9, and parts of 5 and 8.
		WARNINGS	

Notes.—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 ...	29.99	36	31	SE 6	c	4	Holyhead ...	29.47	41	38	SSE 4	c	3
Sumburgh Head ...	29.70	41	41	SE 4	o	6	Valencia ...	29.28	50	48	W 3	c	4
Stornoway ...	29.89	44	43	SE 6	o	5	Scilly ...	29.41	47	47	SSE 7	rm	5
Aberdeen ...	29.62	42	41	SE 5	o 9 10 9	5	Jersey ...	29.60	45	42	E 3	o	3
Shields ...	29.64	40	38	S 2	o	2	Dungeness ...	29.58	41	39	ESE 4	c	4
Ardrossan ...	29.49	41	40	E 2	o	2	London ...	29.61	42	39	ESE 3	c	4
Malin Head ...	29.23	36	36	SSE 5	o	5	Yarmouth ...	29.64	41	40	ESE 4	c	4
Mullaghmore ...	29.19	41	40	SE 8	or	6	Rochefort ...	29.74	43	41	SSW 4	r	2
Belmullet ...	29.17	45	45	SW 2	or	*							

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

The reports for yesterday morning showed that the distribution of pressure was still of the complex type observed on the previous day. There were still two large areas of high pressure - one over Russia, where the maximum readings exceeded 31 ins: and the other to the southward of Spain, where the readings were apparently much above 30.3 ins: . There was a well formed depression over the Mediterranean, a new and large area of low pressure off the west of Ireland, and a small secondary system (filling up) over Belgium. SE winds of moderate strength still prevailed over Russia, Austria-Hungary, Poland, the Baltic, and North Sea, NW winds over Spain and a complete cyclonic circulation of fresh to strong winds over the Mediterranean, while in the western and northern parts of the British Isles strong winds from SSE and S. were setting in. The weather was dull in most places, very unsettled over the Mediterranean and British Isles in both of which regions much rain had again fallen, and sleet locally, while a thunderstorm was in progress at Rome. Temperatures remained low over Northern and Eastern Europe, and was rather so in most other places. The lowest morning values were 3° F. at Moscow, 4° at Archangel, 14° at Kharkov, 21° at Kiev and Neustakwasser, 22° at Haparanda, Kuopio, and Riga, 23° at Vienna, 25° at Berlin, 30° at Oxford, 32° at Nairn, 34° at Paris, 35° at Brussels, and 37° in London; the highest were 55° to 57° on the Algerian coast, 56° at Conunna, 55° at Malta, 53° at San Fernando, 51° at Lisbon, 50° at Brindisi and Naples, and 48° at Valencia (Ireland).

Later in the day the weather became still more unsettled over France and the British Isles, and a new depression began to appear over the Bay of Biscay.

### 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 8 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.

STAT	Haparanda
	Hernösand
	Stockholm
	Wisby
	Bodö
	Christiania
	Skudesnaes
	Christiania (Faro)
	Skagen (Faro)
	Fanö
	Sumburgh
	Stornoway
	Wick
	Nairn
	Aberdeen
	Leith
	Shields
	Spurn Head
	York
	Loughborough
	Ardrossan
	Malin Head
	Mullaghmore
	Belmullet
	Donaghadee
	Barrow-in-Forward
	Liverpool
	Holyhead
	Parsonstown
	Valencia
	Roche's Point
	Pembroke
	Scilly
	Prawle Point
	Jersey
	Hurst Head
	Dungeness
	London
	Oxford
	Cambridge
	Yarmouth
	Cuxhaven
	Berlin
	Wiesbaden
	Munich
	The Hague
	Brussels
	Cape Gr. Br.
	Paris
	Brest
	Lorient
	Rochefort
	Belfort
	Lyons
	Nice...
	Perpignan
	Barritz
	Corunna
	Lisbon

# DAILY WEATHER REPORT.

for Sunday 13<sup>th</sup> JANUARY 1889.  
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 116, 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 2.)	SHADE TEMP.		
				Dirac.	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.	Dirac.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	30.45	17	SE	2	5	30.54	00	28	22	0	S	2	0	*	28	16	0.16
	Hernösand ...	30.25	31	ESE	4	5	30.24	-02	28	27	1	L	0	0	*	31	25	0.18
	Stockholm ...	30.24	31	SE	2	0	30.30	+14	30	28	2	SE	2	0	*	34	27	0.04
	Wisby ...	30.17	30	SEW	4	0	30.28	+17	25	25	7	S	4	0	*	30	?	-
	Bodö ...	30.11	28	L	0	6	30.09	-08	30	29	0	ENE	2	5	1	30	23	-
	Christiansund...	30.06	34	ESE	2	6	30.14	+14	28	27	7	ESE	1	6	2	36	24	-
	Skudesnaes ...	30.05	32	ENE	3	6	30.16	+17	26	25	7	NNE	3	6	2	35	26	-
	Christiania Fjord (Farder)	30.08	29	NNW	5	0	30.16	+08	32	30	2	NNE	5	0	1	?	27	-
	Skagen (The Scaw)	29.99	35	ESE	3	0	30.09	+15	33	32	2	ESE	2	0	1	36	31	0.04
	Fanö ...	29.82	34	E	5	0	29.96	+20	33	32	1	E	6	0	*	34	32	-
BRITISH ISLANDS.	Sumburgh Head	29.91	29	SSE	1	0	30.03	+22	39	39	1	S	2	0	5	41	38	0.19
	Stornoway ...	29.82	43	W	1	6	29.99	+39	41	40	3	S	3	0	3	44	36	-
	Wick ...	29.84	40	S	4	0	30.06	+38	37	35	2	W	2	0	1	40	35	-
	Nairn ...	29.87	37	E	1	0	30.07	+37	35	32	2	L	0	0	1	41	33	-
	Aberdeen...	29.93	38	ESE	3	0	30.12	+33	34	33	4	W	1	0	5	39	34	0.02
	Leith ...	29.86	36	E	2	0	30.08	+29	37	35	1	W	1	0	*	39	35	-
	Shields ...	29.79	40	NE	4	0	30.05	+39	41	39	3	NE	2	0	4	41	36	0.11
	Spurn Head ...	29.66	37	ENE	4	0	29.96	+43	41	39	4	NE	3	0	4	44	35	0.10
	York ...	29.69	37	NE	2	0	29.99	+43	39	38	3	NNE	1	0	*	40	38	0.08
	Loughborough	29.68	34	N	2	0	29.98	+43	38	37	2	N	2	0	*	38	33	0.15
GERMANY.	Ardrossan ...	29.88	36	NE	2	0	30.14	+48	36	36	2	NNE	1	0	1	39	34	-
	Malin Head ...	29.85	39	S	2	0	30.09	+47	36	34	4	S	3	0	3	40	36	-
	Mullaghmore ...	29.85	39	E	4	0	30.09	+53	35	33	5	WSW	1	0	2	41	31	-
	Belmullet ...	29.86	37	E	2	0	30.10	+52	35	37	2	SE	2	0	*	45	32	-
	Donaghadee ...	29.85	41	ENE	5	0	30.11	+50	41	38	0	NE	3	0	2	41	39	-
	Barrow-in-Furness	29.76	38	NE	3	0	30.06	+48	39	37	3	NE	1	0	*	39	35	-
	Liverpool (Bidston)	29.76	37	NNE	2	0	30.05	+51	38	36	2	NNE	2	0	2	38	35	-
	Holyhead ...	29.71	41	ENE	4	0	30.05	+51	42	39	3	ENE	2	0	2	43	38	-
	Parsonstown ...	29.83	29	L	0	0	30.13	+62	27	27	12	L	0	0	*	42	27	-
	Valencia ...	29.83	40	NNE	2	0	30.13	+62	32	31	14	L	0	0	1	48	29	-
FRANCE & NETHERLANDS.	Roche's Point...	29.78	40	NE	2	0	30.09	+61	35	33	5	NNE	3	0	3	45	33	0.18
	Pembroke ...	29.71	40	NE	4	0	30.03	+56	40	38	5	NNE	2	0	2	41	35	-
	Scilly ...	29.64	44	NNE	6	0	30.04	+64	45	42	1	NNE	5	0	5	46	42	-
	Prawle Point ...	29.64	37	NNE	4	0	29.96	+57	38	36	0	N	2	0	2	41	32	-
	Jersey ...	29.52	41	N	3	0	29.91	+60	40	37	2	NNE	3	0	3	45	37	0.12
	Hurst Castle ...	29.57	36	NNE	5	0	29.91	+52	38	38	2	NNE	4	0	2	39	32	0.02
	Dungeness ...	29.44	40	E	5	0	29.82	+45	38	36	1	NNE	5	0	4	41	36	-
	London ...	29.57	36	NE	2	0	29.91	+55	37	36	2	NE	1	0	*	37	35	0.15
	Oxford ...	29.70	31	NE	2	0	29.95	+49	36	36	3	N	3	0	*	36	31	0.08
	Cambridge ...	29.65	35	N	2	0	29.95	+49	35	34	1	N	1	0	*	36	31	0.14
PENIN-SULA.	Yarmouth ...	29.58	36	ENE	4	0	29.91	+45	39	38	3	ENE	5	0	5	39	33	0.12
	Cuxhaven ...	29.70	32	ESE	4	0	29.86	+20	37	?	1	E	3	0	*	31	29	-
	Berlin ...	29.74	35	ESE	3	0	29.89	+17	24	23	4	ESE	5	0	*	37	25	-
	Wiesbaden ...	*	*	*	*	*	29.75	-25	29	28	2	L	0	0	*	34	28	-
	Munich ...	29.52	26	L	0	0	29.67	-18	23	23	2	L	0	0	*	30	23	-
	The Helder ...	29.64	32	ENE	3	0	29.87	+34	35	34	6	ENE	3	0	3	36	28	0.04
	Brussels ...	*	*	*	*	*	29.82	+29	30	29	3	NNE	3	0	*	35	30	-
	Cape Gris Nez...	?	36	E	7	0	?	?	39	36	6	NE	4	0	3	?	32	-
	Paris ...	29.39	33	N	4	0	29.71	+41	34	34	0	NE	3	0	*	35	32	0.20
	Brest ...	29.63	43	N	4	0	29.95	+64	41	37	5	NNE	4	0	3	50	34	-
FRANCE & NETHERLANDS.	Lorient ...	29.56	42	N	4	0	29.84	+60	42	39	3	N	5	0	5	48	37	-
	Rochefort ...	29.56	41	N	7	0	29.82	+51	38	37	8	N	7	0	3	50	32	0.12
	Belfort ...	29.44	34	E	3	0	29.67	+27	37	34	4	E	1	0	*	34	29	-
	Lyons ...	29.39	41	S	5	0	29.68	+30	32	32	7	NNW	3	0	*	45	32	0.32
	Nice ...	29.55	40	ENE	3	0	29.56	-02	39	38	2	ENE	7	0	4	41	36	0.35
	Perpignan ...	29.50	50	NN	8	0	29.61	+08	42	36	3	N	4	0	*	54	39	0.04
	Biarritz ...	29.60	50	NN	12	0	29.77	+26	38	37	16	E	3	0	Y	55	36	0.20
	Corunna ...	*	*	*	*	*	30.04	+20	51	49	3	NNE	5	0	6	55	45	0.16
	Lisbon ...	30.01	33	NN	5	0	30.04	+02	49	48	7	NNW	4	0	5	50	48	0.08

For Explanation of Columns, see p. 4.

Received too late for insertion in parts on p. 2

# WEATHER CHARTS

for 8 a.m. on

Sunday, 13<sup>th</sup> January

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.

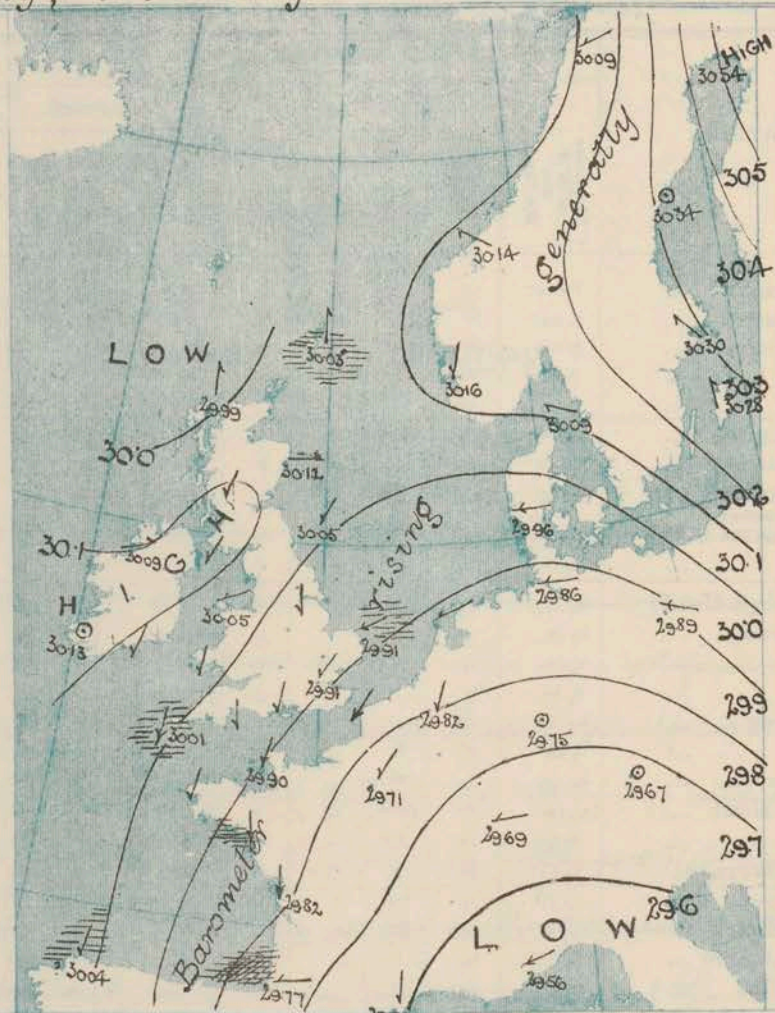
**Sea Disturbance** — where considerable is shown thus.

— Rough — High.

## MEAN HEIGHT of the BAROMETER

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

STATIONS	MEAN READINGS.
Sumburgh Head	29.695
Stornoway	29.697
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



# GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.5 ins. and upwards, in the north of Sweden; 30.1 ins. and upwards over Ireland. Lowest, 29.6 ins. and less, in the southeast of France; 30.0 ins. and less, off the northwest of Scotland. Gradients slight. Barometer rising generally, - most in the south and east.
TEMPERATURE	Highest, 51° at Courmayeur, 48° at Lisbon, 45° at Pelly, 42° at H. Lyhead, Lorient and Biscaya, and 41° at Stornoway, Shields, Green Head and Brest. Lowest, 25° at Haparanda and Munich, 24° at Berlin, 25° at Uirby, 26° at Kudeenao, 27° at Paroseloon, and 28° at Hernoand and Chukaneund. A considerable fall has taken place since yesterday in the west of our Islands.
WIND	Light from the S. on the north coasts of Ireland and Scotland, as well as in Sweden. Moderate from E. on the eastern shores of the North Sea and from NE. or N. over England, France, and the south of Ireland.
WEATHER	Fine in most parts of Ireland and Scotland, and also in Germany and the coast of Norway. Gull elsewhere, with rain in the east of England and snow at Herts and Lyons. Rain and snow fell yesterday in many parts of England and France.
SEA	High at Hissink, rough on the Spanish coast, and rather rough at Lumburg Head, Aberdeen, Pelly and Yarmouth.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay over the north of France yesterday, after moving slowly eastwards, has entirely disappeared, the barometer has risen generally and a new area of high pressure has appeared over Ireland.

There are at present no signs of the approach of any new disturbance.

## FORECASTS

for the 24 hours ending at NOON on 14<sup>th</sup> JAN: 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.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	30.00	35	30	ENE 2	b	3	Holyhead ...	29.67	39	36	ENE 4	omg	3
Sumburgh Head	29.90	39	36	SE 3	o	6	Valencia ...	29.70	46	43	ENE 2	om	2
Stornoway ...	29.75	44	42	S 4	b	4	Scilly ...	29.56	45	41	ENE 5	c	6
Aberdeen ...	29.85	38	36	SE 5	ogpq	6	Jersey ...	29.42	42	39	N 2	c	3
Shields ...	29.72	38	37	NE 4	rsp	6	Dungeness ...	29.41	41	38	ESE 4	c	3
Ardrossan ...	29.79	37	37	NE 2	o	2	London ...	29.49	35	35	NNE 3	omst	*
Malin Head ...	29.79	40	38	S 3	o	3	Yarmouth ...	29.48	36	35	E 5	og	5
Mullaghmore ...	29.75	40	39	E 4	b	3	Rocheport ...	29.39	47	45	NW 7	c	3
Belmullet ...	29.75	44	42	ESE 1	b	*							

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

The report for yesterday morning showed a continuation of the complex condition noticed on Friday pressure having become very high over Russia, while it remained rather rough over the Atlantic to the southward of Lisbon. The depression noticed over the Mediterranean on Friday still held; that observed at the same time off the west of our Islands had disappeared, but a new one, which was apparently developed over the Bay of Biscay during the previous night had advanced over the northwestern parts of France. SE winds, moderate to a gale in force prevailed over Scandinavia, the Baltic, Germany, Poland and Russia, E and NE winds over England, NW gales over the Bay of Biscay, W and NW winds over Spain, while over the Mediterranean there was cyclonic circulation of fresh to strong winds round the depression already referred to. Over the whole of Western Europe the weather was in a most unsettled state, rain was falling in many places both in the British Isles and France, and large quantities had fallen during the previous night at most stations; over Central and Eastern Europe the sky was cloudy or overcast. Temperature varied from much below the freezing point in the last named regions, and from between 30° and 40° over the greater part of England, France, and Italy to considerably above 50° on the coast of the Spanish Peninsula and the southern parts of the Mediterranean. The lowest individual values were -4° F. at Moscow, +1° at Kharkov, 6° at Kiev, 12° both at Odessa and St Petersburg, 18° at Kuopio, 19° at Craew, 23° at Haparanda, Helsingfors and Lemberg, 25° at Munich, 28° at Berlin, 33° at Copenhagen, Brussels and Oxford, 34° at Paris, and 35° in London; the highest was 57° at Algiers, 56° at San Fernando and Lisbon, 54° at Catania and Ravenna, 52° at Palermo and Biarritz, and 46° at Rochefort, Scilly, and Valencia.

Later in the day the French depression moved a little to the eastward, while cold rains and wet snow fell in many parts of England.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (heavy); 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.

STAT	Haparanda
	Hernösand
	Stockholm
	Widby
	Bodö
SCANDINAVIA.	Christiania
	Skudesnaes
	Christiania (East)
	Skagen (East)
	Fanö
	Sumburgh
	Stornoway
	Wick
	Nairn
	Aberdeen
	Leith
	Shields
	Spurn Head
	York
	Loughborough
BRITISH ISLANDS.	Ardrossan
	Malin Head
	Mullaghmore
	Belmullet
	Donaghadee
	Barrow
	Liverpool
	Holyhead
	Parsonsburg
	Valencia
	Roche's Point
	Pembroke
	Scilly
	Prawle
	Jersey
	Hurst Head
	Dungeness
	London
	Oxford
	Cambridge
	Yarmouth
GERMANY.	Cuxhaven
	Berlin
	Wiesbaden
	Munich
FRANCE & NETHERLANDS.	The Hague
	Brussels
	Cape Gr. Br.
	Paris
	Brest
	Lorient
	Rochefort
	Belfort
	Lyons
	Nice
	Perpignan
	Biarritz
PENINSULA.	Coruna
	Lisbon

# DAILY WEATHER REPORT.

for Monday, 14<sup>th</sup> January 1883.  
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.					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 Rain-fall.	
			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 ..	30.45	26	SW	2	0	30.38	- 16	24	24	+ 1	SW	4	S	*	27	14		
Hernösand ...	30.42	31	S	4	S	30.31	+ 17	28	27	0	SSW	4	0	*	32	25	0.04	
Stockholm ...	30.43	28	SE	4	0	30.53	+ 23	24	23	- 6	ESC	2	0	*	?	?		
Wisby ...	30.40	24	SW	4	0	30.46	+ 18	22	21	- 3	SSE	4	0	*	37	23		
Bodö ...	30.13	29	ESE	2	0	30.07	- 02	31	30	+ 1	E	4	S	2	32	23		
Christiansund...	30.17	30	ESE	3	0	30.21	+ 07	35	32	+ 7	Zo	0	bc	2	36	27		
Skudesnaes ...	30.27	32	ESE	1	0	30.31	+ 15	36	35	+ 10	ESE	2	0	3	36	?		
Christiania Fjord (Færd)	30.26	32	NNE	4	S	30.38	+ 22	30	29	- 2	NNE	3	0	1	32	?		
Skagen (The Seaw)	30.26	31	SE	1	0	30.32	+ 23	30	29	- 3	SE	1	0	1	34	28	0.08	
Fanö ...	30.17	29	ESE	5	0	30.23	+ 27	29	29	- 4	ESE	4	0	*	34	28		
BRITISH ISLANDS.																		
Sumburgh Head	30.10	40	SW	2	0	30.09	+ 06	44	39	+ 2	S	3	0	4	42	39	0.02	
Stornoway ...	30.06	42	SW	5	0	29.96	- 03	42	41	+ 1	S	6	0	6	43	40	0.08	
Wick ...	30.12	37	SW	2	0	30.07	+ 01	38	36	+ 1	S	3	0	3	40	34		
Nairn ...	30.11	36	Zo	0	0	30.07	00	35	34	0	Zo	0	bc	1	39	29		
Aberdeen...	30.19	34	SSW	1	cm	30.20	+ 08	36	34	+ 2	S	2	om	4	39	33		
Leith ...	30.18	38	W	1	0	30.21	+ 13	39	36	+ 2	SSE	1	0	*	40	35		
Shields ...	30.15	41	Zo	0	0	30.22	+ 17	38	37	- 3	WNW	1	rm	3	42	35	0.02	
Spurn Head ...	30.09	41	N	3	0	30.19	+ 23	39	38	- 2	NW	2	0	3	41	36	0.03	
York ...	30.11	40	N	1	0	30.19	+ 20	36	36	- 3	N	1	0	*	42	33	0.04	
Loughborough	30.14	39	NW	2	0	30.24	+ 26	37	36	- 1	NW	1	ogm	*	40	36	0.02	
GERMANY.																		
Ardrossan ...	30.17	37	NE	1	0	30.16	+ 02	41	40	+ 5	SSE	3	0	2	42	36		
Malin Head ...	30.14	35	S	3	bem	30.03	- 06	34	33	- 2	SSW	4	om	4	39	34		
Mullaghmore ...	30.15	36	SE	2	0	30.06	- 03	39	36	+ 4	SSW	5	og	4	45	33		
Belmullet ...	30.17	40	SSE	2	0	30.01	- 09	42	41	+ 4	SSW	4	0	*	42	36		
Donaghadee ...	30.19	39	WNW	2	0	30.19	+ 08	38	37	- 2	NW	3	0	1	41	33		
FRANCE & NETHERLANDS.																		
Barrow-in-Furness	30.16	40	NE	1	0	30.21	+ 15	37	36	- 2	ESE	2	0	*	42	36		
Liverpool (Bidston)	30.17	39	NNE	1	0	30.24	+ 19	38	36	0	E	1	og	1	40	38		
Holyhead ...	30.16	42	NE	1	og	30.22	+ 17	40	37	- 2	E	1	og	1	44	39		
Parsonstown ...	?	34	Zo	0	0	30.15	+ 02	33	32	+ 6	SE	1	bc	*	37	27		
Valencia ...	30.19	37	Zo	0	0	30.11	- 02	46	43	+ 14	SE	5	om	5	46	32		
Roche's Point...	30.19	37	NNE	2	0	30.16	+ 07	47	45	+ 12	SSW	4	0	4	47	34		
Pembroke ...	30.17	41	NE	1	0	30.23	+ 20	40	38	0	E	2	og	0	42	39		
Scilly ...	30.10	45	NNE	5	0	30.19	+ 18	44	41	- 1	Zo	0	og	2	46	43		
Prawle Point ...	30.13	39	N	3	0	30.24	+ 28	38	37	0	N	2	0	2	39	36		
Jersey ...	30.05	43	NNE	3	0	30.19	+ 29	43	40	+ 3	NE	2	om	2	43	39		
NETHERLANDS.																		
Hurst Castle ...	30.10	38	NNE	3	om	30.19	+ 28	39	38	+ 1	NNE	3	og	2	39	37		
Dungeness ...	30.00	39	NNE	4	0	30.12	+ 30	40	39	+ 2	NNE	3	0	2	41	37	0.04	
London ...	30.07	39	N	2	om	30.17	+ 26	38	37	+ 1	NW	2	om	*	40	37		
Oxford ...	30.15	38	N	1	0	30.23	+ 28	36	36	0	N	1	og	*	38	36	0.04	
Cambridge ...	30.11	39	N	1	0	30.23	+ 28	36	35	+ 1	N	1	0	*	39	33	0.02	
FRANCE.																		
Yarmouth ...	30.01	40	NE	4	0	30.16	+ 25	39	38	0	ESE	4	og	4	40	37	0.01	
Cuxhaven ...	30.08	26	E	4	0	30.22	+ 36	22	?	- 9	E	5	0	*	?	20		
Berlin ...	30.10	20	E	4	0	30.22	+ 33	12	12	- 2	E	3	0	*	25	12		
Wiesbaden ...	*	*	*	*	*	30.04	+ 29	34	32	+ 5	Zo	0	0	*	39	?		
Munich ...	29.83	25	W	2	?	29.98	+ 31	24	24	+ 1	NE	2	m	*	27	23		
FRANCE & NETHERLANDS.																		
The Helder ...	30.04	34	NE	4	0	30.17	+ 30	32	31	- 3	NE	3	0	3	36	30		
Brussels ...	*	*	*	*	*	30.13	+ 31	31	31	+ 1	NE	1	0	*	34	?		
Cape Gris Nez...	?	42	ESE	5	0	?	?	40	38	+ 1	ESE	7	0	5	43	37		
Paris ...	29.97	34	N	4	0	30.10	+ 39	34	32	0	NNE	4	0	*	39	32		
Brest ...	30.13	42	NNE	1	0	30.23	+ 28	41	40	0	Zo	0	0	2	50	37		
FRANCE & NETHERLANDS.																		
Lorient ...	30.04	42	NNE	4	0	30.18	+ 34	42	40	0	N	3	0	4	43	37		
Rochefort ...	30.00	39	NNE	7	0	30.18	+ 36	37	36	- 1	NE	4	0	2	41	32		
Belfort ...	29.74	30	E	1	0	29.99	+ 30	29	29	- 8	E	1	0	*	?	25		
Lyons ...	29.89	34	NW	3	0	30.02	- 34	30	30	- 2	N	4	0	*	36	30	0.04	
Nice ...	29.62	47	NE	4	0	29.71	+ 15	42	?	+ 3	NE	1	0	0	?	?		
FRANCE & NETHERLANDS.																		
Perpignan ...	29.82	40	NW	4	0	29.89	+ 28	40	35	- 2	NW	9	0	*	48	38		
Biarritz ...	29.93	40	ESE	5	0	30.11	+ 34	39	36	+ 1	Zo	0	0	?	46	36	0.28	
FRANCE & NETHERLANDS.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	30.07	31	N	5	0	30.10	+ 06	47	43	- 2	N	7	0	3	55	46		

For Explanation of Columns, see p. 4.

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

for 8 a.m. on Monday, 14<sup>th</sup> January, 1889.

(Explanation of Map)

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.

 = Rough       = High

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

14 January, 1967

General High

Barometer

Low

30.1, 30.2, 30.3, 30.4, 30.5, 30.6

29.8, 29.9, 30.0, 30.1, 30.2, 30.3, 30.4, 30.5

30.11, 30.12, 30.13, 30.14, 30.15, 30.16, 30.17, 30.18, 30.19, 30.20, 30.21, 30.22, 30.23, 30.24, 30.25, 30.26, 30.27, 30.28, 30.29, 30.30, 30.31, 30.32, 30.33, 30.34, 30.35, 30.36, 30.37, 30.38, 30.39, 30.40, 30.41, 30.42, 30.43, 30.44, 30.45, 30.46, 30.47, 30.48, 30.49, 30.50, 30.51, 30.52, 30.53, 30.54, 30.55, 30.56, 30.57, 30.58, 30.59, 30.60, 30.61, 30.62, 30.63, 30.64, 30.65, 30.66, 30.67, 30.68, 30.69, 30.70, 30.71, 30.72, 30.73, 30.74, 30.75, 30.76, 30.77, 30.78, 30.79, 30.80, 30.81, 30.82, 30.83, 30.84, 30.85, 30.86, 30.87, 30.88, 30.89, 30.90, 30.91, 30.92, 30.93, 30.94, 30.95, 30.96, 30.97, 30.98, 30.99, 31.00

W, E

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

A hand-drawn weather map of the United States, showing temperature readings and weather notes. The map is oriented with North at the top. Key features include:

- Temperature Readings:** Numerous numerical values are scattered across the map, representing temperatures in different locations. These include: 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
- Weather Notes:** Several handwritten notes describe weather conditions:
  - "Rain has fallen" (multiple instances)
  - "Snow has fallen"
  - "Rain and snow have fallen"
  - "MUCH WARMER"
  - "A LITTLE WARMER"
  - "COLDER HERE"
- Geographical Features:** The map shows the outlines of the United States, including the Gulf of Mexico and the Atlantic Ocean.
- Handwritten Text:** The words "PLACES" and "IN MOST" are written vertically across the center of the map.

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, over the Gulf of Bothnia and Finland; 30.2 ins: and upwards in a long band extending S.W. from Scandinavia to the west of England.  
 Lowest, 29.8 ins: and less, over the Gulf of Genoa, 30.0 ins: and less, off our extreme northwestern coasts.  
 Gradient slight, but increasing in Ireland and Scotland.  
 Barometer rising at all but our extreme western and northern stations, where it is falling somewhat decidedly.

## TEMPERATURE

Highest, 47° at Rochester, 46° at Valencia, 44° at Sully, 43° at Jersey, 42° at Stornoway, Balmullet and Lorient.  
 Lowest, 12° at Berlin, 22° at Nieby and Copenhagen, 24° at Haparanda and Munich, 28° at Helsingfors, and 29° at Jaro and Belfast.

## WIND

Fresh from the S.W. on our extreme west and northwestern coast, moderate from S.W. in the north of Sweden.  
 Light or moderate from the N.E. at our southeastern and many of the Continental stations.  
 Variable over the more central parts of the United Kingdom.

## WEATHER

Dull generally with mist or fog at many of the English stations, and snow in the north of Scandinavia.  
 A little rain or sleet fell yesterday in the East and south-east of England.  
 Auroral halos were seen last night at several of our northwestern stations.

## SEA

Rough at Stornoway, and rather rough at Valencia and Cape Girardeau, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The high pressure band over our Islands appears to be moving southwards, and a depression is approaching our extreme western coast.  
 Increasing S.W. winds and milder rainy weather are therefore probable in Ireland and Scotland, but in our southeastern districts no important change is anticipated at present.

## FORECASTS

For the 24 hours ending at NOON on JAN<sup>y</sup> 15<sup>th</sup> 1889.

### DISTRICTS.

### FORECASTS.

0	SCOTLAND NORTH	{ S.W. winds, increasing in force; dull, some rain.
1	SCOTLAND EAST	
2	ENGLAND N.E.	{ Variable breezes, finally S.E. <sup>ly</sup> ; dull, some mist or fog.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	Same as No 2
5	ENGLAND SOUTH	Light breezes, chiefly E. <sup>ly</sup> ; dull, some mist or fog.


### DISTRICTS.


### FORECASTS.

6	SCOTLAND WEST	{ E. <sup>ly</sup> and S.E. <sup>ly</sup> winds, freshening dull, some rain.
7	ENGLAND N.W.	
8	ENGLAND S.W.	
9	IRELAND NORTH	{ S.E. <sup>ly</sup> and S.W. 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.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	30.22	36	32	SE 1	6	2	Holyhead ...	30.13	42	40	NE 2	0 9	2
Sumburgh Head							Valencia ...						
Stornoway ...	30.05	42	42	S 4	8	14	Scilly ...						
Aberdeen ...							Jersey ...	29.98	41	38	NNE 2	0	2
Shields ...							Dungeness ...	29.92	41	38	NE 4	0	3
Ardrossan ...							London ...						*
Malin Head ...	30.02	38	36	S 3	0	3	Yarmouth ...						
Mullaghmore ...							Rocheport ...						
Belmullet ...	30.14	41	40	S 3	0	*							

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

The reports for yesterday morning showed that a large high-pressure area of great intensity lay over Russia, Poland, the Baltic and Scandinavia, while another similar system (intensity unknown) lay over the Atlantic, the two being united by a cold front which stretched across Ireland, Scotland, and the northern parts of the North Sea. At the same time a large shallow depression lay over the Mediterranean, and apparently another at a considerable distance to the west of the British Islands. The disturbance noticed over France on Saturday had filled up. The wind was still E to SE over Russia, Austria, Germany, and the Baltic, blowing strongly in several places, and a gale at Almeria and Tangier; over England, the Irish Sea and France it was N, in Spain N.W., on the Algerian coast W, and in Italy E. In Scotland and Ireland variable winds were experienced, while in the Shetlands and Hebrides there was a light breeze from the S.W. The weather was still unsettled over Southern Europe, and considerable quantities of rain had again fallen over France, and the Mediterranean accompanied by cold mists in many places, and smaller quantities in the British Islands and Sweden; over Russia, Poland and Germany, however, the weather was very fine and bright. Temperatures had again fallen in most places, and were low generally - very low over Russia and eastern Europe. The lowest morning values were -15° at Moscow, -3° at Kiev, +5° at Archangel and St. Petersburg, +6° at Lemberg and Odessa, +3° at Warsaw, +9° at Riga, +10° at Cracow, +12° at Almeria, and Taufahrwasser, +17° at Breslau, +20° at Vienna and Munich, +24° at Berlin, +27° at Tarnobrzeg, +31° at Copenhagen, +34° at Paris and +37° in London. The highest were 59° at Oran, 57° at Algiers, 52° at Bordeaux, 51° at Genoa, 49° at Lisbon and at Cagliari, 46° at Tangier and 45° at Sallee. In the south of France the readings ranged from 36° to 41°.

Very little change occurred later, beyond a steady increase of pressure over England, France and Germany, and a slight decrease in Scotland.

## SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 6<sup>TH</sup> TO THE 12<sup>TH</sup> JANUARY 1889.

The weather of the past week has again been cloudy and very unsettled, especially in the more western and southern parts of our area. Thick fog occurred over England at the commencement of the period, while snow was experienced over our E. districts at the close of the week.

Barometrical pressure was at first highest over Southern Russia, and while a large depression was observed over Lapland and the neighbourhood of the White Sea, a smaller disturbance advanced over Spain from the S.W. The wind was consequently, W to N.W. over the northern parts of the United Kingdom, but N.E. at all the more southern stations. Over England where the conditions were mainly anticyclonic, thick fog and severe frosts were experienced on the 6<sup>th</sup> and 7<sup>th</sup>, but in Scotland and the north of France the weather was fair. In Southern Spain and the S. of France, however, heavy falls of snow or rain were produced by the depression noticed above. On Tuesday the 8<sup>th</sup>, a considerable increase of pressure took place over Northern Europe, while a deep depression appeared off the coast of Ireland. The winds in our Islands therefore shifted to the S.W., and blew a gale in the N.E. and N., while the weather became milder, with rain in most districts. During Tuesday night the depression in the west travelled away N.W., but the conditions now became complicated by the appearance of a second high-pressure system over Portugal, and the weather over the United Kingdom fell into an exceedingly unsettled state. On Wednesday the 9<sup>th</sup> shallow depressions appeared over various parts of the country, and by Thursday these had resolved themselves into one large disturbance which gradually filled up over the E. and S.E. of England. The wind now shifted to the N.W. generally, and the weather became colder. By Friday morning another depression had appeared off the west of Ireland, and although this soon passed away to the N.W., further secondary disturbances were developed over our Islands and their neighbourhood. The most important of these was situated on Saturday morning over the north of France, and the N.E. winds which set in over the greater part of the United Kingdom were accompanied by snow or sleet in the east and south-east of England. In France, gales from various directions were experienced very generally. At the close of the week, however, the disturbance appeared to be filling up. Temperatures were very low at the commencement of the time, especially over England, but on Tuesday a considerable rise took place. By the end of the period, however, the N.E. winds had again produced a return to cold 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.

# DAILY WEATHER REPORT.

for *Tuesday, 15<sup>th</sup> January 1889.*  
*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.	Sec. 0 to 24.		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.	
<b>SCANDINAVIA.</b>																			
Haparanda ..	30.47	25	SW	6	0		30.44	+0.06	25	24	+1	SW	4	0	*		28	23	
Hernösand ...	30.45	25	W	0	0		30.58	+0.07	23	22	-5	S	6	0	*		34	21	
Stockholm ...	30.55	25	ESE	2	0		30.53	-0.02	24	25	+3	E	2	0	*		30	21	
Wisby ...	30.48	22	ESE	2	0		30.45	-0.01	24	24	+2	E	2	0	*		32	18	
Bodö ...	30.17	36	ESE	2	0		30.09	+0.02	36	35	+7	ESE	2	0	1		?	?	0.02
Christiansund...	30.18	34	ESE	2	bc		30.14	-0.07	29	28	-6	ESE	1	0	3		36	24	
Skudesnaes ...	30.36	34	ESE	8	c		30.32	+0.03	30	28	-6	SE	8	0	5		37	30	
Christiania Fjord (Fjord)	30.48	29	ESE	3	0		30.47	+0.09	25	24	-5	ESE	2	0	1		30	21	
Skagen (The Seaw)	30.46	26	SE	1	0		30.41	+0.09	25	24	-5	SE	1	0	1		30	25	
Fanö ...	30.36	24	E	6	c		30.36	+0.13	24	22	-5	E	6	0	*		30	23	
<b>BRITISH ISLANDS.</b>																			
Sumburgh Head	30.01	42	SSE	5	0		29.87	-0.22	42	40	+1	SSE	6	0	7		42	41	
Stornoway ...	29.84	44	SW	8	0		29.67	-0.29	45	45	+3	SW	9	0	4		45	42	0.02
Wick ...	29.98	42	S	4	0		29.82	-0.25	42	39	+4	S	6	0	6		42	38	0.01
Nairn ...	29.97	42	S	3	0		29.81	-0.26	43	40	+8	SW	3	0	2		43	38	
Aberdeen...	30.13	40	SSE	4	0		30.00	-0.20	40	38	+4	SSE	5	0	5		41	36	
Leith ...	30.15	40	SSE	1	c		30.00	-0.21	39	36	0	S	1	0	*		41	37	
Shields ...	30.22	40	WNW	1	om		30.10	-0.12	37	36	-1	S	3	0	2		40	35	0.01
Spurn Head ...	30.21	38	W	0	r		30.18	-0.01	36	35	-3	S	3	0	3		40	35	0.02
York ...	30.21	38	NNE	1	0		30.12	-0.07	36	35	0	SE	2	0	*		40	35	
Loughborough	30.24	38	E	1	0		30.18	-0.06	35	34	-2	SE	1	0	om		39	35	
Ardrossan ...	30.11	43	SSE	4	0		29.94	-0.22	43	43	+2	SE	4	0	om	3	43	40	
Malin Head ...	29.92	42	SSW	6	om		29.68	-0.35	46	44	+12	S	7	0	om	6	46	34	
Mullaghmore...	29.96	46	S	6	om		29.70	-0.36	48	47	+9	SSW	8	0	om	6	49	35	
Belmullet ...	29.89	47	S	6	0		29.67	-0.34	48	48	+6	SSW	6	0	*		48	42	0.23
Donaghadee ...	30.12	43	SSW	3	c		29.92	-0.27	45	43	+7	SW	6	0	5		46	37	
Barrow-in-Furness	30.20	39	SE	3	0		30.09	-0.12	37	35	0	SE	5	0	*		39	35	
Liverpool (Bilston)	30.23	38	SE	1	0		30.09	-0.15	36	34	-2	SSE	3	0	3		40	35	
Holyhead ...	30.18	41	SSE	2	og		30.03	-0.19	42	40	+2	SSE	4	0	om	4	42	40	
Parsonstown ...	30.05	41	SE	1	0		29.84	-0.31	46	45	+13	SSE	2	0	*		47	32	
Valencia ...	30.00	50	SSE	6	om		29.77	-0.24	51	50	+5	SSE	7	0	om	6	51	45	0.16
Roche's Point...	30.09	46	SW	4	0		29.90	-0.26	50	48	+3	SSW	6	0	5		50	43	
Pembroke ...	30.19	44	SSE	3	0		30.05	-0.18	44	43	+4	SSE	5	0	4		45	40	
Scilly ...	30.17	45	SSE	2	0		30.04	-0.15	49	49	+5	S	6	0	4		49	43	
Prawle Point ...	30.24	38	WNW	2	0		30.15	-0.09	41	39	+3	SE	3	0	CU	2	41	34	
Jersey ...	30.21	43	W	0	0		30.18	-0.01	42	39	-1	NNE	1	0	om	1	43	40	
Harst Castle ...	30.22	40	NNE	3	om		30.19	-0.03	37	36	-2	NNE	1	0	og	0	40	36	
Dungeness ...	30.16	40	NNE	4	0		30.16	+0.04	37	36	-3	SE	3	0	3		40	36	0.03
London ...	30.23	39	NNE	2	ogm		30.19	+0.02	36	35	-2	SE	1	0	*		40	36	
Oxford ...	30.24	37	N	1	0		30.20	-0.03	35	33	-1	SSE	1	0	og	*	39	35	
Cambridge ...	30.25	37	W	0	0		30.23	-0.02	35	34	-1	E	1	0	*		38	33	
Yarmouth ...	30.19	38	ESE	3	0		30.25	+0.06	36	35	-3	ESE	2	0	og	3	40	34	
Cuxhaven ...	30.26	23	E	4	c		30.32	+0.10	20	19	-2	SE	3	0	*		23	19	
Berlin ...	30.32	10	ESE	3	b		30.32	+0.10	4	4	-8	ESE	2	0	*		19	8	
Wiesbaden ...	*	*	*	*	*		30.19	+0.15	24	23	-10	W	0	0	*		36	23	
Munich ...	30.04	26	NW	1	0		30.07	+0.09	25	25	+1	SE	1	0	*		28	23	
<b>FRANCE &amp; NETHERLANDS.</b>																			
The Helder ...	30.25	28	ESE	3	c		30.26	+0.09	21	20	-11	ESE	1	0	2		32	19	
Brussels ...	*	*	*	*	*		30.22	+0.09	30	30	-1	ESE	1	0	*		33	30	
Cape Gris Nez...	?	34	SE	3	0		?	?	32	31	-8	E	3	0	2		?	30	
Paris ...	30.17	33	NNE	3	0		30.19	+0.09	32	30	-2	NNE	1	0	*		34	32	
Brest ...	30.26	43	W	0	0		30.18	-0.05	43	41	+2	SSE	4	0	3		50	27	
Lorient ...	30.21	44	N	4	0		30.17	-0.01	41	38	-1	E	3	0	3		45	39	
Rochefort ...	30.20	42	WNW	5	0		30.22	+0.04	35	33	-2	ESE	3	0	2		43	28	
Belfort ...	?	29	E	1	0		30.10	+0.11	29	29	0	E	1	0	*		30	26	
Lyons ...	30.11	30	N	3	0		30.14	+0.12	30	29	0	N	4	0	*		31	28	
Nice ...	29.80	46	ESE	3	c		29.89	+0.18	41	38	-1	E	4	0	2		52	39	
Perpignan ...	29.94	40	WNW	5	b		30.03	+0.14	40	36	0	NW	5	0	3		47	38	
Biarritz ...	30.16	40	SE	3	r		30.14	+0.03	40	38	+1	E	3	0	3		43	37	0.08
<b>PENINSULA.</b>																			
Corunna ...	*	*	*	*	*														
Lisbon ...	*	*	*	*	*														

# WEATHER CHARTS

for 8 a.m. on

Tuesday, 15<sup>th</sup> January.

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.

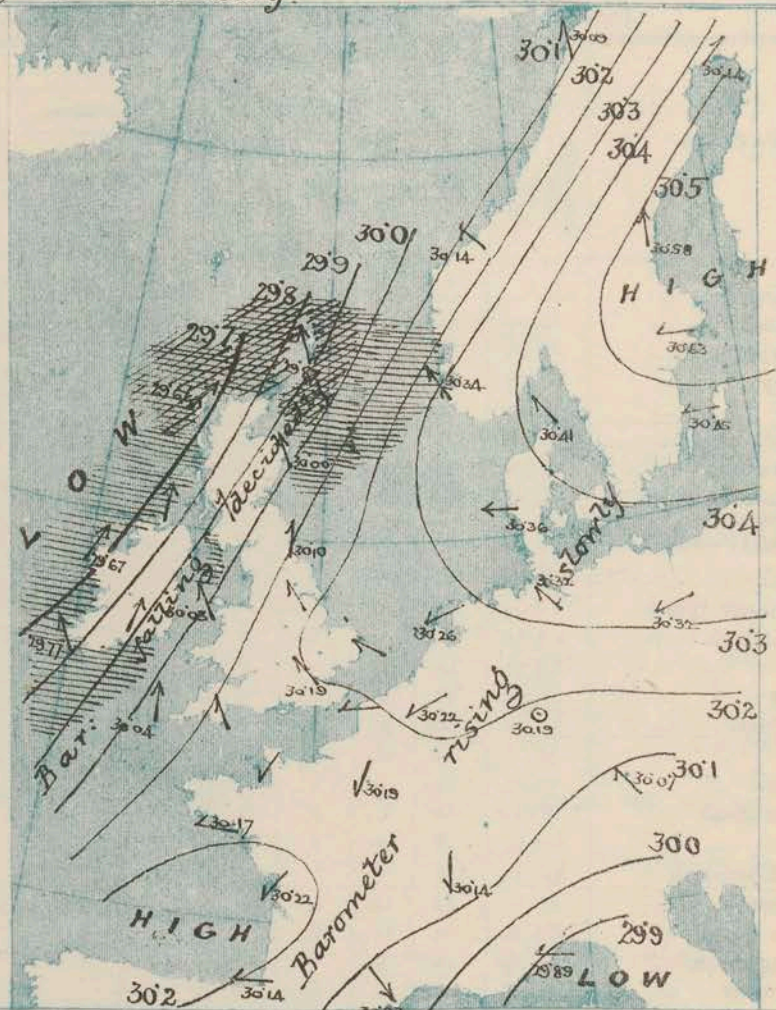
**Sea Disturbance** — where considerable is shown thus.

■ = Rough. ■ = High.

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.695
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

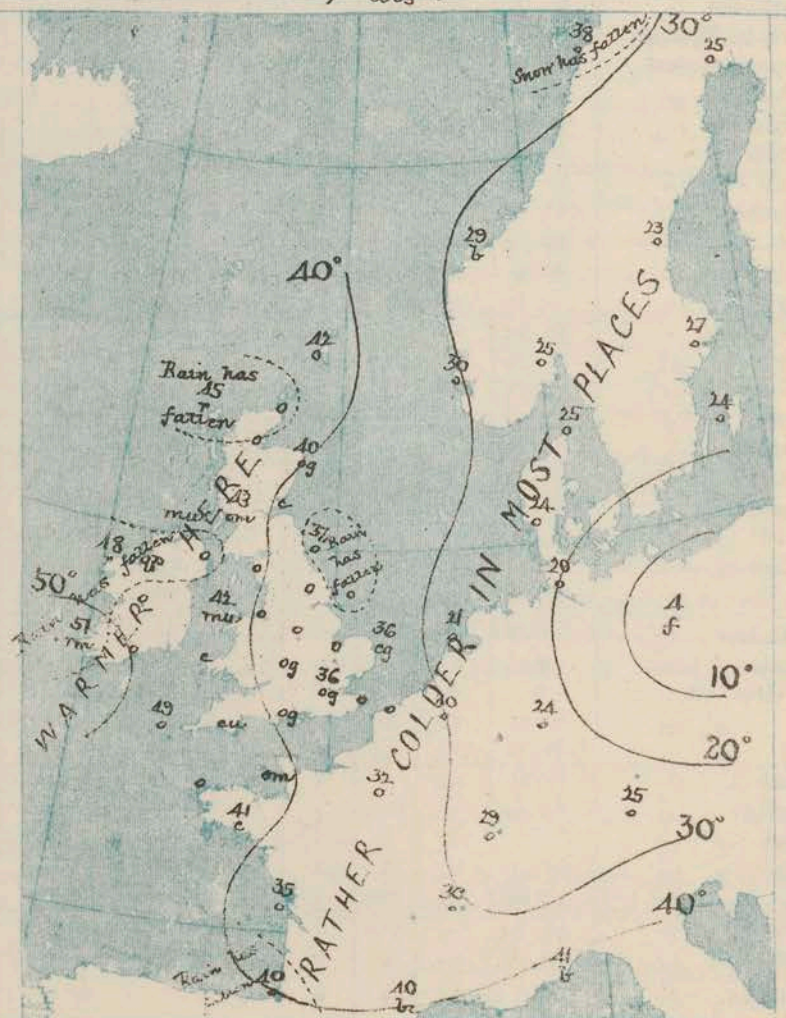
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January.

STATIONS.	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	Dry at 8 a.m.	Wet	
Sumburgh Head	42.9	35.4	39.4	35.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	32.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	42.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.03
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	45.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 ins: to 30.5 ins: over the Baltic, Sweden, and Denmark; 30.2 ins: and more, over the southern part of the Bay of Biscay and NW. off Spain.  
lowest, 29.7 ins: and less, off our extreme northwest coasts - 29.9 ins: and less, over the Mediterranean.  
Gradient somewhat steep for S<sup>W</sup> winds in the west and north; very slight and variable in the east and south.

Barometer falling in west and north, steady in south and east, rising in Germany.

## TEMPERATURE

Highest, 50° and 51° in the south of Ireland, 49° at Bally, 48° at Balmullet and Malbegmore, 45° at Stromway, and 42° at Limerick.  
lowest, 4° at Berlin, 13° at Helsingfors, 24° at Nisby and Niesbaden, 28° at Haparanda and Munich, 32° at Paris, and 36° in London.  
It has risen <sup>greatly</sup> in Ireland and moderately in Scotland, fallen a little over England and quickly over Germany and Holland.

## WIND

S<sup>W</sup> strong to a gale, on our western and northern coasts, SE<sup>W</sup> light and variable in the east and south.  
NW<sup>W</sup> to NE<sup>W</sup> in the south of France, SE<sup>W</sup> in Norway.  
E<sup>W</sup> over the Baltic, Germany, and the eastern shores of the North Sea.

## WEATHER

Dull in the west and north, with rain in the west of Ireland and the Hebrides.  
Dull and gloomy but dry in the south and east, and also over the Continent.  
A little rain fell yesterday at some western and northern stations.

## SEA

Rough in the extreme west and north, moderate in the Irish Sea, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the barometer is rising over Germany and the North Sea and is not falling over the east and southeast of England, the strong S<sup>W</sup> winds and mild weather in the west do not appear likely to spread to our eastern and southeastern stations, and will probably subside even in the west shortly, and veer to the NW<sup>W</sup>.

## FORECASTS

for the 24 hours ending at NOON on 16<sup>TH</sup> JAN: 1889.

### DISTRICTS.

### FORECASTS.

10	SCOTLAND NORTH	S <sup>W</sup> strong to light; slight showers.
11	SCOTLAND EAST	
2	ENGLAND N.E.	S <sup>W</sup> and Variable airs, dull, gloomy, some fog; temperature changing irregularly. Very cold tonight.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

### DISTRICTS.

### FORECASTS.

6	SCOTLAND WEST	S <sup>W</sup> winds, strong; some rain, then W <sup>W</sup> or NW <sup>W</sup> , light; colder.
7	ENGLAND N.W.	
8	ENGLAND S.W.	W <sup>W</sup> S <sup>W</sup> shifting to the NW <sup>W</sup> ; with colder and drier weather.
9	IRELAND NORTH	
10	IRELAND SOUTH	
WARNINGS		The South Cone was hoisted last evening in districts 0, 1, 6, 9, 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 ...	30.35	37	34	SSE 5	0	3	Holyhead ...	30.20	41	38	SSE 2	00	1
Stornoway Head ...	30.02	41	39	S 4	0	5	Valencia ...	30.06	49	46	S 6	00	5
Stornoway ...	29.89	43	42	SW 2	0	6	Scilly ...	30.21	45	42	SSE 2	0	3
Aberdeen ...	30.16	40	38	S 3	0	4	Jersey ...	30.21	43	40	NE 2	0	2
Shields ...	30.22	39	38	WNW 1	0	3	Dungeness ...	30.14	39	39	NNE 4	0	3
Ardrossan ...	30.14	43	41	SSE 3	0	2	London ...	30.21	40	38	NNE 2	5m	*
Malin Head ...	29.95	41	39	SSW 6	0	5	Yarmouth ...	30.17	39	38	ENE 6	00	4
Mullaghmore ...	30.01	43	40	S 6	00	5	Rocheport ...	30.19	42	41	WNW 5	0	2
Belmullet ...	29.96	45	45	SSW 6	0	*							

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

The report for yesterday morning showed that pressure had again increased over nearly the whole of Europe. At Moscow the barometer had risen to 31.23 ins: and in other parts of Russia readings were about 30.7 ins: while, over our Islands, and the Bay of Biscay, and the north of Spain a broad band of high pressure (30.1 ins: and upwards) extended from the Scandinavian Peninsula. The lowest readings, 29.6 ins: and less were found in two depressions lying respectively over the Atlantic and off the east coast of Sardinia, but in the extreme northwest of our Islands, where the barometer was falling, there was another low-pressure area with readings <sup>below</sup> 30.0 ins: The wind was E<sup>2</sup> in the south of Russia, SE<sup>4</sup> in the west of that country, and S<sup>3</sup> or SW<sup>3</sup> in the north. In the east and north of our Islands freshening S<sup>3</sup> breezes were reported, but in the south of England and in France and N. Italy the wind was NE<sup>3</sup>, while in Algeria it was chiefly W<sup>3</sup>. The weather was fine in Russia, N. Germany, Spain and the south of France, but overcast elsewhere, with snow in the north of Scandinavia, and rain at Naples and Algiers. Temperature had fallen considerably over Central Europe, but changed irregularly elsewhere, readings ranged from several degrees below zero over Central Russia, and very little above zero over Finland and Poland and the southern shores of the Baltic to between 45° and 55° at the Mediterranean stations. The lowest individual readings were -15° F. at Moscow, +1° at Uleaborg and Kuopio, 2° at Warsaw, 3° at Cracow and Kiev, 5° at Archangel, St. Petersburg, Memel, Neufahrwasser and Kharkov, 6° at Seinemünde and Breslau, and 7° at Lissa; the highest were 56° at Malta, 55° at Oran, 54° at Nismes, 52° at Brindisi, 50° at Banguinai, 49° at Corunna and Palermo, and 48° at Lissa.

In the course of the day the barometer fell decidedly in the west and north of our Islands, and the wind increased to a strong breeze from the southward on the west coast of Ireland and Scotland. The weather remained dull in all parts of Western Europe, but scarcely any rain was reported.

### 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. mist; 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 16<sup>TH</sup> JANUARY

1889.

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

Issued by the Meteorological Office, 25, Victoria Street, London, W. A. H. SCOTT, Secretary.																		
+ YESTERDAY EVENING.																		
8 A.M. TO DAY.																		
PAST 24 HOURS.																		

For Explanation of Columns, see p. 4.

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

# WEATHER

# CHARTS

for 8 a.m. on

WEDNESDAY 16<sup>th</sup> JANUARY

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.

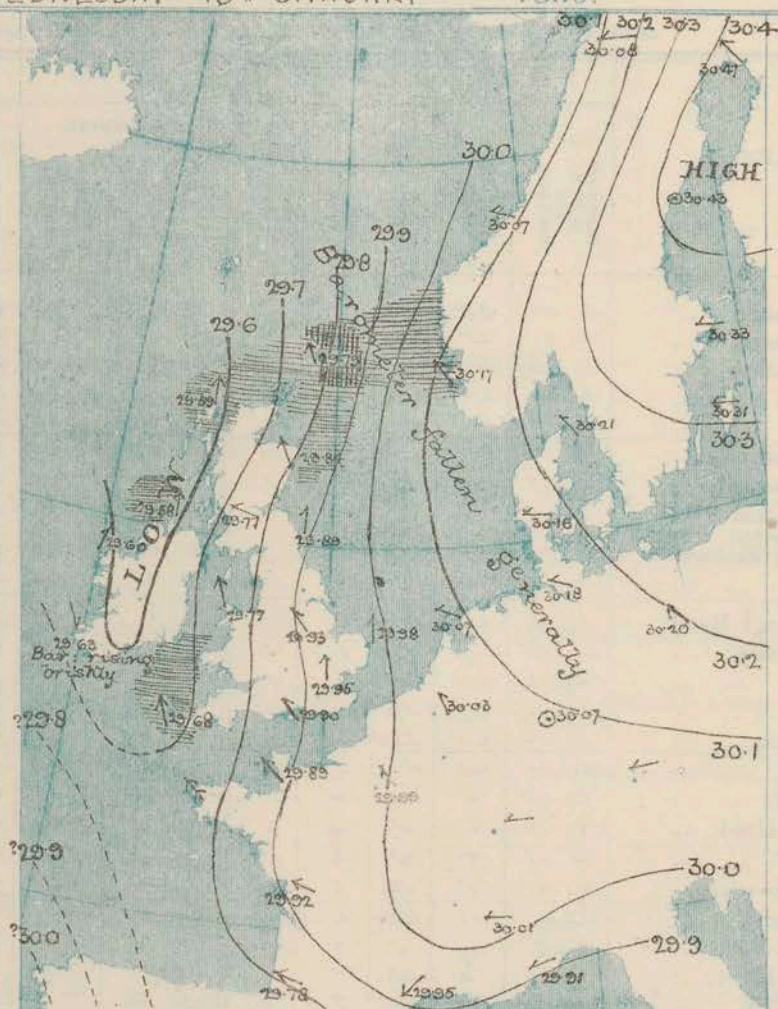
■ — Rough. ■ — High.

## MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of January

During the 15 Years 1871 — 1885.

STATIONS	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

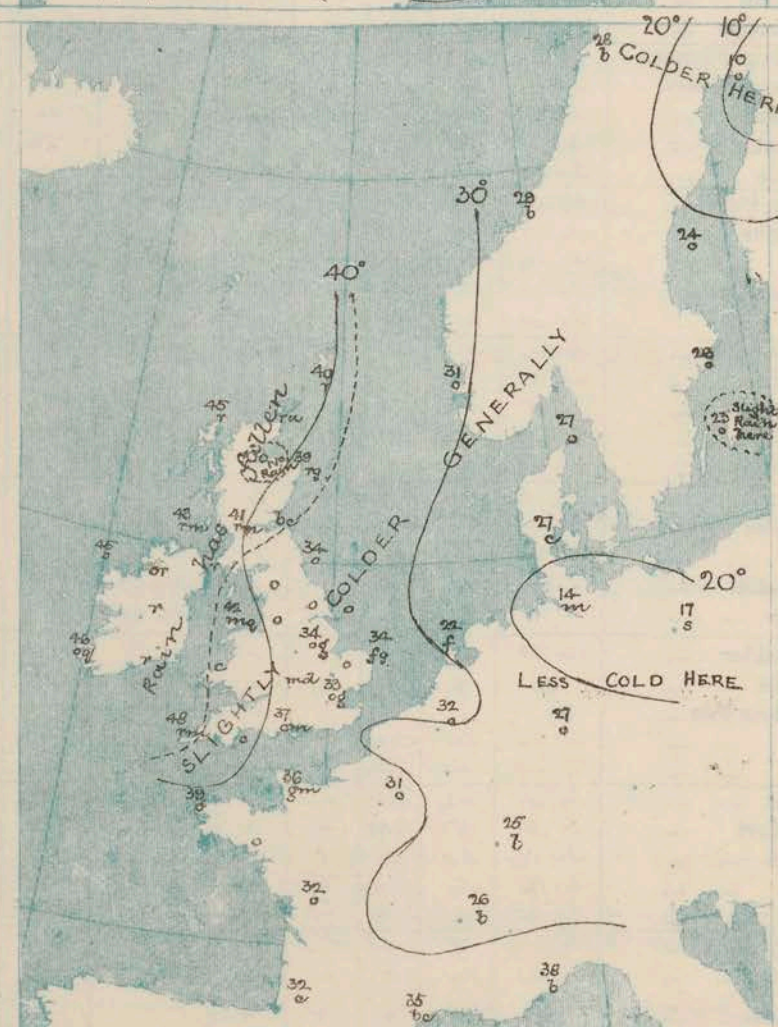
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max	Daily Min	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	42.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	43.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON.	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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 30.3 ins. to 30.5 ins. over Sweden, the Baltic and Finland - 30.0 ins. and more in the extreme southwest of the Spanish Peninsula. Lowest 29.6 ins. and less in a V-shaped disturbance lying over Ireland, and off the west of Scotland. Gradient moderate for S. or S.E. winds in most places and for N.W. winds in the west. Barometer rising in the west of Ireland, falling elsewhere, but not quickly.
TEMPERATURE	Highest 51° at Lisbon, 48° at Seville, 46° at Valencia, and 44° at Stornoway. Lowest 10° at Haparanda, 14° at Cuxhaven, 17° at Berlin, 23° at Wisby, 26° at Odessa, 31° at Paris, 32° at Brussels, and 33° at London. In the south of France it is as low as 35° to 38°. In the west of Ireland it is falling decidedly.
WIND	S. to S.E. over Great Britain and the east of Ireland - light in the east, strong in the west and north - S.E. to E. over France and the North Sea - E. over the Baltic. At Valencia (Ireland) and Lisbon it has shifted to the N.W. and is moderate in force.
WEATHER	Very dull and gloomy, except in the northwest of Norway with rain at several of our western and northern stations. Fog at Harwich and the Helder. The rainfalls in the south of Ireland have been very large 2.4 ins. at Valencia, and 1.1 ins. at Rock's Point - where the fall continues.
SEA	Very rough in the north, rough in the southwest, but is going down in the far west. At Holyhead it is moderate, and in the Straits of Dover slight.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The rise of the barometer and the N.W. wind now prevailing at Valencia, are likely to spread E. winds over the Kingdom later on, followed by colder weather, and in all probability fog in many places.

## FORECASTS

For the 24 hours ending at NOON on 17<sup>th</sup> January 1889.

### DISTRICTS.

### FORECASTS.

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

S. winds, becoming light and variable; rainy to fair.  
  
S. breezes, calms, and variable airs; dull and damp, then foggy. Cold.

### DISTRICTS.

### FORECASTS.

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

Wind, falling and shifting to the N.W.; rainy to fair, colder.

### WARNINGS

The SOUTH CONE has been lowered this morning in districts 0, 1, 6, 9 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 ...	29.50	30	28	SE 2 8	0	5	Holyhead ...	29.95	40	41	S 5	om 7	4
Sumburgh Head ...	29.82	40	41	SE 2 6	0	7	Valencia ...	29.71	52	51	S 5	om 7	5
Stornoway ...	29.60	40	40	SE 2 9	0	7	Scilly ...	29.95	49	48	S 6	0	5
Aberdeen ...	29.74	41	29	SE 2 5	om 7	5	Jersey ...	20.12	42	39	SE 2 1	om 7	1
Shields ...	20.02	37	36	S 2	0	2	Dungeness ...	20.12	35	32	SE 2 1	0	1
Ardrossan ...	29.87	44	42	SE 2 4	om 7	2	London ...	20.14	38	35	SE 2 2	om 7	*
Malin Head ...	29.66	40	46	SE 2 7	om 7	6	Yarmouth ...	20.14	35	34	SE 2 2	om 7	2
Mullaghmore ...	29.68	50	49	SE 2 6	om 7	5	Rochefort ...	20.19	37	35	SE 2 4	0	1
Belmullet ...	29.66	40	40	SE 2 2	0	*							

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

The reports for yesterday morning showed that pressure was still high over the greater part of the continent, and especially over Russia; at Moscow the reading was 31.20 inches. Over northwestern Europe, however, the barometer was falling decidedly and a large cyclonic disturbance had appeared off the west coasts of Ireland and Scotland. The depression noticed off the Sardinian coasts on the previous day had not changed its position much, but the Adriatic disturbance had apparently moved southwards to the neighbourhood of Naples. Strong winds or gales from the S<sup>W</sup> were reported in the west and north of the United Kingdom, and moderate breezes from S.E. over the east and southeast of England, as well as in Scandinavia and the greater part of Russia. Over southern Europe, however, the wind was chiefly E<sup>ly</sup>, while over the more central parts of the Mediterranean it showed a cyclonic circulation round the depressions noticed above. The weather was cloudy or overcast at all but the Spanish, the central Russian and the southern French stations, with rain in Ireland and the west of Scotland, and snow at Kiev, Vienna and Buda-Pesth. Temperature had risen considerably in the west of our Islands, as well as over Finland and the Baltic, but fallen in most other localities; readings ranged from a little above 50° in the south of Ireland, and at some of the Mediterranean stations, to several degrees below zero over central Russia. The highest individual readings were 55° at Malta, 54° at Oran, 53° at Brindisi, 51° at Valencia, 50° at Roche's Point, 49° at Scilly and Langunaire, and 48° at Mullaghmore and Belmullet; the lowest were -12° F. at Moscow, 0° over at Kuopio, +3° at Kharkov, 4° at Swinemunde and Berlin, 6° at Riga and Breslau 7° at Cracow, 9° at Kiev and 12° at Nicolaieff.

In the course of the day the barometer continued to fall in all parts of western Europe, with strong S.W. winds or gales in the west and north of the United Kingdom. Heavy rain fell in the south of Ireland — 2.4 ins. at Valencia, and 1.1 in. at Roche's Point.

### 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 17<sup>th</sup> JANY 1883.  
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 110, 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 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 ..	30.46	2	SE	2	0	30.35	- 12	16	16	+ 6	SSW	4	0	*	25	1	—	
Härnösand ...	30.37	26	Z	0	S	30.35	- 08	26	25	+ 2	Z	0	S	*	27	21	—	
Stockholm ...	30.31	24	Z	0	0	30.33	00	27	26	+ 1	ENE	2	f	*	28	23	0.08	
Wisby ...	30.31	26	E	2	0	30.30	- 01	26	26	+ 3	E	2	S	*	30	21	0.04	
Bodö ...	30.10	26	E	4	0	30.06	- 02	26	26	- 2	E	4	0	2	28	21	—	
Christiansund...	30.12	28	ESE	1	b	30.11	+ 04	28	25	- 1	ESE	6	b	3	30	25	—	
Skudesnæs ...	30.19	30	ESE	6	0	30.21	+ 04	34	31	+ 3	SE	8	0	5	?	30	—	
Christiania Fjord (Færd)	30.28	26	NNE	3	0	30.31	+ 02	27	25	+ 2	NNE	2	b	1	?	23	—	
Skagen (The Scaw)	30.26	29	SE	1	0	30.29	+ 08	29	28	+ 2	Z	0	0	1	30	27	—	
Fanö ...	30.23	24	SE	2	0	30.33	+ 17	27	26	0	SE	1	0	*	27	21	—	
BRITISH ISLANDS.																		
Sumburgh Head	29.80	40	SSE	5	0	29.85	+ 06	42	42	+ 2	SW	1	0	6	44	40	0.31	
Stornoway ...	29.67	44	SW	6	r	29.85	+ 26	41	41	- 4	SW	4	0	4	45	37	0.32	
Wick ...	29.77	40	S	5	0	29.91	+ 14	38	37	- 3	S	2	0	4	42	36	0.15	
Nairn ...	29.72	43	SW	3	0	29.96	+ 25	40	39	- 3	SW	2	0	1	44	36	0.01	
Aberdeen...	29.86	39	SSE	4	0	30.03	+ 17	35	34	- 4	SW	1	0	4	40	34	0.07	
Leith ...	29.85	39	WSW	1	0	30.06	+ 21	38	37	0	W	1	0	*	42	36	0.11	
Shields ...	29.93	36	SSW	3	0	30.11	+ 22	36	36	+ 2	WSW	3	0	2	36	33	0.04	
Spurn Head ...	30.00	34	S	4	0	30.15	+ 23	37	36	+ 3	SSW	4	0	3	37	33	—	
York ...	29.98	34	SE	1	0	30.12	+ 22	36	35	+ 3	WSW	1	0	*	39	32	—	
Loughborough	29.99	34	S	2	0	30.22	+ 23	36	36	+ 2	ESE	1	0	*	37	33	—	
Ardrossan ...	29.87	40	SE	4	rm	30.08	+ 31	44	43	+ 3	SSW	2	0	2	44	34	0.31	
Malin Head ...	29.76	43	NN	3	0	30.02	+ 44	41	39	- 2	SSW	4	0	3	45	40	0.16	
Mullaghmore ...	29.83	45	W	4	0	30.06	+ 48	44	41	- 3	SW	5	0	3	47	39	0.45	
Belmullet ...	29.88	45	NN	3	0	30.02	+ 42	46	44	+ 1	SSW	6	0	*	48	39	0.13	
Donaghadee ...	29.79	44	S	5	0	30.15	+ 41	36	36	- 7	SSW	4	0	2	45	35	0.29	
Barrow-in-Furness	29.90	37	SE	5	0	30.15	+ 32	39	39	+ 2	NN	2	0	*	43	36	0.06	
Liverpool (Bidston)	29.91	37	SE	3	0	30.19	+ 35	40	39	- 4	WSW	3	0	3	42	36	0.08	
Holyhead ...	29.85	42	SSE	5	rm	30.19	+ 42	41	40	- 1	WSW	1	0	2	44	40	0.09	
Parsonstown ...	29.89	41	WSW	1	0	30.19	+ 59	34	33	- 12	Z	0	0	*	48	33	0.06	
Valencia ...	30.00	45	NN	2	0	30.19	+ 56	49	45	+ 3	SSW	4	0	4	50	37	—	
Roche's Point...	29.91	46	NN	5	0	30.22	+ 62	37	35	- 11	N	1	0	4	49	35	0.08	
Pembroke ...	29.89	45	S	6	r	30.26	+ 57	44	43	0	NN	1	0	2	46	42	0.03	
Scilly ...	29.88	48	NNN	6	0	30.26	+ 58	47	45	- 1	NNN	1	0	3	49	45	0.48	
Prawle Point ...	29.99	41	SE	3	0	30.29	+ 46	40	39	- 1	NNN	1	0	2	43	38	0.01	
Jersey ...	30.00	35	SE	3	0	30.29	+ 40	37	36	+ 1	E	1	0	1	41	33	—	
Hurst Castle ...	30.01	38	SE	3	0	30.22	+ 32	42	42	+ 5	SW	2	0	0	42	36	—	
Dungeness ...	30.00	35	SSE	3	0	30.24	+ 30	35	33	+ 1	Z	0	0	2	36	34	—	
London ...	30.04	34	SSE	1	0	30.25	+ 30	36	35	+ 3	S	1	0	*	36	33	—	
Oxford ...	30.05	35	SE	3	0	30.25	+ 31	36	35	+ 3	Z	0	0	*	36	33	0.01	
Cambridge ...	30.08	33	SE	1	0	30.27	+ 29	35	34	+ 3	S	1	0	*	35	30	—	
Yarmouth ...	30.01	35	S	2	0	30.23	+ 25	34	33	0	SW	2	0	3	35	31	—	
Cuxhaven ...	30.17	20	ESE	3	0	30.23	+ 15	19	18	+ 5	SSE	2	0	*	21	?	—	
Berlin ...	30.21	19	E	1	0	30.34	+ 14	21	21	+ 4	NN	1	0	*	21	17	—	
Wiesbaden ...	*	*	*	*	*	30.27	+ 20	30	28	+ 3	NE	1	0	*	36	27	—	
Munich ...	30.08	24	SE	3	0	30.24	+ 26	23	23	- 4	NE	3	0	*	28	21	—	
FRANCE & NETHERLANDS.																		
The Helder ...	30.13	27	ESE	1	f	30.28	+ 21	24	23	+ 2	ESE	1	0	1	28	21	—	
Brussels ...	*	*	*	*	*	30.29	+ 26	29	29	- 3	SSE	1	0	*	35	29	—	
Cape Gris Nez...	?	31	SSE	1	0	?	?	32	32	+ 2	SSE	1	0	0	36	30	—	
Paris ...	30.02	30	NE	1	0	30.26	+ 27	23	23	- 8	NNN	1	0	*	36	23	—	
Brest ...	30.02	38	SSE	5	0	30.32	+ 50	40	37	+ 1	SE	1	0	2	50	34	—	
Lorient ...	30.01	34	E	3	0	30.30	+ 47	33	32	- 3	ENE	3	0	5	41	30	—	
Rochefort ...	30.01	33	ENE	4	0	30.27	+ 35	31	30	- 1	NE	5	0	2	34	25	0.04	
Belfort ...	29.98	29	SSW	1	0	30.19	+ 21	25	24	0	E	3	0	*	32	19	—	
Lyons ...	30.02	32	NNN	1	0	30.19	+ 18	26	25	0	N	1	0	*	39	26	—	
Nice ...	29.89	47	E	3	0	29.90	- 01	24	46	+ 16	E	3	0	4	52	38	—	
Perpignan ...	29.94	42	NE	3	0	30.07	+ 12	45	40	+ 10	NN	7	0	*	46	34	—	
Biarritz ...	29.84	47	WSW	4	0	30.13	+ 35	39	37	+ 7	E	4	0	2	52	32	—	
PENINSULA.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	30.13	50	N	7	0	30.19	+ 18	49	44	- 2	N	8	0	5	55	46	—	

# WEATHER

# CHARTS

for 8 a.m. on

Thursday, 17<sup>th</sup> January

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.

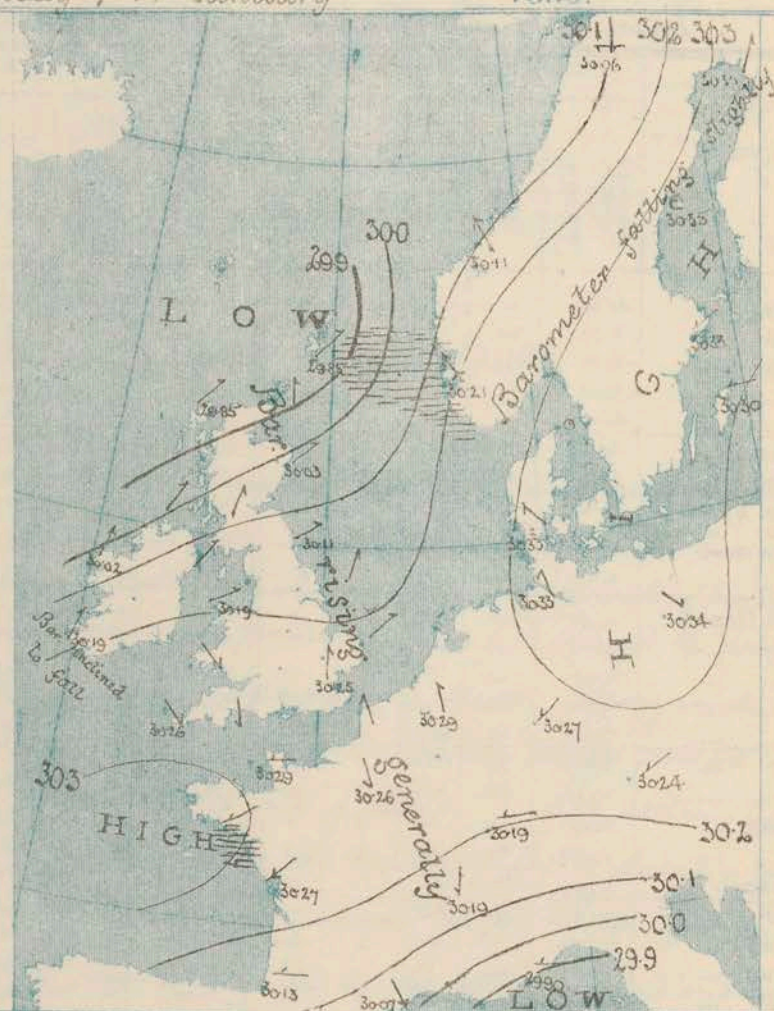
**Sea Disturbance** — where considerable is shown thus.

— Rough — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.820
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

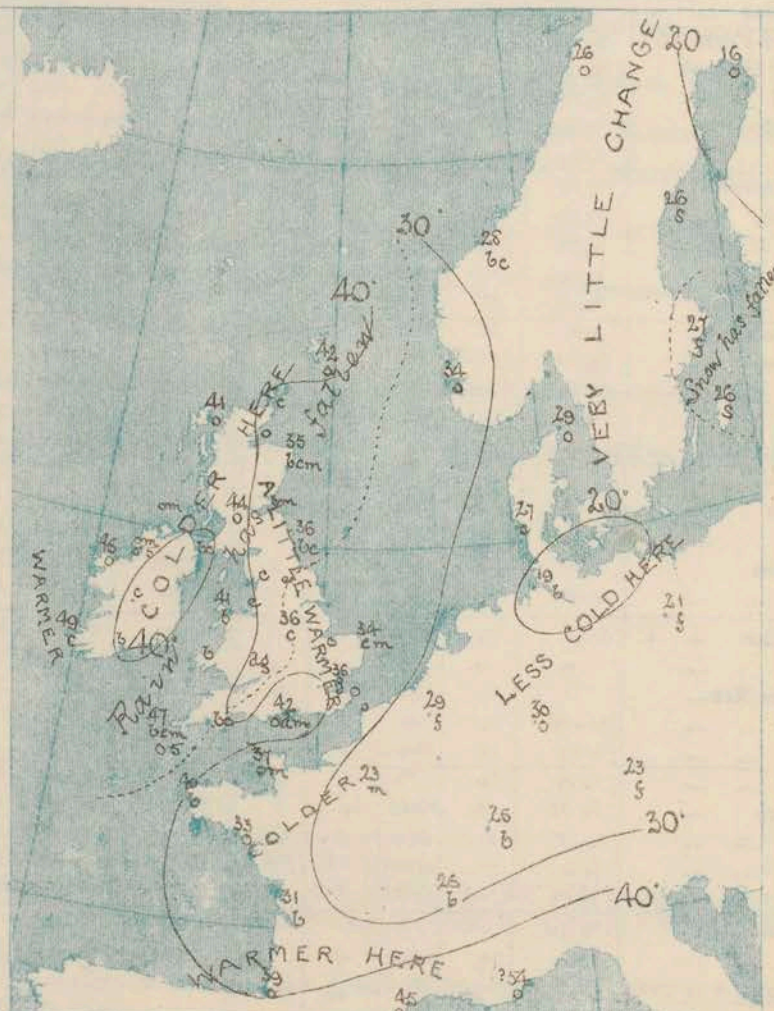
## MEANS OF TEMPERATURE IN SHADE.

## AND RAINFALL.

for the month of January

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max	Daily Min	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	48.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.5 ins. and more, over Sweden, Denmark, and part of North Germany; also over parts of Brittany and the Bay of Biscay.  
 Lowest, 29.5 ins. and less, both to the northward of our islands and also over the Gulf of Genoa.  
 Gradients, moderate for SW winds over Ireland and Scotland, and for E winds in the south of France, very slight elsewhere.  
 Barometer, rising almost everywhere; inclined to fall at Valence.

## TEMPERATURE

Highest, 45° at Dublin and Valencia, 47° at Seilly, 46° at Balmuccia, 44° at Antwerp, and 44° at Hamburg and West Castle.  
 Lowest, 16° at Hafaranda, 19° at Kuchak, 24° at Lisbon, 23° at Paris, 26° at Stockholm, 28° at Brussels, 34° at Copenhagen, and 36° in London.  
 It has fallen fast over Central Ireland, rising slightly over England since yesterday.

## WIND

SW, moderate to fresh, in Ireland and the west of England, light on our northeast coast.  
 SE, strong to a gale in the east of Norway — NE moderate over the Bay of Biscay.  
 Calm, or nearly so at stations in the south of England and north of France.  
 A fresh N gale is reported at Lisbon, and a moderate NW gale at Biscaya.

## WEATHER

Fine and bright over the Irish Sea and several parts of France, dull and gloomy elsewhere, with fog or mist in many places.  
 Rain fell yesterday at our western and northern stations generally.

## SEA

Still rough in the far north, but is moderate in the southeast, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the barometer now shows some tendency to fall again at Valencia, it seems probable that SW winds will become more general, with somewhat milder weather, and that the wind will increase in force on our eastern and northern coasts.

## FORECASTS

for the 24 hours ending at NOON on 18<sup>th</sup> January 1889.

### DISTRICTS.

### FORECASTS.

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

SW winds, increasing; some rain.  
 SW breezes, moderate; fair, milder.  
 SW airs and light breezes; milder, damp. Cold at night.

### DISTRICTS.

### FORECASTS.

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

Same as N° 0.

SW winds, strong and increasing; showery, becoming milder.

### 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.
Skudesnæsa ...	30.17	32	29	SE 6	0	5	Holyhead ...	29.79	44	41	S 4	cm	4
Sumburgh Head	29.80	40	40	SSE 5	r	6	Valencia ...	29.84	50	46	NW 4	cm	4
Stornoway ...	29.62	44	44	S 6	0	6	Scilly ...	29.79	48	48	S 4	cm	6
Aberdeen ...	29.85	40	38	SSE 5	og	6	Jersey ...	29.92	35	34	SE 3	0	3
Shields ...	29.89	36	35	SSW 3	0	2	Dungeness ...	29.96	34	33	S 3	0	3
Ardrossan ...	29.78	40	40	ESE 4	r	3	London ...	29.97	35	33	SE 2	ogm	*
Malin Head ...	29.64	44	44	WSW 4	0	4	Yarmouth ...	29.97	35	34	S 2	og	3
Mullaghmore ...	29.70	44	43	WSW 5	r	4	Rochefort ...	29.91	33	31	ESE 5	0	2
Belmullet ...	29.74	47	45	WSW 3	0	*							

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

The reports for yesterday morning showed that, although the barometer was falling in most parts of Europe, pressure was still very high over Russia, the reading at Moscow being 31.12 inches. The lowest readings, 29.6 inches, and less were found in a "V shaped" depression lying over the west coasts of Ireland and Scotland, but two or three shallow disturbances were still reported in the neighbourhood of Italy, while a new system of low pressure had appeared over the north of Spain. Over the Iberian Peninsula and the Mediterranean cyclonic circulations of wind were shown around these disturbances, and in the north of Italy the NE wind blew strongly. In other parts of Europe, however, the wind was SE or S, and, although light or moderate in force in most places, it blew very strongly in the west and north of the British Islands. The weather was fine over the greater part of Norway and Russia, as well as in Algeria and the south of France, but cloudy or overcast elsewhere. Rain was falling in the west and north of our Islands, and also at Corunna, Lescia, Naples and La Calle, and snow at Copenhagen and Scrimmunde. Temperature had risen over Russia, Austria, North Germany, and the south of Spain, but fallen in most other localities; readings ranged from 45° and upwards in the extreme west and southwest of our Islands, on the Spanish coasts, and on the shores of the Mediterranean to below zero over Finland and Central Russia. The highest individual readings were 51° at Brindisi, 52° at Malta, 51° at Lisbon, Tangier and Lescia, 49° at Corunna and Oran, and 48° at Roches Point, Tilly, San Fernando and Nemours, the lowest were -9° Fahr: at Moscow, -2° at Kuopio, 0° at Uleaborg, +3° at Kharkov, 8° at St. Petersburg, 9° at Nicolaieff, 10° at Kapananda and Kiev, 14° at Cuxhaven, Traraco, and Odessa.

In the course of the day the "V shaped" depression off our W. coasts, moved E and the barometer rose quickly at all our western stations, while the wind in Ireland veered to the NW with improving weather. Over the E. part of the Kingdom no important change was observed.

### 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 3 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 18<sup>th</sup> January 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 ..	30.22	22	E	2	S	29.95	- .40	25	25	+ 9	SSW	4	S	*	?	1	0.12	
	Hernösand ...	30.23	22	Z	0	b	29.97	- .88	26	25	0	SSW	6	S	*	27	19	—	
	Stockholm ...	30.33	25	Z	0	0	30.28	- .10	25	24	- 2	SW	2	0	*	30	21	—	
	Wisby ...	30.36	30	N	4	0	30.32	+ .02	28	27	+ 2	W	4	0	*	34	25	0.08	
	Bodö ...	29.91	26	SSW	2	b	29.57	- .55	30	28	+ 4	E	6	0	3	?	23	—	
	Christiansund...	29.88	37	SE	4	0	29.65	- .46	42	41	+ 14	WSW	8	T	4	42	28	—	
	Skudesnaes ...	30.14	39	SSE	8	r	29.92	- .29	41	41	+ 7	SSE	6	T	5	?	34	0.59	
	Christiania Fjord (Færdar)	30.28	33	SSW	4	0	30.10	- .21	34	33	+ 7	S	5	0	4	?	30	—	
	Skagen (The Scaw)	30.24	30	WSW	2	0	30.15	- .14	29	28	0	SW	4	S	3	36	28	—	
	Fanö ...	30.40	24	SSE	4	C	30.28	- .05	33	32	+ 6	ESE	6	0	*	33	23	—	
BRITISH ISLANDS.	Scribburgh Head	29.76	42	SSW	5	r	29.67	- .18	43	42	+ 1	S	2	T	5	44	42	0.20	
	Stornoway ...	29.73	49	SW	5	0	29.57	- .18	50	50	+ 9	SW	8	T	6	50	39	0.50	
	Wick ...	29.87	40	SW	4	0	29.62	- .29	46	45	+ 8	SW	3	C	3	47	38	0.20	
	Nairn ...	29.85	46	SW	3	0	29.73	- .12	53	51	+ 13	SW	2	CP	1	58	39	0.05	
	Aberdeen...	29.88	42	SSW	6	Opq	29.83	- .20	50	49	+ 15	S	3	0	4	50	35	0.06	
	Leith ...	30.05	47	SW	1	C	29.94	- .12	54	52	+ 16	SW	5	C	*	54	38	0.01	
	Shields ...	30.19	45	SW	4	C	30.07	- .14	51	49	+ 15	SW	4	0	2	51	35	—	
	Spurn Head ...	30.29	40	SW	3	C	30.23	+ .08	44	42	+ 7	SW	4	0	4	44	35	—	
	York ...	30.24	42	WSW	1	0	30.20	+ .08	47	46	+ 11	S	1	0	*	47	35	—	
	Loughborough	30.36	41	W	2	0	30.33	+ .11	45	43	+ 9	WSW	1	C	*	47	34	—	
GERMANY.	Ardrossan ...	30.08	44	SSW	4	T	30.01	- .07	49	49	+ 5	SW	4	0	3	49	42	0.06	
	Malin Head ...	29.97	46	SSW	6	Om	29.92	- .10	52	51	+ 11	SW	7	Om	6	52	41	0.05	
	Mullaghmore ...	30.03	49	SW	6	Od	30.02	- .04	53	52	+ 9	SW	6	Om	5	54	43	0.05	
	Belmullet ...	30.02	50	SW	6	0	30.01	- .01	52	52	+ 6	WSW	9	0	*	52	45	0.15	
	Donaghadee ...	30.13	43	SSW	5	0	30.10	- .05	52	51	+ 16	SSW	2	6	1	52	36	0.07	
	Barrow-in-Furness	30.25	43	SSE	2	0	30.22	+ .07	47	47	+ 8	S	2	fd	*	47	38	0.03	
	Liverpool (Bidston)	30.31	45	SW	2	0	30.26	+ .07	51	48	+ 11	SW	5	0	4	52	40	—	
	Holyhead ...	30.28	48	SW	5	Opq	30.28	+ .09	49	49	+ 8	SSW	6	mq	5	50	40	0.02	
	Parsonstown ...	30.19	48	SW	1	0	30.23	+ .04	53	51	+ 19	WSW	2	0	*	54	34	0.01	
	Valencia ...	30.22	51	SSW	7	Od	30.31	+ .12	51	51	+ 2	SSW	6	Om	5	51	48	0.04	
FRANCE & NETHERLANDS.	Roche's Point...	30.30	50	SW	4	C	30.33	+ .11	50	49	+ 13	SW	5	T	4	50	37	0.10	
	Pembroke ...	30.36	48	SSW	4	C	30.38	+ .12	49	49	+ 5	SSW	5	0	5	49	43	—	
	Scilly ...	30.38	48	SW	4	C	30.44	+ .18	50	49	+ 3	SW	4	C	5	53	45	—	
	Prawle Point ...	30.44	43	NW	2	b	30.49	+ .20	47	47	+ 7	WSW	3	aw	3	53	37	—	
	Jersey ...	30.44	43	WSW	3	b	30.54	+ .25	35	34	- 2	NNW	2	f	2	44	33	—	
	Hurst Castle ...	30.31	40	NNE	2	m	30.47	+ .25	45	45	+ 3	WSW	3	bc	1	46	38	0.02	
	Dungeness ...	30.39	41	NNW	2	m	30.45	+ .21	42	42	+ 7	W	4	C	3	42	35	—	
	London ...	30.42	40	S	1	0	30.44	+ .19	40	40	+ 4	SSW	2	C	*	44	32	—	
	Oxford ...	30.43	36	S	2	f	30.42	+ .17	43	42	+ 7	SSW	3	0	*	43	35	—	
	Cambridge ...	30.39	36	Z	0	f	30.40	+ .13	39	38	+ 4	S	1	C	*	45	32	—	
PENIN- SULA.	Yarmouth ...	30.34	37	WSW	3	Cf	30.35	+ .12	38	37	+ 4	WSW	3	bc	2	38	31	—	
	Cuxhaven ...	30.47	23	SSE	2	C	30.43	+ .10	25	25	+ 6	S	2	f	*	25	19	—	
	Berlin ...	30.50	20	SE	1	C	30.54	+ .20	17	17	- 4	SE	1	bc	*	23	14	—	
	Wiesbaden ...	*	*	*	*	*	30.56	+ .29	25	24	- 5	E	1	0	*	30	25	—	
	Munich ...	30.39	22	E	3	m	30.50	+ .26	22	22	- 1	SE	4	m	*	25	21	—	
	The Helder ...	30.40	28	SSE	1	f	30.39	+ .11	38	37	+ 14	SSW	3	f	3	38	24	—	
	Brussels ...	*	*	*	*	*	30.52	+ .23	34	32	+ 5	SSW	2	0	*	35	—	—	
	Cape Gris Nez...	?	38	SSW	3	0	?	?	39	39	+ 7	SSW	3	?	2	39	32	—	
	Paris ...	30.45	34	N	3	0	30.56	+ .30	32	31	+ 9	N	1	0	*	?	23	—	
	Brest ...	30.51	47	SSW	3	b	30.58	+ .26	41	38	+ 1	NE	1	0	2	52	34	—	

# WEATHER CHARTS

for 8 a.m. on

Friday, 18<sup>th</sup> January

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.

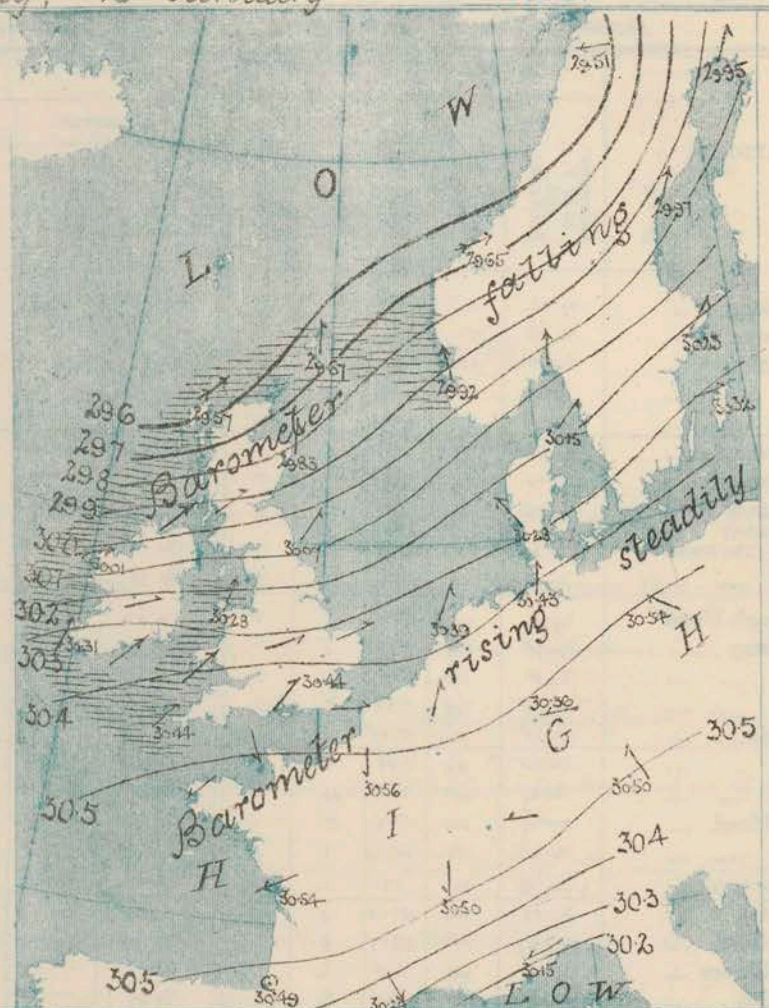
**Sea Disturbance** — where considerable is shown thus.

— Rough — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS	MEAN READINGS
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.940
Donaghadee	29.951
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roches Point	29.894
Pembroke	29.928
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

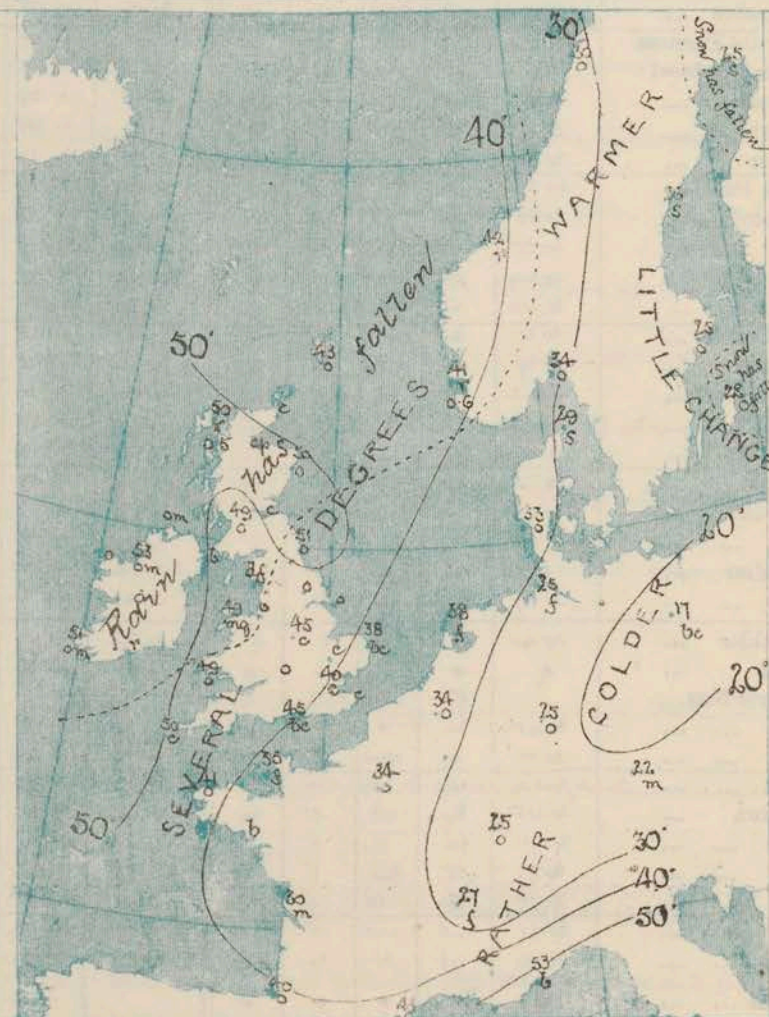
**Weather** — is shown by Letters of the Beaufort Scale.

**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 January

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON.	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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 in: and more, over the Bay of Biscay, Central France and Germany.  
Lowest, 29.6 in: and less, in a large area of low pressure lying to the northward of our islands and to the westward of India.  
Gradients somewhat steep over the north of our islands, moderate over the North Sea, very slight over France and Germany.  
Barometer rising in the south, falling in the north.

## TEMPERATURE

Highest, 54° at Leth, 53° at Hain, Newcastlemore, Parsonstown and Alice, 51° at Valencia, 50° at Samsung.  
Lowest, 17° at Berlin, 22° at Munich, 25° at Wiesbaden, Lushan, Stockholm and Haparanda, 32° at Paris, 34° at Brussels and 40° in London.  
It has risen considerably, but unsteadily over the British Islands since yesterday.

## WIND

SW<sup>ly</sup> in our Islands - strong to a gale in the west and north, light to moderate in east and south.  
NE, moderate over the Bay of Biscay - light SE<sup>ly</sup> over Germany.  
Strong SE to S on the eastern shores of the North Sea.

## WEATHER

Bull and showery in the west and north, fair in the east and south, with fog in places.  
Damp fog prevailed in London last night and a lunar halo was seen both there and at Oxford early this morning.  
Rain fell in the east and north yesterday.

## SEA

Rough in the north, rather rough in the west, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any important change.

## FORECASTS

for the 24 hours ending at NOON on 19<sup>th</sup> January 1889.

### DISTRICTS.

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

### FORECASTS.

SW<sup>ly</sup> breezes, strong; showery, mild.  
SW<sup>ly</sup> breezes, moderate or fresh; fair as a whole.  
SW<sup>ly</sup> breezes, light; fair, cold and perhaps foggy at night.

### DISTRICTS.

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

### WARNINGS

### FORECASTS.

Same as N<sup>o</sup> 0.

Same as N<sup>os</sup> 1 and 2.

Same as N<sup>o</sup> 0.

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 ...	30.21	34	32	SSE 8	s	5	Holyhead ...	30.25	47	44	SW 4	o	3
Sumburgh Head ...	29.85	43	42	SW 2	o	5	Valencia ...	30.20	50	49	SSW 6	ond	5
Stornoway ...	29.78	44	44	SW 8	r	6	Scilly ...	30.35	51	48	WSW 2	c	4
Aberdeen ...	30.01	40	38	S 2	om	4	Jersey ...	30.38	43	41	WSW 2	o	2
Shields ...	30.17	45	42	SW 2	o	2	Dungeness ...	30.32	41	39	W 1	o	2
Ardrossan ...	30.11	44	43	SSW 3	r	2	London ...	30.35	40	40	2	o	*
Malin Head ...	29.92	43	42	SSW 6	o	6	Yarmouth ...	30.27	37	36	WSW 2	c f	3
Mullaghmore ...	30.00	46	45	SW 8	omp	6	Rochefort ...	30.36	33	32	NE 5	m	2
Belmullet ...	30.00	49	49	WSW 7	od	*							

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

The reports for yesterday morning showed that, while pressure remained highest, 31.0 inches and upwards, over Central Russia, a second area of high readings (30.3 inches and upwards) had appeared over the Bay of Biscay. The lowest readings, 29.8 inches and less, were found in a small depression lying off the Iberian coast, and also (apparently) in another disturbance lying near Malta, but a larger area of low pressure with readings below 29.9 inches existed to the northward of the British Islands. The wind was moderate from the SW<sup>th</sup> in the west and north of the United Kingdom, strong to a gale from South-East in the west of Norway, and light from the latter quarter or from South over the greater part of Russia. Over France, Spain, Northern Italy and Western Algeria, however, NE<sup>ly</sup> or N<sup>ly</sup> breezes were reported, while in Tunis the wind was S<sup>ly</sup>, and in Sicily, SW<sup>ly</sup>. The weather was fine in Russia, and the central parts of our Islands and France, as well as in Eastern Algeria and Southern Italy, but cloudy or overcast elsewhere, with fog over Central Europe, rain in Western Algeria, and snow over Poland and the Baltic. Temperature had fallen in Spain, the Netherlands, the west and north of our Islands, and the extreme north of Russia, but risen elsewhere, especially over Finland; readings ranged from a little below 50° in the south of Ireland, and a little above that point at some of the Mediterranean stations to a few degrees below zero over northern and Central Russia. The highest individual readings were 55° at Monaco, 54° at Nice and Brindisi, 53° at Genoa, 52° at Malta, 51° at Tangier and Algiers, 50° at Oran and 49° at Valencia, Lisbon and Chgois, the lowest were -7° at Oronara, -2° at Archangel, -4° at Kharkov, -8° at Kiev, -14° at Nicolaieff, -15° at Uleaborg, -16° at Kapanarda and Odessa, -18° at Kuopio and Münster and -19° at Lwów.

In the course of the day a well-marked depression appeared off the N and NW of our Islands, and the wind increased to a slight gale on the west coasts of Ireland and Scotland. Rain fell at most of our western and northern stations, but the amounts were in most cases very slight.

### 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, 19<sup>th</sup> January 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 3 P. and Sea Level.	Temp. in Shade.	Wind.		Weather.	Barometer. Reading at 8 A.M. 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 ..	29.59	26	S	4	O	28.89	-1.06	30	30	+ 5	S	6	S	*	?	19	0.28	
	Hernösand ...	29.50	31	S	6	S	28.94	-1.03	37	35	+ 11	SW	8	r	*	?	18	0.20	
	Stockholm ...	29.78	31	S	7	S	29.39	-0.84	37	36	+ 12	SW	6	b	*	?	23	0.04	
	Wisby ...	29.97	33	W	8	O	29.62	-0.60	36	35	+ 8	WSW	8	b	*	36	25	0.20	
	Bodö ...	29.17	33	E	4	O	28.85	-0.66	25	23	- 5	E	2	bc	1	34	23		
	Christiansund...	28.88	41	S	8	C	29.18	-0.47	38	36	- 4	W	9	r	6	43	34	0.39	
	Skudesnaes ...	29.60	45	WSW	6	O	29.66	-0.26	39	37	- 2	W	6	O	5	45	37	0.16	
	Christiania Fjord (Farder)	29.54	41	WSW	8	f	29.48	-0.62	39	36	+ 5	WSW	8	b	5	41	?		
	Skagen (The Scaw)	29.66	41	W	6	O	29.62	-0.53	39	37	+ 10	NW	8	b	4	43	?	0.12	
	Fanö ...	29.98	39	SSW	6	O	29.98	-0.30	36	35	+ 3	WSW	4	b	*	41	32	0.16	
BRITISH ISLANDS.	Sumburgh Head	29.54	45	WNW	10	C	29.60	-0.07	39	38	- 4	WNW	5	r	7	50	38	0.25	
	Stornoway ...	29.70	41	WNW	6	Chp	29.94	+0.37	41	40	- 9	NW	6	C	5	52	37	0.32	
	Wick ...	29.62	40	NW	9	bc	29.80	+0.18	35	34	- 11	NW	4	cu	3	57	33	0.25	
	Nairn ...	29.76	47	SW	4	O	29.90	+0.17	40	39	- 13	WNW	3	bc	2	56	38	0.17	
	Aberdeen...	29.76	46	WSW	4	bc	29.93	+0.10	41	36	- 9	WSW	5	bc	4	58	38		
	Leith ...	29.89	43	SW	5	bc	30.03	+0.09	43	40	- 11	W	4	bc	*	56	40	0.08	
	Shields ...	29.92	53	SW	6	C	30.14	+0.07	43	40	- 8	SW	3	C	2	55	38		
	Spurn Head ...	30.09	48	SW	6	C	30.23	-0.00	40	39	- 4	WSW	6	b	4	44	34		
	York ...	30.06	54	S	4	O	30.23	+0.03	40	39	- 7	SW	1	b	*	55	37		
	Loughborough	30.23	50	SW	4	C	30.35	+0.02	36	35	- 9	WNW	1	b	*	51	36		
GERMANY.	Ardrossan ...	29.95	47	W	4	p	30.12	+0.11	45	44	- 4	WNW	6	op	4	50	41	0.07	
	Malin Head ...	30.04	45	NW	5	bc	30.19	+0.27	45	44	- 7	WNW	4	C	5	52	41	0.06	
	Mullaghmore ...																		
	Belmullet ...	30.22	46	WNW	5	b	30.35	+0.34	46	45	- 6	W	5	bc	*	52	44	0.10	
	Donaghadee ...	30.08	49	W	6	O	30.25	+0.15	41	39	- 11	SW	5	bc	3	55	41	0.05	
	Barrow-in-Furness	30.10	48	WSW	7	r	30.26	+0.04	43	42	- 4	SW	4	b	*	48	42	0.04	
	Liverpool (Bidston)	30.18	51	SW	5	O	30.31	+0.05	41	39	- 10	W	4	bc	4	54	40	0.03	
	Holyhead ...	30.19	50	SW	6	d.m	30.36	+0.08	44	42	- 5	W	5	bc	4	50	43	0.01	
	Parsonstown ...	30.23	46	SW	2	O	30.41	+0.18	37	36	- 16	Z	0	b	*	54	35	0.03	
	Valencia ...	30.35	49	WNW	2	om	30.50	+0.19	44	42	- 7	NW	2	bc	2	53	41	0.05	
FRANCE & NETHERLANDS.	Roche's Point...	30.31	50	NW	3	O	30.47	+0.14	43	41	- 7	WNW	3	C	4	52	40	0.15	
	Pembroke ...	30.32	49	SW	6	O	30.45	+0.07	46	44	- 3	W	4	b	4	50	44	0.03	
	Scilly ...	30.42	50	SW	5	C	30.46	+0.02	48	46	- 2	NW	3	C	4	54	47	0.02	
	Prawle Point ...	30.44	48	WSW	5	O	30.45	-0.04	41	40	- 6	N	2	C	2	51	40		
	Jersey ...	30.50	45	W	2	b	30.43	-0.11	50	49	+ 15	WNW	3	omd	3	51	34	0.03	
	Hurst Castle ...	30.41	46	SW	4	C	30.42	-0.05	40	39	- 5	WNW	3	bc	1	50	39		
	Dungeness ...	30.36	47	WSW	5	C	30.34	-0.11	44	41	+ 2	WNW	3	C	3	48	41	0.02	
	London ...	30.36	49	SW	3	O	30.37	-0.07	37	36	- 3	SSW	1	bf	*	52	36		
	Oxford ...	30.33	48	SW	4	O	30.40	-0.02	37	35	- 6	NW	1	b	*	51	36		
	Cambridge ...	30.27	48	SW	2	O	30.35	-0.05	34	33	- 5	SW	1	b	*	50	33		
PENIN-SULA.	Yarmouth ...	30.25	47	W	4	C	30.28	-0.07	37	36	- 1	WNW	2	bm	2	48	35		
	Cuxhaven ...	30.26	45	SW	6	r	30.11	-0.32	36	36	+ 11	W	2	b	*	39	?	0.07	
	Berlin ...	30.45	30	SW	1	O	30.15	-0.39	33	32	+ 16	SW	1	r	*	?	?	0.20	
	Wiesbaden ...	*	*	*	*	*	30.39	-0.17	25	24	0	E	1	O	*	27	25		
	Manich ...	30.48	21	E	2	m	30.36	-0.14	22	22	0	SW	4	m	*	25	19		
	The Helder ...	30.22	41	SW	4	r	30.23	-0.16	40	39	+ 2	WNW	3	b	3	43	37	0.04	
	Brussels ...	*	*	*	*	*	30.34	-0.18	36	36	+ 2	WSW	3	r	*	38	?	0.08	
	Cape Gris Nez ...	?	44	SW	5	O	?	?	45	44	+ 6	N	5	r	4	46	39	0.08	
	Paris ...	30.52	34	SE	1	O	30.45	-0.11	33	32	+ 1	SW	3	O	*	?	30		
	Brest ...	30.54	48	W	1	O	30.49	-0.09	49	46	+ 8	NW	3	O	2	50	39		

# WEATHER CHARTS

for 8 a.m. on *Saturday, 19<sup>th</sup> January, 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.

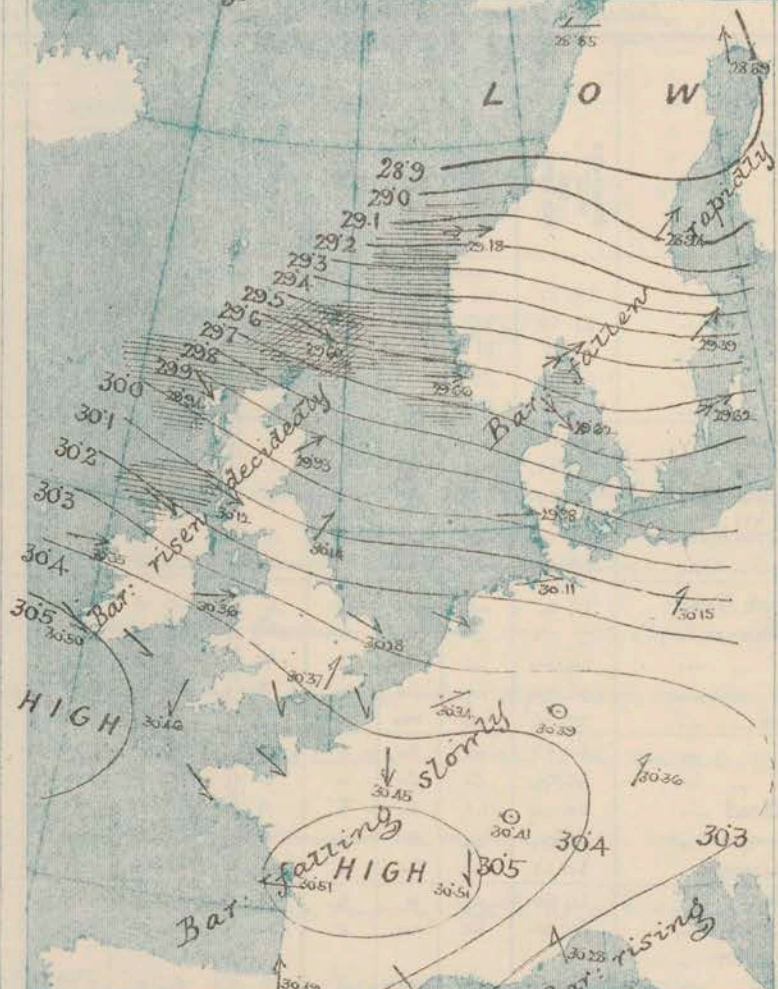
**Sea Disturbance** — where considerable, is shown thus.

■ = Rough ■ = High

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

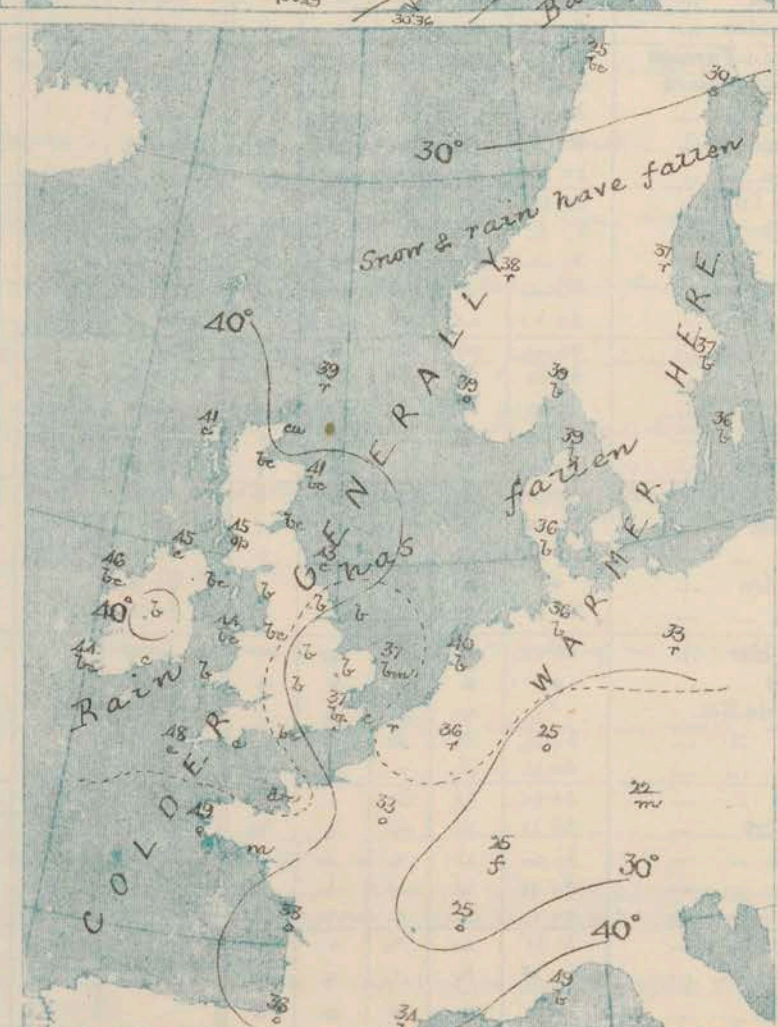
**Rainfall** — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.  
for the month of January.

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.8	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	35.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 ins: to 30.5 ins and more, over France and the southwest of our Islands.  
 Lowest, 29.9 ins: and less, over the north of Scandinavia, 29.6 ins: at Lumburg Head  
 Gradients, somewhat steep except in the south and southwest.  
 Barometer rising in the west and north of our Islands, falling over Lapland, the Baltic, and Northern Europe generally.

## TEMPERATURE

Highest, 49° at Nise and Brest, 48° at Seilly, 46° at Rembrak and Bolmullet  
 Lowest, 22° at Munich, 25° at Belfort and Lyons, also at Rode, 33° at Berlin and Paris, and 37° in London.  
 It has fallen fast over our Islands during the night, risen in Germany and Sweden.

## WIND

Blowing again from the West or S.W. over Norway and Sweden — a strong breeze from NW, in the north of Scotland, a moderate breeze from W. over Ireland and the northern half of England, and from N. in the Channel.  
 Over the Bay of Biscay and France it is variable.

## WEATHER

Dull and rainy in Norway — angry looking at Nise.  
 Fine over England and Ireland, dull and hazy in France.  
 Rain fell yesterday over the British Islands — except on our east coast.

## SEA

High in the far north, moderate in the west and southwest, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

With a rising barometer in the west the weather is likely, under the present circumstances, to improve over the United Kingdom generally, but a cold night is probable inland, and fog in the morning.

## FORECASTS

for the 24 hours ending at NOON on 20<sup>th</sup> JAN: 1889.

### DISTRICTS.

### FORECASTS.

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

NW<sup>ly</sup> and W<sup>ly</sup> winds; perhaps a shower or two, fair as a whole.  
 S.W.<sup>ly</sup> and W<sup>ly</sup> winds, moderate or light; fair generally, cold tonight, with some fog.

### DISTRICTS.



### FORECASTS.

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

NW<sup>ly</sup> winds, moderating; fair, cold at night.  
 N<sup>ly</sup> or NE<sup>ly</sup> winds, light fair.  
 NW<sup>ly</sup> winds, moderate or light; fair, cold inland at night.

### 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 ...	29.72	42	42	S	8	rf	6	Holyhead ...	30.21	49	37	SSW	6	mq	6
Sumburgh Head ...	29.26	49	48	SW	3	0	5	Valencia ...	30.28	53	52	SW	4	omg	6
Stornoway ...	29.57	46	45	W	8	0	6	Scilly ...	30.44	53	51	SW	5	c	5
Aberdeen ...	29.62	50	51	S	5	bc	5	Jersey ...	30.52	49	47	SW	3	b	3
Shields ...	29.98	51	52	SW	7	0	2	Dungeness ...	30.44	47	46	WSW	5	o	4
Ardrossan ...	29.92	50	50	SW	4	1	3	London ...	30.41	52	48	WSW	5	c	*
Malin Head ...	29.91	45	44	W	6	0	7	Yarmouth ...	30.29	48	46	WSW	4	bcm	3
Mullaghmore ...								Rochefort ...	30.51	39	38	NE	4	c	2
Belmullet ...	30.08	50	48	W	7	om	*								

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

The reports for yesterday morning showed that while the highest pressures 30.9 ins. and upwards were still reported over Central Russia a long band of high readings, 30.5 ins. and upwards extended thence in a WSW<sup>ly</sup> direction across Poland, Germany and France to the Bay of Biscay. The lowest pressures, 29.6 ins. and less, were found in a large area lying to the northward of the British Isles and to the eastward of Norway, but an extensive system of relatively low pressure still existed over the Mediterranean, and three small depressions were lying off the coast of Sardinia, Tunis and Sicily.

The wind was SW<sup>ly</sup> over the United Kingdom, with gales on our extreme north-west coast, strong from S. over Scandinavia and Denmark, and light from S. or SE. over the Baltic and Northern Russia. Over Southern Europe, however, it was chiefly NE<sup>ly</sup>, while in Algeria it varied between S. and W.

The weather was dull in most of the northern and central countries, as well as in the extreme west and north of our Islands, with rain in the Hebrides and coast of Norway, and snow over Northern Russia. Elsewhere, however, conditions were mostly fine. Temperature had fallen in Central, Southern and Eastern Europe, but risen elsewhere quickly in the west and north of the United Kingdom; readings ranged from a little above 50° over Ireland and Holland, as well as at some of the Mediterranean stations to a few degrees above zero over Russia. The highest individual readings were 55° at Brindisi, 54° at Leith, and Sanguinaire, 53° at Nain, Mullaghmore, Parsonstown and Kiev, and 52° at Malin Head, Donaghadee, Barcelona, Cagliari and Malta; the lowest were 1° at Moscow, 3° at Kiev, 6° at Nikolaieff, 7° at Khar'kov, 9° at Breslau, 10° at Odessa, 12° at Neufahrwasser, 15° at Archangel and Lemberg, and 16° at Leningrude.

In the course of the day a deep depression started the extreme north of Scotland, and occasioned a brief but severe W<sup>ly</sup> gale in Caithness and the Shetlands. Rain again fell in all the more western and northern parts of the Kingdom, but the amounts were in most cases very slight.

### 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 20<sup>th</sup> JAN<sup>y</sup> 1889.  
 Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the United Kingdom Office, 55, Abchurch Lane, London, E.C. 4.																		
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 ..	29.90	30	SE	6	s	29.56	+ .47	21	21	- 9	NE	4	bc	*	34	21	0.39
	Hernösand ...	29.24	37	NW	2	c	29.66	+ .72	33	29	- 4	NNW	6	b	*	41	28	-
	Stockholm ...	29.44	34	WSW	2	o	29.56	+ .07	27	25	- 10	NNW	2	o	*	39	?	-
	Wisby ...	29.57	35	SW	4	bc	29.59	- .03	34	32	- 2	NNW	4	o	*	39	30	-
	Bodö ...	29.33	36	N	6	o	29.70	+ .85	35	34	+ 10	NNW	6	o	3	36	23	-
	Christiansund...	29.47	39	WSW	2	o	29.92	+ .44	37	36	- 1	Z	0	c	5	39	36	0.16
	Skudesnaes ...	29.69	39	WNW	8	r	29.93	+ .27	39	37	- 0	NNW	4	o	4	?	?	0.16
	Christiania Fjord (Færder)	29.49	37	WSW	3	b	29.76	+ .28	36	32	- 3	NNW	3	b	3	39	31	-
	Skagen (The Scaw)	29.86	37	WNW	4	b	29.75	+ .13	36	34	- 3	N	3	b	3	39	36	-
	Fanö ...	29.85	37	N	6	bc	29.89	- .09	37	35	+ 1	NW	6	c	*	41	36	0.04
BRITISH ISLANDS.	Sumburgh Head	29.89	38	NNW	5	c	30.10	+ .50	35	34	- 4	N	1	b	4	41	34	0.01
	Stornoway ..	30.09	40	NW	5	o	30.16	+ .22	40	40	- 1	Z	0	o	3	44	36	0.10
	Wick ...	30.04	37	NNW	4	bc	30.15	+ .35	35	34	- 0	NW	2	bc	2	40	32	0.10
	Nairn ...	30.09	37	W	2	b	30.17	+ .47	39	38	- 1	WSW	2	c	1	42	37	0.02
	Aberdeen...	30.09	37	W	4	b	30.22	+ .29	39	31	- 9	W	2	b	3	42	32	-
	Leith ...	30.15	42	W	3	c	30.22	+ .19	36	35	- 7	W	1	b	*	47	35	-
	Shields ...	30.16	42	W	3	c	30.22	+ .08	39	38	- 4	NW	2	b	2	46	37	-
	Spurn Head ...	30.18	43	W	4	b	30.18	- .05	40	39	- 0	W	1	c	3	44	37	0.01
	York ...	30.18	43	SW	1	b	30.19	- .04	36	36	- 4	Z	0	o	*	47	35	-
	Loughborough	30.29	44	WSW	3	o	30.19	- .16	42	41	+ 6	E	1	rg	*	48	36	0.13
GERMANY.	Ardrossan ...	30.19	44	W	2	r	30.27	+ .15	39	39	- 6	Z	0	b	0	46	38	0.08
	Malin Head ...	30.19	45	WNW	4	o	30.34	+ .75	45	45	- 0	NW	3	epg	4	45	43	0.25
	Mullaghmore ...																	
	Belmullet ...	30.38	48	W	5	o	30.42	+ .07	47	47	+ 1	NNW	1	o	*	49	46	0.15
	Donaghadee ...	30.27	44	W	2	b	30.29	+ .04	44	43	+ 3	NNW	2	c	1	46	40	0.05
	Barrow-in-Furness	30.23	45	NNW	4	b	30.22	- .04	41	41	- 2	N	1	c	*	47	40	0.14
	Liverpool (Bidston)	30.27	44	W	4	o	30.22	- .09	41	41	- 0	NW	3	c	3	46	41	0.06
	Holyhead ...	30.30	46	WNW	5	bc	30.26	- .10	47	46	+ 3	N	5	epg	5	48	43	0.12
	Parsonstown ...	30.34	46	WSW	3	o	30.38	- .03	46	45	+ 9	Z	0	c	*	49	36	0.04
	Valencia ...	30.49	48	WNW	2	o	30.48	- .02	49	47	+ 5	NNW	2	c	2	52	41	0.04
FRANCE & NETHERLANDS.	Roche's Point...	30.45	47	WNW	3	bc	30.40	- .07	44	47	+ 6	NW	4	c	4	49	34	0.05
	Pembroke ...	30.40	47	WNW	4	b	30.30	- .15	48	47	+ 2	NW	5	cp	4	48	46	0.11
	Scilly ...	30.44	48	NNW	4	c	30.33	- .13	50	49	+ 2	NNW	5	o	5	50	46	0.10
	Prawle Point ...	30.44	42	NNW	2	b	30.30	- .15	45	43	+ 4	W	3	o	2	51	39	-
	Jersey ...	30.43	45	NNW	3	b	30.33	- .10	46	45	- 4	NW	3	cm	3	50	40	0.06
	Hurst Castle ...	30.38	41	NW	3	b	30.27	- .15	37	37	- 3	W	4	cp	1	48	37	0.01
	Dungeness ...	30.31	39	NW	3	b	30.23	- .11	38	38	- 6	WNW	3	o	1	47	37	-
	London ...	30.33	44	WNW	1	cm	30.25	- .12	37	36	- 0	SW	1	bcf	*	48	36	-
	Oxford ...	30.34	40	W	2	o	30.23	- .17	41	40	+ 4	SW	2	c	*	49	35	-
	Cambridge ...	30.27	46	W	1	b	30.22	- .13	39	39	+ 5	W	1	r	*	48	32	0.08
PENIN- SULA.	Yarmouth ...	30.22	41	WNW	3	b	30.20	- .08	36	36	- 1	WNW	2	f	3	43	34	-
	Cuxhaven ...	30.04	35	W	3	c	30.01	- .10	37	36	+ 1	W	3	b	*	39	35	-
	Berlin ...	30.08	36	W	2	o	30.03	- .12	36	35	+ 3	W	4	o	*	36	34	0.12
	Wiesbaden ...	*	*	*	*	*	30.23	- .16	33	32	+ 8	Z	0	o	*	33	30	-
	Munich ...	30.25	30	W	2	o	30.21	- .15	29	29	+ 7	NW	3	s	*	32	21	0.04
	The Helder ...	30.13	41	WNW	3	b	30.16	- .07	39	38	- 1	NW	1	b	2	43	37	-
	Brussels ...	*	*	*	*	*	30.24	- .10	38	37	+ 2	SW	1	f	*	38	33	0.04
	Cape Gris Nez...	?	44	SSW	4	b	?	?	42	42	- 3	W	3	o	2	46	41	0.04
	Paris ...	30.35	36	S	1	bc	30.31	- .14	32	32	- 1	S	1	o	*	37	31	0.08
	Brest ...	30.49	43	E	1	b	30.49	- .00	45	42	- 4	N	5	r	3	52	39	0.08
FRANCE & NETHERLANDS.	Lorient ...	30.42	46	NE	5	o	30.36	- .13	43	41	+ 2	NNW	3	o	4	48	39	0.04
	Rochefort ...	30.45	38	SE	1	o	30.37	- .14	38	37	+ 5	ENE	4	c	2	39	32	0.08
	Belfort ...	30.31	24	E	1	o	30.23	- .18	30	30	+ 5	W	1	o	*	?	20	-
	Lyons ...	30.42	28	N	1	m	30.28	- .23	30	30	+ 5	N	1	f	*	?	25	-
	Nice ...	30.21	50	ESE	1	b	30.08	- .20	45	43	- 4	E	1	c	1	55	37	-
	Perpignan ...	30.26	44	NW	5	b	30.18	- .21	44	37	+ 10	NW	5	o	*	56	34	-
	Biarritz ...	30.48	42	ESE	3	m	30.36	- .13	37	35	- 1	NNE	3	m	2	46	30	-
	Corunna ...	*	*	*	*	*	30.38	- .107	50	49	+ 2	NE	8	r	6	52	43	-
	Lisbon ...	30.23	53	N	5	c	30.16	- .10	42	41	- 2	NNE	3	o	2	51	42	-

For Explanation of Columns, see p. 4.

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

# WEATHER

for 8 a.m. on

# CHARTS

Sunday, 20<sup>th</sup> January

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.

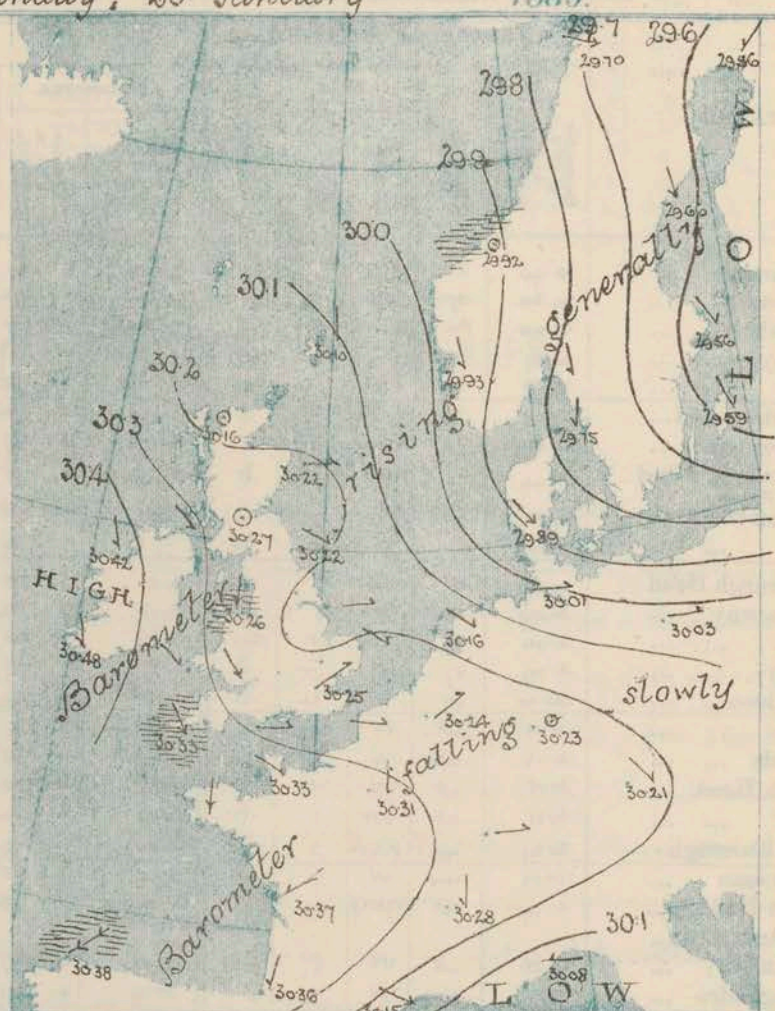
**Sea Disturbance** — where considerable is shown thus.

— Rough. — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

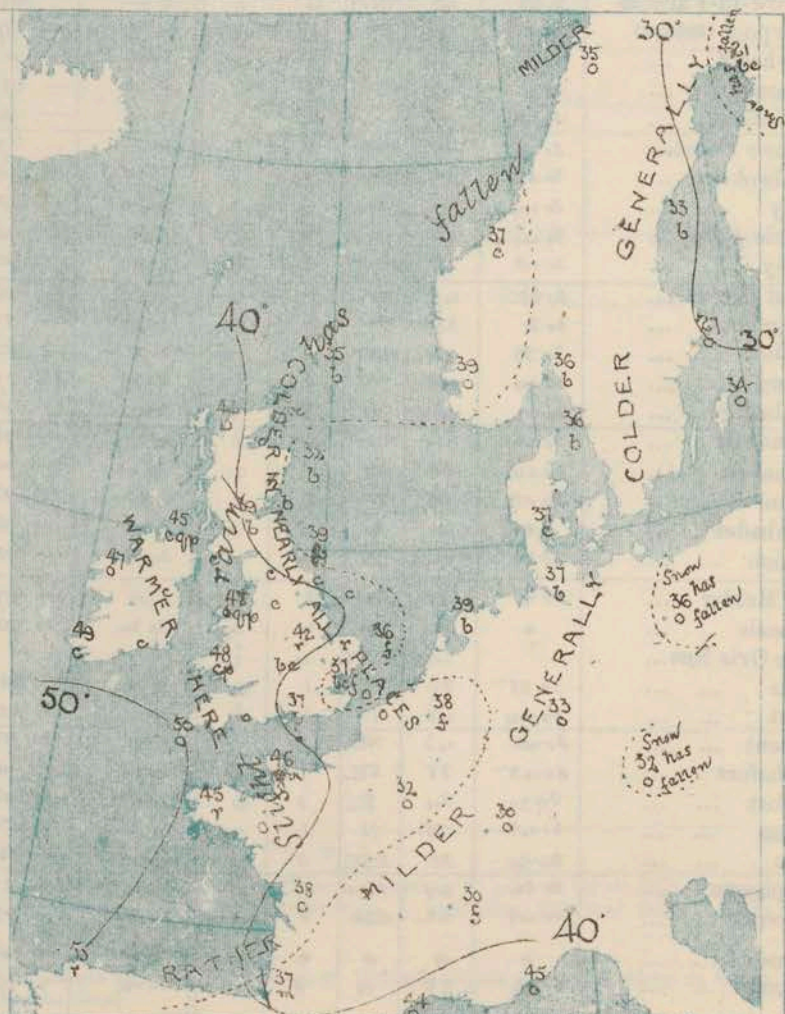
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January

STATIONS	TEMPERATURE.				RAINFALL. (Inches).
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.8	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.0	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



# GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.4 ins: and upwards, in an anticyclone lying off the west of Ireland Lowest, 29.6 ins: and less, over the Gulf of Bohemia and the northern part of the Baltic Gradients slight but irregular. Barometer rising over Scandinavia and the north of our Islands, but falling elsewhere.
TEMPERATURE	Highest, 50° at Seilly and Courmou, 48° at Valence and Roches Point, 48° at Ambroise, 47° at Belmullet, and 46° at Parvatoen and Jerey. Lowest 24° at Haparanda, 27° at Stockholm, 29° at Munich, 30° at Belfort and Lyon, 32° at Aberdeen and Larn, and 33° at Kinsale and Wick. Frost occurred last night in some parts of Great Britain
WIND	Trick from the NW <sup>W</sup> or N <sup>W</sup> over Scandinavia, Denmark, and the west of our Islands Light from W. over the eastern and southern parts of Great Britain, Moderate from NE. in the west of France; strong to gale from the same quarter at Courmou.
WEATHER	Fine in Scandinavia, Denmark and Scotland; fair, but with local showers, on our western coasts Dull and rainy over Central England; foggy at Yarmouth, Brussels and in London; cloudy in France. A little rain fell yesterday in many parts of the United Kingdom and France.
SEA	Rough at Courmou, and rather rough at Christiansund, Holyhead, and Seilly, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The low pressure system noticed over the north of Scandinavia yesterday has travelled away eastwards, but a small shallow disturbance is now moving southwards across England, and rain is setting in over our midland and southern counties.

## FORECASTS

for the 24 hours ending at NOON on 21<sup>ST</sup> JAN: 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.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.68	40	38	W 5	c	5	Holyhead ...	30.33	47	45	WNW 5	cg	5
Sumburgh Head ...	29.76	38	36	NNW 6	c	7	Valencia ...	30.57	50	46	NNW 3	cm	3
Stornoway ...	30.06	44	43	NW 5	bc	4	Scilly ...	30.46	49	46	NNW 4	bc	3
Aberdeen ...	30.04	41	37	WNW 5	bc	3	Jersey ...	30.42	48	45	NNW 3	bc	3
Shields ...	30.11	45	43	W 3	c	2	Dungeness ...	30.38	47	43	NNW 3	bc	3
Ardrossan ...	30.18	? 46	45	WNW 4	r	3	London ...	30.34	48	43	NW 2	bc	*
Malin Head ...	30.22	45	44	WNW 4	o	5	Yarmouth ...	30.28	43	42	WNW 3	bm	2
Mullaghmore ...							Rocheport ...	30.50	38	36	ESE 3	o	2
Belmullet ...	30.37	49	47	WNW 3	o	*							

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

The reports for yesterday morning show that pressure remained high (30.4 ins. to 30.7 ins. and more) over Central and Southern Russia, and that it was also high (30.4 ins. to 30.5 ins. and more) over France, the Bay of Biscay, and the southwest of the United Kingdom; the two systems were united by a col which lay across South Germany. In a northerly direction, readings decreased to less than 28.5 ins. in a deep depression which had advanced over the north of Scandinavia during the night, while to the southward they decreased to rather below 30.2 ins. over the southern part of the Mediterranean. Strong W and NW winds were blowing over the northern half of the British Isles and the North Sea, accompanied by showery weather in places, strong W winds over the southern half of Scandinavia, and severe S winds and snow over Finland and the Baltic Provinces. Over Southern Europe and the Mediterranean the wind was light and variable (mainly NE) and the weather fine — while on the Atlantic coast of Spain and Portugal it was strong from NE. Temperature was very low over Central and southern parts of Russia — and rather low generally; the lowest values were -2° F at Kharkov, +1° at Nikolaioff, 2° at Moscow, 5° at Kiev, 17° at Archangel, 21° at Lemberg, 25° at Wiesbaden, 26° at Kuopio and St. Petersburg, 27° at Vienna and Riga, 33° at Paris and 37° in London and at Portonmouth; the lowest were 57° at Malta, 55° at Brindisi, 53° at Panguinaire, 50° at Cagliari, 49° at Brest, 48° at Corunna and Scilly, and 46° at Belmullet. Later on the depression in the far north began to move southwards and to fill up, while in the north of our Islands the barometer rose quickly.

### 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, 21<sup>st</sup> January 1883.*  
*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.		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 ..	29.80	4	2	0	b	29.71	+ .15	-1	-1	-22	2	0	f	*	30	?	-	
	Hernösand ...	29.90	24	2	0	b	29.85	+ .19	15	14	-18	2	0	f	*	36	?	-	
	Stockholm ...	29.86	30	7	0	o	29.93	+ .37	17	16	-10	2	0	b	*	34	?	0.04	
	Wisby ...	29.82	33	NW	6	r	29.96	+ .37	20	29	-5	N	4	c	*	?	?	0.16	
	Bodö ...	29.72	33	WSW	6	c	29.73	+ .03	31	28	-4	NW	6	c	3	36	28	-	
	Christiansund...	29.91	36	WSW	3	bc	30.01	+ .39	37	34	0	WSW	4	c	5	37	32	0.12	
	Skudesnaes ...	30.09	35	Z	0	c	30.02	+ .09	35	35	-4	ENE	2	r	3	39	34	-	
	Christiania Fjord (Fjorder)	29.91	36	Z	0	bc	29.95	+ .19	30	28	-6	NW	2	0	1	37	29	-	
	Skagen (The Seaw)	30.00	35	N	3	b	30.00	+ .25	31	30	-5	SW	1	b	1	37	29	-	
	Fanö ...	30.09	29	WNW	2	b	30.10	+ .21	32	31	-5	WSW	2	bc	*	39	29	-	
BRITISH ISLANDS.	Sumburgh Head	30.02	43	WSW	1	r	30.24	+ .17	37	35	+2	N	2	b	4	44	34	0.16	
	Stornoway ...	30.19	45	W	3	o	30.37	+ .21	44	44	+4	NW	3	c	3	46	38	0.10	
	Wick ...	30.14	40	NW	2	c	30.35	+ .20	38	37	+3	NNE	2	c	2	42	33	0.05	
	Nairn ...	30.18	44	W	2	c	30.33	+ .16	43	41	+4	W	2	0	1	45	34	0.01	
	Aberdeen...	30.24	37	SW	1	bc	30.31	+ .09	41	39	+9	NW	3	bc	4	42	32	0.03	
	Leith ...	30.25	42	W	1	bc	30.33	+ .11	42	40	+6	N	1	em	*	45	35	-	
	Shields ...	30.25	42	NW	1	b	30.29	+ .07	42	40	+3	NW	2	0	0	46	36	-	
	Spurn Head ...	30.25	40	WNW	2	b	30.25	+ .07	39	38	-1	WNW	4	0	3	43	35	-	
	York ...	30.26	37	WSW	1	b	30.26	+ .07	38	37	+2	N	1	0	*	45	31	-	
	Loughborough	30.31	35	WSW	1	b	30.31	+ .12	38	33	-9	ENE	1	of	*	45	29	0.03	
GERMANY.	Ardrossan ...	30.28	47	Z	0	d	30.36	+ .09	45	44	+6	NW	2	bc	1	47	38	0.01	
	Malin Head ...	30.35	46	NW	3	c/p	30.44	+ .18	47	47	+2	NW	4	op	4	47	45	0.01	
	Mullaghmore ...	30.43	49	NW	1	d	30.51	+ .09	44	46	0	N	2	c	*	50	46	0.08	
	Donaghadee ...	30.35	46	NW	3	o	30.40	+ .11	44	46	+3	WNW	4	c	2	47	43	0.06	
	Barrow-in-Furness	30.31	41	NNE	1	bc	30.31	+ .09	39	38	-2	NE	2	bc	*	45	38	0.04	
	Liverpool (Bidston)	30.33	40	WNW	1	b	30.34	+ .12	41	41	0	NW	1	c	2	44	39	0.04	
	Holyhead ...	30.34	46	NW	1	c	30.36	+ .10	46	46	-1	WNW	5	mdg	5	48	45	-	
	Parsonstown ...	30.43	46	WNW	2	o	30.48	+ .10	45	44	-1	WNW	1	o	*	50	45	0.01	
	Valencia ...	30.51	52	NW	2	o	30.54	+ .06	49	47	0	N	2	o	2	52	47	0.04	
	Roche's Point...	30.44	49	WNW	4	c	30.47	+ .07	48	46	-1	NNE	3	c	3	51	45	-	
FRANCE & NETHERLANDS.	Pembroke ...	30.34	47	WNW	3	c	30.38	+ .08	47	46	-1	WNW	4	cp	3	50	45	0.01	
	Scilly ...	30.54	50	N	5	o	30.36	+ .03	50	48	0	N	6	c	4	51	48	0.02	
	Prawle Point ...	30.32	44	WNW	3	b	30.35	+ .05	42	41	-3	N	1	c	1	52	36	-	
	Jersey ...	30.26	39	WNW	3	c/comp	30.34	+ .01	39	37	-4	NE	1	bm	1	52	37	0.05	
	Hurst Castle ...	30.28	44	NNE	4	c	30.34	+ .07	34	34	-3	WNW	2	m	0	49	32	-	
	Dungeness ...	30.19	43	NE	5	r	30.28	+ .05	27	26	-11	NE	3	f	2	45	26	0.07	
	London ...	30.29	39	NE	3	bc	30.32	+ .07	31	31	-6	Z	0	g	*	43	29	0.15	
	Oxford ...	30.35	37	W	1	b	30.32	+ .09	35	35	-6	WSW	2	odm	*	46	32	0.04	
	Cambridge ...	30.30	37	W	1	b	30.31	+ .09	31	31	-8	Z	0	f	*	43	29	0.08	
	Yarmouth ...	30.23	39	N	1	bcg	30.25	+ .05	31	30	-5	NW	2	bcg	2	42	29	-	
FINLAND.	Cuxhaven ...	30.05	36	WNW	4	c	30.13	+ .12	36	35	-1	NW	2	c	*	38	34	0.04	
	Berlin ...	30.04	36	WNW	4	r	30.14	+ .11	38	31	-3	NW	2	o	*	?	?	-	
	Wiesbaden ...	*	*	*	*	*	30.22	- .01	27	26	-6	Z	0	o	*	34	25	0.04	
	Munich ...	30.15	29	NW	1	r	30.14	- .04	25	25	-4	NW	2	f	*	34	25	0.08	
	The Helder ...	30.21	38	WNW	1	b	30.23	+ .07	37	35	-2	WNW	1	c	2	41	37	-	
	Brussels ...	*	*	*	*	*	30.28	+ .04	35	34	-3	NSW	1	f	*	42	33	-	
	Cape Gris Nez...	?	41	NE	3	b	?	?	40	39	-2	N	4	o	2	45	37	0.08	
	Paris ...	30.22	37	NE	1	o	30.28	- .03	34	33	+2	NE	2	o	*	46	32	0.12	
	Brest ...	30.37	43	N	4	o	30.38	- .11	41	39	-4	ENE	3	o	3	50	36	-	
	Lorient ...	30.29	47	NW	5	?	30.30	- .06	40	38	-3	NNE	5	b	3	48	39	0.04	
FINLAND.	Rockefort ...	30.30	44	N	5	c	30.22	- .15	42	41	+4	NNE	5	o	2	45	34	-	
	Belfort ...	30.21	29	W	1	o	30.16	- .07	30	29	0	W	1	o	*	32	27	-	
	Lyons ...	30.21	33	N	3	o	30.24	- .04	32	31	+2	WNW	5	o	*	36	?	-	
	Nice ...	29.97	46	E	1	c	29.88	- .20	42	41	-3	E	4	o	3	52	41	-	
	Perpignan ...	30.08	42	NW	5	o	30.04	- .11	40	36	-4	NW	5	o	*	46	40	-	
	Biarritz ...	30.24	41	ENE	3	o	30.18	- .18	?	36	?	Z	0	f	3	46	34	0.04	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Lisbon ...	30.12	50	NNE	5	b	30.13	- .03	47	41	+5	NNE	5	b	2	52	?	-	

# WEATHER CHARTS

for 8 a.m. on Monday, 21<sup>st</sup> January, 1889.

## BAROMETER, WIND & SEA.

(Explanation of Map)

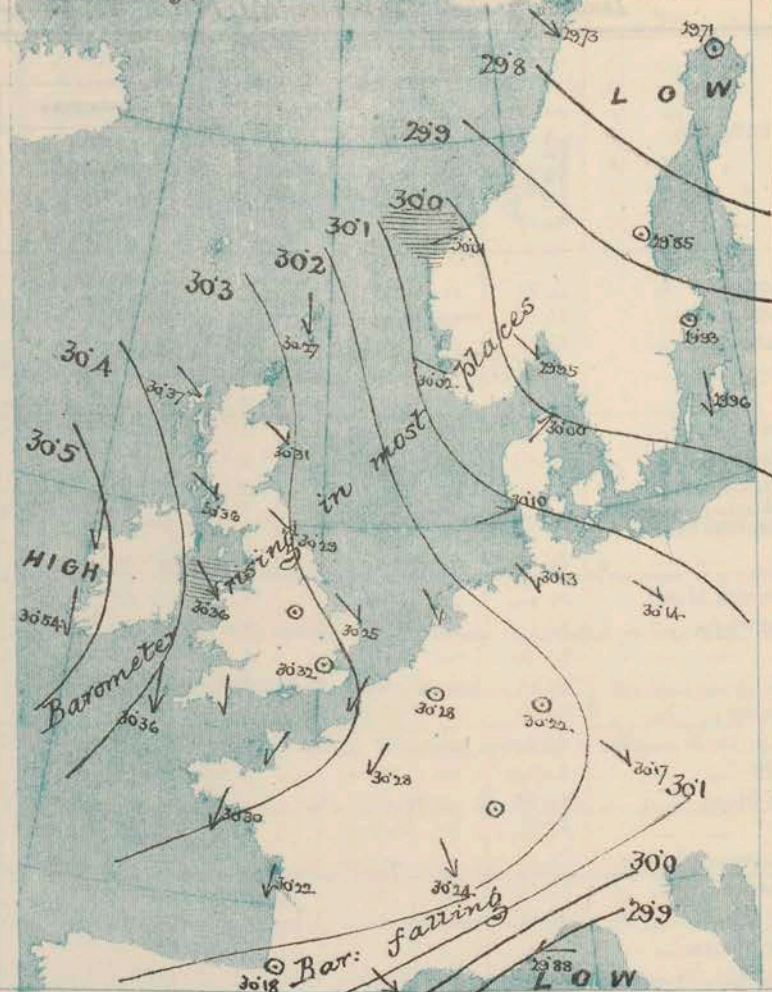
**Barometer** — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.  
**Wind** — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus —  
 \* — forces above 10; — forces 8 to 10;  
 — forces 5 to 7; — forces 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 January  
 During the 15 Years 1871—1885.

STATIONS	MEAN READINGS.
Sumburgh Head	29.695
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

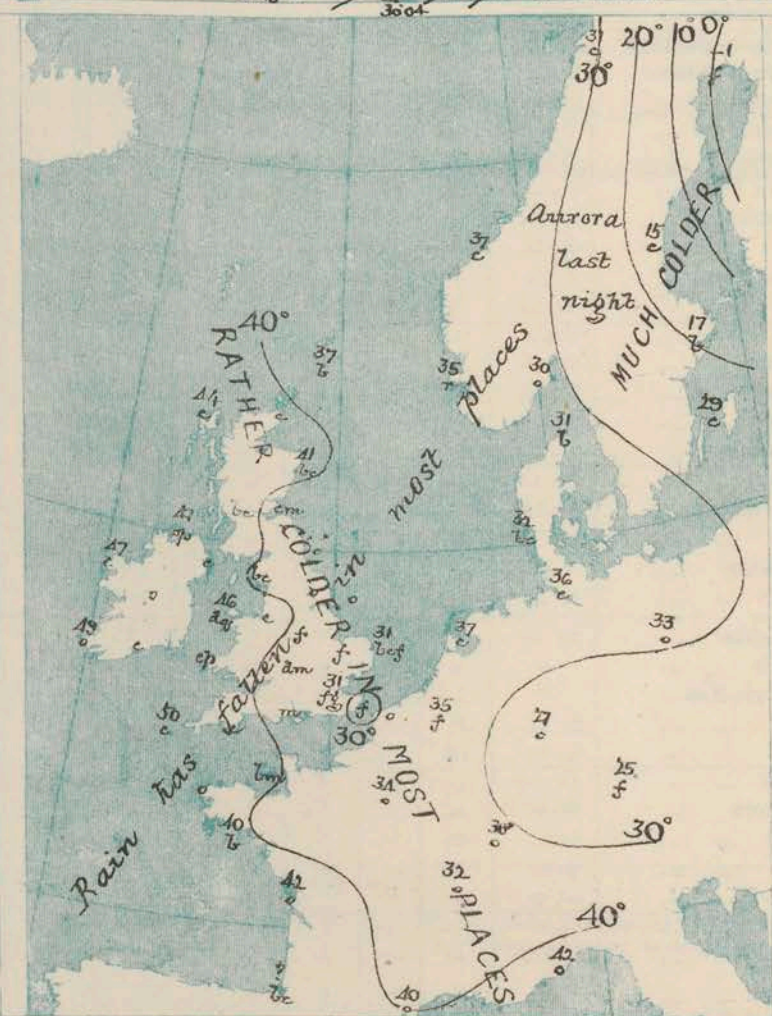
### MEANS OF TEMPERATURE IN SHADE.

#### AND RAINFALL.

for the month of January

STATIONS	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	Dry at 8 a.m.	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.06
Ardrossan	44.4	36.4	39.8	38.5	4.52
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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 in: and upwards, in an anticyclone lying off the west of Ireland. Lowest, 29.8 in: and less, over the north of Scandinavia, 29.3 in: and less, over the Gulf of Finow. Gradients slight but rather irregular. Barometer falling over the south of England and the southern parts of Norway and France, but rising elsewhere.
TEMPERATURE	Highest, 50° at Selly, 49° at Valence, 48° at Rock Point, 47° at Malin Head, Bismullet, Donaghadee, Tombrooke and Lisbon. Lowest, -1° at Itapiranda, +15° at Húsavík, 17° at Stockholm, 25° at Marseilles, 27° at Brest and Wiesbaden, and 29° at Wiesbaden. Frost occurred last night in some parts of Great Britain; in London the thermometer on the grass fell to 32°.
WIND	Light or moderate from the NW <sup>W</sup> or NW <sup>W</sup> over the greater part of Western Europe, but fresh from NNE in the west of France. A slight cyclonic circulation of wind is shown off the south of Norway and also over Central England.
WEATHER	Foggy over the Netherlands, South Germany and the inland parts of England. Dull over Central and Southern France and also in the south of Norway, with rain at Skudenæs; fair or fine elsewhere. Rain fell yesterday in many parts of Western Europe, and in some was seen in Scandinavia at night.
SEA	Rather rough at Christiansund and Holyhead, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

No decided change in the weather is likely at present. An exceedingly small and shallow depression is lying over Central England, and slight rain is therefore probable in many parts of our eastern, midland, and southern counties.

## FORECASTS

For the 24 hours ending at NOON on 22<sup>nd</sup> JAN<sup>y</sup> 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NW <sup>W</sup> winds, light; fair generally but perhaps local showers.	6 SCOTLAND WEST	NW <sup>W</sup> and N <sup>W</sup> winds, light; fair generally.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.	NW <sup>W</sup> to N <sup>W</sup> winds, light; dull misty, rain locally.	8 ENGLAND S.W.	N <sup>W</sup> and NE <sup>W</sup> winds, moderate or fresh; fair generally.
3 ENGLAND EAST	Variable breezes, finally NE <sup>W</sup> ; dull foggy, slight rain locally.	9 IRELAND NORTH	N <sup>W</sup> winds, light; fair generally.
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 ...	30.07	39	36	W 1/4 N 1/4	30	H	Holyhead ...	30.33	47	45	N 1/4 W 1/4	0	1/4
Sumburgh Head ...							Valencia ...						
Stornoway ...	30.19	46	46	W 1/4 S	1/2	3	Scilly ...						
Aberdeen ...							Jersey ...	30.25	49	45	W 1/4 N 1/4	0	3
Shields ...							Dungeness ...	30.21	43	43	N 1/4 S	1/2	3
Ardrossan ...							London ...						*
Malin Head ...	30.32	40	46	W 1/4 S	0	3	Yarmouth ...						
Mullaghmore ...							Rochefort ...	30.31	42	41	W 1/4 N 1/4	0	2
Belmullet ...	30.44	50	49	W 1/4 N 1/4	0	*							

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

The reports for yesterday morning showed that while a new high-pressure area had arrived off the western coasts of our Islands, the one hitherto existing over Central Russia was giving way decidedly, and moving in a southeasterly direction. In the meantime a complex depression (which advanced over Northern Europe on Friday) had reached Finland and the Baltic and appeared to be moving southeasterwards, shallow secondary disturbances were being developed over Great Britain and moving in a similar direction, while a large shallow low pressure system covered the Mediterranean. Under these circumstances the prevailing winds were W. over the British Islands, North Sea, and Scandinavia, W. in Germany, S. over Russia and very variable over France. On the shores of the Mediterranean there was a cyclonic circulation of light winds. The weather varied greatly but was on a whole cloudy and unsettled, with snow at several of the Baltic ports and at Kiev, rain and fog at some western stations. A large quantity of rain had fallen over Western Algeria, and snow in Finland. Temperature was very low over Central and Southern Russia; it was rising in most other places, but was not high anywhere. Over the British Islands, however, the changes were variable. The lowest morning values were - 8° at Kharkov, - 1° at Moscow, 18° at Kiev, 19° at Archangel, 20° to 22° over Central France, 29° to 37° over Austria and Germany, and above the freezing point at nearly all the Baltic and Scandinavian stations. The highest were 54° at Brindisi,

53° at Palma, 52° at Algiers and Tangier, 50° at Coruna and Lally, 49° at Valencia and Roches Point, 47° at Belmullet, 40° at Stornoway.

Unsettled weather continued over England all day.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 13<sup>TH</sup> JANUARY TO THE 19<sup>TH</sup> JANUARY 1889.

At the commencement of the week, barometric pressure was high both over Northern Europe, and in a second area lying to the westward of Ireland - the two systems being united by a 'col' which was stretched across Ireland and Scotland. N. winds were consequently prevalent in most places, with cold, gloomy weather, and occasional falls of cold rain, sleet or snow over the eastern and southern parts of our area.

The 'col' then moved southeasterwards, and, as pressure became high over Central and Eastern Europe, depressions began to appear off our western coasts and to move northeasterwards towards Norway. S. winds of considerable force, at once set in on our western and northwestern coasts, accompanied by a great increase of temperature and rain, but in the east the weather remained rather cold, and, though gloomy, and dark and hazy, was dry. These conditions continued with slight interruption till nearly the close of the week. The amount of rainfall in the south of Ireland on Tuesday night was very large, but in other places it was comparatively small from day to day.

On Friday, a small, but deep depression seems to have advanced rapidly by our extreme northern coasts towards Norway, and for a time severe W. gales and rain were experienced over Caithness and the Shetland Isles; our other coasts escaped, and over England the sky cleared considerably. The disturbance was apparently secondary to a much larger system in the far north, and at the close of the week both were apparently moving southeasterwards towards the Baltic, while high pressures were again established in the west.

#### 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 Tuesday, 22<sup>nd</sup> January 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.		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 ..	29.91	17	NE	4	0	30.15	+ .44	14	14	- 3	2	0	0	*	18	- 8														
Hernösand ...	30.04	27	N	0	0	30.31	+ .46	15	?	0	2	2	0	*	27	10														
Stockholm ...	29.95	25	W	2	0	30.16	+ .23	25	21	+ 8	2	6	0	*	30	16														
Wisby ...	30.01	32	NW	6	0	30.11	+ .15	30	28	+ 1	2	8	0	*	36	28														
Bodö ...	30.19	25	?	4	0	30.19	+ .46	24	22	- 7	SSW	4	2	2	?	19														
Christiansund...	30.31	30	NW	4	0	30.25	+ .24	35	32	- 2	W	2	0	4	36	30														
Skudesnaes ...	30.30	34	NW	2	0	30.37	+ .35	34	31	- 1	N	2	0	3	37	22														
Christiania Fjord (Furder)	30.16	31	2	0	0	30.34	+ .39	30	28	0	NNE	3	0	1	32	27														
Skagen (The Seaw)	30.15	33	N	2	0	30.34	+ .34	30	27	- 1	ESE	3	0	3	36	30														
Fanö ...	30.19	32	2	0	0	30.32	+ .22	27	27	- 5	2	0	0	*	36	27														
Sumburgh Head	30.43	36	N	1	0	30.32	+ .05	45	45	+ 8	W	4	1	4	45	35	0.01													
Stornoway ...	30.50	42	2	0	0	30.47	+ .10	40	39	- 4	SW	3	0	3	46	30	0.01													
Wick ...	30.47	33	2	0	0	30.43	+ .08	40	39	+ 2	N	3	0	1	43	30	0.01													
Nairn ...	30.47	34	W	2	0	30.48	+ .15	40	38	- 3	W	2	0	1	45	32														
Aberdeen...	30.50	36	NW	1	0	30.52	+ .21	34	33	- 7	SW	2	0	3	44	33	0.01													
Leith ...	30.49	37	NW	1	0	30.55	+ .22	33	32	- 9	NW	1	0	2	46	37	0.02													
Shields ...	30.43	43	NE	3	0	30.50	+ .21	39	38	- 3	NW	1	0	2	46	37	0.02													
Spurn Head ...	30.32	42	NNE	5	0	30.42	+ .17	40	39	+ 1	NNE	6	0	4	44	35	0.02													
York ...	30.35	41	NW	3	0	30.45	+ .19	35	35	0	NNE	1	0	*	49	33	0.02													
Loughborough	30.37	42	NW	3	0	30.48	+ .17	36	36	+ 3	NW	2	0	*	45	33	0.01													
Ardrossan ...	30.50	41	NNE	1	0	30.57	+ .21	33	32	- 12	NE	1	0	0	48	32														
Melin Head ...	30.54	46	N	3	0	30.59	+ .15	44	44	- 3	NW	2	0	2	47	44	0.01													
Mullaghmore...	-	-	-	-	-	30.60	-	43	42	-	NNE	2	0	4	48	38	0.01													
Beimullet ...	30.58	47	N	2	0	30.63	+ .08	44	44	- 3	ESE	1	0	*	48	43	0.08													
Donaghadee ...	30.50	47	N	3	0	30.58	+ .18	34	34	- 13	SSW	2	0	0	48	33	0.01													
BRITISH ISLANDS.																														
Barrow-in-Furness	30.45	42	NNE	2	0	30.52	+ .21	38	36	- 1	N	1	0	*	46	36														
Liverpool (Bidston)	30.45	42	NNE	2	0	30.55	+ .21	37	35	- 4	NNE	2	0	3	45	37														
Holyhead ...	30.46	46	NNE	4	0	30.55	+ .19	41	39	- 5	NE	1	0	2	47	40	0.02													
Parsonstown ...	30.53	48	NW	2	0	30.60	+ .12	36	36	- 9	2	0	0	*	50	35														
Valencia ...	30.57	48	N	3	0	30.60	+ .06	44	42	- 5	NNE	3	0	3	50	43														
Roche's Point...	30.49	50	NNE	3	0	30.55	+ .08	40	37	- 8	NNE	3	0	3	51	39														
Pembroke ...	30.41	45	N	3	0	30.54	+ .16	39	37	- 8	ESE	2	0	1	48	36	0.03													
Scilly ...	30.35	49	NNE	6	0	30.46	+ .10	43	41	- 7	ESE	6	0	4	50	42														
Prawle Point ...	30.34	44	NNE	2	0	30.44	+ .09	39	37	- 3	NE	5	0	4	48	36														
Jersey ...	30.30	44	NNE	1	0	30.34	00	43	39	+ 4	NE	5	0	3	46	37	0.02													
Hurst Castle ...	30.32	43	NNE	4	0	30.41	+ .07	37	36	+ 3	NNE	4	0	1	44	34	0.03													
Dungeness ...	30.22	36	NE	2	0	30.31	+ .03	38	37	+ 11	NE	4	0	3	39	26	0.12													
London ...	30.30	42	NNE	3	0	30.41	+ .09	37	36	+ 6	NNE	3	0	*	43	31	0.04													
Oxford ...	30.38	39	NW	3	0	30.46	+ .14	35	34	0	N	4	0	*	43	35	0.01													
Cambridge ...	30.34	38	NW	1	0	30.45	+ .14	35	35	+ 4	N	1	0	*	40	30	0.05													
Yarmouth ...	30.24	40	N	5	0	30.36	+ .11	38	37	+ 7	NE	5	0	5	40	30	0.13													
Cuxhaven ...	30.08	34	SSW	1	0	30.29	+ .16	35	35	- 1	W	1	0	*	38	38														
Berlin ...	30.22	32	NW	1	0	30.25	+ .11	38	31	0	NW	2	0	*	36	30														
Wiesbaden ...	*	*	*	*	*	30.28	+ .06	35	32	+ 2	E	1	0	*	36	?														
Munich ...	30.14	23	NE	2	0	30.15	- .02	24	24	- 1	NE	3	0	*	28	21	0.04													
FRANCE & NETHERLANDS.																														
The Helder ...	30.17	39	N	3	0	30.31	+ .08	36	36	- 1	NNE	1	0	2	39	36	0.08													
Brussels ...	*	*	*	*	*	30.33	+ .05	31	31	- 4	SW	3	0	*	39	31	0.04													
Cape Gris Nez...	?	40	N	5	0	?	?	39	38	- 1	E	7	0	5	43	30	0.08													
Paris ...	30.25	34	NE	3	0	30.24	- .04	32	31	- 2	NE	3	0	*	38	31														
Brest ...	30.33	44	ESE	1	0	30.36	- .02	39	38	- 2	NW	5	0	2	50	36	0.12													
Lorient ...	30.28	45	NE	4	0	30.25	- .05	41	37	+ 1	NNE	7	0	4	46	37														
Rochefort ...	30.25	40	NE	7	0	30.19	- .03	37	34	- 5	ESE	5	0	2	45	30														
Belfort ...	30.12	27	G	1	0	30.07	- .09	30	24	0	E	5	0	*	33	23														
Lyons ...	30.09	32	N	5	0	30.02	- .22	28	26	- 4	N	5	0	*	35	27														
Nice ...	29.78	47	NW	3	0	29.74	- .14	44	36	+ 2	ESE	5	0	1	50	?														
Bayonne ...	29.98	43	NW	4	0	29.93	- .11	35	30	- 5	NW	5	0	*	?	34														
Biarritz ...	30.16	42	NE	4	0	30.10	- .08	34	31	?	ESE	4	0	3	48	32														
PORTUGAL.																														
Corunna ...	*	*	*	*	*																									
Lisbon ...	30.05	50	N	5	0	30.02	- .11	45	39	- 2	NW	5	0	2	55	43														

For Explanation of Columns, see p. 2.

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

# WEATHER CHARTS

for 8 a.m. on

Tuesday, 22<sup>nd</sup> January,

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.

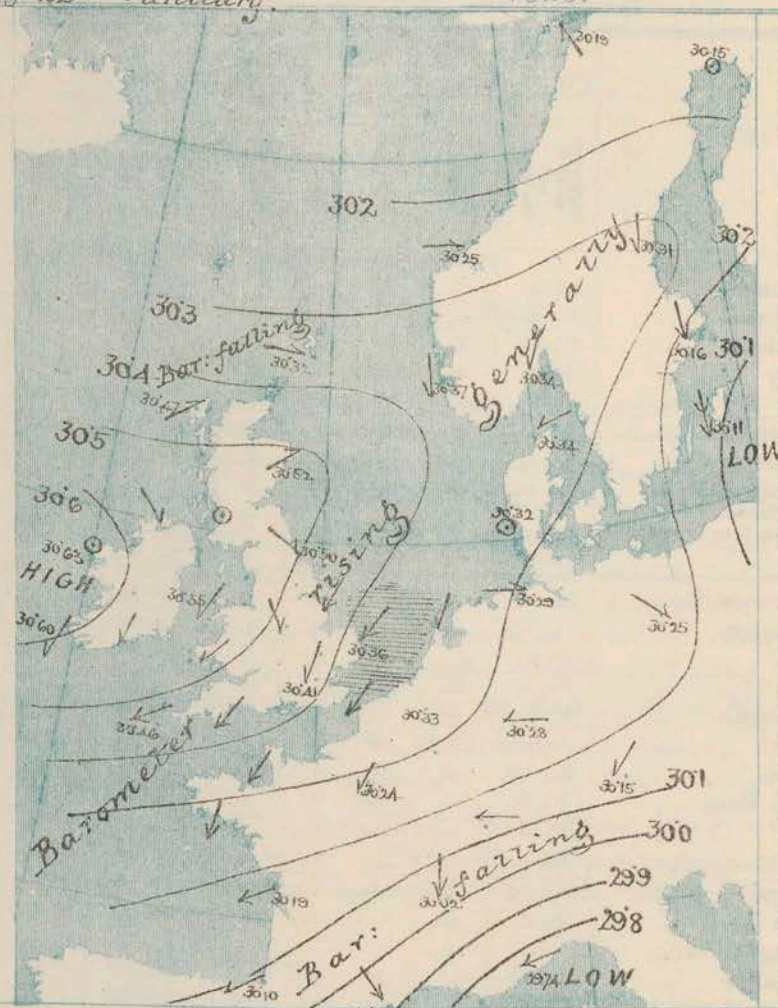
**Sea Disturbance** — where considerable is shown thus.

▨ = Rough ▨ = High

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS in.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.928
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



# GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.6 in: and upwards over the west of Ireland. Lowest, 29.8 in: and less, in a depression lying over the Gulf of Genoa; 30.2 in: and less, over the north of Scandinavia. Gradients slight generally. Barometer falling in France and the north of Scotland, but rising elsewhere.
TEMPERATURE	Highest, 45° at Lumburgh Head and Lisbon, 44° at Malin Head, Bodmuller, Valencia and Nice, and 43° at Mullaghmore, Sally and Jersey. Lowest, 4° at Haparanda, +15° at Helsingfors, 24° at Rode and Munich, 25° at Stockholm, 27° at Tams and 28° at Lyons.
WIND	Light or moderate from the W <sup>nd</sup> in the north of Scotland; moderate from S.E. at Bodm. Moderate to strong from the N.E. <sup>nd</sup> over France and the south of our Islands. Strong to a gale from N. in the south of Sweden.
WEATHER	Fine over the greater part of England, Ireland, and France, as well as in Denmark. Dull elsewhere, with fog over the Netherlands and south of Scotland, rain at Lumburgh Head, and snow at Bodm. and Munich. Slight rain fell yesterday in many parts of the United Kingdom.
SEA	Rather rough at Yarmouth and Cape Fin Noy, but moderate to smooth elsewhere.


## PROBABLE CHANGES IN SYSTEM NOW PREVALENT


The fall of the barometer which has set in over the north of Scotland seems to indicate the advance of a depression towards Norway, and freshening W<sup>nd</sup> winds are therefore probable on our extreme northern coasts. Over the southern parts of the Kingdom no decided change is likely at present.

## FORECASTS

For the 24 hours ending at NOON on 23<sup>rd</sup> JAN<sup>y</sup> 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	W <sup>nd</sup> winds, moderate to strong; unsettled, some rain.	6 SCOTLAND WEST	Variable or W <sup>nd</sup> airs; fair generally.
1 SCOTLAND EAST	W <sup>nd</sup> winds, freshening; fair to showery.	7 ENGLAND N. W.	N.E. to N.W <sup>nd</sup> winds, light; fair generally.
2 ENGLAND N.E.	N <sup>nd</sup> and N.W <sup>nd</sup> winds, moderate; fair generally.	8 ENGLAND S. W.	Same as N <sup>o</sup> 3 to 5
3 ENGLAND EAST	NE <sup>nd</sup> winds, light or moderate; fair generally, but local fogs at night.	9 IRELAND NORTH	Same as N <sup>o</sup> 1
4 MIDLAND COUNTIES		10 IRELAND SOUTH	Same as N <sup>o</sup> 7.
5 ENGLAND SOUTH		WARNINGS	NO NE ISSUED.

*Notes.*—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 ...	30.16	37	35	NW 7	bc	5	Holyhead ...	30.40	47	46	NNE 5	6	4
Sumburgh Head ...	30.38	40	37	N 1	bc	4	Valencia ...	30.54	50	48	NNE 2	c	3
Stornoway ...	30.46	46	45	SE 0	bc	3	Scilly ...	30.35	49	49	NNE 6	c	4
Aberdeen ...	30.43	42	39	N 2	6	4	Jersey ...	30.30	46	41	NNE 3	0	3
Shields ...	30.34	44	42	N 3	c	3	Dungeness ...	30.24	34	34	NE 3	0	2
Ardrossan ...	30.41	45	46	NW 2	6	1	London ...	30.29	40	40	SE 0	0	*
Malin Head ...	30.49	47	46	NW 3	bc	3	Yarmouth ...	30.22	38	37	NW 3	0	3
Mullaghmore ...							Rochefort ...	30.23	42	41	NE 7	0	2
Belmullet ...	30.57	48	47	N 2	c	*							

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

The report for yesterday morning showed that the high pressure area over Russia was still decreasing in intensity, while that over Western Europe and the neighbouring parts of the Atlantic was increasing and spreading slightly to the eastward. The two systems were united by a "col" stretching across South Germany and Austria-Hungary to South Western Russia; and while two depressions still lay over Lapland, Finland, and the Baltic Provinces, that over the Mediterranean had grown deeper and become somewhat more complex than on Sunday. N<sup>1</sup> (NW to NE) winds of no great strength prevailed over Western Europe, as well as over Scandinavia and the Baltic, NW'ais over Germany, SW' in Austria, and SE' over Russia. Over the Mediterranean a cyclonic circulation of wind prevailed around the depression, the centre of which lay near Tarragona (Tunis). The weather was rather changeable and unsettled; the sky was cloudy, snow was falling at several of the Baltic ports, and fog prevailed over England, the north of Finland, and several parts of Austria-Hungary. Much rain had again fallen in Algeria. Temperature was lower in Russia than on the 10<sup>th</sup>, but a new centre of severe cold had been developed over Finland and Sweden, and the frost had hardened again in South Germany. In the British Islands (except over Central England) the air was comparatively mild. The lowest 8 a.m. values were (1) -1° at Haparanda, -2° at Uleaborg, +14° at Archangel, 13° at Helsingfors, 16° at Kuopio, 21° at St. Petersburg, and 30° at Riga; (2) 3° F. at Charkov, 7° at Moscow, 11° at Nicolaioff, 25° at Kiev, and 30° at Lemberg and Hermannstadt. At Munich the temperature was 25°, in London 31°, and at Paris 34°. The highest values were 60° at Malta, 52° at Brindisi and Algiers, 51° at Corunna, 50° at Tarragona, Tanguian and Sicily, 47° to 49° on many parts of our western coast, and 44° at Stornoway.

Little change occurred later beyond the freshening of the N<sup>1</sup> wind over England, with some cold rain, and a clearance of the fog.

### 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 a.m. (Christiania time).

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

# DAILY WEATHER REPORT

for WEDNESDAY 23<sup>rd</sup> JANY 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.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SEASIDE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)				Day.	Nat.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.	Haparanda ..	30.22	7	S	0	6	29.87	-2.8	15	14	+19	S	4	0	*	19	-9	—	
	Hernösand ...	30.33	12	S	0	6	30.05	-2.6	22	21	+7	S	4	0	*	27	9	—	
	Stockholm ...	30.34	16	WNW	2	6	30.23	+0.7	19	17	-6	S	0	0	*	30	14	—	
	Wisby ...	30.24	27	WNW	3	C	30.28	+1.7	26	25	-4	ENE	4	0	*	34	25	—	
	Bodö ...	29.90	28	E	6	5	29.57	-1.62	29	28	+15	SW	8	2	5	?	21	0.29	
	Christiansund...	30.15	40	WNW	2	0	30.00	-2.5	42	41	+7	WNW	9	0	5	42	34	1.69	
	Skudesnaes ...	30.31	37	SE	4	0	30.27	-1.0	37	28	+3	E	2	2	4	37	27	—	
	Christiania Fjord (Færder)	30.35	30	SW	2	6	30.17	-1.7	29	28	-1	W	2	0	1	30	27	—	
	Skagen (The Scaw)	30.39	29	NNE	1	6	30.27	-0.7	28	28	-2	N	2	0	2	30	27	—	
	Fanö ...	30.41	29	SE	2	C	30.29	+0.7	26	25	-1	S	0	0	*	32	25	—	
BRITISH ISLANDS.	Samburgh Head	30.27	44	WNW	2	2	30.22	-1.0	46	45	+1	WNW	2	2	4	46	42	0.05	
	Stornoway ...	30.42	47	NW	4	6C	30.38	-0.9	40	40	0	NW	4	0	3	30	40	0.02	
	Wick ...	30.30	44	NW	2	6	30.23	-1.0	40	39	0	W	1	0	1	40	39	—	
	Nairn ...	30.41	47	WNW	2	6	30.38	-1.0	45	42	+5	SW	1	0	1	48	39	—	
	Aberdeen...	30.52	41	SW	2	6	30.40	-1.2	39	38	+5	N	1	0	2	44	34	—	
	Leith ...	30.47	37	W	1	6	30.44	-1.1	41	40	+8	W	1	0	*	43	30	—	
	Shields ...	30.47	38	NW	1	6m	30.41	-0.9	37	37	-2	SW	2	0	2	45	34	—	
	Spurn Head ...	30.45	39	NNW	1	C	30.43	+0.1	36	35	-4	W	2	0	3	43	34	—	
	York ...	30.46	39	WNW	1	C	30.43	-0.2	29	29	-9	WNW	1	0	*	44	28	—	
	Loughborough	30.50	38	NW	1	0	30.50	+0.2	30	29	-6	ENE	1	0	*	42	30	—	
GERMANY.	Ardrossan ...	30.48	45	NW	2	d	30.44	-0.9	46	46	+13	WNW	1	0	1	46	32	0.01	
	Malin Head ...	30.56	45	W	2	0	30.52	-0.7	44	44	0	W	4	0	3	45	43	0.04	
	Mullaghmore ...	30.60	43	W	1	f	30.57	-0.8	42	42	-1	WNW	2	0	2	46	41	0.03	
	Belmullet ...	30.62	43	WNW	1	0	30.57	-0.4	42	42	-1	SW	2	0	*	44	41	0.03	
	Donaghadee ...	30.56	44	W	2	0	30.52	-0.6	45	45	+11	W	2	0	1	46	34	0.04	
	Barrow-in-Furness	30.50	40	N	2	6C	30.47	-0.5	39	38	+1	N	1	0	*	44	36	—	
	Liverpool (Blisdon)	30.54	39	N	1	6	30.50	-0.5	40	39	+3	W	1	0	1	42	36	0.01	
	Holyhead ...	30.55	43	NNE	2	6	30.50	-0.5	46	46	+5	NNW	2	0	2	47	40	0.02	
	Parsonstown ...	30.60	38	2	0	f	30.58	-0.2	40	40	+4	2	0	0	*	41	36	0.02	
	Valencia ...	30.60	43	E	1	6	30.62	+0.2	37	36	-7	2	0	0	1	50	34	—	
FRANCE & NETHERLANDS.	Roche's Point...	30.58	42	NNE	2	6	30.58	+0.3	41	39	+1	N	2	0	2	49	35	—	
	Pembroke ...	30.53	39	NNE	2	6	30.53	-0.1	41	41	+2	SE	1	0	0	43	37	—	
	Scilly ...	30.46	44	NNE	5	0	30.51	+0.5	44	42	-1	NNE	4	0	2	45	41	—	
	Prawle Point ...	30.48	39	NNE	2	C	30.53	+0.9	35	34	-4	N	2	0	2	49	33	—	
	Jersey ...	30.40	43	NNE	4	C	30.47	+1.3	41	39	-2	NNE	2	0	2	44	39	—	
	Hurst Castle ...	30.40	40	N	4	C	30.48	+0.7	33	33	-4	NNW	2	0	1	43	32	—	
	Dungeness ...	30.38	40	NNE	3	C	30.43	+1.2	36	35	-2	NNE	2	0	2	41	35	0.10	
	London ...	30.47	40	NNE	2	C	30.48	+0.7	31	30	-6	NNW	1	0	*	41	30	—	
	Oxford ...	30.50	38	N	1	C	30.52	+0.6	31	30	-4	2	0	0	*	41	31	—	
	Cambridge ...	30.48	38	N	1	0	30.51	+0.6	32	32	-3	N	1	0	*	43	29	—	
PENINSULA.	Yarmouth ...	30.41	39	NNE	2	C	30.45	+0.9	34	33	-4	N	1	0	2	40	32	—	
	Coxhaven ...	30.32	31	NNW	2	6	30.40	+1.1	29	28	-6	NNE	1	0	*	33	26	—	
	Berlin ...	30.28	32	NW	4	6	30.35	+1.0	26	24	-7	NW	2	0	*	34	26	—	
	Wiesbaden ...	*	*	*	*	*	30.34	+0.6	28	27	-7	NNE	1	0	*	36	28	—	
	Munich ...	30.06	28	NW	2	C	30.22	+0.7	20	19	-4	NW	4	0	*	28	14	0.04	
	The Helder ...	30.42	35	NNE	1	C	30.42	+1.1	33	32	-3	SW	1	0	1	37	33	—	
	Brussels ...	*	*	*	*	*	30.44	+1.1	31	30	0	NNE	1	0	*	35	31	0.04	
	Cape Gris Nez...	?	40	E	7	6C	?	?	36	34	-3	ENE	1	0	2	41	34	0.04	
	Paris ...	30.34	34	NNE	4	0	30.41	+1.7	30	29	-2	N	2	0	*	38	29	—	
	Brest ...	30.39	41	NNE	5	0	30.46	+1.0	40	39	+1	2	0	0	1	30	36	—	

# WEATHER CHARTS

for 8 a.m. on WEDNESDAY 23<sup>rd</sup> JAN 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.

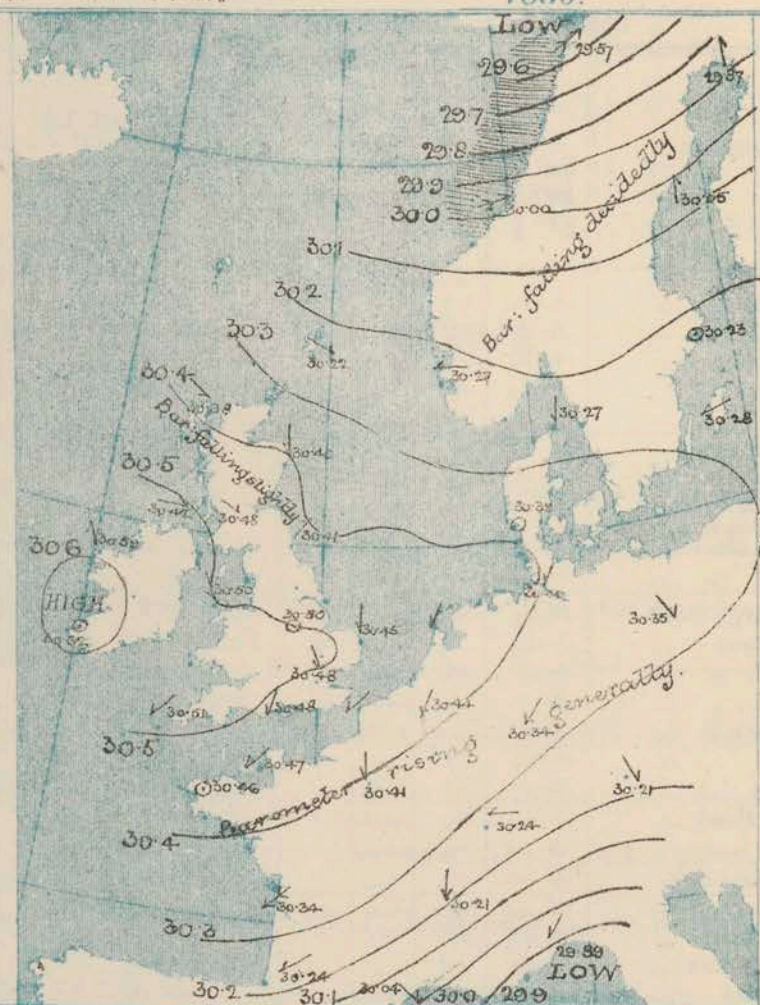
**Sea Disturbance** — where considerable is shown thus.

— Rough — High.

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head.	29.685
Stornoway.	29.687
Wick.	29.725
Nairn.	29.753
Aberdeen.	29.790
Leith.	29.829
Shields.	29.886
York.	29.935
Loughborough.	29.967
Ardrossan.	29.840
Donaghadee.	29.851
Holyhead.	29.896
Liverpool.	29.922
Parsonstown.	29.886
Valencia.	29.869
Roche's Point.	29.894
Pembroke.	29.926
Scilly.	29.980
Jersey.	30.010
Hurst Castle.	29.997
Dover.	30.017
LONDON.	30.007
Oxford.	29.997
Cambridge.	29.992
Yarmouth.	29.981



## 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.

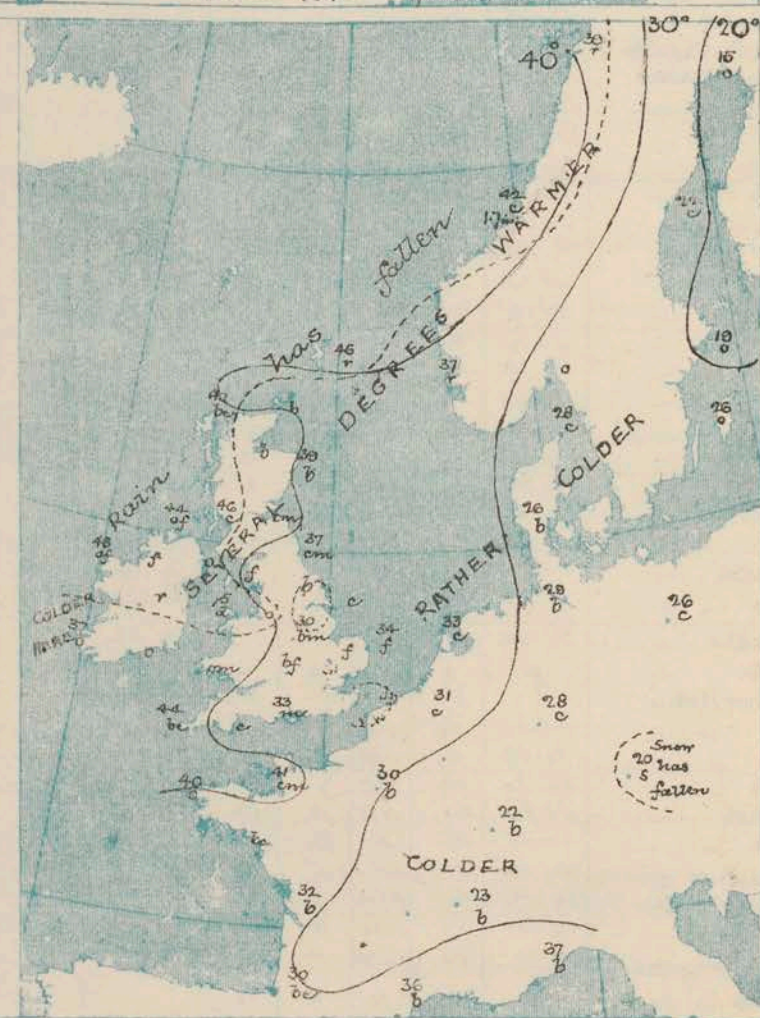
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of January.

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.0	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.8	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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 30.6 ins. and upwards in the southwest of Ireland.</p> <p>Lowest 29.6 ins. and less in a depression lying off the northwest of Norway; 29.7 ins. and less over the Gulf of Genoa.</p> <p>Gradients rather steep over the north of Scandinavia, and also over the southeast of France, but slight elsewhere.</p> <p>Barometer falling briskly in Scandinavia, and slightly over the northern parts of our Islands, but rising elsewhere.</p>
TEMPERATURE	<p>Highest 46° at Lumburgh Head, Ardrossan and Holyhead, 45° at Nairn and Donaghadee and 44° at Malin P. and Scilly.</p> <p>Lowest 15° at Haparanda, 19° at Stockholm, 20° at Munich, 22° at Harnösand and Belfort, 23° at Lyons, and 24° at Wiesbaden &amp; Berlin.</p> <p>Frost occurred last night over the inland parts of St. Britain, in London the thermometer on the grass fell to 20°.</p>
WIND	<p>Light from the W<sup>nd</sup> or NW<sup>nd</sup> over the northern parts of our Islands.</p> <p>Light from NE. on our southern coasts, fresh or strong from the same quarter in France.</p> <p>Strong to a gale from SW. in the west of Norway; moderate from S. in the north of Sweden.</p>
WEATHER	<p>Fine in Denmark, Scotland, France and the southwest of England.</p> <p>Foggy <sup>central</sup> over England, and the north of Ireland; rainy in the west of Norway.</p> <p>Since yesterday morning a little rain has fallen at several of our western stations.</p>
SEA	<p>Rather rough off the west of Norway, but slight or smooth elsewhere.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

In addition to the large disturbance off the west of Norway some small and exceedingly shallow depressions are lying off our northwest and northeast coasts. These latter will probably move slowly southwards and occasion slight rain at some of the English stations.

## FORECASTS

for the 24 hours ending at NOON on 24<sup>th</sup> January 1889.

### DISTRICTS.

### FORECASTS.

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

NW<sup>th</sup> and N<sup>th</sup> winds, light or moderate; changeable, some showers.

W<sup>th</sup> and NW<sup>th</sup> winds, light; dull, misty, some rain.

N<sup>th</sup> to W<sup>th</sup> winds, light; dull, foggy, some rain.

### DISTRICTS.

### FORECASTS.

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

Same as N<sup>o</sup> 0 and 1.

Same as N<sup>o</sup> 2.


N<sup>th</sup> winds, light or moderate; fair to showery.


Same as N<sup>o</sup> 2.

Same as N<sup>o</sup> 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.
Skudesnaes ...	30.37	36	33	SE 2	0	3	Holyhead ...	30.55	43	40	NE 2	0	2
Sumburgh Head ...	30.36	45	45	W 4	0	4	Valencia ...	30.60	47	44	NNE 2	0	2
Sornoway ...	30.44	50	49	SW 3	0	3	Scilly ...	30.47	44	41	ENE 5	0	4
Aberdeen ...	30.42	42	41	WSW 1	0	3	Jersey ...	30.37	44	41	NNE 4	0	3
Shields ...	30.49	45	41	NN 1	0	3	Dungeness ...	30.35	40	39	NE 5	0	4
Ardrossan ...	30.50	44	43	NW 2	0	1	London ...	30.45	41	38	NE 3	0	4
Malin Head ...	30.57	44	44	WSW 2	0	2	Yarmouth ...	30.40	40	38	NNE 4	0	4
Mullaghmore ...	30.60	45	43	W 1	0	2	Roshefort ...	30.21	40	36	NE 8	0	3
Belmullet ...	30.62	44	44	WSW 1	0	*							

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

The reports for yesterday morning showed a continued easterly movement of the whole of the pressure systems over Europe. The Russian high-pressure area had almost entirely disappeared; the low pressure system over Finland and the Baltic Provinces had grown shallower, the Mediterranean depression had become deeper, while the high pressure area over the British Islands and their neighbourhood had extended considerably to the eastward, and covered the whole of the North Sea and the southern parts of Scandinavia. Variable airs prevailed over Central Russia, but the prevailing wind current over northern and western Europe was N<sup>ly</sup> to NE<sup>ly</sup>, and blew with considerable force over the Baltic, and somewhat strongly in places in the east and south of the British Islands, and over the Bay of Biscay. Over the Adriatic, Italy and the Gulf of Genoa there was a gale from NE, while over the southern parts of the Mediterranean the wind was moderate from W. The weather was fair, but locally foggy, in the western countries; snow was falling at many of the Russian and Finnish stations, as well as in some parts of France and northern Italy; on the western, northern and eastern shores of the Mediterranean the weather was bright, but in Algeria a good deal of rain was reported. Temperature was as low as (1) -4° F. at Haparanda, +4° at Uleaborg, 6° at Archangel, 10° at Kuopio, 15° at Hernösand, 17° at St. Petersburg, 20° at Hangö, and 24° at Riga, (2) 8° at Kharkov, 10° at Moscow, 13° at Nicolaïeff, 20° at Kiew and Odessa, 23° at Warsaw, 24° at Breslau and Munich. At Paris it was 32°, Berlin 33°, Oxford and Cambridge 35°, and in London 37°. The highest readings were 56° at Malta, 52° at Brindisi, 51° at Palermo, 50° at Sanguinaire and Algiers, 47° at Coramra, and 44° to 44° in the southwest and west of our Islands.

Later on there were indications of the approach of another depression to the northwest of Norway, but little change occurred in our Islands.

The Newspapers report heavy rains, violent gales, and an Earthquake at Athens.

### 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, 24<sup>th</sup> January, 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 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.			
SCANDINAVIA.																			
Haparanda ..	29.36	31	S	6	0	29.15	-.72	22	19	+.14	WNW	2	bc	*	32	28	0.04		
Hernösand ...	29.73	35	S	7	0	29.58	-.47	35	30	+.18	NW	6	b	*	36	27	-		
Stockholm ...	29.92	27	WSW	2	0	29.77	-.46	27	26	+.8	W	4	c	*	28	14	-		
Wisby ...	30.08	24	NW	4	0	29.84	-.44	32	32	+.6	W	4	o	*	32	23	-		
Bodö ...	29.80	33	WSW	9	m	29.41	-.16	25	23	-.14	W	9	s	6	39	21	-		
Christiansund...	29.87	39	WSW	9	7	29.93	-.07	39	34	-.3	WSW	8	o	6	43	36	0.20		
Skudesnaes ...	30.17	42	NW	4	7	30.14	-.13	41	40	+.4	WNW	2	r	3	41	37	-		
Christiania Fjord (Færder)	29.95	29	W	0	6	29.91	-.26	39	35	+.10	WSW	2	b	1	?	25	-		
Skagen (The Scaw)	29.95	36	WSW	2	c	29.95	-.32	39	37	+.11	NW	3	c	2	39	28	-		
Fanö ...	30.18	36	NW	4	m	30.11	-.28	38	37	+.12	NW	6	c	*	39	25	0.04		
Sumburgh Head	30.20	44	NW	3	0	30.18	-.04	44	44	-.2	WNW	1	r	4	47	42	0.06		
Stornoway ...	30.37	45	NW	3	0	30.29	-.09	46	46	+.6	W	5	c	4	48	40	0.05		
Wick ...	30.30	44	NW	2	0	30.25	-.08	45	44	+.5	NW	2	bc	2	49	40	-		
Nairn ...	30.43	46	WSW	1	bc	30.30	-.08	46	44	+.1	SW	2	bc	1	50	42	-		
Aberdeen...	30.38	41	WSW	1	6	30.35	-.05	39	38	0	SW	1	b	1	47	35	-		
Leith ...	30.44	43	W	1	6	30.41	-.03	46	44	+.5	W	3	cm	*	50	39	-		
Shields ...	30.41	43	WSW	3	6	30.41	00	41	40	+.4	W	3	bc	2	45	36	-		
Spurn Head ...	30.42	40	W	3	6	30.43	00	39	39	+.3	W	3	o	3	42	35	-		
York ...	30.39	38	SW	1	6	30.42	-.01	33	33	+.4	W	0	f	*	45	29	-		
Loughborough	30.49	35	SW	1	6	30.48	-.02	40	39	+.10	W	1	o	*	44	29	-		
BRITISH ISLANDS.																			
Ardrossan ...	30.46	46	WNW	3	2p	30.45	-.03	45	45	-.1	WNW	2	b	1	48	44	-		
Malin Head ...	30.51	45	W	3	6	30.48	-.04	45	45	+.1	WSW	4	cm	4	46	44	0.04		
Mullaghmore ...	30.55	46	WSW	3	f	30.53	-.04	43	43	+.1	WSW	4	cm	2	46	42	0.04		
Belmullet ...	30.57	47	W	1	og	30.56	-.03	46	46	+.3	W	3	o	*	49	43	0.05		
Donaghadee ...	30.52	46	WNW	3	6	30.51	-.01	42	42	-.3	WNW	3	b	1	47	42	-		
Barrow-in-Furness	30.48	40	SE	2	0	30.48	+.01	44	43	+.5	WNW	2	cm	*	44	38	0.02		
Liverpool (Bidston)	30.51	42	NW	1	0	30.51	+.01	43	42	+.3	WNW	2	o	2	44	40	0.01		
Holyhead ...	30.52	46	WNW	3	0	30.53	+.03	46	45	0	WNW	1	og	2	47	45	0.02		
Parsonstown ...	30.59	41	SW	1	0	30.58	00	41	41	+.1	W	0	o	*	42	40	0.01		
Valencia ...	30.61	45	W	0	c	30.63	+.01	43	43	+.6	N	1	cm	1	47	36	-		
Roche's Point...	30.59	44	N	2	0	30.58	00	43	41	+.2	N	2	o	3	45	41	-		
Pembroke ...	30.53	46	WNW	2	0	30.57	+.04	44	43	+.3	WNW	2	og	1	46	41	-		
Scilly ...	30.51	46	WNW	1	0	30.55	+.04	48	48	+.4	N	5	o	4	48	43	-		
Prawle Point ...	30.52	39	WNW	2	bc	30.56	+.02	40	39	+.5	WNW	1	o	1	46	33	-		
Jersey ...	30.49	43	WNW	3	cm	30.54	+.07	43	41	+.2	WNW	2	cm	2	45	35	-		
Hurst Castle ...	30.51	35	WNW	3	6	30.50	+.02	40	40	+.7	WNW	1	cm	0	43	31	-		
Dungeness ...	30.44	41	WNW	3	6	30.45	+.02	34	34	+.2	N	3	f	1	43	34	0.01		
London ...	30.51	34	W	0	f	30.47	-.01	36	35	+.5	W	0	f	*	36	31	-		
Oxford ...	30.52	38	NW	2	0	30.51	-.01	42	41	+.11	NW	1	od	*	44	30	-		
Cambridge ...	30.48	38	NW	1	6	30.48	-.03	35	35	+.3	W	0	o	*	44	31	-		
Yarmouth ...	30.43	40	NW	2	f	30.43	-.02	36	36	+.2	WNW	2	f	2	42	31	-		
Cuxhaven ...	30.33	32	SW	2	0	30.21	-.19	38	37	+.9	NW	4	bc	*	38	27	0.04		
GERMANY.																			
Berlin ...	30.35	29	WNW	2	6	30.17	-.18	27	26	+.1	SW	3	o	*	30	25	-		
Wiesbaden ...	*	*	*	*	*	30.37	+.03	27	26	-.1	WNW	1	s	*	36	23	-		
Munich ...	30.30	19	W	0	0	30.33	+.11	17	16	-.3	SE	3	c	*	27	18	0.04		
FRANCE & NETHERLANDS.																			
The Helder ...	30.37	39	W	1	f	30.35	-.07	39	39	+.6	WNW	1	o	1	44	37	0.04		
Brussels ...	*	*	*	*	*	30.43	-.01	41	41	+.10	WNW	1	r	*	43	34	0.05		
Cape Gris Nez...	?	40	W	0	0	?	?	39	39	+.3	NE	1	m	1	43	34	0.04		
Paris ...	30.43	32	WNW	3	6	30.44	+.03	32	32	+.2	WNW	1	o	*	37	28	-		
Brest ...	30.51	41	W	0	0	30.54	+.08	41	38	+.1	E	1	o	2	50	36	-		
Lorient ...	30.43	43	WNW	5	bc	30.51	+.12	40	37	+.2	NE	1	o	2	45	36	-		
Rochefort ...	30.40	37	NE	7	6	30.47	+.13	32	30	0	NE	7	b	2	41	27	-		
Belfort ...	30.26	24	E	3	6	30.32	+.08	20	20	-.2	E	1	b	*	30	16	-		
Lyons ...	30.22	30	N	7	6	30.27	+.06	24	21	+.1	N	7	b	*	34	23	-		
Nice ...	29.94	39	ENE	1	6	30.05	+.16	34	29	-.5	E	3	b	4	48	30	-		
Perpignan ...	30.06	38	NW	7	6	30.14	+.10	34	30	-.2	NW	8	b	*	44	32	-		
Biarritz ...	30.30	33	ENE	3	bc	30.38	+.14	30	28	0	ENE	4	o	2	46	28	-		
PENINSULA.																			
Coranna ...	+	*	*	*	*	30.41	+.13	48	44	0	ENE	5	c	5	48	43	-		
Lisbon ...	30.26	46	NE	7	6	30.19	+.18	38	33	0	NE	5	b	2	50	37	-		

For Explanation of Columns, see p. 4. <sup>5</sup> At Westminster the thermometer rose to 42°. <sup>†</sup> Received too late for insertion in Charts on p. 2.

# WEATHER CHARTS

for 8 a.m. on Thursday, 24<sup>th</sup> January, 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.

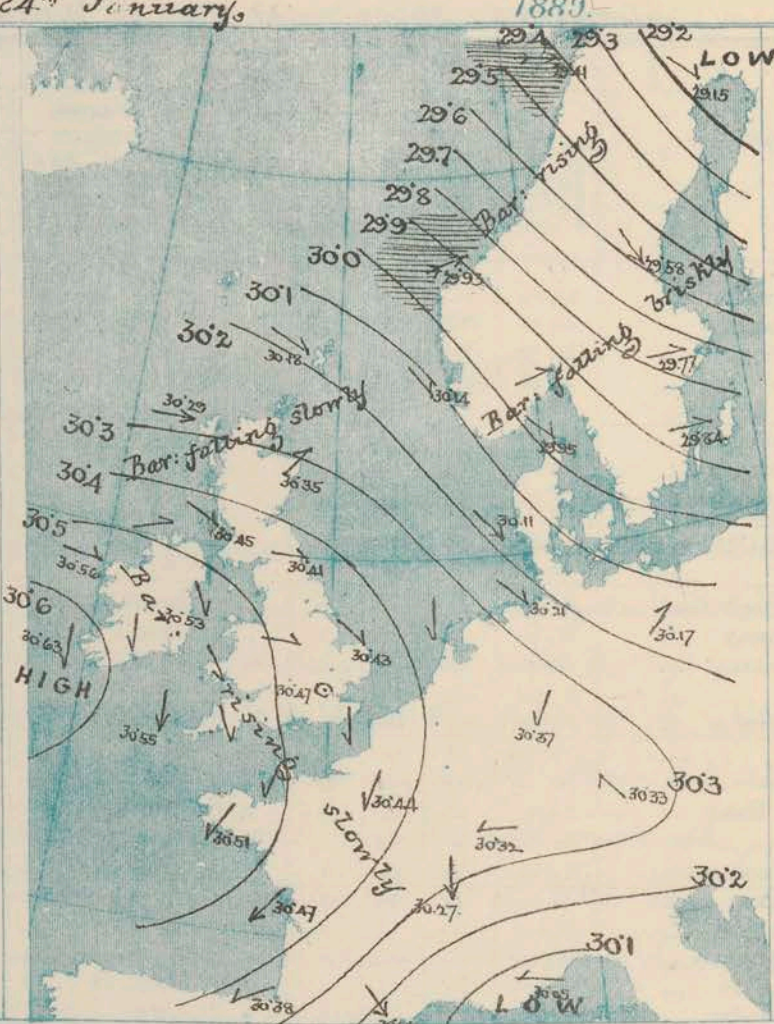
**Sea Disturbance** — where considerable is shown thus.

— Rough — High

## MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of January  
 During the 16 Years 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.924
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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 January.

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.8	3.49
Liverpool	43.9	35.8	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	42.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON.	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

NOTE — The Temperature means are for the 16 years 1871—85, the Rainfall means are mainly those for the 10 years 1866—85



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.63 in. at Valencia; 30.5 in. and upwards, over Ireland, Italy, the southeast of England and the northwest of France.  
Lowest, 29.2 in. and less, in a depression, lying over the east of Lapland; 30.1 in. and less, over the Gulf of Genoa.  
Gradients rather steep over Scandinavia, but slight or smooth elsewhere.  
Barometer rising in France, Spain, and the south of our islands as well as in the west of Norway, but falling elsewhere.

## TEMPERATURE

Highest, 48° at Peilly, 46° at Stornoway, Nain, Leth, Belmullet, and Holyhead, and 45° at Wick, Anderson, and Malin Head.  
Lowest, 17° at Munich, 20° at Belfast, 22° at Haparanda, 24° at Lyons, 25° at Rode, and 27° at Stockholm, Berlin and Wiesbaden.

## WIND

Light from the W<sup>nd</sup> in the north and east of our islands, strong to a gale from the same quarter in the west of Norway.  
Moderate to strong from W. or NW. in Sweden and Denmark.  
Light from N or NW in the south of our islands, NE<sup>ly</sup> in France.

## WEATHER

Fine in Scotland, as well as in Sweden, Denmark, France, and Spain.  
Foggy over England, dull elsewhere, with rain at Skudenes and Sumburgh Head, and snow at Rode and Wiesbaden.  
A little rain fell yesterday in the west and extreme north of our islands.

## SEA

Rough off the west of Norway, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no signs of any very decided change in the weather. Anticyclonic conditions are likely to hold for a time over all the more southern part of the Kingdom, and fog will probably continue at many of the English stations.

In the extreme north~~west~~ there are some indications of the advance of another depression towards the Norwegian coast.

## FORECASTS

For the 24 hours ending at NOON on

25<sup>th</sup> JAN<sup>y</sup>

1889.

### DISTRICTS.

### FORECASTS.

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

W<sup>nd</sup> winds, moderate to strong; fair to dull and some rain.

W<sup>nd</sup> winds, light or moderate; fair generally.

W<sup>nd</sup> winds, light; fair generally but local fogs.

### DISTRICTS.

### FORECASTS.

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

Same as N<sup>os</sup> 1 and 2

NW<sup>ly</sup> to W<sup>nd</sup> winds, moderate; fair to dull.


N<sup>ly</sup> and NW<sup>ly</sup> winds, light; fair generally.


W<sup>nd</sup> winds, freshening; dull, rain locally.

Same as N<sup>o</sup> 8

NONE ISSUED.

### WARNINGS

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 ...	30.20	38	48	E 1	r f	3	Holyhead ...	30.52	46	46	W 1	d	2
Sumburgh Head ...	30.15	45	43	NW 3	o	4	Valencia ...	30.65	45	43	N 1	bc	1
Stornoway ...	30.37	47	47	NW 4	c	3	Scilly ...	30.51	46	44	NE 1	om	2
Aberdeen ...	30.27	45	42	W 1	bcm	2	Jersey ...	30.47	44	40	NE 1	bc	3
Shields ...	30.41	44	42	WSW 2	b	2	Dungeness ...	30.45	42	40	NE 3	o	3
Ardrossan ...	30.47	47	46	WSW 2	c	1	London ...	30.50	42	39	NW 1	e	*
Malin Head ...	30.52	46	46	W 3	b	3	Yarmouth ...	30.44	42	41	NW 3	bc	2
Mullegmore ...	30.56	45	45	WSW 3	b	2	Rocheport ...	30.36	40	35	ENE 8	b	3
Belmullet ...	30.57	49	49	WSW 1	o	*							

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

The reports for yesterday morning showed that the high pressure area over Russia had entirely disappeared, and that readings varied from 30.6 in. and more off the west of Ireland to less than 29.6 in. in the neighbourhood of the North Cape on the one hand, and to less than 29.7 in. both over the south of Italy and Turkey in Asia on the other. Calm, light N<sup>l</sup> breeze and cold weather prevailed in most places, but over the northern parts of Scandinavia the SW gales of a large depression advancing from the Atlantic were already reported, while over the Adriatic, Northern Italy, and at Constantinople NE<sup>l</sup> and N<sup>l</sup> gales and strong winds, due to the low pressure systems in the far south were still prevalent. Over France and the Bay of Biscay the wind was NE<sup>l</sup> to N<sup>l</sup>. The weather was fair at most of the western stations, but fog and drizzling mist were reported in some localities. In Norway, however, rain was beginning to fall pretty generally, snow, in small quantity, was reported at several of the Russian stations, while at Constantinople and in Algeria a large amount of rainfall was again reported. Temperature had risen decidedly over Southern, but fallen over Northern Russia, where it was very low; in our Islands it had changed irregularly, but in France and Germany it had fallen. The lowest individual values were (1.) -11° F. at Archangel, 0° at Ulenborg, 3° at Kilingfors, 5° at Stango, 10° at St Petersburg, 17° at Riga and Moscow; (2.) 14° at Kharkov, 17° at Nicolaieff and Ruda Kuth, 19° at Kiev. Over all the more central parts of Europe and over Central England it was below the freezing point. The highest values were 54° at Malta, 52° at Naples and Brindisi, 48° at Palermo, Algiers, and Courma, 45° at Tunis and 44° at Sicily.

The depression in the far north continued to move eastwards, and spread slowly to the southward later on

### 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 *Friday, 25<sup>th</sup> January* 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.		Difference from 8 a.m. yesterday.	WIND.		Weather.	Sea (0 to 2.)	Max.	Min.	Amount of Rainfall.		
			Dirac.	Force. (0 to 12.)				Dry.	Wet.		Dirac.	Force. (0 to 12.)							
SCANDINAVIA.	Haparanda ..	29.86	14	SW	2	28.89	-.56	24	24	+ 2	W	2	bc	*	32	12	0.20		
	Hernösand ...	29.69	28	2	0	29.06	-.52	36	33	+ 1	SEW	4	6	*	37	25	-		
	Stockholm ...	29.88	32	WSW	2	29.47	-.30	31	29	+ 4	WSW	4	0	*	29	25	-		
	Wisby ...	29.91	35	WSW	2	29.67	-.17	33	32	+ 1	W	4	0	*	37	27	-		
	Bodö ...	29.36	28	WNW	6	28.97	-.44	28	26	+ 3	WNW	7	C	4	28	23	-		
	Christiansund...	29.65	42	WSW	8	29.81	-.62	43	42	+ 4	WSW	9	P	8	43	39	0.32		
	Skudesnaes ...	30.05	43	WNW	4	29.85	-.29	44	43	+ 3	W	6	P	5	43	36	0.24		
	Christiania Fjord (Færdar)	29.95	37	W	2	29.60	-.31	39	37	0	WSW	5	C	2	39	36	-		
	Skagen (The Scaw)	30.00	37	NW	2	29.75	-.20	40	39	+ 1	NW	6	0	4	41	34	-		
	Fanö ...	30.20	30	NW	6	30.14	+ .03	38	38	0	SW	4	0	*	41	36	-		
BRITISH ISLANDS.	Sumburgh Head	30.02	46	WNW	4	29.80	-.38	47	47	+ 3	WNW	5	P	5	47	44	0.15		
	Stornoway ...	30.22	47	W	6	30.07	-.22	48	48	+ 2	NW	7	P	5	48	45	0.05		
	Wick ...	30.20	45	NW	3	30.00	-.25	46	45	+ 1	NW	4	0	2	49	42	-		
	Nairn ...	30.24	47	WSW	3	30.06	-.24	49	47	+ 3	SW	3	C	1	52	45	-		
	Aberdeen...	30.37	47	SW	2	30.13	-.22	47	42	+ 8	S	1	cm	2	53	39	-		
	Leith ...	30.37	46	W	2	30.26	-.15	48	45	+ 2	W	5	C	*	49	45	-		
	Shields ...	30.36	45	W	4	30.25	-.16	46	44	+ 5	WSW	4	C	2	47	39	-		
	Spurn Head ...	30.41	40	W	3	30.34	-.09	43	42	+ 4	W	5	0	4	43	38	-		
	York ...	30.40	40	W	1	30.32	-.10	43	41	+ 10	W	3	6	*	49	32	-		
	Loughborough	30.49	44	NW	2	30.44	-.04	44	42	+ 4	WNW	4	og	*	45	39	-		
GERMANY.	Ardrossan ...	30.43	47	W	3	30.33	-.12	46	46	+ 1	W	4	C	3	49	45	-		
	Malin Head ...	30.43	45	WSW	4	30.35	-.13	46	46	+ 1	W	4	og	5	46	44	0.07		
	Mullaghmore ...	30.51	46	WSW	4	30.43	-.10	46	45	+ 3	WSW	4	og	3	47	42	0.03		
	Belmullet ...	30.53	46	WSW	4	30.46	-.10	48	47	+ 2	WSW	4	0	*	48	46	0.05		
	Donaghadee ...	30.49	43	SEW	3	30.40	-.11	46	45	+ 4	W	3	C	1	48	41	-		
	Barrow-in-Furness	30.47	44	W	2	30.41	-.07	44	43	0	NW	2	0	*	44	43	-		
	Liverpool (Bidston)	30.51	44	WNW	2	30.46	-.05	43	42	0	W	4	0	4	45	42	0.01		
	Holyhead ...	30.53	44	NW	1	30.48	-.05	45	43	- 1	WNW	4	og	3	48	43	-		
	Parsonstown ...	30.56	45	WSW	2	30.51	-.07	44	43	+ 3	20	0	0	*	47	41	0.01		
	Valencia ...	30.62	46	SW	1	30.57	-.06	46	45	+ 3	W	2	0	5	47	42	0.05		
FRANCE & NETHERLANDS.	Roche's Point...	30.58	45	N	3	30.57	-.01	45	42	+ 2	NW	2	0	3	46	43	-		
	Pembroke ...	30.56	44	NW	1	30.52	-.05	44	43	0	NW	2	0	1	45	43	-		
	Scilly ...	30.54	46	N	4	30.55	-.00	46	45	- 2	N	1	0	3	48	44	-		
	Prawle Point ...	30.54	42	N	2	30.55	-.00	41	40	+ 1	NW	1	0	1	42	39	-		
	Jersey ...	30.51	46	NW	1	30.54	-.00	44	42	+ 1	20	0	om	0	46	42	-		
	Hurst Castle ...	30.52	44	NW	4	30.52	+ .02	42	41	+ 2	WNW	3	om	0	45	40	-		
	Dungeness ...	30.45	42	NW	3	30.46	+ .01	42	41	+ 8	W	2	0	1	42	34	-		
	London ...	30.52	40	NW	1	30.47	-.00	41	40	+ 5	W	1	og	*	44	36	-		
	Oxford ...	30.53	42	NW	1	30.50	-.01	40	39	- 2	WNW	1	0	*	45	40	-		
	Cambridge ...	30.49	42	WNW	1	30.45	-.03	42	42	+ 7	W	1	0	*	43	33	-		
PENIN-SULA.	Yarmouth ...	30.42	42	NW	2	30.40	-.03	39	39	+ 3	WNW	3	0	2	44	38	-		
	Cuxhaven ...	30.24	37	NW	4	30.22	+ .01	39	39	+ 1	W	3	0	*	40	36	0.02		
	Berlin ...	30.14	37	WNW	4	30.22	+ .05	36	35	+ 9	WNW	3	0	*	37	?	0.04		
	Wiesbaden ...	*	*	*	*	30.42	+ .05	33	32	+ 6	20	0	0	*	34	?	-		
	Munich ...	30.35	24	20	0	30.39	+ .06	25	24	+ 8	NW	2	m	*	25	?	-		
	The Helder ...	30.39	39	NW	1	30.34	-.01	40	40	+ 1	W	1	0	2	43	39	-		
	Brussels ...	*	*	*	*	30.46	+ .03	40	40	- 1	NW	1	0	*	43	39	0.04		
	Cape Gris Nez...	?	43	N	3	?	?	42	41	+ 3	W	5	m	4	45	37	-		
	Paris ...	30.46	38	N	3	30.49	+ .05	38	38	+ 6	NW	1	0	*	39	?	0.04		
	Brest ...	30.52	44	20	0	30.56	+ .02	43	?	+ 2	E	3	0	?	?	?	-		

for 8 a.m. on Friday, 25<sup>th</sup> January.

1883

(Explanation of Map)

*Sea Disturbance*—where considerable is shown that

MEAN HEIGHT *of the* BAROMETER

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

[illegible]

Temperature— Isotherms are drawn for each  $10^{\circ}$  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 January*

[illegible]

NOTE - The Temperature means are for the 45 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 ins. and upwards, in an anticyclone lying over the southern parts of Ireland, and England, the Channel, and the north-west of France.  
Lowest, 28 ins. and less, in a large and deep depression lying over Lapland.  
Gradients rather steep over Scandinavia and the northern part of the North Sea, slight over England, Ireland and France.  
Barometer rising a little in Germany, France, and the extreme south of England, but falling elsewhere, quickly in Scandinavia.

## TEMPERATURE

Highest, 49° at Kain, 48° at Stomoway, Leith, and Belmullet, and 47° at Lumburgh Head and Aberdeen.  
Lowest, 24° at Haparanda, 25° at Munich, 28° at Bodo and Lyons, 29° at Kilsfjort, 31° at Stockholm, and 33° at Vichy and Wiesbaden.

## WIND

W<sup>ly</sup> or NW<sup>ly</sup> at all but the French stations; strong in force over Scandinavia and the extreme north of Scotland, with a gale at Christiansund.  
In France the wind is light to fresh from the NE<sup>ly</sup>.

## WEATHER

Fine in the north of Sweden and the extreme south of France, fair in the east and south of Scotland and the north of England.  
Cloudy or overcast elsewhere, with fog over the Netherlands, and rain in the Shetlands, Hebrides and west of Norway.  
A little rain fell yesterday in the extreme west and north of our Islands.

## SEA

Very high at Christiansund, and rather rough at Lumburgh Hd., Stomoway, and Malin Head, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The present tendency is for a general increase in the steepness of the gradients over Northwestern Europe, and freshening W<sup>ly</sup> winds are probable over all the more northern parts of the United Kingdom. No decided change in the weather is anticipated at present.

## FORECASTS

for the 24 hours ending at NOON on 26<sup>th</sup> JAN<sup>y</sup> 1889.

### DISTRICTS.

### FORECASTS.

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

W<sup>ly</sup> and NW<sup>ly</sup> winds, strong; drizzle, rain at times.  
W<sup>ly</sup> winds, fresh; fair generally, but perhaps local showers.  
W<sup>ly</sup> winds, light or moderate; fair, mild.

### DISTRICTS.



### FORECASTS.

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

Same as Nos 1 and 2.  
NW<sup>ly</sup> winds, light; drizzle to fair.  
W<sup>ly</sup> winds, moderate to strong; drizzle, rain locally.  
W<sup>ly</sup> or SW<sup>ly</sup> winds, moderate; drizzle, rain locally.

### 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 rear 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 rear 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.	Wex.	Sea.		Bar.	Dry.	Wet.	Wind.	Wex.	Sea.
Skudeenæs ...	30.15	42	41	NW 2	0	3	Holyhead ...	30.53	45	44	NW 3	0g	2
Sumburgh Head ...	30.05	46	46	NW 3	7	4	Valencia ...	30.60	47	46	Z 0	odm	1
Stornoway ...	30.36	48	48	W 6	0	4	Scilly ...	30.54	46	45	N 3	0	2
Aberdeen ...	30.29	52	46	W 1	6	1	Jersey ...	30.50	45	44	NW 2	0	2
Shields ...	30.40	46	44	W 3	c	2	Dungeness ...	30.43	44	40	NW 3	m	1
Ardrossan ...	30.43	49	47	W 4	bc	3	London ...	30.49	44	42	NW 1	ofg	*
Malin Head ...	30.45	46	46	WSW 4	0	4	Yarmouth ...	30.41	43	42	NW 2	bef	2
Mullaghmore ...	30.52	46	45	SSW 3	om	2	Rocheport ...	30.45	43	38	NE 5	bc	2
Belmullet ...	30.53	47	47	WSW 4	om	*							

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

The reports for yesterday morning showed a continuance of the Atlantic high pressure area off the western coast of Europe, whence a long ridge extended eastward across Central Europe to Russia. A well marked depression lay over Lapland and Finland, with a secondary hollow stretching southwards over the Baltic to North Germany, while less deep disturbances prevailed over Northern Africa, the Mediterranean and Greece. Thus, very light N<sup>2</sup> (NW to NE) winds were felt over the British Isles and their neighbourhood, while stronger W<sup>2</sup> or SW<sup>2</sup> winds were experienced in the Baltic and on the shores of the North Sea, W<sup>4</sup> gales in the north of Norway and SW<sup>4</sup> gales in the Gulf of Finland. Over Northern Italy and the Gulf of Genoa NE<sup>2</sup> gales were again reported, while on the eastern and southern shores of the Mediterranean the wind was NW<sup>2</sup>, and in Sicily and Malta W<sup>2</sup>. The weather varied greatly; in our Islands it was dry - gloomy, and foggy in several localities, fair in others, rain was falling in the Netherlands and considerable quantities in Algeria, snow in many parts of Northern Europe, and also in some parts of Italy. Temperature had as a whole, risen over northern, fallen over Southern Europe. The lowest readings reported were (1) 14° at Archangel, 10° at St. Petersburg, 12° at Moscow and Kiev, 13° at Kharkov, 21° at Hermannstadt, (2) 10° at Budapest, 17° at Munich, 19° at Breslau and Warsaw, 27° at Berlin, 32° at Paris and 36° in London. It was below the freezing point over nearly all the inland districts, and was as low as 34° at Kiev and 36° at Naples. The highest values were 52° at Malta, 51° at Brindisi, 50° at Algiers, 48° at Corunna and Scilly, 46° at Belmullet, Stornoway and Kinnaird and 44° at Sumburgh Hd.

Later in the day the depression over Northern Europe grew deeper.

### 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, 26<sup>th</sup> January 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 ..	28.47	8	SW	4	b	28.84	+ .25	14	13	- 10	W	2	0	*	28	- 8		
Hernösand ...	29.15	27	N	4	c	29.35	+ .29	21	18	- 15	N	6	6	*	41	?	0.04	
Stockholm ...	29.21	38	SSW	2	+	29.50	+ .03	23	20	- 8	WNW	4	6	*	45	28	0.16	
Wisby ...	29.35	38	W	6	c	29.58	- .09	32	28	- 1	N	8	6	*	41	28	0.04	
Bodö ...	29.04	23	WNW	6	0	29.19	+ .22	26	22	- 2	WNW	8	0	5	28	19		
Christiansund...	29.50	29	WNW	8	s	29.73	+ .42	28	27	- 15	WNW	8	8	7	?	23		
Skudesnaes ...	29.76	41	WNW	6	bc	29.98	+ .13	31	29	- 13	NNE	2	0	4	45	?		
Christiania Fjord (Færdar)	29.40	42	WSW	3	b	29.78	+ .18	32	27	- 7	NW	3	6	3	43	30		
Skagen (The Scaw)	29.54	41	NW	7	b	29.79	+ .04	36	31	- 4	NNW	6	6	5	41	36		
Fanö ...														*				
BRITISH ISLANDS.																		
Sumburgh Head	29.81	44	NW	4	0	30.03	+ .23	33	33	- 14	W	0	0	3	48	30	0.04	
Stornoway ...	30.03	47	W	4	c	30.14	+ .07	40	40	- 8	NW	6	7	5	49	38	0.10	
Wick ...	29.98	48	NW	3	0	30.07	+ .07	38	37	- 8	NW	2	op	2	51	36	0.15	
Nairn ...	30.01	50	SW	3	0	30.12	+ .06	42	40	- 7	SW	2	0	1	53	40	0.01	
Aberdeen...	30.04	47	SW	3	b	30.15	+ .02	40	38	- 7	W	2	0	3	53	40	0.08	
Leith ...	30.17	47	W	5	b	30.17	- .09	47	45	- 1	W	2	0	*	51	46		
Shields ...	30.18	46	W	4	b	30.20	- .05	48	47	+ 2	SW	3	0	2	50	45		
Spurn Head ...	30.25	44	W	4	0	30.26	- .08	43	42	0	W	5	0	4	44	41		
York ...	30.25	46	SW	1	0	30.24	- .08	46	45	+ 3	W	2	bc	*	48	41		
Loughborough	30.37	45	NW	3	0	30.35	- .09	45	42	+ 1	WNW	2	0	*	46	42		
Ardrossan ...	30.25	50	W	4	cp	30.21	- .12	47	46	+ 1	W	3	om	2	50	46	0.08	
Malin Head ...	30.29	47	W	5	od	30.26	- .09	47	47	+ 1	W	5	od	5	48	46	0.07	
Mullaghmore ...	30.40	47	WSW	5	opm	30.36	- .07	46	45	0	WSW	4	0	3	49	45	0.03	
Belmullet ...	30.42	48	W	3	0	30.40	- .06	49	48	+ 1	W	3	0	*	49	46	0.01	
Donaghadee ...	30.34	48	WNW	3	bcp	30.31	- .09	46	45	0	W	5	6	3	48	44		
GERMANY.																		
Barrow-in-Furness	30.33	45	SW	4	0	30.31	- .10	46	45	+ 2	W	3	0	*	46	44	0.02	
Liverpool (Bidston)	30.38	45	W	5	0	30.37	- .09	46	44	+ 3	W	5	0	4	46	43	0.01	
Holyhead ...	30.42	47	W	4	og	30.40	- .08	48	46	+ 3	W	4	0	4	48	44		
Parsonstown ...	30.47	46	SSW	1	0	30.44	- .07	44	42	0	W	0	0	*	47	43	0.01	
Valencia ...	30.53	47	W	2	0	30.51	- .06	47	45	+ 1	W	1	0	1	49	45		
Roche's Point...	30.52	48	WNW	2	0	30.50	- .07	46	44	+ 1	WNW	3	0	3	49	44		
Pembroke ...	30.48	47	WNW	3	c	30.47	- .05	47	46	+ 3	WNW	3	og	1	47	43		
Scilly ...	30.51	46	NW	3	0	30.53	- .02	45	45	- 1	NW	4	cdp	3	48	44		
Prawle Point ...	30.50	43	NW	1	0	30.50	- .05	44	43	+ 3	NW	2	0	1	44	40		
Jersey ...	30.51	47	WNW	2	om	30.52	- .02	46	43	+ 2	NW	2	om	2	48	43		
Hurst Castle ...	30.45	44	WNW	3	om	30.46	- .06	43	44	+ 1	WNW	3	og	1	44	41		
Dungeness ...	30.40	41	WNW	2	0	30.38	- .08	48	42	+ 1	WNW	4	0	3	43	40		
London ...	30.40	42	WNW	1	og	30.41	- .06	42	40	+ 1	WSW	1	6	*	44	40		
Oxford ...	30.43	43	W	2	0	30.42	- .08	43	41	+ 3	WSW	2	og	*	44	40		
Cambridge ...	30.39	44	W	1	0	30.36	- .09	38	37	- 4	SW	1	6	*	45	36		
Yarmouth ...	30.31	43	WNW	2	og	30.29	- .11	39	38	0	WNW	2	bcf	2	44	37		
Cuxhaven ...	30.14	38	W	4	f	30.07	- .15	40	40	+ 1	W	3	f	*	40	38		
Berlin ...	30.12	39	WNW	4	+	30.06	- .16	40	40	+ 4	WNW	4	+	*	?	?	0.04	
Wiesbaden ...	*	*	*	*	*	30.35	- .07	40	36	+ 7	NW	1	0	*	?	?		
Munich ...	30.38	28	SW	3	0	30.39	- .00	27	26	+ 2	W	5	m	*	34	25		
FRANCE & NETHERLANDS.																		
The Helder ...	30.26	40	W	1	b	30.22	- .12	42	41	+ 2	W	3	0	3	43	39		
Brussels ...	*	*	*	*	*	30.38	- .08	40	39	0	WSW	3	0	*	42	39	0.04	
Cape Gris Nez...	?	41	WSW	5	0	?	?	42	41	0	NW	5	bc	4	45	39		
Paris ...	30.47	41	N	1	0	30.46	- .03	41	?	+ 3	NW	3	0	*	?	?		
Brest ...	30.55	45	W	0	0	30.56	- .00	45	43	+ 2	W	0	0	2	?	36		
Lorient ...	30.50	45	NE	4	0	30.54	+ .02	45	43	+ 3	WNW	3	0	2	48	41		
Rochefort ...	30.49	41	ENE	5	0	30.56	+ .07	39	38	- 1	NE	4	m	2	45	30		
Belfort ...	30.37	28	E	1	0	30.40	+ .01	27	26	- 2	E	1	0	*	35	18		
Lyons ...	30.41	35	N	4	bc	30.48	+ .05	30	30	+ 2	N	3	0	*	36	?		
Nice ...						30.24	+ .03	38	33	+ 3	W	0	6	1	46	34		
Perpignan ...	30.27	42	NW	3	b	30.35	+ .04	45	35	+ 2	NW	3	6	*	49	36		
Biarritz ...	30.43	41	ESE	3	0	30.49	+ .11	37	35	- 1	E	4	0	2	45	36		
PENIN- SULA.																		
Corunna ...	*	*	*	*	*						ENE	5	6	2	54	36		
Lisbon ...	30.30	48	NE	5	b	30.43	+ .18	37	35	- 2	ENE	5	6	2	54	36		

# WEATHER CHARTS

For 8 a.m. on Saturday, 26<sup>th</sup> January,

## BAROMETER, WIND & SEA.

(Explanation of Map)

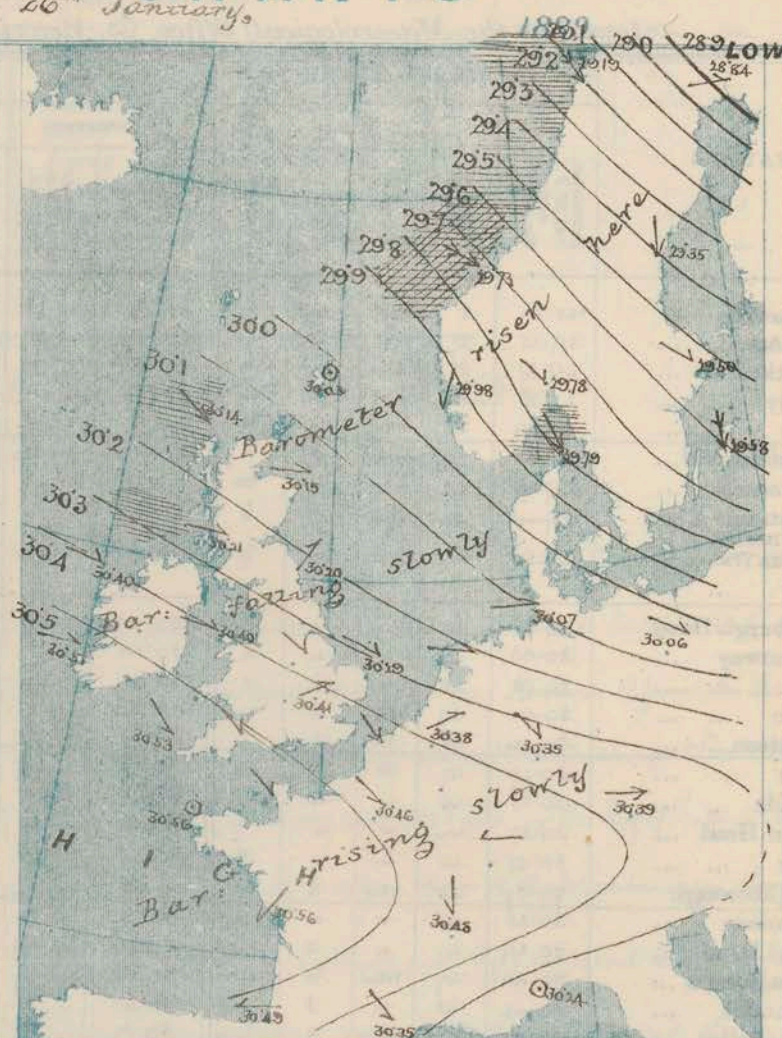
**Barometer** — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.  
**Wind** — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —  
 — = forces above 10; — = forces 6 to 10;  
 — = forces 5 to 7; — = forces 1 to 4;  
 ○ = dead calm.

**Sea Disturbance** — where considerable, is shewn thus.  
 — = Rough. — = High.

## MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of January  
 During the 15 Years 1871–1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.5 ins. and upwards, in an anticyclone lying over the Bay of Biscay, the west of France, and our extreme southwest coast.  
 Lowest, 28.2 ins. and less, in the north of Sweden.  
 Gradient steep over Scandinavia, but moderate or slight elsewhere.  
 Barometer rising at all but the Irish and English stations, where a slight fall is reported.

## TEMPERATURE

Highest, 49° at Belmullet, 48° at Shields and Holyhead, and 47° at Leith, Anderson, Malin Head, Valencia and Pembroke.  
 Lowest, 14° at Haparanda, 21° at Huvvund, 23° at Stockholm, 26° at Rode, 27° at Munich and Kelfort, and 28° at Christiansund.  
 During yesterday the thermometer rose above 50° at several of the Scotch stations.

## WIND

Strong to a gale from NW. in Scandinavia, light to fresh from the same quarter or from W. over our Islands, the Netherlands and Germany.  
 Moderate from N. or NE. over the southwest of France and also in Portugal.

## WEATHER

Fine in Sweden, Denmark, the southeast of England and the extreme south of France.  
 Dull elsewhere, with rain on our extreme northwest coast as well as at Berlin and snow at Christiansund.  
 A little rain fell yesterday at several of our western and northern stations.

## SEA

High at Christiansund, and rather rough at Rode, Llagan, Lornoway, and Malin Head, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression noticed over Lapland yesterday is travelling away in an easterly direction.

There are at present no indications of the advance of any fresh disturbances.

## FORECASTS 27<sup>th</sup> JAN<sup>y</sup>

for the 24 hours ending at NOON on

1889.

### DISTRICTS.

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

### FORECASTS.

NW<sup>y</sup> to W<sup>y</sup> winds, fresh or strong;  
 dull, some rain.

W<sup>y</sup> winds, moderate or fresh; fair  
 generally, but perhaps local showers.

W<sup>y</sup> winds, light or moderate;  
 fair, mild.

### DISTRICTS.

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

### FORECASTS.


Same as Nos 1 and 2


NW<sup>y</sup> to W<sup>y</sup> winds, moderate; cloudy generally.

W<sup>y</sup> to SW<sup>y</sup> winds, moderate or fresh;  
 cloudy, some rain.

NONE ISSUED.

### WARNINGS

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	45	44	W 6	0 f	5	Holyhead ...	30.45	46	45	W 4	0	3
Sumburgh Head ...	29.76	45	43	NW 5	0	5	Valencia ...	30.54	48	46	W 2	om	2
Stornoway ...	30.02	49	49	W 6	0	5	Scilly ...	30.52	49	45	NW 2	0	3
Aberdeen ...	30.05	52	46	SW 4	0	2	Jersey ...	30.51	49	44	ESE 1	0	1
Shields ...	30.23	49	46	SW 4	0	2	Dungeness ...	30.41	43	41	NW 3	0	1
Ardrossan ...	30.27	49	47	W 4	c	3	London ...	30.44	42	40	WNW 3	0	*
Malin Head ...	30.38	47	45	W 5	ce	5	Yarmouth ...	30.32	44	43	WNW 4	cf	3
Mullaghmore ...	30.40	48	47	WSW 5	cm	4	Rocheport ...	30.49	43	41	ESE 5	0	2
Belmullet ...	30.43	49	48	WSW 2	c	*							

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

The report for yesterday morning showed that the large high pressure area lying over Western Europe and the neighbouring parts of the Atlantic, was moving slightly in an easterly direction, but was extending in the form of a "ridge" more and more to the southward. The depression over Northern Europe was in the meantime becoming much deeper (lowest reading, 28.6 in. at Haparanda) while that over the Mediterranean was beginning to fill up quickly. W<sup>4</sup> (NW to SW) gale or strong winds were still reported over Northern Europe moderate W to NW winds over the greater part of the United Kingdom and the North Sea, and W<sup>1</sup> breezes over Central Europe and Southern Russia. Over the Bay of Biscay, Spain, and the southern parts of France, Italy, and Sicily the wind was NE<sup>3</sup>, and blew with the force of a gale at Genoa, as well as at Palermo, Liphorn, and Florence, but on the Algerian coast the wind was SW<sup>4</sup>, and moderate in force. Considerable quantities of rain had again fallen on the Algerian coast and at Palermo; in several parts of Germany and Northern and Northwestern Europe rain or snow was reported; over Italy, and the south of France the sky was clear, but in most other places the weather was dry, with a great deal of cloud and in some places fog. Temperature showed a tendency to increase except in Algeria, but was still very low over Northern Russia, and (for the locality) over the northern shores of the Mediterranean also. The lowest morning readings reported were 7° at St. Petersburg, 12° at Archangel, 14° at Kharkov, 15° at Moscow, 18° at Hermannstadt, 22° at Uleaborg and Riga, 25° at Lemberg and Munich, 30° at Pesaro and at Madrid, 32° at Rome and at Ancona, and 34° at Leghorn. At Berlin the temperature was 36°, at Paris 38°, and in London 41°. The highest values reported were 54° at Palermo, 52° at Brindisi, 49° at Kain, 48° at Stornoway, Belmullet, and Cronna, and 46° at Ardrossan, Valencia, and Scilly.

Later on, the depression in the far north seemed to be moving eastwards towards the White Sea, while that over the Mediterranean appeared to be filling up. The anticyclone in the west was moving slowly to the southward.

### 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 27<sup>th</sup> JAN

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 3.)	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 ..	29.02	20	NW	6	o	29.02	+ .18	22	19	+ 8	NNW	6	c	*	28	0	—	
	Hernösand ...	29.44	22	NNW	6	b	29.51	+ .16	21	18	0	NNW	8	b	*	28	18	—	
	Stockholm ...	29.60	25	N	6	b	29.75	+ .25	21	18	— 2	WNW	4	b	*	39	21	—	
	Wisby ...	29.76	30	NN	8	b	29.80	+ .22	29	26	— 3	N	8	b	*	41	21	—	
	Bodö ...	29.32	24	WNW	6	c	29.49	+ .30	25	22	— 1	NW	8	c	5	26	19	—	
	Christiansund...	29.83	30	WNW	9	s	29.91	+ .18	31	30	+ 3	WNW	8	c	6	?	25	0.35	
	Skudesnaes ...	30.09	30	NNW	2	bc	30.24	+ .26	30	30	— 1	N	2	o	2	34	30	—	
	Christiania Fjord (Farder)	29.90	31	W	5	b	30.00	+ .22	32	?	0	W	5	b	1	32	24	—	
	Skagen (The Seaw)	29.96	32	N	2	b	30.06	+ .27	32	30	— 4	NW	3	b	3	36	30	—	
	Fanö ...	30.06	33	NN	2	bc	30.26	+ .31	32	32	— 8	NN	4	b	*	41	30	—	
BRITISH ISLANDS.	Sumburgh Head	30.19	31	NNE	2	cfs	30.28	+ .25	37	34	+ 4	NN	2	bc	3	37	31	0.03	
	Stornoway ...	30.34	36	NNW	5	bcfs	30.41	+ .27	35	35	— 5	W	3	bc	3	41	30	0.04	
	Wick ...	30.30	35	NW	2	o	30.38	+ .31	34	38	— 4	W	2	c	1	39	30	0.05	
	Nairn ...	30.31	36	WSW	3	o	30.44	+ .32	33	31	— 9	SW	2	bc	2	43	31	0.02	
	Aberdeen...	30.26	35	WNW	5	bcfs	30.49	+ .34	31	29	— 9	W	2	b	2	41	30	0.08	
	Leith ...	30.28	40	NW	1	b	30.53	+ .36	30	28	— 17	W	1	b	*	48	29	0.07	
	Shields ...	30.26	40	N	3	o	30.56	+ .36	30	29	— 18	W	2	b	2	50	29	0.15	
	Spurn Head ...	30.18	44	WNW	5	c	30.54	+ .28	35	34	— 8	NN	3	c	3	46	34	0.03	
	York ...	30.10	47	W	3	c	30.55	+ .31	29	29	— 17	NNW	1	b	*	50	28	0.03	
	Loughborough	30.33	47	NN	3	o	30.60	+ .25	30	29	— 15	W	1	b	*	50	29	—	
GERMANY.	Ardrossan ...	30.34	41	NW	3	b	30.55	+ .34	30	30	— 17	ESE	2	bm	1	47	28	0.05	
	Malin Head ...	30.41	41	N	4	b	30.51	+ .25	35	34	— 12	S	4	b	4	47	34	0.03	
	Mullaghmore ...	30.44	44	NE	5	c	30.52	+ .16	39	36	— 7	SSE	1	bc	2	49	35	0.03	
	Belmullet ...	30.45	46	ENE	2	op	30.47	+ .07	42	41	— 7	ESE	2	o	*	50	39	0.10	
	Donaghadee ...	30.29	44	N	4	c	30.50	+ .25	30	30	— 16	SW	2	b	1	51	30	0.10	
	Barrow-in-Furness	30.32	43	NNW	3	o	30.56	+ .25	31	30	— 15	NE	1	b	*	46	30	—	
	Liverpool (Bidston)	30.33	45	W	6	o	30.60	+ .23	34	31	— 12	ESE	1	b	2	48	33	—	
	Holyhead ...	30.37	48	W	4	o	30.58	+ .18	34	33	— 14	?	0	b	0	49	33	—	
	Parsonstown ...	30.45	46	?	0	b	30.53	+ .09	42	41	— 2	SSE	1	o	*	50	41	—	
	Valencia ...	30.51	47	W	1	om	30.53	+ .02	45	44	— 2	ESE	1	o	0	52	44	0.04	
FRANCE & NETHERLANDS.	Roche's Point...	30.49	49	WNW	3	c	30.54	+ .04	46	44	0	E	2	ow	3	50	42	—	
	Pembroke ...	30.45	48	W	4	c	30.56	+ .09	42	40	— 5	E	3	c	2	48	42	—	
	Scilly ...	30.57	46	WNW	4	cpd	30.55	+ .02	48	47	+ 3	?NE	2	c	3	49	44	—	
	Prawle Point ...	30.49	46	NNW	2	o	30.57	+ .07	46	45	+ 2	ENE	1	o	1	46	42	—	
	Jersey ...	30.51	48	NW	2	o	30.58	+ .06	48	47	+ 2	NN	2	ond	2	48	45	0.01	
	Hurst Castle ...	30.44	45	WNW	3	c	30.57	+ .13	40	39	— 3	NN	4	b	1	46	39	—	
	Dungeness ...	30.36	45	W	4	c	30.56	+ .18	32	32	— 11	NNE	3	b	2	51	31	—	
	London ...	30.29	47	WNW	3	o	30.57	+ .16	36	34	— 6	WNW	1	bc	*	51	35	—	
	Oxford ...	30.29	44	W	2	o	30.62	+ .20	31	30	— 12	NNW	1	bm	*	47	31	—	
	Cambridge ...	30.33	46	W	1	o	30.61	+ .25	30	30	— 8	NN	1	b	*	52	28	—	
PENINSULA.	Yarmouth ...	30.26	46	WNW	4	bc	30.53	+ .24	38	37	— 1	NNE	3	bc	3	48	35	0.01	
	Cuxhaven ...	30.08	39	WNW	3	r	30.24	+ .17	35	34	— 5	N	4	c	*	41	32	0.04	
	Berlin ...	30.08	41	WNW	3	o	30.15	+ .09	32	30	— 8	NN	4	bc	*	41	32	0.08	
	Wiesbaden ...	*	*	*	*	*	30.35	.00	39	36	— 1	NNW	4	bc	*	41	37	0.04	
	Munich ...	30.29	31	W	2	s	30.25	— .14	32	31	+ 5	SW	6	o	*	32	27	—	
	The Helder ...	30.15	43	W	4	r	30.44	+ .22	37	36	— 5	N	4	bc	3	43	37	0.08	
	Brussels ...	*	*	*	*	*	30.49	+ .11	37	?	— 3	NN	3	o	*	47	36	0.04	
	Cape Gris Nez...	?	45	W	5	o	?	?	40	38	— 2	N	5	c	4	46	39	—	
	Paris ...	30.47	43	W	3	o	30.50	+ .04	44	43	+ 3	WNW	3	o	*	?	40	—	
	Brest ...	30.57	46	?	0	o	30.60	+ .04	44	42	— 1	?	0	o	1	50	37	0.20	
PENINSULA.	Lorient ...	30.54	46	NNW	3	o	30.57	+ .03	44	43	— 1	NNW	1	b	2	46	43	—	
	Rochefort ...	30.56	43	NNE	3	o	30.61	+ .05	43	42	+ 4	NN	1	o	1	45	36	—	
	Belfort ...	30.47	29	E	1	o	30.45	+ .05	34	34	+ 7	W	1	o	*	34	24	0.04	
	Lyons ...	30.52	34	N	3	o	30.55	+ .07	35	34	+ 5	N	1	o	*	36	30	0.20	
	Nice ...	30.23	46	ESE	1	b	30.18	— .06	44	35	+ 6	E	3	b	1	55	38	—	
	Perpignan ...	30.31	42	NN	7	b	30.34	— .01	38	35	— 2	WNW	8	b	*	53	37	—	
	Biarritz ...	30.50	37	NE	5	o	30.59	+ .10	37	35	0	SSE	4	o	2	45	34	—	
	Corunna ...	*	*	*	*	*	30.48	— .02	36	?	— 2	E	1	b	3	55	34	—	
	Lisbon ...	30.45	47	NNW	5	b	30.48	+ .05	38	37	+ 1	NNE	4	b	2	52	36	—	

For Explanation of Columns, see p. 4.

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

# WEATHER

for 8 a.m. on

# CHARTS

Sunday, 27<sup>th</sup> January

1889.

## BAROMETER, WIND & SEA.

(Explanation of Map)

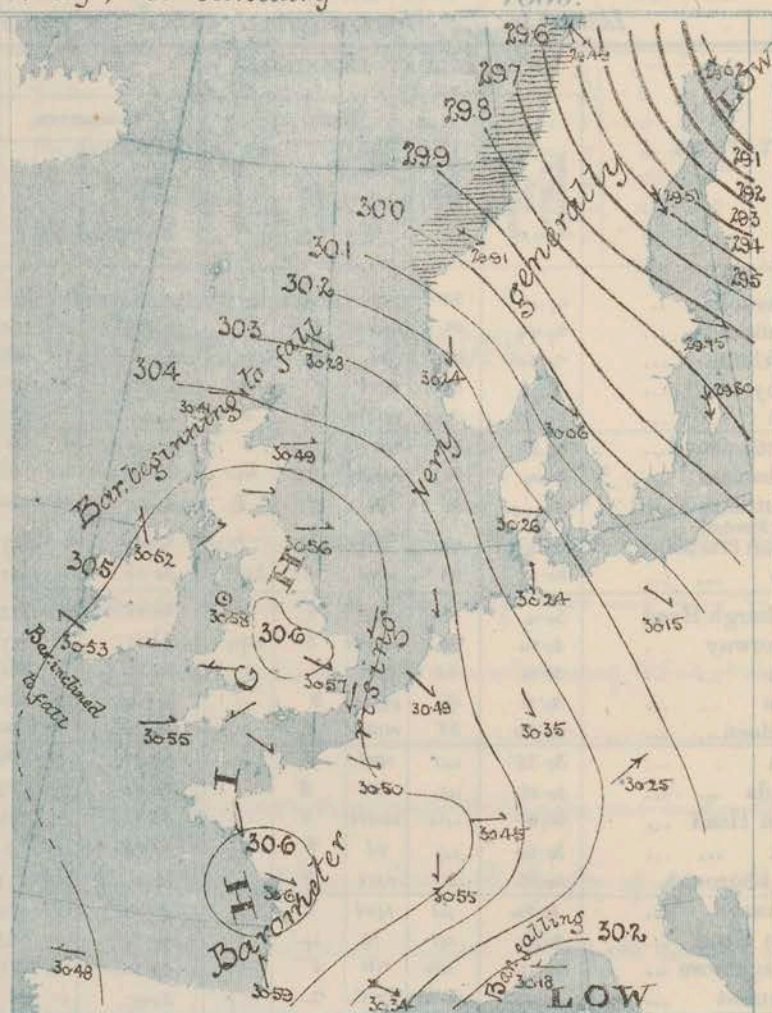
**Barometer** — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.  
**Wind** — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —  
 — = forces above 10; — = forces 8 to 10;  
 — = forces 5 to 7; — = 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 January  
 During the 15 Years 1871—1885.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.907
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.6 in., and upwards, in two small areas lying respectively over Central England and the west of France; high, 30.5 in. and upwards, in a large anticyclone lying over Ireland, England, France, the Bay of Biscay and the north of Spain. Lowest, 29.1 in. and less, in the extreme north of Sweden; 30.2 in. and less, over the Gulf of Genoa. Gradients steep over Scandinavia and also in the extreme south of France, but moderate or slight elsewhere. Barometer rising in most places, but beginning to fall again in the Hebrides.

## TEMPERATURE

Highest, 48° at Selly and Jersey, 46° at Rocher Point and Brouel Point, 45° at Valencia and 44° at Brest, Lorient, and Nice. Lowest, 21° at Helsingfors and Stockholm, 22° at Haparanda, 25° at Rode, 29° at New York, and 30° at Hudson, Bath, Shields, Loughboro, Oudersaw, Donaghadee, and Cambridge. Frost occurred last night in most parts of Great Britain.

## WIND

Strong to a gale from the NW<sup>wd</sup> over the Baltic and the northern parts of Scandinavia. Moderate from the same quarter over the North Sea and adjacent coast. Light from SE. in Ireland; variable in the west of France and also over the more central parts of our islands.

## WEATHER

Fine generally, but dull in the west and south of Ireland as well as over the western and central parts of France. Snow or sleet showers fell yesterday in Scotland, and slight rain in many other parts of Western Europe.

## SEA

Rough off the west of Norway, but slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The slight fall of the barometer which has commenced at Stornoway seems to be due to the advance of some fresh depression towards our northern coast.

## FORECASTS

for the 24 hours ending at NOON on 28<sup>th</sup> JAN<sup>y</sup> 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.	Woa.	Sea.		Bar.	Dry.	Wet.	Wind.	Woa.	Sea.		
Skudesnaes ...	30.04	33	31	NW	2	5	3	Holyhead ...	30.39	48	47	WSW	4	c	4
Sumburgh Head ...	30.12	31	31	NNE	1	0	3	Valencia ...	30.51	52	49	WSW	3	o	3
Stornoway ...	30.24	39	39	NW	5	6c	5	Scilly ...	30.51	47	47	NW	4	c	4
Aberdeen ...	30.18	40	37	W	2	6	3	Jersey ...	30.52	48	45	WNW	3	o	3
Shields ...	30.17	49	48	W	4	0	2	Dungeness ...	30.37	49	46	W	3	6c	3
Ardrossan ...	30.26	43	42	NW	3	0	2	London ...	30.39	51	46	WNW	3	c	*
Malin Head ...	30.24	41	41	N	5	0	5	Yarmouth ...	30.27	48	46	WNW	4	6cm	2
Mullaghmore ...	30.26	49	48	W	5	om	4	Rocheport ...	30.57	44	42	NW	3	o	2
Belmullet ...	30.40	50	49	WNW	3	c	*								

## 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, in a large anticyclone lying over the Bay of Biscay, the extreme southwest of our Islands, the west of France, and the north of Spain, and lowest 28.6 ins: and less, in a depression lying in the neighbourhood of the White Sea. An area of comparatively low readings was still reported over Italy and the central parts of the Mediterranean with a well defined depression near Malta. The wind was strong to gale from NW. in the west of Norway, from N. over the Baltic, and from W. over Poland and Western Germany, and light to fresh from between W. and N. over all the more northern and central parts of Europe. Over Italy, Spain, and the south of France, however, it was NE or N<sup>W</sup>, while in Algeria it was chiefly W<sup>W</sup>. At Malta a strong W<sup>W</sup> gale was reported. The weather was fine in the north and east of England, as well as in Finland, Spain, Italy and the south of France, but cloudy, or overcast elsewhere, with rain in Poland and some parts of Germany as well as at Algiers and Malta, and snow at Christiansund and Mamel. Temperature had fallen in Sweden and the north of our Islands as well as in Spain and Western Algeria, but risen elsewhere; readings ranged from a little above 45° in the west of our Islands and over the Mediterranean to several degrees below the freezing point over the northern parts of Sweden and Russia. The highest individual readings were 54° at Malta, 50° at Brindisi and Laballe, 49° at Belmullet, 48° at Shields and Holyhead, and 47° at Leith, Ardrossan, Malin Head, Valencia, Pembroke, Languisaine, and Palermo; the lowest were 4° at Bleaborg, 8° at Kiofis, 12° at Archangel, 14° at Haparanda, 18° at St Petersburg and Nicolaioff, 20° at Odessa, 21° at Helsingfors, and 22° at Helsingfors, Kharkov and Hermanstadt.

In the course of the day the barometer rose briskly in the north of our Islands, while it fell slightly over England. The wind on our northern coasts veered to the N<sup>W</sup>, with snow showers in many parts of Scotland.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

# DAILY WEATHER REPORT.

for Monday, 28<sup>th</sup> January 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.	Va. (0 to 5.)	SHADE TEMP.				
				Dirce.	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.	Dirce.	Force, (0 to 12.)			Max.	Min.			
SCANDINAVIA.	Haparanda ...	29.34	17	N	6	b	29.41	+ .39	11	10	- 11	NW	2	b	*	25	?			
	Hernösand ...	29.79	18	N	2	b	29.61	+ .10	12	12	- 9	Z	0	o	*	27	?			
	Stockholm ...	29.87	25	WNW	4	b	29.71	- .04	25	23	+ 4	SW	2	o	*	27	21			
	Wisby ...	29.89	33	NW	2	b	29.86	+ .06	33	32	+ 4	WNW	4	c	*	41	21			
	Bodö ...	29.62	24	NW	6	s	29.48	- .01	18	17	- 7	ENE	4	b	2	25	16			
	Christiansund...	29.86	35	WSW	8	s	29.34	- .57	41	38	+ 10	WSW	9	r	6	41	?			
	Skudesnaes ...	30.19	39	W	5	o	29.88	- .36	42	42	+ 13	W	6	r	5	?	?			
	Christiania Fjord (Færdø)	30.05	36	WSW	5	b	29.68	- .32	38	37	+ 6	SSW	8	o	5	?	?			
	Skagen (The Scaw)	30.17	38	N	5	b	29.87	- .19	39	38	+ 7	WSW	6	o	4	39	32			
	Fanö ...	30.37	37	W	5	o	30.10	- .16	38	37	+ 6	W	6	e	*	?	32			
BRITISH ISLANDS.	Sumburgh Head	30.09	40	SW	4	o	29.80	- .48	47	46	+ 10	WNW	3	o	4	47	37			
	Stornoway ...	30.11	43	SW	7	r	29.98	- .43	47	46	+ 12	W	5	o	5	47	34			
	Wick ...	30.20	38	NW	2	o	29.95	- .43	45	44	+ 11	WNW	3	bc	1	45	32			
	Nairn ...	30.24	40	WSW	3	c	30.07	- .37	45	43	+ 12	WSW	3	b	1	45	32			
	Aberdeen...	30.31	36	S	2	b	30.09	- .40	39	38	+ 8	S	2	bm	3	44	31			
	Leith ...	30.40	39	W	2	c	30.17	- .36	45	43	+ 15	W	3	cm	*	45	27			
	Shields ...	30.46	38	SW	2	b	30.25	- .31	42	41	+ 12	WSW	1	om	2	42	29			
	Spurn Head ...	30.55	37	SSW	2	b	30.34	- .20	38	37	+ 3	SW	4	e	3	42	34			
	York ...	30.52	35	S	1	b	30.31	- .24	38	37	+ 9	S	1	o	*	41	29			
	Loughborough	30.59	34	SSE	1	b	30.41	- .19	40	39	+ 10	SW	2	o	*	46	29			
GERMANY.	Ardrossan ...	30.39	42	SSW	4	r m	30.21	- .34	45	44	+ 15	SSW	4	e	3	45	30			
	Malin Head ...	30.35	42	SSW	5	o	30.19	- .32	45	45	+ 10	SW	4	o	4	45	35			
	Mullaghmore ...	30.40	46	SSW	5	o	30.24	- .28	46	44	+ 7	SSW	5	c	3	48	38			
	Belmullet ...	30.39	47	WSW	3	o	30.22	- .25	48	47	+ 6	SW	2	e	*	48	35			
	Donaghadee ...	30.47	41	SW	3	c	30.29	- .27	43	43	+ 13	SW	3	c	1	43	30			
	Barrow-in-Furness	30.51	40	S	3	c	30.32	- .24	45	44	+ 14	SW	2	o	*	45	30			
	Liverpool (Bidston)	30.54	37	SSE	2	o	30.37	- .23	42	40	+ 8	SW	2	b	3	44	33			
	Holyhead ...	30.52	43	SSW	4	e	30.37	- .21	46	45	+ 12	SW	4	e	4	46	34			
	Parsonstown ...	30.48	45	Z	0	o	30.34	- .19	41	40	- 1	Z	0	o	*	47	41			
	Valencia ...	30.46	48	SSE	3	o	30.33	- .20	50	48	+ 5	SSW	3	o	3	50	44			
FRANCE & NETHERLANDS.	Roche's Point...	30.51	47	SW	1	bc	30.37	- .17	48	46	+ 2	WSW	3	c	3	51	45			
	Pembroke ...	30.53	42	S	5	r	30.43	- .13	47	46	+ 5	SSW	4	bc	4	48	41			
	Scilly ...	30.56	47	SSW	3	cp	30.45	- .10	47	47	- 1	SW	4	r	3	50	45			
	Prawle Point ...	30.59	45	SE	3	o	30.50	- .07	47	46	+ 1	WSW	3	op	3	47	43			
	Jersey ...	30.64	46	ENE	3	o	30.57	- .01	46	44	- 2	SW	3	cm	3	48	44			
	Hurst Castle ...	30.64	39	SE	3	b	30.49	- .10	40	39	0	WSW	3	od	2	45	39			
	Dungeness ...	30.63	40	SE	2	b	30.49	- .07	45	45	+ 13	SW	4	r	3	45	31			
	London ...	30.64	35	S	2	b	30.48	- .09	40	40	+ 4	WSW	1	cf	*	44	32			
	Oxford ...	30.63	36	SE	1	bc	30.47	- .15	41	40	+ 10	SSW	2	om	*	44	31			
	Cambridge ...	30.62	33	Z	0	o	30.46	- .15	38	37	+ 8	SW	1	e	*	45	28			
PENIN- SULA.	Yarmouth ...	30.61	34	Z	0	bcm	30.43	- .10	37	36	- 1	WSW	2	cf	2	41	32			
	Cuxhaven ...	30.47	32	WNW	3	o	30.34	+ .10	35	34	- 3	SW	5	o	*	37	32			
	Berlin ...	30.45	32	NW	4	b	30.45	+ .30	33	32	+ 1	WNW	4	o	*	39	28			
	Wiesbaden ...	*	*	*	*	*	30.63	+ .28	28	27	- 11	Z	0	o	*	41	25			
	Munich ...	30.60	30	W	4	s	30.64	+ .39	15	15	- 17	SW	3	m	*	37	14			
	The Helder ...	30.60	39	W	1	c	30.42	- .02	40	38	+ 3	SW	4	e	3	41	?			
	Brussels ...	*	*	*	*	*	30.58		34	32		SW	2	bc	*	42	31			
	Cape Gris Nez...	?	39	E	3	b	?	?	39	38	- 1	SSW	4	o	3	45	36			
	Paris ...	30.68	41	NE	1	c	30.65	+ .15	27	27	- 17	SE	1	b	*	47	26			
	Brest ...	30.59	47	SSW	3	o	30.57	- .03	48	45	+ 4	Z	9	o	0	?	32			

For Explanation of Columns, see p. 4.

‡ Received too late for insertion in Charts.

for 8 a.m. on Monday, 28<sup>th</sup> January, 1889

(Explanation of Map)

*Sea Disturbance*—where considerable is shown thus.

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

[illegible]

Temperature—Isotherms are drawn for each  $10^{\circ}$  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.

AND RAINFALL.

for the month of January

A hand-drawn map of Europe and North Africa, showing isotherms and weather notes. The map includes latitude lines from 20° to 50° North. Isotherms are drawn and labeled: 'WARMER' (above 40°N), 'GENERAL' (between 30°N and 40°N), 'COLDER' (below 30°N), and 'SEVERAL' (near 50°N). A dashed line is labeled 'RAIN'. A circular area in the North Sea is labeled '40°' with '39 bms' inside. Various numerical values are scattered across the map, including 18, 11, 12, 25, 38, 39, 36, 35, 33, 37, 34, 27, 29, 41, 32, 36, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0, -1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -30, -31, -32, -33, -34, -35, -36, -37, -38, -39, -40, -41, -42, -43, -44, -45, -46, -47, -48, -49, -50. The map is drawn on a grid of latitude and longitude lines.

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, 30.6 ins. and upwards, over the Central part of France, Switzerland, and South Germany; also off the coast of Portugal.  
Lowest, 29.4 ins. and less, in a depression off the coast of Norway, 30.0 ins. and less, in the north of Scotland.  
Gradients, very slight over France, moderate (for SW to S winds) over our Islands, rather steep off the west of Norway.  
Barometer falling somewhat decidedly over the United Kingdom.

## TEMPERATURE

Highest, 50° at Valencia, 48° at Belmullet and Brest, 47° at Lumburg Head, Norway, and 46° at Holyhead.  
Lowest, 11° at Kaparanda, 12° at Hemsland, 15° at Munich, 18° at Bodø, 27° at Paris, and 28° at Nicobaden.

It is rising fast over Great Britain. In London, after falling to 32° in the shade and 22° on the grass last night, it rose to 40° in the shade at 8 o'clock this morning, and to 38° on the grass.

## WIND

W to SW fresh gales over the southern half of Norway — E moderate at Bodø.  
W, strong in Denmark, SW moderate to fresh in our Islands and Holland.  
E, light over France — SE over Bay of Biscay, — NE at Lisbon.

## WEATHER

Changeable. Rain at most of our southern stations, variable (clear to cloudy) elsewhere. Fine, with local fogs in France.  
Cloudy in Sweden. Raining in Norway. Some rain has fallen since yesterday in the northwest, west and south.

## SEA

Rough in the far north, moderate to slight elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A continuation of mild SW winds — strong in the west and northwest, moderate in the south — is probable, with somewhat unsettled and showery weather.

## FORECASTS

For the 24 hours ending at NOON on 29<sup>th</sup> JAN<sup>y</sup> 1889.

### DISTRICTS.

### FORECASTS.

- |   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | SW <sup>y</sup> and S <sup>y</sup> winds, mild, some showers.                       |
| 1 | SCOTLAND EAST    |   |
| 2 | ENGLAND N.E.     | SW <sup>y</sup> breezes, moderate or light; mild, fair as a whole, some rain later. |
| 3 | ENGLAND EAST     |   |
| 4 | MIDLAND COUNTIES |   |
| 5 | ENGLAND SOUTH    |   |

### DISTRICTS.

### FORECASTS.

- |    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | S <sup>y</sup> and SW <sup>y</sup> winds, increasing in force; mild; some rain at times. |
| 7  | ENGLAND N.W.  |  |
| 8  | ENGLAND S.W.  |  |
| 9  | IRELAND NORTH |  |
| 10 | IRELAND SOUTH |  |

### WARNINGS

The signals hoisted in the north last evening have been lowered 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.	Wet.	Sea.		Bar.	Dry.	Wet.	Wind.	Wet.	Sea.
Skudesnaes ...	30.26	39	34	WrtW 4	6c	2	Holyhead ...	30.57	42	38	SSW 3	2	2
Sumburgh Head ...							Valencia ...						
Stornoway ...	30.25	43	42	SW 6	6c	5	Scilly ...						
Aberdeen ...							Jersey ...	30.63	47	45	E 3	0	3
Shields ...							Dungeness ...	30.61	43	40	NNE 3	6	2
Ardrossan ...							London ...						*
Malin Head ...	30.39	40	39	SSW 5	0	4	Yarmouth ...						
Mullaghmore ...							Rochefort ...	30.62	46	45	NW 1	0	2
Belmullet ...	30.41	48	47	SSW 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 lying respectively over Central England and the west of France, a large anticyclone with readings above 30.5 inches covered nearly the whole of Western Europe. The lowest readings 29.8 inches and less were found in a depression lying over the White Sea, but shallow areas of low pressure were still reported over European Turkey, and the central parts of the Mediterranean. The wind was strong to a gale from the NW over Scandinavia and the Baltic, and moderate from the same quarter or from W over Russia, Central Europe, and the North Sea. In our Islands, France and Spain, however, light anticyclonic airs were reported, while at the Mediterranean stations, two or three distinct cyclonic circulations were observed. The weather was dull in the extreme west and southwest of our Islands, and also over the greater part of Russia and Austria, with rain at Prague and snow at Breslau. Elsewhere, however, conditions were generally fine. Temperature had risen somewhat over Finland and also in France, Central Spain, Algeria, and the south of Austria, but fallen elsewhere - several degrees in our Islands, readings ranged from a little above 45° in the SW of England and over the Mediterranean to several degrees below the freezing point over Russia and to very little above zero in the neighbourhood of the White Sea. The highest individual readings were 52° at Callalta, 51° at Brindisi, 50° at Aron, 49° at Tangier, 48° at Scilly, and Jersey, 47° at Algiers and 46° at Braut, La Salle, and Tiflis, the lowest were 44° at Archangel, 42° at Krasnoyarsk, 41° at Uleaborg, 40° at Kolobov and 39° at Pskov, 37° at Kharkov, 36° at Moscow, and 35° at Kien and Stockholm and 34° at Haparanda.

In the course of the day the large anticyclone over Western Europe moved southwards and a depression began to appear in the far N. The barometer therefore fell quickly in Scotland, and at Stornoway the wind increased to a moderate gale from the north.

## SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 20<sup>TH</sup> JANUARY TO THE 26<sup>TH</sup> JANUARY 1889.

The weather of the past week was generally fair over the eastern and southern parts of the United Kingdom but in the west and north, showers were rather frequent. Over Scandinavia the conditions were very rough and unsettled, especially towards the close of the period.

At the commencement of the week an anticyclone lay off the west of Ireland, while a large area of low pressure was reported over Finland and the Gulf of Bothnia. The prevailing winds were therefore N.W., but over Great Britain, where some shallow depressions were found, the wind was in many cases W. As the small disturbances moved southwards rain fell in many parts of the Kingdom.

On Monday 21<sup>st</sup>, the anticyclone in the west began to spread eastwards, and for the next two or three days its influence was felt over all but the northern parts of our Islands, when conditions were affected by some depression which advanced over Scandinavia from the Atlantic. The wind was light to fresh from the Westward in the north, but chiefly N.E. in the south, with cloudy weather in most places, and occasional fog over England.

On Wednesday one of the northern depressions which had reached Lapland grew very deep, the barometer fell on our north and northeast coasts, and the high pressure system receded first to the westward and finally to the southward of our Islands. W. or N.W. winds now set in over nearly the whole of North Western Europe, and in Scandinavia they blew with the force of a gale during the whole of the last three days of the week. At the close of the period the deep depression in the far north was moving away to the eastward, and anticyclonic conditions were again spreading northwards and eastwards over our Islands with fine weather in most districts.

Temperature has varied a good deal from time to time. On Sunday 20<sup>th</sup> and again on Saturday 26<sup>th</sup> the thermometer over England rose above 50°, and on the 21<sup>st</sup> and 25<sup>th</sup> similarly high readings were reported over Scotland. Night frosts have, however, been somewhat frequent, and on some occasions over the central parts of England, the maximum thermometer has not reached 40°.

## 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, 29<sup>th</sup> January 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 5.)		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.	
<b>SCANDINAVIA.</b>																			
Haparanda ..															*				
Hernösand ...															*				
Stockholm ...															*				
Wisby ...															*				
Bodö ...	29.63	13	ESE	2	b		29.51	+ .03	9	?	- 9	E	7	b	3		18	9	-
Christiansund...	29.62	40	WSW	8	o		29.39	+ .05	39	38	- 2	SSW	1	c	5		41	37	0.51
Skudesnæs ...	29.83	43	W	4	r		29.62	- .26	42	41	- 1	SSE	6	o	5		45	41	-
Christiania Fjord (Fæder)																			
Skagen (The Seaw)	29.80	40	WSW	5	o		29.80	- .07	40	40	+ 1	W	2	o	3		41	39	-
Fanö ...	30.11	29	W	6	o		29.95	- .15	39	39	+ 1	WSW	4	f	*		41	39	-
<b>BRITISH ISLANDS.</b>																			
Sumburgh Head	29.71	46	W	4	o		29.18	- .62	44	43	- 3	S	4	r	5		48	44	0.21
Sornoway ...	29.82	47	SW	5	r		29.32	- .66	41	41	- 6	WSW	7	r	6		49	40	0.62
Wick ...	29.86	45	W	2	o		29.21	- .74	44	43	- 1	S	3	r	3		48	43	0.10
Nairn ...	29.86	47	W	2	bc		29.24	- .83	47	45	+ 2	SSW	0	ou	1		48	43	-
Aberdeen ...	29.96	45	SSW	2	o		29.36	- .73	45	43	+ 6	SSW	3	ogp	4		48	39	0.01
Leith ...	30.05	46	W	2	o		29.41	- .76	49	46	+ 4	WSW	5	of	*		49	44	0.05
Shields ...	30.14	45	SSW	3	c		29.62	- .63	46	45	+ 4	SSW	4	c	2		48	40	-
Spurn Head ...	30.22	42	SSW	3	bc		29.78	- .56	45	44	+ 7	SSW	6	o	4		46	38	0.01
York ...	30.19	45	S	1	c		29.66	- .65	47	45	+ 9	S	3	o	*		47	37	-
Loughborough	30.30	46	WSW	3	o		29.82	- .59	48	45	+ 8	S	5	og	*		51	40	0.01
Ardrossan ...	30.06	46	SSW	3	om		29.40	- .81	47	46	+ 2	SSW	5	r	5		47	44	0.41
Malin Head ...	29.97	46	SSW	5	ou		29.59	- .60	48	44	+ 3	WSW	7	bcpp	7		48	45	0.17
Mallaghmore ...	30.02	48	S	6	og		29.67	- .57	45	43	- 1	WSW	8	ogp	6		51	41	0.30
Belmullet ...	29.98	49	SW	5	c		29.81	- .41	45	40	- 3	WSW	5	o	*		50	44	0.42
Donaghadee ...	30.11	47	SW	2	c		29.48	- .81	47	47	+ 4	SW	5	r	4		49	43	0.22
<b>GERMANY.</b>																			
Barrow-in-Furness	30.18	45	S	3	bc		29.58	- .74	45	45	0	S	7	ru	*		46	42	0.39
Liverpool (Hidston)	30.24	46	SW	3	o		29.66	- .71	48	46	+ 6	S	4	o	4		50	42	0.08
Holyhead ...	30.22	47	SW	5	o		29.62	- .75	49	48	+ 3	SW	8	dgm	6		49	45	0.26
Parsonstown ...	30.13	46	SSE	2	o		29.73	- .61	45	43	+ 4	WSW	3	o	*		51	41	0.25
Valencia ...	30.09	51	SSE	7	omu		29.89	- .44	48	45	- 2	WSW	5	cgm	5		53	46	0.72
Roche's Point...	30.17	50	SW	5	odp		29.78	- .59	47	44	- 1	WSW	6	b	6		51	46	0.60
Pembroke ...	30.28	48	S	5	c		29.71	- .72	49	49	+ 2	SSW	8	gmm	7		49	46	0.26
Scilly ...	30.31	50	SSW	5	op		29.86	- .59	52	52	+ 5	SSW	7	r	4		54	46	0.26
Prawle Point ...	30.39	46	SW	3	o		29.95	- .55	49	48	+ 2	SSW	5	ou	5		53	44	0.04
Jersey ...	30.49	48	SSW	4	og		30.13	- .44	45	43	- 1	SSE	5	ogm	4		48	43	-
Hurst Castle ...	30.42	46	WSW	4	c		30.02	- .47	47	45	+ 7	SW	7	o	6		48	38	-
Dungeness ...	30.41	46	WSW	4	c		30.06	- .43	46	43	+ 1	SW	6	c	5		49	44	0.01
London ...	30.39	46	SW	2	c		29.98	- .50	46	44	+ 6	S	5	o	*		50	40	0.01
Oxford ...	30.33	44	SW	3	c		29.91	- .56	47	45	+ 6	S	5	ogm	*		48	40	-
Cambridge ...	30.32	45	SW	1	o		29.91	- .55	46	45	+ 8	SW	3	o	*		49	36	0.03
Yarmouth ...	30.32	43	WSW	2	bc		29.98	- .45	43	42	+ 6	SSW	4	og	4		45	35	-
Cuxhaven ...	30.23	38	W	5	f		30.10	- .24	39	39	+ 4	SW	4	f	*		40	?	0.06
Berlin ...	30.28	37	WSW	3	o		30.21	- .24	37	36	+ 4	WSW	2	o	*		37	?	0.04
Wiesbaden ...	*	*	*	*	*		30.37	- .26	38	32	+ 5	WSW	1	c	*		37	?	-
Munich ...	30.54	23	W	0	b		30.43	- .21	44	44	- 1	SW	3	bc	*		36	9	-
<b>FRANCE &amp; NETHERLANDS.</b>																			
The Helder ...	30.30	44	SW	1	o		30.06	- .36	41	40	+ 1	SSW	5	o	3		43	39	-
Brussels ...	*	*	*	*	*		30.23	- .35	38	36	+ 4	S	3	o	*		41	?	0.04
Cape Gris Nez...	?	45	W	4	o		?	?	43	41	+ 4	SW	7	o	5		46	39	0.04
Paris ...	30.55	40	SSW	5	c		30.33	- .32	39	39	+ 3	SSW	3	bc	*		44	3	-
Brest ...	30.49	48	SW	5	o		30.13	- .44	49	47	+ 1	SW	7	o	5		50	41	-
Lorient ...	30.50	47	S	4	o		30.19	- .38	50	47	+ 4	SSW	5	o	3		50	45	-
Rocheport ...	30.56	41	WSW	3	b		30.36	- .28	39	38	- 3	SE	5	f	2		50	25	0.04
Belfort ...	30.55	23	W	1	b		30.36	- .26	22	22	+ 1	W	1	f	*		36	18	-
Lyons ...	30.64	30	N	1	b		30.49	- .21	26	26	- 3	S	1	f	*		38	25	-
Nice ...	30.58	46	W	0	b		30.47	- .07	40	38	- 1	WSE	5	c	1		54	37	-
Perpignan ...	30.60	39	NE	3	b		30.64	+ .03	38	32	- 1	NE	3	o	*		49	30	-
Biarritz ...	30.48	44	E	5	b		30.35	- .23	49	41	+ 17	SW	5	b	2		?	?	?
<b>PENINSULA.</b>																			
Corunna ...	*	*	*	*	*														
Lisbon ...	30.60	50	WSW	1	b		30.51	- .09	43	42	+ 6	NE	3	o	?		54	?	-

For Explanation of Columns, see p. 4.

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

# WEATHER CHARTS

for 8 a.m. on Tuesday, 29<sup>th</sup> January, 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 —

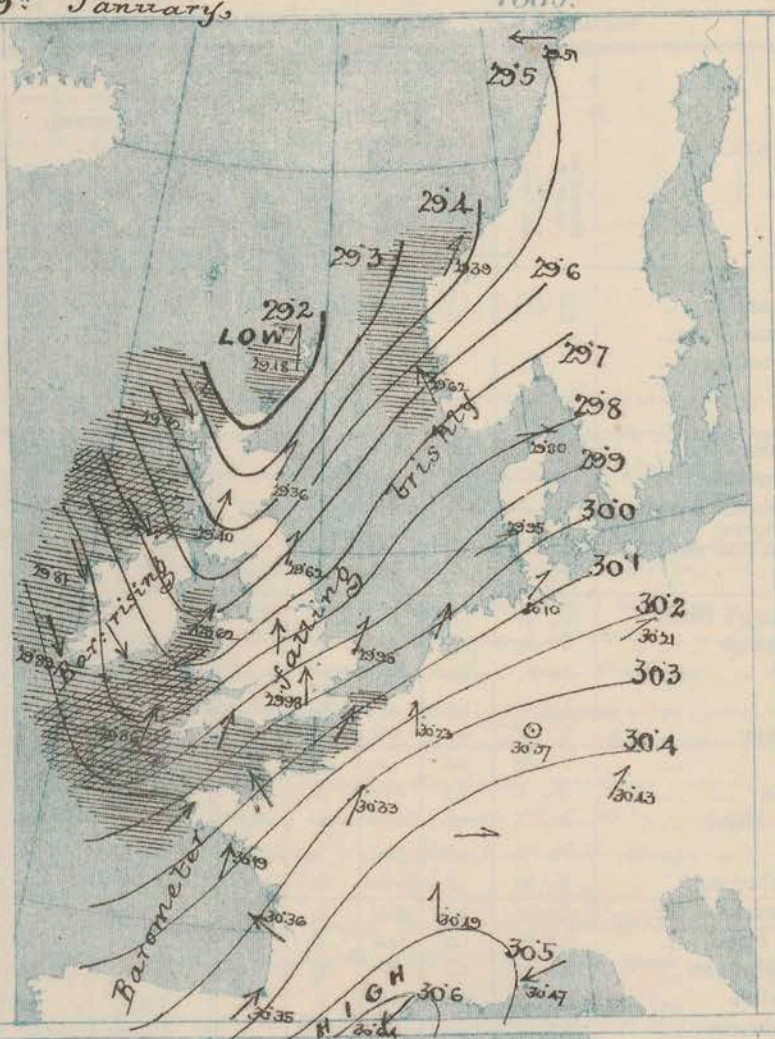
→ = forces above 10; → = forces 8 to 10;  
 → = forces 5 to 7; → = forces 1 to 4;  
 ○ = dead calm.

**Sea Disturbance** — where considerable is shown thus:  
 [Symbol] = Rough, [Symbol] = High.

## MEAN HEIGHT of the BAROMETER

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

STATIONS	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

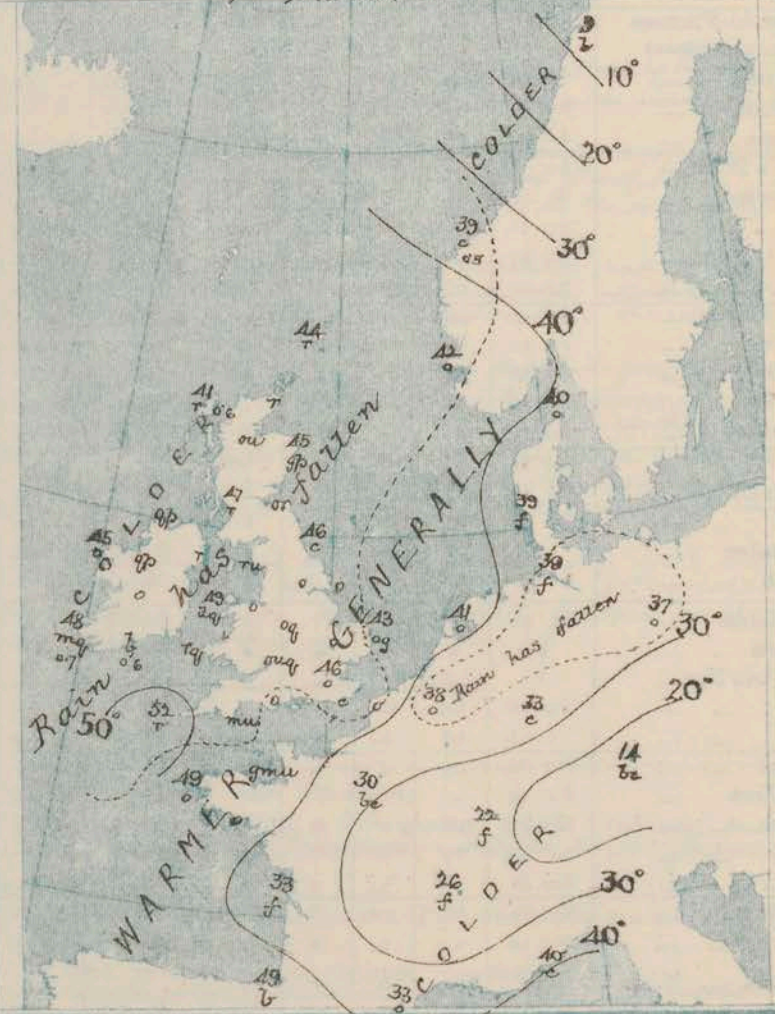
## MEANS OF TEMPERATURE IN SHADE.

### AND RAINFALL.

for the month of January.

STATIONS	TEMPERATURE.				RAINFALL. (Inches)
	Daily Max.	Daily Min.	Dry at 8 a.m.	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	26.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.9	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	36.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.0	34.5	37.7	36.9	2.06

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	<p>Highest, 30.64 ins. at Perpignan; 30.5 ins. and upwards, in a large anticyclone lying over the southern parts of France and Spain.</p> <p>Lowest, 29.2 ins. and less, in a depression lying off the north of Scotland. Several V-shaped secondary disturbances are lying over our western coast.</p> <p>Gradient rather steep over our islands and their immediate neighbourhood, but slight elsewhere.</p> <p>Barometer falling quickly over Great Britain, and less decidedly at the Continental stations, but rising again in Ireland.</p>
TEMPERATURE	<p>Highest, 51° at Seilly, 50° at Lorient, and 49° at Lisle, Holyhead, Pembroke, Chawes Point, Krest, and Biarritz.</p> <p>Lowest, 3° at Bodo, 14° at Munich, 22° at Belfort, 26° at Lyons, 30° at Paris, and 33° at Marseilles, Rochefort, and Perpignan.</p> <p>During yesterday the thermometer rose a little above 60° in many parts of England and Ireland.</p>
WIND	<p>Strong from the NW<sup>nd</sup> over Ireland, and from SW. or S. over England, with gales in the west.</p> <p>Moderate from SW. over the North Sea; but strong from SE. or E. at the Norwegian stations.</p> <p>A fresh to strong gale from S. or SW. was experienced in Ireland last night.</p>
WEATHER	<p>Bull, squally, and rainy over the greater part of our islands, but inclined to improve in Ireland.</p> <p>Fair at some of the Continental stations, but foggy over Central France, and the south of Denmark.</p> <p>Since yesterday morning rain has fallen in most parts of our islands, the largest amounts being 0.7 in at Valencia, and 0.6 in at Stromaway and Roches Point.</p>
SEA	<p>High at Malin Head, Pembroke and Seilly, and rough or rather so in most other places.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depressions over our north and west coast appear to be moving eastward, and the NW<sup>th</sup> winds now prevailing in Ireland are therefore likely to become more general with colder and improving weather.

## FORECASTS

for the 24 hours ending at NOON on JAN<sup>y</sup> 29<sup>th</sup> 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SW <sup>th</sup> to NW <sup>th</sup> winds, moderate or fresh, unsettled, some showers.	† 6 SCOTLAND WEST	SW <sup>th</sup> to NW <sup>th</sup> winds, strong, a gale in places, squally, showery.
1 SCOTLAND EAST		† 7 ENGLAND N. W.	
2 ENGLAND N. E.	S <sup>th</sup> and SW <sup>th</sup> strong, to NW <sup>th</sup> , fresh; squally and rainy at first, but improving later and becoming colder.	† 8 ENGLAND S. W.	NW <sup>th</sup> winds, strong to moderate, squally and showery to fair.
3 ENGLAND EAST		† 9 IRELAND NORTH	
4 MIDLAND COUNTIES		† 10 IRELAND SOUTH	
5 ENGLAND SOUTH			

### WARNINGS

The SOUTH CONE was hoisted last evening in districts 6, 7, 8, 10, and part of 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.	Wet.	Sea.		Bar.	Dry.	Wet.	Wind.	Wet.	Sea.
Skudeenase ...	29.90	44	42	W 6	0 f	5	Holyhead ...	30.29	49	47	SW 4	0	4
Samburgh Head ...	29.83	47	46	W 3	0	4	Valencia ...	30.23	51	48	S 6	0	6
Stornoway ...	29.92	49	48	SW 4	0	3	Scilly ...	30.39	51	49	SSW 4	0	3
Aberdeen ...	30.05	45	43	S 3	0	3	Jersey ...	30.54	48	45	SSW 4	0	3
Shields ...	30.19	48	45	new 3	0	2	Dungeness ...	30.45	49	47	WSW 5	0	4
Ardrossan ...	30.15	46	45	SSW 4	0 m	3	London ...	30.42	50	47	WSW 3	0	3
Malin Head ...	30.08	47	46	SW 5	0	5	Yarmouth ...	30.36	45	44	W 4	0 m	3
Mullaghmore ...	30.13	50	48	S 5	0	4	Rochefort ...	30.63	48	45	SE 1	0	1
Belmullet ...	30.11	50	48	SW 4	0	*							

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

The reports for yesterday morning showed that pressure (which was decreasing decidedly over the British Islands and Northern Europe generally) ranged from between 30.6 in. and 30.7 in. over Spain, France, Switzerland and South Germany to rather below 29.1 in. in a depression lying near Archangel, to about 29.3 in. in another off the west of Norway, and to 30.2 in. and less over the southeastern part of the Mediterranean. W<sup>3</sup> (SW to NW) winds had become prevalent over all the central and northern parts of Europe, including the British Islands, and were moderate to a gale in force, while over the Adriatic, Mediterranean, and the Iberian Peninsula the wind remained NE<sup>3</sup> to N<sup>1</sup> - light at the more western stations, but strong to a gale in the Adriatic, Italy and Tunis. Within the high pressure area and at the Mediterranean stations the weather was fine, with haze or fog over several inland localities; over the British Isles and Northern Europe on the contrary the sky was cloudy and unsettled, rain was falling in several places, and snow in some parts of Finland and Central Russia. Temperature was still very low over Russia, and frost prevailed over the central parts of Austria, Germany, France and Spain. In the British Islands the thermometer was rising quickly, as the SW<sup>3</sup> wind was spreading over the country. The lowest individual morning values were (a) - 5° F. at Archangel, +5° at Uleaborg, 11° at Haparanda and Kuopio, 12° at St. Petersburg and Helsingfors, 13° at Helsingfors, 15° at Munich, 19° at Lemberg, 21° at Belfort, and 23° at Hermannstadt; at Madrid and Paris the temperature was 27°, at Berlin 33°, and Copenhagen 35°, and in London 40°. The highest values were 55° at La Fala, 54° at Malta, 52° at Langunaise, 51° at Palermo, 50° at Brindisi and Valencia (Ireland) 48° at Rock Point and Belmullet, and 47° as far north as Lumburgh Head.

(During the day a further fall of the barometer took place in the British Isles and temperature rose to 50° 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 8 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 30<sup>TH</sup> JANUARY 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.)	Weather.	SHADE TEMP.			
				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.	Dirac.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ..	29.62	-11	SE	4	6	29.21	-0.52	10	10	+2.1	SE	4	5	*	10	-15	0.12	
	Hernösand ...	29.41	31	SE	9	5	29.04	-0.78	32	31	+2.1	N	6	0	*	32	7	0.39	
	Stockholm ...	29.49	34	SE	2	0	29.10	-0.68	34	33	+6	WNW	4	0	*	36	27	0.12	
	Wisby ...	29.58	36	S	4	0	29.28	-0.52	37	34	+4	WNW	6	0	*	39	32	0.24	
	Bodo ...	28.98	26	ENE	8	0	28.93	-0.58	32	31	+2.1	SE	4	5	2	27	?	-	
	Christiansund...	28.96	36	WNW	9	5	29.05	-0.34	36	31	-3	SEW	4	C	5	41	34	0.28	
	Skudesnaes ...	29.38	39	WNW	8	2	29.37	-0.25	41	39	-1	S	7	0	5	41	36	0.59	
	Christiania Fjord (Farder)	29.15	39	S	6	2	29.43	-	38	35	-	SW	5	6	4	39	37	-	
	Skagen (The Scaw)	29.23	39	SW	5	0	29.52	-0.28	37	36	-3	WNW	4	6	3	41	36	0.20	
	Fanø ...	29.35	39	WNW	6	0	29.74	-0.21	36	35	-3	WNW	4	6	*	41	36	0.24	
BRITISH ISLANDS.	Sumburgh Head	29.38	38	NW	5	C	29.87	-0.31	46	45	+2	W	6	2	6	46	38	0.32	
	Stornoway ..	29.62	38	NW	5	0.25	29.24	-0.08	43	42	+2	NW	5	0	5	43	35	0.60	
	Wick ...	29.61	39	NW	3	6	29.11	-0.10	45	44	+1	NW	4	0	3	45	33	0.18	
	Nairn ...	29.64	38	WNW	3	6	29.20	-0.04	48	46	+1	SW	3	0.5	2	48	34	0.02	
	Aberdeen...	29.69	36	WNW	4	6	29.28	-0.08	42	39	-3	SE	5	C	5	45	35	0.04	
	Leith ...	29.78	39	W	4	C	29.40	-0.01	47	46	-2	WNW	5	C	*	49	34	0.07	
	Shields ...	29.76	41	W	4	6	29.56	-0.06	41	39	-5	SW	3	0	2	51	35	-	
	Spurn Head ...	29.84	42	WNW	6	C	29.67	-0.11	40	39	-5	SW	6	0	5	48	38	0.05	
	York ...	29.84	41	W	3	6	29.71	+0.05	40	38	-7	SWW	5	0	*	52	35	-	
	Loughborough	29.95	41	NW	3	6	29.86	+0.04	40	38	-8	SW	4	C	*	50	36	0.08	
GERMANY.	Ardrossan ...	29.81	44	WNW	6	6	29.46	+0.06	48	47	+1	W	5	C	4	48	41	0.18	
	Malin Head ...	29.86	42	WNW	5	C	29.51	-0.08	48	46	0	NW	5	0.5	6	48	39	0.16	
	Mullaghmore ...	29.97	44	W	6	6	29.63	-0.04	49	48	+4	W	8	0.5	6	49	41	0.35	
	Belmullet ...	29.99	45	WNW	5	6	29.70	-0.11	50	48	+5	WNW	6	0	*	50	43	0.33	
	Donaghadee ...	29.93	40	W	3	6	29.38	+0.10	47	47	0	W	5	2	3	48	39	0.12	
	Barrow-in-Furness	29.91	41	NW	5	6	29.64	+0.06	48	43	0	SW	8	0.5	*	48	40	0.54	
	Liverpool (Bidston)	29.95	42	WNW	5	6	29.74	+0.08	48	43	-3	WNW	5	2	4	51	38	0.09	
	Holyhead ...	30.01	43	NW	6	6	29.75	+0.13	46	48	-3	SW	7	0.5	6	50	42	0.24	
	Parsonstown ...	30.06	39	2	0	6	29.76	+0.03	48	47	+3	SW	3	2	*	49	36	0.13	
	Valencia ...	30.13	43	NW	1	C	29.92	+0.08	52	51	+4	WNW	7	0.5	6	52	42	0.19	
FRANCE & NETHERLANDS.	Roche's Point...	30.11	46	WNW	4	6	29.91	+0.13	50	48	+3	WNW	6	0.5	5	50	41	0.15	
	Pembroke ...	30.07	45	WNW	5	6	29.91	+0.20	49	48	0	SW	7	C	6	50	44	0.06	
	Scilly ...	30.07	49	N	6	C	30.09	+0.28	50	48	-2	WNW	5	0	4	52	45	0.08	
	Prawle Point ...	30.07	42	N	3	6	30.06	+0.11	48	43	-4	WNW	4	C	4	50	36	0.14	
	Jersey ...	29.96	50	SW	4	2	30.16	+0.03	44	41	-1	NW	3	6	3	50	38	0.22	
	Hurst Castle ...	29.96	47	WNW	2	C	30.06	+0.04	44	43	-3	WNW	4	6	4	50	35	0.10	
	Dungeness ...	29.87	46	SW	6	2	30.02	-0.03	39	37	-7	WNW	3	6	3	46	33	0.14	
	London ...	29.95	46	NW	4	6	30.00	+0.02	38	36	-8	WNW	2	0	*	49	33	0.08	
	Oxford ...	30.01	40	NW	3	C	29.98	+0.07	38	37	-3	SW	2	0.2	*	50	34	0.09	
	Cambridge ...	29.91	42	WNW	2	6	29.94	+0.03	36	34	-10	SW	1	2	*	49	30	0.06	
PENINSULA.	Yarmouth ...	29.83	44	NW	3	6	29.92	-0.06	36	35	-7	WNW	3	C	3	46	31	0.06	
	Cuxhaven ...	29.79	39	SW	7	2	29.88	-0.22	35	35	-4	W	3	C	*	41	33	0.15	
	Berlin ...	29.93	36	SW	3	6	29.90	-0.31	36	35	-1	NW	3	6	*	39	34	0.04	
	Wiesbaden ...	*	*	*	*	*	30.04	-0.33	36	35	+3	2	0	0	*	?	32	-	
	Munich ...	30.14	24	SE	2	6	30.07	-0.36	39	34	+25	SW	4	0	*	39	14	-	
	The Helder ...	29.82	42	NW	5	6	29.93	-0.13	40	39	-1	WNW	3	C	3	43	39	0.20	
	Brussels ...	*	*	*	*	*	30.04	-0.19	38	38	0	WNW	4	6	*	43	37	0.20	
	Cape Gris Nez...	?	45	SW	8	2	?	-	41	39	-2	W	4	C	3	46	39	0.16	
	Paris ...	30.10	38	SW	7	2	30.10	-0.23	41	39	+11	NW	3	0	*	?	?	-	
	Brest ...	30.09	48	N	5	0	30.26	+0.13	46	45	-3	WNW	3	0	5	50	39	0.24	

# WEATHER CHARTS

For 8 a.m. on

WEDNESDAY 30<sup>th</sup> JANUARY

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.

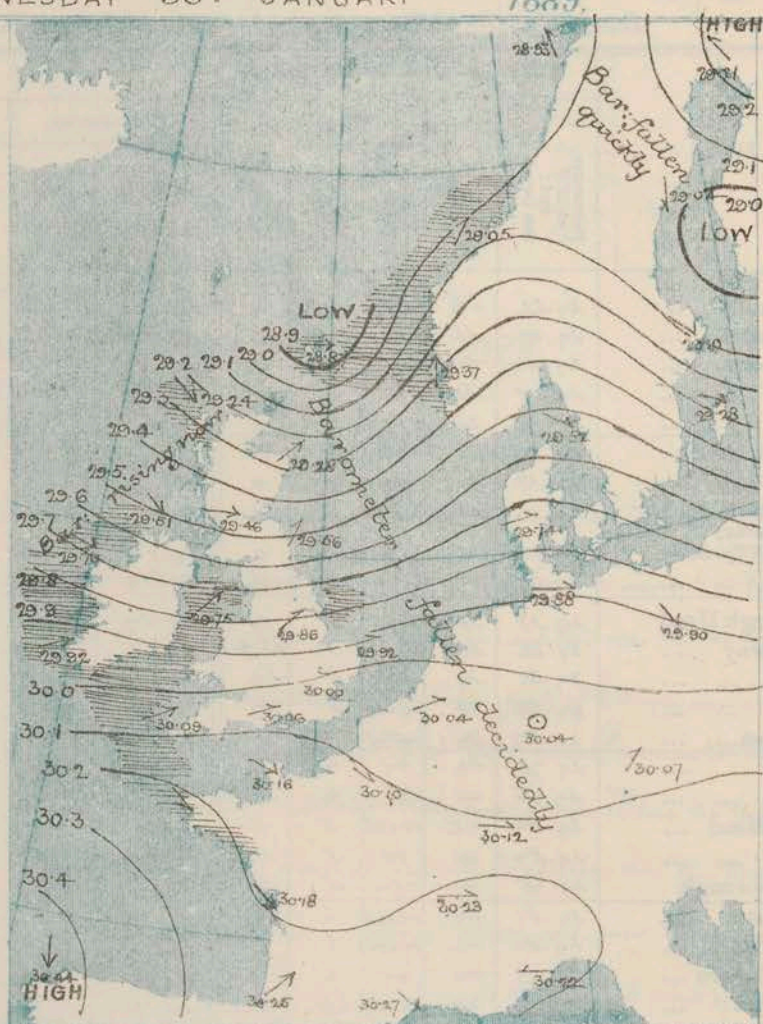
**Sea Disturbance** — where considerable is shown thus.

— Rough — High

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.980
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



## 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.

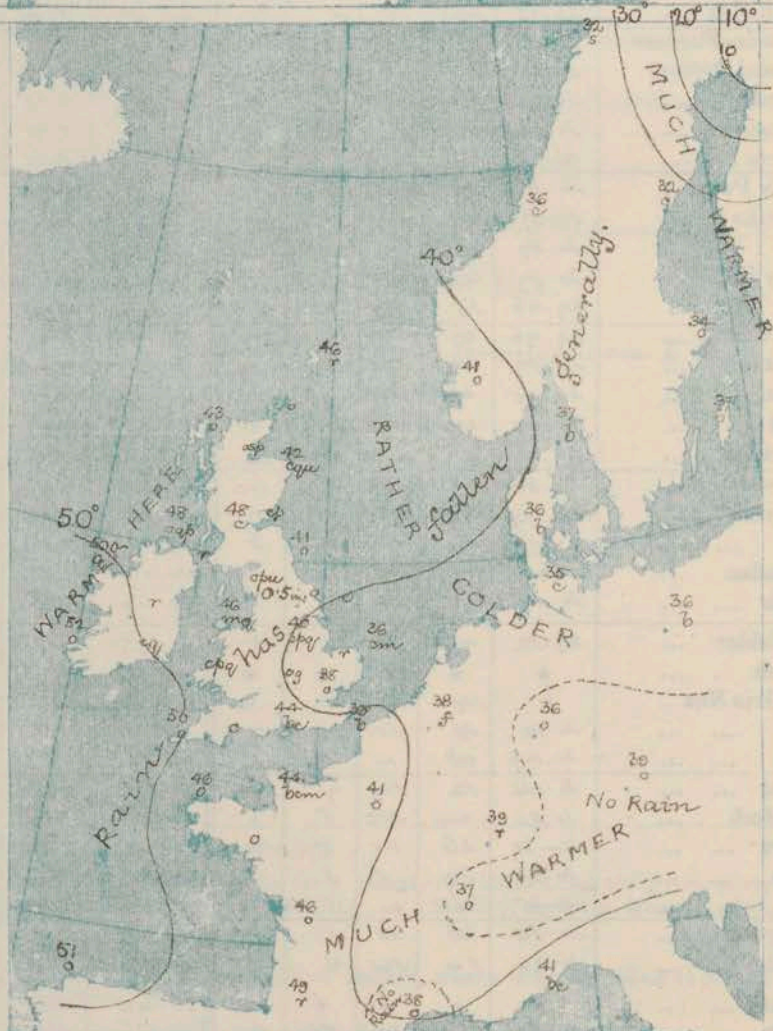
**Rainfall** — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.  
 for the month of January

STATIONS	TEMPERATURE				RAINFALL. (Inches)
	Daily Max.	Daily Min.	Dry Shade	Wet Shade	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	48.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	48.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.8	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.6	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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 to 30.40 ins. and more over the Bay of Biscay, the Spanish Peninsula, and south of France.  
 Lowest 28.9 ins. and less in a depression near the Shetlands, and 29.0 ins. and less in another over Finland.  
 Gradient steep over the northern parts of our islands and the southern parts of Norway and Sweden moderate to slight elsewhere.  
 Barometer very steady, falling decidedly in the North and East, rising slightly in south-west.

## TEMPERATURE

Highest 52° at Valencia, 51° at Bologna, 50° at Scilly and Belmullet, 48° at Skirn, Malin Head, Ardrossan & Glasgow, 46° at Lumbidge Head.  
 Lowest 10° at Naparanda, 32° at Hernösand, 36° at Berlin, 38° in London, and 41° at Paris.  
 It has changed very fitfully over England during the past 24 hours, and risen rapidly over Northern Europe, - well as over France and South Germany.

## WIND

Very variable between S.W. and N.W., moderate at the southeastern and southern stations.  
 Fresh in the northeast, strong to a gale in the west and northwest of our islands, and on the north and west coasts of the Iberian Peninsula.

## WEATHER

Bleak at a few southeastern stations, very cloudy elsewhere, with rain or sleet showers in many places, snow in Lapland.  
 The appearance of the sky in London is very unsettled and showerlike.

## SEA

Rough in the west and north, moderate elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

With the present distribution of pressure and the changes now in progress it is probable that strong W. & N.W. winds will be felt pretty generally, accompanied by squally weather and cold showers.

## FORECASTS

for the 24 hours ending at NOON on 31<sup>st</sup> January, 1889.

### DISTRICTS.

### FORECASTS.

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

N.W. winds, strong to moderate; squally sleet and cold rain.

S.W. and W. winds, fresh or strong; cold rain or sleet.

### DISTRICTS.

### FORECASTS.

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

W. winds, possibly veering to N.W., strong; squally, cold showers.

The SOUTH CONE is still up in districts 6, 7, 9, 10 and part of 8.

### WARNINGS

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 ...	29.29	42	41	SSE 8	rf	6	Holyhead ...	29.87	46	41	NNW 8	bcg	6
Sumburgh Head ...	29.24	39	37	NW 5	bc	5	Valencia ...	30.12	49	43	NW 4	bcg	4
Stornoway ...	29.58	41	40	NW 5	ohsf	5	Scilly ...	29.97	52	48	N 6	c	6
Aberdeen ...	29.55	41	36	WNW 8	bcg	5	Jersey ...	29.99	48	47	S 4	n	4
Shields ...	29.59	47	43	WNW 5	bc	2	Dungeness ...	29.89	45	42	SW 7	n	6
Ardrossan ...	29.78	45	40	WNW 6	6	4	London ...	29.83	49	47	SW 5	og	*
Malin Head ...	29.83	42	39	WNW 6	6	6	Yarmouth ...	29.74	45	44	SW 5	og	4
Mullaghmore ...	29.94	43	40	NNW 7	cqf	6	Rochefort ...	30.29	39	39	SSE 5	f	2
Belmullet ...	30.00	40	41	WNW 4	c	*							

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

The reports for yesterday morning showed that a large area of high pressure (30.5 ins. and upwards) was lying over the whole of Southern Europe, the central parts of the Mediterranean and Algeria. Within this area three maxima were found with readings above 30.6 ins, while over the Gulf of Genoa there was a very shallow depression with readings below 30.5 ins. The lowest pressures of all, 29.2 ins. and less, were found in a depression lying off the north of Scotland, but another disturbance with readings below 29.5 ins. existed over the White Sea, while a third with readings below 29.7 ins. was reported over the Baltic provinces, and in addition to these a trough of "V shaped" secondary disturbances was lying over the western parts of our Islands. The wind was strong from the NW<sup>and</sup> in Ireland, and strong from SW. or S. over Great Britain, with gales in the west, but in Norway SE<sup>by</sup> or E<sup>by</sup> breezes were reported. Over central Europe the wind was chiefly W<sup>by</sup> and in Southern Europe NE<sup>by</sup>, while in Algeria it varied between S. and W. The weather was fine in Sweden, Finland, Austria, Italy and Algeria, but cloudy or overcast elsewhere, with fog over Denmark and central France, rain in many parts of the United Kingdom, and snow at Lemberg and Kiev. Temperature had risen over Great Britain, central Europe and some parts of Spain and Russia, but fallen elsewhere, - quickly in Lapland, readings ranged from between 45° and 50° over our Islands and the Mediterranean, to several degrees below zero in Lapland. The highest individual readings were 52° at Scilly, 51° at Lorient, Sanguinaire and Algiers, 50° at Lorient, Bilbao and Malta and 49° at Leith, Holyhead, Pembroke, Poul Point and Biarritz; the lowest were -11° F. at Haparanda, -10° at Uleaborg, 0 zero at Kuopio, +1° at St. Petersburg and Moscow, 3° at Arkangel, 9° at Bodo and Helsingfors, 11° at Hernösund, 20° at Hangö, 21° at Kharkov, and 22° at Lyons.

In the course of the day the depression off the north of Scotland and the "V shaped" secondaries over our west coasts moved quickly eastwards and in their rear the wind over our Islands veered to the NW<sup>and</sup> generally, with colder but improving weather.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale: 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, 31<sup>st</sup> January 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 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 ...	28.95	15	Z	0	b	28.80	- .41	19	19	+ .9	Z	0	?	*	?	- 8	0.24
	Hernösand ...	28.93	30	SW	4	s	28.94	- .10	22	21	- .10	NW	4	0	*	34	?	0.08
	Stockholm ...	29.17	35	SSW	4	0	29.08	- .02	27	25	- .7	NW	8	6	*	41	30	-
	Wisby ...	29.41	35	NW	8	bc	29.22	- .06	33	?	- .4	Z	8	6	*	39	30	0.08
	Bodö ...	28.69	31	ESE	2	0	28.69	- .24	24	23	- .8	ESE	2	6	1	32	21	-
	Christiansund...	28.99	30	W	9	0	29.06	+ .01	32	28	- .4	W	9	0	7	36	25	0.24
	Skudesnaes ...	29.36	36	WNW	8	bc	29.35	- .02	35	33	- .6	E	1	0.5	4	43	32	-
	Christiania Fjord (Farder)	29.11	41	WSW	5	b	29.25	- .18	33	31	- .5	W	4	6	4	41	30	-
	Skagen (The Scaw)	29.21	38	W	4	bc	29.30	- .22	38	37	+ .1	WNW	5	0	3	39	34	-
	Fanö ...	29.46	39	NW	4	r	29.59	- .15	37	36	+ .1	WSW	5	0	*	39	36	0.16
BRITISH ISLANDS.	Sumburgh Head	29.36	38	NW	4	c	29.14	+ .27	40	39	- .6	Z	0	7	4	46	38	0.35
	Stornoway ...	29.57	40	NW	4	0	29.29	+ .05	49	49	+ .6	W	6	7	5	49	38	0.06
	Wick ...	29.52	40	NW	1	bc	29.23	+ .12	48	46	+ .3	W	3	6	2	48	35	0.04
	Nairn ...	29.58	41	W	1	bc	29.34	+ .14	52	49	+ .4	WSW	3	0	1	52	40	-
	Aberdeen...	29.61	39	SW	1	b	29.38	+ .10	45	43	+ .3	SW	2	0	4	45	37	0.03
	Leith ...	29.68	41	W	3	bc	29.51	+ .11	50	48	+ .3	W	5	0	*	52	41	0.03
	Shields ...	29.69	46	NNE	2	r	29.60	+ .04	50	48	+ .9	SW	4	0	2	51	39	-
	Spurn Head ...	29.66	45	WSW	5	0	29.75	+ .08	44	43	+ .4	SW	3	0	4	47	40	0.01
	York ...	29.65	48	WSW	3	0	29.72	+ .01	49	47	+ .9	W	2	0	*	51	38	0.02
	Loughborough	29.77	48	WNW	2	r	29.87	+ .01	48	47	+ .8	WSW	3	0	*	49	39	0.09
GERMANY.	Ardrossan ...	29.72	45	W	4	bc	29.60	+ .14	48	47	0	SW	4	0	8	49	44	0.02
	Malin Head ...	29.74	46	WNW	4	c	29.57	+ .06	49	49	+ .1	W	6	0.2	6	49	42	0.33
	Mullaghmore ...	29.84	48	W	5	0	29.75	+ .12	50	49	+ .1	WSW	6	0.1	6	50	47	0.15
	Belmullet ...	29.89	50	WSW	4	0	29.78	+ .08	50	50	0	W	5	0	*	50	48	0.10
	Donaghadee ...	29.78	47	NW	3	bc	29.71	+ .13	49	48	+ .2	W	5	0.2	3	51	45	0.17
	Barrow-in-Furness	29.74	47	W	5	0	29.76	+ .12	47	46	+ .2	SW	4	0	*	49	44	0.02
	Liverpool (Bidston)	29.77	47	W	6	0	29.83	+ .09	48	46	+ .3	W	5	0	4	49	44	0.12
	Holyhead ...	29.84	49	W	5	og	29.84	+ .09	49	48	+ .3	SW	4	0	4	52	46	0.01
	Parsonstown ...	29.93	49	W	1	0	29.90	+ .14	49	48	+ .1	WSW	3	0	*	52	47	0.01
	Valencia ...	30.04	52	WNW	4	0 am	30.03	+ .11	52	51	0	WSW	6	0.1	5	54	49	0.14
FRANCE & NETHERLANDS.	Roche's Point...	30.01	50	WNW	4	c	29.98	+ .07	50	47	0	WNW	4	0	4	51	48	0.01
	Pembroke ...	29.94	50	W	5	bc	30.00	+ .09	48	48	- .1	WSW	6	0.1	6	50	48	0.04
	Scilly ...	30.03	51	WNW	6	c	30.15	+ .06	49	49	- .1	W	6	0.1	5	52	48	0.03
	Prawle Point ...	29.99	49	W	4	0	30.09	+ .03	48	48	+ .3	WSW	4	0.1	4	49	44	0.06
	Jersey ...	30.05	49	W	5	op	30.16	0.00	50	49	+ .6	W	5	0.1	4	50	42	0.05
	Hurst Castle ...	29.91	47	WSW	5	0 pm	30.02	- .04	47	46	+ .3	WSW	4	0.1	3	47	44	0.07
	Dungeness ...	29.84	47	WSW	6	r	29.99	- .04	44	43	+ .5	WNW	4	0	4	47	38	0.07
	London ...	29.84	48	WSW	4	0.2	29.96	- .04	44	43	+ .6	WSW	2	0	*	48	38	0.05
	Oxford ...	29.90	47	SW	2	0	29.93	- .05	47	46	+ .9	SW	3	0.1	*	48	37	0.02
	Cambridge ...	29.78	46	WSW	1	0	29.88	- .06	45	44	+ .9	SW	2	0	*	48	34	0.03
PORTUGAL.	Yarmouth ...	29.70	46	W	4	cq	29.63	- .09	42	41	+ .6	WSW	3	0.1	3	46	34	0.04
	Cuxhaven ...	29.68	37	SW	6	r	29.72	- .16	37	37	+ .2	W	5	0	*	39	35	0.30
	Berlin ...	29.82	37	SW	2	0	29.72	- .18	39	38	+ .3	WNW	4	0	*	43	36	0.08
	Wiesbaden ...	*	*	*	*	*	29.97	- .07	41	39	+ .5	W	1	0	*	41	36	0.04
	Munich ...	30.00	38	W	4	bc	30.03	- .04	35	35	- .4	W	6	0	*	41	34	0.20
	The Helder ...	29.65	43	WSW	4	r	29.84	- .09	40	40	0	WSW	3	0	3	45	39	0.28
	Brussels ...	*	*	*	*	*	30.00	- .04	41	41	+ .3	WSW	3	0	*	42	?	0.16
	Cape Gris Nez...	?	46	WSW	8	r	?	?	45	45	+ .4	SW	5	0	5	46	39	0.12
	Paris ...	30.08	43	SW	3	0	30.13	+ .03	45	44	+ .4	WSW	3	0	*	44	32	-
	Brest ...	30.21	50	WSW	5	r	?	?	49	48	+ .3	WNW	4	0	4	50	41	0.39
PORTUGAL.	Lorient ...	30.19	50	WNW	7	f	30.25	+ .08	50	50	+ .7	WNW	5	0	4	52	43	0.04
	Rochefort ...	30.30	48	NW	4	0	30.30	+ .12	48	48	+ .2	WNW	4	0	2	48	41	0.08
	Belfort ...	30.11	34	W	1	r	30.14	+ .02	39	39	0	W	1	0	*	40	32	0.08
	Lyons ...	30.19	41	WSW	3	r	30.28	+ .05	37	35	0	S	1	0	*	47	36	0.08
	Nice ...	30.07	48	ESE	5	0	30.06	- .16	40	38	- .1	ESE	4	0	1	54	37	-
	Perpignan ...	30.24	47	NE	3	0	30.30	+ .03	51	44	+ .13	NW	5	0.2	*	51	?	0.04
	Biarritz ...	30.34	53	NW	7	0	30.35	+ .10	51	50	+ .2	W	8	0	4	54	48	0.08
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lisbon ...	30.44	58	N	5	b	30.47	+ .11	45	?	- .3	N	3	0.2	?	57	46	-

# WEATHER CHARTS

For 8 a.m. on

Thursday, 31<sup>st</sup> January,

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.

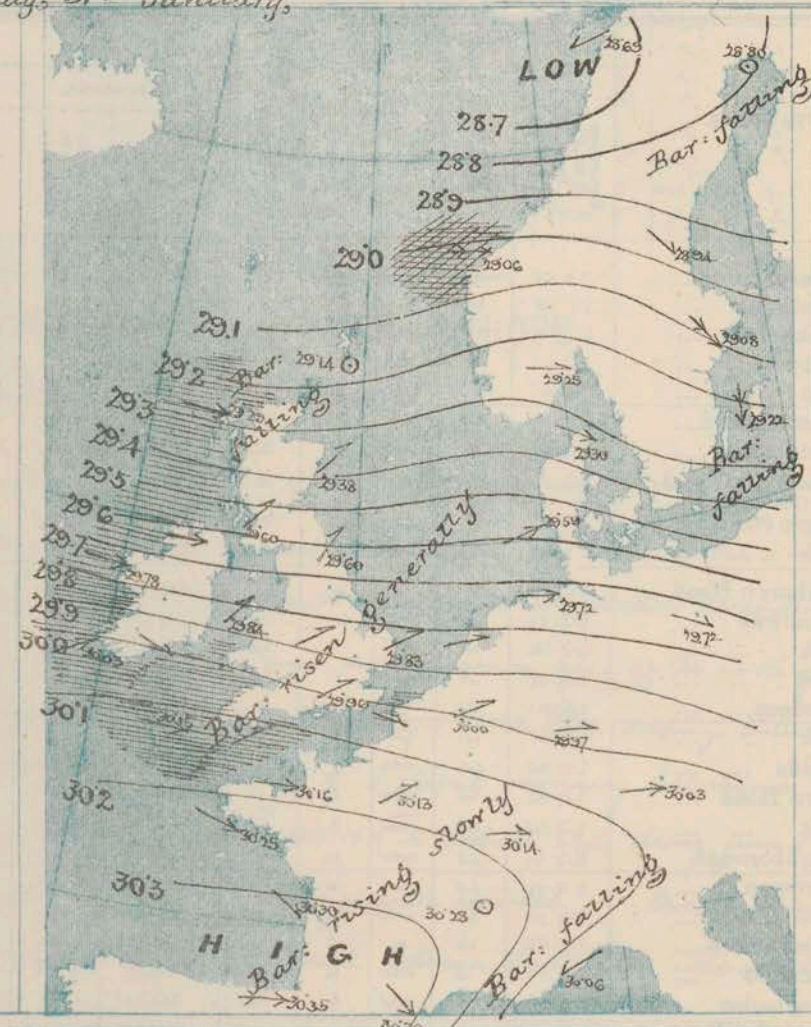
**Sea Disturbance** — where considerable, is shown thus.

— Rough — High.

## MEAN HEIGHT of the BAROMETER

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

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head.	29.685
Stornoway.	29.687
Wick.	29.725
Nairn.	29.753
Aberdeen.	29.790
Leith.	29.829
Shields.	29.886
York.	29.935
Loughborough.	29.967
Ardrossan.	29.840
Donaghadee.	29.851
Holyhead.	29.896
Liverpool.	29.922
Parsonstown.	29.886
Valencia.	29.869
Roche's Point.	29.894
Pembroke.	29.926
Scilly.	29.960
Jersey.	30.010
Hurst Castle.	29.997
Dover.	30.017
LONDON.	30.007
Oxford.	29.997
Cambridge.	29.992
Yarmouth.	29.981



## 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.

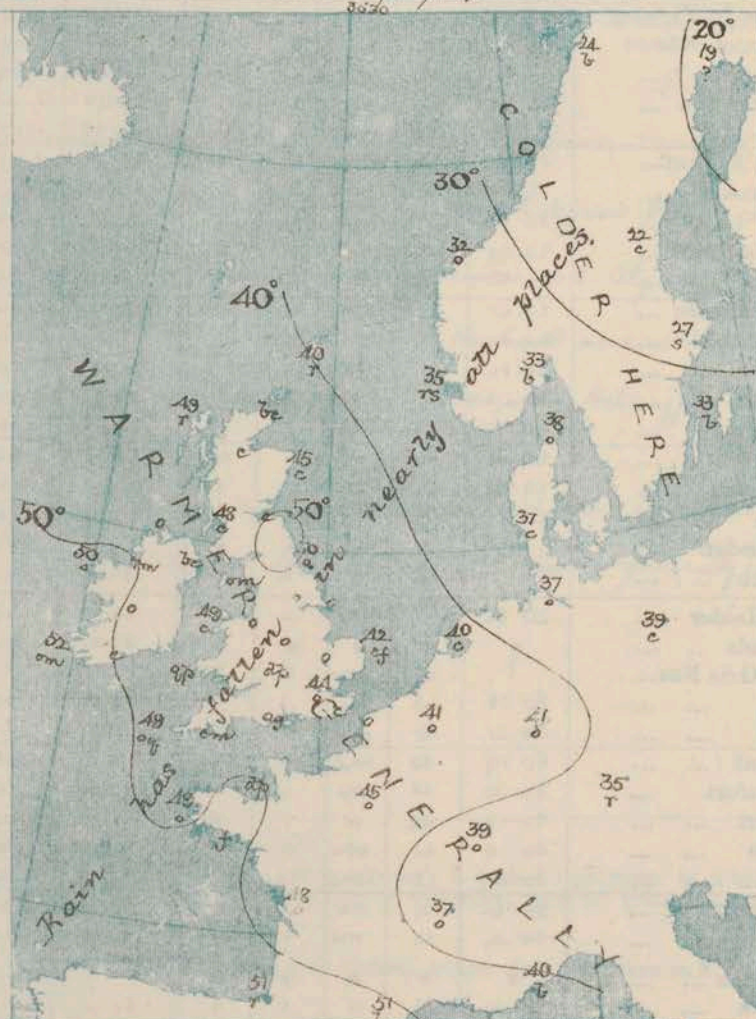
## MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

For the month of January.

STATIONS	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry	Wet	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.2	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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	<p>Highest, 30.1 ins. to nearly 30.5 ins. in a high-pressure area lying over Spain, the Bay of Biscay, and the greater part of France and the Channel.</p> <p>Lowest, 28.7 ins. and less, over the north of Norway—29.1 ins. to the northward of the Shetlands—and about 29.2 ins. over the eastern part of the Baltic.</p> <p>Gradients are moderate generally.</p> <p>Barometer falling decidedly in the north, rising a little in the south.</p>
TEMPERATURE	<p>Highest, 52° at Valencia, 51° at Perpignan and Biarritz, 50° at Lorient, Bismmullet, and Lish, 49° at Rouen, and 48° at Paris and 44° in London.</p> <p>Lowest, 13° at Haparanda, 22° at Åmäsund, 24° at Rode, 27° at Stockholm.</p> <p>It is above 40° in all parts of our islands, Holland, and the north and west of France.</p>
WIND	<p>Moderate to light from S.W. over the eastern part of Great Britain.</p> <p>Strong from W. in the west and north-west, — Light W. over France.</p> <p>Fresh gales are reported — from W. at Christiansund and Biarritz, and from N. off the southeast of Sweden.</p>
WEATHER	<p>Cloudy in almost all places; showery at several of our western and south-western stations. Snow is falling at Stockholm.</p> <p>In London the sky became clear last night, but has become thickly overcast again this morning.</p>
SEA	<p>Continues rough on our northern and western coasts, moderate to slight in the northeast, east, and south.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new depression in the north does not appear to be deep, but will probably cause some increase of wind from W. or N.W. at the Scotch stations. Mild changeable weather is still probable elsewhere, with moderate W. winds.

## FORECASTS

for the 24 hours ending at NOON on 1<sup>st</sup> February 1889.

### DISTRICTS.

### FORECASTS.

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

W<sup>ly</sup> and NW<sup>ly</sup> winds;  
unsettled, showery.

W<sup>ly</sup> winds, moderate;  
cloudy, some rain at times.

### DISTRICTS.


### FORECASTS.


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

W<sup>ly</sup> winds, fresh or strong;  
cloudy, showery.

### 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 ...	29.18	43	41	WNW 5	0	6	Holyhead ...	29.75	50	45	W 5	eq	5
Stamburgh Head ...	29.24	39	36	NW 2	S	6	Valencia ...	30.01	54	52	W 4	cm	4
Stornoway ...	29.51	42	41	NW 4	0	4	Scilly ...	30.02	51	51	WSW 7	opd	6
Aberdeen ...	29.49	43	40	WNW 5	bcpg	4	Jersey ...	30.10	50	47	WSW 4	0	3
Shields ...	29.50	50	48	WNW 3	c	2	Dungeness ...	29.91	46	44	WSW 5	c	3
Ardrossan ...	29.59	47	44	W 5	0	4	London ...	29.85	48	45	WSW 4	or	*
Malin Head ...	29.72	46	45	WNW 3	0	4	Yarmouth ...	29.73	44	43	WSW 4	og	4
Mullaghmore ...	29.77	49	48	W 7	opm	6	Rocheport ...	30.28	46	44	NW 5	0	2
Belmullet ...	29.85	50	48	W 5	om	*							

## 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, 30.4 ins. and upwards, were reported in two areas lying respectively over Portugal and Central Spain and over Sicily, high readings, 30.3 ins. and upwards, were observed over the whole of the Mediterranean, Algeria, and the Iberian Peninsula. The lowest pressures, 28.9 ins. and less, were found in a depression lying to the northwards of the Shetlands, but another disturbance, of a "V shaped" character was reported over Sweden and the Gulf of Bothnia. The wind was strong from SW. or W. over the United Kingdom and the North Sea, and moderate or fresh from the same quarters over Central Europe. In Norway, however, and also in Finland moderate to strong S<sup>W</sup> breezes were general, while in Sweden the wind was N<sup>E</sup> or NW<sup>E</sup>. On the northern shores of the Mediterranean the wind was chiefly E<sup>W</sup>, but in Algeria it varied between S. and W. The weather was fine in Denmark and North Germany, as well as in Algeria and the southern parts of Italy, France, and Austria, but dull elsewhere, with rain in many parts of the United Kingdom, and snow at Bodø and over the Gulf of Finland. Temperature had risen several degrees over Russia and the north of Sweden, and also in France and Italy, but fallen in most other countries; readings ranged from 50° or a little above in the extreme west and south-west of our Islands as well as at some of the Mediterranean stations, to many degrees below the freezing point over Northern and Central Russia. Several of the Russian reports were however, wanting. The highest individual readings were 53° at Panguinai and Algiers, 52° at Valencia (Ireland) and Lough, 51° at Corunna, 50° at Belmullet, Rock Point, Scilly, and San Fernando, and 49° at Mullaghmore, Pembroke, Biarritz, and Malaga; the lowest were 7° at Moscow, 10° at St. Petersburg and Uliabov, 11° at Hermanstadt, 13° at Kuopio, 20° at Helsingfors, 21° at Huda Peth, 23° at Vienna, 26° at Cracow, and 28° at Hanov and Limberg.

In the course of the day the depression off the north of Scotland travelled eastwards, and the wind over our Islands consequently veered to W or NW. while the sky cleared in many places. A considerable rise of temperature took place 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.

CORRECTIONS AND ADDITIONS TO THE REPORTS FOR JAN<sup>y</sup> 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.
				Direc.	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.	Direc.	Force, (0 to 12.)			Max.	Min.	
1	Kisby	30.08	33	SE	6	0	30.00	-	31	30	-	SE	4	0	2	37	?	
"	Corunna	*	*	*	*	*	30.01	+05	51	50	-2	NE	1	0	4	54	48	0.28
"	Lisbon	29.96	51	N	7	6	29.99	+09	52	50	-8	NNW	5	0	?	?	50	
2	Corunna	*	*	*	*	*	30.28	+27	54	52	+3	NE	5	0	8	57	45	
3	Kungeness	-	-	-	-	-	30.63	+28	38	37	-2	E	4	0	4	43	37	
"	Corunna	*	*	*	*	*	30.39	+11	51	49	-3	NE	7	6	6	55	46	
4	Corunna	*	*	*	*	*	30.34	-05	39	37	-12	E	1	6	4	54	37	
5	Lorient	30.61	41	NE	3	0	30.63	+03	31	-	-4	NE	1	m	2	43	27	
"	Corunna	*	*	*	*	*	30.18	-16	47	46	+8	ESE	1	6	6	54	36	
6	Spinn Hd.	30.24	29	SSW	3	6	30.08	-29	28	28	+1	WNW	2	f	2	32	23	
"	Perpignan	30.18	33	N	5	tl	29.97	-31	34	-	0	S	5	r	*	38	32	2.05
7	Haparanda	29.51	25	Z	0	8	29.83	+36	11	10	-9	Z	0	6	*	26	?	
"	Hörnösand	29.77	27	Z	0	6	29.95	+31	30	29	+9	Z	0	0	*	36	21	
"	Stockholm	29.97	37	WSW	2	0	30.00	+11	35	34	-4	Z	0	f	*	41	34	
"	Kisby	30.09	33	SW	4	6	30.07	00	33	33	-2	SW	2	60	*	39	30	
"	Bodo	29.50	30	W	2	5	29.81	+36	30	28	-1	WSW	2	60	1	?	23	
"	Christiansund	29.71	38	WSW	8	60	29.86	-05	39	37	0	S	2	c	5	41	34	0.47
"	Skudesnaes	29.97	37	Z	0	60	29.97	+06	37	36	-6	NNE	1	0	3	43	36	
"	Jaegers	29.71	38	WSW	8	60	29.86	-05	39	37	0	S	2	c	5	41	34	0.47
"	Skagen	30.01	38	SW	1	m	29.95	-06	37	35	-3	SSE	2	0	1	?	37	
"	Janö	30.02	28	S	2	6	29.96	-17	30	30	-6	SSW	2	f	*	39	?	
"	Spinn Hd.	29.99	29	Z	0	f	29.96	-12	33	33	+5	WSW	3	0	2	33	26	
"	Corunna	*	*	*	*	*	30.08	+19	38	38	-5	ESE	3	6	5	50	36	0.04
"	Lisbon	29.87	44	NNW	5	6	30.01	+20	49	44	+10	NNE	5	6	?	50	?	
8	Corunna	*	*	*	*	*	29.73	-35	50	48	+12	SSE	8	r	4	54	?	
9	Corunna	*	*	*	*	*	30.06	+33	50	47	0	NW	4	60	6	55	43	0.16
10	Corunna	*	*	*	*	*	30.21	+15	53	48	+3	WNW	8	0	7	55	46	0.16
11	Corunna	*	*	*	*	*	29.96	-25	56	56	+3	WSW	8	r	6	?	50	0.55
12	Corunna	*	*	*	*	*	29.84	-12	54	51	-2	W	7	0	5	?	41	0.43
14	Corunna	*	*	*	*	*	30.17	+33	49	46	-5	ESE	3	e	5	54	46	
15	Corunna	*	*	*	*	*	30.17	00	38	37	-11	ESE	1	6	2	54	34	
"	Lisbon	30.15	48	NNW	5	6	30.18	+08	41	40	-6	NNE	4	6	?	54	41	
16	Corunna	*	*	*	*	*	29.79	-38	49	49	+11	N	5	r	4	54	36	0.32
17	Corunna	*	*	*	*	*	30.30	+51	53	52	+4	NNE	8	0	6	54	46	0.16
18	Corunna	*	*	*	*	*	30.44	+14	48	45	-5	ESE	7	6	5	55	45	
19	Corunna	*	*	*	*	*	30.45	+01	48	46	0	ESE	7	60	6	54	43	
21	Corunna	*	*	*	*	*	30.32	-13	51	48	+3	NE	8	6	5	52	46	
"	Mullaghmore	-	-	-	-	-	30.60	-	45	43	-	W	1	0	2	-	-	
22	Corunna	*	*	*	*	*	30.18	-14	47	45	-4	NE	8	0	6	54	45	
23	Corunna	*	*	*	*	*	30.28	+10	48	43	+1	NE	8	c	6	48	39	
26	Janö	29.92	40	SW	4	c	29.95	-19	40	40	+2	W	4	c	*	41	37	
"	Corunna	*	*	*	*	*	30.50	+10	38	38	-10	E	3	6	4	54	36	
28	Corunna	*	*	*	*	*	30.60	+12	41	40	+5	ESE	1	6	3	55	36	
29	Haparanda	29.58	2	W	1	0	29.73	+32	11	-	-22	WSW	1	6	*	16	-16	
"	Hörnösand	29.59	28	E	6	5	29.82	+21	11	-	-1	WSW	1	c	*	30	9	0.12
"	Stockholm	29.58	33	SW	2	6	29.78	+07	28	-	+3	WSW	1	f	*	36	23	0.08
"	Kisby	29.67	36	SW	4	0	29.79	+07	33	-	0	SSW	2	6	*	39	28	
"	Corunna	*	*	*	*	*	30.26	-34	51	49	+10	S	7	r	4	50	39	0.12
31	Corunna	*	*	*	*	*	30.54	+10	49	49	-2	ESE	7	6	3	57	46	

# 2. CORRECTIONS.

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.	
				Direc.	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.	Direc.	Force. (0 to 12.)			Max.	Min.		
1	Donaghadee	-	-	-	-	-	30.11	-02	-	-	-	-	-	-	-	-	-	0.28	
-	Dungeness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	Pembroke	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	
-	Aberdeen 2pm	-	-	-	-	-	30.47	-	-	-	-	-	-	-	-	-	-	-	
4	Aberdeen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	
-	Donaghadee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	-	
-	Valencia	-	-	-	-	-	-	-	-	-	-	-	-	-	3	42	-	-	
5	Dungeness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	Liverpool	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	38	-	
7	Barrow-in-Fur.	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	
-	Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
13	Trick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	-	-	
14	Hurst Castle	-	-	-	-	-	30.19	-	-	-	-	-	-	-	-	-	-	0.01	
16	Shields	29.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	Aberdeen	29.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
19	Ardrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	Ardrossan 2pm	-	-	-	-	-	-	-	47	-	-	-	-	-	-	-	-	-	
-	Ardrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Rock Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47	-	-	
21	Belmullet	-	-	-	-	-	30.55	+13	-	-	-	-	-	-	-	-	43	-	
-	Valencia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Jersey	-	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
23	Aberdeen	30.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Malin Hd.	-	-	-	-	-	30.52	-	-	-	-	-	-	-	-	-	-	-	
24	Dungeness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	Aberdeen	30.27	-	-	-	-	-	-	-	-	-	-	-	-	-	42	29	-	
-	Aberdeen 2pm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	Scilly	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	
28	Nairn	-	-	-	-	-	30.02	-42	-	-	-	-	-	-	-	-	-	-	
-	Belmullet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	Bodo	29.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No rain	
-	Hurst Castle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	-	-	
30	Leith	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	
-	Hurst Castle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	-	-	

Note.- In the Monthly Summary for Dec. 1888, the Total amount of Rainfall at Donaghadee was incorrect owing to a telegraphic error. The figures should be "2.79" instead of "2.59".

Note. - In the Monthly Summary for Dec. 1888, the Total amount of Rainfall at Donaghadee was incorrect owing to a telegraphic error. The figures should be "2.79" instead of "2.59".